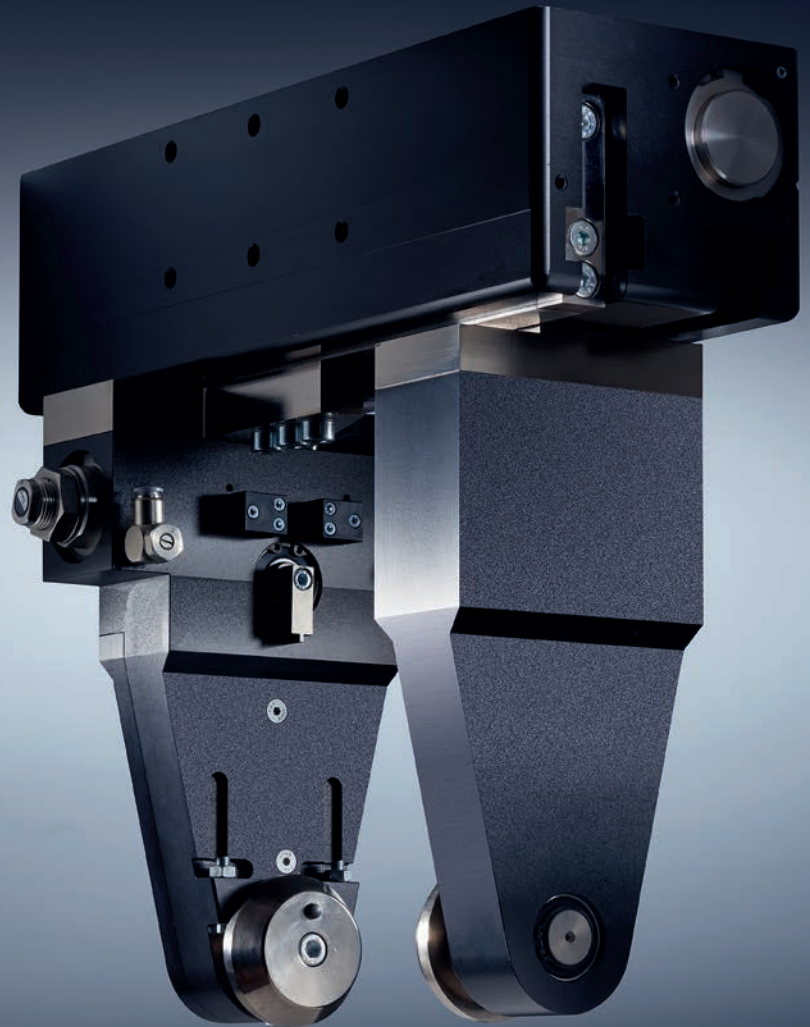


Handling technology 1

- Grippers
- Rotary grippers
- Swivel and rotary modules
- Linear modules
- Cutting tongs
- Separators
- Ball joints
- Sensors and holders
- Valves, fittings, accessories

THE KNOW-HOW FACTORY





“WE ARE PLEASED TO BE TAKING A MAJOR STEP INTO THE FUTURE WITH ZIMMER GROUP. THE UMBRELLA BRAND ZIMMER GROUP SYMBOLIZES OUTWARDLY WHAT WE HAVE ALREADY INTERNALIZED – THE UNITY OF PREVIOUSLY SEPARATE COMPANIES.

AS ZIMMER GROUP, OUR FAMILY-RUN ENTERPRISE CAN DELIVER EVEN GREATER VALUE AND SUPPORT FOR OUR CUSTOMERS.

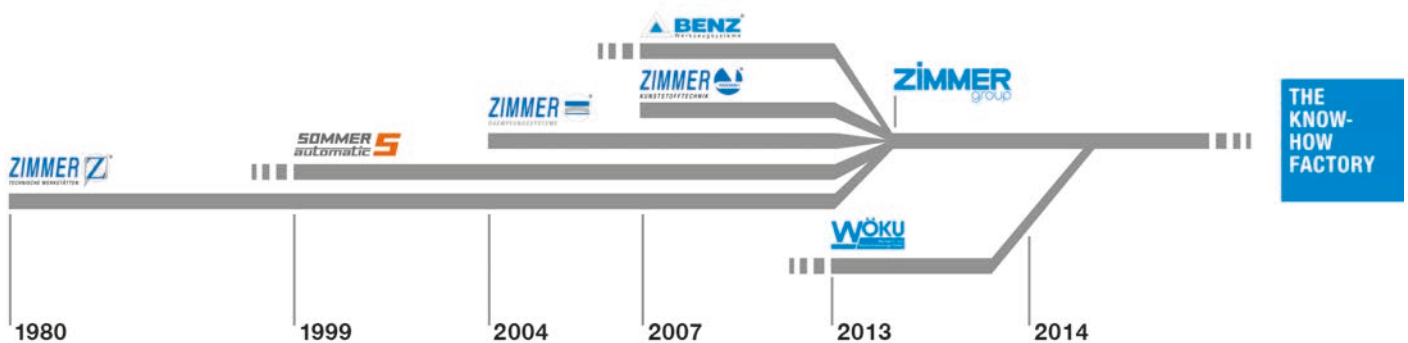
NOW AND IN THE FUTURE. CONTINUING OUR INTERNATIONALIZATION, ENGAGING WITH ALL INDUSTRIES, AND SOLVING ALL TYPES OF DEVELOPMENT TASKS ARE SOME OF THE CHALLENGES THAT WE WILL OVERCOME AS THE KNOW-HOW FACTORY.”

GÜNTHER ZIMMER, MARTIN ZIMMER AND ACHIM GAUSS

Managing Directors, from left to right



ZIMMER GROUP COMMITTED TO OUR CUSTOMERS



WE HAVE SUCCEEDED FOR YEARS BY OFFERING OUR CUSTOMERS INNOVATIVE AND INDIVIDUALIZED SOLUTIONS. ZIMMER HAS GROWN CONTINUOUSLY AND TODAY WE HAVE REACHED A NEW MILESTONE: THE ESTABLISHMENT OF THE KNOW-HOW FACTORY. IS THERE A SECRET TO OUR SUCCESS?

Foundation. Excellent products and services have always been the foundation of our company's growth. Zimmer is a source of ingenious solutions and important technical innovations. This is why customers with high expectations for technology frequently find their way to us. When things get tricky, Zimmer Group is in its best form.

Style. We have an interdisciplinary approach to everything we do, resulting in refined process solutions in six areas of technology. This applies not just to development but to production as well. Zimmer Group serves all industries and stands ready to resolve even unique and highly individualized problems. Worldwide.

Motivation. Customer orientation is perhaps the most important factor of our success. We are a service provider in the complete sense of the word. Even our decision to identify ourselves as Zimmer Group reflects this reality. With Zimmer Group, our customers now have a single, centralized contact for all of their needs. We approach each customer's situation with a high level of competence and a broad range of possible solutions.

TECHNOLOGIES



HANDLING TECHNOLOGY

WITH MORE THAN 30 YEARS OF EXPERIENCE AND INDUSTRY KNOWLEDGE, OUR PNEUMATIC, HYDRAULIC AND ELECTRICAL HANDLING COMPONENTS AND SYSTEMS ARE GLOBAL LEADERS.

Components. More than 2000 standardized gripper systems, positioning systems, robotools and much more. We offer a complete selection of technologically superior products that are ready for rapid delivery.

Semistandard. Our modular approach to design enables custom configurations and high rates of innovation for process automation.

Systems. We are particularly strong in providing custom system solutions for handling technologies, robotics and vacuum engineering.



DAMPING TECHNOLOGY

INDUSTRIAL DAMPING TECHNOLOGY AND SOFT CLOSE PRODUCTS EXEMPLIFY THE INNOVATION AND PIONEERING SPIRIT OF THE KNOW-HOW FACTORY.

Industrial damping technology.

Whether standard or customized solutions, our products stand for the highest cycle rates and maximum energy absorption with minimal space requirements.

Soft Close. Development and mass production of pneumatic and fluid dampers with extraordinary quality and rapid delivery.

OEM und direct. Whether they need components, returning mechanisms or complete production lines – we are the trusted partner of many prestigious customers.



LINEAR TECHNOLOGY

WE DEVELOP LINEAR COMPONENTS AND SYSTEMS THAT ARE INDIVIDUALLY ADAPTED TO OUR CUSTOMERS' NEEDS.

Clamping and braking elements. We offer more than 4000 types for profiled and rounded rails as well as for a variety of guide systems from all manufacturers. It makes no difference whether you prefer manual, automatic, electric or hydraulic drive.

Individualized systems. The unique functionality and precision of our clamping and braking elements open up numerous possibilities for custom applications such as active or semi-active braking and damping.



PROCESS TECHNOLOGY

MAXIMUM EFFICIENCY IS ESSENTIAL FOR SYSTEMS AND COMPONENTS USED IN PROCESS TECHNOLOGY. HIGH-LEVEL CUSTOM SOLUTIONS ARE OUR TRADEMARK.

A rich reservoir of experience. Our know-how ranges from the development of materials, processes and tools through product design to production of series products. Challenge us!

Deep production capabilities. The Zimmer Group pairs these capabilities with flexibility, quality and precision, even when making custom products.

Series production. We manufacture demanding products out of metal (MIM), elastomers and plastics with flexibility and speed.



TOOLING TECHNOLOGY

ZIMMER GROUP DEVELOPS INNOVATIVE METAL, WOOD AND COMPOSITE MATERIAL PROCESSING TOOL SYSTEMS FOR ALL INDUSTRIES. NUMEROUS CUSTOMERS CHOOSE US AS THEIR SYSTEMS AND INNOVATION PARTNER.

Knowledge and experience. Industry knowledge and a decades-long development partnership for exchangeable assemblies, tool interfaces and tool systems predestine us for new challenges around the world.

Components. We deliver numerous standard components from stock and develop innovative, customized systems for OEM and end users – far beyond just the metal and wood processing industries.

Variety. Whether you have machining centres, lathes, or flexible production cells, the power tools, holders, assemblies and drilling heads of Zimmer Group are ready for action.



MACHINE TOOLING TECHNOLOGY

AS A DRIVING FORCE IN OUR INDUSTRY, WE DELIVER HIGH-VALUE SOLUTIONS IN THE FIELD OF MECHANICAL ENGINEERING, FULLY ACCORDING TO THE NEEDS OF OUR CUSTOMERS.

Development partner. We accompany you from brainstorming to inspection of the final machine, always according to your expectations.

Components. We deliver series products and modules, five-axis heads, motor spindles, gearbox swivelling heads, add-on assemblies and motors.

Systems. The Know-how Factory stands for solutions in the fields of mechanical engineering systems, specialty solutions, custom assemblies and mechanical modules. We manufacture and configure multiple-spindle and large-angles as well as large boring heads.

OUR APPLICATION PROFILES ADAPTED TO YOUR REQUIREMENTS

FIND THE BEST SELECTION QUICKLY: ZIMMER APPLICATION PROFILES

HOW DO I FIND THE RIGHT GRIPPER FOR MY NEEDS?

All gripper users ask themselves this question at some point. Surely, at some point you too have looked for a suitable gripper, but were perplexed by the sheer number of options.

FIND THE GRIPPER THAT IS AN EXACT FIT.

With the introduction of Application Profiles, the Zimmer Group now makes it fast and easy to find the gripper that is an exact fit from our extensive product portfolio. We have grouped the Application Profiles (AP for short) into multiple categories according to application-specific features. This easy-to-use system enables the user to efficiently find exactly the product needed for his or her tasks.

ADVANTAGES FOR OUR CUSTOMERS.

In addition to the faster search, the greatest benefit for the customer is in the fact that only those components are used that are actually needed to fulfill the task. This saves money, increases value creation in production and makes machines and systems more competitive.

YOU CAN'T GO WRONG HERE: AP CLASS 5

Many users find it valuable for the gripper components installed to be universally usable. They are looking for a gripper that can not only master all handling tasks, but also reduces stockkeeping costs, parts list depth and restocking effort to a minimum. For these users, in our Application Profiles of Class 5 (AP5), we have created a platform that includes all of our genuine all-around talents. These include universally usable grippers that are equally well suited to all tasks and can be used even under harsh environmental conditions – premium grippers with a wide range of outstanding features, excellent performance data and a universal range of applications. The new 5000 series of premium grippers demonstrate what today's technology can deliver. Our V-ways made of stainless steel, an extremely hard DLC coating, the double seal of the guides, high precision and complete interchangeability of the pneumatic and electric versions mean that these grippers offer a level of performance previously unavailable on the market.

The grippers have an IP67 protection class and boast a full 30 million maintenance-free cycles. This maintenance-free performance is made possible by a grease reservoir in the gripper jaw. A similar reservoir has proven its value for decades in the AP class 3, but in Class 5, it has been improved by the combination of DLC coating and a double lip seal. This is virtually equivalent to a lifetime lubrication that enables an extremely high number of cycles.

However, the premium AP5 class offers you other advantages that makes them future-proof and indispensable. For example, with its platform strategy and the ability to change between pneumatic and electric drives, it reduces the system costs and design effort of tomorrow. Only the AP5 offers pneumatic and electrical grippers with nearly identical performance data. The electric grippers, equipped with a brushless motor, offer significantly more performance compared to the pneumatic version. In addition to the integrated control system, the likewise integrated sensors for 3-position sensing and the single-cable solution, these grippers will, in the future, also offer an IO-Link interface that makes configuring and implementing the gripper amazingly easy. Therefore, if you need outstanding performance and future-proof quality, Class AP5 is the best choice. It is the best tool to equip users for the path towards the single-energy machine 4.0, even if they are currently still using pneumatics and don't plan to switch over to electric components until sometime in the future.

A CLEARLY STRUCTURED PRODUCT PORTFOLIO – ZIMMER GROUP












HANDLING TECHNOLOGY 1

OVERVIEW OF SERIES





1 GRIPPERS 12 - 507

2-JAW PARALLEL GRIPPERS

PNEUMATIC




	Series MGP800	14
	Series GP	32
	Series GP400	46
	Series GP200	66
	Series GPP5000	76
	Series GP400X	114
	Series GP100	115
	Series GP1800	116
	Series GP1200	117

ELECTRICAL


	Series GEP9000	120
	Series GEP1400	126
	Series GEP5000	132
	Series GEP1600	146

2-JAW PARALLEL GRIPPERS WITH LONG STROKE

PNEUMATIC






	Series MGH8000	150
	Series GH6000	170
	Series GH7000	210

ELECTRICAL




	Series GEH6000	218
	Series GEH8000	230

3-JAW CONCENTRIC GRIPPERS

PNEUMATIC

	Series MGD800	236
	Series GD	254
	Series GD300	262
	Series GPD5000	282
	Series GD1700	320

ELECTRICAL

	Series GED1300	324
	Series GED5000	330
	Series GED1500	344





3-JAW CONCENTRIC GRIPPERS WITH LONG STROKE

PNEUMATIC

	Series GD500	348
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2-JAW ANGULAR GRIPPERS

PNEUMATIC

	Series GZ1000	358
	Series MGW800	366
	Series GG1000	384
	Series GZ	394










2-JAW RADIAL GRIPPER

PNEUMATIC



	Series GK	398
	Series GG4000	412

















GRIPPERS FOR SPECIFIC TASKS

















PNEUMATIC

	Series LGS	428
	Series LG1000	436
	Series LGG	446
	Series RG	452
	Series ST	458
	Series SCH	464
	Series GS	470
	Series GSI	478
	Series HM1000	482

ELECTRICAL

	Series GEN9100	494
	Series HEM1000	498

2	ROTARY GRIPPERS	508 - 517
	ROTARY GRIPPERS	
	PNEUMATIC	
	Series DGK	510
	Series DGP400	514
3	SWIVEL AND ROTARY MODULES	520 - 693
	ROTARY CYLINDERS	
	PNEUMATIC	
	Series PRN	522
	Series SH	544
	FLAT SWIVEL UNITS	
	PNEUMATIC	
	Series MSF	552
	Series SF-C	560
	ELECTRICAL	
	Series DES	634
	ANGLE PIVOT UNITS	
	PNEUMATIC	
	Series SWM1000	648
	Series SW	658
	SWIVEL JAWS	
	PNEUMATIC	
	Series SB	674
	Series SBZ	682
4	LINEAR MODULES	694 - 761
	LINEAR CYLINDERS	
	PNEUMATIC	
	Series SHX	696
	Series LI	702
	LINEAR RAIL SLIDES	
	PNEUMATIC	
	Series LS	728
	Series LSF	738
	Series LSX	744

	LIFTING CYLINDERS	
	PNEUMATIC	
	Series HZ	758
5	CUTTING TONGS	762 - 781
	PNEUMATIC	
	Series ZK1000	764
	Series ZK	776
6	SEPARATORS	782 - 813
	PNEUMATIC	
	Series VEG	784
	Series VE	796
	ELECTRICAL	
	Series VEE9200	810
7	BALL JOINTS	814 - 815
	Series KG	814
8	SENSORS AND HOLDERS	816 - 825
	Magnetic Field Sensors	818
	Inductive Proximity Switches	820
	Sensor Cables	822
9	ACCESSORIES	826 - 839
	Fittings	828
	Valves	830
	Jaw Accessories	832
	Jaw Extensions	836
	Rotary Distributors	838
	Busbox	839

GRIPPERS

THE SERIES AT A GLANCE

1

		Gripping force [N]	Stroke per jaw [mm]	Number of installation sizes
PRODUCTS				
2-jaw parallel gripper, pneumatic Page 12				
MGP800 series		6 400	1-12	●●●●●●●●
GP series		4 5250	3-13	●●●●●●
GP400 series		85 19275	3 30	●●●●●●●●
GP200 series		160 4500	6 40	●●●●
GPP5000 series		140 13550	2,5-30	●●●●●●●●
2-jaw parallel gripper, electric Page 118				
GEP9000 series		11-50	2-4	●●
GEP1400 series		140-350	2-6	●●
GEP5000 series		540 1900	6-10	●●●
2-jaw parallel gripper with long stroke, pneumatic Page 148				
MGH8000 series		60 910	10 100	●●●●
GH6000 series		130 3400	40 200	●●●●●●
GH7000 series		8500	65-100	●
2-jaw parallel gripper with long stroke, electric Page 218				
GEH6000 series		~50 2000	0 80	●●
GEH8000 series		~200 3200	0 60	●
3-jaw concentric gripper, pneumatic Page 234				
MGD800 series		30 1420	1-12	●●●●●●●●
GD series		24 530	11-33	●●●
GD300 series		200 34700	3 30	●●●●●●●●
GPD5000 series		310 32400	2,5-30	●●●●●●●●
3-jaw concentric gripper, electric Page 324				
GED1300 series		140-350	2-6	●●
GED5000 series		540 1900	6-10	●●●
3-jaw concentric gripper with long stroke, pneumatic Page 346				
GD500 series		1300-2480	30-60	●●●
		Gripping force [N]	Stroke per jaw [°]	Number of installation sizes
2-jaw angular gripper, pneumatic Page 356				
GZ1000 series		62-315	8-11	●●●
MGW800 series		5-325	37,5	●●●●●●●●
GG1000 series		2910 29110	20	●●●●
2-jaw radial gripper, pneumatic Page 396				
GK series		70 4250	0 90	●●●●●●
GG4000 series		430 4000	0 90	●●●●●●

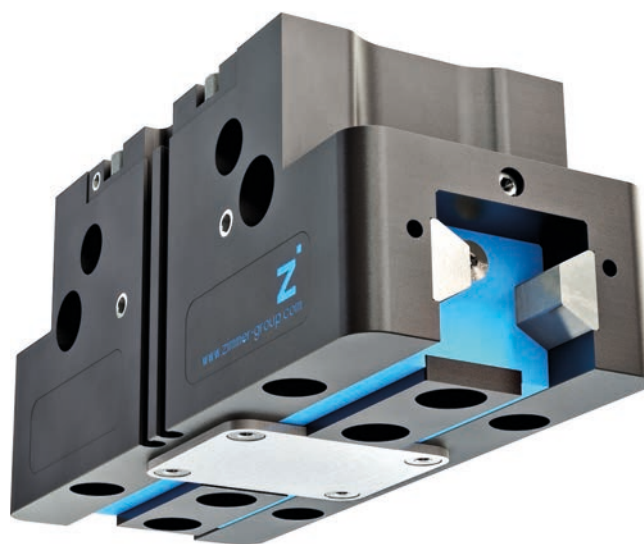
AP class	Position sensing			Options					Safety characteristics			Maintenance
	Magnetic field sensor	Inductive sensor	Integrated sensing	Temperature-resistant	High-strength S	Corrosion resistance	Sealing air	IP class	Closing spring C	Opening spring O	Mechanical self limitation	Maintenance-free cycles up to
2	•							40	•			10 million
2		•						30	•	•		10 million
3	•	•			•		•	40	•			10 million
3	•	•			•		•	40	•			10 million
5	•	•		•	•	•	•	64/67*	•	•		30 million
2			•				•	40	•	•		30 million
3								40				5 million
5			•			•	•	64			•	30 million
2	•	•						64				10 million
3	•	•						40				10 million
3		•						64				10 million
3			•				•	40			•	10 million
3			•					54			•	10 million
2	•							40	•			10 million
2		•						40				10 million
3	•	•			•		•	40	•	•		10 million
5	•	•		•	•	•	•	64/67*	•	•		30 million
3								40				5 million
5			•			•	•	64				30 million
3		•						40				10 million
1		•						30				10 million
2	•							30	•			10 million
3	•	•					•	40	•			10 million
2	•	•						20	•			10 million
3	•	•			•		•	64	•			10 million

2-JAW PARALLEL GRIPPERS










OVERVIEW OF SERIES

1

Overview of Series / 2-Jaw Parallel Grippers



► PNEUMATIC

	Series MGP800	14
	Series GP	32
	Series GP400	46
	Series GP200	66
	Series GPP5000	76
	Series GP400X	114
	Series GP100	115
	Series GP1800	116
	Series GP1200	117

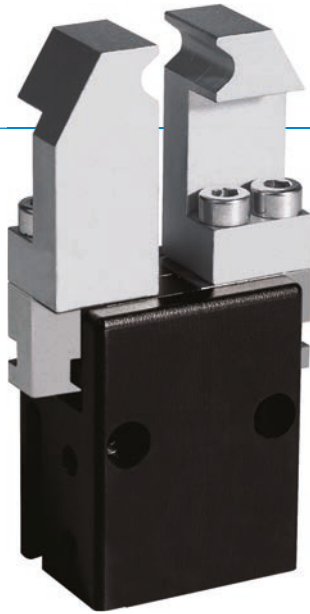
2-JAW PARALLEL GRIPPERS

SERIES MGP800

1

Series MGP800 / 2-Jaw Parallel Grippers / pneumatic / Grippers

▶ PRODUCT ADVANTAGES



“The powerful”

- ▶ **Over 40% more powerful than the benchmark**
Optimisation of weight and force reduces your application costs since all components can have a smaller scale
- ▶ **Gripper jaws up to 50% longer than the benchmark**
The highest force and torque measurement enables flexible use for maximum dynamics
- ▶ **Failure-free continuous operation**
Our uncompromising “Made in Germany” quality guarantees up to 10 million maintenance-free gripping cycles

▶ THE BEST PRODUCT FOR YOUR APPLICATION



- ▶ **Our products love the challenge!**
Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities:
Find the best product for your specific use:
www.zimmer-group.com

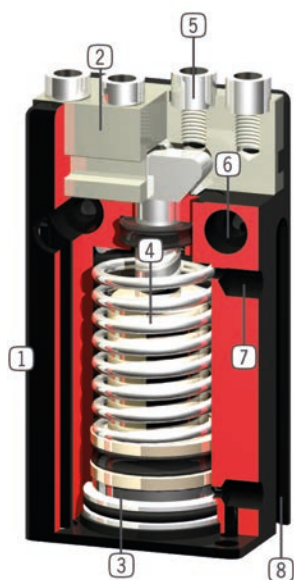
HOW TO ORDER CORRECTLY

- ▶ The product order numbers are arranged according to this diagram:

Order no.	MGP803N	<input type="checkbox"/>		
For external gripping, self-locking, spring closing		C		



► BENEFITS IN DETAIL



- ① **Robust, lightweight housing**
- hard coated aluminium alloy
- ② **Gripper jaw**
- individual gripper finger mounting
- ③ **Position sensing**
- permanent magnet for direct monitoring of piston movement
- ④ **Integrated gripping force safety device**
- spring integrated into cylinder as energy storage (from size 803 upwards)
- ⑤ **Removable centering sleeves**
- quick and economical positioning of the gripper fingers
- ⑥ **Mounting and positioning**
- mounting possible from several sides for versatile positioning
- ⑦ **Energy supply**
- possible from several sides
- ⑧ **Sensing slot**
- mounting and positioning of magnetic field sensors

► SERIES CHARACTERISTICS



Number of installation sizes	8
Stroke per jaw	1 mm - 12 mm
Gripping force	8 N - 400 N
Weight	0,008 kg - 0,46 kg
AP class	2



10 million maintenance-free cycles (max.)



Spring closing C



IP40



Magnetic field sensor

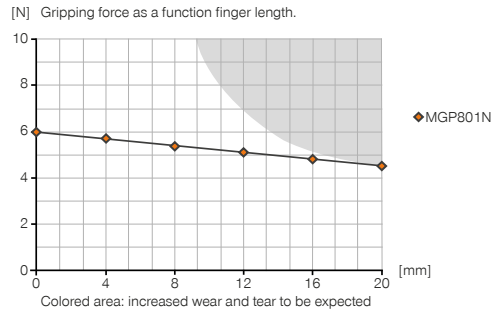
2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE MGP801

▶ PRODUCT SPECIFICATIONS

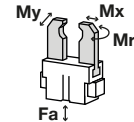


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	1
Mx [Nm]	2
My [Nm]	1
Fa [N]	54

▶ INCLUDED IN DELIVERY



Centering Disc

DST80100

▶ RECOMMENDED ACCESSORIES



Angled Fittings - Barb Style Connection

WVM3



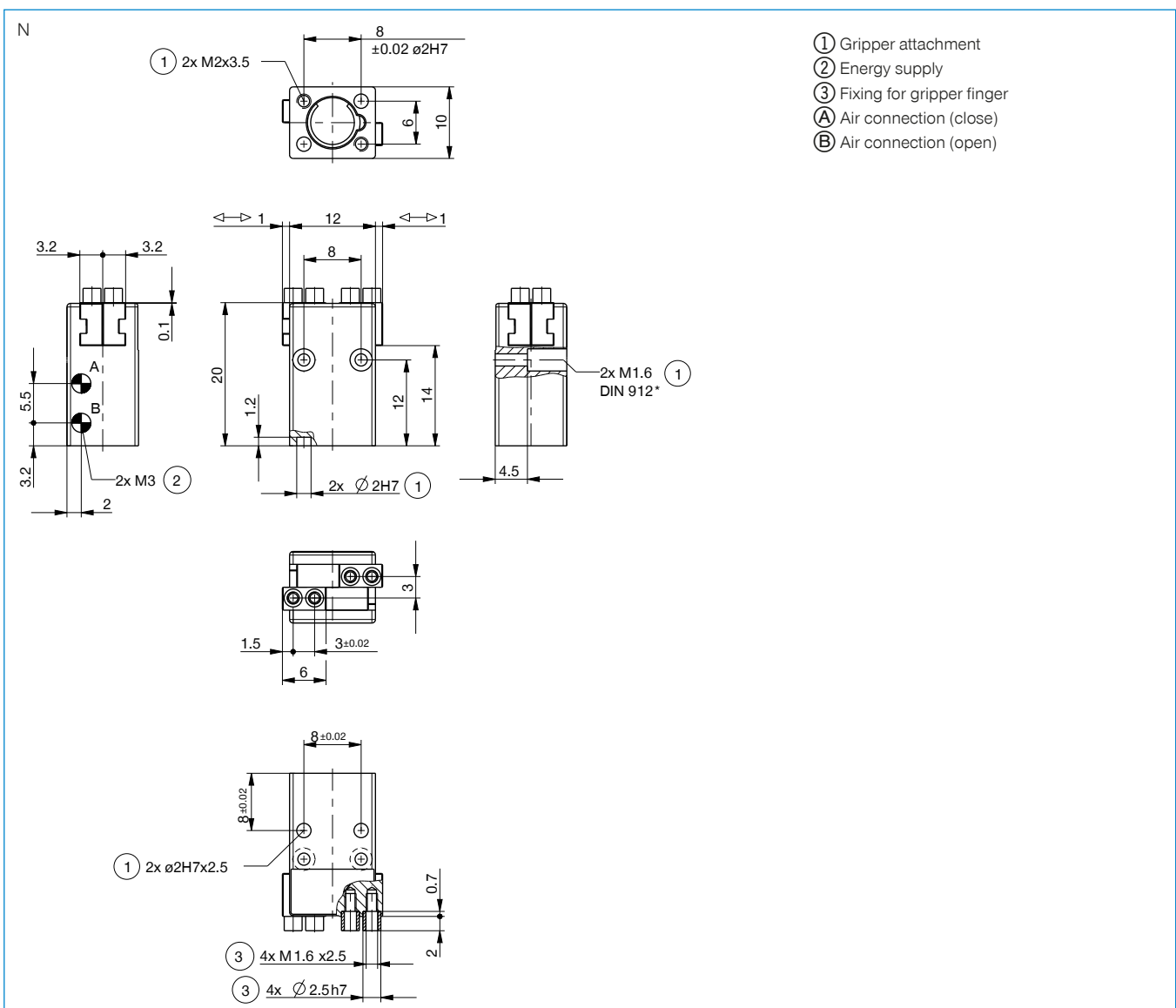
Straight Fittings - Barb Style Connection

GVM3

Order no.	MGP801N
Stroke per jaw [mm]	1
Gripping force in closing [N]	6
Gripping force in opening [N]	8
Gripping force secured by spring min. [N]	
Closing time [s]	0.01
Opening time [s]	0.01
Repetition accuracy +/- [mm]	0.025
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	0.09
Weight [kg]	0.008

► Technical Data*

*All data measured at 6 bar



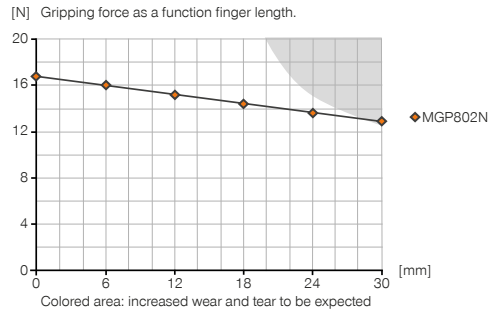
2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE MGP802

▶ PRODUCT SPECIFICATIONS

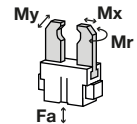


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	1
Mx [Nm]	3
My [Nm]	2
Fa [N]	90

▶ INCLUDED IN DELIVERY



Centering Disc

DST80200

▶ RECOMMENDED ACCESSORIES



Angled Fittings - Barb Style Connection

WVM3

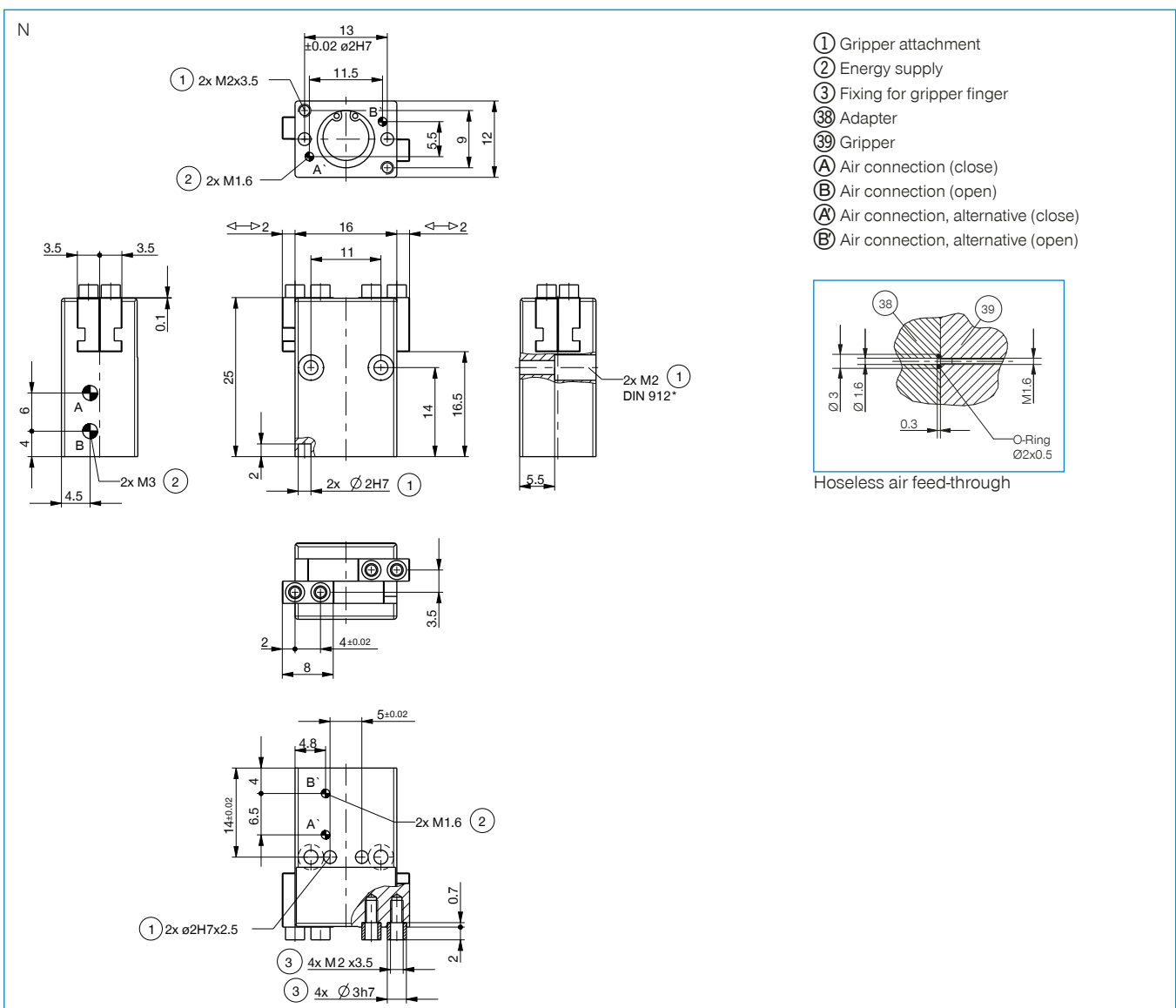


Straight Fittings - Barb Style Connection

GVM3

Order no.	MGP802N
Stroke per jaw [mm]	2
Gripping force in closing [N]	16
Gripping force in opening [N]	19
Gripping force secured by spring min. [N]	-
Closing time [s]	0.01
Opening time [s]	0.01
Repetition accuracy +/- [mm]	0.025
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	0.26
Weight [kg]	0.016

*All data measured at 6 bar



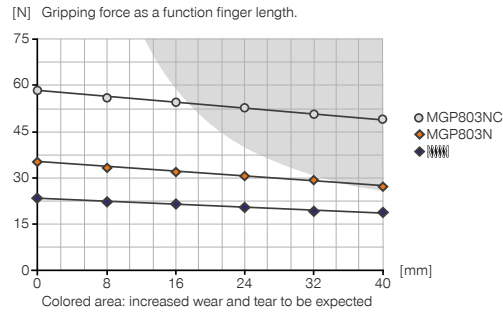
2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE MGP803

1 PRODUCT SPECIFICATIONS

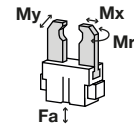


Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	2
Mx [Nm]	5
My [Nm]	2
Fa [N]	140

INCLUDED IN DELIVERY



Centering Disc

DST80320

RECOMMENDED ACCESSORIES



Magnetic field sensor
Angled Cable 0,3 m -
Connector M8
MFS103SKHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8
MFS204SKHC



2-Position-Sensor Cable
0,3 m - Connector M8
MFSP2SKHC



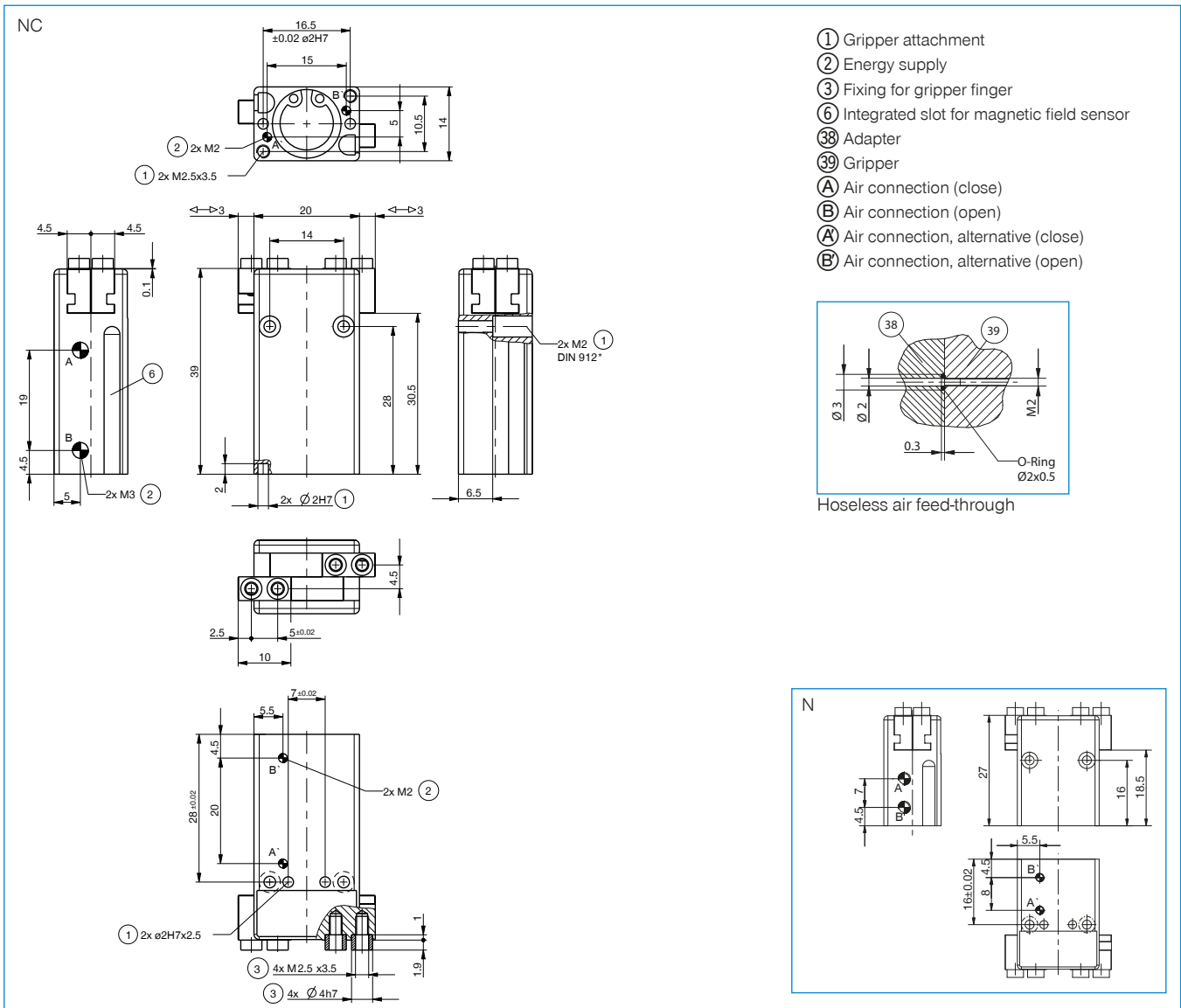
Angled Fittings - Barb
Style Connection
WVM3



Straight Fittings - Barb
Style Connection
GVM3

Order no.	► Technical Data*	
	MGP803N	MGP803NC
Stroke per jaw [mm]	3	3
Gripping force in closing [N]	35	55
Gripping force in opening [N]	40	-
Gripping force secured by spring min. [N]	-	20
Closing time [s]	0.01	0.01
Opening time [s]	0.01	0.03
Repetition accuracy +/- [mm]	0.025	0.025
Operating pressure min. [bar]	3	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm ³]	0.8	1.1
Weight [kg]	0.025	0.035

*All data measured at 6 bar



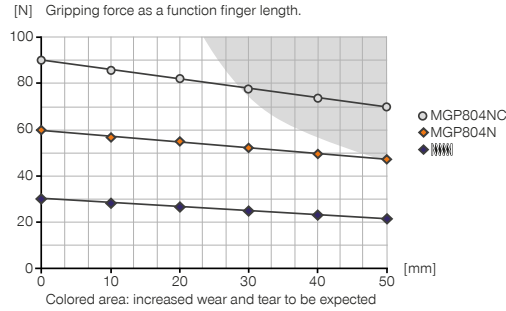
2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE MGP804

▶ PRODUCT SPECIFICATIONS

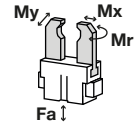


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	3
Mx [Nm]	7
My [Nm]	3
Fa [N]	230

▶ INCLUDED IN DELIVERY



Centering Disc

DST40400

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Angled Cable 0,3 m -
Connector M8
MFS103SKHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8
MFS204SKHC



2-Position-Sensor Cable
0,3 m - Connector M8
MFSP2SKHC



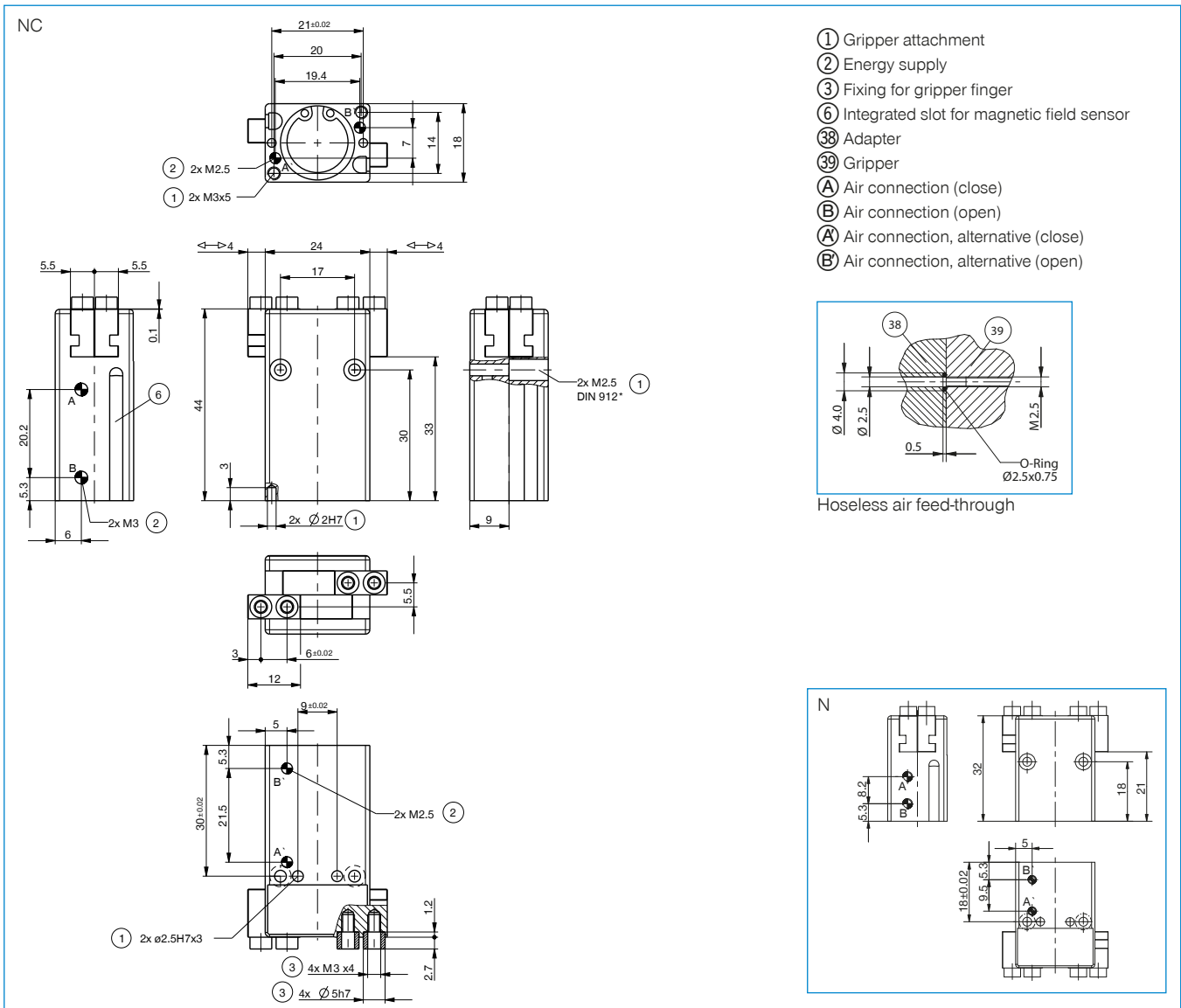
Angled Fittings - Barb
Style Connection
WVM3



Straight Fittings - Barb
Style Connection
GVM3

Order no.	► Technical Data*	
	MGP804N	MGP804NC
Stroke per jaw [mm]	4	4
Gripping force in closing [N]	60	90
Gripping force in opening [N]	65	-
Gripping force secured by spring min. [N]	-	30
Closing time [s]	0.02	0.02
Opening time [s]	0.02	0.04
Repetition accuracy +/- [mm]	0.025	0.025
Operating pressure min. [bar]	3	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm ³]	1.9	2.5
Weight [kg]	0.05	0.07

*All data measured at 6 bar



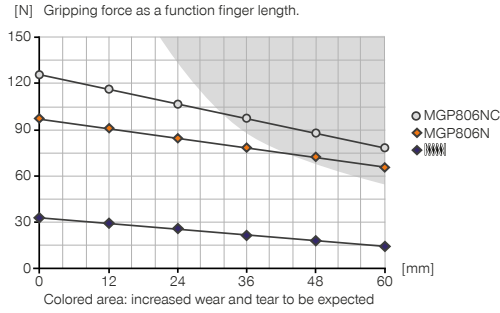
2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE MGP806

1 PRODUCT SPECIFICATIONS

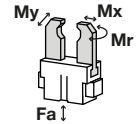


Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	4
Mx [Nm]	14
My [Nm]	5
Fa [N]	330

INCLUDED IN DELIVERY



Centering Disc

DST40400

RECOMMENDED ACCESSORIES



Magnetic field sensor
Angled Cable 0,3 m -
Connector M8
MFS103SKHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8
MFS204SKHC



2-Position-Sensor Cable
0,3 m - Connector M8
MFSP2SKHC



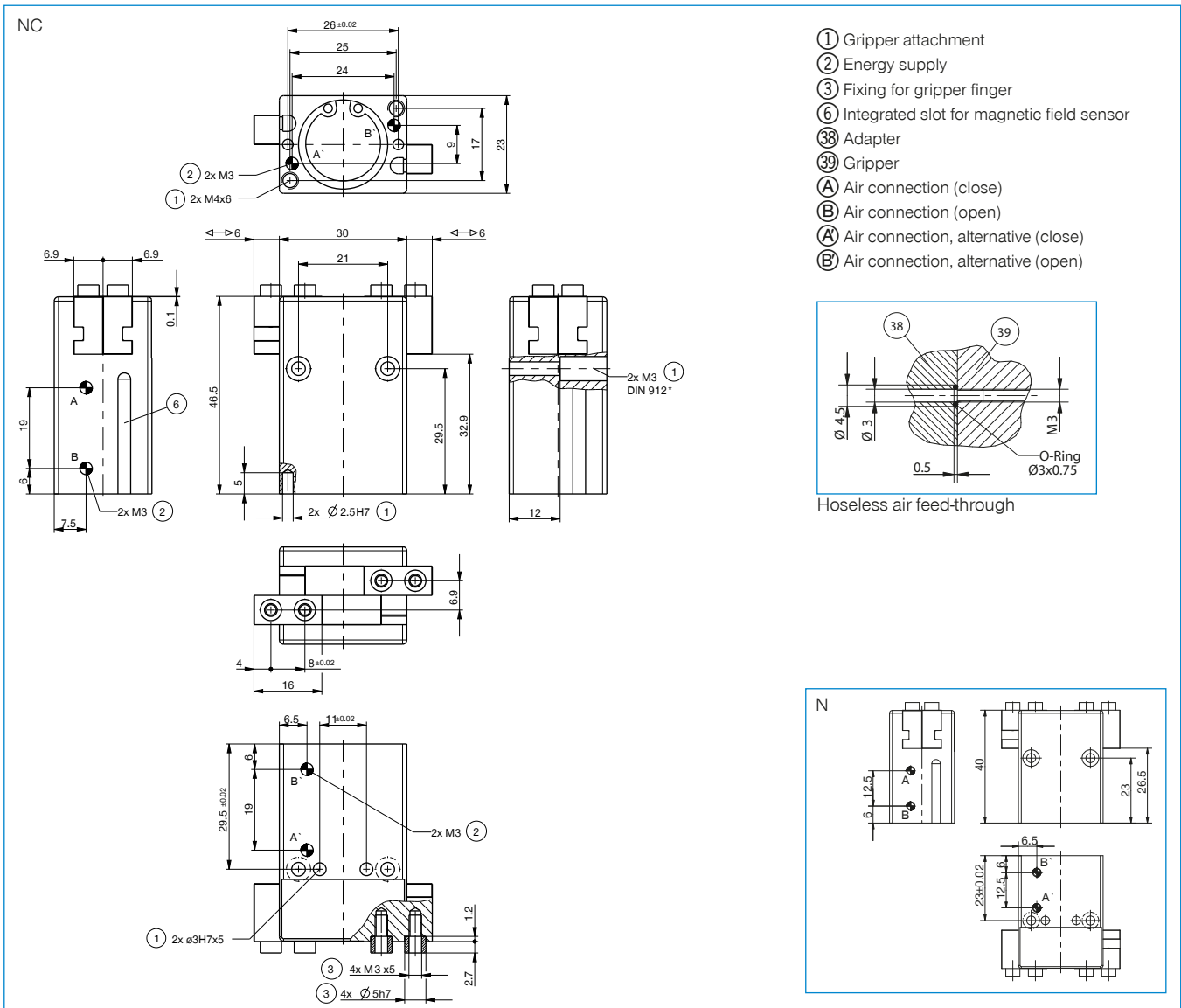
Angled Fittings - Barb
Style Connection
WVM3



Straight Fittings - Barb
Style Connection
GVM3

Order no.	► Technical Data*	
	MGP806N	MGP806NC
Stroke per jaw [mm]	6	6
Gripping force in closing [N]	100	140
Gripping force in opening [N]	120	
Gripping force secured by spring min. [N]		40
Closing time [s]	0.02	0.02
Opening time [s]	0.02	0.04
Repetition accuracy +/- [mm]	0.025	0.025
Operating pressure min. [bar]	3	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm ³]	4.2	5.4
Weight [kg]	0.1	0.11

*All data measured at 6 bar



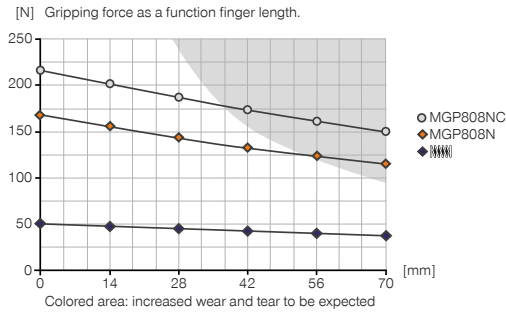
2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE MGP808

1 PRODUCT SPECIFICATIONS

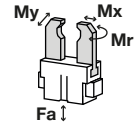


Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	6
Mx [Nm]	21
My [Nm]	7
Fa [N]	450

INCLUDED IN DELIVERY



Centering Disc

DST40600

RECOMMENDED ACCESSORIES



Magnetic field sensor
Angled Cable 0,3 m -
Connector M8
MFS103SKHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8
MFS204SKHC



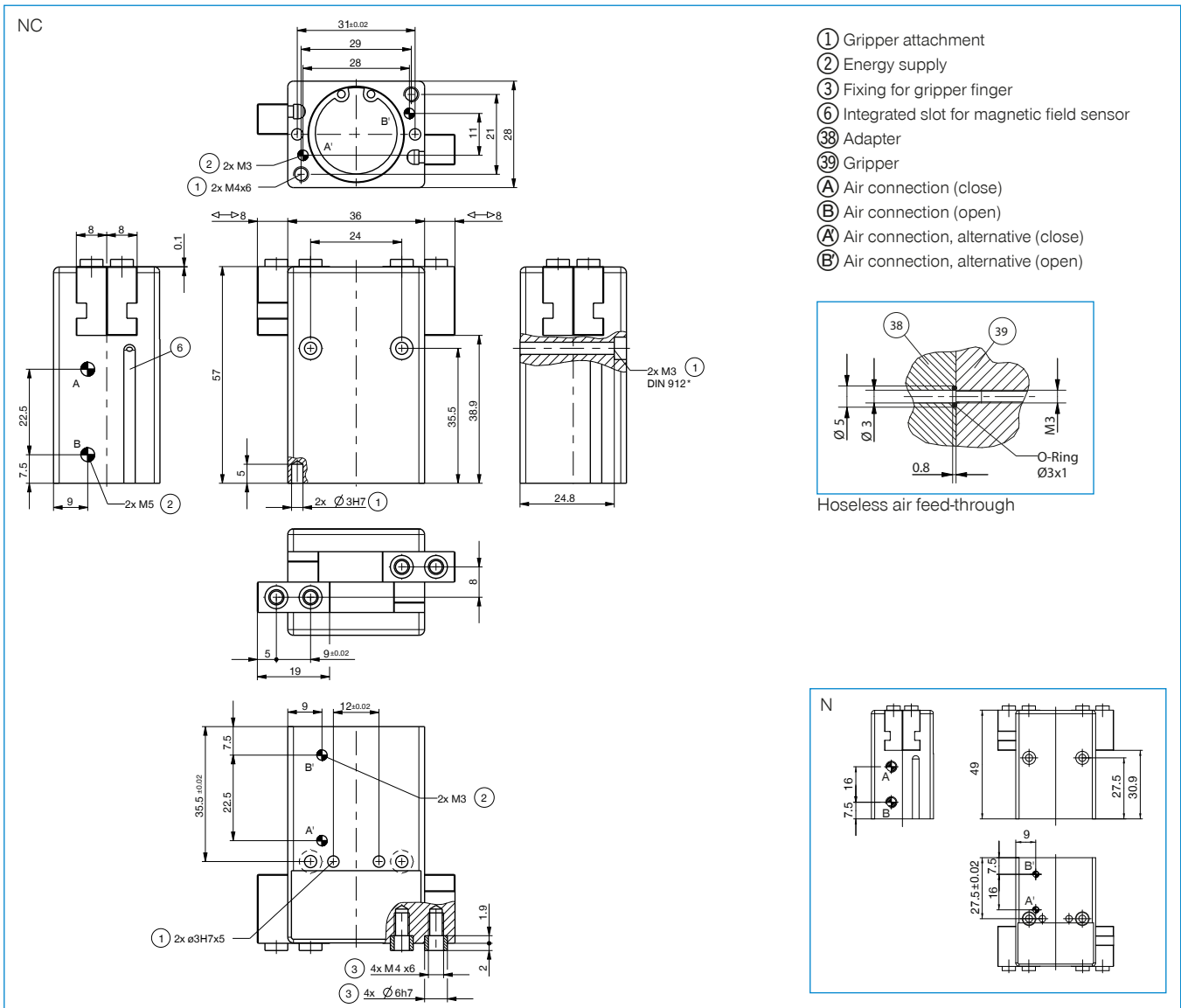
2-Position-Sensor Cable
0,3 m - Connector M8
MFSP2SKHC



Straight Fittings - Quick
Connect Style
GVM5

Order no.	► Technical Data*	
	MGP808N	MGP808NC
Stroke per jaw [mm]	8	8
Gripping force in closing [N]	170	220
Gripping force in opening [N]	190	
Gripping force secured by spring min. [N]		50
Closing time [s]	0.04	0.04
Opening time [s]	0.04	0.06
Repetition accuracy +/- [mm]	0.02	0.02
Operating pressure min. [bar]	3	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm ³]	8.4	11.3
Weight [kg]	0.16	0.18

*All data measured at 6 bar



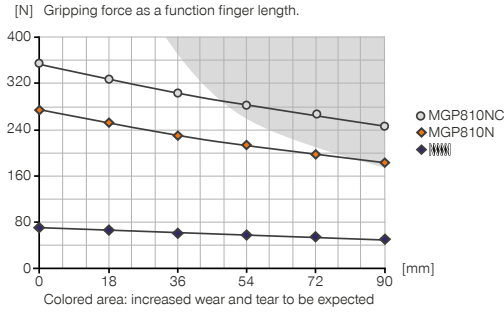
2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE MGP810

1 PRODUCT SPECIFICATIONS

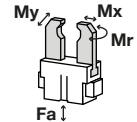


Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	9
Mx [Nm]	32
My [Nm]	12
Fa [N]	590

INCLUDED IN DELIVERY



Centering Disc

DST07540

RECOMMENDED ACCESSORIES



Magnetic field sensor
Angled Cable 0,3 m -
Connector M8
MFS103SKHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8
MFS204SKHC



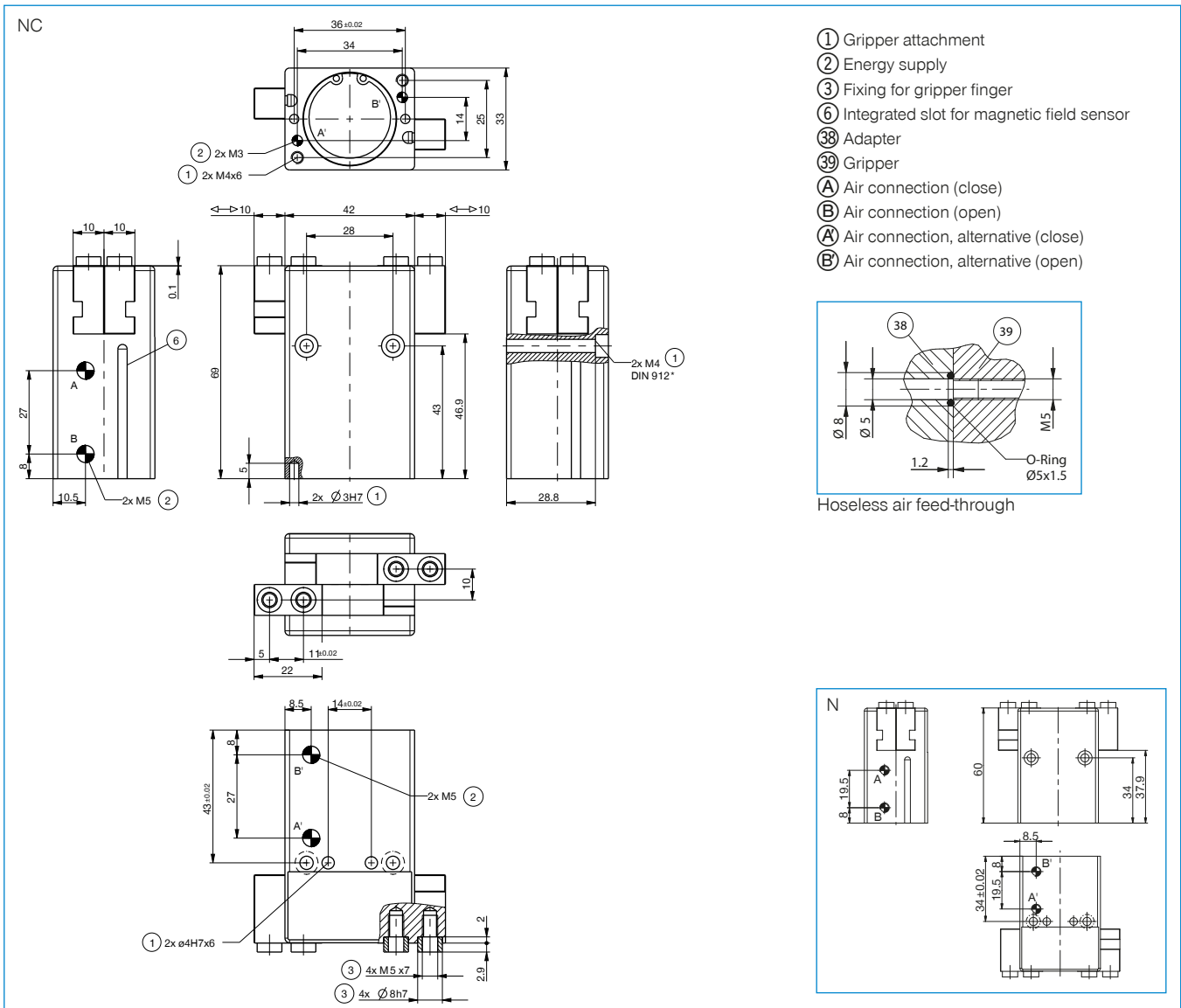
2-Position-Sensor Cable
0,3 m - Connector M8
MFSP2SKHC



Straight Fittings - Quick
Connect Style
GVM5

Order no.	Technical Data*	
	MGP810N	MGP810NC
Stroke per jaw [mm]	10	10
Gripping force in closing [N]	270	350
Gripping force in opening [N]	310	
Gripping force secured by spring min. [N]		80
Closing time [s]	0.04	0.04
Opening time [s]	0.04	0.06
Repetition accuracy +/- [mm]	0.02	0.02
Operating pressure min. [bar]	3	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm³]	15.2	20.5
Weight [kg]	0.28	0.32

*All data measured at 6 bar



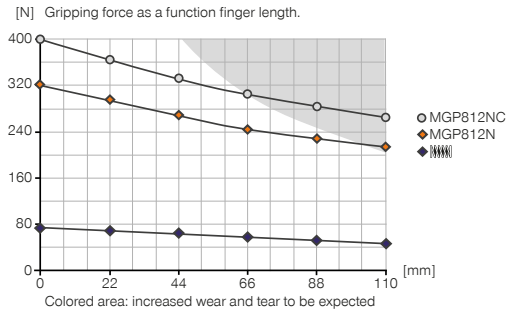
2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE MGP812

1 PRODUCT SPECIFICATIONS

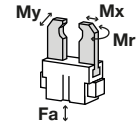


Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	11
Mx [Nm]	42
My [Nm]	16
Fa [N]	790

INCLUDED IN DELIVERY



Centering Disc

DST07540

RECOMMENDED ACCESSORIES



Magnetic field sensor
Angled Cable 0,3 m -
Connector M8
MFS103SKHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8
MFS204SKHC



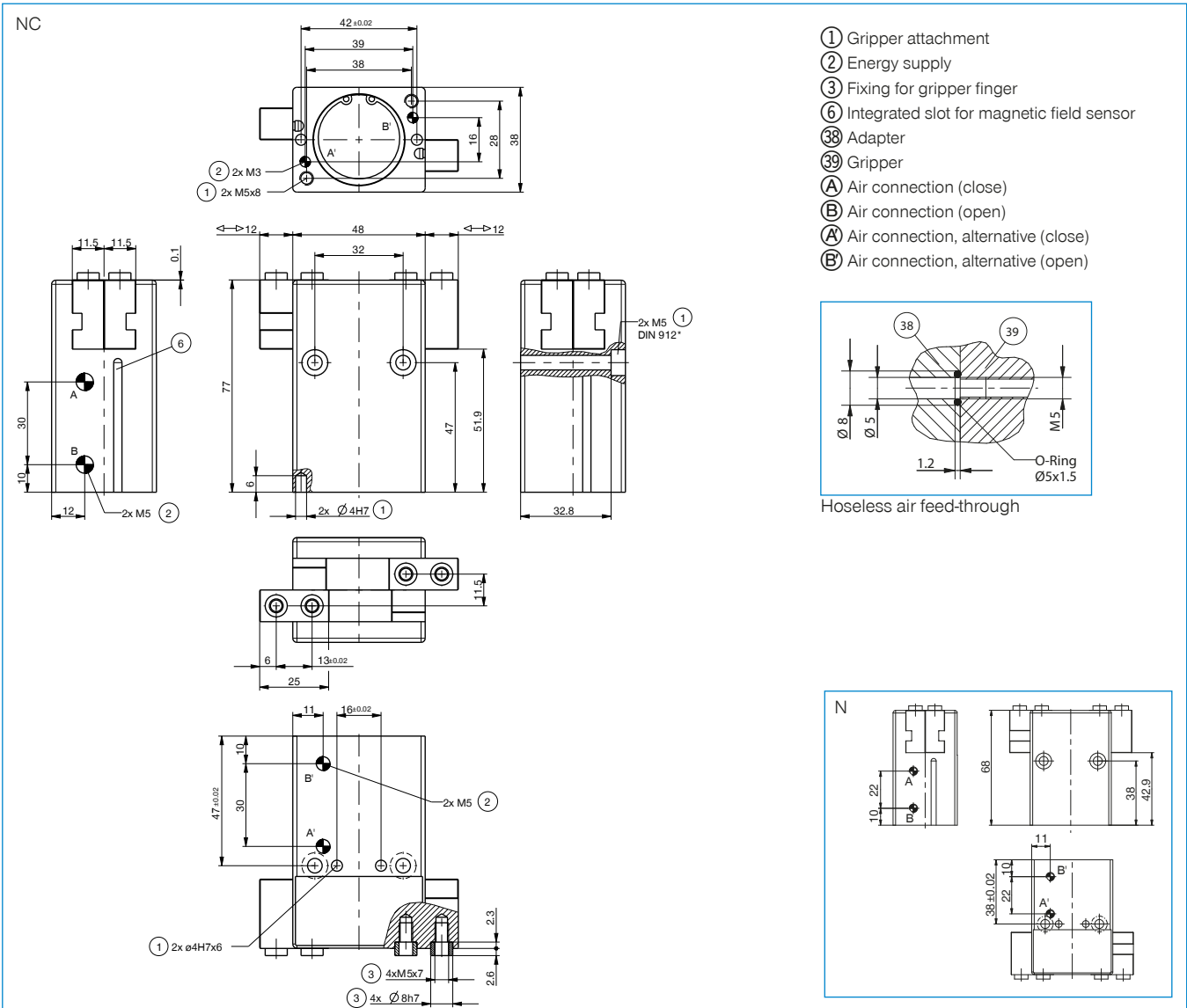
2-Position-Sensor Cable
0,3 m - Connector M8
MFSP2SKHC



Straight Fittings - Quick
Connect Style
GVM5

Order no.	► Technical Data*	
	MGP812N	MGP812NC
Stroke per jaw [mm]	12	12
Gripping force in closing [N]	320	400
Gripping force in opening [N]	350	
Gripping force secured by spring min. [N]		80
Closing time [s]	0.06	0.06
Opening time [s]	0.06	0.08
Repetition accuracy +/- [mm]	0.02	0.02
Operating pressure min. [bar]	3	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm ³]	22.3	28.1
Weight [kg]	0.41	0.46

*All data measured at 6 bar



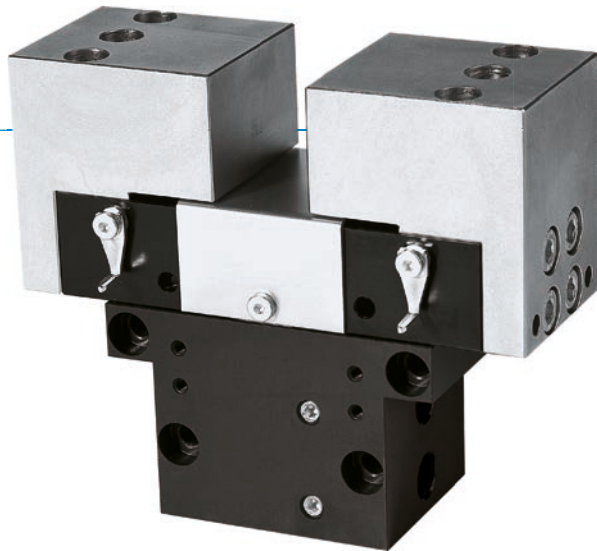
2-JAW PARALLEL GRIPPERS

SERIES GP

1

Series GP / 2-Jaw Parallel Grippers / pneumatic / Grippers

▶ PRODUCT ADVANTAGES



“The enduring”

▶ Proven technology

We have more than 20 years of proven reliability, which ensures uninterrupted production for you

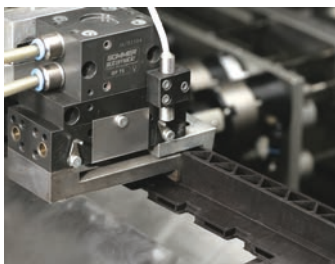
▶ Very short cycle times

Low-friction circular guides enable very short cycle times and, therefore, high component output for your machine

▶ Failure-free continuous operation

Our uncompromising “Made in Germany” quality guarantees up to 10 million maintenance-free gripping cycles

▶ THE BEST PRODUCT FOR YOUR APPLICATION



▶ Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities:

Find the best product for your specific use:

www.zimmer-group.com

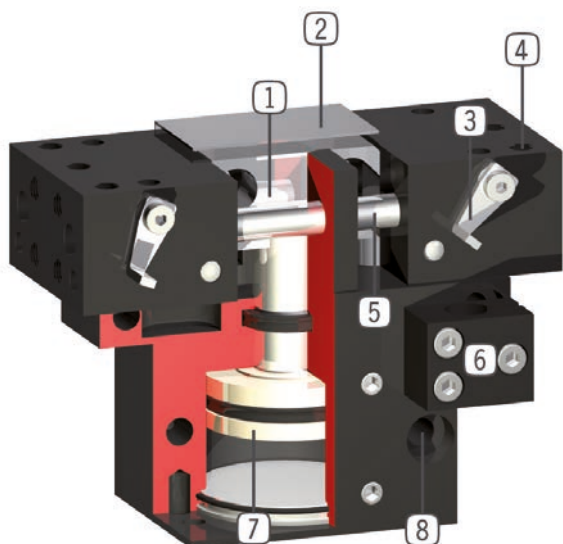
HOW TO ORDER CORRECTLY

▶ The product order numbers are arranged according to this diagram:

Order no.	GP45	<input type="checkbox"/>	-B	
For external gripping, self-locking, spring closing		S		
Without intergrated spring				-99



► BENEFITS IN DETAIL



- ① **Wedge hook mechanism**
 - synchronized the movement of the gripper jaws
 - high force transfer
- ② **Cover plate**
 - to protect the guide and mechanics (from GP45)
- ③ **Adjustable switch cam**
 - for position sensing
- ④ **Gripper jaw**
 - individual gripper finger mounting
- ⑤ **Roller slide**
 - for low wear movement sequence
- ⑥ **Mounting block**
 - mounting for inductive proximity switch
- ⑦ **Drive**
 - double-acting pneumatic cylinder
- ⑧ **Mounting and positioning**
 - mounting possible from several sides for versatile positioning

► SERIES CHARACTERISTICS



Number of installation sizes	6
Stroke per jaw	3 mm - 13 mm
Gripping force	8,4 N - 5250 N
Weight	0,033 kg - 1,4 kg
AP class	2



10 million maintenance-free cycles (max.)



Spring closing C



Inductive sensor



IP30

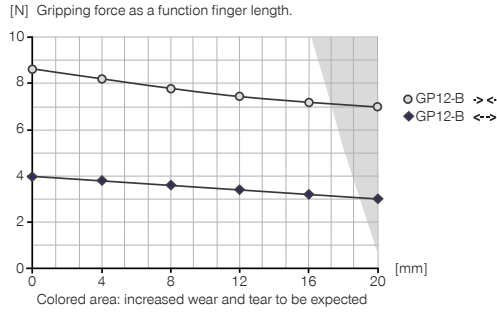
2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GP12

▶ PRODUCT SPECIFICATIONS

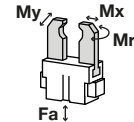


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	0.15
Mx [Nm]	0.15
My [Nm]	0.15
Fa [N]	15

▶ RECOMMENDED ACCESSORIES



Angled Fittings - Barb Style Connection
WVM3



Straight Fittings - Barb Style Connection
GVM3



Centering Disc
ZE10H7X6



Mounting block
KB3M



Inductive proximity switch - Cable 5 m
NJ3-E2



Inductive Proximity Switch - Cable 0,3 m - Connector M8
NJ3-E2SK



Plug-in connector Angled Cable 5m - Socket M8 (female)
KAW500



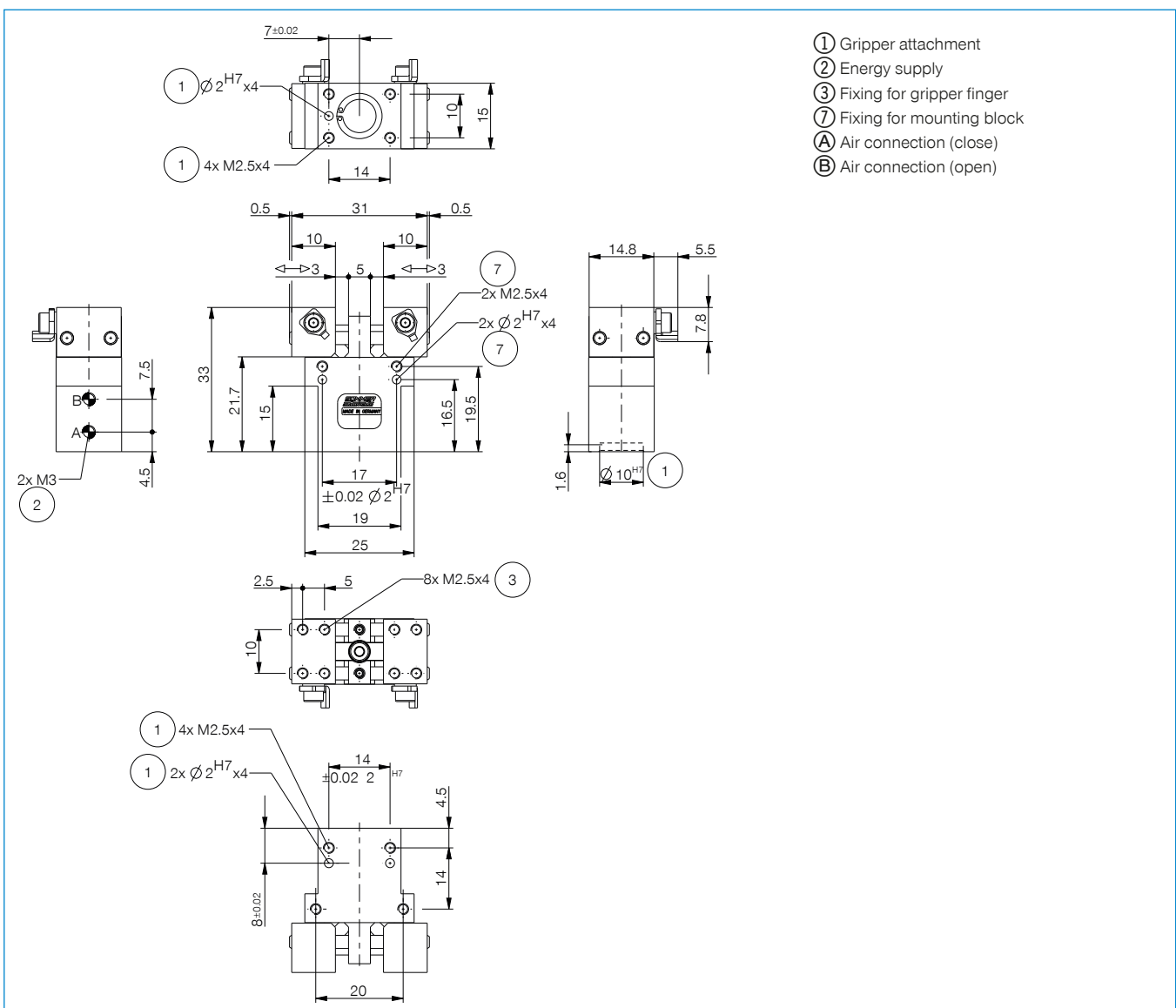
Plug-in connector Straight Cable 5m - Socket M8 (female)
KAG500



Universal Jaw Aluminium
UB12

Order no.	GP12-B
Stroke per jaw [mm]	3
Gripping force in closing [N]	8.4
Gripping force in opening [N]	4
Gripping force secured by spring min. [N]	
Closing time [s]	0.02
Opening time [s]	0.02
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm³]	0.4
Weight [kg]	0.033

*All data measured at 6 bar



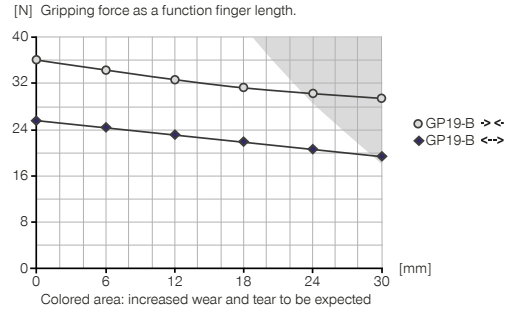
2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GP19

▶ PRODUCT SPECIFICATIONS

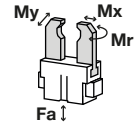


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	0.8
Mx [Nm]	0.8
My [Nm]	0.8
Fa [N]	40

▶ RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style

GVM5



Centering Disc

ZE12H7X4



Mounting block

KB3



Inductive proximity switch - Cable 5 m

NJ3-E2



Inductive Proximity Switch Cable 0,3 m - Connector M8
NJ3-E2SK



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500

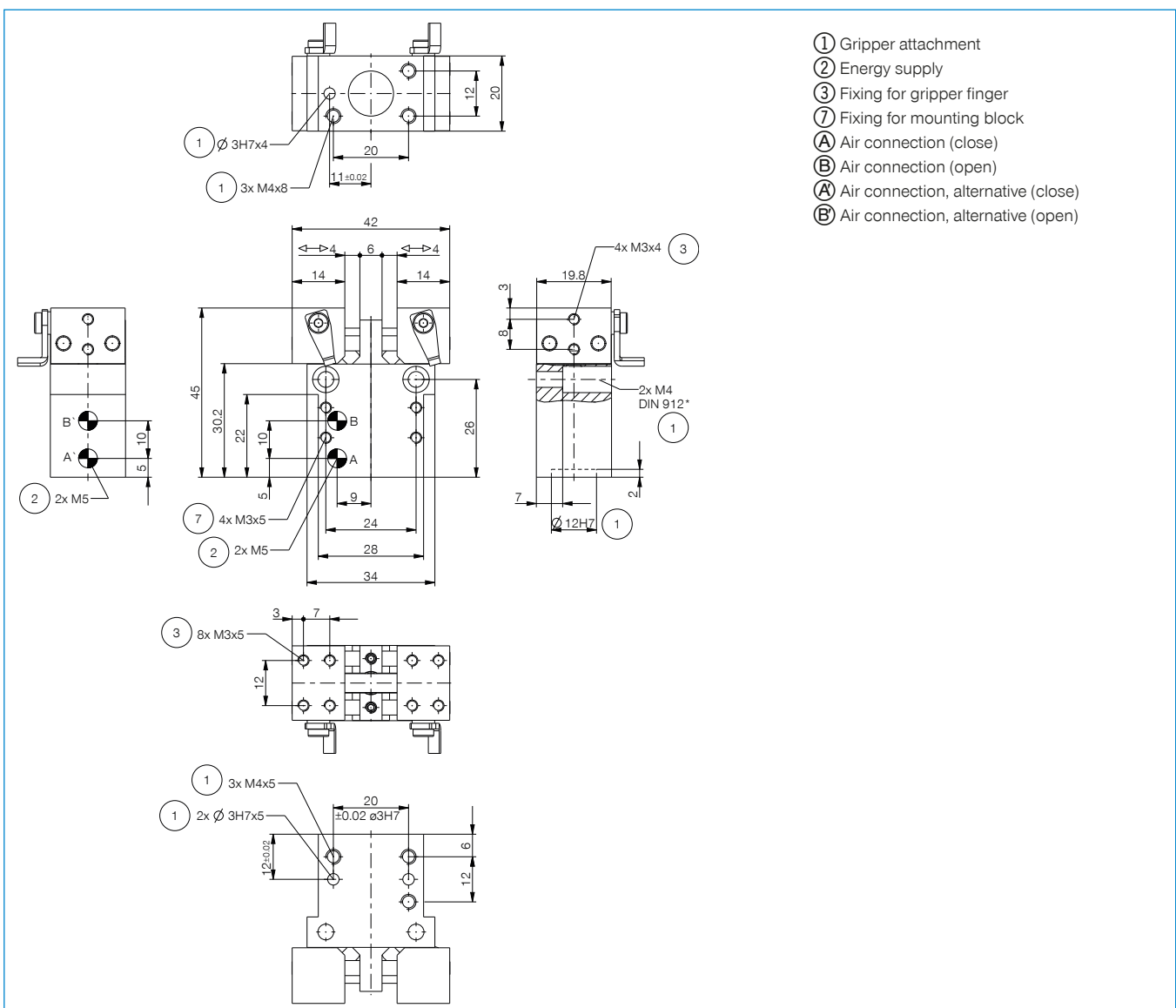


Universal Jaw Aluminium

UB19

Order no.	GP19-B
Stroke per jaw [mm]	4
Gripping force in closing [N]	36
Gripping force in opening [N]	26
Gripping force secured by spring min. [N]	
Closing time [s]	0.02
Opening time [s]	0.02
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm³]	1
Weight [kg]	0.081

*All data measured at 6 bar



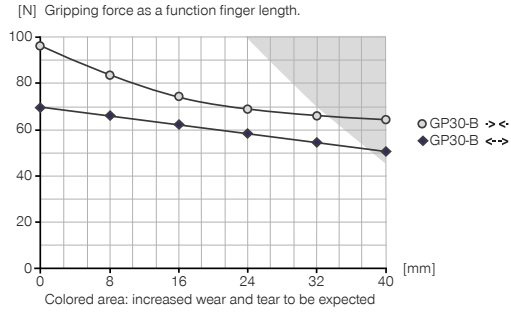
2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GP30

▶ PRODUCT SPECIFICATIONS

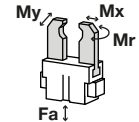


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	2
Mx [Nm]	2
My [Nm]	2
Fa [N]	80

▶ RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style

GVM5



Centering Disc

ZE15H7X4



Mounting block

KB5



Inductive proximity switch - Cable 5 m

NJ5-E2



Inductive Proximity Switch Cable 0,3 m - Connector M8

NJ5-E2SK



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500

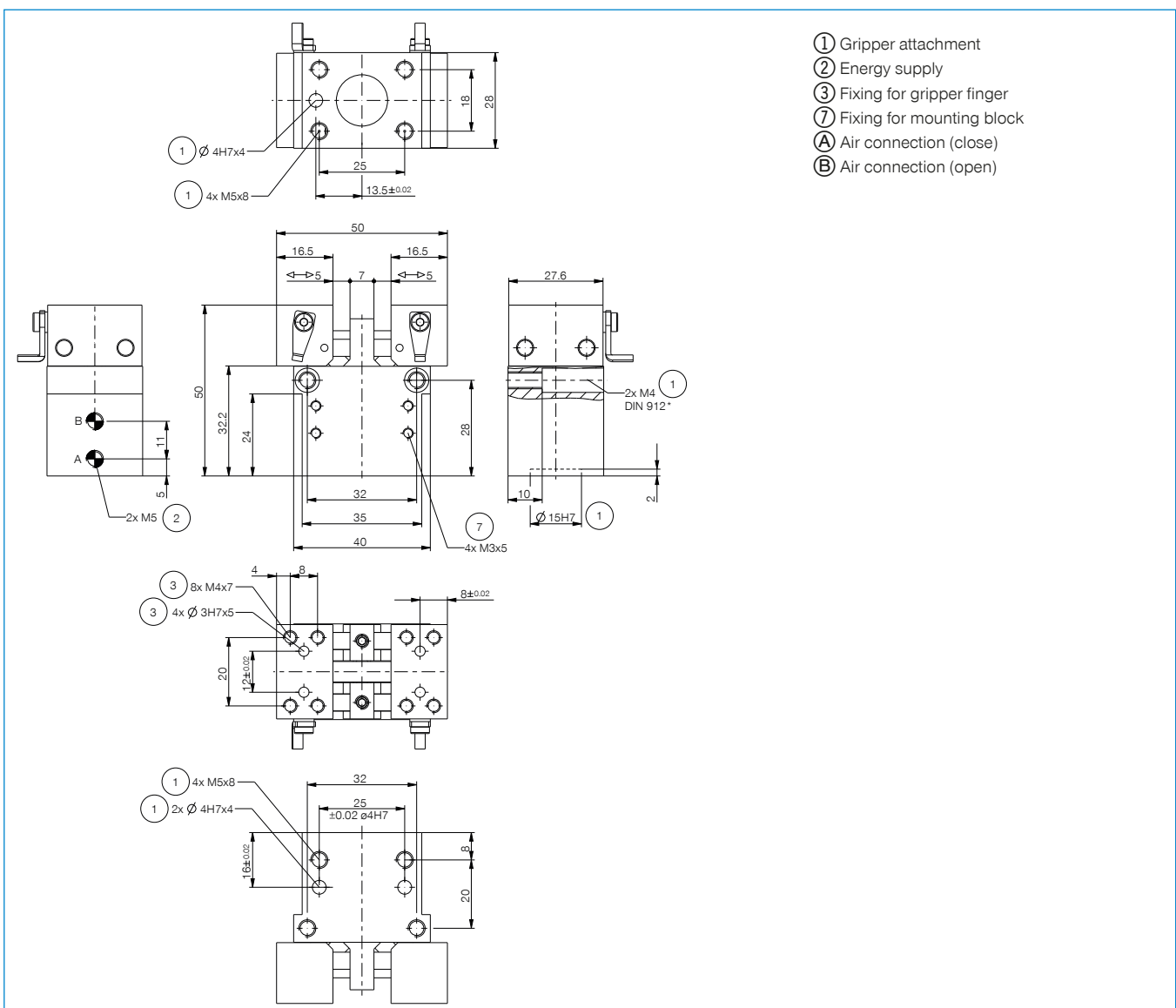


Universal Jaw Aluminium

UB30

Order no.	GP30-B
Stroke per jaw [mm]	5
Gripping force in closing [N]	94
Gripping force in opening [N]	76
Gripping force secured by spring min. [N]	
Closing time [s]	0.02
Opening time [s]	0.02
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm³]	3
Weight [kg]	0.15

*All data measured at 6 bar



- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑦ Fixing for mounting block
- A Air connection (close)
- B Air connection (open)

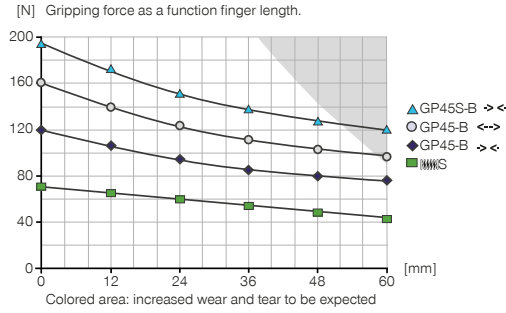
2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GP45

1 PRODUCT SPECIFICATIONS

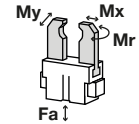


Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	4
Mx [Nm]	4
My [Nm]	4
Fa [N]	160

RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style
GVM5



Centering Disc
ZE20H7X4



Mounting block
KB6.5



Inductive proximity switch - Cable 5 m
NJ6.5-E2-01



Inductive proximity switch - Connector M8
NJ6.5-E2S



Plug-in connector Angled Cable 5m - Socket M8 (female)
KAW500



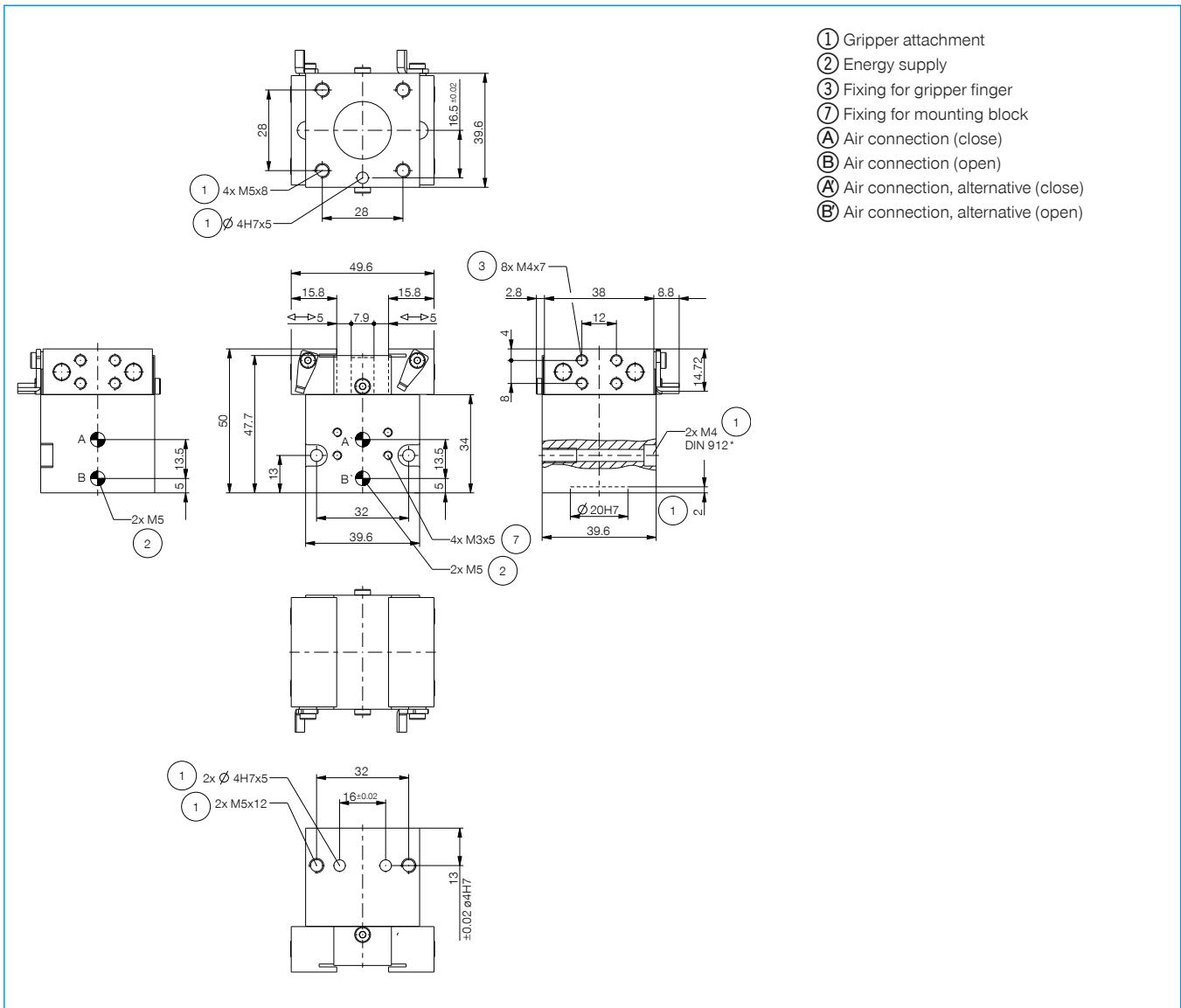
Plug-in connector Straight Cable 5m - Socket M8 (female)
KAG500



Universal Jaw Aluminium
UB45

Order no.	► Technical Data*	
	GP45-B	GP45S-B
Stroke per jaw [mm]	5	5
Gripping force in closing [N]	118	190
Gripping force in opening [N]	155	
Gripping force secured by spring min. [N]		75
Closing time [s]	0.03	0.04
Opening time [s]	0.03	0.04
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	5
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm³]	4	8
Weight [kg]	0.255	0.3

*All data measured at 6 bar



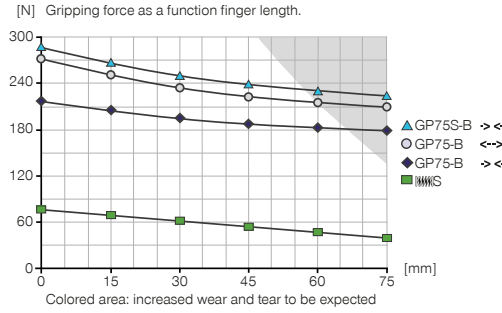
2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GP75

▶ PRODUCT SPECIFICATIONS

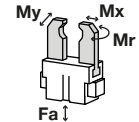


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	5
Mx [Nm]	5
My [Nm]	5
Fa [N]	180

▶ INCLUDED IN DELIVERY



Mounting block

KB8K

▶ RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style

GV1-8X6



Centering Disc

ZE20H7X4



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500

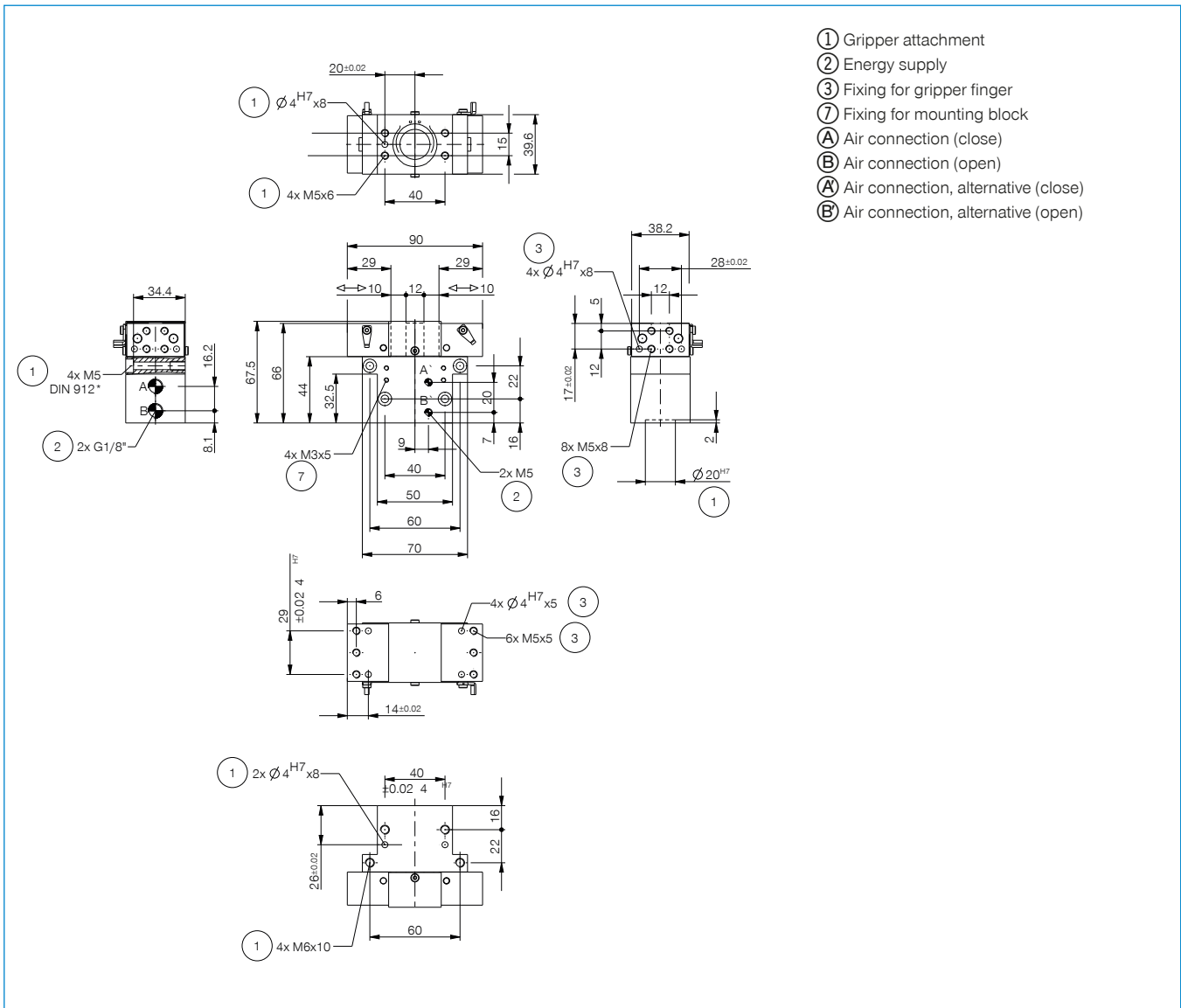


Universal Jaw Aluminium

UB75

Order no.	► Technical Data*	
	GP75-B	GP75S-B
Stroke per jaw [mm]	10	10
Gripping force in closing [N]	220	275
Gripping force in opening [N]	260	
Gripping force secured by spring min. [N]		63
Closing time [s]	0.03	0.04
Opening time [s]	0.03	0.04
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	5
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm ³]	13	19
Weight [kg]	0.45	0.5

*All data measured at 6 bar



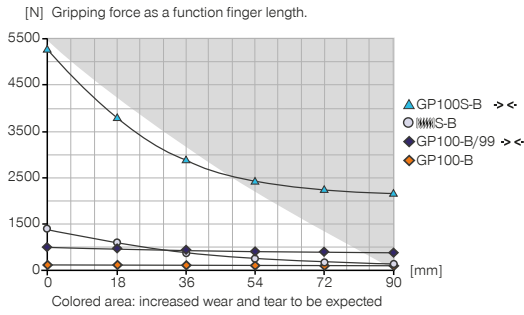
2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GP100

▶ PRODUCT SPECIFICATIONS

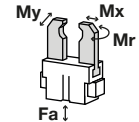


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	10
Mx [Nm]	10
My [Nm]	10
Fa [N]	400

▶ INCLUDED IN DELIVERY



Mounting block

KB8K

▶ RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style

GV1-8X6



Centering Disc

ZE30H7X4



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500

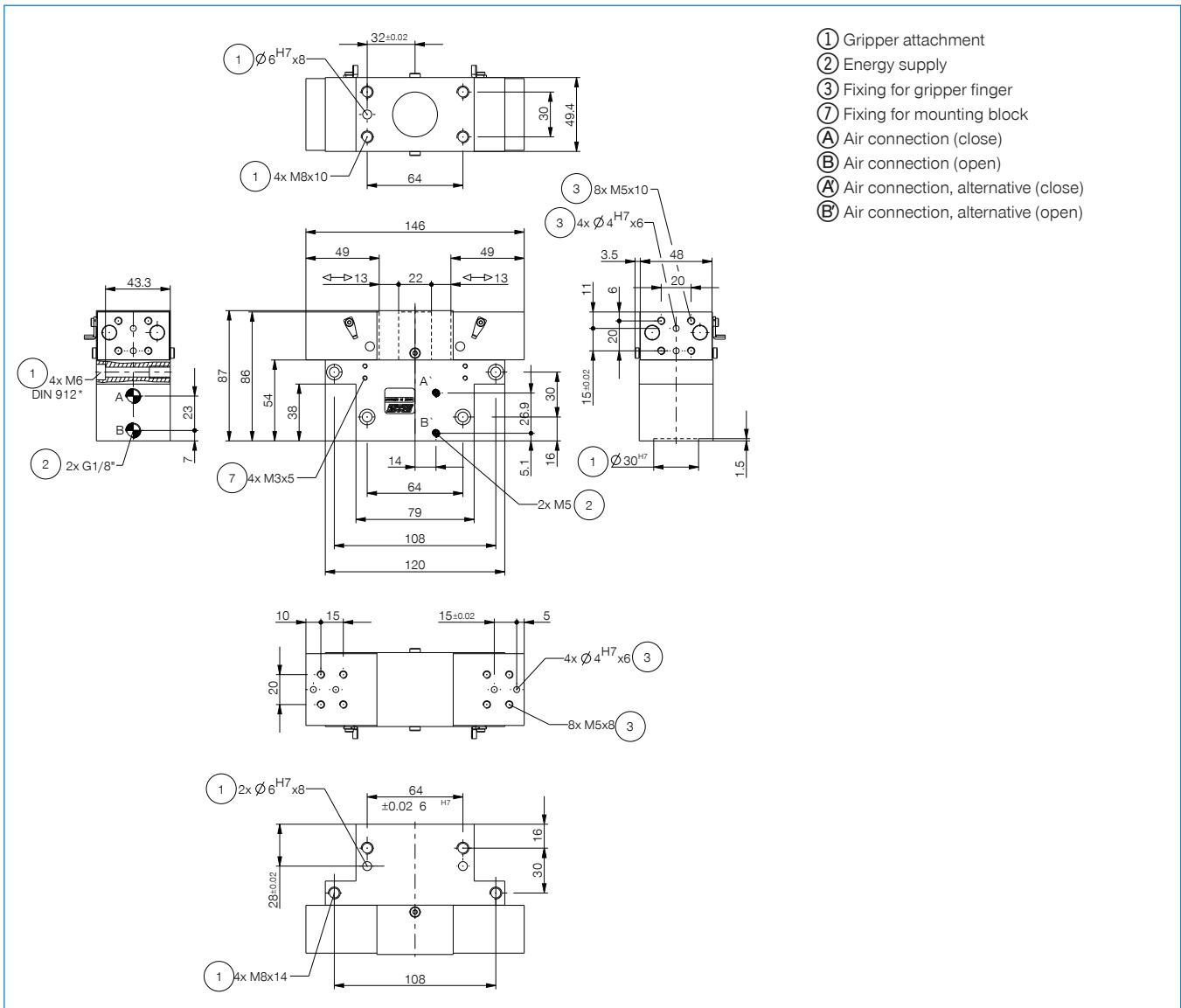


Universal Jaw Aluminium

UB100

Order no.	▶ Technical Data*		
	GP100-B	GP100-B-99	GP100S-B
Stroke per jaw [mm]	13	13	8
Gripping force in closing [N]	450	450	5250
Gripping force in opening [N]		450	
Gripping force secured by spring min. [N]	70		250
Closing time [s]	0.05	0.04	0.05
Opening time [s]	0.05	0.04	0.05
Repetition accuracy +/- [mm]	0.05	0.05	0.05
Operating pressure min. [bar]	5	4	5
Operating pressure max. [bar]	8	8	8
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	80	80	80
Air volume per cycle [cm³]	30	30	30
Weight [kg]	1.4	1.4	1.4

*All data measured at 6 bar



2-JAW PARALLEL GRIPPERS

SERIES GP400

1

Series GP400 / 2-Jaw Parallel Grippers / pneumatic / Grippers

▶ PRODUCT ADVANTAGES



“The economical”

▶ Concentration on the essentials

The most economic type of gripping: This is how you reduce your production costs

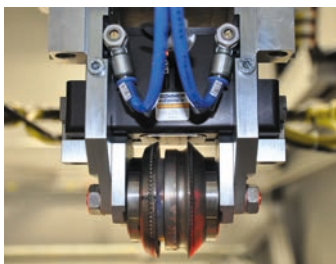
▶ Proven T slot guide

This established and proven guiding technology stands for the highest process reliability like no other

▶ Compact structure

Reduces the interference contours for your application

▶ THE BEST PRODUCT FOR YOUR APPLICATION



▶ Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities:

Find the best product for your specific use:

www.zimmer-group.com

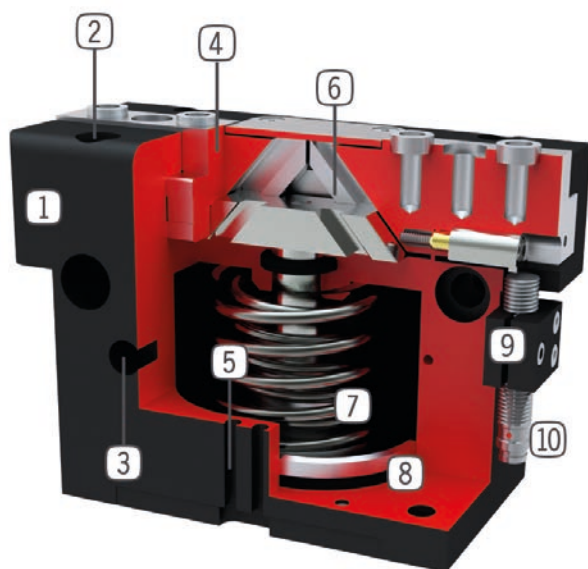
HOW TO ORDER CORRECTLY

▶ The product order numbers are arranged according to this diagram:

Order no.	GP410	<input type="checkbox"/>	<input type="checkbox"/>	-C
Long stroke		N		
High force		S		
For external gripping, self-locking, spring closing			C	
For internal gripping, self-locking, spring opening			O	



► BENEFITS IN DETAIL



- ① **Robust, lightweight housing**
- hard coated aluminium alloy
- ② **Mounting and positioning**
- mounting possible from several sides for versatile positioning
- ③ **Energy supply**
- possible from several sides
- ④ **Gripper jaw**
- individual gripper finger mounting
- ⑤ **Sensing slot**
- mounting and positioning of magnetic field sensors
- ⑥ **Wedge hook mechanism**
- synchronized the movement of the gripper jaws
- ⑦ **Integrated gripping force safety device**
- spring integrated into cylinder as energy storage
- ⑧ **Position sensing**
- permanent magnet for direct monitoring of piston movement
- ⑨ **Mounting block**
- mounting for inductive proximity switch (10)

► SERIES CHARACTERISTICS



Number of installation sizes	9
Stroke per jaw	3 mm - 30 mm
Gripping force	85 N - 19275 N
Weight	0,08 kg - 18,9 kg
AP class	3



10 million maintenance-free cycles (max.)



High-strength S



Magnetic field sensor



Spring closing C



Inductive sensor



Purged air



Spring opening O



IP40

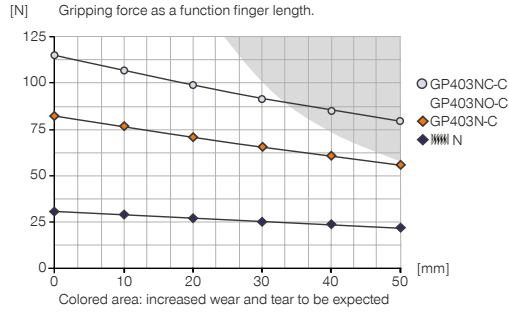
2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GP403

▶ PRODUCT SPECIFICATIONS

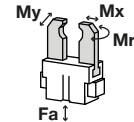


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	6
Mx [Nm]	9
My [Nm]	12
Fa [N]	500

▶ INCLUDED IN DELIVERY



Mounting block

KB3-03



Centering Disc

DST40400

▶ RECOMMENDED ACCESSORIES



Universal Jaw Aluminium

UB403

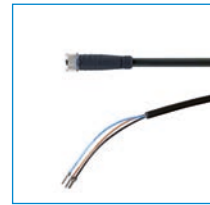


Universal Jaw Steel

UB403ST



Plug-in connector Angled Cable 5m - Socket M8 (female)
KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)
KAG500



Magnetic field sensor Angled Cable 0,3 m - Connector M8
MFS103SKHC



2-Position-Sensor Cable 0,3 m - Connector M8
MFSP2SKHC



Straight Fittings - Quick Connect Style
GVM5



Inductive proximity switch - Cable 5 m
NJ3-E2



Inductive Proximity Switch Cable 0,3 m - Connector M8
NJ3-E2SK

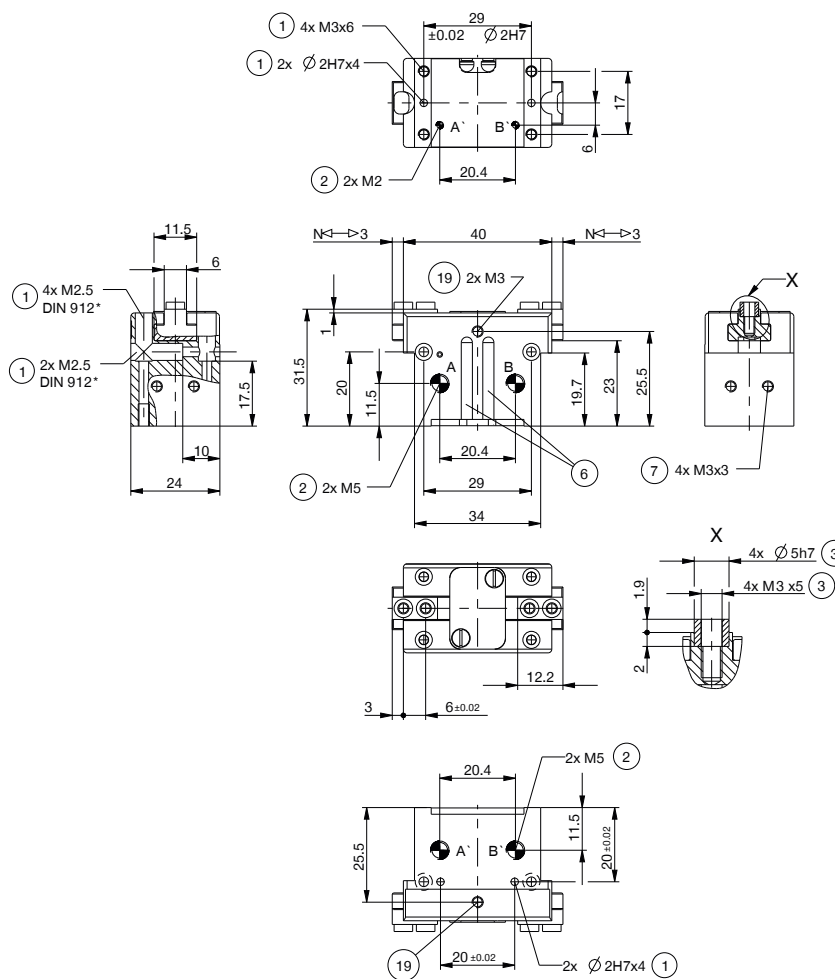


Quick Exhaust Valve
DEV04

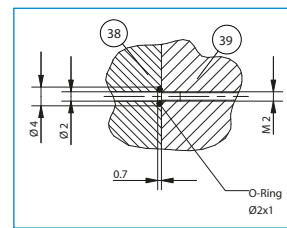
Order no.	► Technical Data*		
	GP403N-C	GP403NC-C	GP403NO-C
Stroke per jaw [mm]	3	3	3
Gripping force in closing [N]	85	115	
Gripping force in opening [N]	100		115
Gripping force secured by spring min. [N]		32	32
Closing time [s]	0.015	0.01	0.02
Opening time [s]	0.015	0.02	0.01
Repetition accuracy +/- [mm]	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4
Operating pressure max. [bar]	8	8	8
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	80	80	80
Air volume per cycle [cm ³]	1.8	3.3	3.3
Weight [kg]	0.08	0.1	0.1

*All data measured at 6 bar

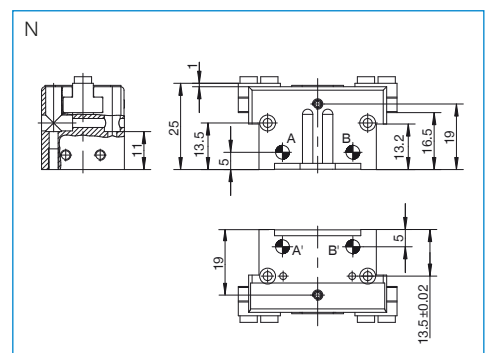
NC / NO



- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑥ Integrated slot for magnetic field sensor
- ⑦ Fixing for mounting block
- ⑰ Air purge connection option
- ⑳ Adapter
- ㉑ Gripper
- A Air connection (close)
- B Air connection (open)
- A Air connection, alternative (close)
- B Air connection, alternative (open)



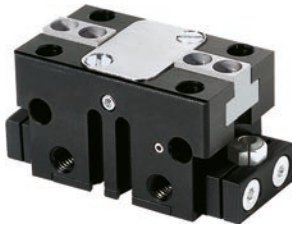
Hoseless air feed-through



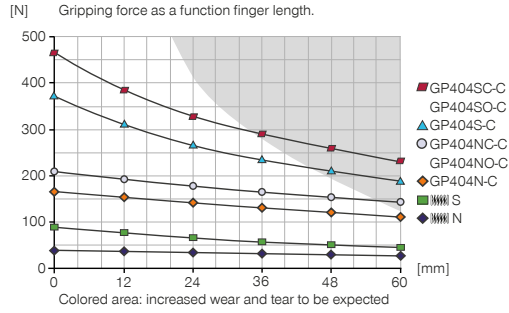
2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GP404

▶ PRODUCT SPECIFICATIONS

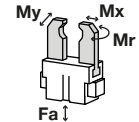


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	8
Mx [Nm]	15
My [Nm]	15
Fa [N]	700

▶ INCLUDED IN DELIVERY



Mounting block

KB3-08



Centering Disc

DST40400

▶ RECOMMENDED ACCESSORIES



Universal Jaw Aluminium

UB404



Universal Jaw Steel

UB404ST



Plug-in connector Angled Cable 5m - Socket M8 (female)
KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)
KAG500



Magnetic field sensor Angled Cable 0,3 m - Connector M8
MFS103SKHC



2-Position-Sensor Cable 0,3 m - Connector M8
MFSP2SKHC



Straight Fittings - Quick Connect Style
GVM5



Inductive proximity switch - Cable 5 m
NJ3-E2



Inductive Proximity Switch Cable 0,3 m - Connector M8
NJ3-E2SK

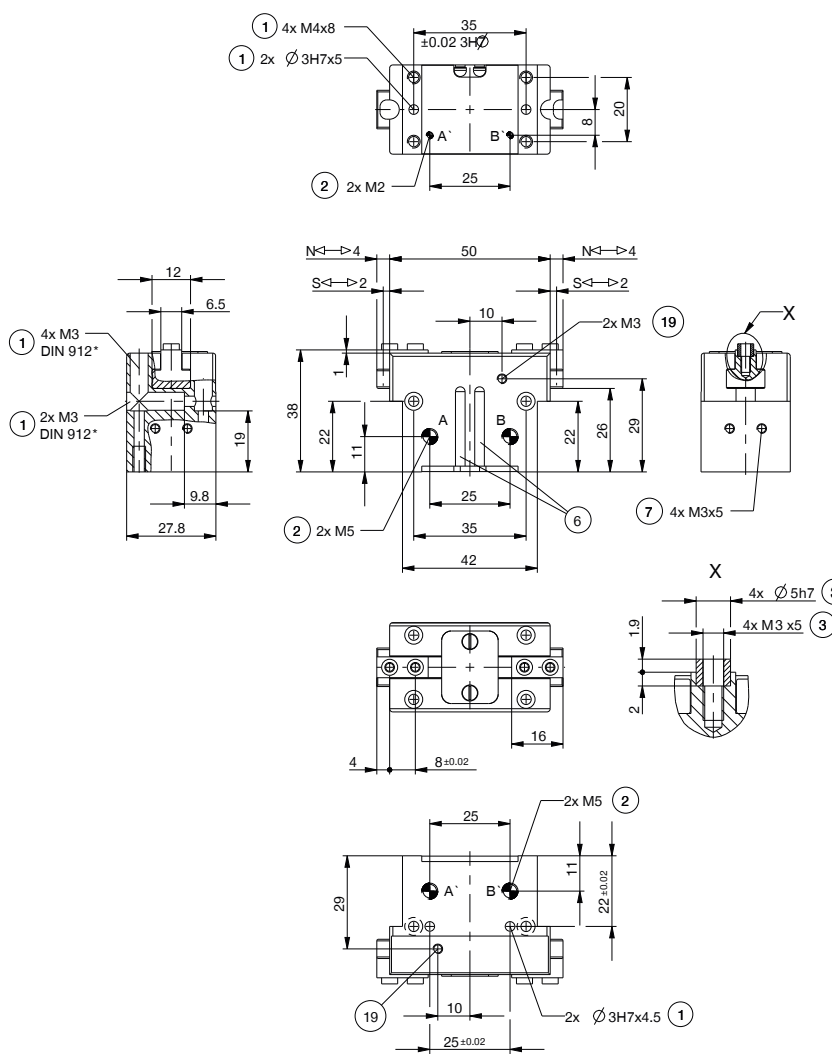


Angle flange
WFR01

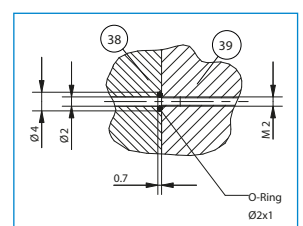
Order no.	► Technical Data*					
	GP404N-C	GP404NC-C	GP404NO-C	GP404S-C	GP404SC-C	GP404SO-C
Stroke per jaw [mm]	4	4	4	2	2	2
Gripping force in closing [N]	170	210		375	465	
Gripping force in opening [N]	185		225	410		500
Gripping force secured by spring min. [N]		40	40		90	90
Closing time [s]	0.02	0.15	0.025	0.02	0.15	0.025
Opening time [s]	0.02	0.025	0.015	0.02	0.025	0.015
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	8	8	8	8	8
Operating temperature min. [°C]	5	5	5	5	5	5
Operating temperature max. [°C]	80	80	80	80	80	80
Air volume per cycle [cm³]	4.1	6.9	6.9	4.1	6.9	6.9
Weight [kg]	0.14	0.16	0.16	0.14	0.16	0.16

*All data measured at 6 bar

NC / NO / SC / SO

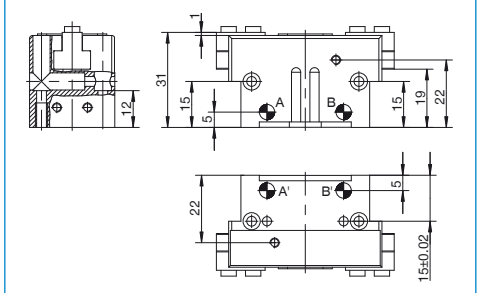


- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑥ Integrated slot for magnetic field sensor
- ⑦ Fixing for mounting block
- ⑱ Air purge connection option
- ⑳ Adapter
- ㉑ Gripper
- A) Air connection (close)
- B) Air connection (open)
- A) Air connection, alternative (close)
- B) Air connection, alternative (open)



Hoseless air feed-through

N / S



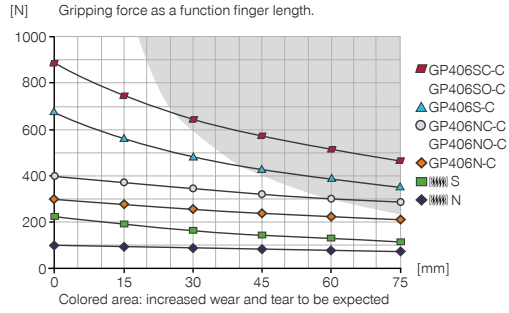
2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GP406

▶ PRODUCT SPECIFICATIONS

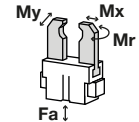


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	35
Mx [Nm]	50
My [Nm]	45
Fa [N]	1200

▶ INCLUDED IN DELIVERY



Mounting block

KB8K



Centering Disc

DST40600

▶ RECOMMENDED ACCESSORIES



Universal Jaw Aluminium

UB406



Universal Jaw Steel

UB406ST



Plug-in connector Angled Cable 5m - Socket M8 (female)
KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)
KAG500



Magnetic field sensor Angled Cable 0,3 m - Connector M8
MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8
MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8
MFSP2SKHC



Straight Fittings - Quick Connect Style
GVM5



Inductive proximity switch - Cable 5 m
NJ8-E2

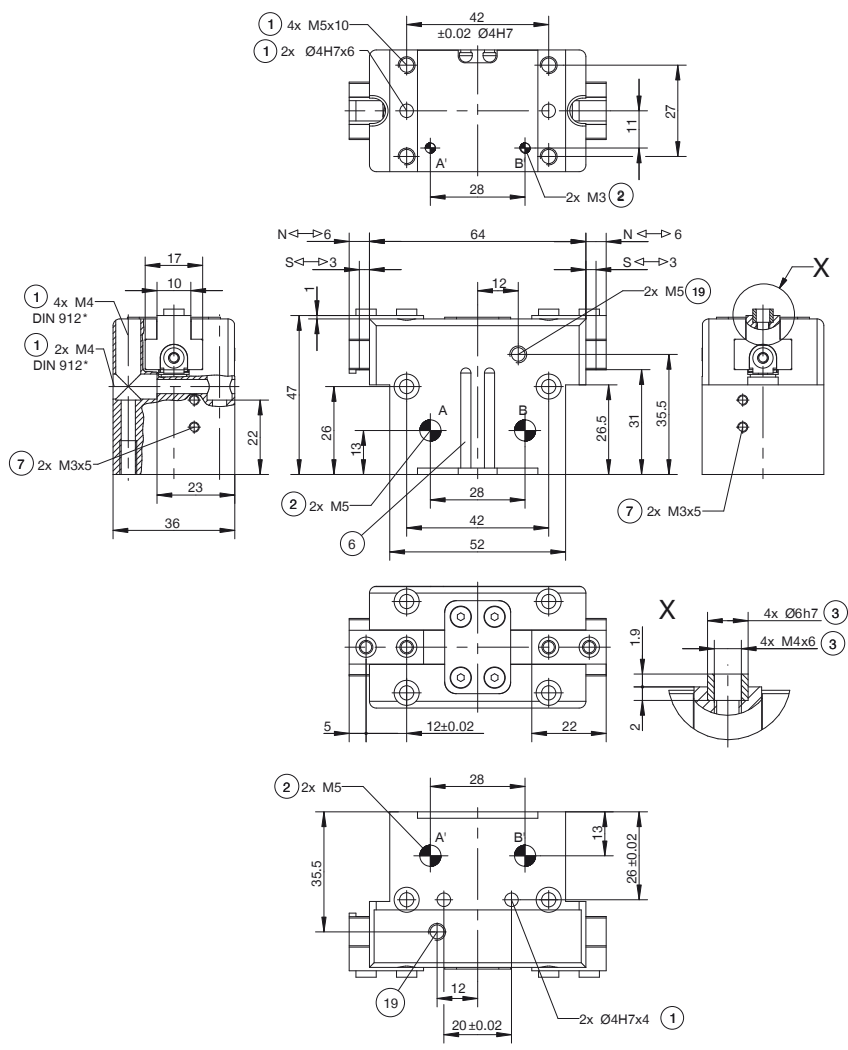


Inductive proximity switch - Connector M8
NJ8-E2S

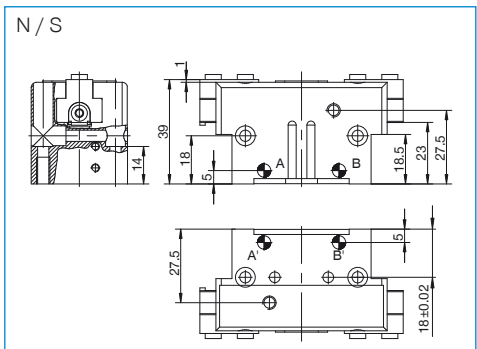
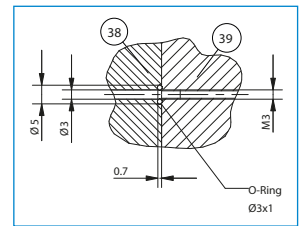
Order no.	Technical Data*					
	GP406N-C	GP406NC-C	GP406NO-C	GP406S-C	GP406SC-C	GP406SO-C
Stroke per jaw [mm]	6	6	6	3	3	3
Gripping force in closing [N]	300	400		670	900	
Gripping force in opening [N]	325		425	725		950
Gripping force secured by spring min. [N]		100	100		230	230
Closing time [s]	0.03	0.025	0.04	0.03	0.025	0.04
Opening time [s]	0.03	0.04	0.025	0.03	0.04	0.025
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	8	8	8	8	8
Operating temperature min. [°C]	5	5	5	5	5	5
Operating temperature max. [°C]	80	80	80	80	80	80
Air volume per cycle [cm³]	10.1	15.5	15.5	10.1	15.5	15.5
Weight [kg]	0.27	0.32	0.32	0.27	0.32	0.32

*All data measured at 6 bar

NC / NO / SC / SO



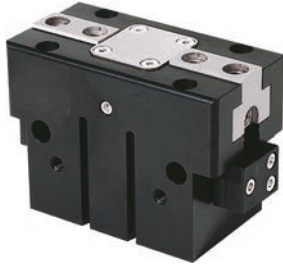
- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑥ Integrated slot for magnetic field sensor
- ⑦ Fixing for mounting block
- ⑰ Air purge connection option
- ⑳ Adapter
- ㉑ Gripper
- Ⓐ Air connection (close)
- Ⓑ Air connection (open)
- Ⓐ Air connection, alternative (close)
- Ⓑ Air connection, alternative (open)



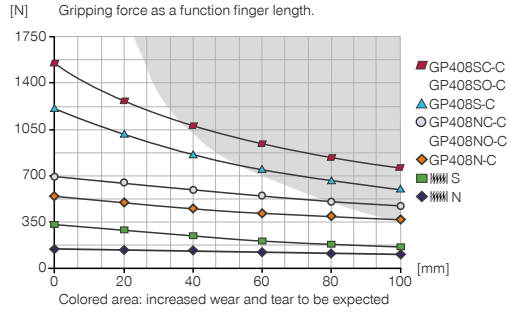
2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GP408

▶ PRODUCT SPECIFICATIONS

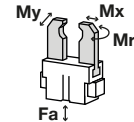


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	50
Mx [Nm]	80
My [Nm]	60
Fa [N]	1800

▶ INCLUDED IN DELIVERY



Mounting block

KB8K



Centering Disc

BDST40800

▶ RECOMMENDED ACCESSORIES



Universal Jaw Aluminium

UB408



Universal Jaw Steel

UB408ST



Plug-in connector Angled Cable 5m - Socket M8 (female)
KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)
KAG500



Magnetic field sensor Angled Cable 0,3 m - Connector M8
MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8
MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8
MFSP2SKHC



Straight Fittings - Quick Connect Style
GVM5



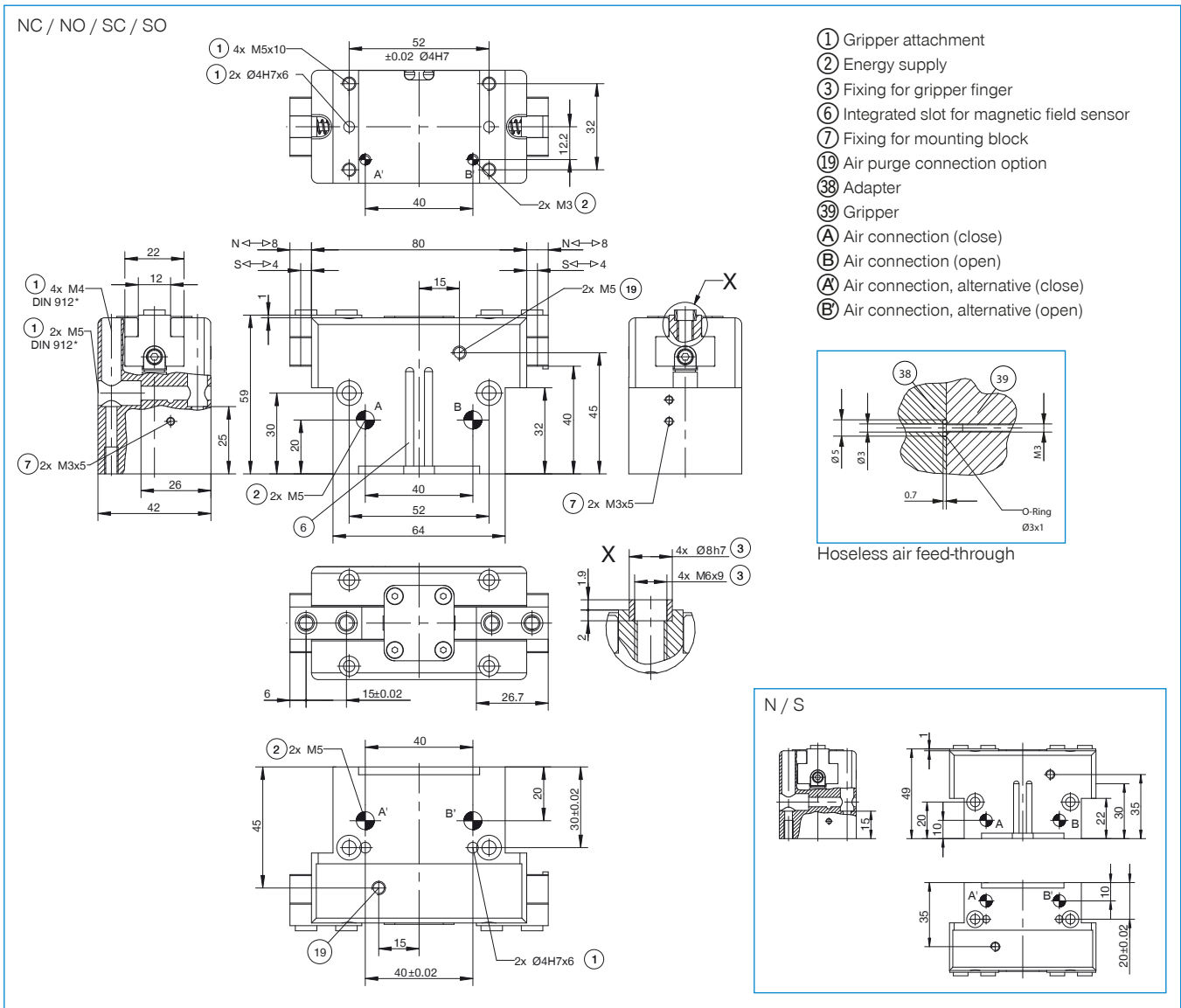
Inductive proximity switch - Cable 5 m
NJ8-E2



Inductive proximity switch - Connector M8
NJ8-E2S

Order no.	Technical Data*					
	GP408N-C	GP408NC-C	GP408NO-C	GP408S-C	GP408SC-C	GP408SO-C
Stroke per jaw [mm]	8	8	8	4	4	4
Gripping force in closing [N]	550	700		1230	1570	
Gripping force in opening [N]	590		740	1320		1660
Gripping force secured by spring min. [N]		150	150		340	340
Closing time [s]	0.04	0.03	0.05	0.04	0.03	0.05
Opening time [s]	0.04	0.05	0.03	0.04	0.05	0.03
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	8	8	8	8	8
Operating temperature min. [°C]	5	5	5	5	5	5
Operating temperature max. [°C]	80	80	80	80	80	80
Air volume per cycle [cm³]	23.6	35.5	35.5	23.6	35.5	35.5
Weight [kg]	0.5	0.57	0.57	0.5	0.57	0.57

*All data measured at 6 bar



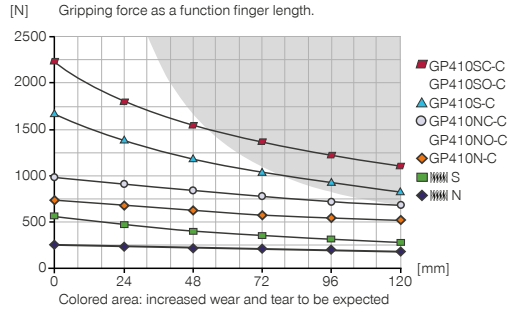
2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GP410

▶ PRODUCT SPECIFICATIONS

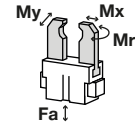


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	75
Mx [Nm]	100
My [Nm]	90
Fa [N]	2500

▶ INCLUDED IN DELIVERY



Mounting block

KB8K



Centering Disc

DST41000

▶ RECOMMENDED ACCESSORIES



Universal Jaw Aluminium

UB410



Universal Jaw Steel

UB410ST



Alternate proximity bracket

KHA410-B-8



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC



Straight Fittings - Quick Connect Style

GV1-8X6



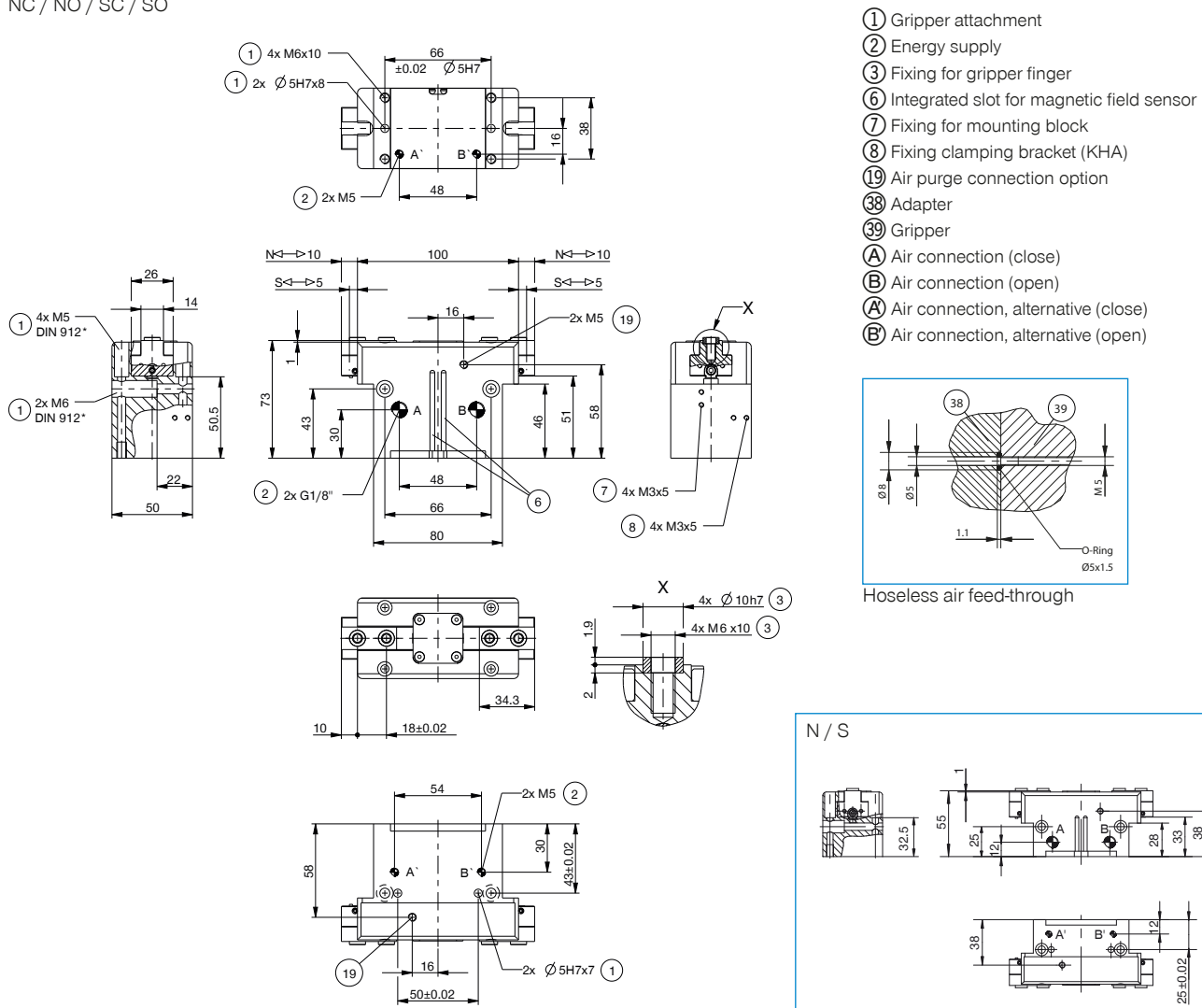
Inductive proximity switch - Cable 5 m

NJ8-E2

Order no.	► Technical Data*					
	GP410N-C	GP410NC-C	GP410NO-C	GP410S-C	GP410SC-C	GP410SO-C
Stroke per jaw [mm]	10	10	10	5	5	5
Gripping force in closing [N]	740	990		1650	2215	
Gripping force in opening [N]	795		1050	1770		2340
Gripping force secured by spring min. [N]		250	250		570	570
Closing time [s]	0.07	0.06	0.09	0.07	0.06	0.09
Opening time [s]	0.07	0.09	0.06	0.07	0.09	0.06
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	8	8	8	8	8
Operating temperature min. [°C]	5	5	5	5	5	5
Operating temperature max. [°C]	80	80	80	80	80	80
Air volume per cycle [cm ³]	39.3	66.7	66.7	39.3	66.7	66.7
Weight [kg]	0.85	1	1	0.85	1	1

*All data measured at 6 bar

NC / NO / SC / SO



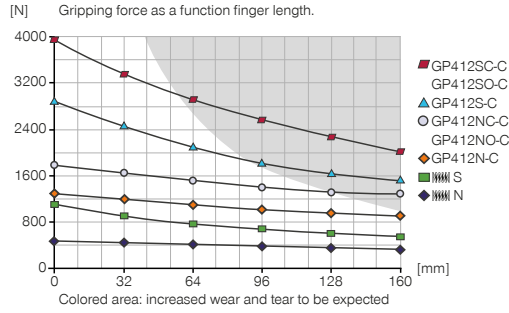
2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GP412

▶ PRODUCT SPECIFICATIONS

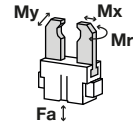


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	100
Mx [Nm]	120
My [Nm]	120
Fa [N]	3200

▶ INCLUDED IN DELIVERY



Mounting block

KB8K



Centering Disc

DST41000

▶ RECOMMENDED ACCESSORIES



Universal Jaw Aluminium

UB412



Universal Jaw Steel

UB412ST



Alternate proximity bracket

KHA412-B-8



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC



Straight Fittings - Quick Connect Style

GV1-8X6



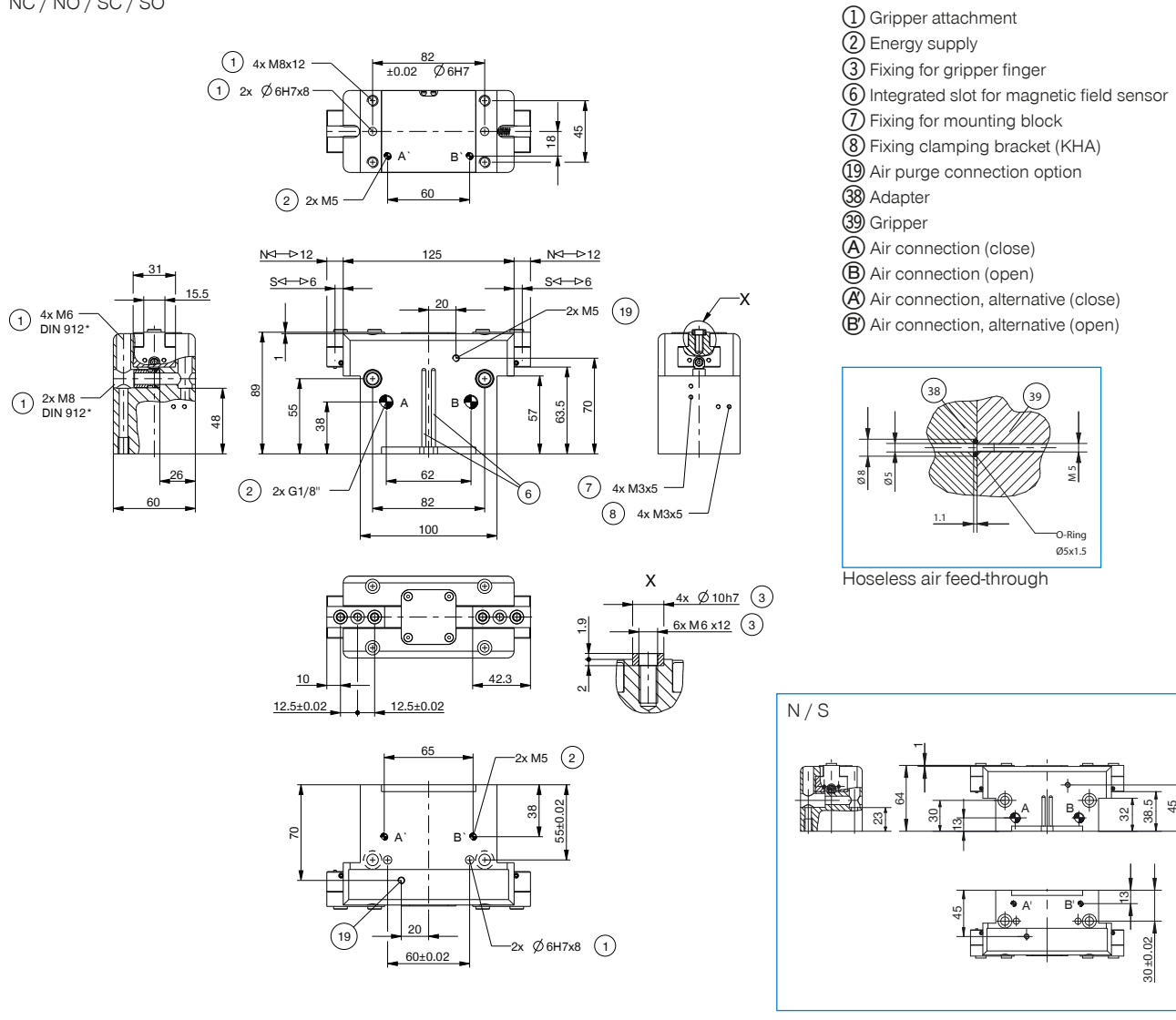
Inductive proximity switch - Cable 5 m

NJ8-E2

Order no.	► Technical Data*					
	GP412N-C	GP412NC-C	GP412NO-C	GP412S-C	GP412SC-C	GP412SO-C
Stroke per jaw [mm]	12	12	12	6	6	6
Gripping force in closing [N]	1290	1780		2890	3960	
Gripping force in opening [N]	1370		1850	3050		4130
Gripping force secured by spring min. [N]		490	490		1080	1080
Closing time [s]	0.1	0.08	0.12	0.1	0.08	0.12
Opening time [s]	0.1	0.12	0.08	0.1	0.12	0.08
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	8	8	8	8	8
Operating temperature min. [°C]	5	5	5	5	5	5
Operating temperature max. [°C]	80	80	80	80	80	80
Air volume per cycle [cm³]	80	148	148	80	148	148
Weight [kg]	1.5	1.78	1.78	1.5	1.78	1.78

*All data measured at 6 bar

NC / NO / SC / SO



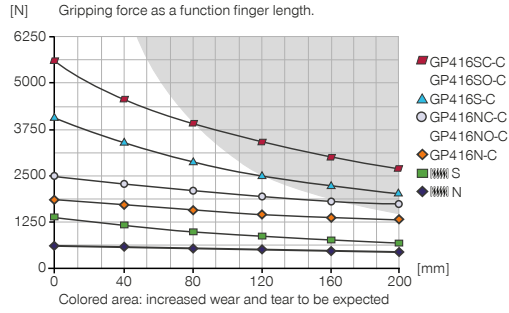
2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GP416

▶ PRODUCT SPECIFICATIONS

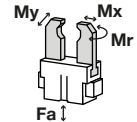


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	140
Mx [Nm]	160
My [Nm]	180
Fa [N]	5000

▶ INCLUDED IN DELIVERY



Mounting block

KB8K



Centering Disc

DST41600

▶ RECOMMENDED ACCESSORIES



Universal Jaw Aluminium

UB416



Universal Jaw Steel

UB416ST



Alternate proximity bracket

KHA416-B-8



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC



Straight Fittings - Quick Connect Style

GV1-8X6



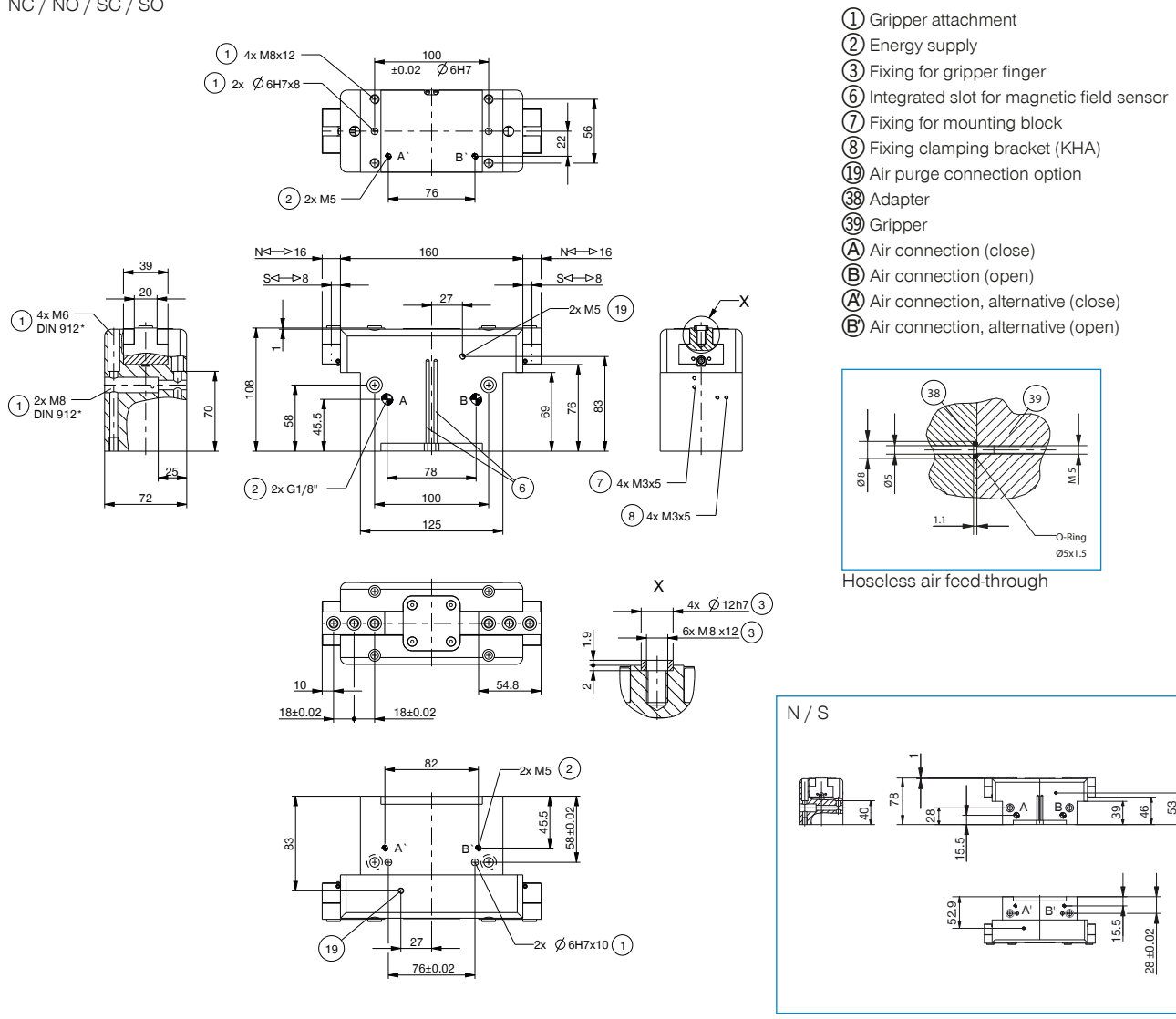
Inductive proximity switch - Cable 5 m

NJ8-E2

Order no.	► Technical Data*					
	GP416N-C	GP416NC-C	GP416NO-C	GP416S-C	GP416SC-C	GP416SO-C
Stroke per jaw [mm]	16	16	16	8	8	8
Gripping force in closing [N]	1860	2490		4160	5560	
Gripping force in opening [N]	1960		2590	4390		5780
Gripping force secured by spring min. [N]		630	630		1400	1400
Closing time [s]	0.2	0.15	0.25	0.2	0.15	0.25
Opening time [s]	0.2	0.25	0.15	0.2	0.25	0.15
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	8	8	8	8	8
Operating temperature min. [°C]	5	5	5	5	5	5
Operating temperature max. [°C]	80	80	80	80	80	80
Air volume per cycle [cm³]	268	477	477	268	477	477
Weight [kg]	2.9	3.4	3.4	2.9	3.4	3.4

*All data measured at 6 bar

NC / NO / SC / SO



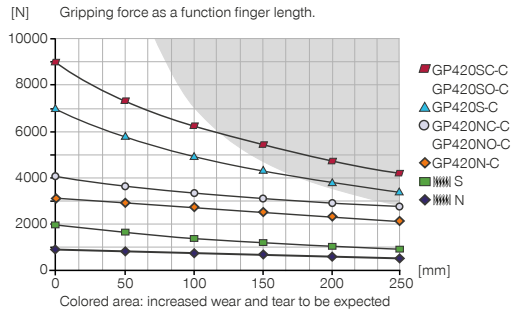
2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GP420

▶ PRODUCT SPECIFICATIONS

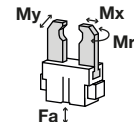


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	170
Mx [Nm]	180
My [Nm]	220
Fa [N]	7000

▶ INCLUDED IN DELIVERY



Mounting block

KB8K



Centering Disc

DST42000

▶ RECOMMENDED ACCESSORIES



Universal Jaw Aluminium

UB420



Universal Jaw Steel

UB420ST



Alternate proximity bracket

KHA420-B-8



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC



Straight Fittings - Quick Connect Style

GV1-4X8

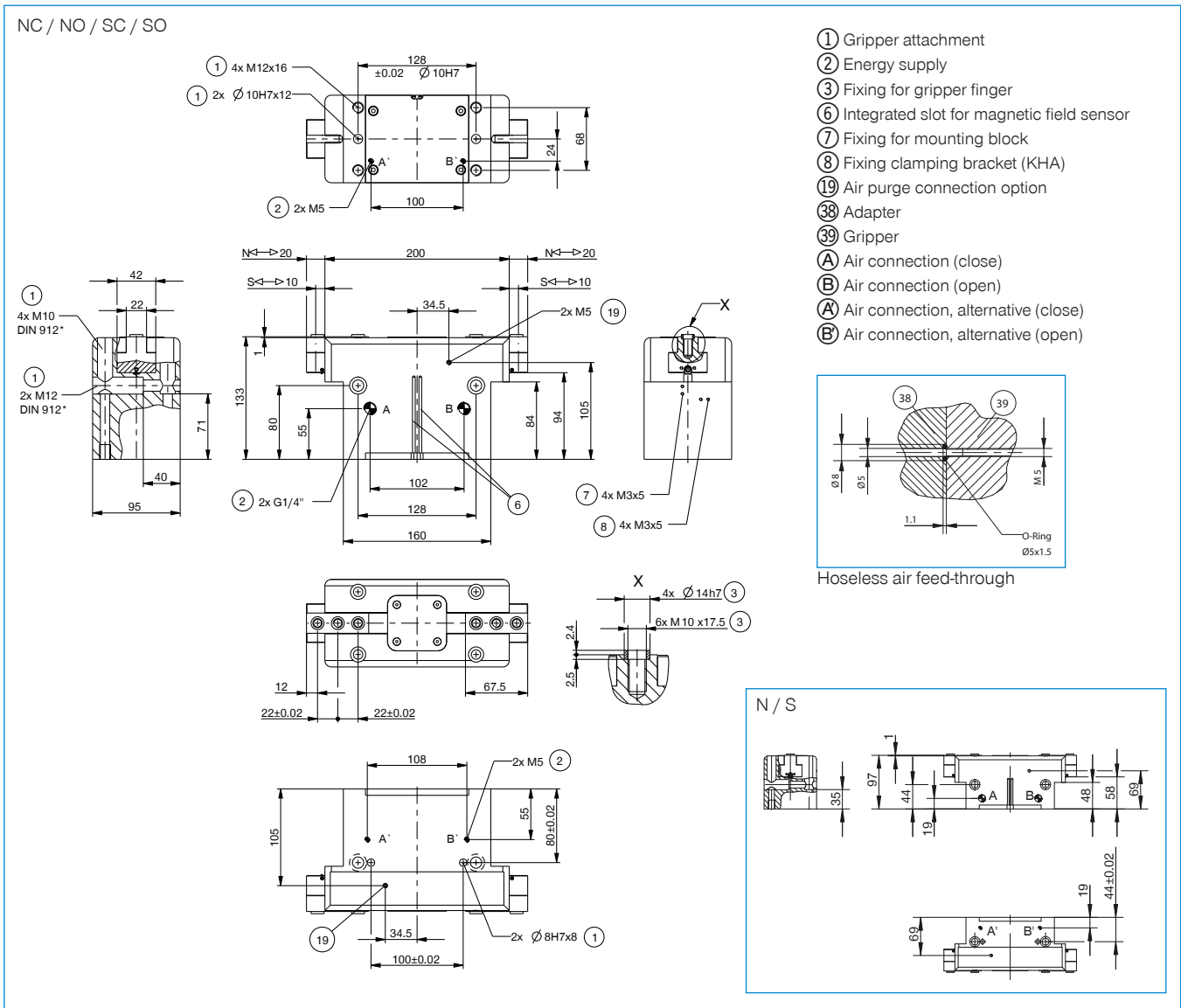


Inductive proximity switch - Cable 5 m

NJ8-E2

Order no.	► Technical Data*					
	GP420N-C	GP420NC-C	GP420NO-C	GP420S-C	GP420SC-C	GP420SO-C
Stroke per jaw [mm]	20	20	20	10	10	10
Gripping force in closing [N]	3175	4060		7080	9060	
Gripping force in opening [N]	3330		4215	7430		9400
Gripping force secured by spring min. [N]		900	900		1975	1975
Closing time [s]	0.35	0.3	0.4	0.35	0.3	0.4
Opening time [s]	0.35	0.4	0.3	0.35	0.4	0.3
Repetition accuracy +/- [mm]	0.02	0.02	0.02	0.02	0.02	0.02
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	8	8	8	8	8
Operating temperature min. [°C]	5	5	5	5	5	5
Operating temperature max. [°C]	80	80	80	80	80	80
Air volume per cycle [cm³]	320	590	590	320	590	590
Weight [kg]	5.5	6.7	6.7	5.5	6.7	6.7

*All data measured at 6 bar



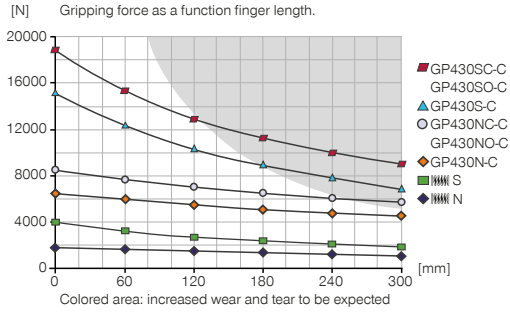
2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GP430

▶ PRODUCT SPECIFICATIONS

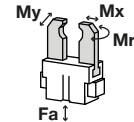


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	200
Mx [Nm]	275
My [Nm]	300
Fa [N]	9000

▶ INCLUDED IN DELIVERY



Mounting block

KB8K



Centering Disc

DST43000

▶ RECOMMENDED ACCESSORIES



Universal Jaw Aluminium

UB430



Universal Jaw Steel

UB430ST



Alternate proximity bracket

KHA430-B-8



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC



Straight Fittings - Quick Connect Style

GV1-4X8

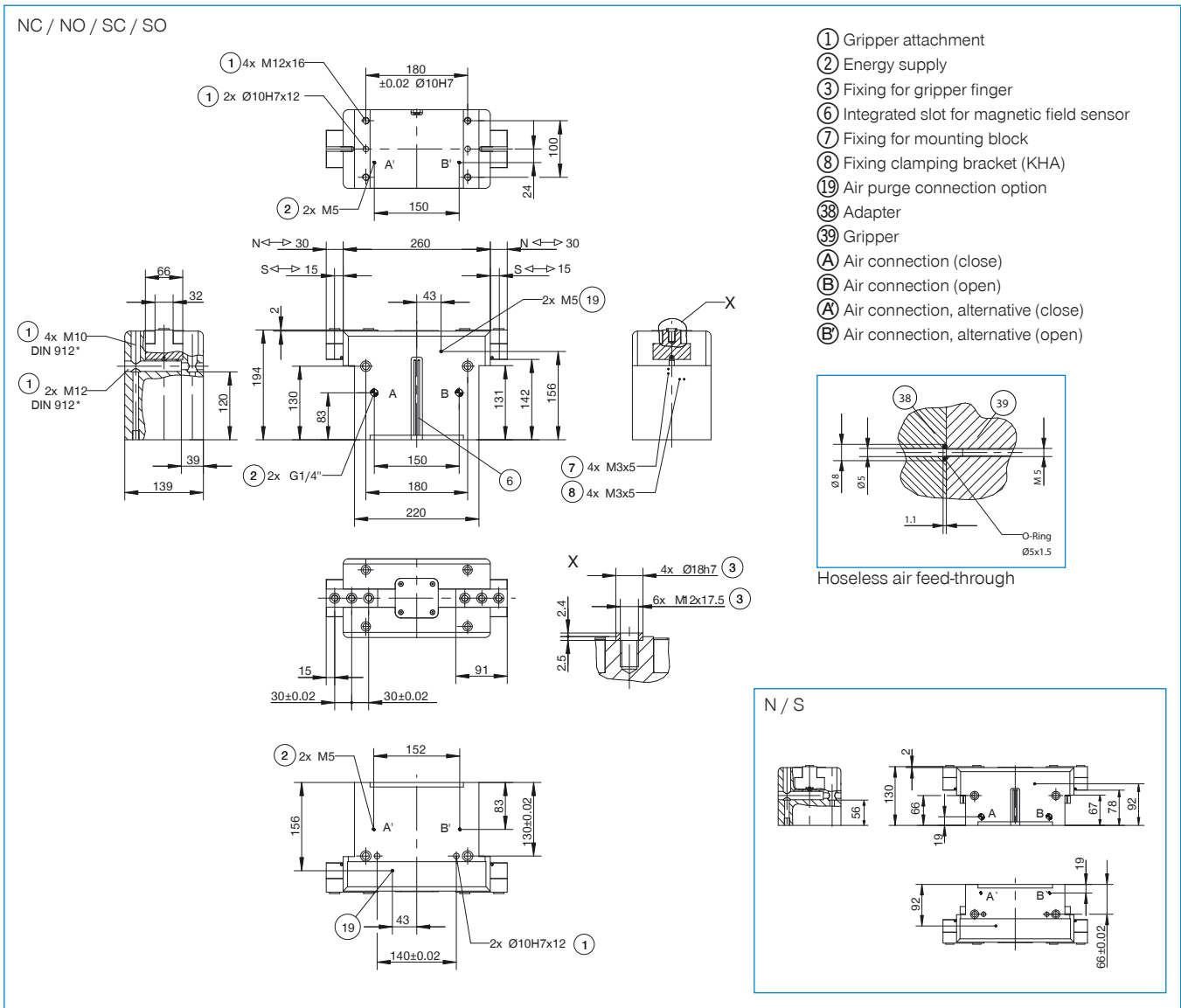


Inductive proximity switch - Cable 5 m

NJ8-E2

Order no.	► Technical Data*					
	GP430N-C	GP430NC-C	GP430NO-C	GP430S-C	GP430SC-C	GP430SO-C
Stroke per jaw [mm]	30	30	30	15	15	15
Gripping force in closing [N]	6675	8480		14900	18930	
Gripping force in opening [N]	6830		8640	15250		19275
Gripping force secured by spring min. [N]		1800	1800		4030	4030
Closing time [s]	0.4	0.4	0.8	0.4	0.4	0.8
Opening time [s]	0.4	0.8	0.4	0.4	0.8	0.4
Repetition accuracy +/- [mm]	0.04	0.04	0.04	0.04	0.04	0.04
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	8	8	8	8	8
Operating temperature min. [°C]	5	5	5	5	5	5
Operating temperature max. [°C]	80	80	80	80	80	80
Air volume per cycle [cm³]	980	1850	1850	980	1850	1850
Weight [kg]	14	18.9	18.9	14	18.9	18.9

*All data measured at 6 bar



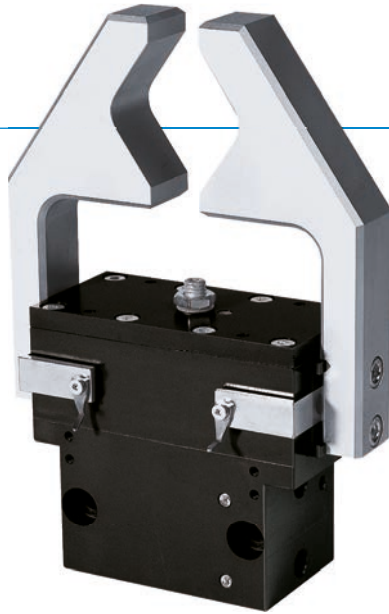
2-JAW PARALLEL GRIPPERS

SERIES GP200

1

Series GP200 / 2-Jaw Parallel Grippers / pneumatic / Grippers

▶ PRODUCT ADVANTAGES



“The variable”

▶ Smooth stroke configuration

An adjusting screw allows you to adjust the stroke to your specific application

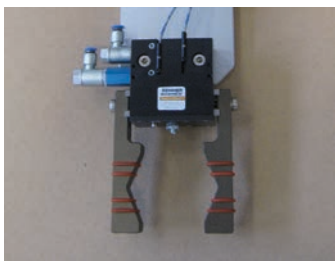
▶ Proven technology

We have more than 20 years of proven reliability, which ensures uninterrupted production for you

▶ Dirt protection

Using the scrapers on the guides, you can reliably use the gripper even under the harshest conditions

▶ THE BEST PRODUCT FOR YOUR APPLICATION



▶ Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities:

Find the best product for your specific use:

www.zimmer-group.com

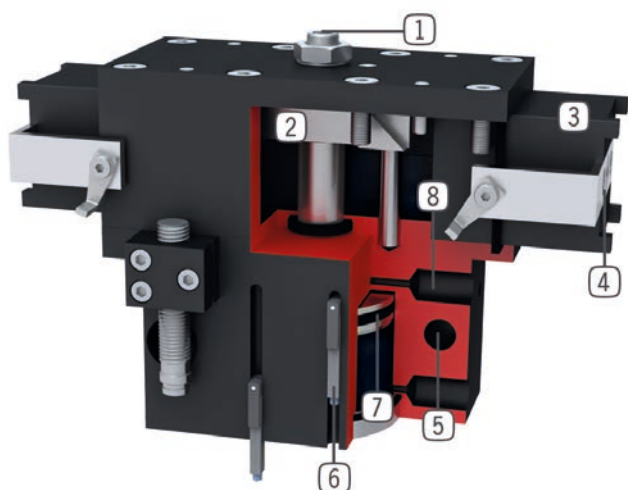
HOW TO ORDER CORRECTLY

- ▶ The product order numbers are arranged according to this diagram:

Order no.	GP280	<input type="checkbox"/>	<input type="checkbox"/>	
High force		S		
Without intergrated spring			-99	



► BENEFITS IN DETAIL



- ① **Stroke adjustment**
 - infinitely adjustable in „open“ movement
 - adjusting screw in delivery
- ② **Wedge hook mechanism**
 - synchronized the movement of the gripper jaws
 - high force transfer
- ③ **Square guide**
 - high forces and moments capacity
- ④ **Gripper jaw**
 - individual gripper finger mounting
- ⑤ **Mounting and positioning**
 - mounting possible from several sides for versatile positioning
- ⑥ **Sensing slot**
 - mounting and positioning of magnetic field sensors
- ⑦ **Drive**
 - double-acting pneumatic cylinder
- ⑧ **Energy supply**
 - possible from several sides

► SERIES CHARACTERISTICS



Number of installation sizes	4
Stroke per jaw	6 mm - 40 mm
Gripping force	160 N - 4500 N
Weight	0,33 kg - 8,3 kg
AP class	3



10 million maintenance-free cycles (max.)



Spring closing C



High-strength S



Inductive sensor



IP40



Magnetic field sensor



Purged air

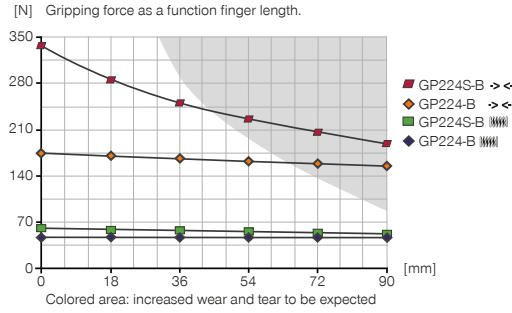
2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GP224

▶ PRODUCT SPECIFICATIONS

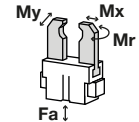


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	8
Mx [Nm]	15
My [Nm]	8
Fa [N]	250

▶ INCLUDED IN DELIVERY



Mounting block

KB8K

▶ RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style

GVM5



Magnetic field sensor
Angled Cable 0,3 m -
Connector M8
MFS103SKHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8
MFS204SKHC



2-Position-Sensor Cable
0,3 m - Connector M8

MFSP2SKHC



Plug-in connector Angled
Cable 5m - Socket M8
(female)
KAW500



Plug-in connector Straight Ca-
ble 5m - Socket M8 (female)

KAG500



Inductive proximity switch
- Cable 5 m

NJ8-E2



Inductive proximity switch
- Connector M8

NJ8-E2S



Centering Disc

ZE15H7X4

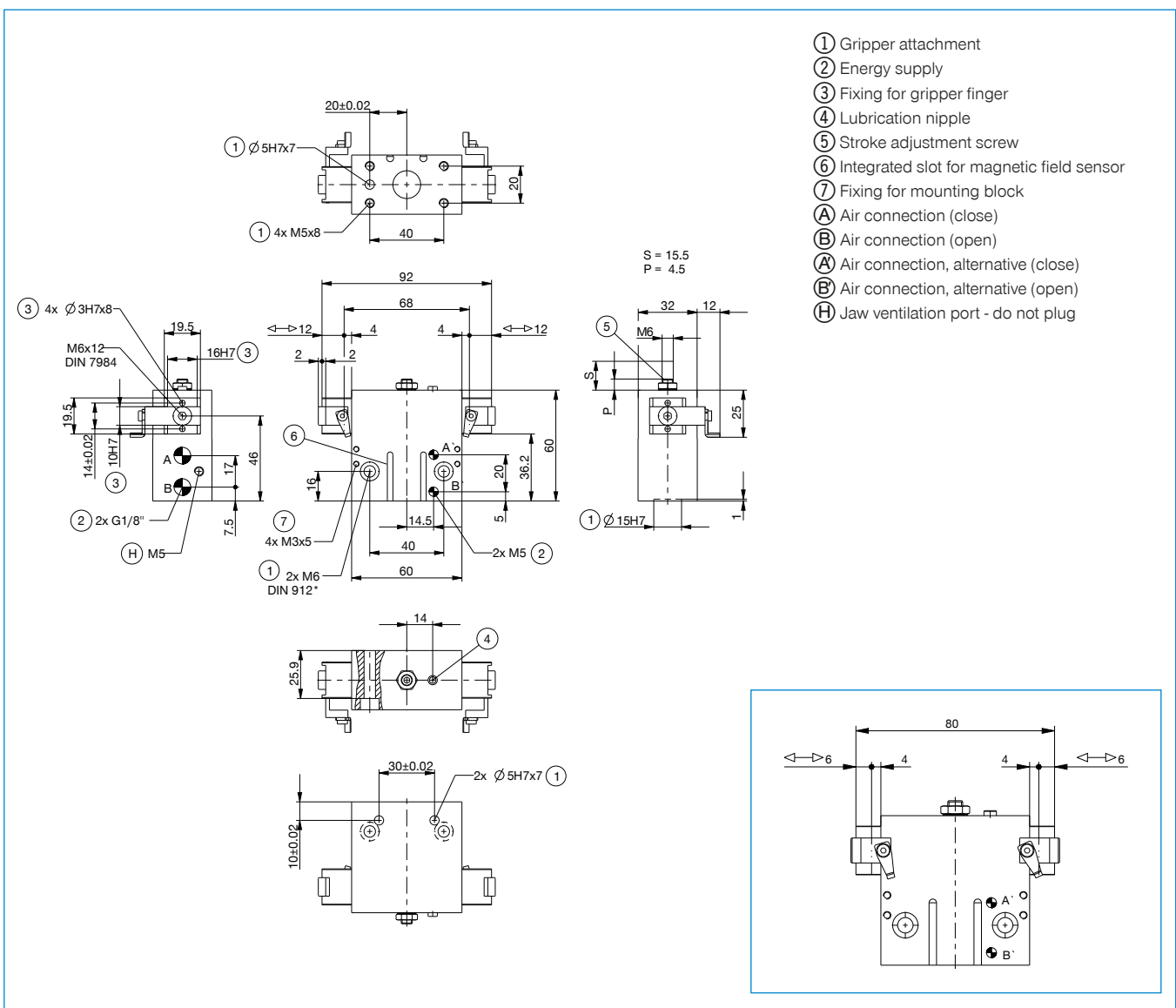


Quick Exhaust Valve

DEV04

Order no.	► Technical Data*			
	GP224-B	GP224-B-99	GP224S-B	GP224S-B-99
Stroke per jaw [mm]	12	12	6	6
Gripping force in closing [N]	170	160	335	335
Gripping force in opening [N]		160		335
Gripping force secured by spring min. [N]	10		35	
Closing time [s]	0.06	0.04	0.06	0.04
Opening time [s]	0.06	0.04	0.06	0.04
Repetition accuracy +/- [mm]	0.05	0.05	0.05	0.05
Operating pressure min. [bar]	5	3	5	3
Operating pressure max. [bar]	8	8	8	8
Operating temperature min. [°C]	5	5	5	5
Operating temperature max. [°C]	80	80	80	80
Air volume per cycle [cm³]	12	12	12	12
Weight [kg]	0.33	0.33	0.33	0.33

*All data measured at 6 bar



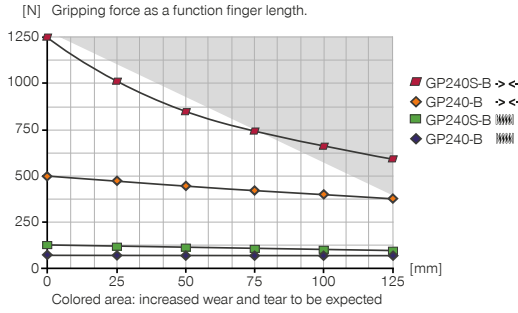
2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GP240

▶ PRODUCT SPECIFICATIONS

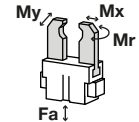


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	15
Mx [Nm]	30
My [Nm]	15
Fa [N]	400

▶ INCLUDED IN DELIVERY



Mounting block

KB8K

▶ RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style

GVM5



Magnetic field sensor
Angled Cable 0,3 m -
Connector M8
MFS103SKHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8
MFS204SKHC



2-Position-Sensor Cable
0,3 m - Connector M8

MFSP2SKHC



Plug-in connector Angled
Cable 5m - Socket M8
(female)
KAW500



Plug-in connector Straight Ca-
ble 5m - Socket M8 (female)

KAG500



Inductive proximity switch
- Cable 5 m

NJ8-E2



Inductive proximity switch
- Connector M8

NJ8-E2S



Centering Disc

ZE30H7X4

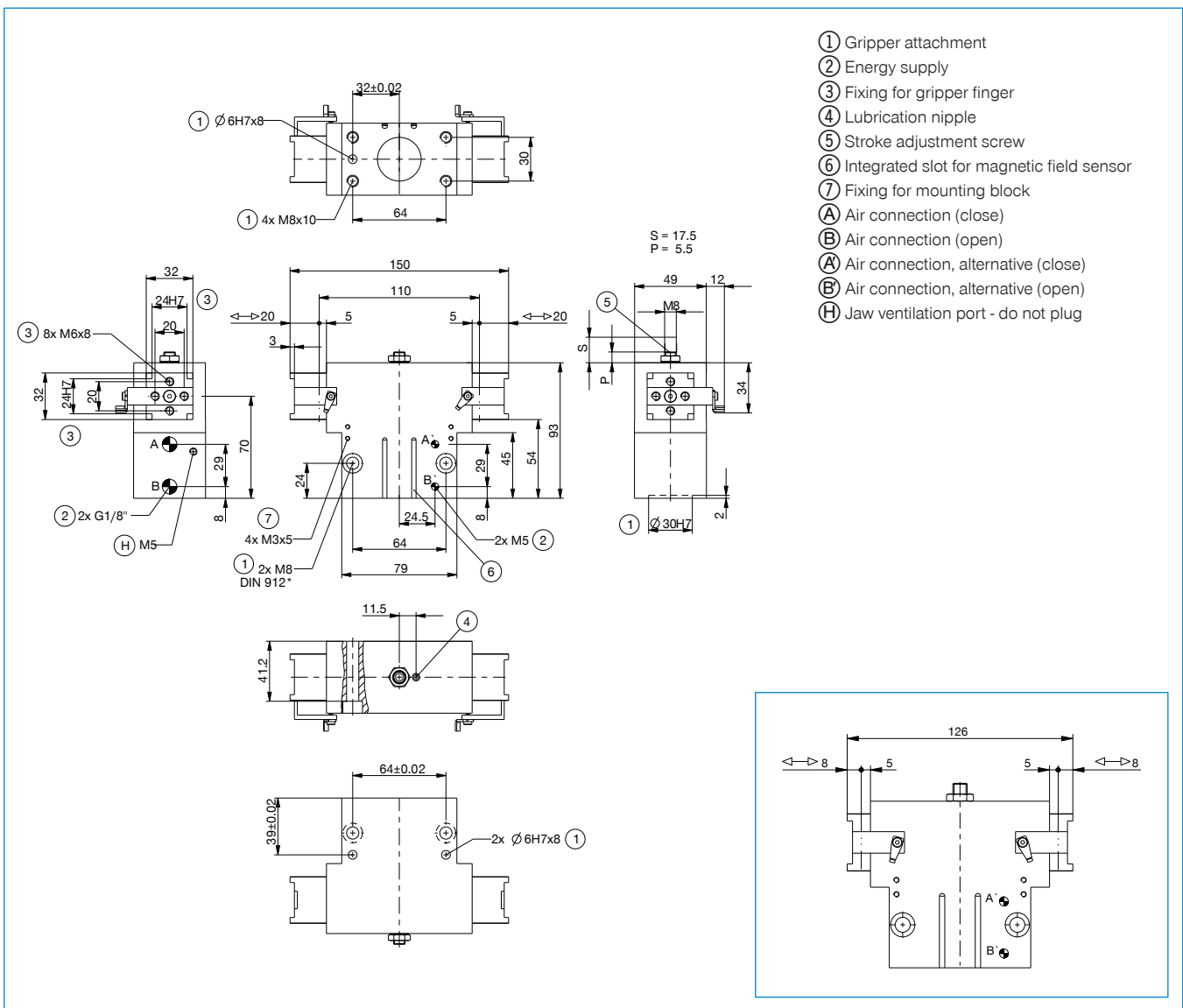


Quick Exhaust Valve

DEV06

Order no.	► Technical Data*			
	GP240-B	GP240-B-99	GP240S-B	GP240S-B-99
Stroke per jaw [mm]	20	20	8	8
Gripping force in closing [N]	510	435	1290	1105
Gripping force in opening [N]		435		1105
Gripping force secured by spring min. [N]	75		185	
Closing time [s]	0.1	0.08	0.1	0.08
Opening time [s]	0.1	0.08	0.1	0.08
Repetition accuracy +/- [mm]	0.05	0.05	0.05	0.05
Operating pressure min. [bar]	5	3	5	3
Operating pressure max. [bar]	8	8	8	8
Operating temperature min. [°C]	5	5	5	5
Operating temperature max. [°C]	80	80	80	80
Air volume per cycle [cm³]	49	49	49	49
Weight [kg]	1.2	1.2	1.2	1.2

*All data measured at 6 bar



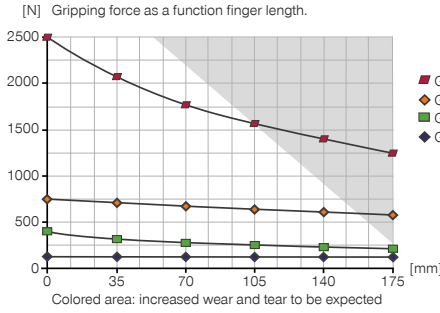
2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GP260

▶ PRODUCT SPECIFICATIONS

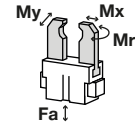


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	25
Mx [Nm]	45
My [Nm]	25
Fa [N]	600

▶ INCLUDED IN DELIVERY



Mounting block

KB8K

▶ RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style

GV1-8X8



Magnetic field sensor
Angled Cable 0,3 m -
Connector M8
MFS103SKHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8
MFS204SKHC



2-Position-Sensor Cable
0,3 m - Connector M8

MFSP2SKHC



Plug-in connector Angled
Cable 5m - Socket M8
(female)
KAW500



Plug-in connector Straight Ca-
ble 5m - Socket M8 (female)

KAG500



Inductive proximity switch
- Cable 5 m

NJ8-E2



Inductive proximity switch
- Connector M8

NJ8-E2S



Centering Disc

ZE40H7X6

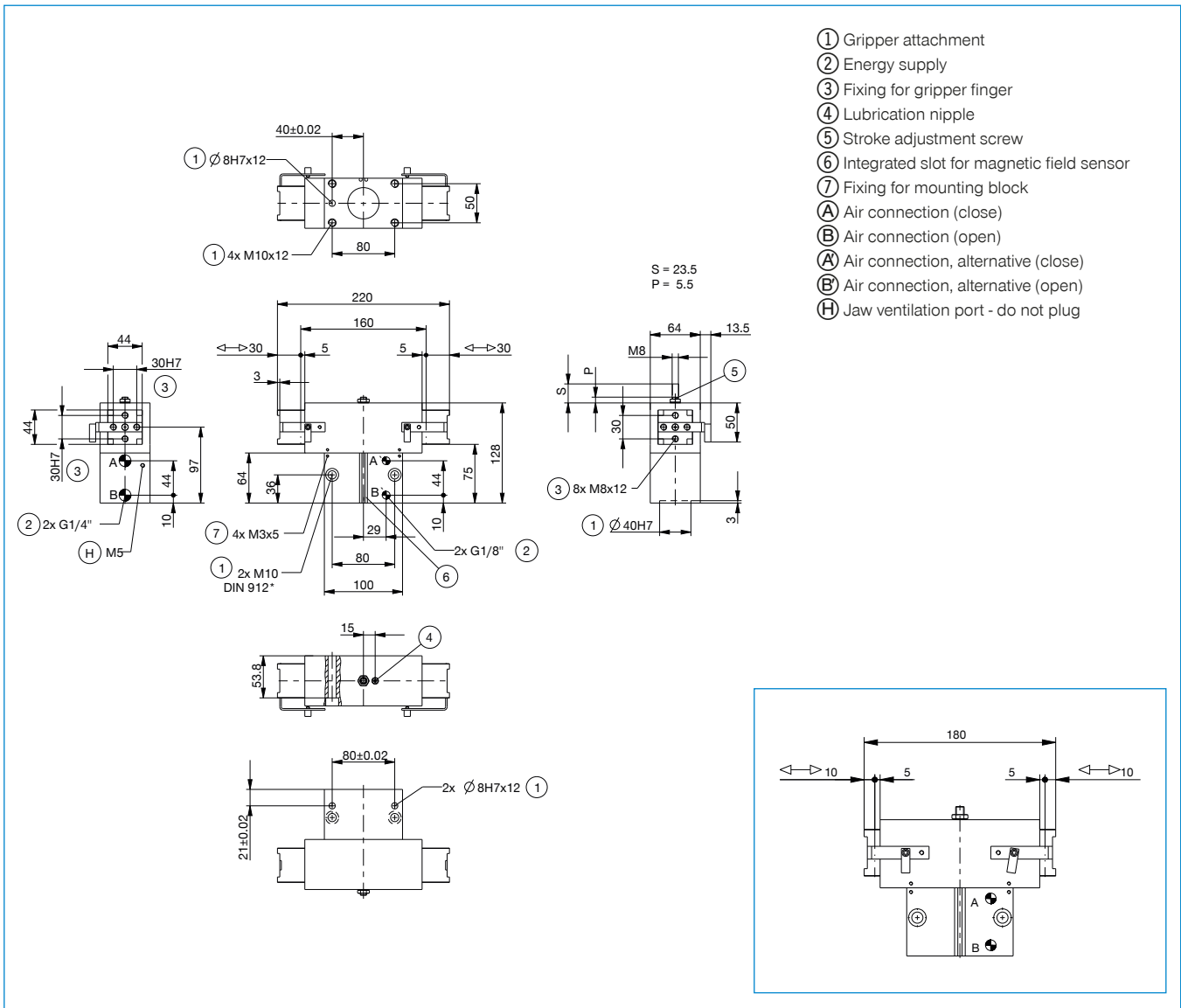


Quick Exhaust Valve

DEV08

Order no.	► Technical Data*			
	GP260	GP260-99	GP260S	GP260S-99
Stroke per jaw [mm]	30	30	10	10
Gripping force in closing [N]	800	665	2480	2120
Gripping force in opening [N]		665		2120
Gripping force secured by spring min. [N]	135		360	
Closing time [s]	0.15	0.1	0.15	0.1
Opening time [s]	0.15	0.1	0.15	0.1
Repetition accuracy +/- [mm]	0.05	0.05	0.05	0.05
Operating pressure min. [bar]	5	3	5	3
Operating pressure max. [bar]	8	8	8	8
Operating temperature min. [°C]	5	5	5	5
Operating temperature max. [°C]	80	80	80	80
Air volume per cycle [cm³]	115	115	115	115
Weight [kg]	2.9	2.9	2.9	2.9

*All data measured at 6 bar



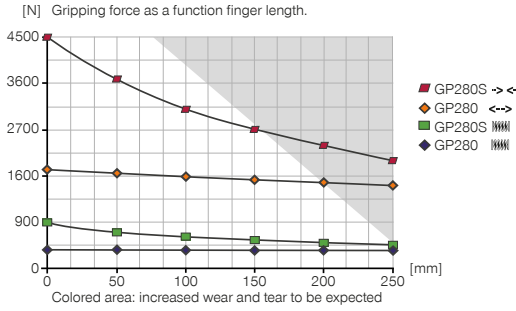
2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GP280

▶ PRODUCT SPECIFICATIONS

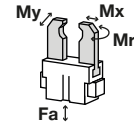


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	40
Mx [Nm]	75
My [Nm]	40
Fa [N]	1000

▶ INCLUDED IN DELIVERY



Mounting block

KB8-23

▶ RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style

GV1-8X8



Magnetic field sensor
Angled Cable 0,3 m -
Connector M8
MFS103SKHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8
MFS204SKHC



2-Position-Sensor Cable
0,3 m - Connector M8

MFSP2SKHC



Plug-in connector Angled
Cable 5m - Socket M8
(female)
KAW500



Plug-in connector Straight Ca-
ble 5m - Socket M8 (female)

KAG500



Inductive proximity switch
- Cable 5 m

NJ8-E2



Inductive proximity switch
- Connector M8

NJ8-E2S



Centering Disc

ZE45H7X6

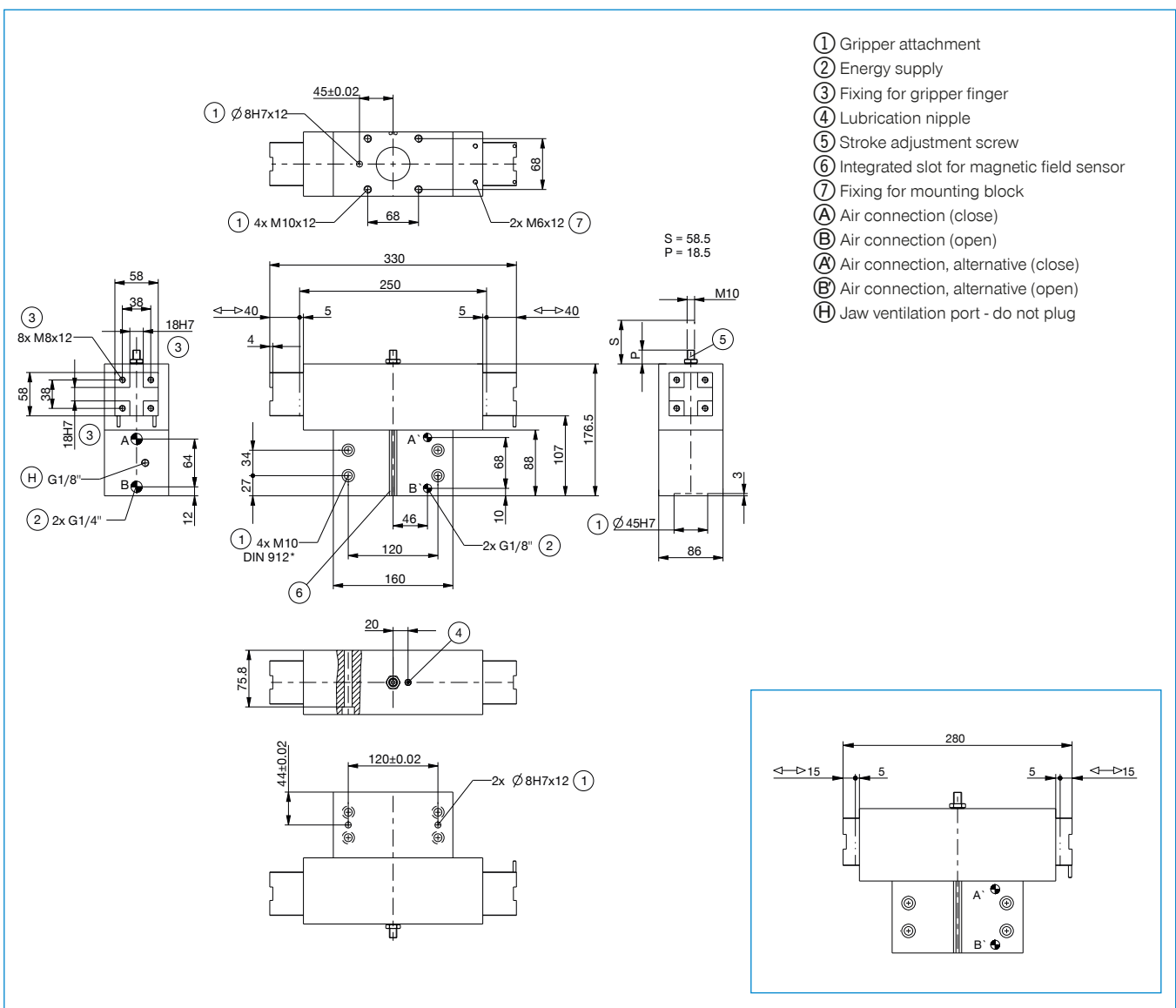


Quick Exhaust Valve

DEV08

Order no.	► Technical Data*			
	GP280	GP280-99	GP280S	GP280S-99
Stroke per jaw [mm]	40	40	15	15
Gripping force in closing [N]	1690	1390	4500	3690
Gripping force in opening [N]		1390		3690
Gripping force secured by spring min. [N]	300		810	
Closing time [s]	0.25	0.2	0.25	0.2
Opening time [s]	0.25	0.2	0.25	0.2
Repetition accuracy +/- [mm]	0.05	0.05	0.05	0.05
Operating pressure min. [bar]	5	5	5	5
Operating pressure max. [bar]	10	10	10	10
Operating temperature min. [°C]	5	5	5	5
Operating temperature max. [°C]	80	80	80	80
Air volume per cycle [cm³]	300	300	300	300
Weight [kg]	8.3	8.3	8.3	8.3

*All data measured at 6 bar



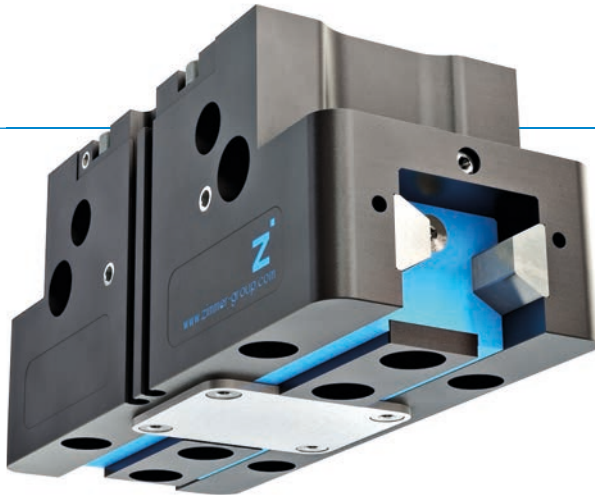
2-JAW PARALLEL GRIPPERS

SERIES GPP5000

1

Series GPP5000 / 2-Jaw Parallel Grippers / pneumatic / Grippers

▶ PRODUCT ADVANTAGES



“The Universal One”

- ▶ Up to 30% more gripping force than the benchmark
- ▶ 10% more static forces and moments than the benchmark
- ▶ Gripper fingers up to 10% longer than the benchmark
- ▶ Gripper fingers weight up to 15% higher than the benchmark
- ▶ Sealed guide IP64 / Protector version IP67 (with purged air)
- ▶ Protected against corrosion
- ▶ Up to 30 million cycles without maintenance

▶ THE BEST PRODUCT FOR YOUR APPLICATION



▶ Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities:
Find the best product for your specific use:
www.zimmer-group.com

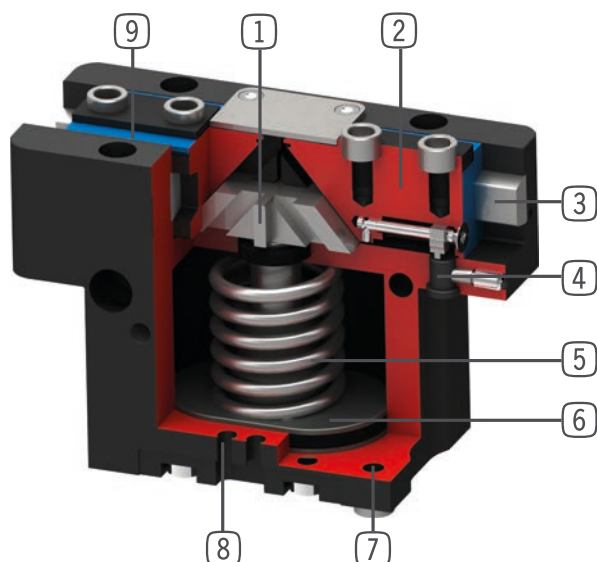
HOW TO ORDER CORRECTLY

- ▶ The product order numbers are arranged according to this diagram:

Order no.	GPP5010	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Basis version	N			
High force	S			
For external gripping, self-locking, spring closing			C	
For internal gripping, self-locking, spring opening			O	
Protector version IP67 for use in adverse environments (with purged air)				P
temperature-resistant version to 130 °C				T



► BENEFITS IN DETAIL



- ① **Wedge hook mechanism**
 - Supports to absorb high forces and moments
 - Synchronized gripper jaw movement
- ② **Gripper jaw**
 - DLC coated to protect against corrosion
 - Gripper fingers mounted using removable centring sleeves
 - Lubricated for life via incorporated lubrication slots
- ③ **Steel Linear Guide**
 - Steel in steel guide
 - Enables use of extremely long gripper fingers
- ④ **Mounting block**
 - mounting for inductive proximity switch
- ⑤ **Integrated gripping force safety device**
 - Spring built into cylinder chamber as an energy store
- ⑥ **Drive**
 - Double-acting pneumatic rotor cylinder
- ⑦ **Mounting and positioning**
 - Alternatively, on several sides for customized mounting
 - Pneumatic and electrical versions identical apart from height
- ⑧ **Sensing slot**
 - mounting and positioning of magnetic field sensors
- ⑨ **Dual lip seal**
 - IP64 and up to IP67 (with purged air) for Protector version
 - Prevents grease from being squeezed out, increasing service life

► SERIES CHARACTERISTICS



Number of installation sizes	9
Stroke per jaw	3 mm - 30 mm
Gripping force	140 N - 13550 N
Weight	0,08 kg - 12 kg
AP class	5



30 million maintenance-free cycles (max.)



High-strength S



IP67



Temperature-resistant



Spring closing C



Inductive sensor



Corrosion resistance



Purged air



Spring opening O



IP64



Magnetic field sensor

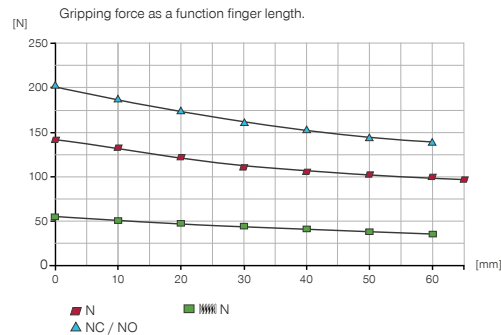
2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5003

▶ PRODUCT SPECIFICATIONS

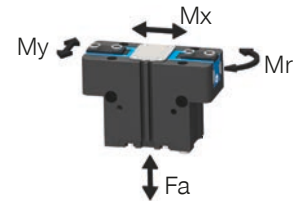


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	7
Mx [Nm]	14
My [Nm]	13
Fa [N]	550

▶ TECHNICAL DATA

Order no.	▶ Technical Data*		
	GPP5003N	GPP5003NC	GPP5003NO
Stroke per jaw [mm]	2.5	2.5	2.5
Gripping force in closing [N]	140	195	
Gripping force in opening [N]	150		205
Gripping force secured by spring min. [N]		55	55
Closing time [s]	0.01	0.01	0.025
Opening time [s]	0.01	0.025	0.01
Weight per jaw max. [kg]	0.12	0.12	0.12
Length of the gripper fingers max. [mm]	65	60	60
Repetition accuracy +/- [mm]	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4
Operating pressure max. [bar]	8	7	7
Operating temperature [°C]	-10 ... +90	-10 ... +90	-10 ... +90
Air volume per cycle [cm³]	2.1	4.8	4.8
Protection to IEC 60529	IP64	IP64	IP64
Weight [kg]	0.08	0.1	0.1

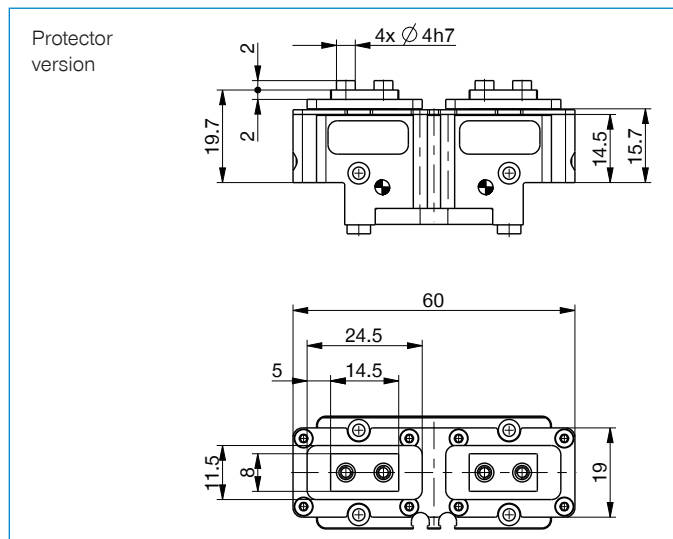
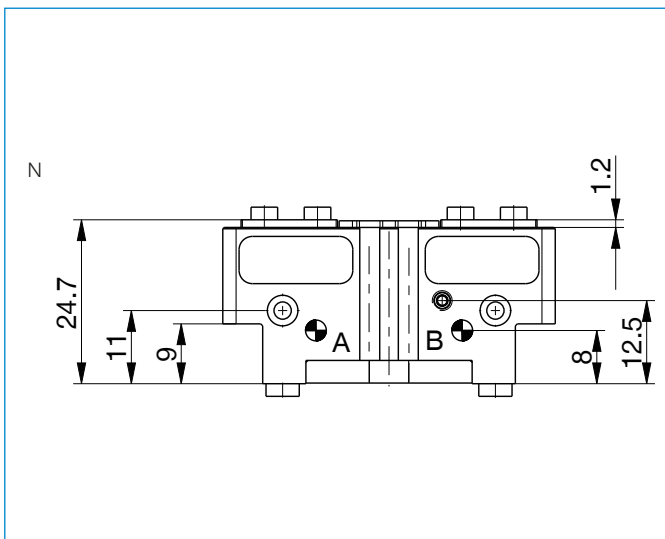
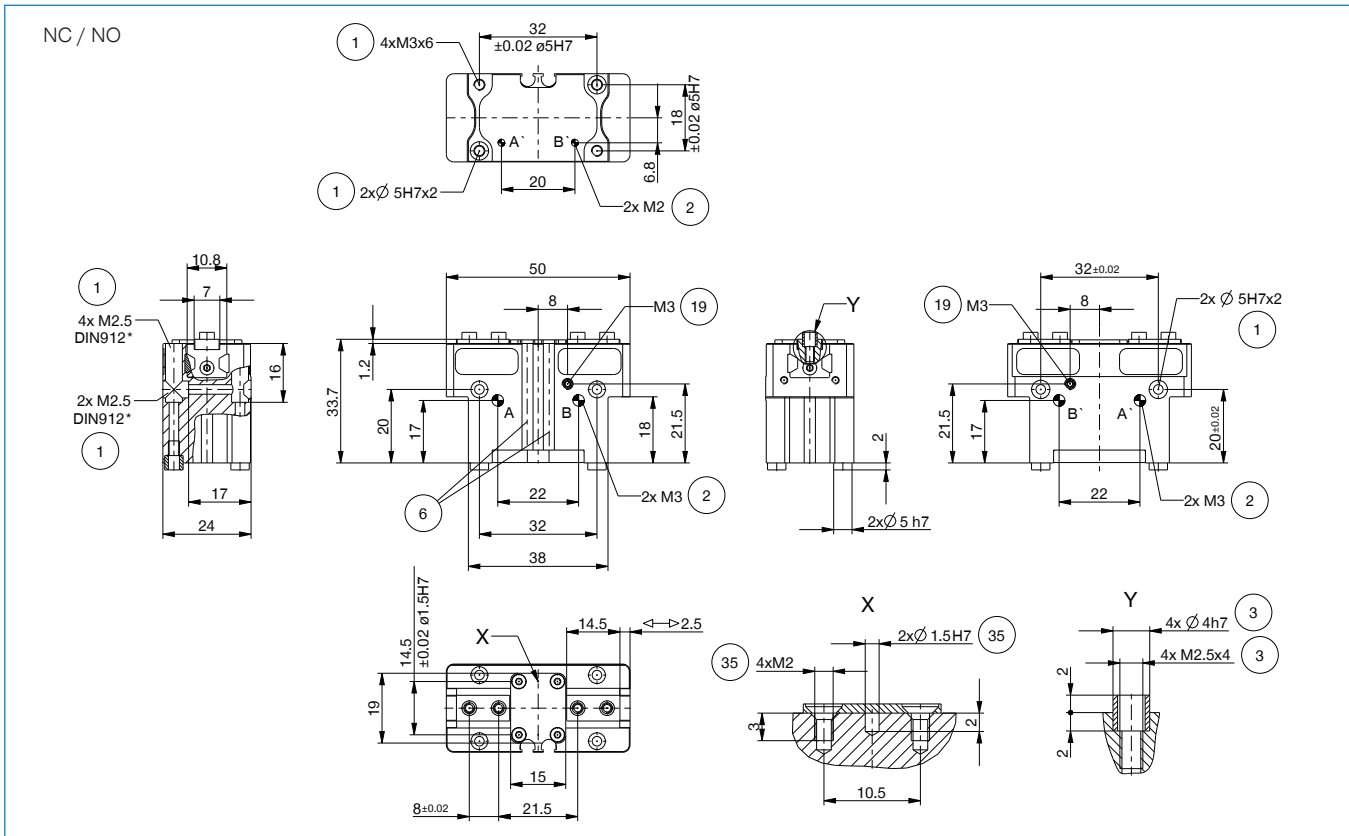
Order no.	▶ Technical Data - Protector Version		
	GPP5003NP	GPP5003NCP	GPP5003NOP
Protection to IEC 60529	IP67**	IP67**	IP67**
Weight [kg]	0.1	0.12	0.12

Order no.	▶ Technical Data - High Temperature Version		
	GPP5003NT	GPP5003NCT	GPP5003NOT
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130

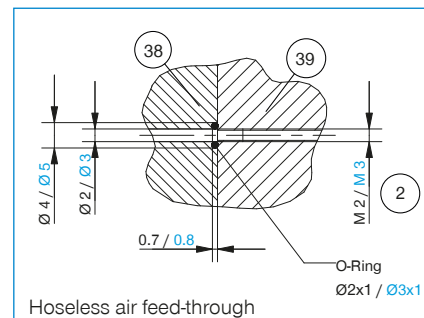
*All data measured at 6 bar

** with purged air

TECHNICAL DRAWINGS



- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑥ Integrated slot for magnetic field sensor
- ⑱ Air purge connection option
- ⑳ Attachment option for customer-specific fittings
- ⑳ Adapter
- ㉑ Gripper
- A Air connection (close)
- B Air connection (open)
- A Air connection, alternative (close)
- B Air connection, alternative (open)

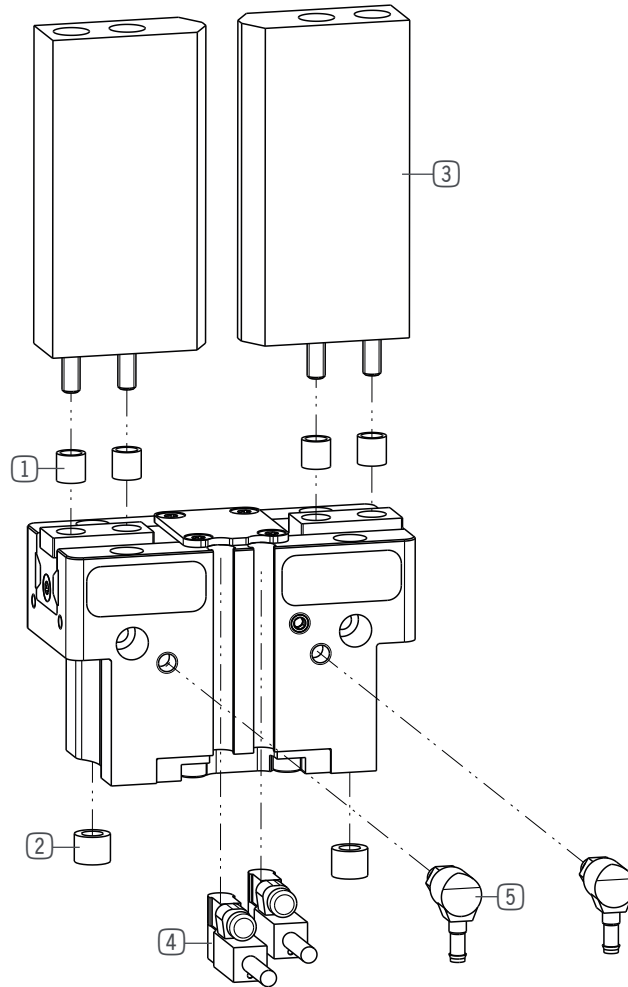


2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5003

1

Installation size GPP5003 / 2-Jaw Parallel Grippers / pneumatic / Grippers



▶ INCLUDED IN DELIVERY



Centering Disc

DST06510



Centering Disc

015761

► RECOMMENDED ACCESSORIES



Universal jaw aluminium

UB5003AL



Universal jaw steel

UB5003ST



Rubber Coated Tape Smooth

KF50G



Rubber Coated Tape Knobbed

KF50N



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-01



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector customizable Straight - Connector M8

S8-G-3



Plug-in connector customizable Straight - Connector M12

S12-G-3



Angled Fittings - Barb Style Connection

WVM3



Straight Fittings - Barb Style Connection

GVM3



Quick Exhaust Valve

DEV04

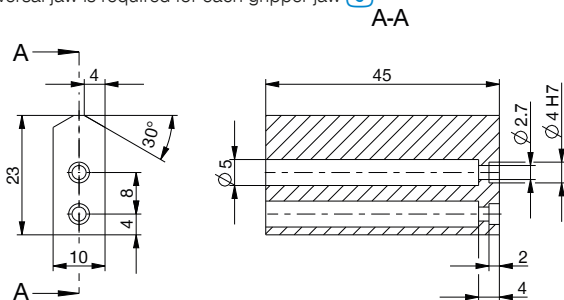


Pressure Safety Valve

DSV1-8

► TECHNICAL DRAWINGS ACCESSORIES

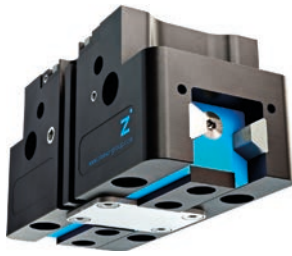
One universal jaw is required for each gripper jaw ³



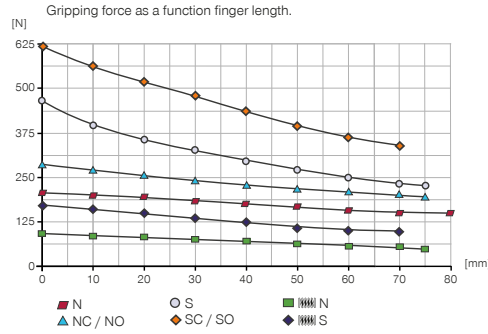
2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5004

▶ PRODUCT SPECIFICATIONS

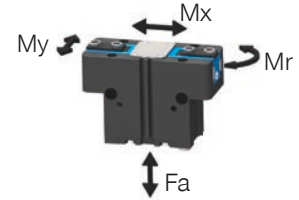


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	14
Mx [Nm]	29
My [Nm]	23
Fa [N]	750

▶ TECHNICAL DATA

Order no.	▶ Technical Data*					
	GPP5004N	GPP5004NC	GPP5004NO	GPP5004S	GPP5004SC	GPP5004SO
Stroke per jaw [mm]	4	4	4	2	2	2
Gripping force in closing [N]	200	280		440	600	
Gripping force in opening [N]	215		295	470		630
Gripping force secured by spring min. [N]		80	80		160	160
Closing time [s]	0.015	0.015	0.025	0.015	0.015	0.025
Opening time [s]	0.015	0.025	0.015	0.015	0.025	0.015
Weight per jaw max. [kg]	0.2	0.2	0.2	0.2	0.2	0.2
Length of the gripper fingers max. [mm]	80	75	75	75	70	70
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Operating temperature [°C]	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90
Air volume per cycle [cm³]	5	12	12	5	12	12
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	0.16	0.21	0.21	0.16	0.21	0.21

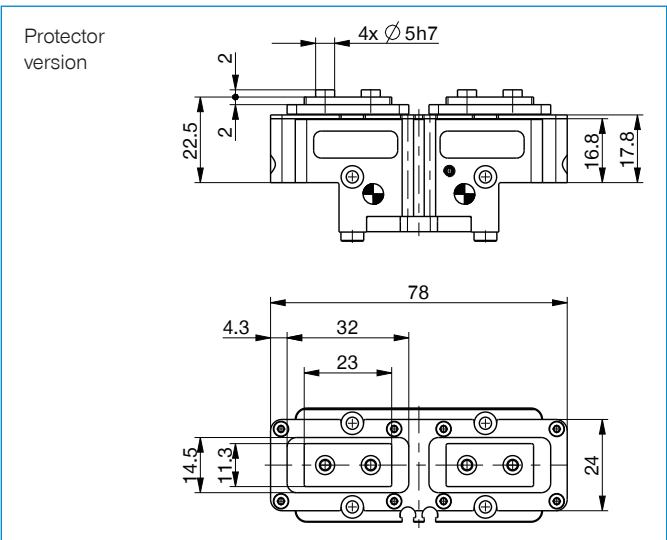
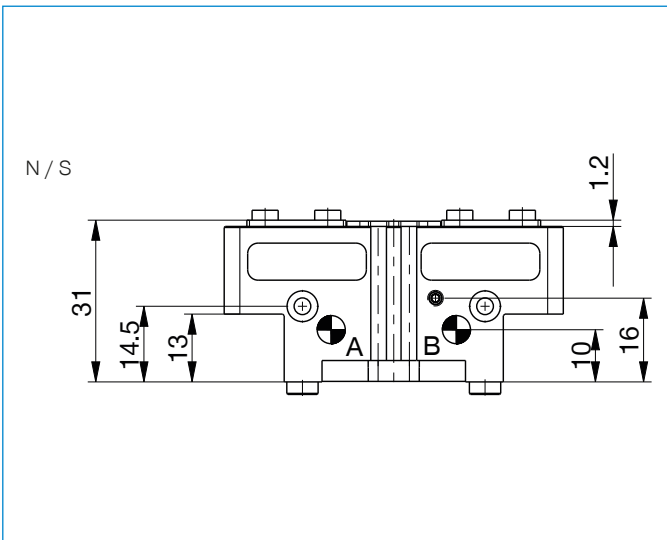
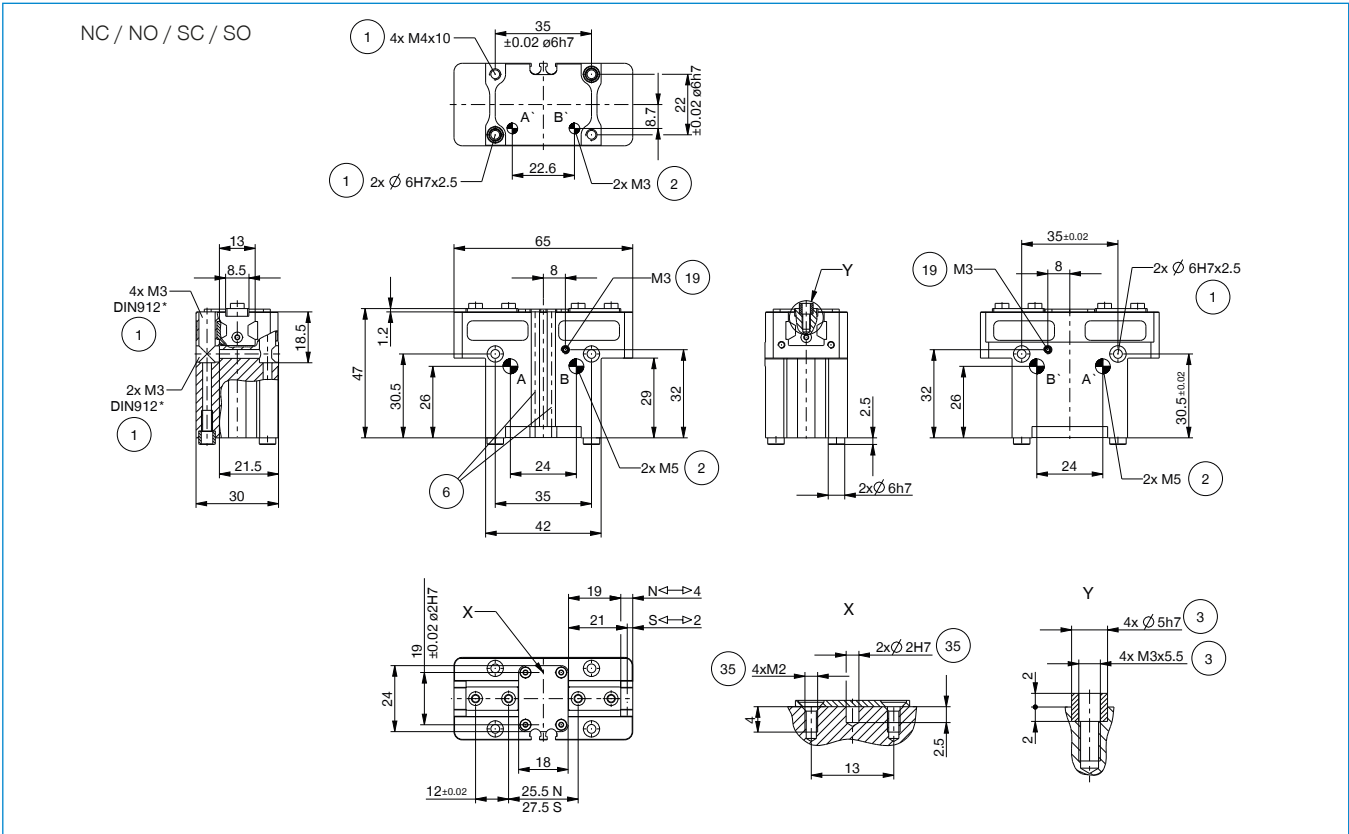
Order no.	▶ Technical Data - Protector Version					
	GPP5004NP	GPP5004NCP	GPP5004NOP	GPP5004SP	GPP5004SCP	GPP5004SOP
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**
Weight [kg]	0.25	0.3	0.3	0.25	0.3	0.3

Order no.	▶ Technical Data - High Temperature Version					
	GPP5004NT	GPP5004NCT	GPP5004NOT	GPP5004ST	GPP5004SCT	GPP5004SOT
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130

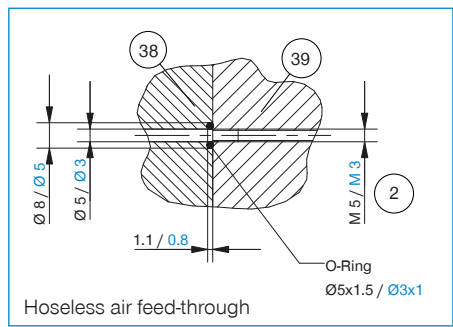
*All data measured at 6 bar

** with purged air

▶ TECHNICAL DRAWINGS



- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑥ Integrated slot for magnetic field sensor
- ⑱ Air purge connection option
- ⑳ Attachment option for customer-specific fittings
- ⑳ Adapter
- ㉑ Gripper
- Ⓐ Air connection (close)
- Ⓑ Air connection (open)
- Ⓐ Air connection, alternative (close)
- Ⓑ Air connection, alternative (open)

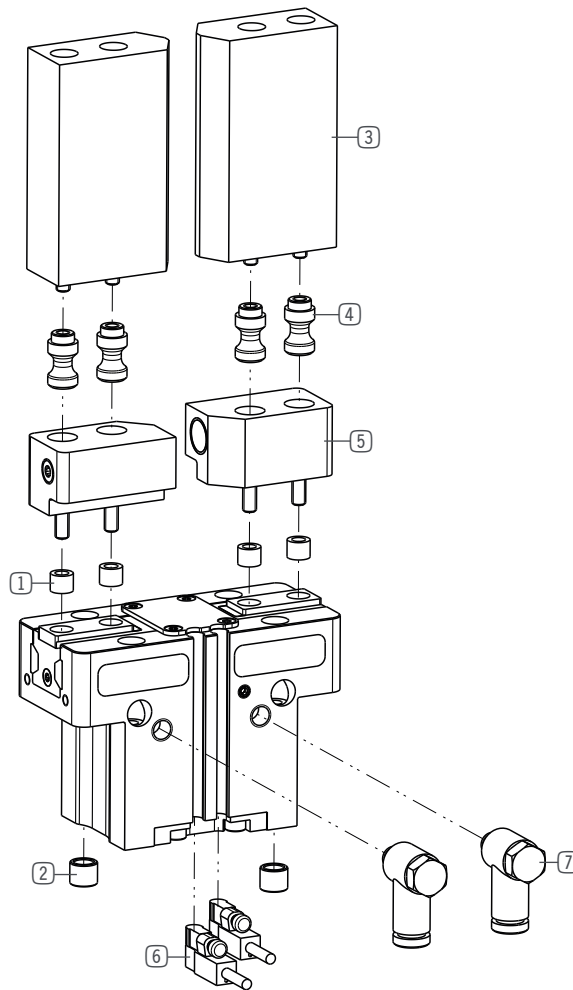


2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5004

1

Installation size GPP5004 / 2-Jaw Parallel Grippers / pneumatic / Grippers



▶ INCLUDED IN DELIVERY



Centering Disc

015761



Centering Disc

024230

► RECOMMENDED ACCESSORIES



Universal jaw aluminium

UB5004AL



Universal jaw steel

UB5004ST



Changeable jaw, loose-part-set

WB5004L



Changeable jaw, fix-part

WB5004F



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-01



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector customizable Straight - Connector M8

S8-G-3



Plug-in connector customizable Straight - Connector M12

S12-G-3



Angled Fittings - Quick Connect Style

WVM5



Straight Fittings - Quick Connect Style

GVM5



Quick Exhaust Valve

DEV04

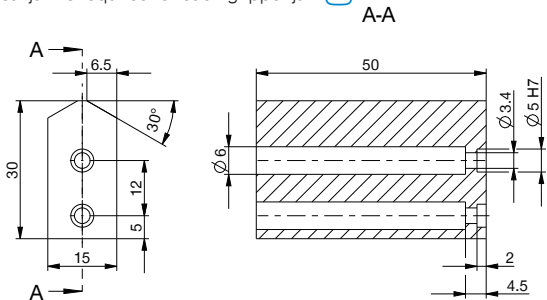


Pressure Safety Valve

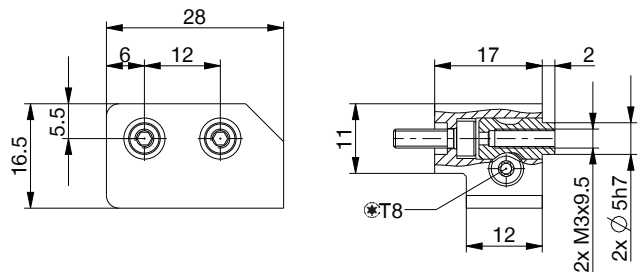
DSV1-8

► TECHNICAL DRAWINGS ACCESSORIES

One universal jaw is required for each gripper jaw **3**



For each gripper jaw, one interchangeable jaw loose part set **4** and one interchangeable jaw fixed part **5** are needed



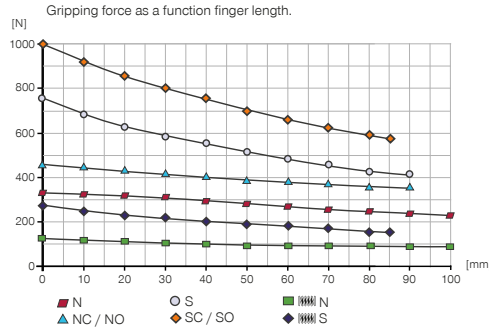
2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5006

▶ PRODUCT SPECIFICATIONS

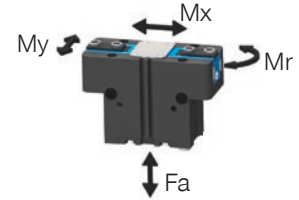


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	43
Mx [Nm]	70
My [Nm]	46
Fa [N]	1250

▶ TECHNICAL DATA

Order no.	▶ Technical Data*					
	GPP5006N	GPP5006NC	GPP5006NO	GPP5006S	GPP5006SC	GPP5006SO
Stroke per jaw [mm]	6	6	6	3	3	3
Gripping force in closing [N]	330	455		740	1020	
Gripping force in opening [N]	360		485	800		1080
Gripping force secured by spring min. [N]		125	125		280	280
Closing time [s]	0.025	0.015	0.035	0.025	0.015	0.035
Opening time [s]	0.025	0.035	0.015	0.025	0.035	0.015
Weight per jaw max. [kg]	0.4	0.4	0.4	0.4	0.4	0.4
Length of the gripper fingers max. [mm]	100	90	90	90	85	85
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Operating temperature [°C]	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90
Air volume per cycle [cm³]	11	24	24	11	24	24
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	0.28	0.35	0.35	0.28	0.35	0.35

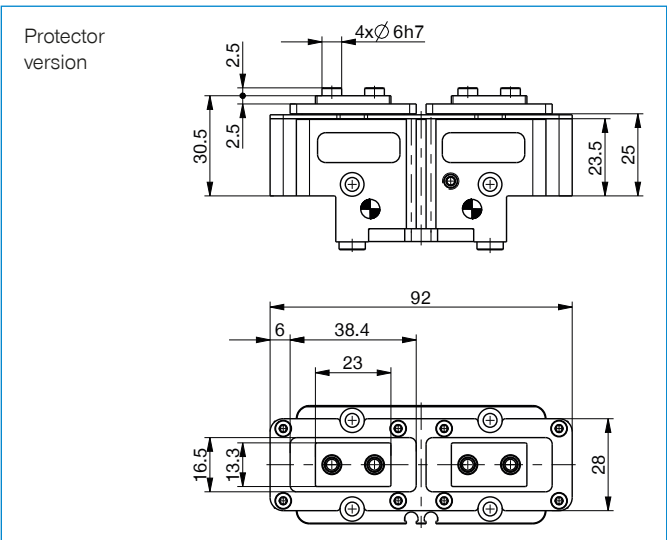
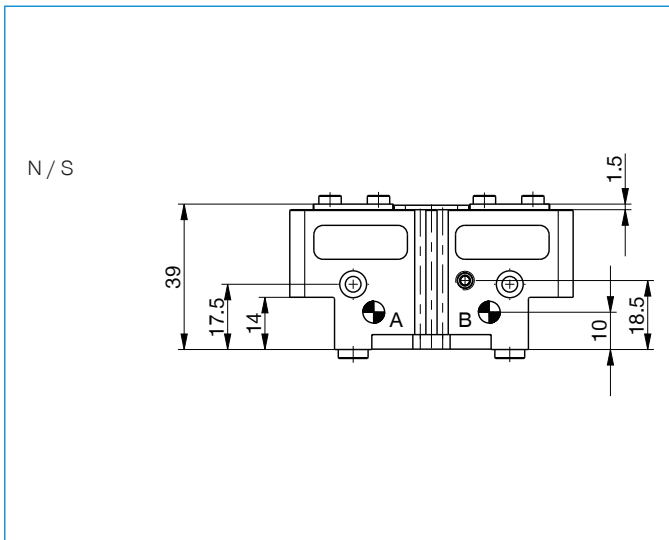
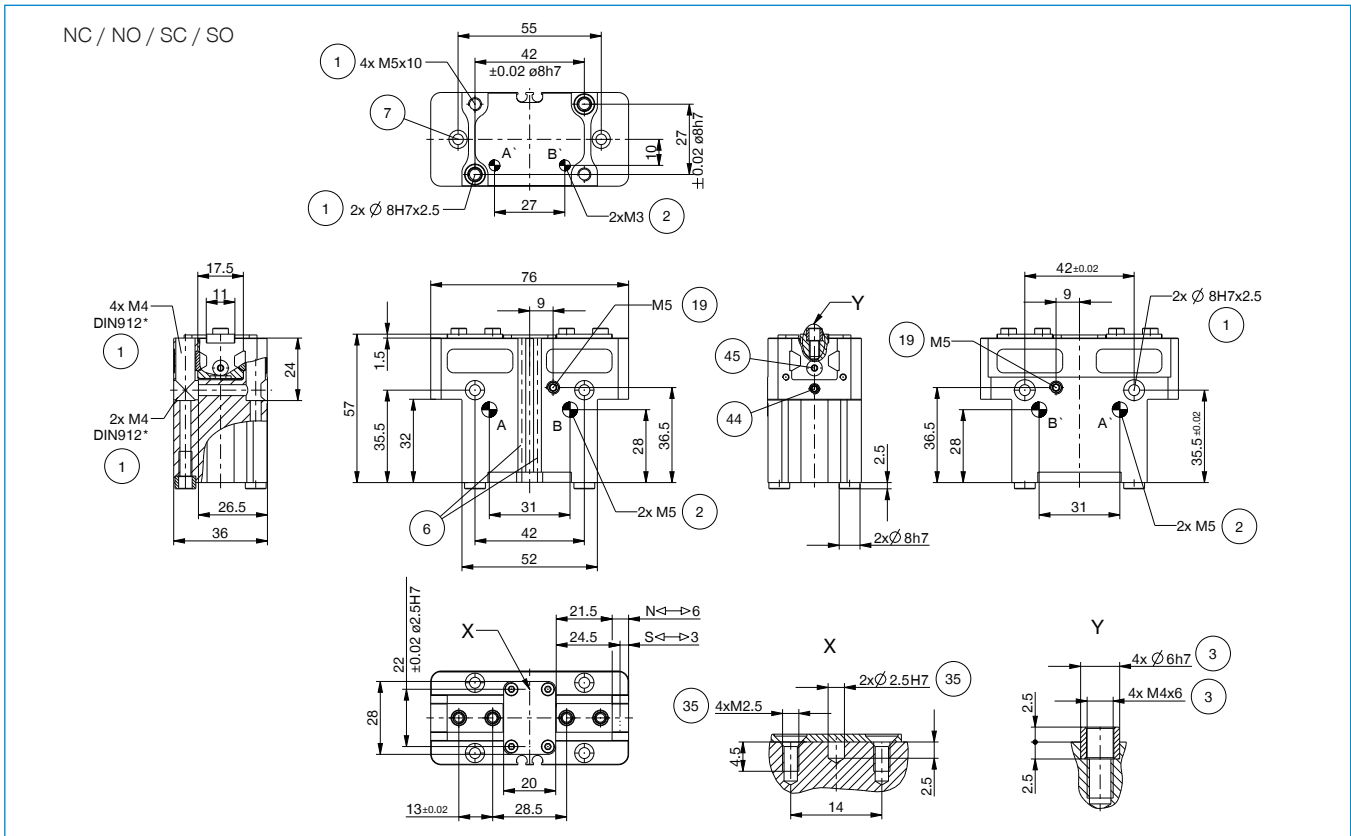
Order no.	▶ Technical Data - Protector Version					
	GPP5006NP	GPP5006NCP	GPP5006NOP	GPP5006SP	GPP5006SCP	GPP5006SOP
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**
Weight [kg]	0.37	0.44	0.44	0.37	0.44	0.44

Order no.	▶ Technical Data - High Temperature Version					
	GPP5006NT	GPP5006NCT	GPP5006NOT	GPP5006ST	GPP5006SCT	GPP5006SOT
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130

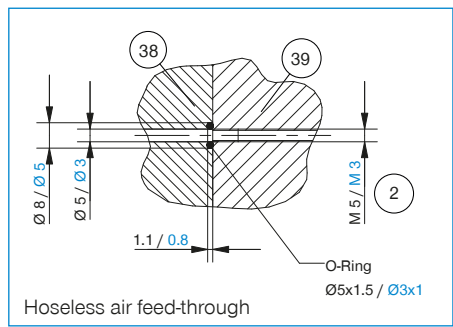
*All data measured at 6 bar

** with purged air

▶ TECHNICAL DRAWINGS



- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑥ Integrated slot for magnetic field sensor
- ⑦ Mounting block
- ⑱ Air purge connection option
- ⑳ Attachment option for customer-specific fittings
- ㉓ Adapter
- ㉔ Gripper
- ㉕ Clamp for sensor
- ㉖ Switch cam adjustment
- Ⓐ Air connection (close)
- Ⓑ Air connection (open)
- Ⓐ Air connection, alternative (close)
- Ⓑ Air connection, alternative (open)

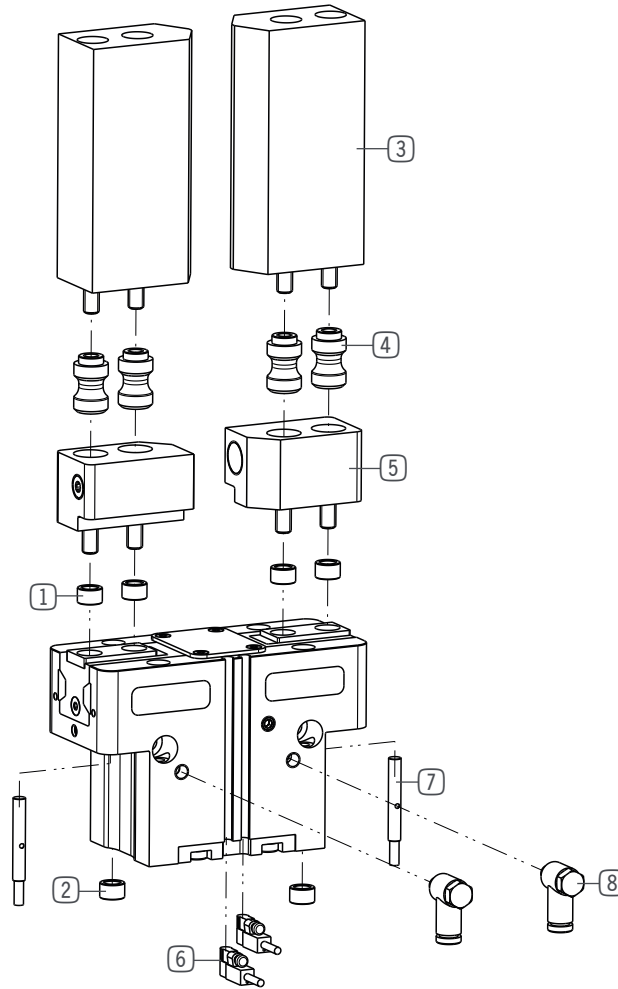


2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5006

1

Installation size GPP5006 / 2-Jaw Parallel Grippers / pneumatic / Grippers



▶ INCLUDED IN DELIVERY



Centering Disc

024230



Centering Disc

024231

► RECOMMENDED ACCESSORIES



Universal jaw aluminium

UB5006AL



Universal jaw steel

UB5006ST



Changeable jaw, loose-part-set

WB5006L



Changeable jaw, fix-part

WB5006F



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-01



Inductive Proximity Switch Cable 0,3 m - Connector M8

NJ4-E2SK-01



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Angled Fittings - Quick Connect Style

WVM5



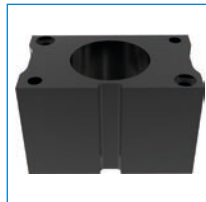
Straight Fittings - Quick Connect Style

GVM5



Pressure Safety Valve

DSV1-8



Compensation module N/S

ZUB5006PNS

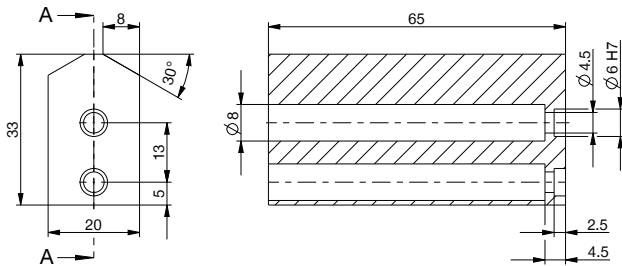


Compensation module NC/NO/SC/SO

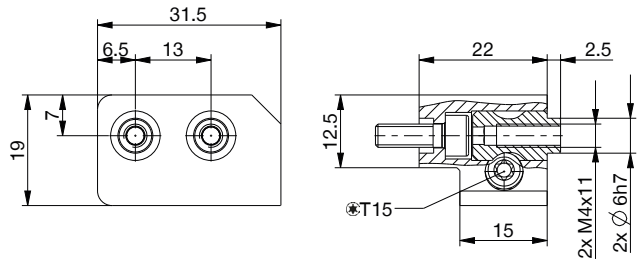
ZUB5006PCO

► TECHNICAL DRAWINGS ACCESSORIES

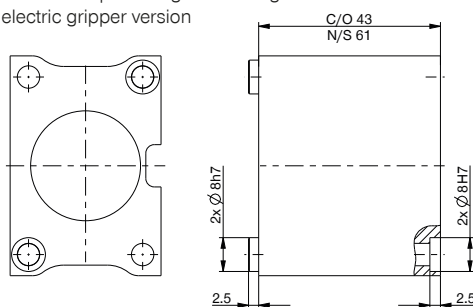
One universal jaw is required for each gripper jaw **3** A-A



For each gripper jaw, one interchangeable jaw loose part set **4** and one interchangeable jaw fixed part **5** are needed



Compensation module for compensating for the height differences between the pneumatic and electric gripper version



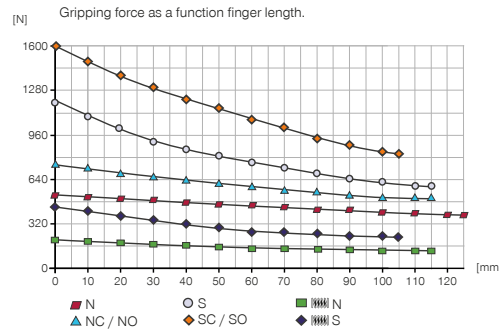
2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5008

▶ PRODUCT SPECIFICATIONS

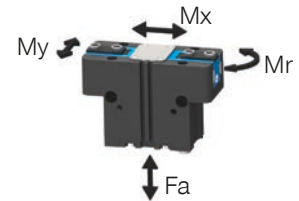


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	60
Mx [Nm]	105
My [Nm]	65
Fa [N]	1900

▶ TECHNICAL DATA

Order no.	▶ Technical Data*					
	GPP5008N	GPP5008NC	GPP5008NO	GPP5008S	GPP5008SC	GPP5008SO
Stroke per jaw [mm]	8	8	8	4	4	4
Gripping force in closing [N]	520	710		1150	1580	
Gripping force in opening [N]	560		750	1240		1670
Gripping force secured by spring min. [N]		190	190		430	430
Closing time [s]	0.035	0.025	0.045	0.035	0.025	0.045
Opening time [s]	0.035	0.045	0.025	0.035	0.045	0.025
Weight per jaw max. [kg]	0.7	0.7	0.7	0.7	0.7	0.7
Length of the gripper fingers max. [mm]	125	115	115	115	105	105
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Operating temperature [°C]	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90
Air volume per cycle [cm³]	22	43	43	22	43	43
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	0.53	0.63	0.63	0.53	0.63	0.63

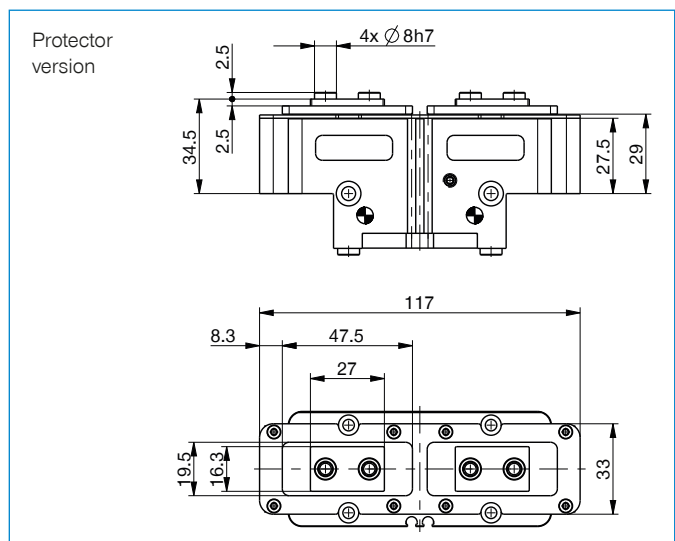
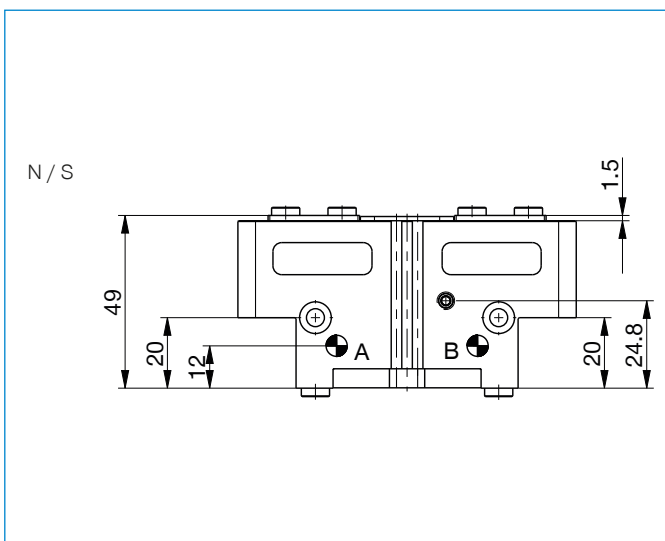
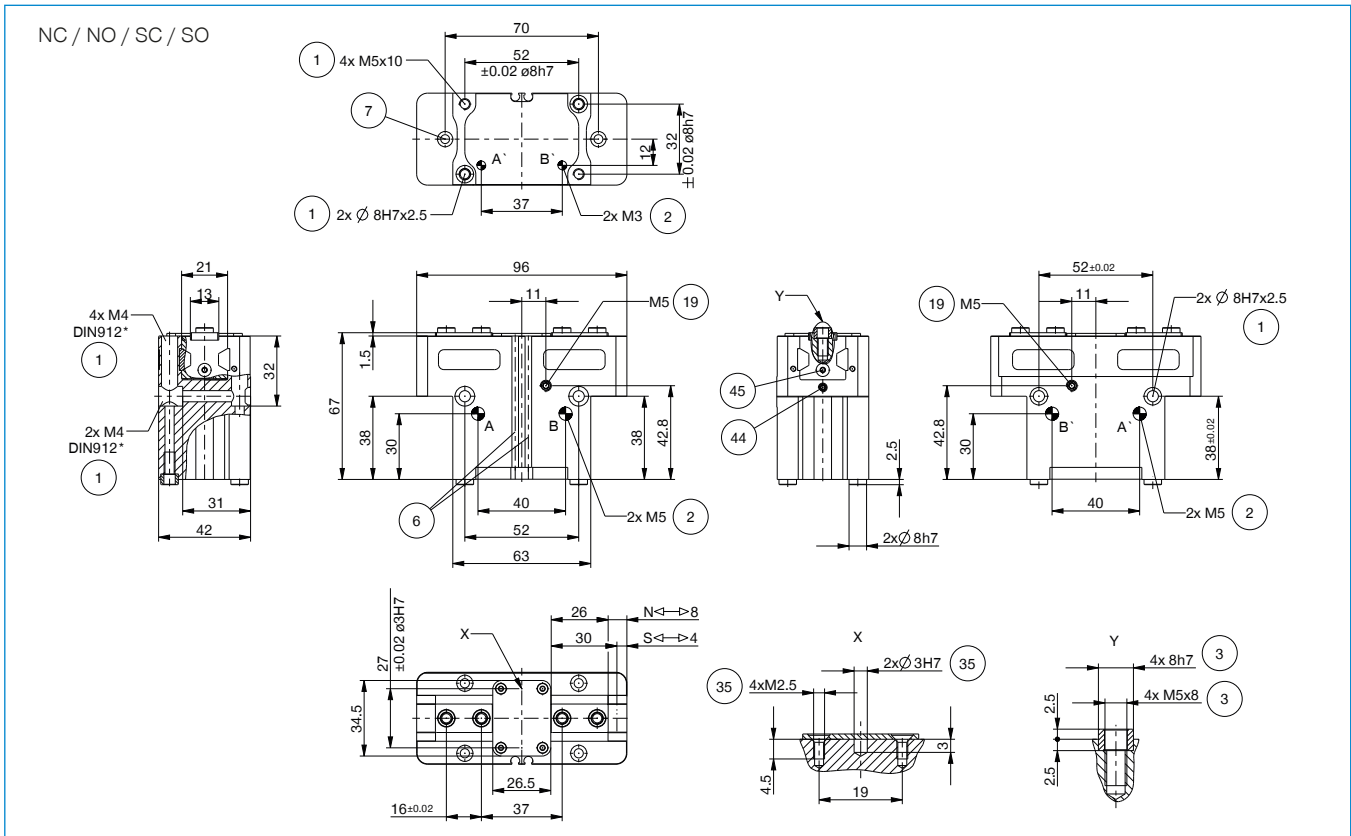
Order no.	▶ Technical Data - Protector Version					
	GPP5008NP	GPP5008NCP	GPP5008NOP	GPP5008SP	GPP5008SCP	GPP5008SOP
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**
Weight [kg]	0.66	0.76	0.76	0.66	0.76	0.76

Order no.	▶ Technical Data - High Temperature Version					
	GPP5008NT	GPP5008NCT	GPP5008NOT	GPP5008ST	GPP5008SCT	GPP5008SOT
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130

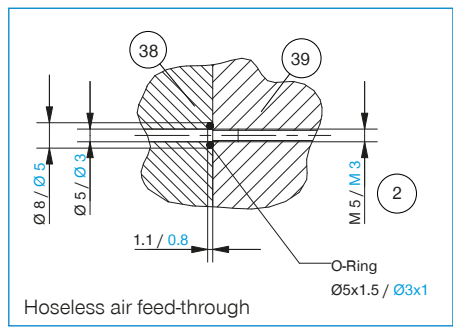
*All data measured at 6 bar

** with purged air

TECHNICAL DRAWINGS



- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑥ Integrated slot for magnetic field sensor
- ⑦ Mounting block
- ⑱ Air purge connection option
- ⑳ Attachment option for customer-specific fittings
- ㉘ Adapter
- ㉙ Gripper
- ㉚ Clamp for sensor
- ㉛ Switch cam adjustment
- Ⓐ Air connection (close)
- Ⓑ Air connection (open)
- Ⓐ Air connection, alternative (close)
- Ⓑ Air connection, alternative (open)

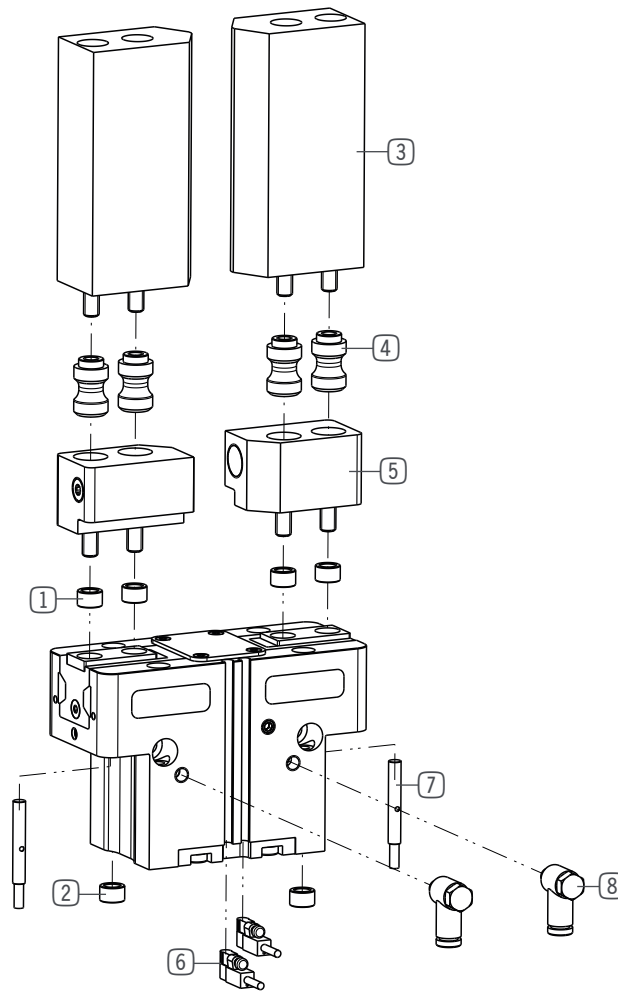


2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5008

1

Installation size GPP5008 / 2-Jaw Parallel Grippers / pneumatic / Grippers



▶ INCLUDED IN DELIVERY



Centering Disc

024231

► RECOMMENDED ACCESSORIES



Universal jaw aluminium

UB5008AL



Universal jaw steel

UB5008ST



Changeable jaw, loose-part-set

WB5008L



Changeable jaw, fix-part

WB5008F



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-01



Inductive Proximity Switch Cable 0,3 m - Connector M8

NJ4-E2SK-01



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Angled Fittings - Quick Connect Style

WVM5



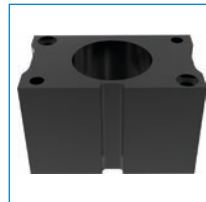
Straight Fittings - Quick Connect Style

GVM5



Pressure Safety Valve

DSV1-8



Compensation module N / S

ZUB5008PNS

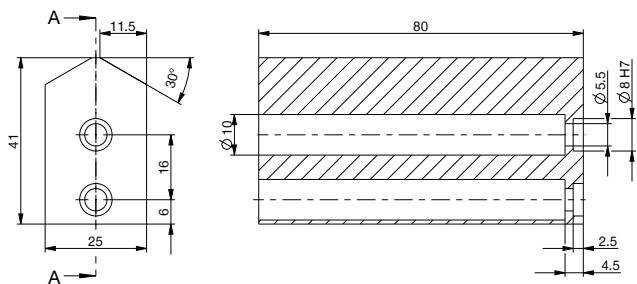


Compensation module NC / NO / SC / SO

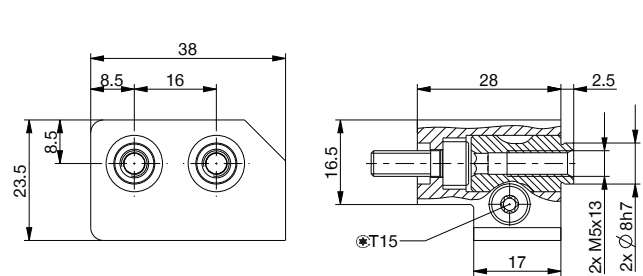
ZUB5008PCO

► TECHNICAL DRAWINGS ACCESSORIES

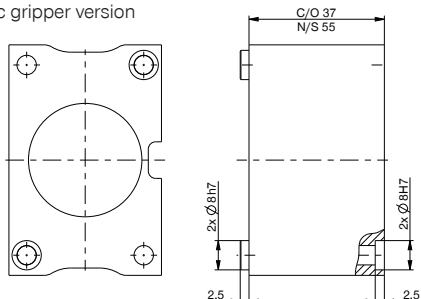
One universal jaw is required for each gripper jaw **3**



For each gripper jaw, one interchangeable jaw loose part set **4** and one interchangeable jaw fixed part **5** are needed



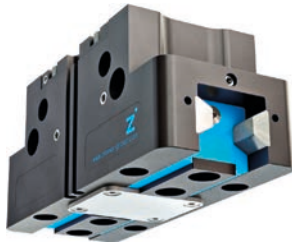
Compensation module for compensating for the height differences between the pneumatic and electric gripper version



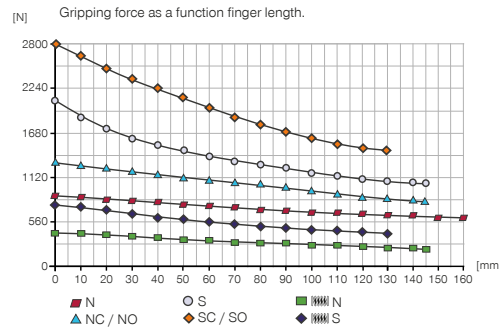
2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5010

▶ PRODUCT SPECIFICATIONS

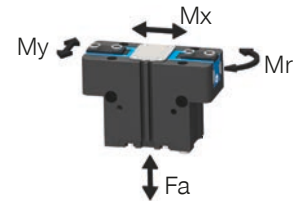


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	75
Mx [Nm]	125
My [Nm]	95
Fa [N]	2700

▶ TECHNICAL DATA

Order no.	▶ Technical Data*					
	GPP5010N	GPP5010NC	GPP5010NO	GPP5010S	GPP5010SC	GPP5010SO
Stroke per jaw [mm]	10	10	10	5	5	5
Gripping force in closing [N]	885	1260		1940	2750	
Gripping force in opening [N]	945		1320	2080		2890
Gripping force secured by spring min. [N]		375	375		810	810
Closing time [s]	0.06	0.05	0.08	0.06	0.05	0.08
Opening time [s]	0.06	0.08	0.05	0.06	0.08	0.05
Weight per jaw max. [kg]	1.3	1.3	1.3	1.3	1.3	1.3
Length of the gripper fingers max. [mm]	160	145	145	145	130	130
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Operating temperature [°C]	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90
Air volume per cycle [cm³]	44	92	92	44	92	92
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	0.87	1.09	1.09	0.87	1.09	1.09

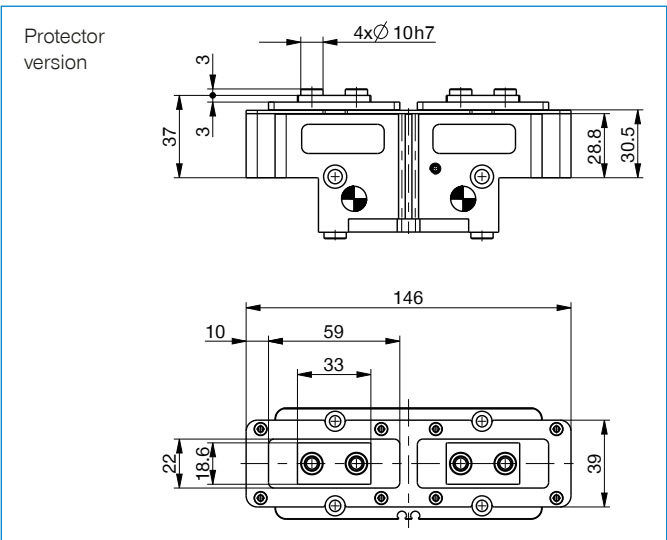
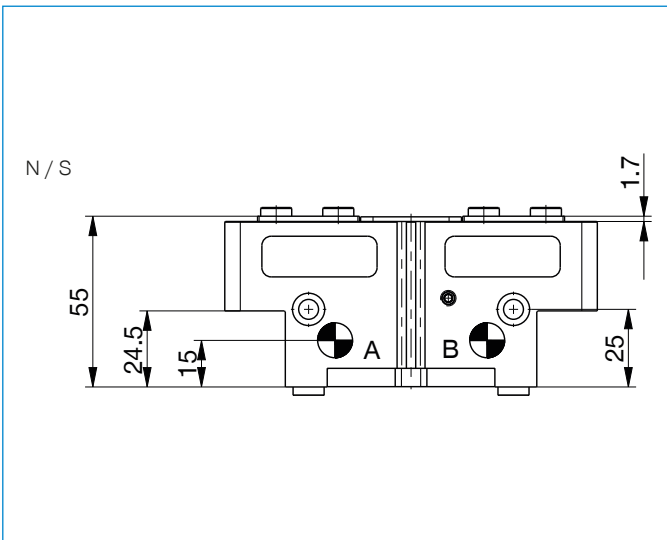
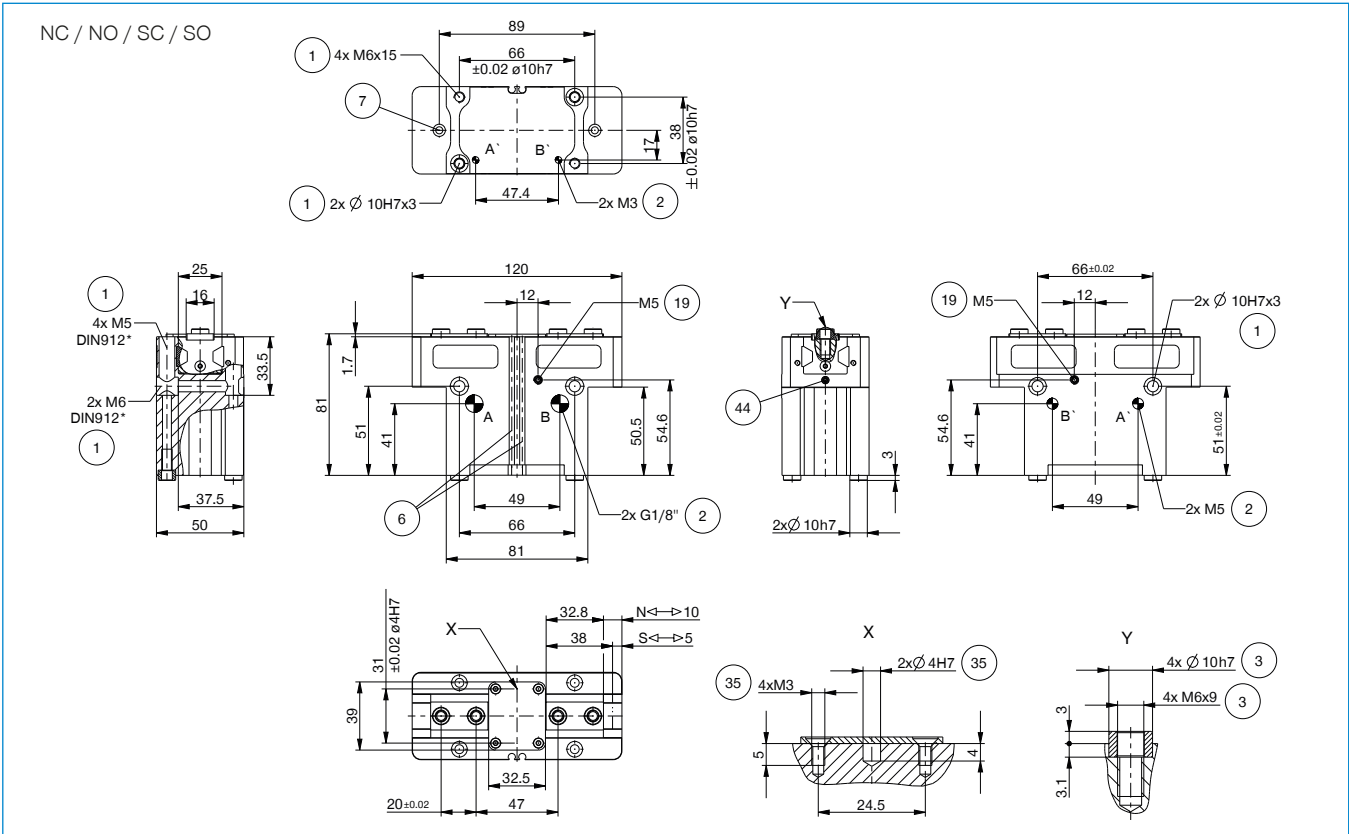
Order no.	▶ Technical Data - Protector Version					
	GPP5010NP	GPP5010NCP	GPP5010NOP	GPP5010SP	GPP5010SCP	GPP5010SOP
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**
Weight [kg]	0.99	1.31	1.31	0.99	1.31	1.31

Order no.	▶ Technical Data - High Temperature Version					
	GPP5010NT	GPP5010NCT	GPP5010NOT	GPP5010ST	GPP5010SCT	GPP5010SOT
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130

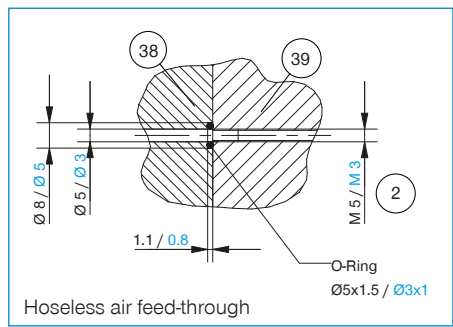
*All data measured at 6 bar

** with purged air

► TECHNICAL DRAWINGS



- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑥ Integrated slot for magnetic field sensor
- ⑦ Mounting block
- ⑱ Air purge connection option
- ⑳ Attachment option for customer-specific fittings
- ㉑ Adapter
- ㉒ Gripper
- ㉓ Clamp for sensor
- ㉔ Switch cam adjustment
- Ⓐ Air connection (close)
- Ⓑ Air connection (open)
- Ⓐ Air connection, alternative (close)
- Ⓑ Air connection, alternative (open)

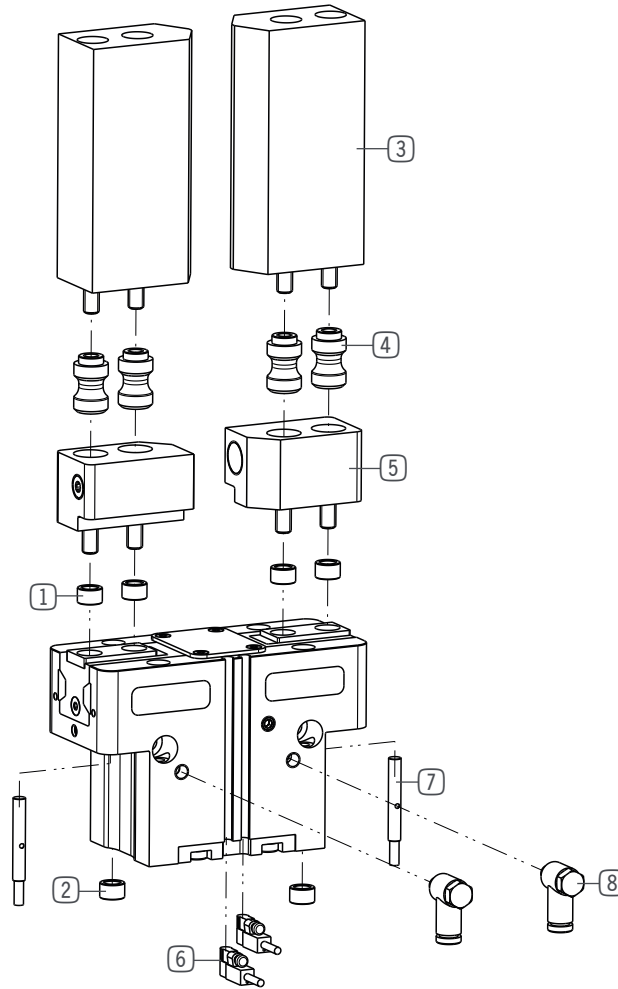


2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5010

1

Installation size GPP5010 / 2-Jaw Parallel Grippers / pneumatic / Grippers



▶ INCLUDED IN DELIVERY



Centering Disc

018187

▶ RECOMMENDED ACCESSORIES



Universal jaw aluminium

UB5010AL



Universal jaw steel

UB5010ST



Changeable jaw, loose-part-set

WB5010L



Changeable jaw, fix-part

WB5010F



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-01



Inductive Proximity Switch Cable 0,3 m - Connector M8

NJ4-E2SK-01



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Angled Fittings - Quick Connect Style

WV1-8X6



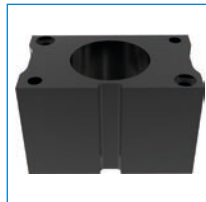
Straight Fittings - Quick Connect Style

GV1-8X6



Pressure Safety Valve

DSV1-8



Compensation module N / S

ZUB5010PNS

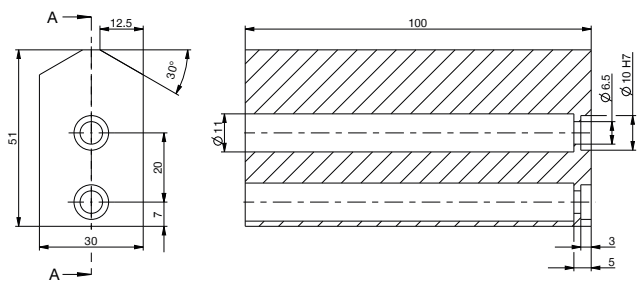


Compensation module NC / NO / SC / SO

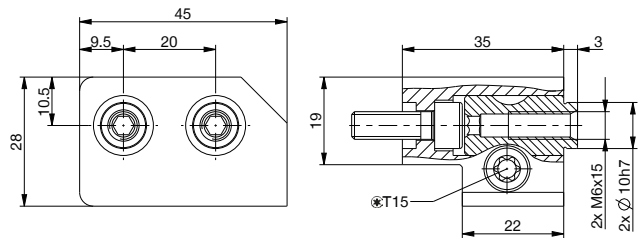
ZUB5010PCO

▶ TECHNICAL DRAWINGS ACCESSORIES

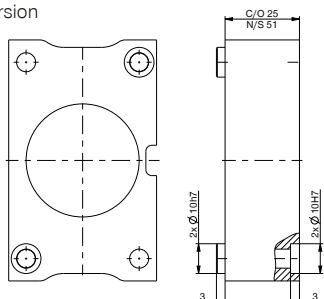
One universal jaw is required for each gripper jaw **3**



For each gripper jaw, one interchangeable jaw loose part set **4** and one interchangeable jaw fixed part **5** are needed



Compensation module for compensating for the height differences between the pneumatic and electric gripper version



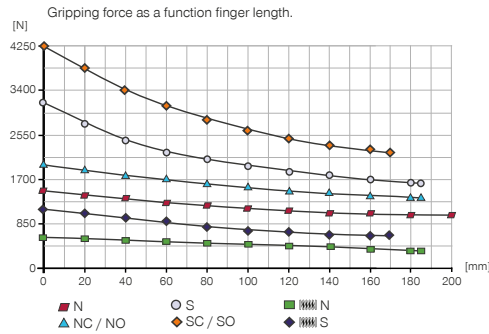
2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5013

▶ PRODUCT SPECIFICATIONS

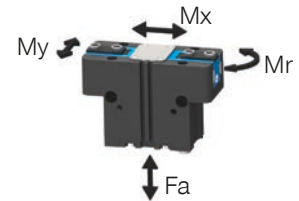


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	110
Mx [Nm]	150
My [Nm]	130
Fa [N]	3300

▶ TECHNICAL DATA

Order no.	▶ Technical Data*					
	GPP5013N	GPP5013NC	GPP5013NO	GPP5013S	GPP5013SC	GPP5013SO
Stroke per jaw [mm]	13	13	13	6	6	6
Gripping force in closing [N]	1410	1920		3100	4220	
Gripping force in opening [N]	1490		1860	3280		4400
Gripping force secured by spring min. [N]		510	510		1120	1120
Closing time [s]	0.09	0.07	0.11	0.09	0.07	0.11
Opening time [s]	0.09	0.11	0.08	0.09	0.11	0.08
Weight per jaw max. [kg]	2.4	2.4	2.4	2.4	2.4	2.4
Length of the gripper fingers max. [mm]	200	185	185	185	170	170
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Operating temperature [°C]	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90
Air volume per cycle [cm³]	88	171	171	88	171	171
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	1.5	1.9	1.9	1.5	1.9	1.9

Order no.	▶ Technical Data - Protector Version					
	GPP5013NP	GPP5013NCP	GPP5013NOP	GPP5013SP	GPP5013SCP	GPP5013SOP
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**
Weight [kg]	1.86	2.26	2.26	1.86	2.26	2.26

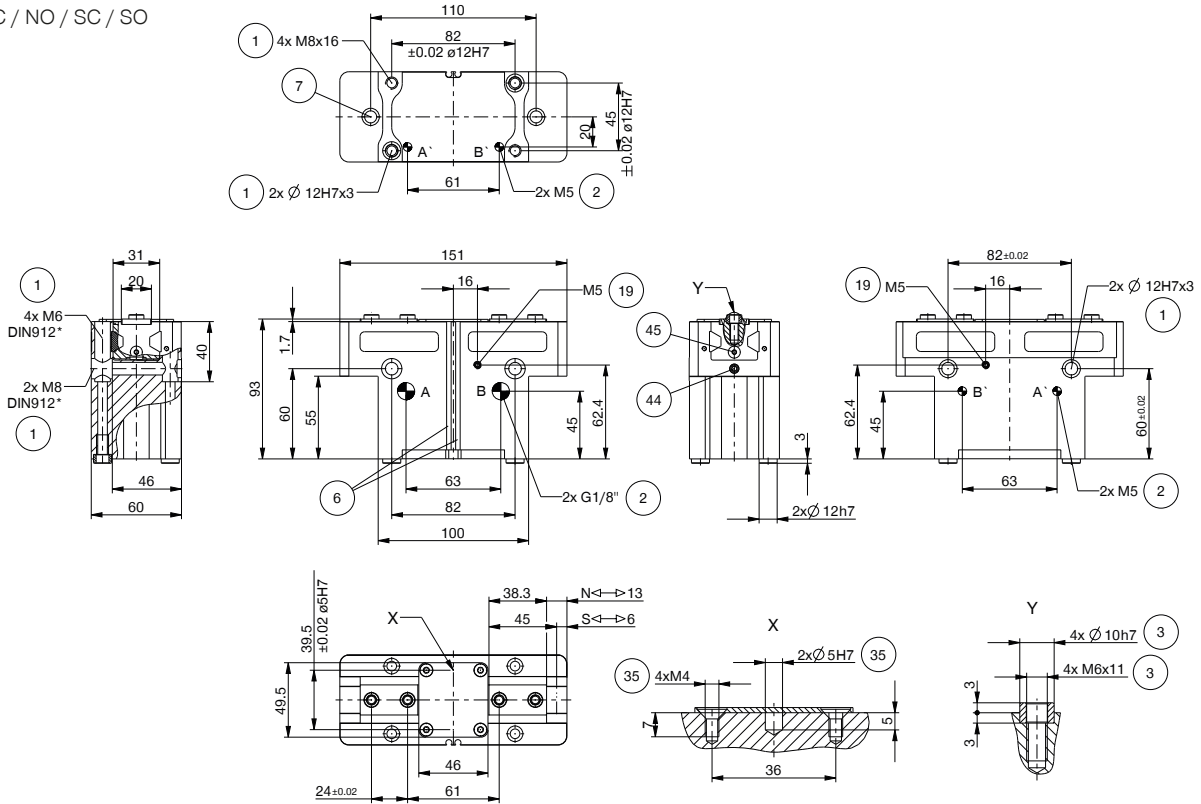
Order no.	▶ Technical Data - High Temperature Version					
	GPP5013NT	GPP5013NCT	GPP5013NOT	GPP5013ST	GPP5013SCT	GPP5013SOT
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130

*All data measured at 6 bar

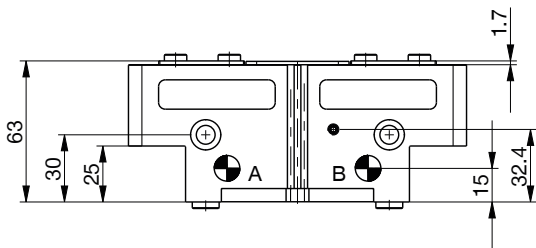
** with purged air

▶ TECHNICAL DRAWINGS

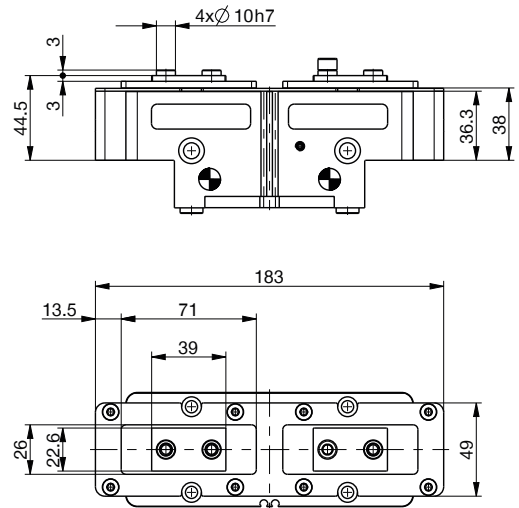
NC / NO / SC / SO



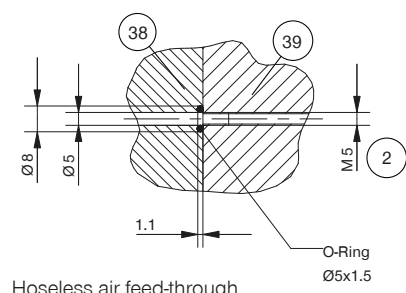
N / S



Protector version



- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑥ Integrated slot for magnetic field sensor
- ⑦ Mounting block
- ⑱ Air purge connection option
- ⑳ Attachment option for customer-specific fittings
- ㉘ Adapter
- ㉙ Gripper
- ㉚ Clamp for sensor
- ㉛ Switch cam adjustment
- Ⓐ Air connection (close)
- Ⓑ Air connection (open)
- Ⓐ Air connection, alternative (close)
- Ⓑ Air connection, alternative (open)



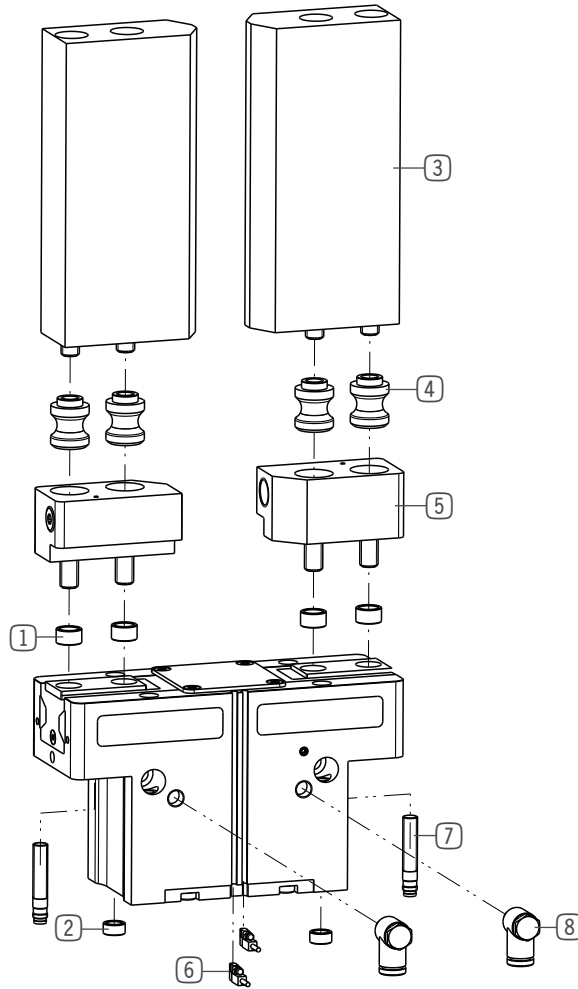
Hoseless air feed-through

2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5013

1

Installation size GPP5013 / 2-Jaw Parallel Grippers / pneumatic / Grippers



▶ INCLUDED IN DELIVERY



Centering Disc

018187



Centering Disc

019280

► RECOMMENDED ACCESSORIES



Universal jaw aluminium

UB5013AL



Universal jaw steel

UB5013ST



Changeable jaw, loose-part-set

WB5013L



Changeable jaw, fix-part

WB5013F



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-01



Inductive proximity switch - Connector M8

NJ8-E2S



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector customizable Straight - Connector M8

S8-G-3



Angled Fittings - Quick Connect Style

WV1-8X6



Straight Fittings - Quick Connect Style

GV1-8X6



Quick Exhaust Valve

DEV06

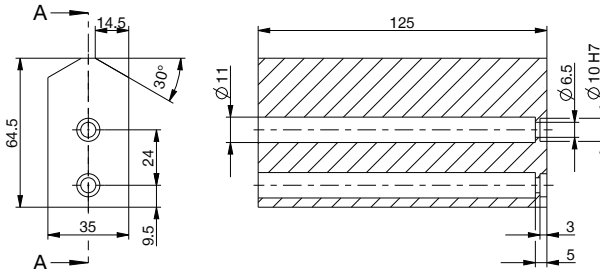


Pressure Safety Valve

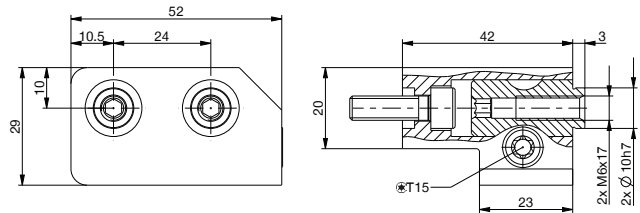
DSV1-8

► TECHNICAL DRAWINGS ACCESSORIES

One universal jaw is required for each gripper jaw **3**
A-A



For each gripper jaw, one interchangeable jaw loose part set **4** and one interchangeable jaw fixed part **5** are needed



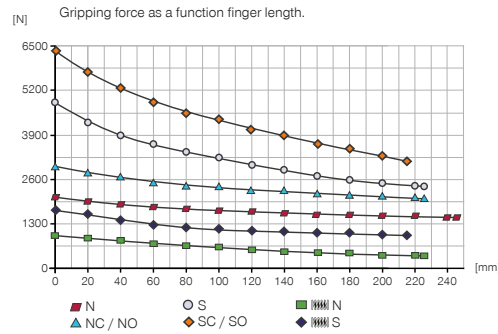
2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5016

▶ PRODUCT SPECIFICATIONS

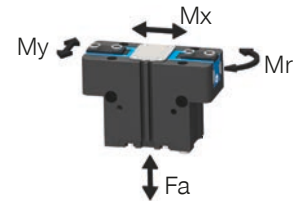


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	145
Mx [Nm]	195
My [Nm]	185
Fa [N]	5200

▶ TECHNICAL DATA

Order no.	▶ Technical Data*					
	GPP5016N	GPP5016NC	GPP5016NO	GPP5016S	GPP5016SC	GPP5016SO
Stroke per jaw [mm]	16	16	16	8	8	8
Gripping force in closing [N]	2090	2860		4610	6310	
Gripping force in opening [N]	2220		2990	4900		6600
Gripping force secured by spring min. [N]		770	770		1700	1700
Closing time [s]	0.13	0.11	0.24	0.13	0.11	0.24
Opening time [s]	0.13	0.24	0.11	0.13	0.24	0.11
Weight per jaw max. [kg]	3.8	3.8	3.8	3.8	3.8	3.8
Length of the gripper fingers max. [mm]	245	225	225	225	215	215
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Operating temperature [°C]	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90
Air volume per cycle [cm³]	166	332	332	166	332	332
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	2.9	3.7	3.7	2.9	3.7	3.7

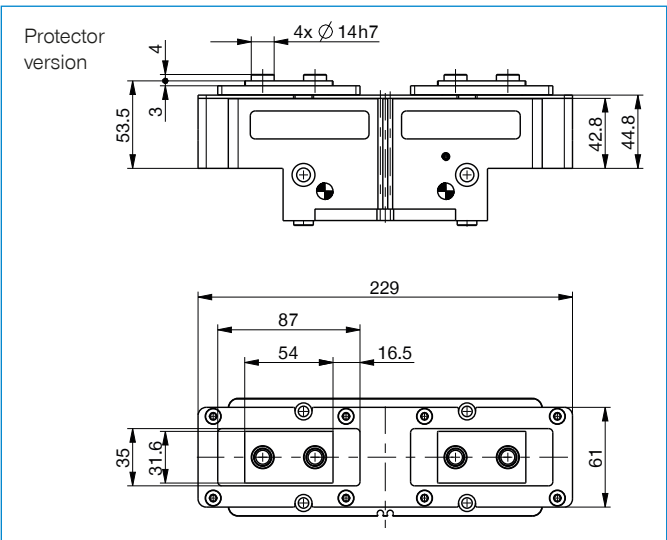
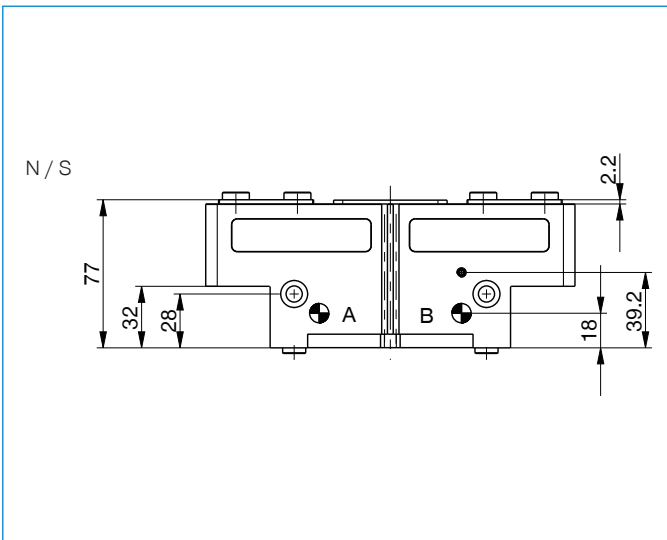
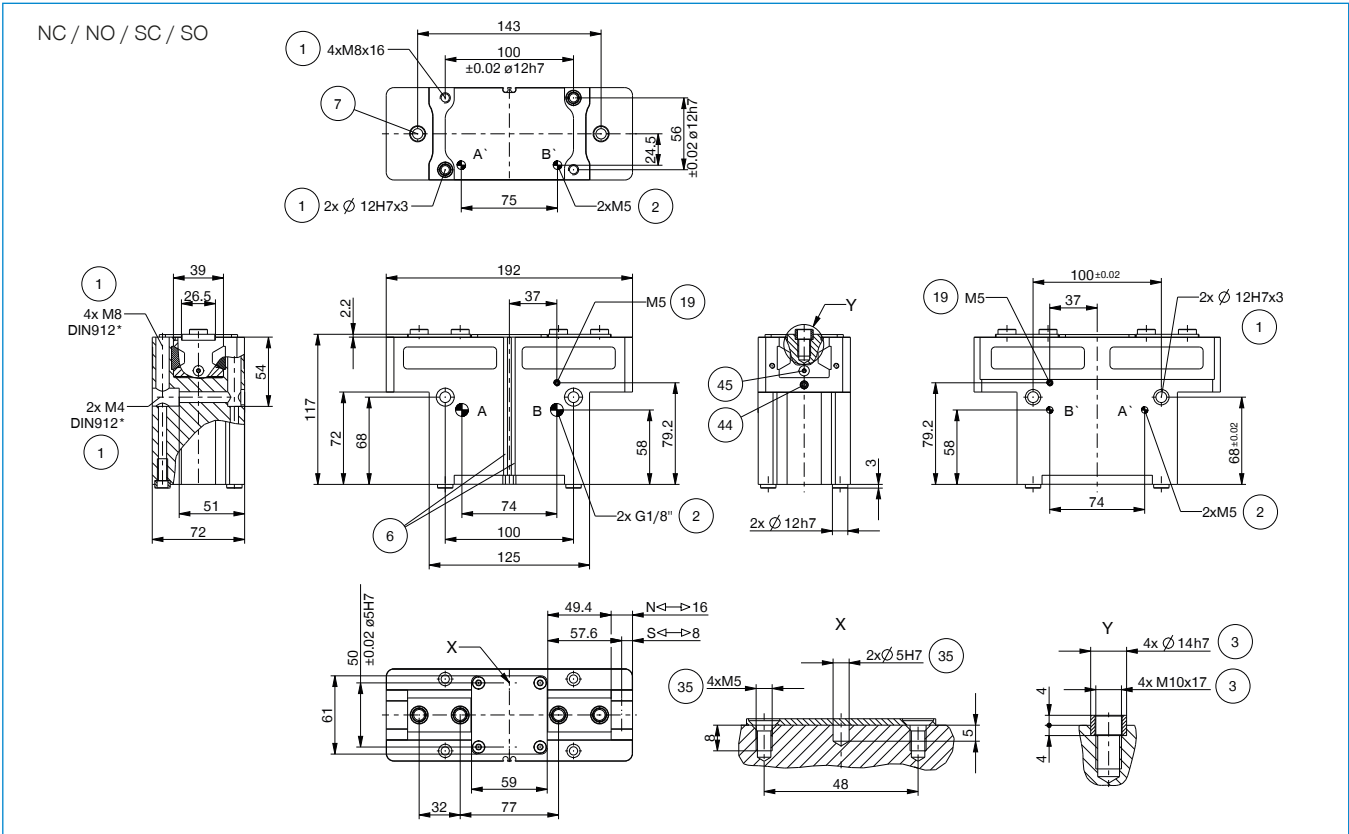
Order no.	▶ Technical Data - Protector Version					
	GPP5016NP	GPP5016NCP	GPP5016NOP	GPP5016SP	GPP5016SCP	GPP5016SOP
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**
Weight [kg]	3.6	4.4	4.4	3.6	4.4	4.4

Order no.	▶ Technical Data - High Temperature Version					
	GPP5016NT	GPP5016NCT	GPP5016NOT	GPP5016ST	GPP5016SCT	GPP5016SOT
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130

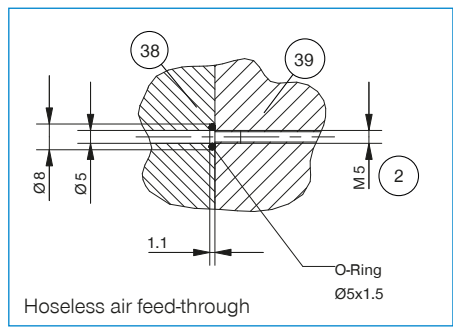
*All data measured at 6 bar

** with purged air

► TECHNICAL DRAWINGS



- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑥ Integrated slot for magnetic field sensor
- ⑦ Mounting block
- ⑱ Air purge connection option
- ⑳ Attachment option for customer-specific fittings
- ㉑ Adapter
- ㉒ Gripper
- ㉓ Clamp for sensor
- ㉔ Switch cam adjustment
- Ⓐ Air connection (close)
- Ⓑ Air connection (open)
- Ⓐ Air connection, alternative (close)
- Ⓑ Air connection, alternative (open)

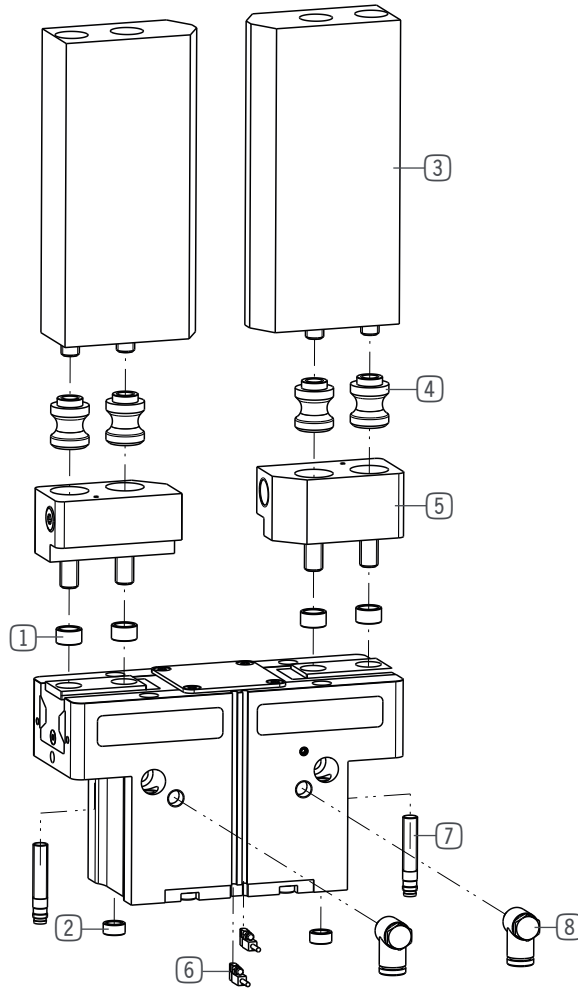


2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5016

1

Installation size GPP5016 / 2-Jaw Parallel Grippers / pneumatic / Grippers



▶ INCLUDED IN DELIVERY



Centering Disc

019387



Centering Disc

019280

► RECOMMENDED ACCESSORIES



Universal jaw aluminium

UB5016AL



Universal jaw steel

UB5016ST



Changeable jaw, loose-part-set

WB5016L



Changeable jaw, fix-part

WB5016F



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-01



Inductive proximity switch - Connector M8

NJ8-E2S



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector customizable Straight - Connector M8

S8-G-3



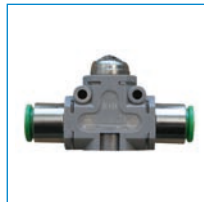
Angled Fittings - Quick Connect Style

WV1-8X6



Straight Fittings - Quick Connect Style

GV1-8X6



Quick Exhaust Valve

DEV06



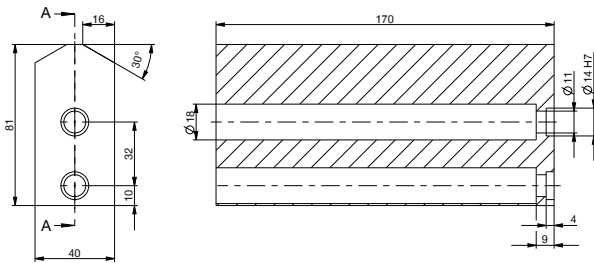
Pressure Safety Valve

DSV1-8

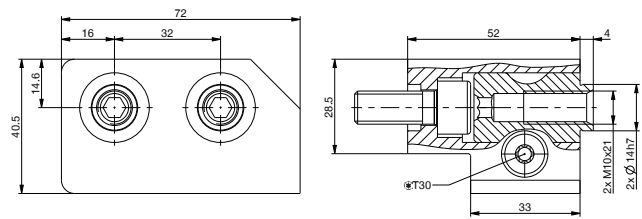
► TECHNICAL DRAWINGS ACCESSORIES

One universal jaw is required for each gripper jaw **(3)**

A-A



For each gripper jaw, one interchangeable jaw loose part set **(4)** and one interchangeable jaw fixed part **(5)** are needed



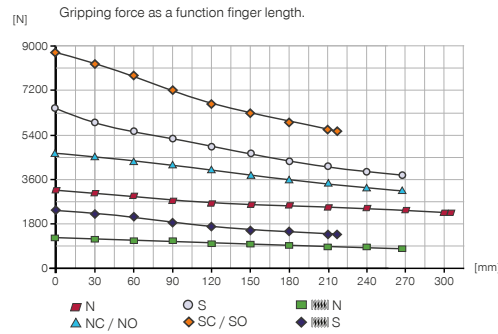
2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5025

▶ PRODUCT SPECIFICATIONS

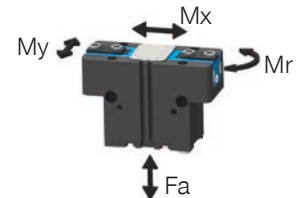


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	180
Mx [Nm]	205
My [Nm]	225
Fa [N]	7500

▶ TECHNICAL DATA

Order no.	▶ Technical Data*					
	GPP5025N	GPP5025NC	GPP5025NO	GPP5025S	GPP5025SC	GPP5025SO
Stroke per jaw [mm]	25	25	25	14	14	14
Gripping force in closing [N]	3280	4510		6360	8730	
Gripping force in opening [N]	3490		4710	6760		9130
Gripping force secured by spring min. [N]		1220	1220		2370	2370
Closing time [s]	0.33	0.28	0.57	0.33	0.28	0.57
Opening time [s]	0.33	0.57	0.28	0.33	0.57	0.28
Weight per jaw max. [kg]	7	7	7	7	7	7
Length of the gripper fingers max. [mm]	310	265	265	265	220	220
Repetition accuracy +/- [mm]	0.04	0.04	0.04	0.04	0.04	0.04
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Operating temperature [°C]	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90
Air volume per cycle [cm³]	420	830	830	420	830	830
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	6.1	7.65	7.65	6.1	7.65	7.65

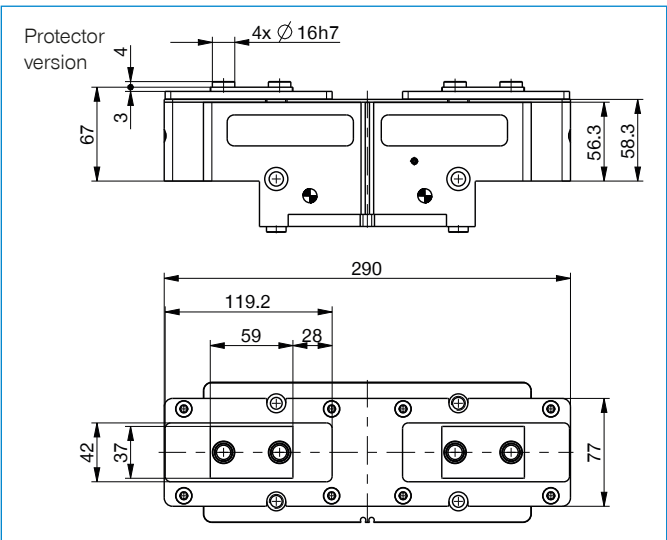
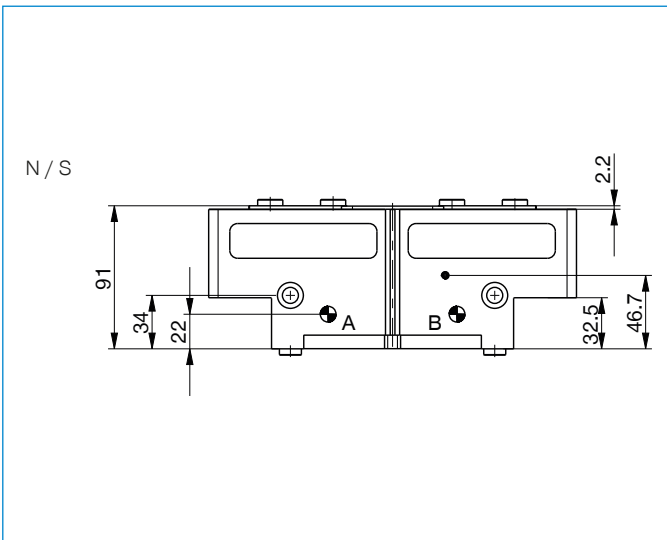
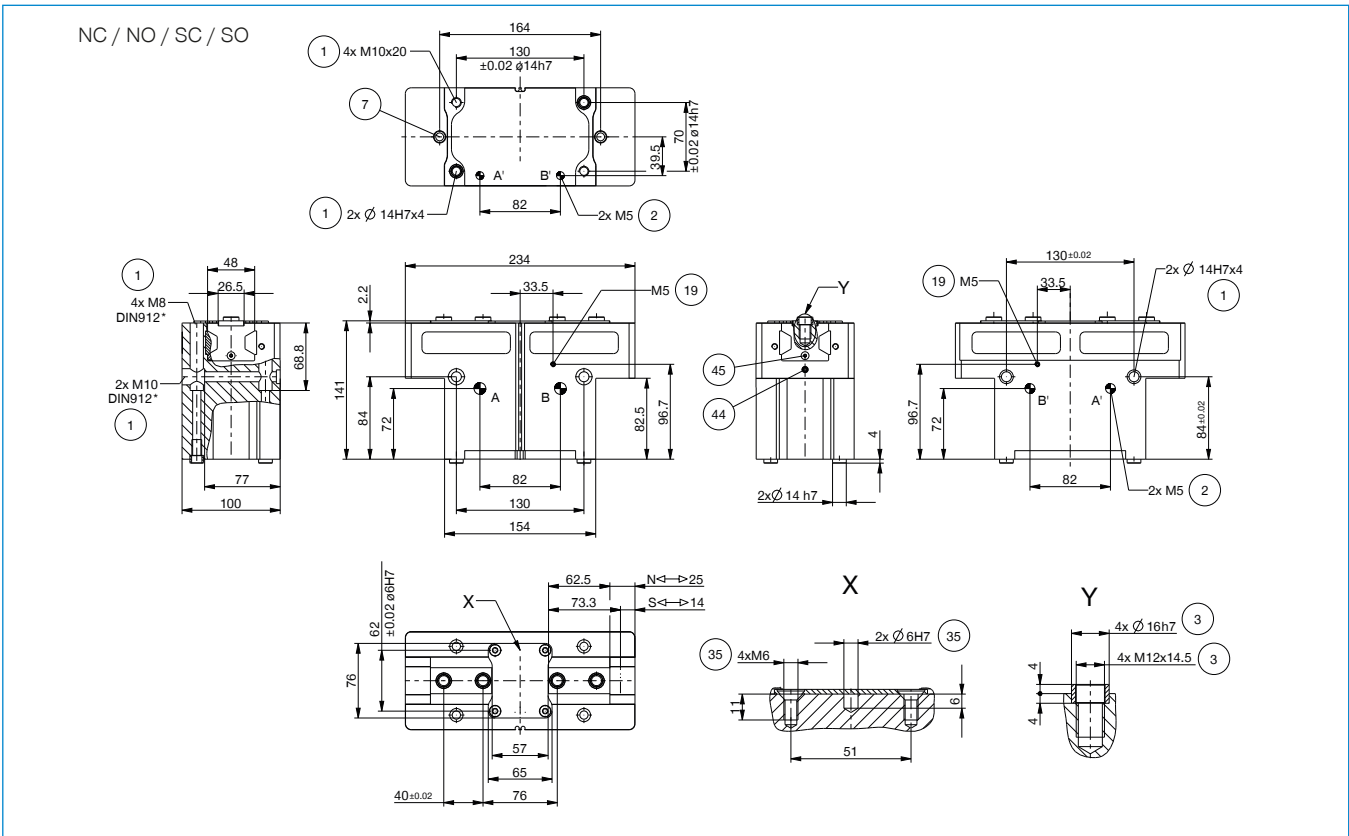
Order no.	▶ Technical Data - Protector Version					
	GPP5025NP	GPP5025NCP	GPP5025NOP	GPP5025SP	GPP5025SCP	GPP5025SOP
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**
Weight [kg]	7.20	8.75	8.75	7.2	8.75	8.75

Order no.	▶ Technical Data - High Temperature Version					
	GPP5025NT	GPP5025NCT	GPP5025NOT	GPP5025ST	GPP5025SCT	GPP5025SOT
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130

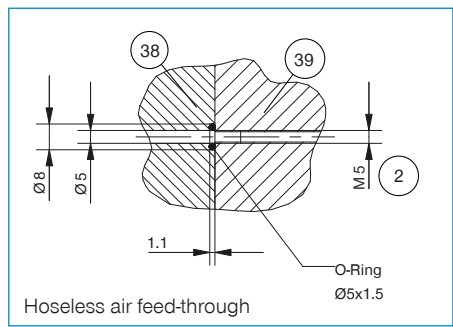
*All data measured at 6 bar

** with purged air

▶ TECHNICAL DRAWINGS



- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑥ Integrated slot for magnetic field sensor
- ⑦ Mounting block
- ⑱ Air purge connection option
- ⑳ Attachment option for customer-specific fittings
- ㉑ Adapter
- ㉒ Gripper
- ㉓ Clamp for sensor
- ㉔ Switch cam adjustment
- Ⓐ Air connection (close)
- Ⓑ Air connection (open)
- Ⓐ Air connection, alternative (close)
- Ⓑ Air connection, alternative (open)

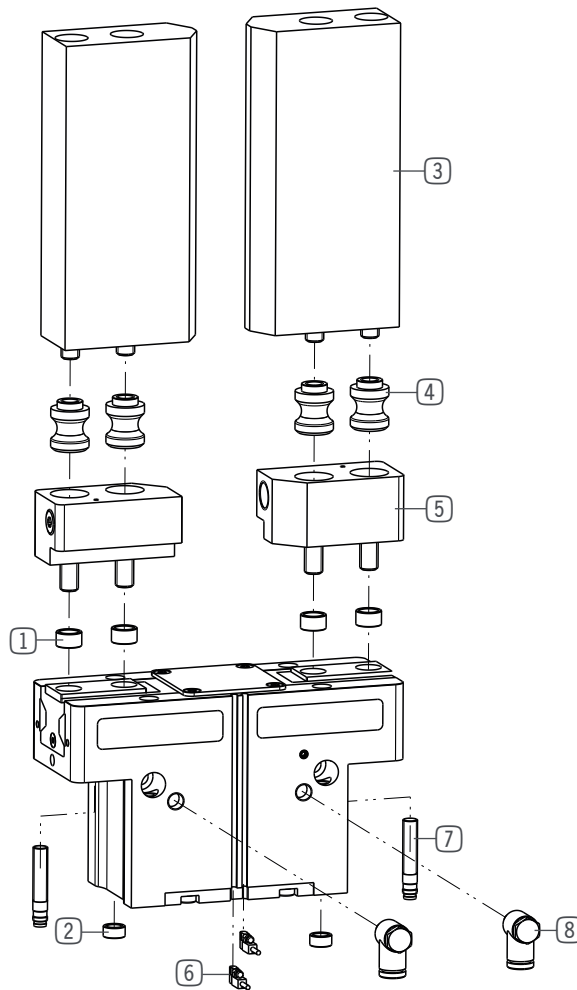


2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5025

1

Installation size GPP5025 / 2-Jaw Parallel Grippers / pneumatic / Grippers



▶ INCLUDED IN DELIVERY



Centering Disc

030529



Centering Disc

019387

▶ RECOMMENDED ACCESSORIES



Universal jaw aluminium

UB5025AL



Universal jaw steel

UB5025ST



Changeable jaw, loose-part-set

WB5025L



Changeable jaw, fix-part

WB5025F



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-01



Inductive proximity switch - Connector M8

NJ8-E2S



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector customizable Straight - Connector M8

S8-G-3



Angled Fittings - Quick Connect Style

WV1-8X8



Straight Fittings - Quick Connect Style

GV1-8X8



Quick Exhaust Valve

DEV08



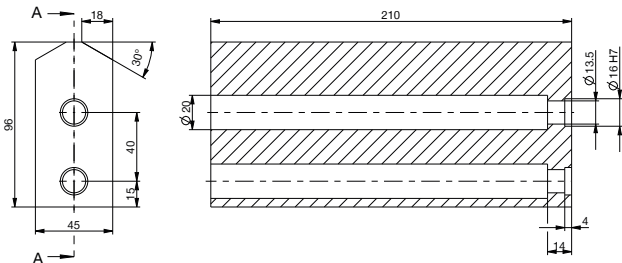
Pressure Safety Valve

DSV1-8

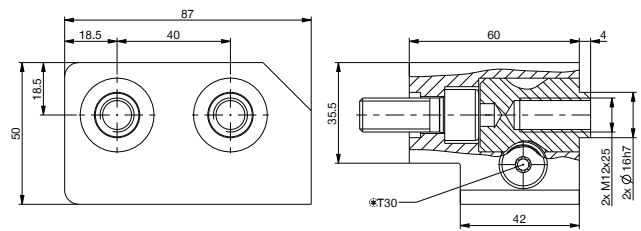
▶ TECHNICAL DRAWINGS ACCESSORIES

One universal jaw is required for each gripper jaw **3**

A-A



For each gripper jaw, one interchangeable jaw loose part set **4** and one interchangeable jaw fixed part **5** are needed



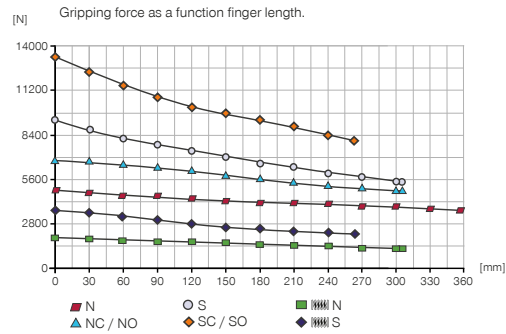
2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5030

▶ PRODUCT SPECIFICATIONS

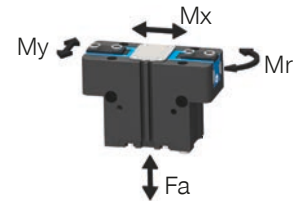


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	210
Mx [Nm]	290
My [Nm]	310
Fa [N]	9500

▶ TECHNICAL DATA

Order no.	▶ Technical Data*					
	GPP5030N	GPP5030NC	GPP5030NO	GPP5030S	GPP5030SC	GPP5030SO
Stroke per jaw [mm]	30	30	30	17	17	17
Gripping force in closing [N]	5000	6850		9600	13160	
Gripping force in opening [N]	5210		7060	9990		13550
Gripping force secured by spring min. [N]		1850	1850		3560	3560
Closing time [s]	0.4	0.35	0.65	0.4	0.35	0.65
Opening time [s]	0.4	0.65	0.35	0.4	0.65	0.35
Weight per jaw max. [kg]	9.5	9.5	9.5	9.5	9.5	9.5
Length of the gripper fingers max. [mm]	355	305	305	305	260	260
Repetition accuracy +/- [mm]	0.04	0.04	0.04	0.04	0.04	0.04
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Operating temperature [°C]	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90
Air volume per cycle [cm³]	745	1430	1430	745	1430	1430
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	9.2	12	12	9.2	12	12

Order no.	▶ Technical Data - Protector Version					
	GPP5030NP	GPP5030NCP	GPP5030NOP	GPP5030SP	GPP5030SCP	GPP5030SOP
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**
Weight [kg]	10.9	13.7	13.7	10.9	13.7	13.7

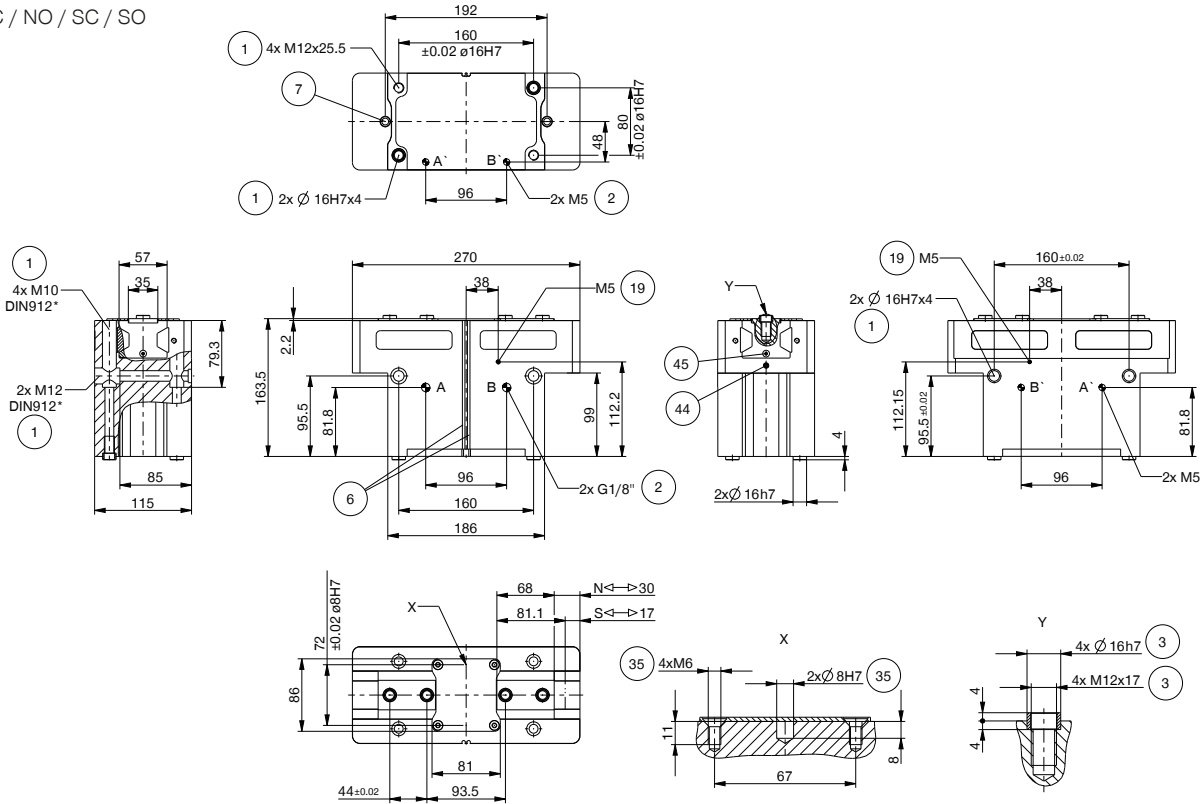
Order no.	▶ Technical Data - High Temperature Version					
	GPP5030NT	GPP5030NCT	GPP5030NOT	GPP5030ST	GPP5030SCT	GPP5030SOT
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130

*All data measured at 6 bar

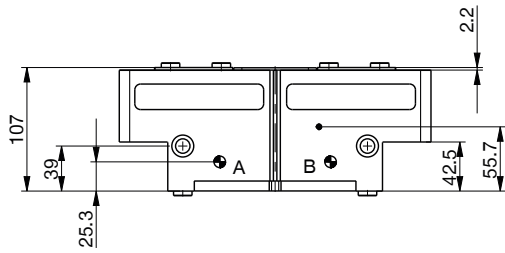
** with purged air

▶ TECHNICAL DRAWINGS

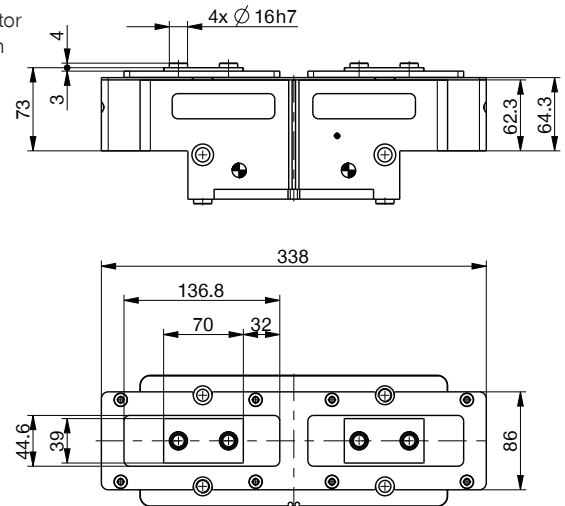
NC / NO / SC / SO



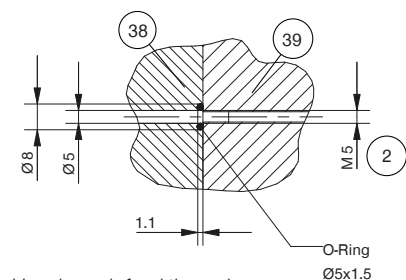
N / S



Protector version



- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑥ Integrated slot for magnetic field sensor
- ⑦ Mounting block
- ⑱ Air purge connection option
- ⑳ Attachment option for customer-specific fittings
- ㉑ Adapter
- ㉒ Gripper
- ㉓ Clamp for sensor
- ㉔ Switch cam adjustment
- Ⓐ Air connection (close)
- Ⓑ Air connection (open)
- Ⓐ Air connection, alternative (close)
- Ⓑ Air connection, alternative (open)



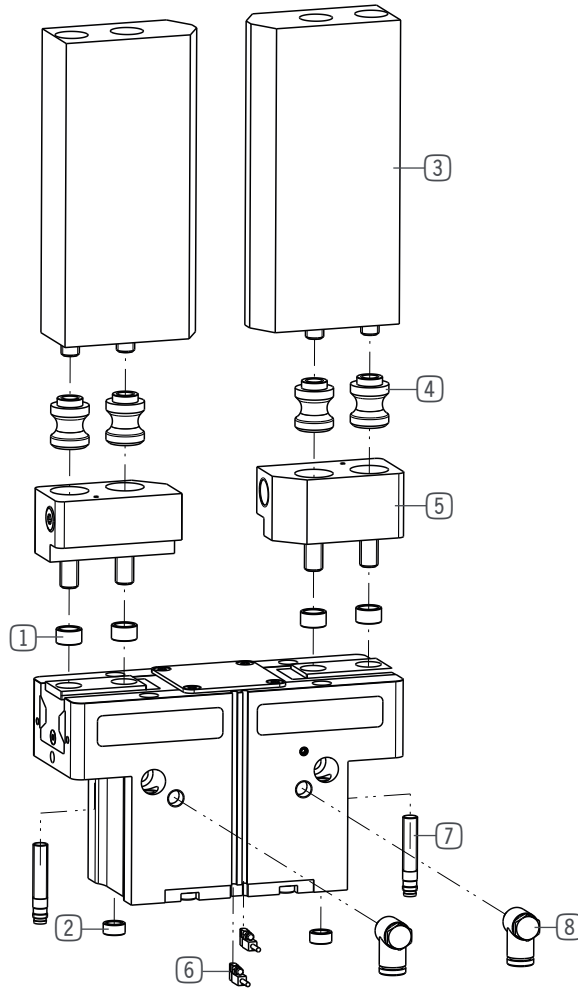
Hoseless air feed-through

2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5030

1

Installation size GPP5030 / 2-Jaw Parallel Grippers / pneumatic / Grippers



▶ INCLUDED IN DELIVERY



Centering Disc

030529

► RECOMMENDED ACCESSORIES



Universal jaw aluminium

UB5030AL



Universal jaw steel

UB5030ST



Changeable jaw, loose-part-set

WB5030L



Changeable jaw, fix-part

WB5030F



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-01



Inductive proximity switch - Connector M8

NJ8-E2S



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector customizable Straight - Connector M8

S8-G-3



Angled Fittings - Quick Connect Style

WV1-8X8



Straight Fittings - Quick Connect Style

GV1-8X8



Quick Exhaust Valve

DEV08

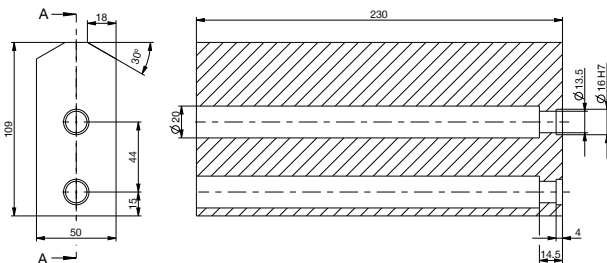


Pressure Safety Valve

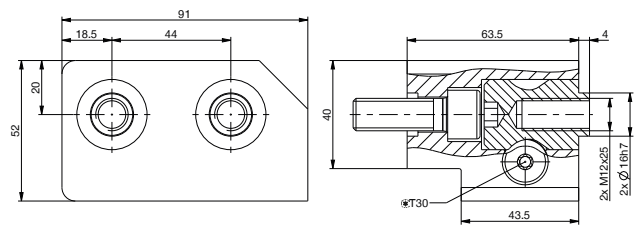
DSV1-8

► TECHNICAL DRAWINGS ACCESSORIES

One universal jaw is required for each gripper jaw **3**
A-A



For each gripper jaw, one interchangeable jaw loose part set **4** and one interchangeable jaw fixed part **5** are needed

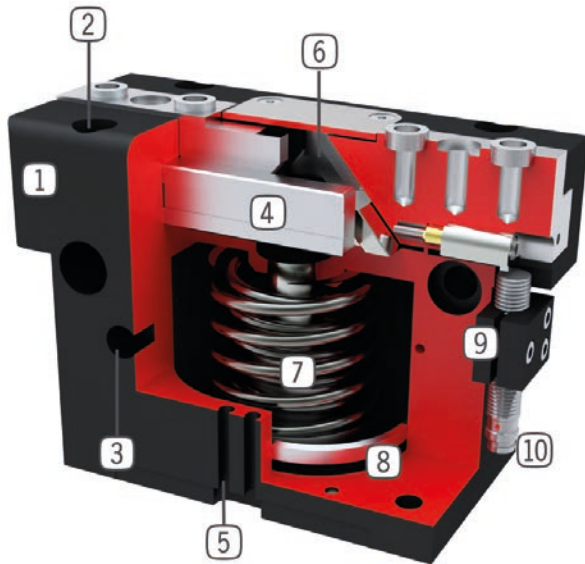


2-JAW PARALLEL GRIPPERS

SERIES GP400X

still available

► BENEFITS IN DETAIL



- ① **Robust, lightweight housing**
- hard coated aluminium alloy
- ② **Mounting and positioning**
- mounting possible from several sides for versatile positioning
- ③ **Energy supply**
- possible from several sides
- ④ **Overlapping guide**
- for maximum forces and moments capacity
- ⑤ **Sensing slot**
- mounting and positioning of magnetic field sensors
- ⑥ **Wedge hook mechanism**
- synchronized the movement of the gripper jaws
- ⑦ **Integrated gripping force safety device**
- spring integrated into cylinder as energy storage
- ⑧ **Position sensing**
- permanent magnet for direct monitoring of piston movement
- ⑨ **Mounting block**
- mounting for inductive proximity switch (10)

► TECHNICAL DATA*



Number of installation sizes	9
Stroke per jaw	3 mm - 30 mm
Gripping force	85 N - 19275 N
Weight	0,08 kg - 18,9 kg

*further information is available online

► FOR NEW DESIGNS, USE THE SUCCESSOR SERIES, THE GPP5000



"The Universal One"

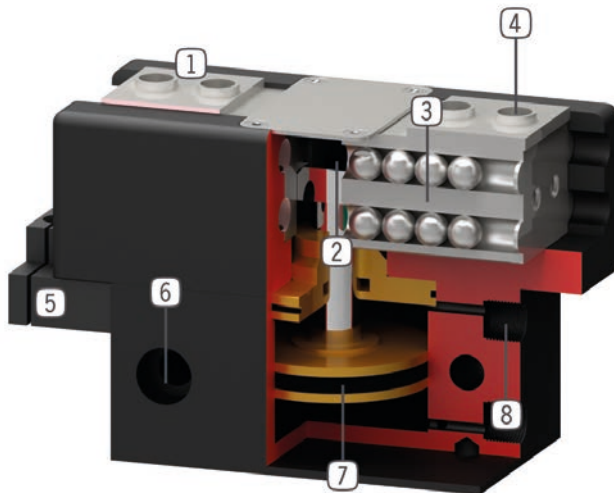
- Up to 30% more gripping force than the benchmark
- 10% more static forces and moments than the benchmark
- Gripper fingers up to 10% longer than the benchmark
- Gripper fingers weight up to 15% higher than the benchmark
- Sealed guide IP64 / Protector version IP67 (with purged air)
- Protected against corrosion
- Up to 30 million cycles without maintenance

2-JAW PARALLEL GRIPPERS

SERIES GP100

still available

► BENEFITS IN DETAIL



- ① **Gripper jaw**
- individual gripper finger mounting
- ② **Wedge hook mechanism**
- synchronized the movement of the gripper jaws
- high force transfer
- ③ **Ball guide**
- smooth running guides via rolling friction
- near constant force in various gripping jaw lengths
- ④ **Removable centering sleeves**
- quick and economical positioning of the gripper fingers
- ⑤ **Mounting block**
- mounting for inductive proximity switch
- ⑥ **Mounting and positioning**
- mounting possible from several sides for versatile positioning
- ⑦ **Drive**
- double-acting pneumatic cylinder
- ⑧ **Energy supply**
- possible from several sides

► TECHNICAL DATA *



Number of installation sizes	5
Stroke per jaw	3 mm - 15 mm
Gripping force	21 N - 1000 N
Weight	0,09 kg - 2,3 kg

*further information is available online

► FOR NEW DESIGNS, USE THE SUCCESSOR SERIES, THE GPP5000



"The Universal One"

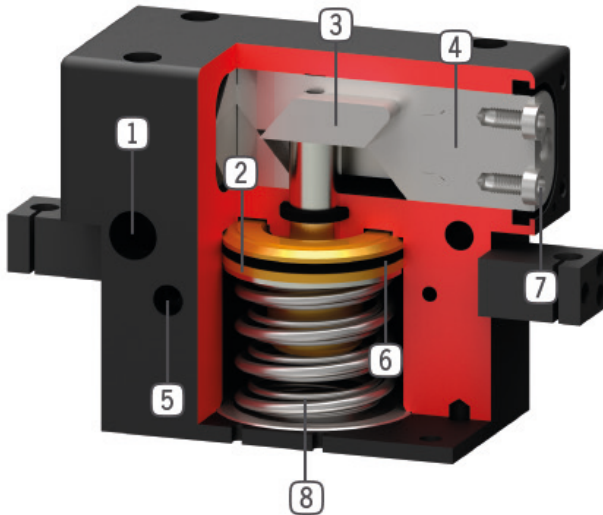
- Up to 30% more gripping force than the benchmark
- 10% more static forces and moments than the benchmark
- Gripper fingers up to 10% longer than the benchmark
- Gripper fingers weight up to 15% higher than the benchmark
- Sealed guide IP64 / Protector version IP67 (with purged air)
- Protected against corrosion
- Up to 30 million cycles without maintenance

2-JAW PARALLEL GRIPPERS

SERIES GP1800

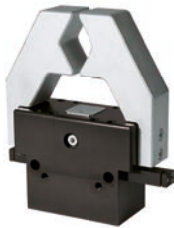
still available

► BENEFITS IN DETAIL



- ① **Mounting and positioning**
- mounting possible from several sides for versatile positioning
- ② **Permanent magnet**
- installed in piston area
- ③ **Wedge hook mechanism**
- synchronized the movement of the gripper jaws
- high force transfer
- ④ **Sealed and precise square guide**
- high forces and moments capacity
- ⑤ **Energy supply**
- possible from several sides
- ⑥ **Drive**
- double-acting pneumatic cylinder
- ⑦ **Removable centering sleeves**
- quick and cost-effective gripper finger positioning
- ⑧ **Integrated gripping force safety device**
- optional via intergrated spring (C and O Models)

► TECHNICAL DATA *



Number of installation sizes	9
Stroke per jaw	3 mm - 30 mm
Gripping force	85 N - 6900 N
Weight	0,12 kg - 22 kg

*further information is available online

► FOR NEW DESIGNS, USE THE SUCCESSOR SERIES, THE GPP5000



"The Universal One"

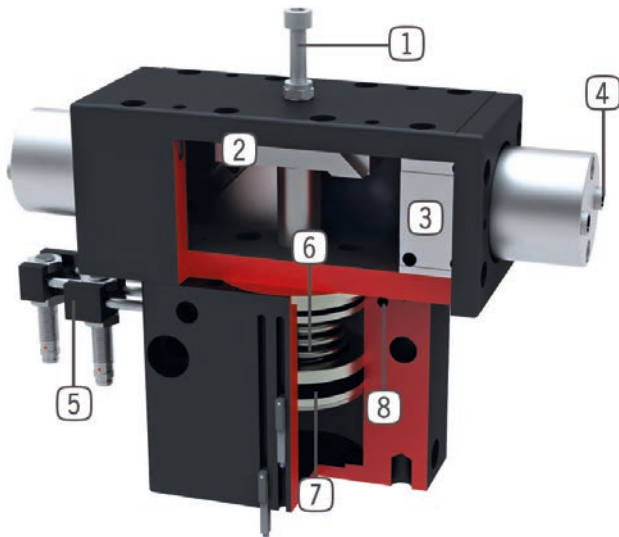
- Up to 30% more gripping force than the benchmark
- 10% more static forces and moments than the benchmark
- Gripper fingers up to 10% longer than the benchmark
- Gripper fingers weight up to 15% higher than the benchmark
- Sealed guide IP64 / Protector version IP67 (with purged air)
- Protected against corrosion
- Up to 30 million cycles without maintenance

2-JAW PARALLEL GRIPPERS

SERIES GP1200

still available

► BENEFITS IN DETAIL



- ① **Stroke adjustment**
 - Infinitely adjustable opening stroke
 - adjusting screw in delivery
- ② **Wedge hook mechanism**
 - synchronized the movement of the gripper jaws
 - high force transfer
- ③ **Sealed flat guide**
 - high forces and moments capacity
- ④ **Removable centering sleeves**
 - quick and economical positioning of the gripper fingers
- ⑤ **Adjustable mounting block**
 - mounting for inductive proximity switch
- ⑥ **Integrated gripping force safety device**
 - spring integrated into cylinder as energy storage
- ⑦ **Drive**
 - double-acting pneumatic cylinder
- ⑧ **Energy supply**
 - possible from several sides

► TECHNICAL DATA *



Number of installation sizes	4
Stroke per jaw	12 mm - 40 mm
Gripping force	130 N - 1550 N
Weight	0,48 kg - 10,5 kg

*further information is available online

► FOR NEW DESIGNS, USE THE SUCCESSOR SERIES, THE GP200



"The variable"

► Smooth stroke configuration

An adjusting screw allows you to adjust the stroke to your specific application

► Proven technology

We have more than 20 years of proven reliability, which ensures uninterrupted production for you

► Dirt protection

Using the scrapers on the guides, you can reliably use the gripper even under the harshest conditions

2-JAW PARALLEL GRIPPERS




OVERVIEW OF SERIES

1

Overview of Series / 2-Jaw Parallel Grippers



▶ ELECTRICAL

	Series GEP9000	120
	Series GEP1400	126
	Series GEP5000	132
	Series GEP1600	146

2-JAW PARALLEL GRIPPERS

SERIES GEP9000

1

Series GEP9000 / 2-Jaw Parallel Grippers / electric / Grippers

▶ PRODUCT ADVANTAGES



“The quickest”

▶ Plug and Play

Reduce programming and assembly costs to a minimum with the integrated control system and the 3 position query

▶ 250 cycles per minute

No more worrying about cycle times: There is nothing faster on the market!

▶ Failure-free continuous operation

Our “Made in Germany” quality guarantees up to 30 million maintenance-free gripping cycles

▶ THE BEST PRODUCT FOR YOUR APPLICATION



▶ Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities:

Find the best product for your specific use:

www.zimmer-group.com

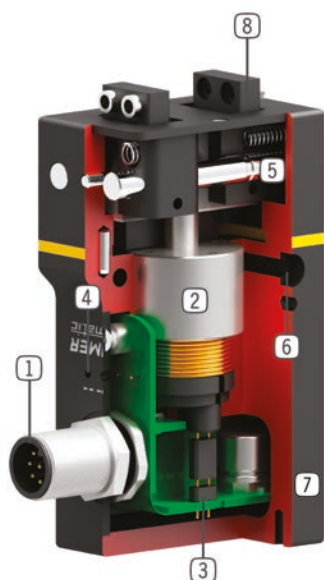
HOW TO ORDER CORRECTLY

▶ The product order numbers are arranged according to this diagram:

Order no.	GEP9002N	<input type="checkbox"/>	-B	
Grip direction closed		C		
Grip direction opened		O		



► BENEFITS IN DETAIL



- ① **Energy supply**
 - standardized interface M12 round connector
- ② **Drive**
 - via Pot magnet and coil bobbin according to the coil system principle
 - energy consumption only at opening and closing (<25ms)
- ③ **Position sensing**
 - integrated Hallsensor
 - 3 positions monitorable
- ④ **Status control**
 - optical LED position display
 - gripper opened, gripper closed, "workpiece available"
- ⑤ **Wedge hook mechanism**
 - mechanical self-locking at stop position
- ⑥ **Mounting and positioning**
 - mounting possible from several sides for versatile positioning
- ⑦ **Robust, lightweight housing**
 - hard coated aluminium alloy
- ⑧ **Gripper jaw**
 - from high-strength, hard-anodized aluminium
 - removable centering sleeves for individual gripper finger mounting

► SERIES CHARACTERISTICS



Number of installation sizes	2
Stroke per jaw	2 mm - 4 mm
Gripping force	15 N - 50 N
Weight	0,25 kg - 0,57 kg
AP class	2



30 million maintenance-free cycles (max.)



Spring closing C



Spring opening O



Integrated sensing



IP40



Purged air

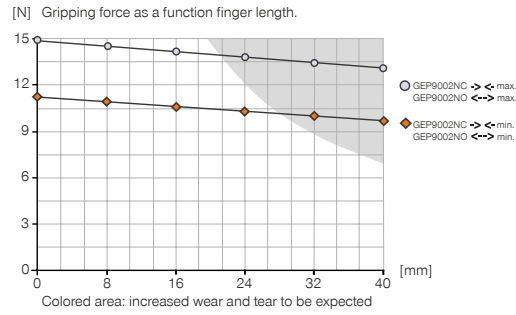
2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GEP9002

▶ PRODUCT SPECIFICATIONS

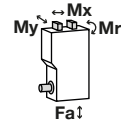


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	1.5
Mx [Nm]	1.5
My [Nm]	2.1
Fa [N]	270

▶ INCLUDED IN DELIVERY



Centering Disc

DST80320

▶ RECOMMENDED ACCESSORIES



Plug-in Connector Angled Cable 10 m - Female M12

KAW1000B8



Plug-in Connector Straight Cable 10 m - Female M12

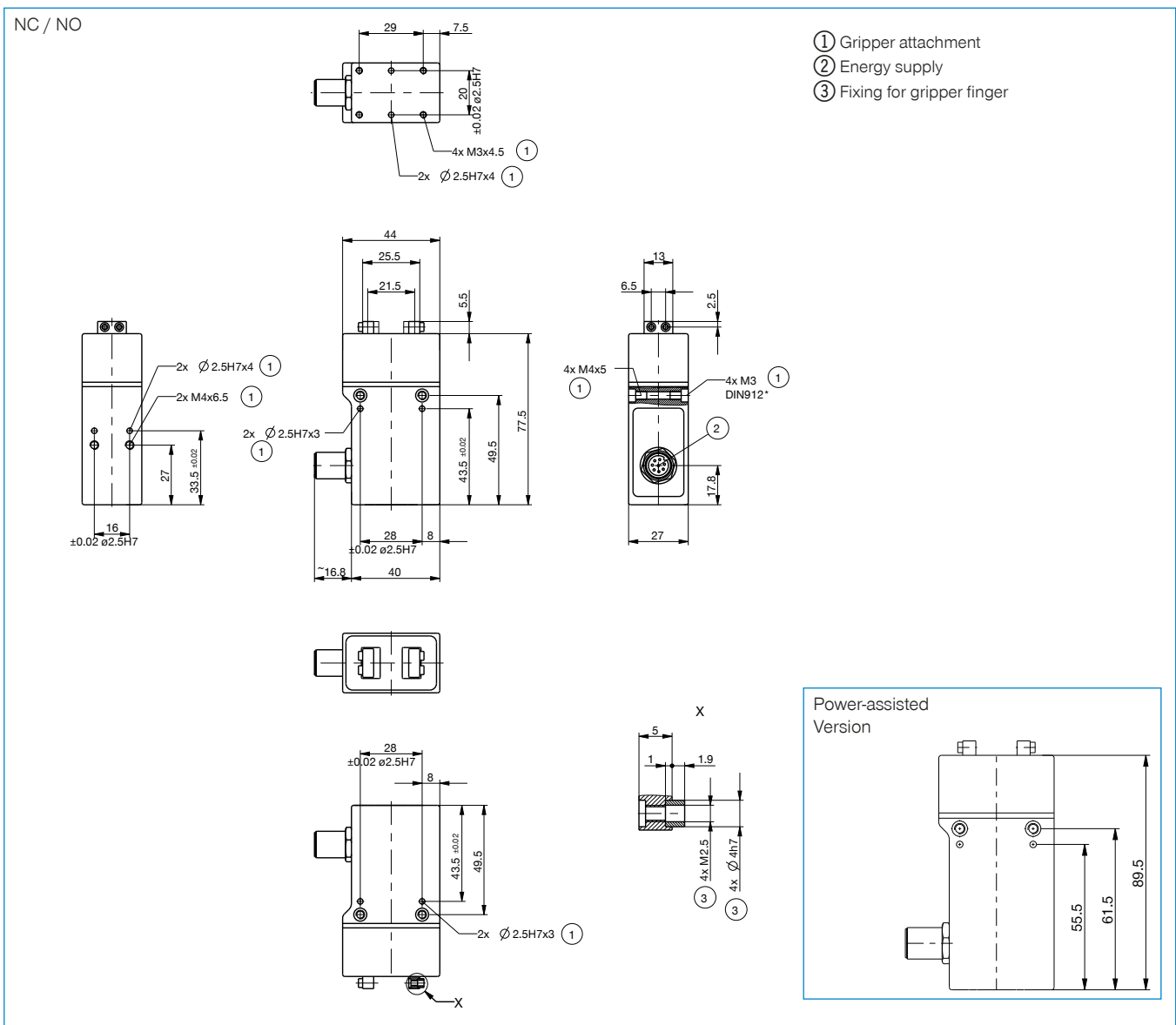
KAG1000B8



Busbox see page 839

ZUBBOX9000-01

Order no.	Technical Data		
	GEP9002NC-B	GEP9002NO-B	GEP9002NCV-B
Stroke per jaw [mm]	2	2	2
Grip force in grip direction min. [N]	11	11	20
Grip force in grip direction max. [N]	15	15	30
Permanent operation cycle count max. [cycle/min]	200	200	200
Cycle count max. [cycle/min]	250	250	250
Operating time [ms]	<20	<20	<20
Pulse time in opening [ms]	25	7	25
Pulse time in closing [ms]	7	25	7
Repetition accuracy +/- [mm]	0.05	0.05	0.05
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	80	80	80
Current consumption per pulse max. [A]	5	5	5
Length of the gripper fingers max. [mm]	40	40	40
Weight per jaw max. [g]	20	20	20
Protection to IEC 60529	IP40	IP40	IP40
Weight [kg]	0.25	0.25	0.34



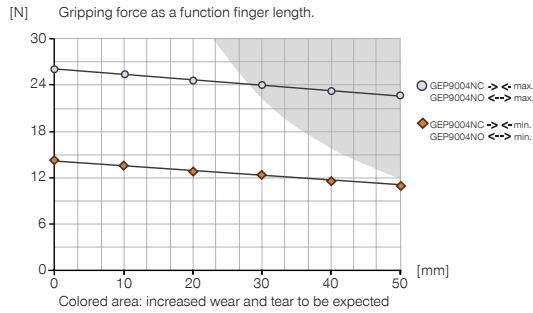
2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GEP9004

1 PRODUCT SPECIFICATIONS

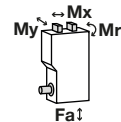


Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	2.7
Mx [Nm]	2.7
My [Nm]	4.3
Fa [N]	335

INCLUDED IN DELIVERY



Centering Disc

DST80320

RECOMMENDED ACCESSORIES



Plug-in Connector Angled Cable 10 m - Female M12

KAW1000B8



Plug-in Connector Straight Cable 10 m - Female M12

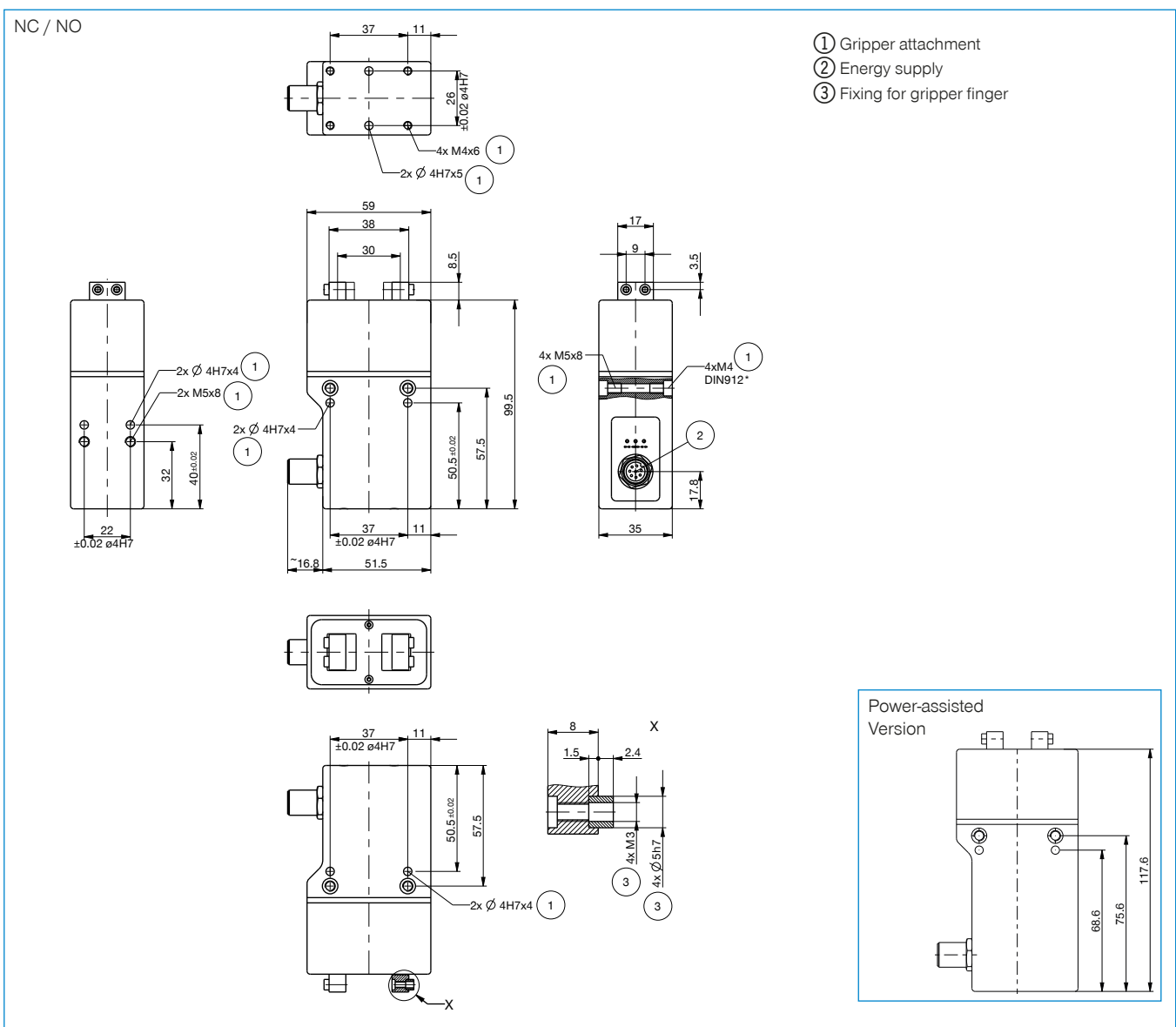
KAG1000B8



Busbox see page 839

ZUBBOX9000-01

Order no.	Technical Data		
	GEP9004NC-B	GEP9004NO-B	GEP9004NCV-B
Stroke per jaw [mm]	4	4	4
Grip force in grip direction min. [N]	14	14	30
Grip force in grip direction max. [N]	26	26	50
Permanent operation cycle count max. [cycle/min]	200	200	200
Cycle count max. [cycle/min]	250	250	250
Operating time [ms]	<20	<20	<20
Pulse time in opening [ms]	35	9	35
Pulse time in closing [ms]	9	35	9
Repetition accuracy +/- [mm]	0.05	0.1	0.05
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	80	80	80
Current consumption per pulse max. [A]	5	5	5
Length of the gripper fingers max. [mm]	50	50	50
Weight per jaw max. [g]	30	30	30
Protection to IEC 60529	IP40	IP40	IP40
Weight [kg]	0.57	0.57	0.79



2-JAW PARALLEL GRIPPERS

SERIES GEP1400

▶ PRODUCT ADVANTAGES



SOMMER
automatic **S**

“The robust”

▶ Proven T slot guide

This established and proven guiding technology stands for the highest process reliability like no other

▶ Integrated position sensing

You can detect the gripper status safely via the motor current using your control system

▶ The simplest activation

The included control unit is controlled easily via plus and minus buttons, while you can optionally adjust the gripping force using the potentiometer

▶ THE BEST PRODUCT FOR YOUR APPLICATION



▶ Our products love the challenge!

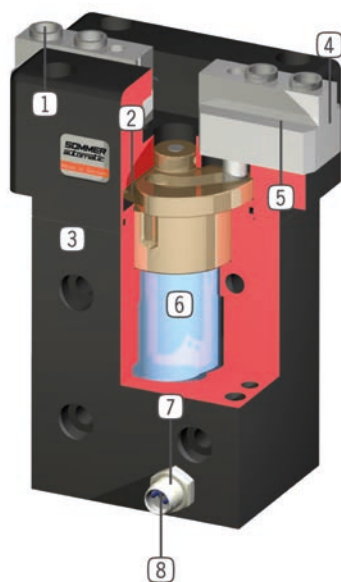
Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities:

Find the best product for your specific use:

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► BENEFITS IN DETAIL



- ① **Removable centering sleeves**
 - quick and economical positioning of the gripper fingers
- ② **Positively driven curve disc**
 - synchronized the movement of the gripper jaws
 - high force transfer
 - rapid stroke and force stroke (version with 6 mm stroke per jaw)
- ③ **Robust, lightweight housing**
 - hard coated aluminium alloy
- ④ **Gripper jaw**
 - hardened steel
 - individual gripper finger mounting
- ⑤ **Guide**
 - precise T-Slot guide for high forces and moments capacity
- ⑥ **Drive**
 - electric drive by 24 VDC step motor
- ⑦ **Position sensing**
 - measured at the end of stroke via power increase on the motor
- ⑧ **Energy supply**
 - standardized interface M8 round plug
 - signal control line (use only cable without diode)

► SERIES CHARACTERISTICS



► Technical Information

All information just a click away at: www.zimmer-group.com

Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product.

Quick, clear and always up-to-date.



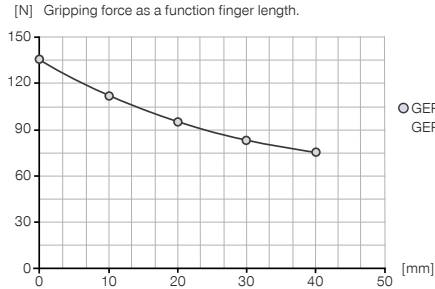
2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GEP1402

1 PRODUCT SPECIFICATIONS

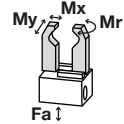


Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	5
Mx [Nm]	5
My [Nm]	4
Fa [N]	70

INCLUDED IN DELIVERY



Centering Disc

DST02900



Control

ELEGR01

RECOMMENDED ACCESSORIES



Plug-in connector Angled
Cable 5m - Socket M8
(female)

KAW500

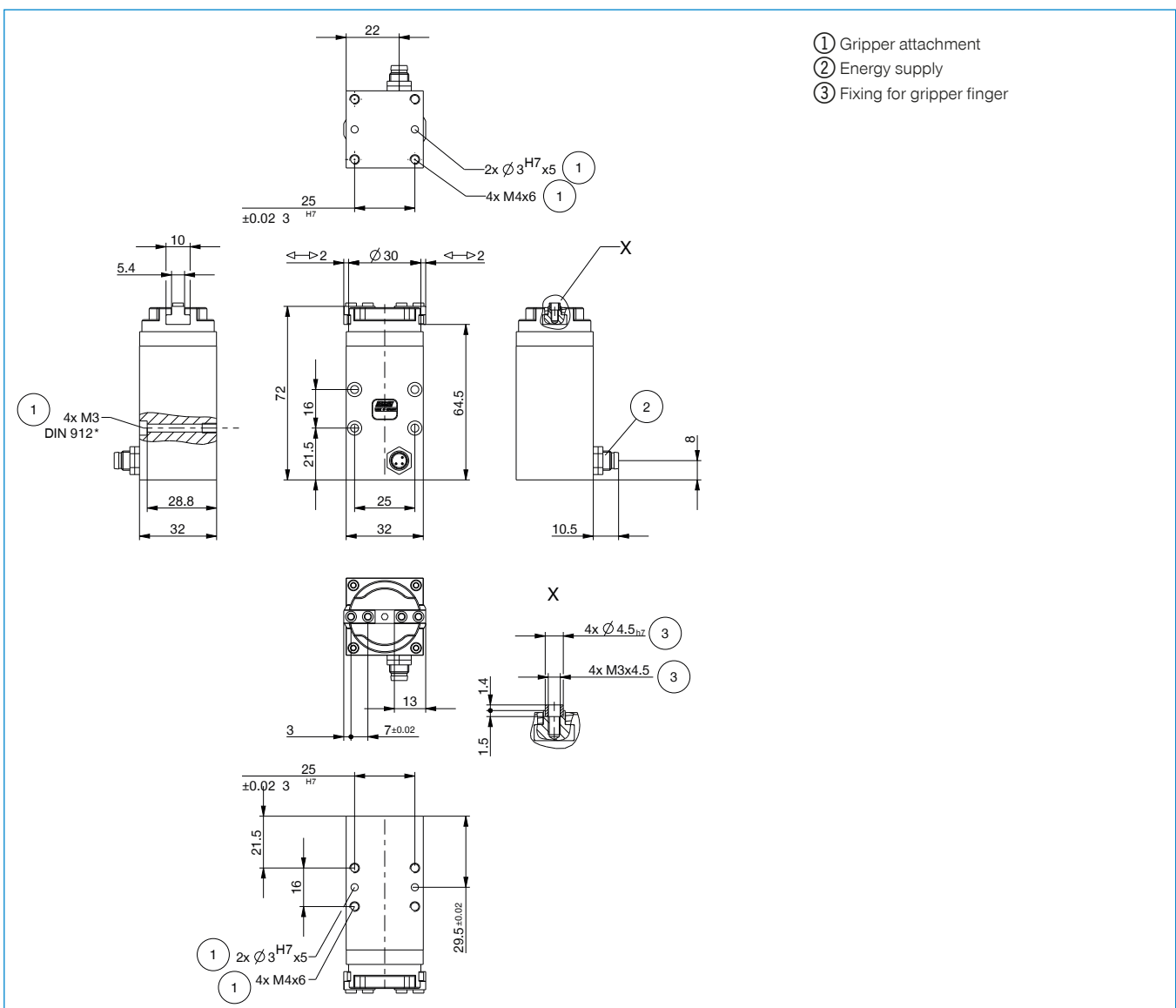


Plug-in connector Straight
Cable 5m - Socket M8
(female)

KAG500

Order no.	Technical Data
	GEP1402
Stroke per jaw [mm]	2
Gripping force in closing (adjustable) max. [N]	140
Gripping force in opening (adjustable) max. [N]	140
Opening time [s]	0.2
Closing time [s]	0.2
Repetition accuracy +/- [mm]	0.1
Voltage [V]*	24
Max. current regulable by potentiometer [mA]	140
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Protection to IEC 60529	IP52
Weight [kg]	0.3

* 12 volt voltage on request



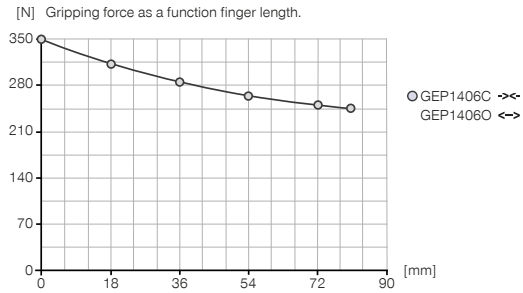
2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GEP1406

1 PRODUCT SPECIFICATIONS

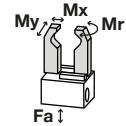


Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	30
Mx [Nm]	30
My [Nm]	20
Fa [N]	500

INCLUDED IN DELIVERY



Centering Disc

BDST40800



Control

ELEGR04

RECOMMENDED ACCESSORIES



Plug-in connector Angled
Cable 5m - Socket M8
(female)

KAW500

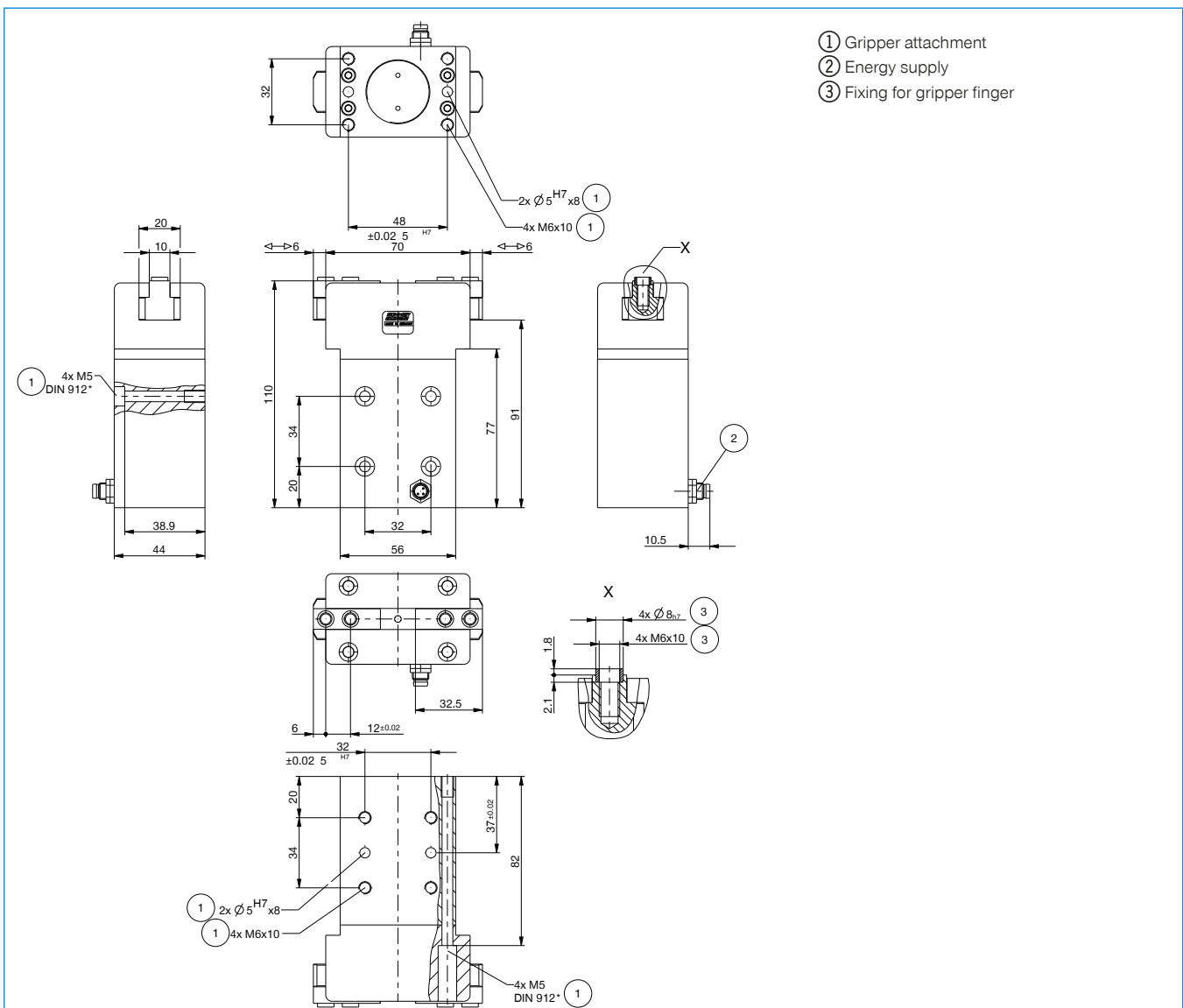


Plug-in connector Straight
Cable 5m - Socket M8
(female)

KAG500

Order no.	Technical Data	
	GEP1406C	GEP1406O
Stroke per jaw [mm]	6	6
Gripping force in closing (adjustable) max. [N]	350	-
Gripping force in opening (adjustable) max. [N]	-	350
Opening time [s]	0.4	0.4
Closing time [s]	0.4	0.4
Repetition accuracy +/- [mm]	0.1	0.1
Voltage [V]*	24	24
Max. current regulable by potentiometer [mA]	210	210
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Protection to IEC 60529	IP52	IP52
Weight [kg]	1	1

* 12 volt voltage on request



2-JAW PARALLEL GRIPPERS

SERIES GEP5000

▶ PRODUCT ADVANTAGES



“ALL in ONE”

- ▶ Approximately the same gripping force as a comparable pneumatic gripper
- ▶ Mechanical self limitation in case of power drop
- ▶ Same connection hole patterns as a comparable pneumatic gripper
- ▶ Plug and play – single-cable solution, supports incredibly easy control using I/O signals
- ▶ Integrated ACM control module - option of configuring gripping force, travel time and 3 switching points
- ▶ Protected from corrosion and sealed in accordance with IP64
- ▶ Brushless DC motor – up to 30 million cycles without maintenance

▶ THE BEST PRODUCT FOR YOUR APPLICATION

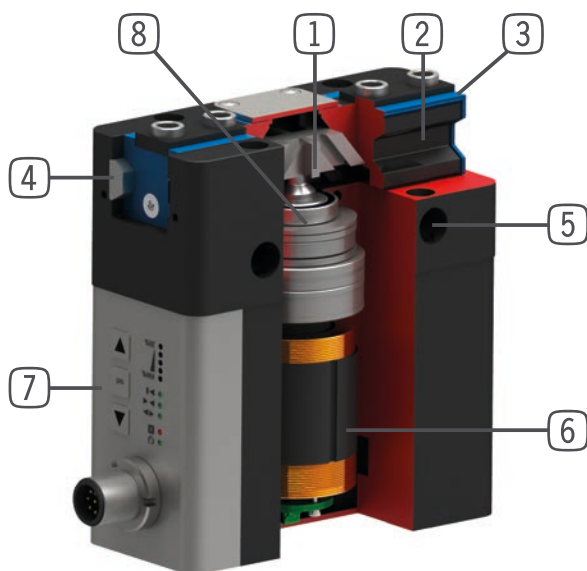


▶ Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities:

Find the best product for your specific use:

www.zimmer-group.com

**BENEFITS IN DETAIL**

- 1 Wedge hook mechanism**
 - Supports to absorb high forces and moments
 - Synchronized gripper jaw movement
- 2 Gripper jaw**
 - DLC coated to protect against corrosion
 - Gripper fingers mounted using removable centring sleeves
 - Lubricated for life via incorporated lubrication slots
- 3 Dual lip seal**
 - Enables IP64
 - Prevents grease from being squeezed out, increasing service life
- 4 Steel Linear Guide**
 - Steel in steel guide
 - Enables use of extremely long gripper fingers
- 5 Mounting and positioning**
 - Alternatively, on several sides for customized mounting
 - Pneumatic and electrical versions identical apart from height
- 6 BLDC motor**
 - Wear-resistant brushless DC motor
- 7 Advanced control module**
 - Integrated control module with single-cable solution
 - Gripping force, travel time and query programmable via the control panel on the housing
- 8 Drive train**
 - Combination of trapezoidal spindle and gear
 - Durable and robust

SERIES CHARACTERISTICS

Number of installation sizes	3
Stroke per jaw	6 mm - 10 mm
Gripping force	540 N - 1900 N
Weight	0,79 kg - 1,66 kg
AP class	5



30 million maintenance-free cycles (max.)



Integrated sensing



IP64



Corrosion resistance



Mechanical self limitation



Purged air

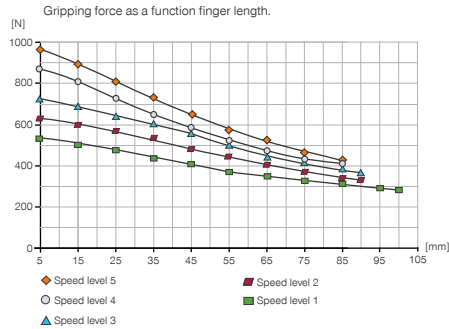
2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GEP5006

▶ PRODUCT SPECIFICATIONS



▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	43
Mx [Nm]	70
My [Nm]	46
Fa [N]	1250

▶ TECHNICAL DATA - BASIC VERSION

Order no.	Technical Data
	GEP5006N
Stroke per jaw [mm]	6
Control time [s]	0.035
Weight per jaw max. [kg]	0.4
Length of the gripper fingers max. [mm]*	100
Repetition accuracy +/- [mm]	0.01
Voltage [V]	24
Current consumption max. [A]	5
Operating temperature min. [°C]	5
Operating temperature max. [°C]	50
Protection to IEC 60529	IP64
Weight [kg]	0.79

*Depending on speed level selected

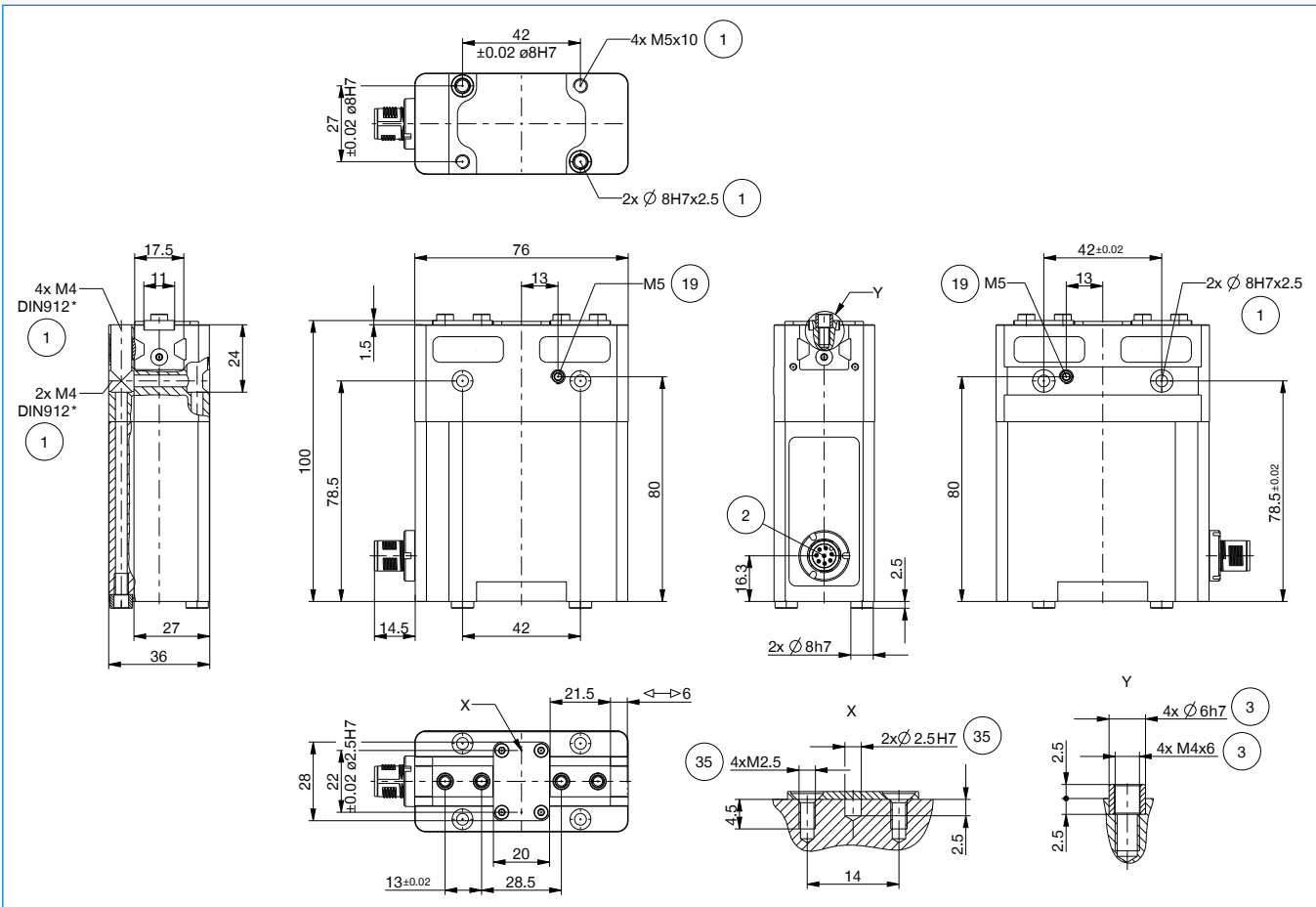
▶ TECHNICAL DATA - MODES

Order no.	Technical data - N mode
	GEP5006N
Gripping force → ← min. / max. [N]	540 / 960
Gripping force ↔ min. / max. [N]	540 / 960
Travel time → ← min. / max. [s]	0,15 / 0,22
Travel time ↔ min. / max. [s]	0,15 / 0,22

Order no.	Technical data - NC mode
	GEP5006N
Gripping force → ← min. / max. [N]	540 / 960
Gripping force ↔ min. / max. [N]	-
Travel time → ← min. / max. [s]	0,15 / 0,22
Travel time ↔ min. / max. [s]	0,13

Order no.	Technical data - NO mode
	GEP5006N
Gripping force → ← min. / max. [N]	-
Gripping force ↔ min. / max. [N]	540 / 960
Travel time → ← min. / max. [s]	0,13
Travel time ↔ min. / max. [s]	0,15 / 0,22

TECHNICAL DRAWINGS



① Gripper attachment

② Energy supply

③ Fixing for gripper finger

⑱ Air purge connection option

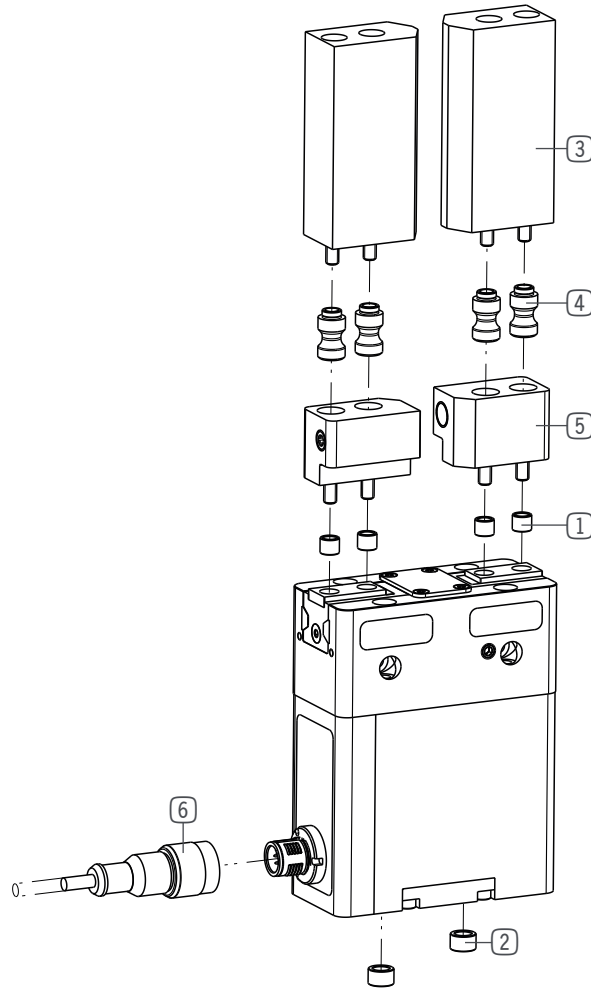
⑳ Attachment option for customer-specific fittings

2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GEP5006

1

Installation size GEP5006 / 2-Jaw Parallel Grippers / electric / Grippers



INCLUDED IN DELIVERY



Centering Disc

024230



Centering Disc

024231

► RECOMMENDED ACCESSORIES



Universal jaw aluminium

UB5006AL



Universal jaw steel

UB5006ST



Changeable jaw, loose-part-set

WB5006L



Changeable jaw, fix-part

WB5006F



Plug-in Connector Angled Cable 10 m - Female M12

KAW1000B8

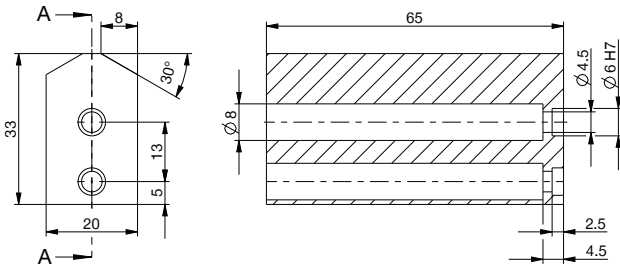


Plug-in Connector Straight Cable 10 m - Female M12

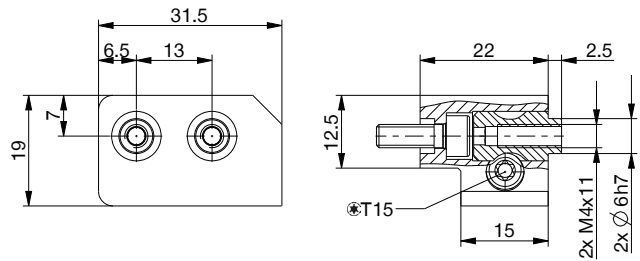
KAG1000B8

► TECHNICAL DRAWINGS ACCESSORIES

One universal jaw is required for each gripper jaw **3**
A-A



For each gripper jaw, one interchangeable jaw loose part set **4** and one interchangeable jaw fixed part **5** are needed



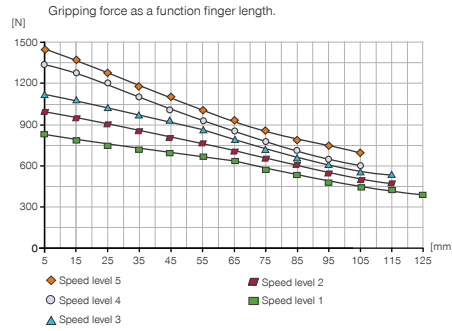
2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GEP5008

▶ PRODUCT SPECIFICATIONS

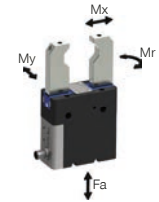


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	60
Mx [Nm]	105
My [Nm]	65
Fa [N]	1900

▶ TECHNICAL DATA - BASIC VERSION

Order no.	Technical Data
	GEP5008N
Stroke per jaw [mm]	8
Control time [s]	0.035
Weight per jaw max. [kg]	0.7
Length of the gripper fingers max. [mm]*	125
Repetition accuracy +/- [mm]	0.01
Voltage [V]	24
Current consumption max. [A]	5
Operating temperature min. [°C]	5
Operating temperature max. [°C]	50
Protection to IEC 60529	IP64
Weight [kg]	1.16

*Depending on speed level selected

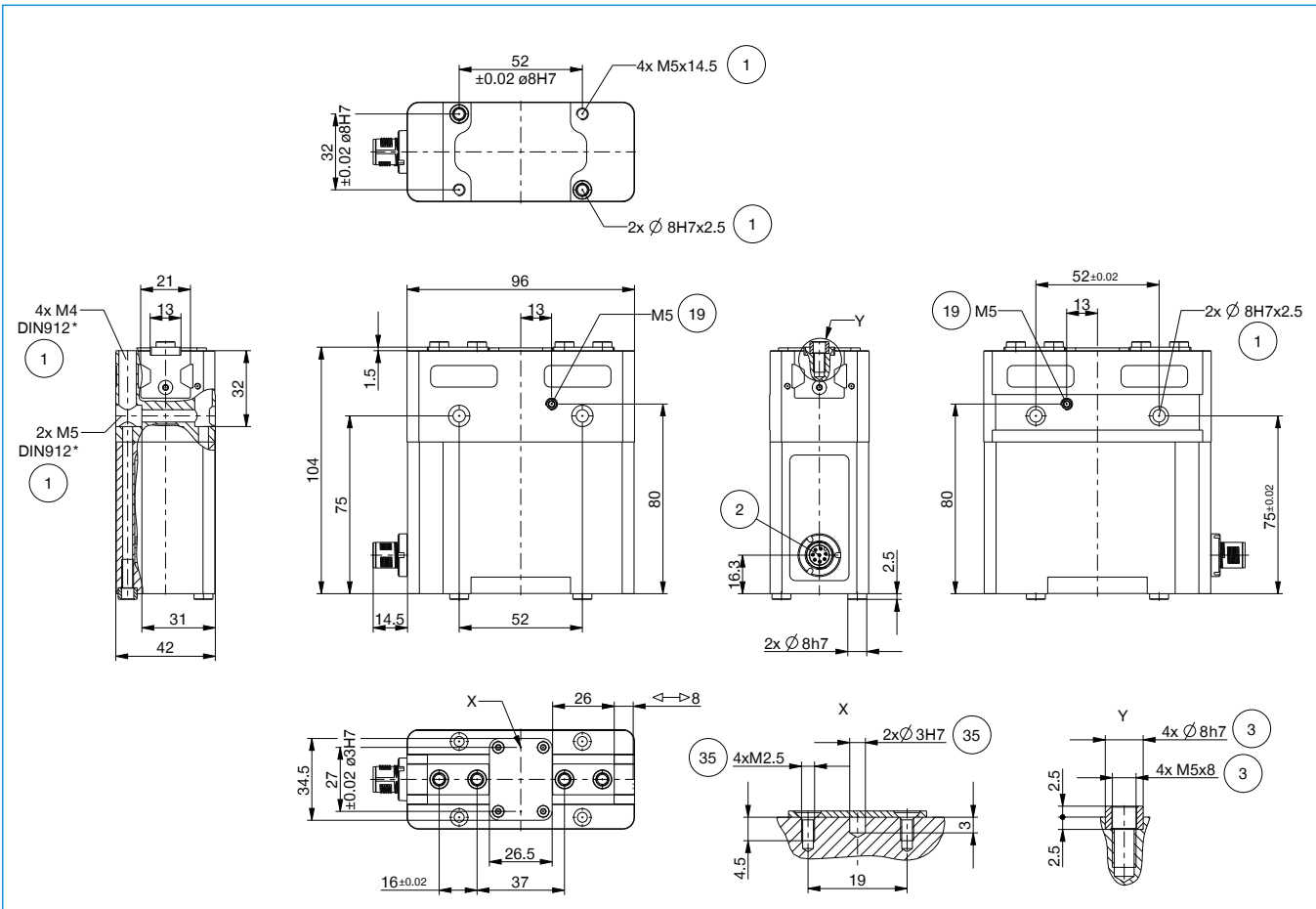
▶ TECHNICAL DATA - MODES

Order no.	Technical data - N mode
	GEP5008N
Gripping force → ← min. / max. [N]	800 / 1450
Gripping force ↔ min. / max. [N]	800 / 1450
Travel time → ← min. / max. [s]	0,18 / 0,29
Travel time ↔ min. / max. [s]	0,18 / 0,29

Order no.	Technical data - NC mode
	GEP5008N
Gripping force → ← min. / max. [N]	800 / 1450
Gripping force ↔ min. / max. [N]	-
Travel time → ← min. / max. [s]	0,18 / 0,29
Travel time ↔ min. / max. [s]	0,15

Order no.	Technical data - NO mode
	GEP5008N
Gripping force → ← min. / max. [N]	-
Gripping force ↔ min. / max. [N]	800 / 1450
Travel time → ← min. / max. [s]	0,15
Travel time ↔ min. / max. [s]	0,18 / 0,29

▶ TECHNICAL DRAWINGS



① Gripper attachment

② Energy supply

③ Fixing for gripper finger

⑱ Air purge connection option

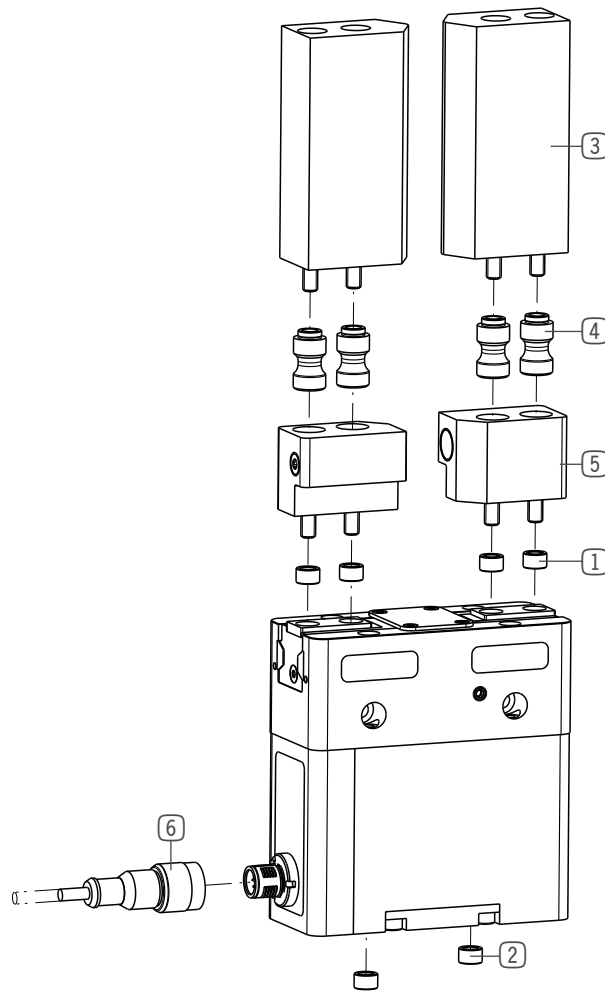
⑳ Attachment option for customer-specific fittings

2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GEP5008

1

Installation size GEP5008 / 2-Jaw Parallel Grippers / electric / Grippers



▶ INCLUDED IN DELIVERY



Centering Disc

024231

▶ RECOMMENDED ACCESSORIES



Universal jaw aluminium

UB5008AL



Universal jaw steel

UB5008ST



Changeable jaw, loose-part-set

WB5008L



Changeable jaw, fix-part

WB5008F



Plug-in Connector Angled Cable 10 m - Female M12

KAW1000B8

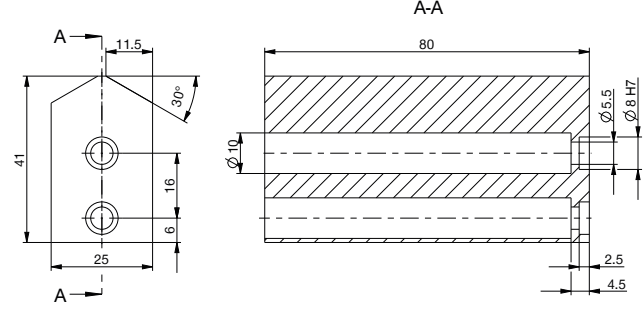


Plug-in Connector Straight Cable 10 m - Female M12

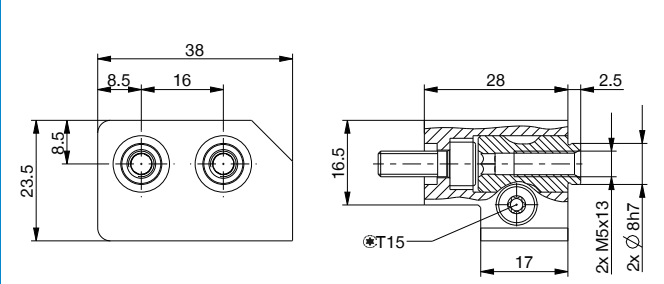
KAG1000B8

▶ TECHNICAL DRAWINGS ACCESSORIES

One universal jaw is required for each gripper jaw **3**



For each gripper jaw, one interchangeable jaw loose part set **4** and one interchangeable jaw fixed part **5** are needed



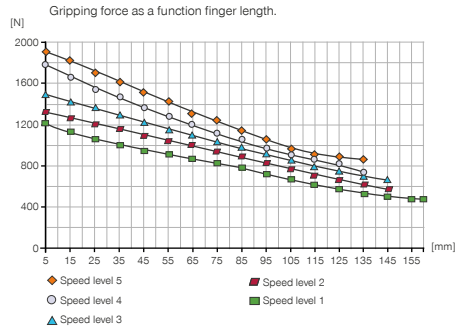
2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GEP5010

▶ PRODUCT SPECIFICATIONS

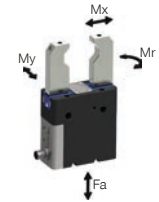


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	75
Mx [Nm]	125
My [Nm]	95
Fa [N]	2700

▶ TECHNICAL DATA - BASIC VERSION

▶ Technical Data	
Order no.	GEP5010N
Stroke per jaw [mm]	10
Control time [s]	0.035
Weight per jaw max. [kg]	1.3
Length of the gripper fingers max. [mm]*	160
Repetition accuracy +/- [mm]	0.01
Voltage [V]	24
Current consumption max. [A]	5
Operating temperature min. [°C]	5
Operating temperature max. [°C]	50
Protection to IEC 60529	IP64
Weight [kg]	1.66

*Depending on speed level selected

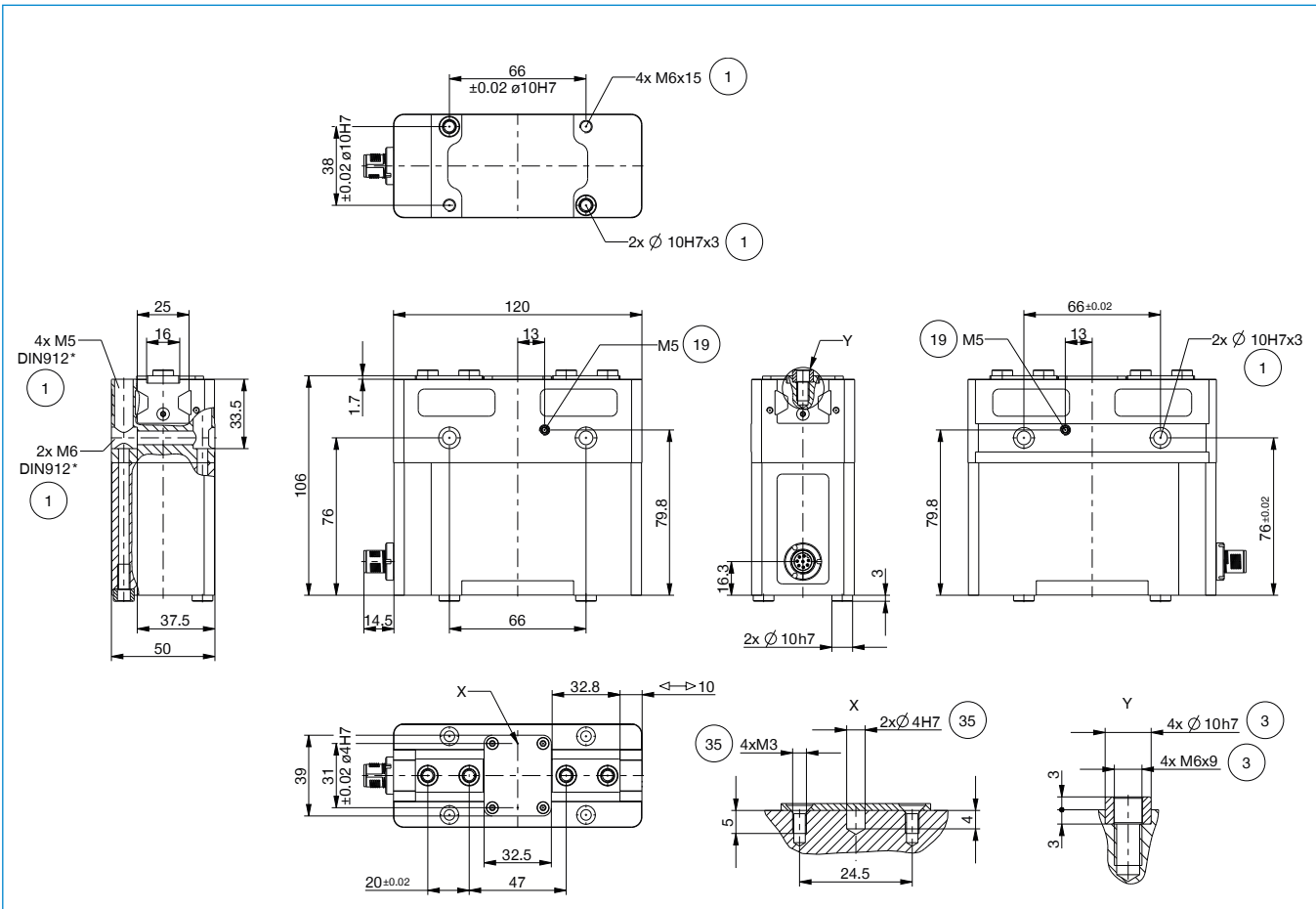
▶ TECHNICAL DATA - MODES

▶ Technical data - N mode	
Order no.	GEP5010N
Gripping force → ← min. / max. [N]	1200 / 1900
Gripping force ↔ min. / max. [N]	1200 / 1900
Travel time → ← min. / max. [s]	0,21 / 0,32
Travel time ↔ min. / max. [s]	0,21 / 0,32

▶ Technical data - NC mode	
Order no.	GEP5010N
Gripping force → ← min. / max. [N]	1200 / 1900
Gripping force ↔ min. / max. [N]	-
Travel time → ← min. / max. [s]	0,21 / 0,32
Travel time ↔ min. / max. [s]	0,16

▶ Technical data - NO mode	
Order no.	GEP5010N
Gripping force → ← min. / max. [N]	-
Gripping force ↔ min. / max. [N]	1200 / 1900
Travel time → ← min. / max. [s]	0,16
Travel time ↔ min. / max. [s]	0,21 / 0,32

TECHNICAL DRAWINGS



① Gripper attachment

② Energy supply

③ Fixing for gripper finger

④ Air purge connection option

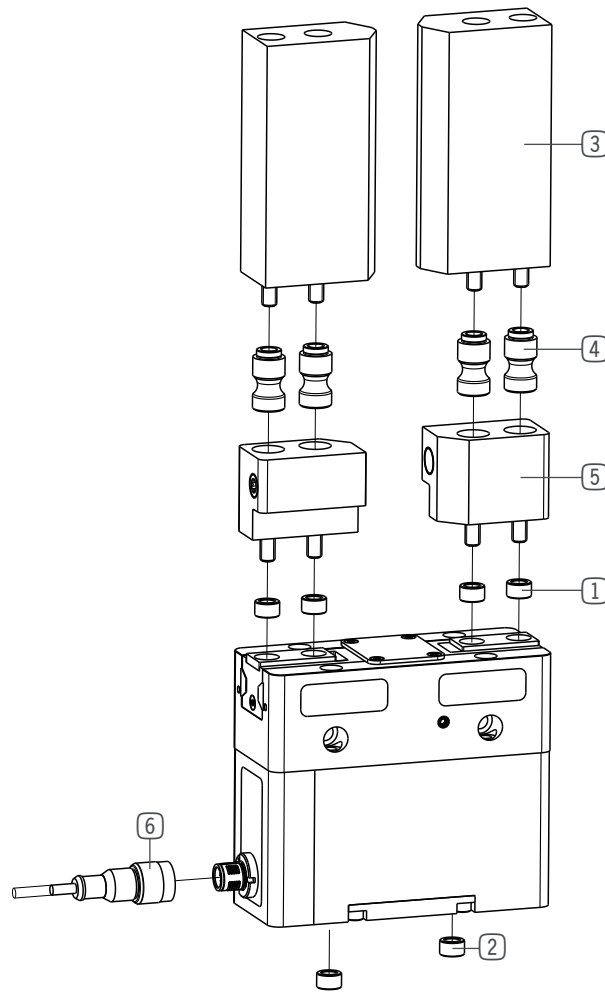
⑤ Attachment option for customer-specific fittings

2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GEP5010

1

Installation size GEP5010 / 2-Jaw Parallel Grippers / electric / Grippers



▶ INCLUDED IN DELIVERY



Centering Disc

018187

▶ RECOMMENDED ACCESSORIES



Universal jaw aluminium

UB5010AL



Universal jaw steel

UB5010ST



Changeable jaw, loose-part-set

WB5010L



Changeable jaw, fix-part

WB5010F



Plug-in Connector Angled Cable 10 m - Female M12

KAW1000B8

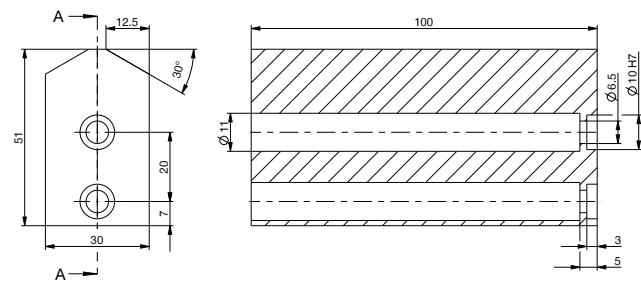


Plug-in Connector Straight Cable 10 m - Female M12

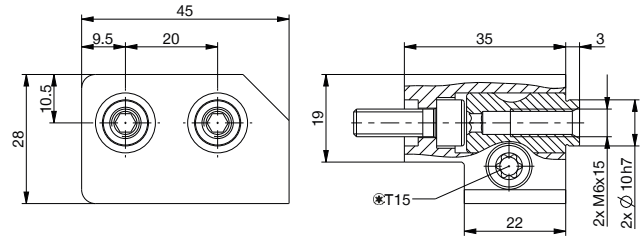
KAG1000B8

▶ TECHNICAL DRAWINGS ACCESSORIES

One universal jaw is required for each gripper jaw **3**



For each gripper jaw, one interchangeable jaw loose part set **4** and one interchangeable jaw fixed part **5** are needed

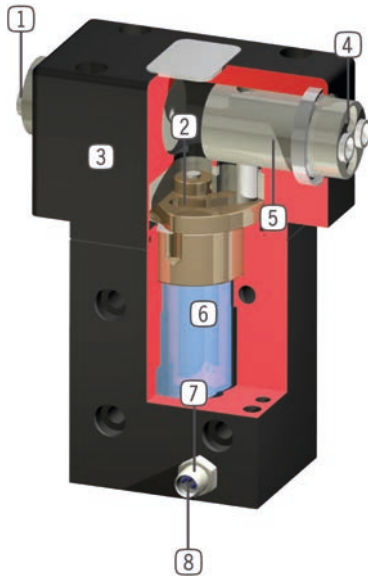


2-JAW PARALLEL GRIPPERS

SERIES GEP1600

still available

► BENEFITS IN DETAIL



- ① **Removable centering sleeves**
 - quick and economical positioning of the gripper fingers
- ② **Positively driven curve disc**
 - synchronized the movement of the gripper jaws
 - high force transfer
 - rapid stroke and force stroke (version with 6 mm stroke per jaw)
- ③ **Robust, lightweight housing**
 - hard coated aluminium alloy
- ④ **Gripper jaw**
 - hardened steel
 - individual gripper finger mounting
- ⑤ **Guide**
 - sealed round guide for harsh environmental conditions
- ⑥ **Drive**
 - electric drive by 24 VDC step motor
- ⑦ **Position sensing**
 - measured at the end of stroke via power increase on the motor
- ⑧ **Energy supply**
 - standardized interface M8 round plug
 - signal control line (use only cable without diode)

► TECHNICAL DATA *



Number of installation sizes	2
Stroke per jaw	2 mm - 6 mm
Gripping force	115 N - 280 N
Weight	0,3 kg - 1,5 kg

*further information is available online

1

Series GEP1600 / 2-Jaw Parallel Grippers / electric / Grippers

2-JAW PARALLEL GRIPPERS WITH LONG STROKE

OVERVIEW OF SERIES

1

Overview of Series / 2-Jaw Parallel Grippers with Long Stroke



► PNEUMATIC



Series MGH8000

150



Series GH6000

170

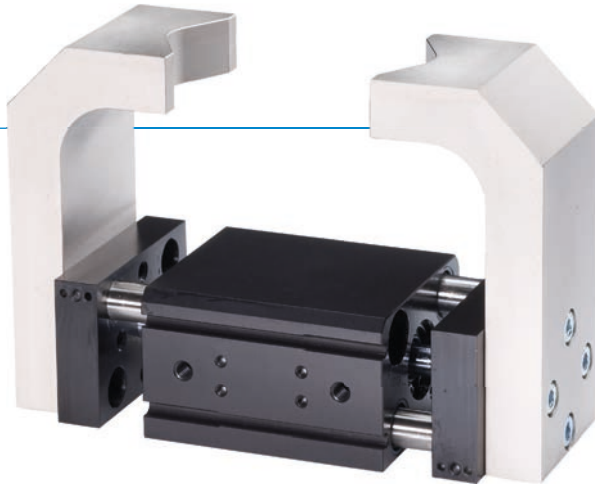


Series GH7000

210

2-JAW PARALLEL GRIPPERS WITH LONG STROKE SERIES MGH8000

▶ PRODUCT ADVANTAGES



“The compact”

▶ Reduced interference contours

Low-profile designs and versatile screw connection options enable simple integration into your design

▶ Dirt protection

Using the scrapers on the guides, you can reliably use the gripper even under the harshest conditions

▶ Failure-free continuous operation

Our uncompromising “Made in Germany” quality guarantees up to 10 million maintenance-free gripping cycles

▶ THE BEST PRODUCT FOR YOUR APPLICATION



▶ Our products love the challenge!

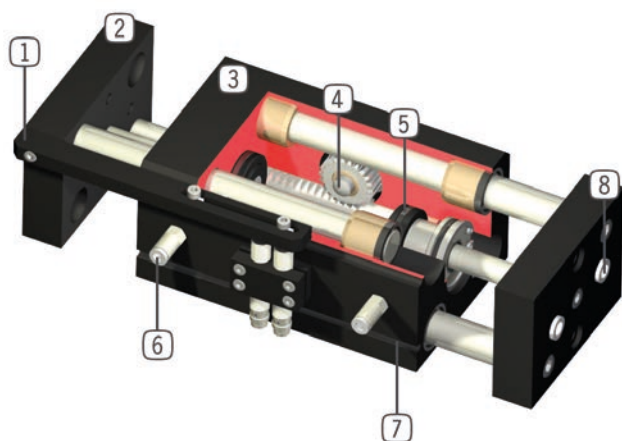
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Find the best product for your specific use:

www.zimmer-group.com



► BENEFITS IN DETAIL



- ① **Attachment kit (cam switch and clamping block)**
 - for sensing position by means of proximity switch (optional feature)
- ② **Gripper jaw**
 - individual gripper finger mounting
- ③ **Robust, lightweight housing**
 - hard coated aluminium alloy
- ④ **Synchronization**
 - via rack and pinion
- ⑤ **Drive**
 - two double-acting pneumatic cylinders
- ⑥ **Energy supply**
 - possible from several sides
- ⑦ **Integrated groove**
 - mounting and positioning of magnetic field sensors
- ⑧ **Removable centering sleeves**
 - quick and economical positioning of the gripper fingers

► SERIES CHARACTERISTICS



Number of installation sizes	3
Stroke per jaw	10 mm - 100 mm
Gripping force	90 N - 910 N
Weight	0,35 kg - 7,3 kg
AP class	2



10 million maintenance-free cycles (max.)



Inductive sensor



IP64



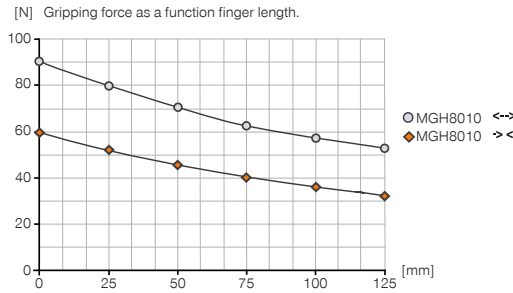
Magnetic field sensor

2-JAW PARALLEL GRIPPERS WITH LONG STROKE INSTALLATION SIZE MGH8010

▶ PRODUCT SPECIFICATIONS

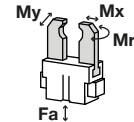


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	12
Mx [Nm]	12
My [Nm]	8
Fa [N]	260

▶ INCLUDED IN DELIVERY



Centering Disc

DST40400

▶ RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style

GVM5



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Inductive proximity switch - Cable 5 m

NJ4-E2



Inductive Proximity Switch Cable 0,3 m - Connector M8

NJ4-E2SK



Attachment Kit for Inductive Proximity Switch

ANS0027



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



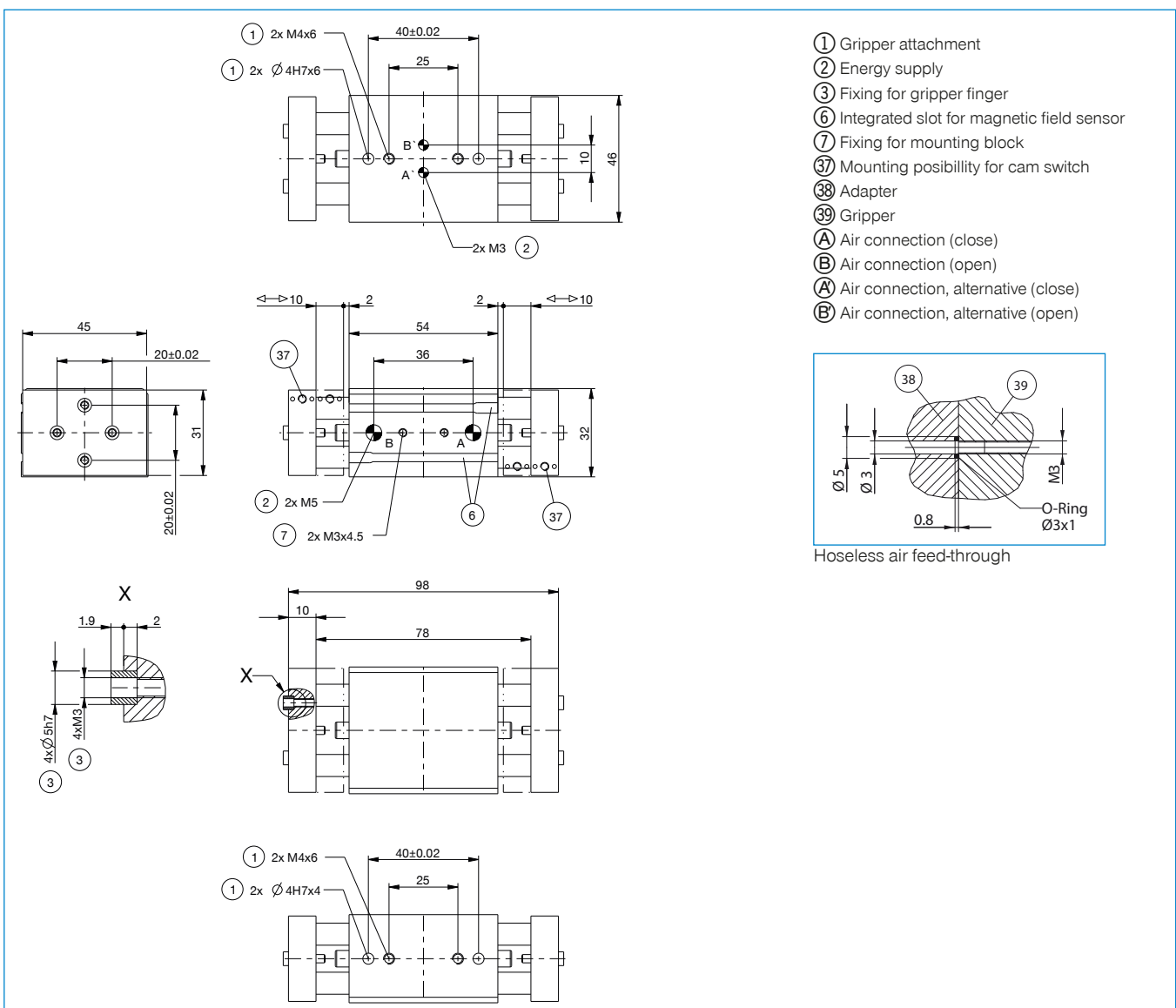
Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC

Order no.	MGH8010
Stroke per jaw [mm]	10
Gripping force in closing [N]	60
Gripping force in opening [N]	90
Closing time [s]	0.07
Opening time [s]	0.04
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	4
Weight [kg]	0.35

*All data measured at 6 bar

► Technical Data*



2-JAW PARALLEL GRIPPERS WITH LONG STROKE INSTALLATION SIZE MGH8020

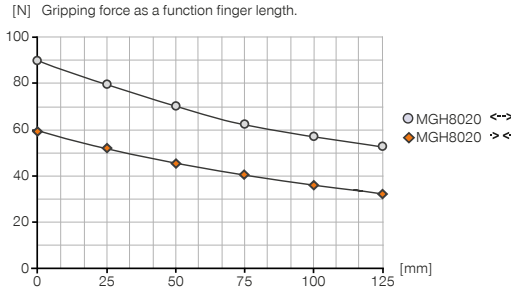
1

Installation size MGH8020 / 2-Jaw Parallel Grippers with Long Stroke / pneumatic / Grippers

▶ PRODUCT SPECIFICATIONS

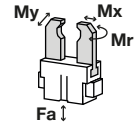


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	12
Mx [Nm]	12
My [Nm]	8
Fa [N]	260

▶ INCLUDED IN DELIVERY



Centering Disc

DST40400

▶ RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style

GVM5



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Inductive proximity switch - Cable 5 m

NJ4-E2



Inductive Proximity Switch Cable 0,3 m - Connector M8

NJ4-E2SK



Attachment Kit for Inductive Proximity Switch

ANS0028



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



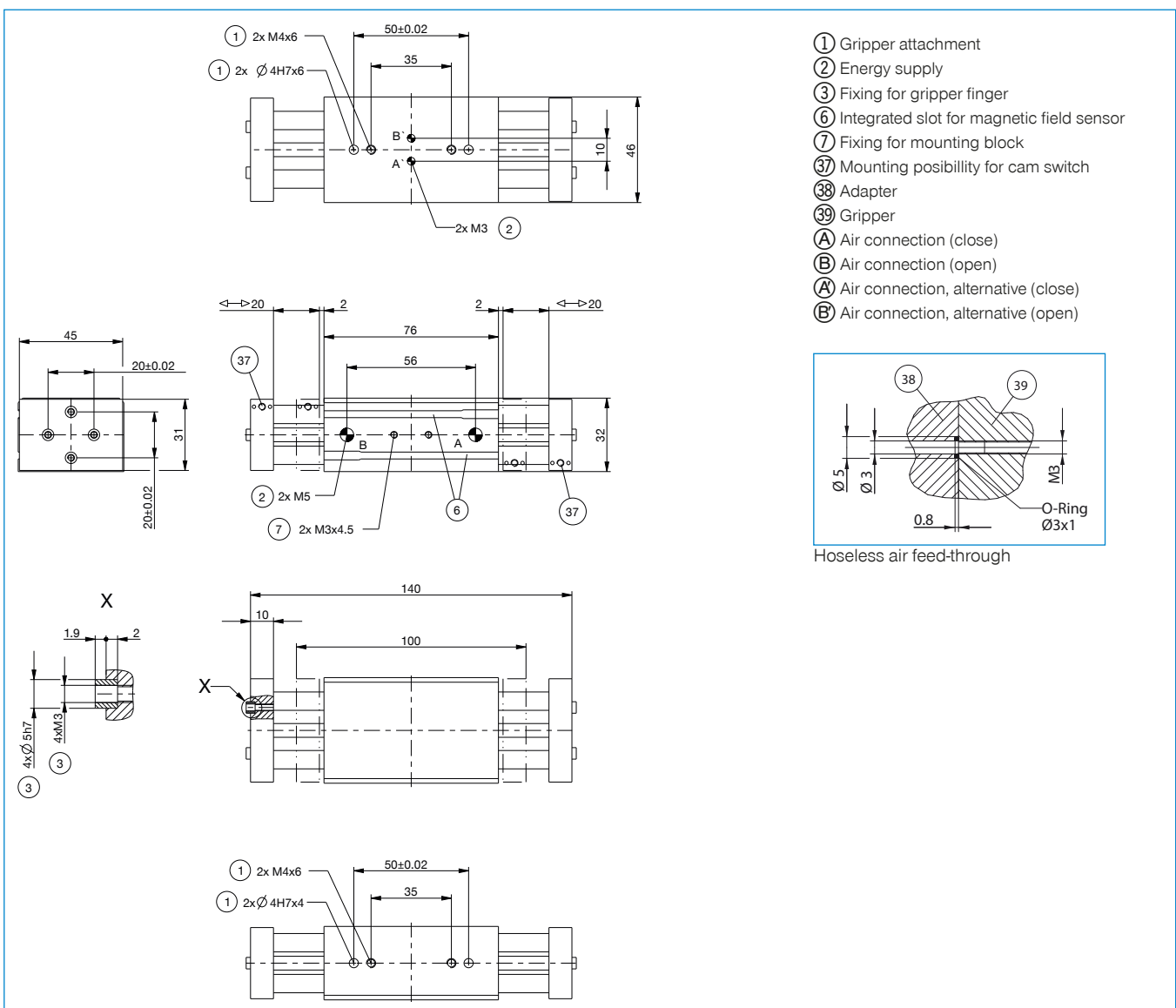
Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC

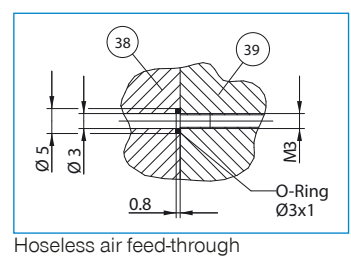
Order no.	MGH8020
Stroke per jaw [mm]	20
Gripping force in closing [N]	60
Gripping force in opening [N]	90
Closing time [s]	0.09
Opening time [s]	0.05
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	8
Weight [kg]	0.5

*All data measured at 6 bar

► Technical Data*



- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑥ Integrated slot for magnetic field sensor
- ⑦ Fixing for mounting block
- ③⑦ Mounting possibility for cam switch
- ③⑧ Adapter
- ③⑨ Gripper
- Ⓐ Air connection (close)
- Ⓑ Air connection (open)
- Ⓐ Air connection, alternative (close)
- Ⓑ Air connection, alternative (open)

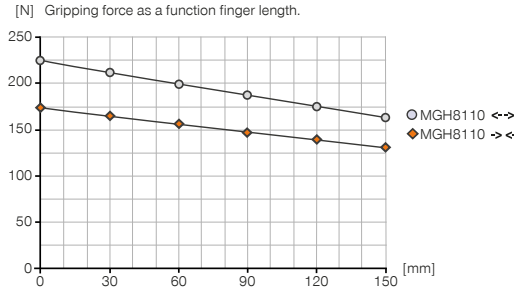


2-JAW PARALLEL GRIPPERS WITH LONG STROKE INSTALLATION SIZE MGH8110

▶ PRODUCT SPECIFICATIONS

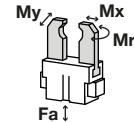


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	20
Mx [Nm]	20
My [Nm]	18
Fa [N]	435

▶ INCLUDED IN DELIVERY



Centering Disc

BDST40800

▶ RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style

GVM5



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S



Attachment Kit for Inductive Proximity Switch

ANS0020



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



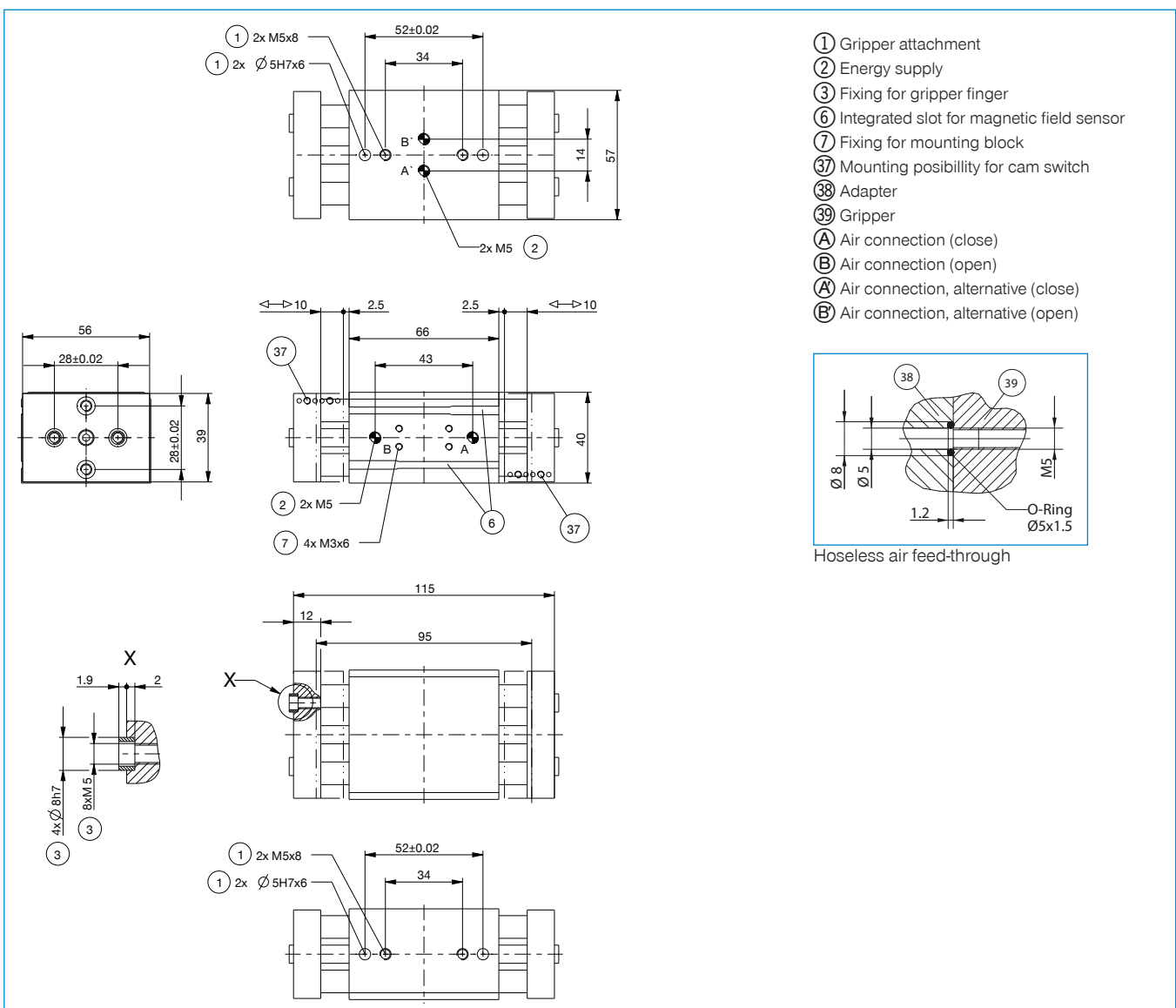
Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC

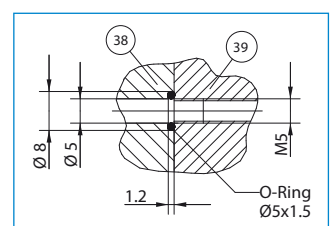
Order no.	MGH8110
Stroke per jaw [mm]	10
Gripping force in closing [N]	180
Gripping force in opening [N]	220
Closing time [s]	0.08
Opening time [s]	0.04
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	9.2
Weight [kg]	0.7

*All data measured at 6 bar

► Technical Data*



- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑥ Integrated slot for magnetic field sensor
- ⑦ Fixing for mounting block
- ③⑦ Mounting possibility for cam switch
- ③⑧ Adapter
- ③⑨ Gripper
- Ⓐ Air connection (close)
- Ⓑ Air connection (open)
- Ⓐ Air connection, alternative (close)
- Ⓑ Air connection, alternative (open)

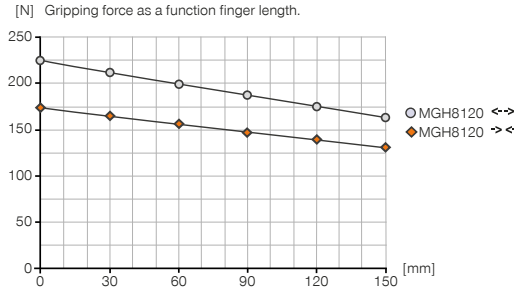


2-JAW PARALLEL GRIPPERS WITH LONG STROKE INSTALLATION SIZE MGH8120

▶ PRODUCT SPECIFICATIONS

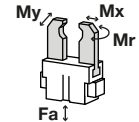


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	20
Mx [Nm]	20
My [Nm]	18
Fa [N]	435

▶ INCLUDED IN DELIVERY



Centering Disc

BDST40800

▶ RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style

GVM5



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S



Attachment Kit for Inductive Proximity Switch

ANS0021



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC

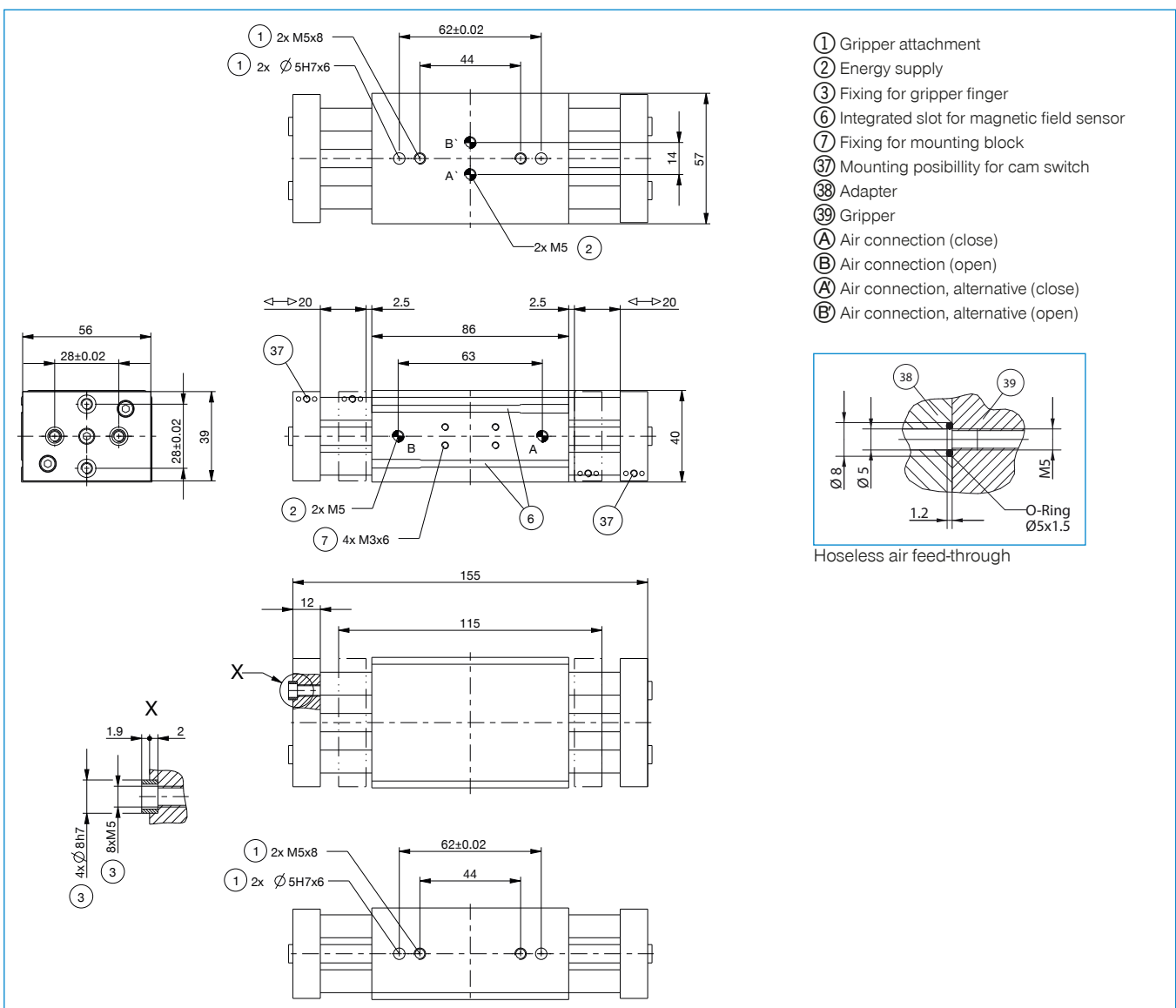


Magnetic field sensor Straight Cable 0,3 m - Connector M8

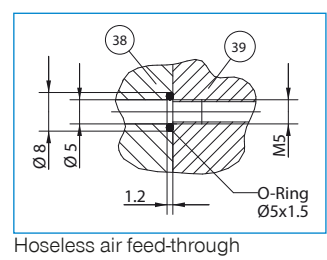
MFS204SKHC

Order no.	MGH8120
Stroke per jaw [mm]	20
Gripping force in closing [N]	190
Gripping force in opening [N]	220
Closing time [s]	0.1
Opening time [s]	0.06
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	18.4
Weight [kg]	0.85

* All data measured at 6 bar



- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑥ Integrated slot for magnetic field sensor
- ⑦ Fixing for mounting block
- ③⑦ Mounting possibility for cam switch
- ③⑧ Adapter
- ③⑨ Gripper
- Ⓐ Air connection (close)
- Ⓑ Air connection (open)
- Ⓐ Air connection, alternative (close)
- Ⓑ Air connection, alternative (open)

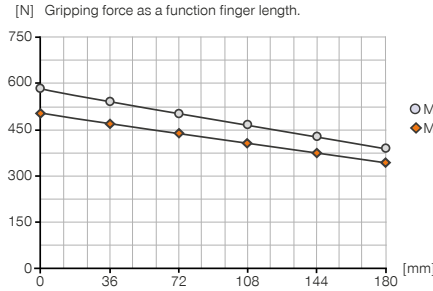


2-JAW PARALLEL GRIPPERS WITH LONG STROKE INSTALLATION SIZE MGH8230

▶ PRODUCT SPECIFICATIONS

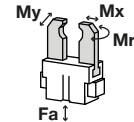


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	64
Mx [Nm]	64
My [Nm]	45
Fa [N]	760

▶ INCLUDED IN DELIVERY



Centering Disc

DST41000

▶ RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style

GVM5



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Inductive proximity switch - Cable 5m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S



Attachment Kit for Inductive Proximity Switch

ANS0022



Magnetic field sensor Angled Cable 5m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 5m

MFS204KHC

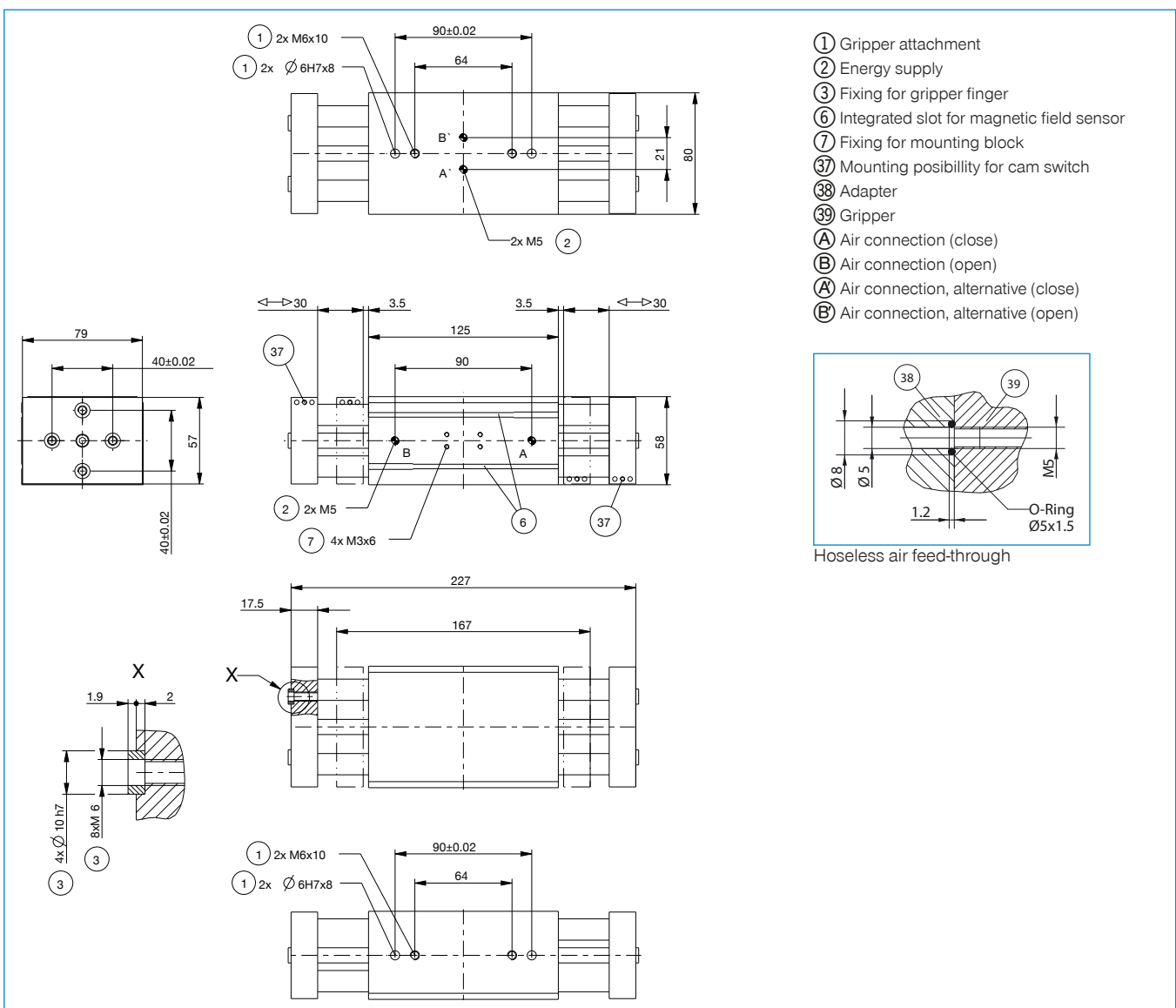


Magnetic field sensor Straight Cable 0,3 m - Connector M8

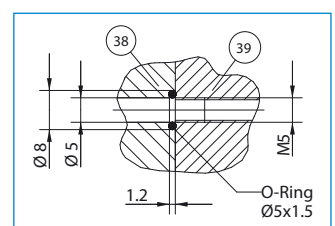
MFS204SKHC

► Technical Data*	
Order no.	MGH8230
Stroke per jaw [mm]	30
Gripping force in closing [N]	500
Gripping force in opening [N]	570
Closing time [s]	0.14
Opening time [s]	0.1
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	64
Weight [kg]	2.4

*All data measured at 6 bar



- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑥ Integrated slot for magnetic field sensor
- ⑦ Fixing for mounting block
- ③⑦ Mounting possibility for cam switch
- ③⑧ Adapter
- ③⑨ Gripper
- Ⓐ Air connection (close)
- Ⓑ Air connection (open)
- Ⓐ Air connection, alternative (close)
- Ⓑ Air connection, alternative (open)

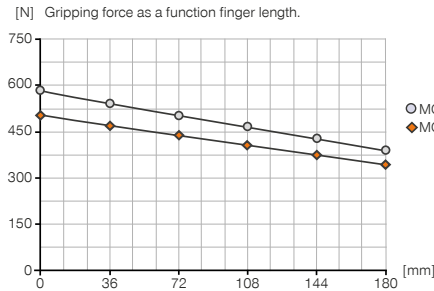


2-JAW PARALLEL GRIPPERS WITH LONG STROKE INSTALLATION SIZE MGH8240

▶ PRODUCT SPECIFICATIONS

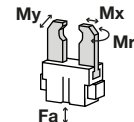


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	64
Mx [Nm]	64
My [Nm]	45
Fa [N]	760

▶ INCLUDED IN DELIVERY



Centering Disc

DST41000

▶ RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style

GVM5



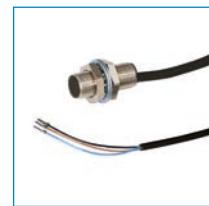
Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S



Attachment Kit for Inductive Proximity Switch

ANS0023



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC

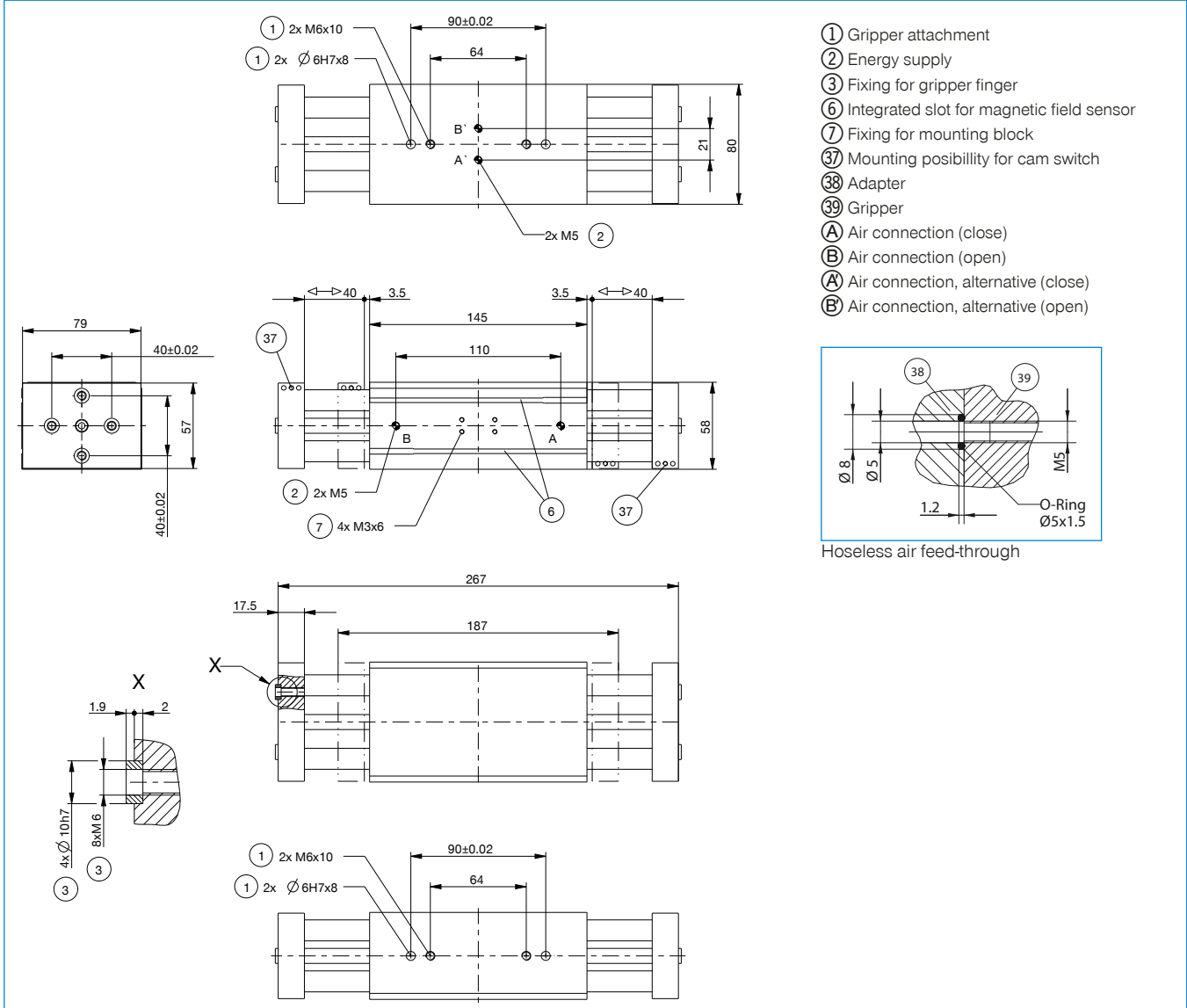


Magnetic field sensor Straight Cable 0,3 m - Connector M8

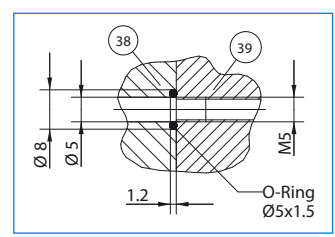
MFS204SKHC

Order no.	MGH8240
Stroke per jaw [mm]	40
Gripping force in closing [N]	500
Gripping force in opening [N]	570
Closing time [s]	0.18
Opening time [s]	0.14
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	128
Weight [kg]	2.9

*All data measured at 6 bar



- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑥ Integrated slot for magnetic field sensor
- ⑦ Fixing for mounting block
- ③⑦ Mounting possibility for cam switch
- ③⑧ Adapter
- ③⑨ Gripper
- A Air connection (close)
- B Air connection (open)
- A Air connection, alternative (close)
- B Air connection, alternative (open)



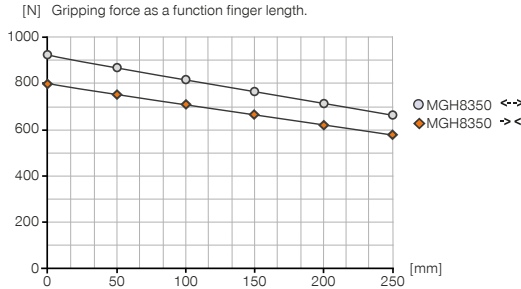
Hoseless air feed-through

2-JAW PARALLEL GRIPPERS WITH LONG STROKE INSTALLATION SIZE MGH8350

▶ PRODUCT SPECIFICATIONS

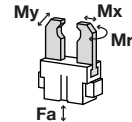


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	130
Mx [Nm]	130
My [Nm]	98
Fa [N]	1300

▶ INCLUDED IN DELIVERY



Centering Disc

DST41600

▶ RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style

GV1-8X6



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S



Attachment Kit for Inductive Proximity Switch

ANS0024



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC

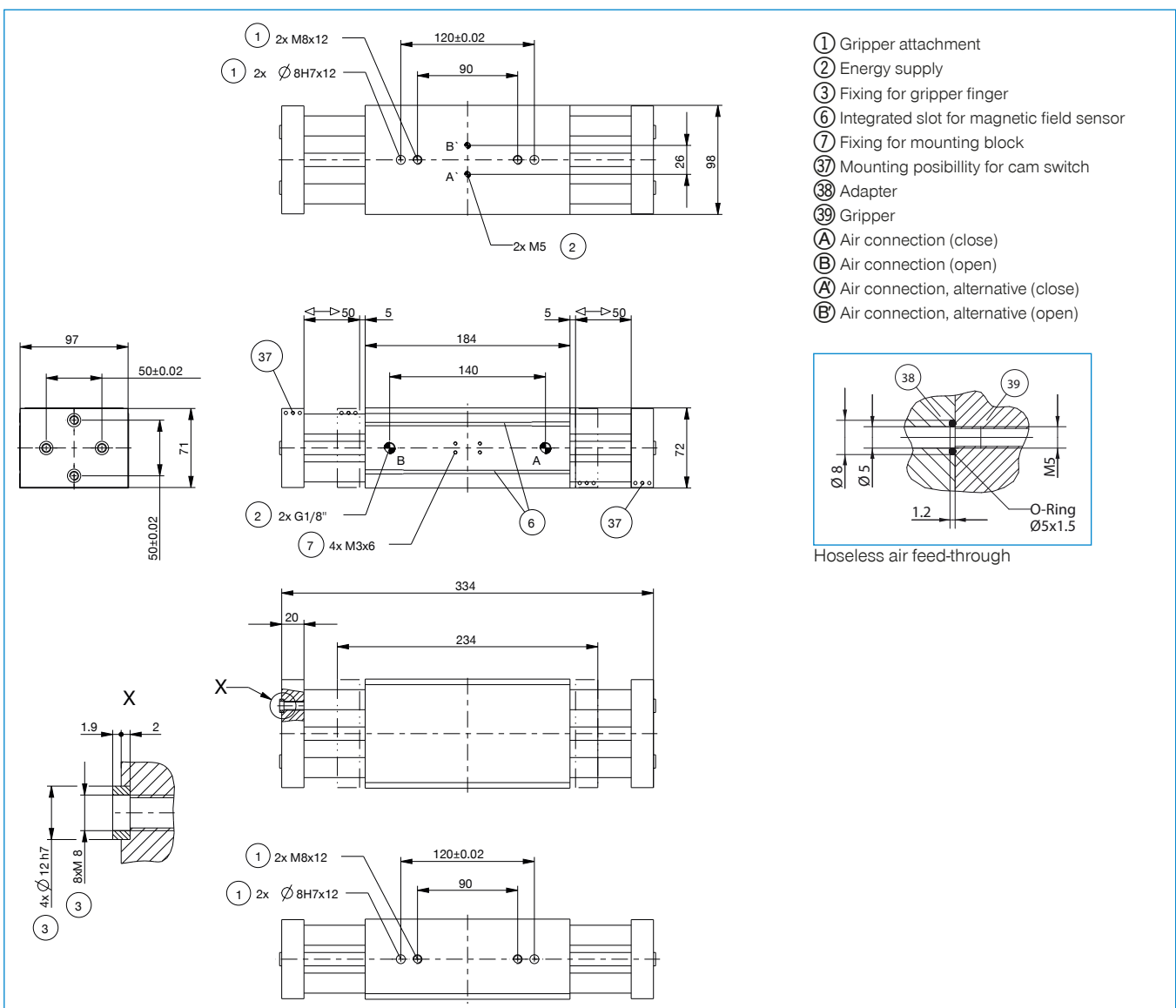


Magnetic field sensor Straight Cable 0,3 m - Connector M8

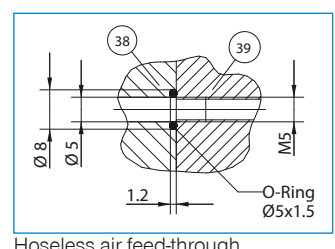
MFS204SKHC

Order no.	MGH8350
Stroke per jaw [mm]	50
Gripping force in closing [N]	800
Gripping force in opening [N]	910
Closing time [s]	0.3
Opening time [s]	0.25
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	170
Weight [kg]	5.1

*All data measured at 6 bar



- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑥ Integrated slot for magnetic field sensor
- ⑦ Fixing for mounting block
- ③⑦ Mounting possibility for cam switch
- ③⑧ Adapter
- ③⑨ Gripper
- Ⓐ Air connection (close)
- Ⓑ Air connection (open)
- Ⓐ Air connection, alternative (close)
- Ⓑ Air connection, alternative (open)

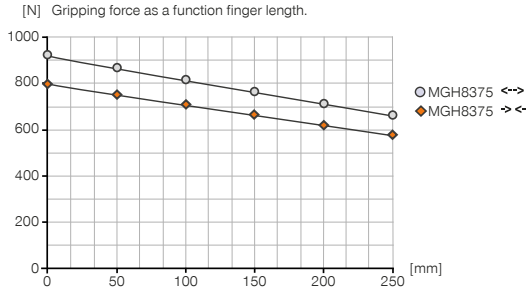


2-JAW PARALLEL GRIPPERS WITH LONG STROKE INSTALLATION SIZE MGH8375

▶ PRODUCT SPECIFICATIONS

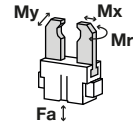


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	130
Mx [Nm]	130
My [Nm]	98
Fa [N]	1300

▶ INCLUDED IN DELIVERY



Centering Disc

DST41600

▶ RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style

GV1-8X6



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Inductive proximity switch - Cable 5m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S



Attachment Kit for Inductive Proximity Switch

ANS0025



Magnetic field sensor Angled Cable 5m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 5m

MFS204KHC

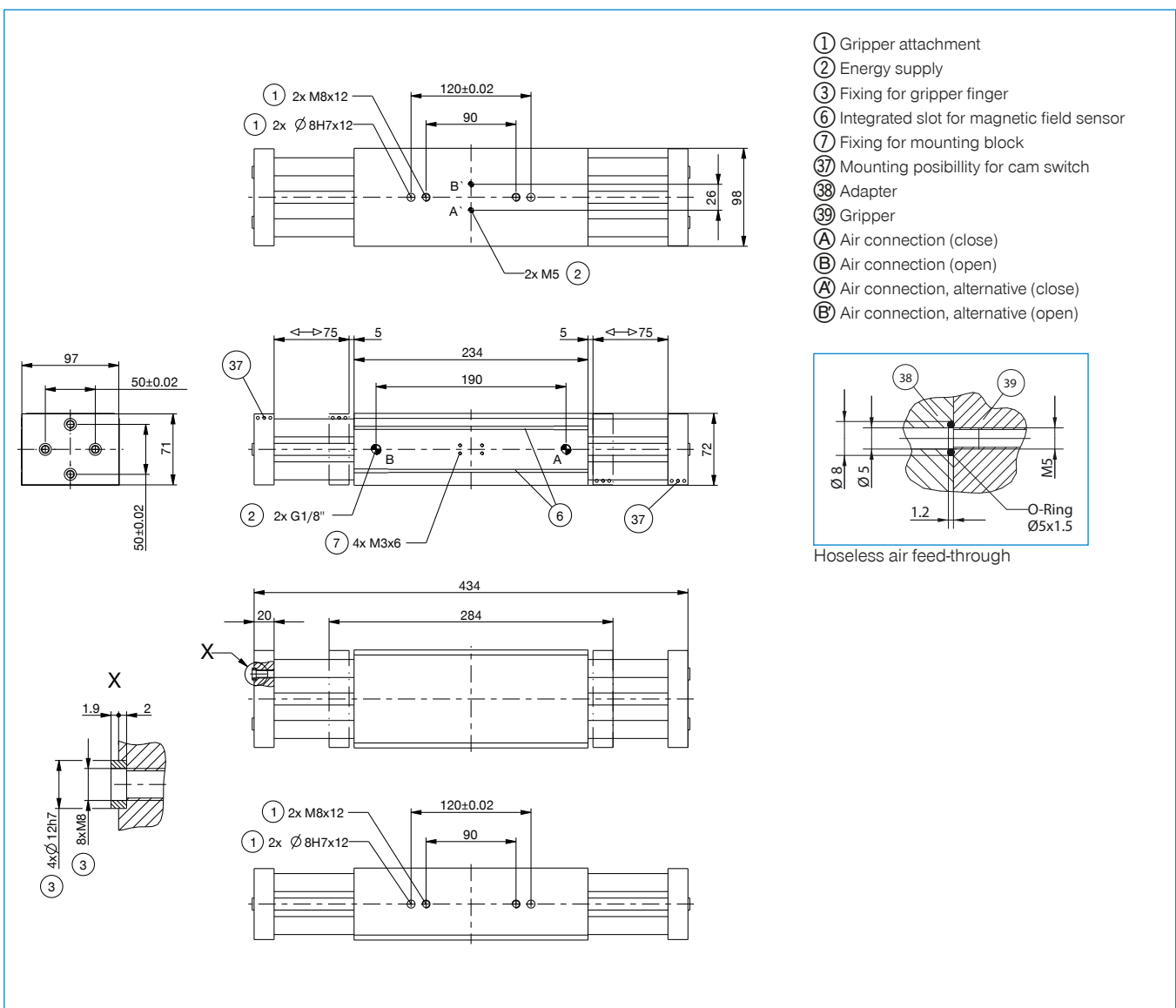


Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC

Order no.	MGH8375
Stroke per jaw [mm]	75
Gripping force in closing [N]	800
Gripping force in opening [N]	910
Closing time [s]	0.4
Opening time [s]	0.35
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	255
Weight [kg]	6.2

*All data measured at 6 bar

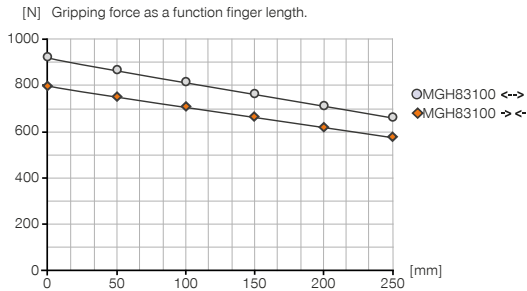


2-JAW PARALLEL GRIPPERS WITH LONG STROKE INSTALLATION SIZE MGH83100

▶ PRODUCT SPECIFICATIONS

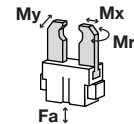


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	130
Mx [Nm]	130
My [Nm]	98
Fa [N]	1300

▶ INCLUDED IN DELIVERY



Centering Disc

DST41600

▶ RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style

GV1-8X6



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S



Attachment Kit for Inductive Proximity Switch

ANS0026



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC

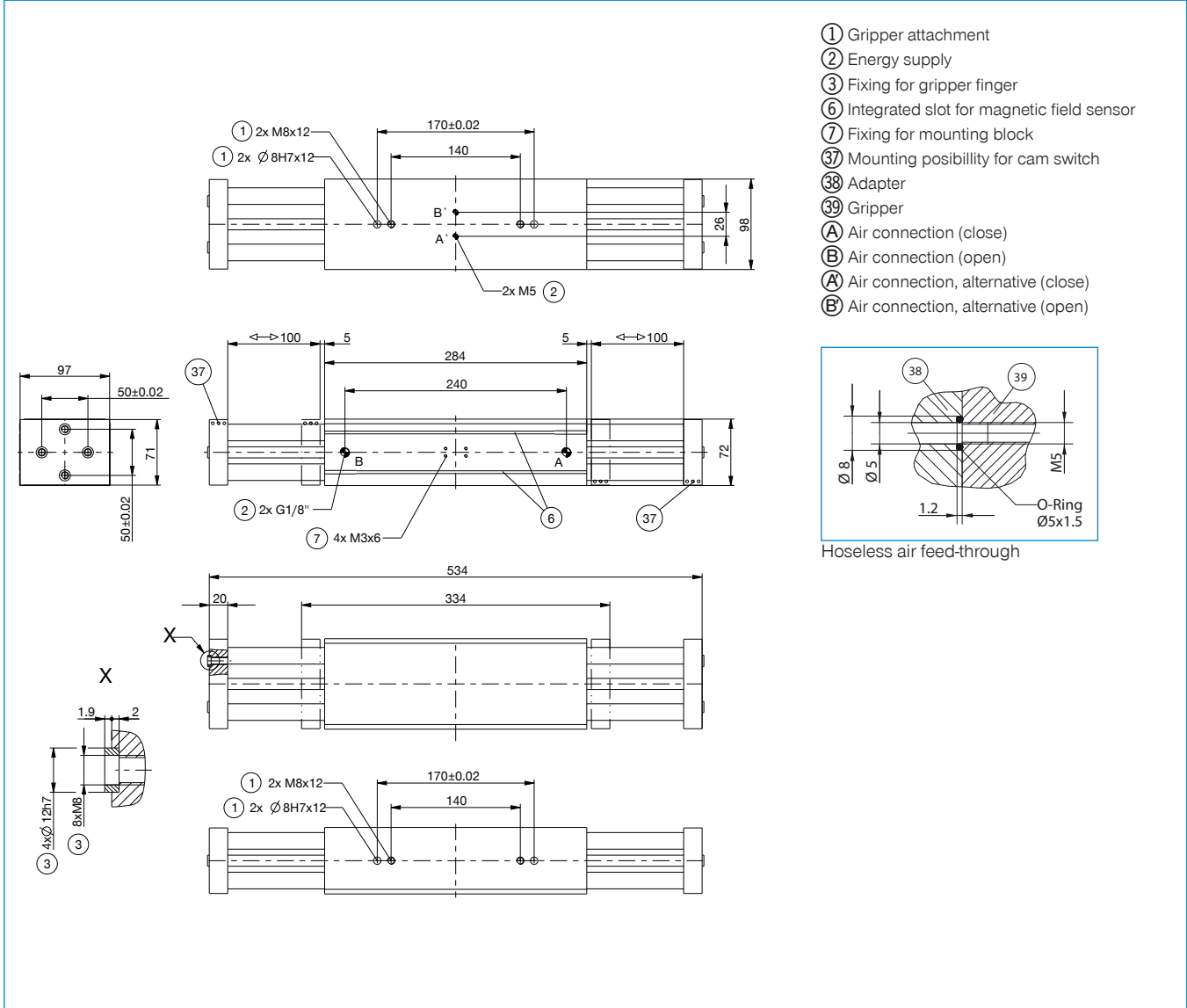


Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC

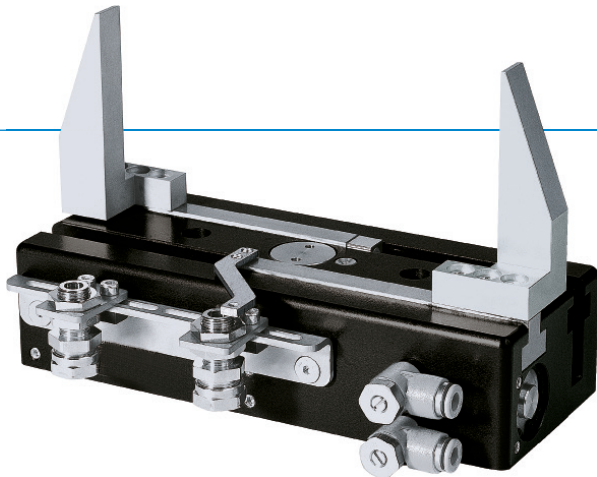
► Technical Data*	
Order no.	MGH83100
Stroke per jaw [mm]	100
Gripping force in closing [N]	800
Gripping force in opening [N]	910
Closing time [s]	0.5
Opening time [s]	0.4
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	340
Weight [kg]	7.3

*All data measured at 6 bar



2-JAW PARALLEL GRIPPERS WITH LONG STROKE SERIES GH6000

▶ PRODUCT ADVANTAGES



SOMMER
automatic **S**

“The robust”

▶ Gripper jaws may be up to 25% longer in comparison to the benchmark

The highest force and torque measurement enables flexible for maximum dynamics

▶ Over 30% more powerful than the benchmark

Optimisation of weight and force reduces your application costs since all components can have a smaller scale

▶ Failure-free continuous operation

Our uncompromising “Made in Germany” quality guarantees up to 10 million maintenance-free gripping cycles

▶ THE BEST PRODUCT FOR YOUR APPLICATION



▶ Our products love the challenge!

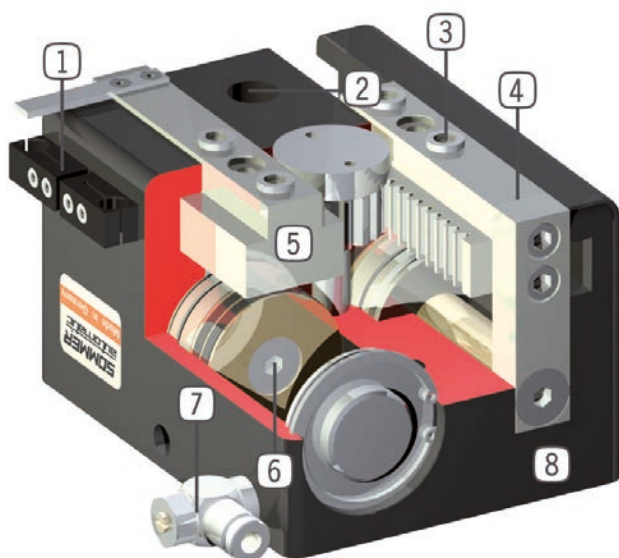
Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities:

Find the best product for your specific use:

www.zimmer-group.com



► BENEFITS IN DETAIL



- ① **Mounting block**
 - mounting for inductive proximity switch
- ② **Mounting and positioning**
 - mounting possible from several sides for versatile positioning
- ③ **Removable centering sleeves**
 - quick and economical positioning of the gripper fingers
- ④ **Gripper jaw**
 - individual gripper finger mounting
- ⑤ **Precise long T-Slot guides**
 - high forces and moments capacity
- ⑥ **Drive**
 - two double-acting pneumatic cylinders
 - synchronized by gearwheel
- ⑦ **Energy supply**
 - possible from several sides
 - CAUTION: always operate long stroke gripper with supplied exhaust air flow control valve (speed regulation)
- ⑧ **Robust, lightweight housing**
 - hard coated aluminium alloy

► SERIES CHARACTERISTICS



Number of installation sizes	5
Stroke per jaw	40 mm - 200 mm
Gripping force	155 N - 3400 N
Weight	0,47 kg - 23,8 kg
AP class	3



10 million maintenance-free cycles (max.)



Inductive sensor



IP40



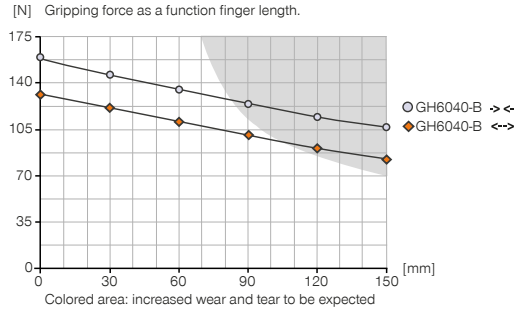
Magnetic field sensor

2-JAW PARALLEL GRIPPERS WITH LONG STROKE INSTALLATION SIZE GH6040

▶ PRODUCT SPECIFICATIONS

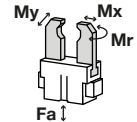


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	35
Mx [Nm]	35
My [Nm]	35
Fa [N]	500

▶ INCLUDED IN DELIVERY



Mounting block

KB6.5-04



Centering Disc

DST40400



Flow Control Valves - with Swivel joint

DRVM5X4

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Angled Cable 5 m

MFS103KHC



Magnetic field sensor
Angled Cable 0,3 m -
Connector M8

MFS103SKHC



Magnetic field sensor
Straight Cable 5 m

MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8

MFS204SKHC



Plug-in connector Angled
Cable 5m - Socket M8
(female)

KAW500



Plug-in connector Straight Ca-
ble 5m - Socket M8 (female)

KAG500



Universal Jaw Aluminium

UB6000-B



Inductive proximity switch
- Cable 5 m

NJ6.5-E2-01



Inductive proximity switch
- Connector M8

NJ6.5-E2S

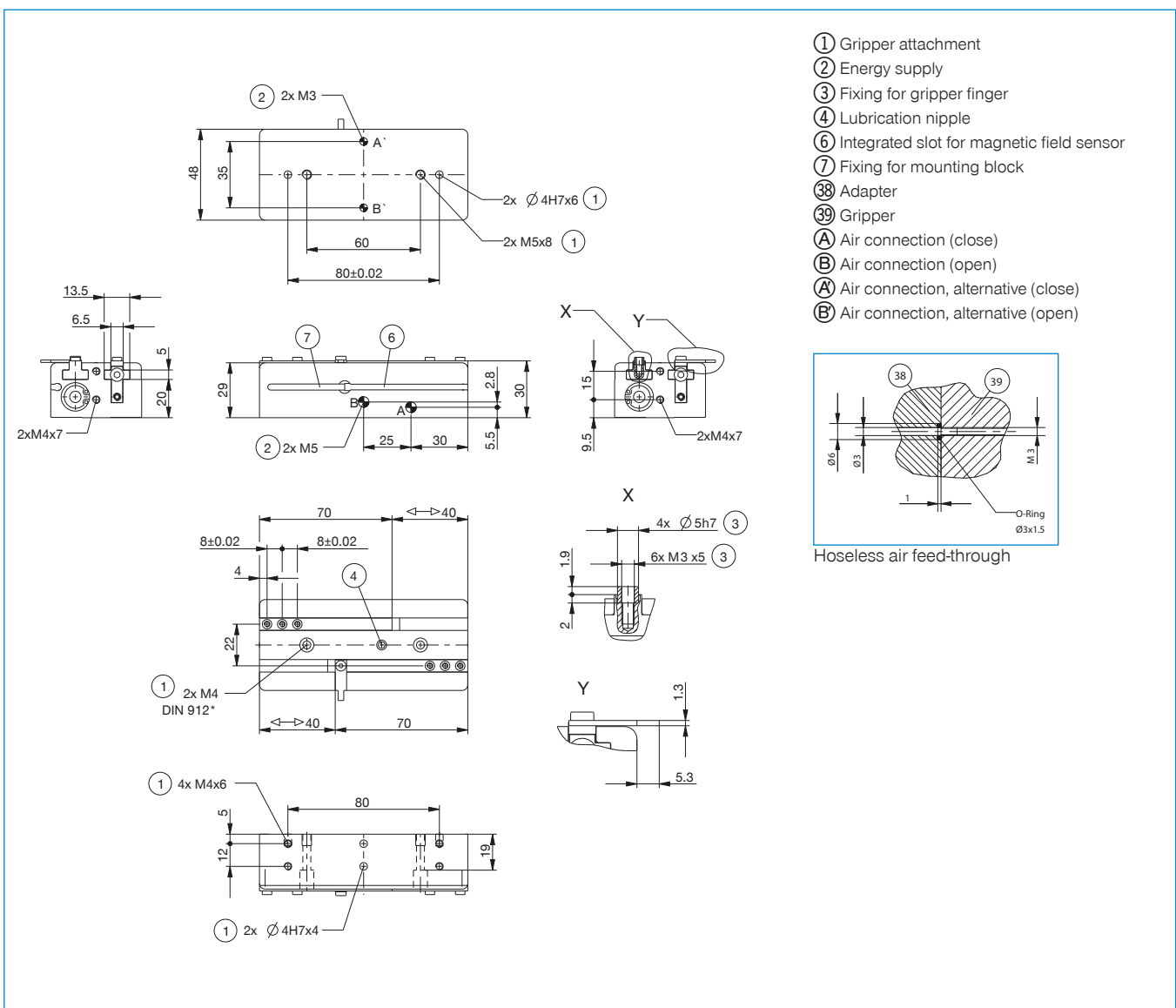


Pressure Safety Valve

DSV1-8

► Technical Data*	
Order no.	GH6040-B
Stroke per jaw [mm]	40
Gripping force in closing [N]	155
Gripping force in opening [N]	130
Closing time [s]	0.2
Opening time [s]	0.2
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	20
Weight [kg]	0.47

*All data measured at 6 bar

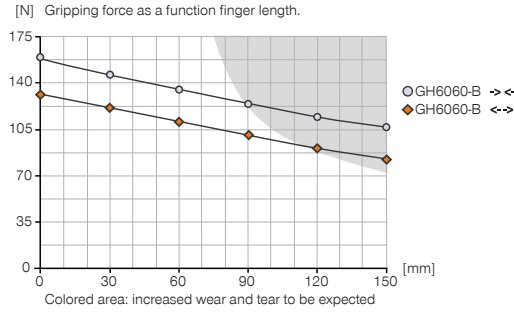


2-JAW PARALLEL GRIPPERS WITH LONG STROKE INSTALLATION SIZE GH6060

▶ PRODUCT SPECIFICATIONS

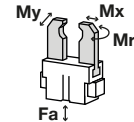


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



M_r [Nm]	50
M_x [Nm]	50
M_y [Nm]	50
F_a [N]	500

▶ INCLUDED IN DELIVERY



Mounting block

KB6.5-04



Centering Disc

DST40400



Flow Control Valves - with Swivel joint

DRVM5X4

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Angled Cable 5 m

MFS103KHC



Magnetic field sensor
Angled Cable 0,3 m -
Connector M8

MFS103SKHC



Magnetic field sensor
Straight Cable 5 m

MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8

MFS204SKHC



Plug-in connector Angled
Cable 5m - Socket M8
(female)

KAW500



Plug-in connector Straight Ca-
ble 5m - Socket M8 (female)

KAG500



Universal Jaw Aluminium

UB6000-B



Inductive proximity switch
- Cable 5 m

NJ6.5-E2-01



Inductive proximity switch
- Connector M8

NJ6.5-E2S

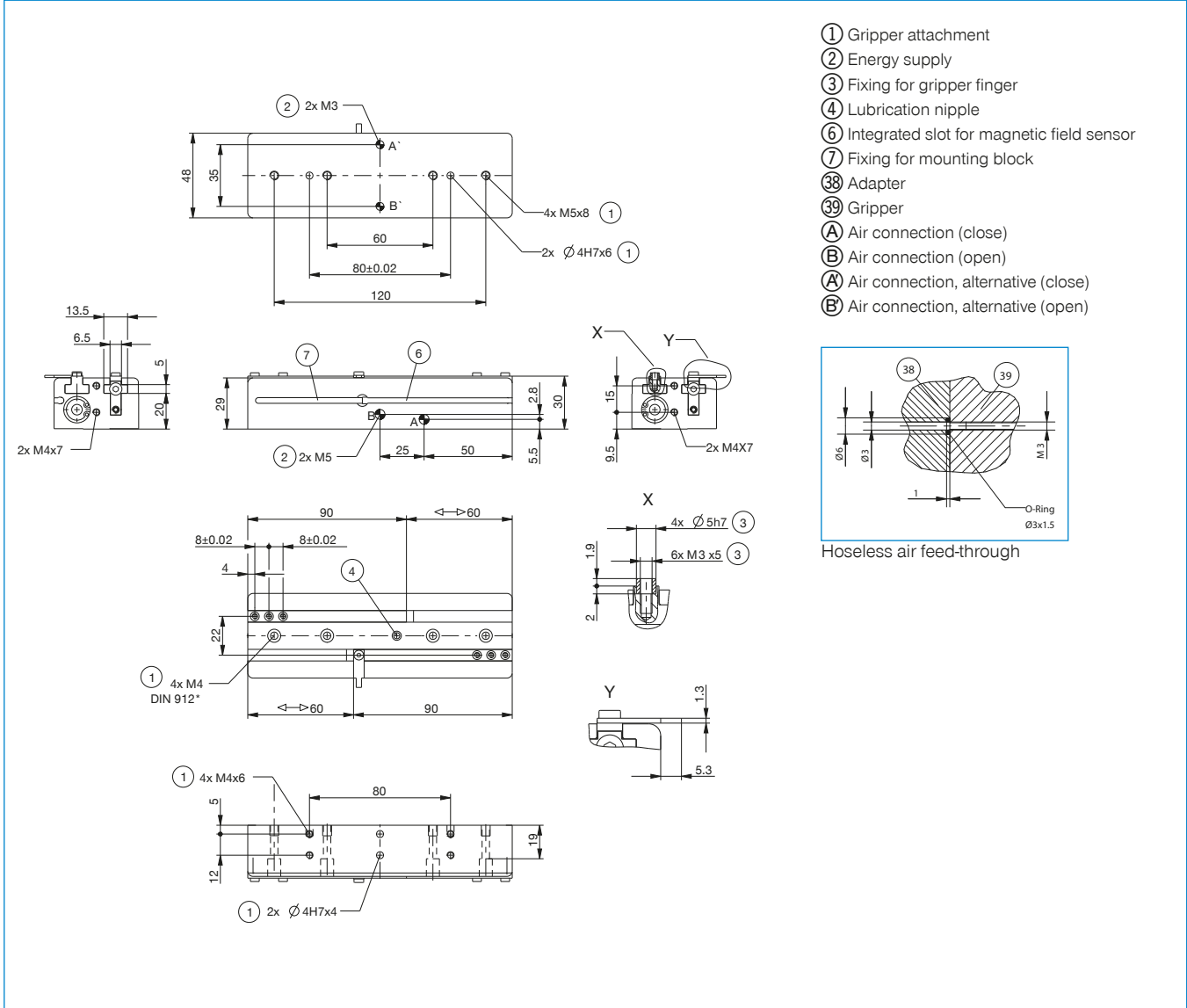


Pressure Safety Valve

DSV1-8

Order no.	Technical Data*
Stroke per jaw [mm]	60
Gripping force in closing [N]	155
Gripping force in opening [N]	130
Closing time [s]	0.25
Opening time [s]	0.25
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	30
Weight [kg]	0.6

*All data measured at 6 bar

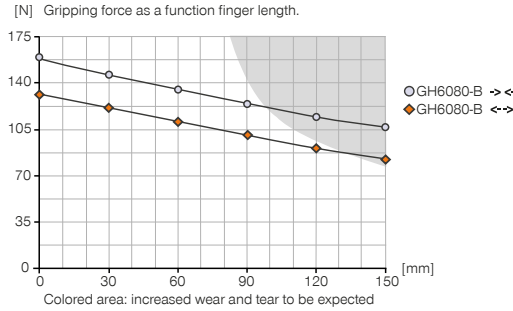


2-JAW PARALLEL GRIPPERS WITH LONG STROKE INSTALLATION SIZE GH6080

▶ PRODUCT SPECIFICATIONS

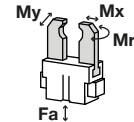


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	65
Mx [Nm]	65
My [Nm]	65
Fa [N]	500

▶ INCLUDED IN DELIVERY



Mounting block

KB6.5-04



Centering Disc

DST40400



Flow Control Valves - with Swivel joint

DRVM5X4

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Universal Jaw Aluminium

UB6000-B



Inductive proximity switch - Cable 5 m

NJ6.5-E2-01



Inductive proximity switch - Connector M8

NJ6.5-E2S



Pressure Safety Valve

DSV1-8

Order no.	Technical Data*
Stroke per jaw [mm]	80
Gripping force in closing [N]	155
Gripping force in opening [N]	130
Closing time [s]	0.3
Opening time [s]	0.3
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	40
Weight [kg]	0.75

*All data measured at 6 bar

① Gripper attachment
 ② Energy supply
 ③ Fixing for gripper finger
 ④ Lubrication nipple
 ⑥ Integrated slot for magnetic field sensor
 ⑦ Fixing for mounting block
 ③⑧ Adapter
 ③⑨ Gripper
 (A) Air connection (close)
 (B) Air connection (open)
 (A) Air connection, alternative (close)
 (B) Air connection, alternative (open)

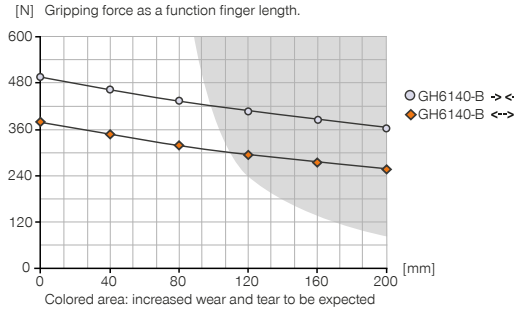
Hoseless air feed-through

2-JAW PARALLEL GRIPPERS WITH LONG STROKE INSTALLATION SIZE GH6140

▶ PRODUCT SPECIFICATIONS

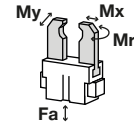


▶ Gripping force diagram



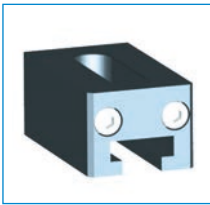
▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	70
Mx [Nm]	100
My [Nm]	60
Fa [N]	1500

▶ INCLUDED IN DELIVERY



Mounting block

KB8-27



Centering Disc

DST60800



Flow Control Valves - with Swivel joint

DRV1-8X8

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Angled Cable 5 m

MFS103KHC



Magnetic field sensor
Angled Cable 0,3 m -
Connector M8

MFS103SKHC



Magnetic field sensor
Straight Cable 5 m

MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8

MFS204SKHC



Alternate proximity
bracket

KHA6140-B-8



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Universal Jaw Aluminium

UB6100-B



Inductive proximity switch - Cable 5 m

NJ8-E2

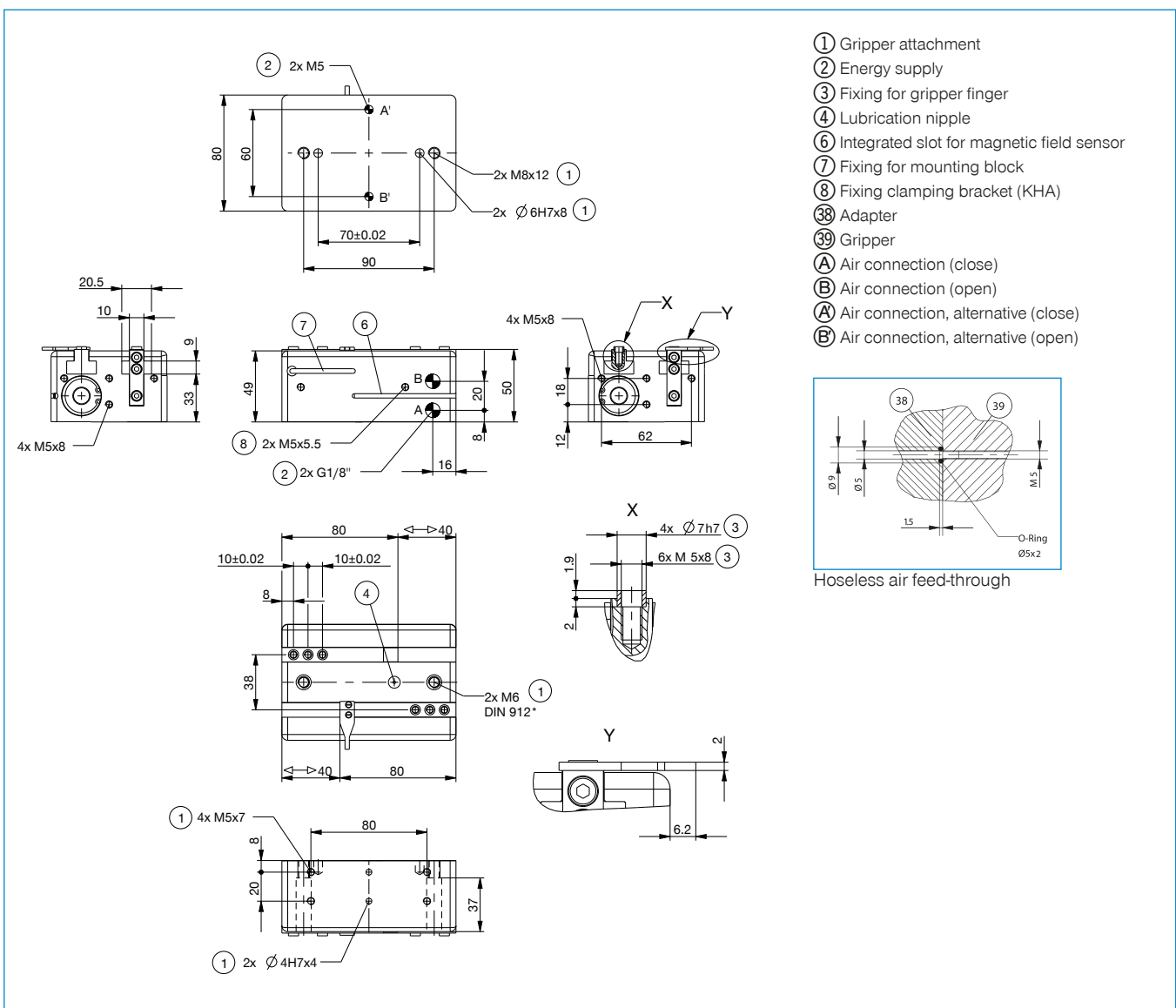


Inductive proximity switch - Connector M8

NJ8-E2S

Order no.	► Technical Data*	
	GH6140-B	GHK6140
Stroke per jaw [mm]	40	40
Gripping force in closing [N]	490	490
Gripping force in opening [N]	370	370
Retention force in case of drop in pressure [N]		300
Closing time [s]	0.25	0.25
Opening time [s]	0.25	0.25
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	3
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm ³]	73	73
Weight [kg]	1.5	1.7

*All data measured at 6 bar
GHK series dimensions, see page 209

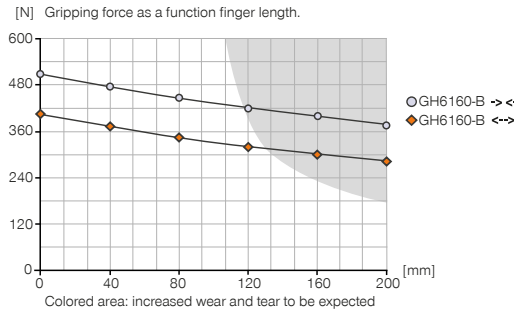


2-JAW PARALLEL GRIPPERS WITH LONG STROKE INSTALLATION SIZE GH6160

▶ PRODUCT SPECIFICATIONS

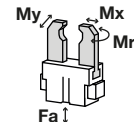


▶ Gripping force diagram



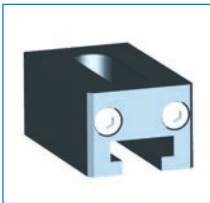
▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	85
Mx [Nm]	120
My [Nm]	75
Fa [N]	1500

▶ INCLUDED IN DELIVERY



Mounting block

KB8-27



Centering Disc

DST60800



Flow Control Valves - with Swivel joint

DRV1-8X8

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Angled Cable 5 m

MFS103KHC



Magnetic field sensor
Angled Cable 0,3 m -
Connector M8

MFS103SKHC



Magnetic field sensor
Straight Cable 5 m

MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8

MFS204SKHC



Alternate proximity
bracket

KHA6160-B-8



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Universal Jaw Aluminium

UB6100-B



Inductive proximity switch - Cable 5 m

NJ8-E2

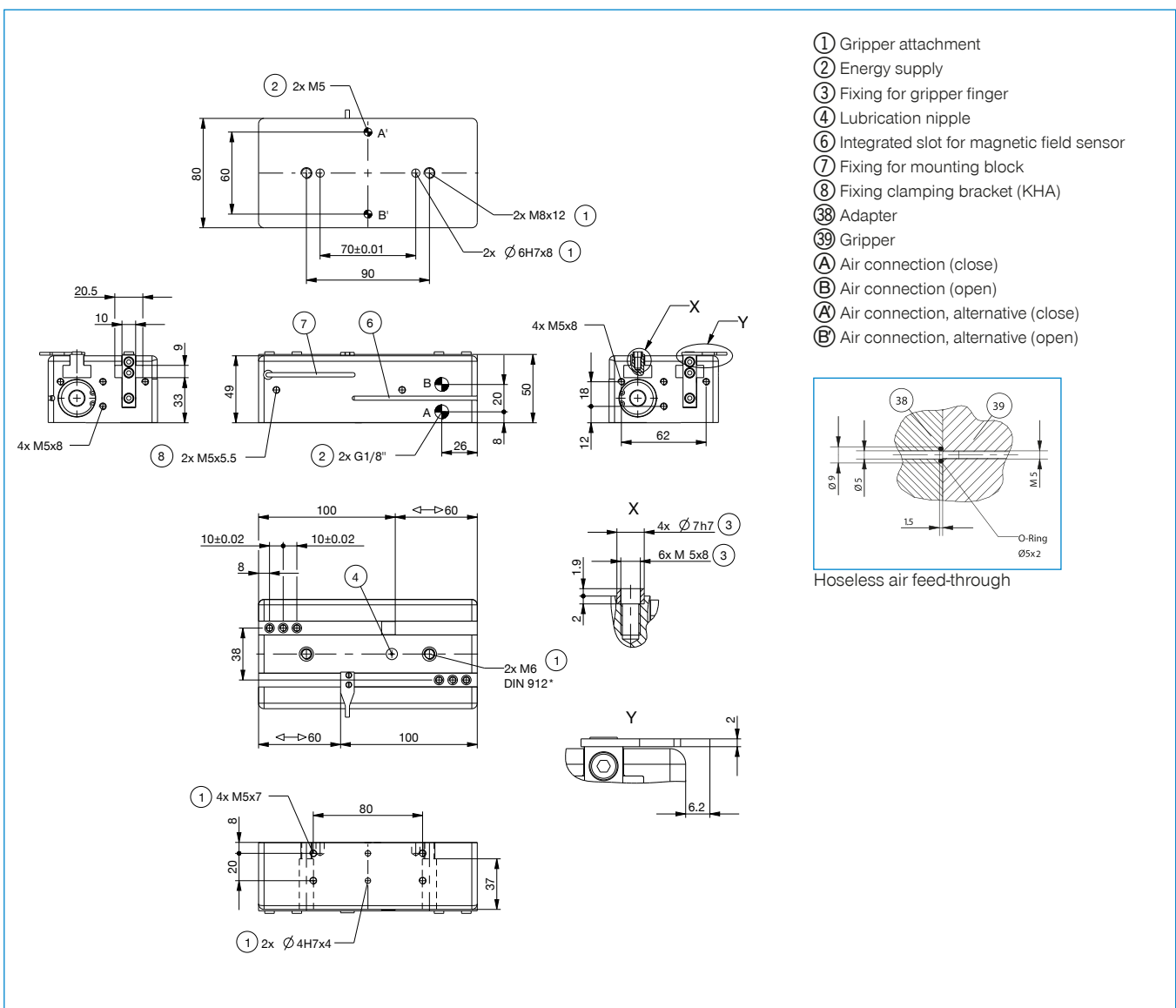


Inductive proximity switch - Connector M8

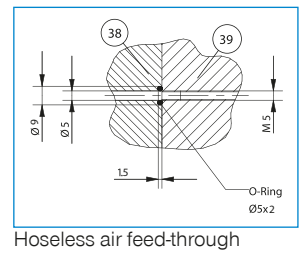
NJ8-E2S

Order no.	► Technical Data*	
	GH6160-B	GHK6160
Stroke per jaw [mm]	60	60
Gripping force in closing [N]	510	510
Gripping force in opening [N]	400	400
Retention force in case of drop in pressure [N]		300
Closing time [s]	0.3	0.3
Opening time [s]	0.3	0.3
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	3
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm ³]	109	109
Weight [kg]	1.9	2.1

* All data measured at 6 bar
 GHK series dimensions, see page 209



- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ④ Lubrication nipple
- ⑥ Integrated slot for magnetic field sensor
- ⑦ Fixing for mounting block
- ⑧ Fixing clamping bracket (KHA)
- ③⑧ Adapter
- ③⑨ Gripper
- A Air connection (close)
- B Air connection (open)
- A Air connection, alternative (close)
- B Air connection, alternative (open)

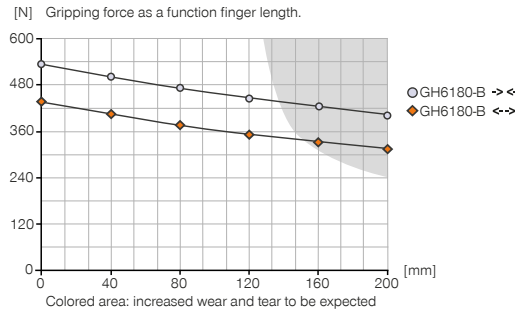


2-JAW PARALLEL GRIPPERS WITH LONG STROKE INSTALLATION SIZE GH6180

▶ PRODUCT SPECIFICATIONS

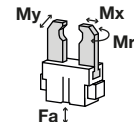


▶ Gripping force diagram



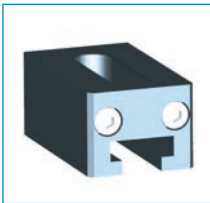
▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	120
Mx [Nm]	140
My [Nm]	90
Fa [N]	1500

▶ INCLUDED IN DELIVERY



Mounting block

KB8-27



Centering Disc

DST60800



Flow Control Valves - with Swivel joint

DRV1-8X8

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Angled Cable 5 m

MFS103KHC



Magnetic field sensor
Angled Cable 0,3 m -
Connector M8

MFS103SKHC



Magnetic field sensor
Straight Cable 5 m

MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8

MFS204SKHC



Alternate proximity
bracket

KHA6180-B-8



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Universal Jaw Aluminium

UB6100-B



Inductive proximity switch - Cable 5 m

NJ8-E2

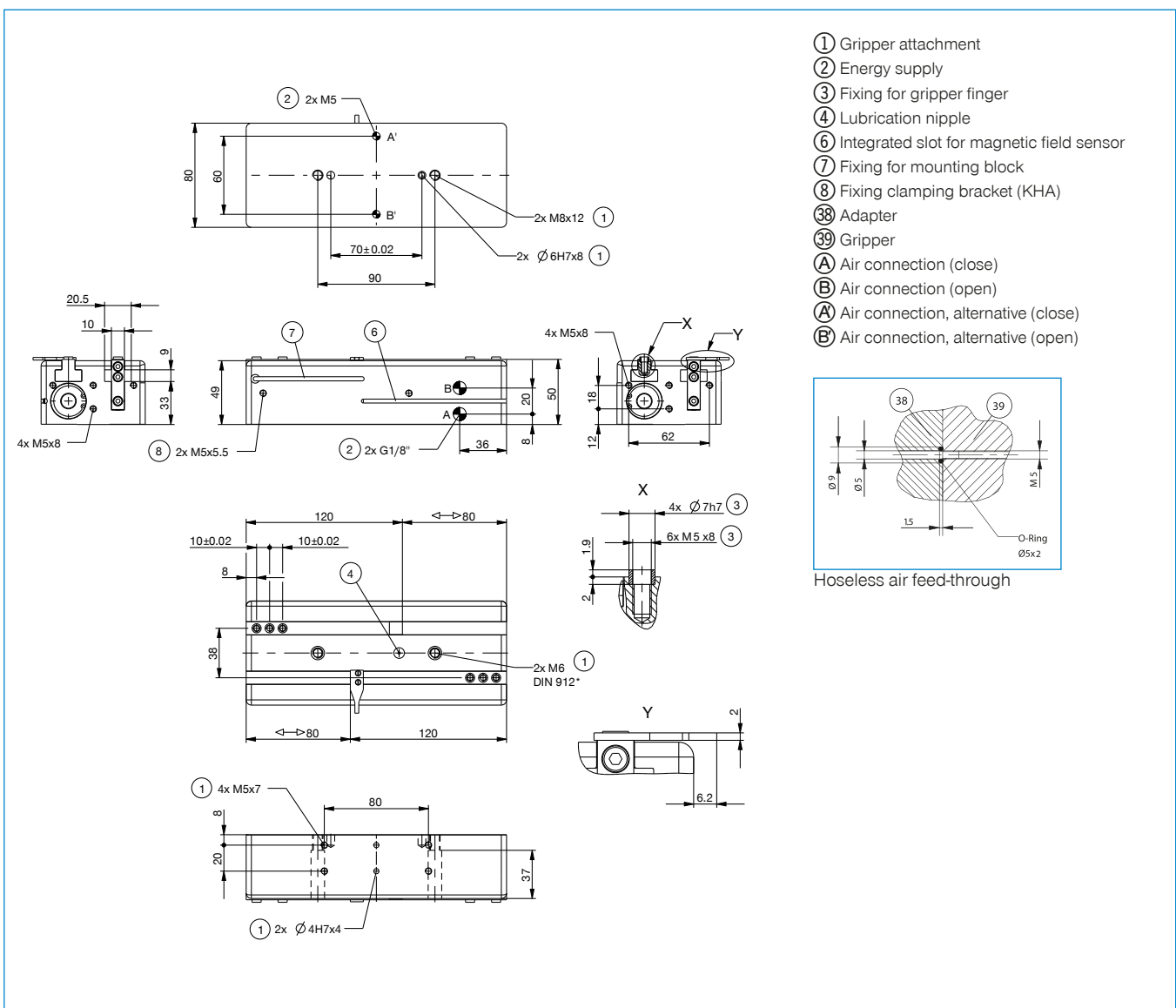


Inductive proximity switch - Connector M8

NJ8-E2S

Order no.	► Technical Data*	
	GH6180-B	GHK6180
Stroke per jaw [mm]	80	80
Gripping force in closing [N]	530	530
Gripping force in opening [N]	430	430
Retention force in case of drop in pressure [N]		300
Closing time [s]	0.35	0.35
Opening time [s]	0.35	0.35
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	3
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm ³]	145	145
Weight [kg]	2.2	2.4

* All data measured at 6 bar
 GHK series dimensions, see page 209

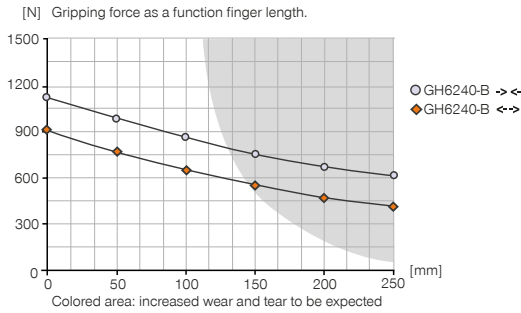


2-JAW PARALLEL GRIPPERS WITH LONG STROKE INSTALLATION SIZE GH6240

▶ PRODUCT SPECIFICATIONS

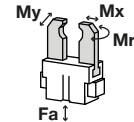


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	100
Mx [Nm]	125
My [Nm]	80
Fa [N]	3000

▶ INCLUDED IN DELIVERY



Mounting block

KB8-28



Centering Disc

DST41000



Flow Control Valves - with Swivel joint

DRV1-8X8

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Alternate proximity bracket

KHA6240-B-8



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Universal Jaw Aluminium

UB6200-B



Inductive proximity switch - Cable 5 m

NJ8-E2

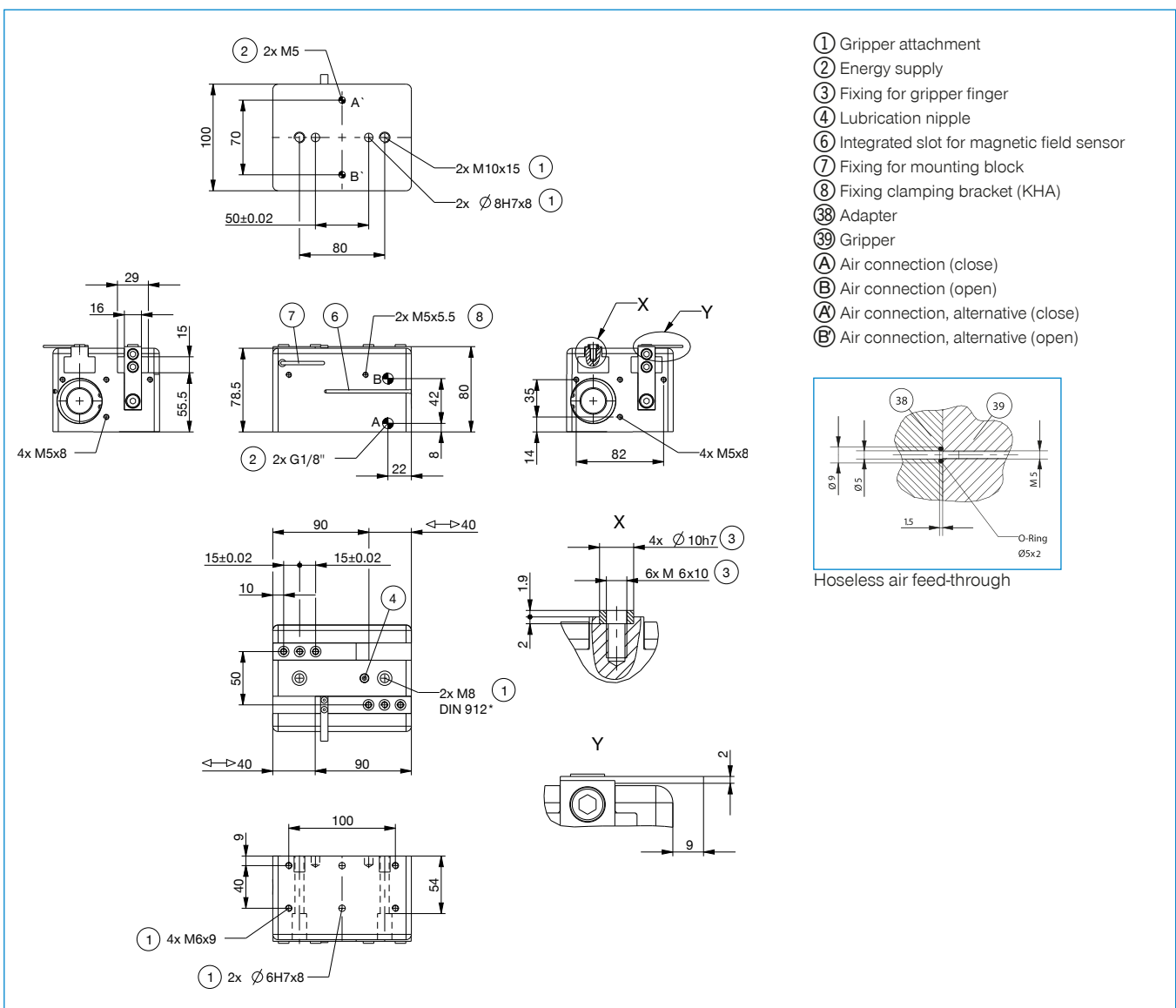


Inductive proximity switch - Connector M8

NJ8-E2S

Order no.	► Technical Data*	
	GH6240-B	GHK6240
Stroke per jaw [mm]	40	40
Gripping force in closing [N]	1120	1120
Gripping force in opening [N]	900	900
Retention force in case of drop in pressure [N]		640
Closing time [s]	0.3	0.3
Opening time [s]	0.3	0.3
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	3
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm³]	183	183
Weight [kg]	3.3	3.8

*All data measured at 6 bar
GHK series dimensions, see page 209

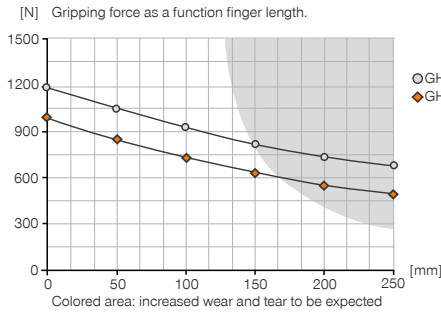


2-JAW PARALLEL GRIPPERS WITH LONG STROKE INSTALLATION SIZE GH6260

▶ PRODUCT SPECIFICATIONS

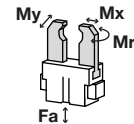


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	120
Mx [Nm]	150
My [Nm]	180
Fa [N]	3000

▶ INCLUDED IN DELIVERY



Mounting block

KB8-28



Centering Disc

DST41000



Flow Control Valves - with Swivel joint

DRV1-8X8

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Angled Cable 5 m

MFS103KHC



Magnetic field sensor
Angled Cable 0,3 m -
Connector M8

MFS103SKHC



Magnetic field sensor
Straight Cable 5 m

MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8

MFS204SKHC



Alternate proximity
bracket

KHA6260-B-8



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Universal Jaw Aluminium

UB6200-B



Inductive proximity switch - Cable 5 m

NJ8-E2



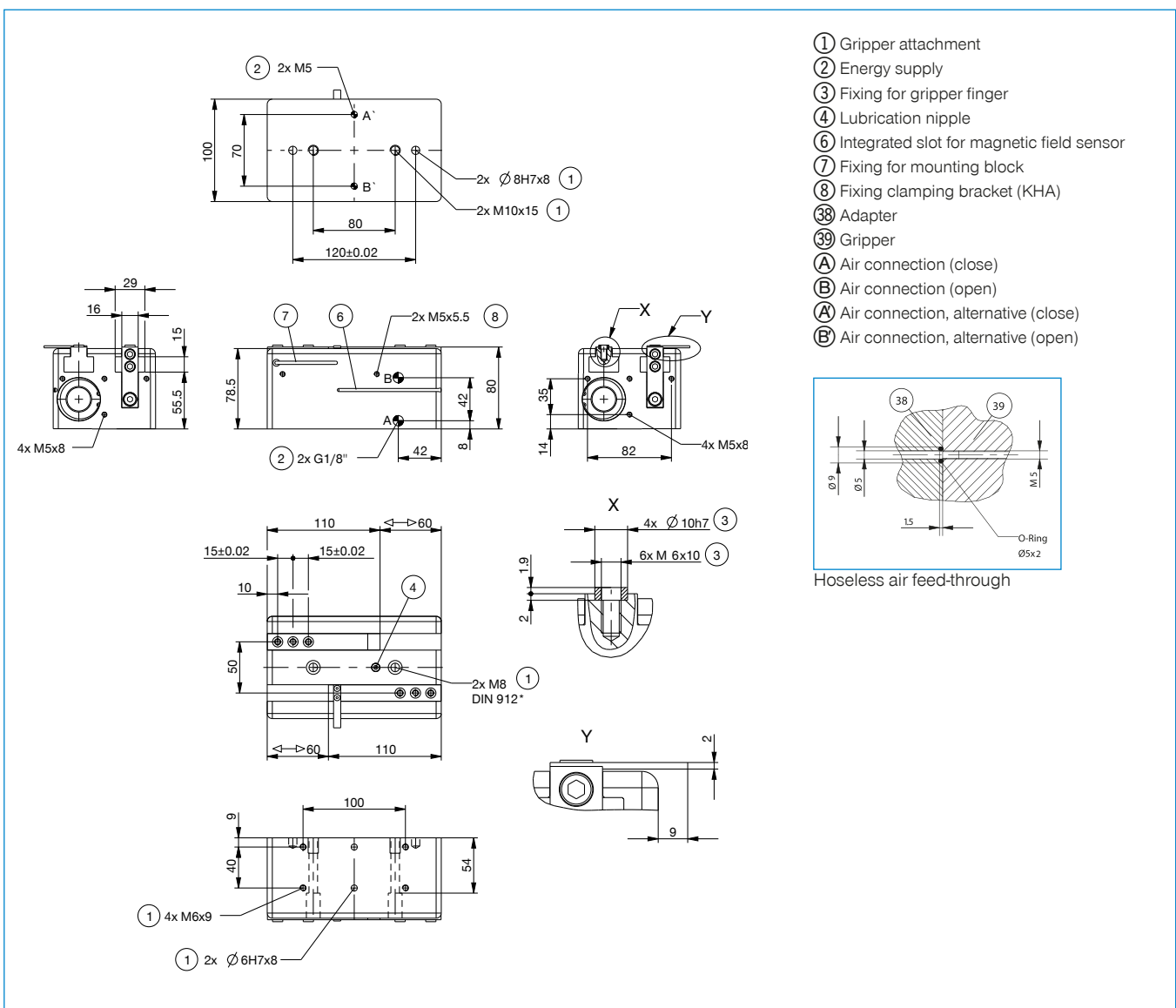
Inductive proximity switch - Connector M8

NJ8-E2S

► Technical Data*

Order no.	GH6260-B	GHK6260
Stroke per jaw [mm]	60	60
Gripping force in closing [N]	1200	1200
Gripping force in opening [N]	980	980
Retention force in case of drop in pressure [N]		640
Closing time [s]	0.35	0.35
Opening time [s]	0.35	0.35
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	3
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm ³]	275	275
Weight [kg]	4.1	4.6

*All data measured at 6 bar
GHK series dimensions, see page 209

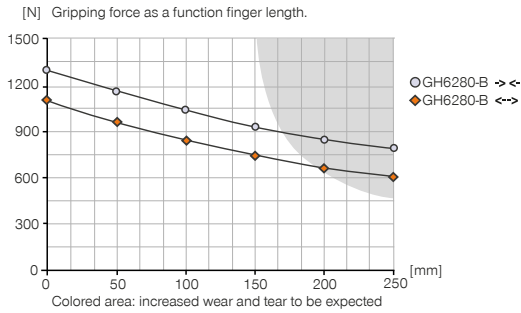


2-JAW PARALLEL GRIPPERS WITH LONG STROKE INSTALLATION SIZE GH6280

▶ PRODUCT SPECIFICATIONS

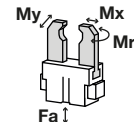


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	140
Mx [Nm]	175
My [Nm]	120
Fa [N]	3000

▶ INCLUDED IN DELIVERY



Mounting block

KB8-28



Centering Disc

DST41000



Flow Control Valves - with Swivel joint

DRV1-8X8

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Angled Cable 5 m

MFS103KHC



Magnetic field sensor
Angled Cable 0,3 m -
Connector M8

MFS103SKHC



Magnetic field sensor
Straight Cable 5 m

MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8

MFS204SKHC



Alternate proximity
bracket

KHA6280-B-8



Plug-in connector Angled Ca-
ble 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Ca-
ble 5m - Socket M8 (female)

KAG500



Universal Jaw Aluminium

UB6200-B



Inductive proximity switch
- Cable 5 m

NJ8-E2



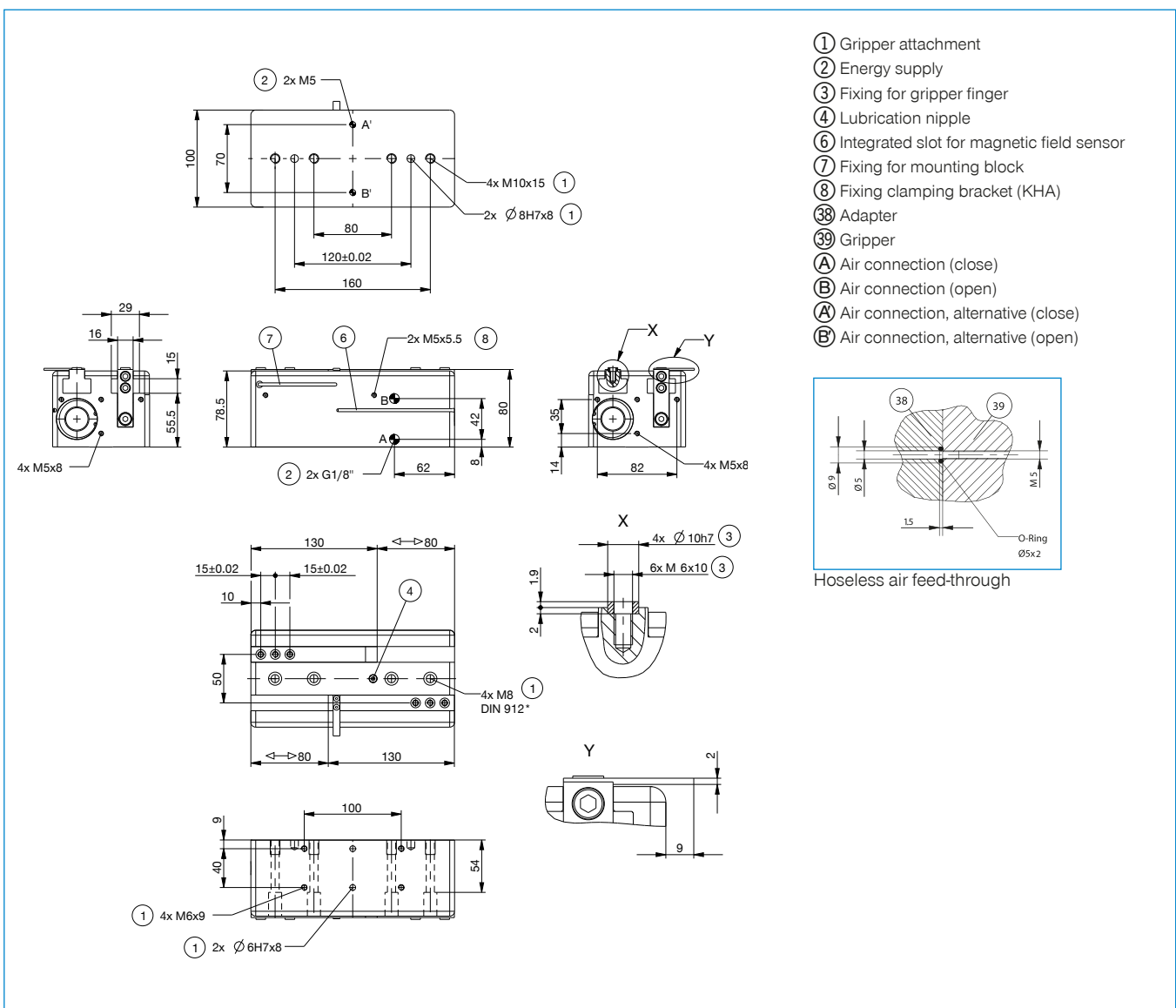
Inductive proximity switch
- Connector M8

NJ8-E2S

► Technical Data*

Order no.	GH6280-B	GHK6280
Stroke per jaw [mm]	80	80
Gripping force in closing [N]	1280	1280
Gripping force in opening [N]	1100	1100
Retention force in case of drop in pressure [N]		640
Closing time [s]	0.4	0.4
Opening time [s]	0.4	0.4
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	3
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm ³]	367	367
Weight [kg]	4.8	5.3

*All data measured at 6 bar
GHK series dimensions, see page 209

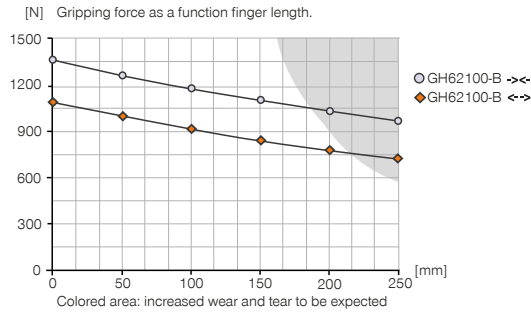


2-JAW PARALLEL GRIPPERS WITH LONG STROKE INSTALLATION SIZE GH62100

▶ PRODUCT SPECIFICATIONS

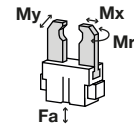


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	160
Mx [Nm]	200
My [Nm]	140
Fa [N]	3000

▶ INCLUDED IN DELIVERY



Mounting block

KB8-28



Centering Disc

DST41000



Flow Control Valves - with Swivel joint

DRV1-8X8

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Angled Cable 5 m

MFS103KHC



Magnetic field sensor
Angled Cable 0,3 m -
Connector M8

MFS103SKHC



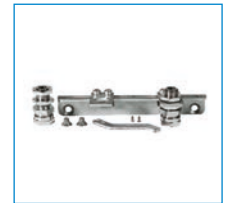
Magnetic field sensor
Straight Cable 5 m

MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8

MFS204SKHC



Alternate proximity
bracket

KHA62100-B-8



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Universal Jaw Aluminium

UB6200-B



Inductive proximity switch - Cable 5 m

NJ8-E2



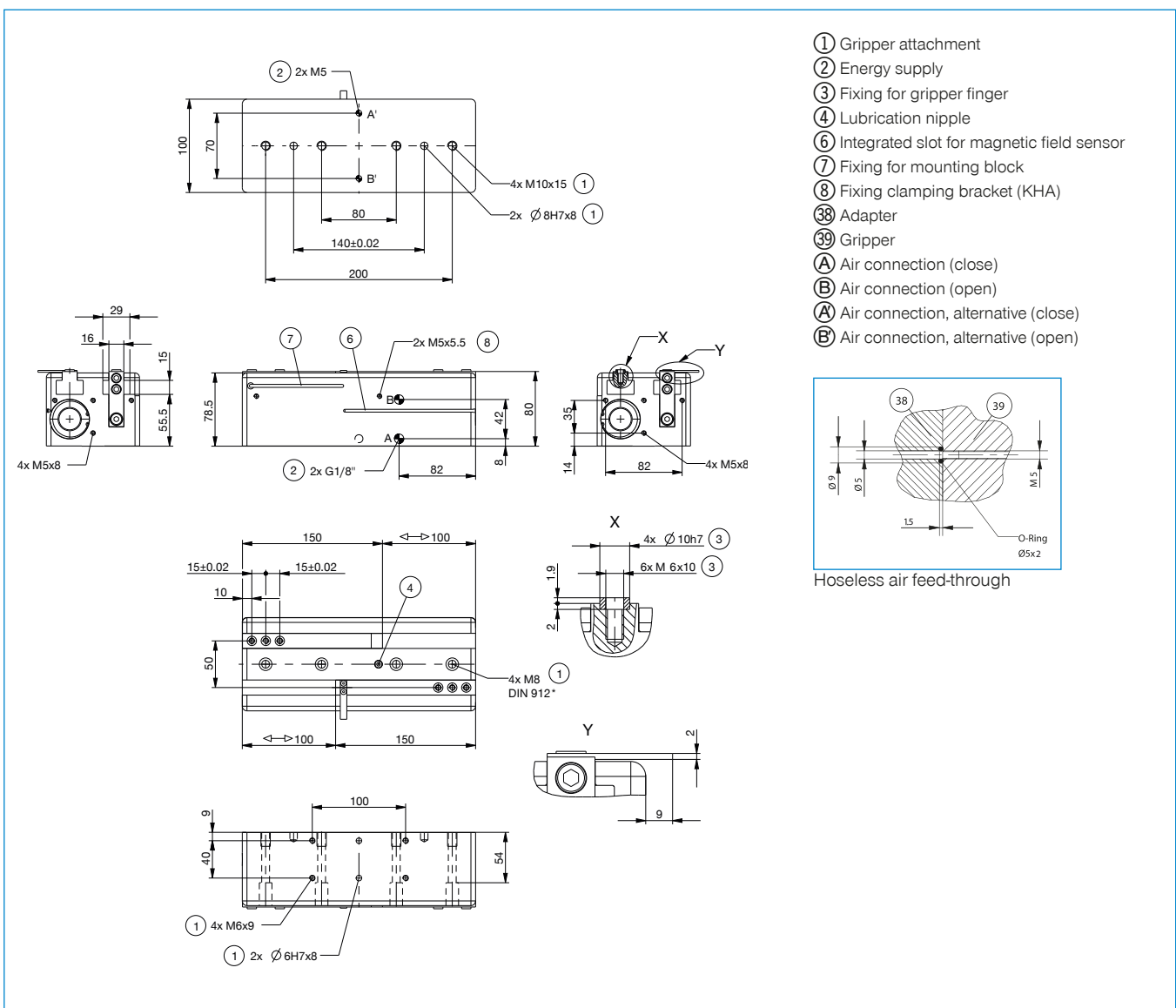
Inductive proximity switch - Connector M8

NJ8-E2S

► Technical Data*

Order no.	GH62100-B	GHK62100
Stroke per jaw [mm]	100	100
Gripping force in closing [N]	1350	1350
Gripping force in opening [N]	1100	1100
Retention force in case of drop in pressure [N]		640
Closing time [s]	0.45	0.45
Opening time [s]	0.45	0.45
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	3
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm ³]	458	458
Weight [kg]	5.6	6.1

*All data measured at 6 bar
GHK series dimensions, see page 209

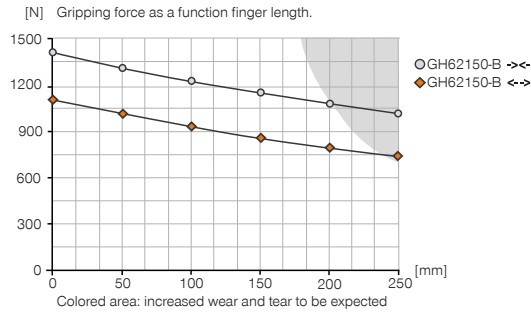


2-JAW PARALLEL GRIPPERS WITH LONG STROKE INSTALLATION SIZE GH62150

1 PRODUCT SPECIFICATIONS

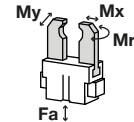


Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	180
Mx [Nm]	225
My [Nm]	160
Fa [N]	3000

INCLUDED IN DELIVERY



Mounting block

KB8-28



Centering Disc

DST41000



Flow Control Valves - with Swivel joint

DRV1-8X8

RECOMMENDED ACCESSORIES



Magnetic field sensor
Angled Cable 5 m

MFS103KHC



Magnetic field sensor
Angled Cable 0,3 m -
Connector M8

MFS103SKHC



Magnetic field sensor
Straight Cable 5 m

MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8

MFS204SKHC



Alternate proximity
bracket

KHA62150-B-8



Plug-in connector Angled Ca-
ble 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Ca-
ble 5m - Socket M8 (female)

KAG500



Universal Jaw Aluminium

UB6200-B



Inductive proximity switch
- Cable 5 m

NJ8-E2



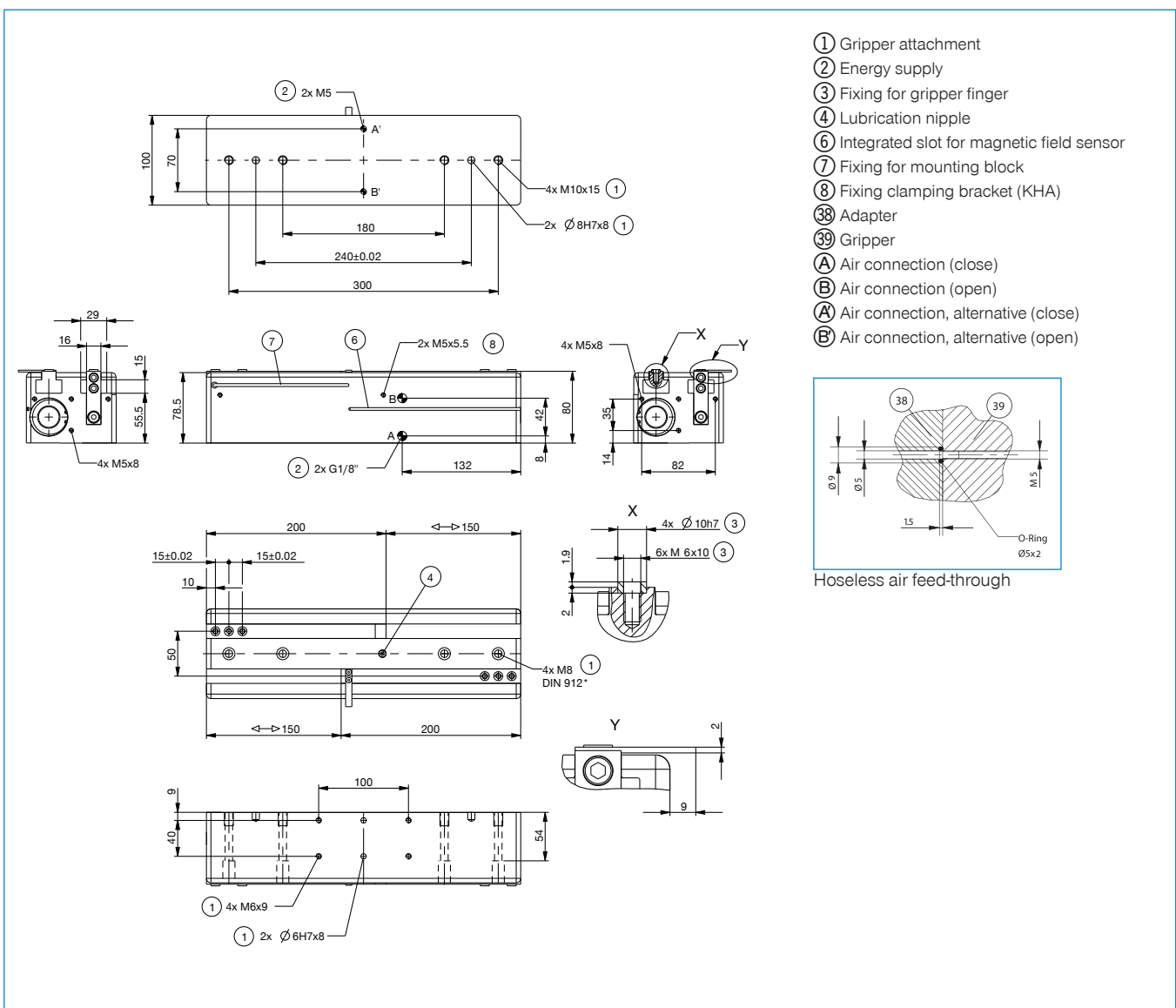
Inductive proximity switch
- Connector M8

NJ8-E2S

► Technical Data*

Order no.	GH62150-B	GHK62150
Stroke per jaw [mm]	150	150
Gripping force in closing [N]	1400	1400
Gripping force in opening [N]	1100	1100
Retention force in case of drop in pressure [N]		640
Closing time [s]	0.5	0.5
Opening time [s]	0.5	0.5
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	3
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm ³]	687	687
Weight [kg]	7.5	8

*All data measured at 6 bar
GHK series dimensions, see page 209

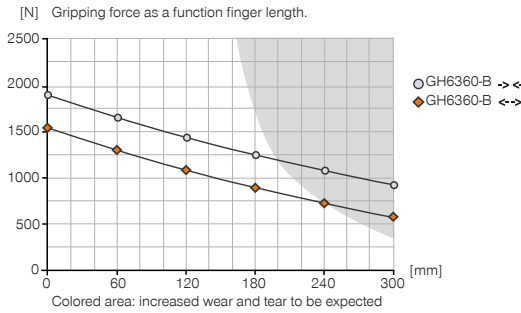


2-JAW PARALLEL GRIPPERS WITH LONG STROKE INSTALLATION SIZE GH6360

▶ PRODUCT SPECIFICATIONS

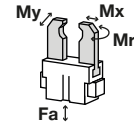


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	160
Mx [Nm]	190
My [Nm]	130
Fa [N]	3800

▶ INCLUDED IN DELIVERY



Mounting block

KB8-28



Centering Disc

DST41600



Flow Control Valves - with Swivel joint

DRV1-4X8

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Angled Cable 5 m

MFS103KHC



Magnetic field sensor
Angled Cable 0,3 m -
Connector M8

MFS103SKHC



Magnetic field sensor
Straight Cable 5 m

MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8

MFS204SKHC



Alternate proximity
bracket

KHA6360-B-8



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S



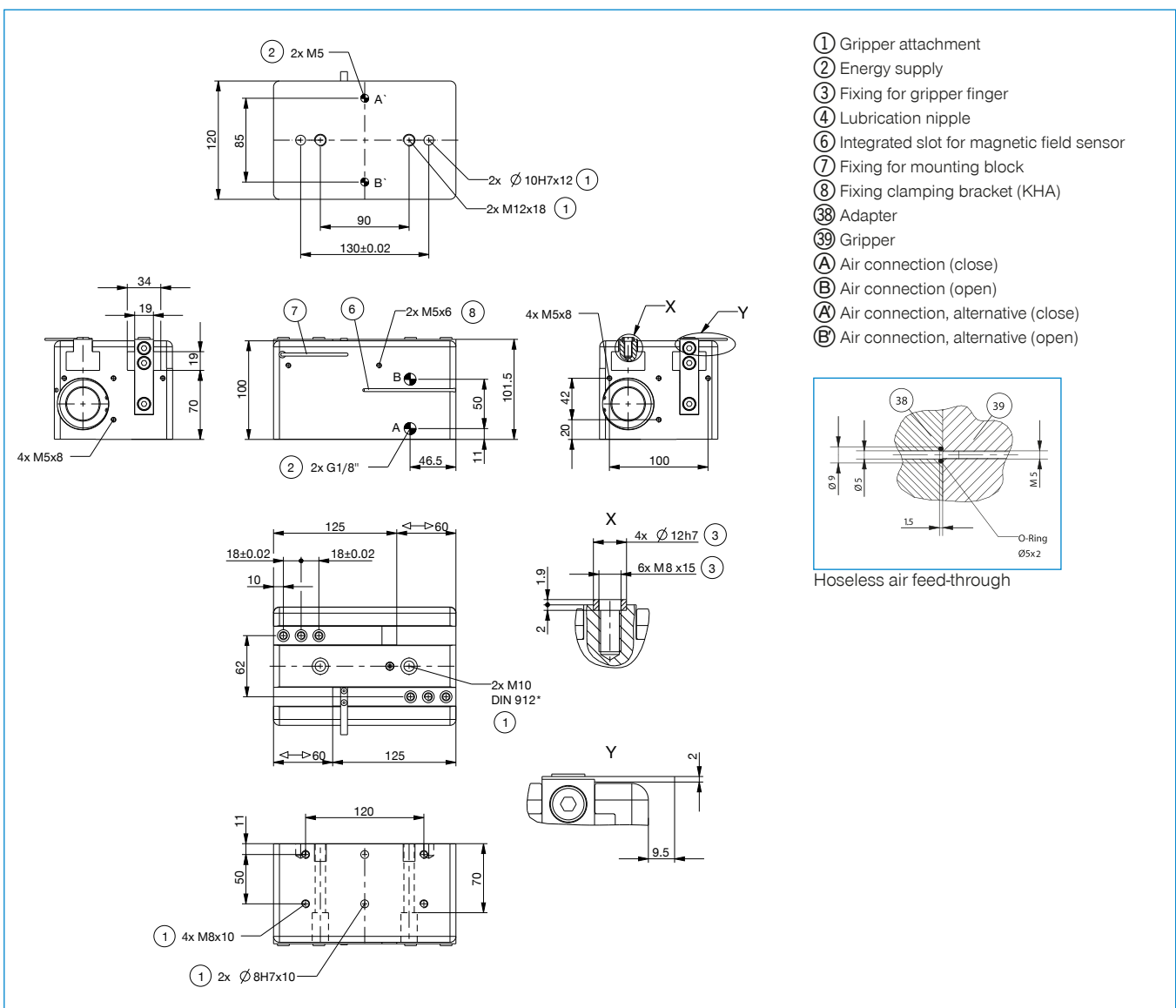
Pressure Safety Valve

DSV1-8

► Technical Data*

Order no.	GH6360-B	GHK6360
Stroke per jaw [mm]	60	60
Gripping force in closing [N]	1840	1840
Gripping force in opening [N]	1520	1520
Retention force in case of drop in pressure [N]		640
Closing time [s]	0.4	0.4
Opening time [s]	0.4	0.4
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	3
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm³]	486	486
Weight [kg]	7	7.5

*All data measured at 6 bar
GHK series dimensions, see page 209

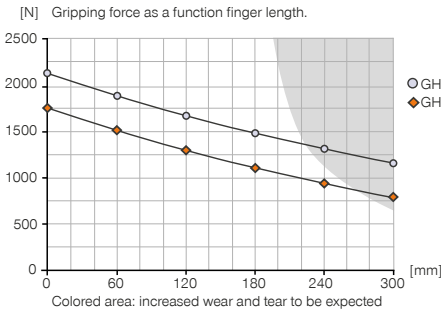


2-JAW PARALLEL GRIPPERS WITH LONG STROKE INSTALLATION SIZE GH63100

▶ PRODUCT SPECIFICATIONS

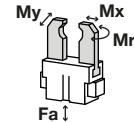


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	220
Mx [Nm]	260
My [Nm]	180
Fa [N]	3800

▶ INCLUDED IN DELIVERY



Mounting block

KB8-28



Centering Disc

DST41600



Flow Control Valves - with Swivel joint

DRV1-4X8

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Angled Cable 5 m

MFS103KHC



Magnetic field sensor
Angled Cable 0,3 m -
Connector M8

MFS103SKHC



Magnetic field sensor
Straight Cable 5 m

MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8

MFS204SKHC



Alternate proximity
bracket

KHA63100-B-8



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S

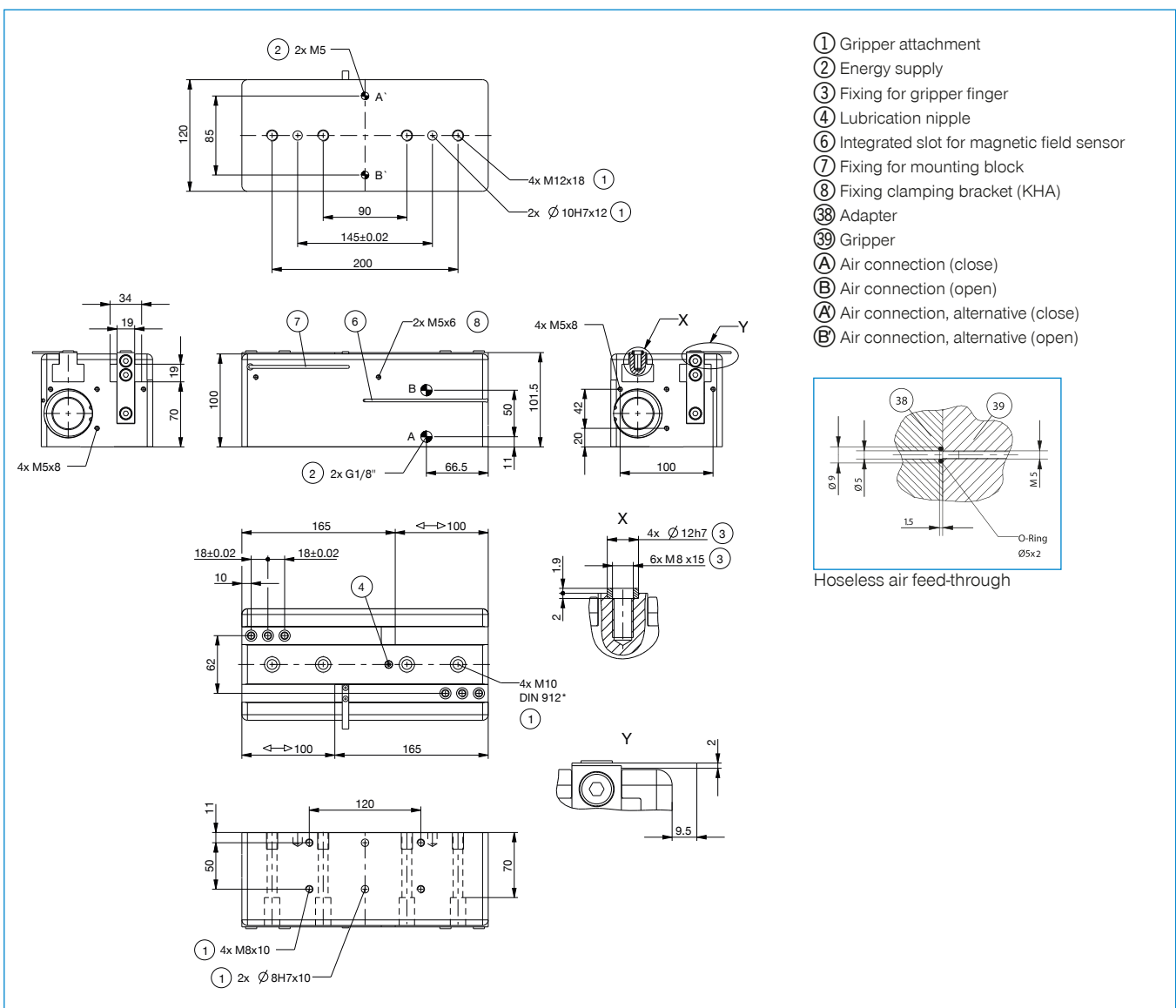


Pressure Safety Valve

DSV1-8

Order no.	► Technical Data*	
	GH63100-B	GHK63100
Stroke per jaw [mm]	100	100
Gripping force in closing [N]	2100	2100
Gripping force in opening [N]	1700	1700
Retention force in case of drop in pressure [N]		640
Closing time [s]	0.65	0.65
Opening time [s]	0.65	0.65
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	3
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm³]	809	809
Weight [kg]	9.1	9.6

*All data measured at 6 bar
GHK series dimensions, see page 209

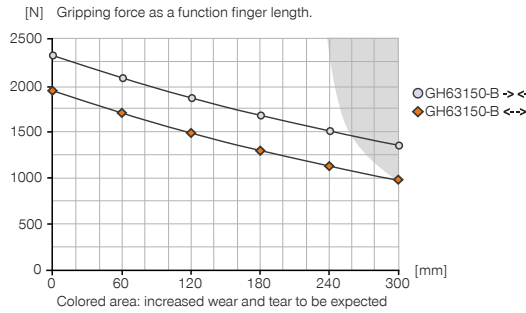


2-JAW PARALLEL GRIPPERS WITH LONG STROKE INSTALLATION SIZE GH63150

1 PRODUCT SPECIFICATIONS

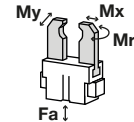


Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	250
Mx [Nm]	290
My [Nm]	220
Fa [N]	3800

INCLUDED IN DELIVERY



Mounting block

KB8-28



Centering Disc

DST41600



Flow Control Valves - with Swivel joint

DRV1-4X8

RECOMMENDED ACCESSORIES



Magnetic field sensor
Angled Cable 5 m

MFS103KHC



Magnetic field sensor
Angled Cable 0,3 m -
Connector M8

MFS103SKHC



Magnetic field sensor
Straight Cable 5 m

MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8

MFS204SKHC



Alternate proximity
bracket

KHA63150-B-8



Plug-in connector Angled Cable 5 m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5 m - Socket M8 (female)

KAG500



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S

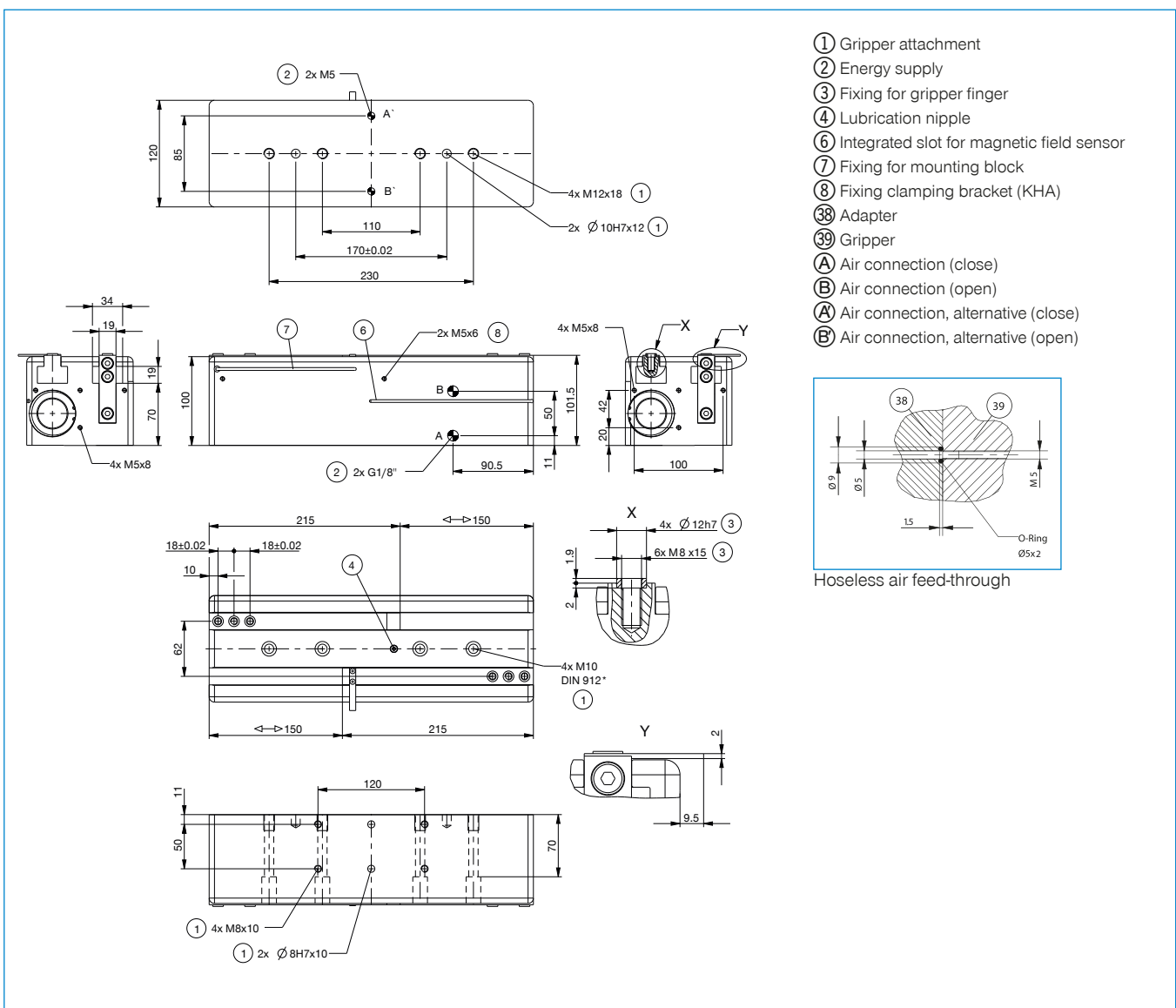


Pressure Safety Valve

DSV1-8

Order no.	► Technical Data*	
	GH63150-B	GHK63150
Stroke per jaw [mm]	150	150
Gripping force in closing [N]	2270	2270
Gripping force in opening [N]	1900	1900
Retention force in case of drop in pressure [N]		640
Closing time [s]	0.95	0.95
Opening time [s]	0.95	0.95
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	3
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm ³]	1215	1215
Weight [kg]	10.5	11

*All data measured at 6 bar
GHK series dimensions, see page 209

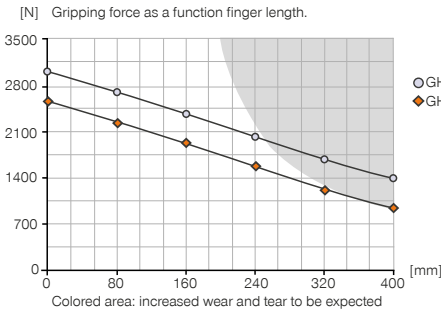


2-JAW PARALLEL GRIPPERS WITH LONG STROKE INSTALLATION SIZE GH6460

▶ PRODUCT SPECIFICATIONS

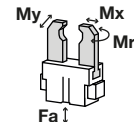


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	250
Mx [Nm]	300
My [Nm]	200
Fa [N]	9000

▶ INCLUDED IN DELIVERY



Mounting block

KB8-28



Centering Disc

DST42000



Flow Control Valves - with Swivel joint

DRV1-4X8

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Angled Cable 5 m

MFS103KHC



Magnetic field sensor
Angled Cable 0,3 m -
Connector M8

MFS103SKHC



Magnetic field sensor
Straight Cable 5 m

MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8

MFS204SKHC



Alternate proximity
bracket

KHA6460-B-8



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S

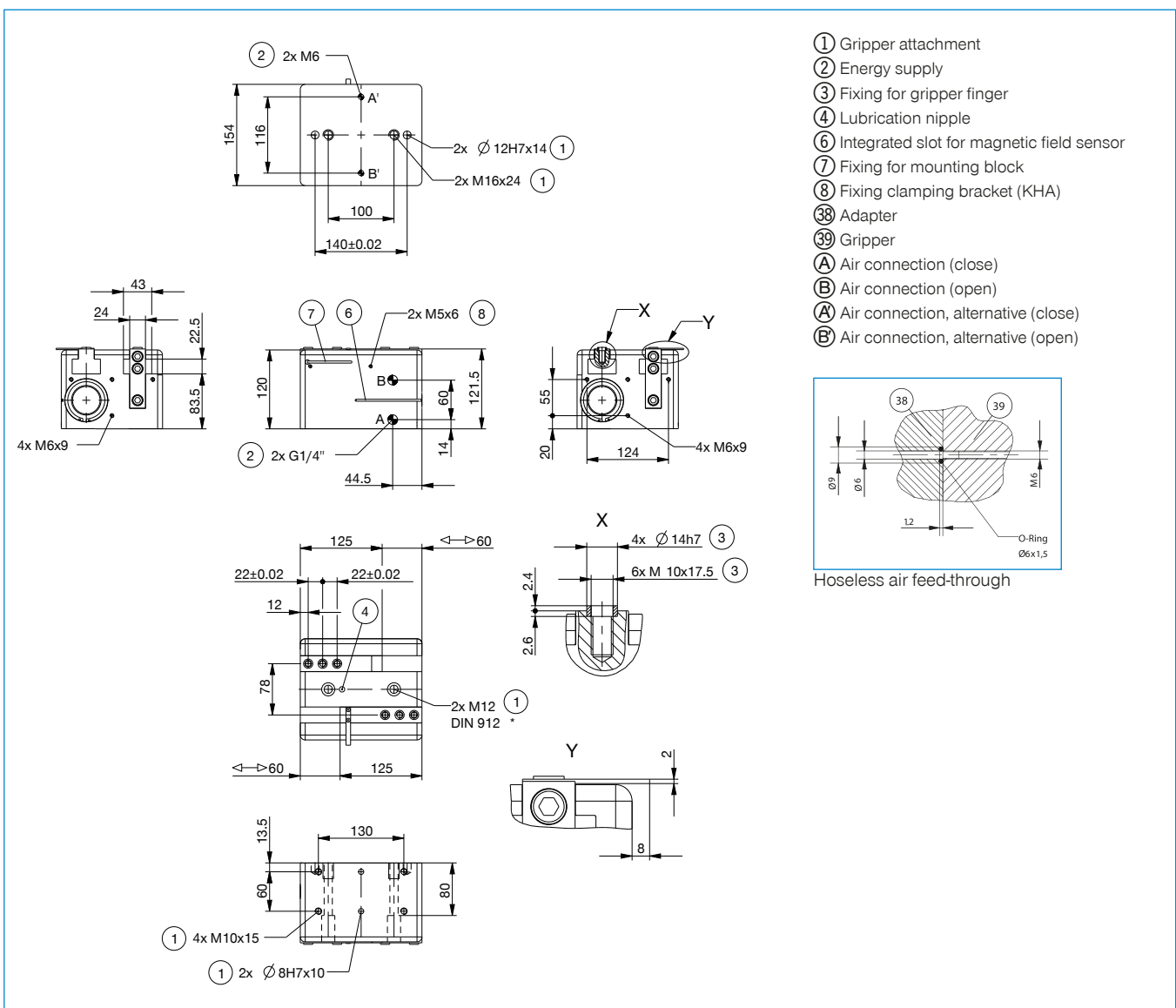


Pressure Safety Valve

DSV1-8

Order no.	► Technical Data*	
	GH6460-B	GHK6460
Stroke per jaw [mm]	60	60
Gripping force in closing [N]	3000	3000
Gripping force in opening [N]	2600	2600
Retention force in case of drop in pressure [N]		1050
Closing time [s]	0.4	0.4
Opening time [s]	0.4	0.4
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	3
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm³]	710	710
Weight [kg]	10.4	11.5

*All data measured at 6 bar
GHK series dimensions, see page 209

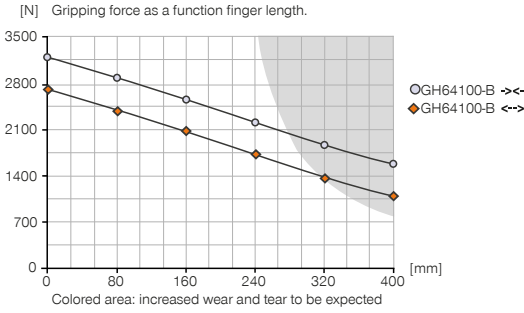


2-JAW PARALLEL GRIPPERS WITH LONG STROKE INSTALLATION SIZE GH64100

▶ PRODUCT SPECIFICATIONS

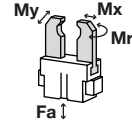


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	300
Mx [Nm]	350
My [Nm]	250
Fa [N]	9000

▶ INCLUDED IN DELIVERY



Mounting block

KB8-28



Centering Disc

DST42000



Flow Control Valves - with Swivel joint

DRV1-4X8

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Angled Cable 5 m

MFS103KHC



Magnetic field sensor
Angled Cable 0,3 m -
Connector M8

MFS103SKHC



Magnetic field sensor
Straight Cable 5 m

MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8

MFS204SKHC



Alternate proximity
bracket

KHA64100-B-8



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S

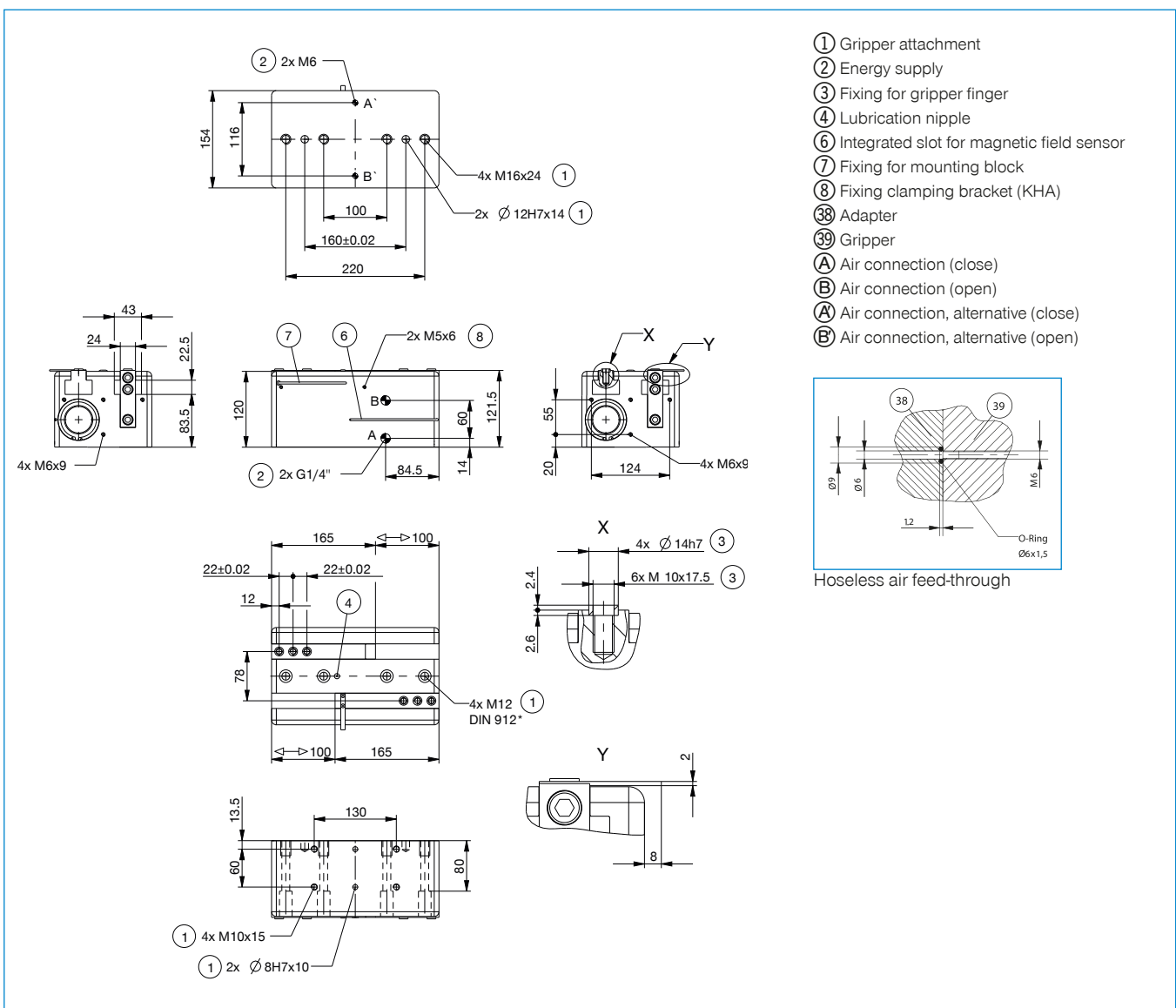


Pressure Safety Valve

DSV1-8

Order no.	► Technical Data*	
	GH64100-B	GHK64100
Stroke per jaw [mm]	100	100
Gripping force in closing [N]	3200	3200
Gripping force in opening [N]	2700	2700
Retention force in case of drop in pressure [N]		1050
Closing time [s]	0.7	0.7
Opening time [s]	0.7	0.7
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	3
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm³]	1185	1185
Weight [kg]	13.7	14.8

*All data measured at 6 bar
GHK series dimensions, see page 209

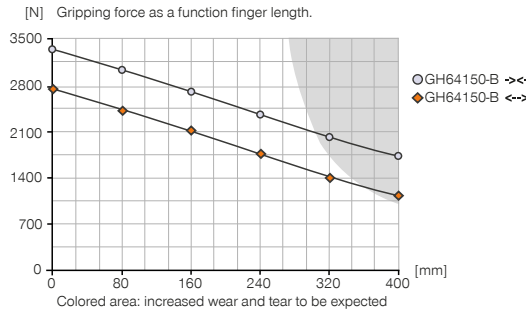


2-JAW PARALLEL GRIPPERS WITH LONG STROKE INSTALLATION SIZE GH64150

▶ PRODUCT SPECIFICATIONS

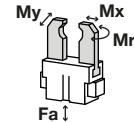


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	350
Mx [Nm]	400
My [Nm]	300
Fa [N]	9000

▶ INCLUDED IN DELIVERY



Mounting block

KB8-28



Centering Disc

DST42000



Flow Control Valves - with Swivel joint

DRV1-4X8

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Angled Cable 5 m

MFS103KHC



Magnetic field sensor
Angled Cable 0,3 m -
Connector M8

MFS103SKHC



Magnetic field sensor
Straight Cable 5 m

MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8

MFS204SKHC



Alternate proximity
bracket

KHA64150-B-8



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S

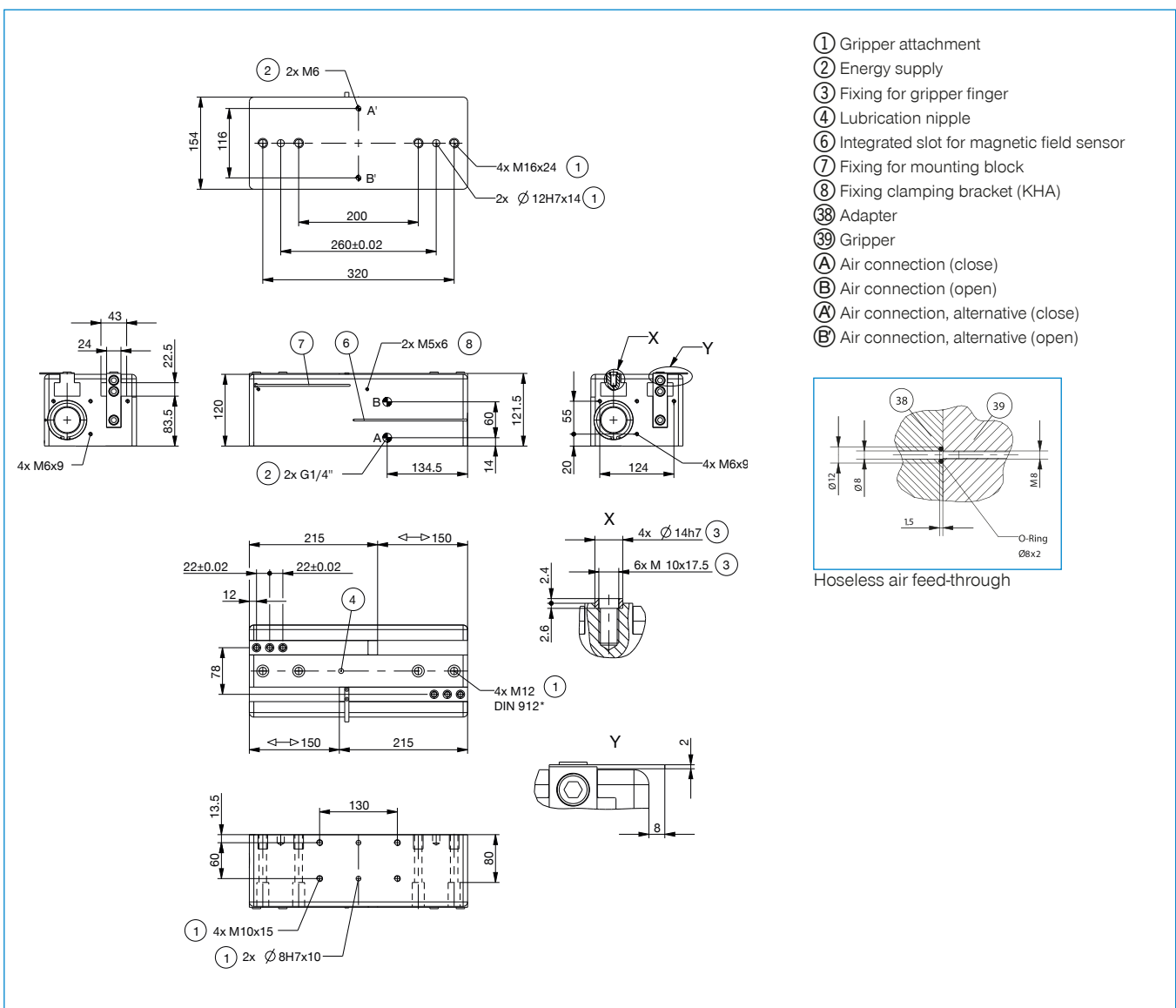


Pressure Safety Valve

DSV1-8

Order no.	► Technical Data*	
	GH64150-B	GHK64150
Stroke per jaw [mm]	150	150
Gripping force in closing [N]	3300	3300
Gripping force in opening [N]	2780	2780
Retention force in case of drop in pressure [N]		1050
Closing time [s]	1	1
Opening time [s]	1	1
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	3
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm ³]	1775	1775
Weight [kg]	18.3	19.4

*All data measured at 6 bar
GHK series dimensions, see page 209

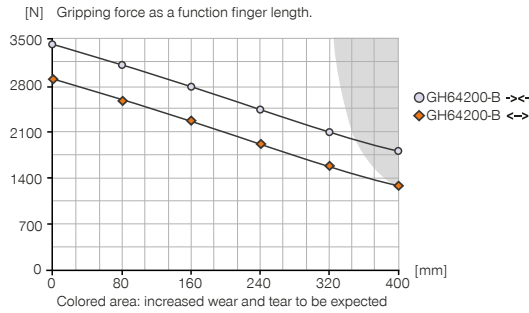


2-JAW PARALLEL GRIPPERS WITH LONG STROKE INSTALLATION SIZE GH64200

▶ PRODUCT SPECIFICATIONS

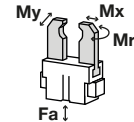


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	400
Mx [Nm]	450
My [Nm]	350
Fa [N]	9000

▶ INCLUDED IN DELIVERY



Mounting block

KB8-28



Centering Disc

DST42000



Flow Control Valves - with Swivel joint

DRV1-4X8

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Angled Cable 5 m

MFS103KHC



Magnetic field sensor
Angled Cable 0,3 m -
Connector M8

MFS103SKHC



Magnetic field sensor
Straight Cable 5 m

MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8

MFS204SKHC



Alternate proximity
bracket

KHA64200-B-8



Plug-in connector Angled Ca-
ble 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Ca-
ble 5m - Socket M8 (female)

KAG500



Inductive proximity switch
- Cable 5 m

NJ8-E2



Inductive proximity switch
- Connector M8

NJ8-E2S

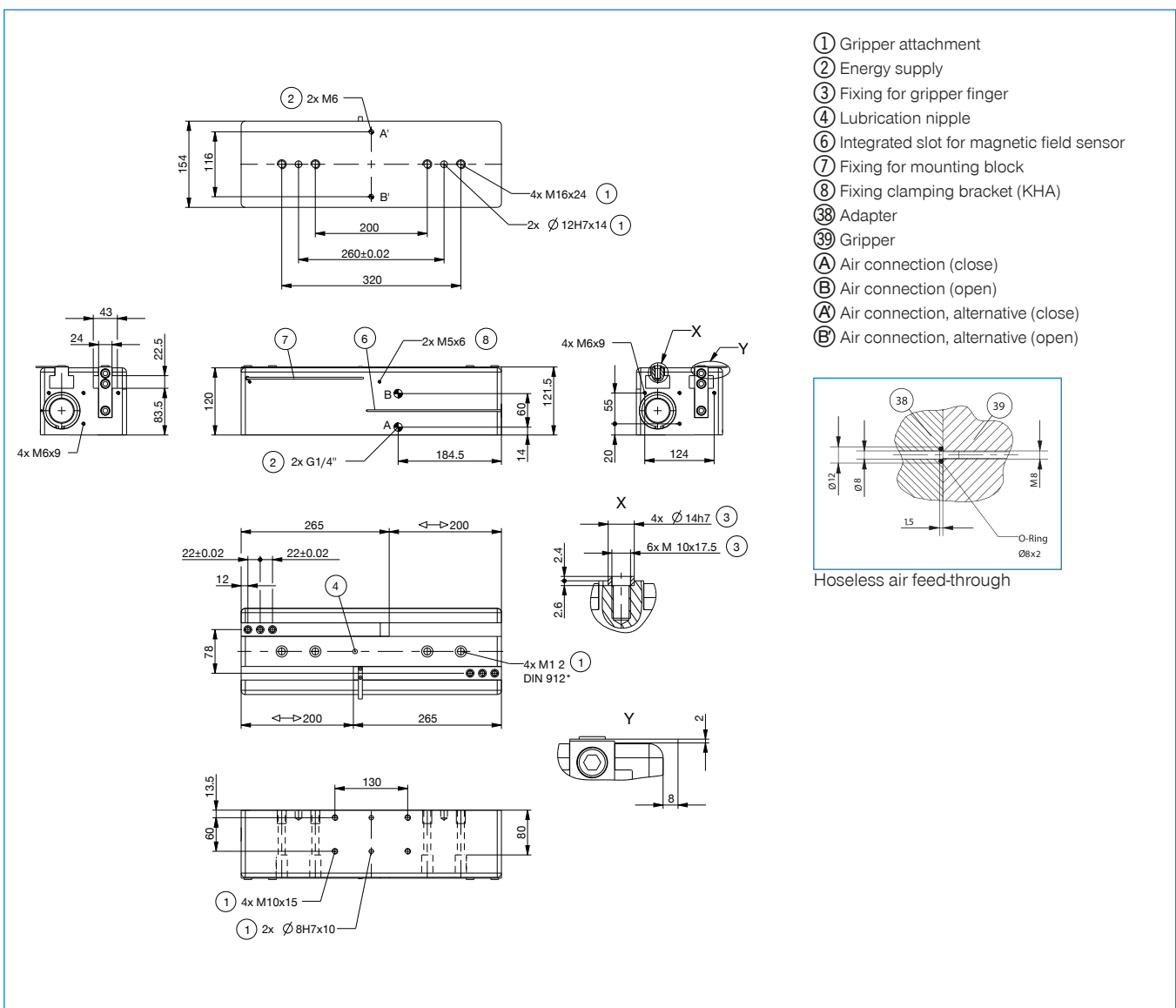


Pressure Safety Valve

DSV1-8

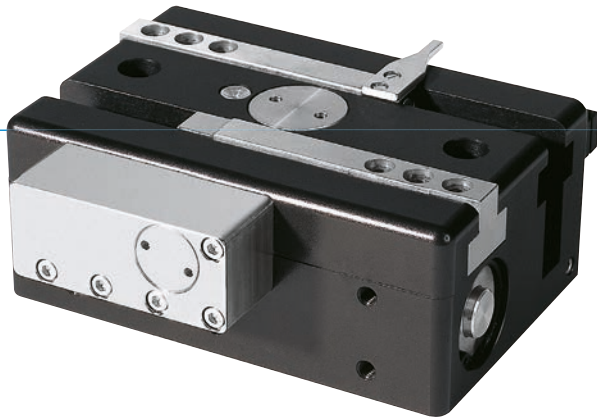
Order no.	► Technical Data*	
	GH64200-B	GHK64200
Stroke per jaw [mm]	200	200
Gripping force in closing [N]	3400	3400
Gripping force in opening [N]	2900	2900
Retention force in case of drop in pressure [N]		1050
Closing time [s]	1.5	1.5
Opening time [s]	1.5	1.5
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	3
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm³]	2370	2370
Weight [kg]	22.7	23.8

*All data measured at 6 bar
GHK series dimensions, see page 209

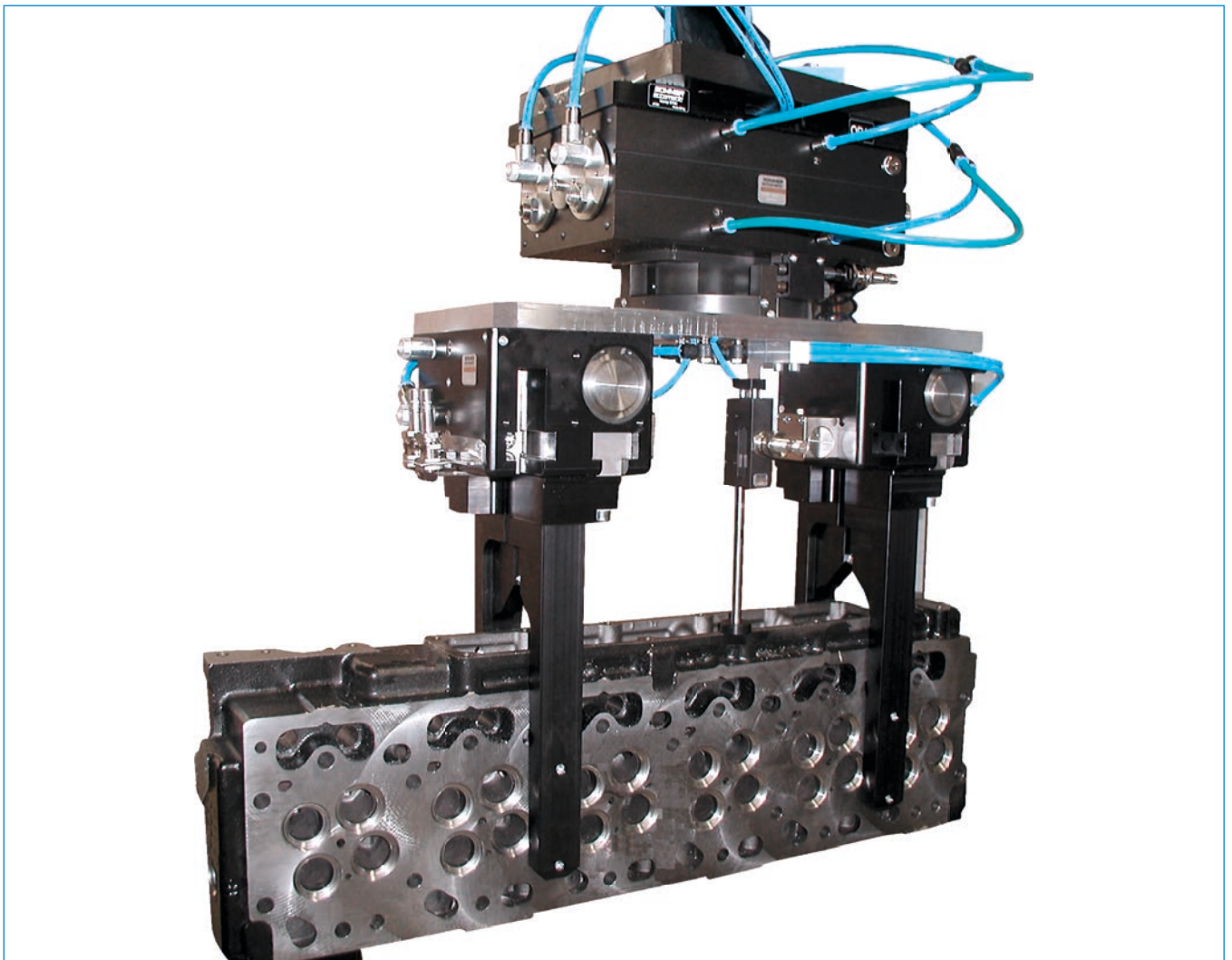


2-JAW PARALLEL GRIPPERS WITH LONG STROKE GHK SERIES

▶ PRODUCT ADVANTAGES

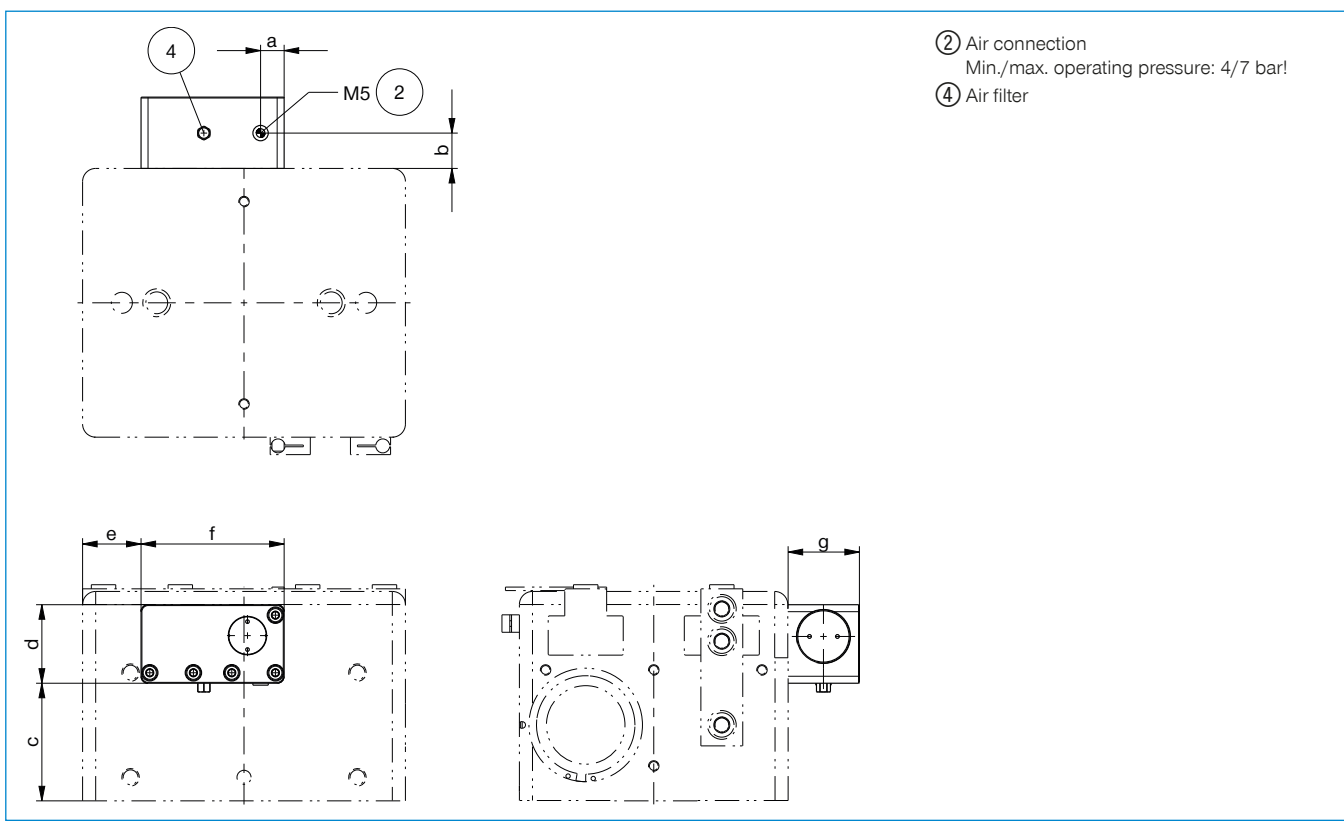


- ▶ Securing the workpiece in case of drop in pressure above clamping element on the condition of a positive gripper jaw design
- ▶ Dimensions based on GH6000 series standard gripper
- ▶ Long stroke, up to 200 mm per jaw
- ▶ Stable T-slot guide, guided completely along the entire length of the housing
- ▶ For gripper fingers with a length of up to 600 mm
- ▶ Compact design, through stacked cylinder and guide



► **Technical Data**

Order no.	Retention force in case of drop in pressure							
	[N]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]
GHK6140	300	9.6	10.5	21.7	25	17.5	58	22
GHK6160	300	9.6	10.5	21.7	25	37.5	58	22
GHK6180	300	9.6	10.5	21.7	25	37.5	58	22
GHK6240	640	15	14	39.5	35	20	66	27
GHK6260	640	15	14	39.5	35	40	66	27
GHK6280	640	15	14	39.5	35	60	66	27
GHK62100	640	15	14	39.5	35	80	66	27
GHK62150	640	15	14	39.5	35	130	66	27
GHK6360	640	15	14	56	35	47.5	66	27
GHK63100	640	15	14	56	35	87.5	66	27
GHK63150	640	15	14	56	35	137.5	66	27
GHK6460	1050	13.5	20.5	67.4	45	33.5	82	41
GHK64100	1050	13.5	20.5	67.4	45	73.5	82	41
GHK64150	1050	13.5	20.5	67.4	45	123.5	82	41
GHK64200	1050	13.5	20.5	67.4	45	173.5	82	41



2-JAW PARALLEL GRIPPERS WITH LONG STROKE SERIES GH7000

▶ PRODUCT ADVANTAGES



“The strong”

▶ High gripping force

The high gripping force allows you to handle the heaviest workpieces in your application reliably

▶ High moment load

The heavy-duty linear guide provides the highest possible durability for your application

▶ Failure-free continuous operation

Our uncompromising “Made in Germany” quality guarantees up to 10 million maintenance-free gripping cycles

▶ THE BEST PRODUCT FOR YOUR APPLICATION



▶ Our products love the challenge!

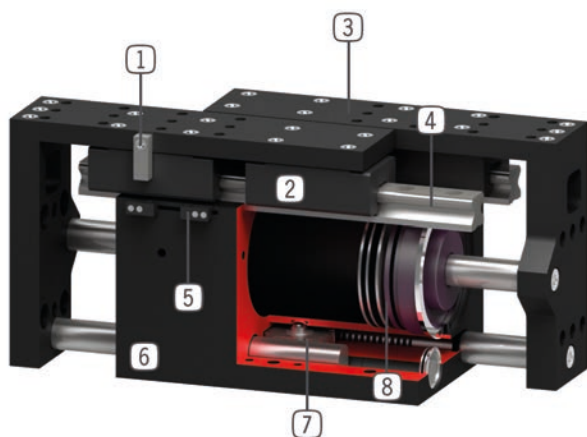
Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities:

Find the best product for your specific use:

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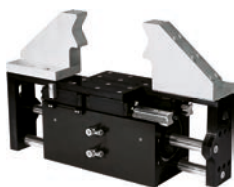


► BENEFITS IN DETAIL



- ① **Switch cam**
 - for position sensing
- ② **Carriage with wiper**
 - for use under extreme conditions
- ③ **Gripper jaw**
 - individual gripper finger mounting
- ④ **Precise linear guide**
 - ideal for highest transverse forces and loads
 - double secured against twisting
- ⑤ **Mounting block adjustable**
 - direct sensing of the gripper jaw position
- ⑥ **Robust, lightweight housing**
 - hard coated aluminium alloy
- ⑦ **Synchronization**
 - via rack and pinion
- ⑧ **Drive**
 - two double-acting pneumatic cylinders

► SERIES CHARACTERISTICS



Number of installation sizes	2
Stroke per jaw	65 mm - 100 mm
Gripping force	8500 N - 8500 N
Weight	31 kg - 36 kg
AP class	3



10 million maintenance-free cycles (max.)



Inductive sensor



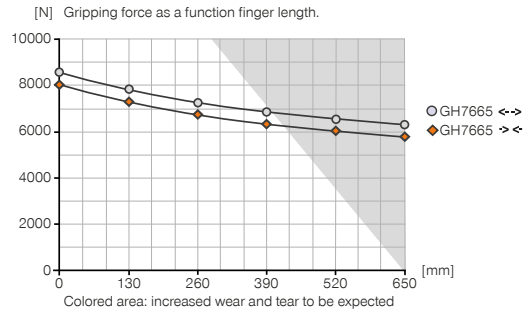
IP64

2-JAW PARALLEL GRIPPERS WITH LONG STROKE INSTALLATION SIZE GH7665

▶ PRODUCT SPECIFICATIONS

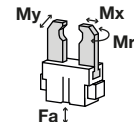


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	2000
Mx [Nm]	2000
My [Nm]	1500
Fa [N]	4000

▶ INCLUDED IN DELIVERY



Mounting block

KB8-28



Flow Control Valves - with Swivel joint

DRV1-4X8

▶ RECOMMENDED ACCESSORIES



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S



Alternate proximity bracket

KHA7665-8



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500

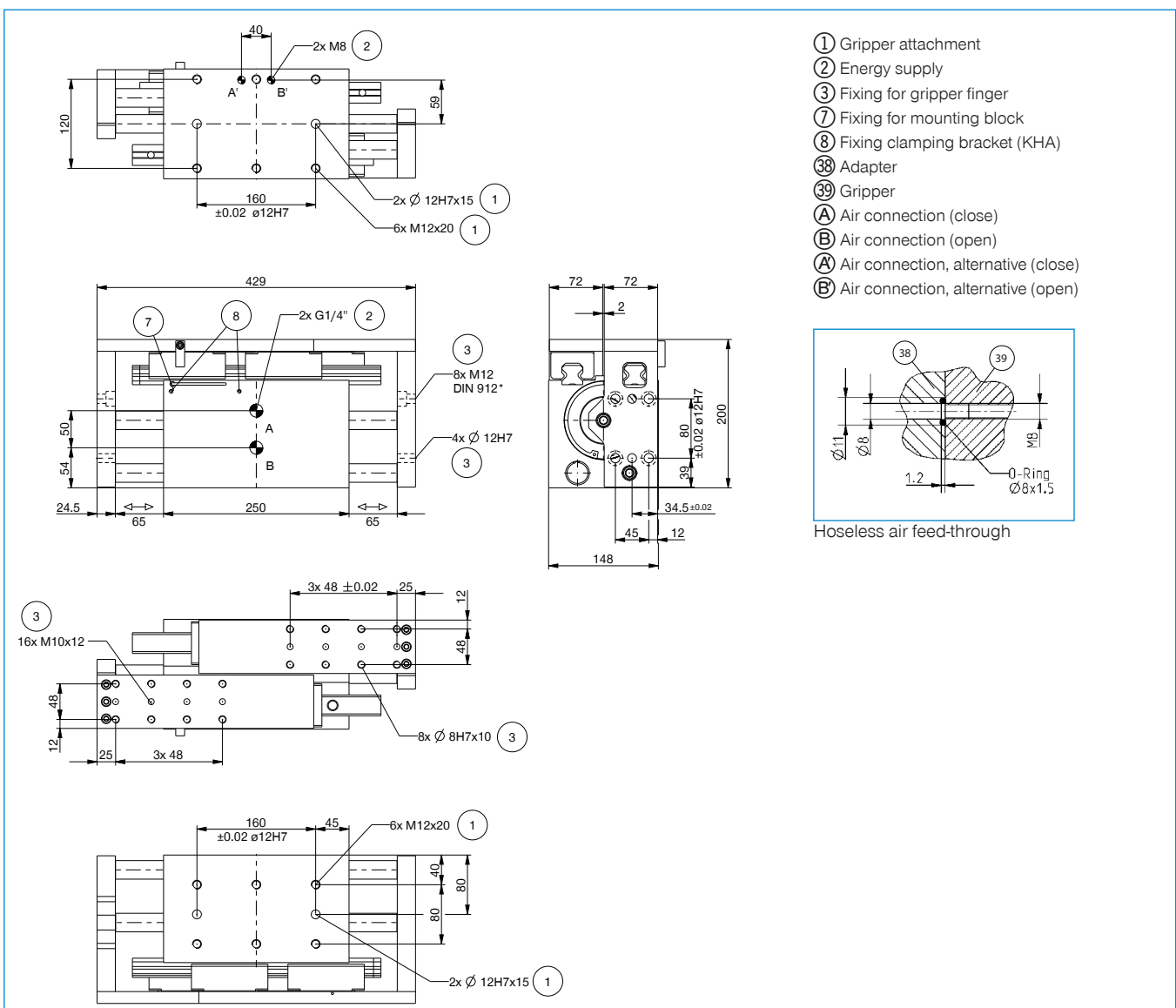


Plug-in connector Straight Cable 5m - Socket M8 (female)

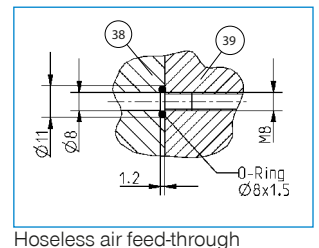
KAG500

► Technical Data*	
Order no.	GH7665
Stroke per jaw [mm]	65
Gripping force in closing [N]	8000
Gripping force in opening [N]	8500
Closing time [s]	1.1
Opening time [s]	1.1
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	1985
Weight [kg]	31

*All data measured at 6 bar



- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑦ Fixing for mounting block
- ⑧ Fixing clamping bracket (KHA)
- ③⑧ Adapter
- ③⑨ Gripper
- Ⓐ Air connection (close)
- Ⓑ Air connection (open)
- Ⓐ Air connection, alternative (close)
- Ⓑ Air connection, alternative (open)

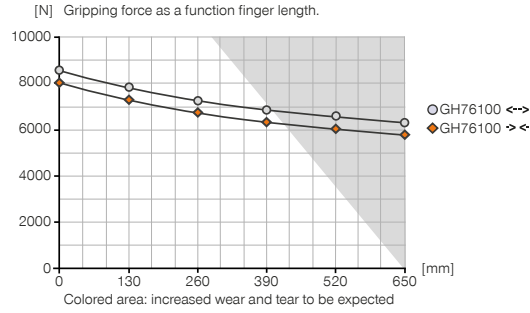


2-JAW PARALLEL GRIPPERS WITH LONG STROKE INSTALLATION SIZE GH76100

▶ PRODUCT SPECIFICATIONS

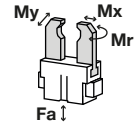


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	2000
Mx [Nm]	2000
My [Nm]	1500
Fa [N]	4000

▶ INCLUDED IN DELIVERY



Mounting block

KB8-28



Flow Control Valves - with Swivel joint

DRV1-4X8

▶ RECOMMENDED ACCESSORIES



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S



Alternate proximity bracket

KHA76100-8



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500

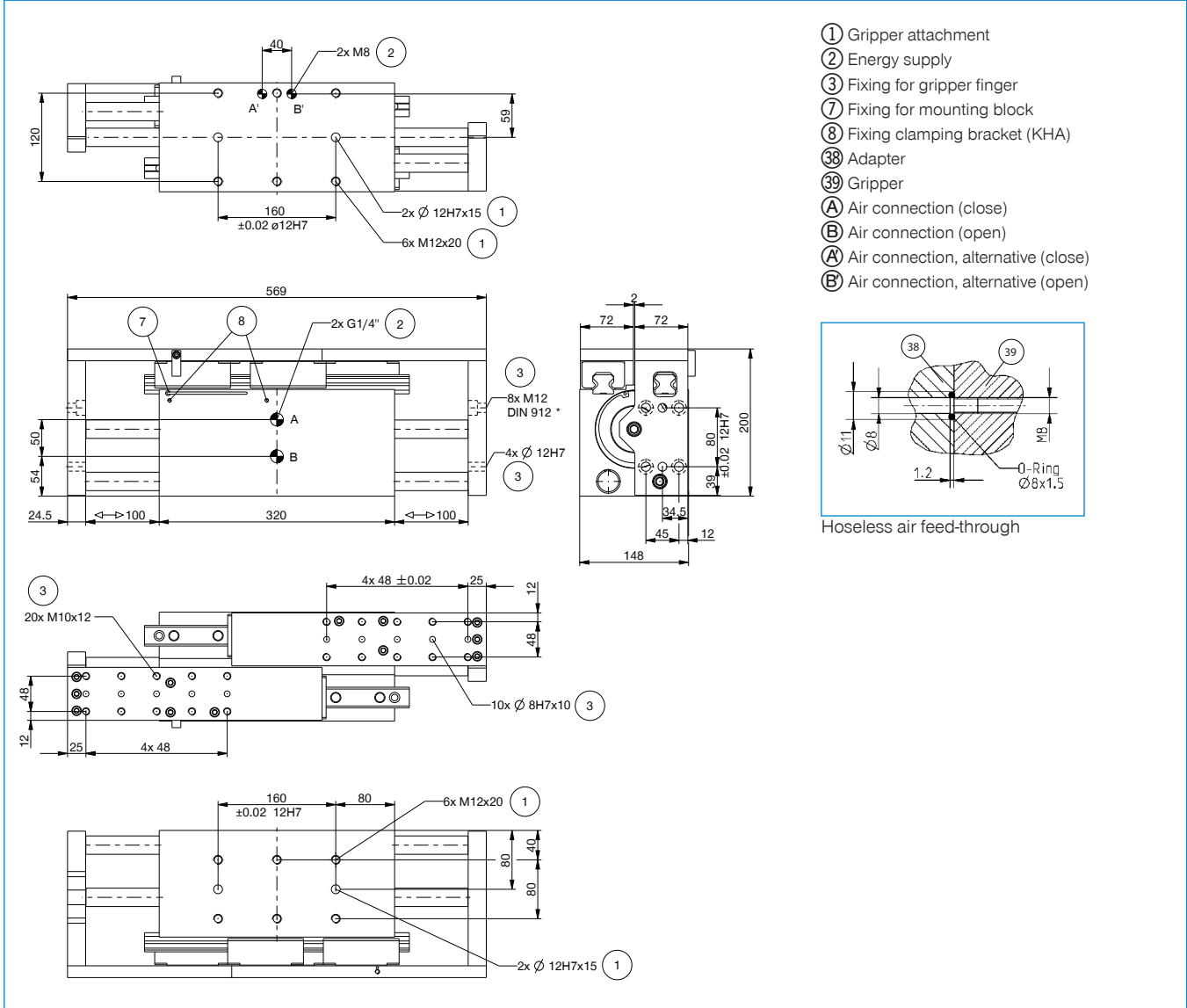


Plug-in connector Straight Cable 5m - Socket M8 (female)

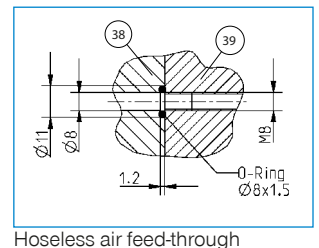
KAG500

► Technical Data*	
Order no.	GH76100
Stroke per jaw [mm]	100
Gripping force in closing [N]	8000
Gripping force in opening [N]	8500
Closing time [s]	1.5
Opening time [s]	1.5
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	3040
Weight [kg]	36

*All data measured at 6 bar



- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑦ Fixing for mounting block
- ⑧ Fixing clamping bracket (KHA)
- ③⑧ Adapter
- ③⑨ Gripper
- Ⓐ Air connection (close)
- Ⓑ Air connection (open)
- Ⓐ Air connection, alternative (close)
- Ⓑ Air connection, alternative (open)



2-JAW PARALLEL GRIPPERS WITH LONG STROKE

OVERVIEW OF SERIES

1

Overview of Series / 2-Jaw Parallel Grippers with Long Stroke

**▶ ELECTRICAL**

Series GEH6000

218



Series GEH8000

230

2-JAW PARALLEL GRIPPERS

SERIES GEH6000

▶ PRODUCT ADVANTAGES



“The powerful”

- ▶ **60% more powerful than comparative products**
Optimisation of weight and force reduces your application costs since all components can have a smaller scale
- ▶ **Servo drive**
Position, speed or force control in combination with a self-locking mechanism guarantee the highest functionality
- ▶ **Multibus**
Be flexible: CANopen, DeviceNet or PROFIBUS - You decide what harmonises the best with your system

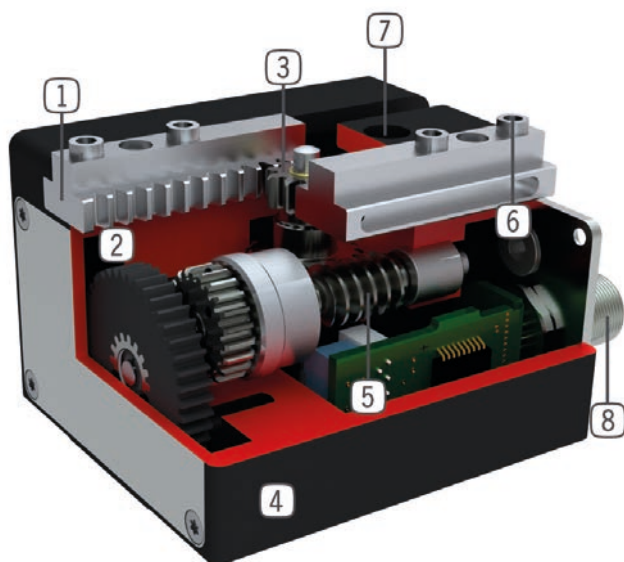
▶ THE BEST PRODUCT FOR YOUR APPLICATION



- ▶ **Our products love the challenge!**
Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities:
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► BENEFITS IN DETAIL



- ① **Precise T-Slot guide**
 - high forces and moments capacity
- ② **Drive**
 - DC-Motor with encoder
- ③ **Rack and pinion gear**
 - synchronized the movement of the gripper jaws
 - high force transfer
- ④ **Robust, lightweight housing**
 - hard coated aluminium alloy
- ⑤ **Helical gear - worm gear**
 - self locking in case of power drop
- ⑥ **Removable centering sleeves**
 - quick and economical positioning of the gripper fingers
- ⑦ **Mounting and positioning**
 - mounting possible from several sides for versatile positioning
- ⑧ **Energy supply**
 - standardized connector

► SERIES CHARACTERISTICS



Number of installation sizes	2
Stroke per jaw	30 mm - 80 mm
Holding force	1000 N - 2000 N
Weight	0,7 kg - 2,6 kg
AP class	3



10 million maintenance-free cycles (max.)



Integrated sensing



IP40



Mechanical self limitation



Purged air

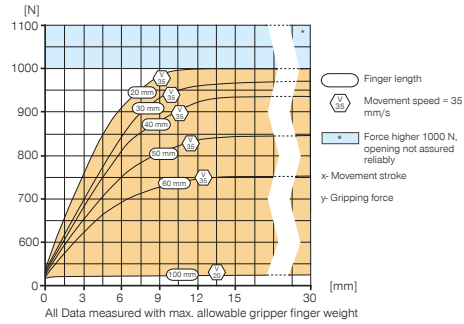
2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GEH6030

1 PRODUCT SPECIFICATIONS

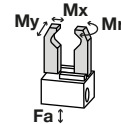


Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	25
Mx [Nm]	25
My [Nm]	25
Fa [N]	500

INCLUDED IN DELIVERY

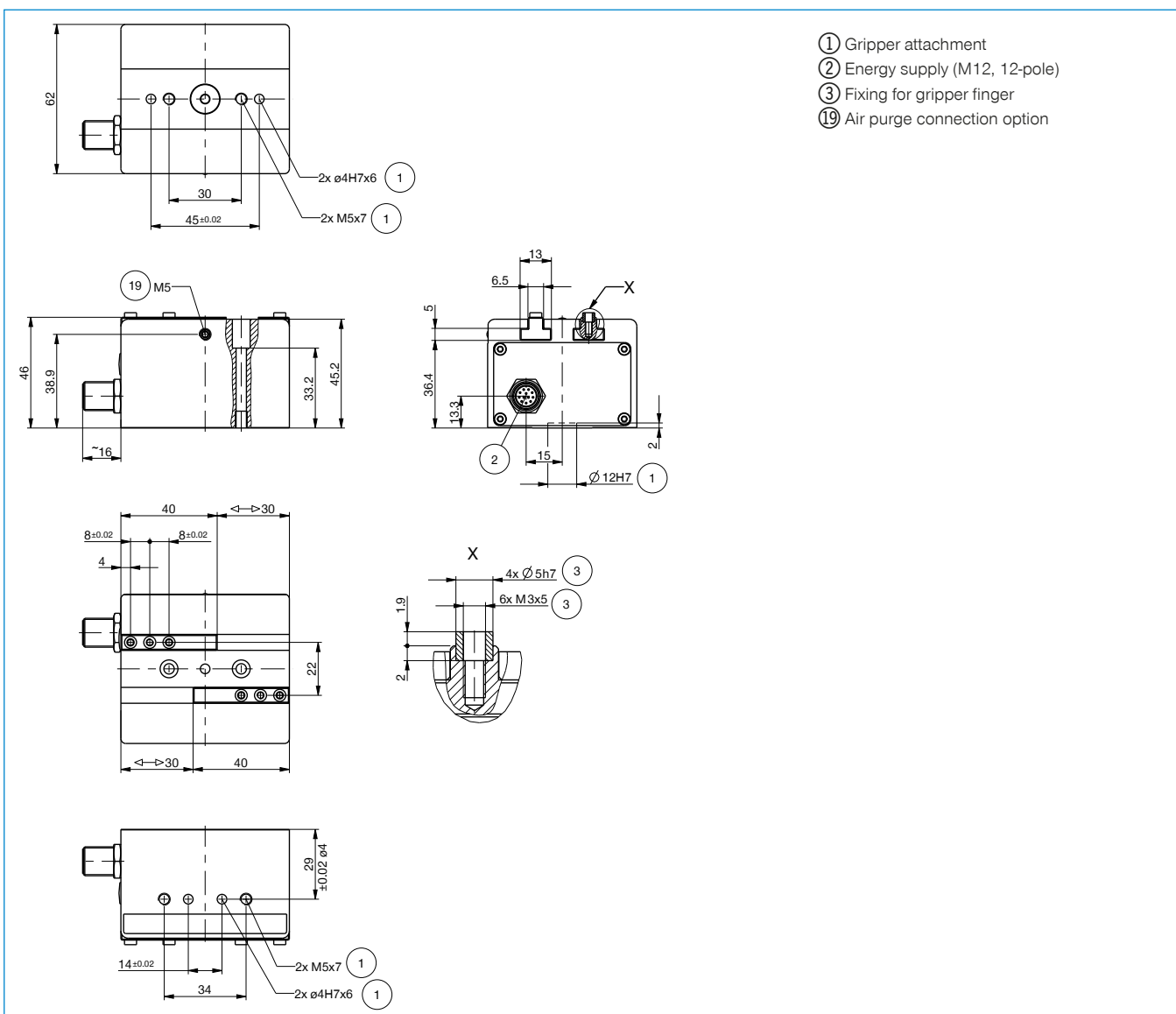


Centering Disc

DST40400

RECOMMENDED ACCESSORIES, SEE PAGE 228

Order no.	Technical Data
Drive	DC-Motor w. encoder
Stroke per jaw, adjustable [mm]	30
Retention force max. [N]	1000
Power transfer	Helical gear / worm gear
Weight per jaw max [kg]	0.3
Jaw speed in force mode max. [mm/s]	35
Jaw speed in positioning mode max. [mm/s]	55
Repetition accuracy +/- [mm]	0.1
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Protection to IEC 60529	IP40
Weight [kg]	0.7



- ① Gripper attachment
- ② Energy supply (M12, 12-pole)
- ③ Fixing for gripper finger
- ⑱ Air purge connection option

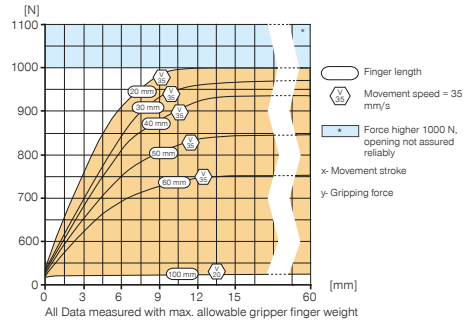
2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GEH6060

1 PRODUCT SPECIFICATIONS

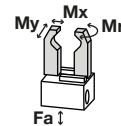


Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	35
Mx [Nm]	35
My [Nm]	35
Fa [N]	500

INCLUDED IN DELIVERY

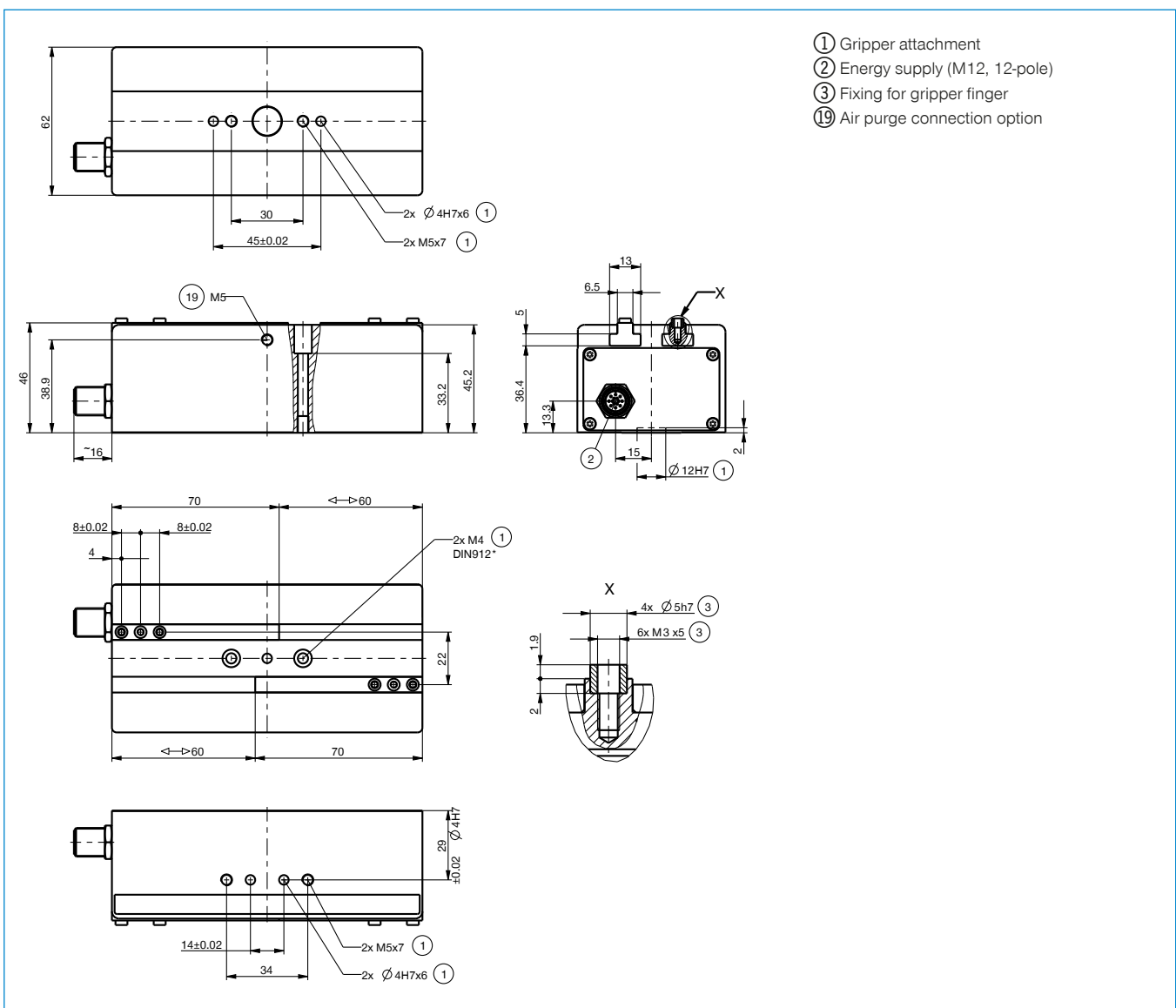


Centering Disc

DST40400

RECOMMENDED ACCESSORIES, SEE PAGE 228

Order no.	Technical Data
Drive	DC-Motor w. encoder
Stroke per jaw, adjustable [mm]	60
Retention force max. [N]	1000
Power transfer	Helical gear / worm gear
Weight per jaw max [kg]	0.3
Jaw speed in force mode max. [mm/s]	35
Jaw speed in positioning mode max. [mm/s]	55
Repetition accuracy +/- [mm]	0.1
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Protection to IEC 60529	IP40
Weight [kg]	0.9



- ① Gripper attachment
- ② Energy supply (M12, 12-pole)
- ③ Fixing for gripper finger
- ⑱ Air purge connection option

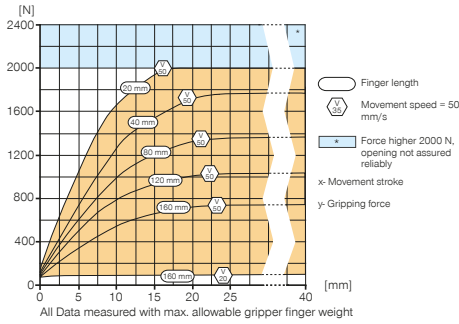
2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GEH6140

1 PRODUCT SPECIFICATIONS

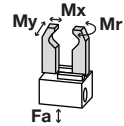


Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	70
Mx [Nm]	80
My [Nm]	60
Fa [N]	1500

INCLUDED IN DELIVERY

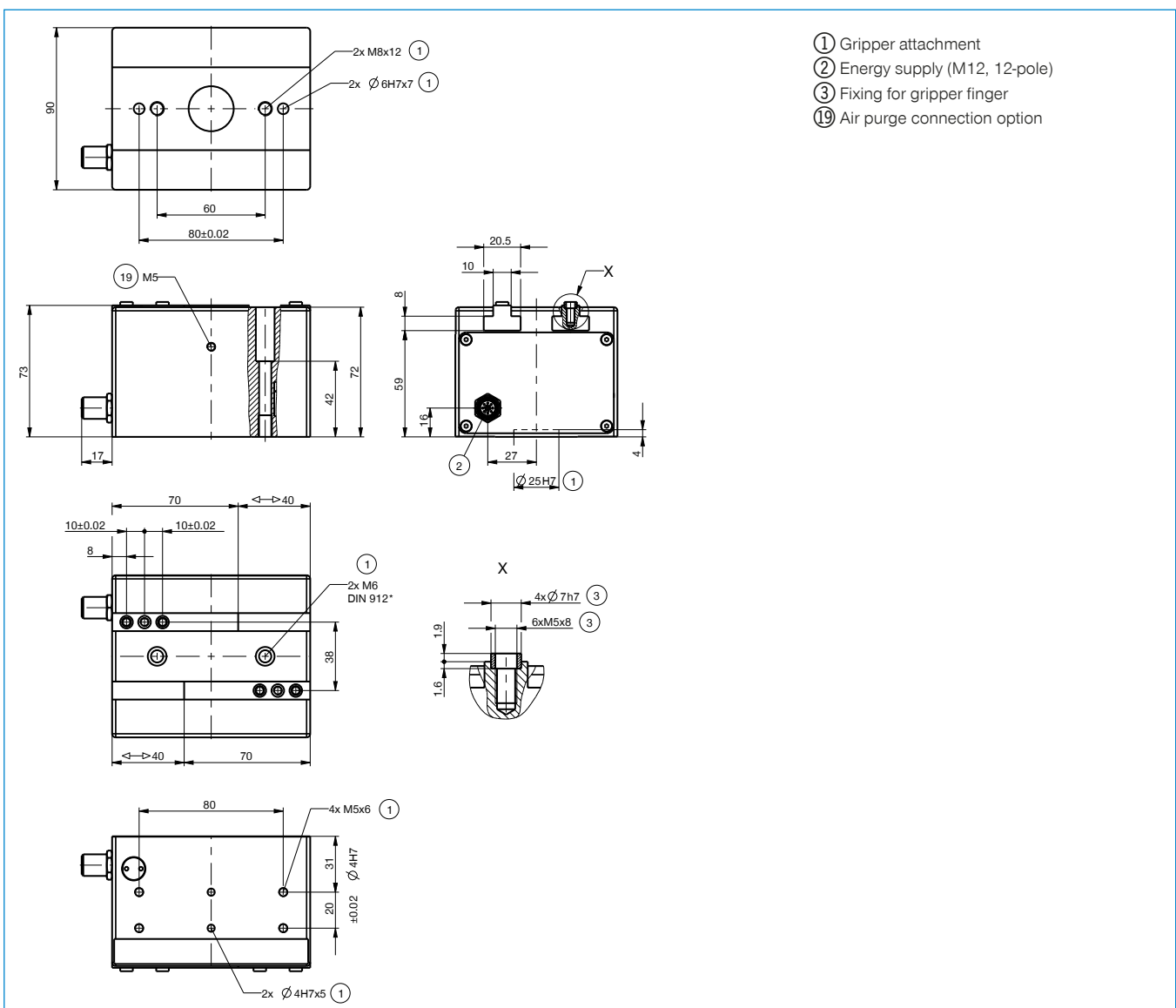


Centering Disc

DST70000

RECOMMENDED ACCESSORIES, SEE PAGE 228

Order no.	Technical Data
	GEH6140
Drive	DC-Motor w. encoder
Stroke per jaw, adjustable [mm]	40
Retention force max. [N]	2000
Power transfer	Helical gear / worm gear
Weight per jaw max [kg]	1
Jaw speed in force mode max. [mm/s]	50
Jaw speed in positioning mode max. [mm/s]	65
Repetition accuracy +/- [mm]	0.1
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Protection to IEC 60529	IP40
Weight [kg]	1.8



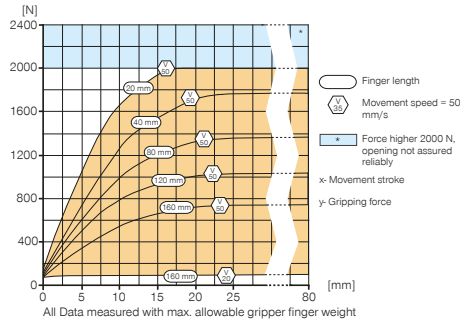
2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GEH6180

1 PRODUCT SPECIFICATIONS

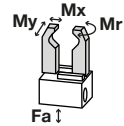


Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



M_r [Nm]	100
M_x [Nm]	140
M_y [Nm]	90
F_a [N]	1500

INCLUDED IN DELIVERY

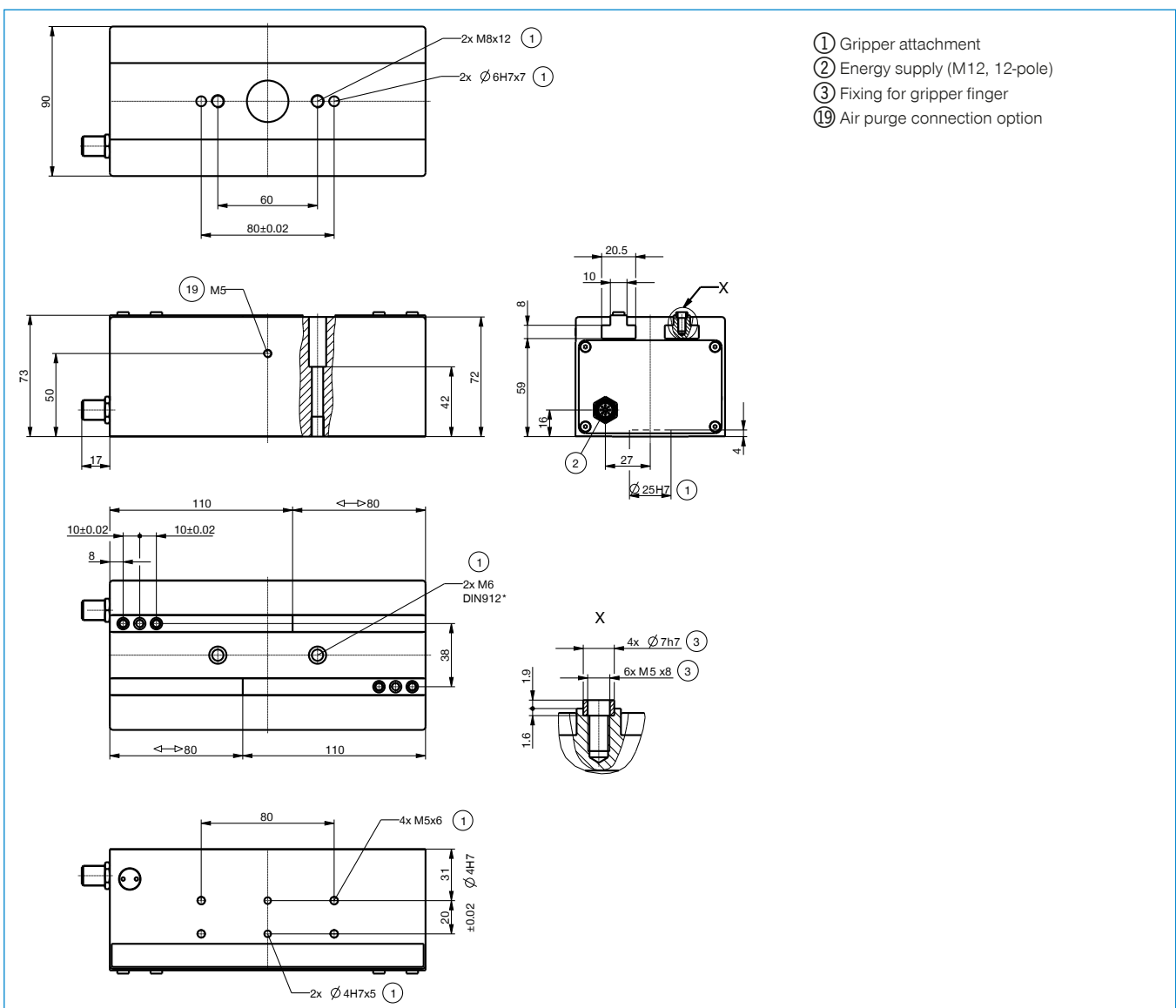


Centering Disc

DST70000

RECOMMENDED ACCESSORIES, SEE PAGE 228

Order no.	Technical Data
Drive	DC-Motor w. encoder
Stroke per jaw, adjustable [mm]	80
Retention force max. [N]	2000
Power transfer	Helical gear / worm gear
Weight per jaw max [kg]	1
Jaw speed in force mode max. [mm/s]	50
Jaw speed in positioning mode max. [mm/s]	65
Repetition accuracy +/- [mm]	0.1
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Protection to IEC 60529	IP40
Weight [kg]	2.6



2-JAW PARALLEL GRIPPERS

GEH6000 SERIES ACCESSORIES

1

Grippers /

electric /

2-jaw parallel grippers /

2-jaw parallel grippers /

2-jaw parallel grippers /

2-jaw parallel grippers /

2-jaw parallel grippers /

2-jaw parallel grippers /

2-jaw parallel grippers /

2-jaw parallel grippers /

2-jaw parallel grippers /

2-jaw parallel grippers /

2-jaw parallel grippers /

2-jaw parallel grippers /



Order no.	CSTE00033	CSTE00292
Fieldbus type	Profibus	CANopen, DeviceNet
Protection to IEC 60529	IP65	IP65
Bus terminator	Integrated	Integrated
Fixing types	Field attachable	Field attachable



Order no.	CSTE00044	CSTE00293
Fieldbus type	Profibus	CANopen, DeviceNet
Protection to IEC 60529	IP65	IP65
Bus terminator	must be connected externally	must be connected externally
Fixing types	5-pin plug/socket	5-pin plug/socket



Order no.	CLTG00065
Application type	Programming cable, for setting parameters and commissioning
Cable length [m]	2.5



Order no.	CLTG00117	CLTG00057	CLTG00118
Application type	Supply cable, for connecting the load and logic supply	Supply cable, for connecting the load and logic supply	Supply cable, for connecting the load and logic supply
Cable length [m]	2.5	5	10

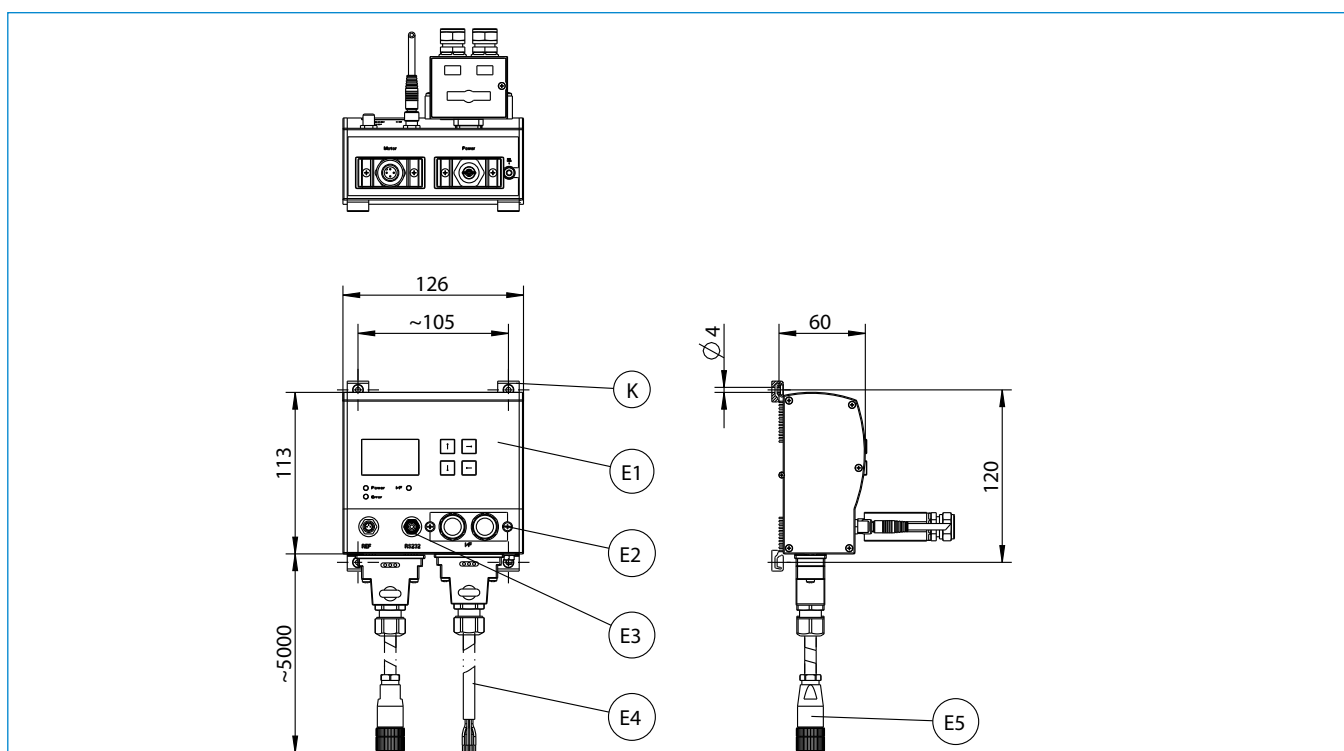


Order no.	CLTG00119	CLTG00060	CLTG00120
Application type	Motor cable, for connecting motor and controller	Motor cable, for connecting motor and controller	Motor cable, for connecting motor and controller
Cable length [m]	2.5	5	10



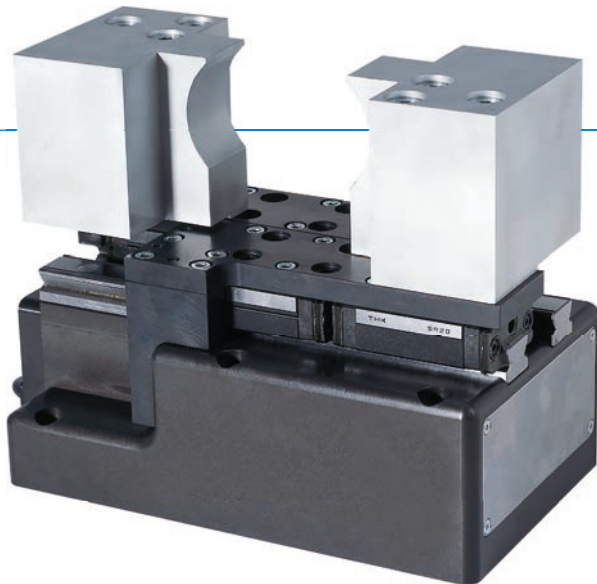
Order no.	CLTG00121
Application type	Fastening for CREG motor controller...
Packaging unit [Pice]	2

Order no.	CREG00018	CREG00019	CREG00020
General data			
Position indicator	Encoder	Encoder	Encoder
Encoder input	RS485 / RS422, A/B signal with index impulse	RS485 / RS422, A/B signal with index impulse	RS485 / RS422, A/B signal with index impulse
Display	Interface with full text display via graphic LCD display	Interface with full text display via graphic LCD display	Interface with full text display via graphic LCD display
Control element	4 keys	4 keys	4 keys
Fieldbus type	Profibus DP	CANopen	DeviceNet
Communication profile	Step 7	DS301, DSP402	Device Type 0Ch
Data rate	12	1	0.5
Fastening type	DIN rail, wall or surface holder	DIN rail, wall or surface holder	DIN rail, wall or surface holder
Weight [kg]	0.6	0.6	0.6
Electrical data			
General			
Nominal power [W]	75	75	75
Configuration interface	RS232 / 9600 baud	RS232 / 9600 baud	RS232 / 9600 baud
Load supply			
Load supply nominal voltage [V DC]	24 +/- 10%	24 +/- 10%	24 +/- 10%
Load supply nominal current [A]	3	3	3
Load supply peak current [A]	5	5	5
Logic supply			
Logic supply nominal voltage [V DC]	24 +/- 10%	24 +/- 10%	24 +/- 10%
Logic supply nominal current [A]	0,1	0,1	0,1
Logic supply peak current [A]	0.8	0.8	0.8
Operating and ambient conditions			
I ² t monitoring	Yes	Yes	Yes
Current monitoring	Yes	Yes	Yes
Voltage failure detection	Yes	Yes	Yes
Position error monitoring	Yes	Yes	Yes
Software end position detection	Yes	Yes	Yes
Operating temperature [°C]	0 ... +40	0 ... +40	0 ... +40
Protection to IEC 60529	IP54	IP54	IP54



2-JAW PARALLEL GRIPPERS WITH LONG STROKE SERIES GEH8000

▶ PRODUCT ADVANTAGES



“The strong”

▶ High gripping force

Using the high gripping force, you can safely handle even the heaviest workpieces

▶ Servo drive

Position, speed and force control in combination with a mechanical self-locking mechanism guarantee the highest functionality

▶ Multibus

How you stay flexible: PROFIBUS, SERCOS III, PROFINET IO, EtherNet/IP or EtherCat - You decide what harmonises best with your system

▶ THE BEST PRODUCT FOR YOUR APPLICATION



▶ Our products love the challenge!

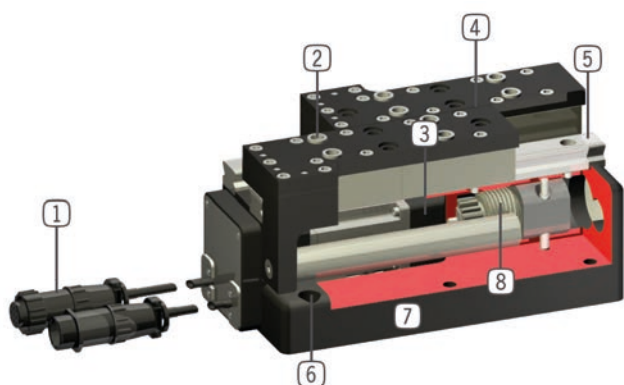
Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities:

Find the best product for your specific use:

www.zimmer-group.com



► BENEFITS IN DETAIL



- ① **Energy supply**
 - motor cable, female
 - encoder cable, male
- ② **Removable centering sleeves**
 - quick and economical positioning of the gripper fingers
- ③ **Drive**
 - AC servo motor
- ④ **Gripper jaw**
 - hardened steel
 - individual gripper finger mounting
- ⑤ **Precise linear guide**
 - high forces and moments capacity
 - guide wagon with wiper for harsh environments
- ⑥ **Mounting and positioning**
- ⑦ **Robust, lightweight housing**
 - hard coated aluminium alloy
- ⑧ **Synchronization**
 - via rack and pinion

► SERIES CHARACTERISTICS



Number of installation sizes	1
Stroke per jaw	max. 60mm
Holding force	max. 3200N
Weight	10kg
AP class	3



10 million maintenance-free cycles (max.)



Integrated sensing



IP54



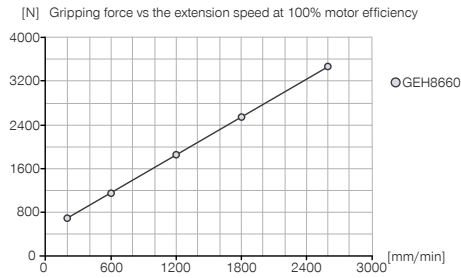
Mechanical self limitation

2-JAW PARALLEL GRIPPERS WITH LONG STROKE SERIES GEH8000

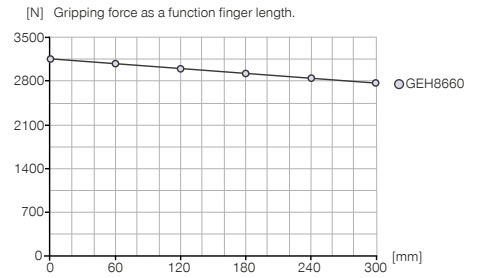
▶ PRODUCT SPECIFICATIONS



▶ Gripping force diagram



▶ Gripping force diagram



▶ INCLUDED IN DELIVERY



Commissioning CD

CD0004

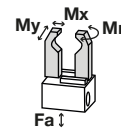


Centering Disc

DST41600

▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr	220
Mx	220
My	950

▶ RECOMMENDED ACCESSORIES



Indra Works Drive Start Up CD

ZUBHCSS



Drive controller Profibus

ZUBHCS



Drive control unit SERCOS III, PROFINET IO, EtherNet/IP, EtherCAT

ZUBHCSME



Programming cable

ZUBHCSKAP01



Power cable 5 m

ZUBHCSKAL05



Power cable 10 m

ZUBHCSKAL10



Power cable 25 m

ZUBHCSKAL25



Encoder cable 5 m

ZUBHCSKAG05



Encoder cable 10 m

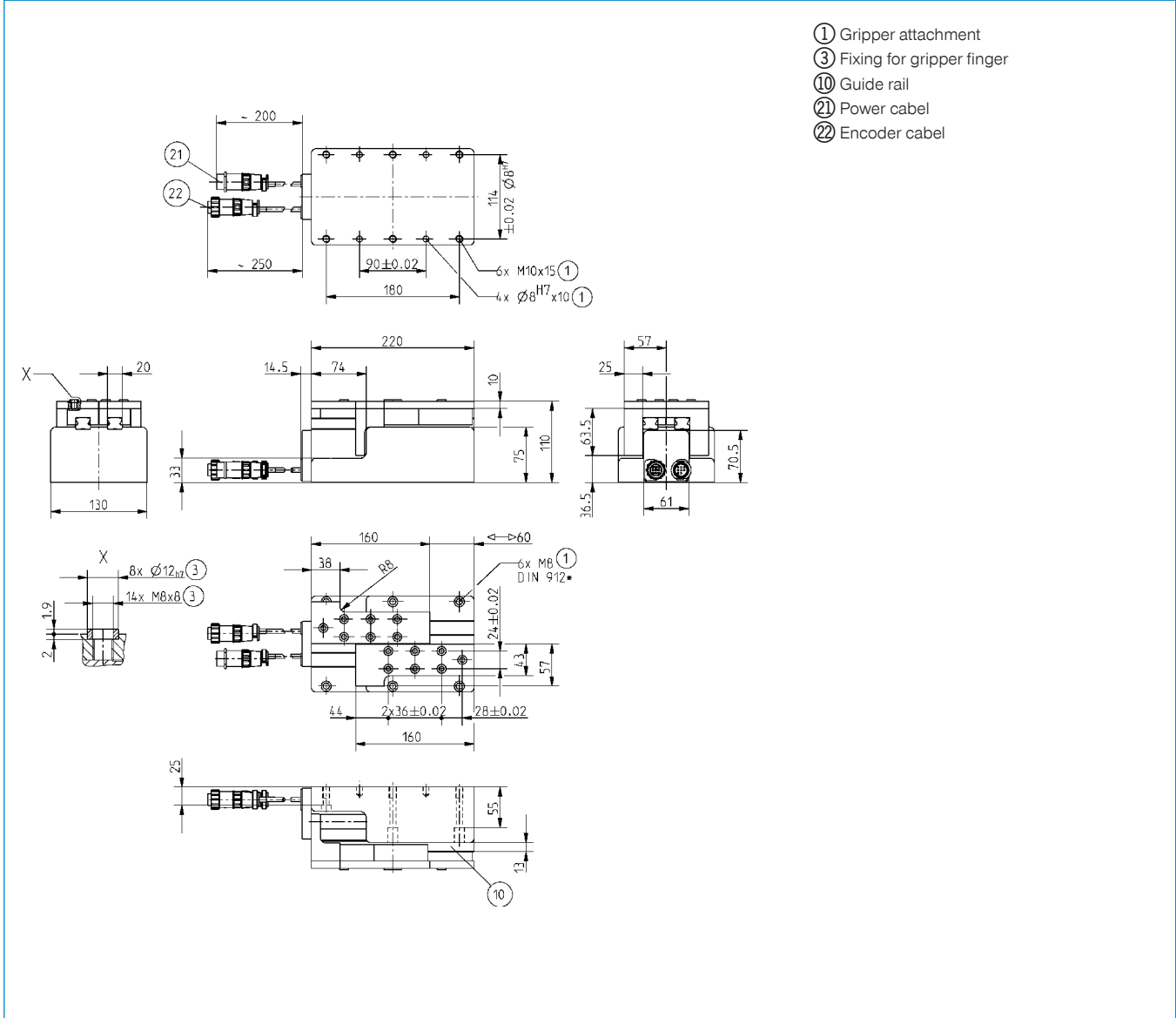
ZUBHCSKAG10



Encoder cable 25 m

ZUBHCSKAG25

► Technical Data	
Order no.	GEH8660
Drive	AC-Servomotor
Stroke per jaw [mm]	60
Max. retention force (at 100% opening usage) [N]	3200
Retention force min. [N]	200
Self limitation	gear rack / worm drive
Power transfer	Rack / worm gear
Closing time / Opening time at maximum stroke [s]	1.5
Repetition accuracy +/- [mm]	0.05
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Protection to IEC 60529	IP54
Weight [kg]	10
Drive	
Load gear output revolution	49
Load gear input revolution	375
Feed constant [mm/rev]	3.1415

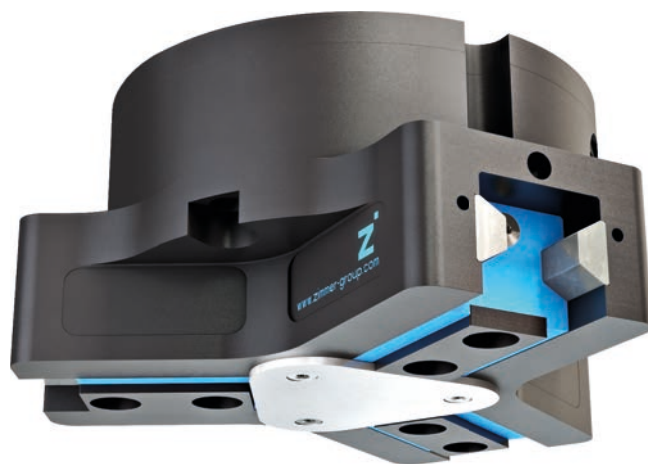


3-JAW CONCENTRIC GRIPPERS


OVERVIEW OF SERIES

1

Overview of Series / 3-Jaw Concentric Grippers



▶ PNEUMATIC

	Series MGD800	236
	Series GD	254
	Series GD300	262
	Series GPD5000	282
	Series GD1700	320

3-JAW CONCENTRIC GRIPPERS

SERIES MGD800

1

Series MGD800 / 3-Jaw Concentric Grippers / pneumatic / Grippers

▶ PRODUCT ADVANTAGES



“The superior”

- ▶ **Gripper jaws may be almost 100% longer in comparison to the benchmark**
The highest force and torque measurement enables flexible for maximum dynamics
- ▶ **Best price/performance ratio**
Reduces your investment costs and speeds the ROI for your application
- ▶ **Failure-free continuous operation**
Our uncompromising “Made in Germany” quality guarantees up to 10 million maintenance-free gripping cycles

▶ THE BEST PRODUCT FOR YOUR APPLICATION



- ▶ **Our products love the challenge!**
Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities:
Find the best product for your specific use:
www.zimmer-group.com

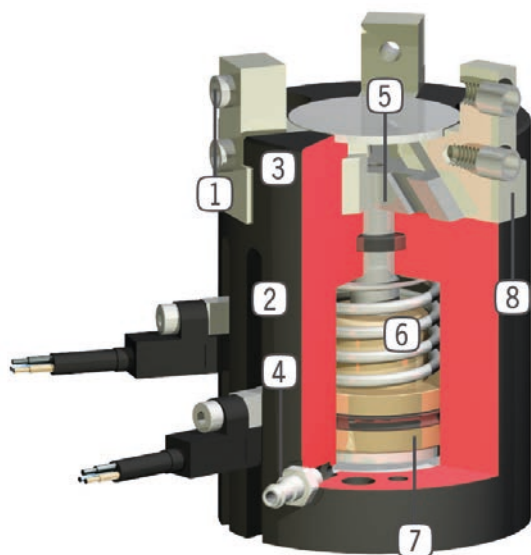
HOW TO ORDER CORRECTLY

- ▶ The product order numbers are arranged according to this diagram:

Order no.	MGD803N	<input type="checkbox"/>		
For external gripping, self-locking, spring closing		C		



► BENEFITS IN DETAIL



- ① **Removable centering sleeves**
- quick and economical positioning of the gripper fingers
- ② **Sensing slot**
- mounting and positioning of magnetic field sensors
- ③ **Robust, lightweight housing**
- hard coated aluminium alloy
- ④ **Energy supply**
- possible from several sides
- ⑤ **Wedge hook mechanism**
- synchronized the movement of the gripper jaws
- ⑥ **Integrated gripping force safety device**
- spring integrated into cylinder as energy storage (from size 803 upwards)
- ⑦ **Position sensing**
- permanent magnet for direct monitoring of piston movement
- ⑧ **Precise T-Slot guide**
- high forces and moments capacity

► SERIES CHARACTERISTICS



Number of installation sizes	8
Stroke per jaw	1 mm - 12 mm
Gripping force	34 N - 1420 N
Weight	0,025 kg - 2 kg
AP class	2



10 million maintenance-free cycles (max.)



Spring closing C



IP40



Magnetic field sensor

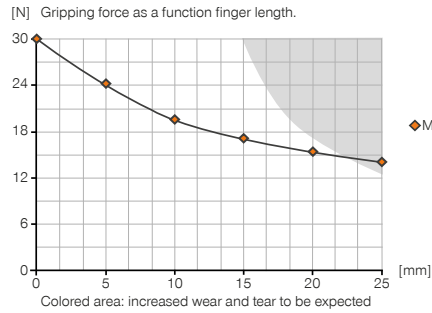
3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE MGD801

▶ PRODUCT SPECIFICATIONS

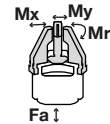


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	2
Mx [Nm]	2
My [Nm]	4
Fa [N]	58

▶ INCLUDED IN DELIVERY



Centering Disc

DST80200

▶ RECOMMENDED ACCESSORIES



Angled Fittings - Barb Style Connection

WVM3



Straight Fittings - Barb Style Connection

GVM3



Quick Exhaust Valve

DEV04

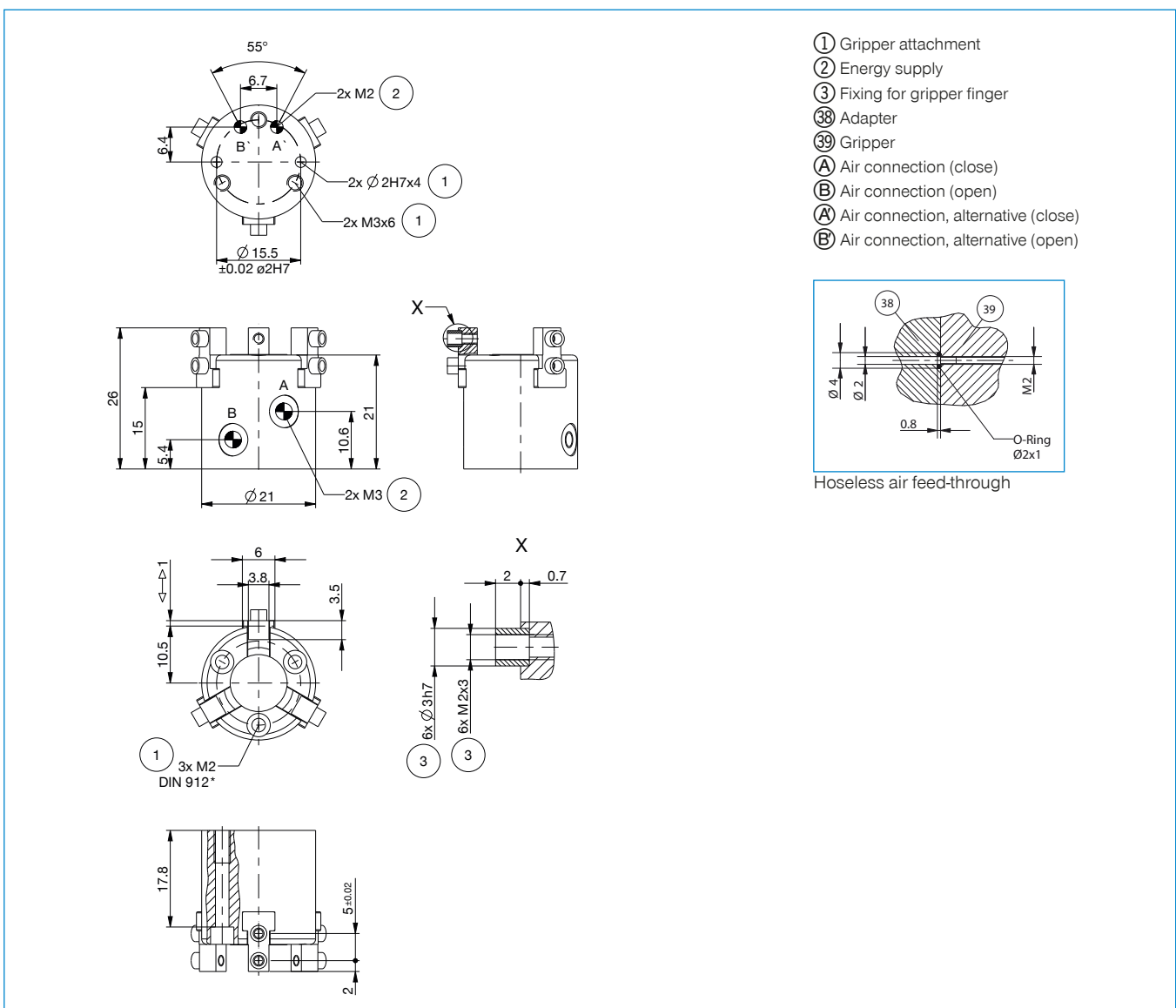


Pressure Safety Valve

DSV1-8

Order no.	MGD801N
Stroke per jaw [mm]	1
Gripping force in closing [N]	30
Gripping force in opening [N]	34
Closing time [s]	0.01
Opening time [s]	0.01
Repetition accuracy +/- [mm]	0.02
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	0.2
Weight [kg]	0.025

* All data measured at 6 bar



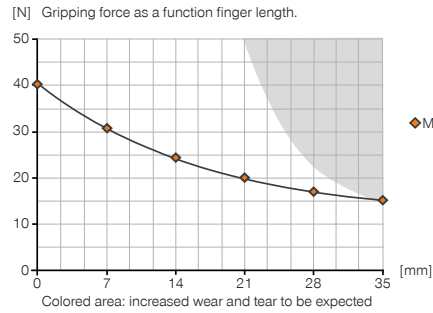
3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE MGD802

▶ PRODUCT SPECIFICATIONS

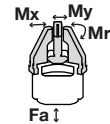


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	4
Mx [Nm]	4
My [Nm]	6
Fa [N]	100

▶ INCLUDED IN DELIVERY



Centering Disc

DST80200

▶ RECOMMENDED ACCESSORIES



Angled Fittings - Barb Style Connection

WVM3



Straight Fittings - Barb Style Connection

GVM3



Quick Exhaust Valve

DEV04

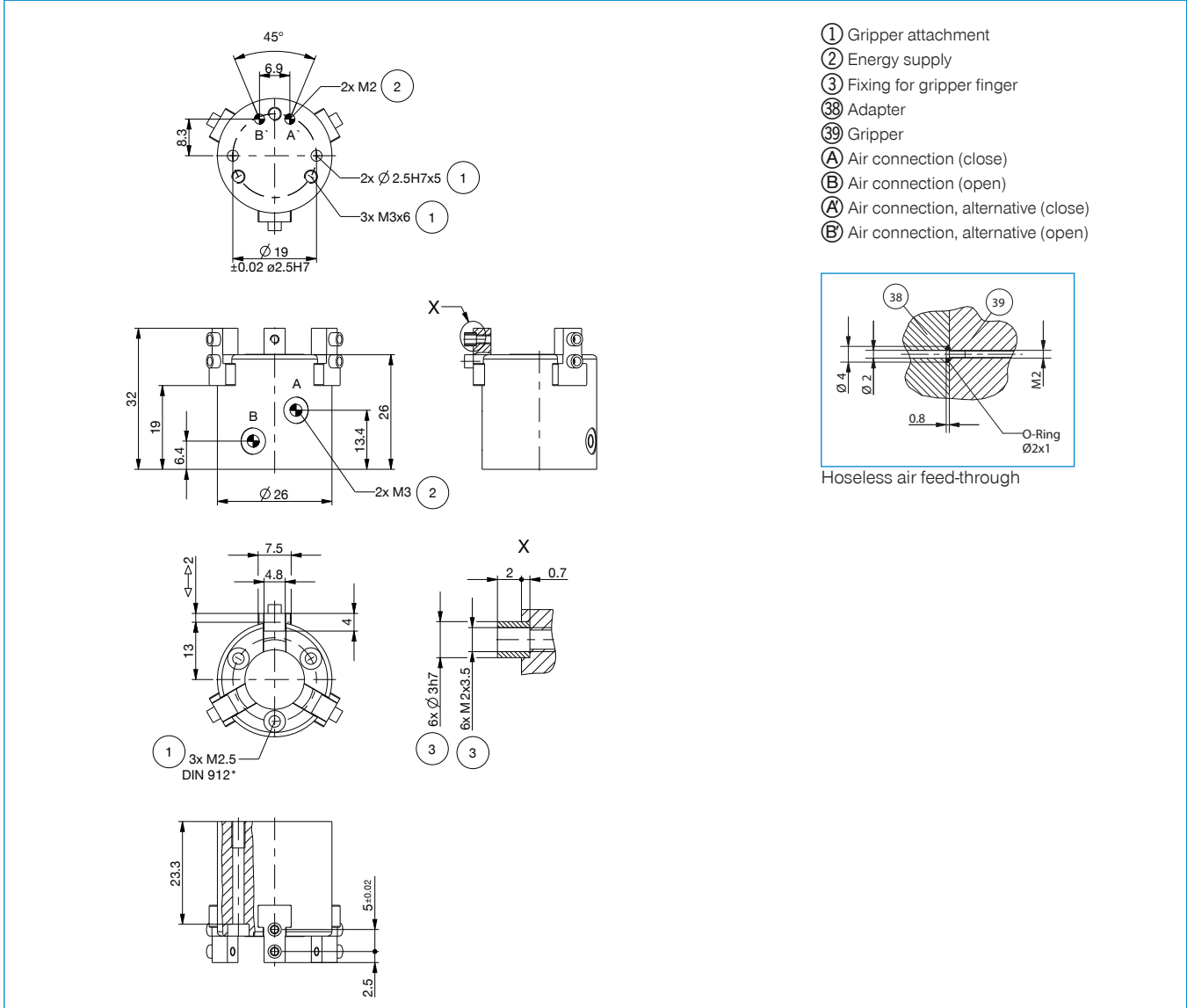


Pressure Safety Valve

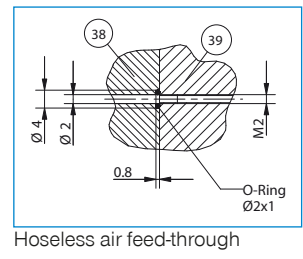
DSV1-8

Order no.	MGD802N
Stroke per jaw [mm]	2
Gripping force in closing [N]	40
Gripping force in opening [N]	45
Closing time [s]	0.02
Opening time [s]	0.02
Repetition accuracy +/- [mm]	0.02
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	0.3
Weight [kg]	0.05

*All data measured at 6 bar



- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ③⑧ Adapter
- ③⑨ Gripper
- A Air connection (close)
- B Air connection (open)
- A Air connection, alternative (close)
- B Air connection, alternative (open)



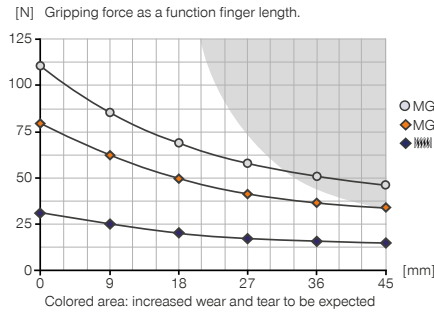
3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE MGD803

1 PRODUCT SPECIFICATIONS

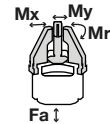


Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	5
Mx [Nm]	5
My [Nm]	8
Fa [N]	155

INCLUDED IN DELIVERY



Centering Disc

DST80320

RECOMMENDED ACCESSORIES



Magnetic field sensor
Angled Cable 5 m

MFS103KHC



Magnetic field sensor
Angled Cable 0,3 m -
Connector M8

MFS103SKHC



Magnetic field sensor
Straight Cable 5 m

MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8

MFS204SKHC



Angled Fittings - Barb
Style Connection

WVM3



Straight Fittings - Barb
Style Connection

GVM3



Quick Exhaust Valve

DEV04

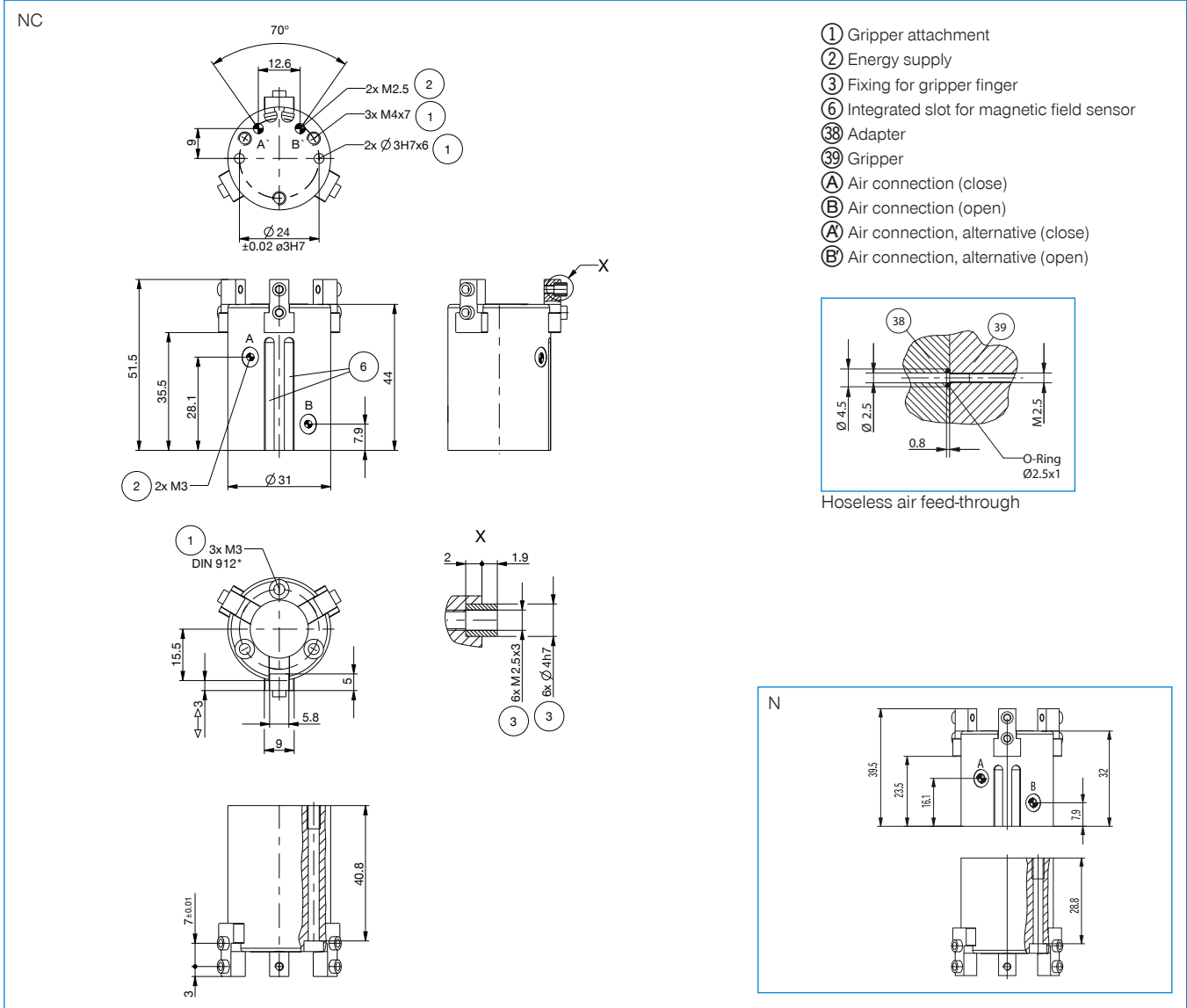


Pressure Safety Valve

DSV1-8

Order no.	► Technical Data*	
	MGD803N	MGD803NC
Stroke per jaw [mm]	3	3
Gripping force in closing [N]	78	110
Gripping force in opening [N]	87	-
Gripping force secured by spring min. [N]	-	32
Closing time [s]	0.02	0.02
Opening time [s]	0.02	0.03
Repetition accuracy +/- [mm]	0.02	0.02
Operating pressure min. [bar]	3	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm ³]	1.5	2.4
Weight [kg]	0.08	0.115

*All data measured at 6 bar



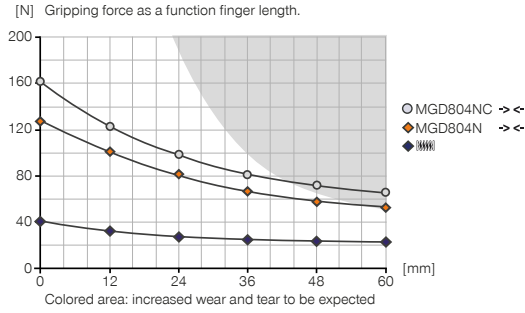
3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE MGD804

▶ PRODUCT SPECIFICATIONS

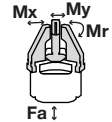


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	8
Mx [Nm]	8
My [Nm]	12
Fa [N]	250

▶ INCLUDED IN DELIVERY



Centering Disc

DST06510

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Angled Cable 5 m

MFS103KHC



Magnetic field sensor
Angled Cable 0,3 m -
Connector M8

MFS103SKHC



Magnetic field sensor
Straight Cable 5 m

MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8

MFS204SKHC



Angled Fittings - Barb
Style Connection

WVM3



Straight Fittings - Barb
Style Connection

GVM3



Quick Exhaust Valve

DEV04

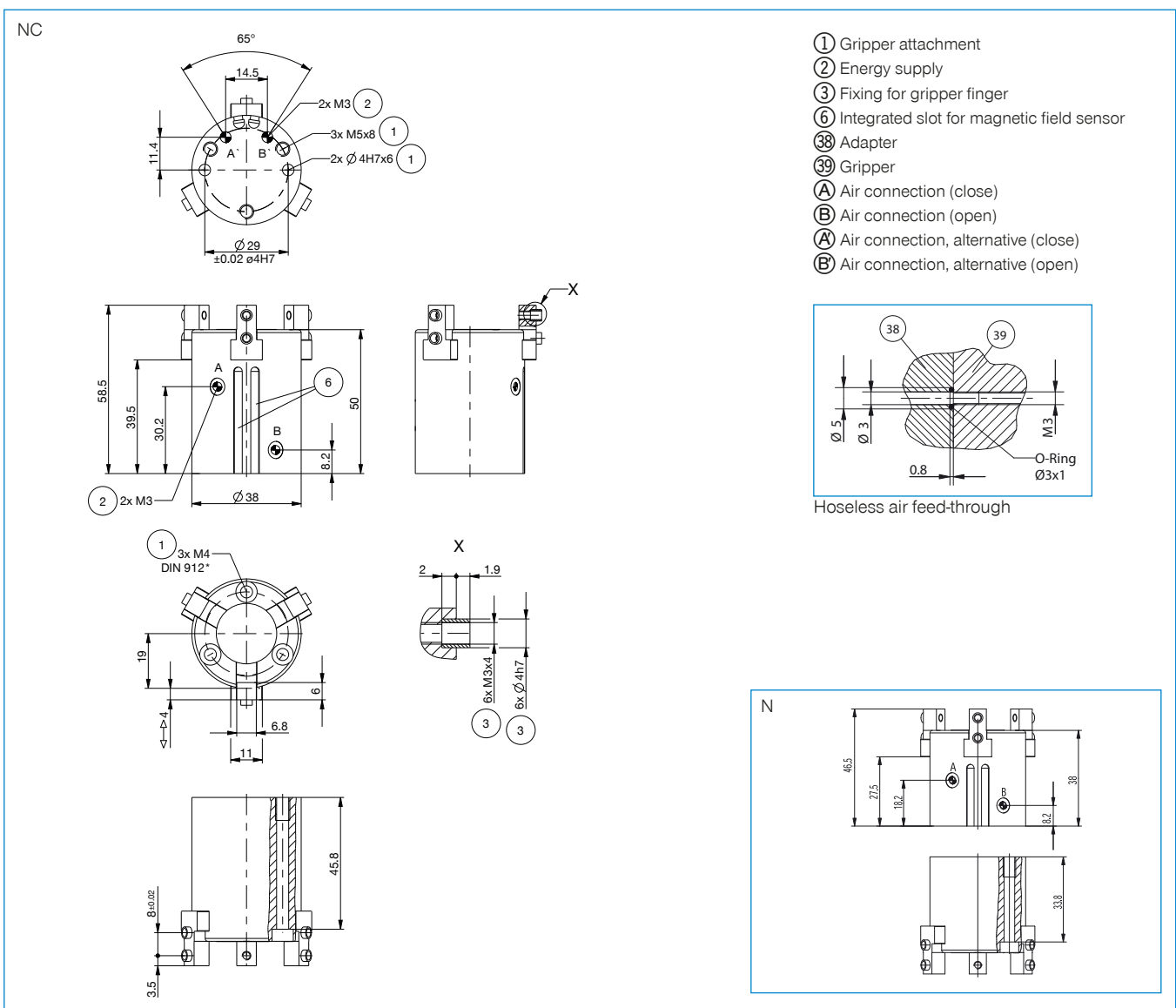


Pressure Safety Valve

DSV1-8

Order no.	► Technical Data*	
	MGD804N	MGD804NC
Stroke per jaw [mm]	4	4
Gripping force in closing [N]	125	160
Gripping force in opening [N]	140	-
Gripping force secured by spring min. [N]	-	35
Closing time [s]	0.02	0.02
Opening time [s]	0.02	0.03
Repetition accuracy +/- [mm]	0.02	0.02
Operating pressure min. [bar]	3	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm ³]	2.9	4.5
Weight [kg]	0.14	0.18

*All data measured at 6 bar



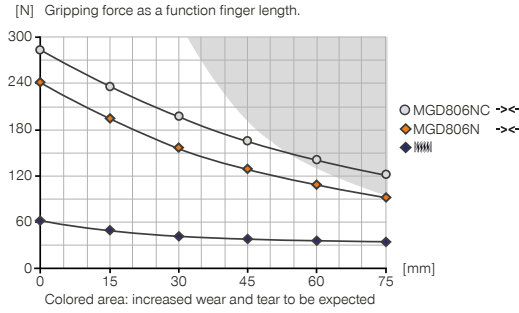
3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE MGD806

1 PRODUCT SPECIFICATIONS

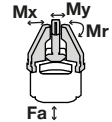


Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	12
Mx [Nm]	12
My [Nm]	18
Fa [N]	420

INCLUDED IN DELIVERY



Centering Disc

DST40400

RECOMMENDED ACCESSORIES



Magnetic field sensor
Angled Cable 5 m

MFS103KHC



Magnetic field sensor
Angled Cable 0,3 m -
Connector M8

MFS103SKHC



Magnetic field sensor
Straight Cable 5 m

MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8

MFS204SKHC



Straight Fittings - Quick
Connect Style

GVM5



Quick Exhaust Valve

DEV04



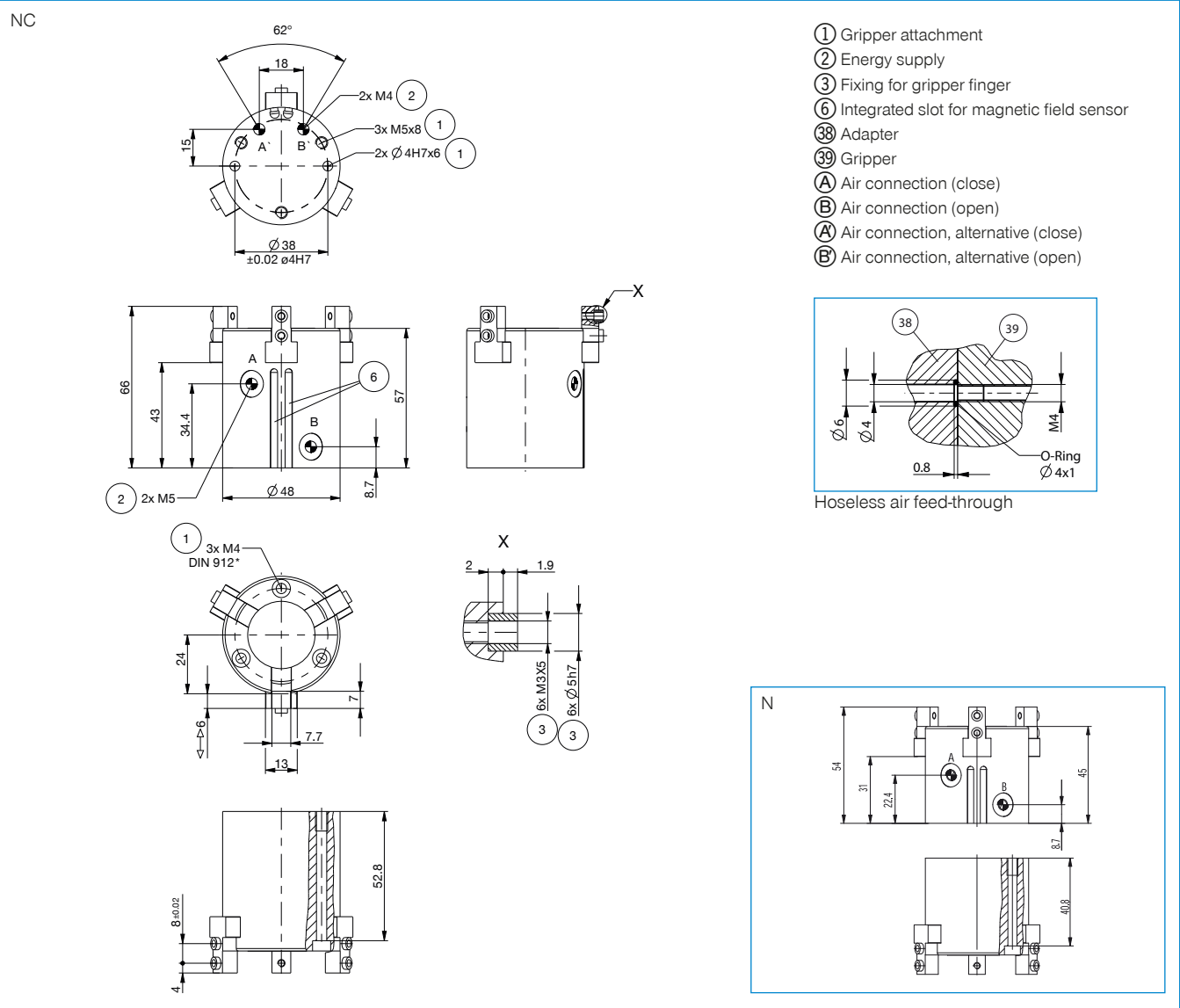
Pressure Safety Valve

DSV1-8

► Technical Data*

Order no.	MGD806N	MGD806NC
Stroke per jaw [mm]	6	6
Gripping force in closing [N]	240	295
Gripping force in opening [N]	265	-
Gripping force secured by spring min. [N]	-	55
Closing time [s]	0.04	0.04
Opening time [s]	0.04	0.06
Repetition accuracy +/- [mm]	0.02	0.02
Operating pressure min. [bar]	3	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm³]	8	11
Weight [kg]	0.26	0.35

*All data measured at 6 bar



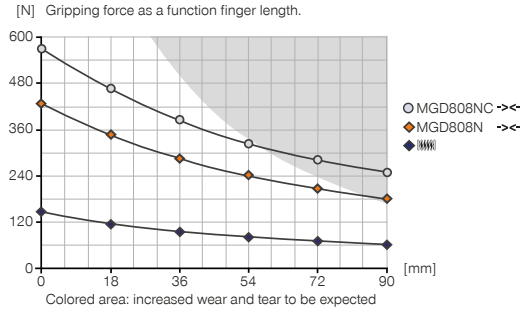
3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE MGD808

1 PRODUCT SPECIFICATIONS

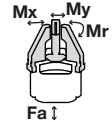


Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	18
Mx [Nm]	19
My [Nm]	29
Fa [N]	660

INCLUDED IN DELIVERY



Centering Disc

DST40600

RECOMMENDED ACCESSORIES



Magnetic field sensor
Angled Cable 5 m

MFS103KHC



Magnetic field sensor
Angled Cable 0,3 m -
Connector M8

MFS103SKHC



Magnetic field sensor
Straight Cable 5 m

MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8

MFS204SKHC



Straight Fittings - Quick
Connect Style

GVM5



Quick Exhaust Valve

DEV04



Pressure Safety Valve

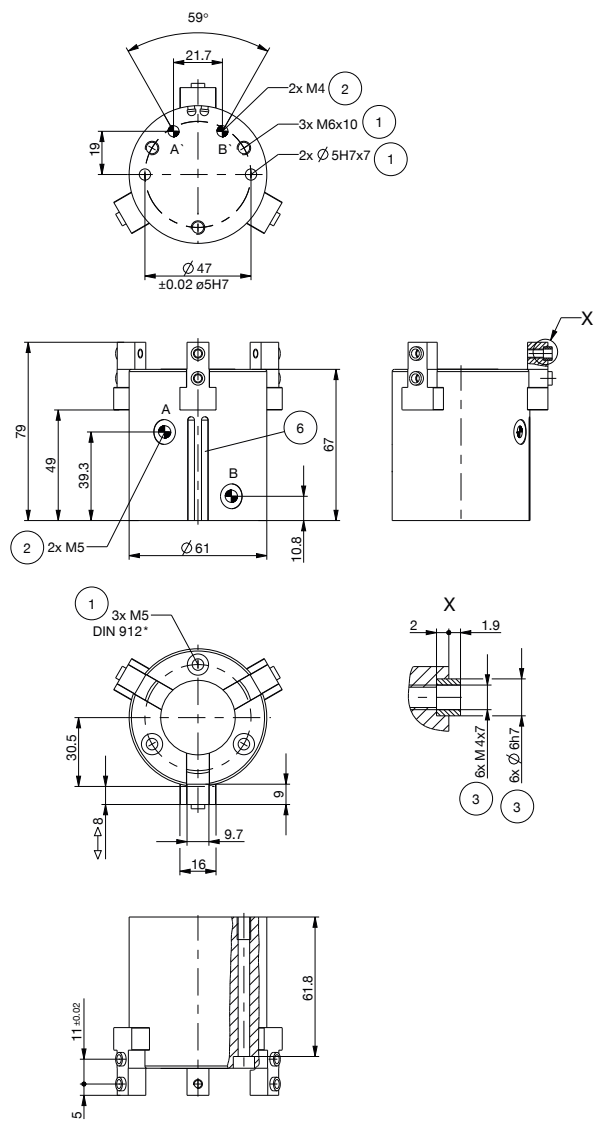
DSV1-8

► Technical Data*

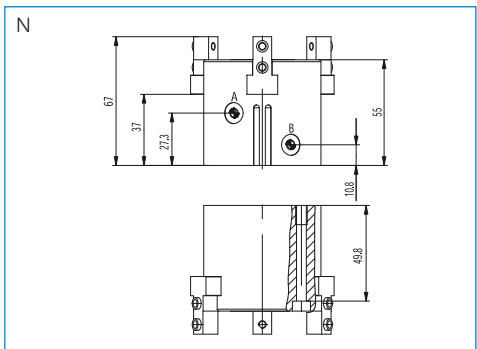
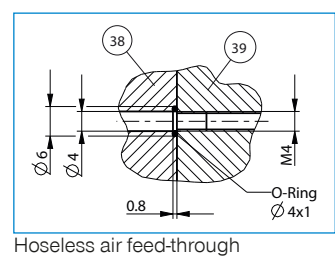
Order no.	MGD808N	MGD808NC
Stroke per jaw [mm]	8	8
Gripping force in closing [N]	415	560
Gripping force in opening [N]	450	-
Gripping force secured by spring min. [N]	-	145
Closing time [s]	0.09	0.08
Opening time [s]	0.09	0.13
Repetition accuracy +/- [mm]	0.02	0.02
Operating pressure min. [bar]	3	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm³]	18	26
Weight [kg]	0.47	0.65

*All data measured at 6 bar

NC



- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑥ Integrated slot for magnetic field sensor
- ③⑧ Adapter
- ③⑨ Gripper
- Ⓐ Air connection (close)
- Ⓑ Air connection (open)
- Ⓐ' Air connection, alternative (close)
- Ⓑ' Air connection, alternative (open)



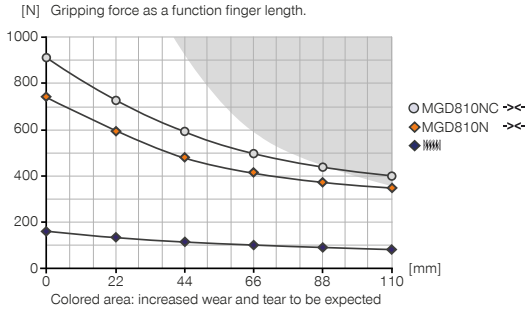
3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE MGD810

1 PRODUCT SPECIFICATIONS

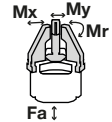


Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	27
Mx [Nm]	29
My [Nm]	43
Fa [N]	960

INCLUDED IN DELIVERY



Centering Disc

DST07540

RECOMMENDED ACCESSORIES



Magnetic field sensor
Angled Cable 5 m

MFS103KHC



Magnetic field sensor
Angled Cable 0,3 m -
Connector M8

MFS103SKHC



Magnetic field sensor
Straight Cable 5 m

MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8

MFS204SKHC



Straight Fittings - Quick
Connect Style

GVM5



Quick Exhaust Valve

DEV04



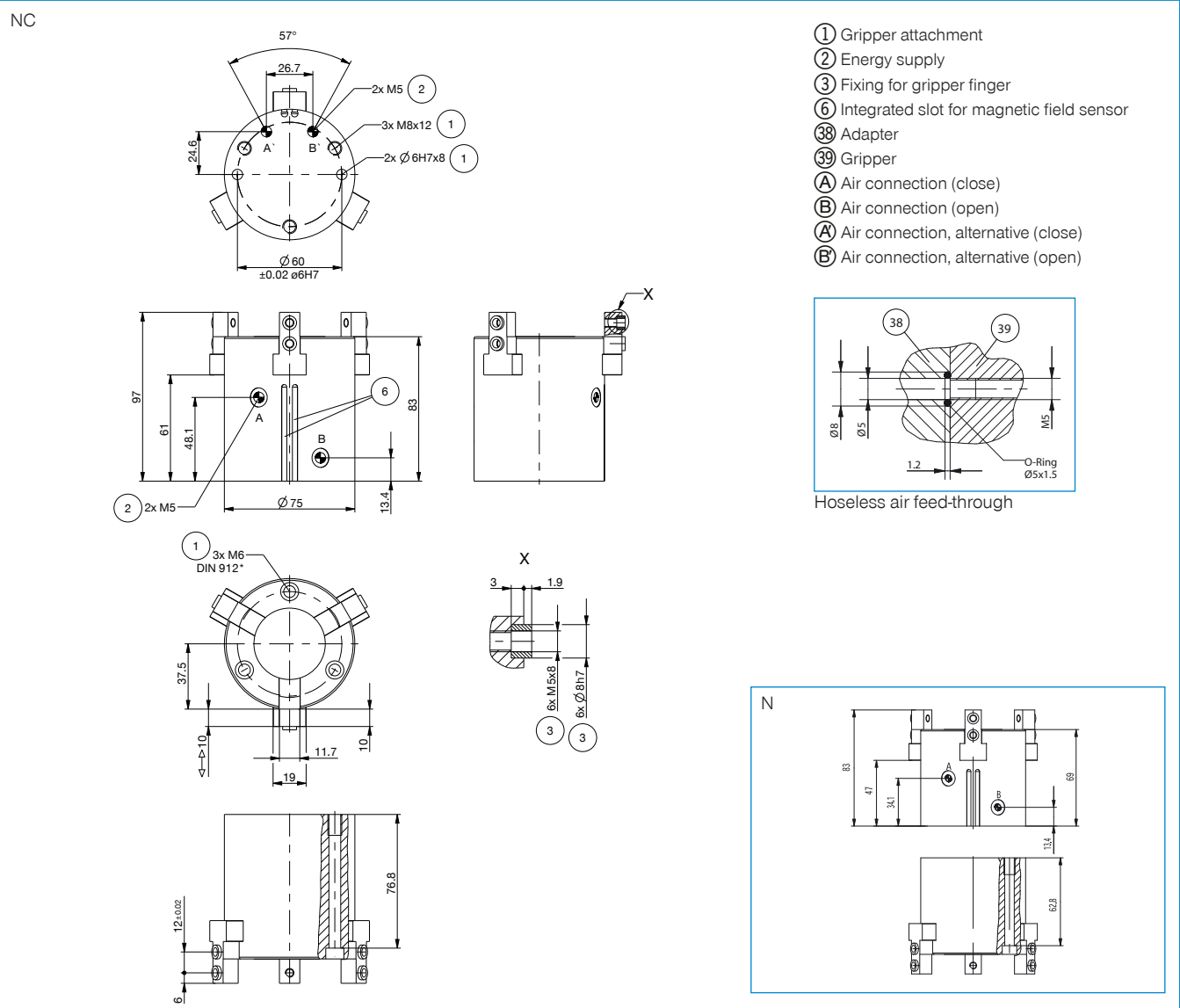
Pressure Safety Valve

DSV1-8

► Technical Data*

Order no.	MGD810N	MGD810NC
Stroke per jaw [mm]	10	10
Gripping force in closing [N]	740	920
Gripping force in opening [N]	790	-
Gripping force secured by spring min. [N]	-	180
Closing time [s]	0.1	0.1
Opening time [s]	0.1	0.15
Repetition accuracy +/- [mm]	0.02	0.02
Operating pressure min. [bar]	3	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm ³]	37	50
Weight [kg]	0.98	1.16

*All data measured at 6 bar



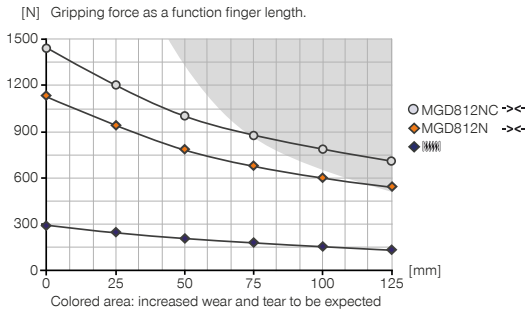
3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE MGD812

1 PRODUCT SPECIFICATIONS

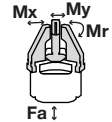


Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	41
Mx [Nm]	45
My [Nm]	65
Fa [N]	1500

INCLUDED IN DELIVERY



Centering Disc

DST41000

RECOMMENDED ACCESSORIES



Magnetic field sensor
Angled Cable 5 m

MFS103KHC



Magnetic field sensor
Angled Cable 0,3 m -
Connector M8

MFS103SKHC



Magnetic field sensor
Straight Cable 5 m

MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8

MFS204SKHC



Straight Fittings - Quick
Connect Style

GV1-8X6



Quick Exhaust Valve

DEV06



Pressure Safety Valve

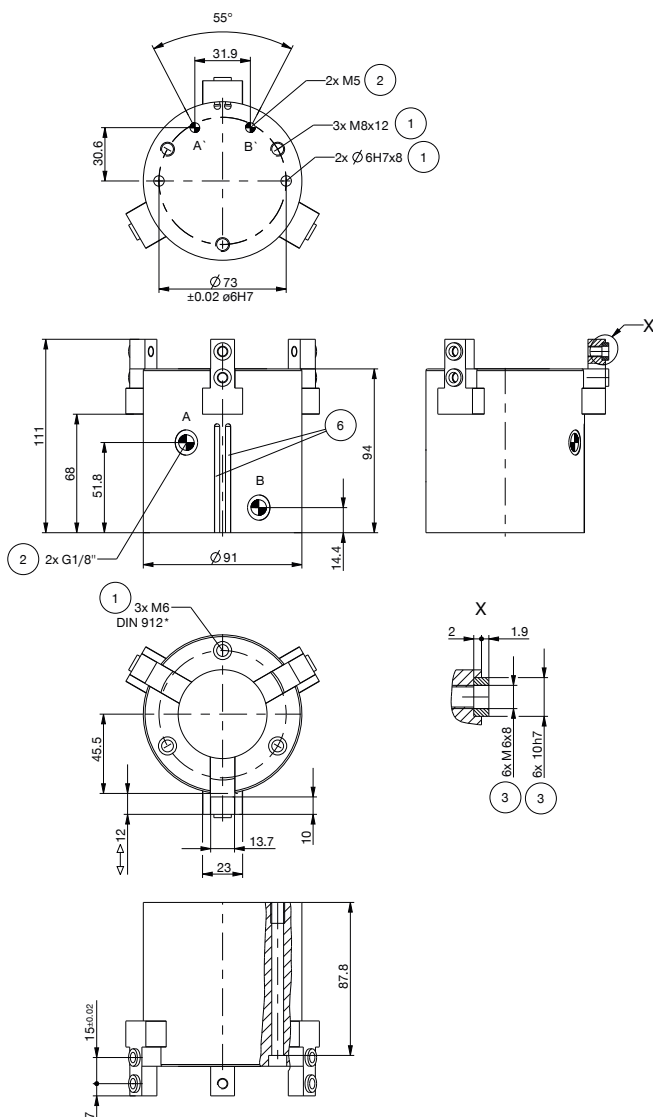
DSV1-8

► Technical Data*

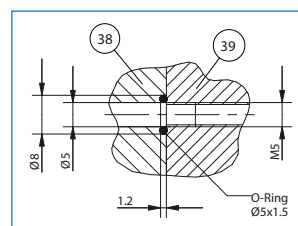
Order no.	MGD812N	MGD812NC
Stroke per jaw [mm]	12	12
Gripping force in closing [N]	1130	1420
Gripping force in opening [N]	1200	-
Gripping force secured by spring min. [N]	-	290
Closing time [s]	0.12	0.12
Opening time [s]	0.12	0.17
Repetition accuracy +/- [mm]	0.02	0.02
Operating pressure min. [bar]	3	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm ³]	69	97
Weight [kg]	1.67	2

*All data measured at 6 bar

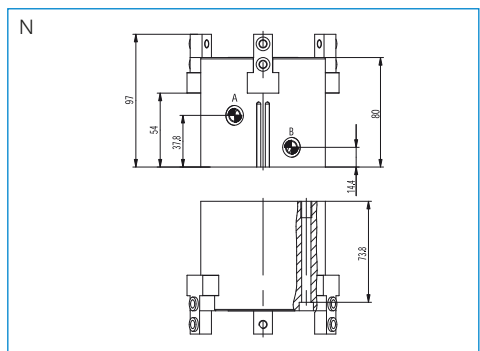
NC



- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑥ Integrated slot for magnetic field sensor
- ⊗ Adapter
- ⊗ Gripper
- Ⓐ Air connection (close)
- Ⓑ Air connection (open)
- Ⓐ Air connection, alternative (close)
- Ⓑ Air connection, alternative (open)



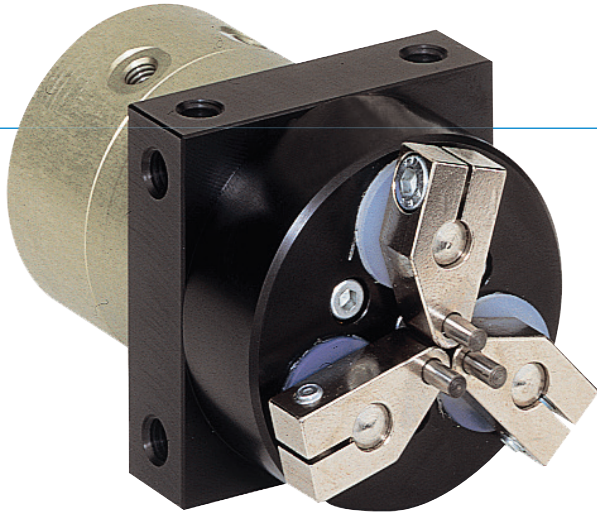
Hoseless air feed-through



3-JAW CONCENTRIC GRIPPERS

SERIES GD

▶ PRODUCT ADVANTAGES



“The flexible”

▶ Largest stroke in small installation space

You can cover numerous application variants with just one gripper type

▶ Gripper jaws included in the delivery

Reduces your design effort, manufacturing costs and setup time

▶ Smooth stroke configuration

Using the optionally available stroke limit, you can customise the stroke to your application, even stroke sensing is possible

▶ THE BEST PRODUCT FOR YOUR APPLICATION



▶ Our products love the challenge!

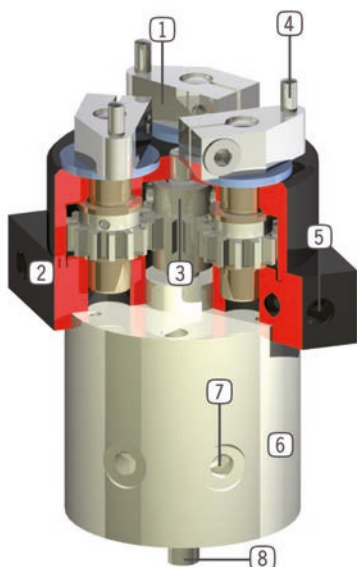
Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities:

Find the best product for your specific use:

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► BENEFITS IN DETAIL



- ① **Gripping movement on rotation**
- for various workpiece diameters
- ② **Robust, lightweight housing**
- hard coated aluminium alloy
- ③ **Planetary transmission**
- synchronized the movement of the gripper jaws
- ④ **Standard pins serve as gripper jaw**
- ⑤ **Mounting and positioning**
- mounting possible from several sides for versatile positioning
- ⑥ **Drive**
- double-acting pneumatic cylinder
- ⑦ **Energy supply**
- possible radial and axial
- ⑧ **Shaft projection**
- for accessory assembly e.g. sensors

► SERIES CHARACTERISTICS



Number of installation sizes	3
Stroke per jaw	120° - 180°
Gripping force	24 N - 530 N
Weight	0,08 kg - 2 kg
AP class	2



10 million maintenance-free cycles (max.)



Inductive sensor



IP40

3-JAW CONCENTRIC GRIPPERS

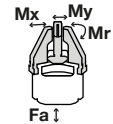
INSTALLATION SIZE GD1

▶ PRODUCT SPECIFICATIONS



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	0.1
Mx [Nm]	0.1
My [Nm]	0.1
Fa [N]	10

▶ RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style
GVM5



Rotation limiter
DB1-B



Inductive proximity switch - Cable 5 m
NJ3-E2-02



Quick Exhaust Valve
DEV04



Pressure Safety Valve
DSV1-8



Plug-in connector customizable Straight - Connector M8
S8-G-3

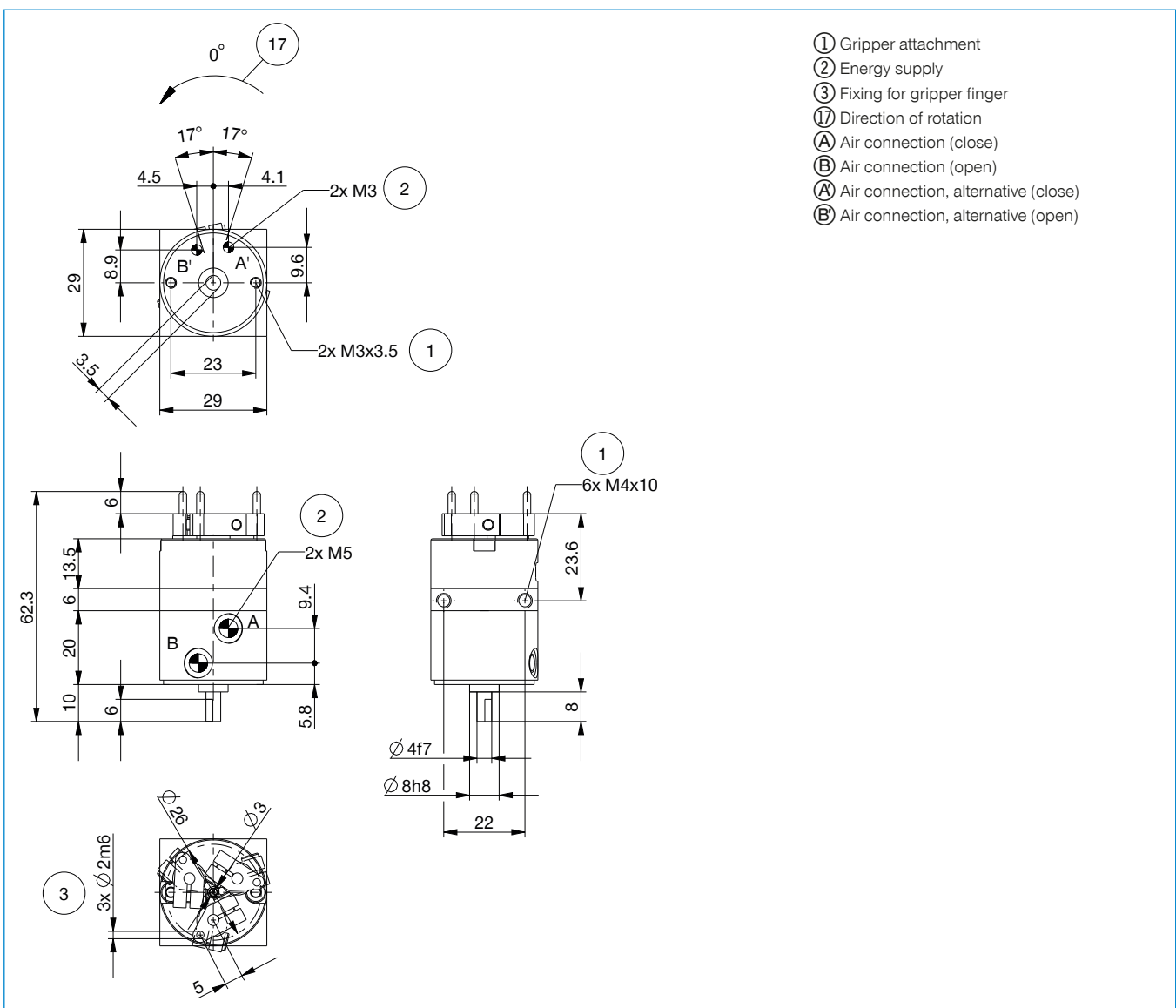


Plug-in connector customizable Straight - Connector M12
S12-G-3

► Technical Data*

Order no.	GD1-B
Stroke per jaw [°]	130
Grip diameter in closing min. [mm]	3
Grip diameter in closing max. [mm]	22
Grip diameter in opening min. [mm]	7
Grip diameter in opening max. [mm]	26
Gripping moment in closing [Nm]	0.12
Gripping moment in opening [Nm]	0.12
Closing time [s]	0.02
Opening time [s]	0.02
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+60
Air volume per cycle [cm³]	2.8
Weight [kg]	0.08

*All data measured at 6 bar



- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- 17 Direction of rotation
- A Air connection (close)
- B Air connection (open)
- A Air connection, alternative (close)
- B Air connection, alternative (open)

3-JAW CONCENTRIC GRIPPERS

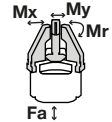
INSTALLATION SIZE GD10

▶ PRODUCT SPECIFICATIONS



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	1
Mx [Nm]	1
My [Nm]	0.5
Fa [N]	30

▶ RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style
GVM5



Rotation limiter
DB10



Inductive proximity switch - Cable 5 m
NJ12-E2



Inductive proximity switch - Connector M8
NJ12-E2S



Stop Stroke Adjustment Screws
AI-M8X1-38



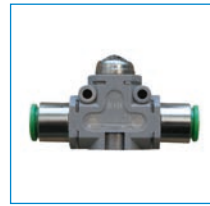
Stop Stroke Adjustment Screws
AI-M8X1-53



Plug-in connector Angled Cable 5m - Socket M8 (female)
KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)
KAG500



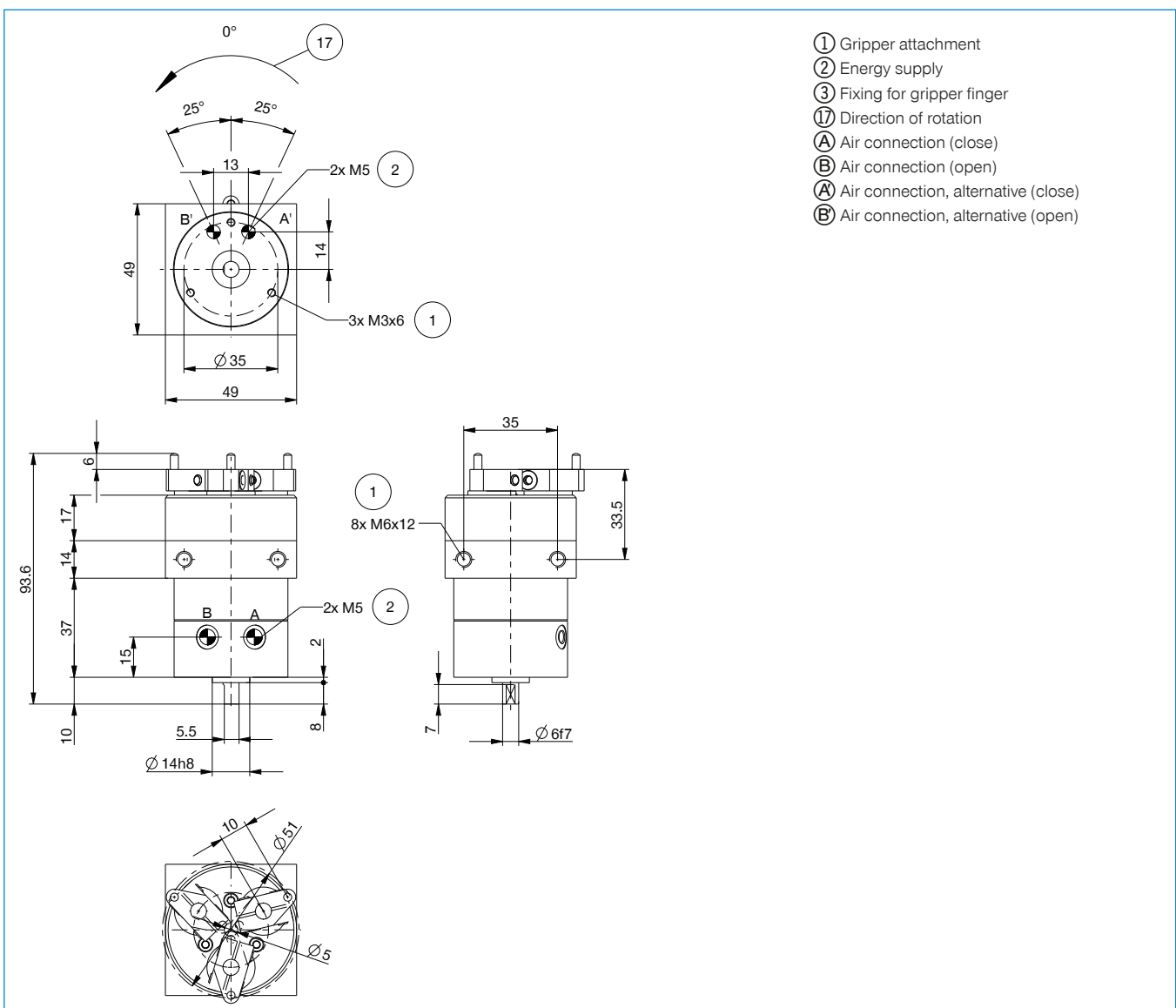
Quick Exhaust Valve
DEV04



Pressure Safety Valve
DSV1-8

Order no.	GD10
Stroke per jaw [°]	180
Grip diameter in closing min. [mm]	5
Grip diameter in closing max. [mm]	45
Grip diameter in opening min. [mm]	11
Grip diameter in opening max. [mm]	51
Gripping moment in closing [Nm]	1
Gripping moment in opening [Nm]	1
Closing time [s]	0.07
Opening time [s]	0.07
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+60
Air volume per cycle [cm ³]	20
Weight [kg]	0.35

*All data measured at 6 bar



- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑰ Direction of rotation
- Ⓐ Air connection (close)
- Ⓑ Air connection (open)
- Ⓐ Air connection, alternative (close)
- Ⓑ Air connection, alternative (open)

3-JAW CONCENTRIC GRIPPERS

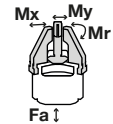
INSTALLATION SIZE GD50

▶ PRODUCT SPECIFICATIONS



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	5
Mx [Nm]	5
My [Nm]	4
Fa [N]	100

▶ RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style
GV1-8X8



Rotation limiter
DB50



Inductive proximity switch - Cable 5 m
NJ12-E2



Inductive proximity switch - Connector M8
NJ12-E2S



Stop Stroke Adjustment Screws
AI-M8X1-38



Stop Stroke Adjustment Screws
AI-M8X1-53



Plug-in connector Angled Cable 5m - Socket M8 (female)
KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)
KAG500



Inquiry for interim position
GF50

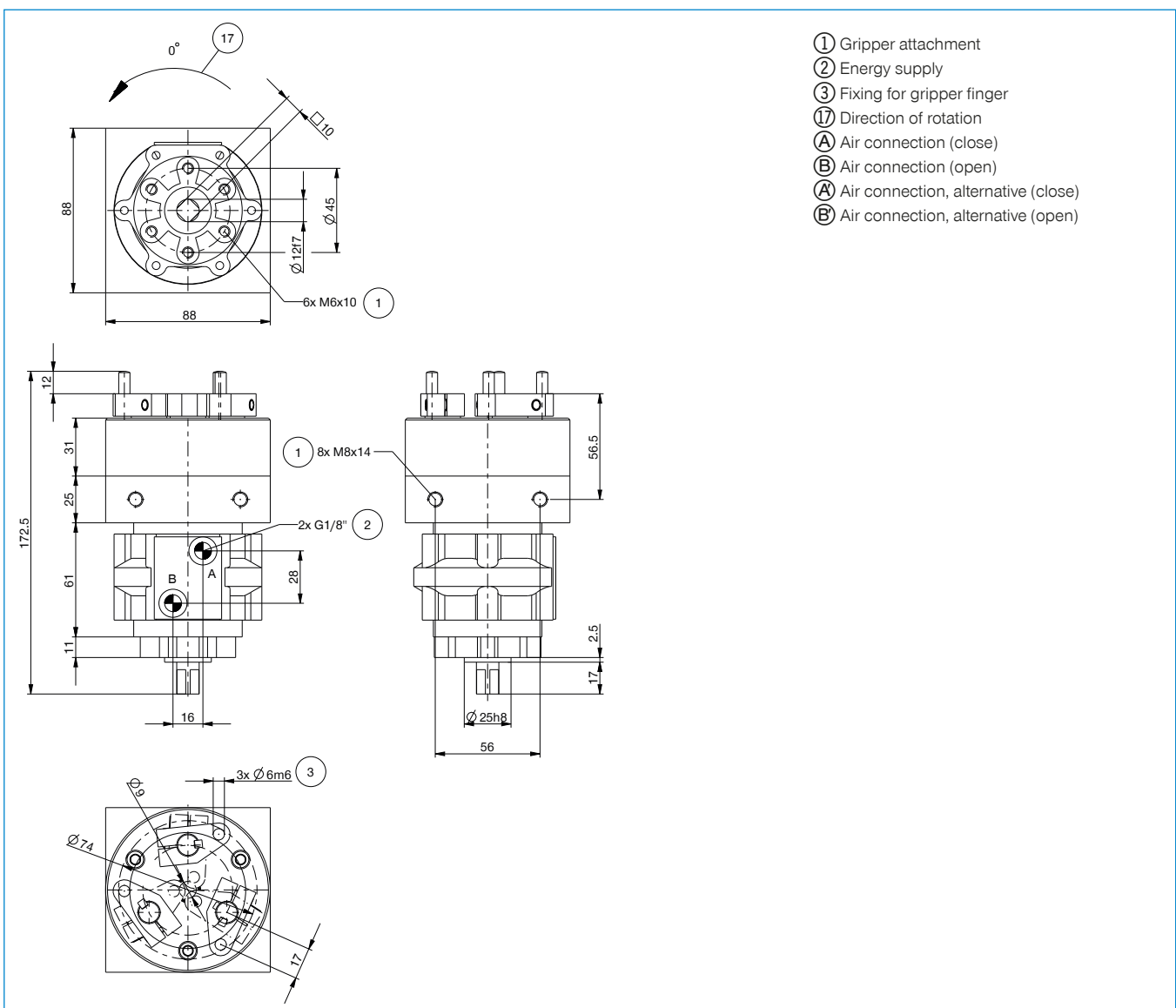


Quick Exhaust Valve
DEV08

► Technical Data*

Order no.	GD50
Stroke per jaw [°]	120
Grip diameter in closing min. [mm]	9
Grip diameter in closing max. [mm]	62
Grip diameter in opening min. [mm]	21
Grip diameter in opening max. [mm]	74
Gripping moment in closing [Nm]	9
Gripping moment in opening [Nm]	9
Closing time [s]	0.09
Opening time [s]	0.09
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+60
Air volume per cycle [cm³]	102
Weight [kg]	2

*All data measured at 6 bar



- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑰ Direction of rotation
- Ⓐ Air connection (close)
- Ⓑ Air connection (open)
- Ⓐ Air connection, alternative (close)
- Ⓑ Air connection, alternative (open)

3-JAW CONCENTRIC GRIPPERS

SERIES GD300

1

Series GD300 / 3-Jaw Concentric Grippers / pneumatic / Grippers

▶ PRODUCT ADVANTAGES



“The economical”

▶ Concentration on the essentials

The most economic type of gripping: This is how you reduce your production costs

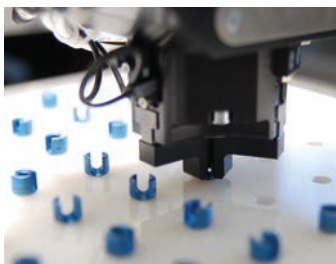
▶ Proven T slot guide

This established and proven guiding technology stands for the highest process reliability like no other

▶ Compact structure

Reduces the interference contours for your application

▶ THE BEST PRODUCT FOR YOUR APPLICATION



▶ Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities:

Find the best product for your specific use:

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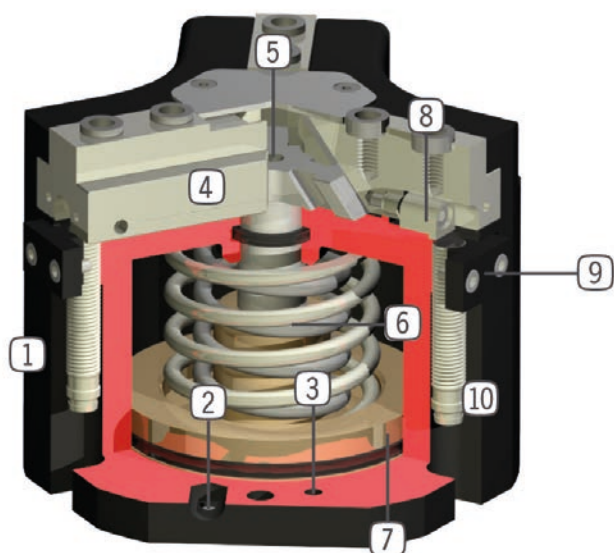
HOW TO ORDER CORRECTLY

▶ The product order numbers are arranged according to this diagram:

Order no.	GD304	<input type="checkbox"/>	<input type="checkbox"/>	-C
Long stroke		N		
High force		S		
For external gripping, self-locking, spring closing			C	
For internal gripping, self-locking, spring opening			O	



► BENEFITS IN DETAIL



- ① **Robust, lightweight housing**
- hard coated aluminium alloy
- ② **Energy supply**
- possible from several sides
- ③ **Mounting and positioning**
- mounting possible from several sides for versatile positioning
- ④ **Gripper jaw**
- individual gripper finger mounting
- ⑤ **Wedge hook mechanism**
- synchronized the movement of the gripper jaws
- high force transfer
- ⑥ **Integrated gripping force safety device**
- spring integrated into cylinder as energy storage
- ⑦ **Position sensing**
- permanent magnet for direct monitoring of piston movement
- ⑧ **Integrated, adjustable switch cam**
- for direct position sensing of the gripper jaw
- ⑨ **Mounting block**
- mounting for inductive proximity switch (10)

► SERIES CHARACTERISTICS



Number of installation sizes	9
Stroke per jaw	3 mm - 30 mm
Gripping force	300 N - 34700 N
Weight	0,16 kg - 24 kg
AP class	3



10 million maintenance-free cycles (max.)



High-strength S



Magnetic field sensor



Spring closing C



Inductive sensor



Purged air



Spring opening O



IP40

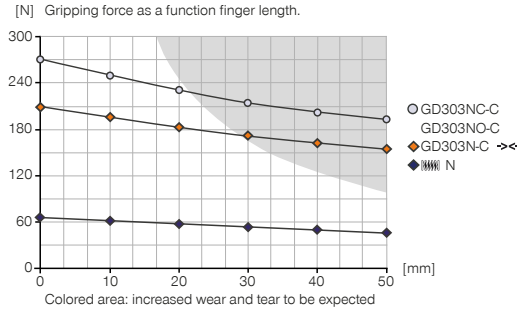
3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GD303

1 PRODUCT SPECIFICATIONS

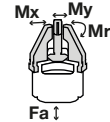


Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	6
Mx [Nm]	9
My [Nm]	12
Fa [N]	500

INCLUDED IN DELIVERY



Mounting block

KB3-07



Centering Disc

DST40400

RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style

GVM5



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Inductive proximity switch - Cable 5 m

NJ3-E2



Inductive Proximity Switch Cable 0,3 m - Connector M8

NJ3-E2SK



Universal Jaw Aluminium

UB303



Universal Jaw Steel

UB303ST



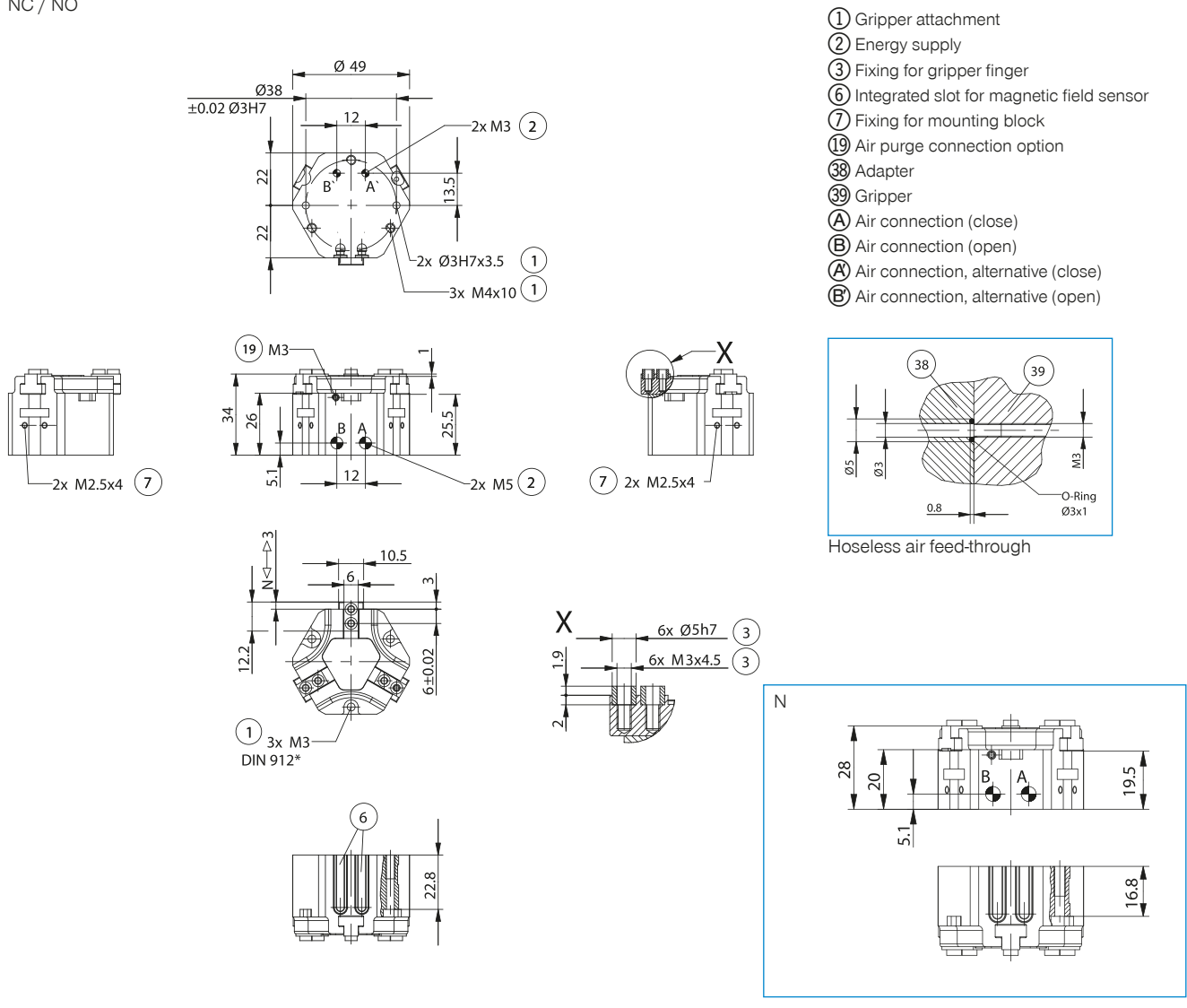
Pressure Safety Valve

DSV1-8

Order no.	Technical Data*		
	GD303N-C	GD303NC-C	GD303NO-C
Stroke per jaw [mm]	3	3	3
Gripping force in closing [N]	200	270	-
Gripping force in opening [N]	230	-	300
Gripping force secured by spring min. [N]	-	70	70
Closing time [s]	0.02	0.02	0.03
Opening time [s]	0.02	0.03	0.02
Repetition accuracy +/- [mm]	0.05	0.05	0.05
Operating pressure min. [bar]	2	4	4
Operating pressure max. [bar]	8	8	8
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	80	80	80
Air volume per cycle [cm³]	3.5	6.7	6.7
Weight [kg]	0.13	0.16	0.16

*All data measured at 6 bar

NC / NO



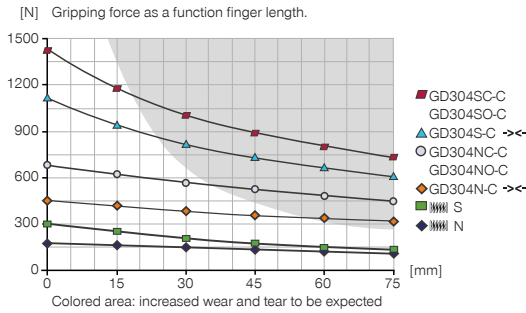
3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GD304

1 PRODUCT SPECIFICATIONS

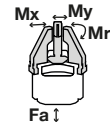


Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	8
Mx [Nm]	15
My [Nm]	15
Fa [N]	700

INCLUDED IN DELIVERY



Mounting block

KB3-08



Centering Disc

DST40400

RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style

GVM5



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Inductive proximity switch - Cable 5 m

NJ3-E2



Inductive Proximity Switch Cable 0,3 m - Connector M8

NJ3-E2SK



Universal Jaw Aluminium

UB304



Universal Jaw Steel

UB304ST

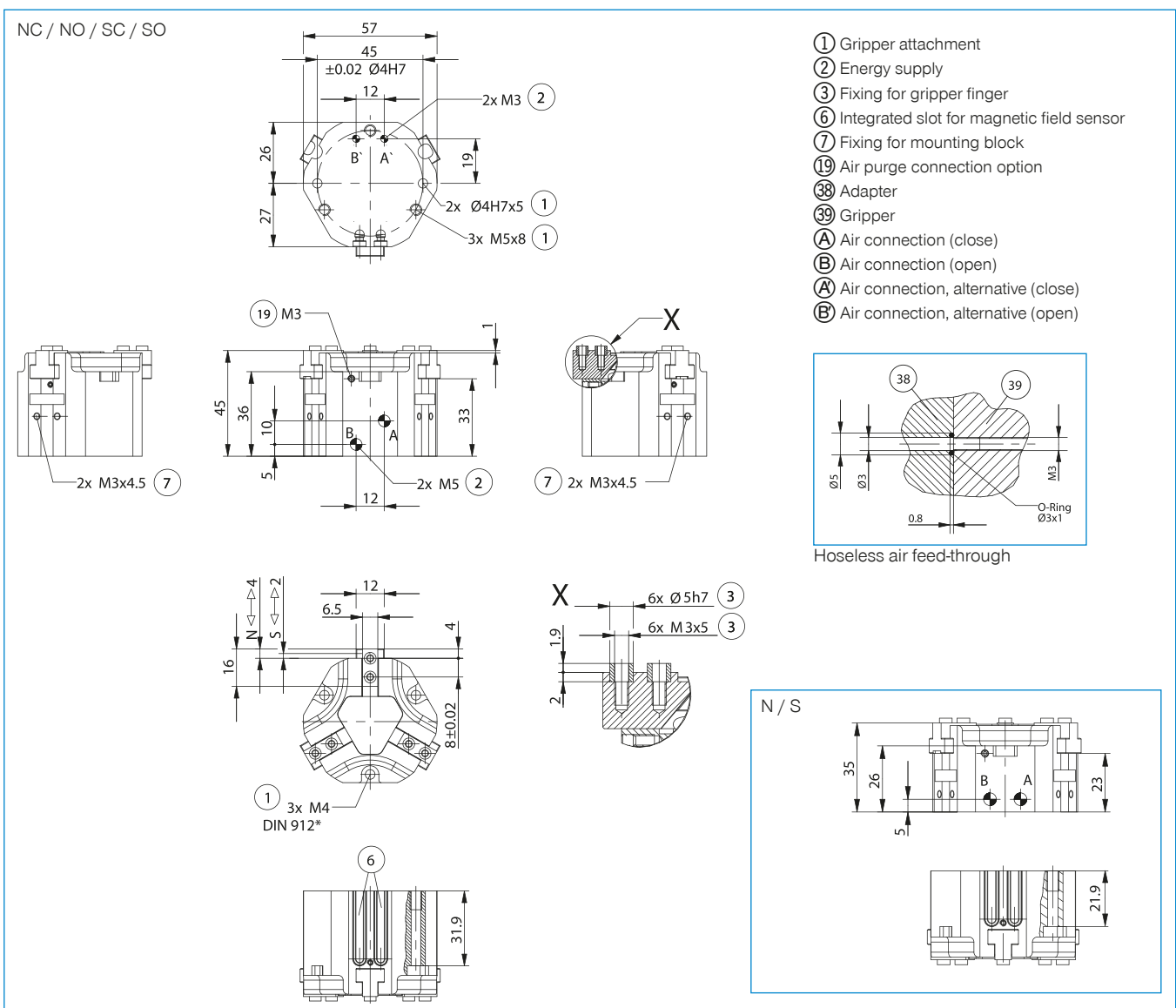


Pressure piece N / S

ADS304N-S

Order no.	Technical Data*					
	GD304N-C	GD304NC-C	GD304NO-C	GD304S-C	GD304SC-C	GD304SO-C
Stroke per jaw [mm]	4	4	4	2	2	2
Gripping force in closing [N]	450	650	-	1000	1400	-
Gripping force in opening [N]	500	-	700	1100	-	1500
Gripping force secured by spring min. [N]	-	200	200	-	400	400
Closing time [s]	0.025	0.02	0.03	0.025	0.02	0.03
Opening time [s]	0.025	0.03	0.02	0.025	0.03	0.02
Repetition accuracy +/- [mm]	0.05	0.05	0.05	0.05	0.05	0.05
Operating pressure min. [bar]	2	4	4	2	4	4
Operating pressure max. [bar]	8	8	8	8	8	8
Operating temperature min. [°C]	5	5	5	5	5	5
Operating temperature max. [°C]	80	80	80	80	80	80
Air volume per cycle [cm³]	9.2	19.2	19.2	9.2	19.2	19.2
Weight [kg]	0.22	0.28	0.28	0.22	0.28	0.28

*All data measured at 6 bar



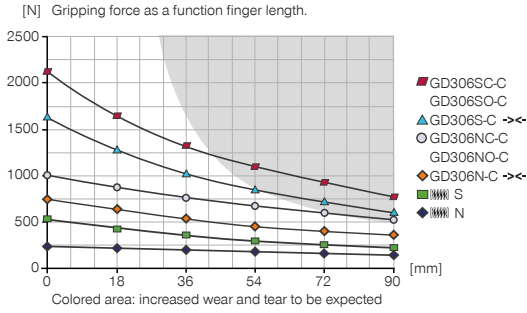
3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GD306

1 PRODUCT SPECIFICATIONS

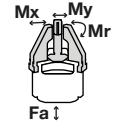


Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	35
Mx [Nm]	50
My [Nm]	45
Fa [N]	1200

INCLUDED IN DELIVERY



Mounting block

KB3-39



Centering Disc

DST40600

RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style

GVM5



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S



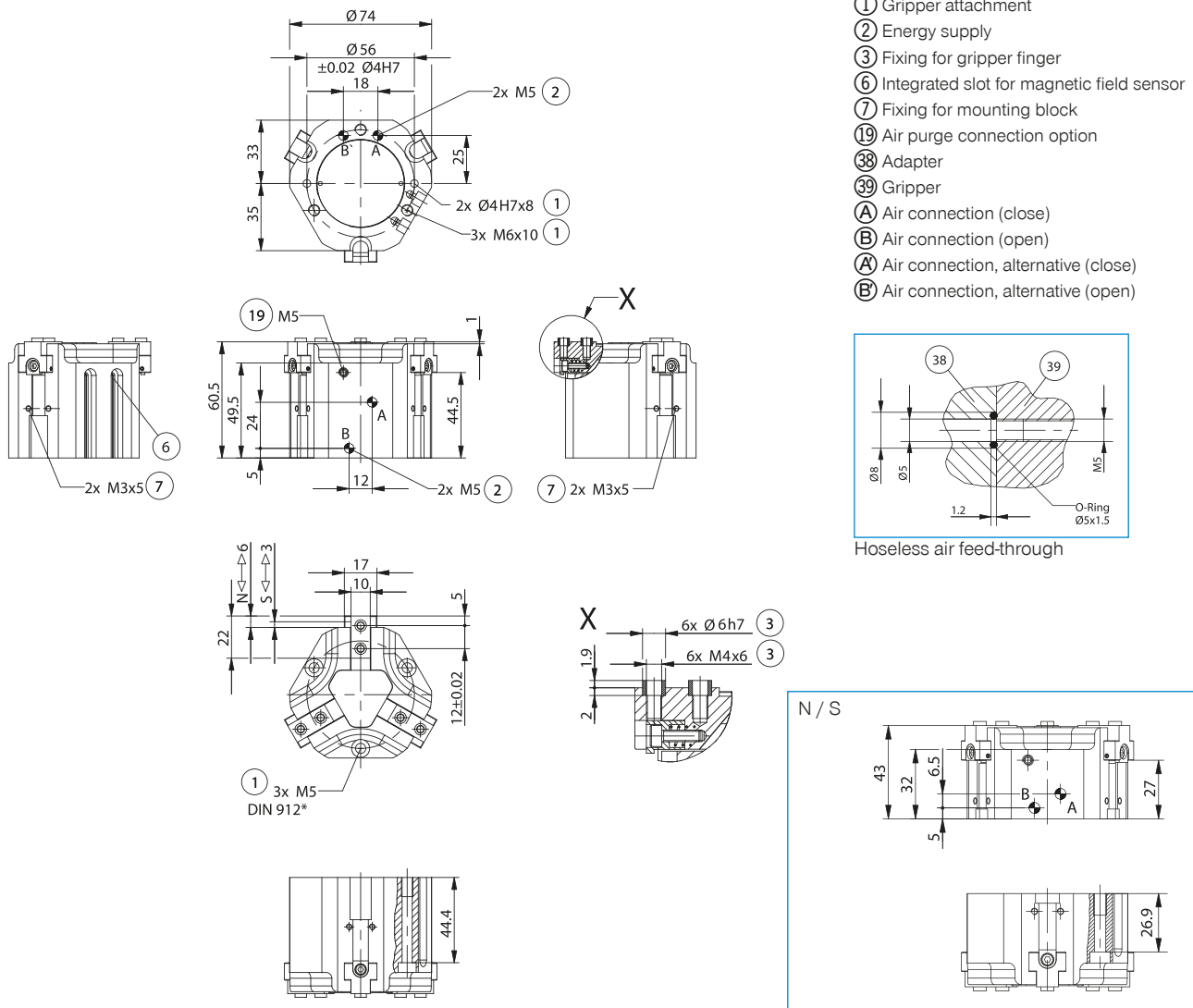
Universal Jaw Aluminium

UB306

Order no.	Technical Data*					
	GD306N-C	GD306NC-C	GD306NO-C	GD306S-C	GD306SC-C	GD306SO-C
Stroke per jaw [mm]	6	6	6	3	3	3
Gripping force in closing [N]	750	1000	-	1600	2150	-
Gripping force in opening [N]	800	-	1050	1750	-	2300
Gripping force secured by spring min. [N]	-	250	250	-	550	550
Closing time [s]	0.03	0.03	0.05	0.03	0.03	0.05
Opening time [s]	0.03	0.05	0.03	0.03	0.05	0.03
Repetition accuracy +/- [mm]	0.05	0.05	0.05	0.05	0.05	0.05
Operating pressure min. [bar]	2	4	4	2	4	4
Operating pressure max. [bar]	8	8	8	8	8	8
Operating temperature min. [°C]	5	5	5	5	5	5
Operating temperature max. [°C]	80	80	80	80	80	80
Air volume per cycle [cm³]	21.5	48	48	21.5	48	48
Weight [kg]	0.5	0.65	0.65	0.5	0.65	0.65

*All data measured at 6 bar

NC / NO / SC / SO



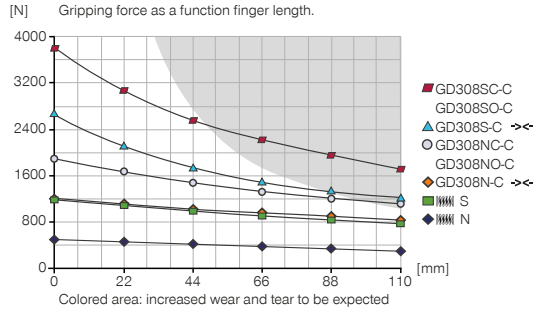
3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GD308

▶ PRODUCT SPECIFICATIONS

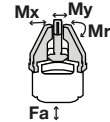


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	50
Mx [Nm]	80
My [Nm]	60
Fa [N]	1800

▶ INCLUDED IN DELIVERY



Mounting block

KB8-30



Centering Disc

BDST40800

▶ RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style

GV1-8X6



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S



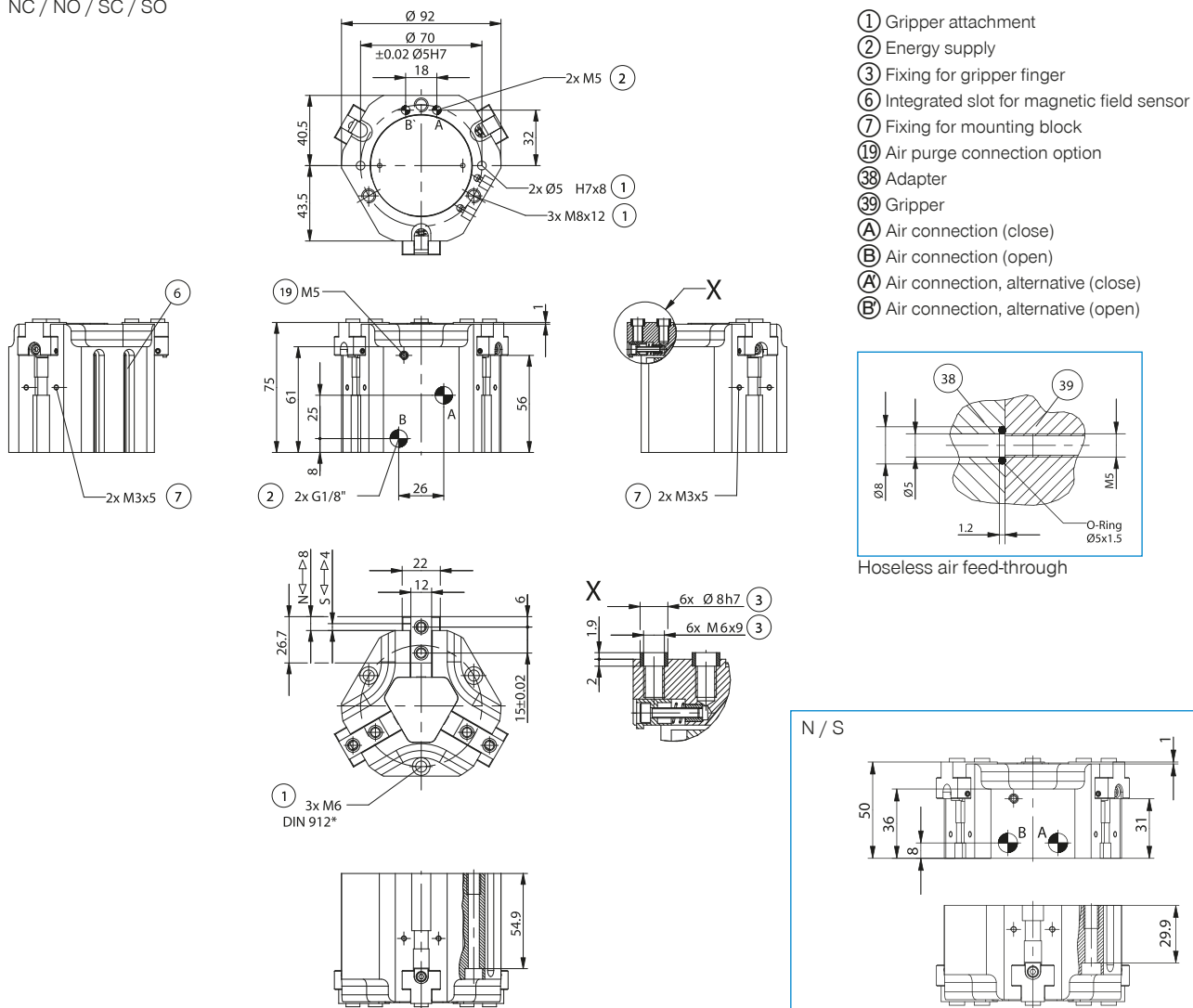
Universal Jaw Aluminium

UB308

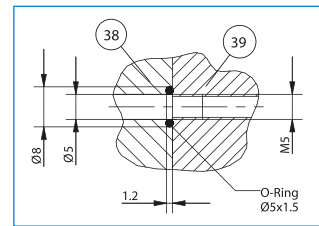
Order no.	Technical Data*					
	GD308N-C	GD308NC-C	GD308NO-C	GD308S-C	GD308SC-C	GD308SO-C
Stroke per jaw [mm]	8	8	8	4	4	4
Gripping force in closing [N]	1200	1800	-	2600	3800	-
Gripping force in opening [N]	1300	-	1900	2800	-	4000
Gripping force secured by spring min. [N]	-	600	600	-	1200	1200
Closing time [s]	0.05	0.03	0.06	0.05	0.03	0.06
Opening time [s]	0.05	0.06	0.03	0.05	0.06	0.03
Repetition accuracy +/- [mm]	0.05	0.05	0.05	0.05	0.05	0.05
Operating pressure min. [bar]	2	4	4	2	4	4
Operating pressure max. [bar]	8	8	8	8	8	8
Operating temperature min. [°C]	5	5	5	5	5	5
Operating temperature max. [°C]	80	80	80	80	80	80
Air volume per cycle [cm³]	47	108	108	47	108	108
Weight [kg]	0.85	1.2	1.2	0.85	1.2	1.2

*All data measured at 6 bar

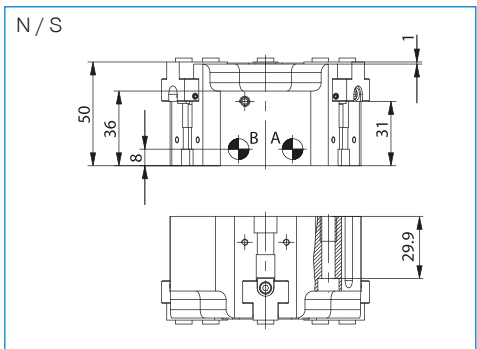
NC / NO / SC / SO



- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑥ Integrated slot for magnetic field sensor
- ⑦ Fixing for mounting block
- ⑰ Air purge connection option
- ⑳ Adapter
- ㉔ Gripper
- Ⓐ Air connection (close)
- Ⓑ Air connection (open)
- Ⓐ Air connection, alternative (close)
- Ⓑ Air connection, alternative (open)



Hoseless air feed-through



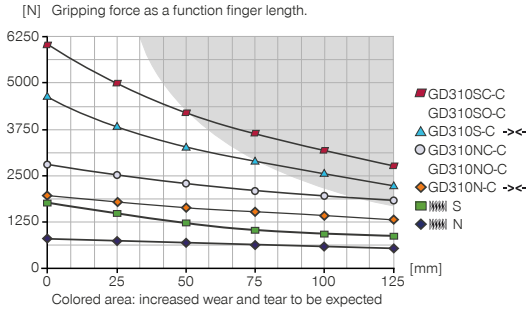
3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GD310

1 PRODUCT SPECIFICATIONS

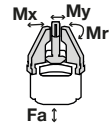


Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	75
Mx [Nm]	100
My [Nm]	90
Fa [N]	2500

INCLUDED IN DELIVERY



Mounting block

KB8-31



Centering Disc

DST41000

RECOMMENDED ACCESSORIES



Alternate proximity bracket

KHA310-B-8



Straight Fittings - Quick Connect Style

GV1-8X6



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Inductive proximity switch - Cable 5 m

NJ8-E2

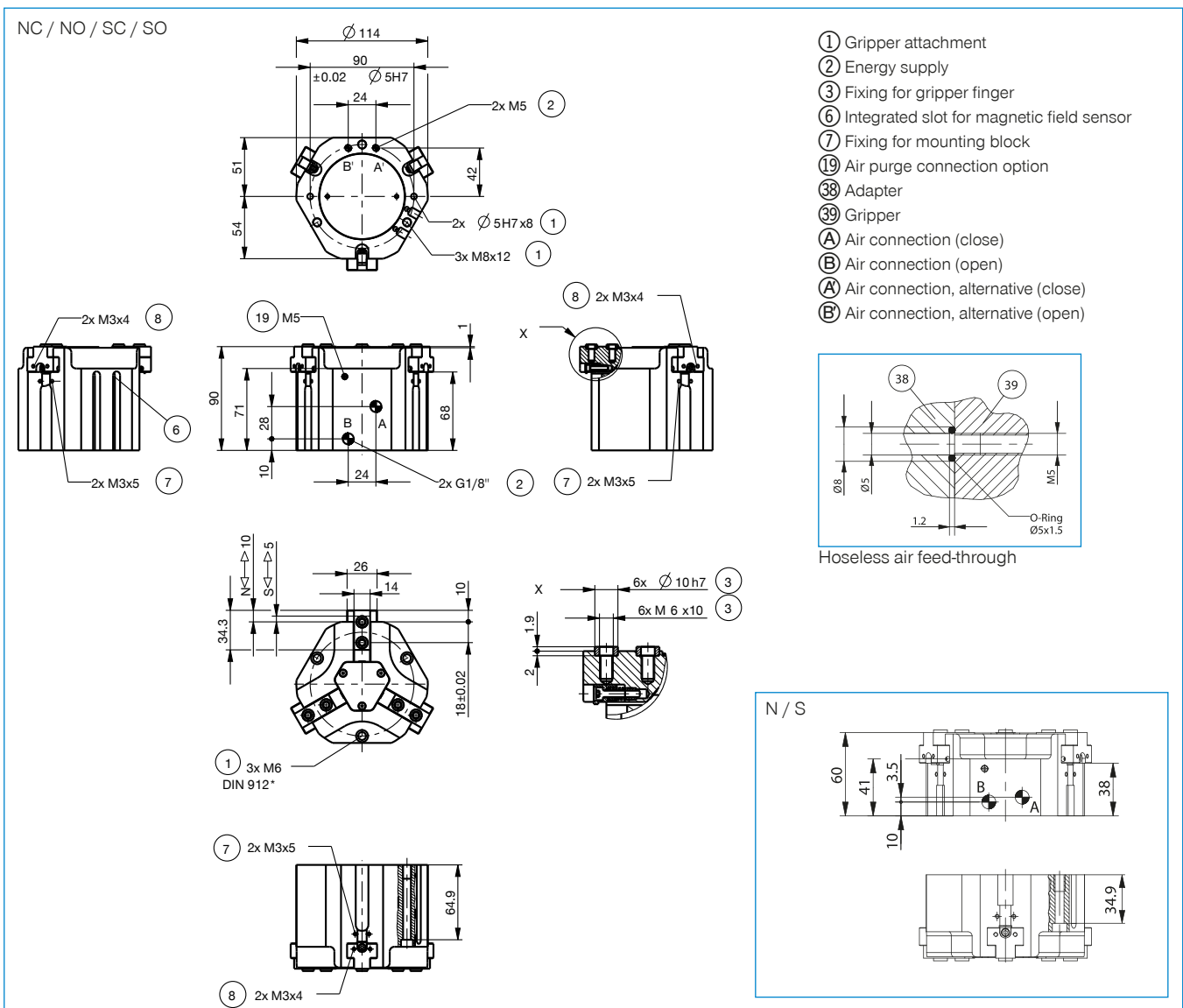


Inductive proximity switch - Connector M8

NJ8-E2S

Order no.	Technical Data*					
	GD310N-C	GD310NC-C	GD310NO-C	GD310S-C	GD310SC-C	GD310SO-C
Stroke per jaw [mm]	10	10	10	5	5	5
Gripping force in closing [N]	2000	2800	-	4400	6200	-
Gripping force in opening [N]	2100	-	2900	4600	-	6400
Gripping force secured by spring min. [N]	-	800	800	-	1800	1800
Closing time [s]	0.1	0.07	0.2	0.1	0.07	0.2
Opening time [s]	0.1	0.2	0.07	0.1	0.2	0.07
Repetition accuracy +/- [mm]	0.05	0.05	0.05	0.05	0.05	0.05
Operating pressure min. [bar]	2	4	4	2	4	4
Operating pressure max. [bar]	8	8	8	8	8	8
Operating temperature min. [°C]	5	5	5	5	5	5
Operating temperature max. [°C]	80	80	80	80	80	80
Air volume per cycle [cm³]	100	220	220	100	220	220
Weight [kg]	1.6	2.2	2.2	1.6	2.2	2.2

*All data measured at 6 bar



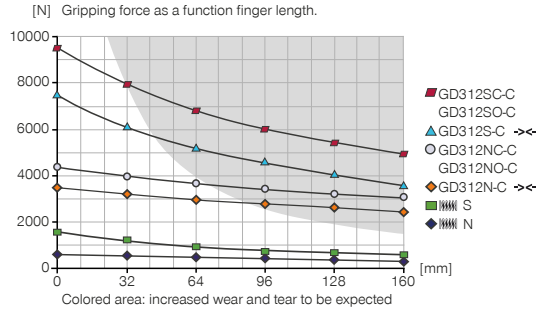
3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GD312

1 PRODUCT SPECIFICATIONS

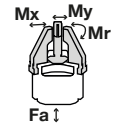


Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	100
Mx [Nm]	120
My [Nm]	120
Fa [N]	3200

INCLUDED IN DELIVERY



Mounting block

KB8-32



Centering Disc

DST41000

RECOMMENDED ACCESSORIES



Alternate proximity bracket

KHA312-B-8



Straight Fittings - Quick Connect Style

GV1-8X6



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Inductive proximity switch - Cable 5 m

NJ8-E2



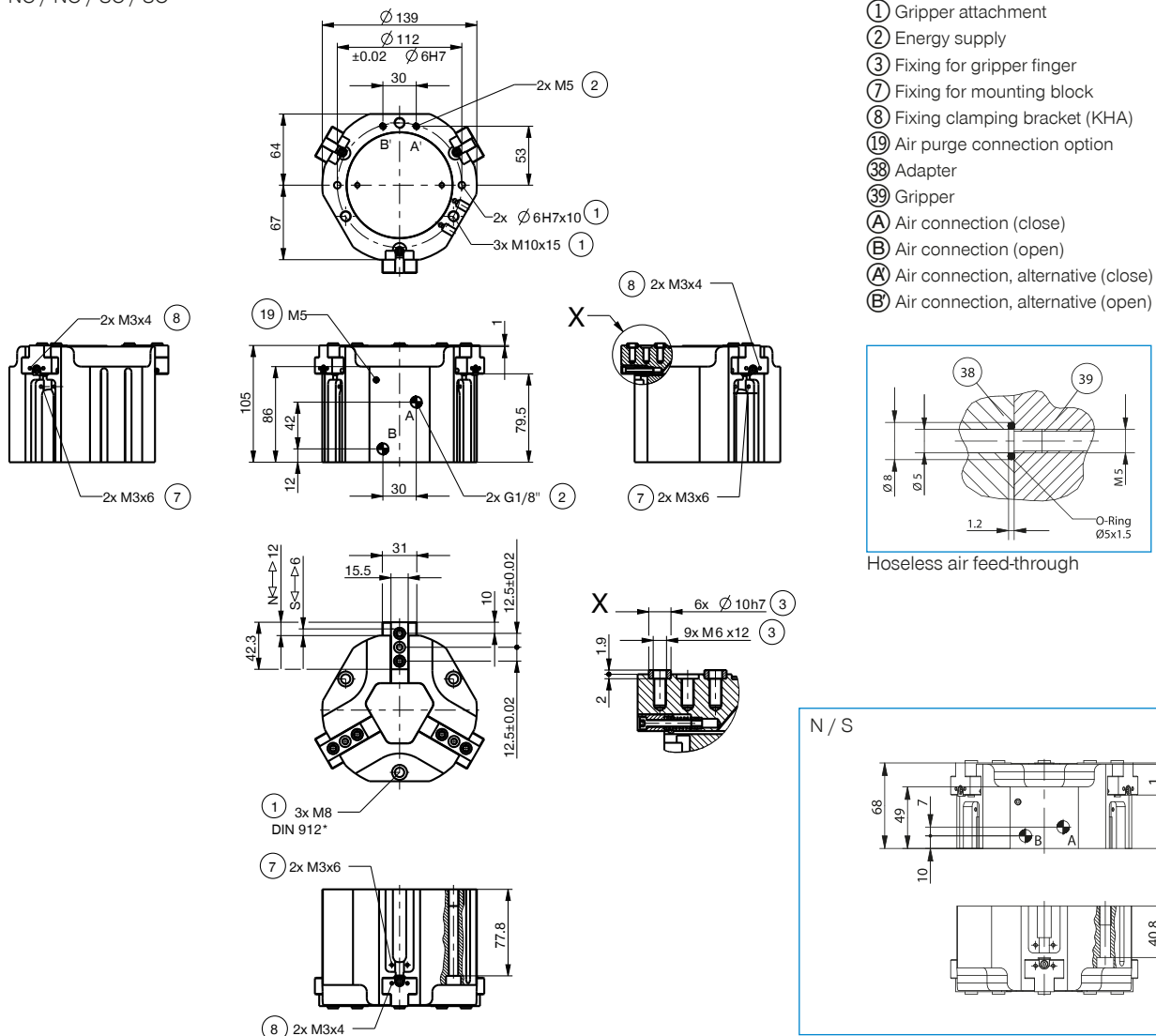
Inductive proximity switch - Connector M8

NJ8-E2S

Order no.	► Technical Data*					
	GD312N-C	GD312NC-C	GD312NO-C	GD312S-C	GD312SC-C	GD312SO-C
Stroke per jaw [mm]	12	12	12	6	6	6
Gripping force in closing [N]	3500	4150	-	7600	9000	-
Gripping force in opening [N]	3600	-	4250	7850	-	9250
Gripping force secured by spring min. [N]	-	650	650	-	1400	1400
Closing time [s]	0.2	0.15	0.35	0.2	0.15	0.35
Opening time [s]	0.2	0.35	0.15	0.2	0.35	0.15
Repetition accuracy +/- [mm]	0.05	0.05	0.05	0.05	0.05	0.05
Operating pressure min. [bar]	2	4	4	2	4	4
Operating pressure max. [bar]	8	8	8	8	8	8
Operating temperature min. [°C]	5	5	5	5	5	5
Operating temperature max. [°C]	80	80	80	80	80	80
Air volume per cycle [cm³]	190	420	420	190	420	420
Weight [kg]	2.7	3.8	3.8	2.7	3.8	3.8

*All data measured at 6 bar

NC / NO / SC / SO



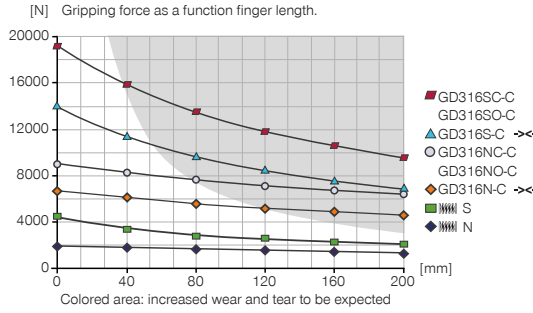
3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GD316

▶ PRODUCT SPECIFICATIONS

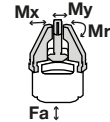


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	140
Mx [Nm]	160
My [Nm]	180
Fa [N]	5000

▶ INCLUDED IN DELIVERY



Mounting block

KB8-33



Centering Disc

DST41600

▶ RECOMMENDED ACCESSORIES



Alternate proximity bracket

KHA316-B-8



Straight Fittings - Quick Connect Style

GV1-8X6



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Inductive proximity switch - Cable 5 m

NJ8-E2



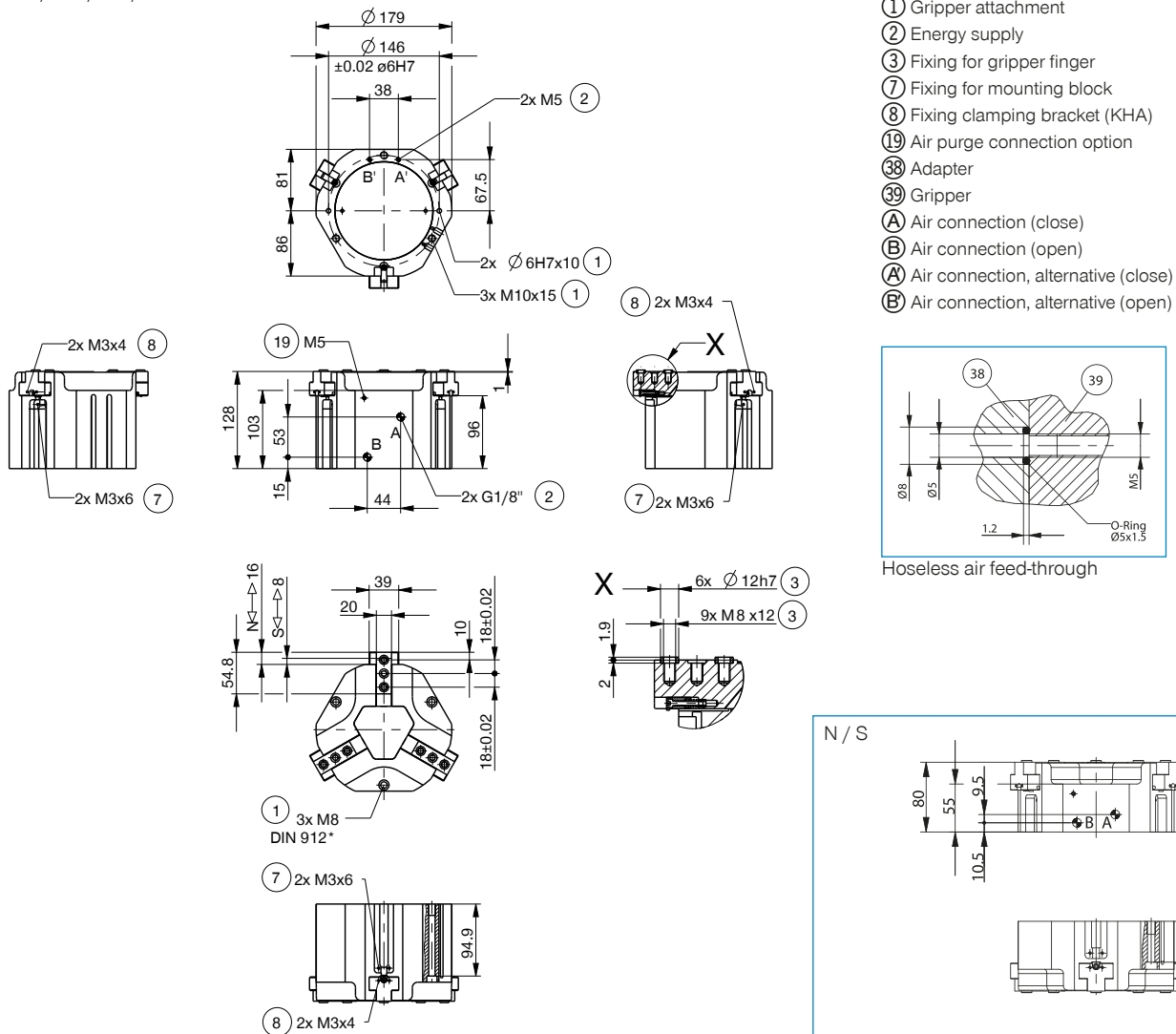
Inductive proximity switch - Connector M8

NJ8-E2S

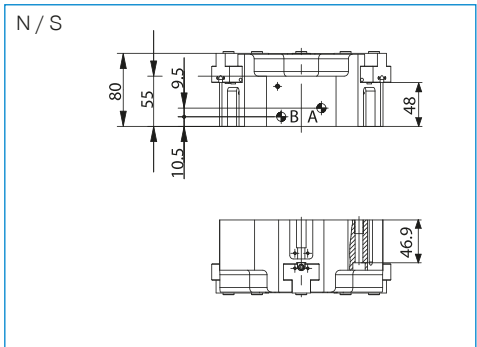
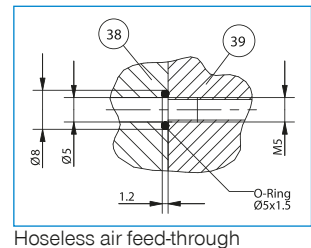
Order no.	Technical Data*					
	GD316N-C	GD316NC-C	GD316NO-C	GD316S-C	GD316SC-C	GD316SO-C
Stroke per jaw [mm]	16	16	16	8	8	8
Gripping force in closing [N]	6500	8600	-	14000	18700	-
Gripping force in opening [N]	6600	-	8700	14400	-	19100
Gripping force secured by spring min. [N]	-	2100	2100	-	4700	4700
Closing time [s]	0.25	0.2	0.4	0.25	0.2	0.4
Opening time [s]	0.25	0.4	0.2	0.25	0.4	0.2
Repetition accuracy +/- [mm]	0.05	0.05	0.05	0.05	0.05	0.05
Operating pressure min. [bar]	2	4	4	2	4	4
Operating pressure max. [bar]	8	8	8	8	8	8
Operating temperature min. [°C]	5	5	5	5	5	5
Operating temperature max. [°C]	80	80	80	80	80	80
Air volume per cycle [cm³]	470	960	960	470	960	960
Weight [kg]	5.1	8	8	5.1	8	8

*All data measured at 6 bar

NC / NO / SC / SO



- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑦ Fixing for mounting block
- ⑧ Fixing clamping bracket (KHA)
- ⑨ Air purge connection option
- ⑩ Adapter
- ⑪ Gripper
- A Air connection (close)
- B Air connection (open)
- A Air connection, alternative (close)
- B Air connection, alternative (open)



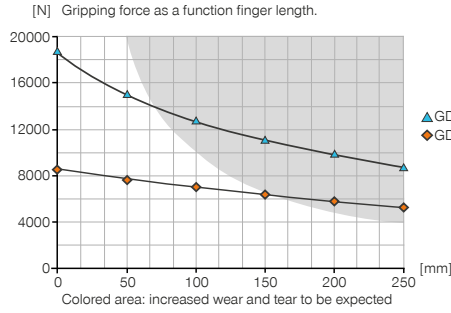
3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GD320

1 PRODUCT SPECIFICATIONS

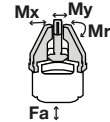


Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	170
Mx [Nm]	180
My [Nm]	220
Fa [N]	7000

INCLUDED IN DELIVERY



Mounting block

KB8-34



Centering Disc

DST42000

RECOMMENDED ACCESSORIES



Alternate proximity bracket

KHA320-B-8



Straight Fittings - Quick Connect Style

GV1-4X8



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Inductive proximity switch - Cable 5 m

NJ8-E2



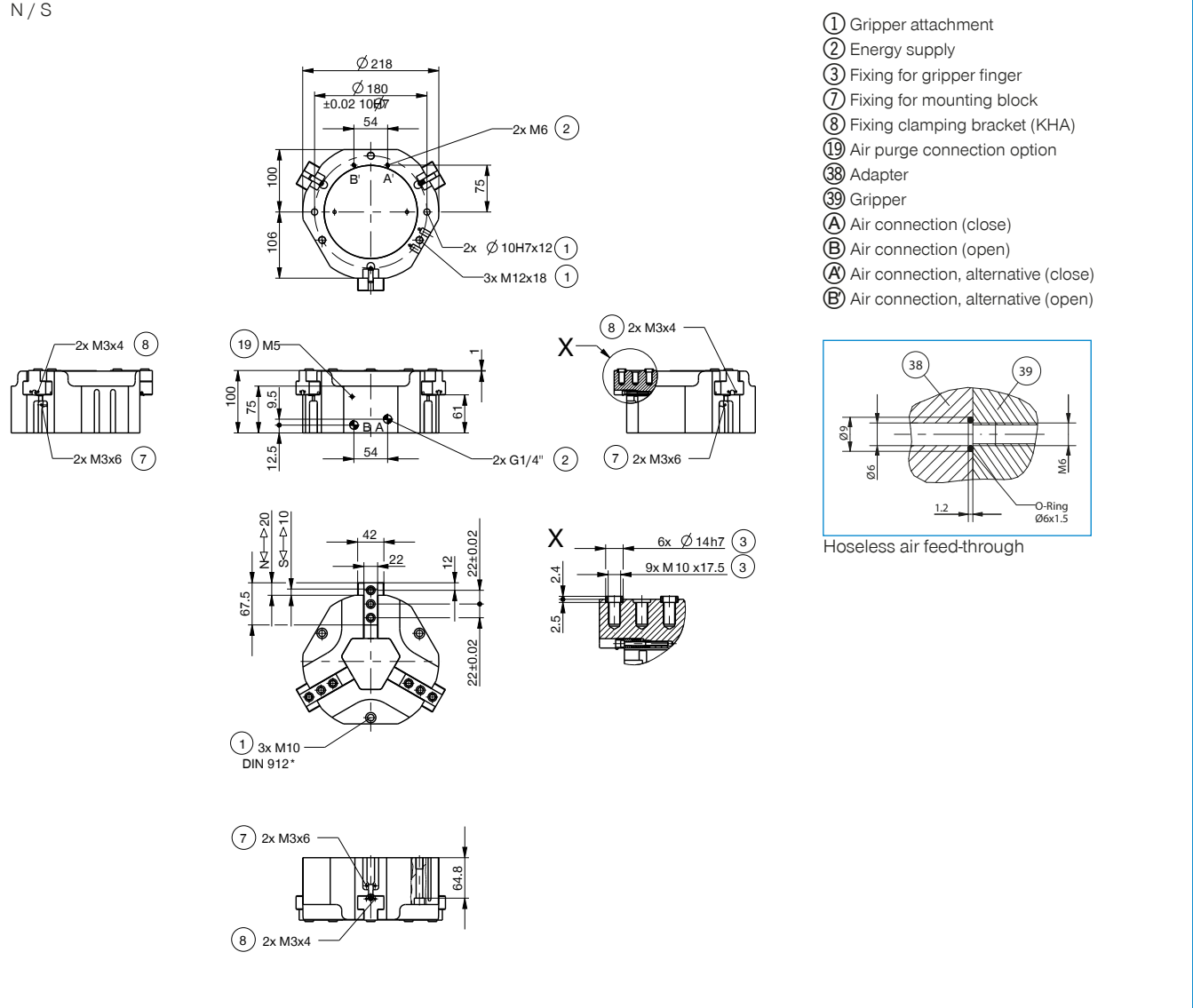
Inductive proximity switch - Connector M8

NJ8-E2S

Order no.	Technical Data*	
	GD320N-C	GD320S-C
Stroke per jaw [mm]	20	10
Gripping force in closing [N]	8200	18150
Gripping force in opening [N]	8450	18700
Gripping force secured by spring min. [N]	-	-
Closing time [s]	0.35	0.35
Opening time [s]	0.35	0.35
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	2	2
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm³]	825	825
Weight [kg]	9.6	9.6

*All data measured at 6 bar

N / S



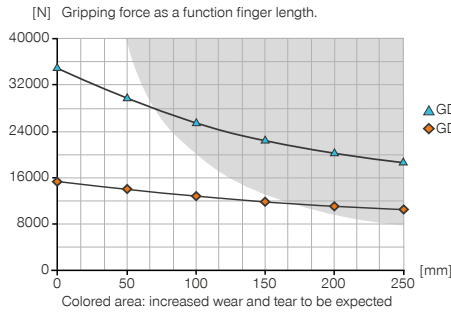
3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GD330

▶ PRODUCT SPECIFICATIONS

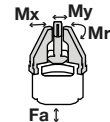


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	200
Mx [Nm]	275
My [Nm]	300
Fa [N]	9000

▶ INCLUDED IN DELIVERY



Mounting block

KB8-34



Centering Disc

DST43000

▶ RECOMMENDED ACCESSORIES



Alternate proximity bracket

KHA330-B-8



Straight Fittings - Quick Connect Style

GV1-4X8



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Inductive proximity switch - Cable 5 m

NJ8-E2



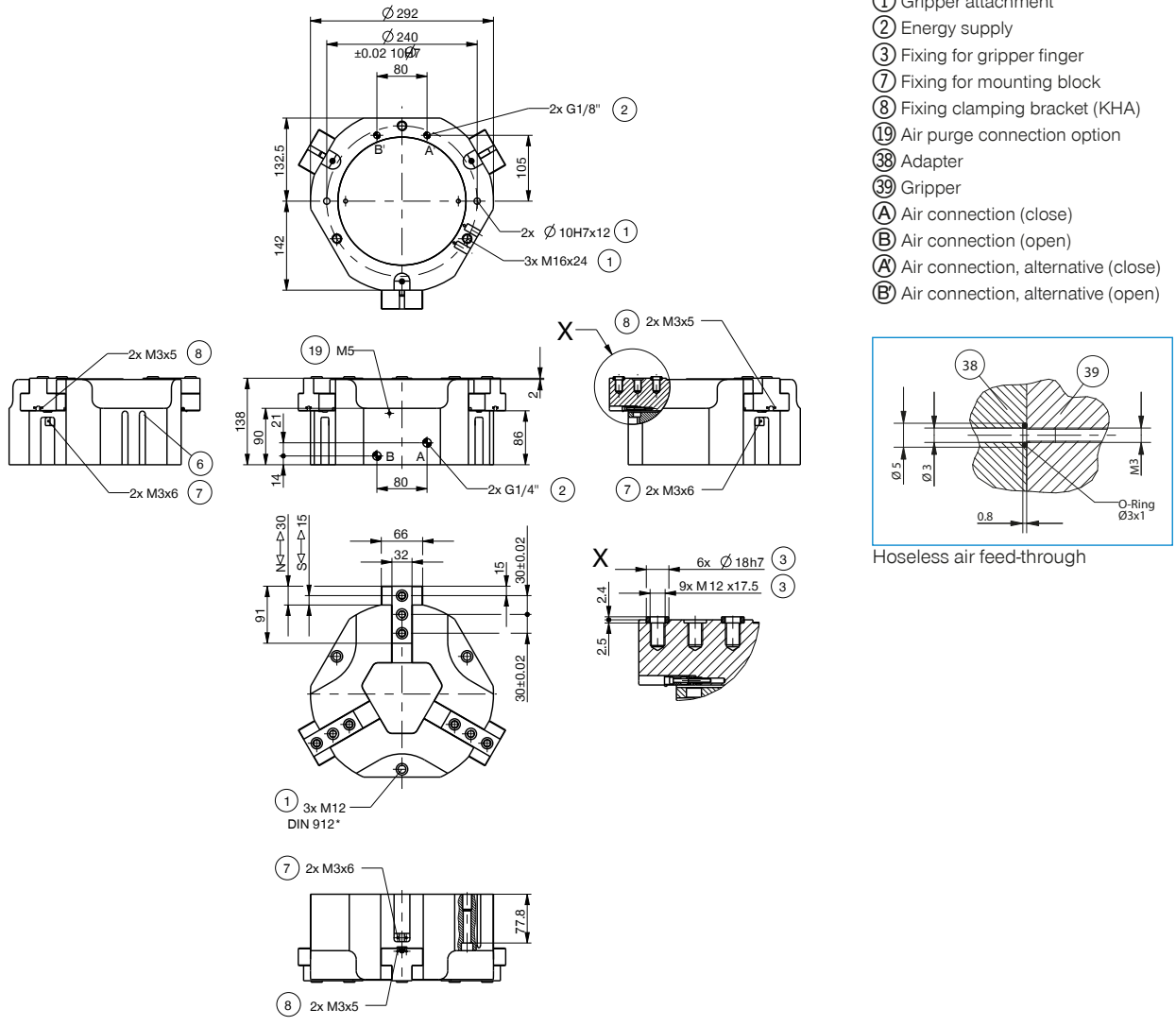
Inductive proximity switch - Connector M8

NJ8-E2S

Order no.	► Technical Data*	
	GD330N-C	GD330S-C
Stroke per jaw [mm]	30	15
Gripping force in closing [N]	15300	34150
Gripping force in opening [N]	15550	34700
Gripping force secured by spring min. [N]	-	-
Closing time [s]	0.8	0.8
Opening time [s]	0.8	0.8
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	2	2
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm ³]	2270	2270
Weight [kg]	24	24

*All data measured at 6 bar

N / S



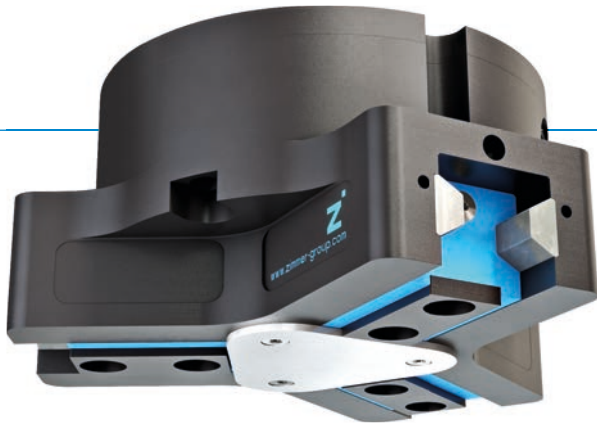
3-JAW CONCENTRIC GRIPPERS

SERIES GPD5000

1

Series GPD5000 / 3-jaw concentric grippers / pneumatic / Grippers

▶ PRODUCT ADVANTAGES



“The Universal One”

- ▶ Up to 30% more gripping force than the benchmark
- ▶ 10% more static forces and moments than the benchmark
- ▶ Gripper fingers up to 10% longer than the benchmark
- ▶ Gripper fingers weight up to 15% higher than the benchmark
- ▶ Sealed guide IP64 / Protector version IP67 (with purged air)
- ▶ Protected against corrosion
- ▶ Up to 30 million cycles without maintenance

▶ THE BEST PRODUCT FOR YOUR APPLICATION



▶ Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities:
Find the best product for your specific use:
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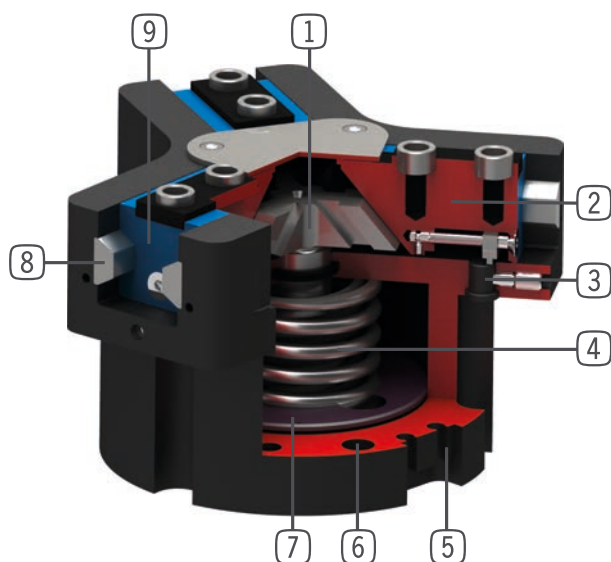
HOW TO ORDER CORRECTLY

- ▶ The product order numbers are arranged according to this diagram:

Order no.	GPD5010	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Basis version	N			
High force	S			
For external gripping, self-locking, spring closing		C		
For internal gripping, self-locking, spring opening		O		
Protector version IP67 for use in adverse environments (with purged air)				P
temperature-resistant version to 130 °C				T



► BENEFITS IN DETAIL



- ① **Wedge hook mechanism**
 - high forces and moments capacity
 - Synchronized gripper jaw movement
- ② **Gripper jaw**
 - DLC coated to protect against corrosion
 - Gripper fingers mounted using removable centring sleeves
 - Lubricated for life via incorporated lubrication slots
- ③ **Mounting block**
 - mounting for inductive proximity switch
- ④ **Integrated gripping force safety device**
 - Spring built into cylinder chamber as an energy store
- ⑤ **Sensing slot**
 - mounting and positioning of magnetic field sensors
- ⑥ **Mounting and positioning**
 - Alternatively, on several sides for customized mounting
 - Pneumatic and electrical versions identical apart from height
- ⑦ **Drive**
 - Double-acting pneumatic rotor cylinder
- ⑧ **Steel Linear Guide**
 - Steel in steel guide
 - Enables use of extremely long gripper fingers
- ⑨ **Dual lip seal**
 - IP64 and up to IP67 (with purged air) for Protector version
 - Prevents grease from being squeezed out, increasing service life

► SERIES CHARACTERISTICS



Number of installation sizes	9
Stroke per jaw	3 mm - 30 mm
Gripping force	310 N - 32400 N
Weight	0,14 kg - 27,5 kg
AP class	5



30 million maintenance-free cycles (max.)



High-strength S



IP67



Temperature-resistant



Spring closing C



Inductive sensor



Corrosion resistance



Purged air



Spring opening O



IP64



Magnetic field sensor

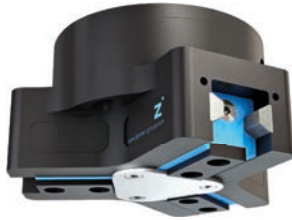
3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5003

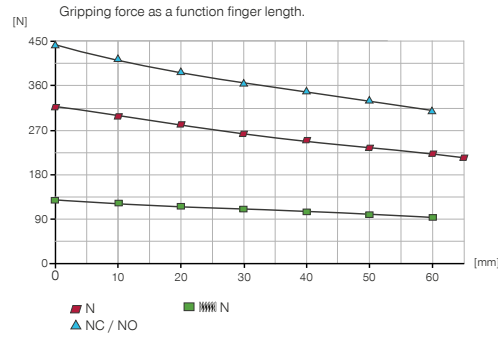
1

Installation size GPD5003 / 3-Jaw Concentric Grippers / pneumatic / Grippers

▶ PRODUCT SPECIFICATIONS



▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	7
Mx [Nm]	14
My [Nm]	13
Fa [N]	550

▶ TECHNICAL DATA

Order no.	▶ Technical Data*		
	GPD5003N	GPD5003NC	GPD5003NO
Stroke per jaw [mm]	2.5	2.5	2.5
Gripping force in closing [N]	310	440	
Gripping force in opening [N]	335		465
Gripping force secured by spring min. [N]		130	130
Closing time [s]	0.015	0.01	0.02
Opening time [s]	0.015	0.02	0.01
Weight per jaw max. [kg]	0.12	0.12	0.12
Length of the gripper fingers max. [mm]	65	60	60
Repetition accuracy +/- [mm]	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4
Operating pressure max. [bar]	8	7	7
Operating temperature [°C]	-10 ... +90	-10 ... +90	10 ... +90
Air volume per cycle [cm³]	4.2	9.5	9.5
Protection to IEC 60529	IP64	IP64	IP64
Weight [kg]	0.14	0.18	0.18

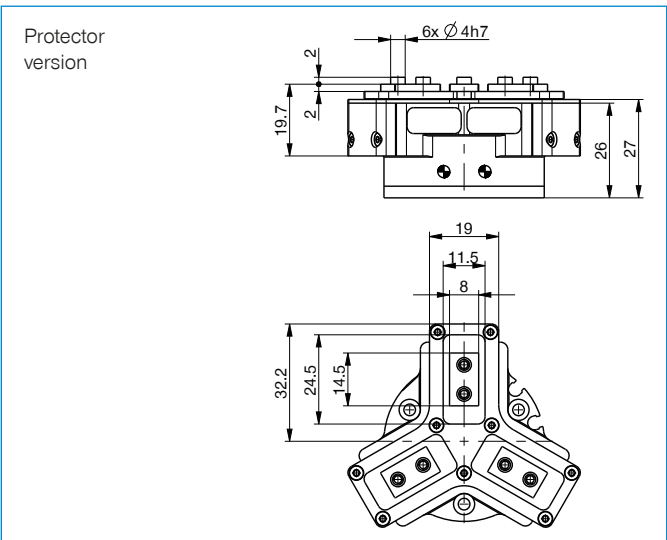
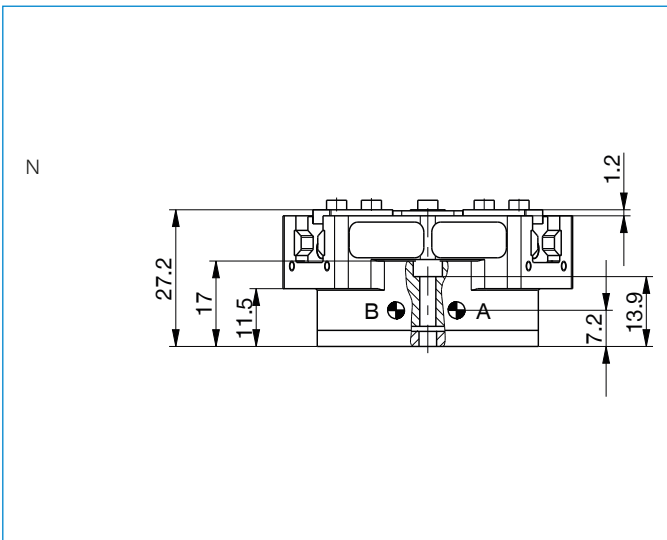
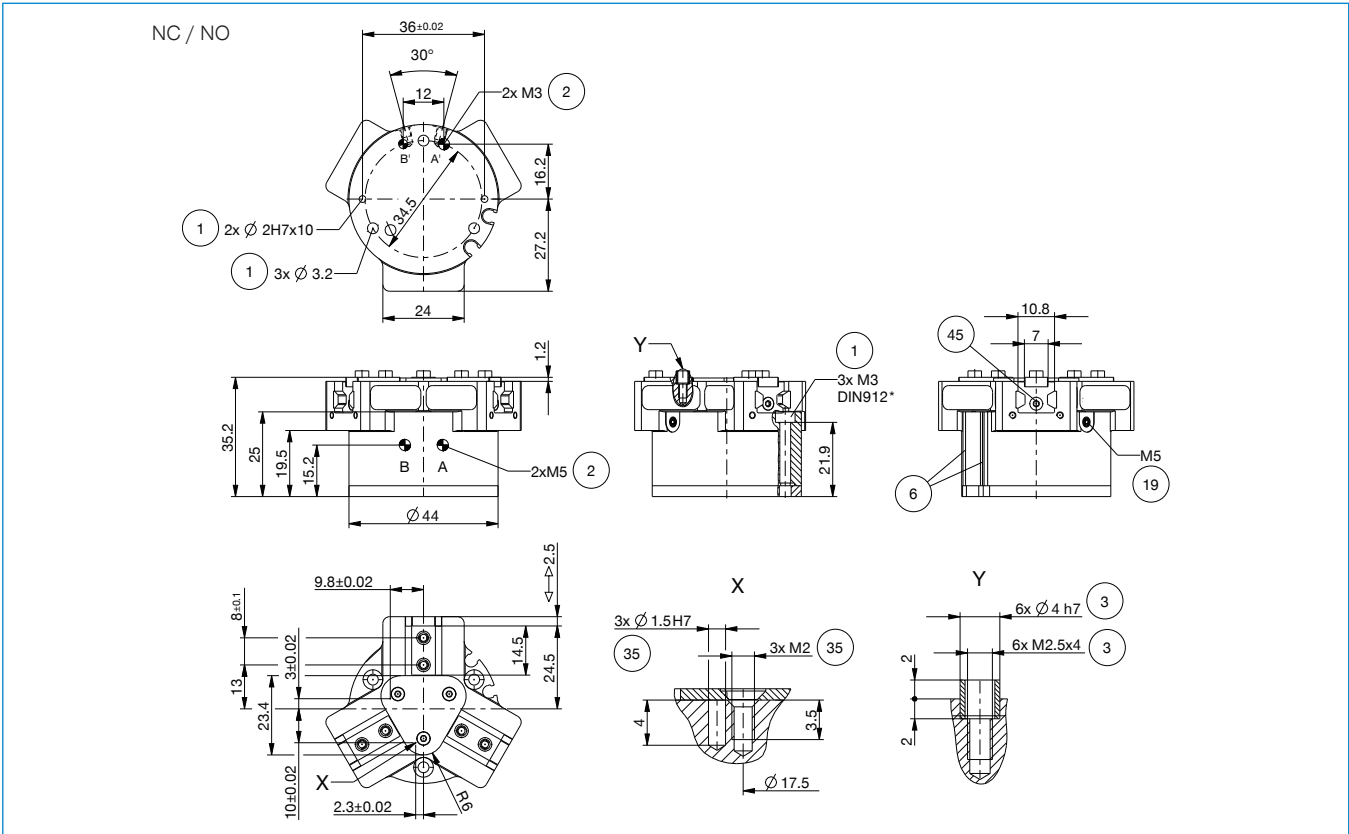
Order no.	▶ Technical Data - Protector Version		
	GPD5003NP	GPD5003NCP	GPD5003NOP
Protection to IEC 60529	IP67**	IP67**	IP67**
Weight [kg]	0.18	0.22	0.22

Order no.	▶ Technical Data - High Temperature Version		
	GPD5003NT	GPD5003NCT	GPD5003NOT
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130

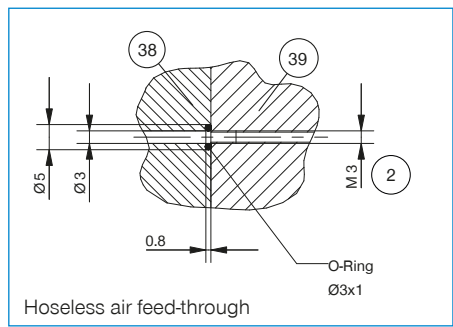
*All data measured at 6 bar

** with purged air

▶ TECHNICAL DRAWINGS



- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑥ Integrated slot for magnetic field sensor
- ⑱ Air purge connection option
- ⑳ Attachment option for customer-specific fittings
- ㉔ Adapter
- ㉙ Gripper
- ④⑤ Switch cam adjustment
- Ⓐ Air connection (close)
- Ⓑ Air connection (open)
- Ⓐ Air connection, alternative (close)
- Ⓑ Air connection, alternative (open)

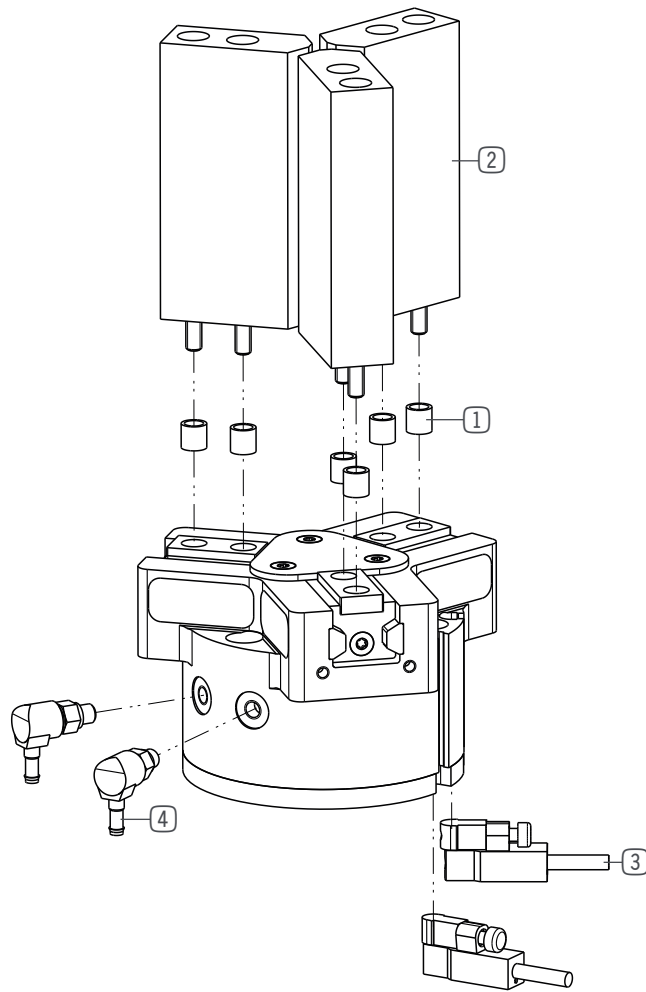


3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5003

1

Installation size GPD5003 / 3-Jaw Concentric Grippers / pneumatic / Grippers



▶ INCLUDED IN DELIVERY



Centering Disc

DST06510

► RECOMMENDED ACCESSORIES



Universal jaw aluminium

UB5003AL



Universal jaw steel

UB5003ST



Pressure piece N / S

ADS5003-01



Pressure piece NC / NO / SC / SO

ADS5003-02



Rubber Coated Tape Smooth

KF50G



Rubber Coated Tape Knobbed

KF50N



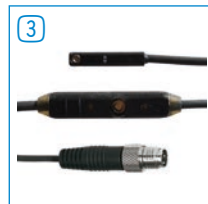
Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-01



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector customizable Straight - Connector M12

S12-G-3



Angled Fittings - Barb Style Connection

WVM3



Straight Fittings - Barb Style Connection

GVM3

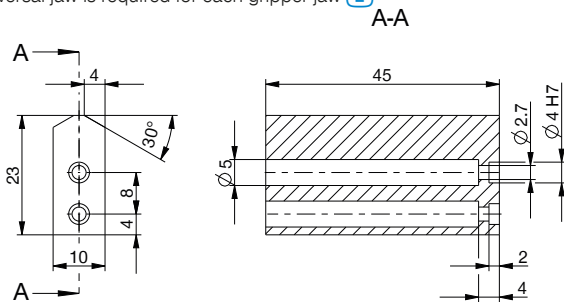


Pressure Safety Valve

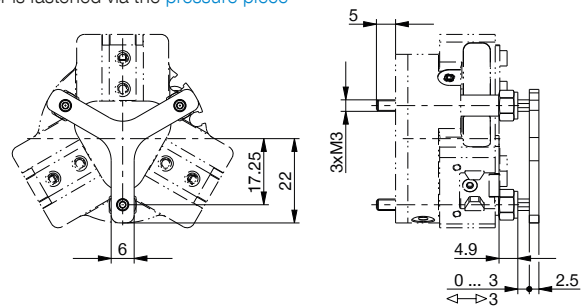
DSV1-8

► TECHNICAL DRAWINGS ACCESSORIES

One universal jaw is required for each gripper jaw ²



Gripper is fastened via the **pressure piece**



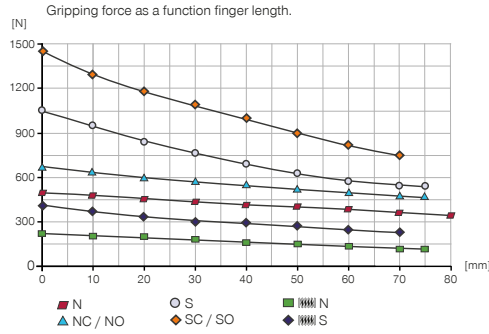
3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5004

▶ PRODUCT SPECIFICATIONS



▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	14
Mx [Nm]	29
My [Nm]	23
Fa [N]	750

▶ TECHNICAL DATA

Order no.	▶ Technical Data*					
	GPD5004N	GPD5004NC	GPD5004NO	GPD5004S	GPD5004SC	GPD5004SO
Stroke per jaw [mm]	4	4	4	2	2	2
Gripping force in closing [N]	460	650		1010	1430	
Gripping force in opening [N]	500		690	1100		1520
Gripping force secured by spring min. [N]		190	190		420	420
Closing time [s]	0.025	0.018	0.028	0.025	0.018	0.028
Opening time [s]	0.025	0.028	0.018	0.025	0.028	0.018
Weight per jaw max. [kg]	0.2	0.2	0.2	0.2	0.2	0.2
Length of the gripper fingers max. [mm]	80	75	75	75	70	70
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Operating temperature [°C]	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90
Air volume per cycle [cm³]	11	21	21	11	21	21
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	0.27	0.33	0.33	0.27	0.33	0.33

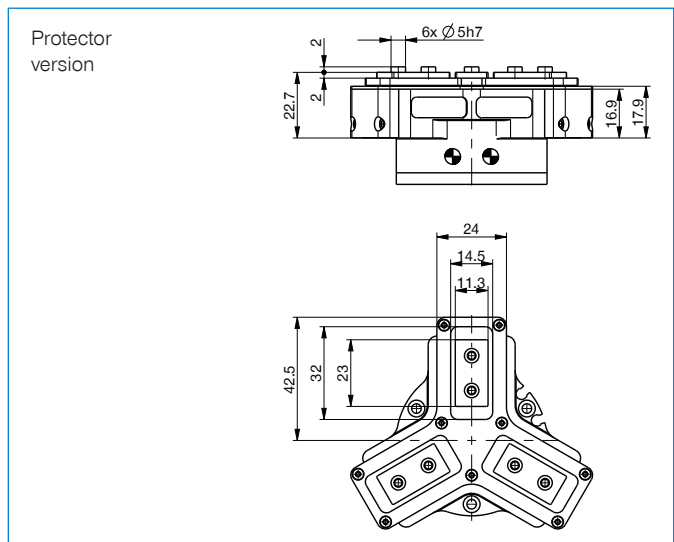
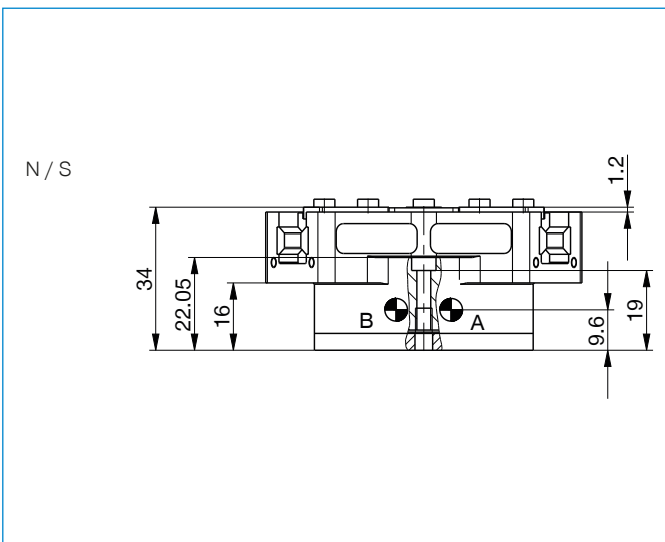
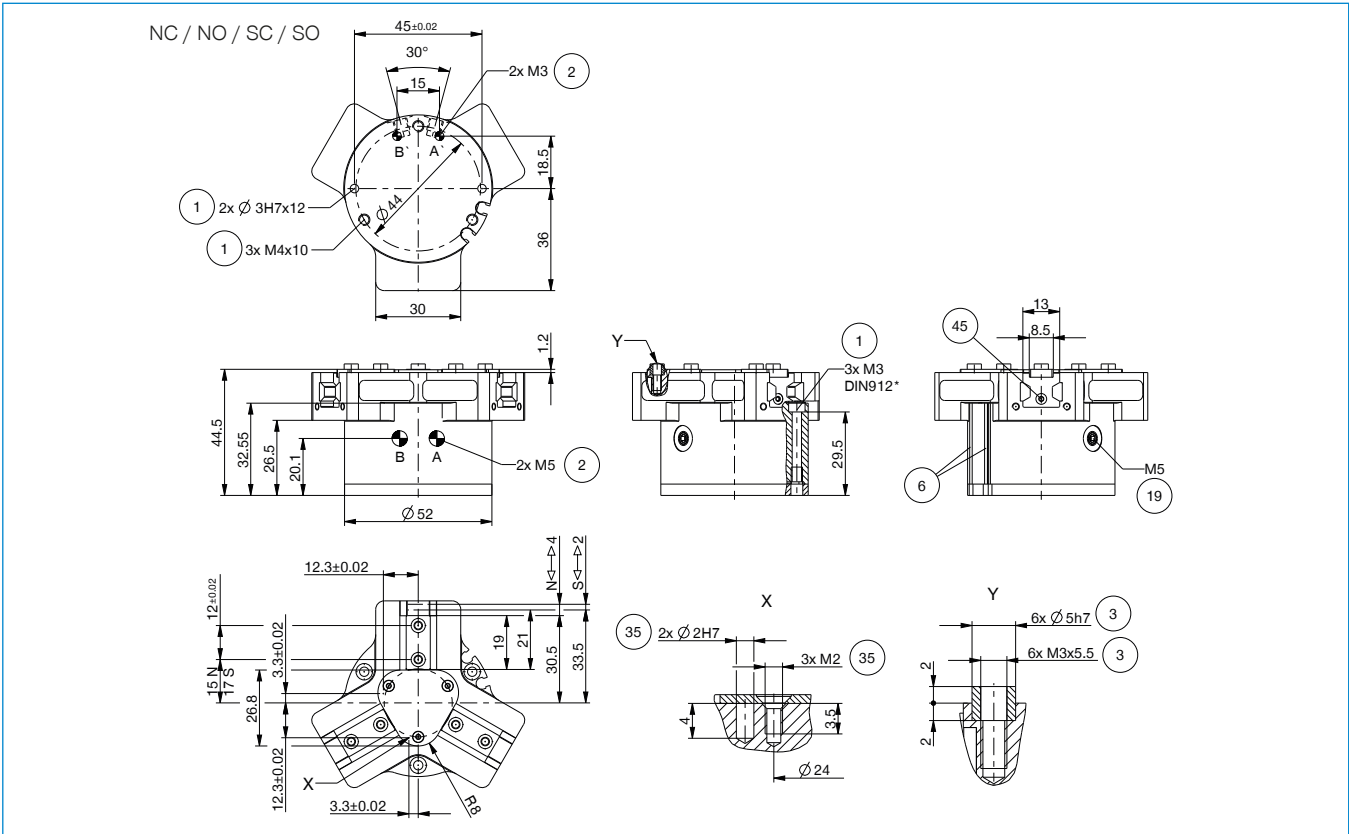
Order no.	▶ Technical Data - Protector Version					
	GPD5004NP	GPD5004NCP	GPD5004NOP	GPD5004SP	GPD5004SCP	GPD5004SOP
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**
Weight [kg]	0.35	0.41	0.41	0.35	0.41	0.41

Order no.	▶ Technical Data - High Temperature Version					
	GPD5004NT	GPD5004NCT	GPD5004NOT	GPD5004ST	GPD5004SCT	GPD5004SOT
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130

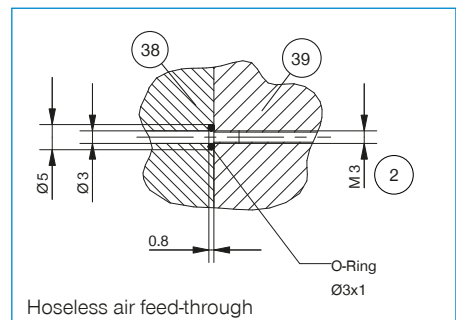
*All data measured at 6 bar

** with purged air

► TECHNICAL DRAWINGS



- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑥ Integrated slot for magnetic field sensor
- ⑱ Air purge connection option
- ⑳ Attachment option for customer-specific fittings
- ㉔ Adapter
- ㉙ Gripper
- ④⑤ Switch cam adjustment
- Ⓐ Air connection (close)
- Ⓑ Air connection (open)
- Ⓐ Air connection, alternative (close)
- Ⓑ Air connection, alternative (open)

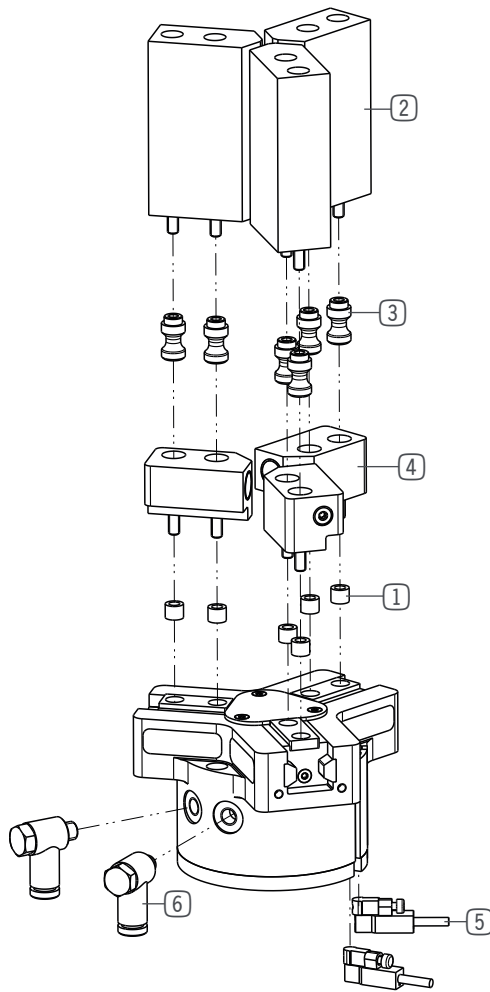


3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5004

1

Installation size GPD5004 / 3-Jaw Concentric Grippers / pneumatic / Grippers



▶ INCLUDED IN DELIVERY



Centering Disc

015761

► RECOMMENDED ACCESSORIES



Universal jaw aluminium

UB5004AL



Universal jaw steel

UB5004ST



Pressure piece N / S

ADS5004-01



Pressure piece NC / NO / SC / SO

ADS5004-02



Changeable jaw, loose-part-set

WB5004L



Changeable jaw, fix-part

WB5004F



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-01



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector customizable Straight - Connector M12

S12-G-3



Angled Fittings - Quick Connect Style

WVM5



Straight Fittings - Quick Connect Style

GVM5

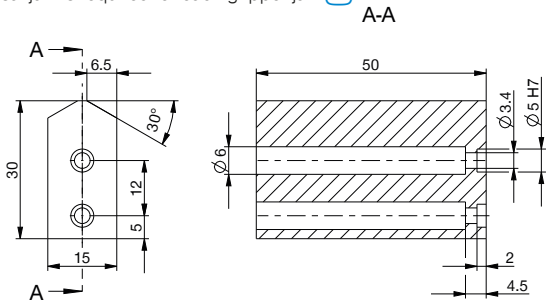


Pressure Safety Valve

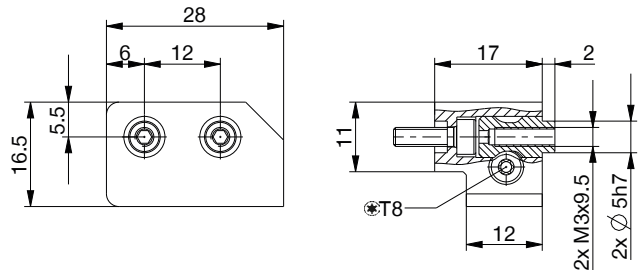
DSV1-8

► TECHNICAL DRAWINGS ACCESSORIES

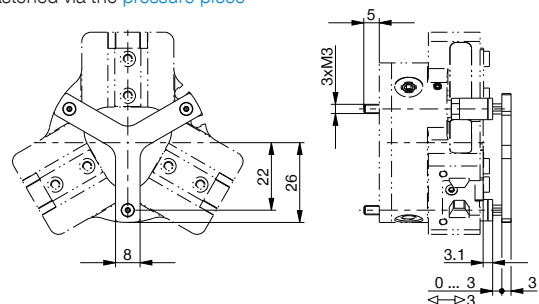
One universal jaw is required for each gripper jaw **2**



For each gripper jaw, one interchangeable jaw loose part set **3** and one interchangeable jaw fixed part **4** are needed



Gripper is fastened via the **pressure piece**



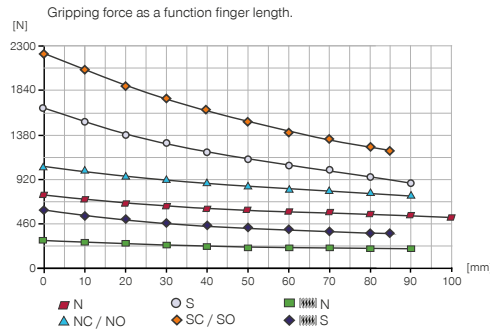
3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5006

▶ PRODUCT SPECIFICATIONS



▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	43
Mx [Nm]	70
My [Nm]	46
Fa [N]	1250

▶ TECHNICAL DATA

Order no.	▶ Technical Data*					
	GPD5006N	GPD5006NC	GPD5006NO	GPD5006S	GPD5006SC	GPD5006SO
Stroke per jaw [mm]	6	6	6	3	3	3
Gripping force in closing [N]	740	1020		1620	2240	
Gripping force in opening [N]	800		1080	1750		2370
Gripping force secured by spring min. [N]		280	280		620	620
Closing time [s]	0.028	0.018	0.038	0.028	0.018	0.038
Opening time [s]	0.028	0.038	0.018	0.028	0.038	0.018
Weight per jaw max. [kg]	0.4	0.4	0.4	0.4	0.4	0.4
Length of the gripper fingers max. [mm]	100	90	90	90	85	85
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Operating temperature [°C]	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90
Air volume per cycle [cm³]	22	43	43	22	43	43
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	0.48	0.58	0.58	0.48	0.58	0.58

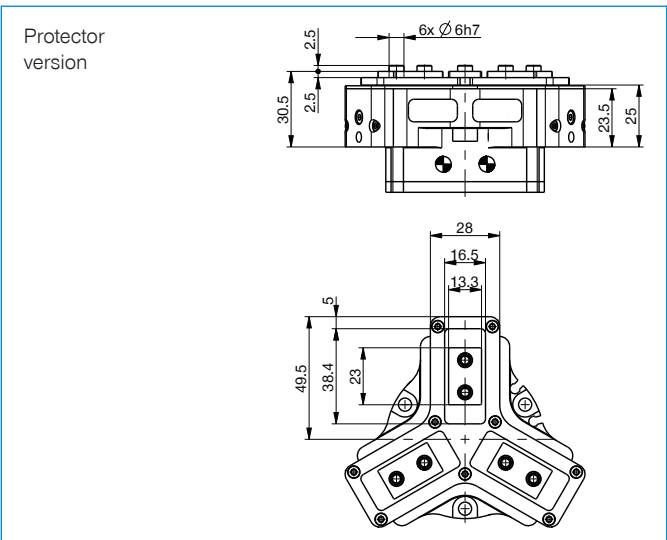
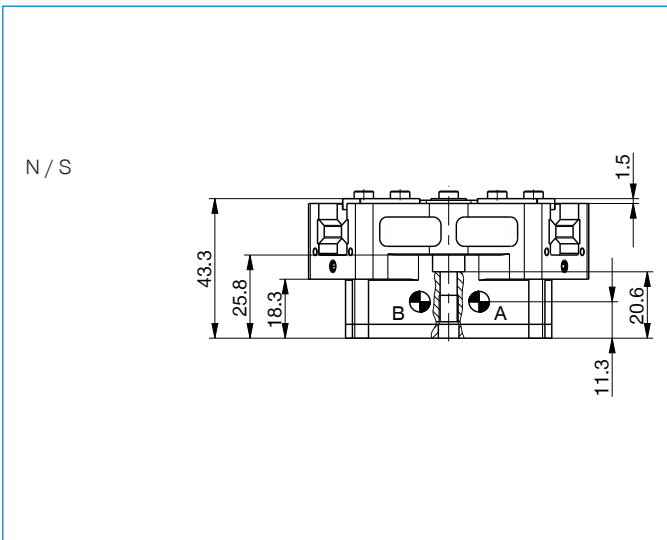
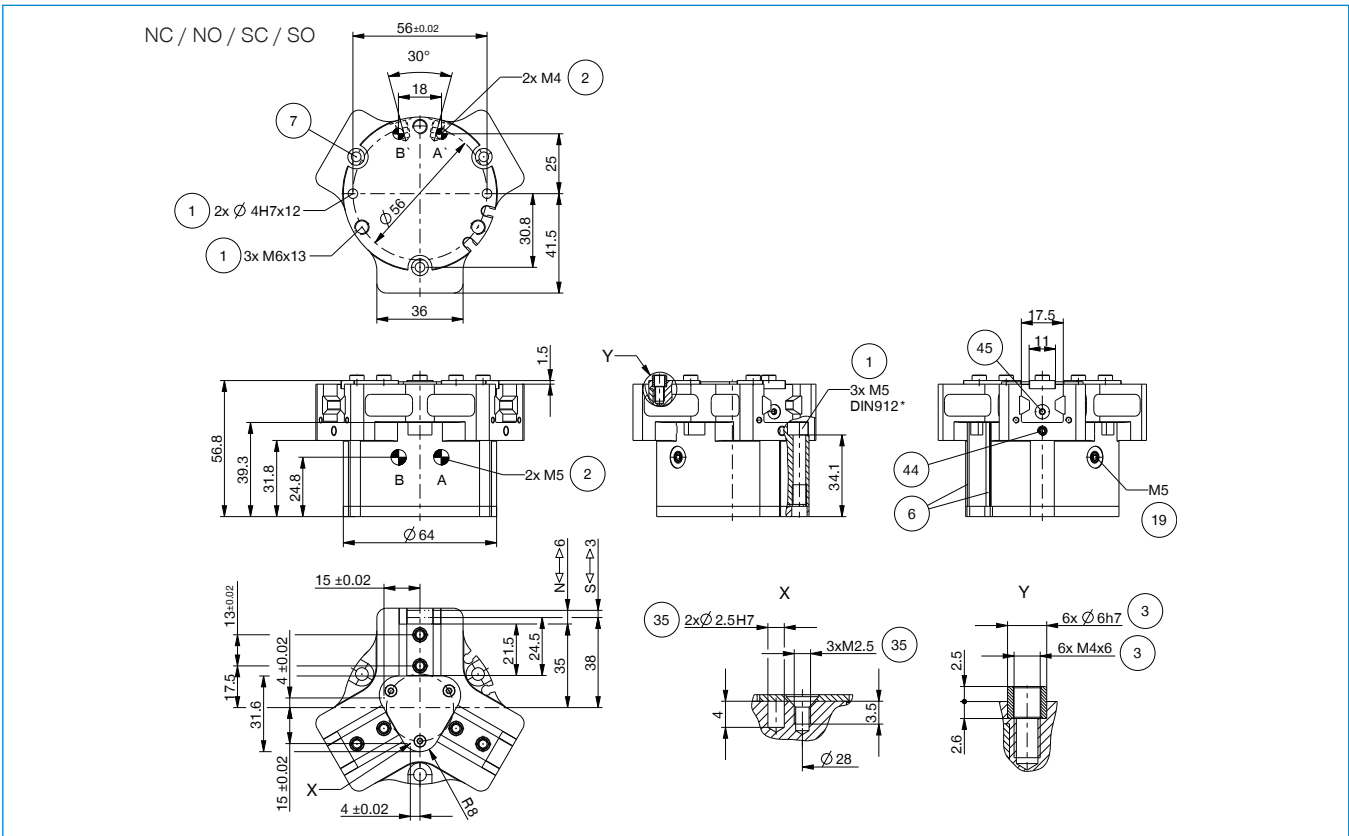
Order no.	▶ Technical Data - Protector Version					
	GPD5006NP	GPD5006NCP	GPD5006NOP	GPD5006SP	GPD5006SCP	GPD5006SOP
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**
Weight [kg]	0.61	0.71	0.71	0.61	0.71	0.71

Order no.	▶ Technical Data - High Temperature Version					
	GPD5006NT	GPD5006NCT	GPD5006NOT	GPD5006ST	GPD5006SCT	GPD5006SOT
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130

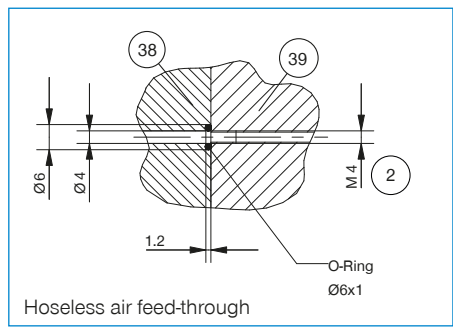
*All data measured at 6 bar

** with purged air

▶ TECHNICAL DRAWINGS



- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑥ Integrated slot for magnetic field sensor
- ⑦ Mounting block
- ⑱ Air purge connection option
- ⑳ Attachment option for customer-specific fittings
- ㉑ Adapter
- ㉒ Gripper
- ㉓ Clamp for sensor
- ㉔ Switch cam adjustment
- Ⓐ Air connection (close)
- Ⓑ Air connection (open)
- Ⓒ Air connection, alternative (close)
- Ⓓ Air connection, alternative (open)

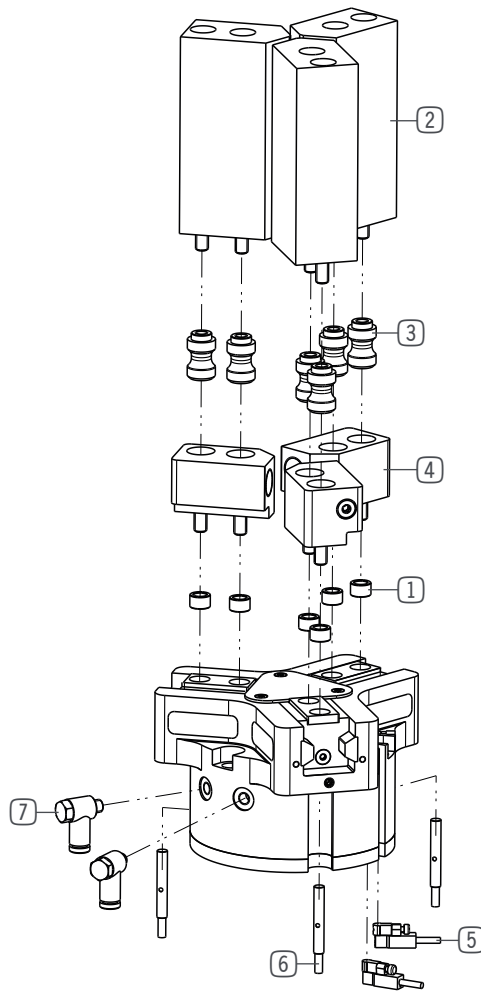


3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5006

1

Installation size GPD5006 / 3-Jaw Concentric Grippers / pneumatic / Grippers



▶ INCLUDED IN DELIVERY



Centering Disc

024230

► RECOMMENDED ACCESSORIES



Universal jaw aluminium

UB5006AL



Universal jaw steel

UB5006ST



Pressure piece N / S

ADS5006-01



Pressure piece NC / NO / SC / SO

ADS5006-02



Changeable jaw, loose-part-set

WB5006L



Changeable jaw, fix-part

WB5006F



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-01



Inductive Proximity Switch Cable 0,3 m - Connector M8

NJ4-E2SK-01



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



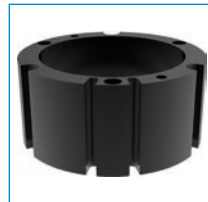
Angled Fittings - Quick Connect Style

WVM5



Pressure Safety Valve

DSV1-8



Compensation module N / S

ZUB5006DNS

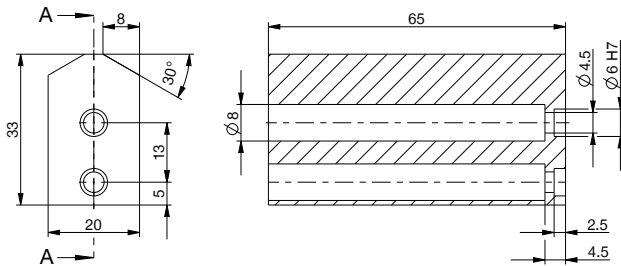


Compensation module NC / NO / SC / SO

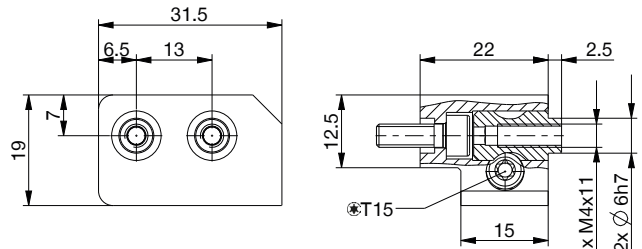
ZUB5006DCO

► TECHNICAL DRAWINGS ACCESSORIES

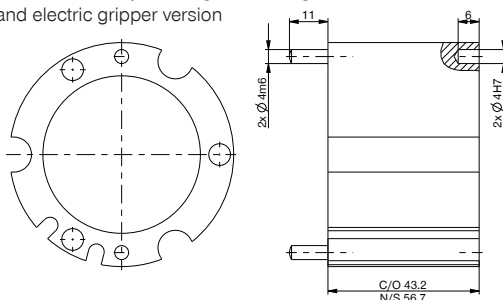
One universal jaw is required for each gripper jaw **(2)** A-A



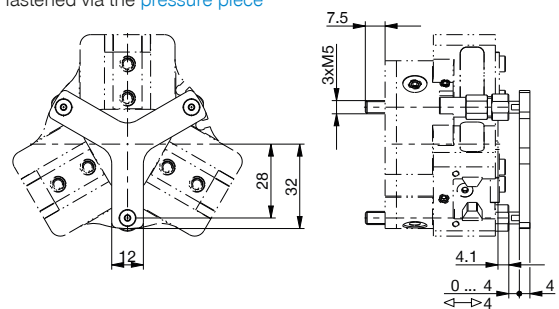
For each gripper jaw, one interchangeable jaw loose part set **(3)** and one interchangeable jaw fixed part **(4)** are needed



Compensation module for compensating for the height differences between the pneumatic and electric gripper version



Gripper is fastened via the pressure piece



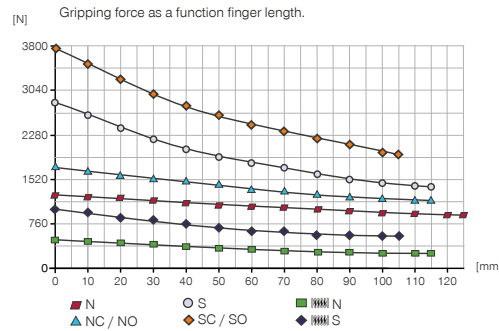
3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5008

▶ PRODUCT SPECIFICATIONS

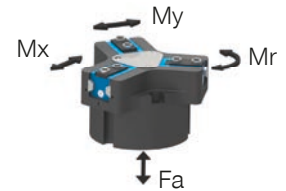


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	60
Mx [Nm]	105
My [Nm]	65
Fa [N]	1900

▶ TECHNICAL DATA

▶ Technical Data*

Order no.	GPD5008N	GPD5008NC	GPD5008NO	GPD5008S	GPD5008SC	GPD5008SO
Stroke per jaw [mm]	8	8	8	4	4	4
Gripping force in closing [N]	1260	1690		2780	3730	
Gripping force in opening [N]	1340		1770	2960		3910
Gripping force secured by spring min. [N]		430	430		950	950
Closing time [s]	0.048	0.035	0.055	0.048	0.035	0.055
Opening time [s]	0.048	0.055	0.035	0.048	0.055	0.035
Weight per jaw max. [kg]	0.7	0.7	0.7	0.7	0.7	0.7
Length of the gripper fingers max. [mm]	125	115	115	115	105	105
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Operating temperature [°C]	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90
Air volume per cycle [cm³]	51	90	90	51	90	90
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	0.83	1	1	0.83	1	1

▶ Technical Data - Protector Version

Order no.	GPD5008NP	GPD5008NCP	GPD5008NOP	GPD5008SP	GPD5008SCP	GPD5008SOP
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**
Weight [kg]	1.03	1.2	1.2	1.03	1.2	1.2

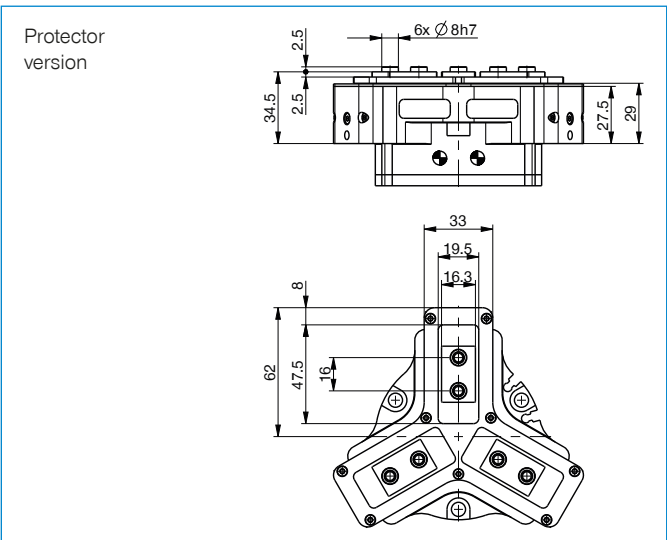
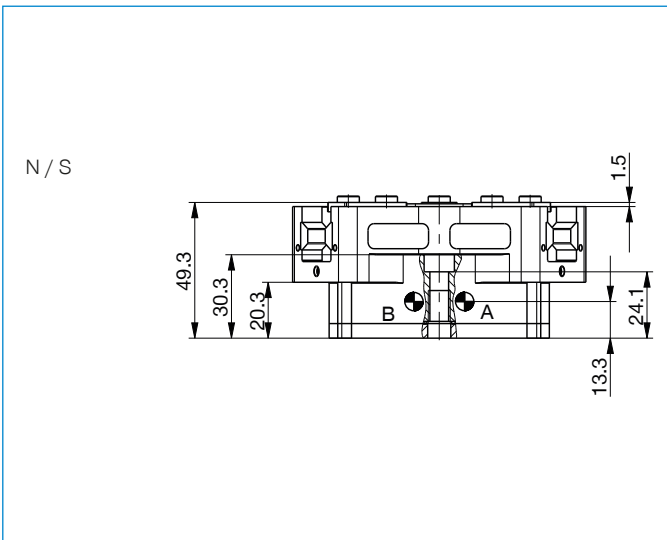
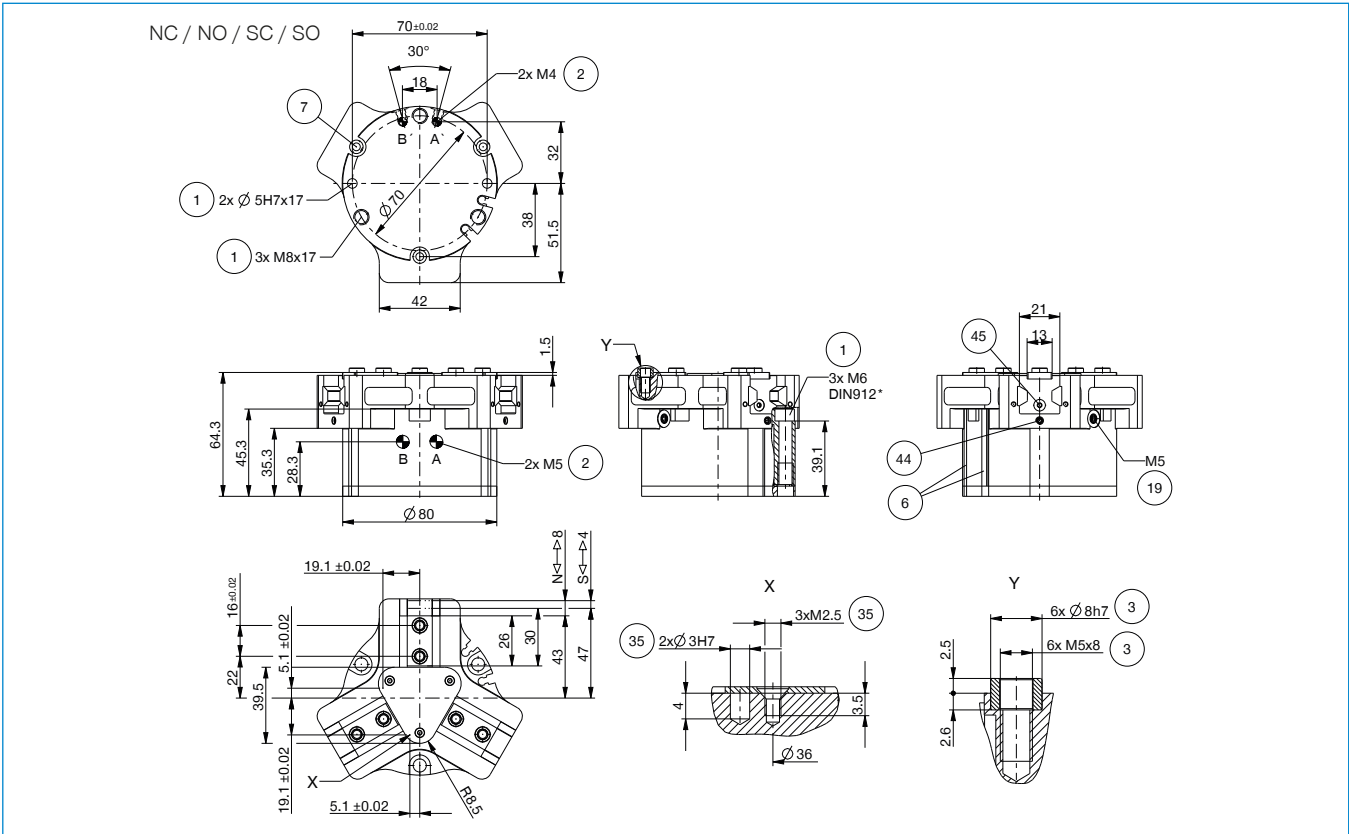
▶ Technical Data - High Temperature Version

Order no.	GPD5008NT	GPD5008NCT	GPD5008NOT	GPD5008ST	GPD5008SCT	GPD5008SOT
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130

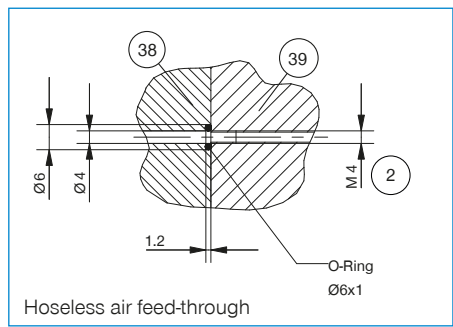
*All data measured at 6 bar

** with purged air

TECHNICAL DRAWINGS



- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑥ Integrated slot for magnetic field sensor
- ⑦ Mounting block
- ⑱ Air purge connection option
- ⑳ Attachment option for customer-specific fittings
- ㉓ Adapter
- ㉔ Gripper
- ㉕ Clamp for sensor
- ㉖ Switch cam adjustment
- Ⓐ Air connection (close)
- Ⓑ Air connection (open)
- Ⓐ Air connection, alternative (close)
- Ⓑ Air connection, alternative (open)

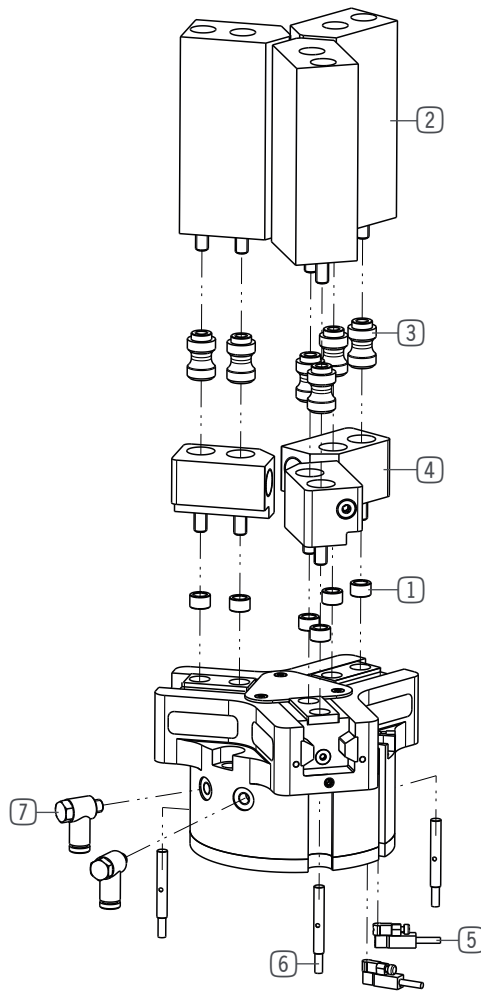


3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5008

1

Installation size GPD5008 / 3-Jaw Concentric Grippers / pneumatic / Grippers



▶ INCLUDED IN DELIVERY



Centering Disc

024231

► RECOMMENDED ACCESSORIES



Universal jaw aluminium

UB5008AL



Universal jaw steel

UB5008ST



Pressure piece N / S

ADS5008-01



Pressure piece NC / NO / SC / SO

ADS5008-02



Changeable jaw, loose-part-set

WB5008L



Changeable jaw, fix-part

WB5008F



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-01



Inductive Proximity Switch Cable 0,3 m - Connector M8

NJ4-E2SK-01



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



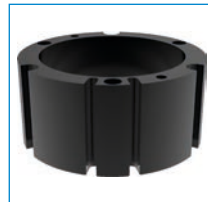
Angled Fittings - Quick Connect Style

WVM5



Pressure Safety Valve

DSV1-8



Compensation module N / S

ZUB5008DNS

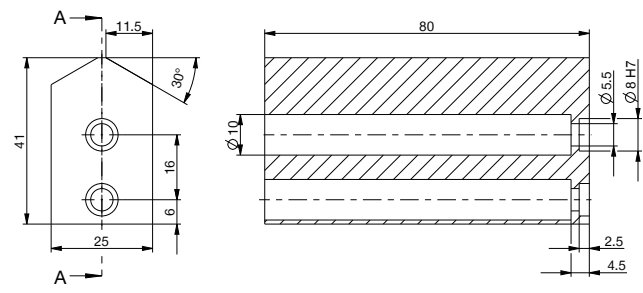


Compensation module NC / NO / SC / SO

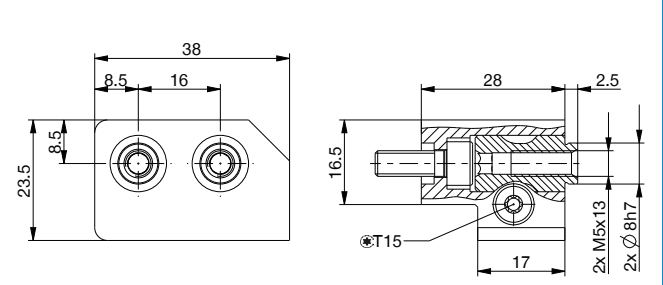
ZUB5008DCO

► TECHNICAL DRAWINGS ACCESSORIES

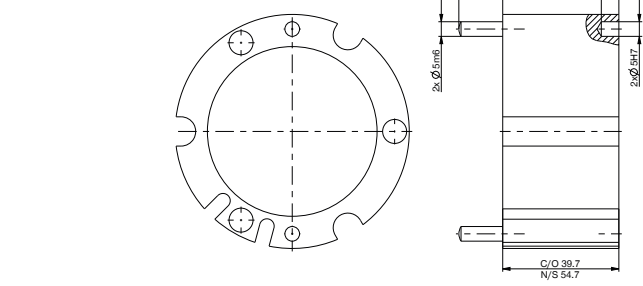
One universal jaw is required for each gripper jaw **2**



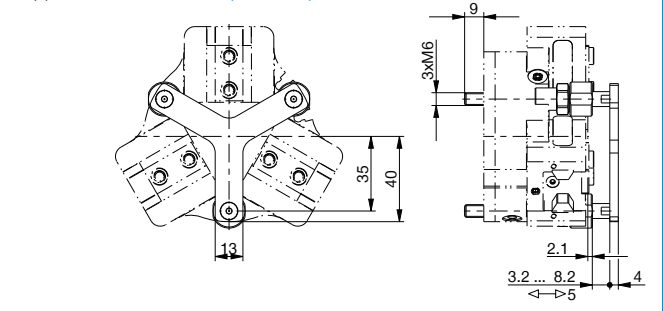
For each gripper jaw, one interchangeable jaw loose part set **3** and one interchangeable jaw fixed part **4** are needed



Compensation module for compensating for the height differences between the pneumatic and electric gripper version



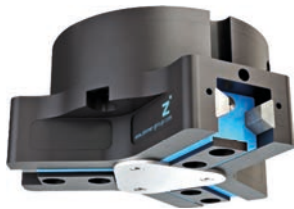
Gripper is fastened via the pressure piece



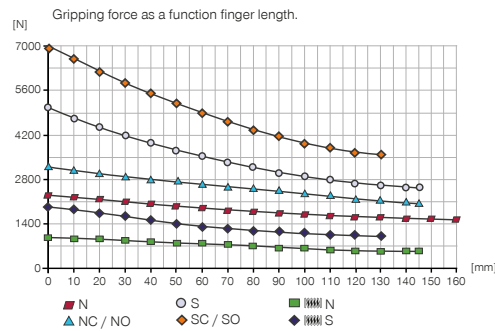
3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5010

▶ PRODUCT SPECIFICATIONS



▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	75
Mx [Nm]	125
My [Nm]	95
Fa [N]	2700

▶ TECHNICAL DATA

Order no.	▶ Technical Data*					
	GPD5010N	GPD5010NC	GPD5010NO	GPD5010S	GPD5010SC	GPD5010SO
Stroke per jaw [mm]	10	10	10	5	5	5
Gripping force in closing [N]	2290	3140		5050	6930	
Gripping force in opening [N]	2400		3250	5280		7160
Gripping force secured by spring min. [N]		850	850		1880	1880
Closing time [s]	0.095	0.095	0.19	0.095	0.095	0.19
Opening time [s]	0.095	0.19	0.095	0.095	0.19	0.095
Weight per jaw max. [kg]	1.3	1.3	1.3	1.3	1.3	1.3
Length of the gripper fingers max. [mm]	160	145	145	145	130	130
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Operating temperature [°C]	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90
Air volume per cycle [cm³]	100	200	200	100	200	200
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	1.45	1.9	1.9	1.45	1.9	1.9

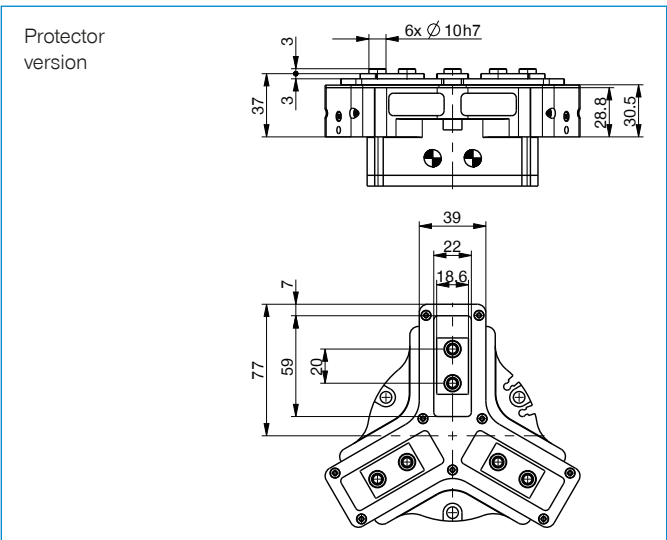
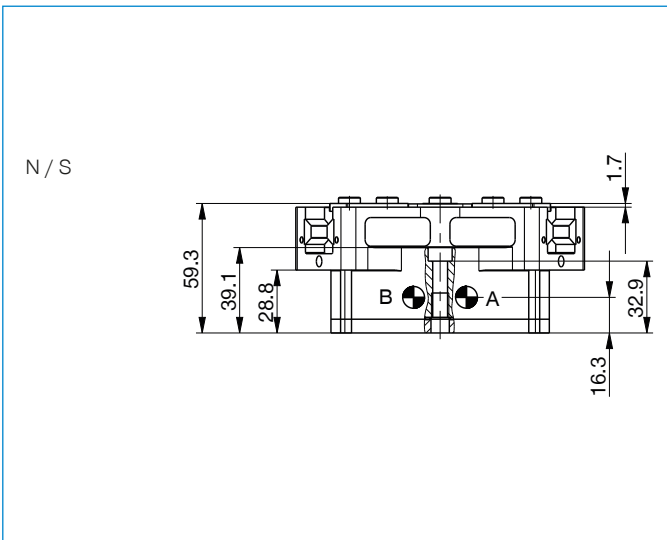
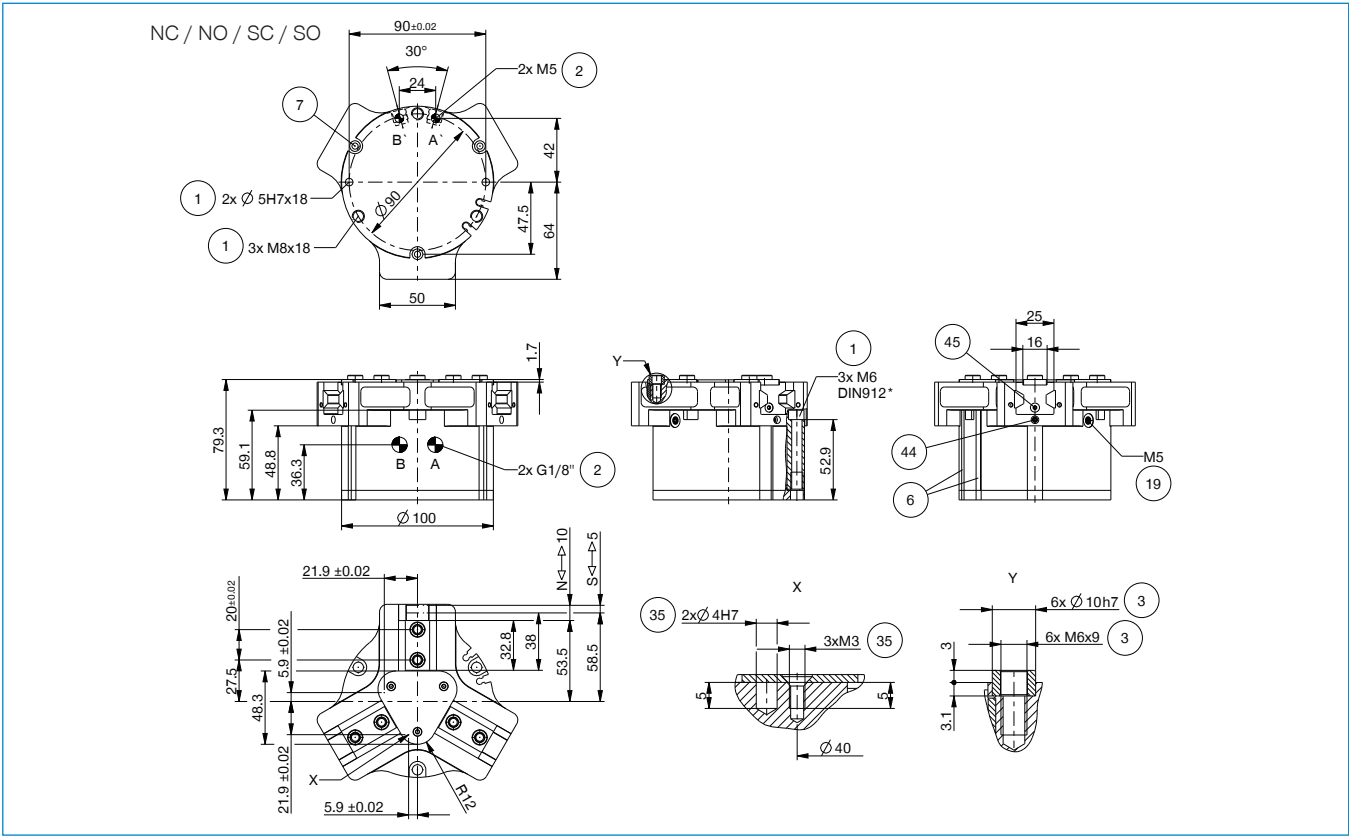
Order no.	▶ Technical Data - Protector Version					
	GPD5010NP	GPD5010NCP	GPD5010NOP	GPD5010SP	GPD5010SCP	GPD5010SOP
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**
Weight [kg]	1.8	2.23	2.23	1.8	2.23	2.23

Order no.	▶ Technical Data - High Temperature Version					
	GPD5010NT	GPD5010NCT	GPD5010NOT	GPD5010ST	GPD5010SCT	GPD5010SOT
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130

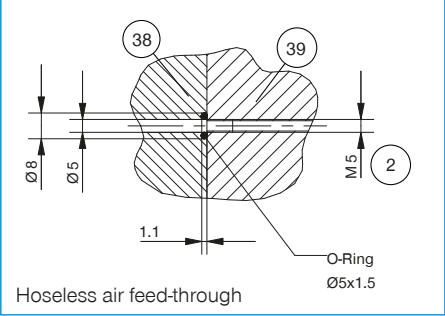
*All data measured at 6 bar

** with purged air

▶ TECHNICAL DRAWINGS



- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑥ Integrated slot for magnetic field sensor
- ⑦ Mounting block
- ⑱ Air purge connection option
- ⑳ Attachment option for customer-specific fittings
- ㉘ Adapter
- ㉙ Gripper
- ㉚ Clamp for sensor
- ㉛ Switch cam adjustment
- Ⓐ Air connection (close)
- Ⓑ Air connection (open)
- Ⓐ Air connection, alternative (close)
- Ⓑ Air connection, alternative (open)

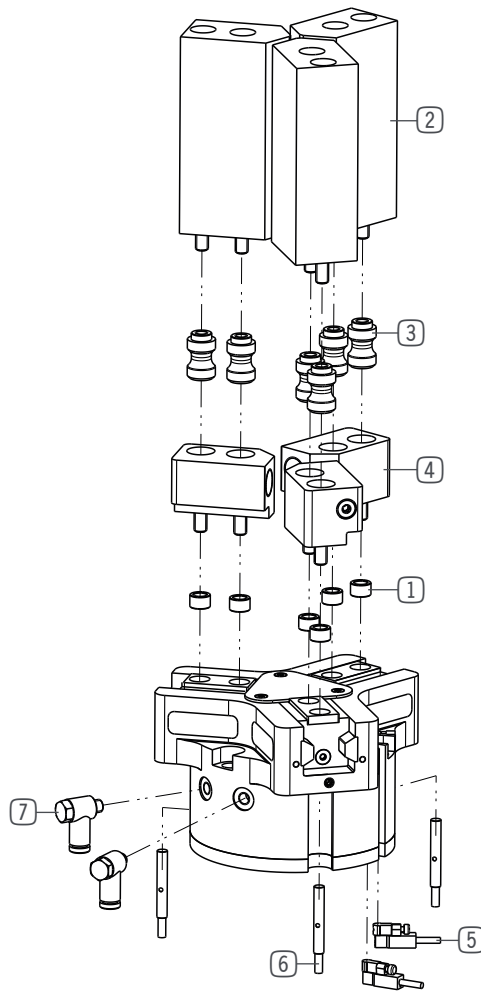


3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5010

1

Installation size GPD5010 / 3-Jaw Concentric Grippers / pneumatic / Grippers



▶ INCLUDED IN DELIVERY



Centering Disc

018187

► RECOMMENDED ACCESSORIES



Universal jaw aluminium

UB5010AL



Universal jaw steel

UB5010ST



Pressure piece N / S

ADS5010-01



Pressure piece NC / NO / SC / SO

ADS5010-02



Changeable jaw, loose-part-set

WB5010L



Changeable jaw, fix-part

WB5010F



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-01



Inductive Proximity Switch Cable 0,3 m - Connector M8

NJ4-E2SK-01



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Angled Fittings - Quick Connect Style

WV1-8X6



Pressure Safety Valve

DSV1-8



Compensation module N / S

ZUB5010DNS

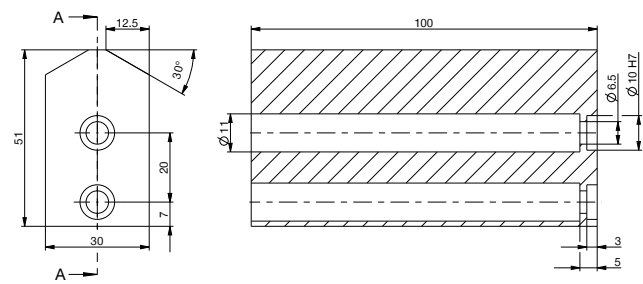


Compensation module NC / NO / SC / SO

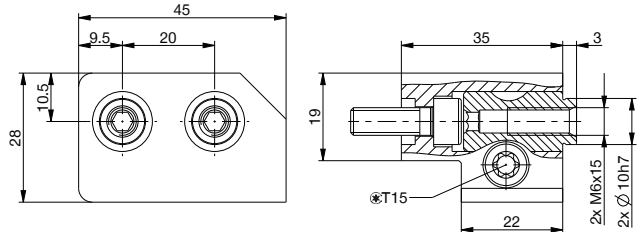
ZUB5010DCO

► TECHNICAL DRAWINGS ACCESSORIES

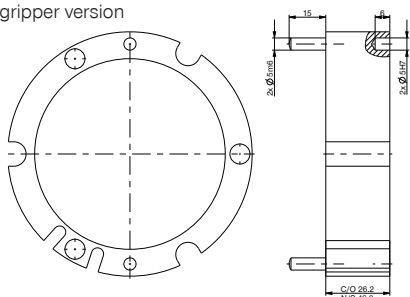
One universal jaw is required for each gripper jaw ⁽²⁾



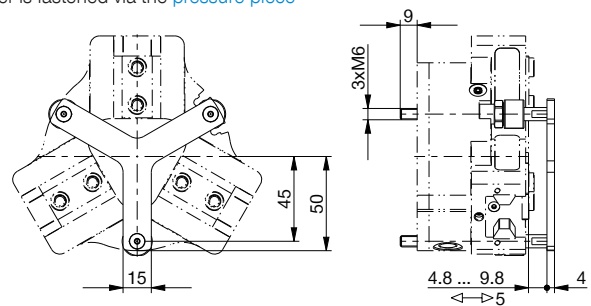
For each gripper jaw, one interchangeable jaw loose part set ⁽³⁾ and one interchangeable jaw fixed part ⁽⁴⁾ are needed



Compensation module for compensating for the height differences between the pneumatic and electric gripper version



Gripper is fastened via the pressure piece



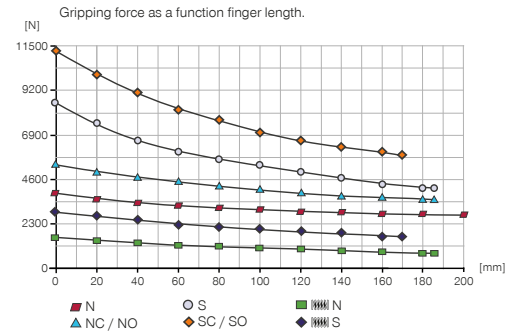
3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5013

▶ PRODUCT SPECIFICATIONS

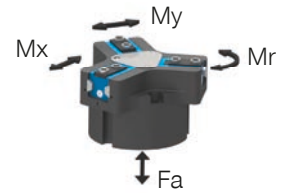


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	110
Mx [Nm]	150
My [Nm]	130
Fa [N]	3300

▶ TECHNICAL DATA

Order no.	▶ Technical Data*					
	GPD5013N	GPD5013NC	GPD5013NO	GPD5013S	GPD5013SC	GPD5013SO
Stroke per jaw [mm]	13	13	13	6	6	6
Gripping force in closing [N]	3770	5060		8310	11160	
Gripping force in opening [N]	3910		5200	8600		11450
Gripping force secured by spring min. [N]		1290	1290		2850	2850
Closing time [s]	0.19	0.15	0.25	0.19	0.15	0.25
Opening time [s]	0.19	0.25	0.15	0.19	0.25	0.15
Weight per jaw max. [kg]	2.4	2.4	2.4	2.4	2.4	2.4
Length of the gripper fingers max. [mm]	200	185	185	185	170	170
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Operating temperature [°C]	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90
Air volume per cycle [cm³]	230	415	415	230	415	415
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	2.6	3.5	3.5	2.6	3.5	3.5

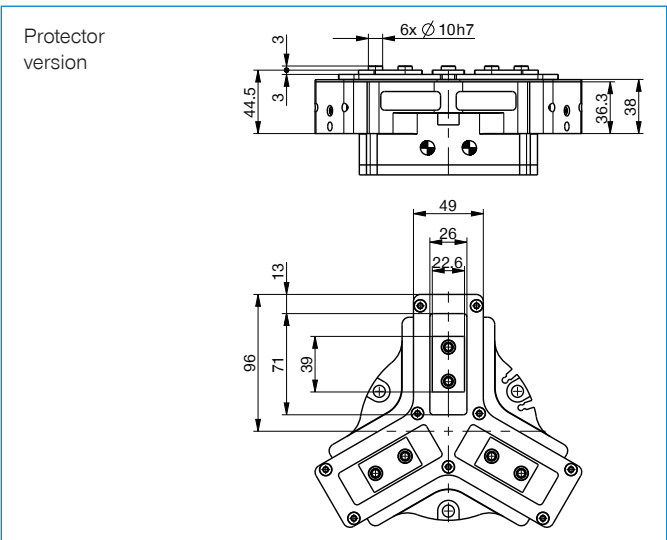
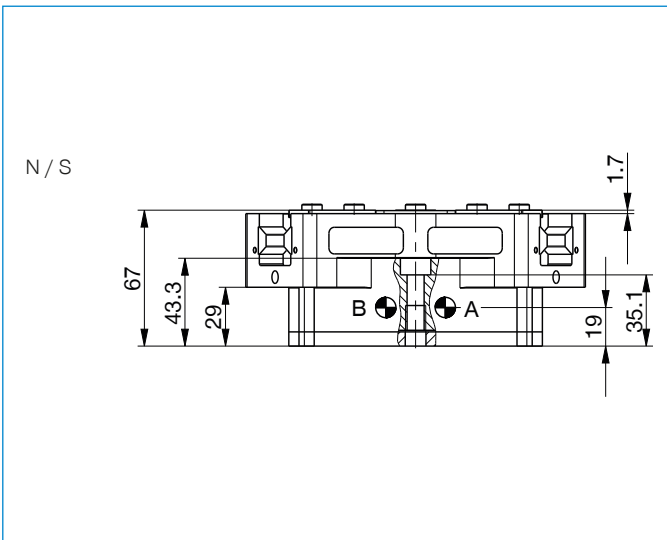
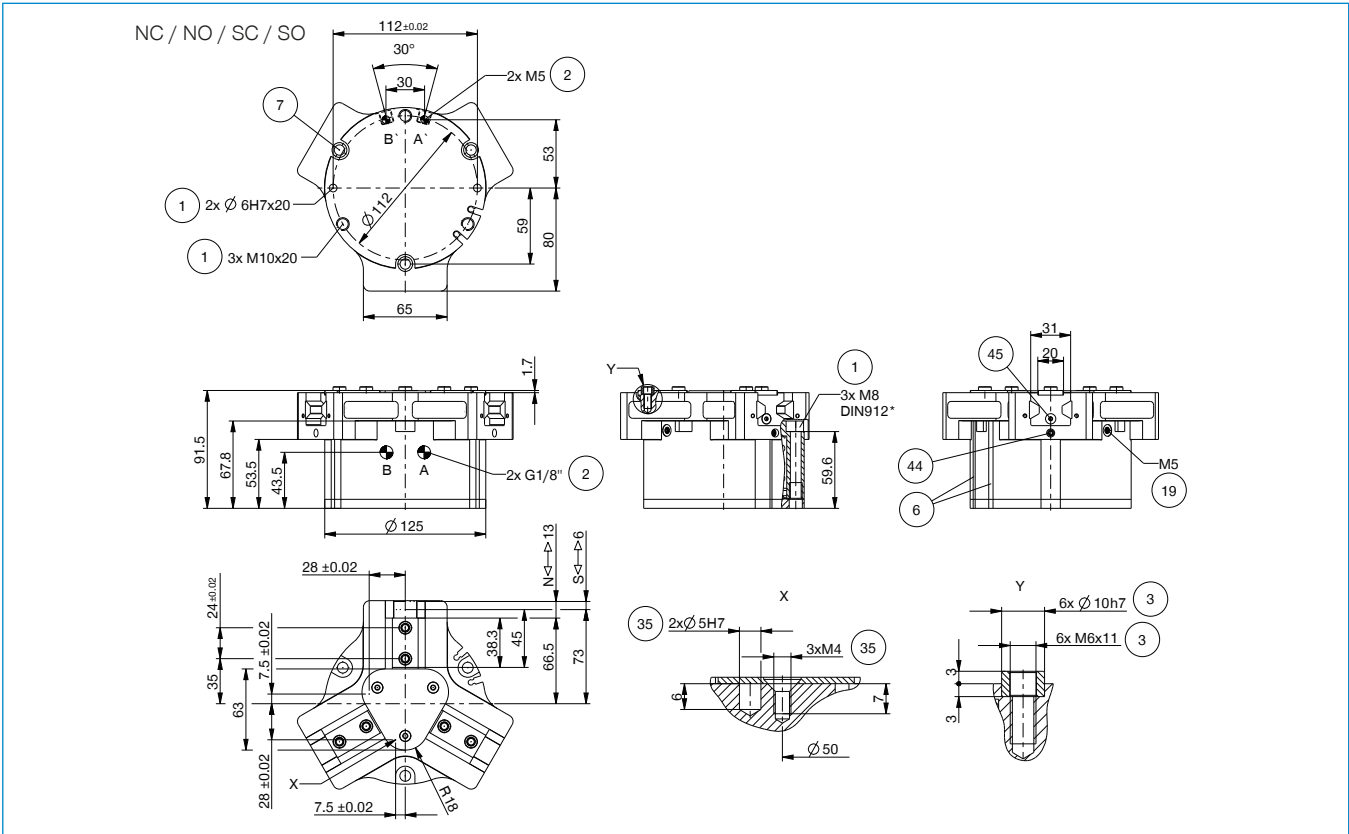
Order no.	▶ Technical Data - Protector Version					
	GPD5013NP	GPD5013NCP	GPD5013NOP	GPD5013SP	GPD5013SCP	GPD5013SOP
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**
Weight [kg]	3.15	4.05	4.05	3.15	4.05	4.05

Order no.	▶ Technical Data - High Temperature Version					
	GPD5013NT	GPD5013NCT	GPD5013NOT	GPD5013ST	GPD5013SCT	GPD5013SOT
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130

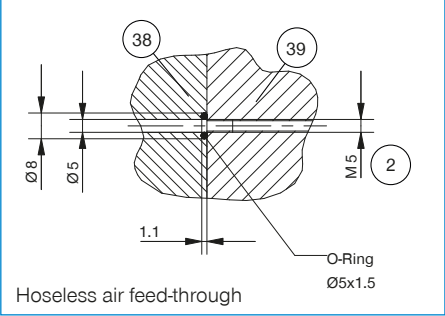
*All data measured at 6 bar

** with purged air

▶ TECHNICAL DRAWINGS



- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑥ Integrated slot for magnetic field sensor
- ⑦ Mounting block
- ⑱ Air purge connection option
- ⑳ Attachment option for customer-specific fittings
- ㉘ Adapter
- ㉙ Gripper
- ㉚ Clamp for sensor
- ㉛ Switch cam adjustment
- Ⓐ Air connection (close)
- Ⓑ Air connection (open)
- Ⓐ Air connection, alternative (close)
- Ⓑ Air connection, alternative (open)

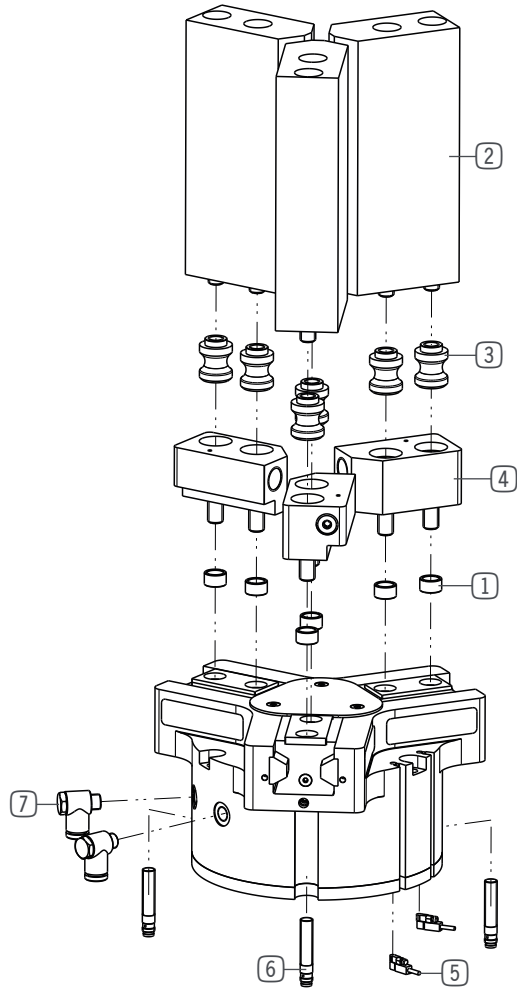


3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5013

1

Installation size GPD5013 / 3-Jaw Concentric Grippers / pneumatic / Grippers



▶ INCLUDED IN DELIVERY



Centering Disc

018187

► RECOMMENDED ACCESSORIES



Universal jaw aluminium

UB5013AL



Universal jaw steel

UB5013ST



Pressure piece N / S

ADS5013-01



Pressure piece NC / NO / SC / SO

ADS5013-02



Changeable jaw, loose-part-set

WB5013L



Changeable jaw, fix-part

WB5013F



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-01



Inductive proximity switch - Connector M8

NJ8-E2S



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Angled Fittings - Quick Connect Style

WV1-8X6



Straight Fittings - Quick Connect Style

GV1-8X6

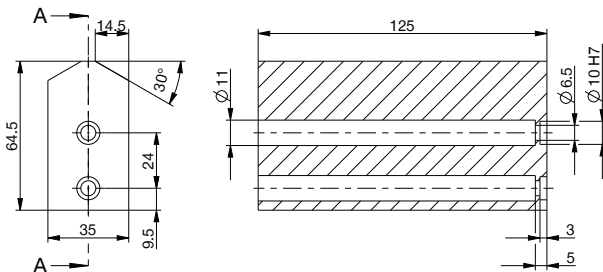


Pressure Safety Valve

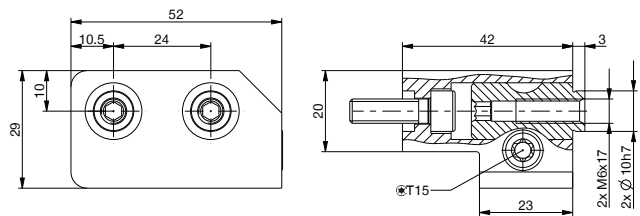
DSV1-8

► TECHNICAL DRAWINGS ACCESSORIES

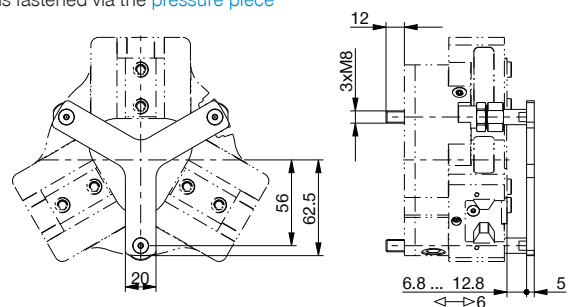
One universal jaw is required for each gripper jaw **(2)**
A-A



For each gripper jaw, one interchangeable jaw loose part set **(3)** and one interchangeable jaw fixed part **(4)** are needed



Gripper is fastened via the **pressure piece**



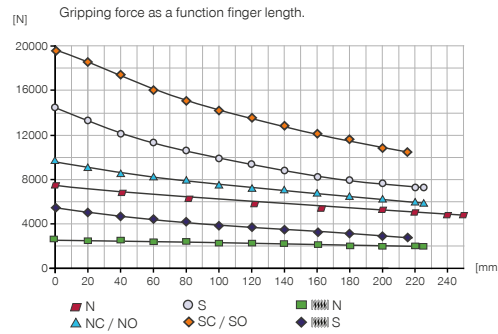
3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5016

▶ PRODUCT SPECIFICATIONS

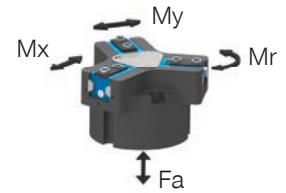


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	145
Mx [Nm]	195
My [Nm]	185
Fa [N]	5200

▶ TECHNICAL DATA

Order no.	▶ Technical Data*					
	GPD5016N	GPD5016NC	GPD5016NO	GPD5016S	GPD5016SC	GPD5016SO
Stroke per jaw [mm]	16	16	16	8	8	8
Gripping force in closing [N]	6870	9240		14700	19780	
Gripping force in opening [N]	7120		9490	15250		20330
Gripping force secured by spring min. [N]		2370	2370		5080	5080
Closing time [s]	0.4	0.3	0.5	0.4	0.3	0.5
Opening time [s]	0.4	0.5	0.3	0.4	0.5	0.3
Weight per jaw max. [kg]	3.8	3.8	3.8	3.8	3.8	3.8
Length of the gripper fingers max. [mm]	245	225	225	225	215	215
Repetition accuracy +/- [mm]	0.02	0.02	0.02	0.02	0.02	0.02
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Operating temperature [°C]	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90
Air volume per cycle [cm³]	525	925	925	525	925	925
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	5.7	7.5	7.5	5.7	7.5	7.5

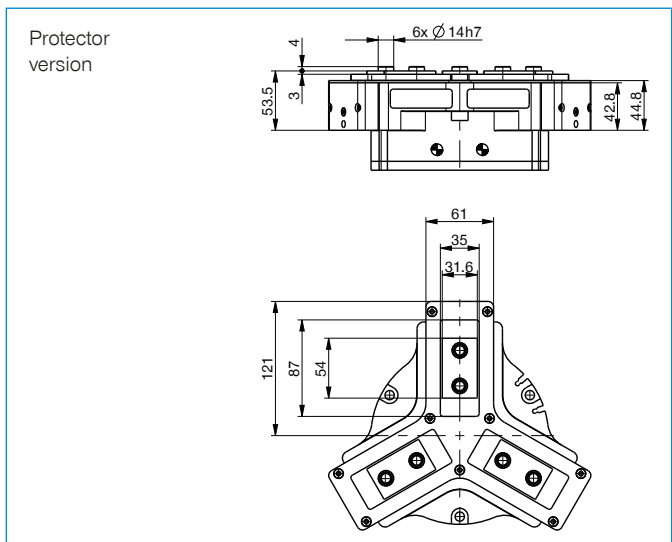
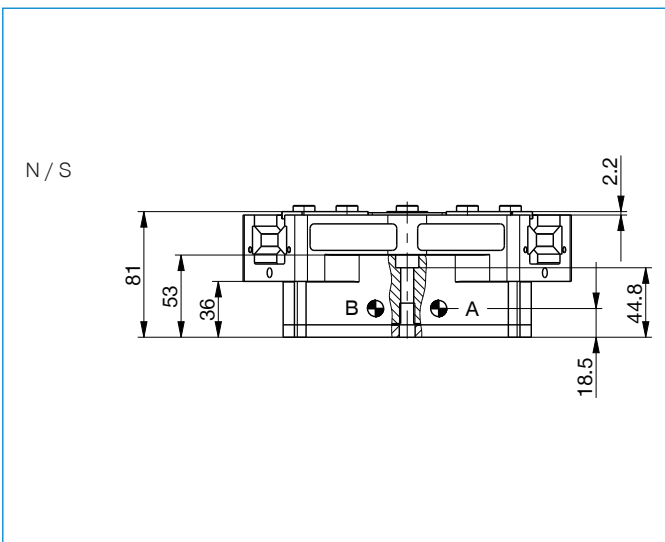
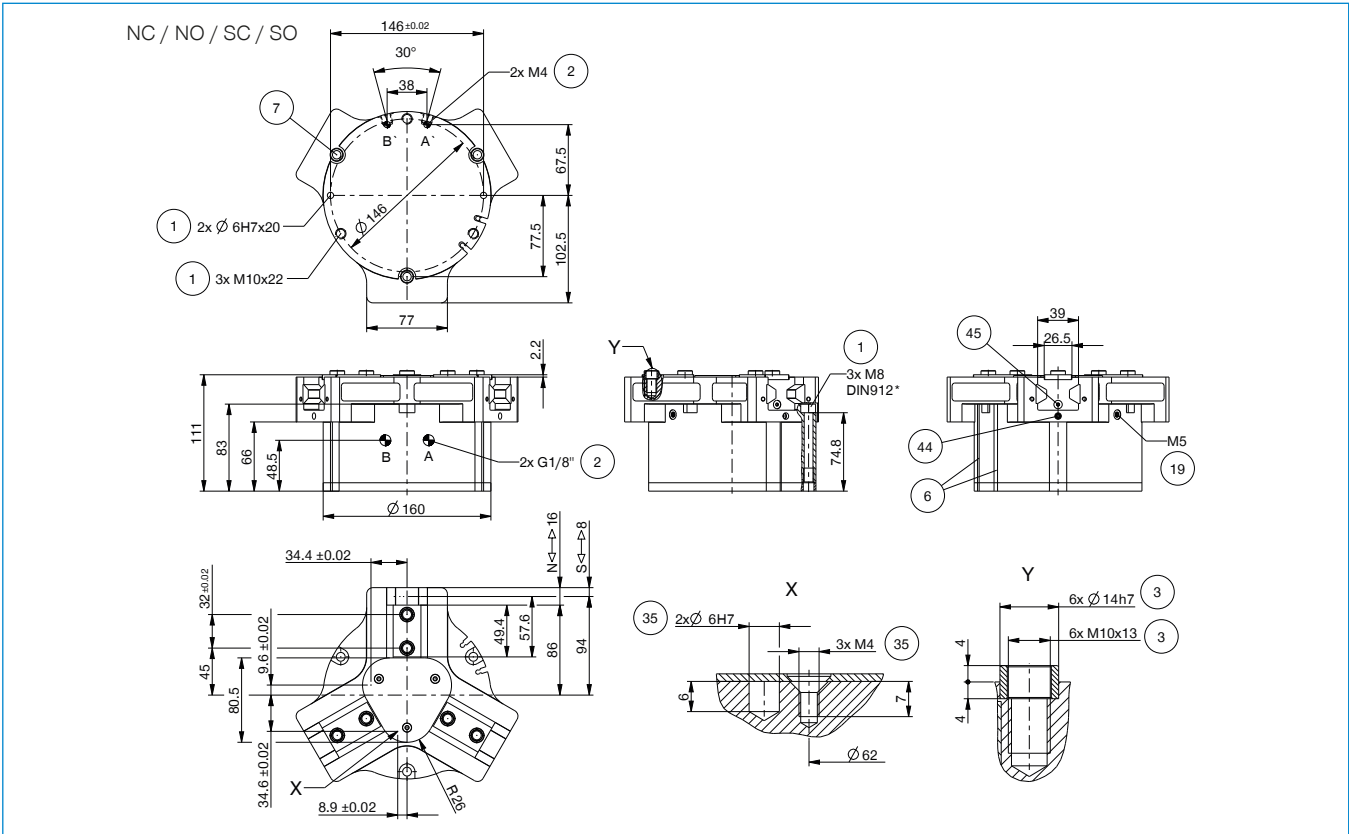
Order no.	▶ Technical Data - Protector Version					
	GPD5016NP	GPD5016NCP	GPD5016NOP	GPD5016SP	GPD5016SCP	GPD5016SOP
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**
Weight [kg]	6.8	8.6	8.6	6.8	8.6	8.6

Order no.	▶ Technical Data - High Temperature Version					
	GPD5016NT	GPD5016NCT	GPD5016NOT	GPD5016ST	GPD5016SCT	GPD5016SOT
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130

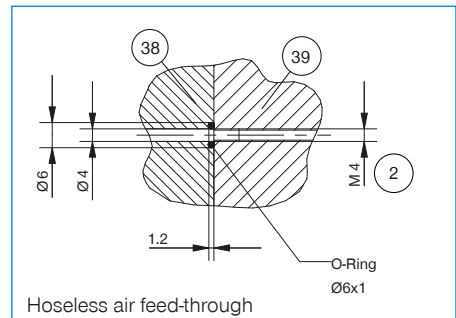
*All data measured at 6 bar

** with purged air

► TECHNICAL DRAWINGS



- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑥ Integrated slot for magnetic field sensor
- ⑦ Mounting block
- ⑱ Air purge connection option
- ⑳ Attachment option for customer-specific fittings
- ㉘ Adapter
- ㉙ Gripper
- ㉚ Clamp for sensor
- ㉛ Switch cam adjustment
- Ⓐ Air connection (close)
- Ⓑ Air connection (open)
- Ⓐ Air connection, alternative (close)
- Ⓑ Air connection, alternative (open)

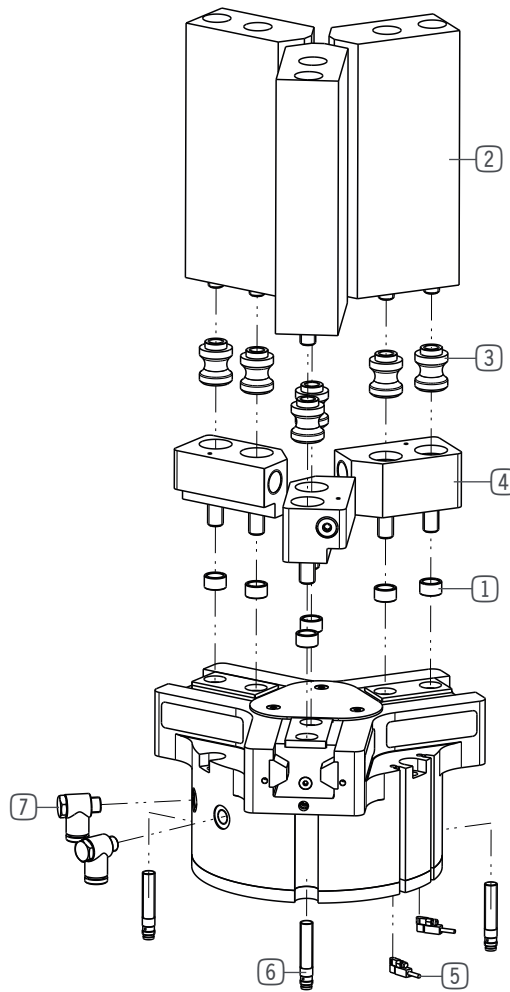


3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5016

1

Installation size GPD5016 / 3-Jaw Concentric Grippers / pneumatic / Grippers



▶ INCLUDED IN DELIVERY



Centering Disc

019387

► RECOMMENDED ACCESSORIES



Universal jaw aluminium

UB5016AL



Universal jaw steel

UB5016ST



Pressure piece N / S

ADS5016-01



Pressure piece NC / NO / SC / SO

ADS5016-02



Changeable jaw, loose-part-set

WB5016L



Changeable jaw, fix-part

WB5016F



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-01



Inductive proximity switch - Connector M8

NJ8-E2S



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Angled Fittings - Quick Connect Style

WV1-8X8



Straight Fittings - Quick Connect Style

GV1-8X8



Pressure Safety Valve

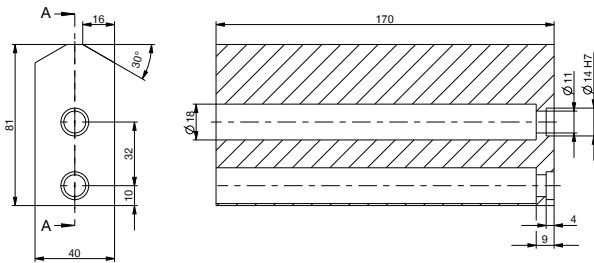
DSV1-8

► TECHNICAL DRAWINGS ACCESSORIES

One universal jaw is required for each gripper jaw **2**

2

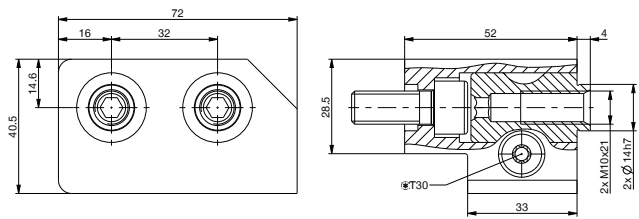
A-A



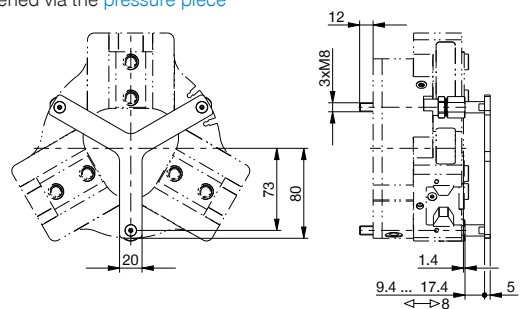
For each gripper jaw, one interchangeable jaw loose part set **3** and one interchangeable jaw fixed part **4** are needed

3

4



Gripper is fastened via the **pressure piece**



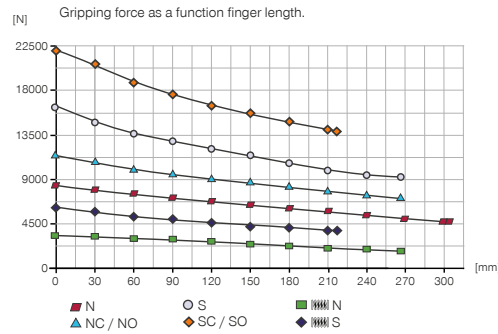
3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5025

▶ PRODUCT SPECIFICATIONS

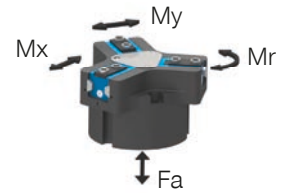


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	180
Mx [Nm]	205
My [Nm]	225
Fa [N]	7500

▶ TECHNICAL DATA

Order no.	▶ Technical Data*					
	GPD5025N	GPD5025NC	GPD5025NO	GPD5025S	GPD5025SC	GPD5025SO
Stroke per jaw [mm]	25	25	25	14	14	14
Gripping force in closing [N]	8430	11560		16240	22270	
Gripping force in opening [N]	8730		11860	16820		22850
Gripping force secured by spring min. [N]		3130	3130		6030	6030
Closing time [s]	0.6	0.6	1.0	0.6	0.6	1.0
Opening time [s]	0.6	1.0	0.6	0.6	1.0	0.6
Weight per jaw max. [kg]	7	7	7	7	7	7
Length of the gripper fingers max. [mm]	310	265	265	265	220	220
Repetition accuracy +/- [mm]	0.05	0.05	0.05	0.05	0.05	0.05
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Operating temperature [°C]	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90
Air volume per cycle [cm³]	1025	1750	1750	1025	1750	1750
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	11.8	15.4	15.4	11.8	15.4	15.4

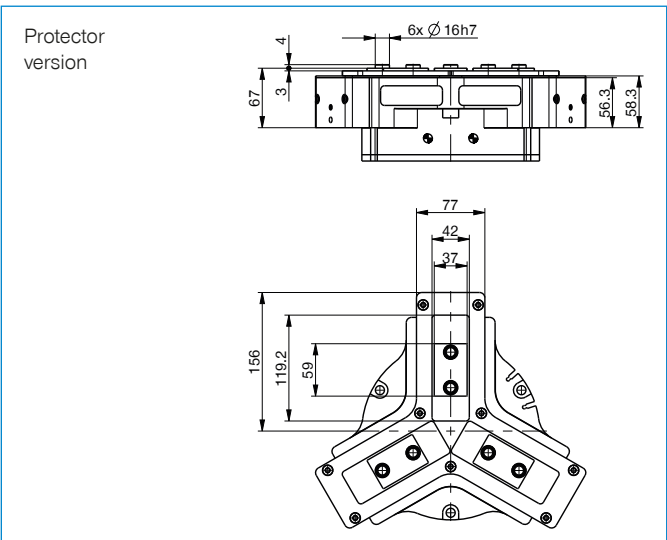
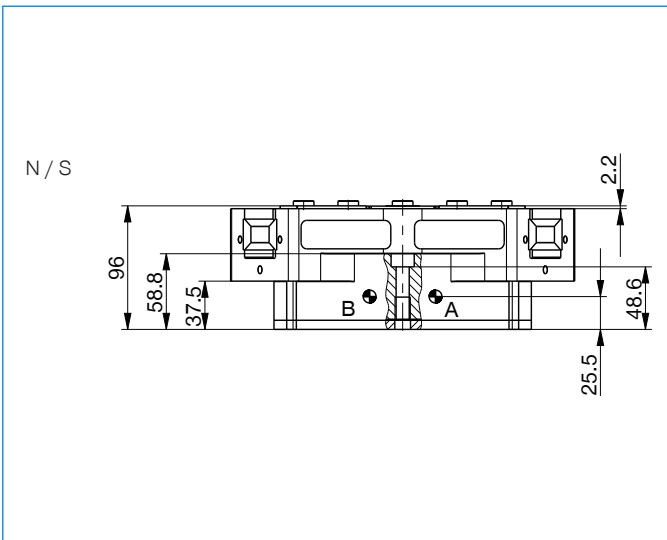
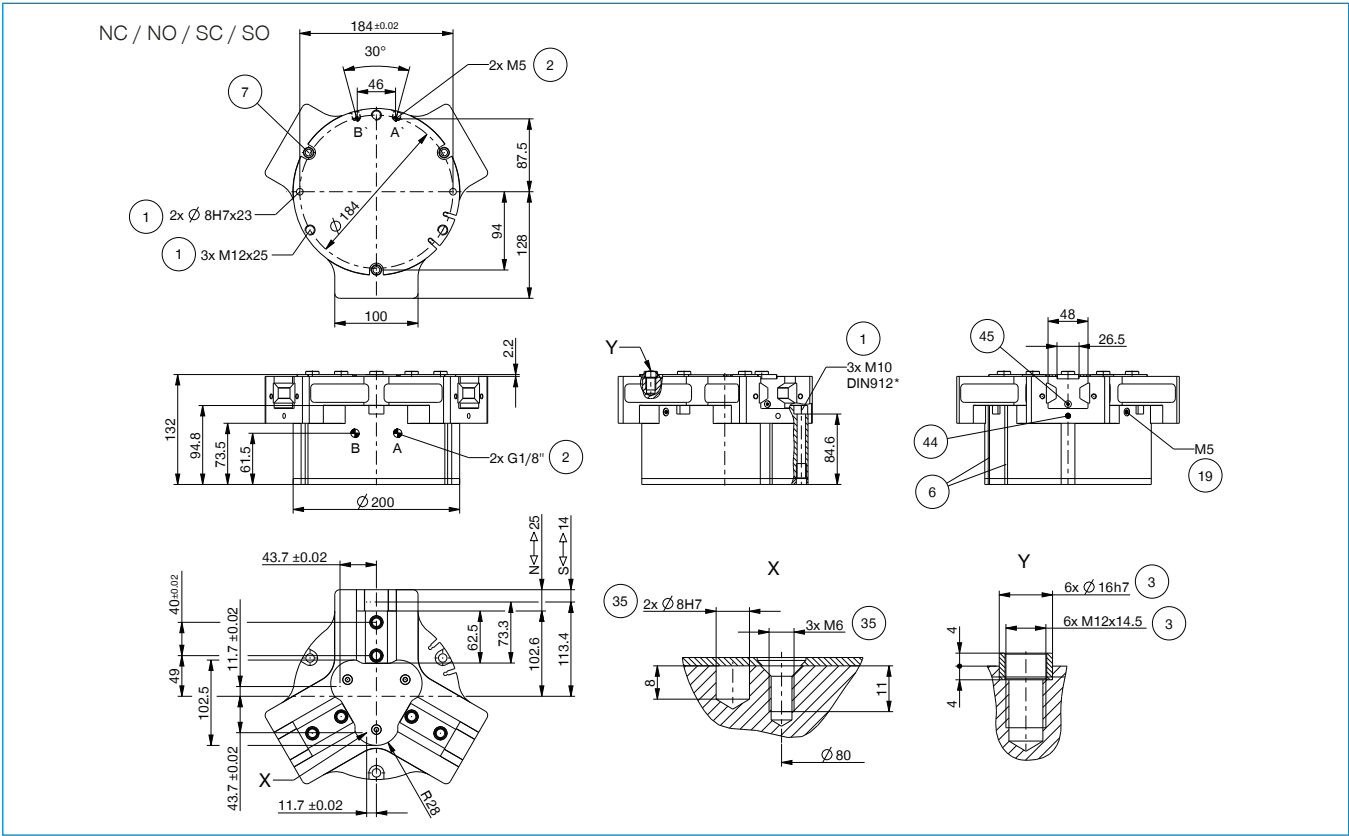
Order no.	▶ Technical Data - Protector Version					
	GPD5025NP	GPD5025NCP	GPD5025NOP	GPD5025SP	GPD5025SCP	GPD5025SOP
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**
Weight [kg]	14	17.6	17.6	14	17.6	17.6

Order no.	▶ Technical Data - High Temperature Version					
	GPD5025NT	GPD5025NCT	GPD5025NOT	GPD5025ST	GPD5025SCT	GPD5025SOT
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130

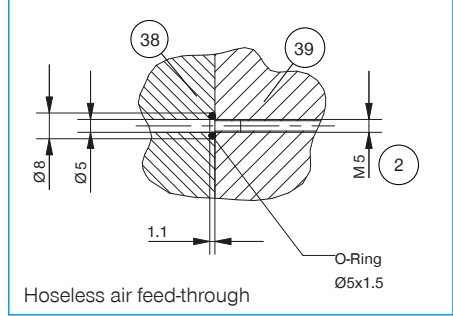
*All data measured at 6 bar

** with purged air

▶ TECHNICAL DRAWINGS



- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑥ Integrated slot for magnetic field sensor
- ⑦ Mounting block
- ⑱ Air purge connection option
- ⑳ Attachment option for customer-specific fittings
- ㉑ Adapter
- ㉒ Gripper
- ④④ Clamp for sensor
- ④⑤ Switch cam adjustment
- Ⓐ Air connection (close)
- Ⓑ Air connection (open)
- Ⓐ Air connection, alternative (close)
- Ⓑ Air connection, alternative (open)

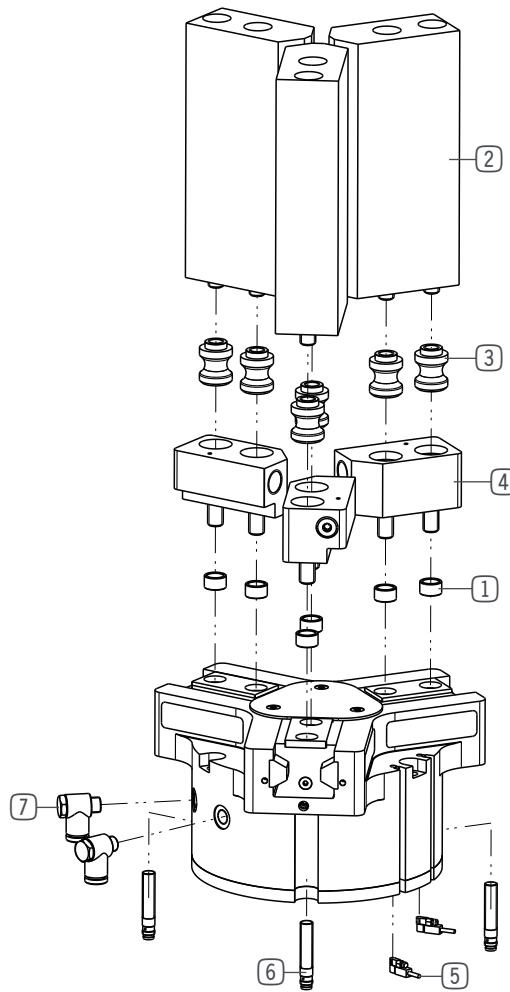


3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5025

1

Installation size GPD5025 / 3-Jaw Concentric Grippers / pneumatic / Grippers



▶ INCLUDED IN DELIVERY



Centering Disc

030529

▶ RECOMMENDED ACCESSORIES



Universal jaw aluminium

UB5025AL



Universal jaw steel

UB5025ST



Pressure piece N / S

ADS5025-01



Pressure piece NC / NO / SC / SO

ADS5025-02



Changeable jaw, loose-part-set

WB5025L



Changeable jaw, fix-part

WB5025F



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-01



Inductive proximity switch - Connector M8

NJ8-E2S



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Angled Fittings - Quick Connect Style

WV1-8X8



Straight Fittings - Quick Connect Style

GV1-8X8



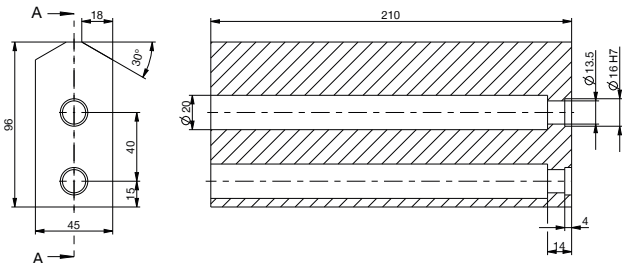
Pressure Safety Valve

DSV1-8

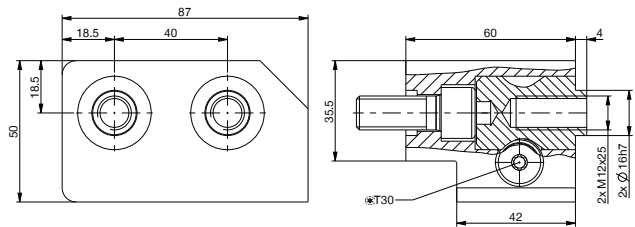
▶ TECHNICAL DRAWINGS ACCESSORIES

One universal jaw is required for each gripper jaw **2**

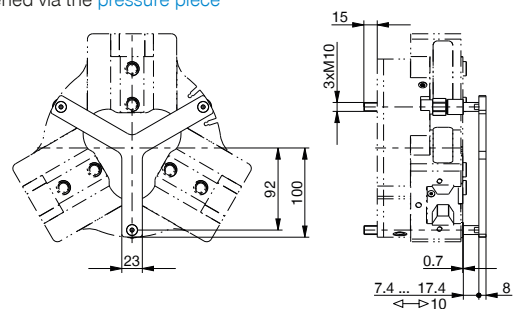
A-A



For each gripper jaw, one interchangeable jaw loose part set **3** and one interchangeable jaw fixed part **4** are needed



Gripper is fastened via the **pressure piece**



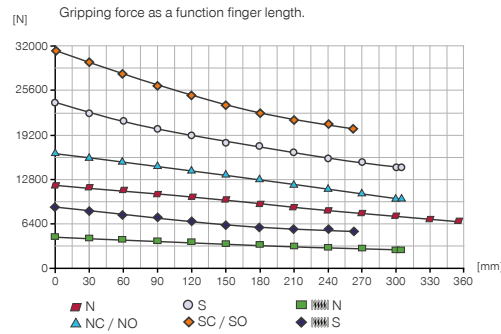
3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5030

▶ PRODUCT SPECIFICATIONS



▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	210
Mx [Nm]	290
My [Nm]	310
Fa [N]	9500

▶ TECHNICAL DATA

Order no.	▶ Technical Data*					
	GPD5030N	GPD5030NC	GPD5030NO	GPD5030S	GPD5030SC	GPD5030SO
Stroke per jaw [mm]	30	30	30	17	17	17
Gripping force in closing [N]	12130	16560		23150	31620	
Gripping force in opening [N]	12540		16970	23930		32400
Gripping force secured by spring min. [N]		4430	4430		8470	8470
Closing time [s]	1.13	1.0	1.9	1.13	1.0	1.9
Opening time [s]	1.13	1.9	1.0	1.13	1.9	1.0
Weight per jaw max. [kg]	9.5	9.5	9.5	9.5	9.5	9.5
Length of the gripper fingers max. [mm]	355	305	305	305	260	260
Repetition accuracy +/- [mm]	0.05	0.05	0.05	0.05	0.05	0.05
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Operating temperature [°C]	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90
Air volume per cycle [cm³]	1780	3000	3000	1780	3000	3000
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	21	27.5	27.5	21	27.5	27.5

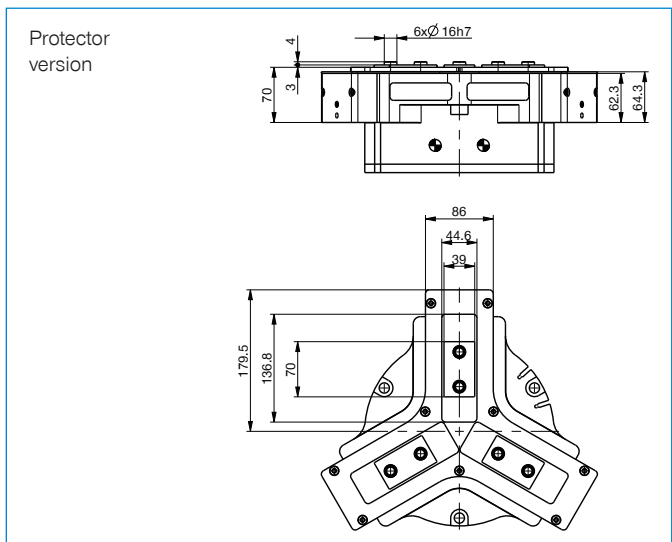
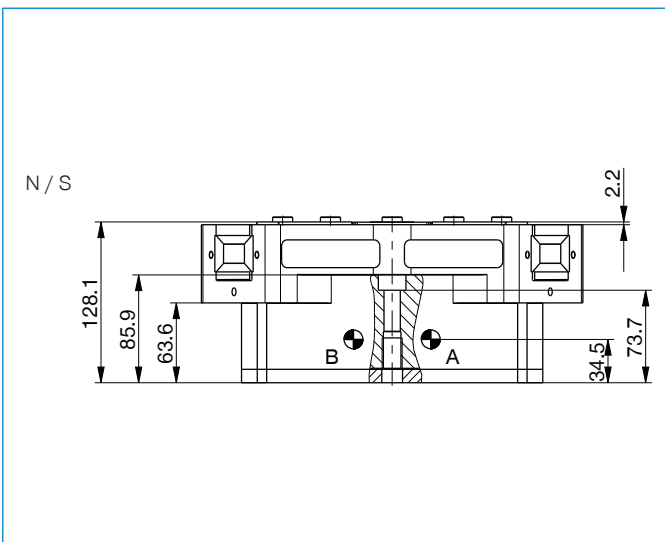
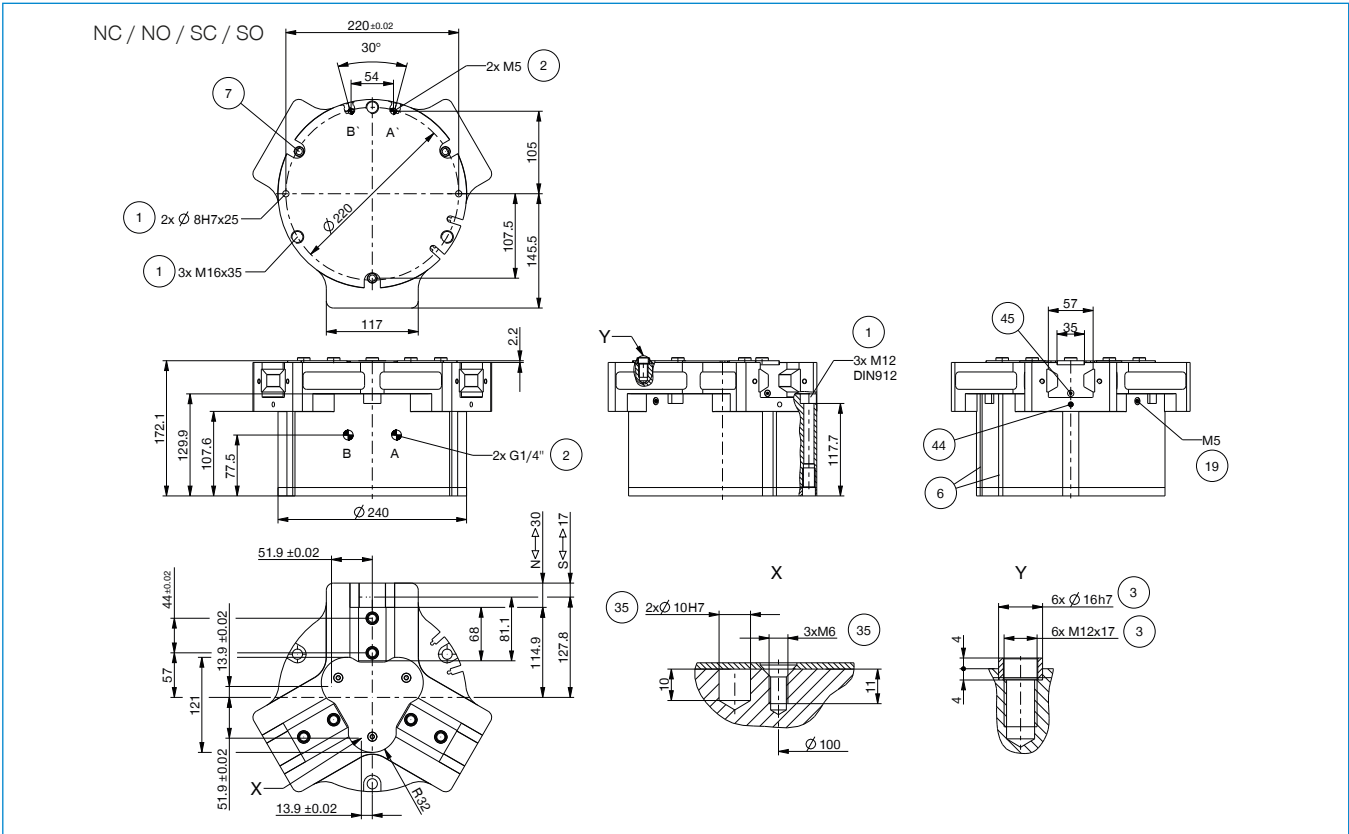
Order no.	▶ Technical Data - Protector Version					
	GPD5030NP	GPD5030NCP	GPD5030NOP	GPD5030SP	GPD5030SCP	GPD5030SOP
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**
Weight [kg]	24	30.5	30.5	24	30.5	30.5

Order no.	▶ Technical Data - High Temperature Version					
	GPD5030NT	GPD5030NCT	GPD5030NOT	GPD5030ST	GPD5030SCT	GPD5030SOT
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130

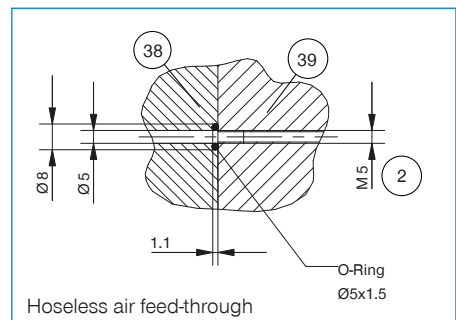
*All data measured at 6 bar

** with purged air

► TECHNICAL DRAWINGS



- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑥ Integrated slot for magnetic field sensor
- ⑦ Mounting block
- ⑱ Air purge connection option
- ⑳ Attachment option for customer-specific fittings
- ㉘ Adapter
- ㉙ Gripper
- ㉚ Clamp for sensor
- ㉛ Switch cam adjustment
- Ⓐ Air connection (close)
- Ⓑ Air connection (open)
- Ⓐ Air connection, alternative (close)
- Ⓑ Air connection, alternative (open)

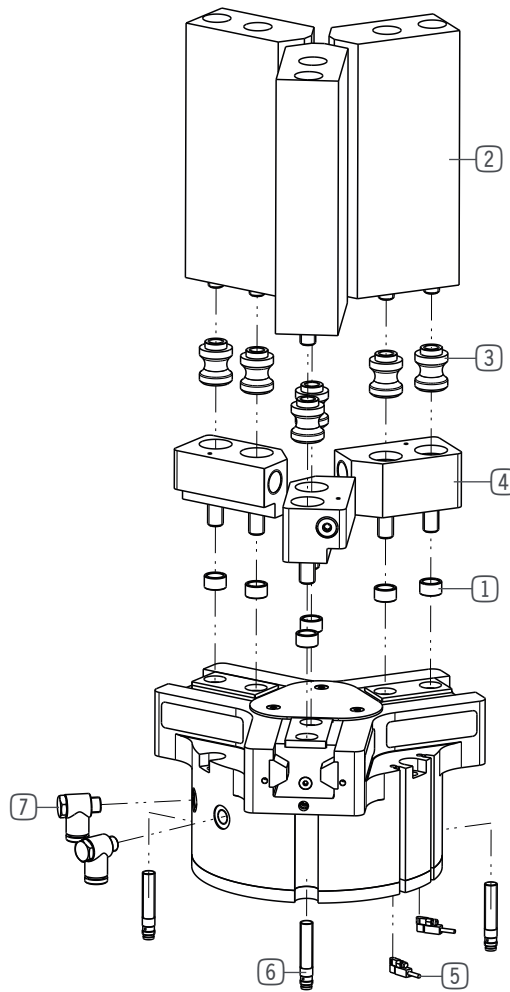


3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5030

1

Installation size GPD5030 / 3-Jaw Concentric Grippers / pneumatic / Grippers



▶ INCLUDED IN DELIVERY



Centering Disc

030529

► RECOMMENDED ACCESSORIES



Universal jaw aluminium

UB5030AL



Universal jaw steel

UB5030ST



Pressure piece N / S

ADS5030-01



Pressure piece NC / NO / SC / SO

ADS5030-02



Changeable jaw, loose-part-set

WB5030L



Changeable jaw, fix-part

WB5030F



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-01



Inductive proximity switch - Connector M8

NJ8-E2S



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Angled Fittings - Quick Connect Style

WV1-4X8



Straight Fittings - Quick Connect Style

GV1-4X8



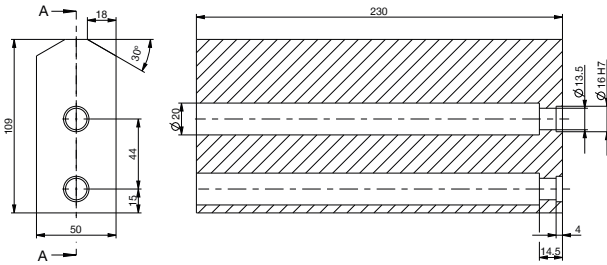
Pressure Safety Valve

DSV1-8

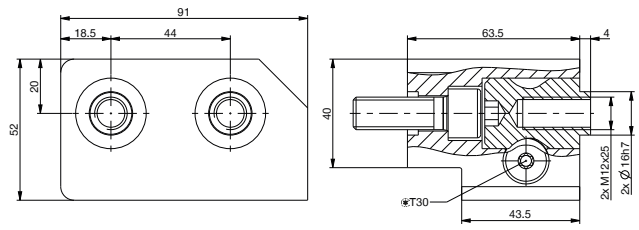
► TECHNICAL DRAWINGS ACCESSORIES

One universal jaw is required for each gripper jaw **2**

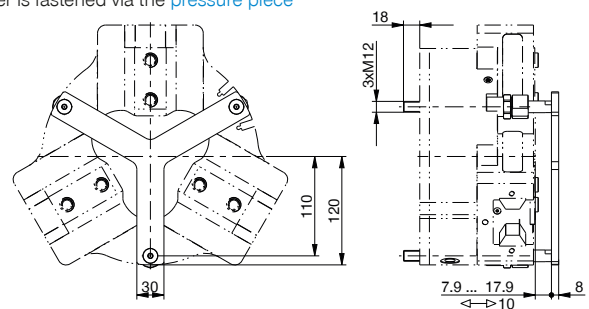
A-A



For each gripper jaw, one interchangeable jaw loose part set **3** and one interchangeable jaw fixed part **4** are needed



Gripper is fastened via the **pressure piece**

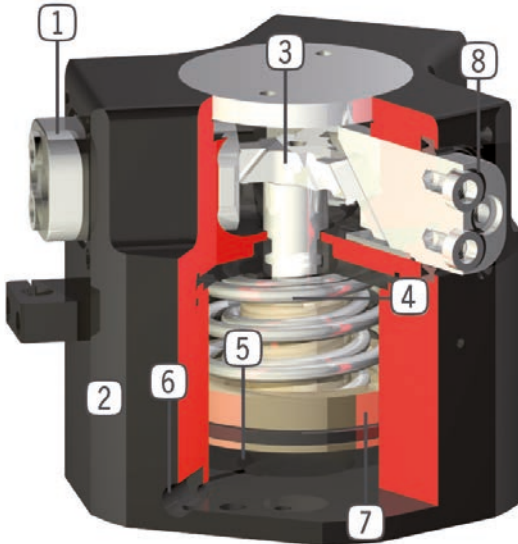


3-JAW CONCENTRIC GRIPPERS

SERIES GD1700

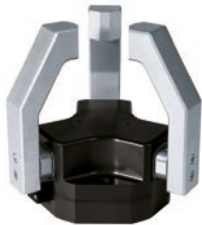
still available

► BENEFITS IN DETAIL



- ① **Sealed and precise square guide for / harsh environmental conditions**
 - high forces and moments capacity
- ② **Robust, lightweight housing**
 - hard coated aluminium alloy
- ③ **Wedge hook mechanism**
 - synchronized the movement of the gripper jaws
 - high force transfer
- ④ **Integrated gripping force safety device**
 - spring integrated into cylinder as energy storage
 - optional in designs C and O
- ⑤ **Permanent magnet**
 - installed in piston chamber as indicator for magnetic field sensor (up to GD1708-B)
- ⑥ **Energy supply**
 - possible from several sides
- ⑦ **Drive**
 - double-acting pneumatic cylinder
- ⑧ **Removable centering sleeves**
 - quick and economical positioning of the gripper fingers

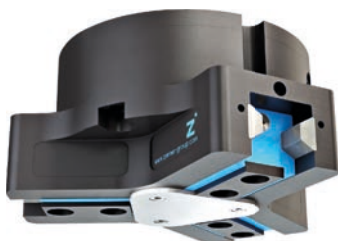
► TECHNICAL DATA *



Number of installation sizes	7
Stroke per jaw	4 mm - 20 mm
Gripping force	280 N - 5250 N
Weight	0,35 kg - 13,4 kg

*further information is available online

► FOR NEW DESIGNS, USE THE SUCCESSOR SERIES, THE GPD5000



"The Universal One"

- Up to 30% more gripping force than the benchmark
- 10% more static forces and moments than the benchmark
- Gripper fingers up to 10% longer than the benchmark
- Gripper fingers weight up to 15% higher than the benchmark
- Sealed guide IP64 / Protector version IP67 (with purged air)
- Protected against corrosion
- Up to 30 million cycles without maintenance

3-JAW CONCENTRIC GRIPPERS

OVERVIEW OF SERIES

1

Overview of Series / 3-Jaw Concentric Grippers



▶ ELECTRICAL



Series GED1300

324



Series GED5000

330



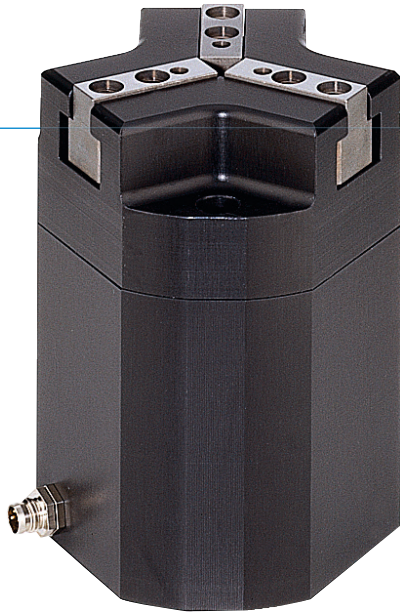
Series GED1500

344

3-JAW CONCENTRIC GRIPPERS

SERIES GED1300

▶ PRODUCT ADVANTAGES



“The robust”

▶ Proven T slot guide

This established and proven guiding technology stands for the highest process reliability like no other

▶ Integrated position sensing

You can detect the gripper status safely via the motor current using your control system

▶ The simplest activation

The included control unit is controlled easily via plus and minus buttons, while you can optionally adjust the gripping force using the potentiometer

▶ THE BEST PRODUCT FOR YOUR APPLICATION



▶ Our products love the challenge!

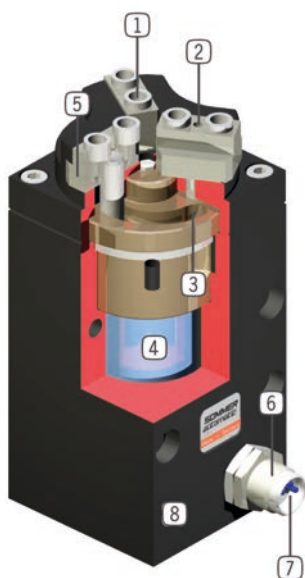
Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities:

Find the best product for your specific use:

www.zimmer-group.com



► BENEFITS IN DETAIL



- ① **Removable centering sleeves**
 - quick and economical positioning of the gripper fingers
- ② **Gripper jaw**
 - hardened steel
 - individual gripper finger mounting
- ③ **Positively driven curve disc**
 - synchronized the movement of the gripper jaws
 - high force transfer
 - rapid stroke and force stroke (version with 6 mm stroke per jaw)
- ④ **Drive**
 - electric drive by 24 VDC step motor
- ⑤ **Guide**
 - precise T-Slot guide for high forces and moments capacity
- ⑥ **Position sensing**
 - measured at the end of stroke via power increase on the motor
- ⑦ **Energy supply**
 - standardized interface M8 round plug connection signal control line (use only cable without diode)
- ⑧ **Robust, lightweight housing**
 - hard coated aluminium alloy

► SERIES CHARACTERISTICS



► Technical Information

All information just a click away at: www.zimmer-group.com

Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product.

Quick, clear and always up-to-date.



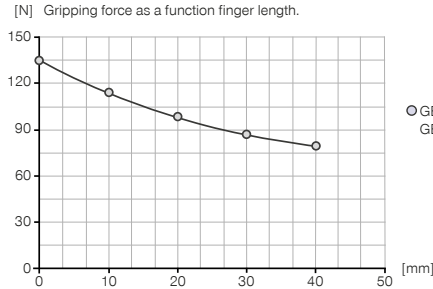
3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GED1302

1 PRODUCT SPECIFICATIONS

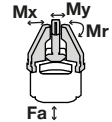


Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	5
Mx [Nm]	5
My [Nm]	4
Fa [N]	120

INCLUDED IN DELIVERY



Centering Disc

DST02900



Control

ELEGR01

RECOMMENDED ACCESSORIES



Plug-in connector Angled
Cable 5m - Socket M8
(female)

KAW500

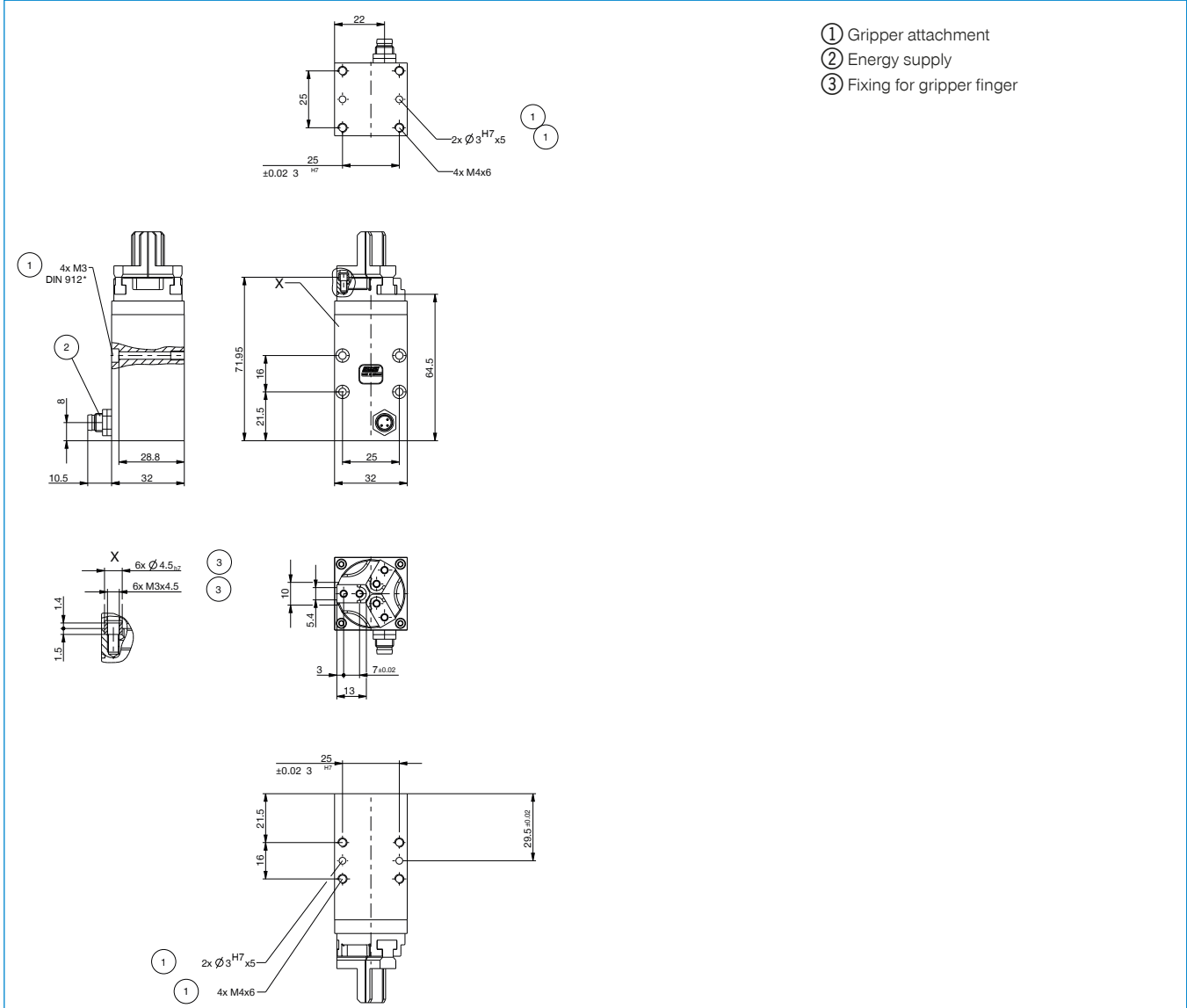


Plug-in connector Straight
Cable 5m - Socket M8
(female)

KAG500

Order no.	GED1302
Stroke per jaw [mm]	2
Gripping force in closing (adjustable) max. [N]	140
Gripping force in opening (adjustable) max. [N]	140
Closing time [s]	0.2
Opening time [s]	0.2
Repetition accuracy +/- [mm]	0.1
Voltage [V]*	24
Max. current regulable by potentiometer [mA]	140
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Protection to IEC 60529	IP40
Weight [kg]	0.25

* 12 volt voltage on request



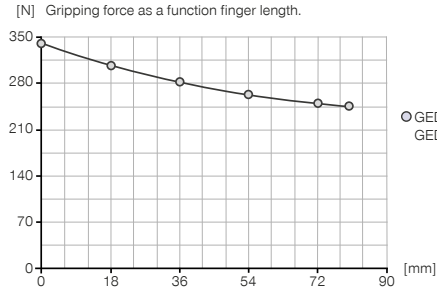
3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GED1306

▶ PRODUCT SPECIFICATIONS

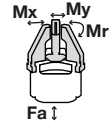


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	30
Mx [Nm]	25
My [Nm]	20
Fa [N]	800

▶ INCLUDED IN DELIVERY



Centering Disc

BDST40800



Control

ELEGR04

▶ RECOMMENDED ACCESSORIES



Plug-in connector Angled
Cable 5m - Socket M8
(female)

KAW500

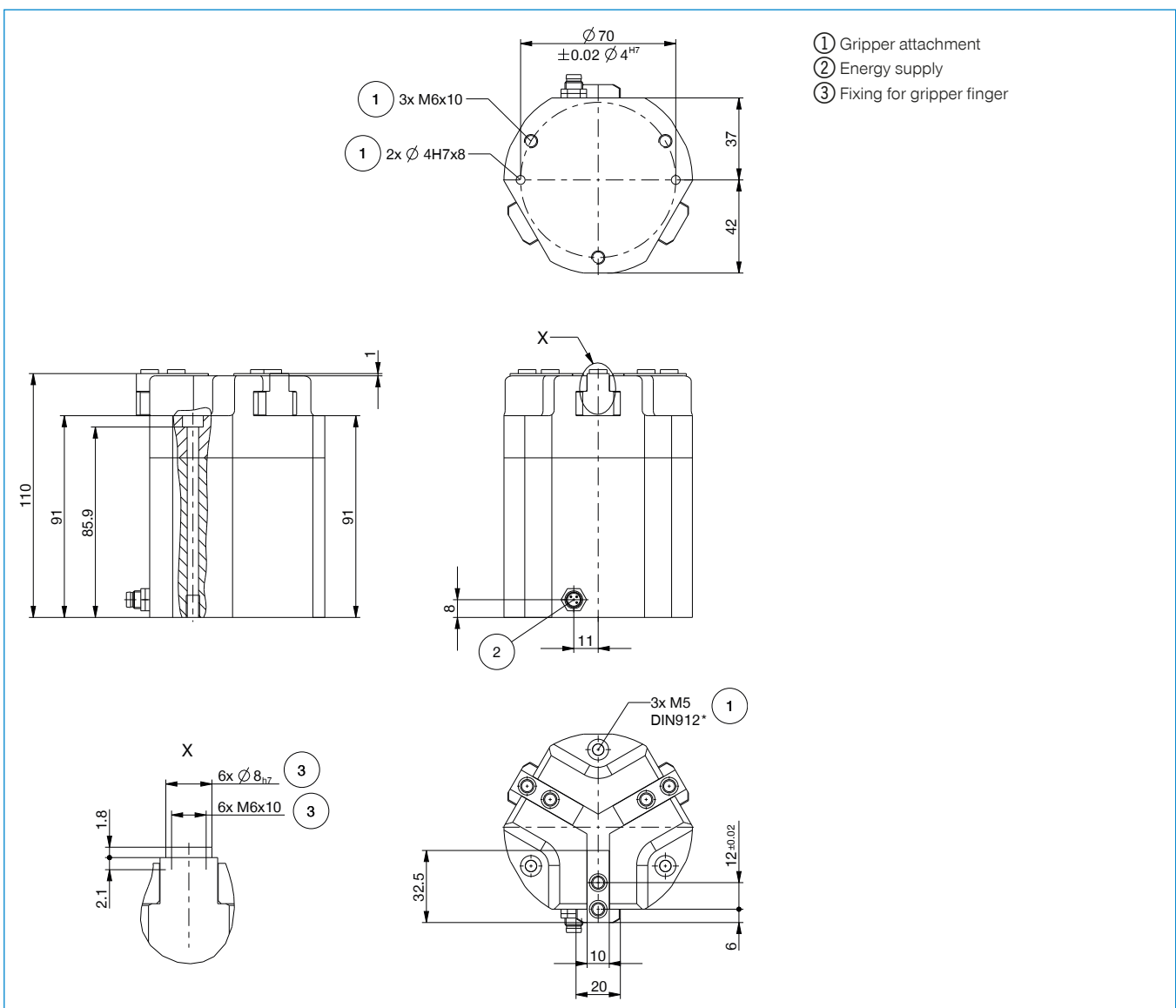


Plug-in connector Straight
Cable 5m - Socket M8
(female)

KAG500

Order no.	Technical Data	
	GED1306C	GED1306O
Stroke per jaw [mm]	6	6
Gripping force in closing (adjustable) max. [N]	350	
Gripping force in opening (adjustable) max. [N]		350
Closing time [s]	0.4	0.4
Opening time [s]	0.4	0.4
Repetition accuracy +/- [mm]	0.02	0.02
Voltage [V]*	24	24
Max. current regulable by potentiometer [mA]	210	210
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Protection to IEC 60529	IP40	IP40
Weight [kg]	1.7	1.7

* 12 volt voltage on request



3-JAW CONCENTRIC GRIPPERS

SERIES GED5000

▶ PRODUCT ADVANTAGES



“ALL in ONE”

- ▶ Approximately the same gripping force as a comparable pneumatic gripper
- ▶ Mechanical self limitation in case of power drop
- ▶ Same connection hole patterns as a comparable pneumatic gripper
- ▶ Plug and play – single-cable solution, supports incredibly easy control using I/O signals
- ▶ Integrated ACM control module - option of configuring gripping force, travel time and 3 switching points
- ▶ Protected from corrosion and sealed in accordance with IP64
- ▶ Brushless DC motor – up to 30 million cycles without maintenance

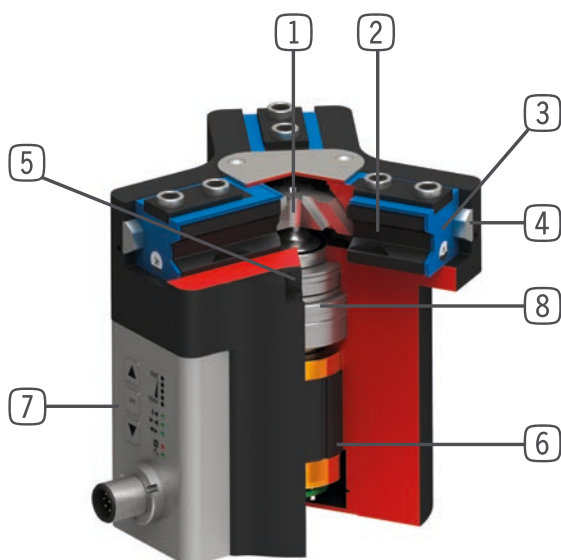
▶ THE BEST PRODUCT FOR YOUR APPLICATION



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www.zimmer-group.com

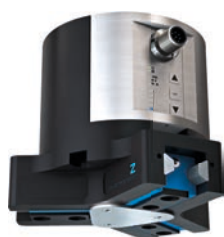


► BENEFITS IN DETAIL



- ① Wedge hook mechanism**
 - high forces and moments capacity
 - Synchronized gripper jaw movement
- ② Gripper jaw**
 - DLC coated to protect against corrosion
 - Gripper fingers mounted using removable centring sleeves
 - Lubricated for life via incorporated lubrication slots
- ③ Dual lip seal**
 - Enables IP64
 - Prevents grease from being squeezed out, increasing service life
- ④ Steel Linear Guide**
 - Steel in steel guide
 - Enables use of extremely long gripper fingers
- ⑤ Mounting and positioning**
 - Alternatively, on several sides for customized mounting
 - Pneumatic and electrical versions identical apart from height
- ⑥ BLDC motor**
 - Wear-resistant brushless DC motor
- ⑦ Advanced control module**
 - Integrated control module with single-cable solution
 - Gripping force, travel time and query programmable via the control panel on the housing
- ⑧ Drive train**
 - Combination of trapezoidal spindle and gear
 - Durable and robust

► SERIES CHARACTERISTICS



Number of installation sizes	3
Stroke per jaw	6 mm - 10 mm
Gripping force	540 N - 1900 N
Weight	1,09 kg - 2,33 kg
AP class	5



30 million maintenance-free cycles (max.)



Integrated sensing



IP64



Corrosion resistance



Mechanical self limitation



Purged air

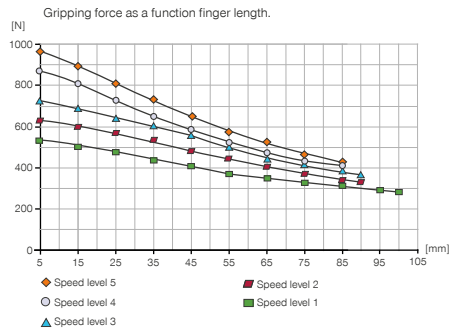
3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GED5006

▶ PRODUCT SPECIFICATIONS



▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	43
Mx [Nm]	70
My [Nm]	46
Fa [N]	1250

▶ TECHNICAL DATA - BASIC VERSION

Order no.	GED5006N
Stroke per jaw [mm]	6
Control time [s]	0.035
Weight per jaw max. [kg]	0.4
Length of the gripper fingers max. [mm]*	100
Repetition accuracy +/- [mm]	0.01
Voltage [V]	24
Current consumption max. [A]	5
Operating temperature min. [°C]	5
Operating temperature max. [°C]	50
Protection to IEC 60529	IP64
Weight [kg]	1.09

*Depending on speed level selected

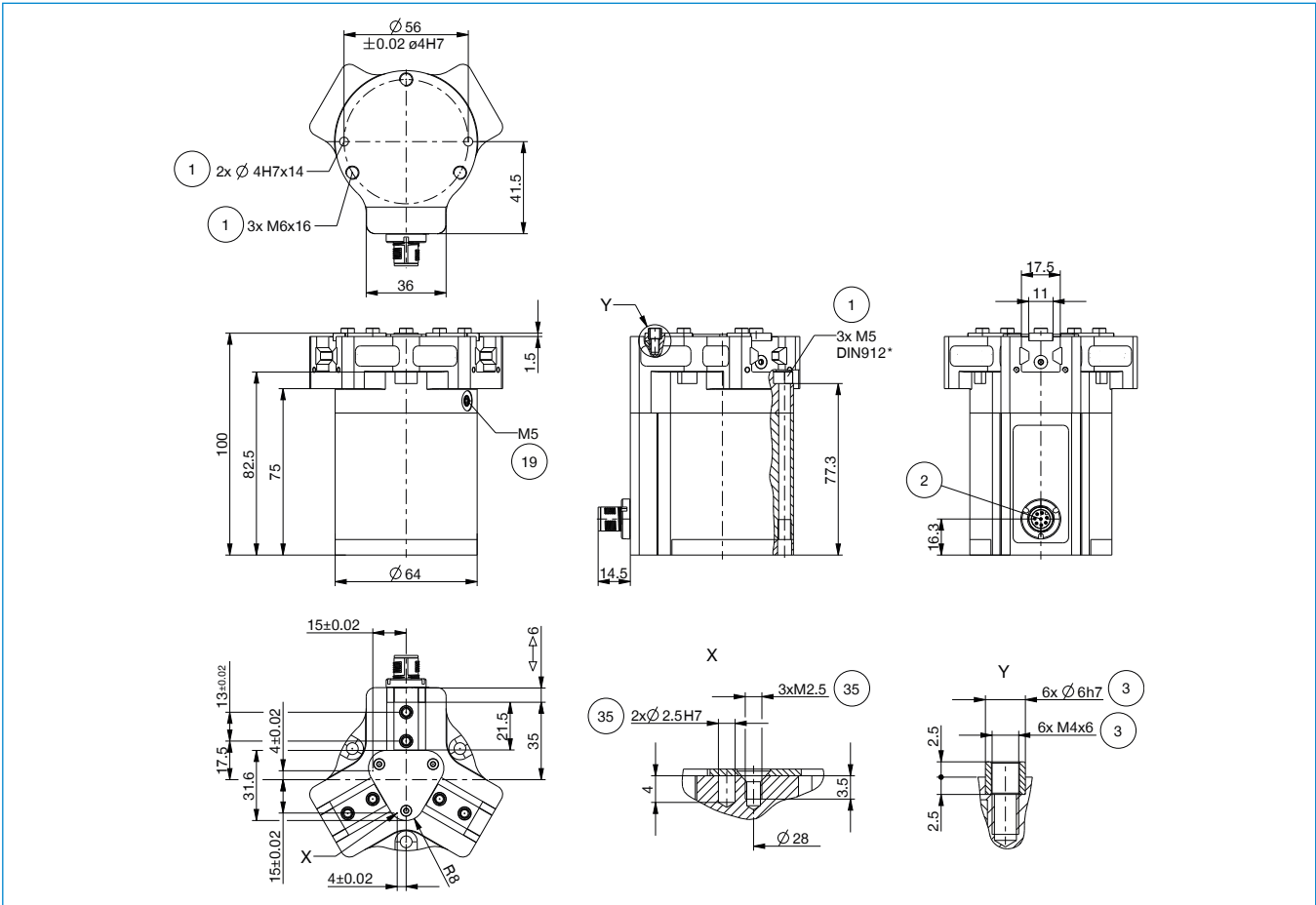
▶ TECHNICAL DATA - MODES

Order no.	GED5006N
Gripping force → ← min. / max. [N]	540 / 960
Gripping force ↔ min. / max. [N]	540 / 960
Travel time → ← min. / max. [s]	0,15 / 0,22
Travel time ↔ min. / max. [s]	0,15 / 0,22

Order no.	GED5006N
Gripping force → ← min. / max. [N]	540 / 960
Gripping force ↔ min. / max. [N]	-
Travel time → ← min. / max. [s]	0,15 / 0,22
Travel time ↔ min. / max. [s]	0,13

Order no.	GED5006N
Gripping force → ← min. / max. [N]	-
Gripping force ↔ min. / max. [N]	540 / 960
Travel time → ← min. / max. [s]	0,13
Travel time ↔ min. / max. [s]	0,15 / 0,22

TECHNICAL DRAWINGS



① Gripper attachment

② Energy supply

③ Fixing for gripper finger

⑱ Air purge connection option

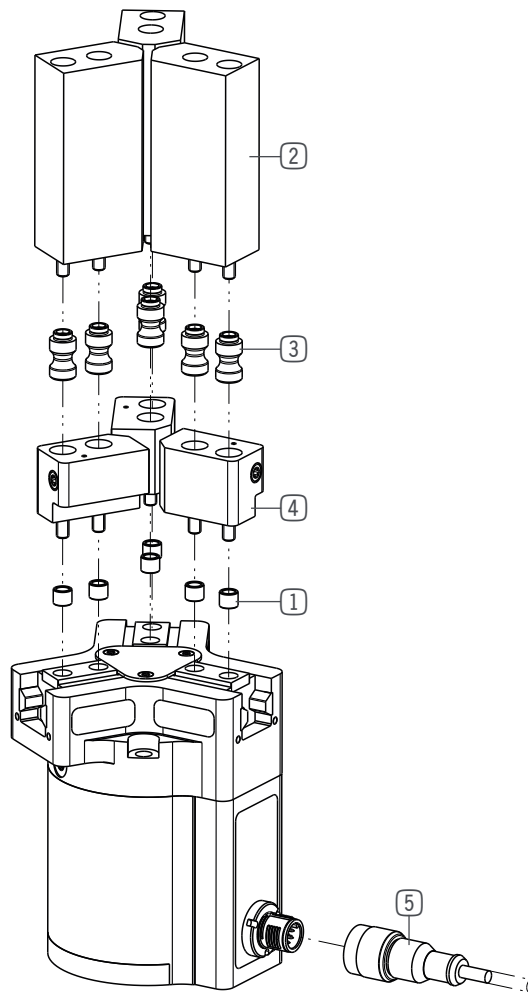
⑳ Attachment option for customer-specific fittings

3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GED5006

1

Installation size GED5006 / 3-Jaw Concentric Grippers / electric / Grippers



▶ INCLUDED IN DELIVERY



Centering Disc

024230

► RECOMMENDED ACCESSORIES



Universal jaw aluminium

UB5006AL



Universal jaw steel

UB5006ST



Pressure piece

ADS5006-05



Changeable jaw, loose-part-set

WB5006L



Changeable jaw, fix-part

WB5006F



Plug-in Connector Angled Cable 10 m - Female M12

KAW1000B8

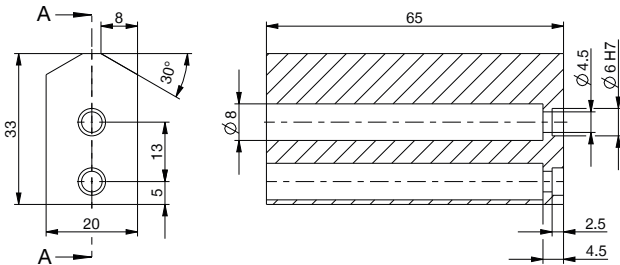


Plug-in Connector Straight Cable 10 m - Female M12

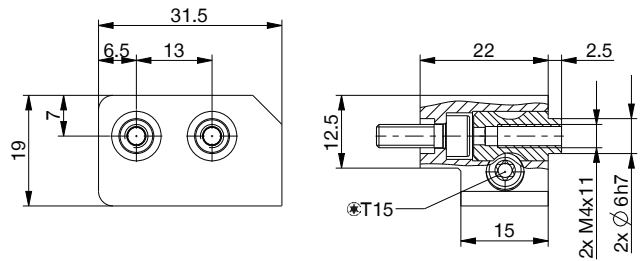
KAG1000B8

► TECHNICAL DRAWINGS ACCESSORIES

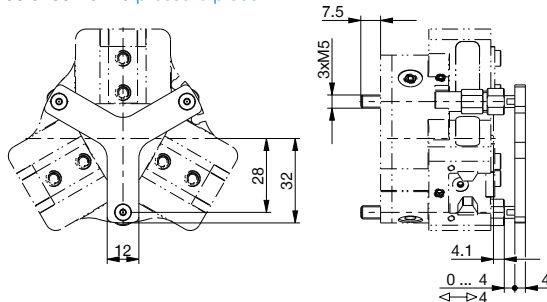
One universal jaw is required for each gripper jaw (2) A-A



For each gripper jaw, one interchangeable jaw loose part set (3) and one interchangeable jaw fixed part (4) are needed



Gripper is fastened via the pressure piece



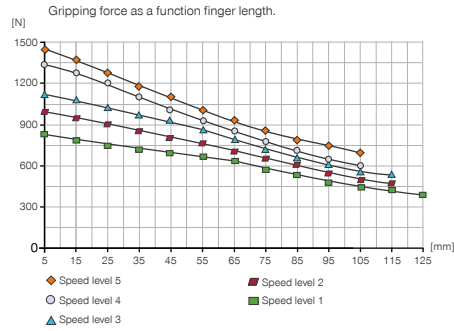
3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GED5008

▶ PRODUCT SPECIFICATIONS



▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	60
Mx [Nm]	105
My [Nm]	65
Fa [N]	1900

▶ TECHNICAL DATA - BASIC VERSION

Order no.	GED5008N
Stroke per jaw [mm]	8
Control time [s]	0.035
Weight per jaw max. [kg]	0.7
Length of the gripper fingers max. [mm]*	125
Repetition accuracy +/- [mm]	0.01
Voltage [V]	24
Current consumption max. [A]	5
Operating temperature min. [°C]	5
Operating temperature max. [°C]	50
Protection to IEC 60529	IP64
Weight [kg]	1.66

*Depending on speed level selected

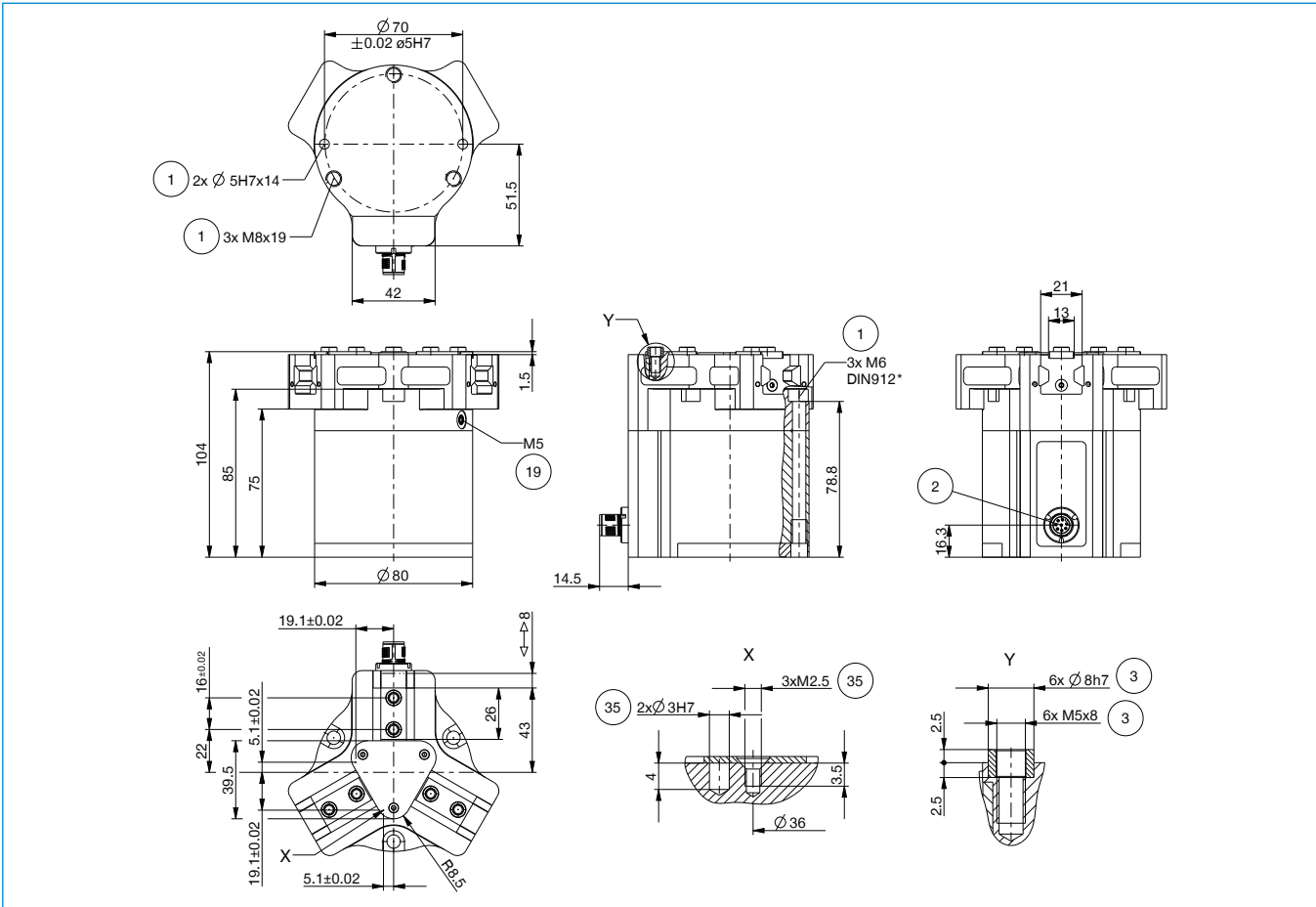
▶ TECHNICAL DATA - MODES

Order no.	GED5008N
Gripping force → ← min. / max. [N]	800 / 1450
Gripping force ↔ min. / max. [N]	800 / 1450
Travel time → ← min. / max. [s]	0,18 / 0,29
Travel time ↔ min. / max. [s]	0,18 / 0,29

Order no.	GED5008N
Gripping force → ← min. / max. [N]	800 / 1450
Gripping force ↔ min. / max. [N]	-
Travel time → ← min. / max. [s]	0,18 / 0,29
Travel time ↔ min. / max. [s]	0,15

Order no.	GED5008N
Gripping force → ← min. / max. [N]	-
Gripping force ↔ min. / max. [N]	800 / 1450
Travel time → ← min. / max. [s]	0,15
Travel time ↔ min. / max. [s]	0,18 / 0,29

TECHNICAL DRAWINGS



① Gripper attachment

② Energy supply

③ Fixing for gripper finger

⑱ Air purge connection option

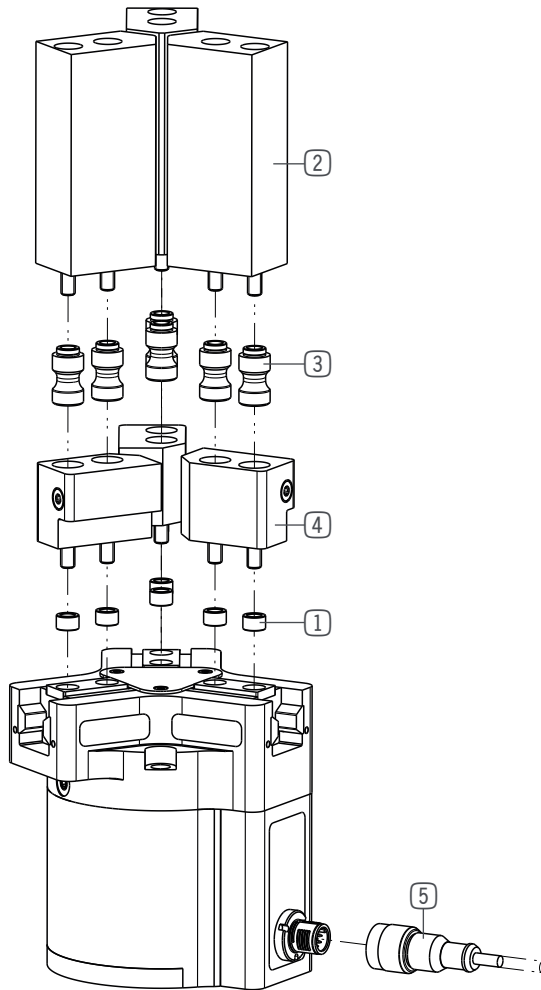
⑳ Attachment option for customer-specific fittings

3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GED5008

1

Installation size GED5008 / 3-Jaw Concentric Grippers / electric / Grippers



▶ INCLUDED IN DELIVERY



Centering Disc

024231

► RECOMMENDED ACCESSORIES



Universal jaw aluminium

UB5008AL



Universal jaw steel

UB5008ST



Pressure piece

ADS5008-05



Changeable jaw, loose-part-set

WB5008L



Changeable jaw, fix-part

WB5008F



Plug-in Connector Angled Cable 10 m - Female M12

KAW1000B8

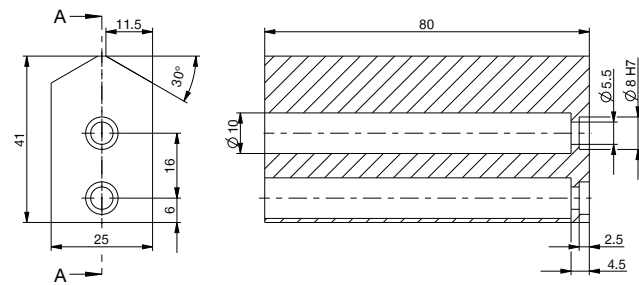


Plug-in Connector Straight Cable 10 m - Female M12

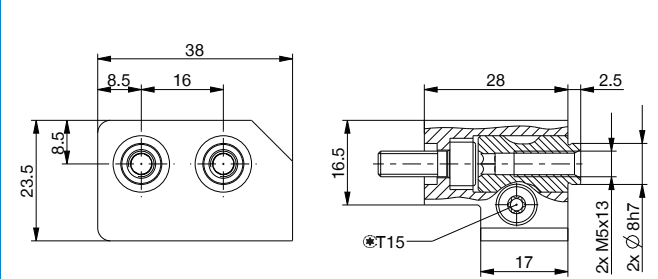
KAG1000B8

► TECHNICAL DRAWINGS ACCESSORIES

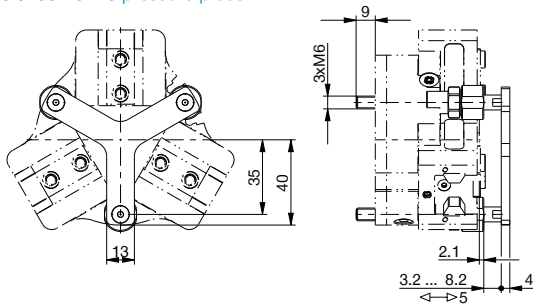
One universal jaw is required for each gripper jaw **2**



For each gripper jaw, one interchangeable jaw loose part set **3** and one interchangeable jaw fixed part **4** are needed



Gripper is fastened via the [pressure piece](#)



3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GED5010

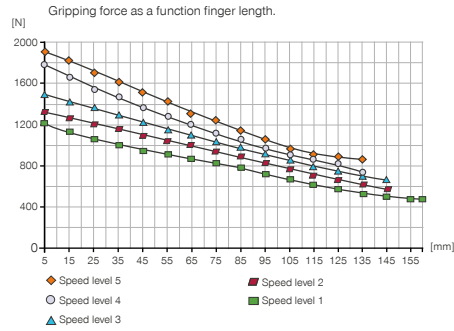
1

Installation size GED5010 / 3-Jaw Concentric Grippers / electric / Grippers

▶ PRODUCT SPECIFICATIONS



▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	75
Mx [Nm]	125
My [Nm]	95
Fa [N]	2700

▶ TECHNICAL DATA - BASIC VERSION

Order no.	GED5010N
Stroke per jaw [mm]	10
Control time [s]	0.035
Weight per jaw max. [kg]	1.3
Length of the gripper fingers max. [mm]*	160
Repetition accuracy +/- [mm]	0.01
Voltage [V]	24
Current consumption max. [A]	5
Operating temperature min. [°C]	5
Operating temperature max. [°C]	50
Protection to IEC 60529	IP64
Weight [kg]	2.33

*Depending on speed level selected

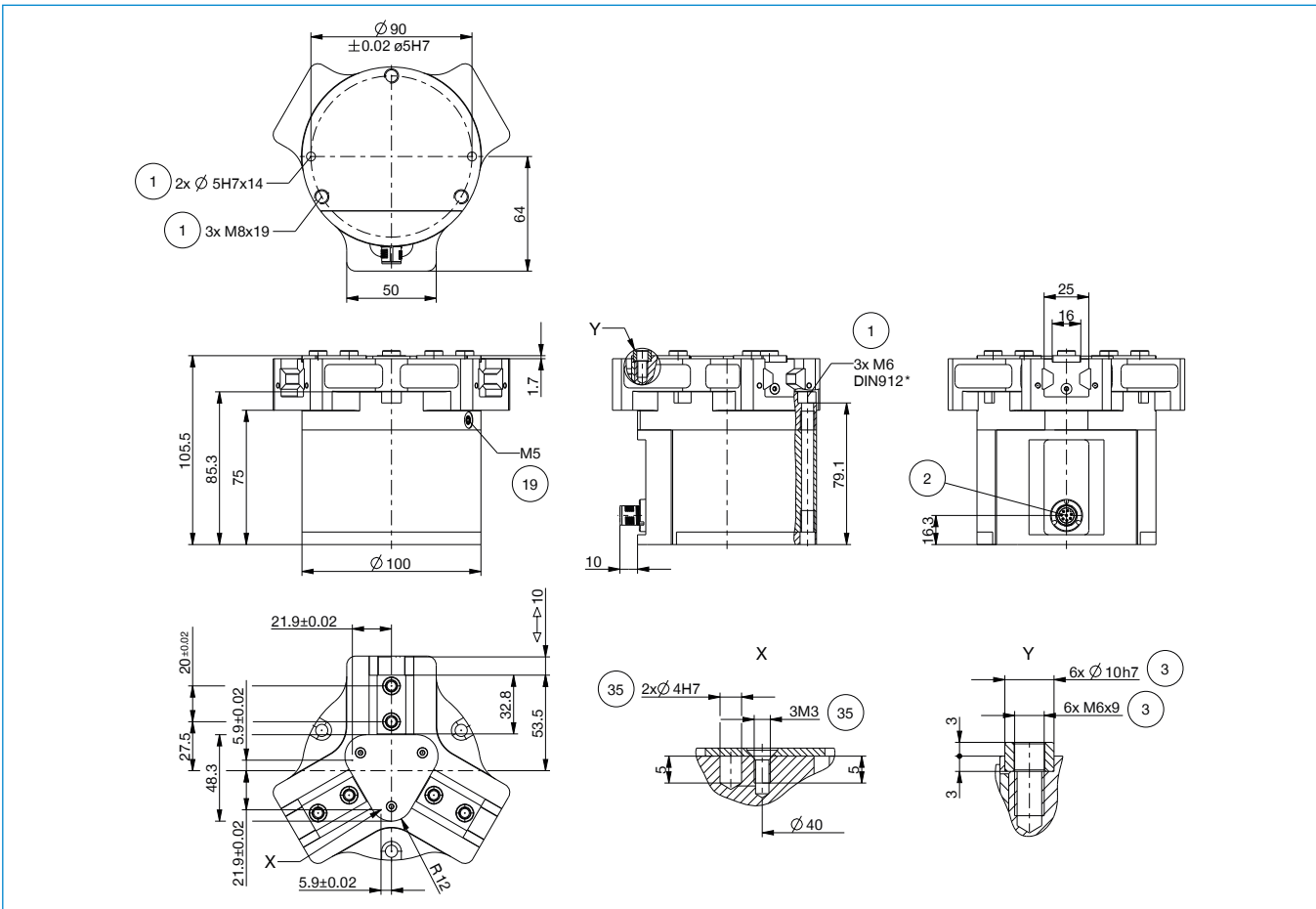
▶ TECHNICAL DATA - MODES

Order no.	GED5010N
Gripping force → ← min. / max. [N]	1200 / 1900
Gripping force ↔ min. / max. [N]	1200 / 1900
Travel time → ← min. / max. [s]	0,21 / 0,32
Travel time ↔ min. / max. [s]	0,21 / 0,32

Order no.	GED5010N
Gripping force → ← min. / max. [N]	1200 / 1900
Gripping force ↔ min. / max. [N]	-
Travel time → ← min. / max. [s]	0,21 / 0,32
Travel time ↔ min. / max. [s]	0,16

Order no.	GED5010N
Gripping force → ← min. / max. [N]	-
Gripping force ↔ min. / max. [N]	1200 / 1900
Travel time → ← min. / max. [s]	0,16
Travel time ↔ min. / max. [s]	0,21 / 0,32

TECHNICAL DRAWINGS



① Gripper attachment

② Energy supply

③ Fixing for gripper finger

⑱ Air purge connection option

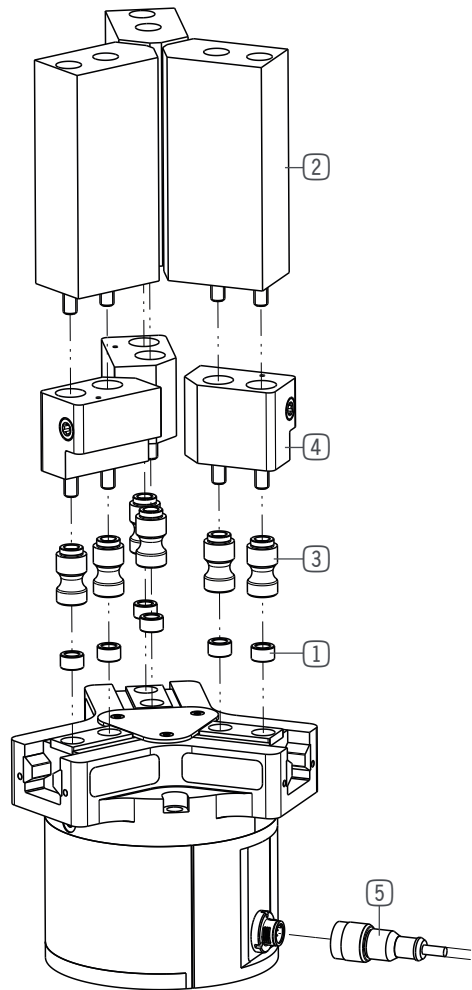
⑳ Attachment option for customer-specific fittings

3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GED5010

1

Installation size GED5010 / 3-Jaw Concentric Grippers / electric / Grippers



▶ INCLUDED IN DELIVERY



Centering Disc

018187

► RECOMMENDED ACCESSORIES



Universal jaw aluminium

UB5010AL



Universal jaw steel

UB5010ST



Pressure piece

ADS5010-05



Changeable jaw, loose-part-set

WB5010L



Changeable jaw, fix-part

WB5010F



Plug-in Connector Angled Cable 10 m - Female M12

KAW1000B8

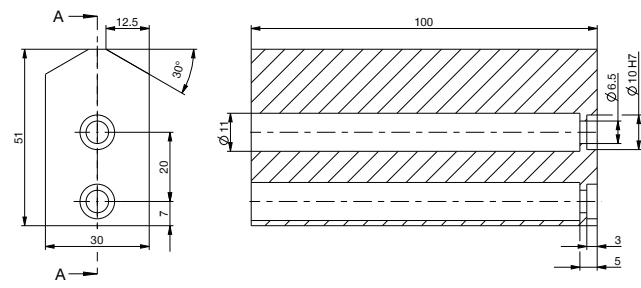


Plug-in Connector Straight Cable 10 m - Female M12

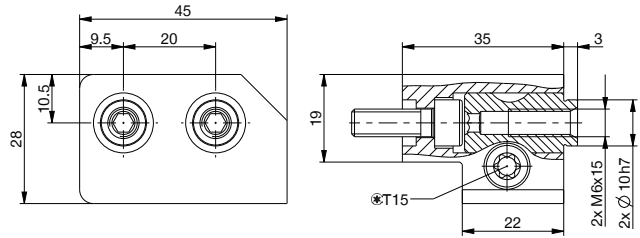
KAG1000B8

► TECHNICAL DRAWINGS ACCESSORIES

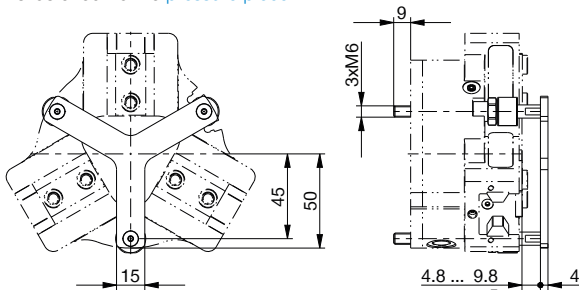
One universal jaw is required for each gripper jaw **2**



For each gripper jaw, one interchangeable jaw loose part set **3** and one interchangeable jaw fixed part **4** are needed



Gripper is fastened via the [pressure piece](#)

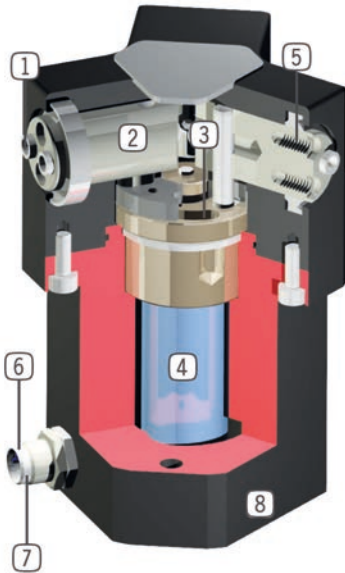


3-JAW CONCENTRIC GRIPPERS

SERIES GED1500

still available

► BENEFITS IN DETAIL



- ① **Removable centering sleeves**
 - quick and economical positioning of the gripper fingers
- ② **Gripper jaw**
 - hardened steel
 - individual gripper finger mounting
- ③ **Positively driven curve disc**
 - synchronized the movement of the gripper jaws
 - high force transfer
 - rapid stroke and force stroke (version with 6 mm stroke per jaw)
- ④ **Drive**
 - electric drive by 24 VDC step motor
- ⑤ **Guide**
 - sealed round guide for harsh environmental conditions
- ⑥ **Position sensing**
 - measured at the end of stroke via power increase on the motor
- ⑦ **Energy supply**
 - standardized interface M8 round plug connection signal control line (use only cable without diode)
- ⑧ **Robust, lightweight housing**
 - hard coated aluminium alloy

► TECHNICAL DATA *



Number of installation sizes	2
Stroke per jaw	2 mm - 6 mm
Gripping force	115 N - 290 N
Weight	0,32 kg - 2 kg

*further information is available online

3-JAW CONCENTRIC GRIPPERS WITH LONG STROKE

OVERVIEW OF SERIES

1

Overview of Series / 3-Jaw Concentric Grippers with Long Stroke



► PNEUMATIC

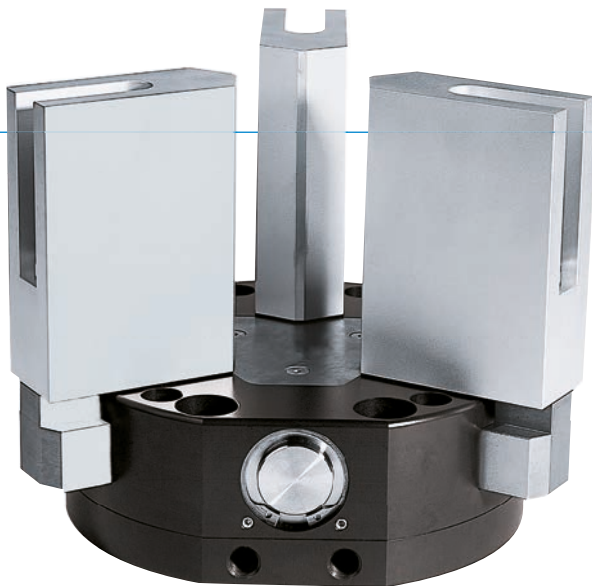


Series GD500

348

3-JAW CONCENTRIC GRIPPERS WITH LONG STROKE SERIES GD500

▶ PRODUCT ADVANTAGES



“The flat”

- ▶ **Reduced installation height due to horizontal drive**
Reduces the interference contours for your application
- ▶ **Proven T slot guide**
This established and proven guiding technology stands for the highest process reliability like no other
- ▶ **Failure-free continuous operation**
Our uncompromising “Made in Germany” quality guarantees up to 10 million maintenance-free gripping cycles

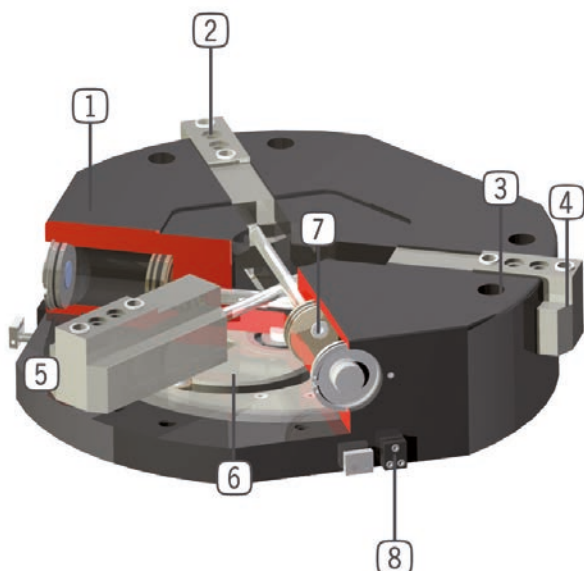
▶ THE BEST PRODUCT FOR YOUR APPLICATION



- ▶ **Our products love the challenge!**
Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities:
Find the best product for your specific use:
www.zimmer-group.com

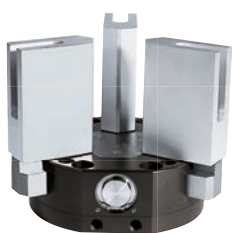


► BENEFITS IN DETAIL



- ① **Robust, lightweight housing**
 - hard coated aluminium alloy
- ② **Removable centering sleeves**
 - quick and economical positioning of the gripper fingers
- ③ **Mounting and positioning**
- ④ **Gripper jaw**
 - ground, hardened steel
 - individual gripper finger mounting
- ⑤ **Precise T-Slot guide**
 - high forces and moments capacity
- ⑥ **Cam**
 - synchronized jaw movement
- ⑦ **Drive**
 - three double-acting pneumatic cylinders
- ⑧ **Mounting block**
 - mounting for inductive proximity switch

► SERIES CHARACTERISTICS



Number of installation sizes	3
Stroke per jaw	30 mm - 60 mm
Gripping force	1300 N - 2480 N
Weight	7,4 kg - 29 kg
AP class	3



10 million maintenance-free cycles (max.)



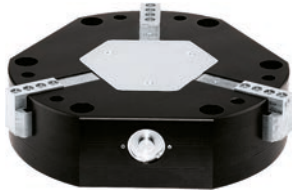
Inductive sensor



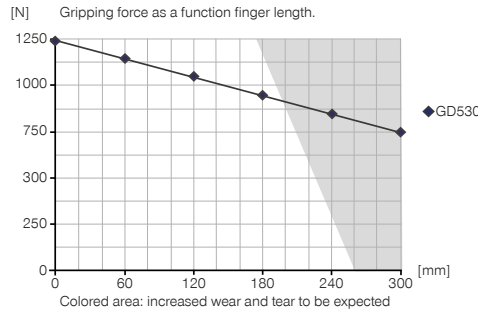
IP40

3-JAW CONCENTRIC GRIPPERS WITH LONG STROKE INSTALLATION SIZE GD530

▶ PRODUCT SPECIFICATIONS

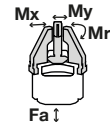


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	300
Mx [Nm]	200
My [Nm]	300
Fa [N]	8000

▶ INCLUDED IN DELIVERY



Mounting block

KB8K



Centering Disc

DST41600

▶ RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style

GV1-4X8



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S



Quick Exhaust Valve

DEV08



Pressure Safety Valve

DSV1-8



Plug-in connector customizable Straight - Connector M8

S8-G-3

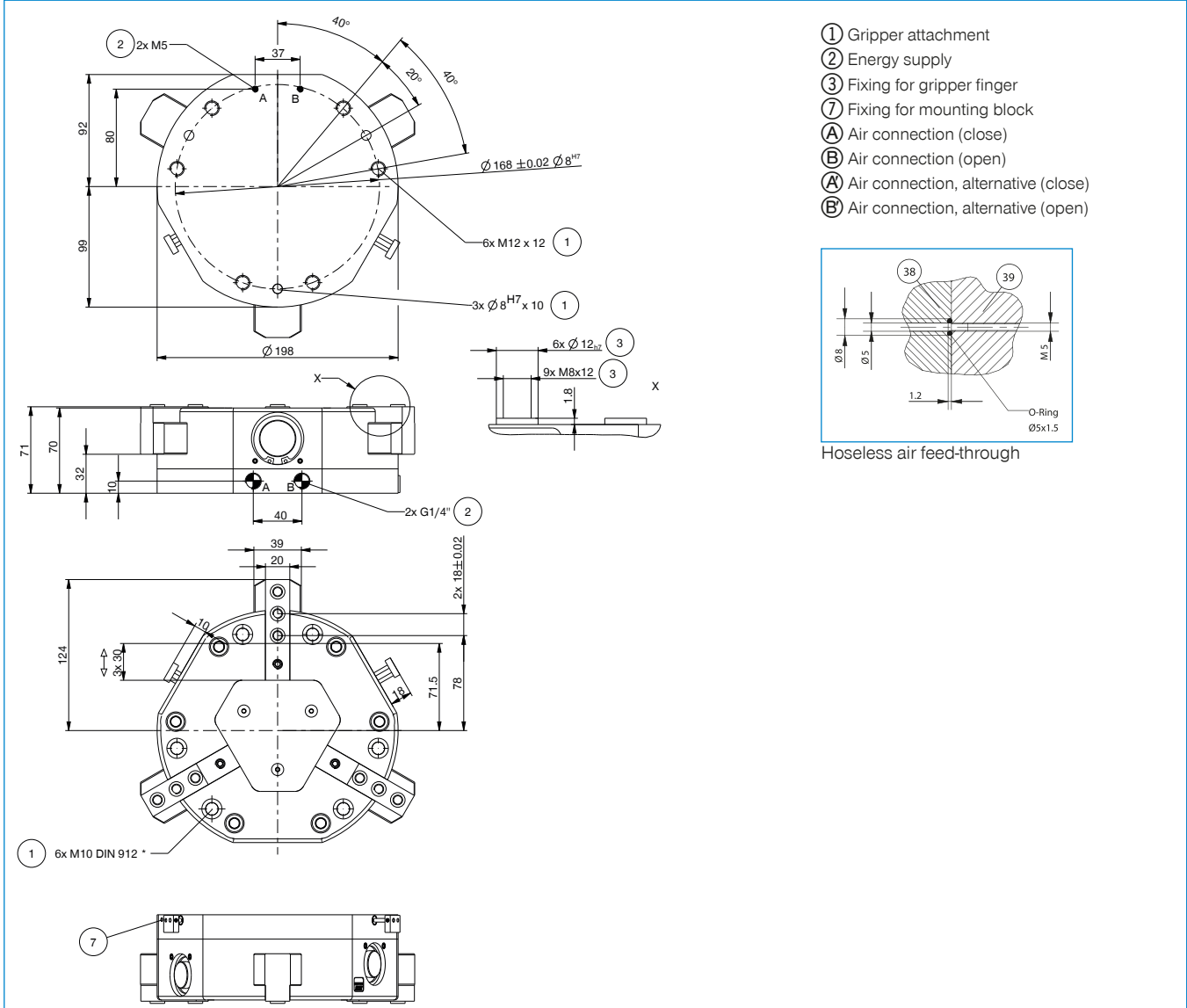


Plug-in connector customizable Straight - Connector M12

S12-G-3

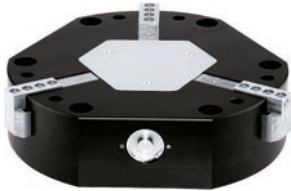
Order no.	GD530
Stroke per jaw [mm]	30
Gripping force in closing [N]	1300
Gripping force in opening [N]	1300
Closing time [s]	0.3
Opening time [s]	0.3
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	170
Weight [kg]	7.4

*All data measured at 6 bar

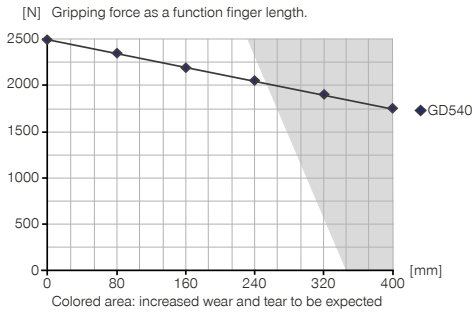


3-JAW CONCENTRIC GRIPPERS WITH LONG STROKE INSTALLATION SIZE GD540

▶ PRODUCT SPECIFICATIONS

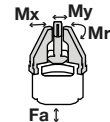


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	300
Mx [Nm]	200
My [Nm]	300
Fa [N]	8000

▶ INCLUDED IN DELIVERY



Mounting block

KB8K



Centering Disc

DST42000

▶ RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style

GV1-4X8



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S



Quick Exhaust Valve

DEV08



Pressure Safety Valve

DSV1-8



Plug-in connector customizable Straight - Connector M8

S8-G-3

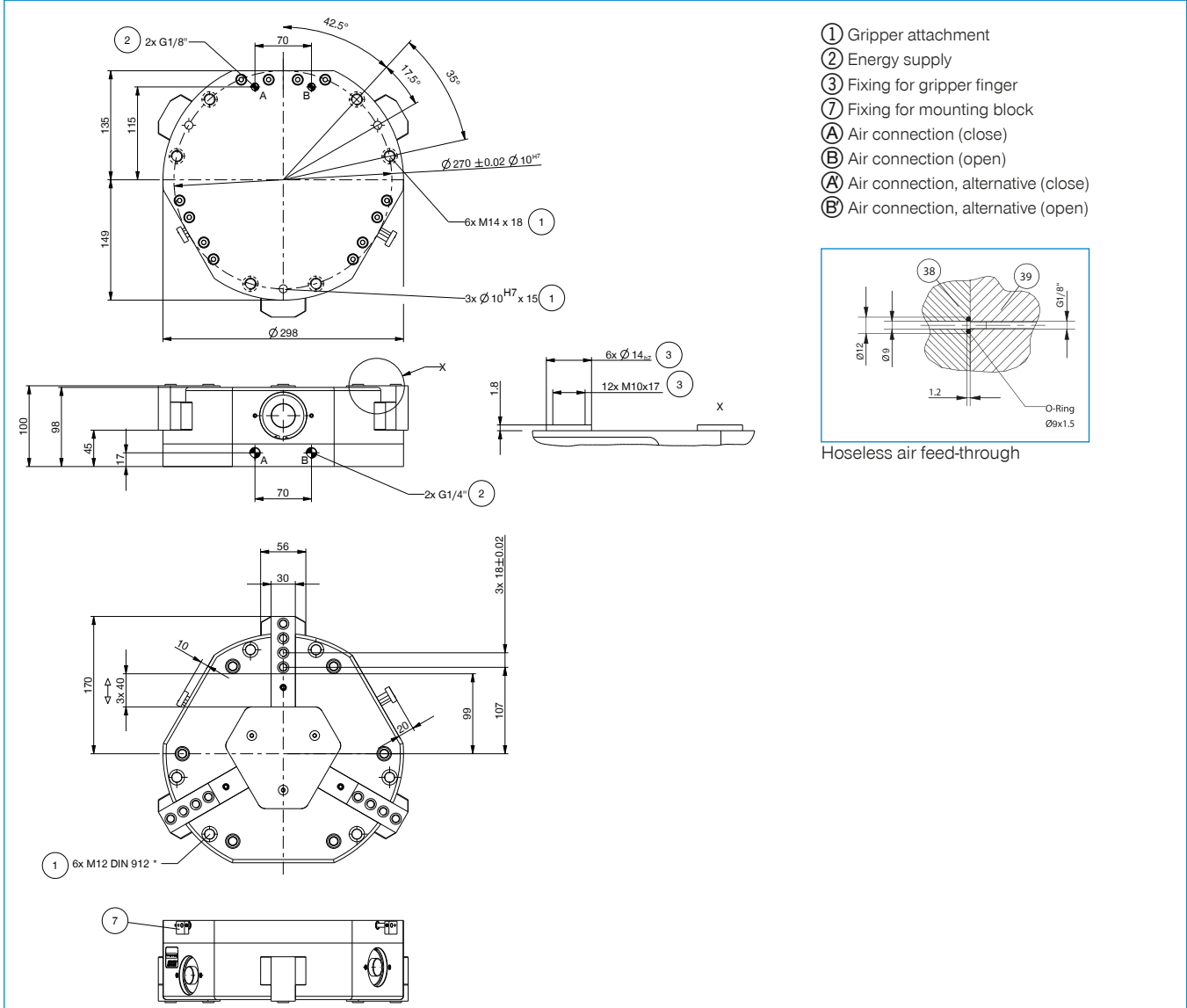


Plug-in connector customizable Straight - Connector M12

S12-G-3

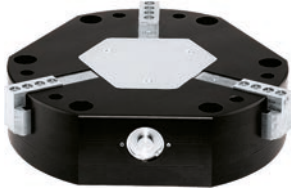
Order no.	GD540
Stroke per jaw [mm]	40
Gripping force in closing [N]	2480
Gripping force in opening [N]	2480
Closing time [s]	0.35
Opening time [s]	0.35
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	440
Weight [kg]	19

*All data measured at 6 bar

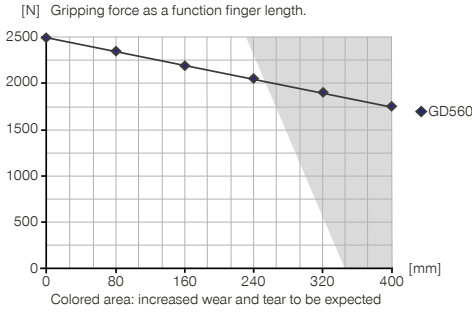


3-JAW CONCENTRIC GRIPPERS WITH LONG STROKE INSTALLATION SIZE GD560

▶ PRODUCT SPECIFICATIONS

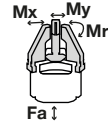


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	300
Mx [Nm]	200
My [Nm]	300
Fa [N]	8000

▶ INCLUDED IN DELIVERY



Mounting block

KB8K



Centering Disc

DST42000

▶ RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style

GV1-4X8



Plug-in connector Angled Cable 5m - Socket M8 (female)
KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)
KAG500



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S



Quick Exhaust Valve

DEV08



Pressure Safety Valve

DSV1-8



Plug-in connector customizable Straight - Connector M8

S8-G-3

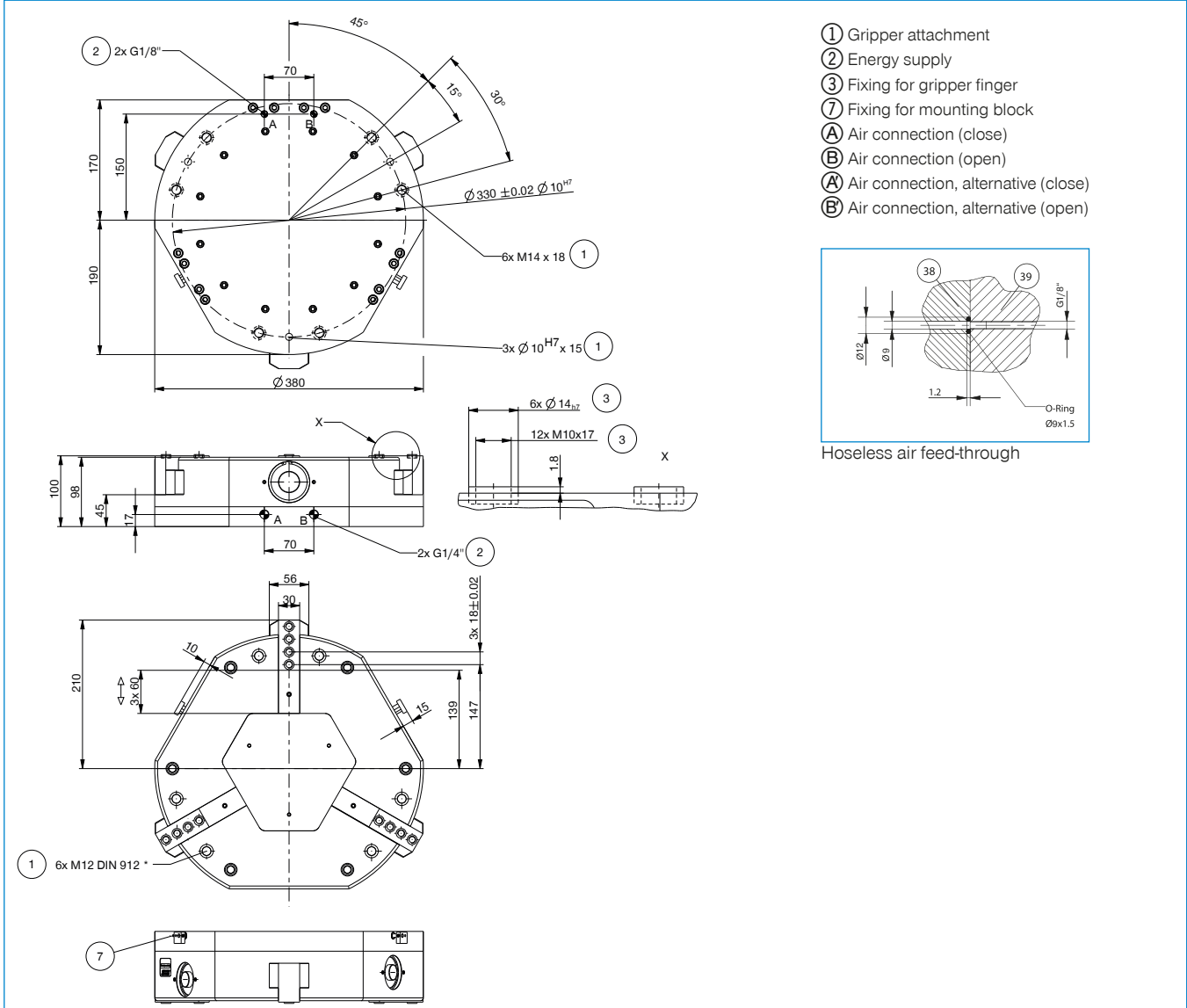


Plug-in connector customizable Straight - Connector M12

S12-G-3

Order no.	GD560
Stroke per jaw [mm]	60
Gripping force in closing [N]	2480
Gripping force in opening [N]	2480
Closing time [s]	0.45
Opening time [s]	0.45
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	650
Weight [kg]	29

* All data measured at 6 bar

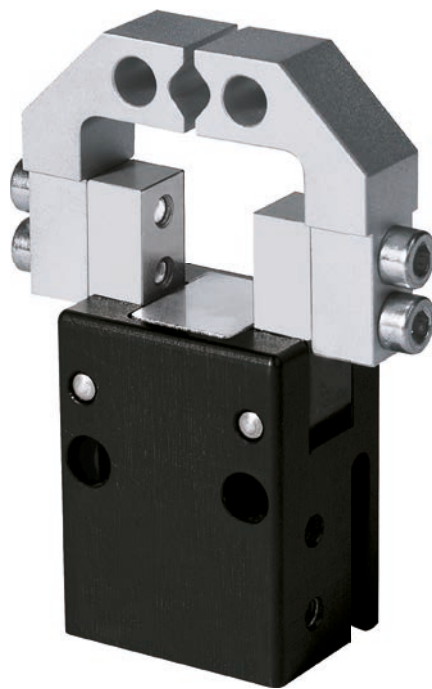


2-JAW ANGULAR GRIPPERS

OVERVIEW OF SERIES

1

Overview of Series / 2-Jaw Angular Grippers



► PNEUMATIC



Series GZ1000

358



Series MGW800

366



Series GG1000

384



Series GZ

394

2-JAW ANGULAR GRIPPERS

SERIES GZ1000

1

Series GZ1000 / 2-Jaw Angular Grippers / pneumatic / Grippers

▶ PRODUCT ADVANTAGES



“The top of the line”

▶ Unique quality meets functionality

This is one of the best angular grippers on the market, enabling you to make your application more cost-effective and functional

▶ Variable attachment

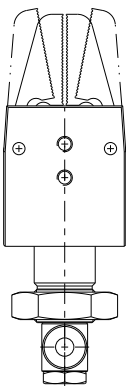
Decide for yourself whether you want use screws, lock-nuts or a toolkit clamping system for fastening

▶ Sensing with process reliability

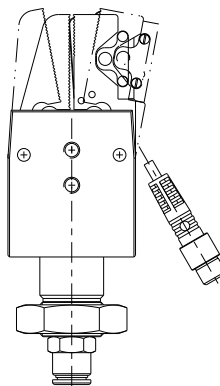
Unlike many other established products on the market, you can even differentiate between “Component present” and “Component not present”

▶ VERSIONS

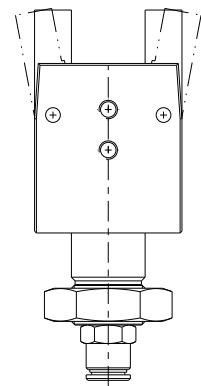
-01



-02



-03



HOW TO ORDER CORRECTLY

- ▶ The product order numbers are arranged according to this diagram:

Order no.	GZ1030	<input type="checkbox"/>		
Saw tooth jaw without query		-01		
Saw tooth jaw with query		-02		
Version for attaching customer-specific gripper fingers		-03		



► BENEFITS IN DETAIL



- ① **Gripper jaw**
 - available in different versions
- ② **Position sensing**
 - via inductive proximity switch
- ③ **Return spring**
 - to open the gripper jaws
- ④ **Mounting and positioning**
 - via thread / through-hole
- ⑤ **Drive**
 - single-acting pneumatic cylinder
- ⑥ **Housing**
 - hard coated surface for increased durability
- ⑦ **Mounting and positioning**
 - via fit, thread and lock nut
- ⑧ **Energy supply**

► SERIES CHARACTERISTICS



Number of installation sizes	3
Stroke per jaw	8° - 10°
Gripping moment	0,5 Nm - 4,4 Nm
Weight	0,03 kg - 0,125 kg
AP class	1



10 million maintenance-free cycles (max.)



Spring opening O



Inductive sensor



IP30

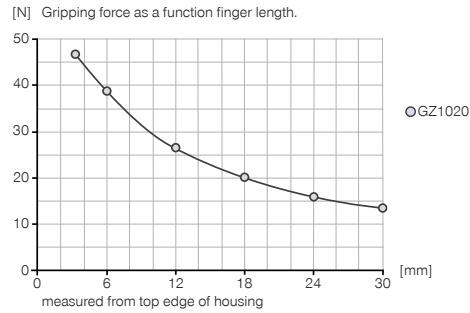
2-JAW ANGULAR GRIPPERS

INSTALLATION SIZE GZ1020

▶ PRODUCT SPECIFICATIONS

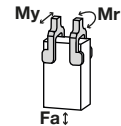


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	1
My [Nm]	0.6
Fa [N]	60

▶ INCLUDED IN DELIVERY



Lockung nut

C092610009

▶ RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style

GVM5



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector customizable Straight - Connector M8

S8-G-3

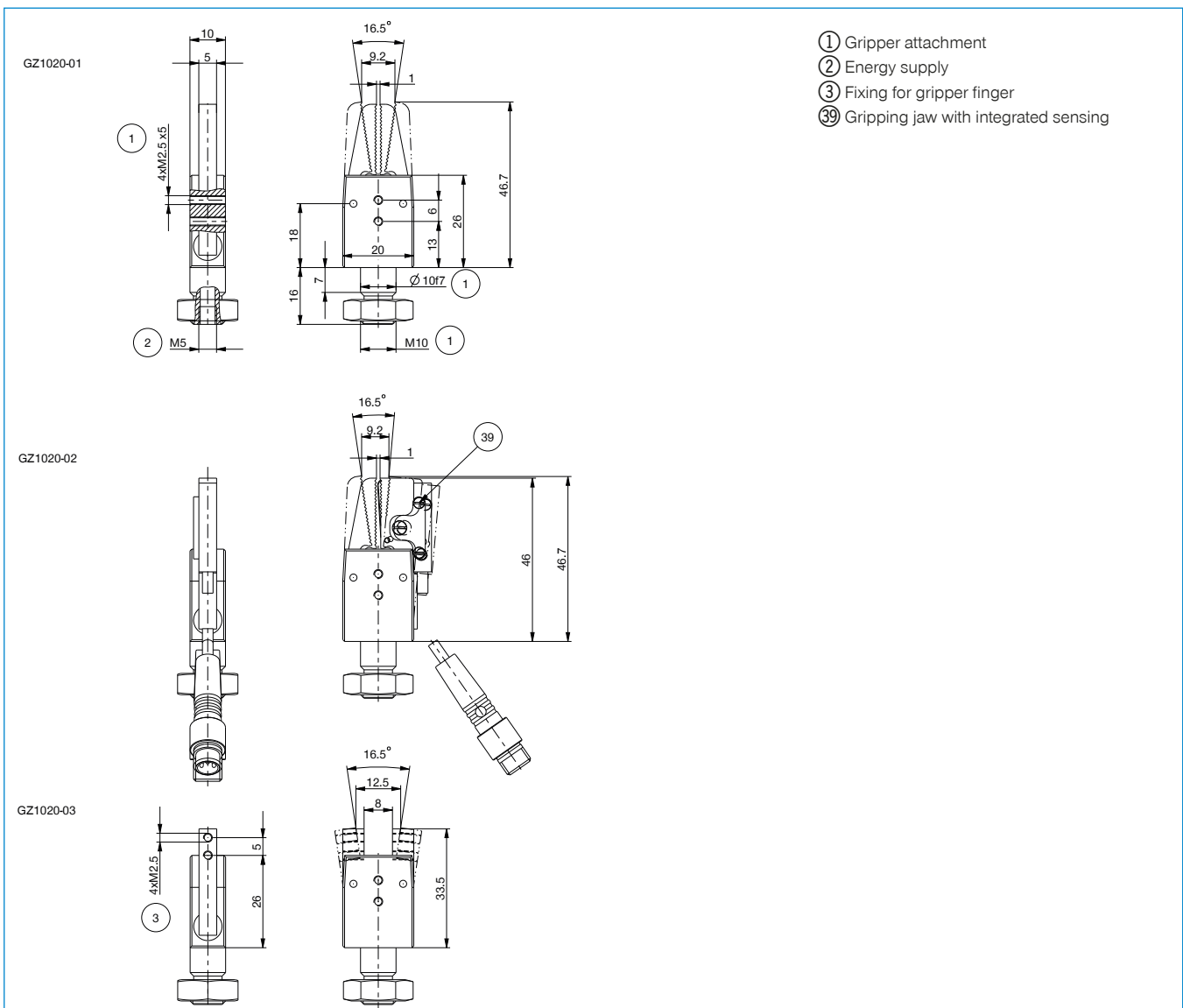


Plug-in connector customizable Straight - Connector M12

S12-G-3

Order no.	Technical Data*		
	GZ1020-01	GZ1020-02	GZ1020-03
Stroke per jaw [°]	8	8	8
Gripping force in closing [N]	62	62	62
Closing moment [Nm]	0.5	0.5	0.5
Closing time [s]	0.01	0.01	0.01
Opening time [s]	0.02	0.02	0.02
Operating pressure min. [bar]	2	2	2
Operating pressure max. [bar]	6	6	6
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	80	80	80
Air volume per cycle [cm ³]	0.25	0.25	0.25
Gripper finger with integrated sensor	No	Yes	No
Weight [kg]	0.017	0.03	0.015

*All data measured at 6 bar



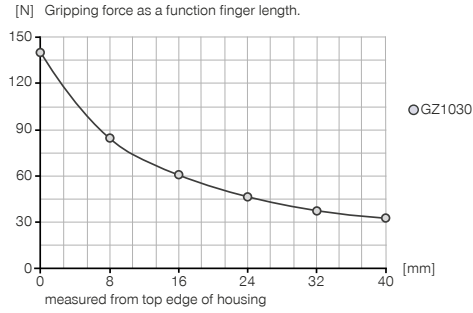
2-JAW ANGULAR GRIPPERS

INSTALLATION SIZE GZ1030

▶ PRODUCT SPECIFICATIONS

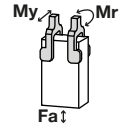


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	1.5
My [Nm]	1
Fa [N]	110

▶ INCLUDED IN DELIVERY



Lockung nut

C093614159

▶ RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style

GVM5



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector customizable Straight - Connector M8

S8-G-3

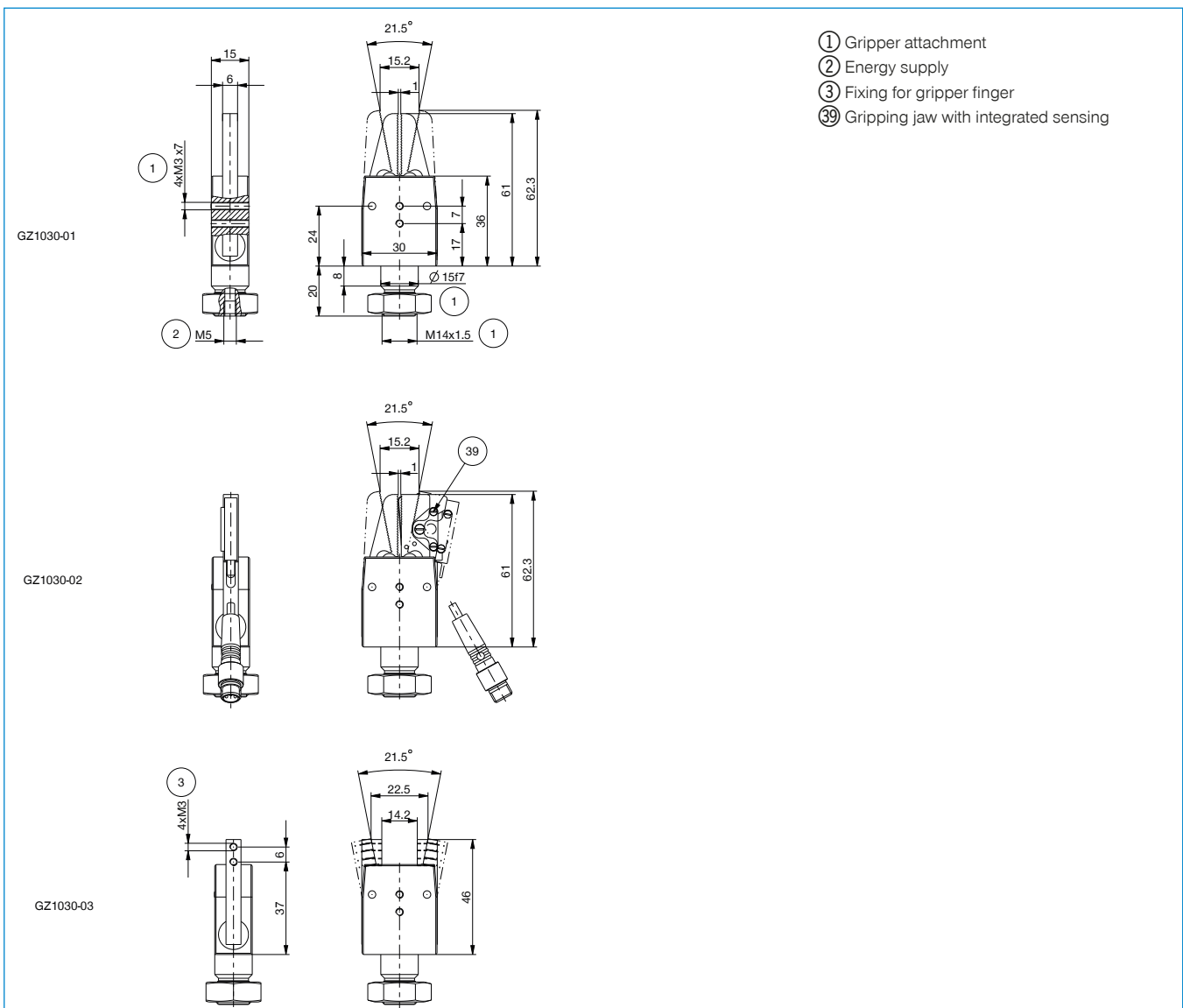


Plug-in connector customizable Straight - Connector M12

S12-G-3

Order no.	Technical Data*		
	GZ1030-01	GZ1030-02	GZ1030-03
Stroke per jaw [°]	11	11	11
Gripping force in closing [N]	130	130	130
Closing moment [Nm]	1.6	1.6	1.6
Closing time [s]	0.02	0.02	0.02
Opening time [s]	0.03	0.03	0.03
Operating pressure min. [bar]	2	2	2
Operating pressure max. [bar]	6	6	6
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	80	80	80
Air volume per cycle [cm ³]	0.9	0.9	0.9
Gripper finger with integrated sensor	No	Yes	No
Weight [kg]	0.05	0.063	0.046

*All data measured at 6 bar



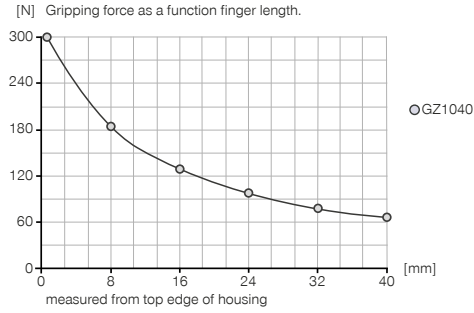
2-JAW ANGULAR GRIPPERS

INSTALLATION SIZE GZ1040

▶ PRODUCT SPECIFICATIONS

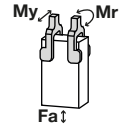


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	2.5
My [Nm]	2
Fa [N]	200

▶ INCLUDED IN DELIVERY



Lockung nut

C093620159

▶ RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style

GV1-8X6



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector customizable Straight - Connector M8

S8-G-3

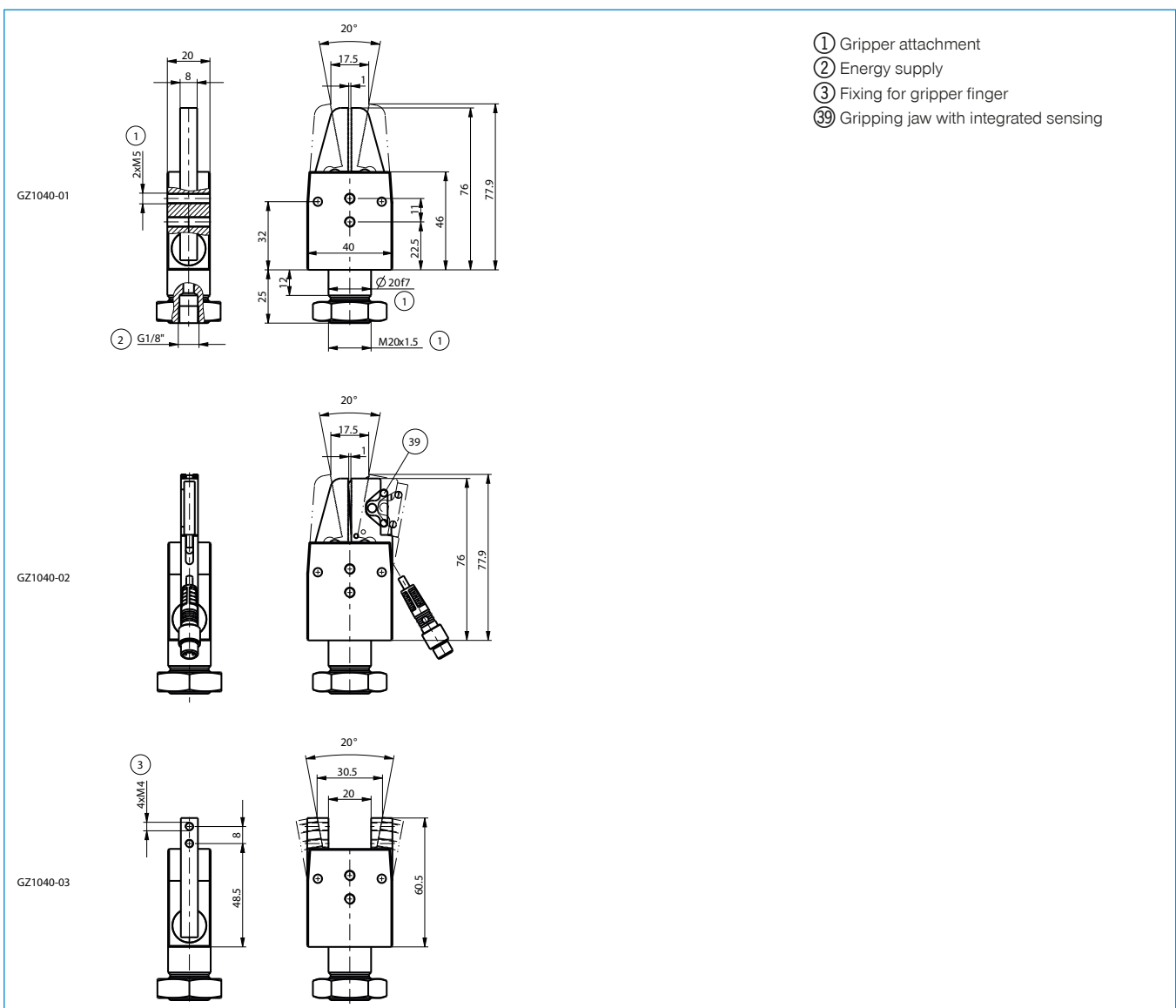


Plug-in connector customizable Straight - Connector M12

S12-G-3

Order no.	Technical Data*		
	GZ1040-01	GZ1040-02	GZ1040-03
Stroke per jaw [°]	10	10	10
Gripping force in closing [N]	315	315	315
Closing moment [Nm]	4.4	4.4	4.4
Closing time [s]	0.02	0.02	0.02
Opening time [s]	0.04	0.04	0.04
Operating pressure min. [bar]	2	2	2
Operating pressure max. [bar]	6	6	6
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	80	80	80
Air volume per cycle [cm ³]	2	2	2
Gripper finger with integrated sensor	No	Yes	No
Weight [kg]	0.11	0.125	0.105

*All data measured at 6 bar



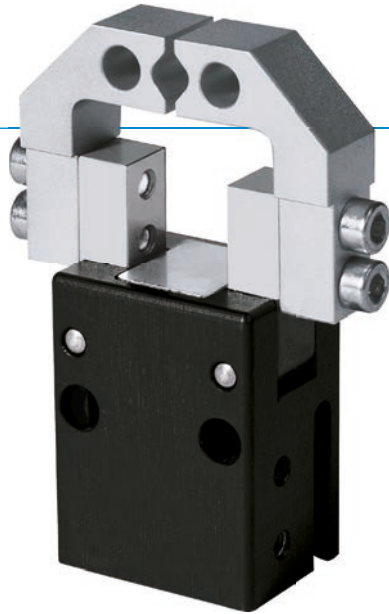
2-JAW ANGULAR GRIPPERS

SERIES MGW800

1

Series MGW800 / 2-Jaw Angular Grippers / pneumatic / Grippers

▶ PRODUCT ADVANTAGES



“The economical”

▶ Concentration on the essentials

The most economic type of gripping: This is how you reduce your production costs

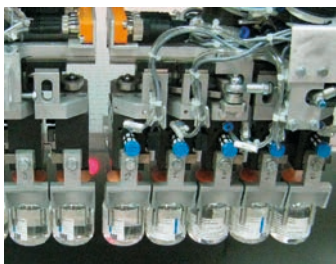
▶ High moment load

The optimally designed angular gear box provides the highest durability for your application

▶ Failure-free continuous operation

Our uncompromising “Made in Germany” quality guarantees up to 10 million maintenance-free gripping cycles

▶ THE BEST PRODUCT FOR YOUR APPLICATION



▶ Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities:

Find the best product for your specific use:

www.zimmer-group.com

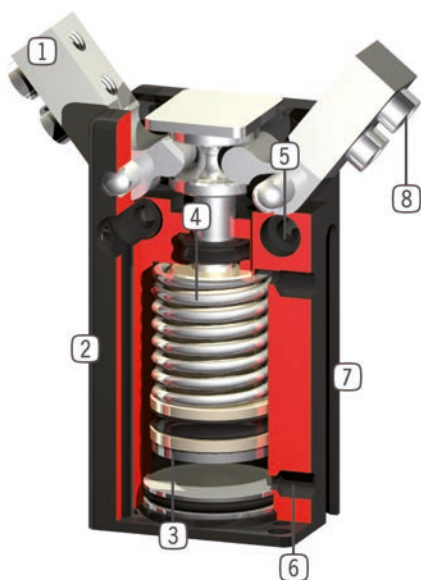
HOW TO ORDER CORRECTLY

- ▶ The product order numbers are arranged according to this diagram:

Order no.	MGW803N	<input type="checkbox"/>		
For external gripping, self-locking, spring closing		C		



► BENEFITS IN DETAIL



- ① **Gripper jaw**
 - individual gripper finger mounting
- ② **Robust, lightweight housing**
 - hard coated aluminium alloy
- ③ **Position sensing**
 - permanent magnet for direct monitoring of piston movement
- ④ **Integrated gripping force safety device**
 - spring integrated into cylinder as energy storage (from size 803 upwards)
- ⑤ **Mounting and positioning**
 - mounting possible from several sides for versatile positioning
- ⑥ **Energy supply**
 - possible from several sides
- ⑦ **Sensing slot**
 - mounting and positioning of magnetic field sensors
- ⑧ **Removable centering sleeves**
 - quick and economical positioning of the gripper fingers

► SERIES CHARACTERISTICS



Number of installation sizes	8
Stroke per jaw	37,5°
Gripping moment	0,025 Nm - 5,2 Nm
Weight	0,01 kg - 0,45 kg
AP class	2



10 million maintenance-free cycles (max.)



Spring closing C



IP30



Magnetic field sensor

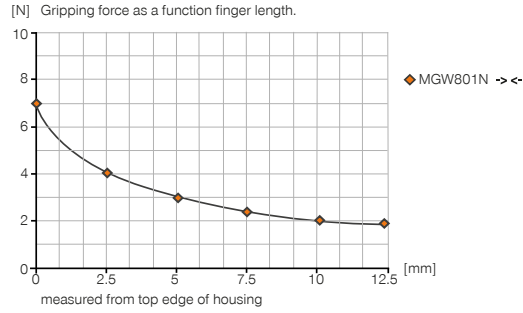
2-JAW ANGULAR GRIPPERS

INSTALLATION SIZE MGW801

▶ PRODUCT SPECIFICATIONS

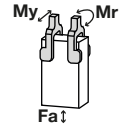


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	0.2
My [Nm]	0.2
Fa [N]	37

▶ INCLUDED IN DELIVERY



Centering Disc

DST80100

▶ RECOMMENDED ACCESSORIES



Angled Fittings - Barb Style Connection

WVM3

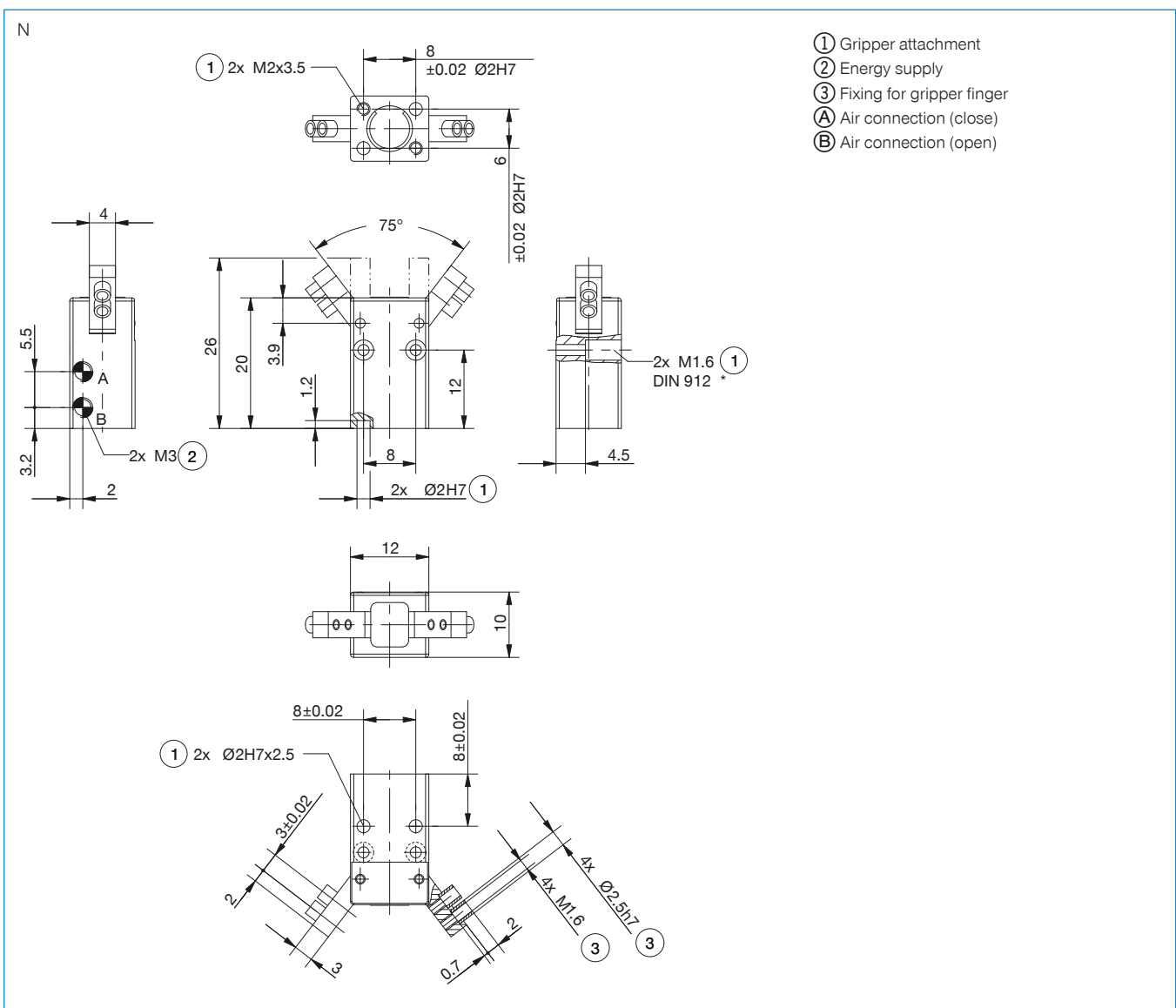


Straight Fittings - Barb Style Connection

GVM3

Order no.	MGW801N
Stroke per jaw [°]	37.5
Gripping force in closing [N]	5
Gripping force in opening [N]	7.5
Gripping moment secured by spring min. [Nm]	-
Closing time [s]	0.01
Opening time [s]	0.01
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	0.14
Weight [kg]	0.01

*All data measured at 6 bar



2-JAW ANGULAR GRIPPERS

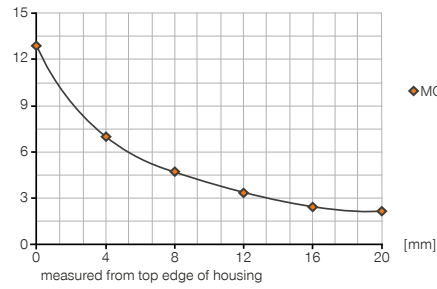
INSTALLATION SIZE MGW802

▶ PRODUCT SPECIFICATIONS



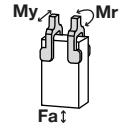
▶ Gripping force diagram

[N] Gripping force as a function finger length.



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	0.3
My [Nm]	0.3
Fa [N]	60

▶ INCLUDED IN DELIVERY



Centering Disc

DST80200

▶ RECOMMENDED ACCESSORIES



Angled Fittings - Barb Style Connection

WVM3

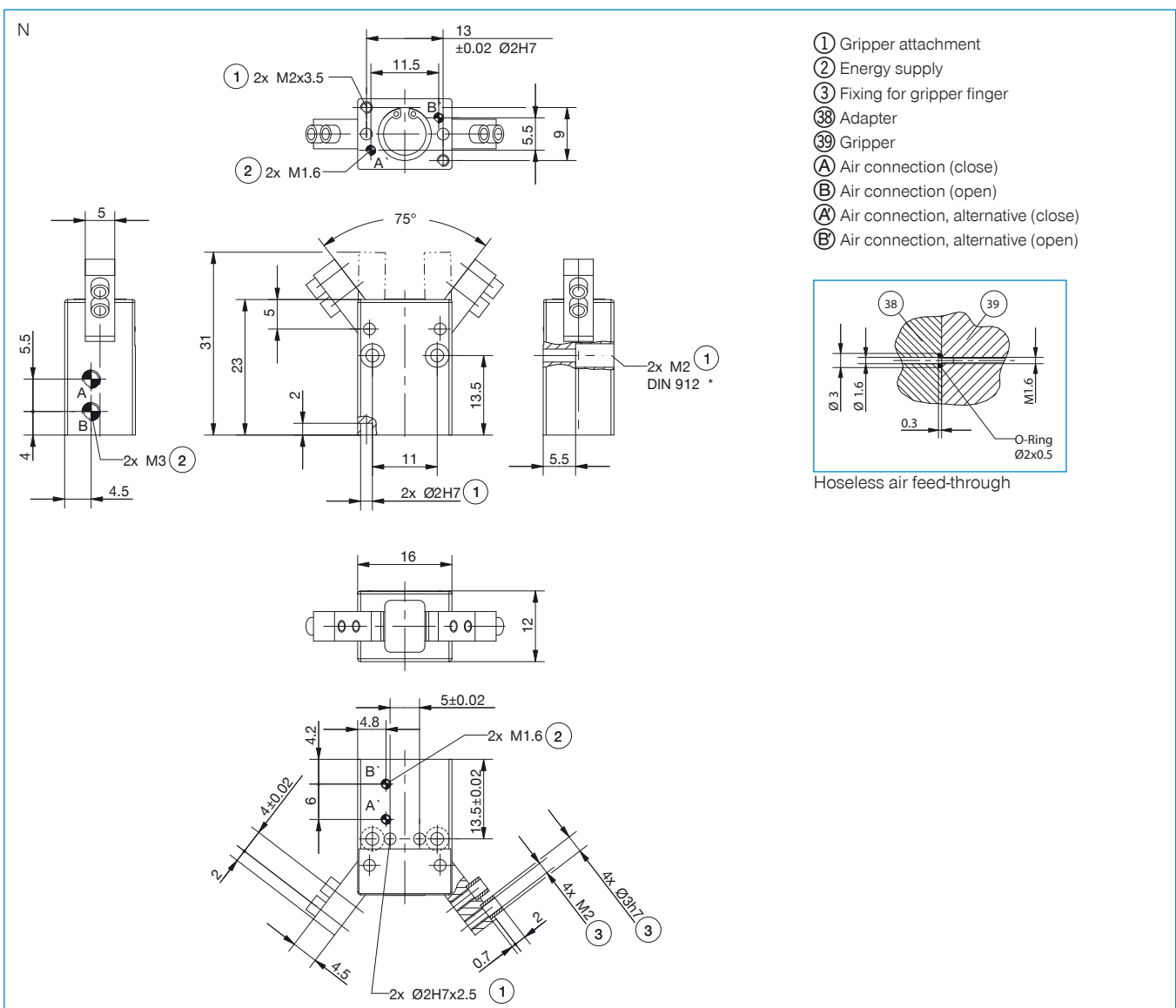


Straight Fittings - Barb Style Connection

GVM3

Order no.	Technical Data*
Stroke per jaw [°]	37.5
Gripping force in closing [N]	9
Gripping force in opening [N]	10
Gripping moment secured by spring min. [Nm]	-
Closing time [s]	0.01
Opening time [s]	0.01
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	0.22
Weight [kg]	0.015

*All data measured at 6 bar



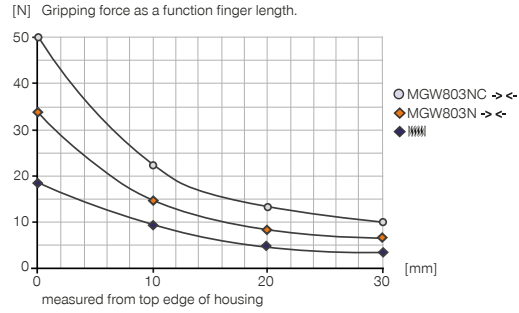
2-JAW ANGULAR GRIPPERS

INSTALLATION SIZE MGW803

▶ PRODUCT SPECIFICATIONS

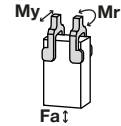


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	0.4
My [Nm]	0.4
Fa [N]	90

▶ INCLUDED IN DELIVERY



Centering Disc

DST80320

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Angled Cable 5 m

MFS103KHC



Magnetic field sensor
Angled Cable 0,3 m -
Connector M8

MFS103SKHC



Magnetic field sensor
Straight Cable 5 m

MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8

MFS204SKHC



Angled Fittings - Barb
Style Connection

WVM3

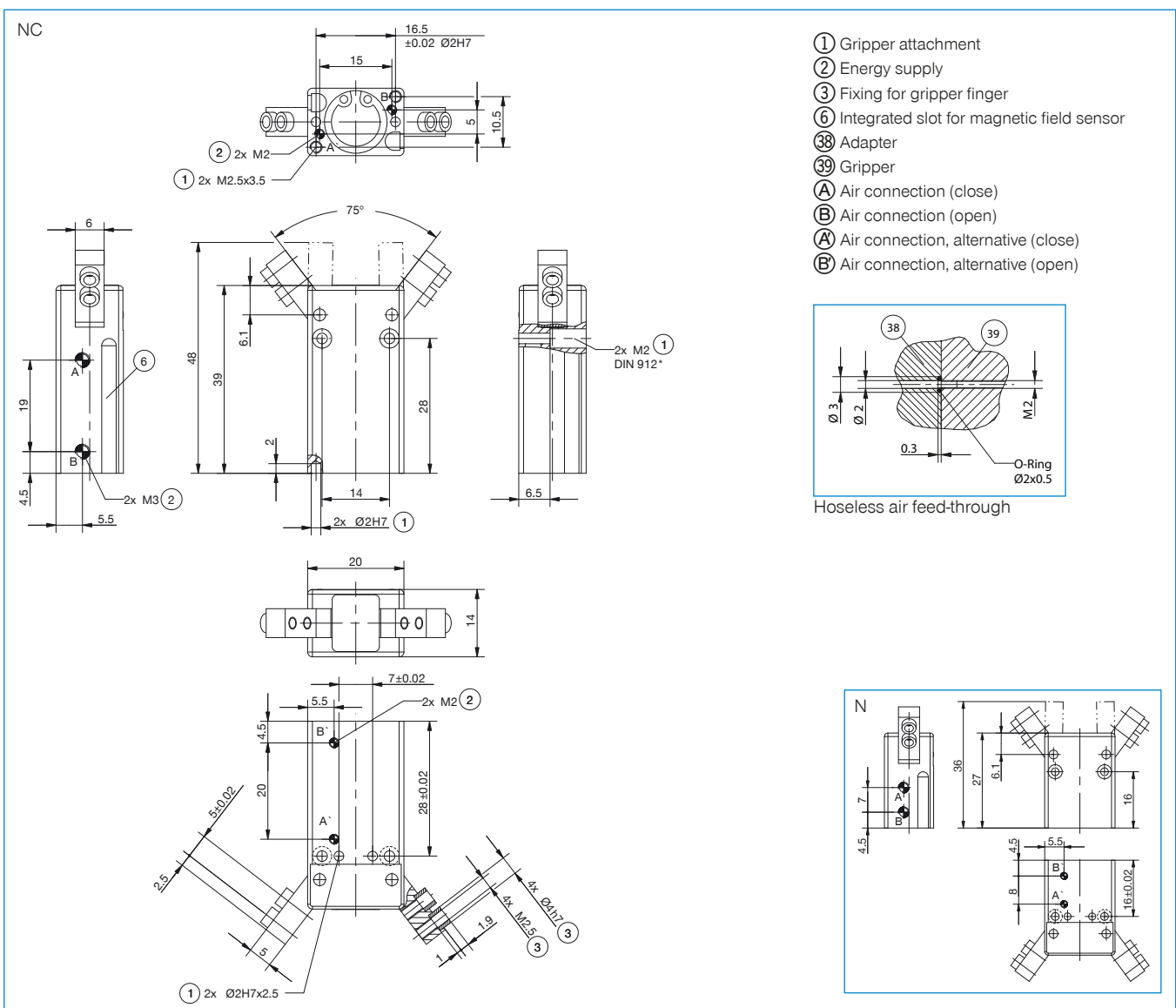


Straight Fittings - Barb
Style Connection

GVM3

Order no.	Technical Data*	
	MGW803N	MGW803NC
Stroke per jaw [°]	37.5	37.5
Gripping force in closing [N]	33	49
Gripping force in opening [N]	38	
Gripping moment secured by spring min. [Nm]		0.1
Closing time [s]	0.01	0.01
Opening time [s]	0.01	0.02
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm ³]	0.64	1
Weight [kg]	0.025	0.04

*All data measured at 6 bar



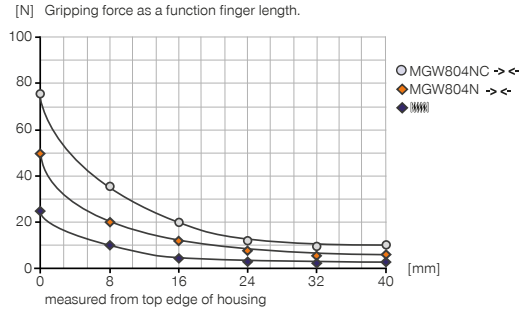
2-JAW ANGULAR GRIPPERS

INSTALLATION SIZE MGW804

▶ PRODUCT SPECIFICATIONS

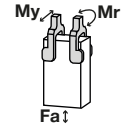


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	0.5
My [Nm]	0.5
Fa [N]	150

▶ INCLUDED IN DELIVERY



Centering Disc

DST40400

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Angled Cable 5 m

MFS103KHC



Magnetic field sensor
Angled Cable 0,3 m -
Connector M8

MFS103SKHC



Magnetic field sensor
Straight Cable 5 m

MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8

MFS204SKHC



Angled Fittings - Barb
Style Connection

WVM3

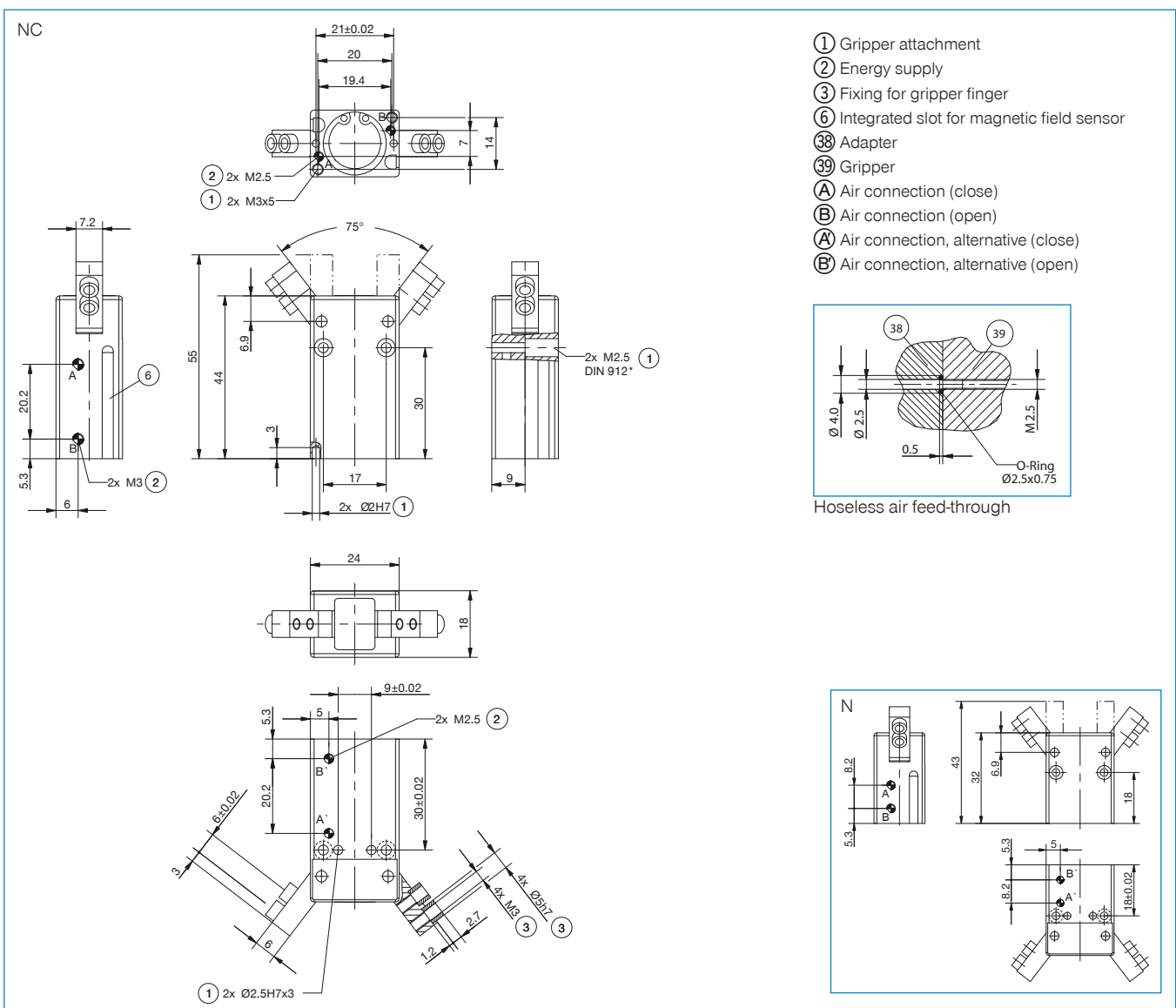


Straight Fittings - Barb
Style Connection

GVM3

Order no.	Technical Data*	
	MGW804N	MGW804NC
Stroke per jaw [°]	37.5	37.5
Gripping force in closing [N]	51	72
Gripping force in opening [N]	59	-
Gripping moment secured by spring min. [Nm]	-	-
Closing time [s]	0.02	0.02
Opening time [s]	0.02	0.03
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm³]	1.4	2
Weight [kg]	0.05	0.08

*All data measured at 6 bar



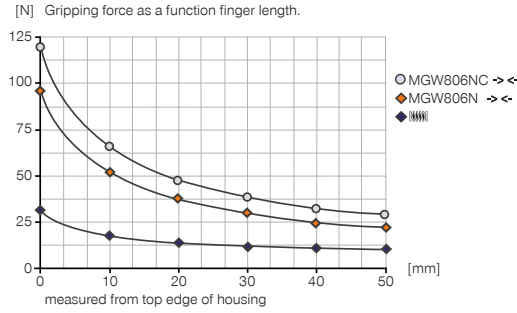
2-JAW ANGULAR GRIPPERS

INSTALLATION SIZE MGW806

▶ PRODUCT SPECIFICATIONS

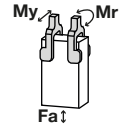


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	0.7
My [Nm]	0.7
Fa [N]	260

▶ INCLUDED IN DELIVERY



Centering Disc

DST40600

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Angled Cable 5 m

MFS103KHC



Magnetic field sensor
Angled Cable 0,3 m -
Connector M8

MFS103SKHC



Magnetic field sensor
Straight Cable 5 m

MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8

MFS204SKHC



Angled Fittings - Barb
Style Connection

WVM3

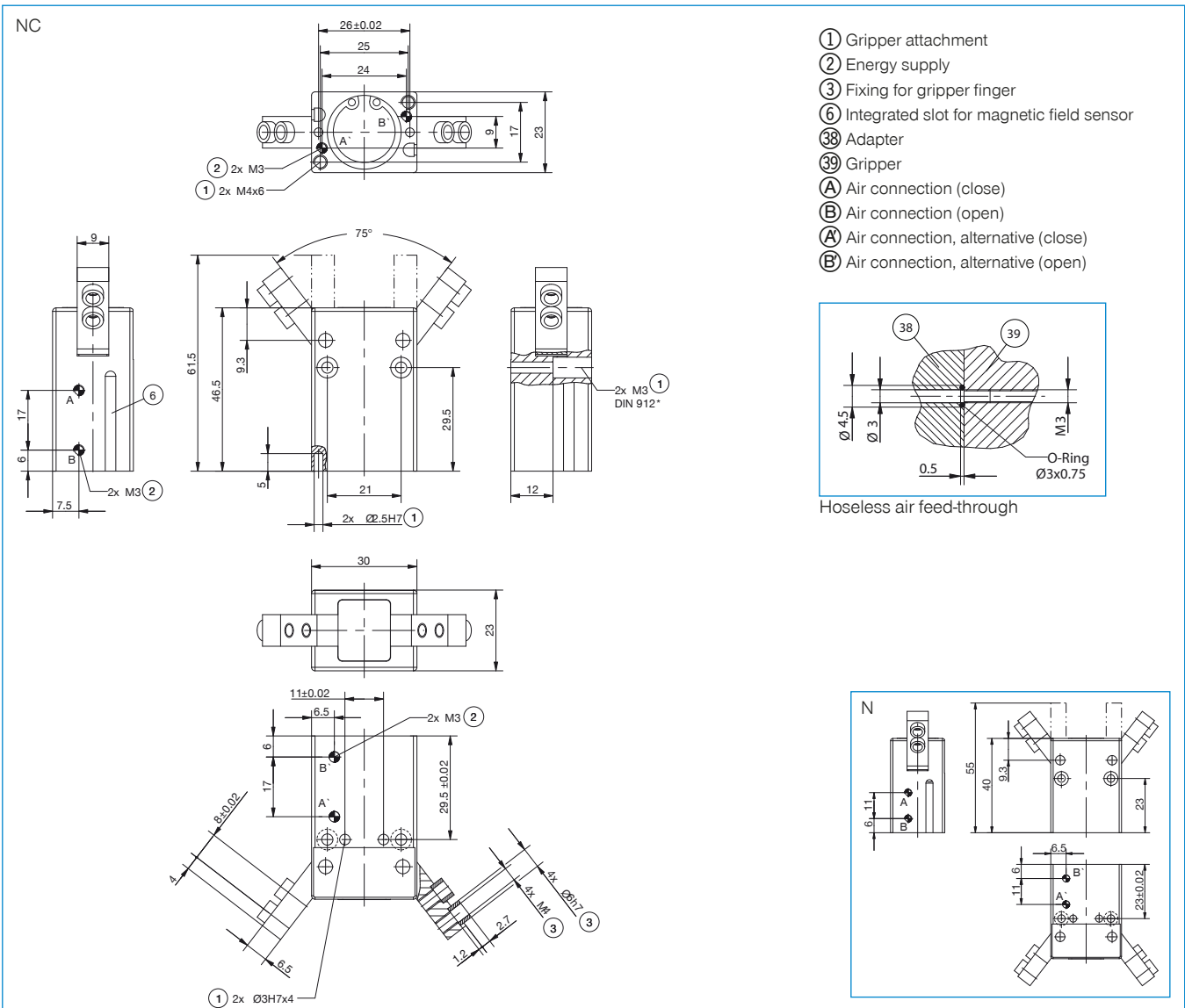


Straight Fittings - Barb
Style Connection

GVM3

Order no.	► Technical Data*	
	MGW806N	MGW806NC
Stroke per jaw [°]	37.5	37.5
Gripping force in closing [N]	91	118
Gripping force in opening [N]	110	-
Gripping moment secured by spring min. [Nm]	-	0.25
Closing time [s]	0.02	0.02
Opening time [s]	0.02	0.04
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm ³]	2.4	3.4
Weight [kg]	0.1	0.12

*All data measured at 6 bar



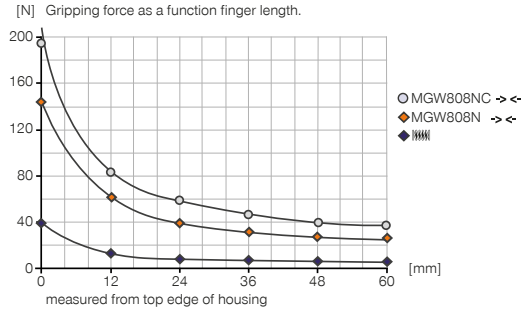
2-JAW ANGULAR GRIPPERS

INSTALLATION SIZE MGW808

▶ PRODUCT SPECIFICATIONS

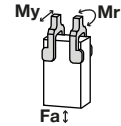


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	1.3
My [Nm]	1.3
Fa [N]	430

▶ INCLUDED IN DELIVERY



Centering Disc

DST40600

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Angled Cable 5 m

MFS103KHC



Magnetic field sensor
Angled Cable 0,3 m -
Connector M8

MFS103SKHC



Magnetic field sensor
Straight Cable 5 m

MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8

MFS204SKHC



Angled Fittings - Barb
Style Connection

WVM3

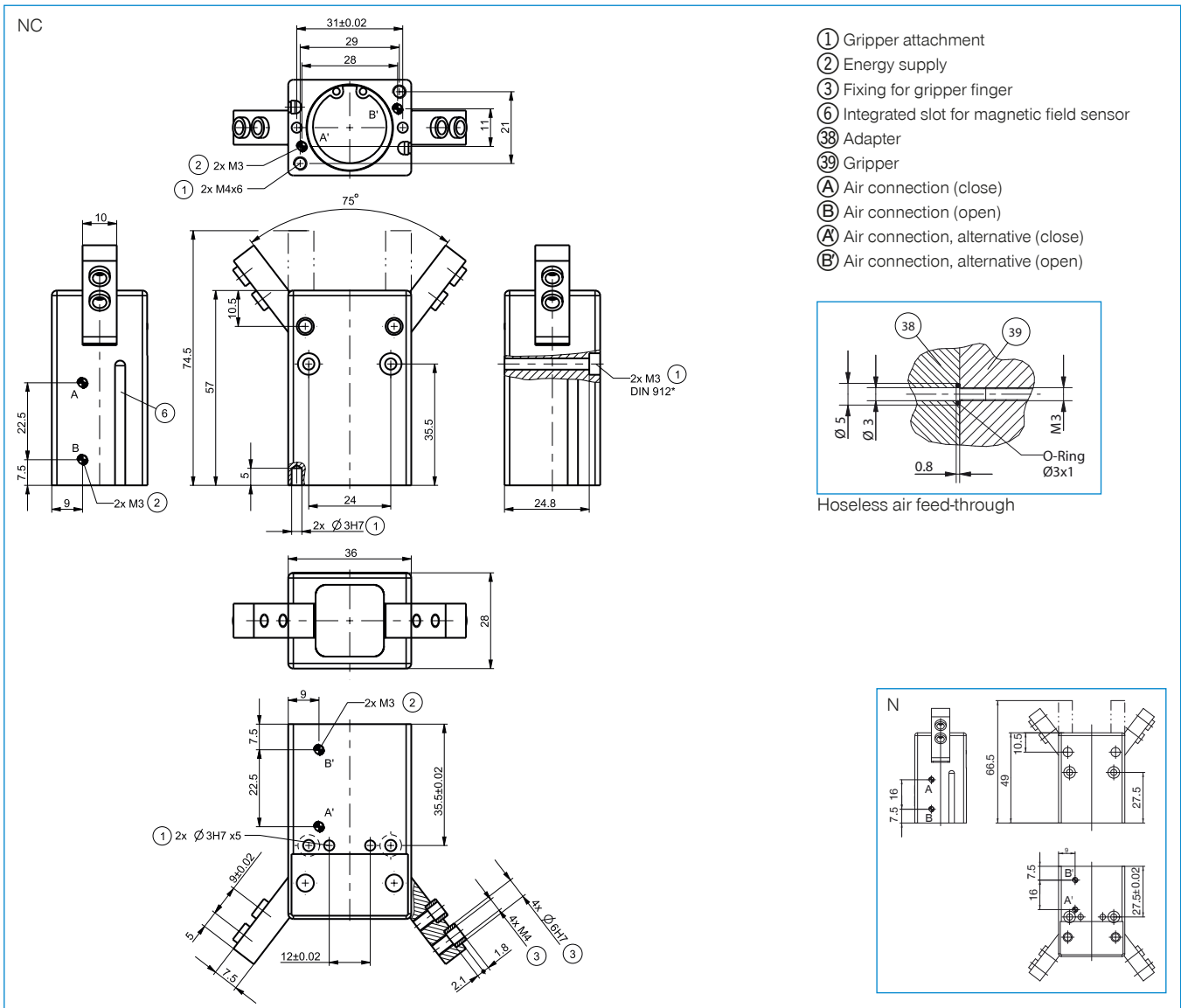


Straight Fittings - Barb
Style Connection

GVM3

Order no.	Technical Data*	
	MGW808N	MGW808NC
Stroke per jaw [°]	37.5	37.5
Gripping force in closing [N]	148	190
Gripping force in opening [N]	168	-
Gripping moment secured by spring min. [Nm]	-	0.45
Closing time [s]	0.02	0.02
Opening time [s]	0.02	0.04
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm ³]	8.1	10.5
Weight [kg]	0.18	0.19

*All data measured at 6 bar



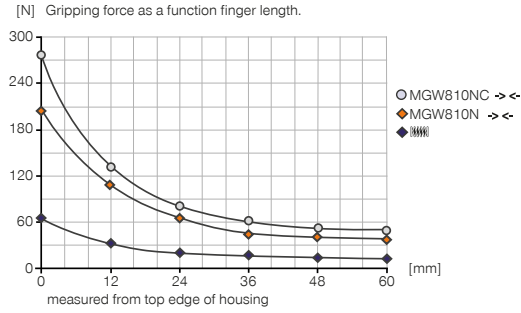
2-JAW ANGULAR GRIPPERS

INSTALLATION SIZE MGW810

▶ PRODUCT SPECIFICATIONS

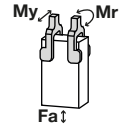


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	1.6
My [Nm]	1.6
Fa [N]	500

▶ INCLUDED IN DELIVERY



Centering Disc

DST07540

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Angled Cable 5 m

MFS103KHC



Magnetic field sensor
Angled Cable 0,3 m -
Connector M8

MFS103SKHC



Magnetic field sensor
Straight Cable 5 m

MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8

MFS204SKHC

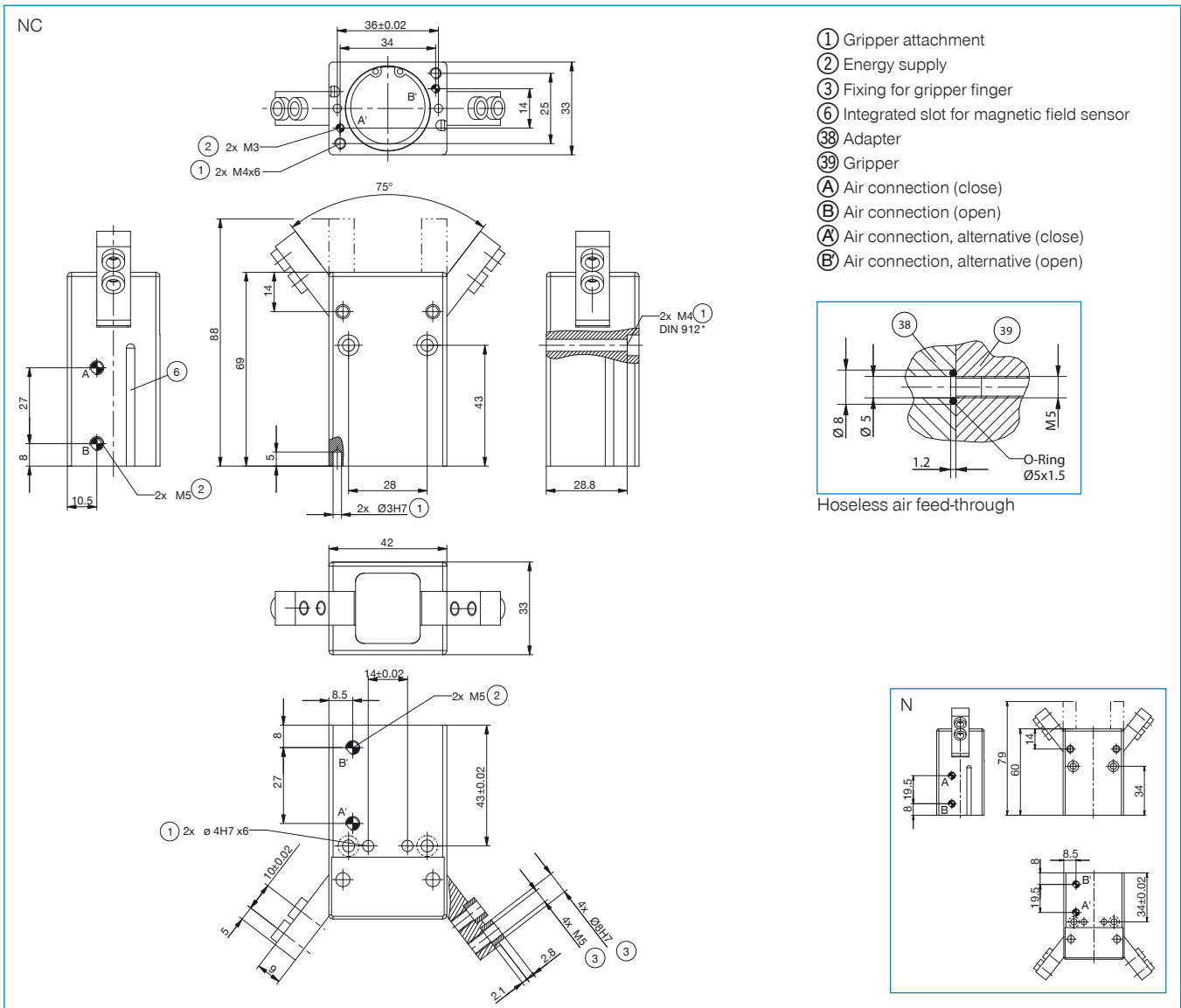


Straight Fittings - Quick
Connect Style

GVM5

Order no.	► Technical Data*	
	MGW810N	MGW810NC
Stroke per jaw [°]	37.5	37.5
Gripping force in closing [N]	205	270
Gripping force in opening [N]	235	-
Gripping moment secured by spring min. [Nm]	-	0.9
Closing time [s]	0.03	0.03
Opening time [s]	0.03	0.06
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm ³]	14.1	18.4
Weight [kg]	0.28	0.31

*All data measured at 6 bar



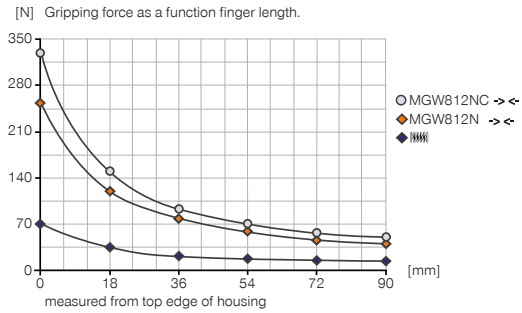
2-JAW ANGULAR GRIPPERS

INSTALLATION SIZE MGW812

▶ PRODUCT SPECIFICATIONS

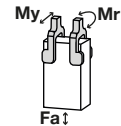


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	2.3
My [Nm]	2.3
Fa [N]	720

▶ INCLUDED IN DELIVERY



Centering Disc

DST07540

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Angled Cable 5 m

MFS103KHC



Magnetic field sensor
Angled Cable 0,3 m -
Connector M8

MFS103SKHC



Magnetic field sensor
Straight Cable 5 m

MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8

MFS204SKHC

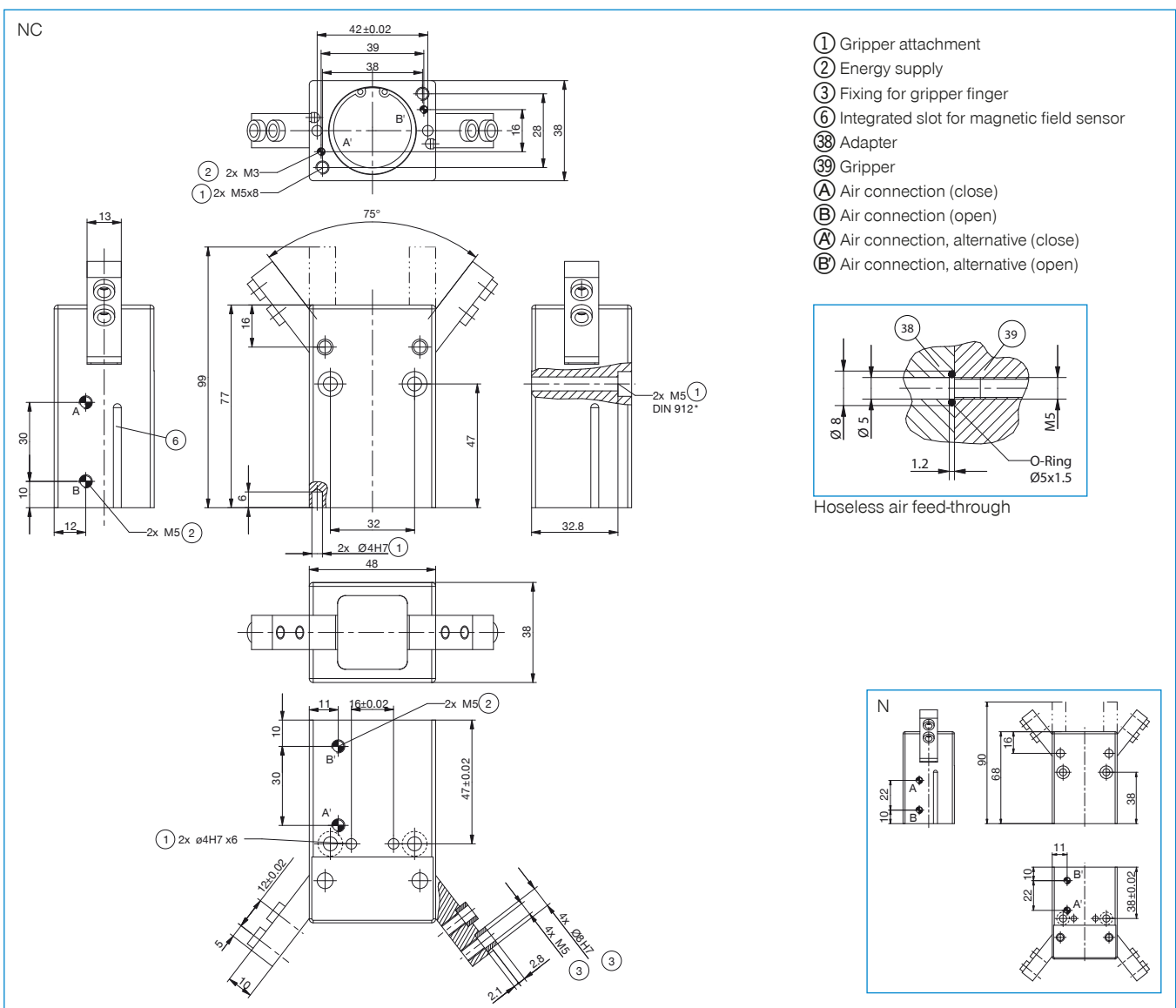


Straight Fittings - Quick
Connect Style

GVM5

Order no.	Technical Data*	
	MGW812N	MGW812NC
Stroke per jaw [°]	37.5	37.5
Gripping force in closing [N]	255	325
Gripping force in opening [N]	285	-
Gripping moment secured by spring min. [Nm]	-	1.1
Closing time [s]	0.03	0.03
Opening time [s]	0.03	0.06
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm³]	22.1	27.6
Weight [kg]	0.4	0.45

*All data measured at 6 bar



2-JAW ANGULAR GRIPPERS

SERIES GG1000

1

Series GG1000 / 2-Jaw Angular Grippers / pneumatic / Grippers

▶ PRODUCT ADVANTAGES



“The strong”

- ▶ **High gripping force**
Using the high gripping force, you can safely handle even the heaviest workpieces
- ▶ **High moment load**
The generously scaled angular gear box provides the highest possible durability for your application
- ▶ **Failure-free continuous operation**
Our uncompromising “Made in Germany” quality guarantees up to 10 million maintenance-free gripping cycles

▶ THE BEST PRODUCT FOR YOUR APPLICATION



- ▶ **Our products love the challenge!**
Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities:
Find the best product for your specific use:
www.zimmer-group.com

HOW TO ORDER CORRECTLY

- ▶ The product order numbers are arranged according to this diagram:

Order no.	GG1065	<input type="checkbox"/>	NC	
Gripper jaws with mounting possibility on the side		F		



► BENEFITS IN DETAIL



- ① **Cam-switch and mounting block**
- for position sensing
- ② **Robust, lightweight housing**
- hard coated aluminium alloy
- ③ **Sensing slot**
- groove for positioning of the magnetic field sensor
- ④ **Permanent magnet**
- sensing of the piston setting position via magnetic field sensors
- ⑤ **Positively driven lever mechanism**
- synchronized the movement of the gripper jaws
- ⑥ **Integrated gripping force safety device**
- spring integrated into cylinder as energy storage
- ⑦ **Drive**
- double-acting pneumatic cylinder
- ⑧ **Removable centering sleeves**
- quick and economical positioning of the gripper fingers

► SERIES CHARACTERISTICS



Number of installation sizes	4
Stroke per jaw	20°
Gripping force	2910 N - 29110 N
Weight	1,4 kg - 13 kg
AP class	3



10 million maintenance-free cycles (max.)



IP40



Spring closing C



Magnetic field sensor



Inductive sensor



Purged air

2-JAW ANGULAR GRIPPERS

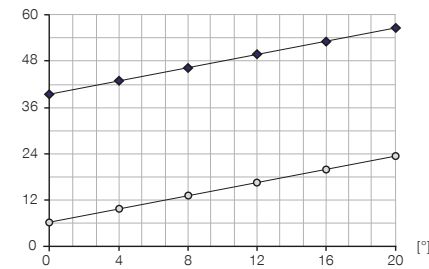
INSTALLATION SIZE GG1065

▶ PRODUCT SPECIFICATIONS



▶ Gripping moment diagram

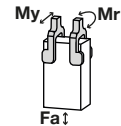
[Nm] Gripping force as a function of opening angle.



◆ GG1065NC
○ GG1065FNC

▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	20
My [Nm]	20
Fa [N]	330

▶ INCLUDED IN DELIVERY



Centering Disc

BDST40800

▶ RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style

GVM5



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Mounting block

KB8-43



Alternate proximity bracket

KHA1065-8



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S

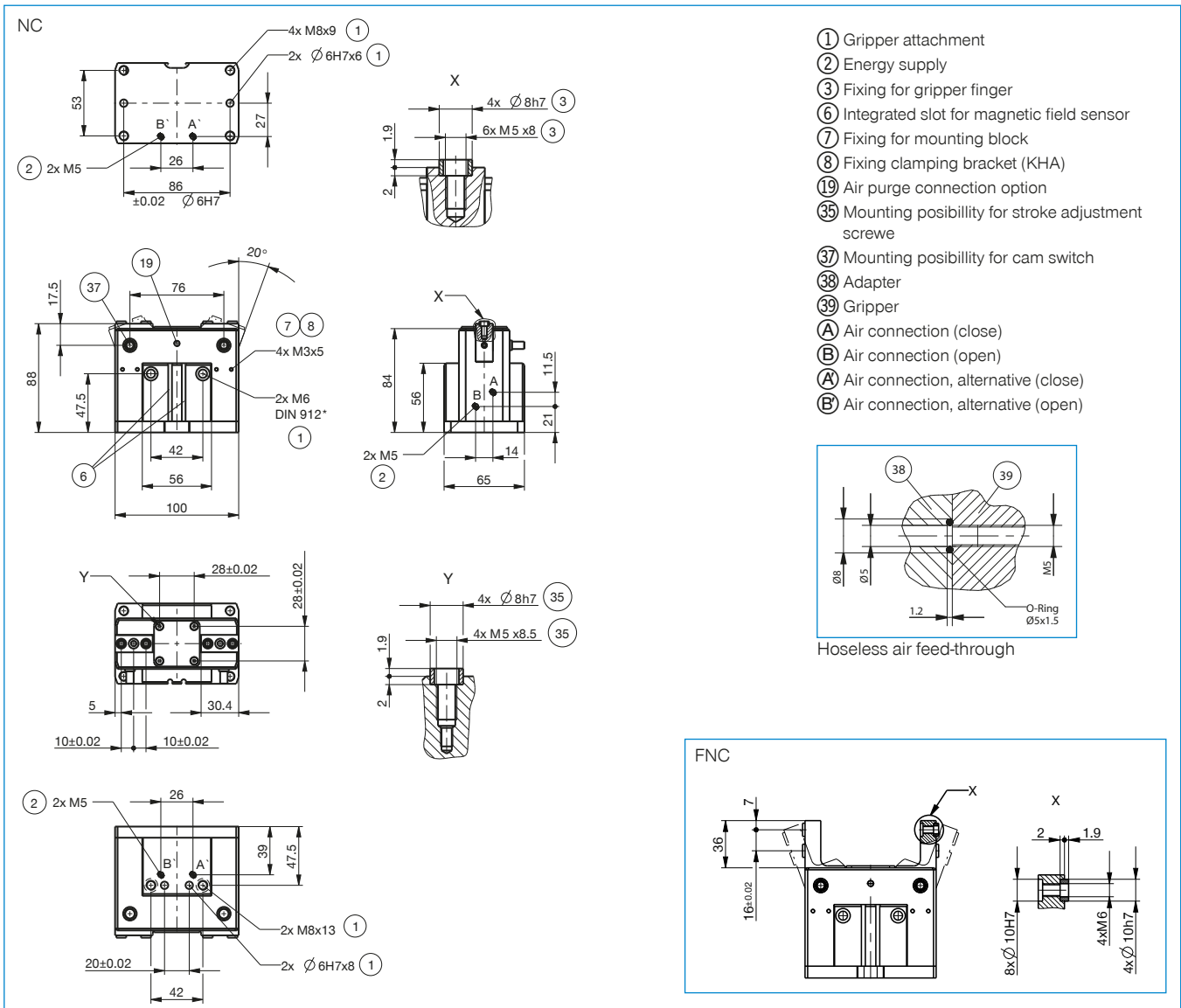


Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500

Order no.	► Technical Data*	
	GG1065NC	GG1065FNC
Stroke per jaw [°]	20	20
Gripping moment in closing max. [Nm]	39	39
Gripping force in closing max. [N]	2910	2910
Gripping moment secured by spring min. [Nm]	6.5	6.5
Closing time [s]	0.04	0.04
Opening time [s]	0.07	0.07
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	4	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm ³]	68	68
Weight [kg]	1.3	1.4

*All data measured at 6 bar



2-JAW ANGULAR GRIPPERS

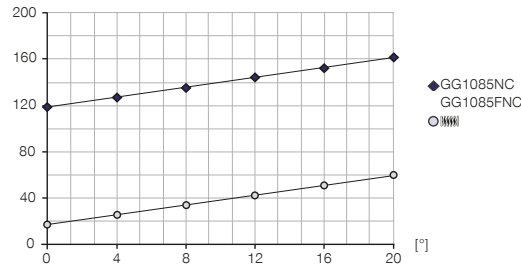
INSTALLATION SIZE GG1085

▶ PRODUCT SPECIFICATIONS



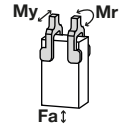
▶ Gripping moment diagram

[Nm] Gripping force as a function of opening angle.



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	40
My [Nm]	50
Fa [N]	600

▶ INCLUDED IN DELIVERY



Centering Disc

DST41000

▶ RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style

GV1-8X6



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Mounting block

KB8-43



Alternate proximity bracket

KHA1085-8



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S

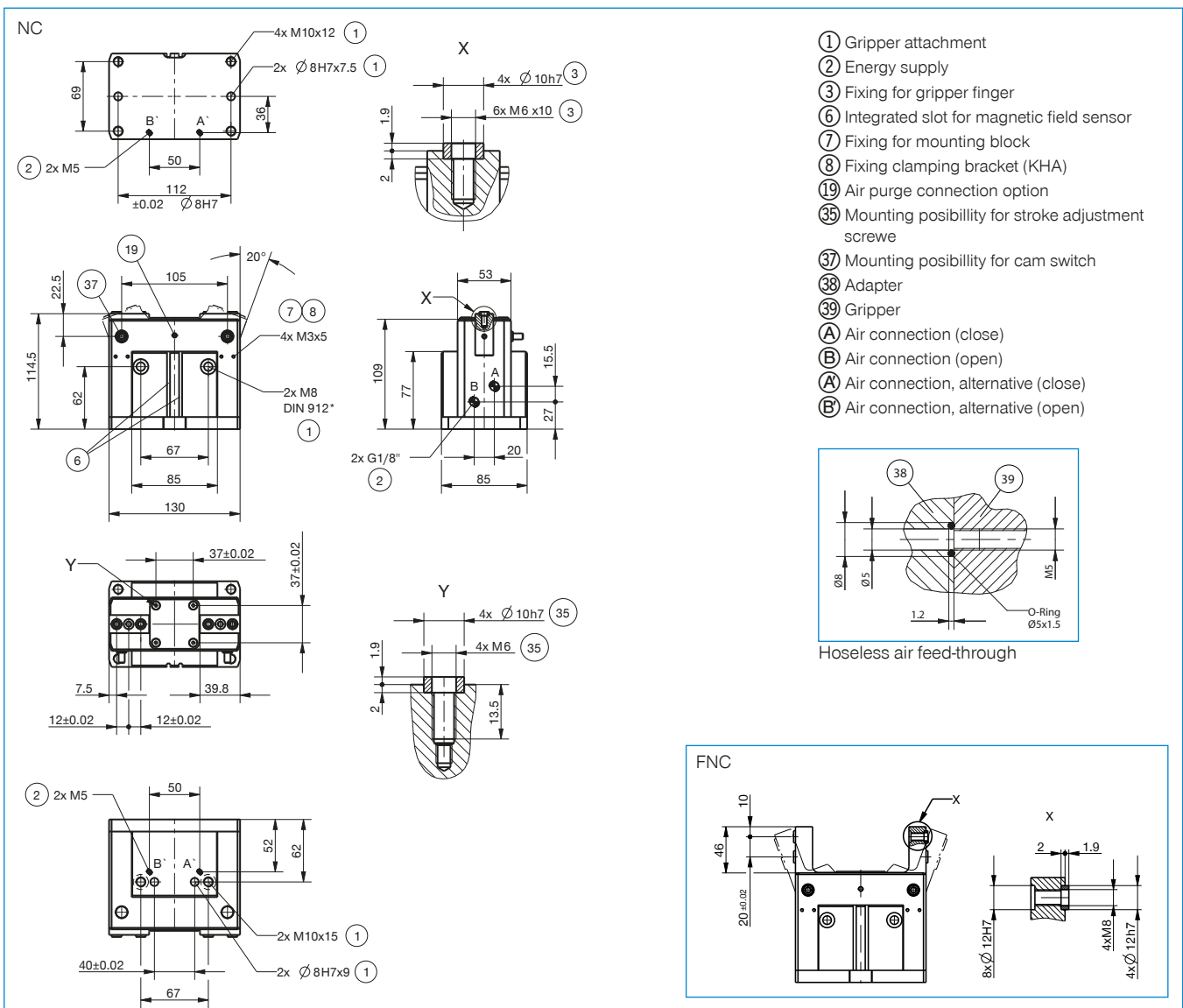


Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500

Order no.	► Technical Data*	
	GG1085NC	GG1085FNC
Stroke per jaw [°]	20	20
Gripping moment in closing max. [Nm]	120	120
Gripping force in closing max. [N]	7120	7120
Gripping moment secured by spring min. [Nm]	18	18
Closing time [s]	0.05	0.05
Opening time [s]	0.1	0.1
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	4	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm ³]	145	145
Weight [kg]	2.8	3.2

*All data measured at 6 bar



2-JAW ANGULAR GRIPPERS

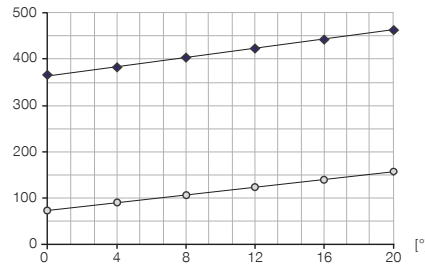
INSTALLATION SIZE GG1110

▶ PRODUCT SPECIFICATIONS



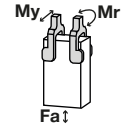
▶ Gripping moment diagram

[Nm] Gripping force as a function of opening angle.



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	60
My [Nm]	65
Fa [N]	1000

▶ INCLUDED IN DELIVERY



Centering Disc

DST41600

▶ RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style

GV1-8X6



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Mounting block

KB8-43



Alternate proximity bracket

KHA1110-8



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S

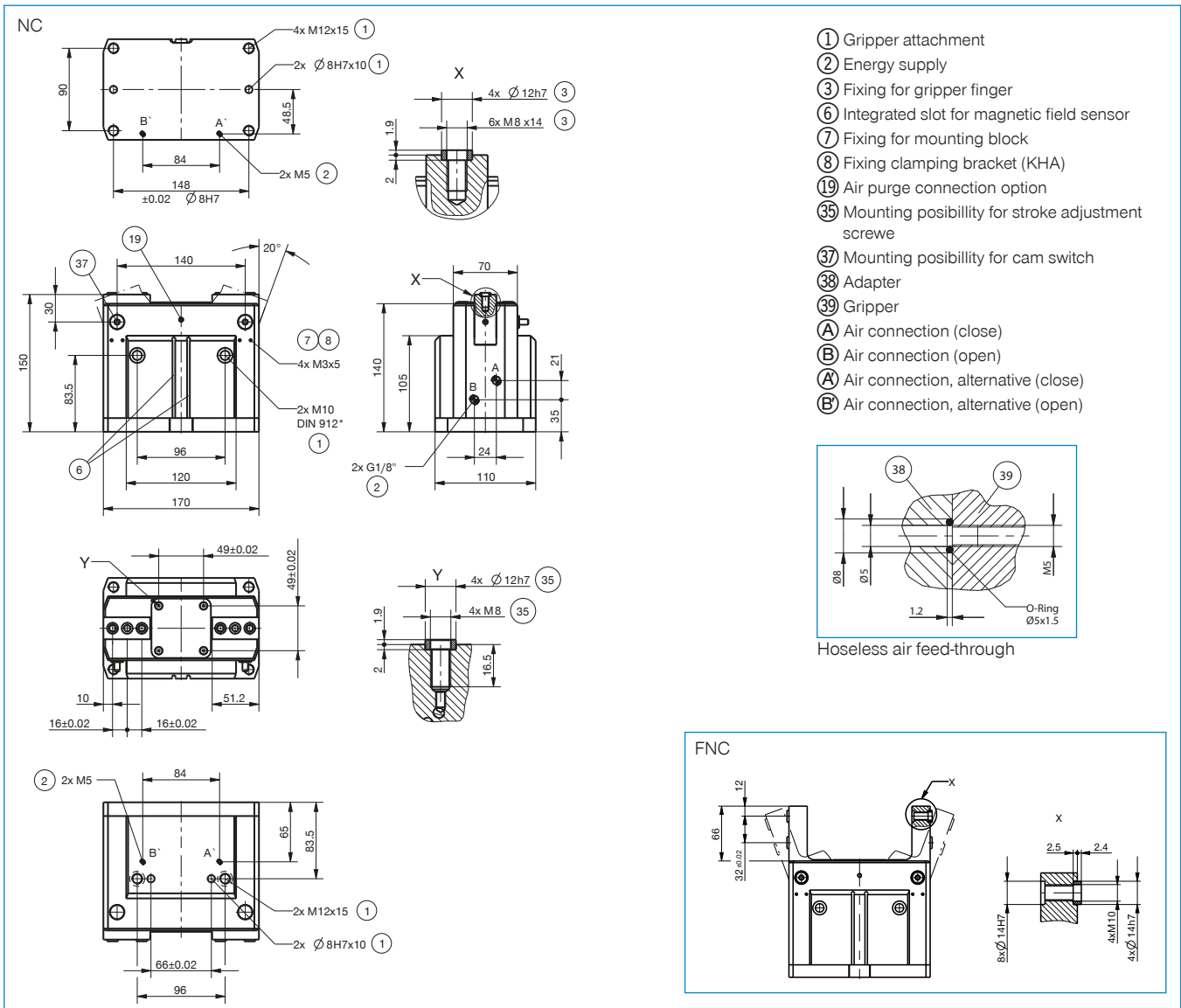


Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500

Order no.	► Technical Data*	
	GG1110NC	GG1110FNC
Stroke per jaw [°]	20	20
Gripping moment in closing max. [Nm]	370	370
Gripping force in closing max. [N]	18665	18665
Gripping moment secured by spring min. [Nm]	75	75
Closing time [s]	0.16	0.16
Opening time [s]	0.27	0.27
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	4	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm ³]	455	455
Weight [kg]	6.3	6.7

*All data measured at 6 bar



2-JAW ANGULAR GRIPPERS

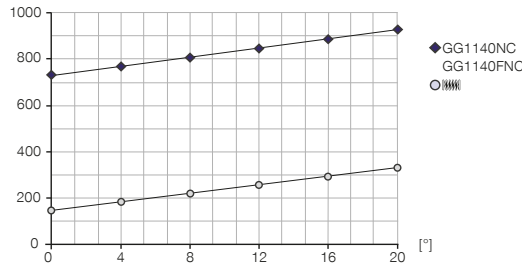
INSTALLATION SIZE GG1140

▶ PRODUCT SPECIFICATIONS



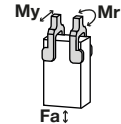
▶ Gripping moment diagram

[Nm] Gripping force as a function of opening angle.



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	110
My [Nm]	120
Fa [N]	1500

▶ INCLUDED IN DELIVERY



Centering Disc

DST42000

▶ RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style

GV1-4X8



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Mounting block

KB8-43



Alternate proximity bracket

KHA1140-8



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S



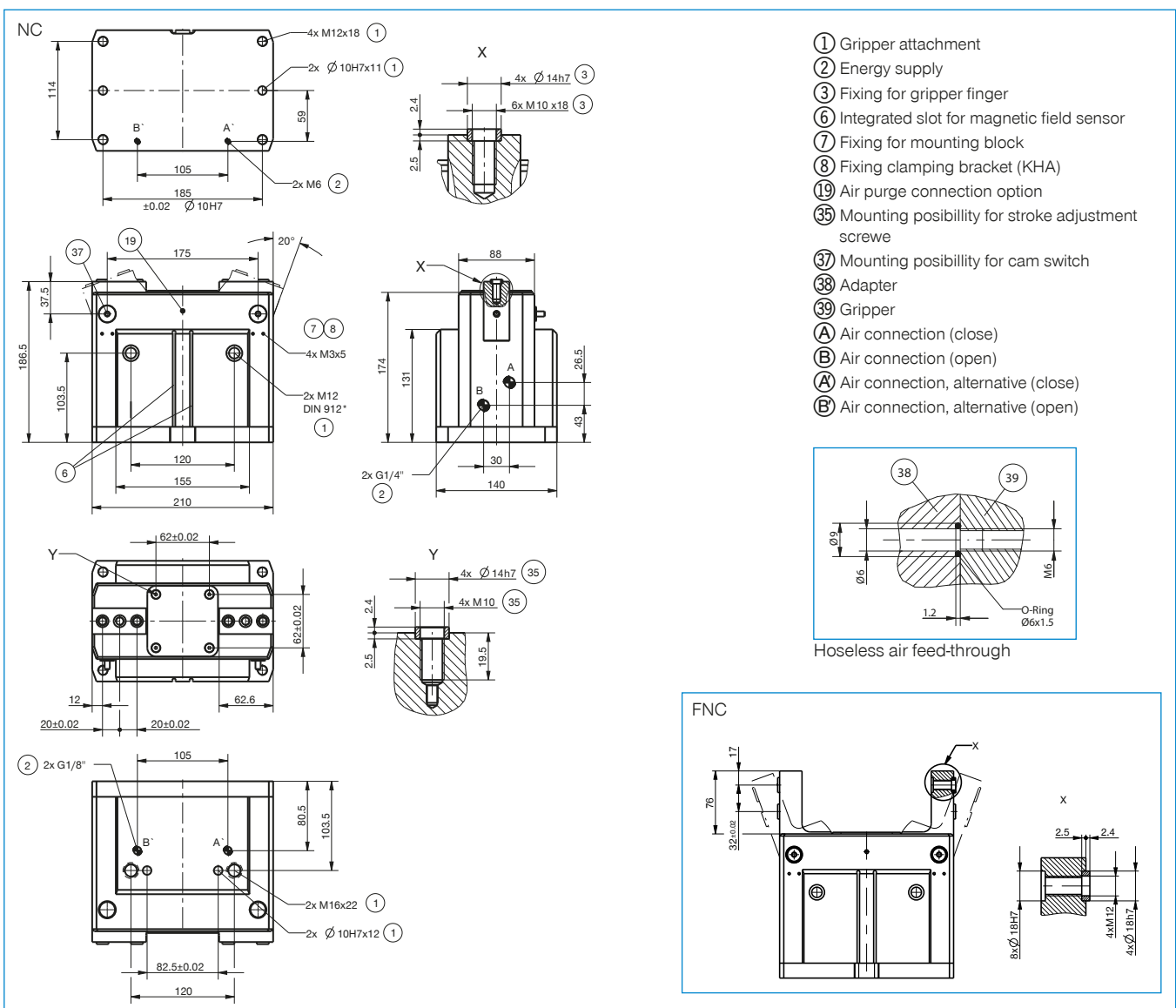
Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500

► Technical Data*

Order no.	GG1140NC	GG1140FNC
Stroke per jaw [°]	20	20
Gripping moment in closing max. [Nm]	725	725
Gripping force in closing max. [N]	29110	29110
Gripping moment secured by spring min. [Nm]	143	143
Closing time [s]	0.25	0.25
Opening time [s]	0.5	0.5
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	4	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm ³]	760	760
Weight [kg]	12.4	13

*All data measured at 6 bar

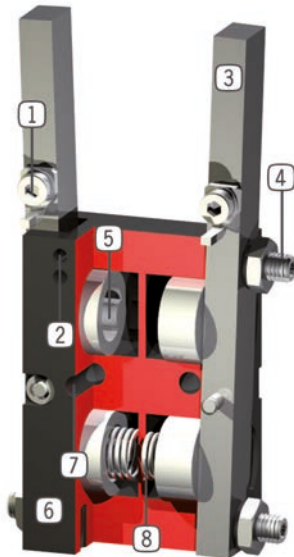


2-JAW ANGULAR GRIPPERS

SERIES GZ

still available

► BENEFITS IN DETAIL



- 1 **Adjustable switch cam**
- direct sensing of gripper jaw movement
- 2 **Fixing for mounting block**
- for inductive proximity switch
- 3 **Steel (C45K) gripper jaw**
- can be machined to suit individual applications and hardened
- 4 **Adjusting screw**
- infinitely adjustable opening stroke
- setting of gripper jaw for exact adjustment of the workpiece
- 5 **Drive**
- direct drive via plunger pistons
- 6 **Robust, lightweight housing**
- hard coated aluminium alloy
- 7 **Mounting and positioning**
- mounting possible from several sides for versatile positioning
- 8 **Integrated gripping force safety device**
- integrated into piston chamber as energy storage (from GZ18-23D up to GZ55-65D)

► TECHNICAL DATA *



Number of installation sizes	8
Stroke per jaw	4 mm - 5 mm
Gripping force	5,4 N - 135 N
Weight	0,036 kg - 0,38 kg

*further information is available online

► FOR NEW DESIGNS, USE THE SUCCESSOR SERIES, THE GZ1000



"The top of the line"

► Unique quality meets functionality

This is one of the best angular grippers on the market, enabling you to make your application more cost-effective and functional

► Variable attachment

Decide for yourself whether you want use screws, locknuts or a toolkit clamping system for fastening

► Sensing with process reliability

Unlike many other established products on the market, you can even differentiate between "Component present" and "Component not present"

2-JAW RADIAL GRIPPER

THE SERIES AT A GLANCE

1

The series at a glance / 2-jaw radial gripper



► PNEUMATIC



Series GK

398



Series GG4000

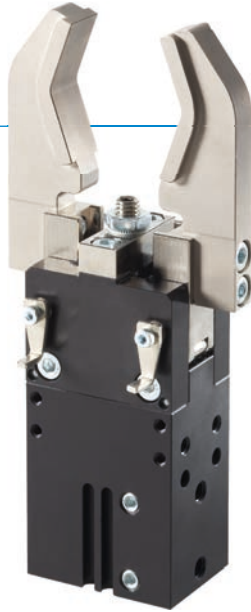
412

2-JAW RADIAL GRIPPER SERIES GK

1

Series GK / 2-jaw radial gripper / pneumatic / Grippers

▶ PRODUCT ADVANTAGES



“The compact”

▶ Proven technology

We have more than 20 years of proven reliability, which ensures uninterrupted production for you

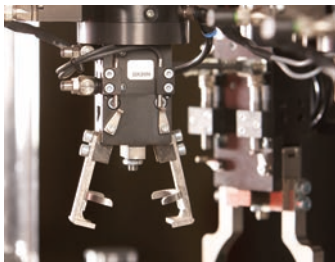
▶ Best force/installation space ratio

Force transmission using the toggle lever enables high gripping force while optimally utilizing the installation space

▶ Smooth stroke configuration

You can adjust the 180° opening angle to be unique to your application using an adjusting screw

▶ THE BEST PRODUCT FOR YOUR APPLICATION



▶ Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities:

Find the best product for your specific use:

www.zimmer-group.com

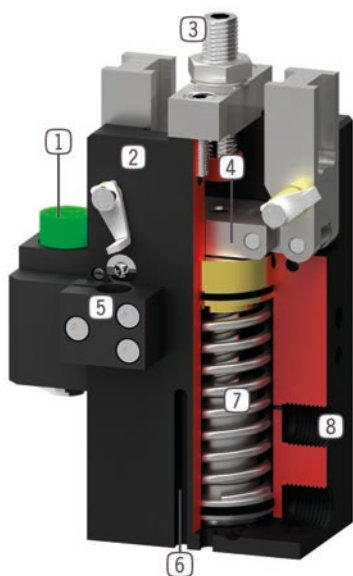
HOW TO ORDER CORRECTLY

- ▶ The product order numbers are arranged according to this diagram:

Order no.	GK15N	<input type="checkbox"/>	-B	
External gripping, mechanical self-locking at 0° opening angle and spring closing		C		



► BENEFITS IN DETAIL



- ① **Buffer stop**
- absorption of kinetic energy for heavy and long gripper fingers
- ② **Robust, lightweight housing**
- hard coated aluminium alloy
- ③ **Stroke adjustment screw**
- Infinitely adjustable opening stroke
- ④ **Guided toggle lever mechanism**
- synchronized the movement of the gripper jaws
- mechanically self-locking
- ⑤ **Mounting block**
- mounting for inductive proximity switch
- ⑥ **Sensing slot**
- mounting and positioning of magnetic field sensors
- ⑦ **Integrated gripping force safety device**
- spring integrated into cylinder as energy storage
- ⑧ **Energy supply**
- possible from several sides

► SERIES CHARACTERISTICS



Number of installation sizes	6
Stroke per jaw	90°
Gripping force	100 N - 4250 N
Weight	0,12 kg - 4,1 kg
AP class	2



10 million maintenance-free cycles (max.)



IP20



Spring closing C



Magnetic field sensor



Inductive sensor

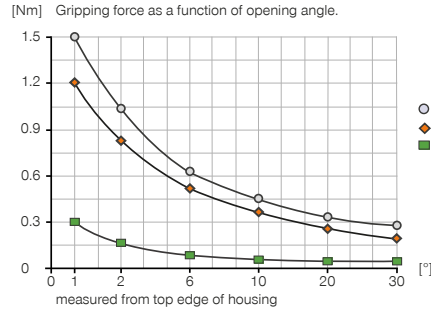
2-JAW RADIAL GRIPPER

INSTALLATION SIZE GK15

▶ PRODUCT SPECIFICATIONS

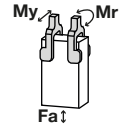


▶ Gripping moment diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	0.4
My [Nm]	0.4
Fa [N]	75

▶ RECOMMENDED ACCESSORIES



Buffer stop

PB15N



Mounting block

KB3



Inductive proximity switch
- Cable 5 m

NJ3-E2



Inductive Proximity Switch
Cable 0,3 m - Connector
M8

NJ3-E2SK



Plug-in connector Angled
Cable 5m - Socket M8
(female)

KAW500



Plug-in connector Straight
Cable 5m - Socket M8 (female)

KAG500



Straight Fittings - Quick
Connect Style

GVM5



Centering Disc

ZE12H7X4



Magnetic field sensor
Angled Cable 5 m

MFS103KHC



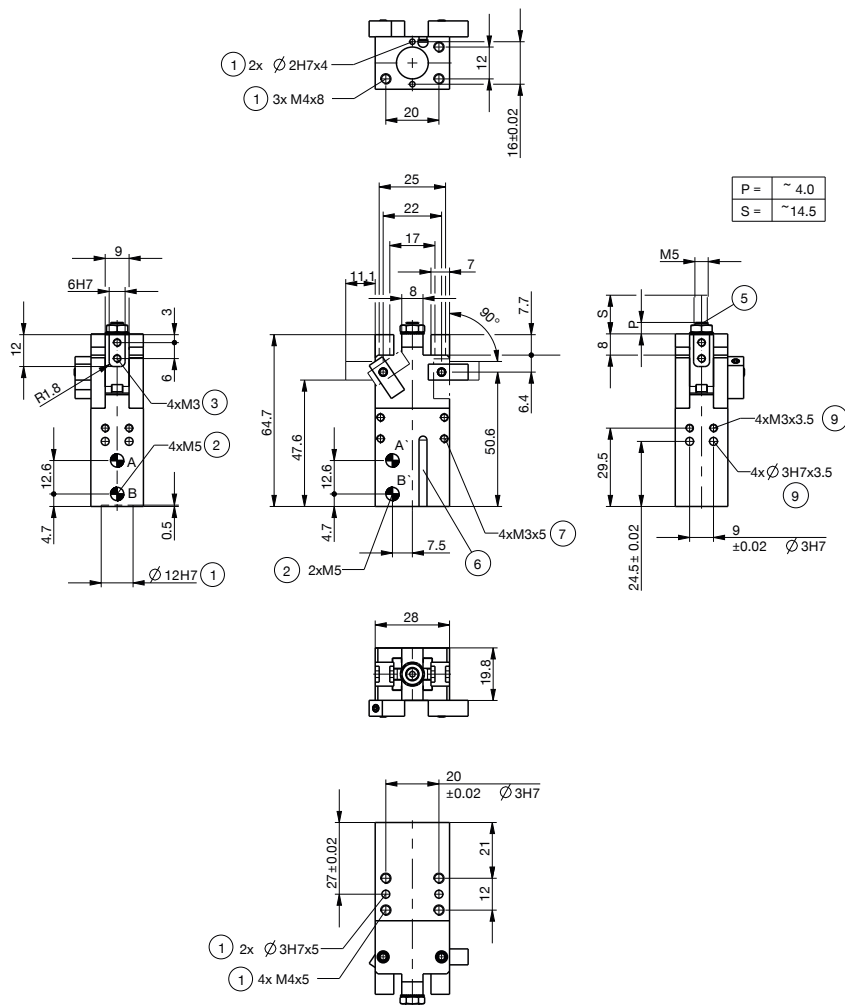
Magnetic field sensor Angled
Cable 0,3 m - Connector M8

MFS103SKHC

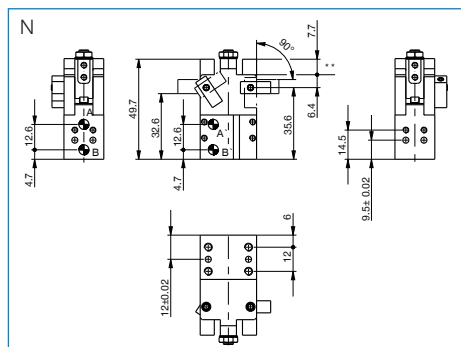
Order no.	Technical Data*	
	GK15N-B	GK15NC-B
Stroke per jaw [°]	90	90
Gripping moment in closing [Nm]	1.2	1.6
Gripping force in closing [N]	70	100
Closing time [s]	0.1	0.2
Opening time [s]	0.1	0.2
Repetition accuracy +/- [mm]	0.06	0.06
Operating pressure min. [bar]	3	5
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm³]	2	2.4
Weight [kg]	0.1	0.12

* All data measured at 6 bar

NC



- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑤ Stroke adjustment screw
- ⑥ Integrated slot for magnetic field sensor
- ⑦ Fixing for mounting block
- ⑨ Buffer stop mounting
- A Air connection (close)
- B Air connection (open)
- A Air connection, alternative (close)
- B Air connection, alternative (open)



2-JAW RADIAL GRIPPER

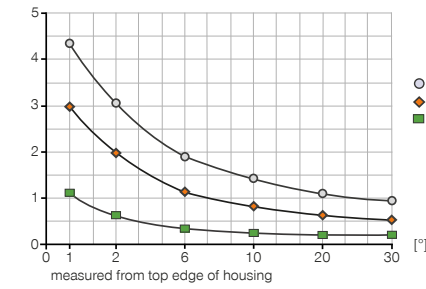
INSTALLATION SIZE GK20

▶ PRODUCT SPECIFICATIONS



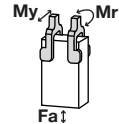
▶ Gripping moment diagram

[Nm] Gripping force as a function of opening angle.



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	0.8
My [Nm]	1
Fa [N]	150

▶ INCLUDED IN DELIVERY



Mounting block

KB8K

▶ RECOMMENDED ACCESSORIES



Buffer stop

PB20N



Inductive proximity switch
- Cable 5 m

NJ8-E2



Inductive proximity switch
- Connector M8

NJ8-E2S



Plug-in connector Angled
Cable 5m - Socket M8
(female)

KAW500



Plug-in connector
Straight Cable 5m - Socket
M8 (female)

KAG500



Straight Fittings - Quick
Connect Style

GVM5



Centering Disc

ZE20H7X4



Magnetic field sensor
Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled
Cable 0,3 m - Connector M8

MFS103SKHC



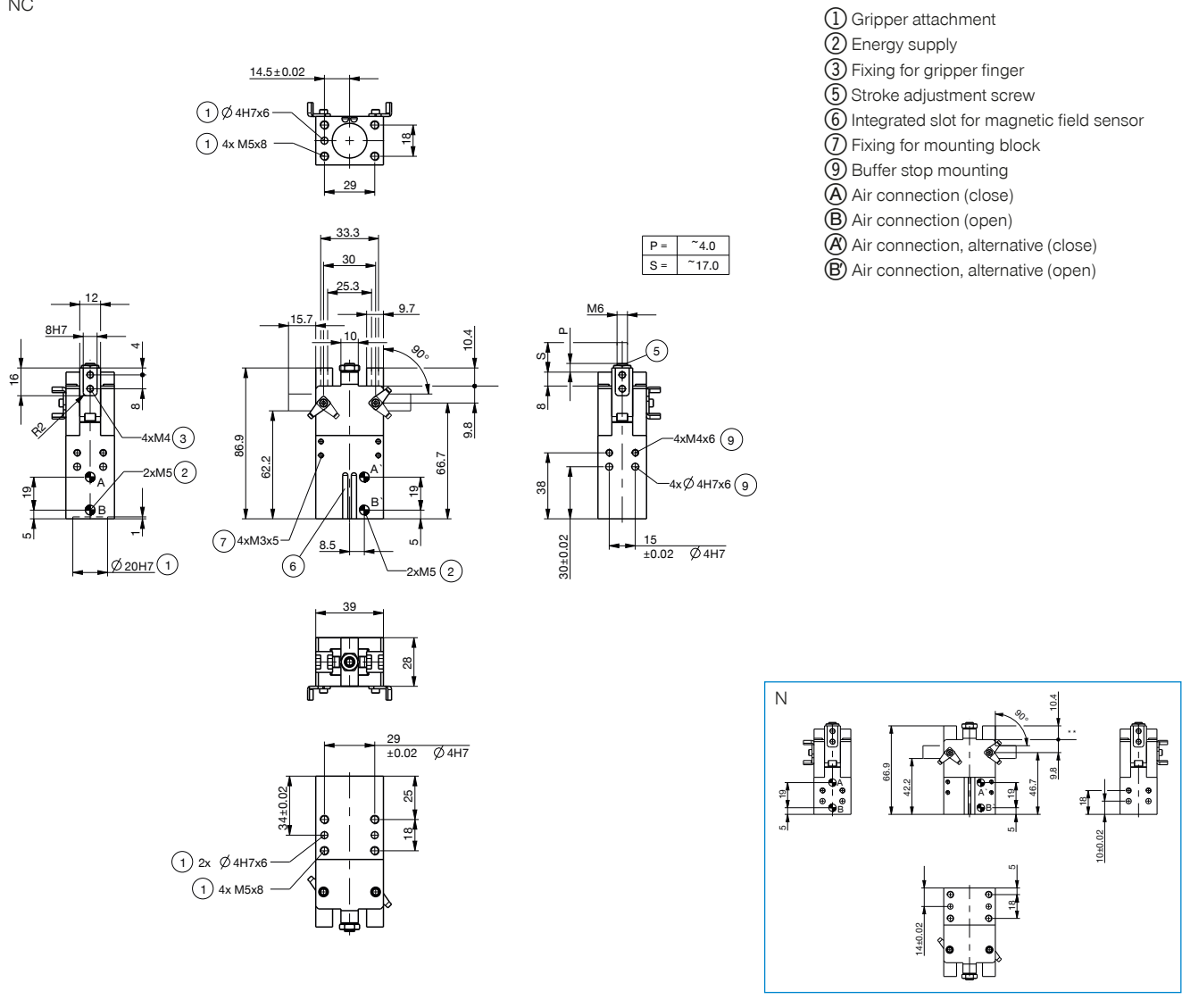
Magnetic field sensor
Straight Cable 5 m

MFS204KHC

Order no.	► Technical Data*	
	GK20N-B	GK20NC-B
Stroke per jaw [°]	90	90
Gripping moment in closing [Nm]	3	4.2
Gripping force in closing [N]	150	210
Closing time [s]	0.1	0.2
Opening time [s]	0.1	0.2
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	5
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm ³]	9	11
Weight [kg]	0.23	0.3

*All data measured at 6 bar

NC



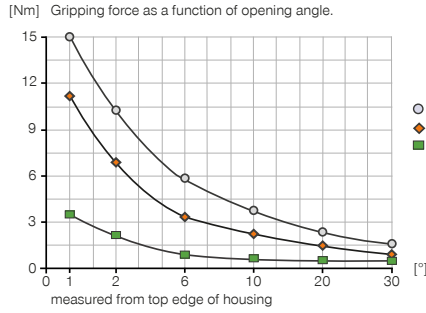
2-JAW RADIAL GRIPPER

INSTALLATION SIZE GK25

1 PRODUCT SPECIFICATIONS

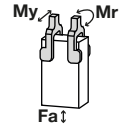


Gripping moment diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	2.5
My [Nm]	4
Fa [N]	250

INCLUDED IN DELIVERY



Mounting block

KB8K

RECOMMENDED ACCESSORIES



Buffer stop

PB25N



Inductive proximity switch
- Cable 5 m

NJ8-E2



Inductive proximity switch
- Connector M8

NJ8-E2S



Plug-in connector Angled
Cable 5m - Socket M8
(female)

KAW500



Plug-in connector
Straight Cable 5m - Socket
M8 (female)

KAG500



Straight Fittings - Quick
Connect Style

GVM5



Centering Disc

ZE20H7X4



Magnetic field sensor
Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled
Cable 0,3 m - Connector M8

MFS103SKHC

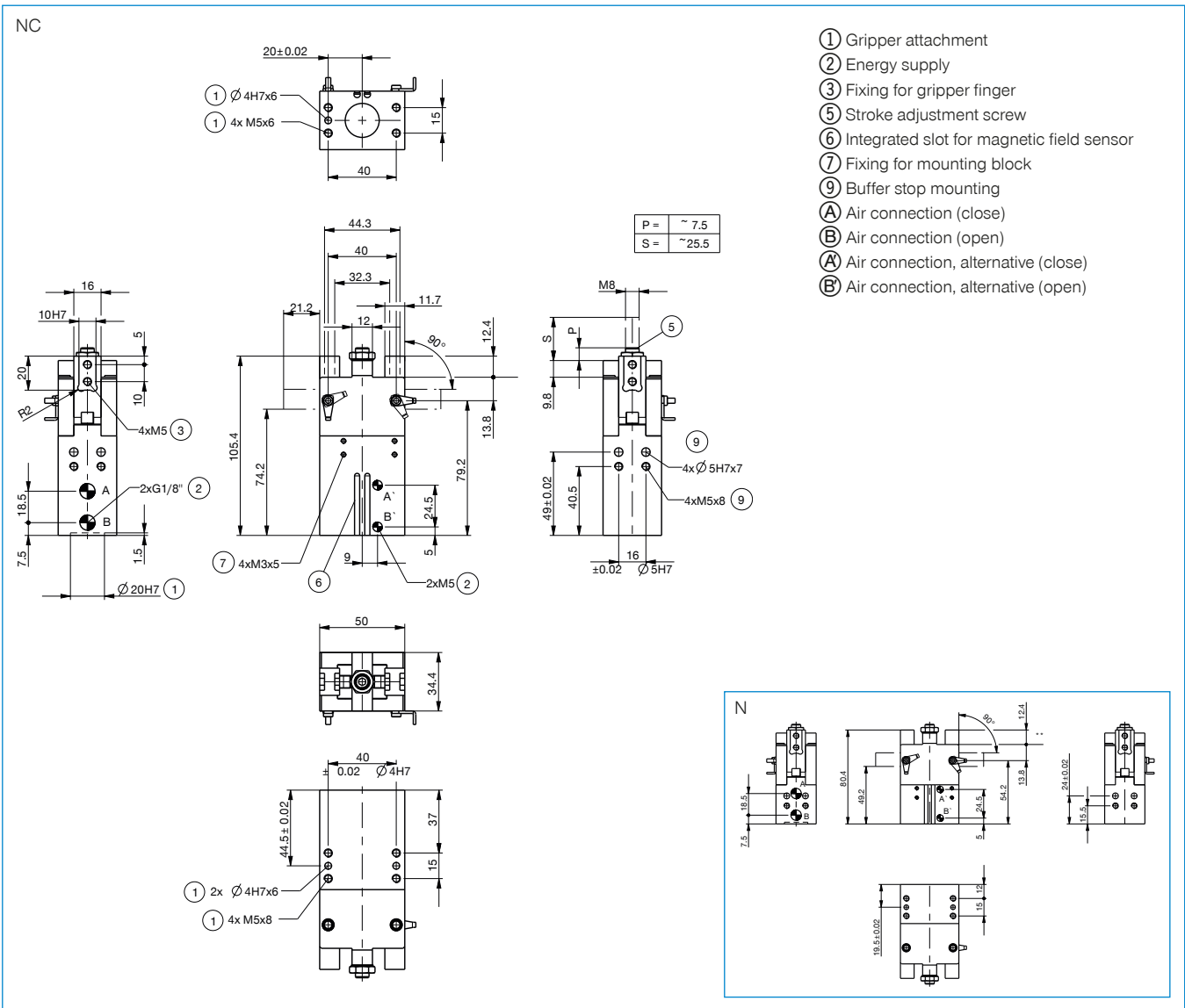


Magnetic field sensor
Straight Cable 5 m

MFS204KHC

Order no.	Technical Data*	
	GK25N-B	GK25NC-B
Stroke per jaw [°]	90	90
Gripping moment in closing [Nm]	10.5	14.5
Gripping force in closing [N]	440	610
Closing time [s]	0.15	0.25
Opening time [s]	0.15	0.25
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	5
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm ³]	18	21
Weight [kg]	0.42	0.58

*All data measured at 6 bar



2-JAW RADIAL GRIPPER

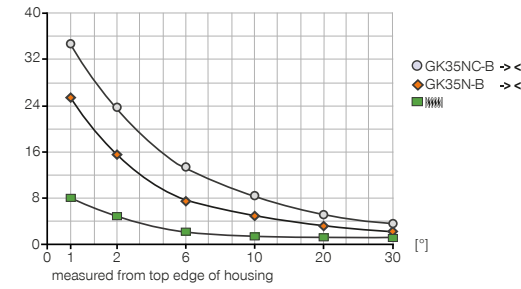
INSTALLATION SIZE GK35

▶ PRODUCT SPECIFICATIONS



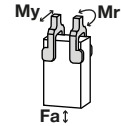
▶ Gripping moment diagram

[Nm] Gripping force as a function of opening angle.



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	12
My [Nm]	20
Fa [N]	400

▶ INCLUDED IN DELIVERY



Mounting block

KB8K

▶ RECOMMENDED ACCESSORIES



Buffer stop

PB35N



Inductive proximity switch
- Cable 5 m

NJ8-E2



Inductive proximity switch
- Connector M8

NJ8-E2S



Plug-in connector Angled
Cable 5m - Socket M8
(female)

KAW500



Plug-in connector
Straight Cable 5m - Socket
M8 (female)

KAG500



Straight Fittings - Quick
Connect Style

GVM5



Centering Disc

ZE25H7X6



Magnetic field sensor
Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled
Cable 0,3 m - Connector M8

MFS103SKHC

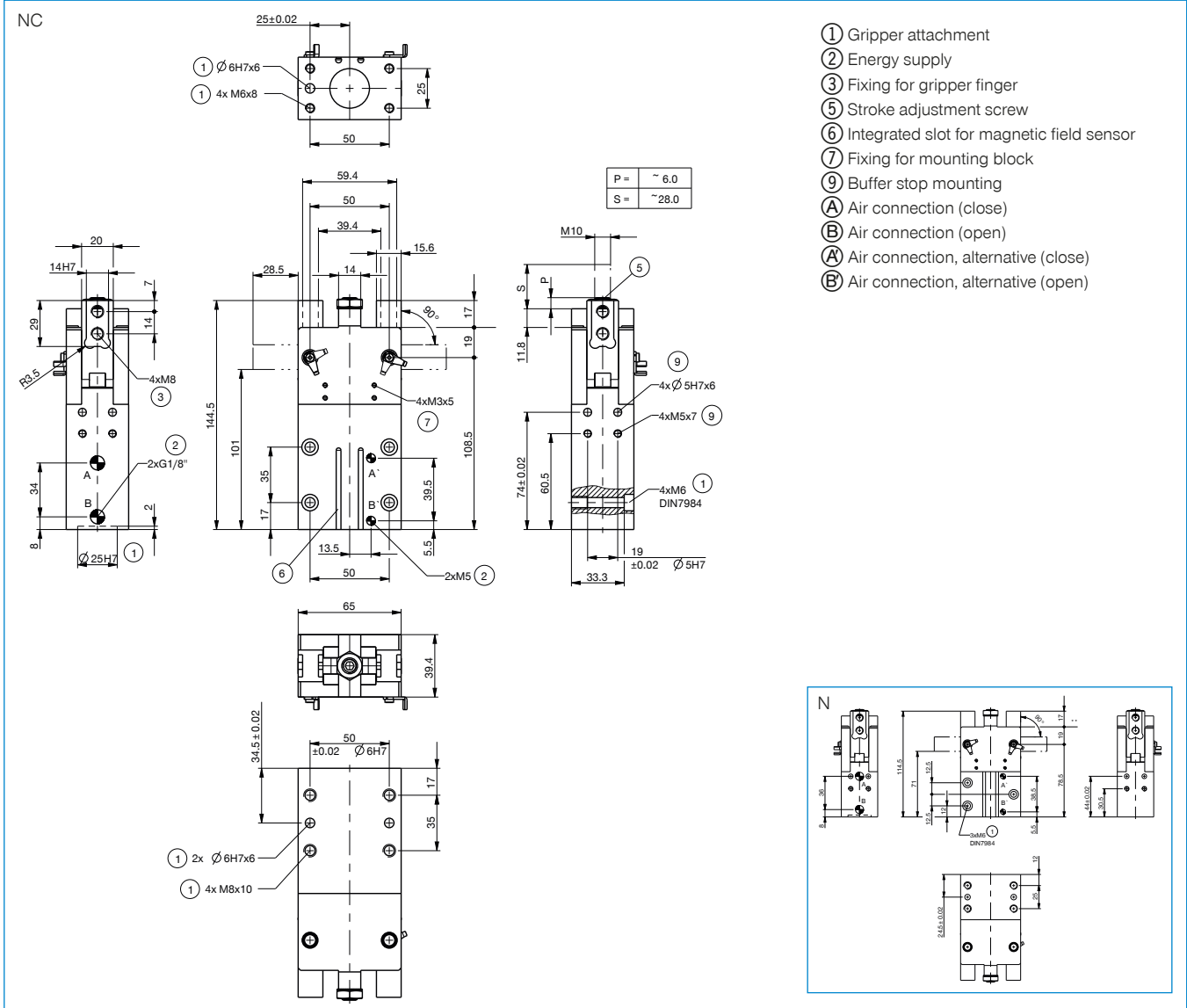


Magnetic field sensor
Straight Cable 5 m

MFS204KHC

Order no.	► Technical Data*	
	GK35N-B	GK35NC-B
Stroke per jaw [°]	90	90
Gripping moment in closing [Nm]	27.5	36.5
Gripping force in closing [N]	950	1250
Closing time [s]	0.25	0.35
Opening time [s]	0.25	0.35
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	5
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm ³]	43	50
Weight [kg]	0.9	1.2

*All data measured at 6 bar



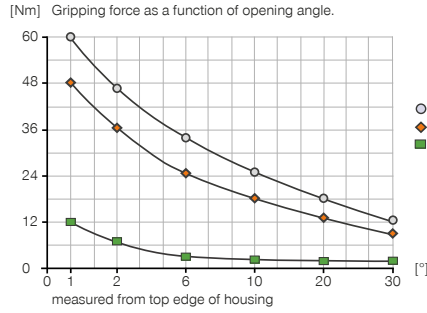
2-JAW RADIAL GRIPPER

INSTALLATION SIZE GK40

▶ PRODUCT SPECIFICATIONS

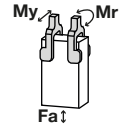


▶ Gripping moment diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	17
My [Nm]	30
Fa [N]	600

▶ INCLUDED IN DELIVERY



Mounting block

KB8K

▶ RECOMMENDED ACCESSORIES



Buffer stop

PB40N



Inductive proximity switch
- Cable 5 m

NJ8-E2



Inductive proximity switch
- Connector M8

NJ8-E2S



Plug-in connector Angled
Cable 5m - Socket M8
(female)

KAW500



Plug-in connector
Straight Cable 5m - Socket
M8 (female)

KAG500



Straight Fittings - Quick
Connect Style

GVM5



Centering Disc

ZE30H7X4



Magnetic field sensor
Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled
Cable 0,3 m - Connector M8

MFS103SKHC

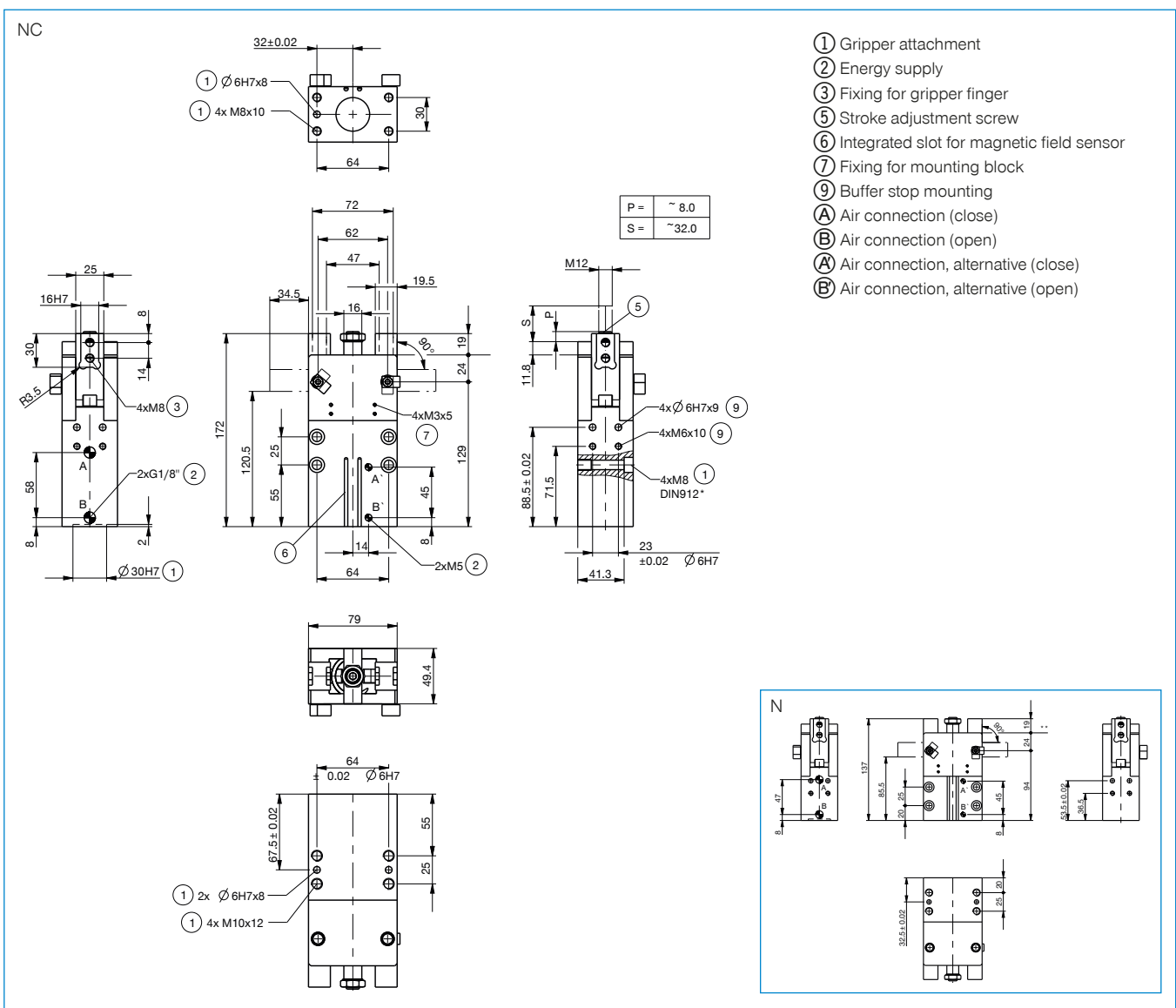


Magnetic field sensor
Straight Cable 5 m

MFS204KHC

Order no.	Technical Data*	
	GK40N-B	GK40NC-B
Stroke per jaw [°]	90	90
Gripping moment in closing [Nm]	47	62
Gripping force in closing [N]	1400	1820
Closing time [s]	0.25	0.35
Opening time [s]	0.25	0.35
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	5
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm ³]	78	90
Weight [kg]	1.7	2.2

*All data measured at 6 bar



2-JAW RADIAL GRIPPER

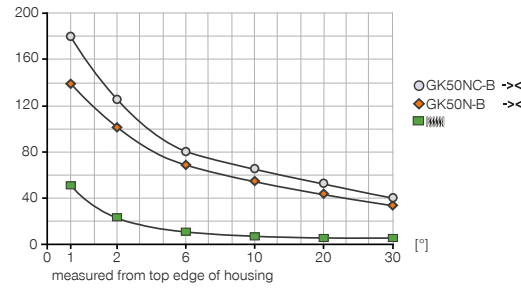
INSTALLATION SIZE GK50

1 PRODUCT SPECIFICATIONS



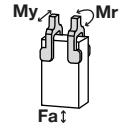
Gripping moment diagram

[Nm] Gripping force as a function of opening angle.



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	28
My [Nm]	40
Fa [N]	800

INCLUDED IN DELIVERY



Mounting block

KB8K

RECOMMENDED ACCESSORIES



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Straight Fittings - Quick Connect Style

GV1-8X6



Centering Disc

ZE30H7X6



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC

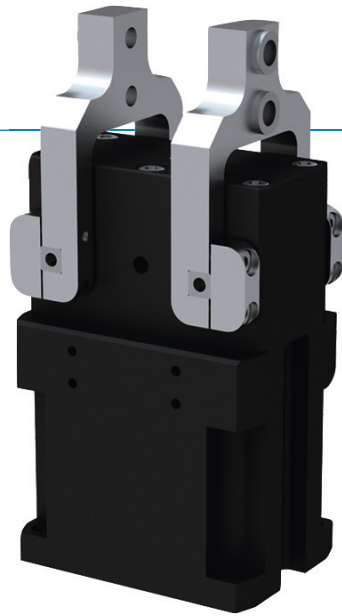
2-JAW RADIAL GRIPPER

SERIES GG4000

1

Series GG4000 / 2-jaw radial gripper / pneumatic / Grippers

▶ PRODUCT ADVANTAGES



“The sealed”

▶ Suitable for use under extreme conditions

The sealed rotation axis guarantees process reliability even under the harshest conditions

▶ Smooth stroke configuration

You can adjust the 180° opening angle to be unique to your application using an adjusting screw

▶ Failure-free continuous operation

Our uncompromising “Made in Germany” quality guarantees up to 10 million maintenance-free gripping cycles

▶ THE BEST PRODUCT FOR YOUR APPLICATION



▶ Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities:

Find the best product for your specific use:

www.zimmer-group.com

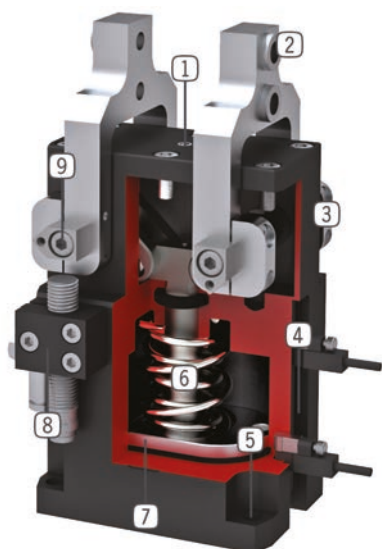
HOW TO ORDER CORRECTLY

- ▶ The product order numbers are arranged according to this diagram:

Order no.	GG4032	<input type="checkbox"/>	C	
Stroke per jaw 90°		N		
Stroke per jaw 20°		S		



► BENEFITS IN DETAIL



- ① **Stroke adjustment screw**
 - Infinitely adjustable opening stroke
- ② **Removable centering sleeves**
 - individual gripper finger mounting
- ③ **Robust, lightweight housing**
 - hard coated aluminium alloy
- ④ **Sensing slot**
 - mounting and positioning of magnetic field sensors
- ⑤ **Mounting and positioning**
 - mounting possible from several sides for versatile positioning
- ⑥ **Integrated gripping force safety device**
 - spring integrated into cylinder as energy storage
- ⑦ **Position sensing**
 - permanent magnet for direct monitoring of piston movement
- ⑧ **Mounting block**
 - mounting for inductive proximity switch
- ⑨ **Sealed rotation point**
 - for use under extreme conditions

► SERIES CHARACTERISTICS



Number of installation sizes	6
Stroke per jaw	90°
Gripping moment	7 Nm - 156 Nm
Weight	0,25 kg - 4,5 kg
AP class	3



10 million maintenance-free cycles (max.)



Inductive sensor



Purged air



Spring closing C



IP64



High-strength S



Magnetic field sensor

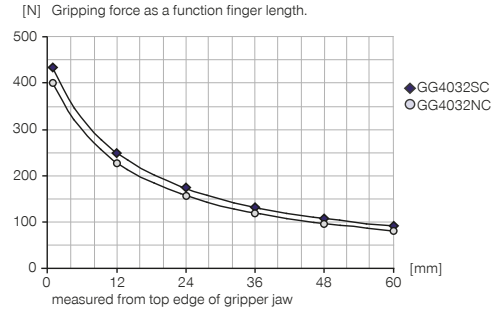
2-JAW RADIAL GRIPPER

INSTALLATION SIZE GG4032

▶ PRODUCT SPECIFICATIONS

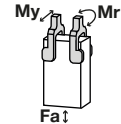


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	8.5
My [Nm]	8.5
Fa [N]	180

▶ INCLUDED IN DELIVERY



Centering Disc

DST40600



Stroke adjustment screw

HES0014

▶ RECOMMENDED ACCESSORIES



Mounting block

KB4-06



Straight Fittings - Quick Connect Style

GVM5



Pressure Safety Valve

DSV1-8



Magnetic field sensor
Angled Cable 0,3 m -
Connector M8
MFS103SKHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8
MFS204SKHC



2-Position-Sensor Cable
0,3 m - Connector M8
MFSP2SKHC



Inductive proximity switch
- Cable 5 m
NJ4-E2



Plug-in connector Angled Ca-
ble 5m - Socket M8 (female)
KAW500



Plug-in connector Straight Ca-
ble 5m - Socket M8 (female)
KAG500

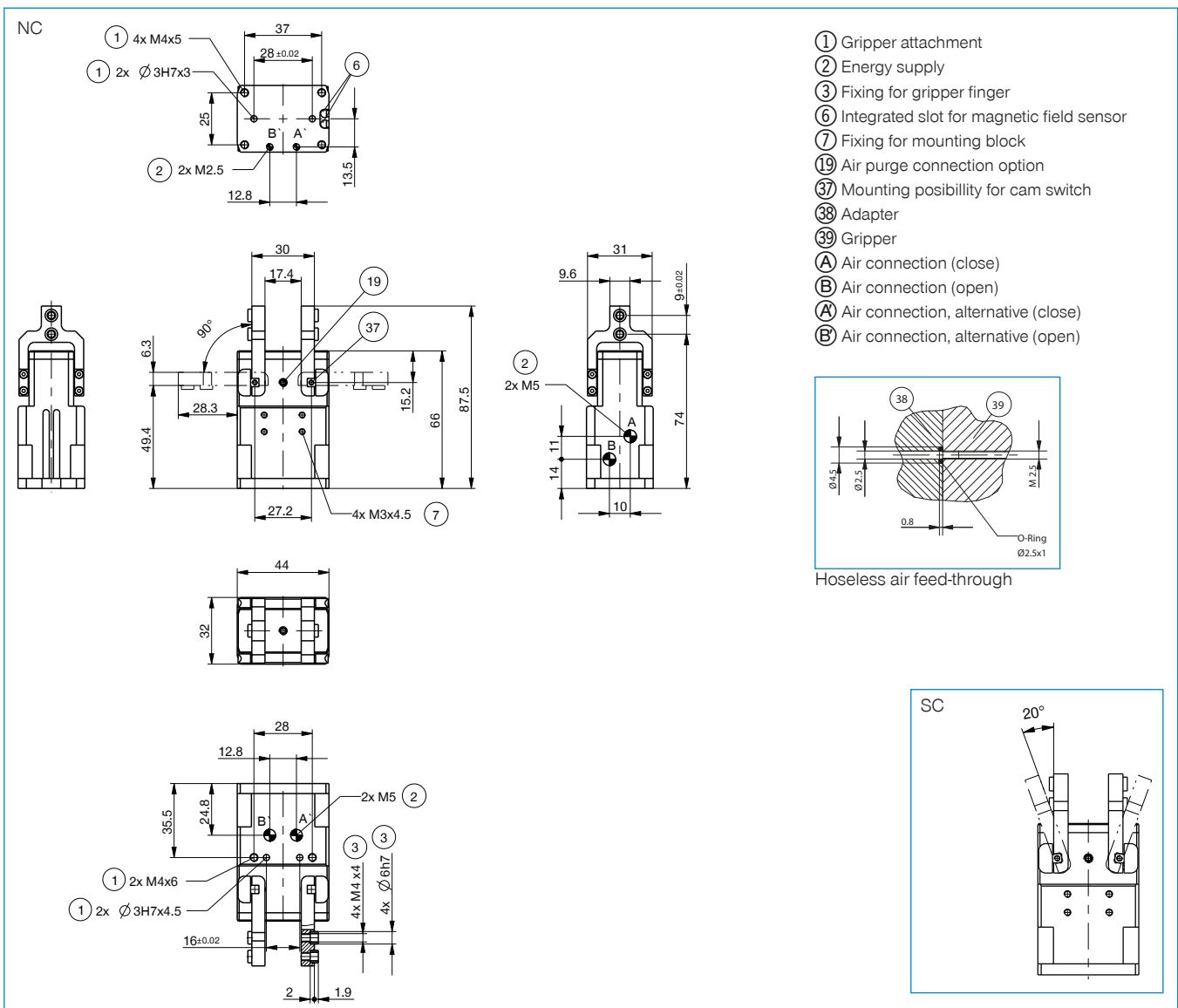


Plug-in connector customiz-
able Straight - Connector M8
S8-G-3

► Technical Data*

Order no.	GG4032NC	GG4032SC
Stroke per jaw [°]	90	20
Gripping moment in closing at 0° [Nm]	6.5	7
Gripping force in closing [N]	430	460
Gripping moment secured by spring min. [Nm]	1	1.5
Length of the gripper fingers max. [mm]	65	65
Weight per jaw max. [g]	55	55
Closing time [s]	0.055	0.02
Opening time [s]	0.08	0.03
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	4	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm³]	13	10
Weight [kg]	0.25	0.25

*All data measured at 6 bar



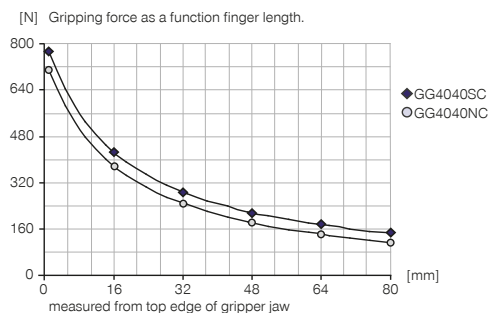
2-JAW RADIAL GRIPPER

INSTALLATION SIZE GG4040

1 PRODUCT SPECIFICATIONS

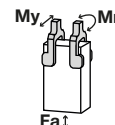


Gripping force diagram



Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	19
My [Nm]	19
Fa [N]	180

INCLUDED IN DELIVERY



Centering Disc

BDST40800



Stroke adjustment screw

HES0015

RECOMMENDED ACCESSORIES



Mounting block

KB8-48



Straight Fittings - Quick Connect Style

GVM5



Pressure Safety Valve

DSV1-8



Magnetic field sensor
Angled Cable 0,3 m -
Connector M8
MFS103SKHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8
MFS204SKHC



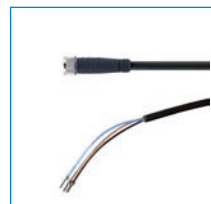
2-Position-Sensor Cable
0,3 m - Connector M8
MFSP2SKHC



Inductive proximity switch
- Connector M8
NJ8-E2S



Plug-in connector Angled Ca-
ble 5m - Socket M8 (female)
KAW500



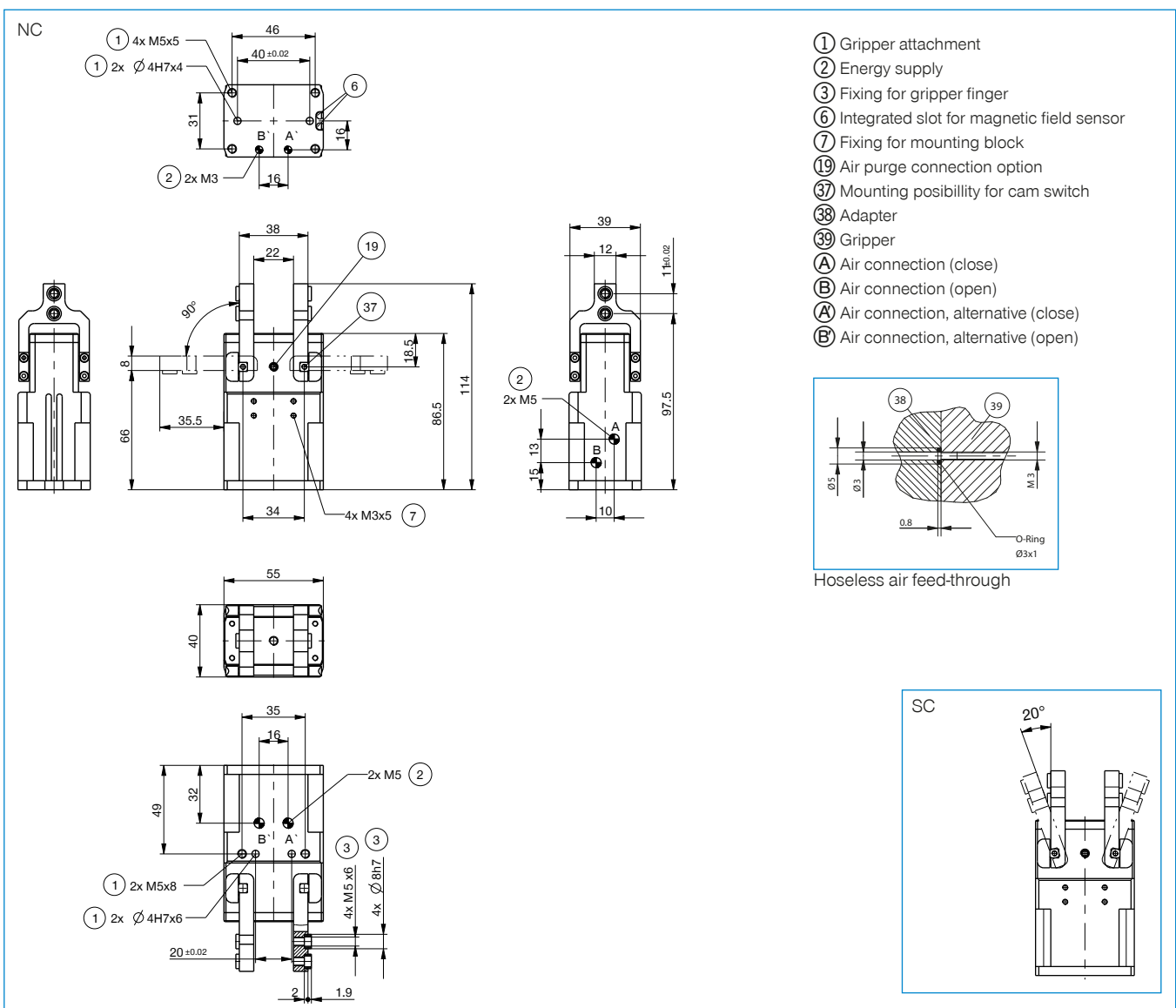
Plug-in connector Straight Ca-
ble 5m - Socket M8 (female)
KAG500



Plug-in connector customiz-
able Straight - Connector M8
S8-G-3

Order no.	► Technical Data*	
	GG4040NC	GG4040SC
Stroke per jaw [°]	90	20
Gripping moment in closing at 0° [Nm]	13	15
Gripping force in closing [N]	700	800
Gripping moment secured by spring min. [Nm]	6	8.5
Length of the gripper fingers max. [mm]	85	85
Weight per jaw max. [g]	120	120
Closing time [s]	0.060	0.02
Opening time [s]	0.11	0.06
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	4	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm³]	24	18
Weight [kg]	0.5	0.5

*All data measured at 6 bar



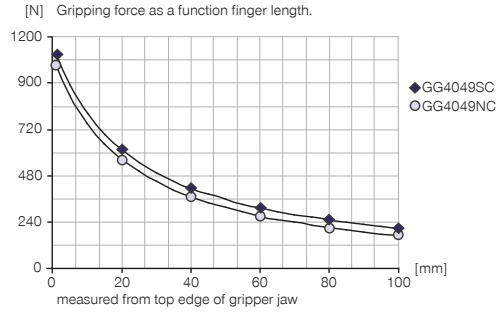
2-JAW RADIAL GRIPPER

INSTALLATION SIZE GG4049

▶ PRODUCT SPECIFICATIONS

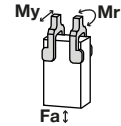


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	22
My [Nm]	22
Fa [N]	475

▶ INCLUDED IN DELIVERY



Centering Disc

DST41000



Stroke adjustment screw

HES0016

▶ RECOMMENDED ACCESSORIES



Mounting block

KB8-49



Straight Fittings - Quick Connect Style

GVM5



Pressure Safety Valve

DSV1-8



Magnetic field sensor
Angled Cable 0,3 m -
Connector M8
MFS103SKHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8
MFS204SKHC



2-Position-Sensor Cable
0,3 m - Connector M8
MFSP2SKHC



Inductive proximity switch
- Connector M8
NJ8-E2S



Plug-in connector Angled Ca-
ble 5m - Socket M8 (female)
KAW500



Plug-in connector Straight Ca-
ble 5m - Socket M8 (female)
KAG500

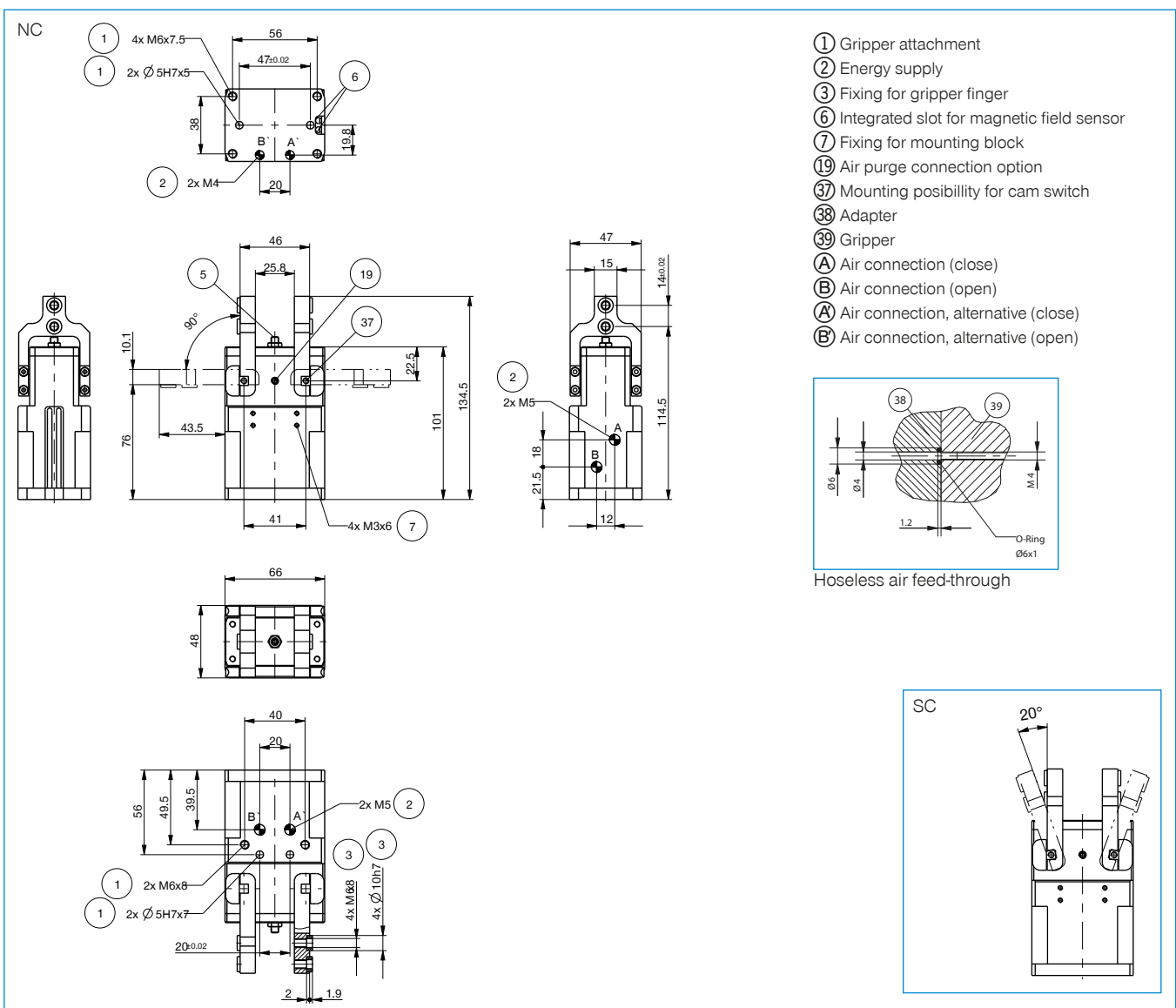


Plug-in connector customiz-
able Straight - Connector M8
S8-G-3

► Technical Data*

Order no.	GG4049NC	GG4049SC
Stroke per jaw [°]	90	20
Gripping moment in closing at 0° [Nm]	23	26
Gripping force in closing [N]	1000	1150
Gripping moment secured by spring min. [Nm]	4.2	7.2
Length of the gripper fingers max. [mm]	100	100
Weight per jaw max. [g]	200	200
Closing time [s]	0.11	0.05
Opening time [s]	0.17	0.09
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	4	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm³]	44	33
Weight [kg]	0.85	0.85

*All data measured at 6 bar



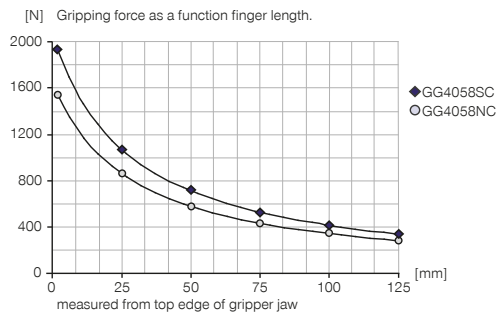
2-JAW RADIAL GRIPPER

INSTALLATION SIZE GG4058

▶ PRODUCT SPECIFICATIONS

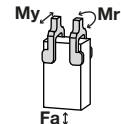


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	33
My [Nm]	33
Fa [N]	720

▶ INCLUDED IN DELIVERY



Centering Disc

DST11500



Stroke adjustment screw

HES0017

▶ RECOMMENDED ACCESSORIES



Mounting block

KB8-49



Straight Fittings - Quick Connect Style

GVM5



Pressure Safety Valve

DSV1-8



Magnetic field sensor
Angled Cable 0,3 m -
Connector M8
MFS103SKHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8
MFS204SKHC



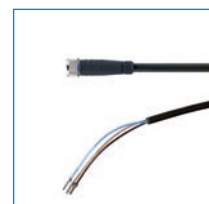
2-Position-Sensor Cable
0,3 m - Connector M8
MFSP2SKHC



Inductive proximity switch
- Connector M8
NJ8-E2S



Plug-in connector Angled Ca-
ble 5m - Socket M8 (female)
KAW500



Plug-in connector Straight Ca-
ble 5m - Socket M8 (female)
KAG500

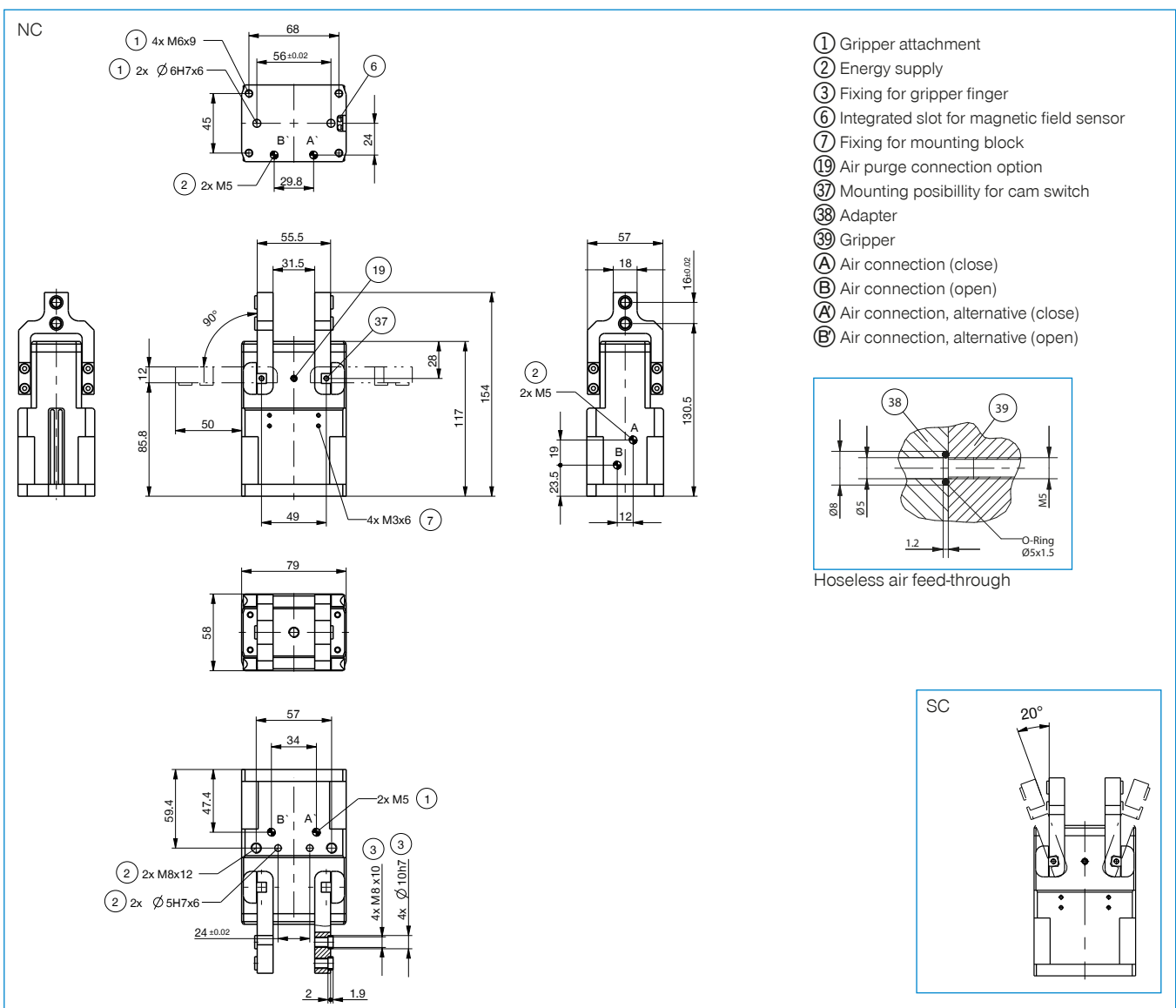


Plug-in connector customiz-
able Straight - Connector M8
S8-G-3

► Technical Data*

Order no.	GG4058NC	GG4058SC
Stroke per jaw [°]	90	20
Gripping moment in closing at 0° [Nm]	46	53.5
Gripping force in closing [N]	1650	1900
Gripping moment secured by spring min. [Nm]	5.7	14.5
Length of the gripper fingers max. [mm]	120	120
Weight per jaw max. [g]	360	360
Closing time [s]	0.16	0.14
Opening time [s]	0.28	0.17
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	4	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm³]	86	65
Weight [kg]	1.4	1.4

*All data measured at 6 bar



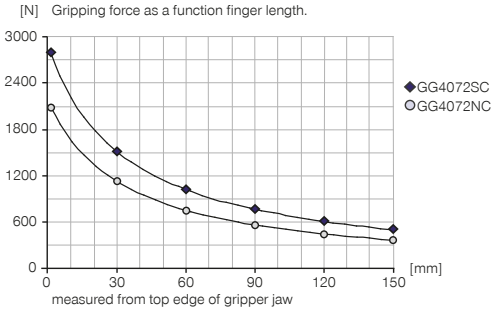
2-JAW RADIAL GRIPPER

INSTALLATION SIZE GG4072

▶ PRODUCT SPECIFICATIONS

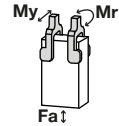


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	41
My [Nm]	41
Fa [N]	1100

▶ INCLUDED IN DELIVERY



Centering Disc

DST42000



Stroke adjustment screw

HES0018

▶ RECOMMENDED ACCESSORIES



Mounting block

KB8-49



Straight Fittings - Quick Connect Style

GV1-8X6



Pressure Safety Valve

DSV1-8



Magnetic field sensor
Angled Cable 0,3 m -
Connector M8
MFS103SKHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8
MFS204SKHC



2-Position-Sensor Cable
0,3 m - Connector M8
MFSP2SKHC



Inductive proximity switch
- Connector M8
NJ8-E2S



Plug-in connector Angled Ca-
ble 5m - Socket M8 (female)
KAW500



Plug-in connector Straight Ca-
ble 5m - Socket M8 (female)
KAG500

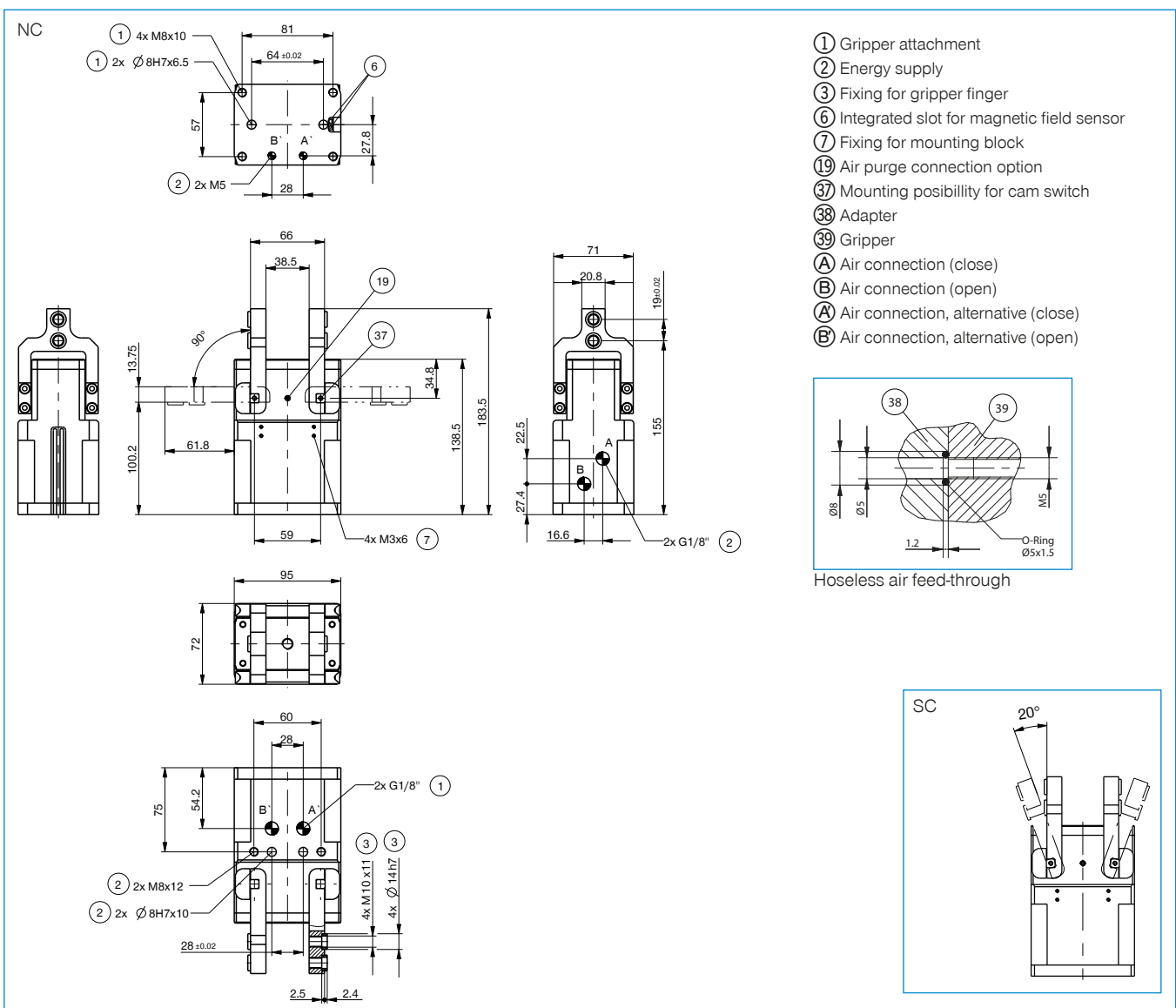


Plug-in connector customiz-
able Straight - Connector M8
S8-G-3

► Technical Data*

Order no.	GG4072NC	GG4072SC
Stroke per jaw [°]	90	20
Gripping moment in closing at 0° [Nm]	69	94
Gripping force in closing [N]	1950	2700
Gripping moment secured by spring min. [Nm]	10	21
Length of the gripper fingers max. [mm]	145	145
Weight per jaw max. [g]	650	650
Closing time [s]	0.21	0.06
Opening time [s]	0.34	0.175
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	4	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm³]	130	100
Weight [kg]	2.45	2.45

*All data measured at 6 bar



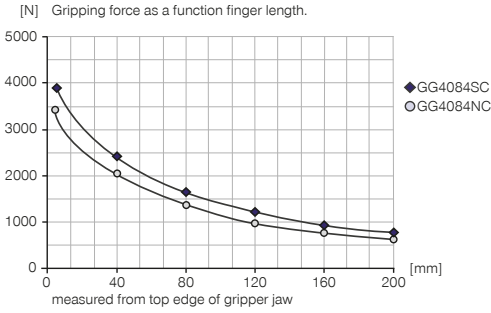
2-JAW RADIAL GRIPPER

INSTALLATION SIZE GG4084

▶ PRODUCT SPECIFICATIONS

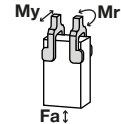


▶ Gripping force diagram



▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	60
My [Nm]	60
Fa [N]	1800

▶ INCLUDED IN DELIVERY



Centering Disc

DST43000



Stroke adjustment screw

HES0019

▶ RECOMMENDED ACCESSORIES



Mounting block

KB8-49



Straight Fittings - Quick Connect Style

GV1-8X6



Pressure Safety Valve

DSV1-8



Magnetic field sensor
Angled Cable 0,3 m -
Connector M8
MFS103SKHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8
MFS204SKHC



2-Position-Sensor Cable
0,3 m - Connector M8
MFSP2SKHC



Inductive proximity switch
- Connector M8
NJ8-E2S



Plug-in connector Angled Ca-
ble 5m - Socket M8 (female)
KAW500



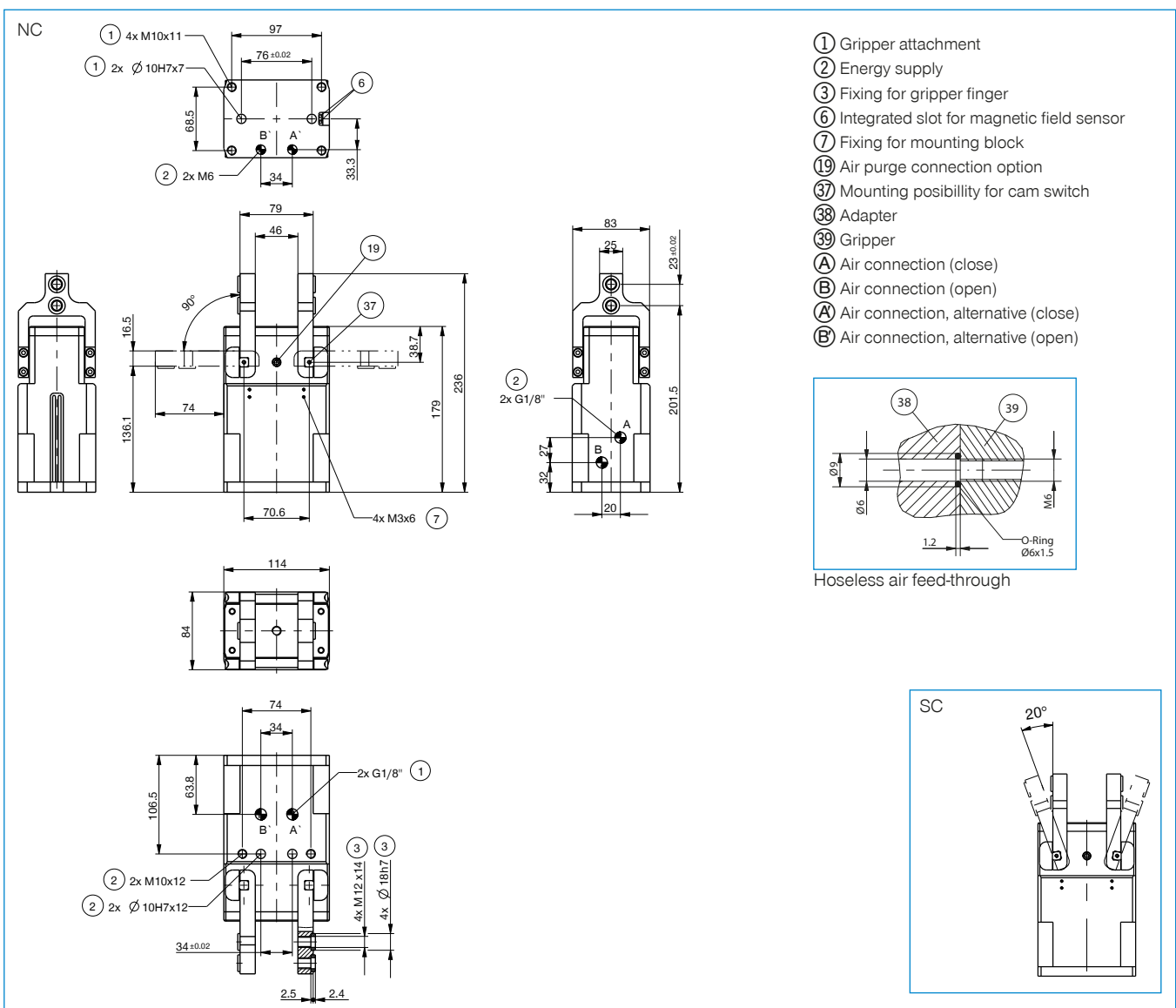
Plug-in connector Straight Ca-
ble 5m - Socket M8 (female)
KAG500



Plug-in connector customiz-
able Straight - Connector M8
S8-G-3

Order no.	► Technical Data*	
	GG4084NC	GG4084SC
Stroke per jaw [°]	90	20
Gripping moment in closing at 0° [Nm]	135	156
Gripping force in closing [N]	3500	4000
Gripping moment secured by spring min. [Nm]	80	115
Length of the gripper fingers max. [mm]	175	175
Weight per jaw max. [g]	1000	1000
Closing time [s]	0.27	0.11
Opening time [s]	0.48	0.250
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	4	4
Operating pressure max. [bar]	8	8
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm³]	220	170
Weight [kg]	4.5	4.5

*All data measured at 6 bar



GRIPPERS FOR SPECIFIC TASKS










OVERVIEW OF SERIES

1

Overview of Series / Grippers for Specific Tasks



► PNEUMATIC

	Series LGS	428
	Series LG1000	436
	Series LGG	446
	Series RG	452
	Series ST	458
	Series SCH	464
	Series GS	470
	Series GSI	478
	Series HM1000	482

INTERNAL GRIPPER SERIES LGS

1

Series LGS / Internal gripper / pneumatic / Grippers

▶ PRODUCT ADVANTAGES



▶ Concentration on the essentials

The most economic type of gripping: This is how you reduce your production costs

▶ Individually machinable clamping jaws

You have never adjusted a gripper to your application this quickly and easily

▶ Direct drive

The control system with only one pneumatic line reduces installation effort and interference contours

▶ THE BEST PRODUCT FOR YOUR APPLICATION



▶ Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities:

Find the best product for your specific use:

www.zimmer-group.com

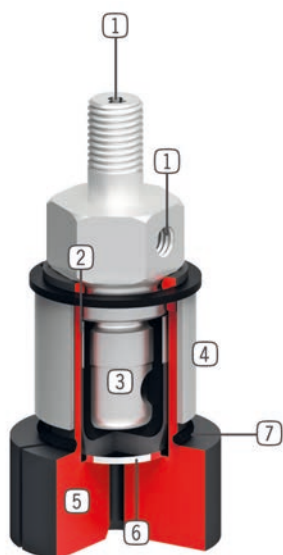
HOW TO ORDER CORRECTLY

- ▶ The product order numbers are arranged according to this diagram:

Order no.	LG4-20	<input type="checkbox"/>		
extended collet chuck		V		



► BENEFITS IN DETAIL



- ① **Energy supply**
 - axial and radial possible
- ② **Protective membrane**
 - between collet chuck and function membrane
- ③ **Direct drive with membrane**
 - only one pneumatic line required
- ④ **Stroke limit**
 - prevents damage by overstretching with empty strokes
- ⑤ **Collet chuck**
 - for individual machining
- ⑥ **Steel protective cover**
 - protects the membrane against puncturing
- ⑦ **O-ring for backstroke**
 - gripper close movement after venting

► FURTHER INFORMATION IS AVAILABLE ONLINE



► Technical Information

All information just a click away at: www.zimmer-group.com

Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product.

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INTERNAL GRIPPER

INSTALLATION SIZE LG4-20

1

Installation size LG4-20 / Internal gripper / pneumatic / Grippers

▶ PRODUCT SPECIFICATIONS



▶ INCLUDED IN DELIVERY



Collet Chuck

DST04200



Collet Chuck

DST04201

▶ RECOMMENDED ACCESSORIES

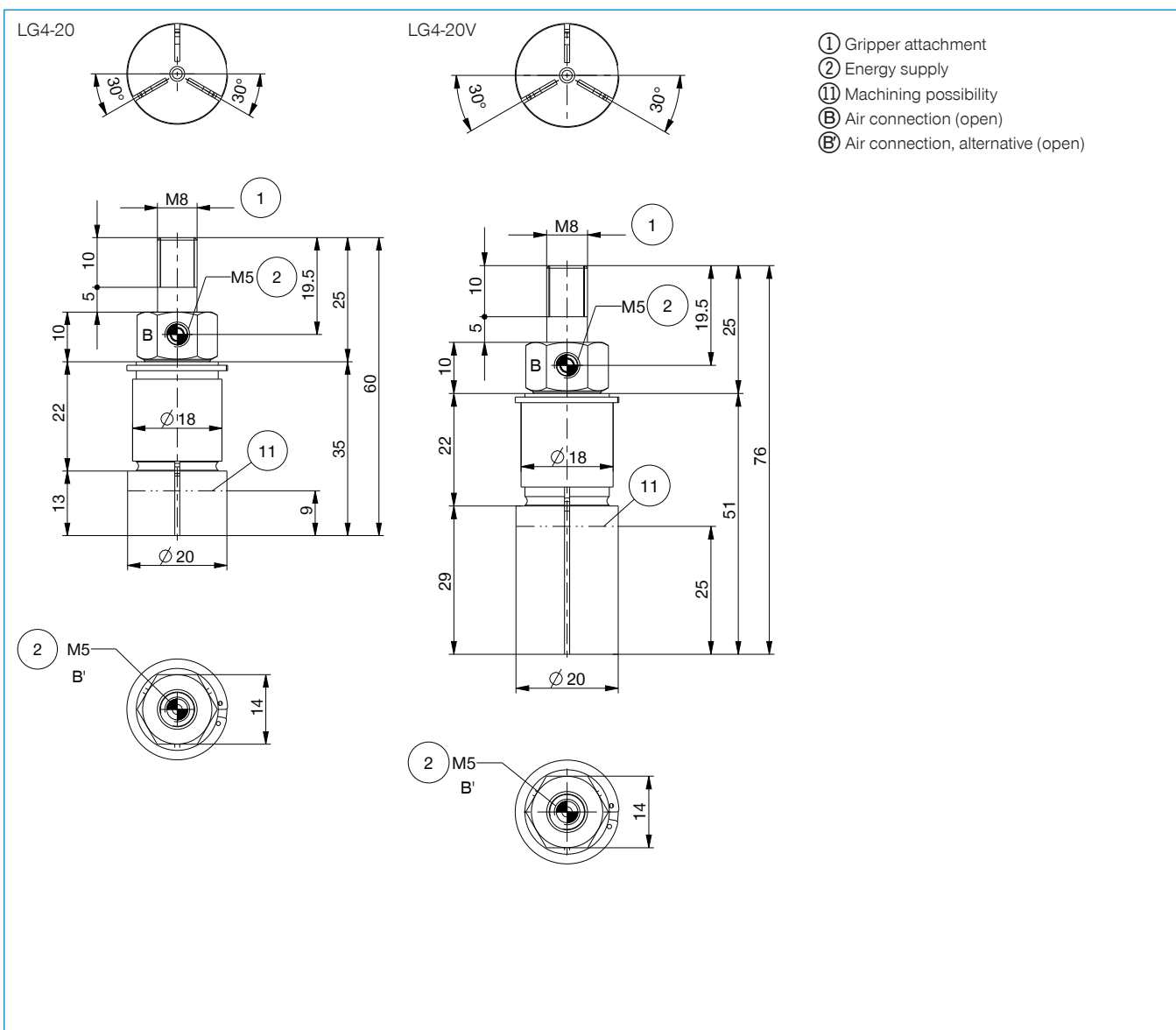


Straight Fittings - Quick
Connect Style

GVM5

Order no.	LG4-20
Total stroke in Ø [mm]	1
Grip diameter min. [mm]	4
Gripping moment in opening [Nm]	0.5
Closing time [s]	0.1
Opening time [s]	0.1
Operating pressure min. [bar]	4
Operating pressure max. [bar]	6
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+60
Air volume per cycle [cm ³]	1
Weight [kg]	0.075
Machining length of the collet max. [mm]	9

*All data measured at 6 bar



INTERNAL GRIPPER

INSTALLATION SIZE LG20-30

1

Installation size LG20-30 / Internal gripper / pneumatic / Grippers

▶ PRODUCT SPECIFICATIONS



▶ INCLUDED IN DELIVERY



Collet Chuck

DST20300



Collet Chuck

DST20301

▶ RECOMMENDED ACCESSORIES

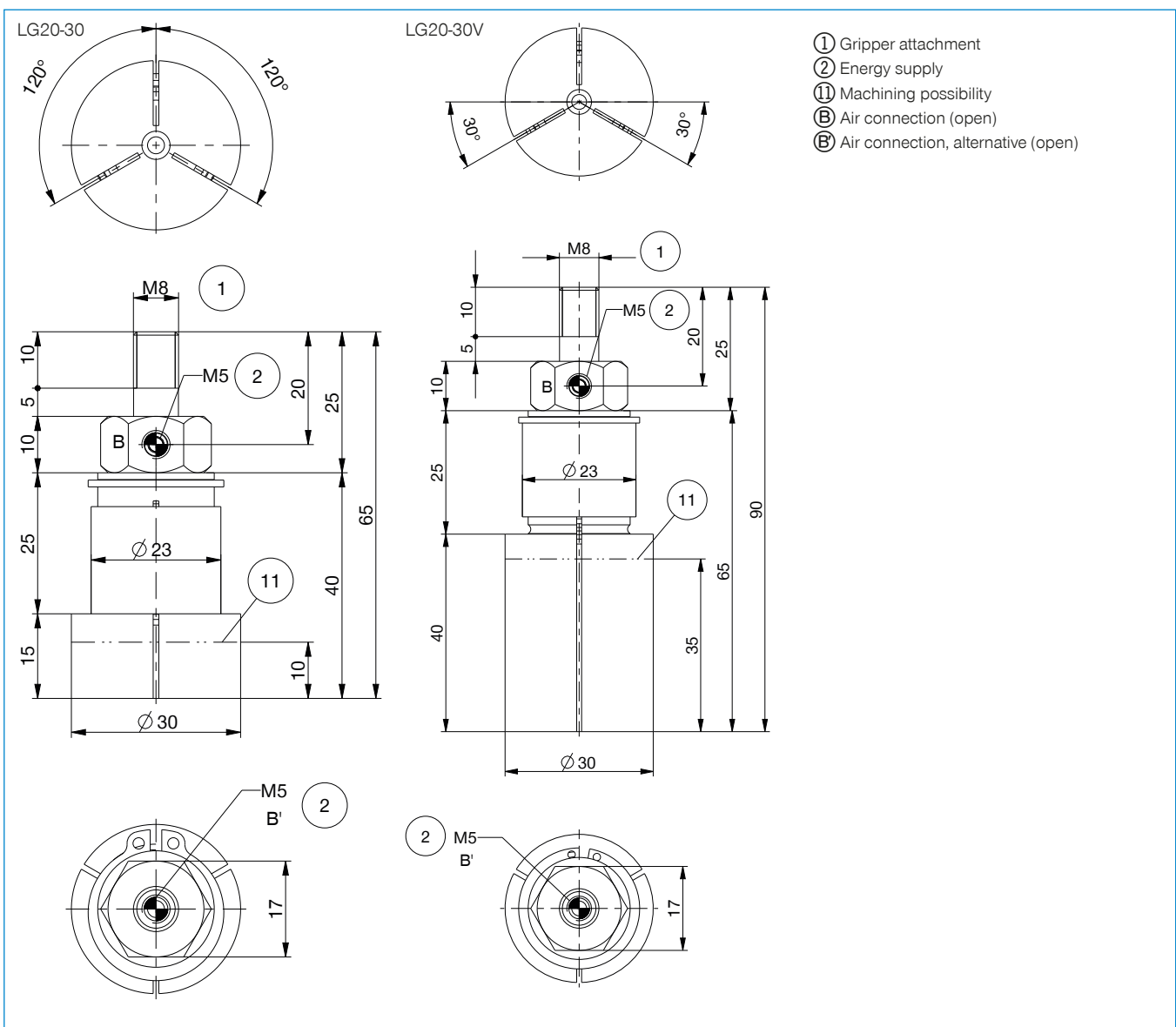


Straight Fittings - Quick
Connect Style

GVM5

Order no.	▶ Technical Data*	
	LG20-30	LG20-30V
Total stroke in Ø [mm]	1	1
Grip diameter min. [mm]	5	5
Gripping moment in opening [Nm]	2	2
Closing time [s]	0.1	0.1
Opening time [s]	0.1	0.1
Operating pressure min. [bar]	4	4
Operating pressure max. [bar]	6	6
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+60	+60
Air volume per cycle [cm ³]	3	3
Weight [kg]	0.16	0.29
Machining length of the collet max. [mm]	10	35

*All data measured at 6 bar



INTERNAL GRIPPER

INSTALLATION SIZE LG30-50

▶ PRODUCT SPECIFICATIONS



▶ INCLUDED IN DELIVERY



Collet Chuck

DST30500

▶ RECOMMENDED ACCESSORIES



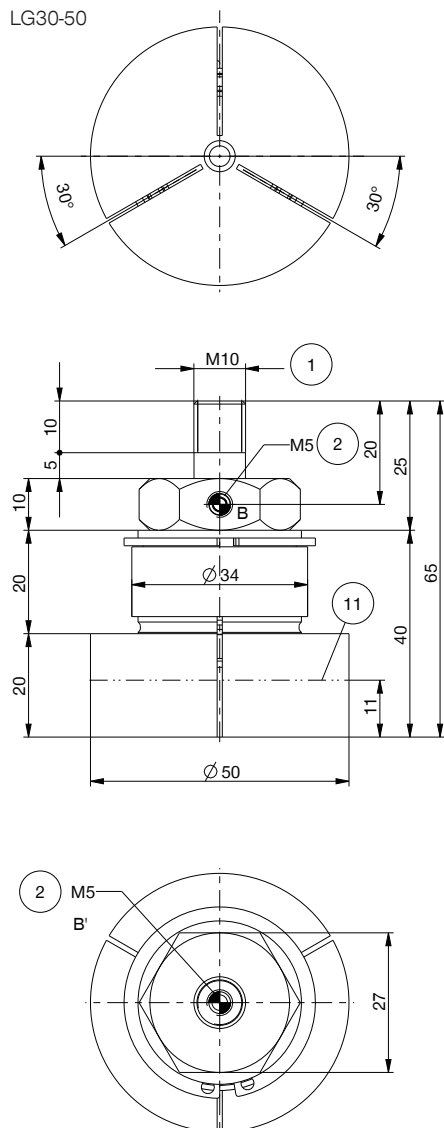
Straight Fittings - Quick
Connect Style

GVM5

Order no.	Technical Data*
Total stroke in Ø [mm]	1
Grip diameter min. [mm]	6
Gripping moment in opening [Nm]	3
Closing time [s]	0.1
Opening time [s]	0.1
Operating pressure min. [bar]	4
Operating pressure max. [bar]	6
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+60
Air volume per cycle [cm ³]	5
Weight [kg]	0.46
Machining length of the collet max. [mm]	11

*All data measured at 6 bar

LG30-50



- ① Gripper attachment
- ② Energy supply
- ⑪ Machining possibility
- Ⓑ Air connection (open)
- Ⓑ' Air connection, alternative (open)

INTERNAL GRIPPER

SERIES LG1000

1

Series LG1000 / Internal gripper / pneumatic / Grippers

▶ PRODUCT ADVANTAGES



▶ Individually adjustable

The design of the gripper enables you to grip not only cylindrical gripping surfaces, but also conical and square ones with process reliability

▶ Integrated air or vacuum feedthrough

Use this option for applications such as leak tests, purging or vacuuming your part

▶ Surface protection provided by silicone membrane

In addition to covering a vast range of gripper hole diameters, the membrane provides ideal protection from damage

▶ THE BEST PRODUCT FOR YOUR APPLICATION



▶ Our products love the challenge!

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HOW TO ORDER CORRECTLY

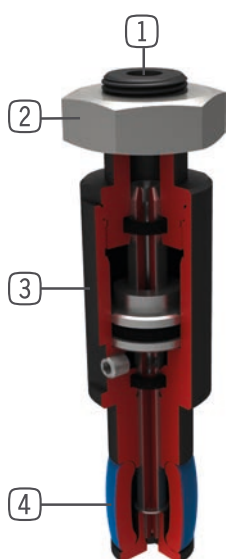
- ▶ The product order numbers are arranged according to this diagram:

Order no.	LG1008	<input type="checkbox"/>	SI	
Axial energy supply		-01		
Radial energy supply, through-hole		-02		
Silicone rubber membrane				



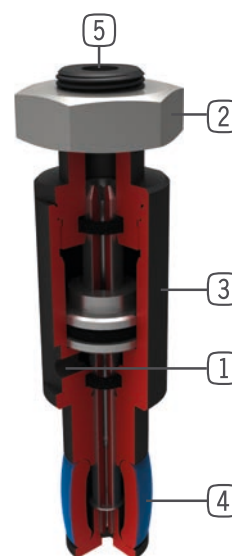
► BENEFITS IN DETAIL

Version-01

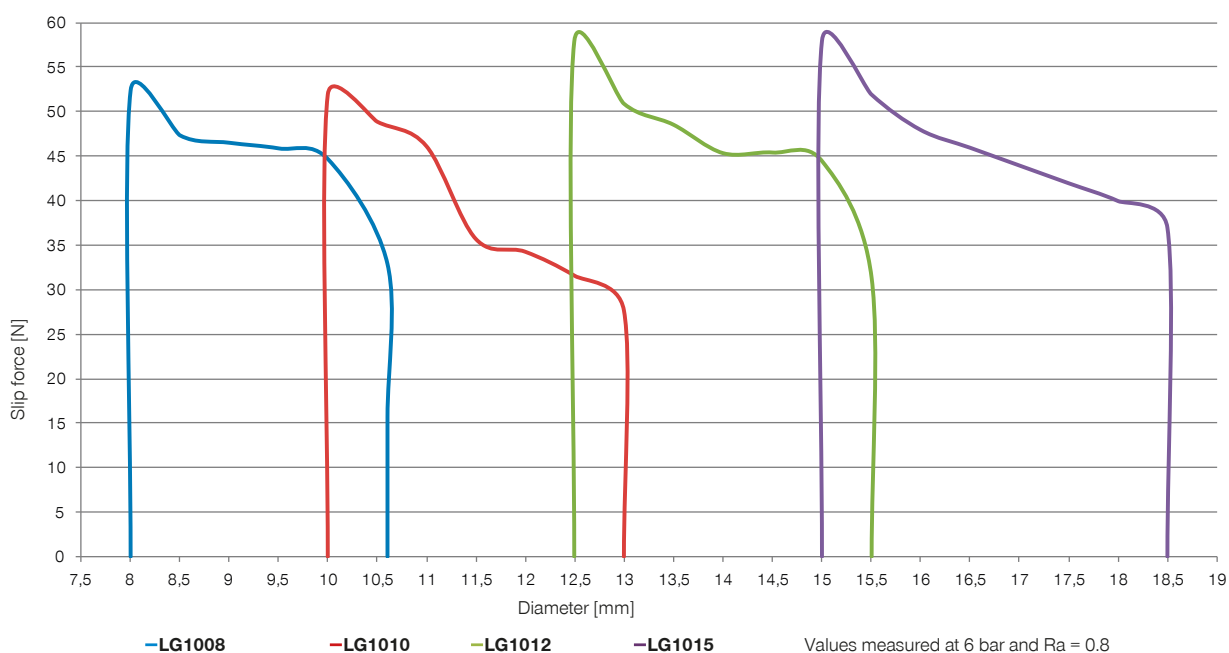


- ① **Energy supply**
 - Axial (version-01) or radial (version-02)
- ② **Mounting and positioning**
 - via fit, thread and lock nut
- ③ **Robust, lightweight housing**
 - hard coated aluminium alloy
- ④ **Direct gripping with rubber membrane**
 - High holding force due to high friction value
 - reset when venting
- ⑤ **Through-hole**
 - Compressed air or vacuum connection for cooling the workpieces or testing them for leaks (version-02)

Version-02



► SLIP FORCE DIAGRAM



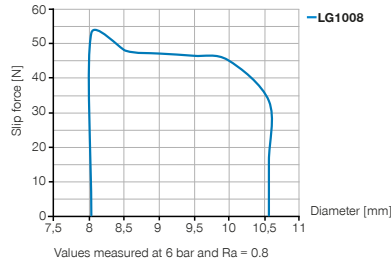
INTERNAL GRIPPER

INSTALLATION SIZE LG1008

▶ PRODUCT SPECIFICATIONS



▶ Slip force diagram



▶ RECOMMENDED ACCESSORIES



Straight Fittings - Barb Style Connection
GVM3



Straight Fittings - Quick Connect Style
GVM5



Angled Fittings - Barb Style Connection
WVM3



Angled Fittings - Quick Connect Style
WVM5

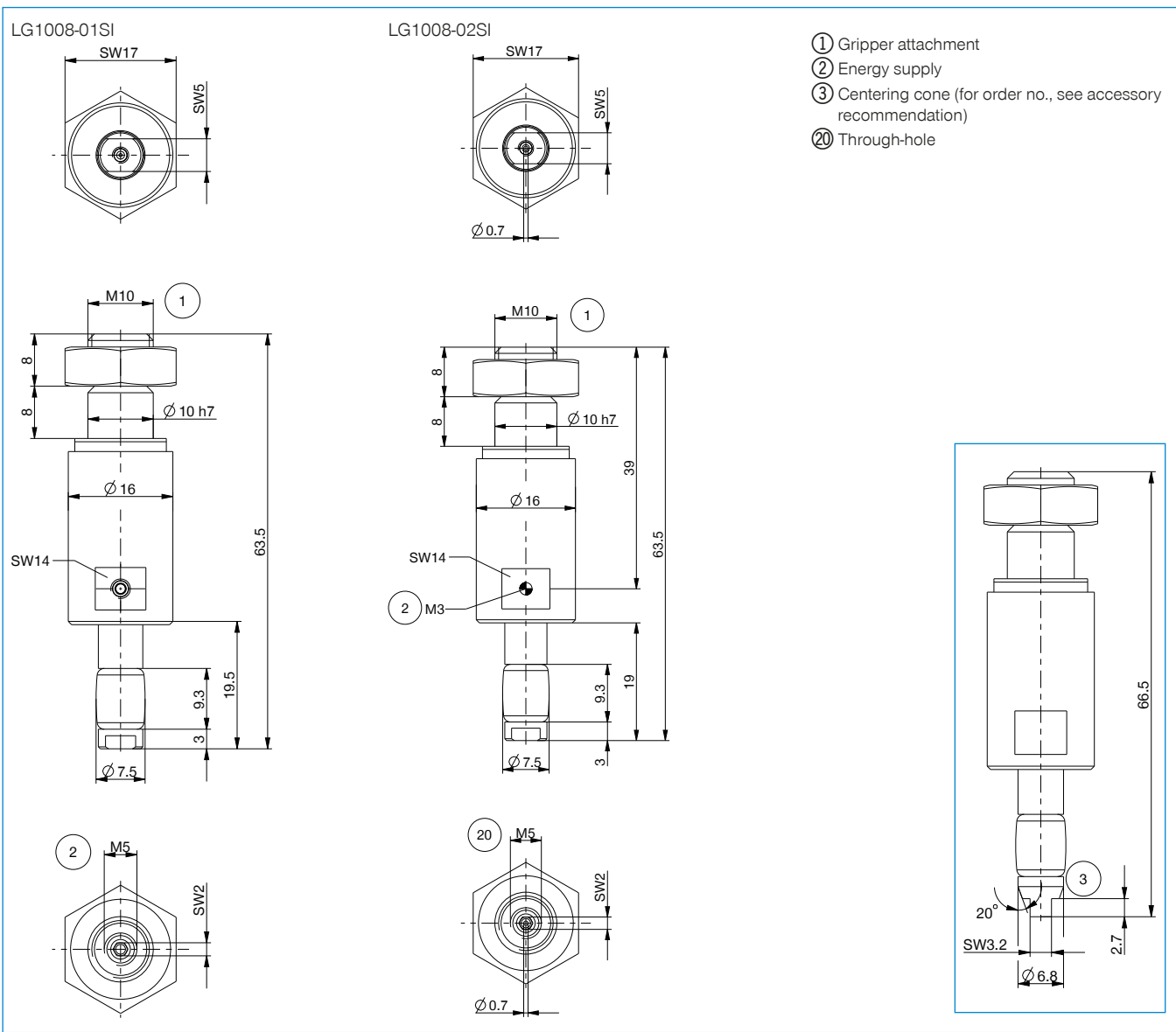


Centering cone
DAL02350

1
Installation size LG1008 / Internal gripper / pneumatic / Grippers

Order no.	▶ Technical Data*	
	LG1008-01SI	LG1008-02SI
Operating temperature [°C]	5 ... 80	5 ... 80
Retract time / Extend time [s]	0.2	0.2
Grip diameter max. [mm]	10.5	10.5
Grip diameter min. [mm]	8	8
Total stroke in Ø [mm]	2.5	2.5
Max. slip force [N]	53	53
Operating pressure min. [bar]	4	4
Operating pressure max. [bar]	6	6
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm ³]	0.7	0.7
Weight [kg]	0.032	0.028

*All data measured at 6 bar



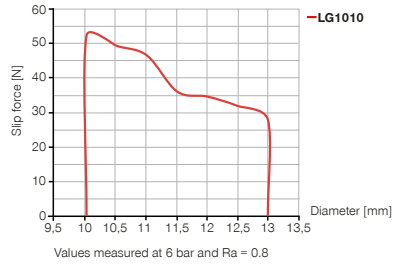
INTERNAL GRIPPER

INSTALLATION SIZE LG1010

▶ PRODUCT SPECIFICATIONS



▶ Slip force diagram



▶ RECOMMENDED ACCESSORIES



Straight Fittings - Barb Style Connection
GVM3



Straight Fittings - Quick Connect Style
GVM5



Angled Fittings - Barb Style Connection
WVM3



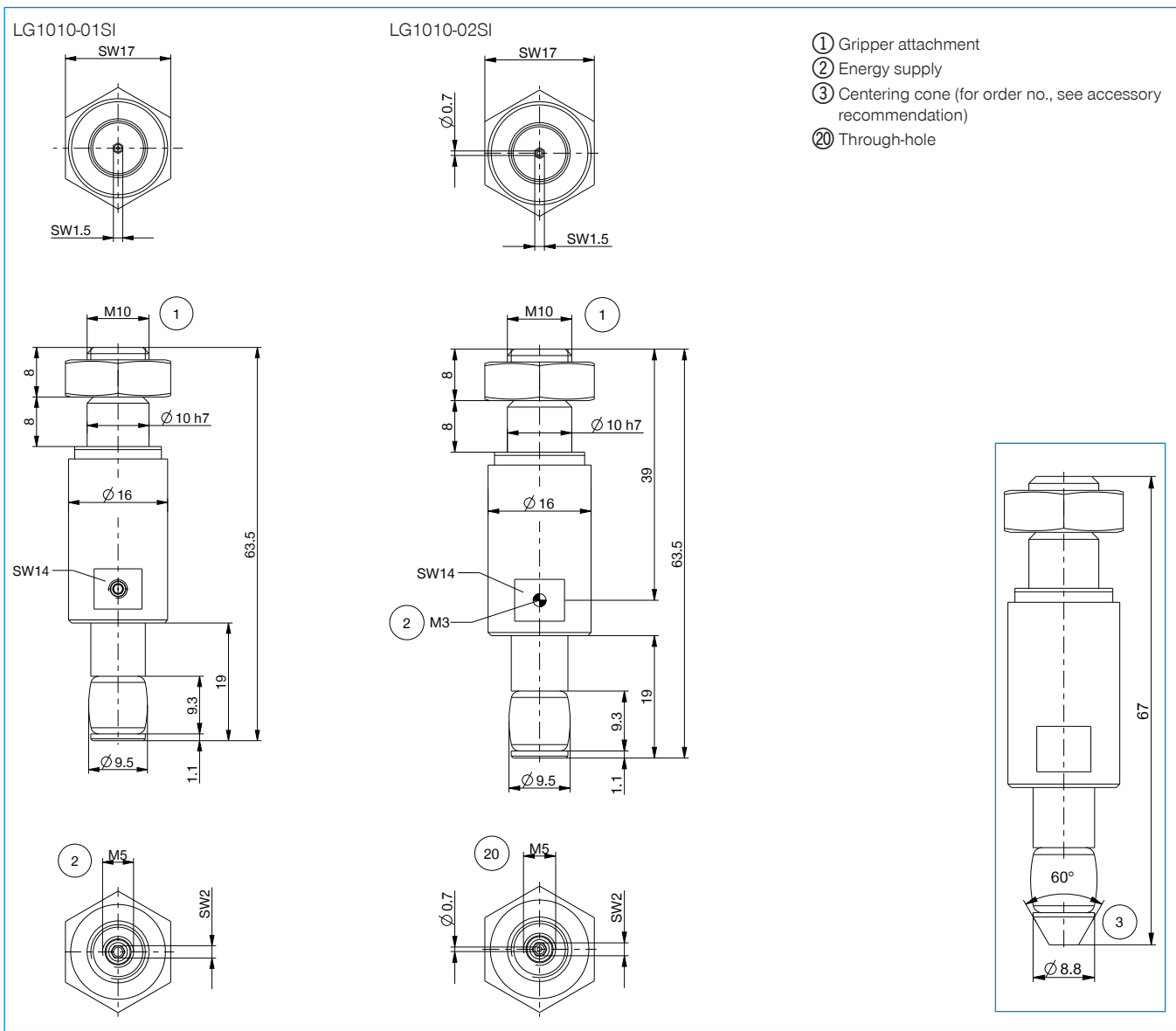
Angled Fittings - Quick Connect Style
WVM5



Centering cone
DAL02360

Order no.	▶ Technical Data*	
	LG1010-01SI	LG1010-02SI
Operating temperature [°C]	5 ... 80	5 ... 80
Retract time / Extend time [s]	0.2	0.2
Grip diameter max. [mm]	13	13
Grip diameter min. [mm]	10	10
Total stroke in Ø [mm]	3	3
Max. slip force [N]	53	53
Operating pressure min. [bar]	4	4
Operating pressure max. [bar]	6	6
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm ³]	0.7	0.7
Weight [kg]	0.033	0.029

*All data measured at 6 bar



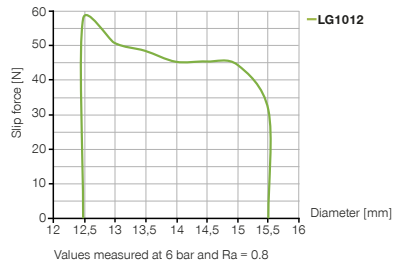
INTERNAL GRIPPER

INSTALLATION SIZE LG1012

▶ PRODUCT SPECIFICATIONS



▶ Slip force diagram



▶ RECOMMENDED ACCESSORIES



Straight Fittings - Barb Style Connection
GVM3



Straight Fittings - Quick Connect Style
GVM5



Angled Fittings - Barb Style Connection
WVM3



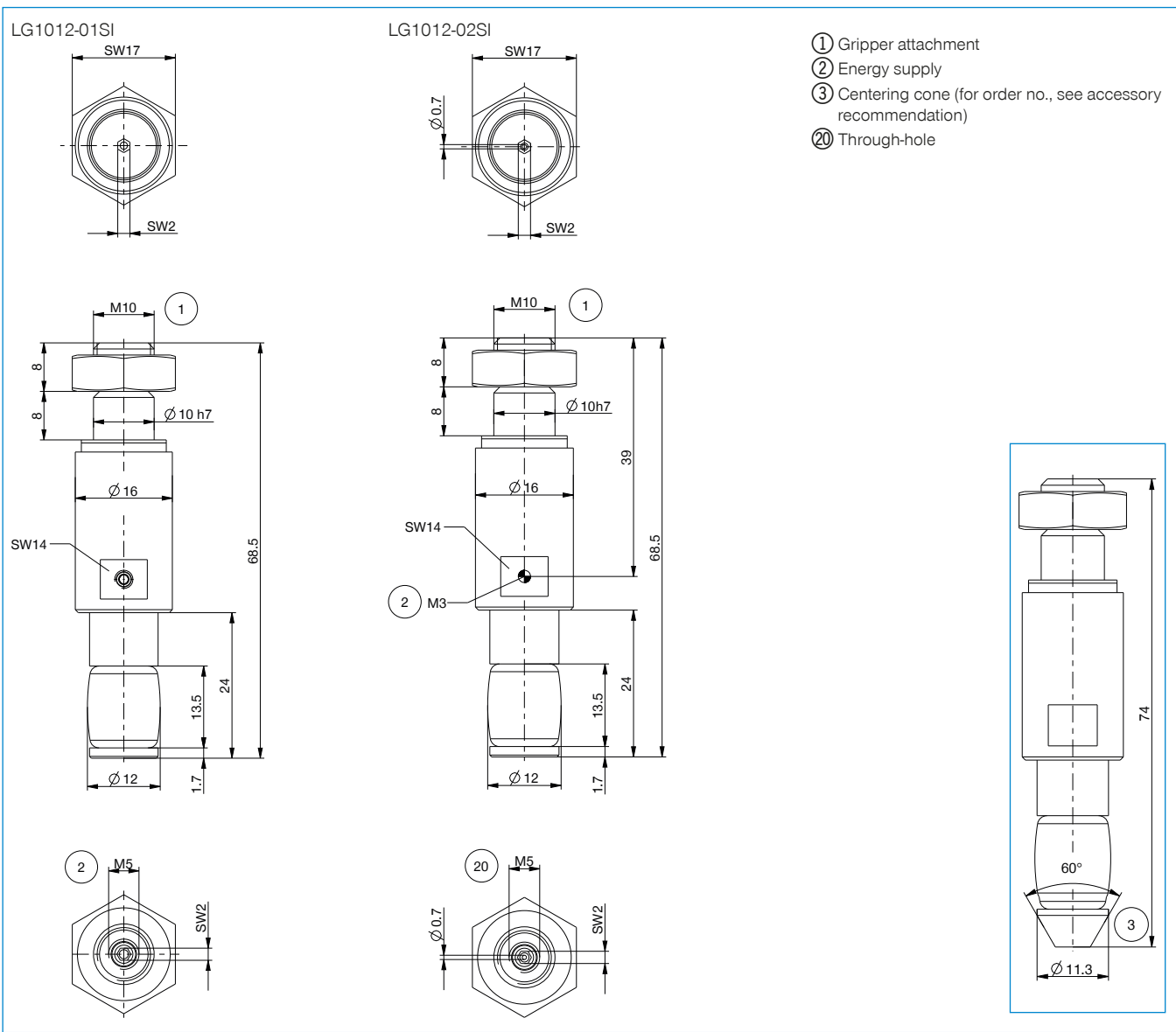
Angled Fittings - Quick Connect Style
WVM5



Centering cone
DAL02370

Order no.	▶ Technical Data*	
	LG1012-01SI	LG1012-02SI
Operating temperature [°C]	5 ... 80	5 ... 80
Retract time / Extend time [s]	0.2	0.2
Grip diameter max. [mm]	15.5	15.5
Grip diameter min. [mm]	12.5	12.5
Total stroke in Ø [mm]	3	3
Max. slip force [N]	58	58
Operating pressure min. [bar]	4	4
Operating pressure max. [bar]	6	6
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm ³]	0.7	0.7
Weight [kg]	0.036	0.034

*All data measured at 6 bar



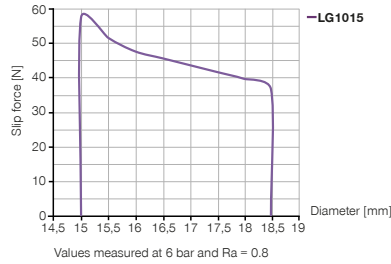
INTERNAL GRIPPER

INSTALLATION SIZE LG1015

▶ PRODUCT SPECIFICATIONS



▶ Slip force diagram



▶ RECOMMENDED ACCESSORIES



Straight Fittings - Barb Style Connection
GVM3



Straight Fittings - Quick Connect Style
GVM5



Angled Fittings - Barb Style Connection
WVM3



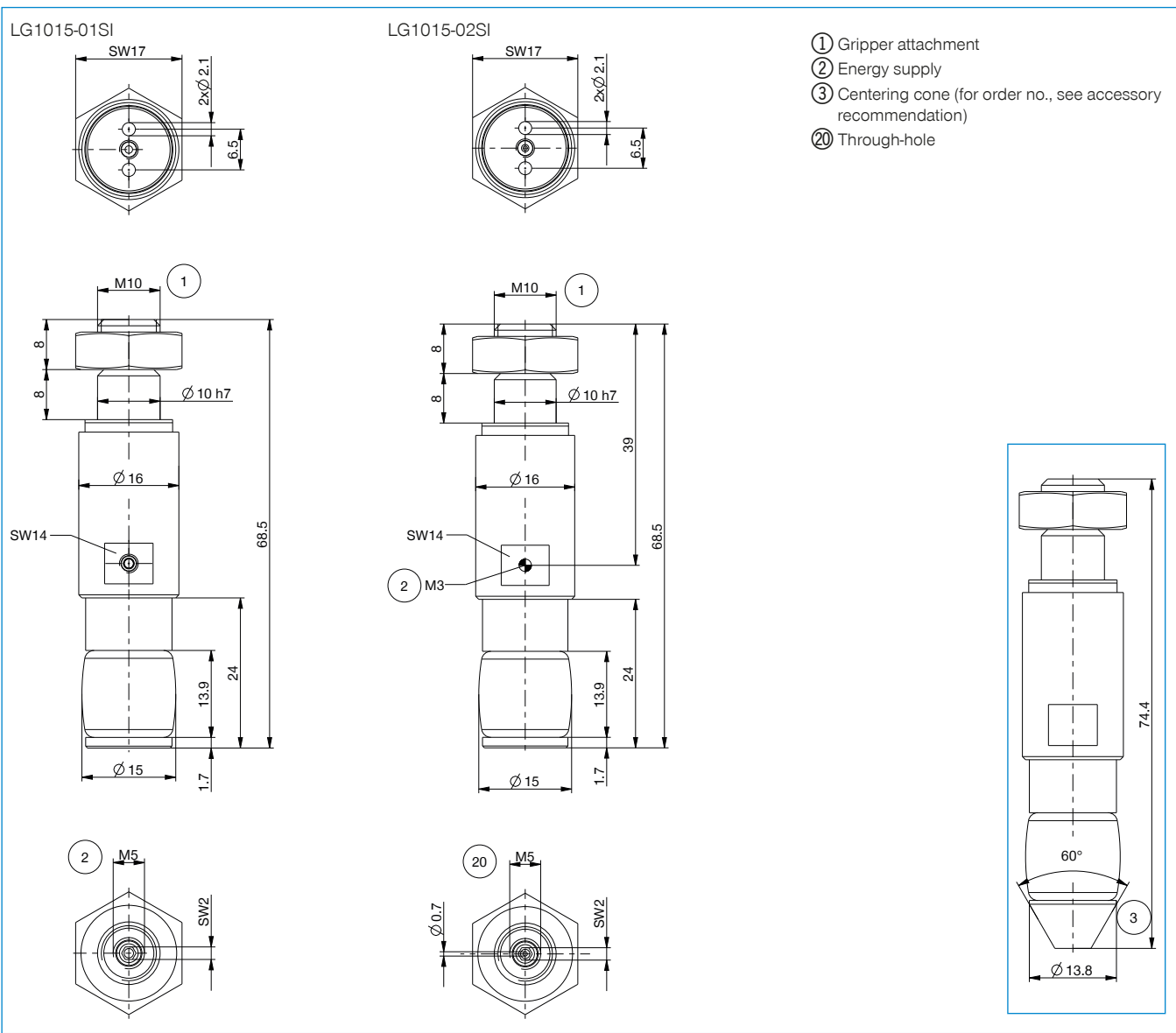
Angled Fittings - Quick Connect Style
WVM5



Centering cone
DAL02380

Order no.	Technical Data*	
	LG1015-01SI	LG1015-02SI
Operating temperature [°C]	5 ... 80	5 ... 80
Retract time / Extend time [s]	0.2	0.2
Grip diameter max. [mm]	18.5	18.5
Grip diameter min. [mm]	15	15
Total stroke in Ø [mm]	3.5	3.5
Max. slip force [N]	58	58
Operating pressure min. [bar]	4	4
Operating pressure max. [bar]	6	6
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm³]	0.7	0.7
Weight [kg]	0.041	0.037

*All data measured at 6 bar



INTERNAL GRIPPER SERIES LGG

▶ PRODUCT ADVANTAGES



▶ Surface protection with rubber knobs

Continuously protect the surface of your workpieces and minimise rejections in the process

▶ Secure hold

The coefficient of friction ensures your workpiece stays held reliably, even under high dynamics

▶ Direct drive

The control system with only one pneumatic line reduces installation effort and interference contours

▶ THE BEST PRODUCT FOR YOUR APPLICATION



▶ Our products love the challenge!

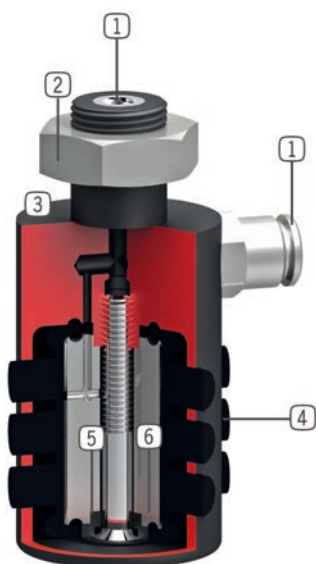
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► BENEFITS IN DETAIL



- ① **Energy supply**
 - radial
 - axial and radial from LG35-39
- ② **Fixing**
 - by fit, thread and locknut
- ③ **Robust, lightweight housing**
 - hard coated aluminium alloy
 - no overstretching of the rubber membrane at empty stroke
- ④ **Direct gripping with rubber knobs**
 - high retention force due to good friction value, approx. 0.5 with rubber
- ⑤ **Gripping with single-acting rubber membranes**
 - low actuate effort
 - reset when venting
 - adjustable force with operating pressure (2 - 6 bar)
- ⑥ **Inner core**
 - saves air volume and cycle time (from LG35-39)

► FURTHER INFORMATION IS AVAILABLE ONLINE



► Technical Information

All information just a click away at: www.zimmer-group.com

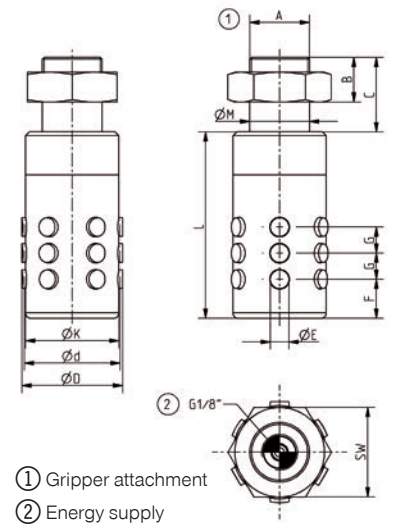
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INTERNAL GRIPPER SERIES LGG

▶ PRODUCT SPECIFICATIONS



▶ RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style

GV1-8X6



Quick Exhaust Valve

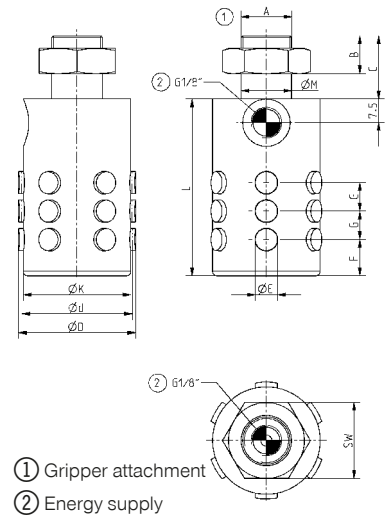
DEV06

▶ Technical Data*

Order no.	LG15-18	LG18-22	LG22-26	LG26-30	LG30-35
Total stroke in Ø [mm]	2.5	4	4	4	5
Clamping diameter d min. [mm]	15	17.5	21.5	25.5	29.5
Clamping diameter D max. [mm]	17.5	21.5	25.5	29.5	34.5
Gripping force in extraction [N]	100	100	150	150	200
Retract time / Extend time [s]	0.2	0.2	0.2	0.2	0.2
Repetition accuracy +/- [mm]	0.05	0.05	0.05	0.05	0.05
Operating pressure min. [bar]	2	2	2	2	2
Operating pressure max. [bar]	6	6	6	6	6
Air volume per cycle [cm ³]	1	1	1	2	3
Operating temperature min. [°C]	5	5	5	5	5
Operating temperature max. [°C]	80	80	80	80	80
A	M14X1.5	M14X1.5	M14X1.5	M16X1	M16X1
C [mm]	18	18	20	20	20
E Ø [mm]	5	5	5	6	7
F [mm]	10.5	10.5	11.5	10.5	11.5
G [mm]	7	7	7	7	8
K Ø [mm]	14.5	17	21	25	29
L [mm]	42	42	50	50	52
M Ø [mm]	14h7	14h7	14h7	16h7	16h7
Weight [kg]	0.031	0.035	0.051	0.071	0.09

*All data measured at 6 bar

▶ **PRODUCT SPECIFICATIONS**



▶ **RECOMMENDED ACCESSORIES**



Straight Fittings - Quick Connect Style
GV1-8X6



Quick Exhaust Valve
DEV06

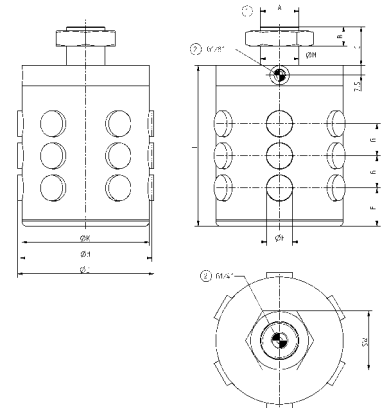
▶ **Technical Data***

Order no.	LG35-39	LG40-45	LG46-51	LG51-56	LG56-62	LG63-70	LG71-80	LG76-84	LG81-90	LG91-100
Total stroke in Ø [mm]	4.5	6.5	6	7	7.5	8	10.5	8.5	11	10
Clamping diameter d min. [mm]	34.5	39.5	45.5	50.5	55.5	62.5	70.5	75.5	80.5	90.5
Clamping diameter D max. [mm]	39	46	51.5	57.5	63	70.5	81	84	91.5	100.5
Gripping force in extraction [N]	300	400	500	750	900	1100	1500	1700	2000	2500
Retract time / Extend time [s]	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4
Repetition accuracy +/- [mm]	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Operating pressure min. [bar]	2	2	2	2	2	2	2	2	2	2
Operating pressure max. [bar]	6	6	6	6	6	6	6	6	6	6
Air volume per cycle [cm ³]	5	8	13	17	25	33	42	53	67	117
Operating temperature min. [°C]	5	5	5	5	5	5	5	5	5	5
Operating temperature max. [°C]	80	80	80	80	80	80	80	80	80	80
A	M16X1	M16X1	M16X1	M16X1	M16X1	M20X1.5	M20X1.5	M20X1.5	M20X1.5	M20X1.5
C [mm]	20	20	20	20	20	15	15	15	15	15
E Ø [mm]	7	8	9	10	11	12.5	15	15.5	16	18
F [mm]	11.5	14	15.5	17	19	21.5	21.5	22.7	24.5	26.5
G [mm]	9	11	12	13	14.5	15.5	18	19	20	22.5
K Ø [mm]	34	39	45	50	50	62	70	75	80	90
L [mm]	56	62	68	74	80	86	92	96	100	110
M Ø [mm]	16h7	16h7	16h7	16h7	16h7	20h7	20h7	20h7	20h7	20h7
Weight [kg]	0.13	0.178	0.26	0.37	0.373	0.53	0.69	0.8	1	1.3

*All data measured at 6 bar

INTERNAL GRIPPER SERIES LGG

▶ PRODUCT SPECIFICATIONS



- ① Gripper attachment
- ② Energy supply

▶ RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style

GV1-8X6



Quick Exhaust Valve

DEV06

▶ Technical Data*

Order no.	LG100-110	LG110-120	LG120-135
Total stroke in Ø [mm]	11	11	16
Clamping diameter d min. [mm]	99.5	109.5	119.5
Clamping diameter D max. [mm]	110.5	120.5	135.5
Gripping force in extraction [N]	2800	3500	3500
Retract time / Extend time [s]	0.4	0.4	0.4
Repetition accuracy +/- [mm]	0.05	0.05	0.05
Operating pressure min. [bar]	2	2	2
Operating pressure max. [bar]	6	6	6
Air volume per cycle [cm ³]	150	200	250
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	80	80	80
A	M30X1.5	M30X1.5	M30X1.5
C [mm]	30	30	30
E Ø [mm]	20	22	22
F [mm]	30	31	37
G [mm]	25	25	28
K Ø [mm]	99	109	119
L [mm]	120	130	145
M Ø [mm]	30h7	30h7	30h7
Weight [kg]	1.9	2.3	2.7

*All data measured at 6 bar



THE KNOW- HOW FACTORY

EXTERNAL GRIPPER

SERIES RG

▶ PRODUCT ADVANTAGES



SOMMER
automatic **S**

▶ Surface protection with rubber knobs

Continuously protect the surface of your workpieces and minimise rejections in the process

▶ Secure hold

The coefficient of friction ensures your workpiece stays held reliably, even under high dynamics

▶ Direct drive

The control system with only one pneumatic line reduces installation effort and interference contours

▶ THE BEST PRODUCT FOR YOUR APPLICATION



▶ Our products love the challenge!

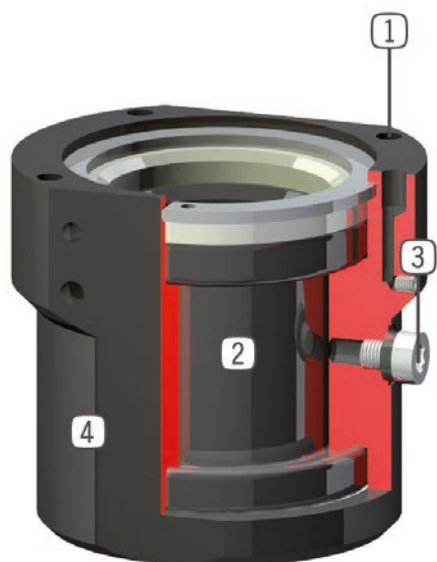
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► BENEFITS IN DETAIL



- ① **Mounting and positioning**
- ② **Drive**
 - direct via rubber membrane
- ③ **Energy supply**
 - possible from several sides
- ④ **Robust, lightweight housing**
 - hard coated aluminium alloy

► FURTHER INFORMATION IS AVAILABLE ONLINE



► **Technical Information**

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Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product.

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EXTERNAL GRIPPER

INSTALLATION SIZE RG0-30

1

Installation size RG0-30 / External gripper / pneumatic / Grippers

▶ PRODUCT SPECIFICATIONS



▶ RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style

GVM5

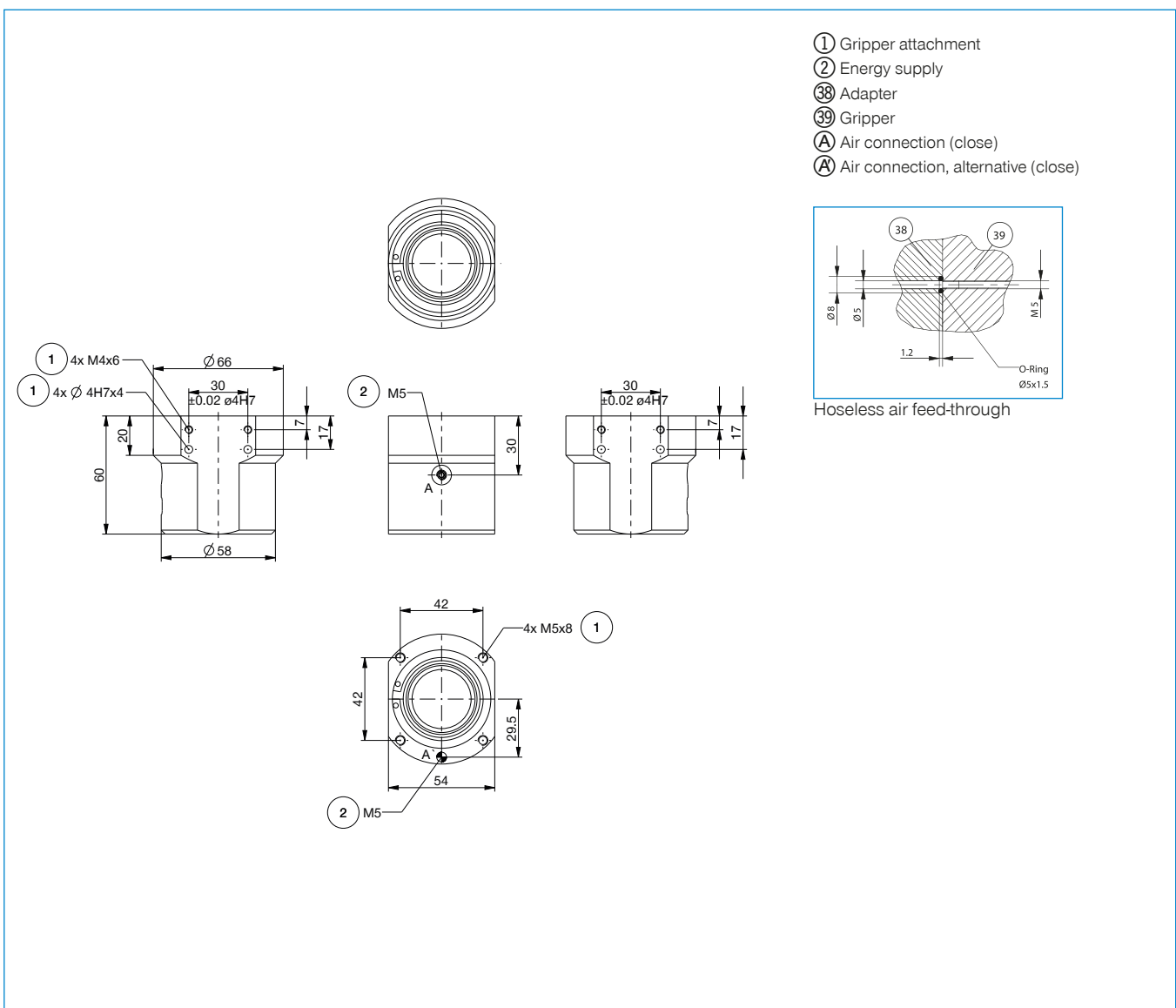


Quick Exhaust Valve

DEV04

Order no.	RG0-30
Grip diameter min. [mm]	0
Grip diameter max. [mm]	28
Gripping force in closing [N]	350
Closing time [s]	0.1
Opening time [s]	0.1
Operating pressure min. [bar]	1
Operating pressure max. [bar]	3
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	5
Weight [kg]	0.28

*All data measured at 3 bar



EXTERNAL GRIPPER

INSTALLATION SIZE RG10-60

1

Installation size RG10-60 / External gripper / pneumatic / Grippers

▶ PRODUCT SPECIFICATIONS



▶ RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style

GVM5

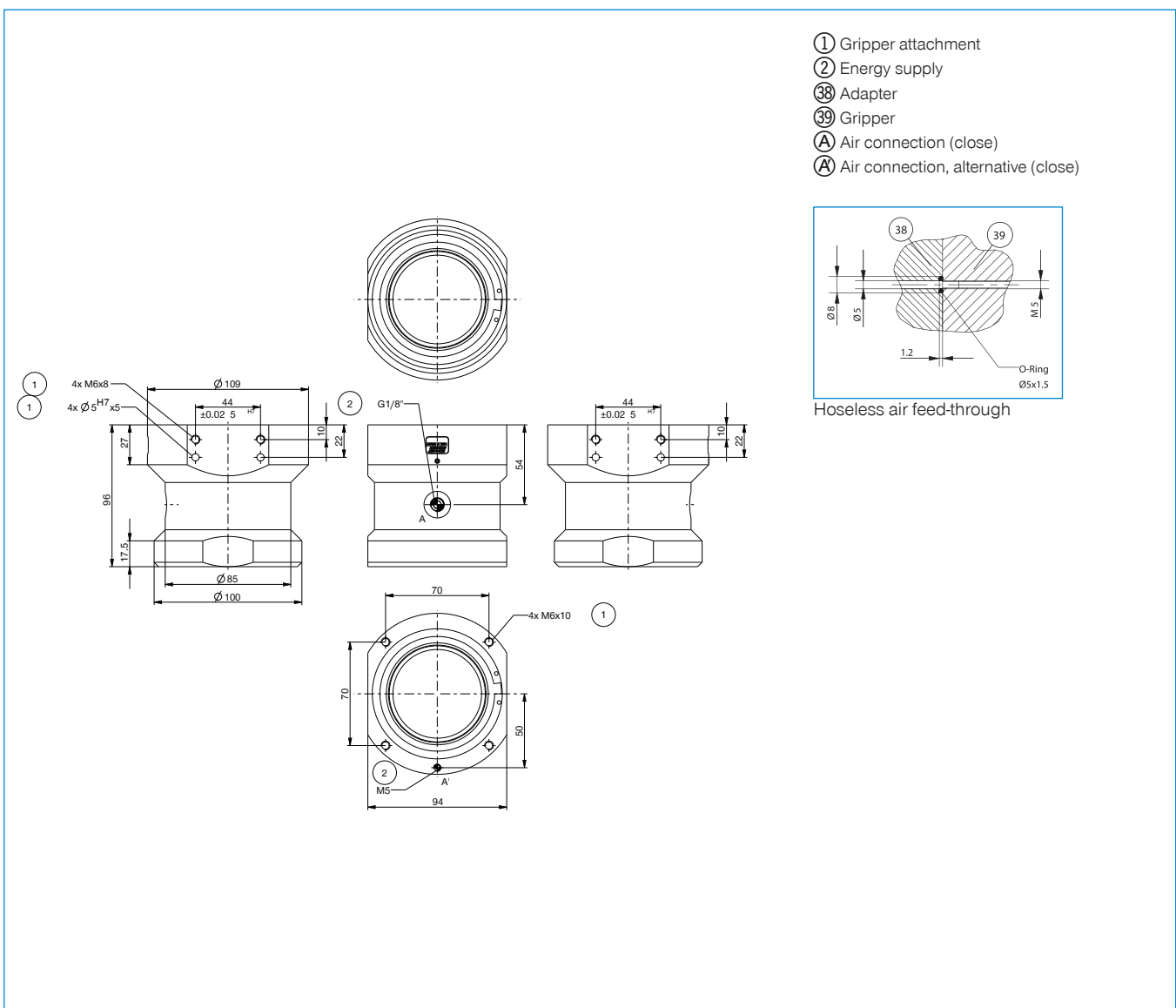


Quick Exhaust Valve

DEV04

Order no.	RG10-60
Grip diameter min. [mm]	10
Grip diameter max. [mm]	58
Gripping force in closing [N]	1000
Closing time [s]	0.1
Opening time [s]	0.1
Operating pressure min. [bar]	1
Operating pressure max. [bar]	3
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	33
Weight [kg]	0.85

*All data measured at 3 bar



NEEDLE GRIPPER SERIES ST

▶ PRODUCT ADVANTAGES



SOMMER
automatic **S**

▶ Smooth stroke configuration

Customise the stroke for your application with infinitely variable adjustment using an adjusting dial

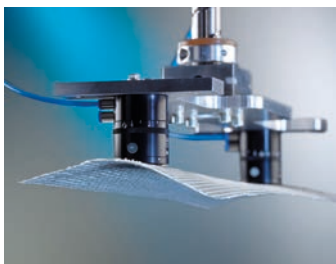
▶ Workpiece drain function

This function guarantees the quick and reliable deposit of the workpiece and prevents disruptions to the process sequence

▶ Query about magnetic field sensor technology

Detecting the end position allows you to have shorter cycle times and an integrated control system

▶ THE BEST PRODUCT FOR YOUR APPLICATION



▶ Our products love the challenge!

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► BENEFITS IN DETAIL



- ① **Extending needles**
 - gripping by penetration
- ② **Force transfer**
 - via hardened steel taper pin
- ③ **Needle wiper**
 - helps wiping the workpiece
- ④ **Stroke adjustment**
 - adjustment of the needle stroke
- ⑤ **Integrated spring**
 - for return
- ⑥ **Blow off air connection**
 - to reject the workpiece with air
- ⑦ **Energy supply**
 - possible from several sides (size ST40)
- ⑧ **Drive**
 - single-acting pneumatic cylinder with spring return
- ⑨ **Sensing slot**
 - mounting and positioning of magnetic field sensors

► FURTHER INFORMATION IS AVAILABLE ONLINE



► Technical Information

All information just a click away at: www.zimmer-group.com

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NEEDLE GRIPPER

INSTALLATION SIZE ST36

▶ PRODUCT SPECIFICATIONS



▶ RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style

GVM5



Magnetic field sensor
Angled Cable 5 m

MFS103KHC



Magnetic field sensor
Angled Cable 0,3 m -
Connector M8

MFS103SKHC



Plug-in connector
customizable Straight -
Connector M8

S8-G-3

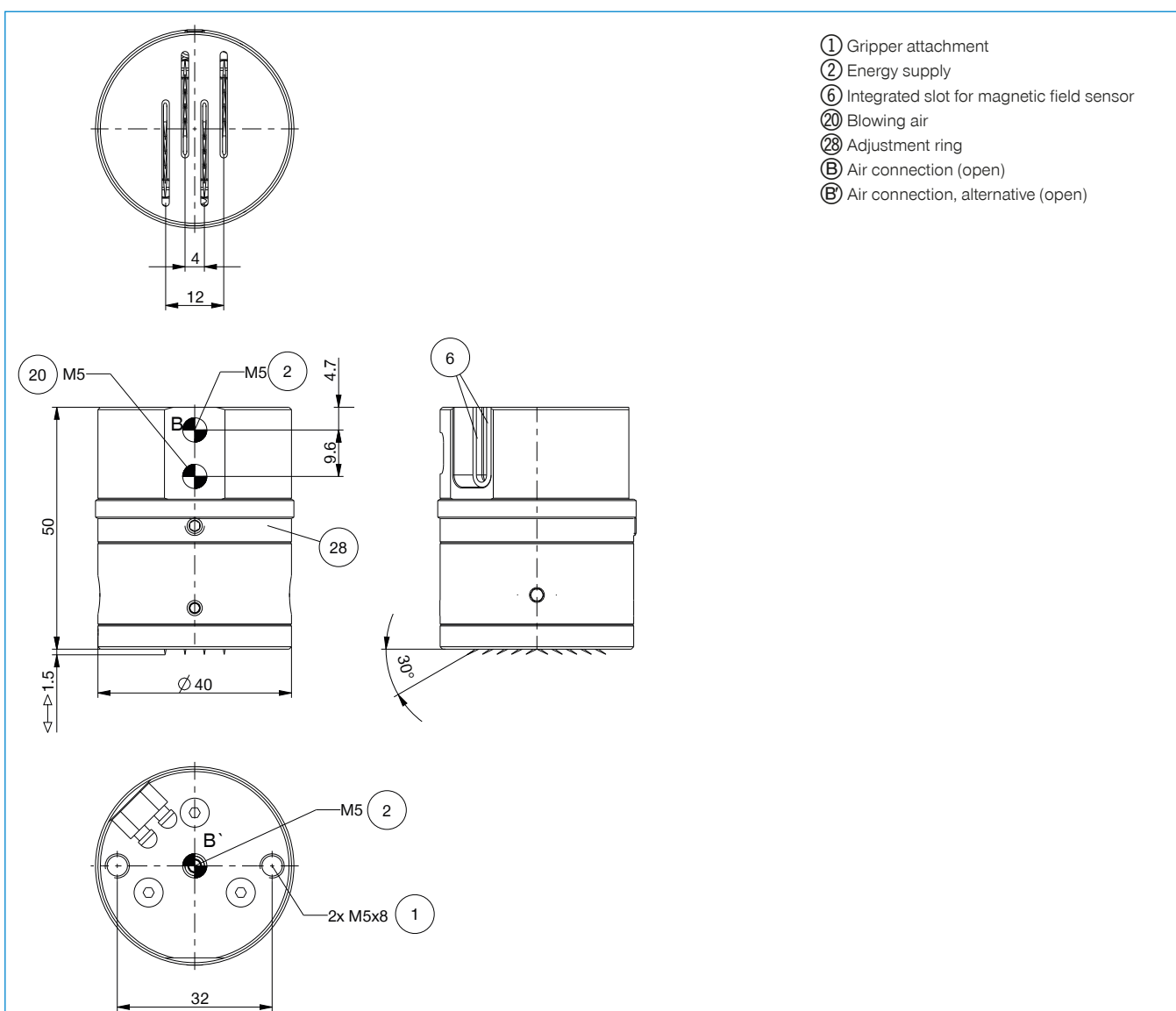


Plug-in connector
customizable Straight -
Connector M12

S12-G-3

Order no.	Technical Data*
Needle stroke adjustable min. [mm]	0
Needle stroke adjustable max. [mm]	1.5
Number of needles [Pice]	20
Needle diameter [mm]	0.7
Retract time / Extend time [s]	0.03
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	4
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	1
Weight [kg]	0.21

*All data measured at 6 bar



NEEDLE GRIPPER

INSTALLATION SIZE ST40

▶ PRODUCT SPECIFICATIONS



▶ RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style

GVM5



Magnetic field sensor
Angled Cable 5 m

MFS103KHC



Magnetic field sensor
Angled Cable 0,3 m -
Connector M8

MFS103SKHC



Plug-in connector
customizable Straight -
Connector M8

S8-G-3

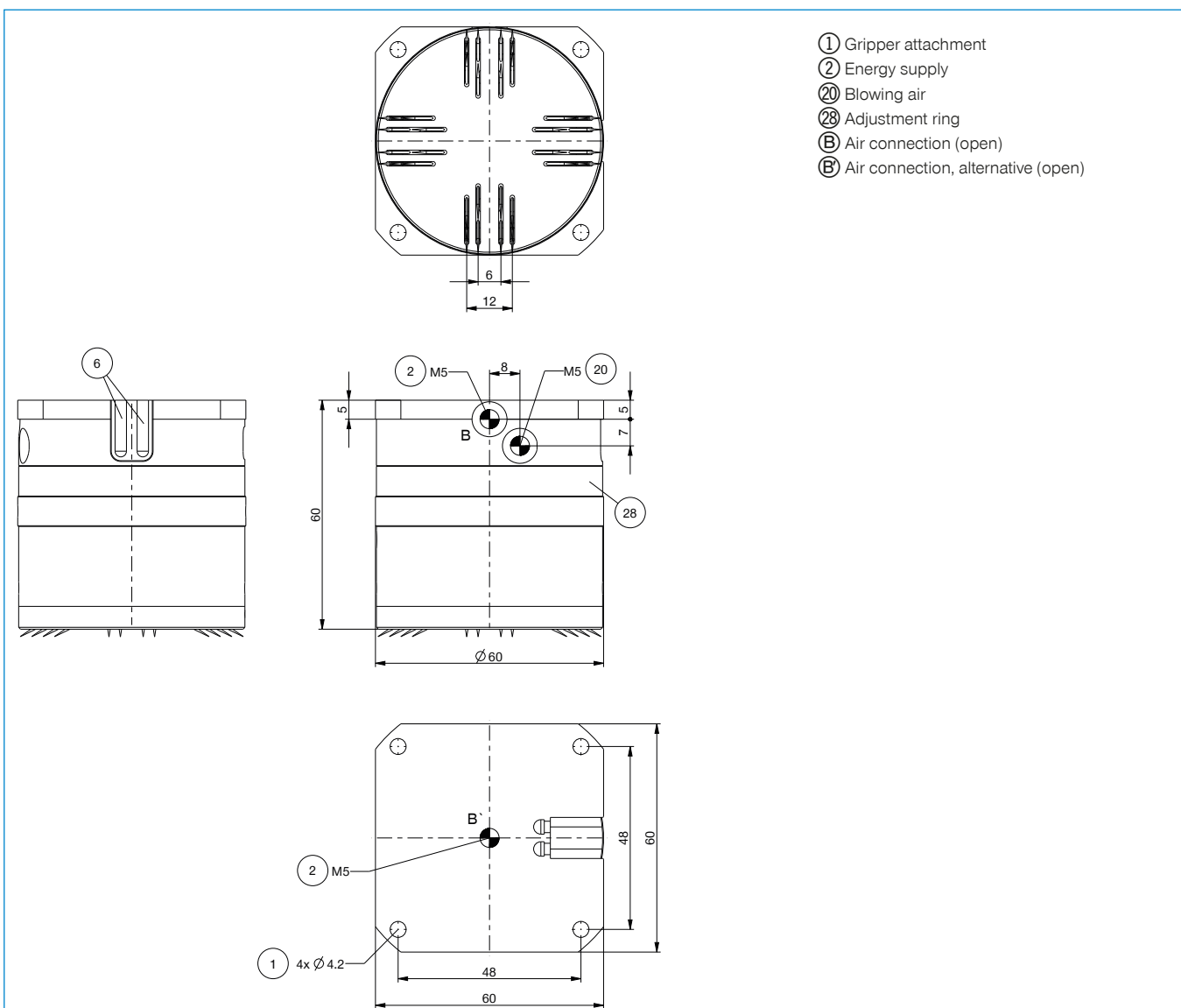


Plug-in connector
customizable Straight -
Connector M12

S12-G-3

Order no.	ST40-B
Needle stroke adjustable min. [mm]	0
Needle stroke adjustable max. [mm]	2
Number of needles [Pice]	40
Needle diameter [mm]	0.7
Retract time / Extend time [s]	0.03
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	4
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	3
Weight [kg]	0.49

*All data measured at 6 bar



NEEDLE GRIPPER SERIES SCH

▶ PRODUCT ADVANTAGES



▶ Smooth stroke configuration

Adjust the needle stroke individually and smoothly via the direct needle setting

▶ Flat structure

Due to its compact design, you save precious space in your machine

▶ Query about magnetic field sensor technology

Detecting the end position allows you to have faster cycle times and an integrated control system

▶ THE BEST PRODUCT FOR YOUR APPLICATION



▶ Our products love the challenge!

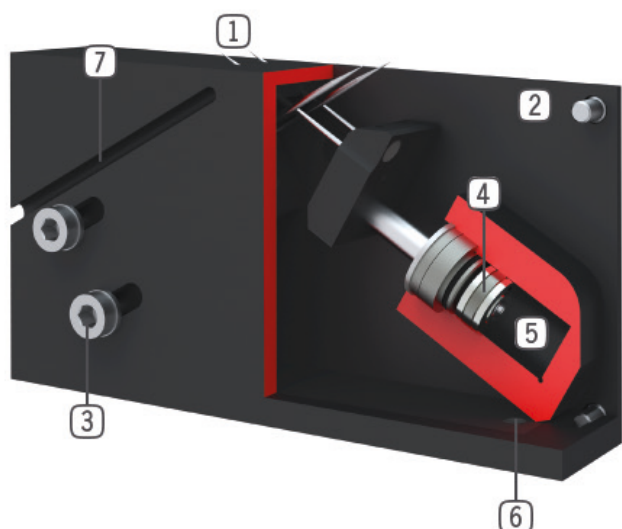
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► BENEFITS IN DETAIL



- ① **Extending needles**
 - gripping by penetration
- ② **Robust, lightweight housing**
 - hard coated aluminium alloy
- ③ **Stroke adjustment**
 - by shifting in an elongated hole
- ④ **Drive**
 - two double-acting pneumatic cylinders
- ⑤ **Energy supply**
- ⑥ **Mounting and positioning**
- ⑦ **Sensing slot**
 - mounting and positioning of magnetic field sensors

► FURTHER INFORMATION IS AVAILABLE ONLINE



► **Technical Information**

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NEEDLE GRIPPER

INSTALLATION SIZE SCH20

1

Installation size SCH20 / Needle gripper / pneumatic / Grippers

▶ PRODUCT SPECIFICATIONS



▶ INCLUDED IN DELIVERY



Spare needle

CNAD00200



Pneumatic face hose

PYA

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Straight Cable 5 m

MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8

MFS204SKHC



Plug-in connector Angled
Cable 5m - Socket M8
(female)

KAW500



Plug-in connector Straight
Cable 5m - Socket M8
(female)

KAG500



Plug-in connector
customizable Straight -
Connector M8

S8-G-3

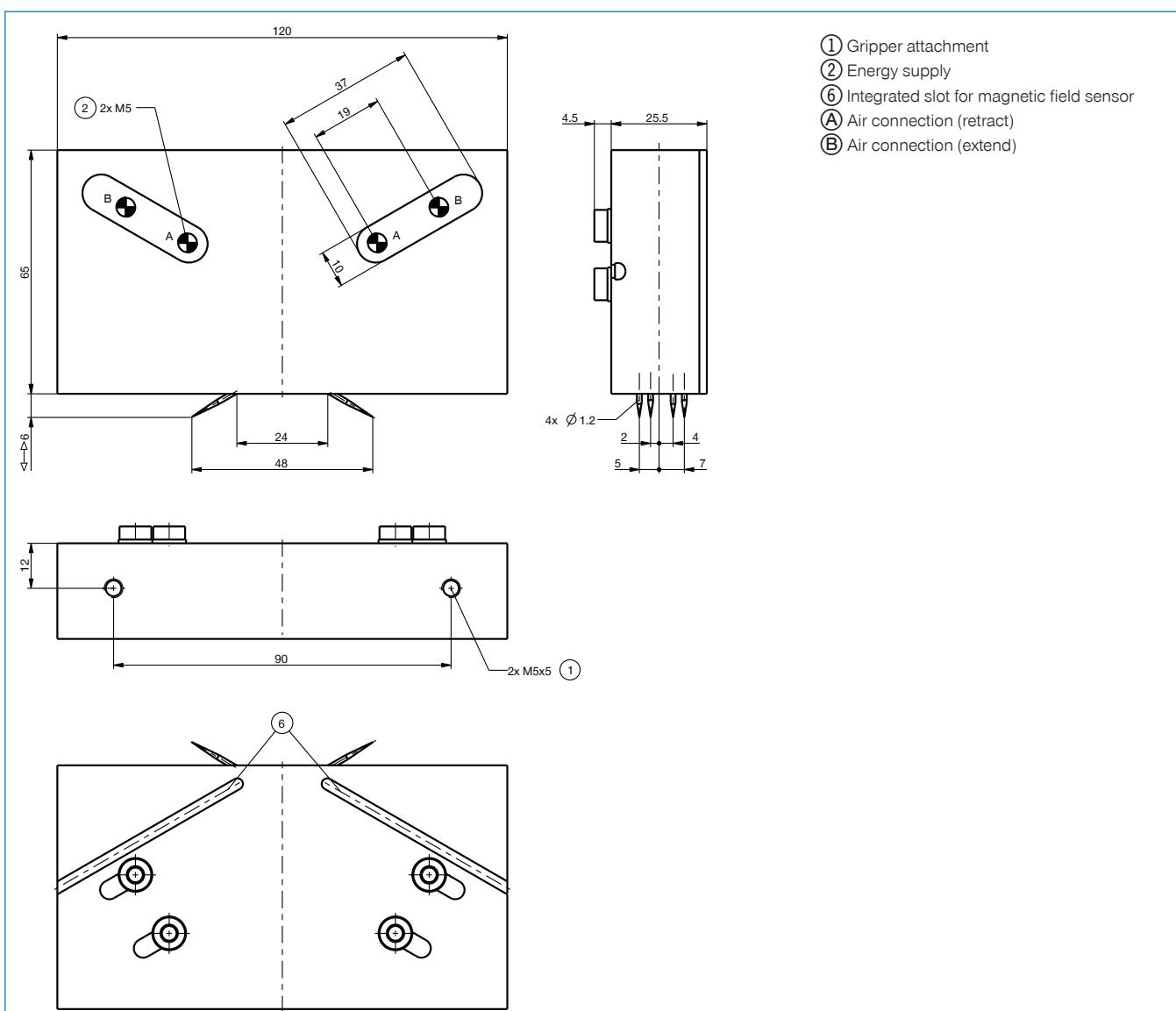


Plug-in connector customiz-
able Straight - Connector M12

S12-G-3

Order no.	Technical Data*
Needle stroke adjustable min. [mm]	0
Needle stroke adjustable max. [mm]	6
Number of needles [Pice]	4
Needle diameter [mm]	1.2
Retract time / Extend time [s]	0.02
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	4
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	5
Weight [kg]	0.35

*All data measured at 6 bar



NEEDLE GRIPPER

INSTALLATION SIZE SCH23

1

Installation size SCH23 / Needle gripper / pneumatic / Grippers

▶ PRODUCT SPECIFICATIONS



▶ INCLUDED IN DELIVERY



Spare needle

CNAD00230



Pneumatic face hose

PYA

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Straight Cable 5 m

MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8

MFS204SKHC



Plug-in connector Angled
Cable 5m - Socket M8
(female)

KAW500



Plug-in connector Straight
Cable 5m - Socket M8
(female)

KAG500



Plug-in connector
customizable Straight -
Connector M8

S8-G-3

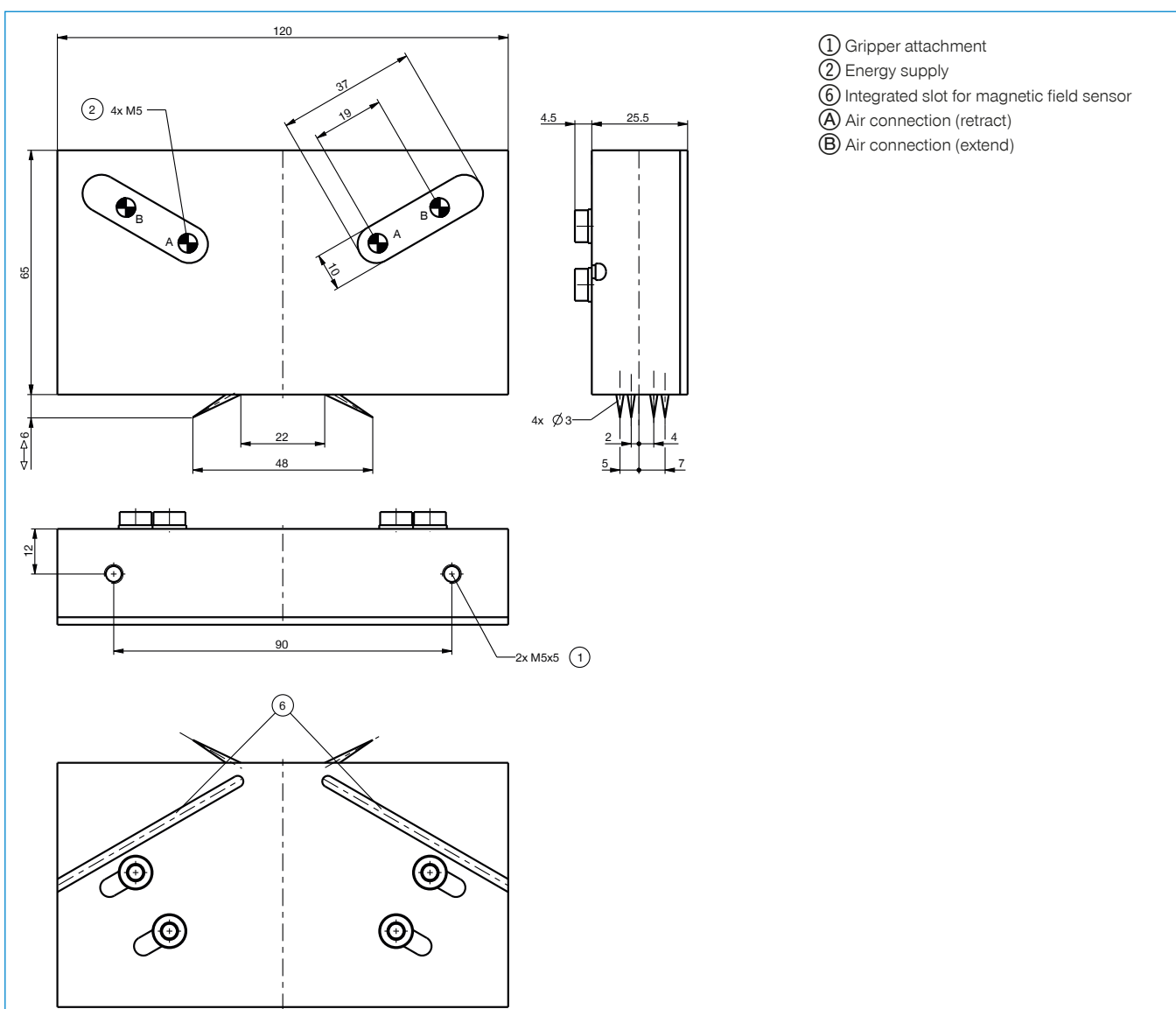


Plug-in connector customiz-
able Straight - Connector M12

S12-G-3

Order no.	Technical Data*
Needle stroke adjustable min. [mm]	0
Needle stroke adjustable max. [mm]	6
Number of needles [Pice]	4
Needle diameter [mm]	3
Retract time / Extend time [s]	0.2
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	4
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	5
Weight [kg]	0.37

*All data measured at 6 bar



O-RING ASSEMBLY GRIPPER, OUTER SERIES GS

▶ PRODUCT ADVANTAGES



▶ Proven technology

We have more than 20 years of proven reliability, which ensures uninterrupted production for you

▶ Adjustable expanding stroke

Prevents the O-ring from overexpanding and ensures consistent production quality

▶ Query about magnetic field sensor technology

Detecting the end position allows you to have shorter cycle times and an integrated control system

▶ THE BEST PRODUCT FOR YOUR APPLICATION



▶ Our products love the challenge!

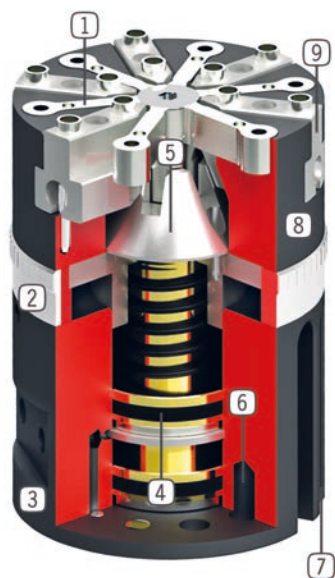
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► BENEFITS IN DETAIL



- ① **Ejector jaw**
 - to shift off the O-ring
- ② **Stroke adjustment**
 - for adjustment of the spread stroke
- ③ **Energy supply**
 - possible from several sides
- ④ **Drive**
 - two single-acting pneumatic cylinders
- ⑤ **Force transfer**
 - direct via taper
- ⑥ **Mounting and positioning**
 - axial, on the gripper bottom
- ⑦ **Sensing slot**
 - mounting and positioning of magnetic field sensors
- ⑧ **Robust, lightweight housing**
 - hard coated aluminium alloy
- ⑨ **Gripper jaw**
 - individual gripper finger mounting

► FURTHER INFORMATION IS AVAILABLE ONLINE



► Technical Information

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O-RING ASSEMBLY GRIPPER, OUTER

INSTALLATION SIZE GS65

▶ PRODUCT SPECIFICATIONS



▶ INCLUDED IN DELIVERY



Centering Disc

DST06510

▶ RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style

GVM5



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Mounting block

KB6.5-02



Inductive proximity switch - Cable 5 m

NJ6.5-E2-01



Inductive proximity switch - Connector M8

NJ6.5-E2S



Ejector Jaws Aluminium

UB65-3



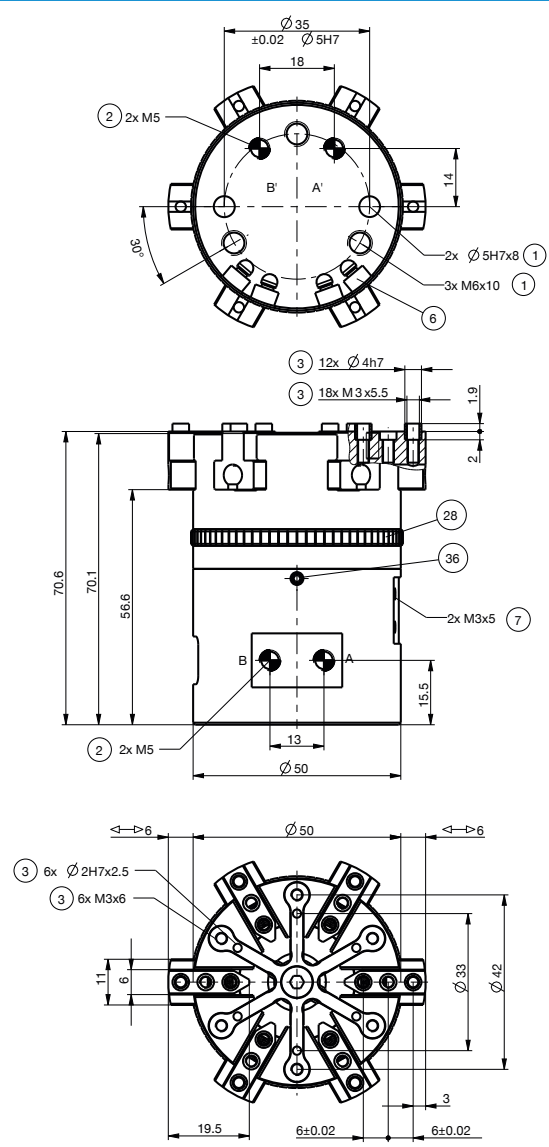
Expanding Jaws Steel

UB65-4

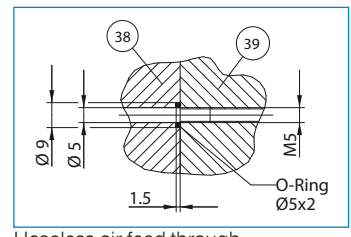
Order no.	GS65-B
Opening stroke adjustable per jaw min. [mm]	3
Opening stroke adjustable per jaw max. [mm]	6
Stripping stroke [mm]	5
Opening force [N]	300
Recommended O-ring diameter min. [mm]	4
Recommended O-ring diameter max. [mm]	60
Number of gripping jaws [Quantity]	6
Closing time [s]	0.05
Opening time [s]	0.05
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	4
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Weight [kg]	0.5

*All data measured at 6 bar

► Technical Data*



- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑥ Integrated slot for magnetic field sensor
- ⑦ Fixing for mounting block
- ⑳ Adjustment ring
- ㉔ Arbor for adjustment ring
- ㉘ Adapter
- ㉙ Gripper
- Ⓐ Air connection (expanding stroke)
- Ⓑ Air connection (ejector stroke)
- Ⓒ Air connection alternate (expanding stroke)
- Ⓓ Air connection alternate (ejector stroke)



Hoseless air feed-through

O-RING ASSEMBLY GRIPPER, OUTER

INSTALLATION SIZE GS810

1

Installation size GS810 / O-ring assembly gripper, outer / pneumatic / Grippers

▶ PRODUCT SPECIFICATIONS



▶ INCLUDED IN DELIVERY



Centering Disc

DST40600

▶ RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style

GV1-8X6



Magnetic field sensor
Angled Cable 5 m

MFS103KHC



Magnetic field sensor
Angled Cable 0,3 m -
Connector M8

MFS103SKHC



Plug-in connector Angled
Cable 5m - Socket M8
(female)

KAW500



Plug-in connector
Straight Cable 5m - Socket
M8 (female)

KAG500



Mounting block

KB6.5-02



Inductive proximity switch
- Cable 5 m

NJ8-E2



Inductive proximity switch
- Connector M8

NJ8-E2S



Ejector Jaws Aluminium

UB810-3

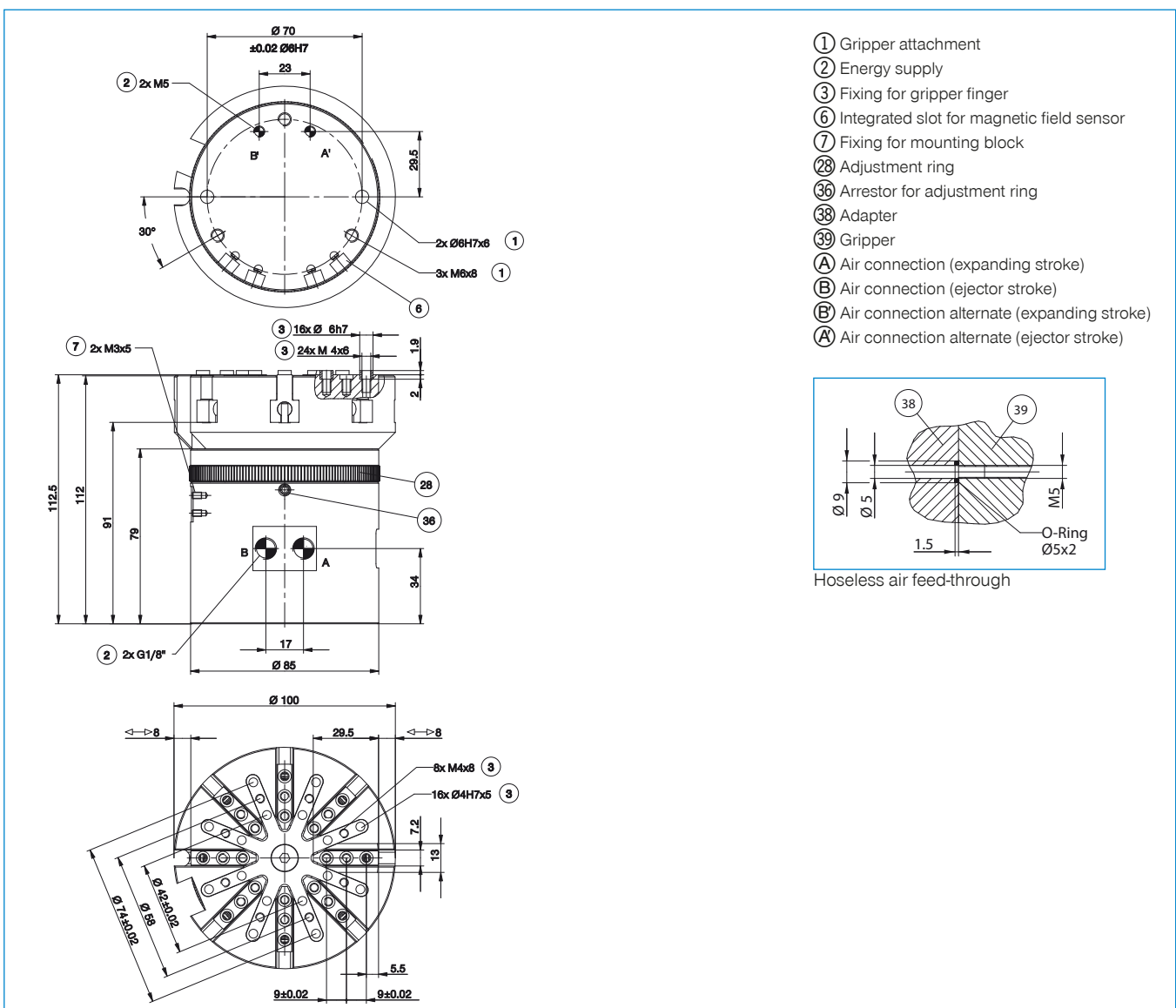


Expanding Jaws Steel

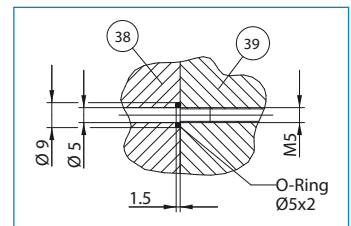
UB810-4

Order no.	Technical Data*
Opening stroke adjustable per jaw min. [mm]	4
Opening stroke adjustable per jaw max. [mm]	8
Stripping stroke [mm]	10
Opening force [N]	1200
Recommended O-ring diameter min. [mm]	30
Recommended O-ring diameter max. [mm]	120
Number of gripping jaws [Quantity]	8
Closing time [s]	0.05
Opening time [s]	0.05
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Weight [kg]	2.5

*All data measured at 6 bar



- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑥ Integrated slot for magnetic field sensor
- ⑦ Fixing for mounting block
- ⑧ Adjustment ring
- ⑩ Arrestor for adjustment ring
- ⑪ Adapter
- ⑫ Gripper
- A Air connection (expanding stroke)
- B Air connection (ejector stroke)
- B' Air connection alternate (expanding stroke)
- A' Air connection alternate (ejector stroke)



Hoseless air feed-through

O-RING ASSEMBLY GRIPPER, OUTER

INSTALLATION SIZE GS1015

1

Installation size GS1015 / O-ring assembly gripper, outer / pneumatic / Grippers

▶ PRODUCT SPECIFICATIONS



▶ INCLUDED IN DELIVERY



Mounting block

KB8K



Centering Disc

DST60800

▶ RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style

GV1-8X8



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S



Ejector Jaws Aluminium

UB1015-3



Expanding Jaws Steel

UB1015-4

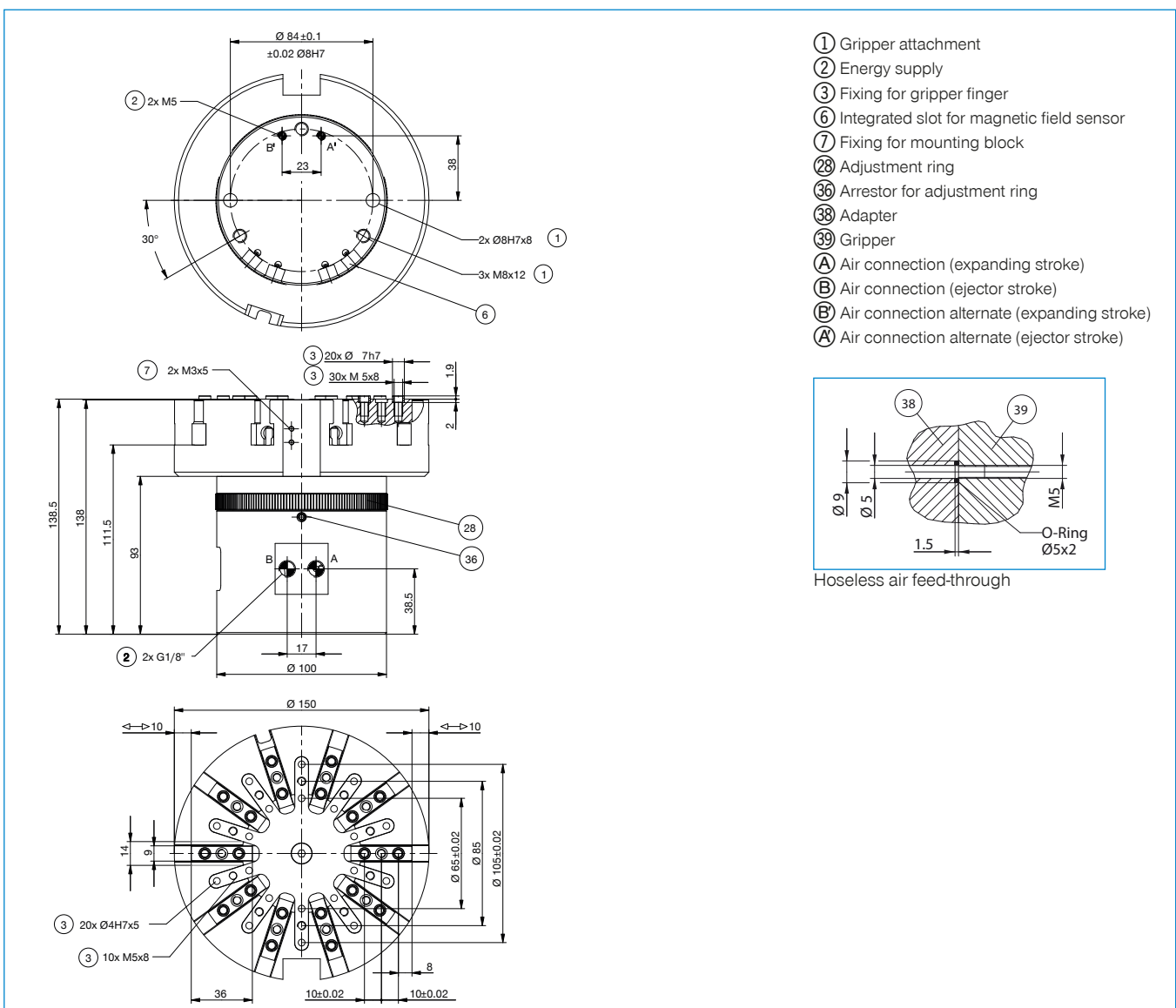


Plug-in connector customizable Straight - Connector M8

S8-G-3

► Technical Data*	
Order no.	GS1015-B
Opening stroke adjustable per jaw min. [mm]	1.6
Opening stroke adjustable per jaw max. [mm]	10
Stripping stroke [mm]	15
Opening force [N]	1450
Recommended O-ring diameter min. [mm]	40
Recommended O-ring diameter max. [mm]	150
Number of gripping jaws [Quantity]	10
Closing time [s]	0.05
Opening time [s]	0.05
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Weight [kg]	5.4

*All data measured at 6 bar



O-RING ASSEMBLY GRIPPER, INNER SERIES GSI

▶ PRODUCT ADVANTAGES



SOMMER
automatic **S**

▶ Concentration on the essentials

Only pay for what you need - individual standard gripper specific to O-ring inside assembly

▶ Adjustable expanding stroke

Prevents the O-ring from overexpanding and ensures consistent production quality

▶ Query about magnetic field sensor technology

Detecting the end position allows you to have shorter cycle times and an integrated control system

▶ THE BEST PRODUCT FOR YOUR APPLICATION



▶ Our products love the challenge!

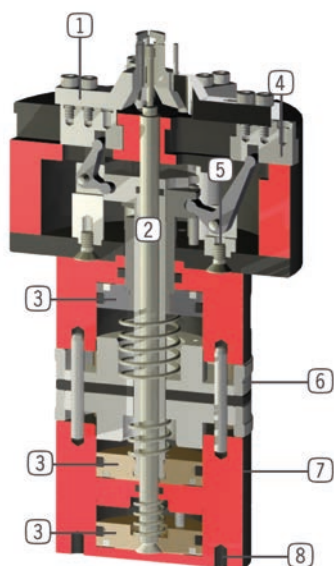
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► BENEFITS IN DETAIL



- ① **Spread jaws**
 - to position the O-ring in the groove of the workpiece
- ② **Ejector (piston rod)**
 - to remove the O-ring
- ③ **Driven by three single-acting pneumatic cylinders**
 - drive for grabber jaws
 - drive for spread jaws
 - drive for ejector
- ④ **Grabber jaw**
 - to grab the O-ring
- ⑤ **Force transfer**
 - via lever and connecting rod
- ⑥ **Stroke adjustment on grabber jaws**
 - prevents overstretching of O-ring during assembly
- ⑦ **Stroke on spread jaws**
 - adjustable to fit bore diameter of workpiece
- ⑧ **Mounting and positioning**
 - axial, on the gripper bottom

► FURTHER INFORMATION IS AVAILABLE ONLINE



► Technical Information

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O-RING ASSEMBLY GRIPPER, INNER

INSTALLATION SIZE GSI206

1

Installation size GSI206 / O-ring assembly gripper, inner / pneumatic / Grippers

▶ PRODUCT SPECIFICATIONS



▶ INCLUDED IN DELIVERY



Centering Disc

DST06510

▶ RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style

GVM5



Magnetic field sensor Angled Cable 5 m

MFS103KHC



Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector customizable Straight - Connector M8

S8-G-3

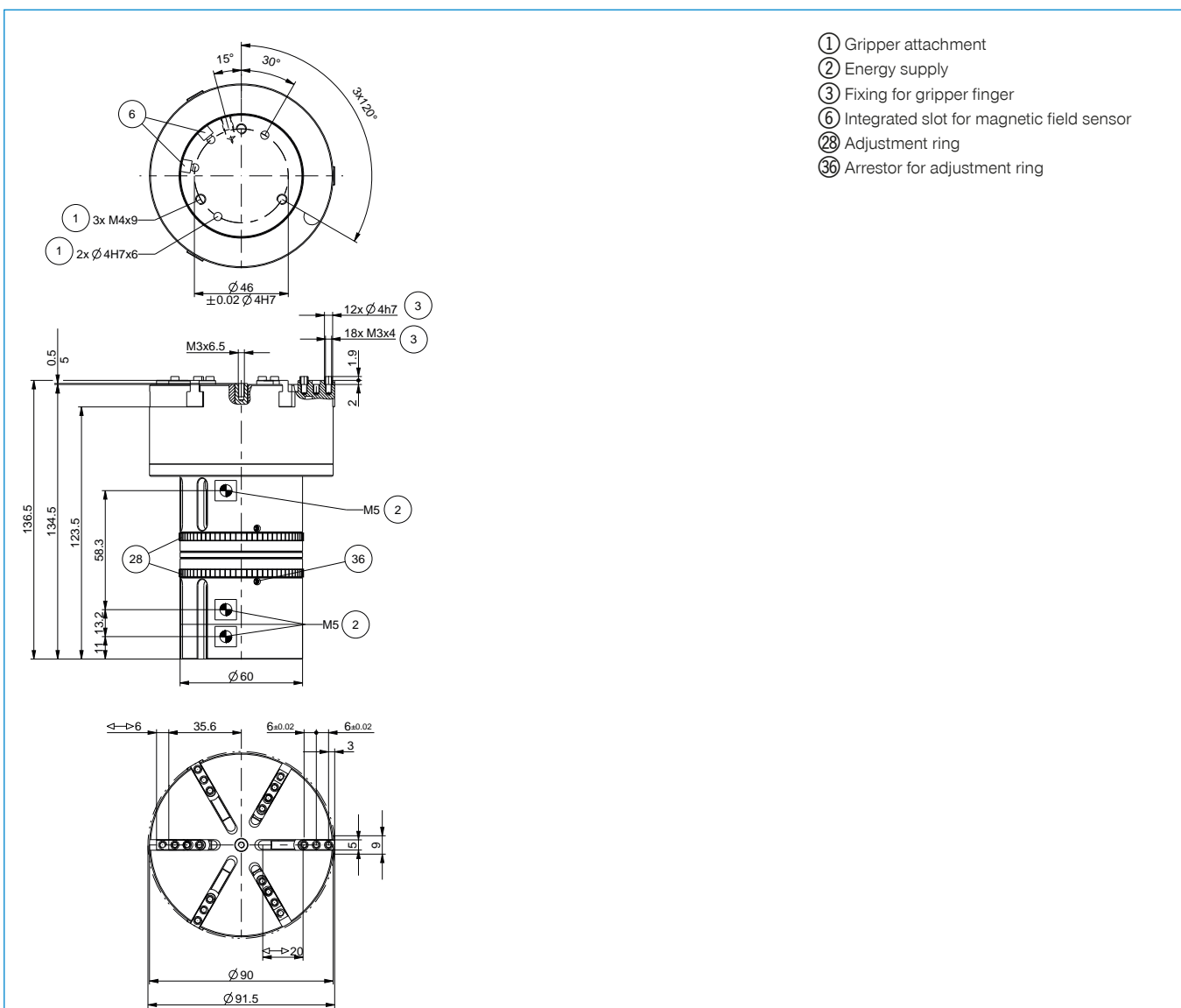


Plug-in connector customizable Straight - Connector M12

S12-G-3

Order no.	Technical Data*
Stroke adjustable per jaw min. [mm]	6
Stroke adjustable per jaw max. [mm]	20
Opening stroke adjustable per jaw min. [mm]	1
Opening stroke adjustable per jaw max. [mm]	6
Stripping stroke [mm]	5
Opening force [N]	240
Possible O-ring diameter at cord size 1 [mm]	11-45
Possible O-ring diameter at cord size 2 [mm]	20-130
Possible O-ring diameter at cord size 3 [mm]	32-130
Possible O-ring diameter at cord size 4 [mm]	42-100
Number of gripping jaws [Quantity]	6
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Weight [kg]	1.1

*All data measured at 6 bar



MAGNETIC GRIPPER

SERIES HM1000

▶ PRODUCT ADVANTAGES



▶ **Secure hold during EMERGENCY STOP**

Magnets attached to springs ensure your workpiece remains secure, even during a drop in pressure

▶ **Contact plate that increases friction value**

The replaceable O-ring ensures the high dynamics in your application and protection of your workpiece

▶ **Residual holding force < 1N**

The demagnetised contact surface safeguards the process reliability of dropping off your workpiece

▶ THE BEST PRODUCT FOR YOUR APPLICATION



▶ **Our products love the challenge!**

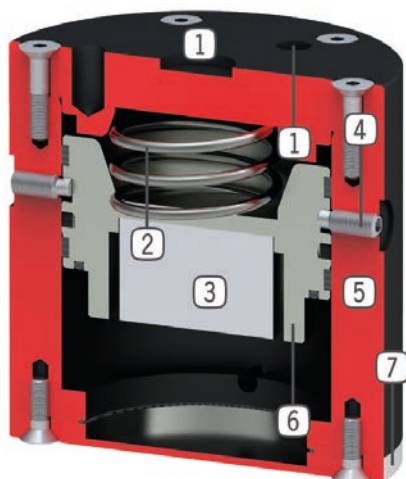
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► BENEFITS IN DETAIL



- ① **Mounting and positioning**
 - via centering sleeve and thread
- ② **Spring**
 - for piston return
 - secured holding even in drop pressure
- ③ **Permanent magnet**
 - requires no power supply
 - high holding forces
- ④ **Transport safeguarding**
- ⑤ **Robust, lightweight housing**
 - hard coated aluminium alloy
- ⑥ **single-acting pneumatic cylinders**
 - only one pneumatic line required
 - Spring return
- ⑦ **Contact plate**
 - easy replaceable
 - embedded O-ring to increase the friction coefficient

► FURTHER INFORMATION IS AVAILABLE ONLINE



► Technical Information

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Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product.

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MAGNETIC GRIPPER

INSTALLATION SIZE HM1030

1

Installation size HM1030 / Magnetic gripper / pneumatic / Grippers

▶ PRODUCT SPECIFICATIONS



▶ INCLUDED IN DELIVERY



Lockung nut

C043910002

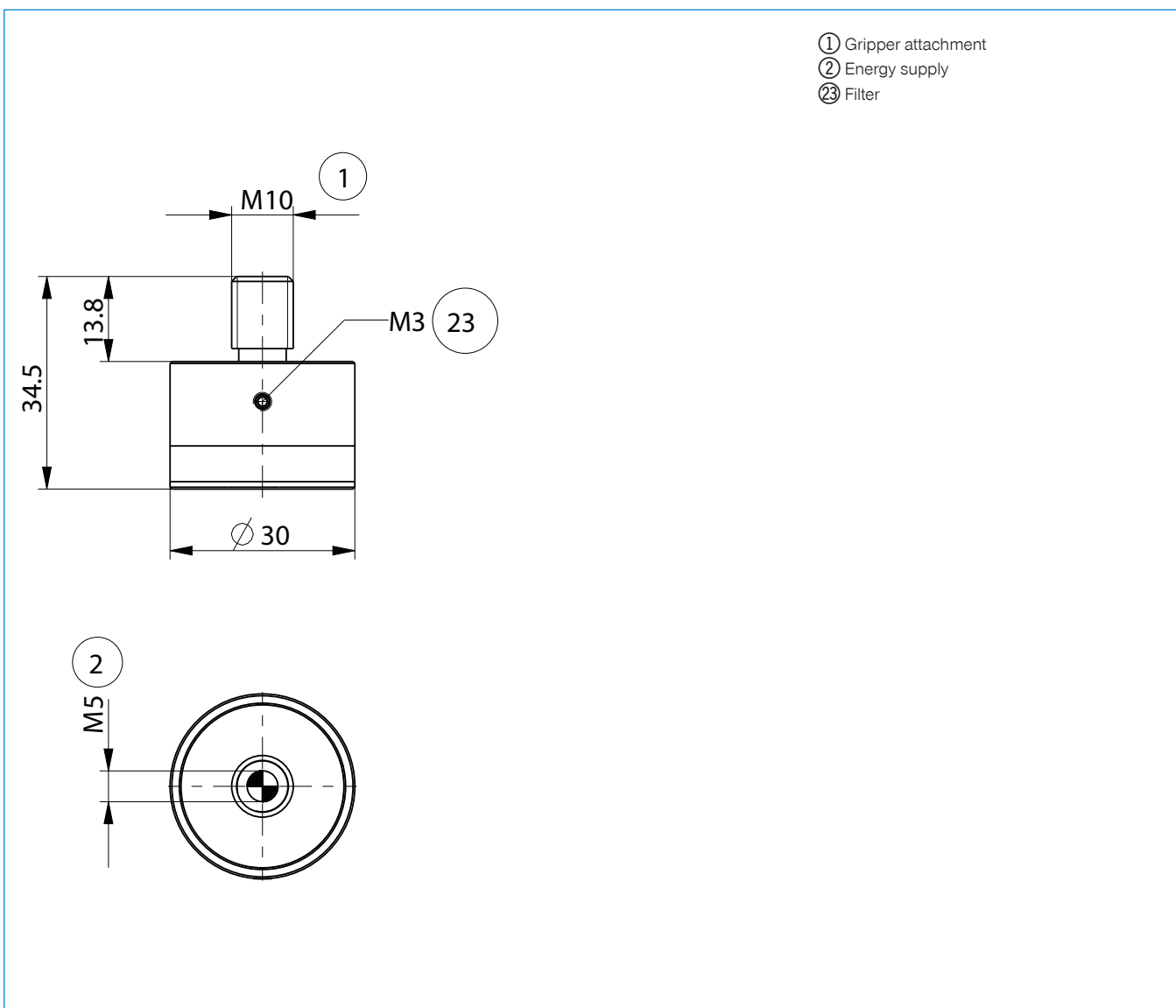
▶ RECOMMENDED ACCESSORIES



Straight Fittings - Quick
Connect Style

GVM5

Order no.	Technical Data
Max. adhesive force [N]	27
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	3.5
Weight [kg]	0.06



MAGNETIC GRIPPER

INSTALLATION SIZE HM1046

▶ PRODUCT SPECIFICATIONS



▶ RECOMMENDED ACCESSORIES



Straight Fittings - Quick
Connect Style
GVM5



Centering Disc
ZE10H7X6

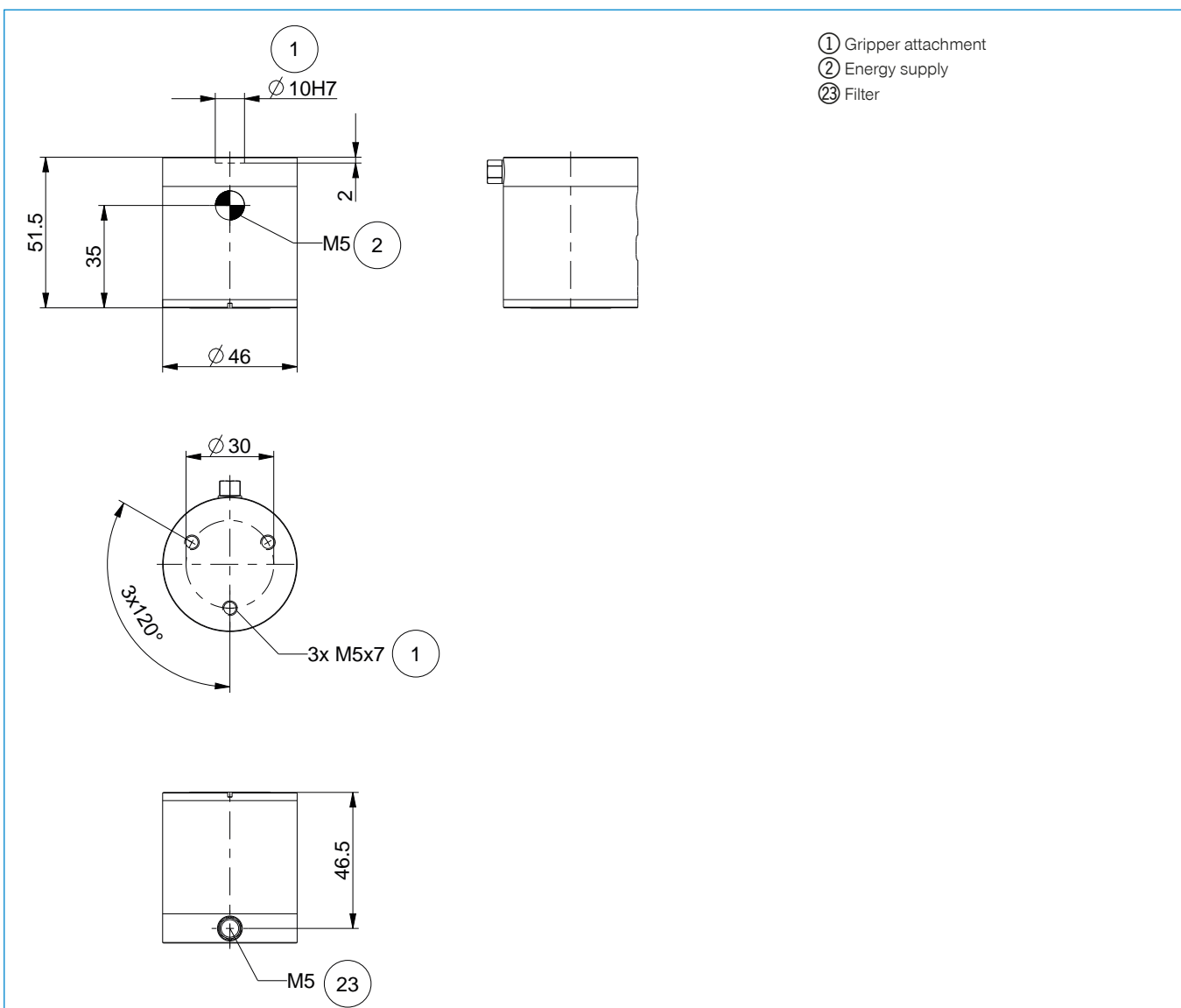


Ball Joints
KG40



Ball Joints Steel
KG40ST

Order no.	Technical Data
Max. adhesive force [N]	65
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	9
Weight [kg]	0.28



MAGNETIC GRIPPER

INSTALLATION SIZE HM1078

▶ PRODUCT SPECIFICATIONS



▶ INCLUDED IN DELIVERY



Set Screw

C091505129



Dummy plug

CPNEU00536

▶ RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style

GV1-8X6



Centering Disc

ZE15H7X4



Ball Joints

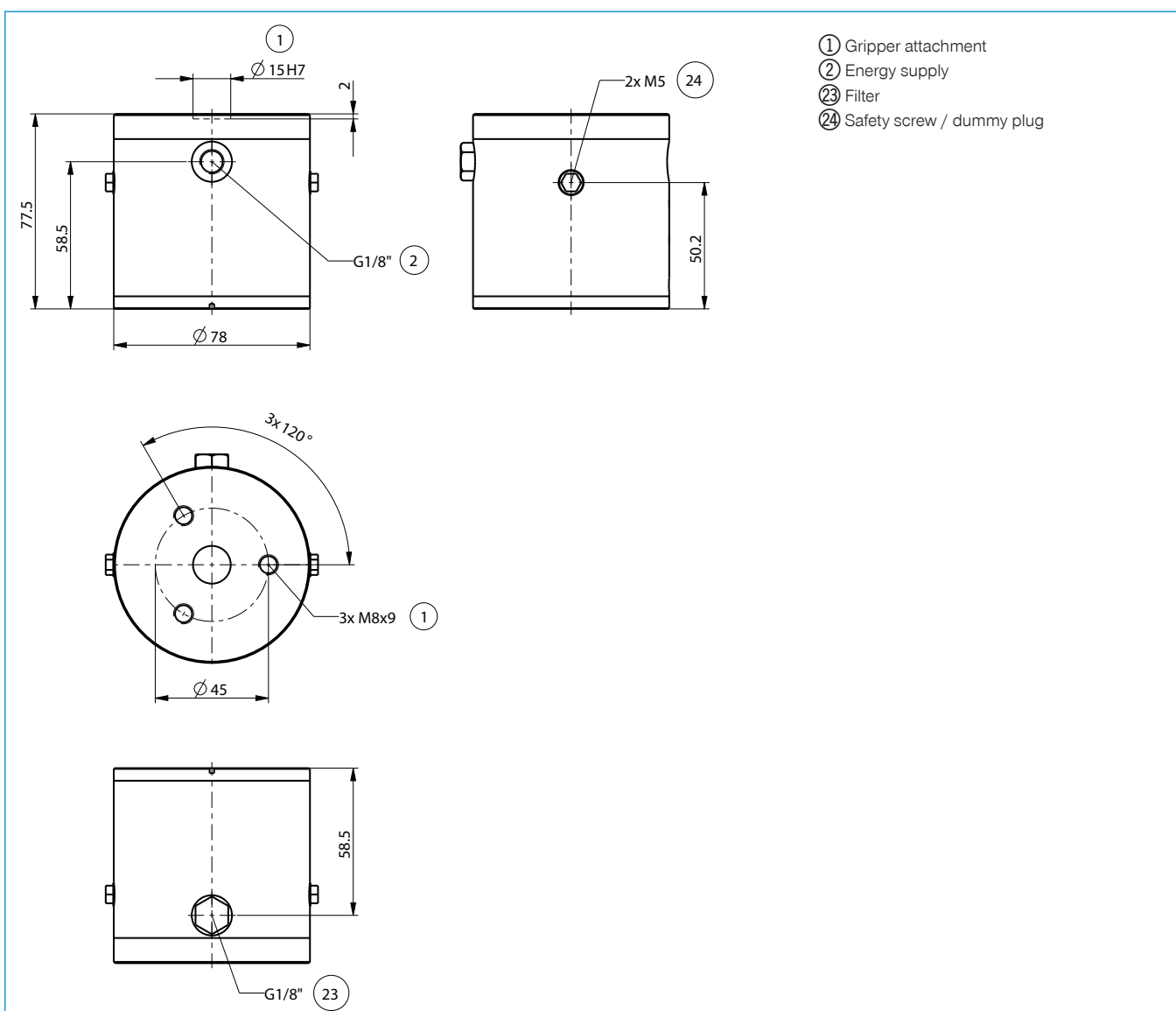
KG60



Ball Joints Steel

KG60ST

Order no.	Technical Data
	HM1078NC
Max. adhesive force [N]	220
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	75
Weight [kg]	1.2



MAGNETIC GRIPPER

INSTALLATION SIZE HM1097

1

Installation size HM1097 / Magnetic gripper / pneumatic / Grippers

▶ PRODUCT SPECIFICATIONS



▶ INCLUDED IN DELIVERY



Set Screw

C091505129



Dummy plug

CPNEU00536

▶ RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style

GV1-8X6



Centering Disc

ZE20H7X4



Ball Joints

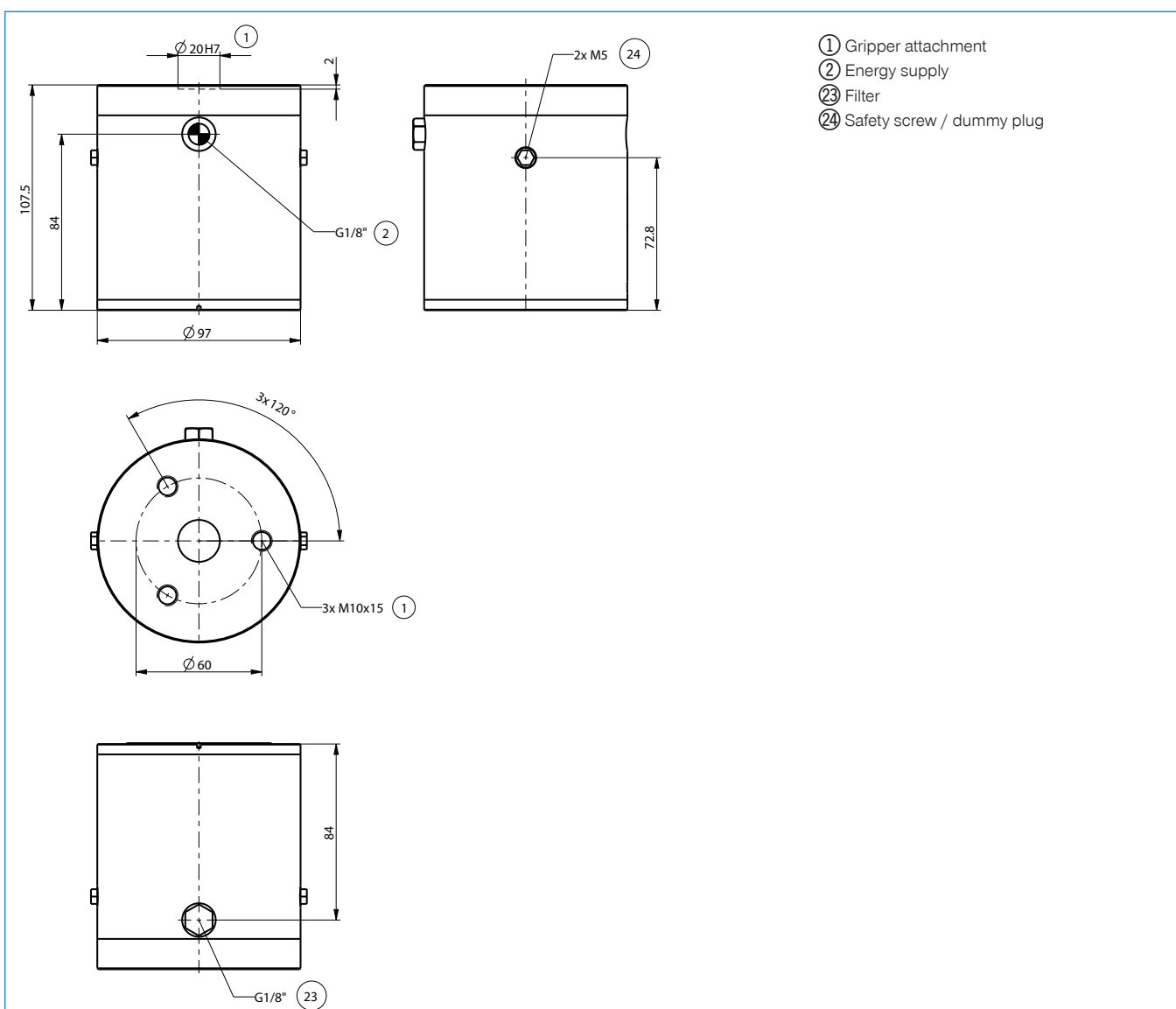
KG80



Ball Joints Steel

KG80ST

Order no.	Technical Data
	HM1097NC
Max. adhesive force [N]	450
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	250
Weight [kg]	2.2



GRIPPERS FOR SPECIFIC TASKS

OVERVIEW OF SERIES

1

Overview of Series / Grippers for Specific Tasks



▶ ELECTRICAL

	Series GEN9100	494
	Series HEM1000	498

NEEDLE GRIPPER

SERIES GEN9100

▶ PRODUCT ADVANTAGES



SOMMER
automatic **S**

▶ Plug and Play

Reduce programming and assembly costs to a minimum with the integrated control system and the 2 position query

▶ Saving energy with pulse control

You only have to supply current briefly when retracting and extending the needle; no energy is required when transporting the workpiece

▶ Smooth stroke configuration

The needle stroke is displayed via a scale. You can smoothly adjust the needle stroke to fit your application

▶ THE BEST PRODUCT FOR YOUR APPLICATION



▶ Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities:

Find the best product for your specific use:

www.zimmer-group.com



► BENEFITS IN DETAIL



- 1 Energy supply**
 - standardized interface M12 round connector
- 2 Drive**
 - via Pot magnet and coil bobbin according to the coil system principle
 - energy consumption only at impulse <25 ms
- 3 Position sensing**
 - integrated Hallsensor
 - 2 positions monitorable
- 4 Status control**
 - optical LED position display
 - Needles retracted, needles extended
- 5 Stroke adjustment**
 - infinitely variable
 - Can be read off the scale
- 6 Mounting and positioning**
 - mounting possible from several sides for versatile positioning
- 7 Robust, lightweight housing**
 - hard coated aluminium alloy
- 8 Extending needles**
 - gripping by penetration

► FURTHER INFORMATION IS AVAILABLE ONLINE



► Technical Information

All information just a click away at: www.zimmer-group.com

Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product.

Quick, clear and always up-to-date.



NEEDLE GRIPPER

INSTALLATION SIZE GEN9102

1

Installation size GEN9102 / Needle gripper / electric / Grippers

▶ PRODUCT SPECIFICATIONS



▶ RECOMMENDED ACCESSORIES



Plug-in Connector Angled
Cable 10 m - Female M12

KAW1000B8



Plug-in Connector
Straight Cable 10 m -
Female M12

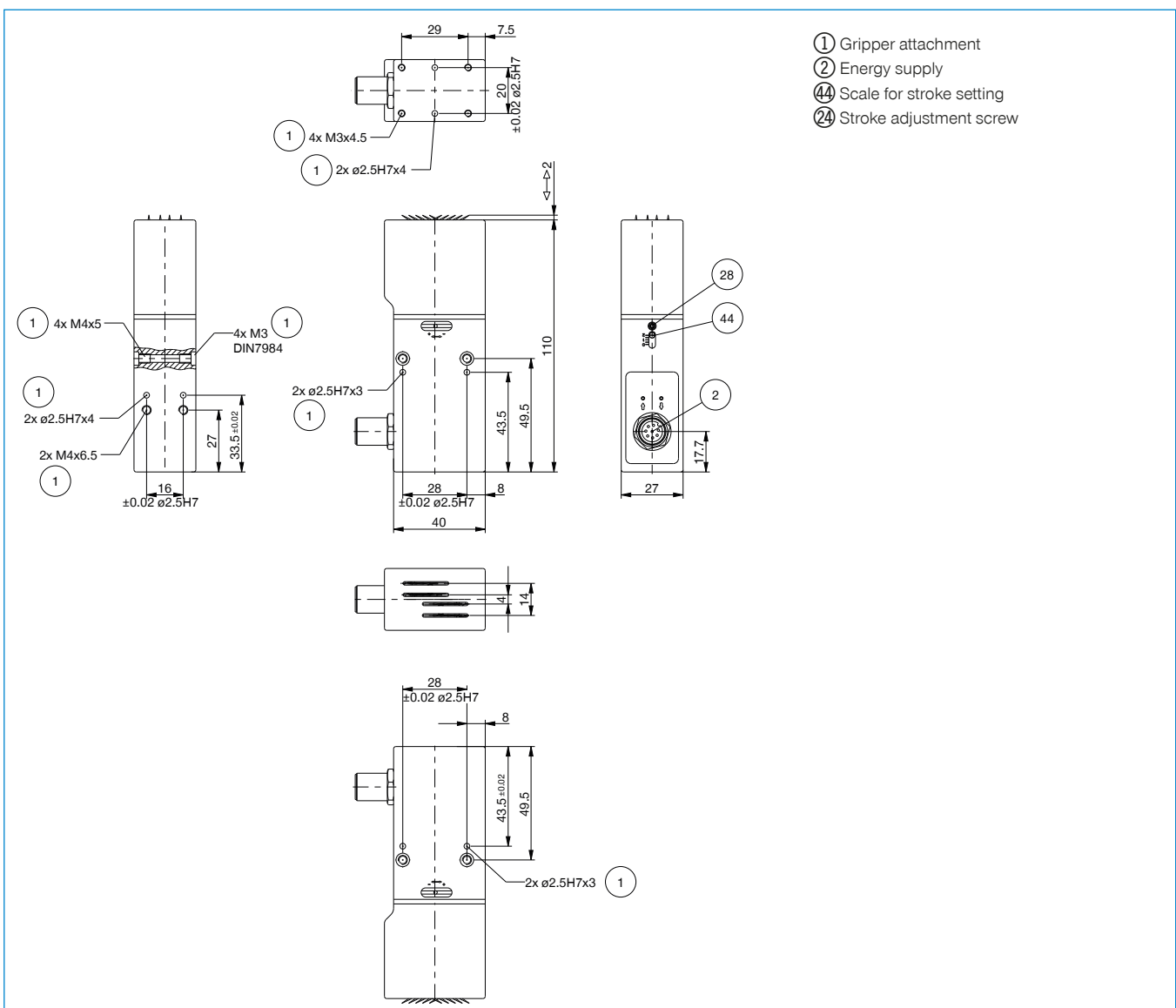
KAG1000B8



Busbox
see page 839

ZUBBOX9000-01

► Technical Data	
Order no.	GEN9102
Pulse time in extend [ms]	25
Pulse time in retract [ms]	20
Needle stroke adjustable min. [mm]	0
Needle stroke adjustable max. [mm]	2
Current consumption in a stand-by mode [A]	0.02
Current consumption per pulse max. [A]	5
Cycle count max. [cycle/min]	150
Permanent operation cycle count max. [cycle/min]	120
Operating time [ms]	<28
Operating temperature min. [°C]	10
Operating temperature max. [°C]	+50
Debounce time [ms]	10
Noise level [db(A)]	<70
Repetition accuracy +/- [mm]	0.1
Protection to IEC 60529	IP50
Weight [kg]	0.33



MAGNETIC GRIPPER

SERIES HEM1000

▶ PRODUCT ADVANTAGES



▶ Plug and Play

Reduce your installation effort to a minimum by using the single cable solution and the simple control system via plus and minus buttons

▶ Saving energy with pulse control

You only have to supply current briefly when releasing the workpiece; no energy is required when transporting the workpiece

▶ Secure hold during EMERGENCY STOP

The magnet provides full holding force when it is not powered, preventing the loss of the workpiece if there is a voltage drop

▶ THE BEST PRODUCT FOR YOUR APPLICATION



▶ Our products love the challenge!

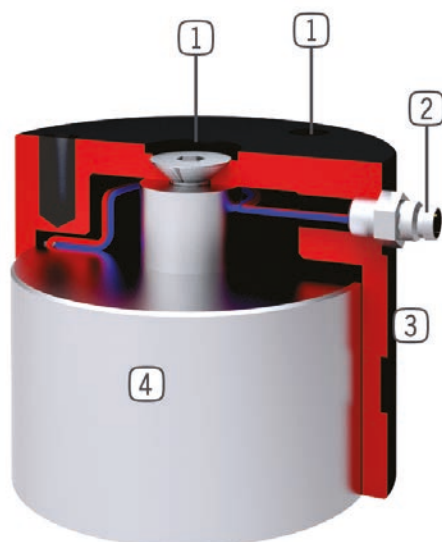
Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities:

Find the best product for your specific use:

www.zimmer-group.com



► BENEFITS IN DETAIL



- ① **Mounting and positioning**
 - via centering sleeve and thread
- ② **Energy supply**
 - standardized interface M8 round plug
- ③ **Robust, lightweight housing**
 - hard coated aluminium alloy
- ④ **Holding solenoid**
 - with electrical switch off

► TERMS

Adhesive surface:	Complete contact surface of the gripper
Adhesive force:	refers to 100% coating of the adhesive surface, zero clearance, status at operating temperature on ST37 steel and compliance with the minimum coating thickness
Minimum coating thickness:	Minimum thickness of the workpiece to be gripped to reach the max. adhesive force
Remaining adhesive force:	max. 3% of the adhesive force
On-time:	the time in which current is supplied to the gripper
Break time:	the time in which no current is supplied to the gripper
Cycle time:	On-time + break time

MAGNETIC GRIPPER

INSTALLATION SIZE HEM1030

▶ PRODUCT SPECIFICATIONS



▶ RECOMMENDED ACCESSORIES



Centering Disc

ZE10H7X6



Plug-in connector Straight
Cable 5m - Socket M8
(female)

KAG500



Plug-in connector Angled
Cable 5m - Socket M8
(female)

KAW500

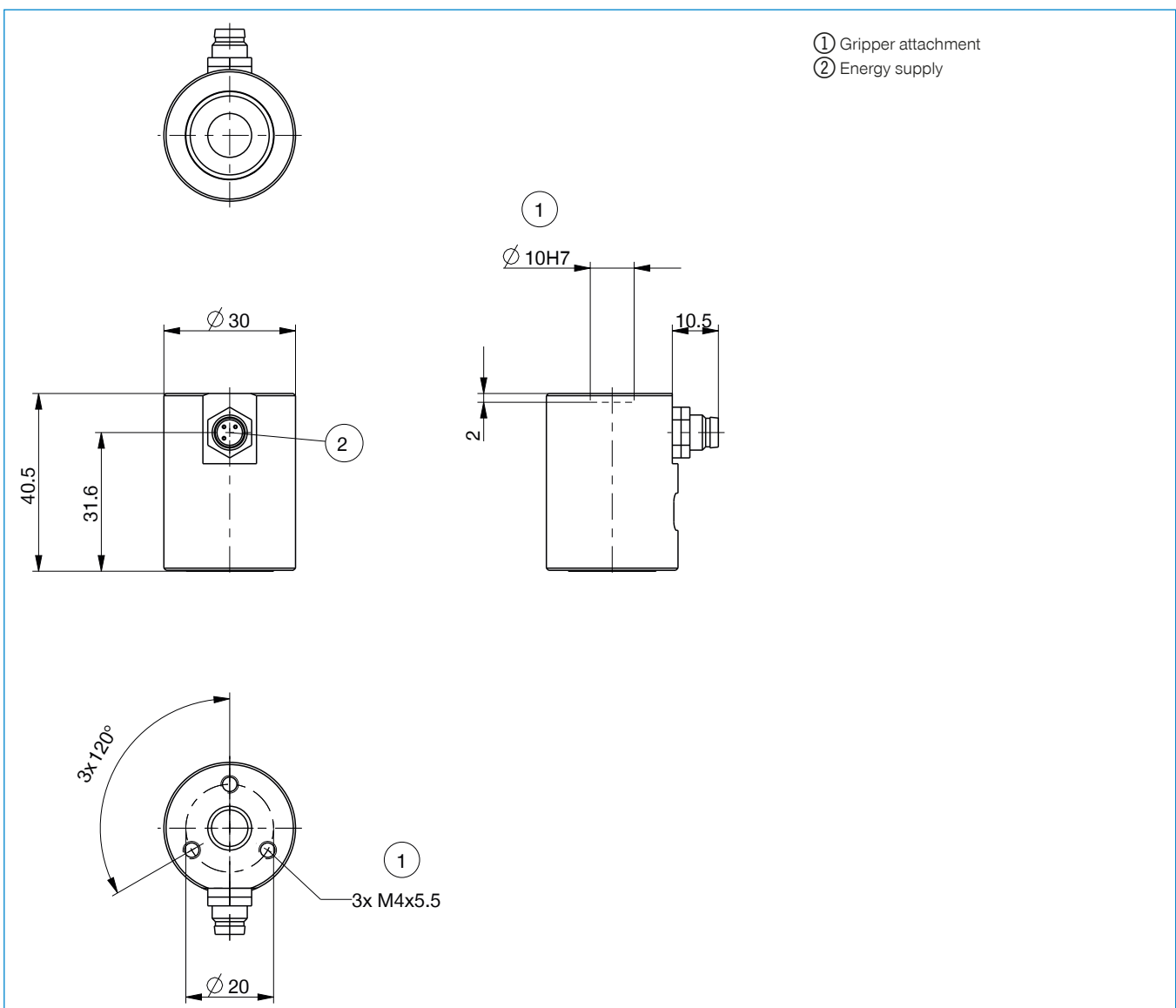


Plug-in connector
customizable Straight -
Connector M8

S8-G-3

Order no.	Technical Data
Max. adhesive force [N]*	40
Minimum coating thickness [mm]	2.5
Max. residual retention force [N]	1.2
Duty cycle max. with a cycle time < 2 min [%]	25
Duty cycle max. with a cycle time < 0.5 min [%]	40
Input power [W]	3.6
Voltage [V]	24
Operating temperature min. [°C]	-25
Operating temperature max. [°C]	80
Weight [kg]	0.09

*St37-100%, St34 -88%, St 50-81%, St70-75%, GT-65%, 20MnCr5-55%, GG-35%



MAGNETIC GRIPPER

INSTALLATION SIZE HEM1042

▶ PRODUCT SPECIFICATIONS



▶ RECOMMENDED ACCESSORIES



Centering Disc

ZE10H7X6



Ball Joints

KG40



Plug-in connector Straight
Cable 5m - Socket M8
(female)

KAG500



Plug-in connector Angled
Cable 5m - Socket M8
(female)

KAW500



Plug-in connector
customizable Straight -
Connector M8

S8-G-3

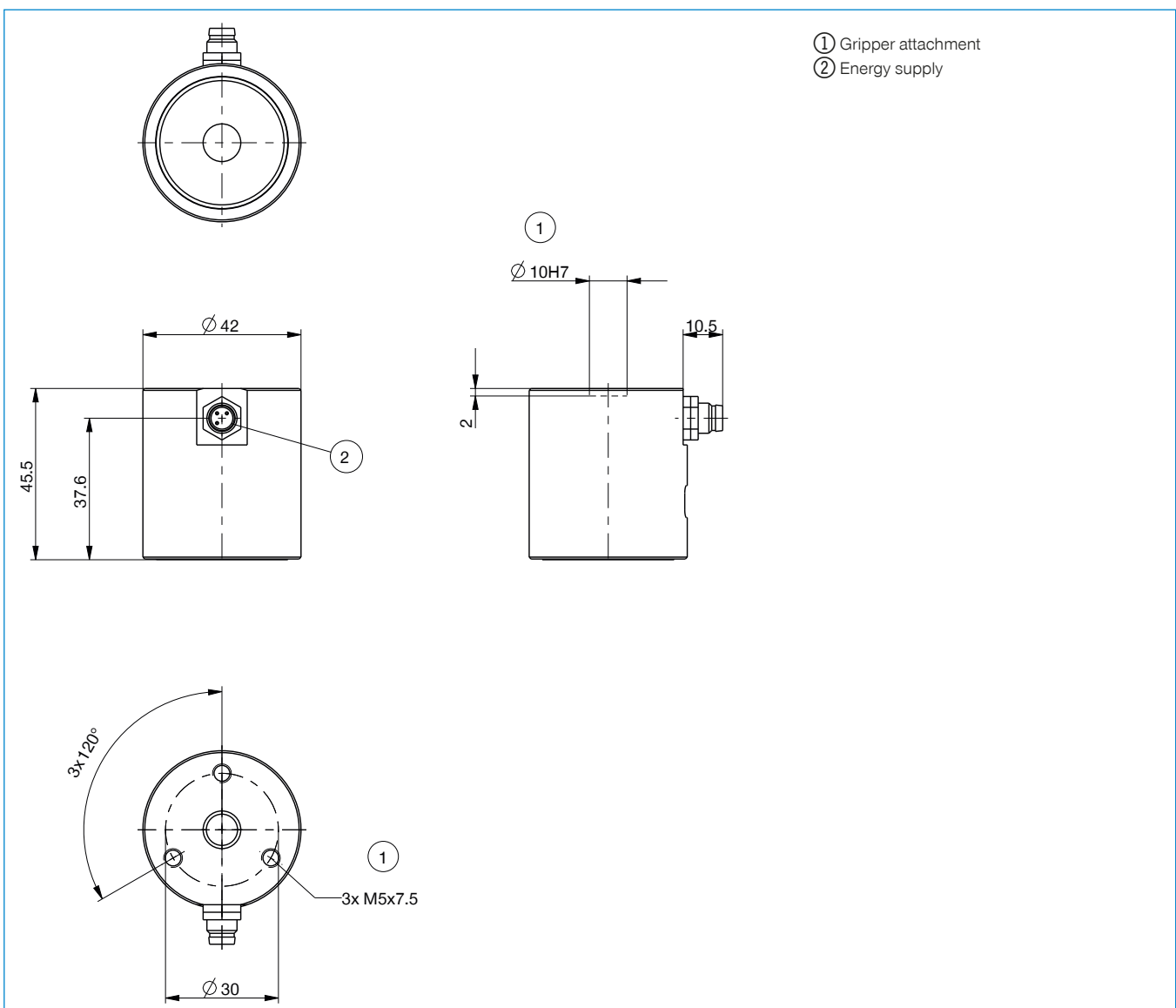


Plug-in Connector Customiz-
able Angled - Connector M8

S8-W-3

Order no.	▶ Technical Data
	HEM1042NC
Max. adhesive force [N]*	160
Minimum coating thickness [mm]	3
Max. residual retention force [N]	4.8
Duty cycle max. with a cycle time < 2 min [%]	25
Duty cycle max. with a cycle time < 0.5 min [%]	40
Input power [W]	4.6
Voltage [V]	24
Operating temperature min. [°C]	-25
Operating temperature max. [°C]	80
Weight [kg]	0.28

*St37-100%, St34 -88%, St 50-81%, St70-75%, GT-65%, 20MnCr5-55%, GG-35%



MAGNETIC GRIPPER

INSTALLATION SIZE HEM1062

▶ PRODUCT SPECIFICATIONS



▶ RECOMMENDED ACCESSORIES



Centering Disc

ZE10H7X6



Ball Joints

KG60



Plug-in connector Straight
Cable 5m - Socket M8
(female)

KAG500



Plug-in connector Angled
Cable 5m - Socket M8
(female)

KAW500



Plug-in connector
customizable Straight -
Connector M8

S8-G-3

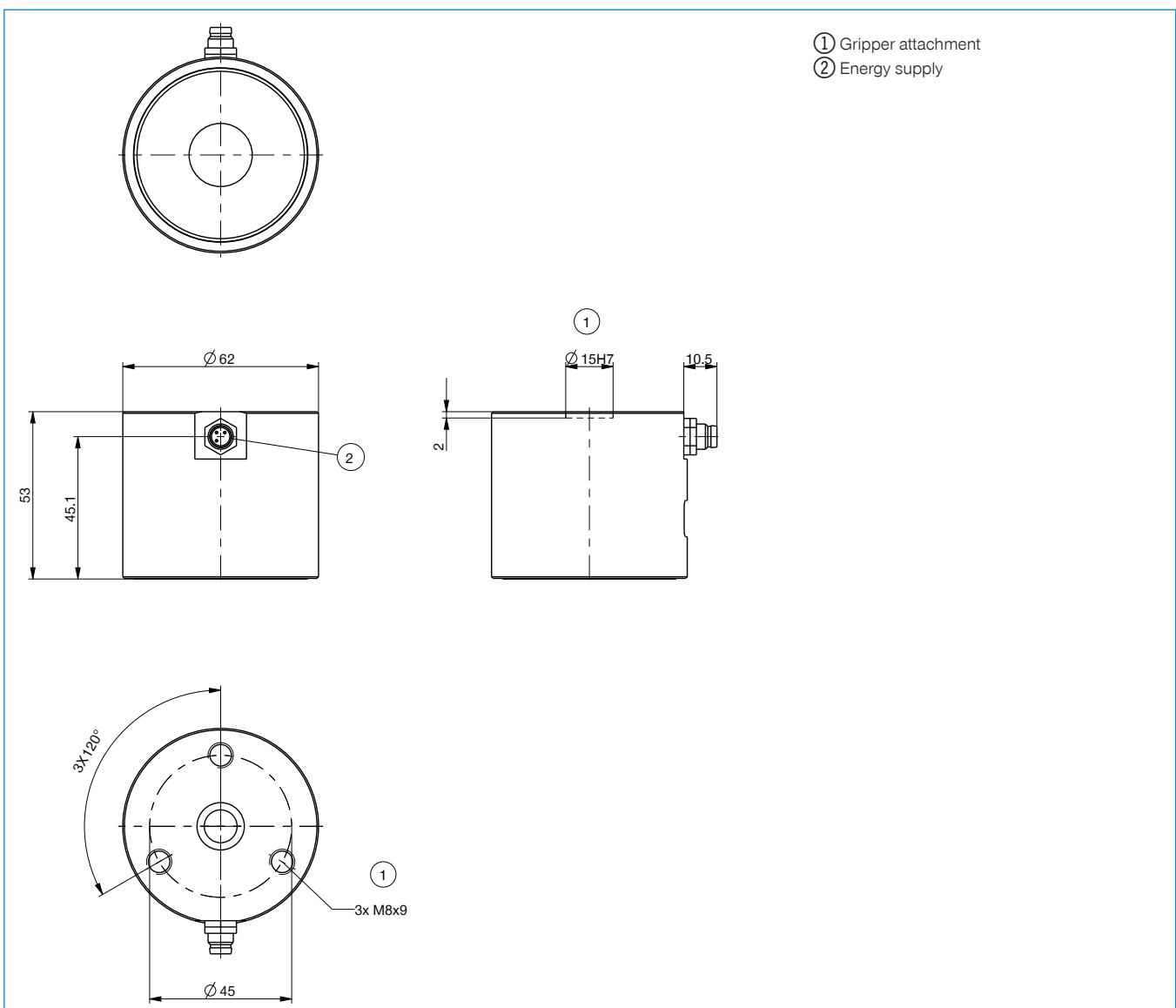


Plug-in Connector Customizable
Angled - Connector M8

S8-W-3

Order no.	Technical Data
Max. adhesive force [N]*	420
Minimum coating thickness [mm]	4.5
Max. residual retention force [N]	12.6
Duty cycle max. with a cycle time < 2 min [%]	25
Duty cycle max. with a cycle time < 0.5 min [%]	40
Input power [W]	9
Voltage [V]	24
Operating temperature min. [°C]	-25
Operating temperature max. [°C]	80
Weight [kg]	0.66

*St37-100%, St34 -88%, St 50-81%, St70-75%, GT-65%, 20MnCr5-55%, GG-35%



MAGNETIC GRIPPER

INSTALLATION SIZE HEM1080

▶ PRODUCT SPECIFICATIONS



▶ RECOMMENDED ACCESSORIES



Centering Disc

ZE10H7X6



Ball Joints

KG80



Plug-in connector Straight
Cable 5m - Socket M8
(female)

KAG500



Plug-in connector Angled
Cable 5m - Socket M8
(female)

KAW500



Plug-in connector
customizable Straight -
Connector M8

S8-G-3

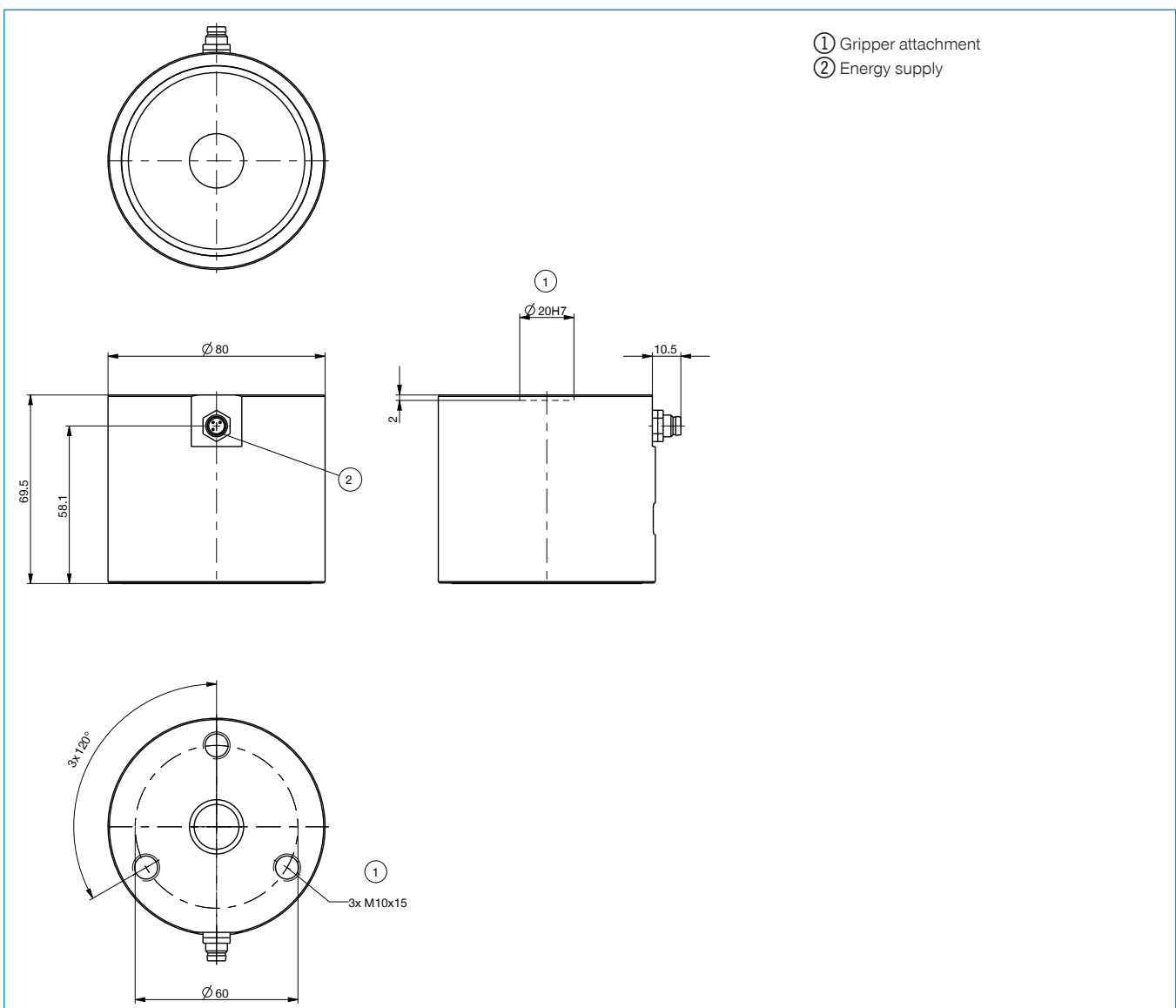


Plug-in Connector Customiz-
able Angled - Connector M8

S8-W-3

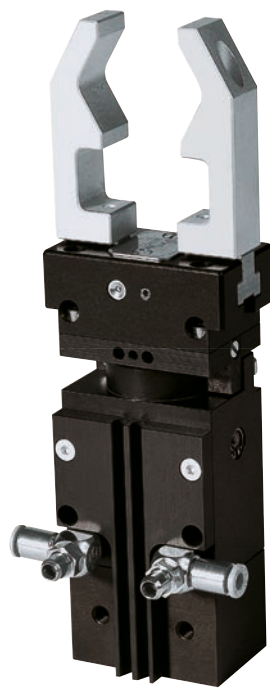
Order no.	Technical Data
	HEM1080NC
Max. adhesive force [N]*	720
Minimum coating thickness [mm]	6
Max. residual retention force [N]	21.6
Duty cycle max. with a cycle time < 2 min [%]	25
Duty cycle max. with a cycle time < 0.5 min [%]	40
Input power [W]	13.3
Voltage [V]	24
Operating temperature min. [°C]	-25
Operating temperature max. [°C]	80
Weight [kg]	1.3

*St37-100%, St34 -88%, St 50-81%, St70-75%, GT-65%, 20MnCr5-55%, GG-35%



ANGULAR GRIP & ROTATE MODULES

OVERVIEW OF SERIES

**▶ PNEUMATIC**

Series DGK

510



Series DGP400

514

2-JAW ANGULAR ROTARY GRIPPERS

SERIES DGK

▶ PRODUCT ADVANTAGES

SOMMER
automatic **S**



“TWO in ONE”

▶ Smooth stroke configuration

You can adjust the 180° opening angle to be unique to your application using an adjusting screw

▶ 2 in 1

Gripping and swivelling in a module allows optimum utilisation of the installation space

▶ Individually adjustable

How you stay flexible: 90° or 180° swivel angle - You decide what your application requires on site

▶ THE BEST PRODUCT FOR YOUR APPLICATION



▶ Our products love the challenge!

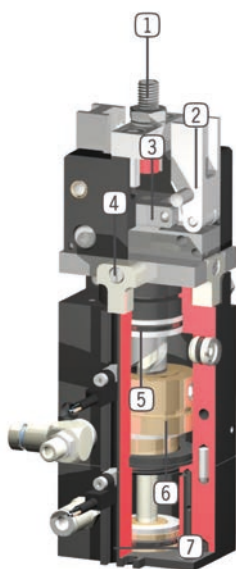
Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities:

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► BENEFITS IN DETAIL



- ① **Stroke adjustment screw**
 - Infinitely adjustable opening stroke
- ② **Gripper jaw**
 - individual gripper finger mounting
- ③ **Guided toggle lever mechanism**
 - synchronized the movement of the gripper jaws
 - mechanically self-locking
- ④ **Endposition 0°/90°/180° adjustment**
 - endstops for 0°/90°/180° included with purchase
- ⑤ **Rotating-drive mechanism**
 - robust, wear-resistant
- ⑥ **Drive**
 - two double-acting pneumatic cylinders
- ⑦ **Slot for magnetic field sensor**
 - sensing of the rotational position and gripper jaw position

► FURTHER INFORMATION IS AVAILABLE ONLINE



► Technical Information

All information just a click away at: www.zimmer-group.com

Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product.

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2-JAW ANGULAR ROTARY GRIPPERS

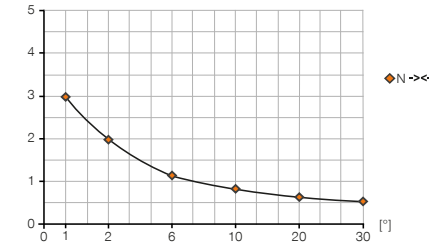
INSTALLATION SIZE DGK20

▶ PRODUCT SPECIFICATIONS



▶ Gripping moment diagram

[Nm] Gripping force as a function of opening angle.



▶ Forces and moments

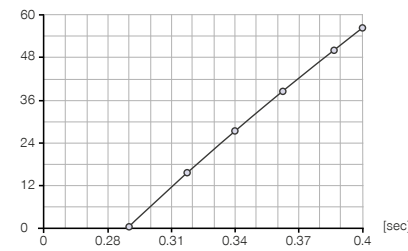
Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	0.8
Mx [Nm]	0.8
My [Nm]	1
Fa [N]	150

▶ Rotation time diagram

[kg cm²] Rotation time as a function of mass moment of inertia



▶ INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint
DRVM5X4



Stop 90° + 180°
ANS0065

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Angled Cable 5 m
MFS103KHC



Magnetic field sensor
Angled Cable 0,3 m -
Connector M8
MFS103SKHC



Magnetic field sensor
Straight Cable 5 m
MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8
MFS204SKHC

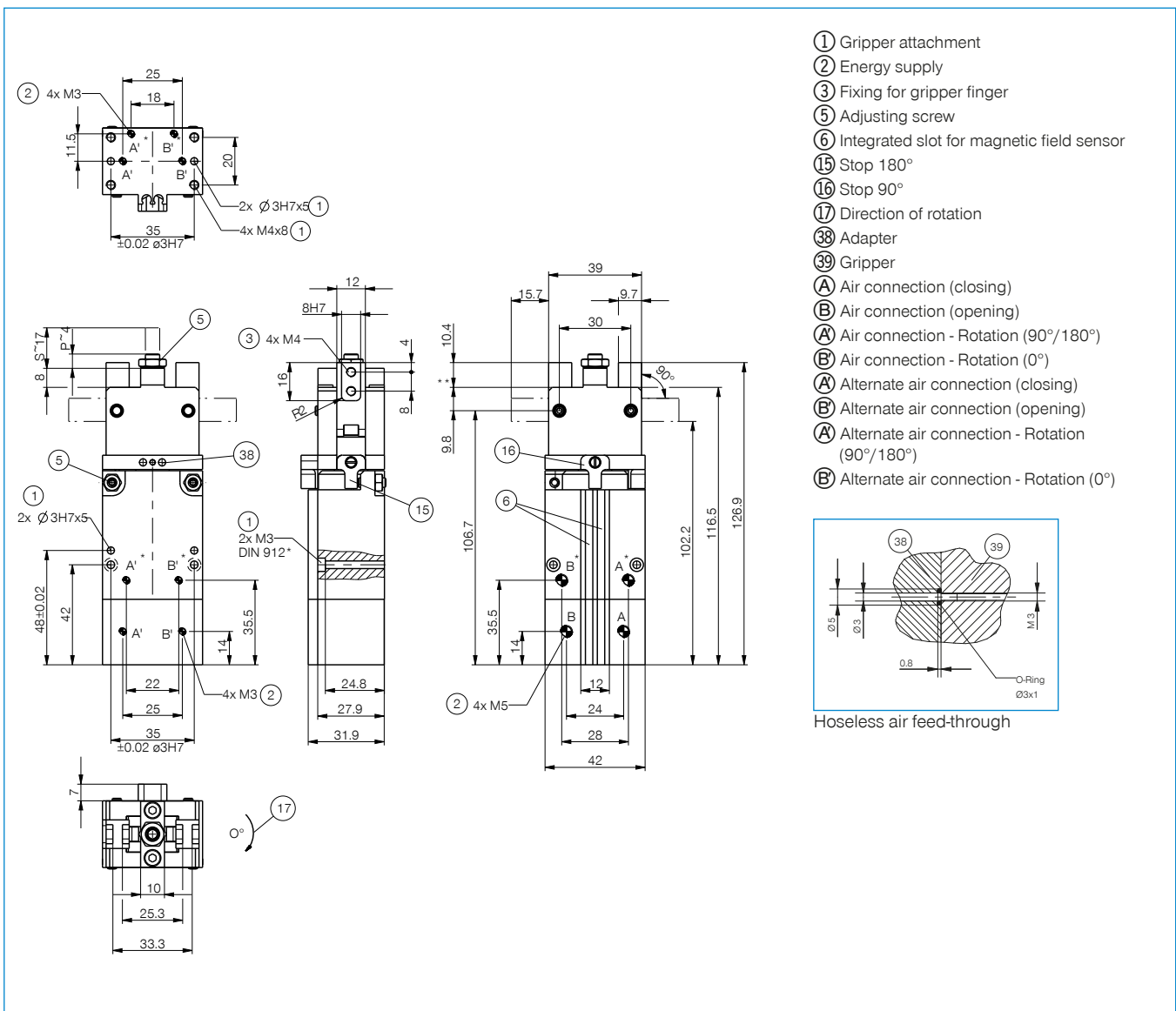


Straight Fittings - Quick
Connect Style
GVM5

► Technical Data*

Order no.	DGK20N
Stroke per jaw [°]	90
Gripping force in closing [N]	150
Gripping moment in closing [Nm]**	3
Closing time [s]	0.25
Opening time [s]	0.25
Torque [Nm]	0.5
Repetition accuracy +/- [mm]	0.1
Repetition accuracy +/- [°]	0.05
Axial bearing load [N]	960
Radial bearing load [Nm]	10
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	9
Air volume per cycle 90° [cm ³]	4.6
Air volume per cycle 180° [cm ³]	9.2
Weight [kg]	0.55

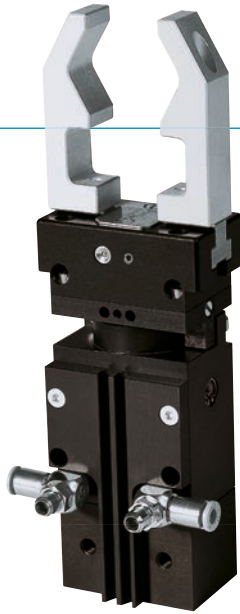
*All data measured at 6 bar



2-JAW PARALLEL ROTARY GRIPPERS

SERIES DGP400

▶ PRODUCT ADVANTAGES



“TWO in ONE”

▶ Proven T slot guide

This established and proven guiding technology stands for the highest process reliability like no other

▶ 2 in 1

Gripping and swivelling in a module allows optimum utilisation of the installation space

▶ Individually adjustable

How you stay flexible: 90° or 180° swivel angle - You decide what your application requires on site

▶ THE BEST PRODUCT FOR YOUR APPLICATION



▶ Our products love the challenge!

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HOW TO ORDER CORRECTLY

- ▶ The product order numbers are arranged according to this diagram:

Order no.	DGP404N	<input type="checkbox"/>		
For external gripping, self-locking, spring closing		C		
For internal gripping, self-locking, spring opening		O		



► BENEFITS IN DETAIL



- ① **Removable centering sleeves**
 - quick and economical positioning of the gripper fingers
- ② **Wedge hook mechanism**
 - synchronized the movement of the gripper jaws
- ③ **Precise T-Slot guide**
 - high forces and moments capacity
- ④ **Endposition 0°/90°/180° adjustment**
 - endstops for 0°/90°/180° included with purchase
- ⑤ **Rotating-drive mechanism**
 - robust, wear-resistant
- ⑥ **Drive**
 - two double-acting pneumatic cylinders
- ⑦ **Slot for magnetic field sensor**
 - sensing of the rotational position and gripper jaw position
- ⑧ **Integrated gripping force safety device**
 - optional via integrated spring (C or O models)

► FURTHER INFORMATION IS AVAILABLE ONLINE



► Technical Information

All information just a click away at: www.zimmer-group.com

Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product.

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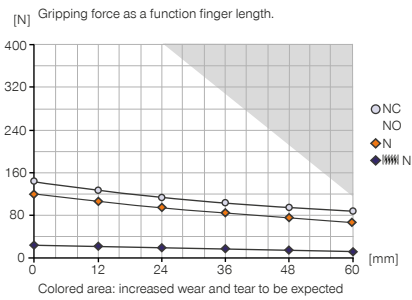
2-JAW PARALLEL ROTARY GRIPPERS

INSTALLATION SIZE DGP404

▶ PRODUCT SPECIFICATIONS

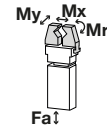


▶ Gripping moment diagram



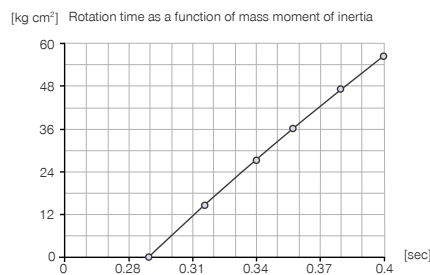
▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	8
Mx [Nm]	15
My [Nm]	10
Fa [N]	300

▶ Rotation time diagram



▶ INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint
DRVM5X4



Centering Disc
DST40400



Stop 90° + 180°
ANS0065

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Angled Cable 5 m
MFS103KHC



Magnetic field sensor
Angled Cable 0,3 m -
Connector M8
MFS103SKHC



Magnetic field sensor
Straight Cable 5 m
MFS204KHC



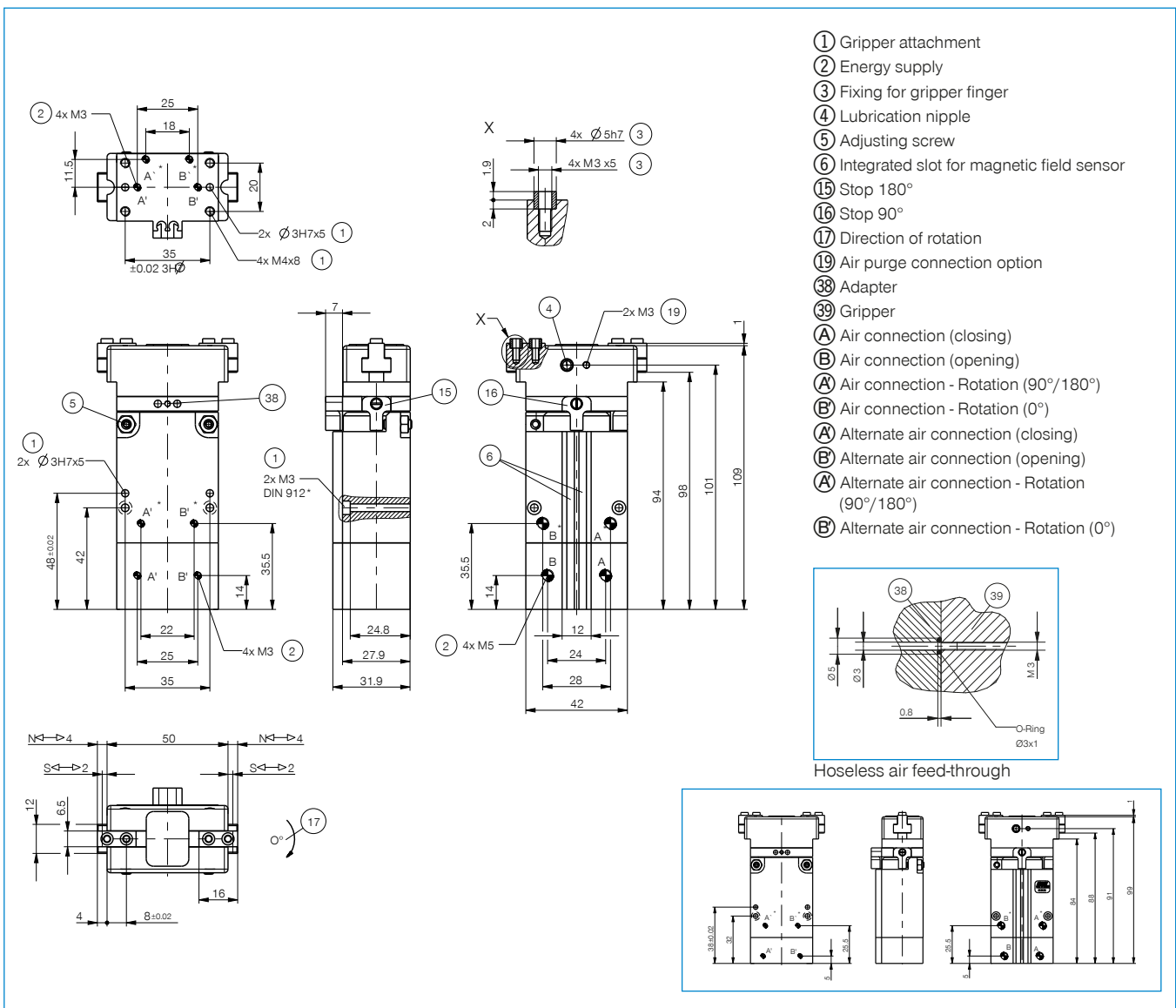
Magnetic field sensor
Straight Cable 0,3 m -
Connector M8
MFS204SKHC



Straight Fittings - Quick
Connect Style
GVM5

Order no.	► Technical Data*		
	DGP404N	DGP404NC	DGP404NO
Stroke per jaw [mm]	4	4	4
Gripping force in opening [N]	115		155
Gripping force in closing [N]	115	155	
Gripping force secured by spring min. [N]		40	40
Closing time / Opening time [s]	0.01 / 0.01	0.015 / 0.015	0.015 / 0.015
Torque [Nm]	0.5	0.5	0.5
Repetition accuracy +/- [mm]	0.05	0.05	0.05
Repetition accuracy +/- [°]	0.05	0.05	0.05
Axial bearing load [N]	960	960	960
Radial bearing load [Nm]	10	10	10
Operating pressure [bar]	3 / 8	3 / 8	3 / 8
Operating temperature [°C]	5 ... 80	5 ... 80	5 ... 80
Air volume per cycle [cm³]	3	5	5
Air volume per cycle 90° [cm³]	4.5	4.5	4.5
Air volume per cycle 180° [cm³]	9	9	9
Weight [kg]	0.44	0.48	0.48

*All data measured at 6 bar



SWIVELING AND ROTARY MODULES

THE SERIES AT A GLANCE

3

PRODUCTS

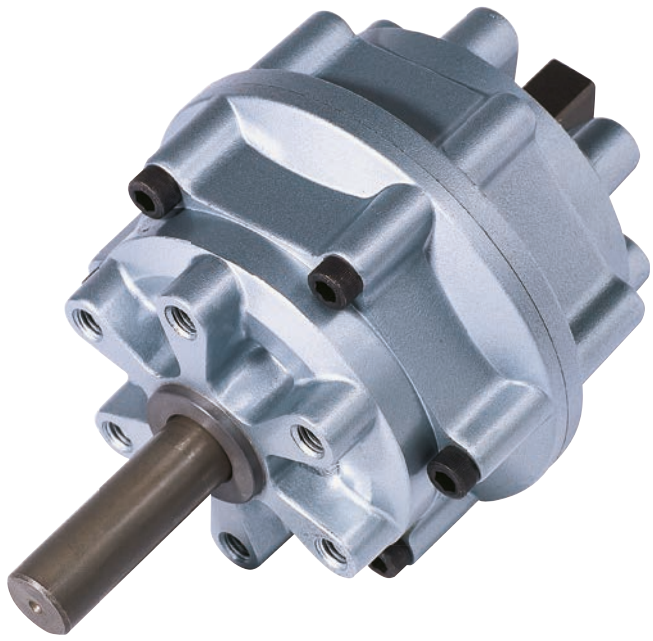
	Torque [Nm]	Swivel angle [°]	Number of installation sizes
Rotor cylinder, pneumatic Page 520			
PRN series	0,15 247	90 280	●●●●●●●●
SH series	0,59-7,2	0 360	●●
Flat swivel units, pneumatic Page 552			
MSF series	0,3-1,2	90-180	●●●
SF series	1,5 130	0 180	●●●●●●
Rotary modules, electric Page 634			
DES series	1,5 50	∞	●●
Angle pivot units, pneumatic Page 648			
SWM1000 series	10 6	90	●●●●
SW series	1,5 120	180	●●●●●●
Swivel jaws, pneumatic Page 674			
SB* series	0,1-1,6	90-180	●●●●●●
SBZ series	1,2 57	90-180	●●●●●●

*Specifications for setup in pairs

AP class	Position sensing			Positionability				Options					Safety characteristics	Maintenance cycles	Maintenance revolutions	
	Magnetic field sensor	Inductive sensor	Integrated sensing	Positionability, 2 positions	Positionability, 3 positions	Positionability, 4 positions	Positionability, freely selectable	Elastomer end position damping	PowerStop end position damping	Adjustable swivel angle	IP class	Fluid feed-through				Electrical feed-through
1		•		•							54				1.5 million	
1						•				•	54				1.5 million	
2	•			•				•	•	•	41	•			10 million	
3	•	•		•	•				•	•	64	•			10 million	
3			•				•			•	54	•	•	•		5 million
3	•			•							30				10 million	
3	•	•		•					•		64	•			10 million	
2		•		•				•		•	54				10 million	
3		•		•					•		54				10 million	

ROTARY CYLINDERS

OVERVIEW OF SERIES



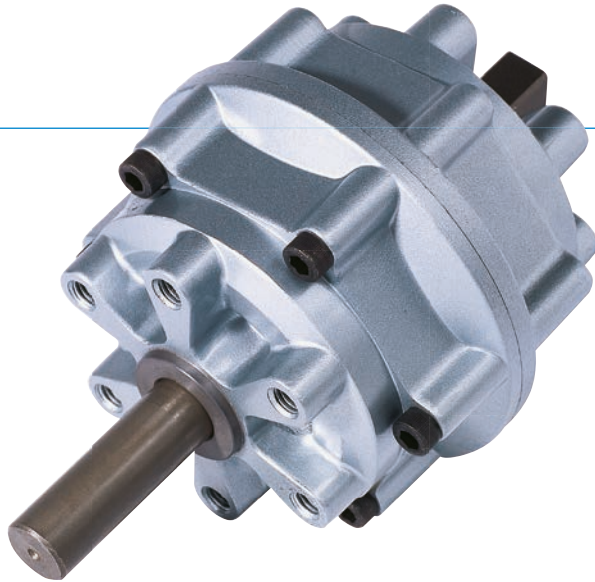
▶ PNEUMATIC

	Series PRN	522
	Series SH	544

ROTARY CYLINDERS

SERIES PRN

▶ PRODUCT ADVANTAGES



“The economical”

▶ Concentration on the essentials

The most economic type of swivelling reduces your production costs

▶ Dampened end position

Using the hydraulic brake allows you to move up to the end positions gently, increasing the process reliability and durability of your application

▶ Forged drive shaft

This shaft is not only robust, but can be individually adjusted, e.g. with supply holes through the axis

▶ THE BEST PRODUCT FOR YOUR APPLICATION



▶ Our products love the challenge!

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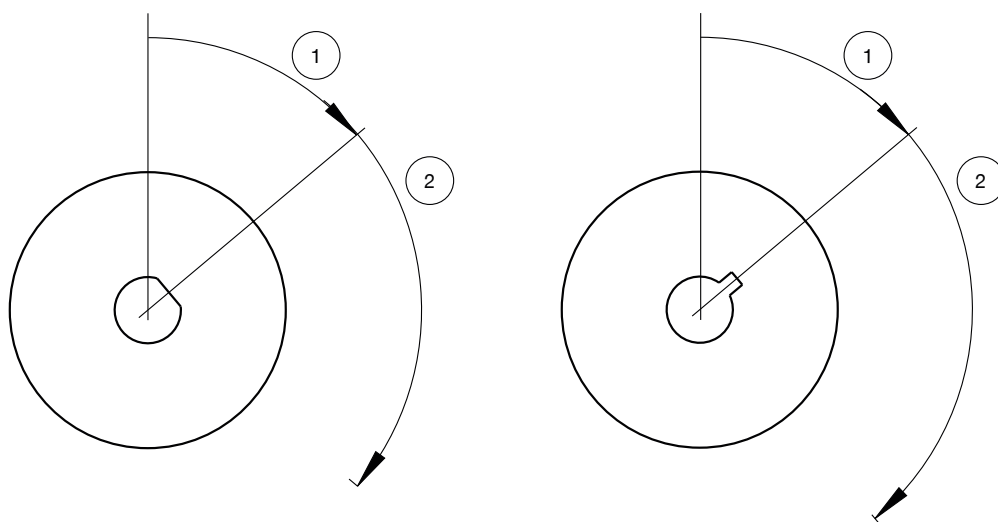
HOW TO ORDER CORRECTLY

- ▶ The product order numbers are arranged according to this diagram:

Order no.	PRN30-	<input type="checkbox"/>	-B	
Rotation angle 90°	90			
Rotation angle 100°	100			
Rotation angle 180°	180			
Swivel angle 270°	270			
Swivel angle 280°	280			



▶ STARTING ANGLE



- ① Starting angle
- ② Swivel angle

PRN1
PRN3
PRN10

PRN20
PRN30
PRN50
PRN150
PRN300
PRN800

▶ SERIES CHARACTERISTICS



Number of installation sizes	9
Swivel angle	90° - 280°
Torque	0,15 Nm - 247 Nm
Weight	0,04 kg - 12,5 kg
AP class	1



Inductive sensor



Positionability - 2 positions



IP54



1.5 million maintenance-free cycles (max.)

ROTARY CYLINDERS

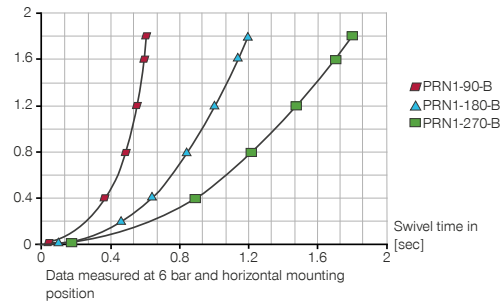
INSTALLATION SIZE PRN1

▶ PRODUCT SPECIFICATIONS



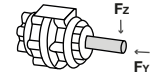
▶ Moment of inertia

[kg cm²] Shows the expected swivel time vs the calculated moment of inertia



▶ Forces and moments

Shows the maximum static shaft load.



FY [N]	3
FZ [N]	30

▶ RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style
GVM5



Flow Control Valves - with Swivel joint
DRVM5X4



Pressure Safety Valve
DSV1-8



Flange
F1-P



Angle flange
F1-LB

▶ RECOMMENDED ACCESSORY ROTATION LIMITER



Rotation limiter
DB1-B



Inductive proximity switch - Cable 5 m
NJ3-E2-02



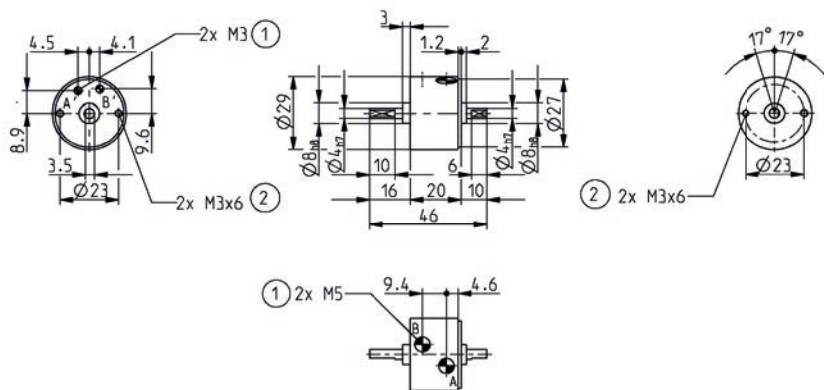
Plug-in connector customizable Straight - Connector M8
S8-G-3

► Technical Data*

Order no.	PRN1-90-B	PRN1-180-B	PRN1-270-B
Swivel angle [°]	90	180	270
Tolerance swivel angle [°]	0° / +4°	0° / +4°	0° / +4°
Starting Angle [°]	90	90	45
Torque [Nm]	0.15	0.15	0.15
Swivel time [s]	0.1	0.17	0.24
Operating pressure min. [bar]	2	2	2
Operating pressure max. [bar]	7	7	7
Operating temperature min. [°C]	-5	-5	-5
Operating temperature max. [°C]	80	80	80
Air volume per cycle [cm ³]	2.8	2.8	2.8
Weight [kg]	0.04	0.04	0.04

*All data measured at 6 bar

- ① Energy supply
- ② Fixing Rotor
- Ⓐ Air connection (0°-90°/180°/270°)
- Ⓑ Air connection (90°/180°/270°-0°)
- Ⓐ Alternate air connection 0°-90°/180°/270°
- Ⓑ Alternate air connection 90°/180°/270°-0°



ROTARY CYLINDERS

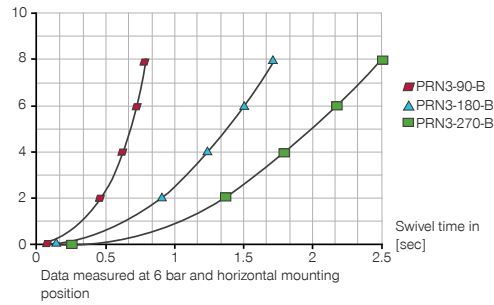
INSTALLATION SIZE PRN3

▶ PRODUCT SPECIFICATIONS



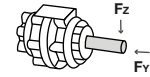
▶ Moment of inertia

[kg cm²] Shows the expected swivel time vs the calculated moment of inertia



▶ Forces and moments

Shows the maximum static shaft load.



FY [N]	4
FZ [N]	40

▶ RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style
GVM5



Flow Control Valves - with Swivel joint
DRVM5X4



Pressure Safety Valve
DSV1-8



Flange
F3-P



Angle flange
F3-LB

▶ RECOMMENDED ACCESSORY ROTATION LIMITER



Rotation limiter
DB3



Inductive proximity switch - Cable 5 m
NJ3-E2-02



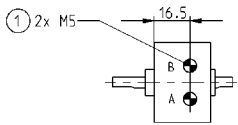
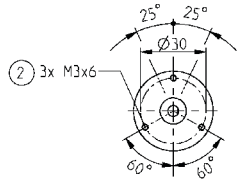
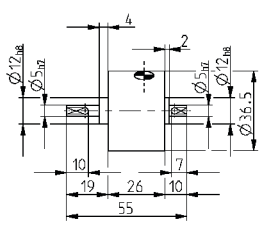
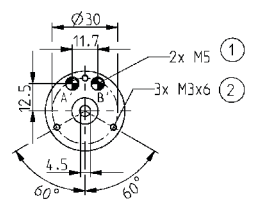
Plug-in connector customizable Straight - Connector M8
S8-G-3

► Technical Data*

Order no.	PRN3-90-B	PRN3-180-B	PRN3-270-B
Swivel angle [°]	90	180	270
Tolerance swivel angle [°]	0° / +4°	0° / +4°	0° / +4°
Starting Angle [°]	90	90	45
Torque [Nm]	0.38	0.38	0.38
Swivel time [s]	0.13	0.2	0.28
Operating pressure min. [bar]	2	2	2
Operating pressure max. [bar]	7	7	7
Operating temperature min. [°C]	-5	-5	-5
Operating temperature max. [°C]	80	80	80
Air volume per cycle [cm ³]	6.8	6.8	6.8
Weight [kg]	0.07	0.07	0.07

*All data measured at 6 bar

- ① Energy supply
- ② Fixing Rotor
- Ⓐ Air connection (0°-90°/180°/270°)
- Ⓑ Air connection (90°/180°/270°-0°)
- Ⓐ Alternate air connection 0°-90°/180°/270°
- Ⓑ Alternate air connection 90°/180°/270°-0°



ROTARY CYLINDERS

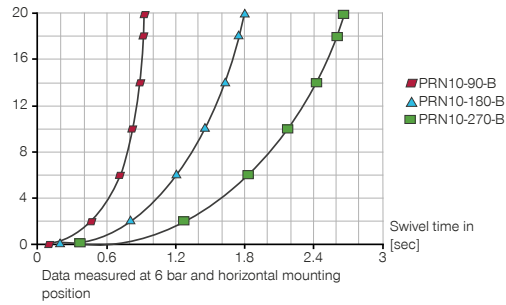
INSTALLATION SIZE PRN10

▶ PRODUCT SPECIFICATIONS



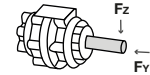
▶ Moment of inertia

[kg cm²] Shows the expected swivel time vs the calculated moment of inertia



▶ Forces and moments

Shows the maximum static shaft load.



FY [N]	4
FZ [N]	50

▶ RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style
GVM5



Flow Control Valves - with Swivel joint
DRVM5X4



Pressure Safety Valve
DSV1-8



Flange
F10-P



Angle flange
F10-LB

▶ RECOMMENDED ACCESSORY ROTATION LIMITER



Rotation limiter
DB10



Stop Stroke Adjustment Screws
AI-M8X1-38



Inductive proximity switch - Cable 5 m
NJ12-E2



Inductive proximity switch - Connector M8
NJ12-E2S



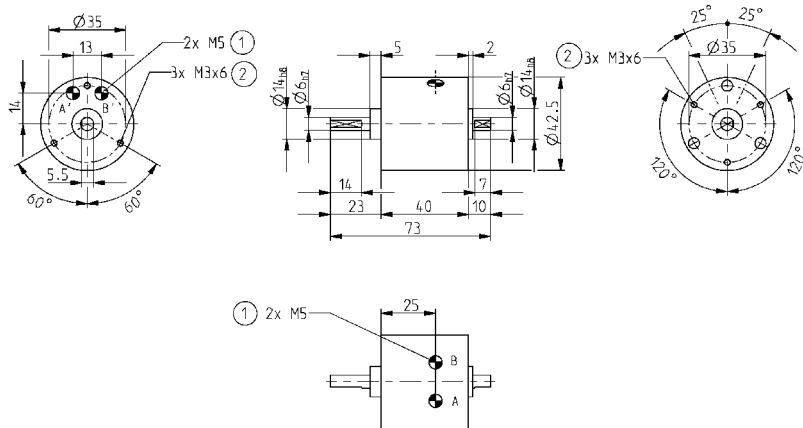
Plug-in connector Angled Cable 5m - Socket M8 (female)
KAW500

► Technical Data*

Order no.	PRN10-90-B	PRN10-180-B	PRN10-270-B
Swivel angle [°]	90	180	270
Tolerance swivel angle [°]	0° / +4°	0° / +4°	0° / +4°
Starting Angle [°]	90	90	45
Torque [Nm]	1.2	1.2	1.2
Swivel time [s]	0.13	0.2	0.28
Operating pressure min. [bar]	2	2	2
Operating pressure max. [bar]	7	7	7
Operating temperature min. [°C]	-5	-5	-5
Operating temperature max. [°C]	80	80	80
Air volume per cycle [cm ³]	19.6	19.6	19.6
Weight [kg]	0.14	0.14	0.14

*All data measured at 6 bar

- ① Energy supply
- ② Fixing Rotor
- Ⓐ Air connection (0°-90°/180°/270°)
- Ⓑ Air connection (90°/180°/270°-0°)
- Ⓐ Alternate air connection 0°-90°/180°/270°
- Ⓑ Alternate air connection 90°/180°/270°-0°



ROTARY CYLINDERS

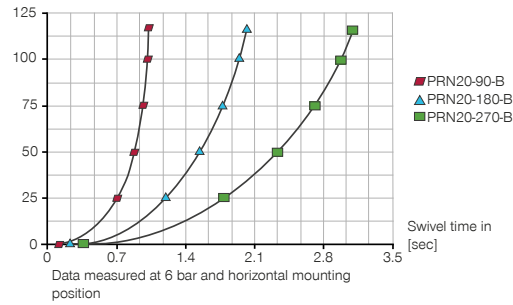
INSTALLATION SIZE PRN20

▶ PRODUCT SPECIFICATIONS



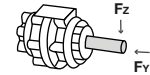
▶ Moment of inertia

[kg cm²] Shows the expected swivel time vs the calculated moment of inertia



▶ Forces and moments

Shows the maximum static shaft load.



FY [N]	25
FZ [N]	300

▶ RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style
GVM5



Flow Control Valves - with Swivel joint
DRVM5X4



Pressure Safety Valve
DSV1-8



Flange
F20-P



Angle flange
F20-LB

▶ RECOMMENDED ACCESSORY ROTATION LIMITER



Rotation limiter
DB20



Stop Stroke Adjustment Screws
AI-M8X1-38



Inductive proximity switch - Cable 5 m
NJ12-E2



Inductive proximity switch - Connector M8
NJ12-E2S



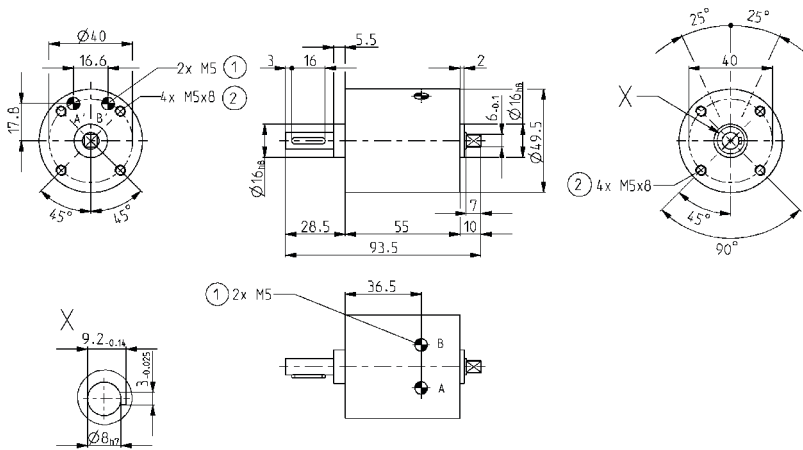
Plug-in connector Angled Cable 5m - Socket M8 (female)
KAW500

► Technical Data*

Order no.	PRN20-90-B	PRN20-180-B	PRN20-270-B
Swivel angle [°]	90	180	270
Tolerance swivel angle [°]	0° / +4°	0° / +4°	0° / +4°
Starting Angle [°]	90	90	45
Torque [Nm]	2.1	2.1	2.1
Swivel time [s]	0.14	0.25	0.34
Operating pressure min. [bar]	2	2	2
Operating pressure max. [bar]	10	10	10
Operating temperature min. [°C]	-5	-5	-5
Operating temperature max. [°C]	80	80	80
Air volume per cycle [cm ³]	34	34	34
Weight [kg]	0.25	0.25	0.25

*All data measured at 6 bar

- ① Energy supply
- ② Fixing Rotor
- Ⓐ Air connection (0°-90°/180°/270°)
- Ⓑ Air connection (90°/180°/270°-0°)
- Ⓐ Alternate air connection 0°-90°/180°/270°
- Ⓑ Alternate air connection 90°/180°/270°-0°



ROTARY CYLINDERS

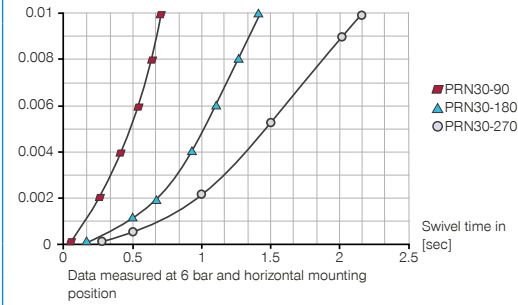
INSTALLATION SIZE PRN30

▶ PRODUCT SPECIFICATIONS



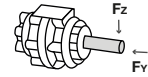
▶ Moment of inertia

[kg m²] Shows the expected swivel time vs the calculated moment of inertia



▶ Forces and moments

Shows the maximum static shaft load.



FY [N]	30
FZ [N]	400

▶ RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style
GV1-8X6



Flow Control Valves - with Swivel joint
DRV1-8X6



Pressure Safety Valve
DSV1-8



Flange
F30-P



Angle flange
F30-LB

▶ RECOMMENDED ACCESSORY ROTATION LIMITER



Rotation limiter
DB30



Stop Stroke Adjustment Screws
AI-M8X1-38



Inductive proximity switch - Cable 5 m
NJ12-E2



Inductive proximity switch - Connector M8
NJ12-E2S

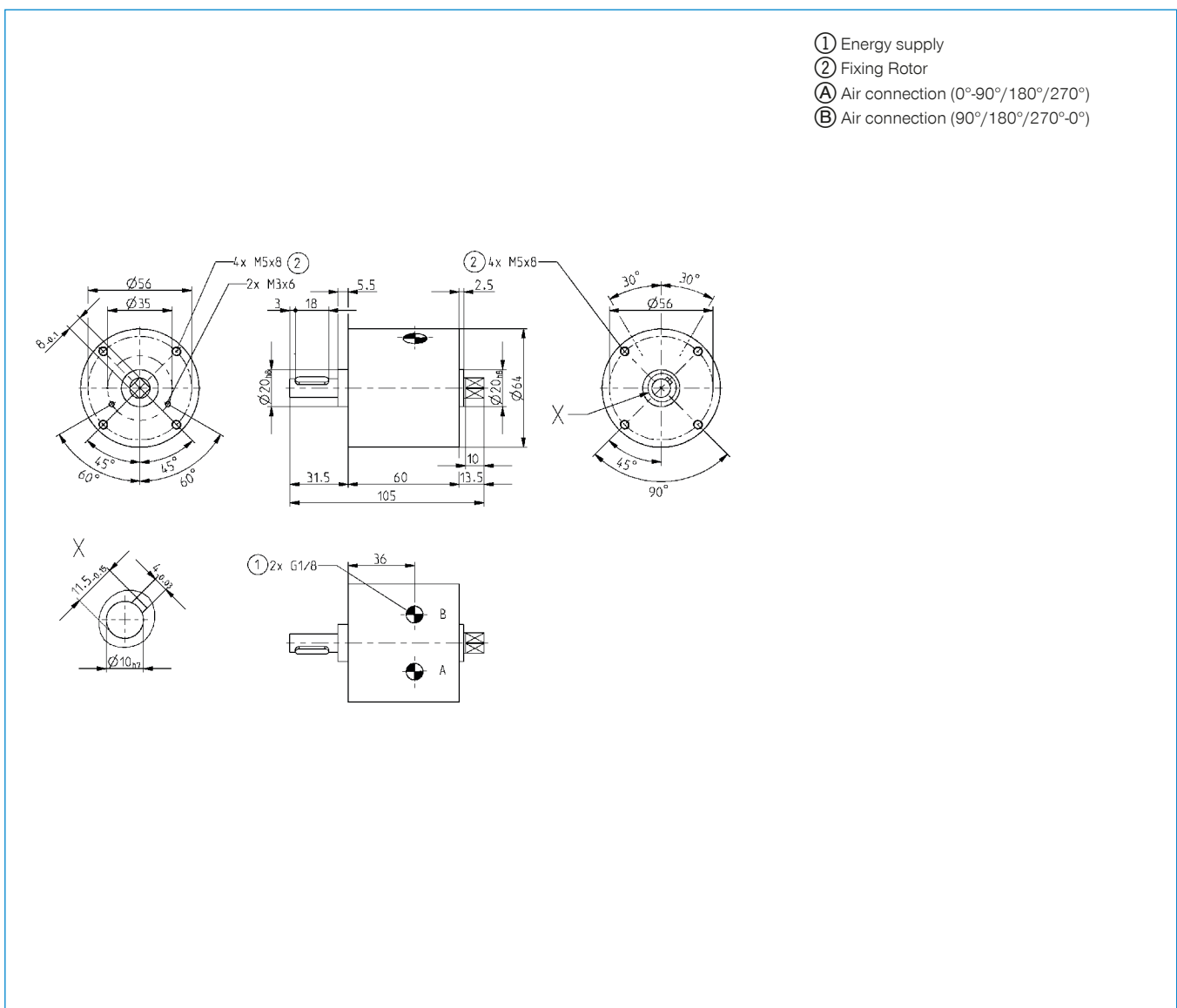


Plug-in connector Angled Cable 5m - Socket M8 (female)
KAW500

► Technical Data*

Order no.	PRN30-90	PRN30-180	PRN30-270
Swivel angle [°]	90	180	270
Tolerance swivel angle [°]	0° / +3°	0° / +3°	0° / +3°
Starting Angle [°]	45	45	45
Torque [Nm]	4.1	4.1	4.1
Swivel time [s]	0.17	0.33	0.5
Operating pressure min. [bar]	2	2	2
Operating pressure max. [bar]	10	10	10
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	+60	+60	+60
Air volume per cycle [cm ³]	74	74	86
Weight [kg]	0.5	0.5	0.5

*All data measured at 6 bar



ROTARY CYLINDERS

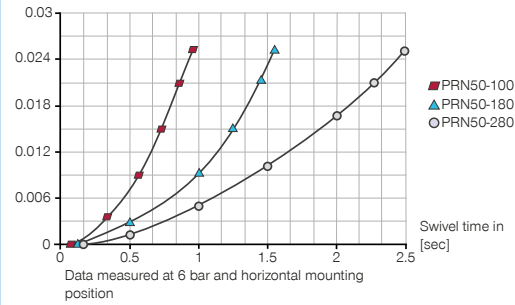
INSTALLATION SIZE PRN50

▶ PRODUCT SPECIFICATIONS



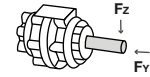
▶ Moment of inertia

[kg m²] Shows the expected swivel time vs the calculated moment of inertia



▶ Forces and moments

Shows the maximum static shaft load.



FY [N]	44
FZ [N]	580

▶ RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style
GV1-8X6



Flow Control Valves - with Swivel joint
DRV1-8X6



Pressure Safety Valve
DSV1-8



Flange
F50-P



Angle flange
F50-LB

▶ RECOMMENDED ACCESSORY ROTATION LIMITER



Rotation limiter
DB50



Stop Stroke Adjustment Screws
AI-M8X1-38



Inductive proximity switch - Cable 5 m
NJ12-E2



Inductive proximity switch - Connector M8
NJ12-E2S



Plug-in connector Angled Cable 5m - Socket M8 (female)
KAW500

▶ RECOMMENDED ACCESSORY OIL DAMPER



Oil damper see page 542
CRN50



Stop Lever 90° / Starting Angle 45°
A50-90



Stop Lever 180° / Starting Angle 45°
A50-180-B

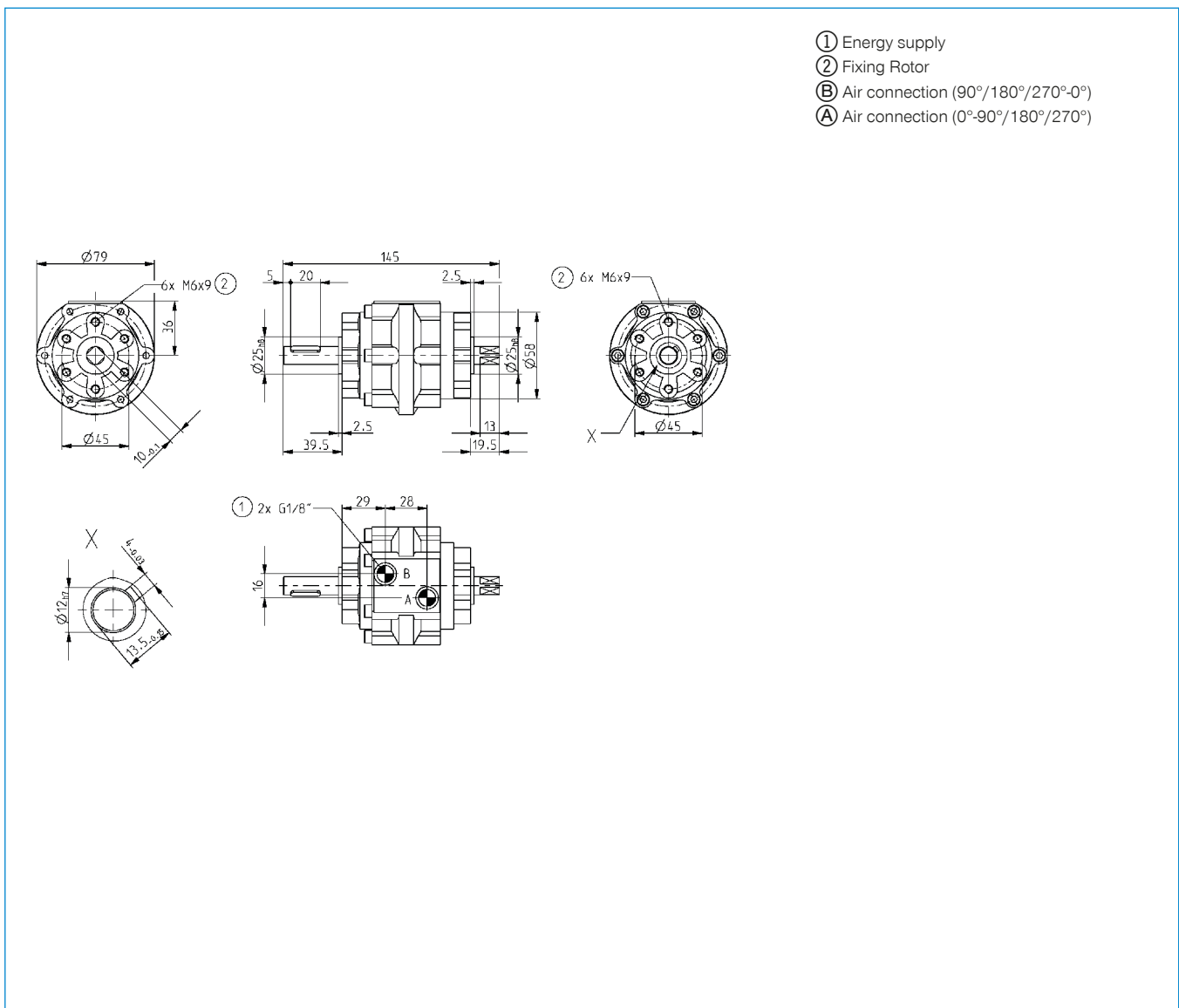


Stop Lever 270° / Starting Angle 45°
A50-270

► Technical Data*

Order no.	PRN50-90	PRN50-180-B	PRN50-270
Swivel angle [°]	90	180	270
Tolerance swivel angle [°]	0° / +3°	0° / +3°	0° / +3°
Starting Angle [°]	45	45	45
Torque [Nm]	12.8	5.9	5.9
Swivel time [s]	0.17	0.33	0.5
Operating pressure min. [bar]	2	2	2
Operating pressure max. [bar]	10	10	10
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	+60	+60	+60
Air volume per cycle [cm ³]	86	102	124
Weight [kg]	0.8	0.75	0.75

*All data measured at 6 bar



ROTARY CYLINDERS

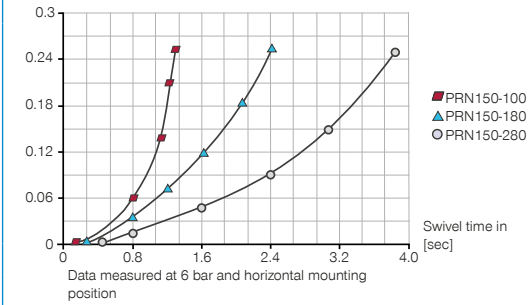
INSTALLATION SIZE PRN150

▶ PRODUCT SPECIFICATIONS



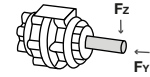
▶ Moment of inertia

[kg m²] Shows the expected swivel time vs the calculated moment of inertia



▶ Forces and moments

Shows the maximum static shaft load.



FY [N]	88
FZ [N]	1170

▶ RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style
GV1-4X8



Flow Control Valves - with Swivel joint
DRV1-4X8



Pressure Safety Valve
DSV1-8



Flange
F150-P



Angle flange
F150-LB

▶ RECOMMENDED ACCESSORY ROTATION LIMITER



Rotation limiter
DB150



Stop Stroke Adjustment Screws
AI-M10X1-70



Inductive proximity switch - Cable 5 m
NJ12-E2



Inductive proximity switch - Connector M8
NJ12-E2S



Plug-in connector Angled Cable 5m - Socket M8 (female)
KAW500

▶ RECOMMENDED ACCESSORY OIL DAMPER



Oil damper see page 542
CRN150



Stop Lever 90° / Starting Angle 45°
A150-90



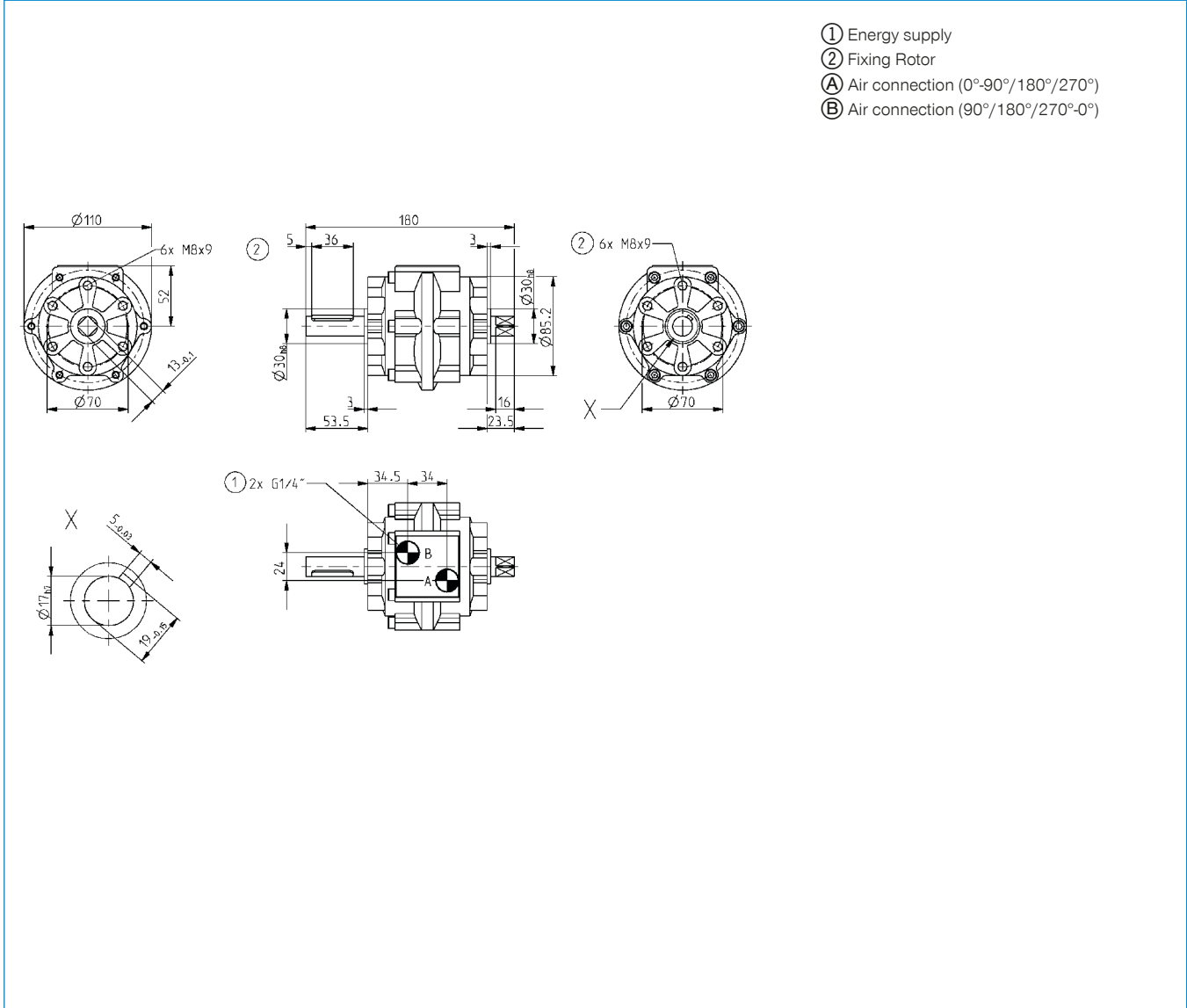
Stop Lever 180° / Starting Angle 45°
A150-180-B



Stop Lever 270° / Starting Angle 45°
A150-270

Order no.	► Technical Data*		
	PRN150-90	PRN150-180-B	PRN150-270
Swivel angle [°]	90	180	270
Tolerance swivel angle [°]	0° / +3°	0° / +3°	0° / +3°
Starting Angle [°]	45	45	45
Torque [Nm]	41.5	18	18
Swivel time [s]	0.25	0.38	0.63
Operating pressure min. [bar]	2	2	2
Operating pressure max. [bar]	10	10	10
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	+60	+60	+60
Air volume per cycle [cm ³]	246	292	370
Weight [kg]	1.9	1.9	1.6

*All data measured at 6 bar



ROTARY CYLINDERS

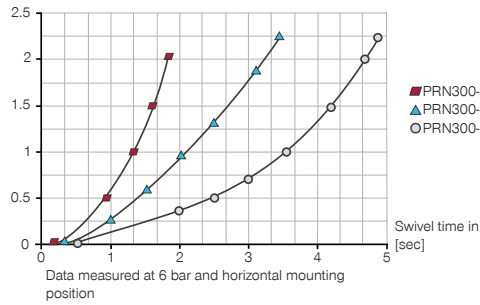
INSTALLATION SIZE PRN300

▶ PRODUCT SPECIFICATIONS



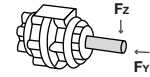
▶ Moment of inertia

[kg m²] Shows the expected swivel time vs the calculated moment of inertia



▶ Forces and moments

Shows the maximum static shaft load.



FY [N]	145
FZ [N]	1950

▶ RECOMMENDED ACCESSORIES



Straight Fittings - Barb Style Connection
GV3-8X13ID



Flow Control Valves - in Line
DRV1-4I



Pressure Safety Valve
DSV1-8



Angle flange
F300-LB

▶ RECOMMENDED ACCESSORY ROTATION LIMITER



Rotation limiter
DB300



Stop Stroke Adjustment Screws
AI-M10X1-70



Inductive proximity switch - Cable 5 m
NJ12-E2



Inductive proximity switch - Connector M8
NJ12-E2S



Plug-in connector Angled Cable 5m - Socket M8 (female)
KAW500

▶ RECOMMENDED ACCESSORY OIL DAMPER



Oil damper see page 542
CRN300



Stop Lever 90° / Starting Angle 45°
A300-90



Stop Lever 180° / Starting Angle 45°
A300-180-B

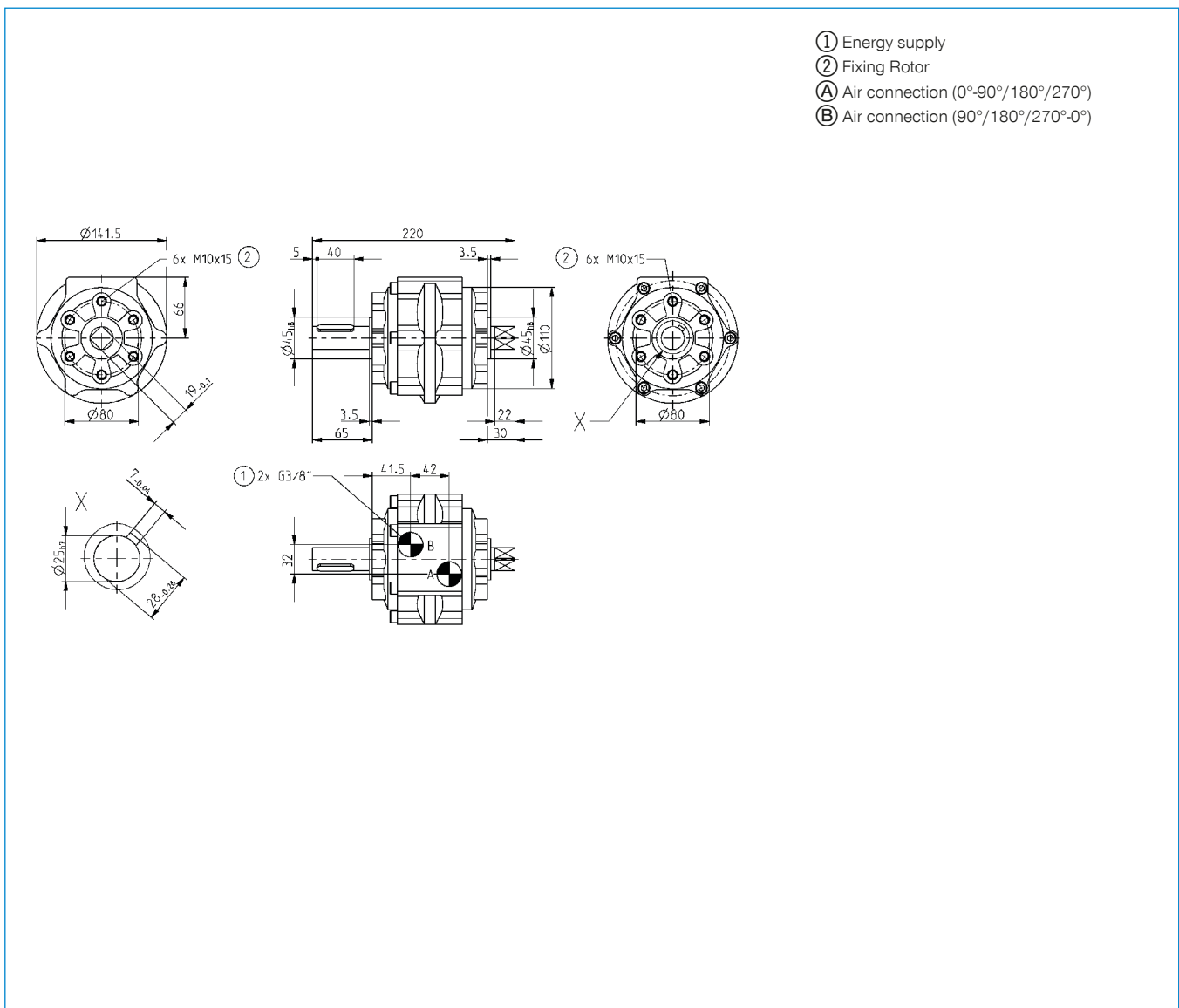


Stop Lever 270° / Starting Angle 45°
A300-270

► Technical Data*

Order no.	PRN300-90	PRN300-180-B	PRN300-270
Swivel angle [°]	90	180	270
Tolerance swivel angle [°]	0° / +3°	0° / +3°	0° / +3°
Starting Angle [°]	45	45	45
Torque [Nm]	83	34.5	34.5
Swivel time [s]	0.33	0.5	0.71
Operating pressure min. [bar]	2	2	2
Operating pressure max. [bar]	10	10	10
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	+60	+60	+60
Air volume per cycle [cm ³]	542	566	730
Weight [kg]	4.1	3.7	3.6

*All data measured at 6 bar



ROTARY CYLINDERS

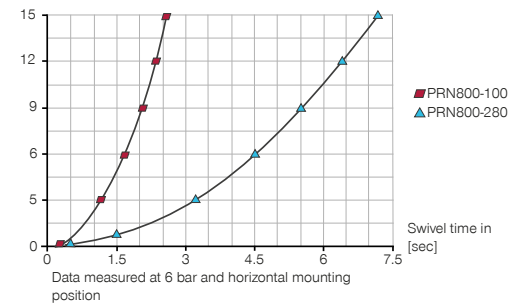
INSTALLATION SIZE PRN800

▶ PRODUCT SPECIFICATIONS



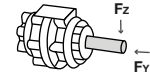
▶ Moment of inertia

[kg m²] Shows the expected swivel time vs the calculated moment of inertia



▶ Forces and moments

Shows the maximum static shaft load.



FY [N]	490
FZ [N]	4900

▶ RECOMMENDED ACCESSORIES



Straight Fittings - Barb Style Connection
GV1-2X13ID



Flow Control Valves - in Line
DRV1-4I



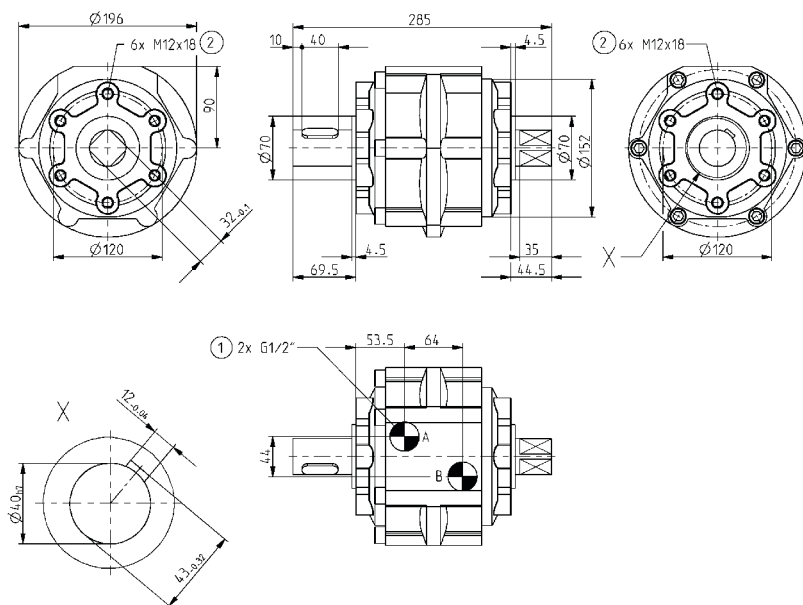
Pressure Safety Valve
DSV1-8

► Technical Data*

Order no.	PRN800-90	PRN800-270
Swivel angle [°]	90	270
Tolerance swivel angle [°]	0° / +3°	0° / +3°
Starting Angle [°]	45	45
Torque [Nm]	247	123
Swivel time [s]	0.45	1
Operating pressure min. [bar]	2	2
Operating pressure max. [bar]	10	10
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+60	+60
Air volume per cycle [cm ³]	1548	2092
Weight [kg]	12.5	11

*All data measured at 6 bar

- ① Energy supply
- ② Fixing Rotor
- Ⓐ Air connection (0°-90°/180°/270°)
- Ⓑ Air connection (90°/180°/270°-0°)



ROTARY CYLINDERS

ACCESSORIES SERIES PRN

▶ OIL DAMPER FOR PNEUMATIC ROTOR

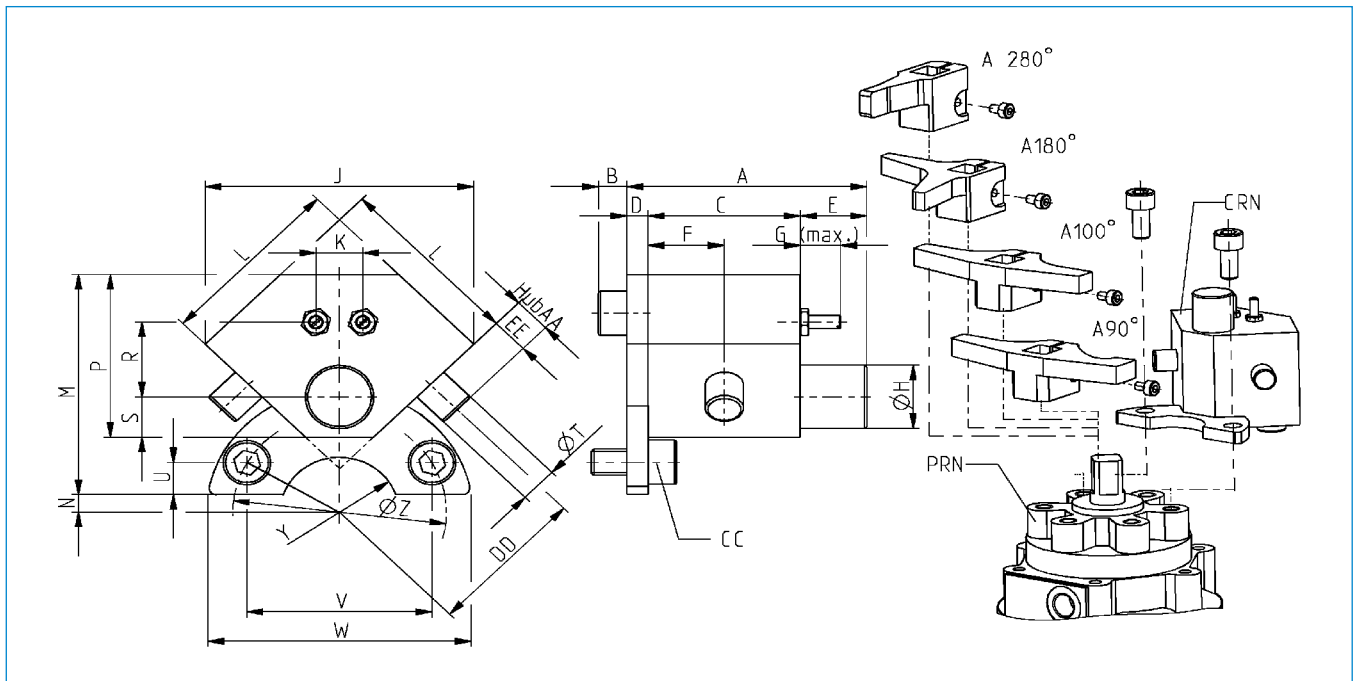


3

Series PRN / Rotary Cylinders / pneumatic / Swivel- and Rotary Modules

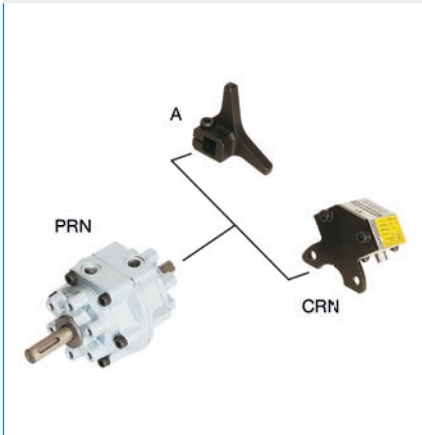
▶ Technical Data

Order no.	CRN50	CRN150	CRN300
suitable for	PRN50	PRN150	PRN300
Brake angle [°]	11	12	14
Energy absorption per stroke max. [Nm]	3	10	20
Energy absorption per stroke max. [Nm/h]	12000	43200	84000
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	50	50	50
Weight [g]	240	420	780



Order no.	A	B	C	D	E	F	G	H	J	K	L	M	N	P	R	S	T	U	V	W	Y	Z	AA	CC	DD	EE
CRN50	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
CRN150	50.6	6.0	3.2	4.5	14	16	8.5	Ø14,4	56.6	9.9	40	50	4.0	37	17.0	9.2	Ø8	7.2	39.0	56	R12,5	Ø45	6.5	M6x1x12	34	8
CRN300	62.5	7.2	4.2	4.5	16	21	12.0	Ø22,5	91.9	12.7	65	87	8.0	61	33.2	14.1	Ø12	12.0	69.2	95	R22,5	Ø80	15.0	M10x1,5x20	62	18

▶ STOP LEVER FOR OIL DAMPER



▶ STOP LEVER PRN50

Order no.	A50-90	A50-180-B	A50-270
Swivel angle [°]	90	180	270

▶ STOP LEVER PRN150

Order no.	A150-90	A150-180-B	A150-270
Swivel angle [°]	90	180	270

▶ STOP LEVER PRN300

Order no.	A300-90	A300-180-B	A300-270
Swivel angle [°]	90	180	270

ROTARY CYLINDERS

SERIES SH

▶ PRODUCT ADVANTAGES



SOMMER
automatic **S**

“The flexible”

▶ Movable to four positions

The two separately or jointly controlled rotors provide you with the greatest flexibility in positioning your workpieces

▶ High torque rating

The optimal ratio of installation space and torque reduces interference contours and creates precious space in your application

▶ 360° swivel angle

Do you want your application to be flexible and individualised? The infinitely variable 360° adjustable swivel angle lets you!

▶ THE BEST PRODUCT FOR YOUR APPLICATION



▶ Our products love the challenge!

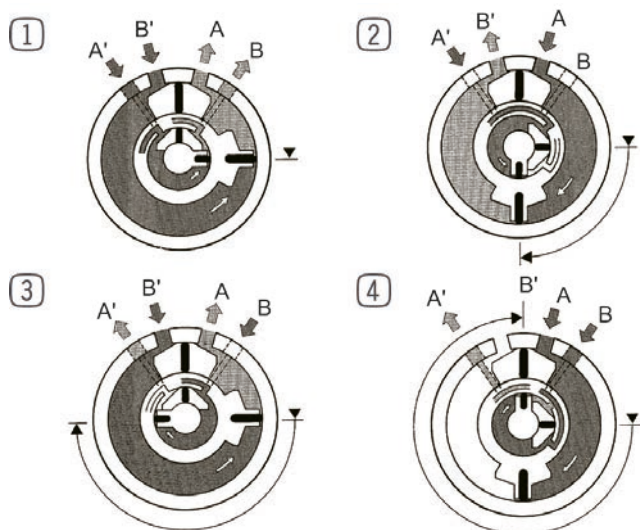
Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities:

Find the best product for your specific use:

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► BENEFITS IN DETAIL



- ① **0-position**
- High-pressure air in 1B and 2B: Internal- and external blades go to the 0-position
- ② **First 90°-intermediate adjustment**
- High-pressure air A and A': The external blade swivel up to the external limit stop (Stopper) at 90 °.
- ③ **Second 90°-intermediate setting**
- High-pressure air B and B': The external blade swivels with the internal 90° limit stop to the 0-position. The internal blade swivel 180° set opposite each other.
- ④ **Third 90°-intermediate adjustment**
- High-pressure air A and B: The external blade swivels with the internal blade in the movement direction at 90°.

► SERIES CHARACTERISTICS



Number of installation sizes	2
Swivel angle	360°
Torque	0,59 Nm - 7,2 Nm
Weight	0,52 kg - 1,13 kg
AP class	1



Positionability - 4 positions



Adjustable swivel angle



IP54



1.5 million maintenance-free cycles (max.)

ROTARY CYLINDERS

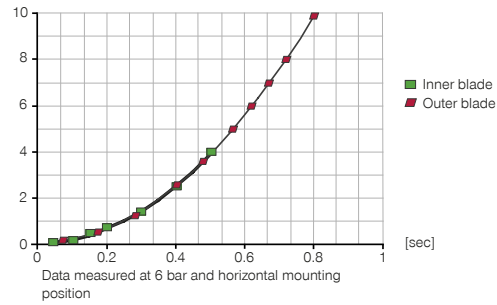
INSTALLATION SIZE SH-5

▶ PRODUCT SPECIFICATIONS



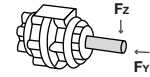
▶ Moment of inertia

[kg cm²] Shows the expected swivel time vs the calculated moment of inertia



▶ Forces and moments

Shows the maximum static shaft load.



FY [N]	30
FZ [N]	60

▶ RECOMMENDED ACCESSORIES



Straight Fittings - Quick Connect Style
GVM5

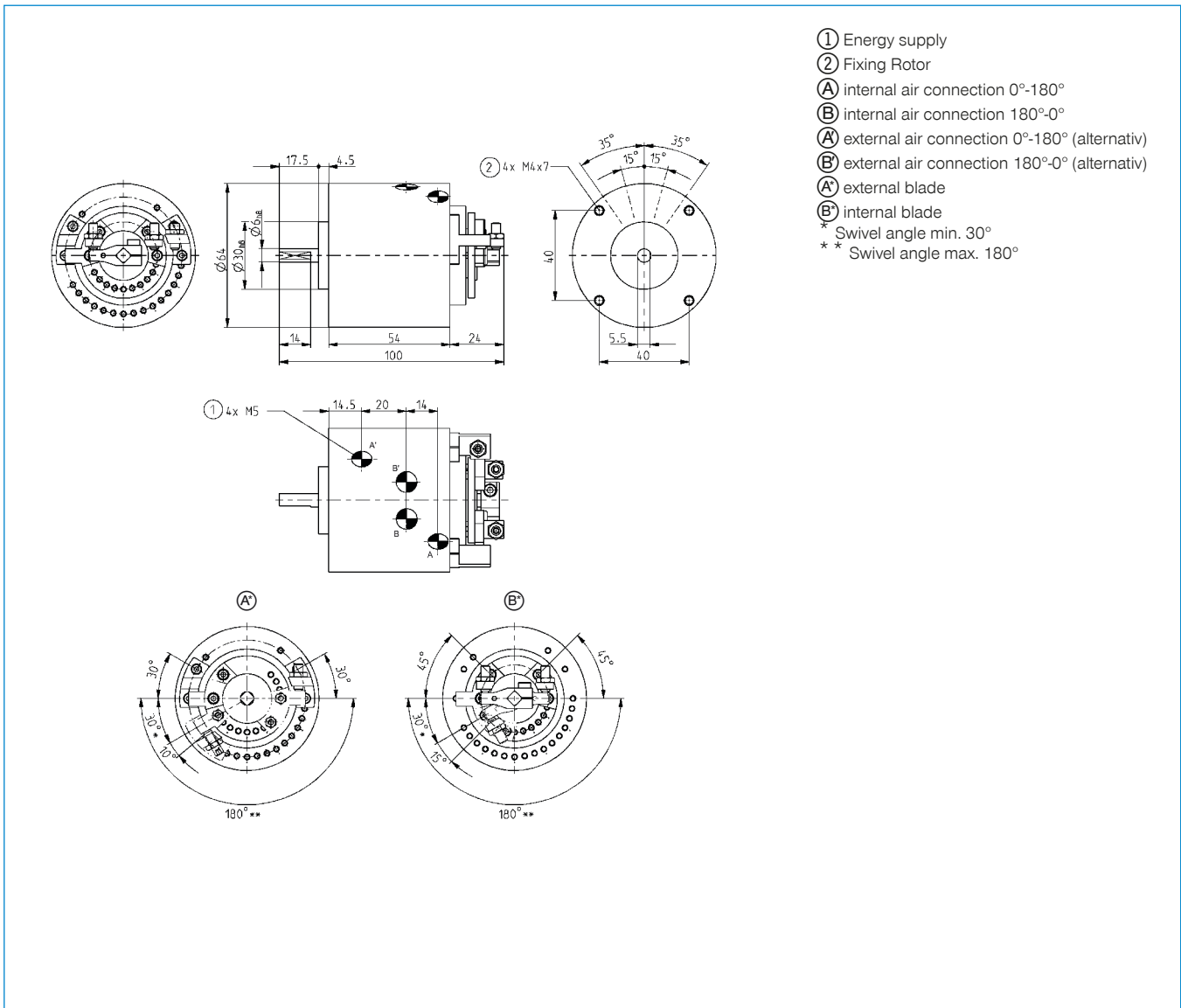


Flow Control Valves - with Swivel joint
DRVM5X4

Order no.	SH-5
Swivel angle [°]	360
Torque outer blade [Nm]	2.73
Torque inner blade [Nm]	0.59
Swivel time outer blade [s]	0.8
Swivel time inner blade [s]	0.5
Repetition accuracy +/- [°]	3
Operating pressure min. [bar]	3
Operating pressure max. [bar]	7
Air volume per cycle outer blade [cm³]	14
Air volume per cycle inner blade [cm³]	56
Weight [kg]	0.52

* All data measured at 6 bar

► Technical Data*



ROTARY CYLINDERS

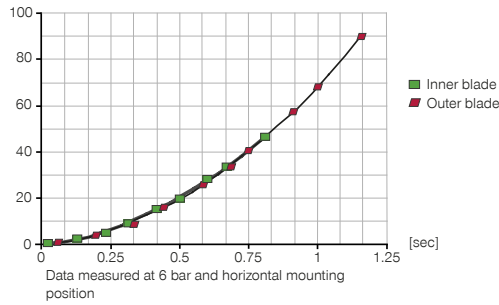
INSTALLATION SIZE SH-20

▶ PRODUCT SPECIFICATIONS



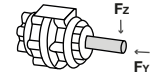
▶ Moment of inertia

[kg cm²] Shows the expected swivel time vs the calculated moment of inertia



▶ Forces and moments

Shows the maximum static shaft load.



FY [N]	125
FZ [N]	255

▶ RECOMMENDED ACCESSORIES



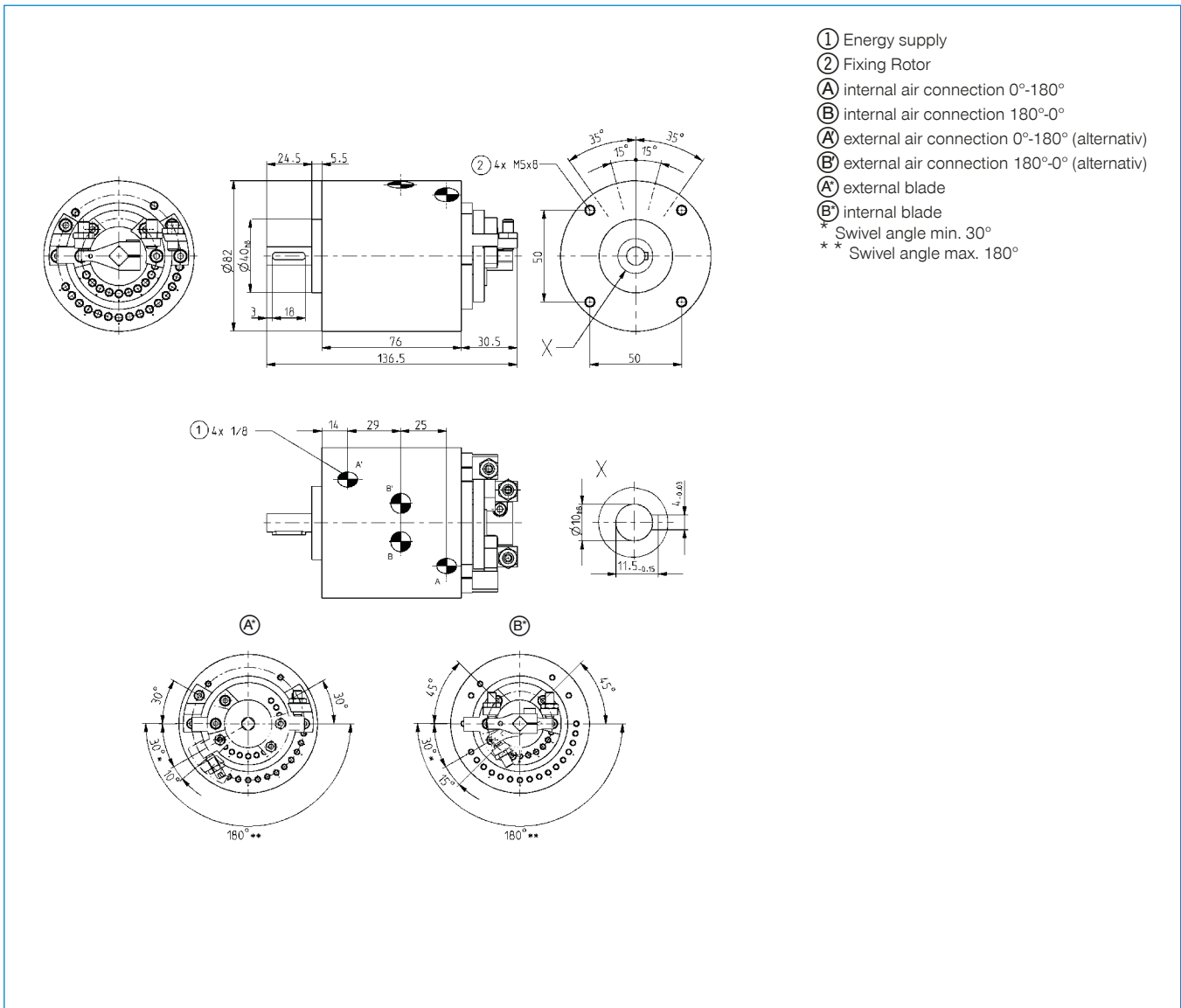
Straight Fittings - Quick Connect Style
GV1-8X6



Flow Control Valves - with Swivel joint
DRV1-8X6

Order no.	SH-20
Swivel angle [°]	360
Torque outer blade [Nm]	7.2
Torque inner blade [Nm]	2.35
Swivel time outer blade [s]	1.1
Swivel time inner blade [s]	0.8
Repetition accuracy +/- [°]	3
Operating pressure min. [bar]	3
Operating pressure max. [bar]	7
Air volume per cycle outer blade [cm³]	72
Air volume per cycle inner blade [cm³]	23
Weight [kg]	1.13

* All data measured at 6 bar



FLAT SWIVEL UNITS

OVERVIEW OF SERIES

**▶ PNEUMATIC**

Series MSF

552



Series SF-C

560

FLAT SWIVEL UNITS

SERIES MSF

▶ PRODUCT ADVANTAGES



“The unique”

▶ Decide for yourself!

Flange connection or journal shaft, with or without shock absorbers: The multitude of variants ensure you always find what you need

▶ Flat structure

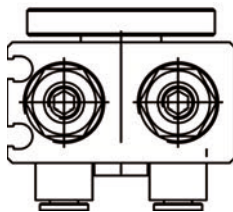
Thanks to the reverse double piston drive, the unit can work in operations requiring flat conditions. This is how you can build your application to save more space

▶ Infinitely adjustable swivel angle

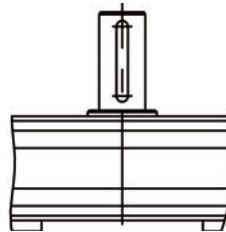
Become flexible and unique with the completely adjustable swivel angle that also reduces set up times

▶ VERSIONS

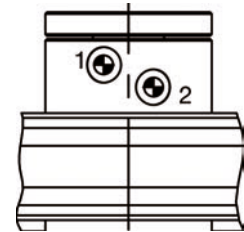
-F001



-F002



-D2



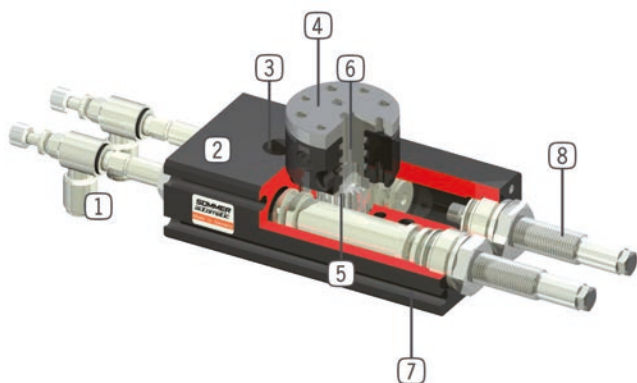
HOW TO ORDER CORRECTLY

- ▶ The product order numbers are arranged according to this diagram:

Order no.	MSF40	<input type="checkbox"/>	<input type="checkbox"/>
Without shock absorber		N	
With shock absorber		S	
Tool holder via flange			-F001
Tool holder via shaft extension			-F002
Tool holder via flange with integrated 2-way rotary distributor			-D2

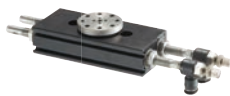


► BENEFITS IN DETAIL



- ① **Air flow control valve**
 - for speed regulation
 - included in scope of delivery
- ② **Robust, lightweight housing**
 - hard coated aluminium alloy
- ③ **Mounting and positioning**
 - mounting possible from several sides for versatile positioning
- ④ **Tool intake**
 - with shaft extension or flange available
- ⑤ **Force transfer**
 - rack and pinion
- ⑥ **Up to 2 way integrated air feed-through**
 - for hoseless air transfer
 - hose package does not have to be pivoted
- ⑦ **Sensing slot**
 - mounting and positioning of magnetic field sensors
- ⑧ **Integrated and patented hydraulic shock absorbers**
 - adjustable end position damping

► SERIES CHARACTERISTICS



Number of installation sizes	3
Swivel angle	90° - 180°
Torque	0,3 Nm - 1,2 Nm
Weight	0,17 kg - 0,46 kg
AP class	2



Elastomer end position damping



Powerstop end position damping



fluid feed-through



Magnetic field sensor



Positionability - 2 positions



Adjustable swivel angle



IP41



10 million maintenance-free cycles (max.)

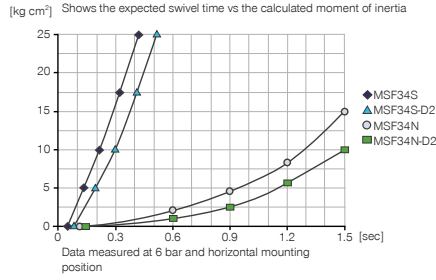
FLAT SWIVEL UNITS

INSTALLATION SIZE MSF34

▶ PRODUCT SPECIFICATIONS



▶ Moment of inertia



▶ INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint
DRVM3X4



Centering Disc
BDST40800

▶ RECOMMENDED ACCESSORIES



Straight Fittings - Barb Style Connection
GVM3



Magnetic field sensor Angled Cable 0,3 m - Connector M8
MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8
MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8
MFSP2SKHC



Plug-in connector Straight Cable 5m - Socket M8 (female)
KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)
KAW500



Plug-in connector customizable Straight - Connector M8
S8-G-3



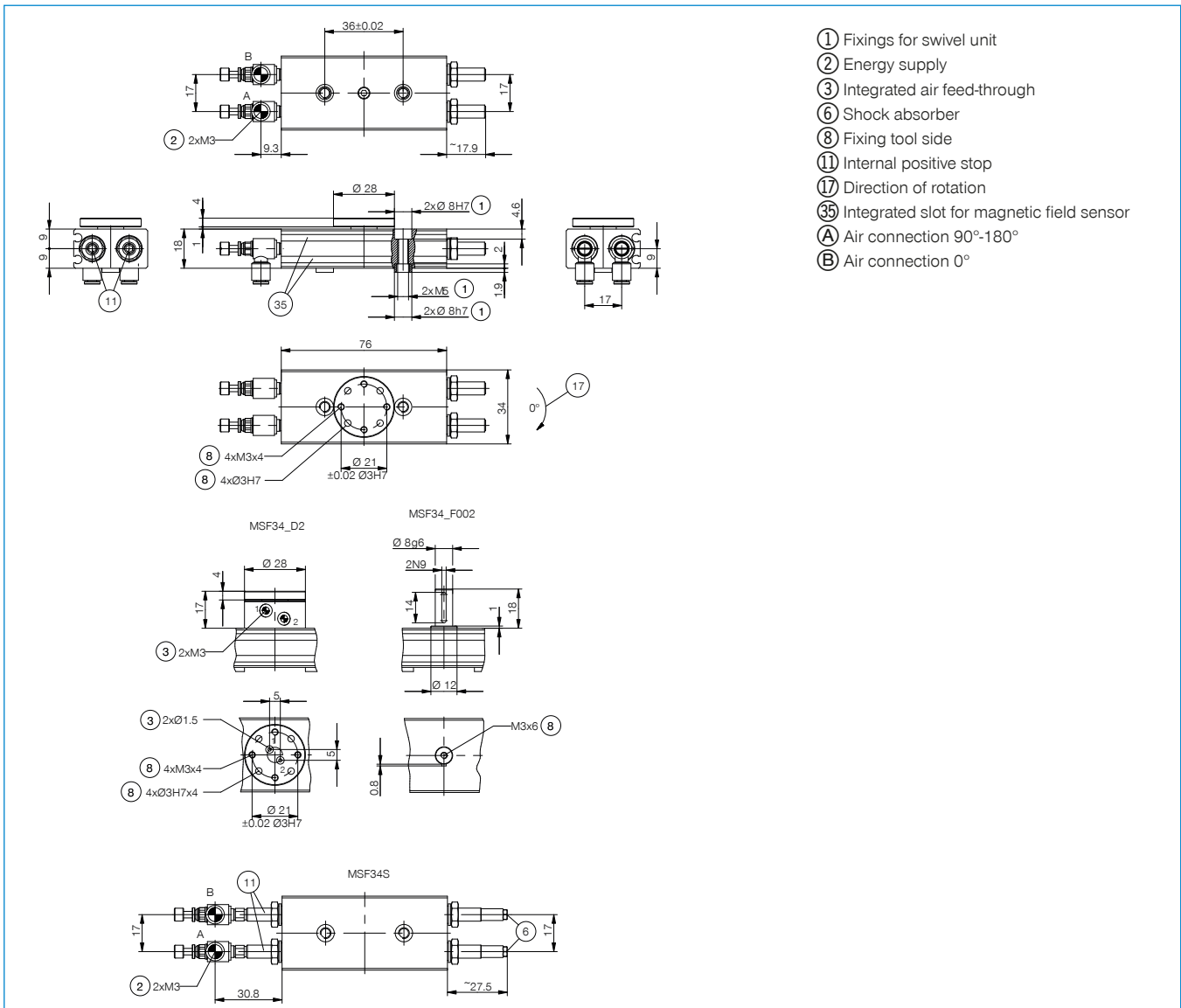
Plug-in connector customizable Straight - Connector M12
S12-G-3



Pressure Safety Valve
DSV1-8

Order no.	Technical Data*					
	MSF34N-F001	MSF34S-F001	MSF34N-F002	MSF34S-F002	MSF34N-D2	MSF34S-D2
Swivel angle [°]	90-180	90-180	90-180	90-180	90-180	90-180
Torque [Nm]	0.4	0.4	0.4	0.4	0.3	0.3
Repetition accuracy +/- [°]	0.07	0.01	0.07	0.01	0.07	0.01
Air feed-through [Quantity]	0	0	0	0	2	2
Axial bearing load [N]	215	215	215	215	215	215
Radial bearing load [Nm]	5.5	5.5	5.5	5.5	5.5	5.5
Operating pressure min. [bar]	3	3	3	3	3	3
Operating pressure max. [bar]	8	8	8	8	8	8
Operating temperature min. [°C]	5	5	5	5	5	5
Operating temperature max. [°C]	80	80	80	80	80	80
Air volume per cycle 90° [cm³]	3	3	3	3	3	3
Air volume per cycle 180° [cm³]	6	6	6	6	6	6
Weight [kg]	0.17	0.18	0.17	0.18	0.2	0.21

*All data measured at 6 bar



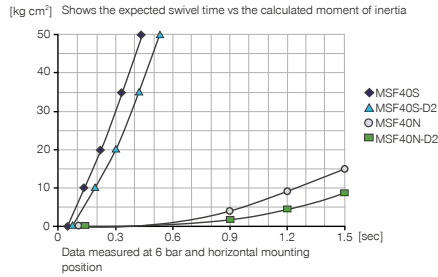
FLAT SWIVEL UNITS

INSTALLATION SIZE MSF40

▶ PRODUCT SPECIFICATIONS



▶ Moment of inertia



▶ INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint
DRVM3X4



Centering Disc
BDST40800

▶ RECOMMENDED ACCESSORIES



Straight Fittings - Barb Style Connection
GVM3



Magnetic field sensor Angled Cable 0,3 m - Connector M8
MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8
MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8
MFSP2SKHC



Plug-in connector Straight Cable 5m - Socket M8 (female)
KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)
KAW500



Plug-in connector customizable Straight - Connector M8
S8-G-3



Plug-in connector customizable Straight - Connector M12
S12-G-3

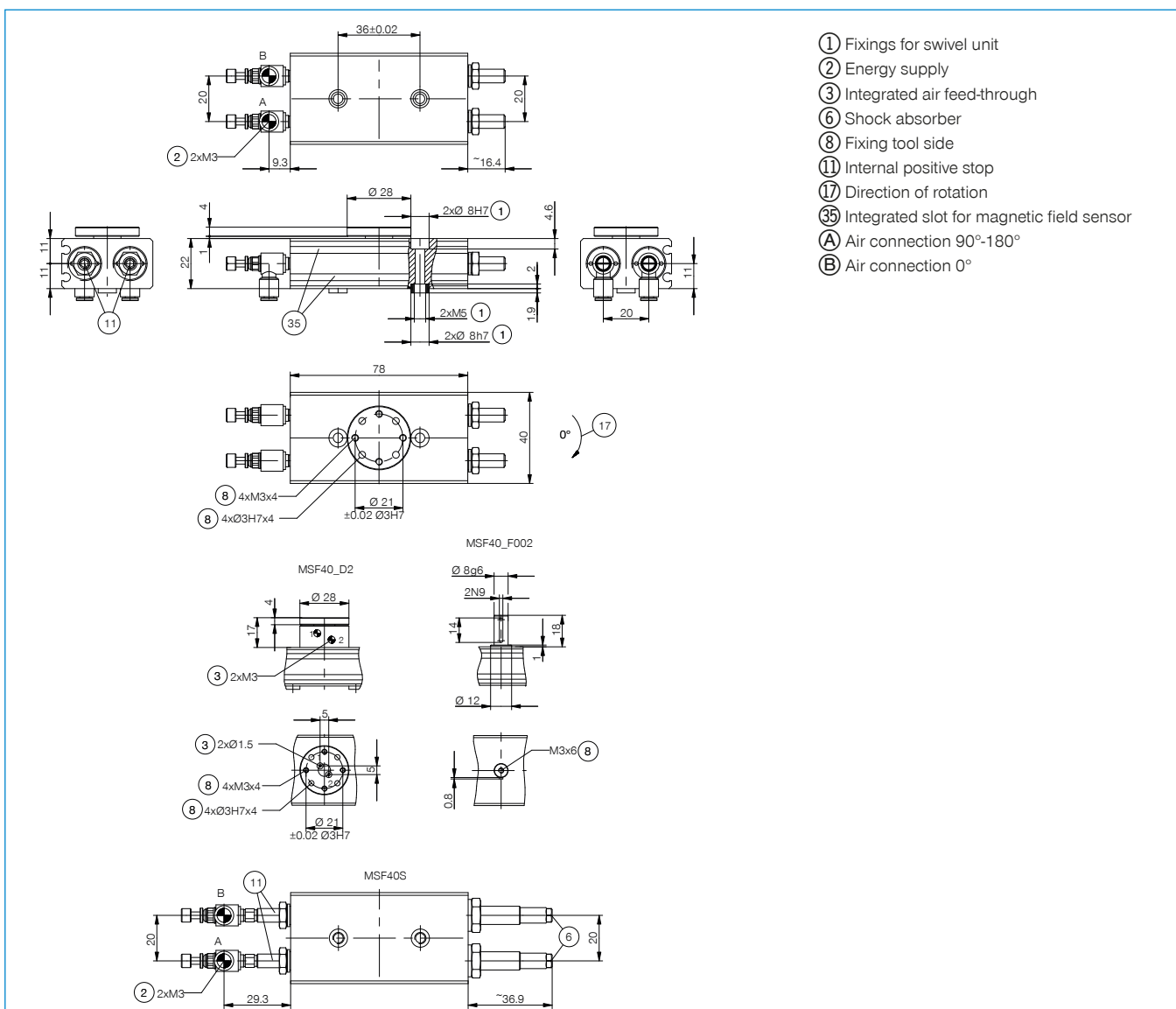


Pressure Safety Valve
DSV1-8

► Technical Data*

Order no.	MSF40N-F001	MSF40S-F001	MSF40N-F002	MSF40S-F002	MSF40N-D2	MSF40S-D2
Swivel angle [°]	90-180	90-180	90-180	90-180	90-180	90-180
Torque [Nm]	0.7	0.7	0.7	0.7	0.6	0.6
Repetition accuracy +/- [°]	0.07	0.01	0.07	0.01	0.07	0.01
Air feed-through [Quantity]	0	0	0	0	2	2
Axial bearing load [N]	215	215	215	215	215	215
Radial bearing load [Nm]	7	7	7	7	7	7
Operating pressure min. [bar]	3	3	3	3	3	3
Operating pressure max. [bar]	8	8	8	8	8	8
Operating temperature min. [°C]	5	5	5	5	5	5
Operating temperature max. [°C]	80	80	80	80	80	80
Air volume per cycle 90° [cm³]	4.3	4.3	4.3	4.3	4.3	4.3
Air volume per cycle 180° [cm³]	8.6	8.6	8.6 <td 8.6	8.6	8.6	
Weight [kg]	0.26	0.27	0.26	0.27	0.28	0.29

*All data measured at 6 bar



FLAT SWIVEL UNITS

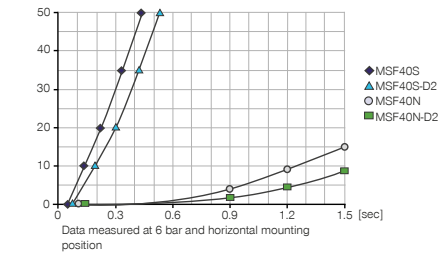
INSTALLATION SIZE MSF44

▶ PRODUCT SPECIFICATIONS



▶ Moment of inertia

[kg cm²] Shows the expected swivel time vs the calculated moment of inertia



▶ INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint
DRVM3X4



Centering Disc
BDST40800

▶ RECOMMENDED ACCESSORIES



Straight Fittings - Barb Style Connection
GVM3



Magnetic field sensor Angled Cable 0,3 m - Connector M8
MFS103SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8
MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8
MFSP2SKHC



Plug-in connector Straight Cable 5m - Socket M8 (female)
KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)
KAW500



Plug-in connector customizable Straight - Connector M8
S8-G-3



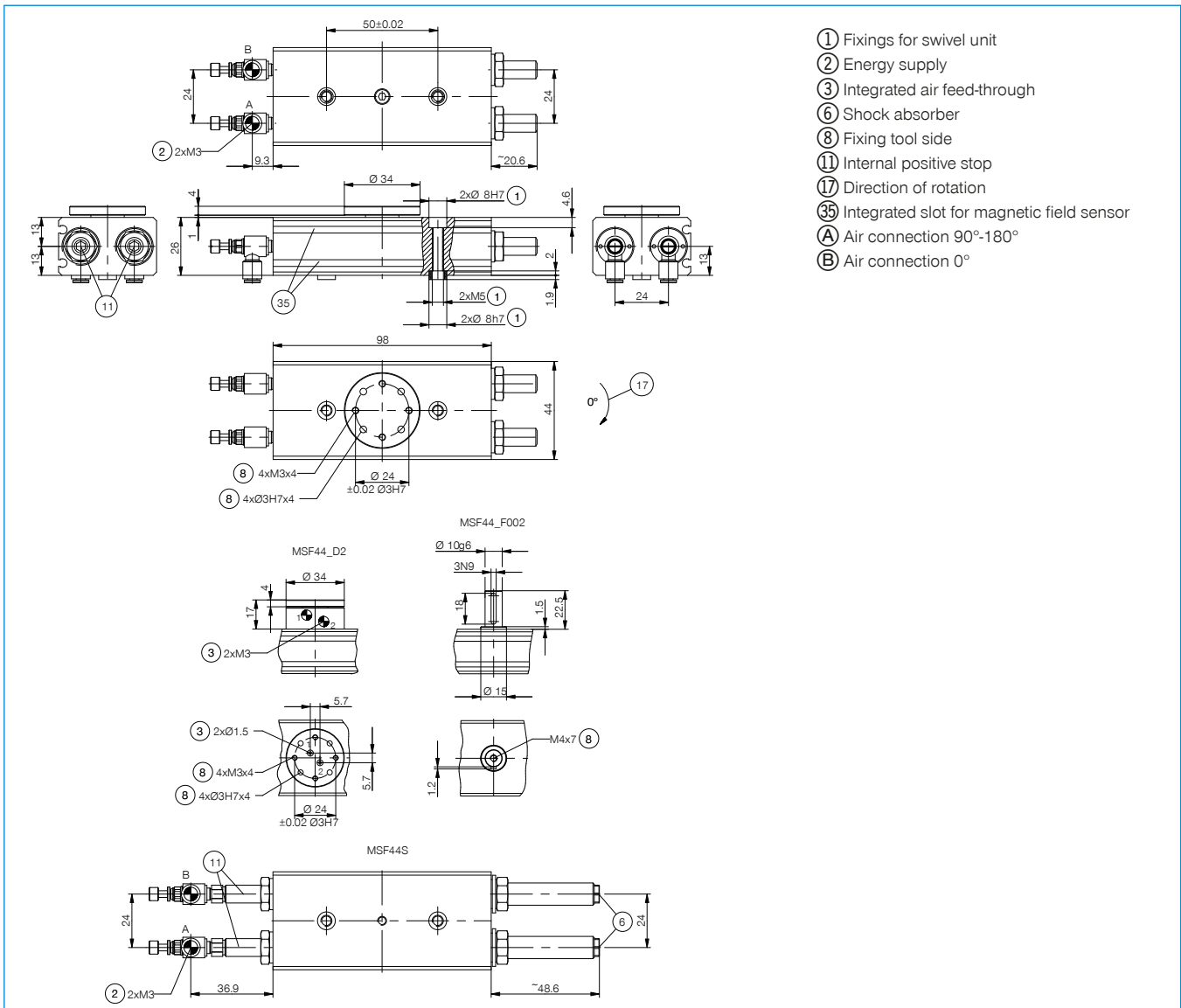
Plug-in connector customizable Straight - Connector M12
S12-G-3



Pressure Safety Valve
DSV1-8

Order no.	Technical Data*					
	MSF44N-F001	MSF44S-F001	MSF44N-F002	MSF44S-F002	MSF44N-D2	MSF44S-D2
Swivel angle [°]	90-180	90-180	90-180	90-180	90-180	90-180
Torque [Nm]	1.2	1.2	1.2	1.2	1	1
Repetition accuracy +/- [°]	0.07	0.01	0.07	0.01	0.07	0.01
Air feed-through [Quantity]	0	0	0	0	2	2
Axial bearing load [N]	520	520	520	520	520	520
Radial bearing load [Nm]	19	19	19	19	19	19
Operating pressure min. [bar]	3	3	3	3	3	3
Operating pressure max. [bar]	8	8	8	8	8	8
Operating temperature min. [°C]	5	5	5	5	5	5
Operating temperature max. [°C]	80	80	80 </td <td>80</td> <td>80</td> <td>80</td>	80	80	80
Air volume per cycle 90° [cm³]	7.7	7.7	7.7	7.7	7.7	7.7
Air volume per cycle 180° [cm³]	15.4	15.4	15.4	15.4	15.4	15.4
Weight [kg]	0.41	0.42	0.41	0.42	0.45	0.46

*All data measured at 6 bar



FLAT SWIVEL UNITS

SERIES SF-C

▶ PRODUCT ADVANTAGES



“The superior”

▶ Up to 100% more performance than the benchmark

Superior end position damping lets you swivel more mass in the shortest amount of time, increasing your machine's component output

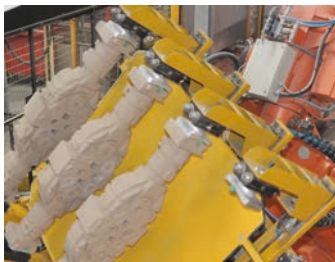
▶ Large centre bore

Reduce the interference contours in your application by placing your power supply line directly through the middle of the rotary flange

▶ More than 100% higher radial bearing load than the benchmark

The generously scaled bearings stand for robustness and long service life and provide the highest process reliability for your application

▶ THE BEST PRODUCT FOR YOUR APPLICATION



▶ Our products love the challenge!

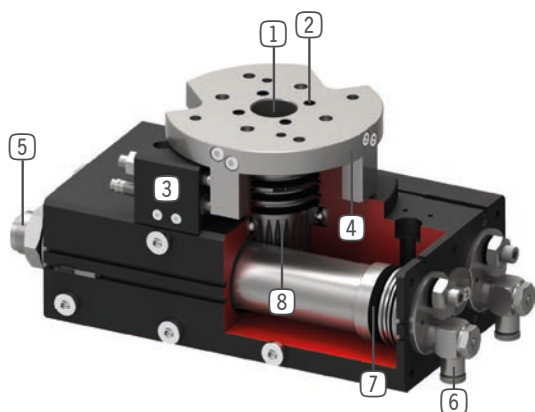
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Find the best product for your specific use:

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► BENEFITS IN DETAIL



- ① **Two way ball bearing hollow shaft**
 - for feedthrough cables and hoses
 - high forces and moments capacity
- ② **Up to 8 way integrated air feed-through**
 - for hoseless air transfer
 - hose package does not have to be pivoted
- ③ **Adjustable end position**
 - +/- 3° adjustable end position
- ④ **Large, precise locating flange**
 - simple tool connection
- ⑤ **Integrated and patented hydraulic shock absorbers**
 - adjustable end position damping
 - heating is prevented through installation in pneumatic pressure chamber
- ⑥ **Air flow control valve**
 - for speed regulation (included in the delivery)
- ⑦ **Force transfer**
 - rack and pinion
- ⑧ **Drive**
 - two double-acting pneumatic cylinders
 - high torque rating

► SERIES CHARACTERISTICS



Number of installation sizes	6
Swivel angle	0° - 180°
Torque	1,5 Nm - 130 Nm
Weight	0,6 kg - 41,1 kg
AP class	3



Powerstop end position damping



Magnetic field sensor



Adjustable swivel angle



fluid feed-through



Positionability - 2 positions



IP64



Inductive sensor



Positionability - 3 positions



10 million maintenance-free cycles (max.)

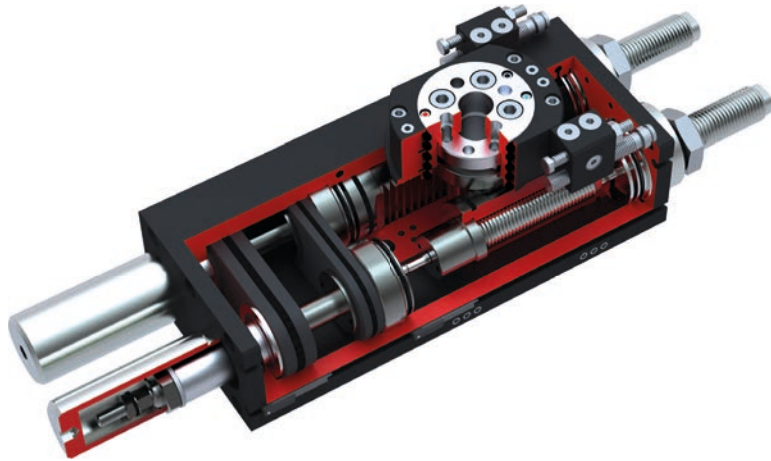
FLAT SWIVEL UNITS

SF SERIES

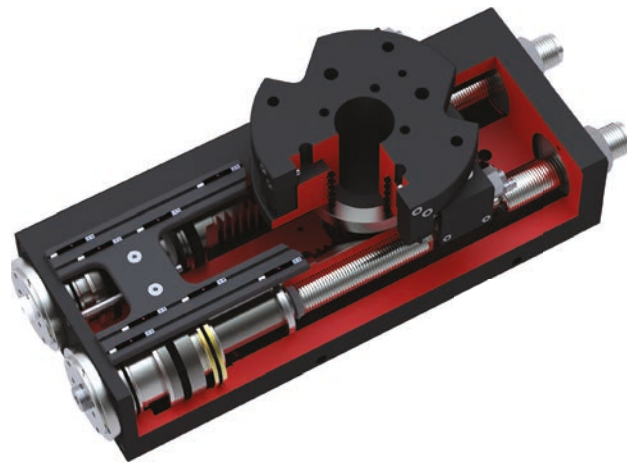
► HOW TO ORDER CORRECTLY

Order no.	<input type="checkbox"/>	SF	<input type="checkbox"/>	<input type="checkbox"/>	-C
Clean room class 5	R				
Flat swivel units					
Installation size			50		
Installation size			74		
Installation size			100		
Installation size			125		
Installation size			155		
Installation size			195		
Swivel angle 0° - 180°, infinitely variable				N	
Integrated hoseless pneumatic feed-through, 4-way				D4	
Integrated hoseless pneumatic feed-through, 6-way				D6	
Integrated hoseless pneumatic feed-through, 8-way				D8	
Rotation angle 90°				-90N	
Integrated hoseless pneumatic feed-through, 4-way				-90D4	
Integrated hoseless pneumatic feed-through, 6-way				-90D6	
Integrated hoseless pneumatic feed-through, 8-way				-90D8	
Rotation angle 180°				-180N	
Integrated hoseless pneumatic feed-through, 4-way				-180D4	
Integrated hoseless pneumatic feed-through, 6-way				-180D6	
Integrated hoseless pneumatic feed-through, 8-way				-180D8	
Version: ML (Size SF50 / SF74 / SF100)					
<ul style="list-style-type: none"> ► At -90° and +90° position, mechanical and shock-absorbed fixed stop ► 0° position is not locked, as opposed to the M version ► For these units, the driven pistons move against dominant limit stop pistons and, like for the locked center position, undergo shock absorption while moving into end position ► Simplified activation for horizontal rotary movements 					
Swivel angle -90° - 0° - +90°				ML	
Integrated hoseless pneumatic feed-through, 4-way				MLD4	
Integrated hoseless pneumatic feed-through, 6-way				MLD6	
Integrated hoseless pneumatic feed-through, 8-way				MLD8	
Version: M (Size SF125 / SF155 / SF195)					
<ul style="list-style-type: none"> ► All three positions for mechanical and shock-mounted fixed stop ► 0° center position using two stopper pistons with integrated shock absorbers ► A mechanical fixed stop is generated using ratchet bolts that are pushed through arrester pistons into the ring groove of the stopper piston 					
Swivel angle -90° - 0° - +90°				M	
Integrated hoseless pneumatic feed-through, 4-way				MD4	
Integrated hoseless pneumatic feed-through, 6-way				MD6	
Integrated hoseless pneumatic feed-through, 8-way				MD8	

► VERSION: ML (SIZE SF50 / SF74 / SF100)



► VERSION: M (SIZE SF125 / SF155 / SF195)



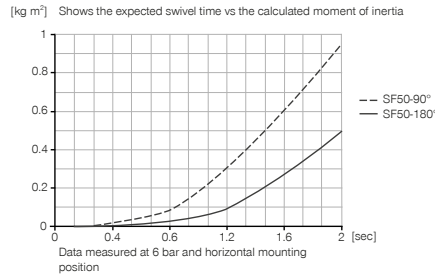
FLAT SWIVEL UNITS

INSTALLATION SIZE SF50N-C

▶ PRODUCT SPECIFICATIONS



▶ Moment of inertia



▶ INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint
DRVM5X4

▶ RECOMMENDED ACCESSORIES



2-Position-Sensor Cable
0,3 m - Connector M8
MFSP2SKHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8
MFS204SKHC



Plug-in connector Straight
Cable 5m - Socket M8
(female)
KAG500



Plug-in connector
customizable Straight -
Connector M8
S8-G-3



Pressure Safety Valve
DSV1-8

▶ RECOMMENDED ACCESSORY ATTACHMENT KIT



Attachment Kit
ANS0006



Inductive proximity switch
- Cable 5 m
NJ8-E2



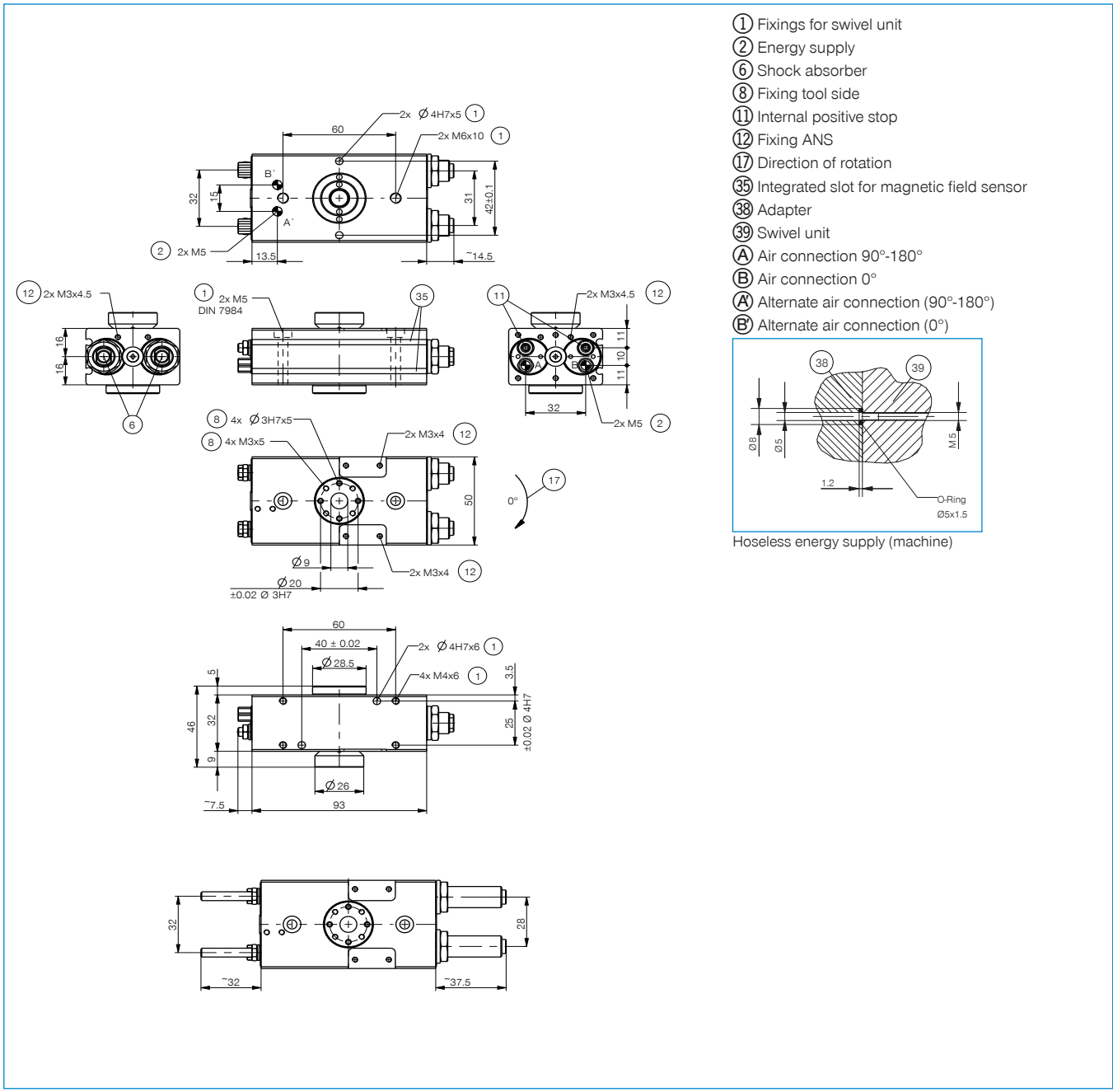
Inductive proximity switch
- Connector M8
NJ8-E2S



Plug-in connector Angled
Cable 5m - Socket M8
(female)
KAW500

Order no.	Technical Data*		
	SF50-90N-C	SF50-180N-C	SF50N-C
Swivel angle [°]	90	180	0-180
Torque [Nm]	2.4	2.4	2.4
Swivel angle regulable +/- [°]	3	3	180
Repetition accuracy +/- [°]	0.01	0.01	0.01
Passage bore Ø [mm]	9	9	9
Axial bearing load [N]	490	490	490
Radial bearing load [Nm]	24	24	24
Operating pressure min. [bar]	3	3	3
Operating pressure max. [bar]	8	8	8
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	80	80	80
Air volume per cycle [cm³]	14	28	28
Weight [kg]	0.6	0.6	0.6

*All data measured at 6 bar



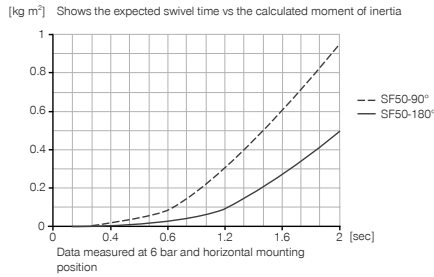
FLAT SWIVEL UNITS

INSTALLATION SIZE SF50D4-C

▶ PRODUCT SPECIFICATIONS



▶ Moment of inertia



▶ INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint
DRVM5X4



O-Ring
COR0020100

▶ RECOMMENDED ACCESSORIES



2-Position-Sensor Cable 0,3 m - Connector M8
MFSP2SKHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8
MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8 (female)
KAG500



Plug-in connector customizable Straight - Connector M8
S8-G-3



Pressure Safety Valve
DSV1-8

▶ RECOMMENDED ACCESSORY ATTACHMENT KIT



Attachment Kit
ANS0008



Inductive proximity switch - Cable 5 m
NJ8-E2



Inductive proximity switch - Connector M8
NJ8-E2S



Plug-in connector Angled Cable 5m - Socket M8 (female)
KAW500

Order no.	► Technical Data*		
	SF50-90D4-C	SF50-180D4-C	SF50D4-C
Swivel angle [°]	90	180	0-180
Torque [Nm]	1.5	1.5	1.5
Swivel angle regulable +/- [°]	3	3	180
Repetition accuracy +/- [°]	0.01	0.01	0.01
Passage bore Ø [mm]	9	9	9
Axial bearing load [N]	490	490	490
Radial bearing load [Nm]	24	24	24
Operating pressure min. [bar]	3	3	3
Operating pressure max. [bar]	8	8 <td 8	
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	80	80	80
Air volume per cycle [cm³]	14	28	28
Weight [kg]	0.76	0.76	0.76

* All data measured at 6 bar

- ① Fixings for swivel unit
- ② Energy supply
- ③ Integrated air feed-through
- ⑥ Shock absorber
- ⑧ Fixing tool side
- ⑪ Internal positive stop
- ⑫ Fixing ANS
- ⑰ Direction of rotation
- ⑳ Integrated slot for magnetic field sensor
- ㉑ Adapter
- ㉒ Swivel unit
- Ⓐ Air connection 90°-180°
- Ⓑ Air connection 0°
- Ⓐ Alternate air connection (90°-180°)
- Ⓑ Alternate air connection (0°)

Hoseless pneumatic feed-through (tool)

Hoseless pneumatic feed-through (machine)

Hoseless energy supply (machine)

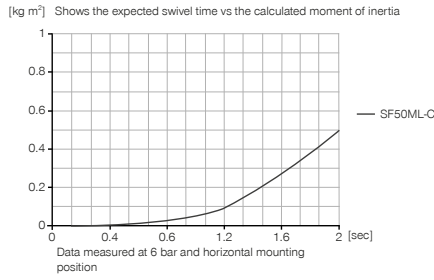
FLAT SWIVEL UNITS

INSTALLATION SIZE SF50ML-C

▶ PRODUCT SPECIFICATIONS



▶ Moment of inertia



▶ INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint
DRVM5X4



Attachment Kit
ANS0066

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Straight Cable 5 m
MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8
MFS204SKHC



Plug-in connector Straight
Cable 5m - Socket M8
(female)
KAG500



Plug-in connector
customizable Straight -
Connector M8
S8-G-3



Pressure Safety Valve
DSV1-8

▶ RECOMMENDED ACCESSORY ATTACHMENT KIT



Inductive proximity switch
- Cable 5 m
NJ8-E2



Inductive proximity switch
- Connector M8
NJ8-E2S

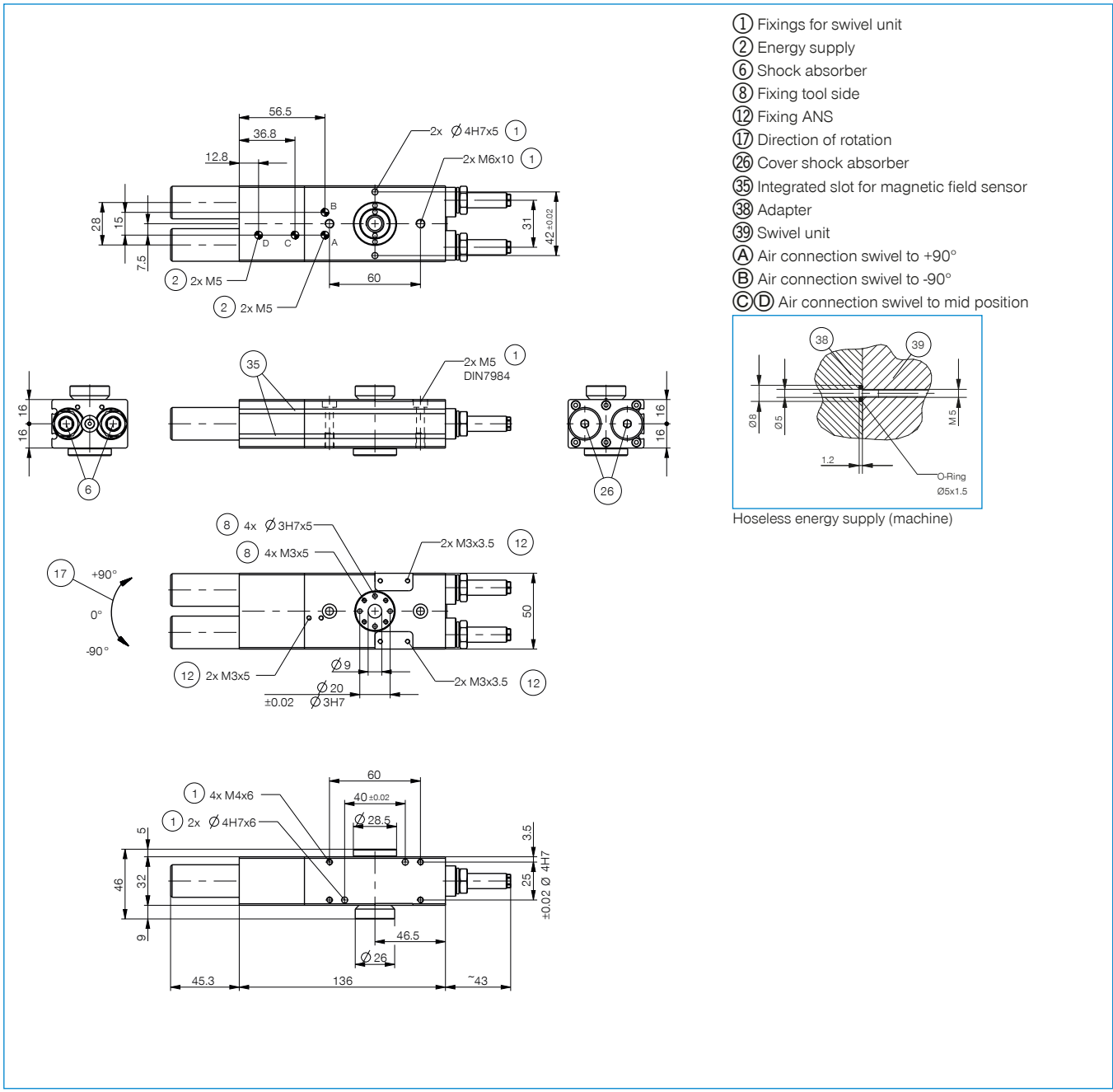


Plug-in connector Angled
Cable 5m - Socket M8
(female)
KAW500

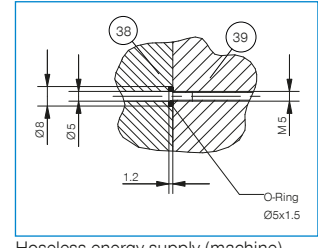
Order no.	SF50ML-C
Swivel angle [°]	-90 / 0 / +90
Torque [Nm]	2.4
Swivel angle regulable +/- [°]	3
Repetition accuracy +/- [°]	0.01
Passage bore Ø [mm]	9
Axial bearing load [N]	490
Radial bearing load [Nm]	24
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm³]	44
Weight [kg]	0.98

*All data measured at 6 bar

► Technical Data*



- ① Fixings for swivel unit
- ② Energy supply
- ⑥ Shock absorber
- ⑧ Fixing tool side
- ⑫ Fixing ANS
- ⑰ Direction of rotation
- ⑳ Cover shock absorber
- ㉓ Integrated slot for magnetic field sensor
- ㉔ Adapter
- ㉕ Swivel unit
- Ⓐ Air connection swivel to +90°
- Ⓑ Air connection swivel to -90°
- Ⓒ Ⓓ Air connection swivel to mid position



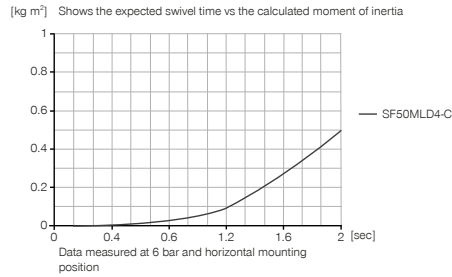
FLAT SWIVEL UNITS

INSTALLATION SIZE SF50MLD4-C

▶ PRODUCT SPECIFICATIONS



▶ Moment of inertia



▶ INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint
DRVM5X4



O-Ring
COR0020100



Attachment Kit
ANS0067

▶ RECOMMENDED ACCESSORY



Magnetic field sensor
Straight Cable 5 m
MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8
MFS204SKHC



Plug-in connector Straight
Cable 5m - Socket M8
(female)
KAG500



Plug-in connector
customizable Straight -
Connector M8
S8-G-3



Pressure Safety Valve
DSV1-8

▶ RECOMMENDED ACCESSORY ATTACHMENT KIT



Inductive proximity switch
- Cable 5 m
NJ8-E2



Inductive proximity switch
- Connector M8
NJ8-E2S



Plug-in connector Angled
Cable 5m - Socket M8
(female)
KAW500

Order no.	SF50MLD4-C
Swivel angle [°]	-90 / 0 / +90
Torque [Nm]	1.5
Swivel angle regulable +/- [°]	3
Repetition accuracy +/- [°]	0.01
Passage bore Ø [mm]	9
Axial bearing load [N]	490
Radial bearing load [Nm]	24
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm³]	44
Weight [kg]	1.14

*All data measured at 6 bar

- ① Fixings for swivel unit
- ② Energy supply
- ③ Integrated air feed-through
- ⑥ Shock absorber
- ⑧ Fixing tool side
- ⑫ Fixing ANS
- ⑰ Direction of rotation
- ⑳ Cover shock absorber
- ㉓ Integrated slot for magnetic field sensor
- ㉔ Adapter
- ㉕ Swivel unit
- Ⓐ Air connection swivel to +90°
- Ⓑ Air connection swivel to -90°
- Ⓒ Ⓓ Air connection swivel to mid position

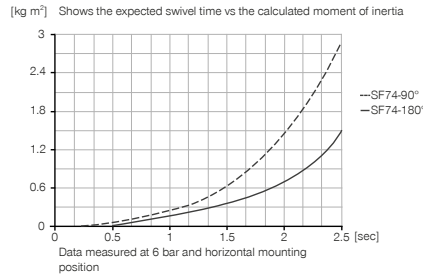
FLAT SWIVEL UNITS

INSTALLATION SIZE SF74N-C

▶ PRODUCT SPECIFICATIONS



▶ Moment of inertia



▶ INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint
DRV1-8X6

▶ RECOMMENDED ACCESSORIES



2-Position-Sensor Cable
0,3 m - Connector M8
MFSP2SKHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8
MFS204SKHC



Plug-in connector Straight
Cable 5m - Socket M8
(female)
KAG500



Plug-in connector Angled
Cable 5m - Socket M8
(female)
KAW500



Pressure Safety Valve
DSV1-8

▶ RECOMMENDED ACCESSORY ATTACHMENT KIT



Attachment Kit
ANS0010



Inductive proximity switch
- Cable 5 m
NJ6.5-E2-01



Inductive proximity switch
- Connector M8
NJ6.5-E2S



Inductive proximity switch
- Cable 5 m
NJ8-E2

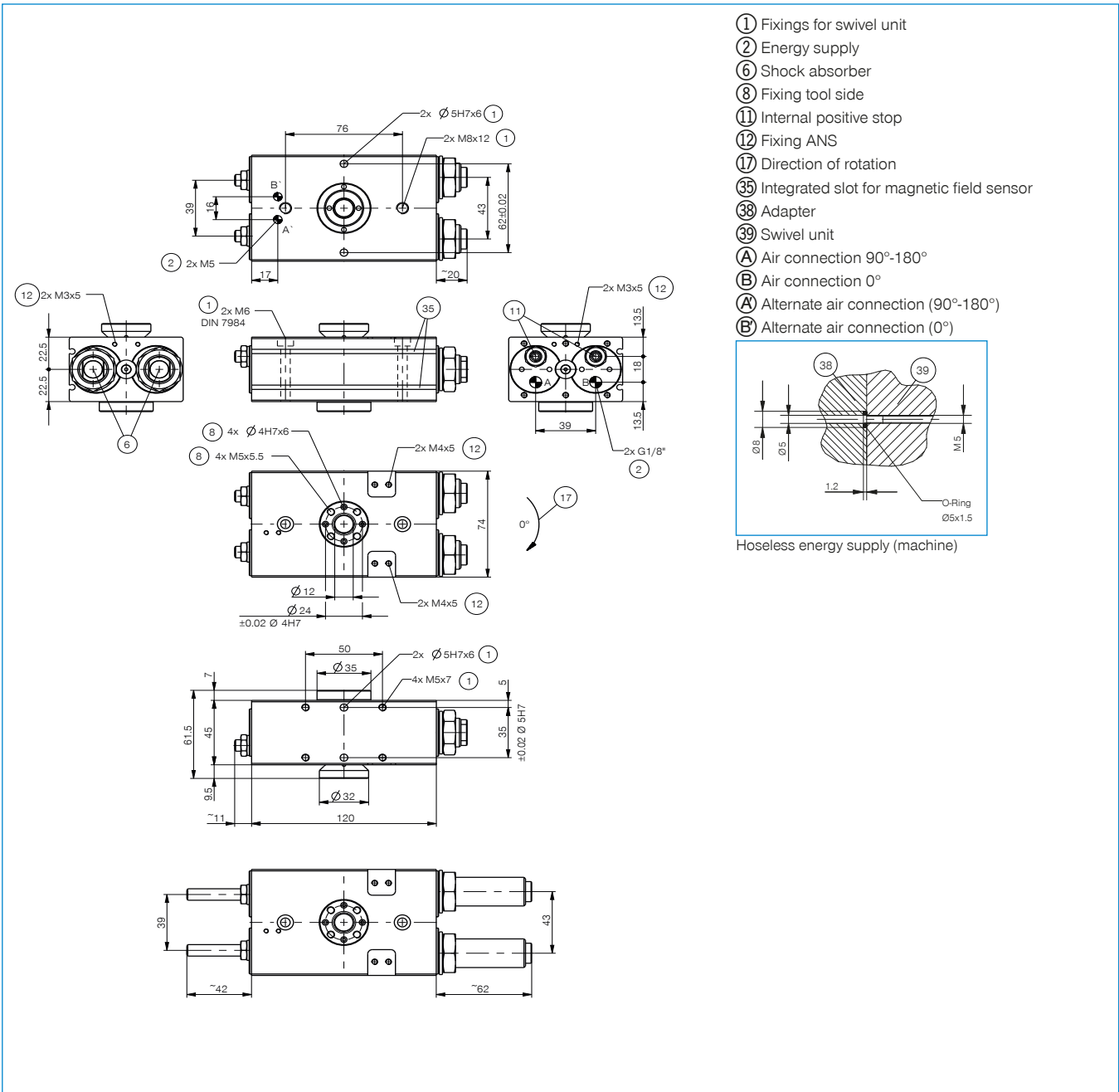


Inductive proximity switch
- Connector M8
NJ8-E2S

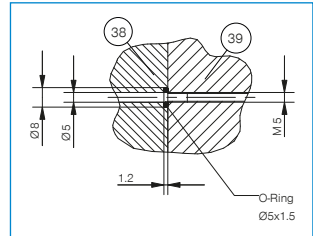
► Technical Data*

Order no.	SF74-90N-C	SF74-180N-C	SF74N-C
Swivel angle [°]	90	180	0-180
Torque [Nm]	7.3	7.3	7.3
Swivel angle regulable +/- [°]	3	3	180
Repetition accuracy +/- [°]	0.01	0.01	0.01
Passage bore Ø [mm]	12	12	12
Axial bearing load [N]	1120	1120	1120
Radial bearing load [Nm]	88	88	88
Operating pressure min. [bar]	3	3	3
Operating pressure max. [bar]	8	8	8
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	80	80	80
Air volume per cycle [cm³]	42	84	84
Weight [kg]	1.6	1.6	1.6

*All data measured at 6 bar



- ① Fixings for swivel unit
- ② Energy supply
- ⑥ Shock absorber
- ⑧ Fixing tool side
- ⑪ Internal positive stop
- ⑫ Fixing ANS
- ⑰ Direction of rotation
- ⑳ Integrated slot for magnetic field sensor
- ㉑ Adapter
- ㉒ Swivel unit
- Ⓐ Air connection 90°-180°
- Ⓑ Air connection 0°
- Ⓐ Alternate air connection (90°-180°)
- Ⓑ Alternate air connection (0°)



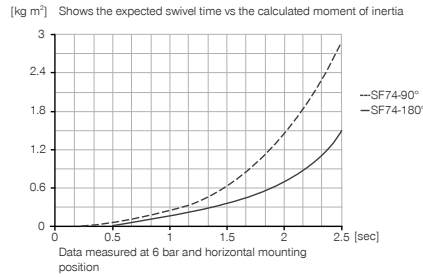
FLAT SWIVEL UNITS

INSTALLATION SIZE SF74D4-C

▶ PRODUCT SPECIFICATIONS



▶ Moment of inertia



▶ INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint
DRV1-8X6



O-Ring
COR0020100

▶ RECOMMENDED ACCESSORIES



2-Position-Sensor Cable
0,3 m - Connector M8
MFSP2SKHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8
MFS204SKHC



Plug-in connector Straight
Cable 5m - Socket M8
(female)
KAG500



Plug-in connector Angled
Cable 5m - Socket M8
(female)
KAW500



Pressure Safety Valve
DSV1-8

▶ RECOMMENDED ACCESSORY ATTACHMENT KIT



Attachment Kit
ANS0012



Inductive proximity switch
- Cable 5 m
NJ6.5-E2-01



Inductive proximity switch
- Connector M8
NJ6.5-E2S



Inductive proximity switch
- Cable 5 m
NJ8-E2



Inductive proximity switch
- Connector M8
NJ8-E2S

Order no.	► Technical Data*		
	SF74-90D4-C	SF74-180D4-C	SF74D4-C
Swivel angle [°]	90	180	0-180
Torque [Nm]	5.5	5.5	5.5
Swivel angle regulable +/- [°]	3	3	180
Repetition accuracy +/- [°]	0.01	0.01	0.01
Passage bore Ø [mm]	12	12	12
Axial bearing load [N]	1120	1120	1120
Radial bearing load [Nm]	88	88	88
Operating pressure min. [bar]	3	3	3
Operating pressure max. [bar]	8	8	8
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	80	80	80
Air volume per cycle [cm³]	42	84	84
Weight [kg]	1.8	1.8	1.8

*All data measured at 6 bar

- ① Fixings for swivel unit
- ② Energy supply
- ③ Integrated air feed-through
- ⑥ Shock absorber
- ⑧ Fixing tool side
- ⑪ Internal positive stop
- ⑫ Fixing ANS
- ⑰ Direction of rotation
- ⑳ Integrated slot for magnetic field sensor
- ㉔ Adapter
- ㉕ Swivel unit
- Ⓐ Air connection 90°-180°
- Ⓑ Air connection 0°
- ⓧ Alternate air connection (90°-180°)
- ⓧ Alternate air connection (0°)

Hoseless pneumatic feed-through (tool)
 Hoseless pneumatic feed-through (machine)
 Hoseless energy supply (machine)

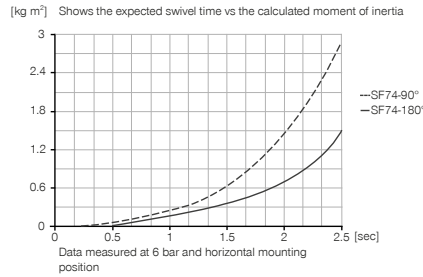
FLAT SWIVEL UNITS

INSTALLATION SIZE SF74D6-C

▶ PRODUCT SPECIFICATIONS



▶ Moment of inertia



▶ INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint
DRV1-8X6



O-Ring
COR0020100

▶ RECOMMENDED ACCESSORIES



2-Position-Sensor Cable
0,3 m - Connector M8
MFSP2SKHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8
MFS204SKHC



Plug-in connector Straight
Cable 5m - Socket M8
(female)
KAG500



Plug-in connector Angled
Cable 5m - Socket M8
(female)
KAW500



Pressure Safety Valve
DSV1-8

▶ RECOMMENDED ACCESSORY ATTACHMENT KIT



Attachment Kit
ANS0012



Inductive proximity switch
- Cable 5 m
NJ6.5-E2-01



Inductive proximity switch
- Connector M8
NJ6.5-E2S



Inductive proximity switch
- Cable 5 m
NJ8-E2



Inductive proximity switch
- Connector M8
NJ8-E2S

Order no.	► Technical Data*		
	SF74-90D6-C	SF74-180D6-C	SF74D6-C
Swivel angle [°]	90	180	0-180
Torque [Nm]	4.5	4.5	4.5
Swivel angle regulable +/- [°]	3	3	180
Repetition accuracy +/- [°]	0.01	0.01	0.01
Passage bore Ø [mm]	12	12	12
Axial bearing load [N]	1120	1120	1120
Radial bearing load [Nm]	88	88	88
Operating pressure min. [bar]	3	3	3
Operating pressure max. [bar]	8	8	8
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	80	80	80
Air volume per cycle [cm³]	42	84	84
Weight [kg]	1.8	1.8	1.8

*All data measured at 6 bar

- ① Fixings for swivel unit
- ② Energy supply
- ③ Integrated air feed-through
- ⑥ Shock absorber
- ⑧ Fixing tool side
- ⑪ Internal positive stop
- ⑫ Fixing ANS
- ⑰ Direction of rotation
- ⑳ Integrated slot for magnetic field sensor
- ㉑ Adapter
- ㉒ Swivel unit
- ㉓ Air connection 90°-180°
- ㉔ Air connection 0°
- ㉕ Alternate air connection (90°-180°)
- ㉖ Alternate air connection (0°)

Hoseless pneumatic feed-through (tool)

Hoseless pneumatic feed-through (machine)

Hoseless energy supply (machine)

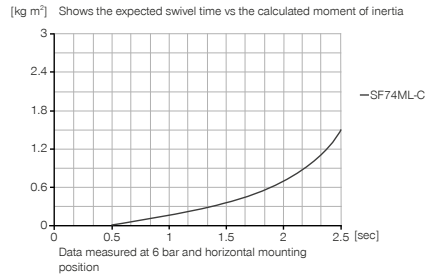
FLAT SWIVEL UNITS

INSTALLATION SIZE SF74ML-C

▶ PRODUCT SPECIFICATIONS



▶ Moment of inertia



▶ INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint
DRV1-8X6



Attachment Kit
ANS0068

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Straight Cable 5 m
MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8
MFS204SKHC



Plug-in connector Straight
Cable 5m - Socket M8
(female)
KAG500



Plug-in connector
customizable Straight -
Connector M8
S8-G-3



Pressure Safety Valve
DSV1-8

▶ RECOMMENDED ACCESSORY ATTACHMENT KIT



Inductive proximity switch
- Cable 5 m
NJ6.5-E2-01



Inductive proximity switch
- Connector M8
NJ6.5-E2S



Inductive proximity switch
- Cable 5 m
NJ8-E2



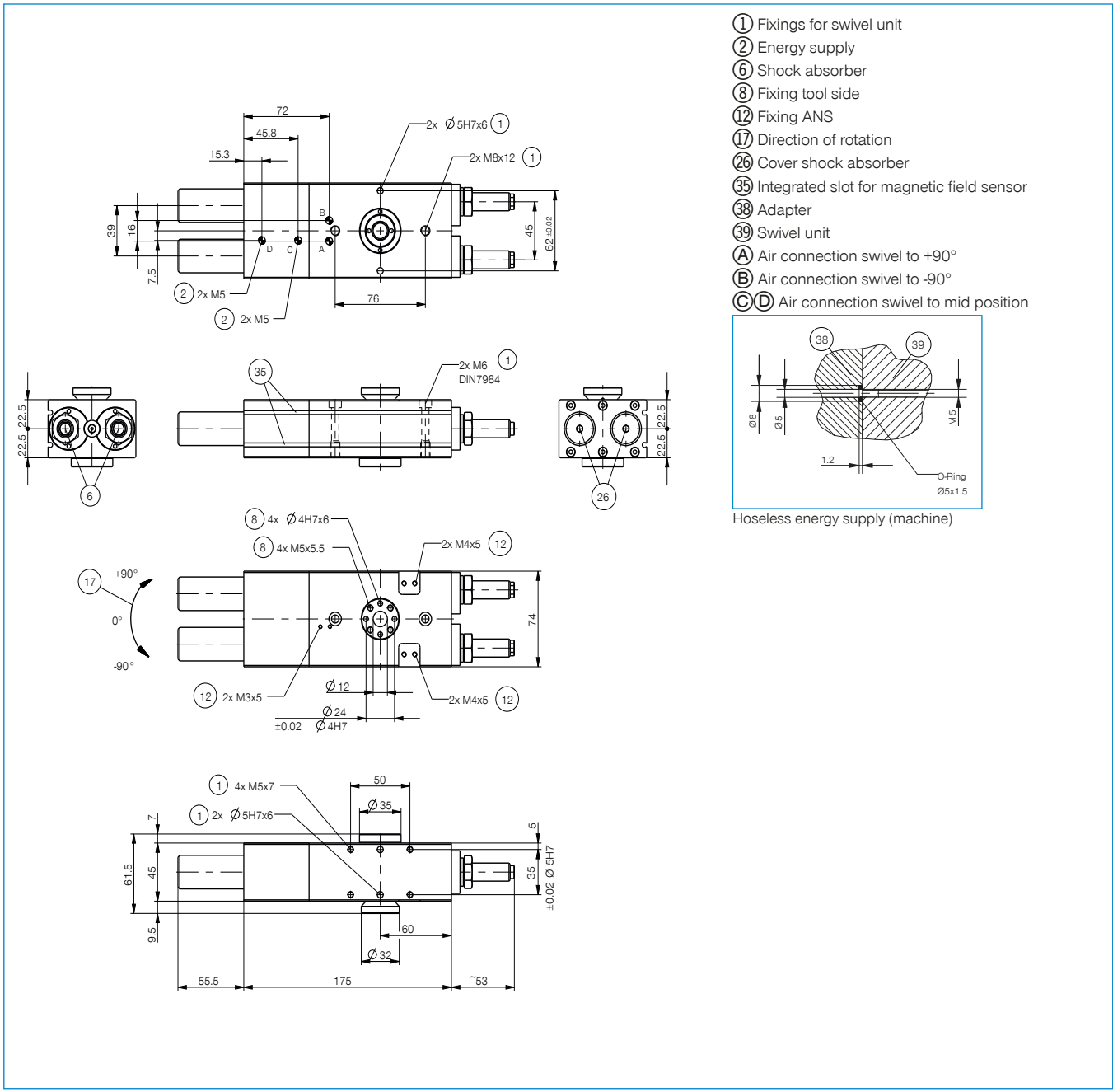
Inductive proximity switch
- Connector M8
NJ8-E2S



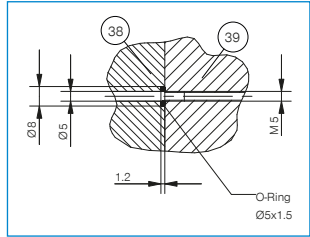
Plug-in connector Angled
Cable 5m - Socket M8
(female)
KAW500

► Technical Data*	
Order no.	SF74ML-C
Swivel angle [°]	-90 / 0 / +90
Torque [Nm]	7.3
Swivel angle regulable +/- [°]	3
Repetition accuracy +/- [°]	0.01
Passage bore Ø [mm]	12
Axial bearing load [N]	1120
Radial bearing load [Nm]	88
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm³]	125
Weight [kg]	2.4

* All data measured at 6 bar



- ① Fixings for swivel unit
- ② Energy supply
- ⑥ Shock absorber
- ⑧ Fixing tool side
- ⑫ Fixing ANS
- ⑰ Direction of rotation
- ⑳ Cover shock absorber
- ㉓ Integrated slot for magnetic field sensor
- ㉔ Adapter
- ㉕ Swivel unit
- Ⓐ Air connection swivel to +90°
- Ⓑ Air connection swivel to -90°
- Ⓒ Ⓓ Air connection swivel to mid position



Hoseless energy supply (machine)

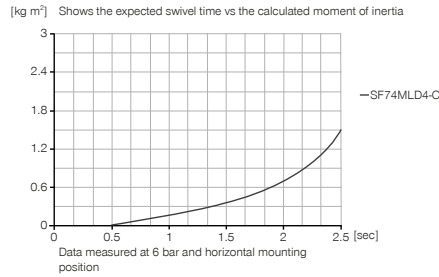
FLAT SWIVEL UNITS

INSTALLATION SIZE SF74MLD4-C

▶ PRODUCT SPECIFICATIONS



▶ Moment of inertia



▶ INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint
DRV1-8X6



O-Ring
COR0020100



Attachment Kit
ANS0069

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor Straight Cable 5 m
MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8
MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8 (female)
KAG500



Plug-in connector customizable Straight - Connector M8
S8-G-3



Pressure Safety Valve
DSV1-8

▶ RECOMMENDED ACCESSORY ATTACHMENT KIT



Inductive proximity switch - Cable 5 m
NJ6.5-E2-01



Inductive proximity switch - Connector M8
NJ6.5-E2S



Inductive proximity switch - Cable 5 m
NJ8-E2



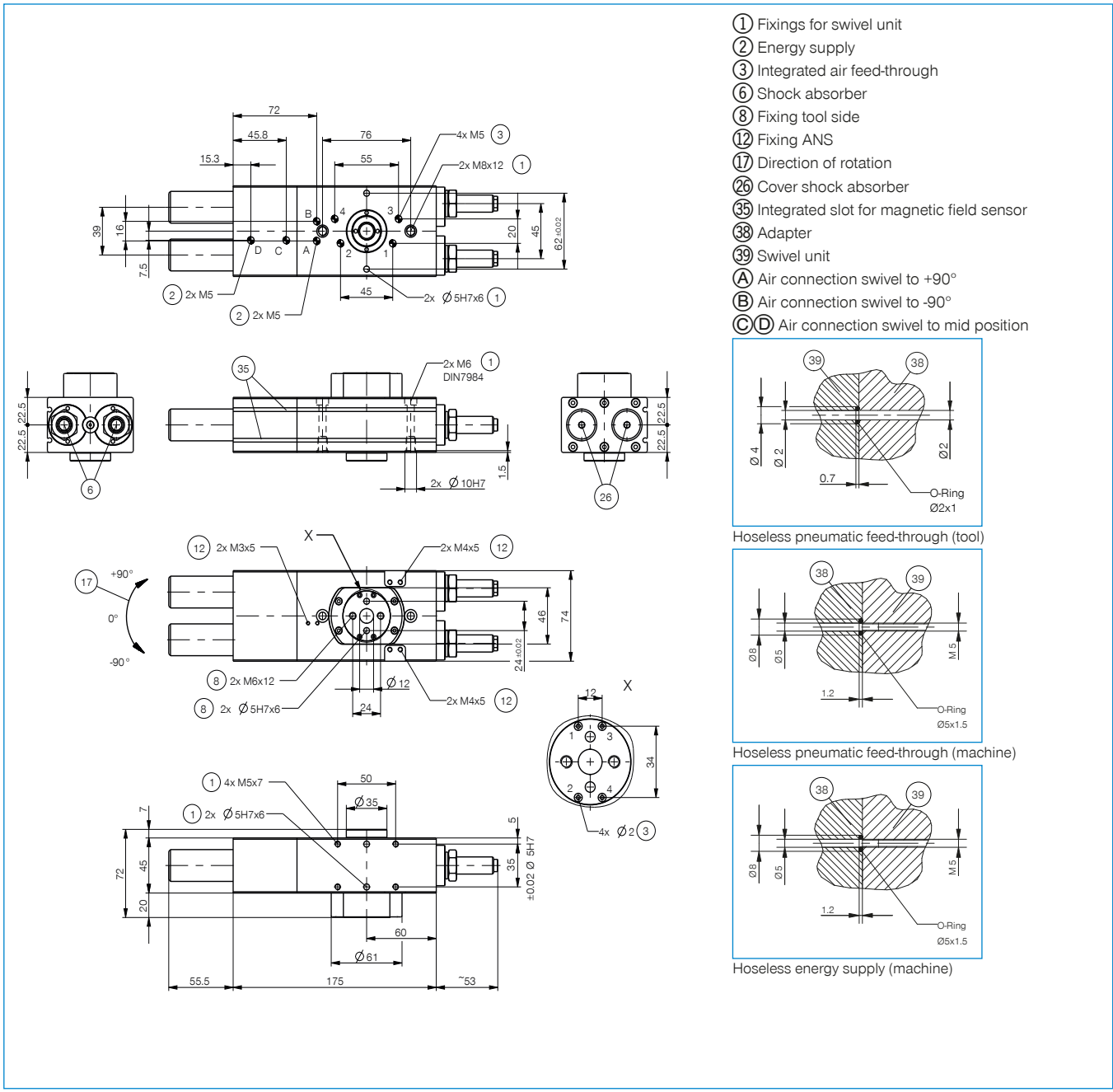
Inductive proximity switch - Connector M8
NJ8-E2S



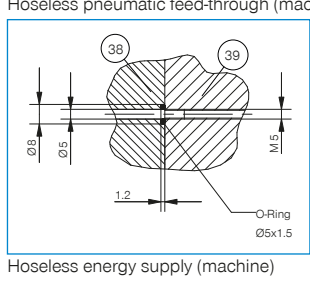
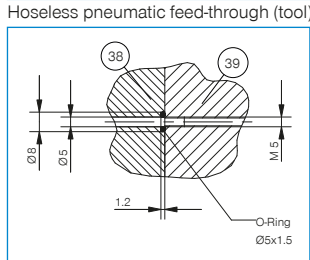
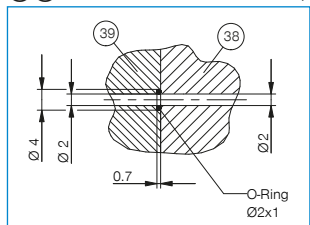
Plug-in connector Angled Cable 5m - Socket M8 (female)
KAW500

► Technical Data*	
Order no.	SF74MLD4-C
Swivel angle [°]	-90 / 0 / +90
Torque [Nm]	5.5
Swivel angle regulable +/- [°]	3
Repetition accuracy +/- [°]	0.01
Passage bore Ø [mm]	12
Axial bearing load [N]	1120
Radial bearing load [Nm]	88
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm³]	125
Weight [kg]	2.6

*All data measured at 6 bar



- ① Fixings for swivel unit
- ② Energy supply
- ③ Integrated air feed-through
- ⑥ Shock absorber
- ⑧ Fixing tool side
- ⑫ Fixing ANS
- ⑰ Direction of rotation
- ⑳ Cover shock absorber
- ㉓ Integrated slot for magnetic field sensor
- ㉔ Adapter
- ㉕ Swivel unit
- A Air connection swivel to +90°
- B Air connection swivel to -90°
- C D Air connection swivel to mid position



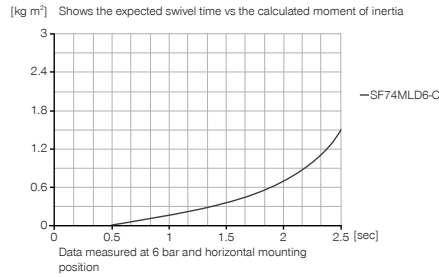
FLAT SWIVEL UNITS

INSTALLATION SIZE SF74MLD6-C

▶ PRODUCT SPECIFICATIONS



▶ Moment of inertia



▶ INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint
DRV1-8X6



O-Ring
COR0020100



Attachment Kit
ANS0070

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor Straight Cable 5 m
MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8
MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8 (female)
KAG500



Plug-in connector customizable Straight - Connector M8
S8-G-3



Pressure Safety Valve
DSV1-8

▶ RECOMMENDED ACCESSORY ATTACHMENT KIT



Inductive proximity switch - Cable 5 m
NJ6.5-E2-01



Inductive proximity switch - Connector M8
NJ6.5-E2S



Inductive proximity switch - Cable 5 m
NJ8-E2



Inductive proximity switch - Connector M8
NJ8-E2S



Plug-in connector Angled Cable 5m - Socket M8 (female)
KAW500

► Technical Data*

Order no.	SF74MLD6-C
Swivel angle [°]	-90 / 0 / +90
Torque [Nm]	4.5
Swivel angle regulable +/- [°]	3
Repetition accuracy +/- [°]	0.01
Passage bore Ø [mm]	12
Axial bearing load [N]	1120
Radial bearing load [Nm]	88
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm³]	125
Weight [kg]	2.6

*All data measured at 6 bar

Technical drawings of the SF74MLD6-C flat swivel unit. The main drawing shows a side view with dimensions: 72, 45.8, 76, 15.3, 55, 65, 39, 16, 7.5, 2x M5, 2x M5, 2x M8x12, 6x M5, 2x M6x12, 2x Ø5H7x6, 20, 45, 62±0.02. Callouts include 1, 2, 3, 4, 5, 6, 8, 12, 17, 26, 35, 38, 39, A, B, C, D.

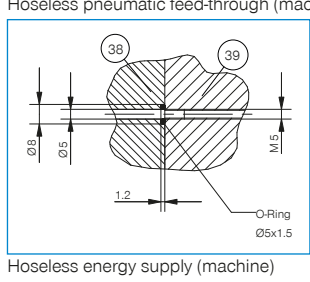
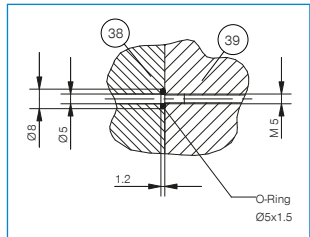
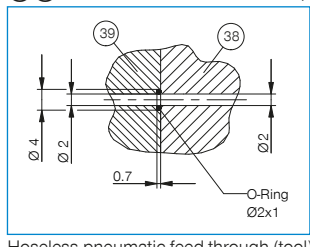
Front view shows dimensions: 22.5, 22.5, 2x M6 DIN7984, 2x Ø10H7, 1.5, 26.

Top view shows dimensions: 74, 46, 24±0.02, 7, 45, 30, 62, 55.5, 175, 60, 61, 5, 35, ±0.02 Ø 5H7, 63, 12, 34, 36, 6x Ø 2, 3.

Swivel angle range: +90°, 0°, -90°.

Callouts for detail drawings: 39, 38, O-Ring Ø2x1, 0.4, 0.2, 0.7, 0.8, 0.5, 1.2, M1.5, O-Ring Ø5x1.5, 0.8, 0.5, 1.2, M1.5, O-Ring Ø5x1.5.

- ① Fixings for swivel unit
- ② Energy supply
- ③ Integrated air feed-through
- ⑥ Shock absorber
- ⑧ Fixing tool side
- ⑫ Fixing ANS
- ⑰ Direction of rotation
- ⑳ Cover shock absorber
- ㉓ Integrated slot for magnetic field sensor
- ㉔ Adapter
- ㉕ Swivel unit
- Ⓐ Air connection swivel to +90°
- Ⓑ Air connection swivel to -90°
- Ⓒ Ⓓ Air connection swivel to mid position



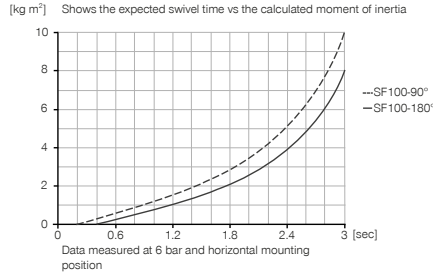
FLAT SWIVEL UNITS

INSTALLATION SIZE SF100N-C

▶ PRODUCT SPECIFICATIONS



▶ Moment of inertia



▶ INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint
DRV1-8X6

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Straight Cable 5 m
MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8
MFS204SKHC



Plug-in connector Straight
Cable 5m - Socket M8
(female)
KAG500



Plug-in connector
customizable Straight -
Connector M8
S8-G-3



Pressure Safety Valve
DSV1-8

▶ RECOMMENDED ACCESSORY ATTACHMENT KIT



Attachment Kit
ANS0015



Inductive proximity switch
- Cable 5 m
NJ8-E2



Inductive proximity switch
- Connector M8
NJ8-E2S

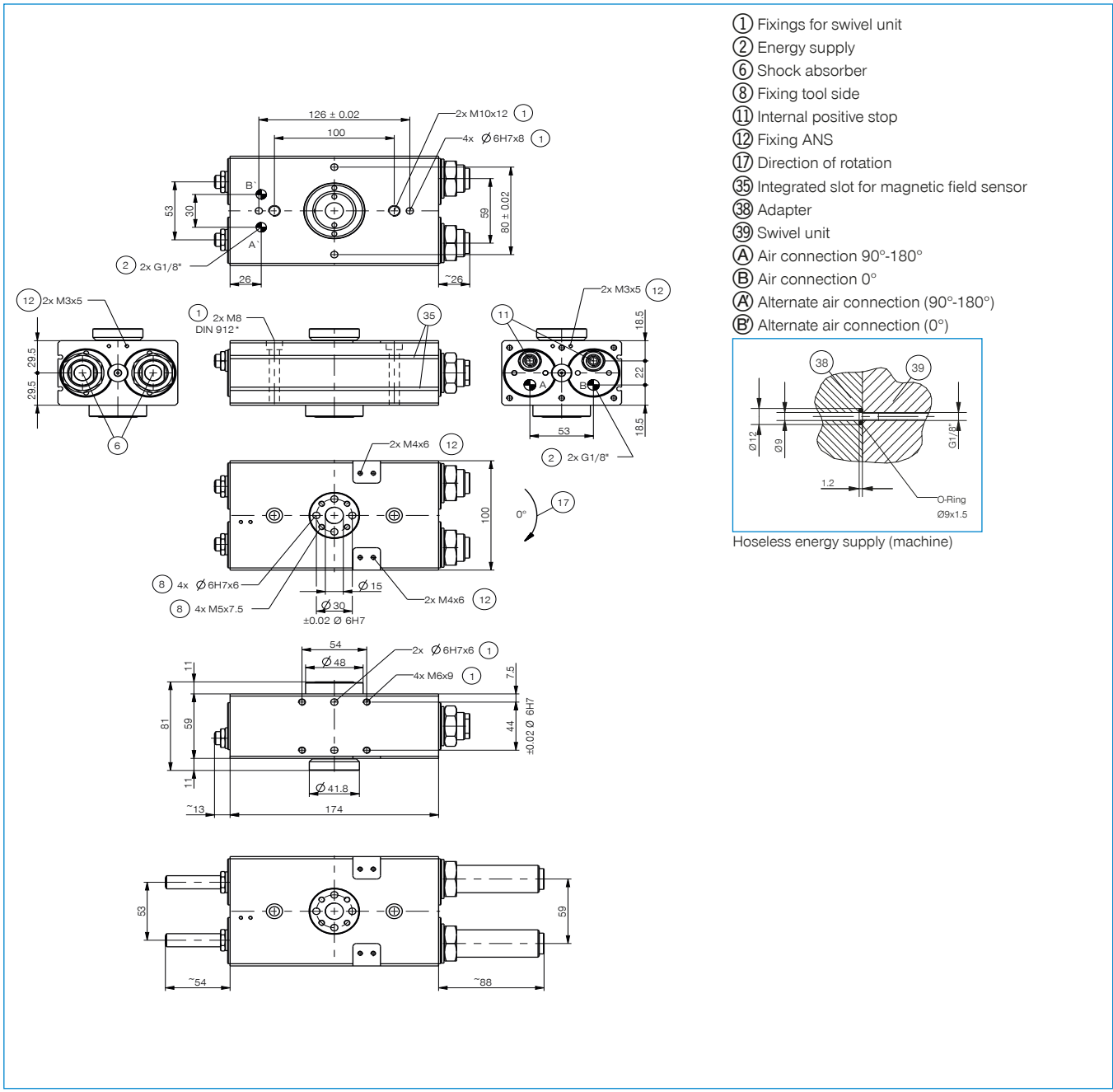


Plug-in connector Angled
Cable 5m - Socket M8
(female)
KAW500

► Technical Data*

Order no.	SF100-90N-C	SF100-180N-C	SF100N-C
Swivel angle [°]	90	180	0-180
Torque [Nm]	20	20	20
Swivel angle regulable +/- [°]	3	3	180
Repetition accuracy +/- [°]	0.01	0.01	0.01
Passage bore Ø [mm]	15	15	15
Axial bearing load [N]	2500	2500	2500
Radial bearing load [Nm]	155	155	155
Operating pressure min. [bar]	3	3	3
Operating pressure max. [bar]	8	8	8
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	80	80	80
Air volume per cycle [cm³]	103	206	206
Weight [kg]	3.7	3.7	3.7

*All data measured at 6 bar



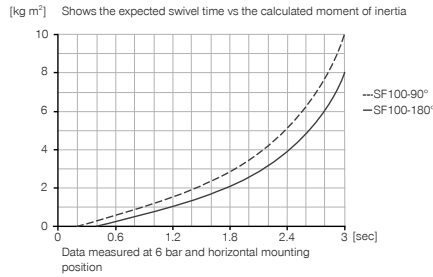
FLAT SWIVEL UNITS

INSTALLATION SIZE SF100D4-C

▶ PRODUCT SPECIFICATIONS



▶ Moment of inertia



▶ INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint
DRV1-8X6



O-Ring
COR0030100

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Straight Cable 5 m
MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8
MFS204SKHC



Plug-in connector Straight
Cable 5m - Socket M8
(female)
KAG500



Plug-in connector
customizable Straight -
Connector M8
S8-G-3



Pressure Safety Valve
DSV1-8

▶ RECOMMENDED ACCESSORY ATTACHMENT KIT



Attachment Kit
ANS0017



Inductive proximity switch
- Cable 5 m
NJ8-E2



Inductive proximity switch
- Connector M8
NJ8-E2S



Plug-in connector Angled
Cable 5m - Socket M8
(female)
KAW500

Order no.	► Technical Data*		
	SF100-90D4-C	SF100-180D4-C	SF100D4-C
Swivel angle [°]	90	180	0-180
Torque [Nm]	15	15	15
Swivel angle regulable +/- [°]	3	3	180
Repetition accuracy +/- [°]	0.01	0.01	0.01
Passage bore Ø [mm]	15	15	15
Axial bearing load [N]	2500	2500	2500
Radial bearing load [Nm]	155	155	155
Operating pressure min. [bar]	3	3	3
Operating pressure max. [bar]	8	8	8
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	80	80	80
Air volume per cycle [cm³]	103	206	206
Weight [kg]	4	4	4

*All data measured at 6 bar

- ① Fixings for swivel unit
- ② Energy supply
- ③ Integrated air feed-through
- ⑥ Shock absorber
- ⑧ Fixing tool side
- ⑪ Internal positive stop
- ⑫ Fixing ANS
- ⑰ Direction of rotation
- ⑳ Integrated slot for magnetic field sensor
- ㉑ Adapter
- ㉒ Swivel unit
- ㉓ Air connection 90°-180°
- ㉔ Air connection 0°
- ㉕ Alternate air connection (90°-180°)
- ㉖ Alternate air connection (0°)

Hoseless pneumatic feed-through (tool)
 Hoseless pneumatic feed-through (machine)
 Hoseless energy supply (machine)

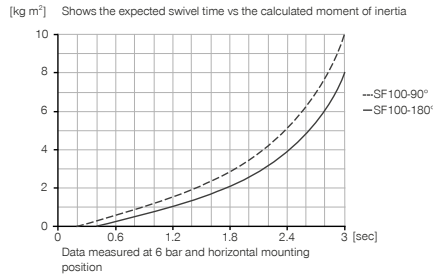
FLAT SWIVEL UNITS

INSTALLATION SIZE SF100D6-C

▶ PRODUCT SPECIFICATIONS



▶ Moment of inertia



▶ INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint
DRV1-8X6



O-Ring
COR0030100

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Straight Cable 5 m
MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8
MFS204SKHC



Plug-in connector Straight
Cable 5m - Socket M8
(female)
KAG500



Plug-in connector
customizable Straight -
Connector M8
S8-G-3



Pressure Safety Valve
DSV1-8

▶ RECOMMENDED ACCESSORY ATTACHMENT KIT



Attachment Kit
ANS0017



Inductive proximity switch
- Cable 5 m
NJ8-E2



Inductive proximity switch
- Connector M8
NJ8-E2S

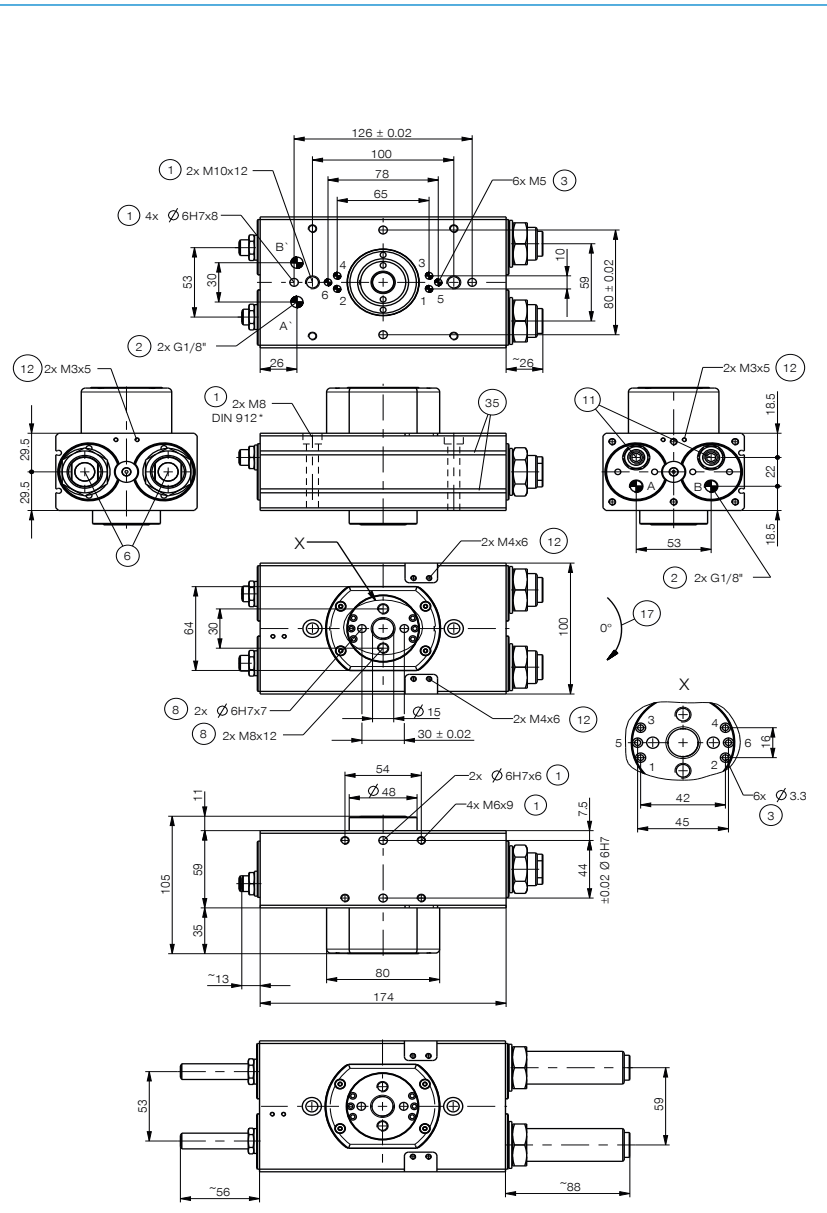


Plug-in connector Angled
Cable 5m - Socket M8
(female)
KAW500

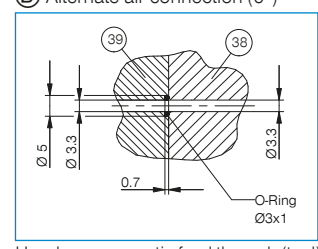
► Technical Data*

Order no.	SF100-90D6-C	SF100-180D6-C	SF100D6-C
Swivel angle [°]	90	180	0-180
Torque [Nm]	13	13	13
Swivel angle regulable +/- [°]	3	3	180
Repetition accuracy +/- [°]	0.01	0.01	0.01
Passage bore Ø [mm]	15	15	15
Axial bearing load [N]	2500	2500	2500
Radial bearing load [Nm]	155	155	155
Operating pressure min. [bar]	3	3	3
Operating pressure max. [bar]	8	8	8
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	80	80	80
Air volume per cycle [cm³]	103	206	206
Weight [kg]	4.1	4.1	4.1

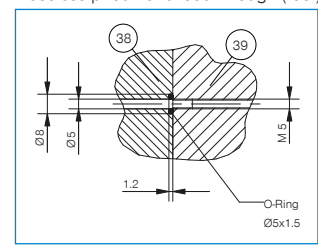
*All data measured at 6 bar



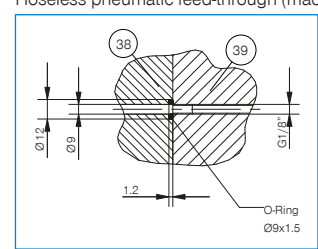
- ① Fixings for swivel unit
- ② Energy supply
- ③ Integrated air feed-through
- ⑥ Shock absorber
- ⑧ Fixing tool side
- ⑪ Internal positive stop
- ⑫ Fixing ANS
- ⑰ Direction of rotation
- ⑳ Integrated slot for magnetic field sensor
- ㉑ Adapter
- ㉒ Swivel unit
- Ⓐ Air connection 90°-180°
- Ⓑ Air connection 0°
- Ⓐ Alternate air connection (90°-180°)
- Ⓑ Alternate air connection (0°)



Hoseless pneumatic feed-through (tool)



Hoseless pneumatic feed-through (machine)



Hoseless energy supply (machine)

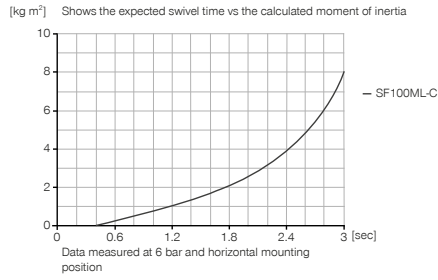
FLAT SWIVEL UNITS

INSTALLATION SIZE SF100ML-C

▶ PRODUCT SPECIFICATIONS



▶ Moment of inertia



▶ INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint
DRV1-8X6



Attachment Kit
ANS0071

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor Straight Cable 5 m
MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8
MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8 (female)
KAG500



Plug-in connector customizable Straight - Connector M8
S8-G-3



Pressure Safety Valve
DSV1-8

▶ RECOMMENDED ACCESSORY ATTACHMENT KIT



Inductive proximity switch - Cable 5 m
NJ8-E2



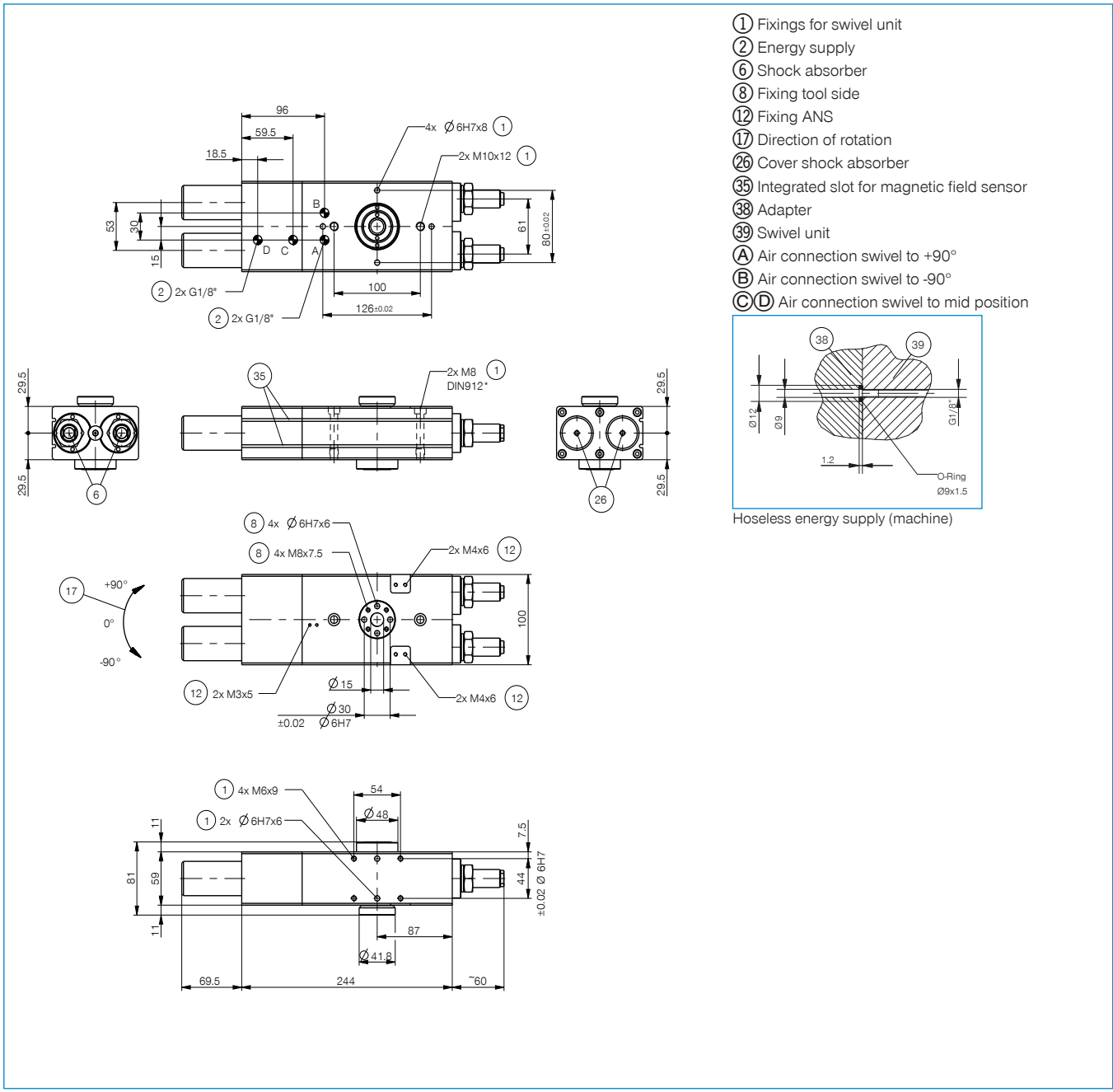
Inductive proximity switch - Connector M8
NJ8-E2S



Plug-in connector Angled Cable 5m - Socket M8 (female)
KAW500

Order no.	SF100ML-C
Swivel angle [°]	-90 / 0 / +90
Torque [Nm]	20
Swivel angle regulable +/- [°]	3
Repetition accuracy +/- [°]	0.01
Passage bore Ø [mm]	15
Axial bearing load [N]	2500
Radial bearing load [Nm]	155
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	304
Weight [kg]	5.4

* All data measured at 6 bar



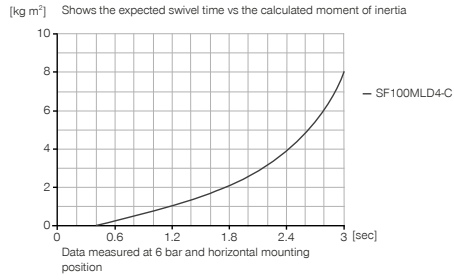
FLAT SWIVEL UNITS

INSTALLATION SIZE SF100MLD4-C

▶ PRODUCT SPECIFICATIONS



▶ Moment of inertia



▶ INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint
DRV1-8X6



O-Ring
COR0030100



Attachment Kit
ANS0072

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Straight Cable 5 m
MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8
MFS204SKHC



Plug-in connector Straight
Cable 5m - Socket M8
(female)
KAG500



Plug-in connector
customizable Straight -
Connector M8
S8-G-3



Pressure Safety Valve
DSV1-8

▶ RECOMMENDED ACCESSORY ATTACHMENT KIT



Inductive proximity switch
- Cable 5 m
NJ8-E2



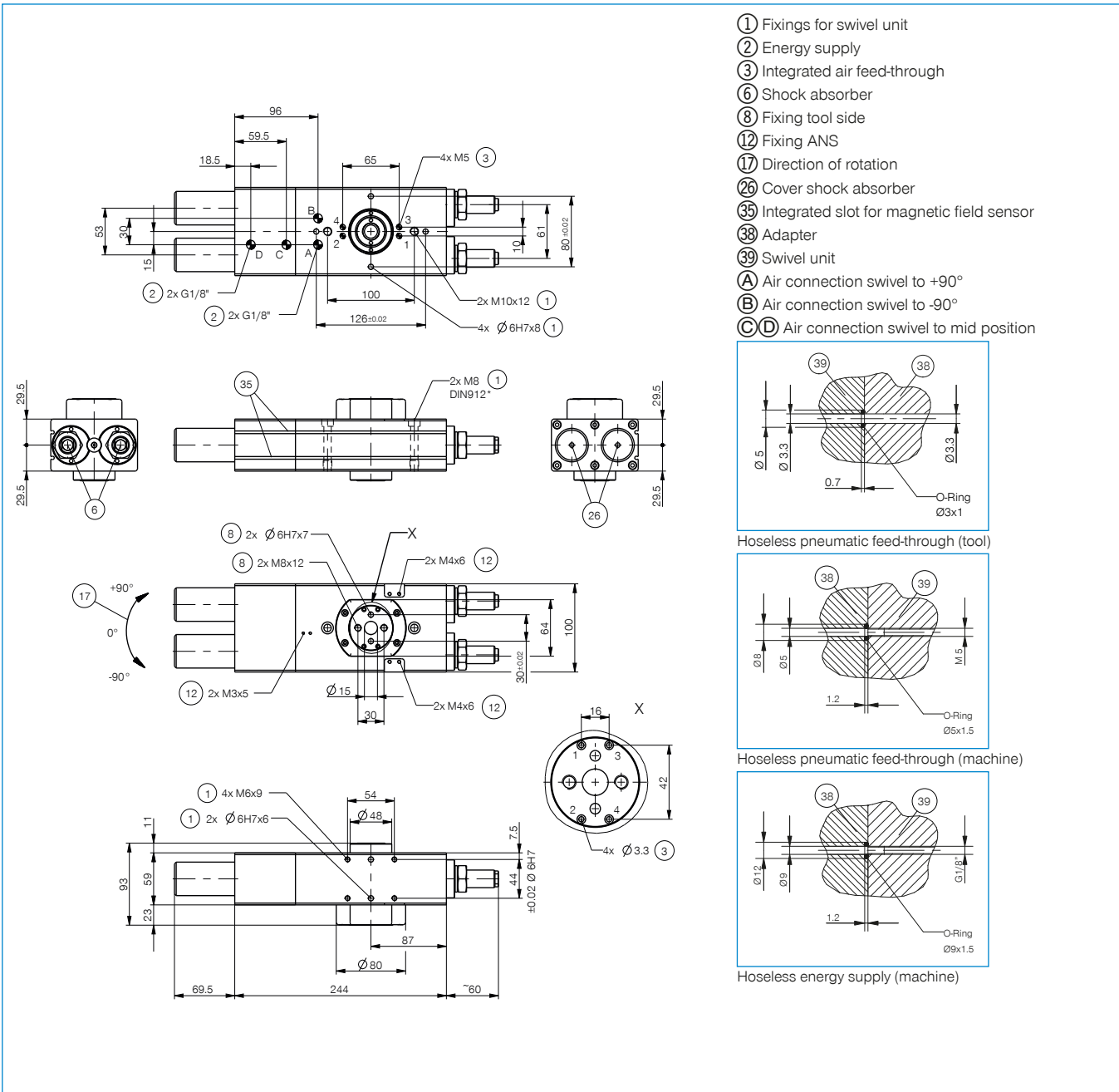
Inductive proximity switch
- Connector M8
NJ8-E2S



Plug-in connector Angled
Cable 5m - Socket M8
(female)
KAW500

Order no.	SF100MLD4-C
Swivel angle [°]	-90 / 0 / +90
Torque [Nm]	15
Swivel angle regulable +/- [°]	3
Repetition accuracy +/- [°]	0.01
Passage bore Ø [mm]	15
Axial bearing load [N]	2500
Radial bearing load [Nm]	155
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	304
Weight [kg]	5.7

*All data measured at 6 bar



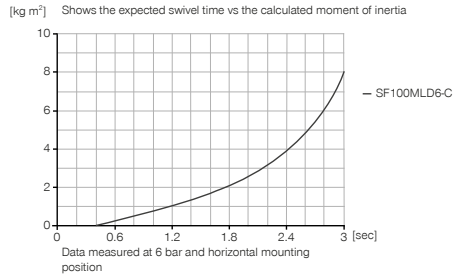
FLAT SWIVEL UNITS

INSTALLATION SIZE SF100MLD6-C

▶ PRODUCT SPECIFICATIONS



▶ Moment of inertia



▶ INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint
DRV1-8X6



O-Ring
COR0030100



Attachment Kit
ANS0073

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Straight Cable 5 m
MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8
MFS204SKHC



Plug-in connector Straight
Cable 5m - Socket M8
(female)
KAG500



Plug-in connector
customizable Straight -
Connector M8
S8-G-3



Pressure Safety Valve
DSV1-8

▶ RECOMMENDED ACCESSORY ATTACHMENT KIT



Inductive proximity switch
- Cable 5 m
NJ8-E2



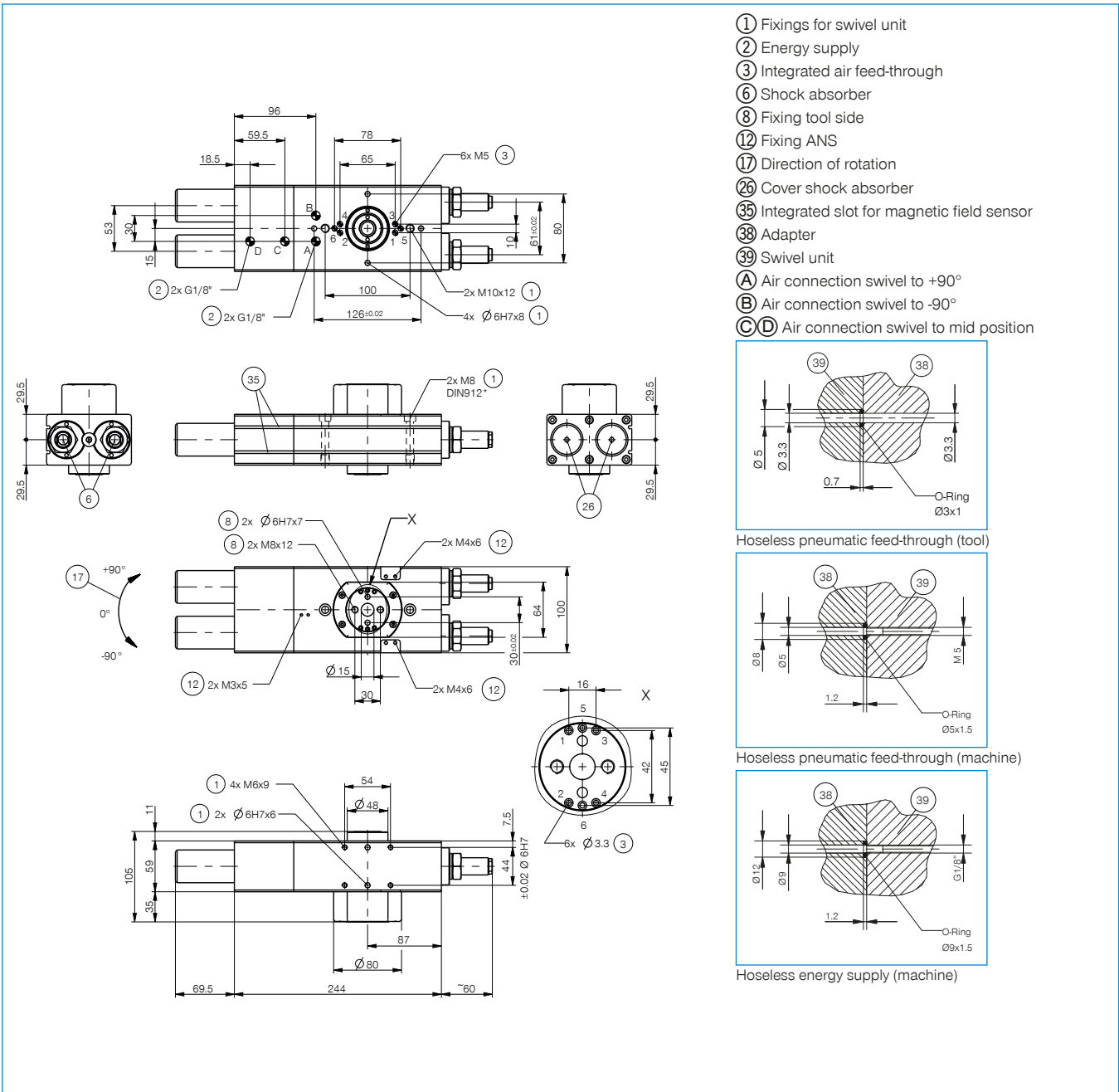
Inductive proximity switch
- Connector M8
NJ8-E2S



Plug-in connector Angled
Cable 5m - Socket M8
(female)
KAW500

Order no.	SF100MLD6-C
Swivel angle [°]	-90 / 0 / +90
Torque [Nm]	13
Swivel angle regulable +/- [°]	3
Repetition accuracy +/- [°]	0.01
Passage bore Ø [mm]	15
Axial bearing load [N]	2500
Radial bearing load [Nm]	155
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm³]	304
Weight [kg]	5.8

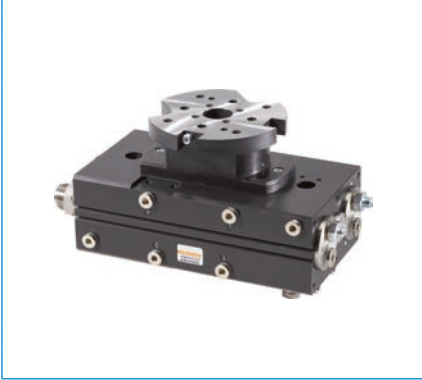
*All data measured at 6 bar



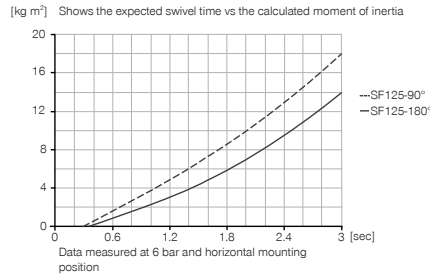
FLAT SWIVEL UNITS

INSTALLATION SIZE SF125N-C

▶ PRODUCT SPECIFICATIONS



▶ Moment of inertia



▶ INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint
DRV1-4X8

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Straight Cable 5 m
MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8
MFS204SKHC



Plug-in connector Straight
Cable 5m - Socket M8
(female)
KAG500



Plug-in connector
customizable Straight -
Connector M8
S8-G-3



Pressure Safety Valve
DSV1-8

▶ RECOMMENDED ACCESSORY ATTACHMENT KIT



Attachment Kit
ANS0035



Inductive proximity switch
- Cable 5 m
NJ8-E2



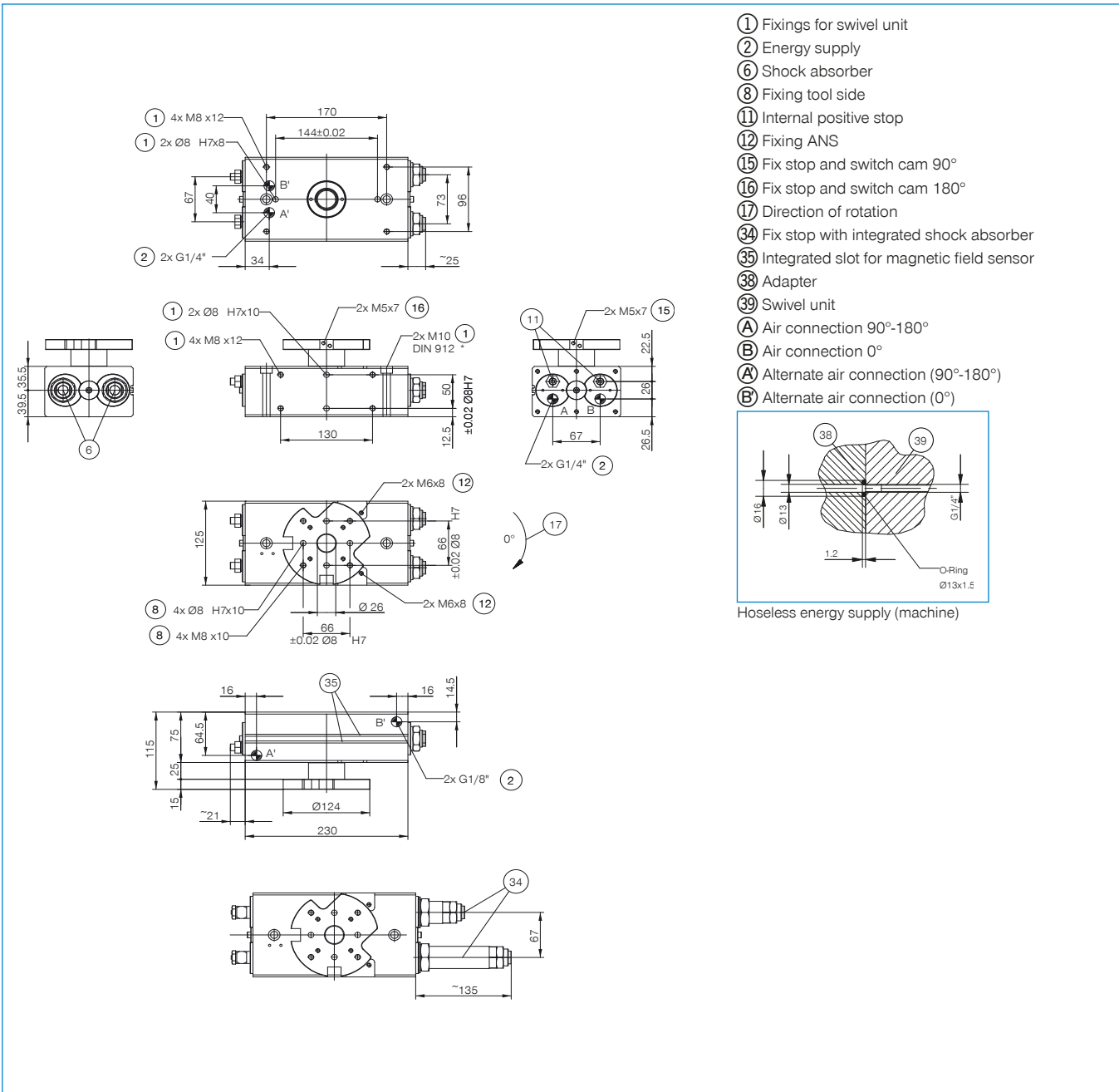
Inductive proximity switch
- Cable 5 m
NJ12-E2



Plug-in connector Angled
Cable 5m - Socket M8
(female)
KAW500

Order no.	► Technical Data*		
	SF125-90N-C	SF125-180N-C	SF125N-C
Swivel angle [°]	90	180	0-180
Torque [Nm]	38	38	38
Swivel angle regulable +/- [°]	3	3	180
Repetition accuracy +/- [°]	0.01	0.01	0.01
Passage bore Ø [mm]	26	26	26
Axial bearing load [N]	3400	3400	3400
Radial bearing load [Nm]	391	391	391
Operating pressure min. [bar]	3	3	3
Operating pressure max. [bar]	8	8	8
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	80	80	80
Air volume per cycle [cm³]	220	440	440
Weight [kg]	8.8	8.8	9.8

*All data measured at 6 bar



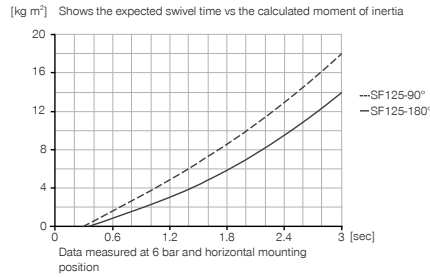
FLAT SWIVEL UNITS

INSTALLATION SIZE SF125D4-C

▶ PRODUCT SPECIFICATIONS



▶ Moment of inertia



▶ INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint
DRV1-4X8



O-Ring
COR0040150

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Straight Cable 5 m
MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8
MFS204SKHC



Plug-in connector Straight
Cable 5m - Socket M8
(female)
KAG500



Plug-in connector
customizable Straight -
Connector M8
S8-G-3



Pressure Safety Valve
DSV1-8

▶ RECOMMENDED ACCESSORY ATTACHMENT KIT



Attachment Kit
ANS0036



Inductive proximity switch
- Cable 5 m
NJ8-E2



Inductive proximity switch
- Cable 5 m
NJ12-E2



Plug-in connector Angled
Cable 5m - Socket M8
(female)
KAW500

► Technical Data*

Order no.	SF125-90D4-C	SF125-180D4-C	SF125D4-C
Swivel angle [°]	90	180	0-180
Torque [Nm]	34	34	34
Swivel angle regulable +/- [°]	3	3	180
Repetition accuracy +/- [°]	0.01	0.01	0.01
Passage bore Ø [mm]	26	26	26
Axial bearing load [N]	3400	3400	3400
Radial bearing load [Nm]	391	391	391
Operating pressure min. [bar]	3	3	3
Operating pressure max. [bar]	8	8	8
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	80	80	80
Air volume per cycle [cm³]	220	440	440
Weight [kg]	9.5	9.5	10.5

*All data measured at 6 bar

1 4x M8x12
 1 2x ø8H7x8
 2 2x G1/4"
 3 4x G1/8"
 6 2x ø8H7x10
 8 4x M8x12
 11 2x M5x7
 12 2x M6x8
 15 2x M5x7
 16 2x M10 DIN 912
 17 4x ø4.2
 34 2x G1/8"
 35 2x G1/8"
 38 Adapter
 39 Swivel unit

A Air connection 90°-180°
 B Air connection 0°
 A Alternate air connection (90°-180°)
 B Alternate air connection (0°)

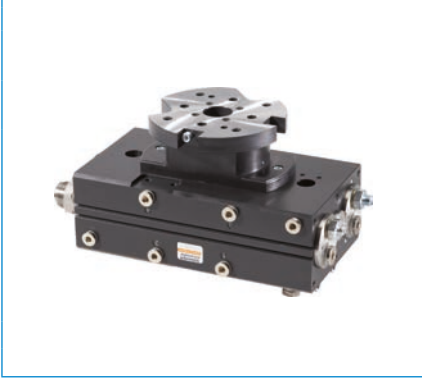
Hoseless pneumatic feed-through (tool)
 Hoseless pneumatic feed-through (machine)
 Hoseless energy supply (machine)

- ① Fixings for swivel unit
- ② Energy supply
- ③ Integrated air feed-through
- ⑥ Shock absorber
- ⑧ Fixing tool side
- ⑪ Internal positive stop
- ⑫ Fixing ANS
- ⑮ Fix stop and switch cam 90°
- ⑯ Fix stop and switch cam 180°
- ⑰ Direction of rotation
- ⑳ Fix stop with integrated shock absorber
- ㉑ Integrated slot for magnetic field sensor
- ㉒ Adapter
- ㉓ Swivel unit
- A Air connection 90°-180°
- B Air connection 0°
- A Alternate air connection (90°-180°)
- B Alternate air connection (0°)

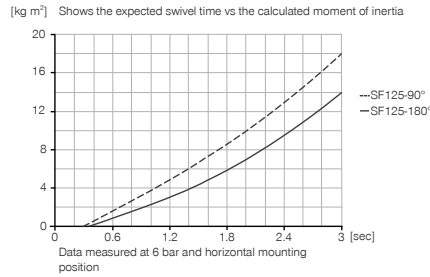
FLAT SWIVEL UNITS

INSTALLATION SIZE SF125D8-C

▶ PRODUCT SPECIFICATIONS



▶ Moment of inertia



▶ INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint
DRV1-4X8



O-Ring
COR0040150

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Straight Cable 5 m
MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8
MFS204SKHC



Plug-in connector Straight
Cable 5m - Socket M8
(female)
KAG500



Plug-in connector
customizable Straight -
Connector M8
S8-G-3



Pressure Safety Valve
DSV1-8

▶ RECOMMENDED ACCESSORY ATTACHMENT KIT



Attachment Kit
ANS0037



Inductive proximity switch
- Cable 5 m
NJ8-E2



Inductive proximity switch
- Cable 5 m
NJ12-E2



Plug-in connector Angled
Cable 5m - Socket M8
(female)
KAW500

► Technical Data*

Order no.	SF125-90D8-C	SF125-180D8-C	SF125D8-C
Swivel angle [°]	90	180	0-180
Torque [Nm]	32	32	32
Swivel angle regulable +/- [°]	3	3	180
Repetition accuracy +/- [°]	0.01	0.01	0.01
Passage bore Ø [mm]	26	26	26
Axial bearing load [N]	3400	3400	3400
Radial bearing load [Nm]	391	391	391
Operating pressure min. [bar]	3	3	3
Operating pressure max. [bar]	8	8	8
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	80	80	80
Air volume per cycle [cm³]	220	440	440
Weight [kg]	10.5	10.5	11.5

*All data measured at 6 bar

① Fixings for swivel unit
 ② Energy supply
 ③ Integrated air feed-through
 ⑥ Shock absorber
 ⑧ Fixing tool side
 ⑪ Internal positive stop
 ⑫ Fixing ANS
 ⑮ Fix stop and switch cam 90°
 ⑯ Fix stop and switch cam 180°
 ⑰ Direction of rotation
 ⑳ Fix stop with integrated shock absorber
 ㉓ Integrated slot for magnetic field sensor
 ㉔ Adapter
 ㉕ Swivel unit
 A Air connection 90°-180°
 B Air connection 0°
 A' Alternate air connection (90°-180°)
 B' Alternate air connection (0°)

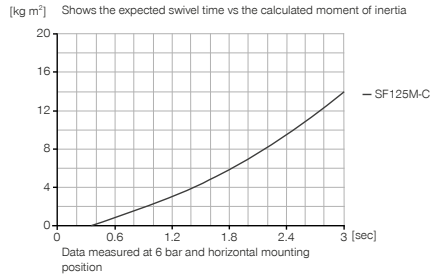
Hoseless pneumatic feed-through (tool)
 Hoseless pneumatic feed-through (machine)
 Hoseless energy supply (machine)

FLAT SWIVEL UNITS INSTALLATION SIZE

▶ PRODUCT SPECIFICATIONS



▶ Moment of inertia



▶ INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint
DRV1-4X8



Attachment Kit
ANS0074

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Straight Cable 5 m
MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8
MFS204SKHC



Plug-in connector Straight
Cable 5m - Socket M8
(female)
KAG500



Plug-in connector
customizable Straight -
Connector M8
S8-G-3



Pressure Safety Valve
DSV1-8

▶ RECOMMENDED ACCESSORY ATTACHMENT KIT



Inductive proximity switch
- Cable 5 m
NJ8-E2



Inductive proximity switch
- Cable 5 m
NJ12-E2



Plug-in connector Angled
Cable 5m - Socket M8
(female)
KAW500

► Technical Data*

Order no.	SF125M-C
Swivel angle [°]	-90 / 0 / +90
Torque [Nm]	38
Swivel angle regulable +/- [°]	3
Repetition accuracy +/- [°]	0.01
Passage bore Ø [mm]	26
Axial bearing load [N]	3400
Radial bearing load [Nm]	391
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	540
Weight [kg]	11.9

* All data measured at 6 bar

Technical drawings of the SF125M-C flat swivel unit, showing front, side, and detail views with dimensions and callouts.

- ① Fixings for swivel unit
- ② Energy supply
- ⑤ Adjusting screw
- ⑥ Shock absorber
- ⑧ Fixing tool side
- ⑫ Fixing ANS
- ⑰ Direction of rotation
- ⑲ Switch cam
- ⑳ Integrated slot for magnetic field sensor
- ㉓ Adapter
- ㉔ Swivel unit
- Ⓐ Air connection swivel to +90°
- Ⓑ Air connection swivel to -90°
- Ⓐ Alternate air connection swivel to +90°
- Ⓑ Alternate air connection swivel to -90°
- ⒸⒹⒺⒻ Air connection swivel to mid position
- ⒸⒹⒺⒻ Alternate air connection swivel to mid position

Hoseless energy supply (machine)

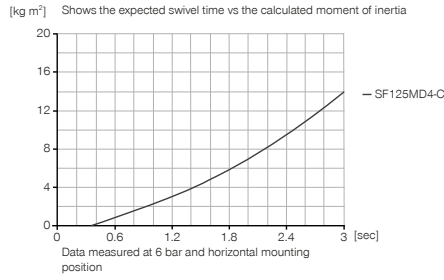
FLAT SWIVEL UNITS

INSTALLATION SIZE SF125MD4-C

▶ PRODUCT SPECIFICATIONS



▶ Moment of inertia



▶ INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint
DRV1-4X8



O-Ring
COR0040150



Attachment Kit
ANS0075

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Straight Cable 5 m
MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8
MFS204SKHC



Plug-in connector Straight
Cable 5m - Socket M8
(female)
KAG500



Plug-in connector
customizable Straight -
Connector M8
S8-G-3



Pressure Safety Valve
DSV1-8

▶ RECOMMENDED ACCESSORY ATTACHMENT KIT



Inductive proximity switch
- Cable 5 m
NJ8-E2



Inductive proximity switch
- Cable 5 m
NJ12-E2



Plug-in connector Angled
Cable 5m - Socket M8
(female)
KAW500

Order no.	Technical Data*
Swivel angle [°]	-90 / 0 / +90
Torque [Nm]	34
Swivel angle regulable +/- [°]	3
Repetition accuracy +/- [°]	0.01
Passage bore Ø [mm]	26
Axial bearing load [N]	3400
Radial bearing load [Nm]	391
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm³]	540
Weight [kg]	12.9

*All data measured at 6 bar

Legend:

- ① Fixings for swivel unit
- ② Energy supply
- ③ Integrated air feed-through
- ⑤ Adjusting screw
- ⑥ Shock absorber
- ⑧ Fixing tool side
- ⑫ Fixing ANS
- ⑰ Direction of rotation
- ⑲ Switch cam
- ⑳ Integrated slot for magnetic field sensor
- ㉓ Adapter
- ㉔ Swivel unit
- A Air connection swivel to +90°
- B Air connection swivel to -90°
- A' Alternate air connection swivel to +90°
- B' Alternate air connection swivel to -90°
- C D E F Air connection swivel to mid position
- C' D' E' F' Alternate air connection swivel to mid position

Dimensions and Callouts:

- Top view: 170, 58.5, 22, 144, ±0.02 8H7, 68, 4x G1/8" (3), 4x M8x12 (1), 2x Ø8H7x8 (1), 80, 67, 60, 40, 104, 82, 73, 96, 1.8, 45, 2x G1/4" (2), 4x M5 (2)
- Side view: 39.5, 35.5, 73, 12.5, ±0.02 8H7, 50, 130, 64.8, 104.5, 67, 2x G1/8" (2), 4x M8x12 (1), 2x Ø8H7x10 (1)
- Front view: 125, 109, 66, ±0.02 8H7, 45°, 45°, 4x Ø8H7x10 (8), 4x M8x10 (8), Ø28, ±0.02 8H7, X, 17, +90°, 0°, -90°
- Bottom view: 58.5, 46.5, 22, 80, 66, 16, 14.5, 130, 7.5, 64.5, 10, 10, 40, 15, 16, 70, 230, 4x M5 (2), 4x G1/8" (3), 2x G1/8" (2), 35
- Detail X: 45°, 45°, 4, 4, 3, 2, 1, 4x Ø 4.2 (3)

Hoseless pneumatic feed-through (tool):

Ø 7, Ø 4.2, 1.2, O-Ring Ø4x1.5

Hoseless pneumatic feed-through (machine):

Ø 12, Ø 9, 1.2, O-Ring Ø9x1.5, G1/8"

Hoseless energy supply (machine):

Ø 18, Ø 13, 1.2, O-Ring Ø13x1.5, G1/4"

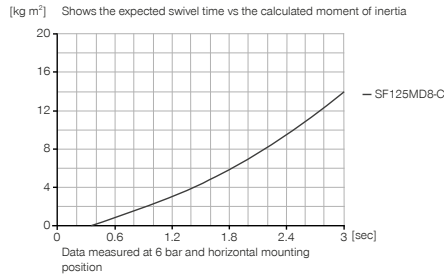
FLAT SWIVEL UNITS

INSTALLATION SIZE SF125MD8-C

▶ PRODUCT SPECIFICATIONS



▶ Moment of inertia



▶ INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint
DRV1-4X8



O-Ring
COR0040150



Attachment Kit
ANS0076

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Straight Cable 5 m
MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8
MFS204SKHC



Plug-in connector Straight
Cable 5m - Socket M8
(female)
KAG500



Plug-in connector
customizable Straight -
Connector M8
S8-G-3



Pressure Safety Valve
DSV1-8

▶ RECOMMENDED ACCESSORY ATTACHMENT KIT



Inductive proximity switch
- Cable 5 m
NJ8-E2



Inductive proximity switch
- Cable 5 m
NJ12-E2



Plug-in connector Angled
Cable 5m - Socket M8
(female)
KAW500

Order no.	SF125MD8-C
Swivel angle [°]	-90 / 0 / +90
Torque [Nm]	32
Swivel angle regulable +/- [°]	3
Repetition accuracy +/- [°]	0.01
Passage bore Ø [mm]	26
Axial bearing load [N]	3400
Radial bearing load [Nm]	391
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	540
Weight [kg]	12.9

*All data measured at 6 bar

► **Technical Data***

Legend:

- ① Fixings for swivel unit
- ② Energy supply
- ③ Integrated air feed-through
- ⑤ Adjusting screw
- ⑥ Shock absorber
- ⑧ Fixing tool side
- ⑫ Fixing ANS
- ⑰ Direction of rotation
- ⑲ Switch cam
- ⑳ Integrated slot for magnetic field sensor
- ㉓ Adapter
- ㉔ Swivel unit
- A Air connection swivel to +90°
- B Air connection swivel to -90°
- Ⓐ Alternate air connection swivel to +90°
- Ⓑ Alternate air connection swivel to -90°
- ⒸⒹⒺⒻ Air connection swivel to mid position
- ⒼⒽⒿ Alternate air connection swivel to mid position

Hoseless pneumatic feed-through (tool)

Hoseless pneumatic feed-through (machine)

Hoseless energy supply (machine)

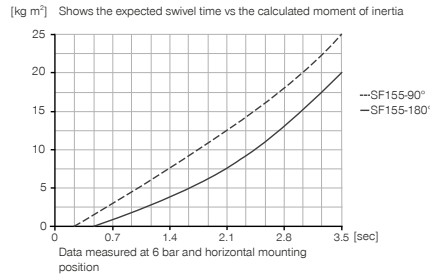
FLAT SWIVEL UNITS

INSTALLATION SIZE SF155N-C

▶ PRODUCT SPECIFICATIONS



▶ Moment of inertia



▶ INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint
DRV1-4X8

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Straight Cable 5 m
MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8
MFS204SKHC



Plug-in connector Straight
Cable 5m - Socket M8
(female)
KAG500



Plug-in connector
customizable Straight -
Connector M8
S8-G-3



Pressure Safety Valve
DSV1-8

▶ RECOMMENDED ACCESSORY ATTACHMENT KIT



Attachment Kit
ANS0038



Inductive proximity switch
- Cable 5 m
NJ8-E2



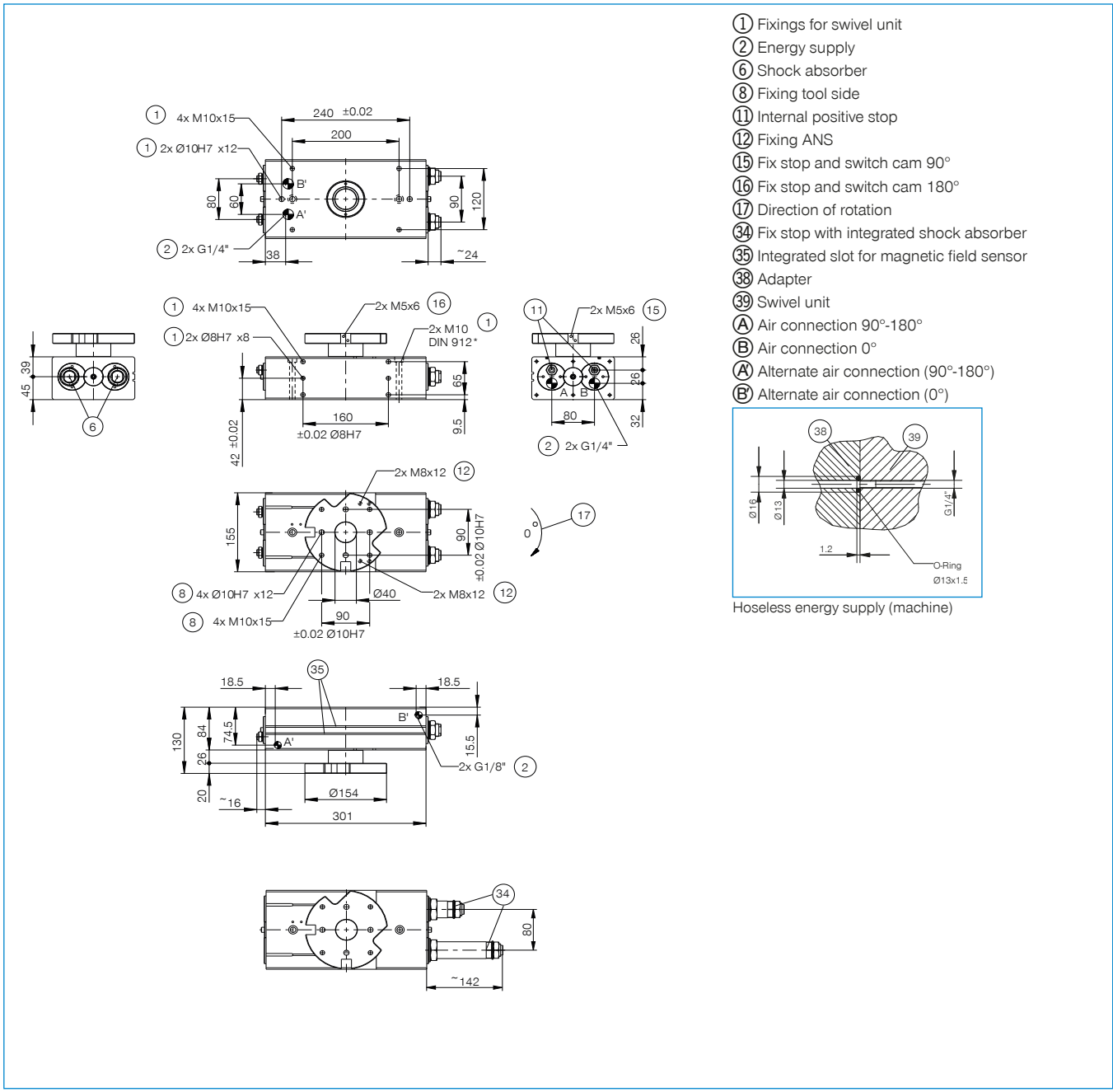
Inductive proximity switch
- Cable 5 m
NJ12-E2



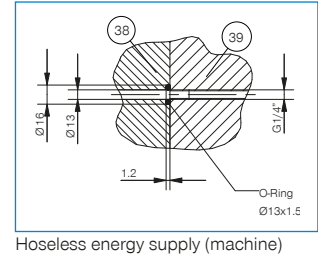
Plug-in connector Angled
Cable 5m - Socket M8
(female)
KAW500

Order no.	► Technical Data*		
	SF155-90N-C	SF155-180N-C	SF155N-C
Swivel angle [°]	90	180	0-180
Torque [Nm]	62	62	62
Swivel angle regulable +/- [°]	3	3	180
Repetition accuracy +/- [°]	0.01	0.01	0.01
Passage bore Ø [mm]	40	40	40
Axial bearing load [N]	5900	5900	5900
Radial bearing load [Nm]	761	761	761
Operating pressure min. [bar]	3	3	3
Operating pressure max. [bar]	8	8	8
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	80	80	80
Air volume per cycle [cm³]	350	700	700
Weight [kg]	15	15	16.5

*All data measured at 6 bar



- ① Fixings for swivel unit
- ② Energy supply
- ⑥ Shock absorber
- ⑧ Fixing tool side
- ⑪ Internal positive stop
- ⑫ Fixing ANS
- ⑮ Fix stop and switch cam 90°
- ⑯ Fix stop and switch cam 180°
- ⑰ Direction of rotation
- ⑳ Fix stop with integrated shock absorber
- ㉓ Integrated slot for magnetic field sensor
- ㉔ Adapter
- ㉕ Swivel unit
- A Air connection 90°-180°
- B Air connection 0°
- A' Alternate air connection (90°-180°)
- B' Alternate air connection (0°)



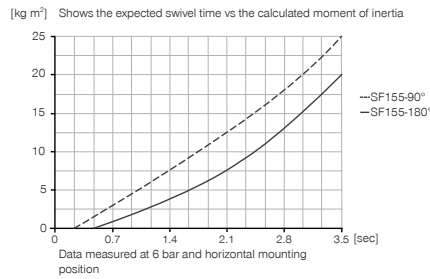
FLAT SWIVEL UNITS

INSTALLATION SIZE SF155D4-C

▶ PRODUCT SPECIFICATIONS



▶ Moment of inertia



▶ INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint
DRV1-4X8



O-Ring
COR0040150

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Straight Cable 5 m
MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8
MFS204SKHC



Plug-in connector Straight
Cable 5m - Socket M8
(female)
KAG500



Plug-in connector
customizable Straight -
Connector M8
S8-G-3



Pressure Safety Valve
DSV1-8

▶ RECOMMENDED ACCESSORY ATTACHMENT KIT



Attachment Kit
ANS0039



Inductive proximity switch
- Cable 5 m
NJ8-E2



Inductive proximity switch
- Cable 5 m
NJ12-E2



Plug-in connector Angled
Cable 5m - Socket M8
(female)
KAW500

► Technical Data*

Order no.	SF155-90D4-C	SF155-180D4-C	SF155D4-C
Swivel angle [°]	90	180	0-180
Torque [Nm]	58	58	58
Swivel angle regulable +/- [°]	3	3	180
Repetition accuracy +/- [°]	0.01	0.01	0.01
Passage bore Ø [mm]	40	40	40
Axial bearing load [N]	5900	5900	5900
Radial bearing load [Nm]	761	761	761
Operating pressure min. [bar]	3	3	3
Operating pressure max. [bar]	8	8	8
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	80	80	80
Air volume per cycle [cm³]	350	700	700
Weight [kg]	16	16	17.5

*All data measured at 6 bar

- ① Fixings for swivel unit
- ② Energy supply
- ③ Integrated air feed-through
- ⑥ Shock absorber
- ⑧ Fixing tool side
- ⑪ Internal positive stop
- ⑫ Fixing ANS
- ⑮ Fix stop and switch cam 90°
- ⑯ Fix stop and switch cam 180°
- ⑰ Direction of rotation
- ⑳ Fix stop with integrated shock absorber
- ㉓ Integrated slot for magnetic field sensor
- ㉔ Adapter
- ㉕ Swivel unit
- A Air connection 90°-180°
- B Air connection 0°
- A Alternate air connection (90°-180°)
- B Alternate air connection (0°)

Hoseless pneumatic feed-through (tool)

Hoseless pneumatic feed-through (machine)

Hoseless energy supply (machine)

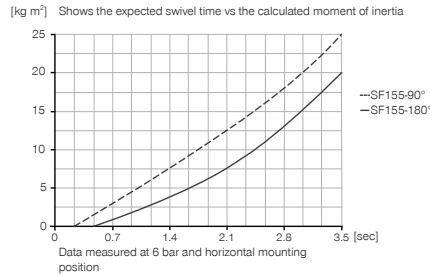
FLAT SWIVEL UNITS

INSTALLATION SIZE SF155D8-C

▶ PRODUCT SPECIFICATIONS



▶ Moment of inertia



▶ INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint
DRV1-4X8



O-Ring
COR0040150

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Straight Cable 5 m
MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8
MFS204SKHC



Plug-in connector Straight
Cable 5m - Socket M8
(female)
KAG500



Plug-in connector
customizable Straight -
Connector M8
S8-G-3



Pressure Safety Valve
DSV1-8

▶ RECOMMENDED ACCESSORY ATTACHMENT KIT



Attachment Kit
ANS0040



Inductive proximity switch
- Cable 5 m
NJ8-E2



Inductive proximity switch
- Cable 5 m
NJ12-E2



Plug-in connector Angled
Cable 5m - Socket M8
(female)
KAW500

► Technical Data*

Order no.	SF155-90D8-C	SF155-180D8-C	SF155D8-C
Swivel angle [°]	90	180	0-180
Torque [Nm]	54	54	54
Swivel angle regulable +/- [°]	3	3	180
Repetition accuracy +/- [°]	0.01	0.01	0.01
Passage bore Ø [mm]	40	40	40
Axial bearing load [N]	5900	5900	5900
Radial bearing load [Nm]	761	761	761
Operating pressure min. [bar]	3	3	3
Operating pressure max. [bar]	8	8	8
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	80	80	80
Air volume per cycle [cm³]	350	700	700
Weight [kg]	17.5	17.5	19

*All data measured at 6 bar

- ① Fixings for swivel unit
- ② Energy supply
- ③ Integrated air feed-through
- ⑥ Shock absorber
- ⑧ Fixing tool side
- ⑪ Internal positive stop
- ⑫ Fixing ANS
- ⑮ Fix stop and switch cam 90°
- ⑯ Fix stop and switch cam 180°
- ⑰ Direction of rotation
- ⑳ Fix stop with integrated shock absorber
- ㉓ Integrated slot for magnetic field sensor
- ㉔ Adapter
- ㉕ Swivel unit
- Ⓐ Air connection 90°-180°
- Ⓑ Air connection 0°
- Ⓐ Alternate air connection (90°-180°)
- Ⓑ Alternate air connection (0°)

Hoseless pneumatic feed-through (tool)

Hoseless pneumatic feed-through (machine)

Hoseless energy supply (machine)

FLAT SWIVEL UNITS

INSTALLATION SIZE SF155M-C

▶ PRODUCT SPECIFICATIONS



▶ Moment of inertia

[kg m²] Shows the expected swivel time vs the calculated moment of inertia



▶ INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint
DRV1-4X8



Attachment Kit
ANS0077

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor Straight Cable 5 m
MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8
MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8 (female)
KAG500



Plug-in connector customizable Straight - Connector M8
S8-G-3



Pressure Safety Valve
DSV1-8

▶ RECOMMENDED ACCESSORY ATTACHMENT KIT



Inductive proximity switch - Cable 5 m
NJ8-E2



Inductive proximity switch - Cable 5 m
NJ12-E2

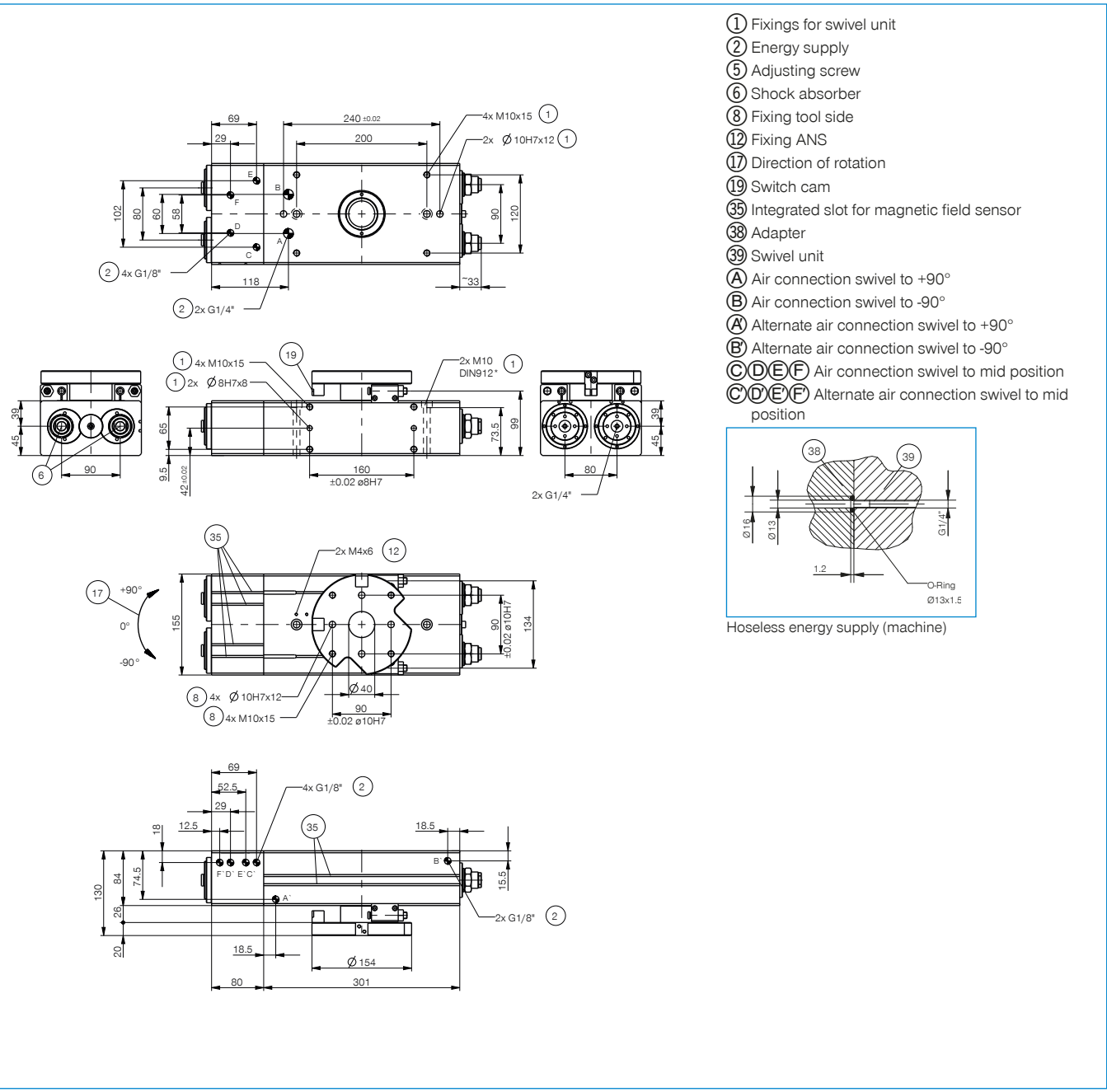


Plug-in connector Angled Cable 5m - Socket M8 (female)
KAW500

► Technical Data*

Order no.	SF155M-C
Swivel angle [°]	-90 / 0 / +90
Torque [Nm]	62
Swivel angle regulable +/- [°]	3
Repetition accuracy +/- [°]	0.01
Passage bore Ø [mm]	40
Axial bearing load [N]	5900
Radial bearing load [Nm]	761
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	1010
Weight [kg]	19.3

*All data measured at 6 bar



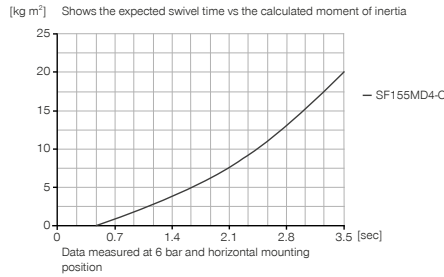
FLAT SWIVEL UNITS

INSTALLATION SIZE SF155MD4-C

▶ PRODUCT SPECIFICATIONS



▶ Moment of inertia



▶ INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint
DRV1-4X8



O-Ring
COR0040150



Attachment Kit
ANS0078

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Straight Cable 5 m
MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8
MFS204SKHC



Plug-in connector Straight
Cable 5m - Socket M8
(female)
KAG500



Plug-in connector
customizable Straight -
Connector M8
S8-G-3



Pressure Safety Valve
DSV1-8

▶ RECOMMENDED ACCESSORY ATTACHMENT KIT



Inductive proximity switch
- Cable 5 m
NJ8-E2



Inductive proximity switch
- Cable 5 m
NJ12-E2



Plug-in connector Angled
Cable 5m - Socket M8
(female)
KAW500

Order no.	Technical Data*
Swivel angle [°]	-90 / 0 / +90
Torque [Nm]	58
Swivel angle regulable +/- [°]	3
Repetition accuracy +/- [°]	0.01
Passage bore Ø [mm]	40
Axial bearing load [N]	5900
Radial bearing load [Nm]	761
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm³]	1010
Weight [kg]	20.3

*All data measured at 6 bar

Legend:

- ① Fixings for swivel unit
- ② Energy supply
- ③ Integrated air feed-through
- ⑤ Adjusting screw
- ⑥ Shock absorber
- ⑧ Fixing tool side
- ⑫ Fixing ANS
- ⑰ Direction of rotation
- ⑲ Switch cam
- ⑳ Integrated slot for magnetic field sensor
- ㉓ Adapter
- ㉔ Swivel unit
- A Air connection swivel to +90°
- B Air connection swivel to -90°
- A Alternate air connection swivel to +90°
- B Alternate air connection swivel to -90°
- C D E F Air connection swivel to mid position
- C D E F Alternate air connection swivel to mid position

Hoseless pneumatic feed-through (tool)

Hoseless pneumatic feed-through (machine)

Hoseless energy supply (machine)

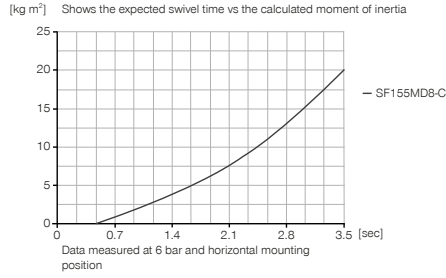
FLAT SWIVEL UNITS

INSTALLATION SIZE SF155MD8-C

▶ PRODUCT SPECIFICATIONS



▶ Moment of inertia



▶ INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint
DRV1-4X8



O-Ring
COR0040150



Attachment Kit
ANS0079

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Straight Cable 5 m
MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8
MFS204SKHC



Plug-in connector Straight
Cable 5m - Socket M8
(female)
KAG500



Plug-in connector
customizable Straight -
Connector M8
S8-G-3



Pressure Safety Valve
DSV1-8

▶ RECOMMENDED ACCESSORY ATTACHMENT KIT



Inductive proximity switch
- Cable 5 m
NJ8-E2



Inductive proximity switch
- Cable 5 m
NJ12-E2



Plug-in connector Angled
Cable 5m - Socket M8
(female)
KAW500

► Technical Data*

Order no.	SF155MD8-C
Swivel angle [°]	-90 / 0 / +90
Torque [Nm]	54
Swivel angle regulable +/- [°]	3
Repetition accuracy +/- [°]	0.01
Passage bore Ø [mm]	40
Axial bearing load [N]	5900
Radial bearing load [Nm]	761
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	1010
Weight [kg]	21.8

*All data measured at 6 bar

- ① Fixings for swivel unit
- ② Energy supply
- ③ Integrated air feed-through
- ⑤ Adjusting screw
- ⑥ Shock absorber
- ⑧ Fixing tool side
- ⑫ Fixing ANS
- ⑰ Direction of rotation
- ⑲ Switch cam
- ⑳ Integrated slot for magnetic field sensor
- ㉓ Adapter
- ㉔ Swivel unit
- A Air connection swivel to +90°
- B Air connection swivel to -90°
- A Alternate air connection swivel to +90°
- B Alternate air connection swivel to -90°
- C D E F Air connection swivel to mid position
- C D E F Alternate air connection swivel to mid position

Hoseless pneumatic feed-through (tool)

Hoseless pneumatic feed-through (machine)

Hoseless energy supply (machine)

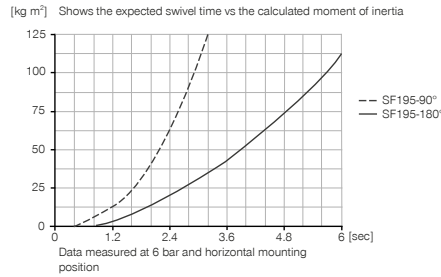
FLAT SWIVEL UNITS

INSTALLATION SIZE SF195N-C

▶ PRODUCT SPECIFICATIONS



▶ Moment of inertia



▶ INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint
DRV1-4X8

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Straight Cable 5 m
MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8
MFS204SKHC



Plug-in connector Straight
Cable 5m - Socket M8
(female)
KAG500



Plug-in connector
customizable Straight -
Connector M8
S8-G-3



Pressure Safety Valve
DSV1-8

▶ RECOMMENDED ACCESSORY ATTACHMENT KIT



Attachment Kit
ANS0041



Inductive proximity switch
- Cable 5 m
NJ8-E2



Inductive proximity switch
- Cable 5 m
NJ12-E2

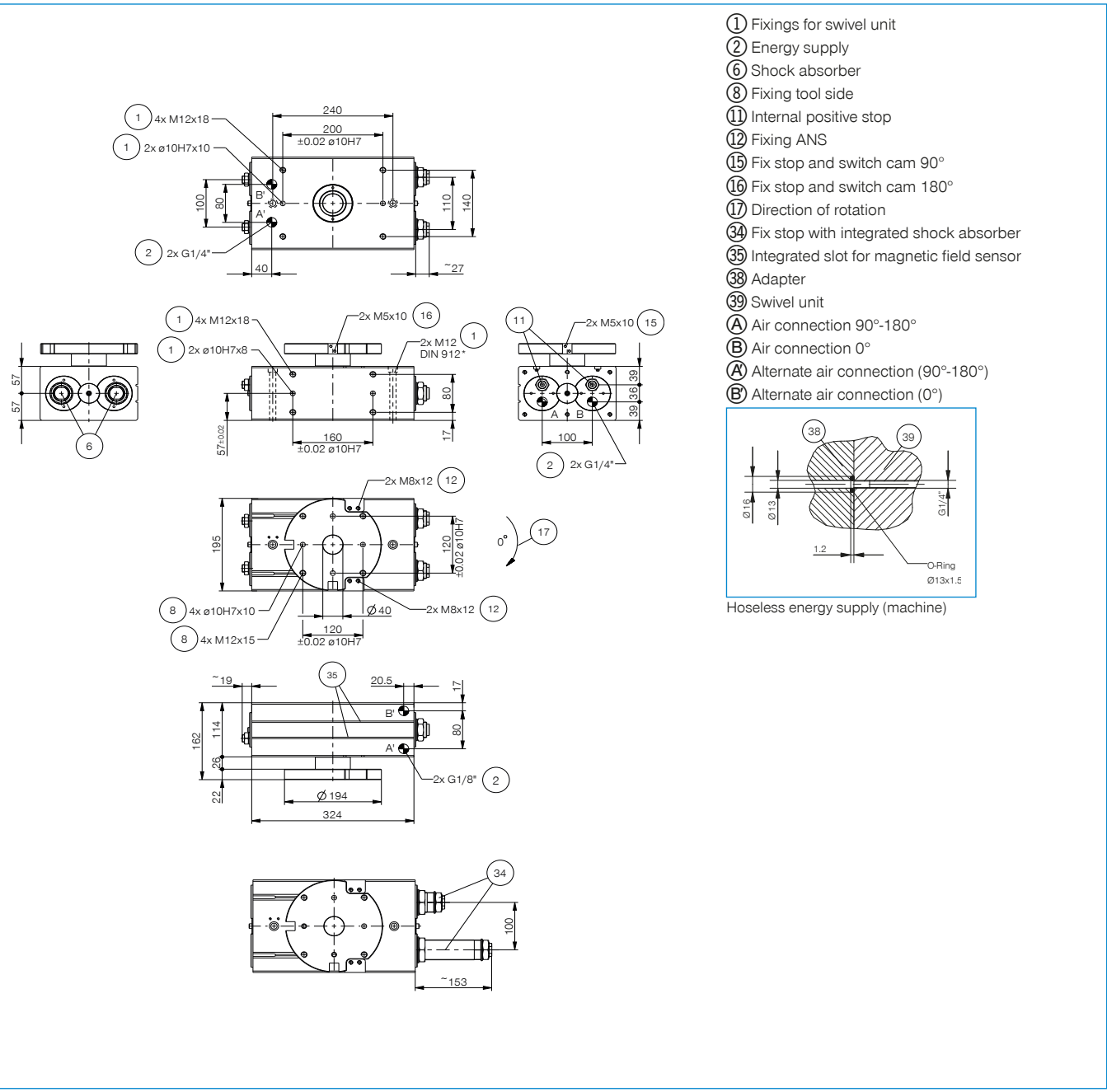


Plug-in connector Angled
Cable 5m - Socket M8
(female)
KAW500

► Technical Data*

Order no.	SF195-90N-C	SF195-180N-C	SF195N-C
Swivel angle [°]	90	180	0-180
Torque [Nm]	130	130	130
Swivel angle regulable +/- [°]	3	3	180
Repetition accuracy +/- [°]	0.01	0.01	0.01
Passage bore Ø [mm]	40	40	40
Axial bearing load [N]	7000	7000	7000
Radial bearing load [Nm]	1253	1253	1253
Operating pressure min. [bar]	3	3	3
Operating pressure max. [bar]	8	8	8
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	80	80	80
Air volume per cycle [cm³]	740	1480	1480
Weight [kg]	27.5	27.5	29.5

*All data measured at 6 bar



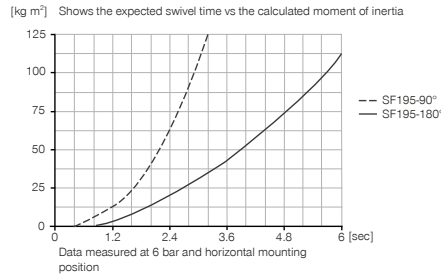
FLAT SWIVEL UNITS

INSTALLATION SIZE SF195D4-C

▶ PRODUCT SPECIFICATIONS



▶ Moment of inertia



▶ INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint
DRV1-4X8



O-Ring
COR0050100

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor Straight Cable 5 m
MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8
MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8 (female)
KAG500



Plug-in connector customizable Straight - Connector M8
S8-G-3



Pressure Safety Valve
DSV1-8

▶ RECOMMENDED ACCESSORY ATTACHMENT KIT



Attachment Kit
ANS0042



Inductive proximity switch - Cable 5 m
NJ8-E2



Inductive proximity switch - Cable 5 m
NJ12-E2



Plug-in connector Angled Cable 5m - Socket M8 (female)
KAW500

► Technical Data*

Order no.	SF195-90D4-C	SF195-180D4-C	SF195D4-C
Swivel angle [°]	90	180	0-180
Torque [Nm]	125	125	125
Swivel angle regulable +/- [°]	3	3	180
Repetition accuracy +/- [°]	0.01	0.01	0.01
Passage bore Ø [mm]	40	40	40
Axial bearing load [N]	7000	7000	7000
Radial bearing load [Nm]	1253	1253	1253
Operating pressure min. [bar]	3	3	3
Operating pressure max. [bar]	8	8	8
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	80	80	80
Air volume per cycle [cm³]	740	1480	1480
Weight [kg]	29	29	31

*All data measured at 6 bar

1) Fixings for swivel unit
 2) Energy supply
 6) Shock absorber
 8) Fixing tool side
 11) Internal positive stop
 12) Fixing ANS
 15) Fix stop and switch cam 90°
 16) Fix stop and switch cam 180°
 17) Direction of rotation
 34) Fix stop with integrated shock absorber
 35) Integrated slot for magnetic field sensor
 38) Adapter
 39) Swivel unit
 A) Air connection 90°-180°
 B) Air connection 0°
 A) Alternate air connection (90°-180°)
 B) Alternate air connection (0°)

Hoseless pneumatic feed-through (tool)
 Hoseless pneumatic feed-through (machine)
 Hoseless energy supply (machine)

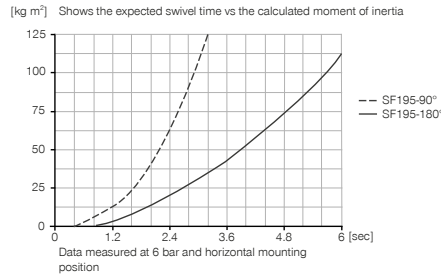
FLAT SWIVEL UNITS

INSTALLATION SIZE SF195D8-C

▶ PRODUCT SPECIFICATIONS



▶ Moment of inertia



▶ INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint
DRV1-4X8



O-Ring
COR0050100

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Straight Cable 5 m
MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8
MFS204SKHC



Plug-in connector Straight
Cable 5m - Socket M8
(female)
KAG500



Plug-in connector
customizable Straight -
Connector M8
S8-G-3



Pressure Safety Valve
DSV1-8

▶ RECOMMENDED ACCESSORY ATTACHMENT KIT



Attachment Kit
ANS0043



Inductive proximity switch
- Cable 5 m
NJ8-E2



Inductive proximity switch
- Cable 5 m
NJ12-E2

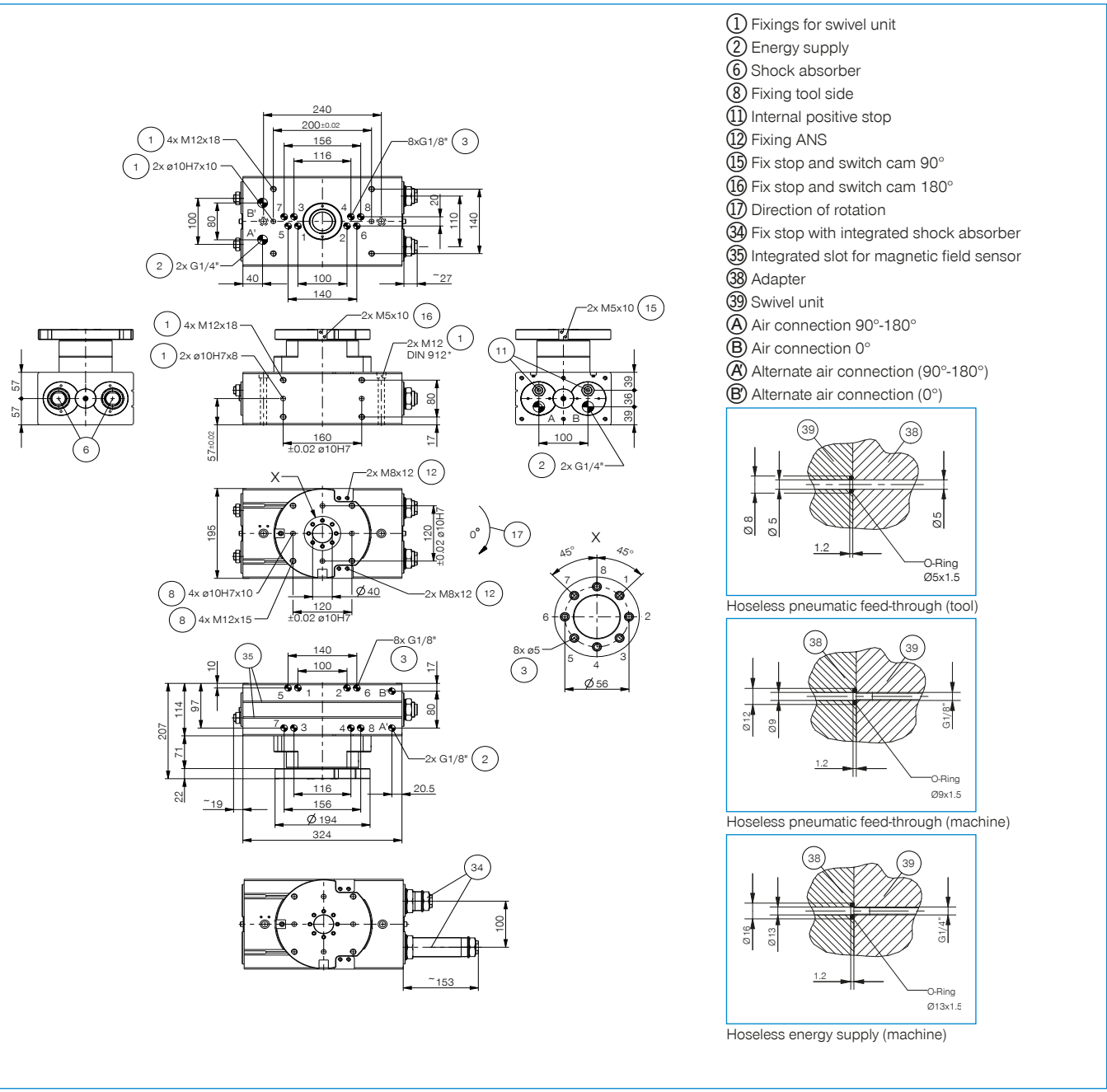


Plug-in connector Angled
Cable 5m - Socket M8
(female)
KAW500

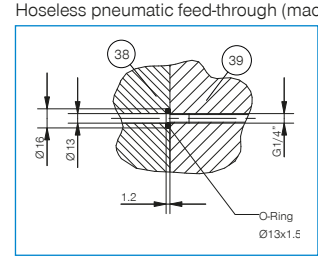
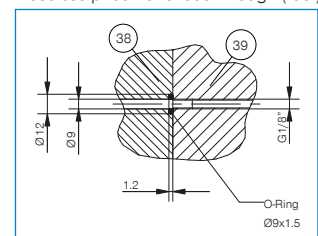
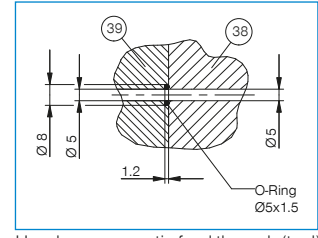
► Technical Data*

Order no.	SF195-90D8-C	SF195-180D8-C	SF195D8-C
Swivel angle [°]	90	180	0-180
Torque [Nm]	120	120	120
Swivel angle regulable +/- [°]	3	3	180
Repetition accuracy +/- [°]	0.01	0.01	0.01
Passage bore Ø [mm]	40	40	40
Axial bearing load [N]	7000	7000	7000
Radial bearing load [Nm]	1253	1253	1253
Operating pressure min. [bar]	3	3	3
Operating pressure max. [bar]	8	8	8
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	80	80	80
Air volume per cycle [cm³]	740	1480	1480
Weight [kg]	31.5	31.5	33.5

*All data measured at 6 bar



- ① Fixings for swivel unit
- ② Energy supply
- ⑥ Shock absorber
- ⑧ Fixing tool side
- ⑪ Internal positive stop
- ⑫ Fixing ANS
- ⑮ Fix stop and switch cam 90°
- ⑯ Fix stop and switch cam 180°
- ⑰ Direction of rotation
- ⑳ Fix stop with integrated shock absorber
- ㉑ Integrated slot for magnetic field sensor
- ㉒ Adapter
- ㉓ Swivel unit
- A Air connection 90°-180°
- B Air connection 0°
- A Alternate air connection (90°-180°)
- B Alternate air connection (0°)



FLAT SWIVEL UNITS

INSTALLATION SIZE SF195M-C

▶ PRODUCT SPECIFICATIONS



▶ Moment of inertia

[kg m²] Shows the expected swivel time vs the calculated moment of inertia



▶ INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint
DRV1-4X8



Attachment Kit
ANS0080

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor Straight Cable 5 m
MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8
MFS204SKHC



Plug-in connector Straight Cable 5m - Socket M8 (female)
KAG500



Plug-in connector customizable Straight - Connector M8
S8-G-3



Pressure Safety Valve
DSV1-8

▶ RECOMMENDED ACCESSORY ATTACHMENT KIT



Inductive proximity switch - Cable 5 m
NJ8-E2



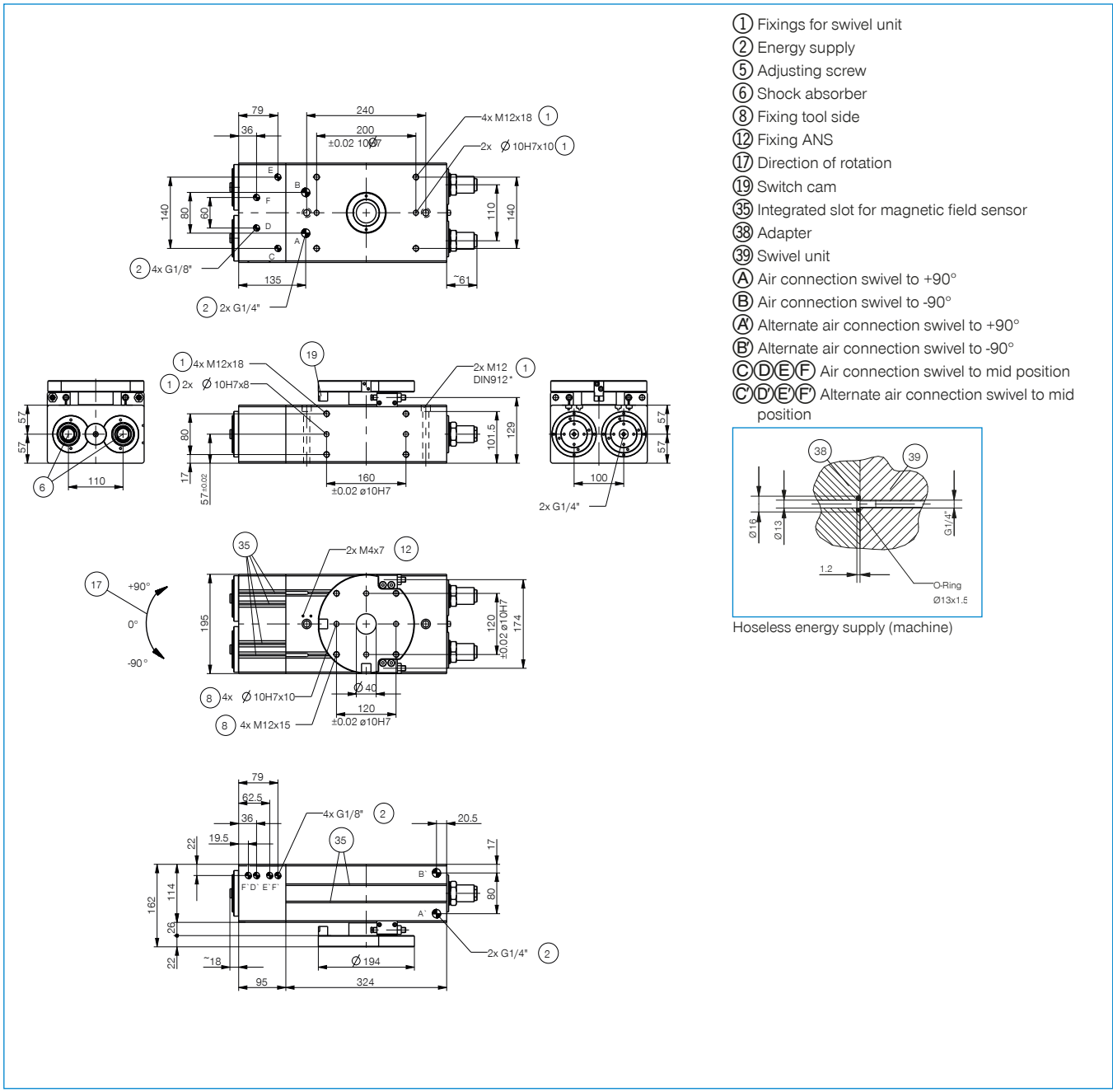
Inductive proximity switch - Cable 5 m
NJ12-E2



Plug-in connector Angled Cable 5m - Socket M8 (female)
KAW500

Order no.	Technical Data*
Swivel angle [°]	-90 / 0 / +90
Torque [Nm]	130
Swivel angle regulable +/- [°]	3
Repetition accuracy +/- [°]	0.01
Passage bore Ø [mm]	40
Axial bearing load [N]	7000
Radial bearing load [Nm]	1253
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	2035
Weight [kg]	37.1

*All data measured at 6 bar



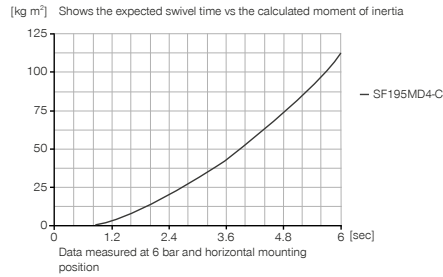
FLAT SWIVEL UNITS

INSTALLATION SIZE SF195MD4-C

▶ PRODUCT SPECIFICATIONS



▶ Moment of inertia



▶ INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint
DRV1-4X8



O-Ring
COR0050100



Attachment Kit
ANS0081

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Straight Cable 5 m
MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8
MFS204SKHC



Plug-in connector Straight
Cable 5m - Socket M8
(female)
KAG500



Plug-in connector
customizable Straight -
Connector M8
S8-G-3



Pressure Safety Valve
DSV1-8

▶ RECOMMENDED ACCESSORY ATTACHMENT KIT



Inductive proximity switch
- Cable 5 m
NJ8-E2



Inductive proximity switch
- Cable 5 m
NJ12-E2



Plug-in connector Angled
Cable 5m - Socket M8
(female)
KAW500

Order no.	SF195MD4-C
Swivel angle [°]	-90 / 0 / +90
Torque [Nm]	125
Swivel angle regulable +/- [°]	3
Repetition accuracy +/- [°]	0.01
Passage bore Ø [mm]	40
Axial bearing load [N]	7000
Radial bearing load [Nm]	1253
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm³]	2035
Weight [kg]	41.1

*All data measured at 6 bar

► Technical Data*

① Fixings for swivel unit
 ② Energy supply
 ③ Integrated air feed-through
 ⑤ Adjusting screw
 ⑥ Shock absorber
 ⑧ Fixing tool side
 ⑫ Fixing ANS
 ⑰ Direction of rotation
 ⑱ Switch cam
 ⑳ Integrated slot for magnetic field sensor
 ㉟ Adapter
 ㊸ Swivel unit
 A Air connection swivel to +90°
 B Air connection swivel to -90°
 C Alternate air connection swivel to +90°
 D Alternate air connection swivel to -90°
 E Air connection swivel to mid position
 F Alternate air connection swivel to mid position

Hoseless pneumatic feed-through (tool)

Hoseless pneumatic feed-through (machine)

Hoseless energy supply (machine)

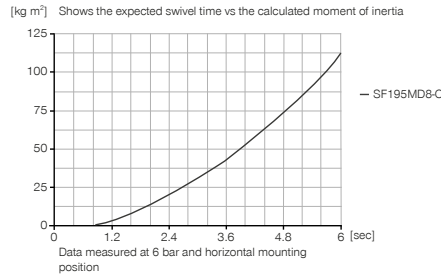
FLAT SWIVEL UNITS

INSTALLATION SIZE SF195MD8-C

▶ PRODUCT SPECIFICATIONS



▶ Moment of inertia



▶ INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint
DRV1-4X8



O-Ring
COR0050100



Attachment Kit
ANS0082

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Straight Cable 5 m
MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8
MFS204SKHC



Plug-in connector Straight
Cable 5m - Socket M8
(female)
KAG500



Plug-in connector
customizable Straight -
Connector M8
S8-G-3



Pressure Safety Valve
DSV1-8

▶ RECOMMENDED ACCESSORY ATTACHMENT KIT



Inductive proximity switch
- Cable 5 m
NJ8-E2



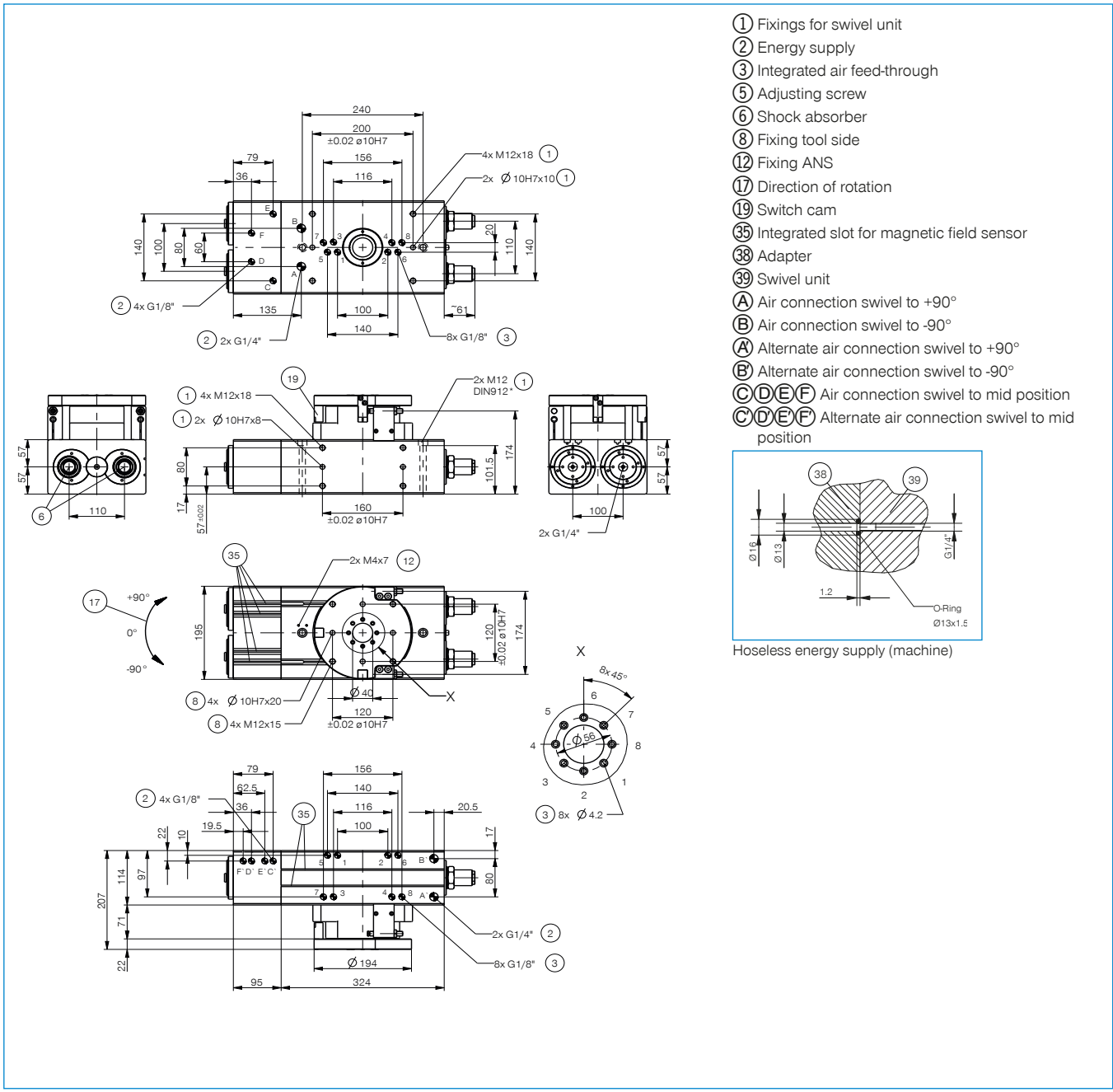
Inductive proximity switch
- Cable 5 m
NJ12-E2



Plug-in connector Angled
Cable 5m - Socket M8
(female)
KAW500

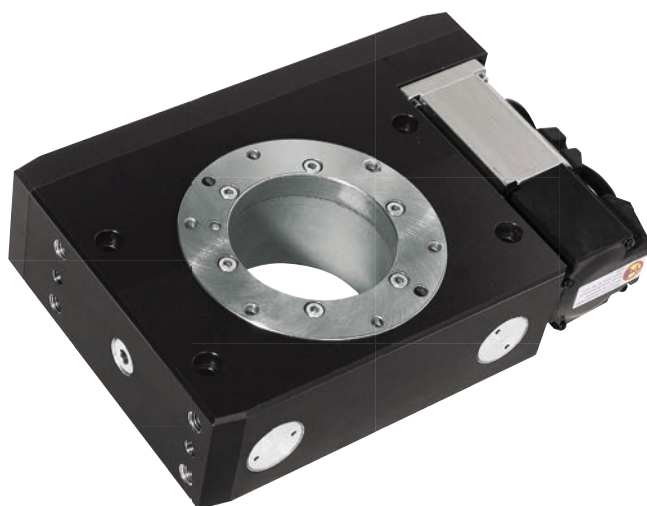
Order no.	Technical Data*
Swivel angle [°]	-90 / 0 / +90
Torque [Nm]	120
Swivel angle regulable +/- [°]	3
Repetition accuracy +/- [°]	0.01
Passage bore Ø [mm]	40
Axial bearing load [N]	7000
Radial bearing load [Nm]	1253
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm³]	2035
Weight [kg]	41.1

*All data measured at 6 bar



FLAT SWIVEL UNITS

OVERVIEW OF SERIES



▶ ELECTRICAL



Series DES

634

FLAT SWIVEL UNITS

SERIES DES

▶ PRODUCT ADVANTAGES



“The unique”

▶ Decide for yourself!

With the standard motor or motors from another manufacturer - You decide what harmonises the best with your system

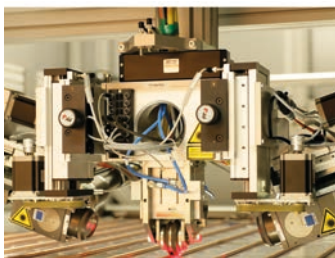
▶ Integrated media transmission

The D1 media exchanger makes cable breaks and undefined interference contours through the power supply line a thing of the past

▶ Freely positionable

No matter whether your task involves rotating, lifting or cycling: The unit is universally usable and can be uniquely adjusted to your application

▶ THE BEST PRODUCT FOR YOUR APPLICATION



▶ Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities:

Find the best product for your specific use:

www.zimmer-group.com

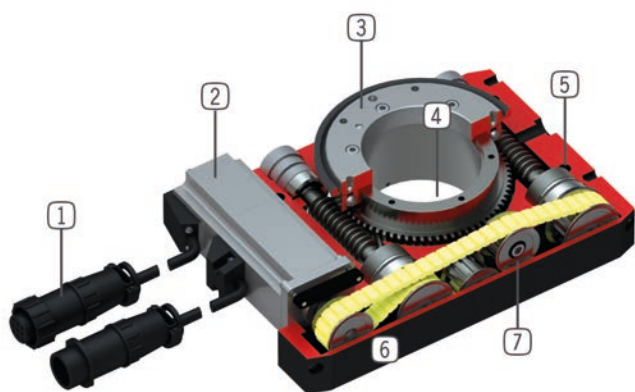
HOW TO ORDER CORRECTLY

▶ The product order numbers are arranged according to this diagram:

Order no.	DES140	<input type="checkbox"/>	<input type="checkbox"/>	
Feed-through, 12x electrical, 1x pneumatic		D1		
Unpowered; installation provided by customer			-99	

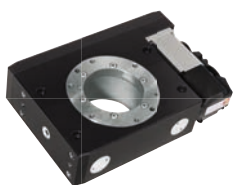


► BENEFITS IN DETAIL



- ① **Energy supply**
 - motor cable, female
 - encoder cable, male
- ② **Drive**
 - AC servo motor
- ③ **Intake flange**
 - for connection to application-specific adapter plate (to be produced by the customer)
 - simple tool connection
- ④ **Central bore**
 - for cable feed-through
- ⑤ **Mounting and positioning**
 - mounting possible from several sides for versatile positioning
- ⑥ **Robust, lightweight housing**
 - hard coated aluminium alloy
- ⑦ **Force transfer**
 - tooth belt/gear rack/worm gear

► SERIES CHARACTERISTICS



Number of installation sizes	2
Swivel angle	∞
Torque	9 Nm - 50 Nm
Weight	4 kg - 15,9 kg
AP class	3



electrical feed-through



fluid feed-through



Integrated sensing



Mechanical self limitation



Freely selectable positionability



Adjustable swivel angle



IP54



5 million maintenance-free revolutions (max.)

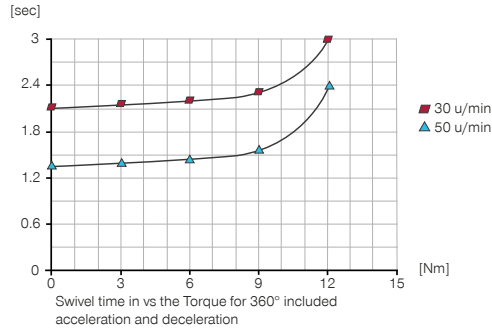
FLAT SWIVEL UNITS

INSTALLATION SIZE DES140

▶ PRODUCT SPECIFICATIONS

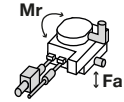


▶ Rotation time diagram



▶ Forces and moments

Indicates the static load on the bearing.



Fa [N]	7000
Mr [Nm]	400

▶ INCLUDED IN DELIVERY



Commissioning CD

CD0006

▶ RECOMMENDED ACCESSORIES



Indra Works Drive Start Up CD

ZUBHCSS



Drive controller Profibus

ZUBHCS



Drive control unit SER-COS III, PROFINET IO, EtherNet/IP, EtherCAT

ZUBHCSME



Programming cable

ZUBHCSKAP01



Power cable 5 m

ZUBHCSKAL05



Power cable 10 m

ZUBHCSKAL10



Power cable 25 m

ZUBHCSKAL25



Encoder cable 5 m

ZUBHCSKAG05



Encoder cable 10 m

ZUBHCSKAG10

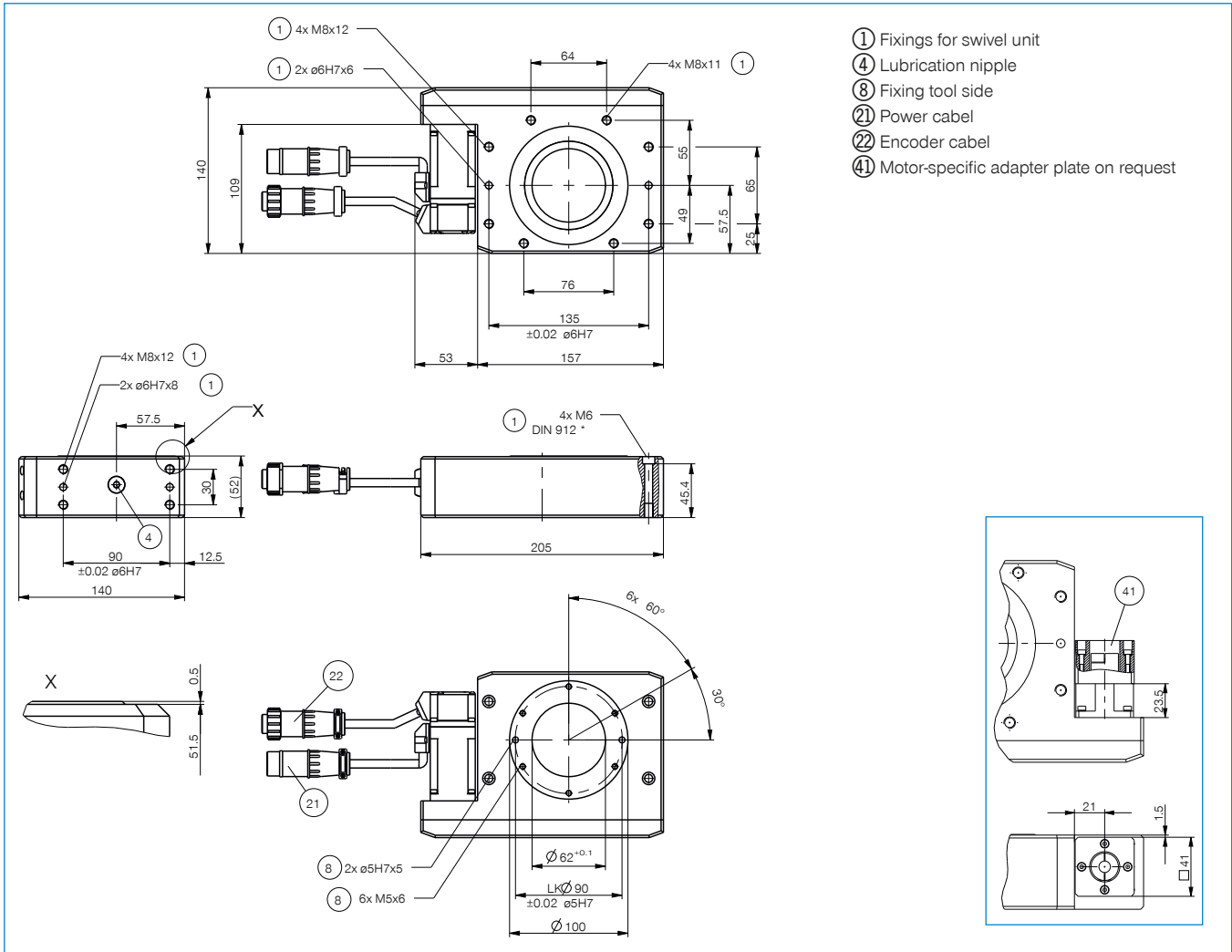


Encoder cable 25 m

ZUBHCSKAG25

Order no.	► Technical Data	
	DES140	DES140-99
Drive *	AC servo motor	Specific to the customer*
Rotation angle [°]	unlimited	
Torque max. [Nm]	12	
Nominal torque [Nm]	9	
Nominal speed [rpm]	30	
Max. speed [rpm]	50	
Swivel time 360° with 30 rpm [s]	2.5	
Swivel time 360° with 50 rpm [s]	1.8	
Jaw speed in positioning mode [rad/s ²]	50	
Positioning delay [rad/s ²]	50	
Electrical energy transfer		
Pneumatic energy transfer [Quantity]		
Self limitation	Helical gear / worm gear	Helical gear / worm gear
Power transfer	Helical gear / worm gear	Helical gear / worm gear
Repetition accuracy +/- [°]	0.1	0.1
Operating temperature [°C]	5 ... 80	5 ... 80
Protection to IEC 60529	IP54	
Net input voltage	1x200-240 VAC 50HZ	
Continuous current [A]	0.9	
Peak current [A]	3	
Weight [kg]	4.2	4

*Third-party motor corresponding to the motor identification number, select page 644



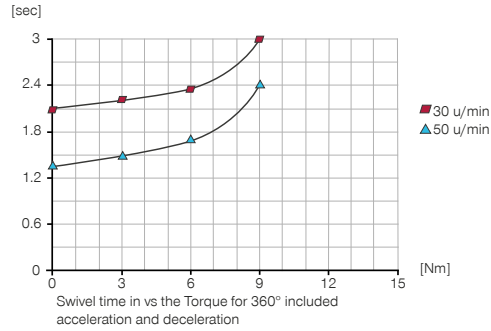
FLAT SWIVEL UNITS

INSTALLATION SIZE DES140D1

▶ PRODUCT SPECIFICATIONS

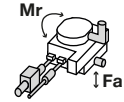


▶ Rotation time diagram



▶ Forces and moments

Indicates the static load on the bearing.



Fa [N]	7000
Mr [Nm]	400

▶ INCLUDED IN DELIVERY



Commissioning CD

CD0006

▶ RECOMMENDED ACCESSORIES



Indra Works Drive Start Up CD

ZUBHCSS



Drive controller Profibus

ZUBHCS



Drive control unit SER-COS III, PROFINET IO, EtherNet/IP, EtherCAT

ZUBHCSME



Round plug, straight - M23 socket

RSTVSM23G12B-B



Round plug, angular - M23 socket

RSTVSM23W12B-B



Round plug, straight - M23 plug

RSTVSM23G12S-B



Round plug, angular - M23 plug

RSTVSM23W12S-B



Programming cable

ZUBHCSKAP01



Power cable 5 m

ZUBHCSKAL05

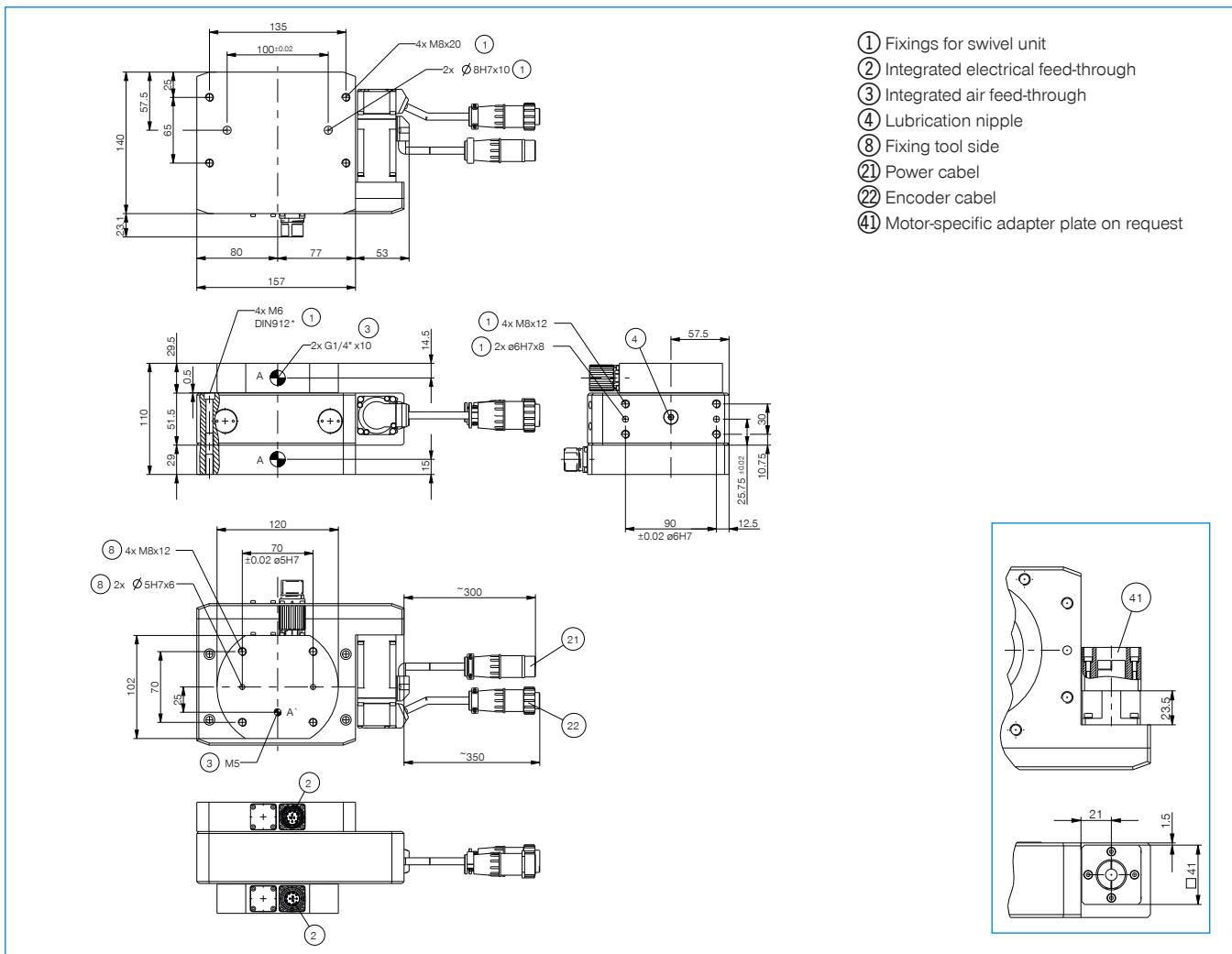


Power cable 10 m

ZUBHCSKAL10

Order no.	► Technical Data	
	DES140D1	DES140D1-99
Drive *	AC servo motor	Specific to the customer*
Rotation angle [°]	unlimited	
Torque max. [Nm]	10	
Nominal torque [Nm]	7	
Nominal speed [rpm]	30	
Max. speed [rpm]	50	
Swivel time 360° with 30 rpm [s]	2.5	
Swivel time 360° with 50 rpm [s]	1.8	
Jaw speed in positioning mode [rad/s ²]	50	
Positioning delay [rad/s ²]	50	
Electrical energy transfer	12x2A / 12x120V DC	12x2A / 12x120V DC
Pneumatic energy transfer [Quantity]	1	1
Self limitation	Helical gear / worm gear	Helical gear / worm gear
Power transfer	Helical gear / worm gear	Helical gear / worm gear
Repetition accuracy +/- [°]	0.1	0.1
Operating temperature [°C]	5 ... 80	5 ... 80
Protection to IEC 60529	IP54	
Net input voltage	1x200-240 VAC 50HZ	
Continuous current [A]	0.9	
Peak current [A]	3	
Weight [kg]	7	6.8

*Third-party motor corresponding to the motor identification number, select page 644



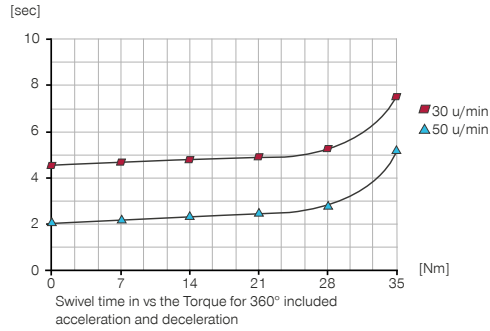
FLAT SWIVEL UNITS

INSTALLATION SIZE DES190

▶ PRODUCT SPECIFICATIONS

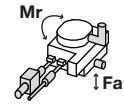


▶ Rotation time diagram



▶ Forces and moments

Indicates the static load on the bearing.



Fa [N]	8000
Mr [Nm]	525

▶ INCLUDED IN DELIVERY



Commissioning CD

CD0008

▶ RECOMMENDED ACCESSORIES



Indra Works Drive Start Up CD

ZUBHCSS



Drive controller Profibus

ZUBHCS



Drive control unit SERCOS III, PROFINET IO, EtherNet/IP, EtherCAT

ZUBHCSME



Programming cable

ZUBHCSKAP01



Power cable 5 m

ZUBHCSKAL05



Power cable 10 m

ZUBHCSKAL10



Power cable 25 m

ZUBHCSKAL25



Encoder cable 5 m

ZUBHCSKAG05



Encoder cable 10 m

ZUBHCSKAG10

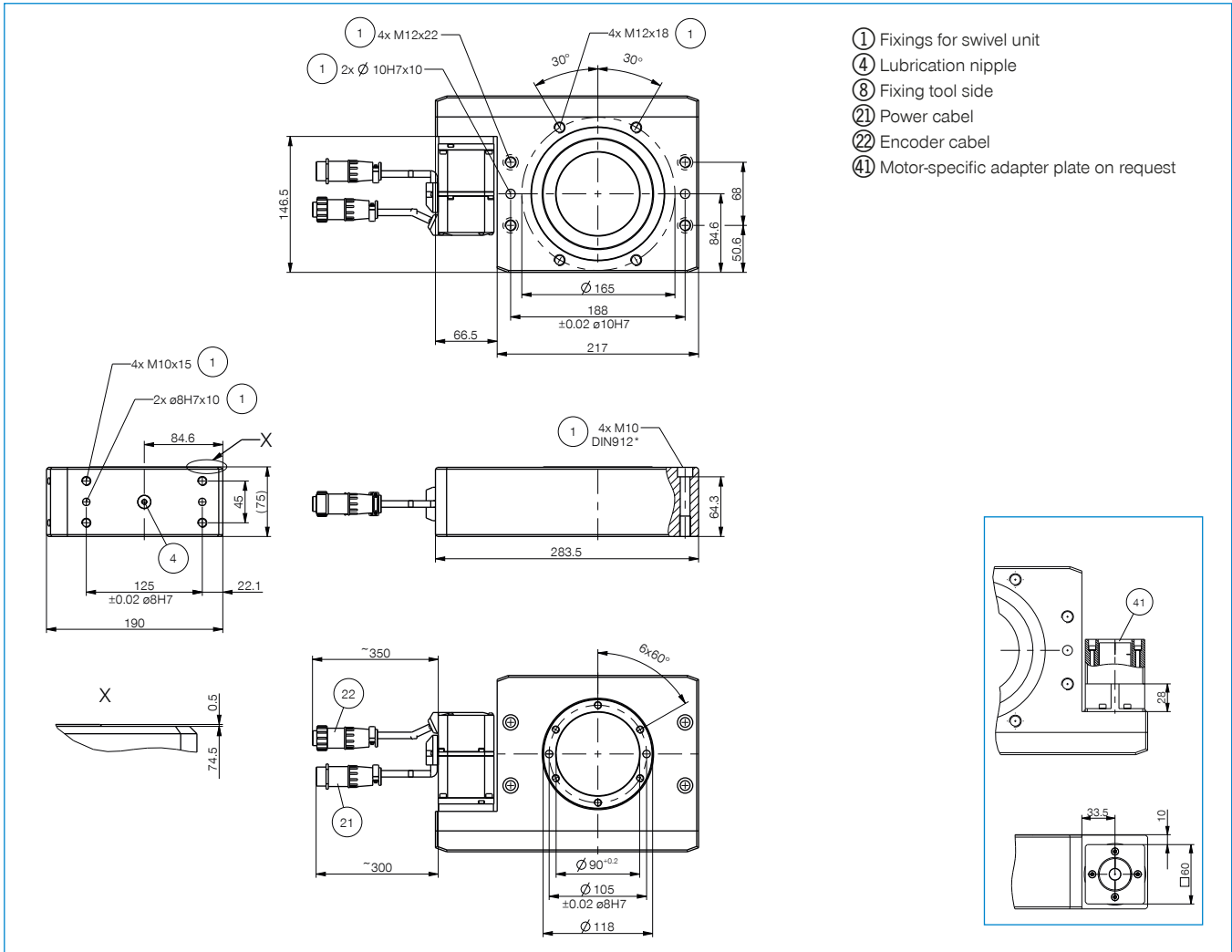


Encoder cable 25 m

ZUBHCSKAG25

Order no.	► Technical Data	
	DES190	DES190-99
Drive *	AC servo motor	Specific to the customer*
Rotation angle [°]	unlimited	
Torque max. [Nm]	64	
Nominal torque [Nm]	50	
Nominal speed [rpm]	15	
Max. speed [rpm]	25	
Swivel time 360° with 30 rpm [s]	4.6	
Swivel time 360° with 50 rpm [s]	3	
Jaw speed in positioning mode [rad/s ²]	50	
Positioning delay [rad/s ²]	50	
Electrical energy transfer		
Pneumatic energy transfer [Quantity]		
Self limitation	Helical gear / worm gear	Helical gear / worm gear
Power transfer	Helical gear / worm gear	Helical gear / worm gear
Repetition accuracy +/- [°]	0.05	0.05
Operating temperature [°C]	5 ... 80	5 ... 80
Protection to IEC 60529	IP54	
Net input voltage	1x200-240 VAC 50HZ	
Continuous current [A]	2.3	
Peak current [A]	7.4	
Weight [kg]	11.2	10.8

*Third-party motor corresponding to the motor identification number, select page 644



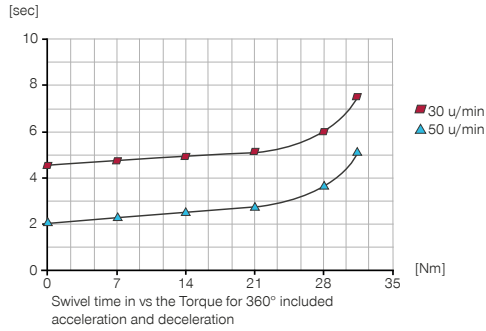
FLAT SWIVEL UNITS

INSTALLATION SIZE DES190D1

▶ PRODUCT SPECIFICATIONS

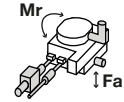


▶ Rotation time diagram



▶ Forces and moments

Indicates the static load on the bearing.



Fa [N]	8000
Mr [Nm]	525

▶ INCLUDED IN DELIVERY



Commissioning CD

CD0008

▶ RECOMMENDED ACCESSORIES



Indra Works Drive Start Up CD

ZUBHCSS



Drive controller Profibus

ZUBHCS



Drive control unit SER-COS III, PROFINET IO, EtherNet/IP, EtherCAT

ZUBHCSME



Round plug, straight - M23 socket

RSTVSM23G12B-B



Round plug, angular - M23 socket

RSTVSM23W12B-B



Round plug, straight - M23 plug

RSTVSM23G12S-B



Round plug, angular - M23 plug

RSTVSM23W12S-B



Programming cable

ZUBHCSKAP01



Power cable 5 m

ZUBHCSKAL05

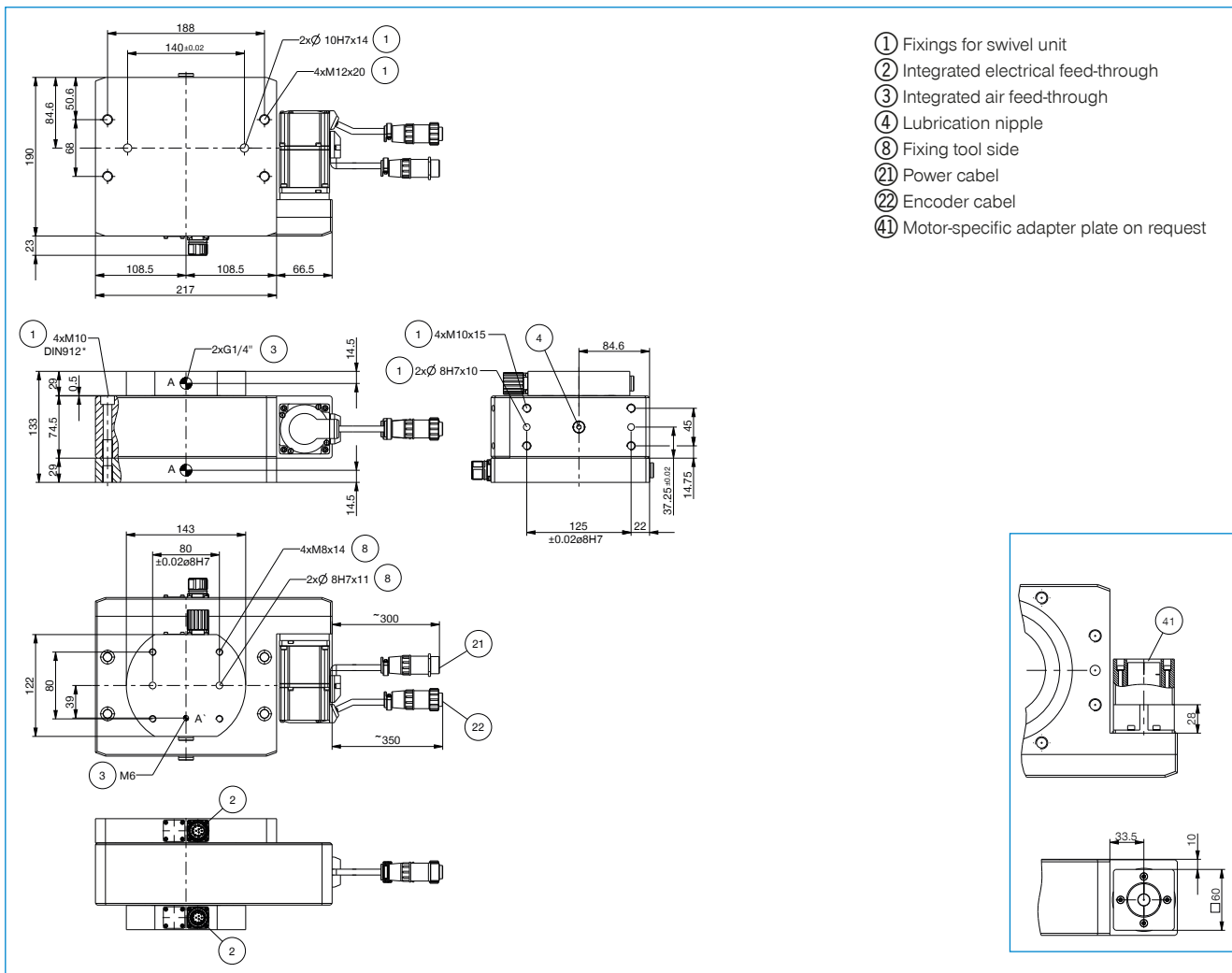


Power cable 10 m

ZUBHCSKAL10

Order no.	► Technical Data	
	DES190D1	DES190D1-99
Drive *	AC servo motor	Specific to the customer*
Rotation angle [°]	unlimited	
Torque max. [Nm]	62	
Nominal torque [Nm]	48	
Nominal speed [rpm]	15	
Max. speed [rpm]	25	
Swivel time 360° with 30 rpm [s]	4.6	
Swivel time 360° with 50 rpm [s]	3	
Jaw speed in positioning mode [rad/s ²]	50	
Positioning delay [rad/s ²]	50	
Electrical energy transfer	12x2A / 12x48V DC	12x2A / 12x48V DC
Pneumatic energy transfer [Quantity]	1	1
Self limitation	Helical gear / worm gear	Helical gear / worm gear
Power transfer	Helical gear / worm gear	Helical gear / worm gear
Repetition accuracy +/- [°]	0.05	0.05
Operating temperature [°C]	5 ... 80	5 ... 80
Protection to IEC 60529	IP54	
Net input voltage	1x200-240 VAC 50HZ	
Continuous current [A]	2.3	
Peak current [A]	7.4	
Weight [kg]	15.9	15.5

*Third-party motor corresponding to the motor identification number, select page 644



FLAT SWIVEL UNITS

DES SERIES ACCESSORIES

▶ RECOMMENDED ACCESSORIES



Indra Works Drive Start Up CD

ZUBHCSS



Drive controller Profibus

ZUBHCS



Drive control unit SERCOS III, PROF-INET IO, EtherNet/IP, EtherCAT

ZUBHCSME



Line filter

ZUBHCSN



Programming cable

ZUBHCSKAP01



Power cable 5 m

ZUBHCSKAL05



Power cable 10 m

ZUBHCSKAL10



Power cable 25 m

ZUBHCSKAL25



Encoder cable 5 m

ZUBHCSKAG05



Encoder cable 10 m

ZUBHCSKAG10



Encoder cable 25 m

ZUBHCSKAG25



Straight Fittings - Quick Connect Style

GV1-8X4



Angled Fittings - Quick Connect Style

WV1-4X8



Round plug, straight - M23 socket

RSTVSM23G12B-B



Round plug, angular - M23 socket

RSTVSM23W12B-B



Round plug, straight - M23 plug

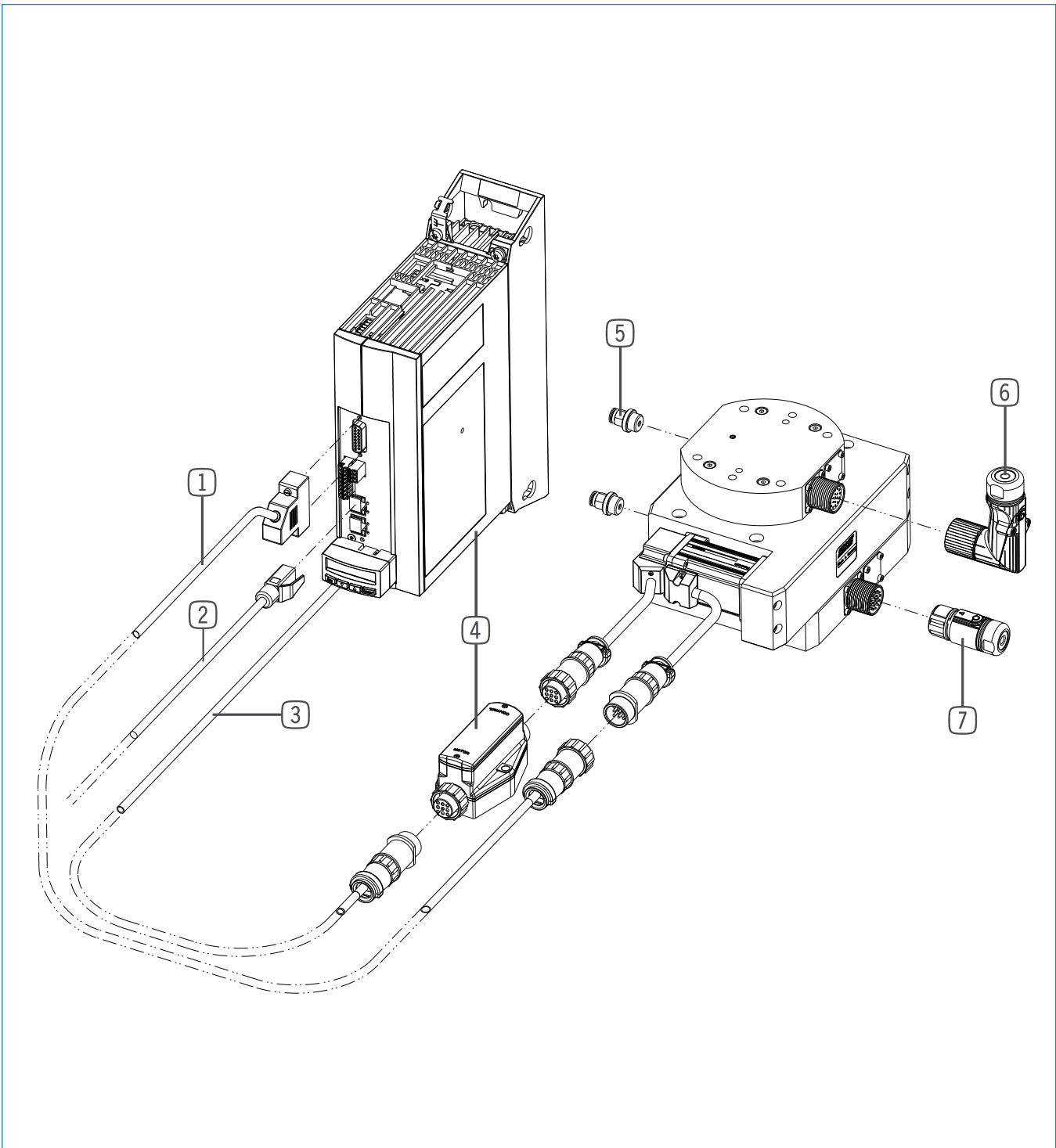
RSTVSM23G12S-B



Round plug, angular - M23 plug

RSTVSM23W12S-B

Order no.	► Technical data for motors	
	MSM019B	MSM031C
compatible with	DES140	DES190
Manufacturer	BOSCH	BOSCH
Nominal speed [rpm]	3000	3000
Max. speed [rpm]	5000	5000
Nominal torque [Nm]	0,32	1,3
Torque max. [Nm]	0.95	3.8
Protection to IEC 60529	IP54	IP54



ANGLE PIVOT UNITS

OVERVIEW OF SERIES



▶ PNEUMATIC



Series SWM1000

648



Series SW

658

ANGLE PIVOT UNITS

SERIES SWM1000

▶ PRODUCT ADVANTAGES



SOMMER
automatic **S**

“The slim”

▶ Optimised design

Adjusted to a gantry axle, you can integrate the unit in your machine loading system to save space

▶ Large locating flange

The large mounting surface simplifies your design and allows secure attachment of follow-on tools

▶ Failure-free continuous operation

Our uncompromising “Made in Germany” quality guarantees up to 10 million maintenance-free gripping cycles

▶ THE BEST PRODUCT FOR YOUR APPLICATION



▶ Our products love the challenge!

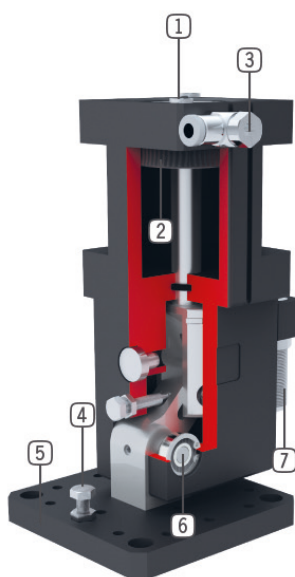
Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities:

Find the best product for your specific use:

www.zimmer-group.com



► BENEFITS IN DETAIL



- ① **Mounting and positioning**
- ② **Drive**
 - double-acting pneumatic cylinder
- ③ **Air flow control valve**
 - for speed regulation
 - included in scope of delivery
- ④ **Adjustable end position**
 - +/- 3° adjustable end position
- ⑤ **Intake flange**
 - for connection to application-specific adapter plate (to be supplied by the customer)
- ⑥ **Force transfer 90° pivoting**
 - toggle lever principle
- ⑦ **Patented, hydraulic shock absorber**
 - adjustable end position damping

► SERIES CHARACTERISTICS



Number of installation sizes	4
Swivel angle	90°
Torque	10 Nm - 64 Nm
Weight	0,65 kg - 3,5 kg
AP class	3



Powerstop end position damping



IP30



Magnetic field sensor



10 million maintenance-free cycles (max.)



Positionability - 2 positions

ANGLE PIVOT UNITS

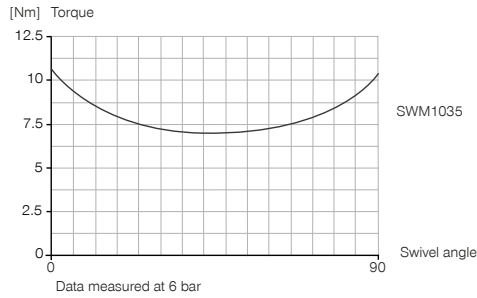
INSTALLATION SIZE SWM1035

▶ PRODUCT SPECIFICATIONS



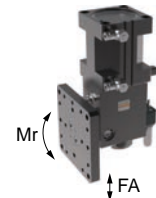
▶ Moment of inertia

Shows the torque when lifting vs the swivel angle.



▶ Forces and moments

Indicates the static load on the bearing.



Fa [N]	200
Mr [Nm]	10

▶ INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint
DRVM5X4



Centering Disc
DST60800

▶ RECOMMENDED ACCESSORIES



Attachment Kit
ANS0046



Magnetic field sensor
Angled Cable 0,3 m -
Connector M8
MFS103SKHC



Magnetic field sensor
Angled Cable 5 m
MFS103KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8
MFS204SKHC



Magnetic field sensor
Straight Cable 5 m
MFS204KHC



Plug-in connector Straight Cable 5m - Socket M8 (female)
KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)
KAW500



Shock Absorbers
M8X1M



Pressure Safety Valve
DSV1-8

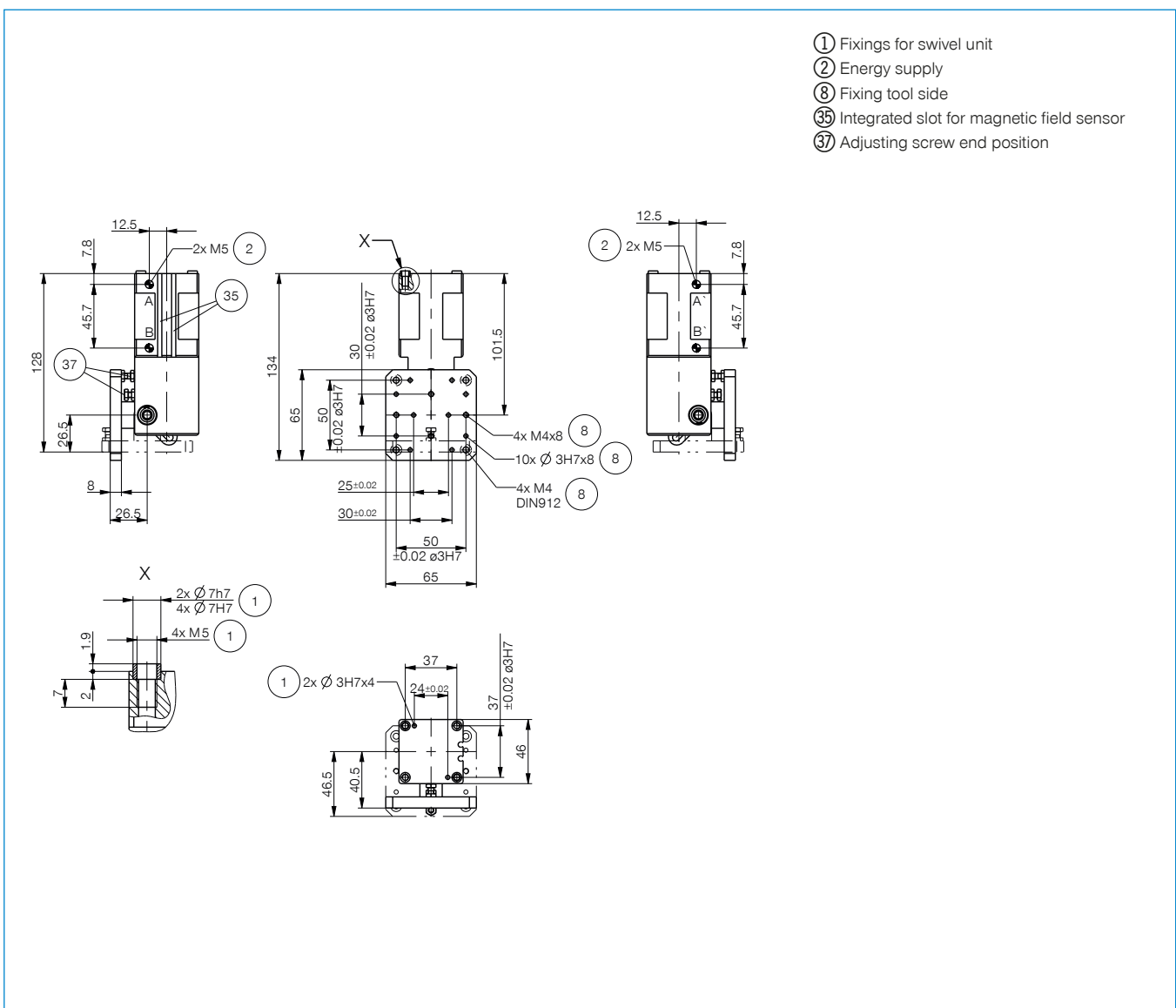


Plug-in connector customizable Straight - Connector M8
S8-G-3

Order no.	SWM1035
Swivel angle [°]	90
Swivel angle regulable +/- [°]	3
Torque 0° [Nm]	10
Torque 45° [Nm]	7
Torque 90° [Nm]	10
Repetition accuracy +/- [°]	0.01
Swivel time without extension load [s]	0.3
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm³]	55
Weight [kg]	0.65

► Technical Data*

*All data measured at 6 bar



- ① Fixings for swivel unit
- ② Energy supply
- ⑧ Fixing tool side
- ③⑤ Integrated slot for magnetic field sensor
- ③⑦ Adjusting screw end position

ANGLE PIVOT UNITS

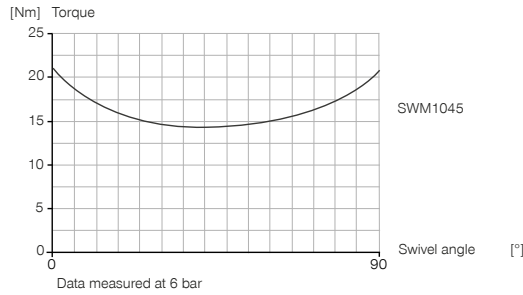
INSTALLATION SIZE SWM1045

▶ PRODUCT SPECIFICATIONS



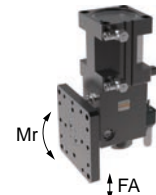
▶ Moment of inertia

Shows the torque when lifting vs the swivel angle.



▶ Forces and moments

Indicates the static load on the bearing.



Fa [N]	300
Mr [Nm]	20

▶ INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint
DRVM5X4



Centering Disc
BDST40800

▶ RECOMMENDED ACCESSORIES



Attachment Kit
ANS0047



Magnetic field sensor Angled Cable 0,3 m - Connector M8
MFS103SKHC



Magnetic field sensor Angled Cable 5 m
MFS103KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8
MFS204SKHC



Magnetic field sensor Straight Cable 5 m
MFS204KHC



Plug-in connector Straight Cable 5m - Socket M8 (female)
KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)
KAW500



Shock Absorbers
M10X1H



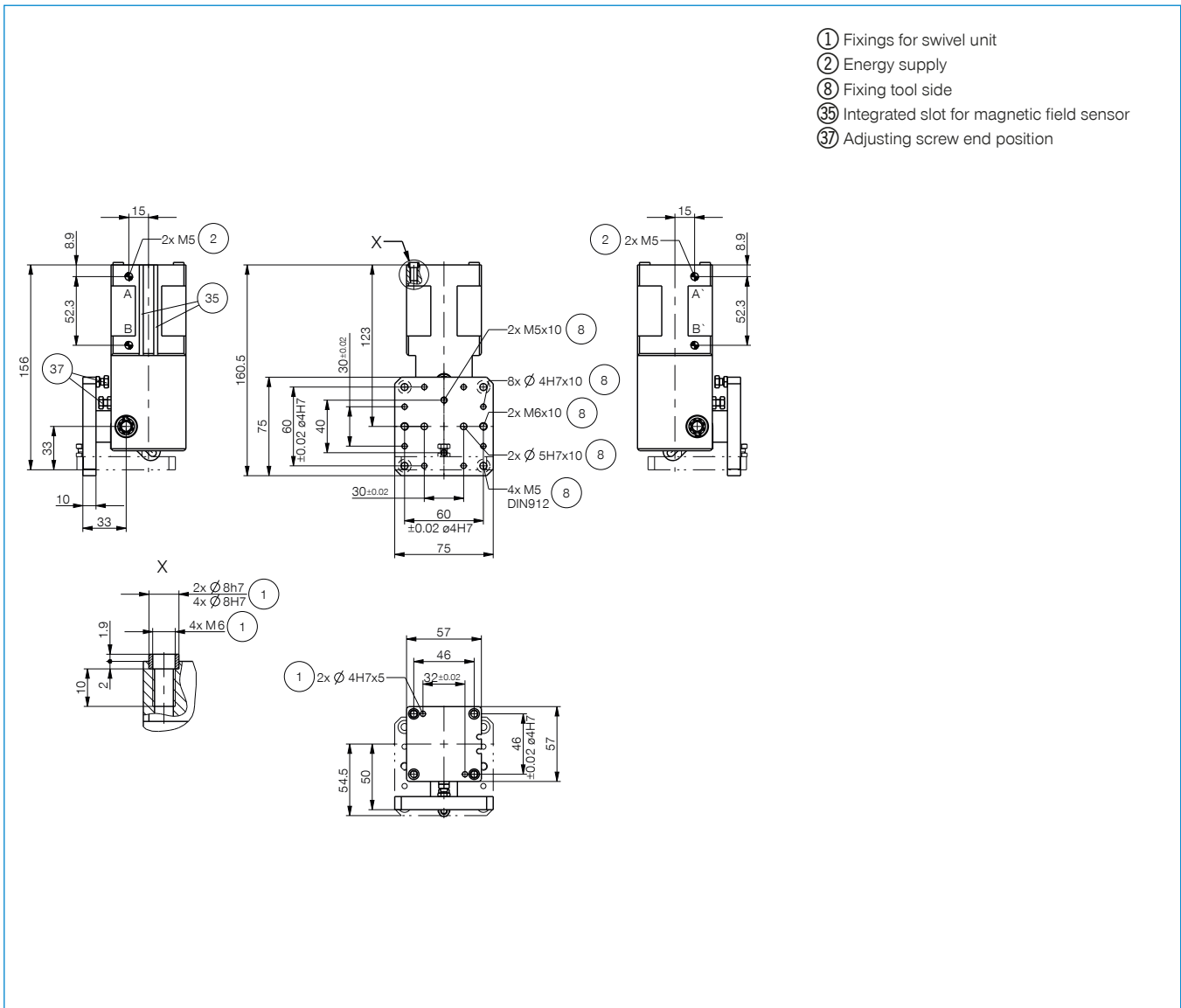
Pressure Safety Valve
DSV1-8



Plug-in connector customizable Straight - Connector M8
S8-G-3

Order no.	► Technical Data*
Swivel angle [°]	90
Swivel angle regulable +/- [°]	3
Torque 0° [Nm]	21
Torque 45° [Nm]	14
Torque 90° [Nm]	21
Repetition accuracy +/- [°]	0.01
Swivel time without extension load [s]	0.4
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	110
Weight [kg]	1.2

*All data measured at 6 bar



- ① Fixings for swivel unit
- ② Energy supply
- ⑧ Fixing tool side
- ③⑤ Integrated slot for magnetic field sensor
- ③⑦ Adjusting screw end position

ANGLE PIVOT UNITS

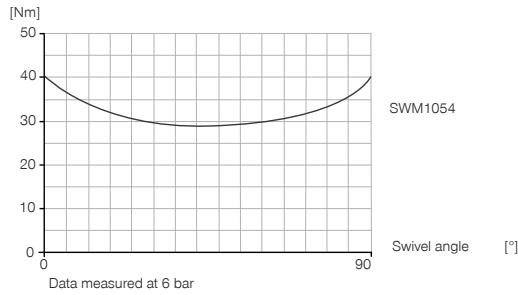
INSTALLATION SIZE SWM1054

▶ PRODUCT SPECIFICATIONS



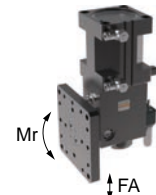
▶ Moment of inertia

Shows the torque when lifting vs the swivel angle.



▶ Forces and moments

Indicates the static load on the bearing.



Fa [N]	400
Mr [Nm]	30

▶ INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint
DRV1-8X6



Centering Disc
DST11500

▶ RECOMMENDED ACCESSORIES



Attachment Kit
ANS0048



Magnetic field sensor
Angled Cable 0,3 m -
Connector M8
MFS103SKHC



Magnetic field sensor
Angled Cable 5 m
MFS103KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8
MFS204SKHC



Magnetic field sensor
Straight Cable 5 m
MFS204KHC



Plug-in connector Straight Cable 5m - Socket M8 (female)
KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)
KAW500



Shock Absorbers
M12X1H



Pressure Safety Valve
DSV1-8

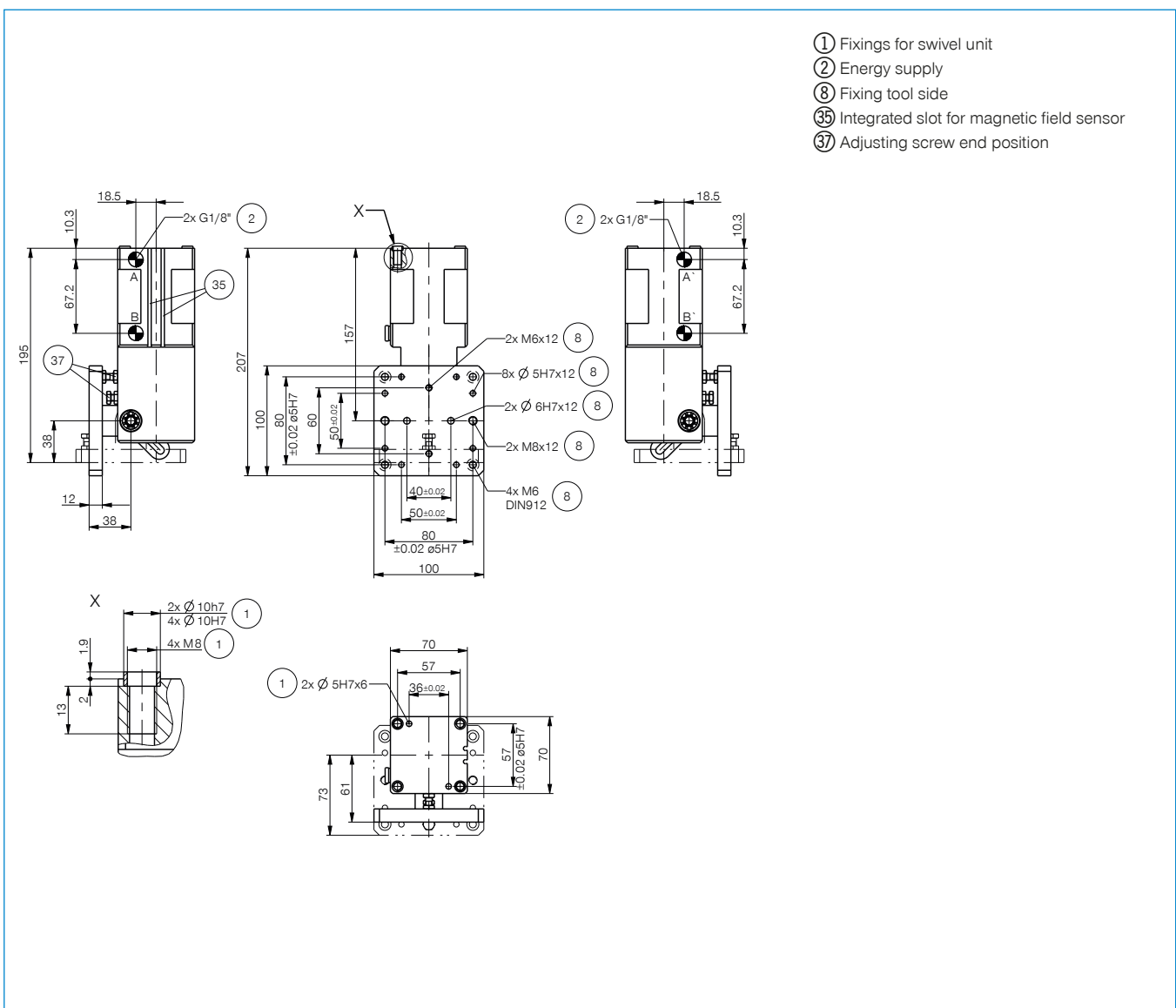


Plug-in connector customizable Straight - Connector M8
S8-G-3

► Technical Data*

Order no.	SWM1054
Swivel angle [°]	90
Swivel angle regulable +/- [°]	3
Torque 0° [Nm]	40
Torque 45° [Nm]	29
Torque 90° [Nm]	40
Repetition accuracy +/- [°]	0.01
Swivel time without extension load [s]	0.5
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	215
Weight [kg]	2.3

*All data measured at 6 bar



ANGLE PIVOT UNITS

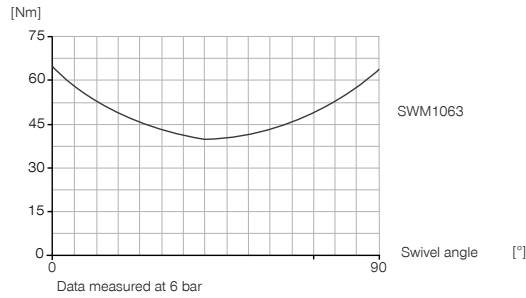
INSTALLATION SIZE SWM1063

▶ PRODUCT SPECIFICATIONS



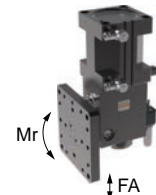
▶ Moment of inertia

Shows the torque when lifting vs the swivel angle.



▶ Forces and moments

Indicates the static load on the bearing.



Fa [N]	500
Mr [Nm]	45

▶ INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint
DRV1-8X6



Centering Disc
DST42000

▶ RECOMMENDED ACCESSORIES



Attachment Kit
ANS0049



Magnetic field sensor Angled Cable 0,3 m - Connector M8
MFS103SKHC



Magnetic field sensor Angled Cable 5 m
MFS103KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8
MFS204SKHC



Magnetic field sensor Straight Cable 5 m
MFS204KHC



Plug-in connector Straight Cable 5m - Socket M8 (female)
KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)
KAW500



Shock Absorbers
M14X1H



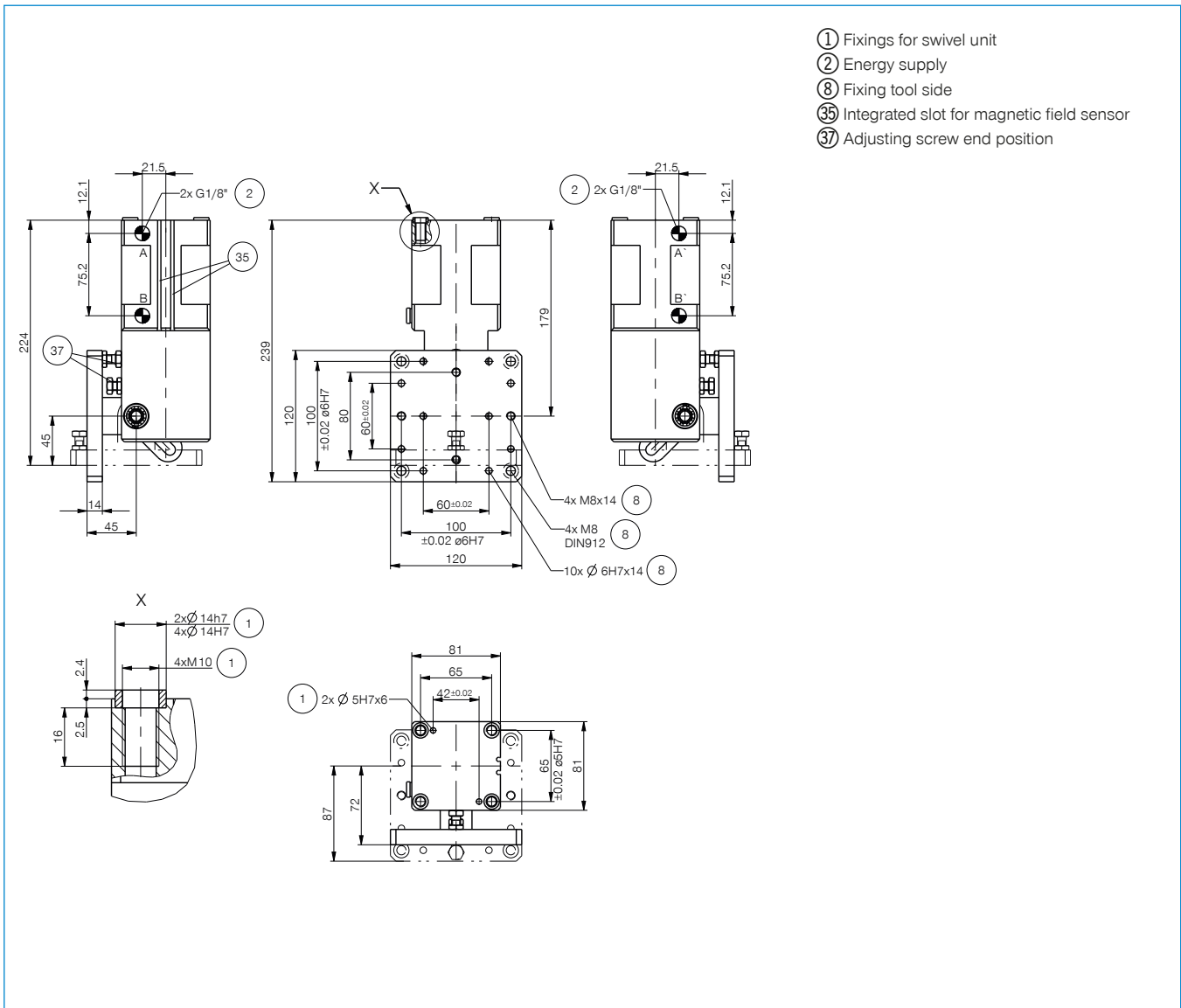
Pressure Safety Valve
DSV1-8



Plug-in connector customizable Straight - Connector M8
S8-G-3

► Technical Data*	
Order no.	SWM1063
Swivel angle [°]	90
Swivel angle regulable +/- [°]	3
Torque 0° [Nm]	64
Torque 45° [Nm]	39
Torque 90° [Nm]	64
Repetition accuracy +/- [°]	0.01
Swivel time without extension load [s]	0.6
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	340
Weight [kg]	3.5

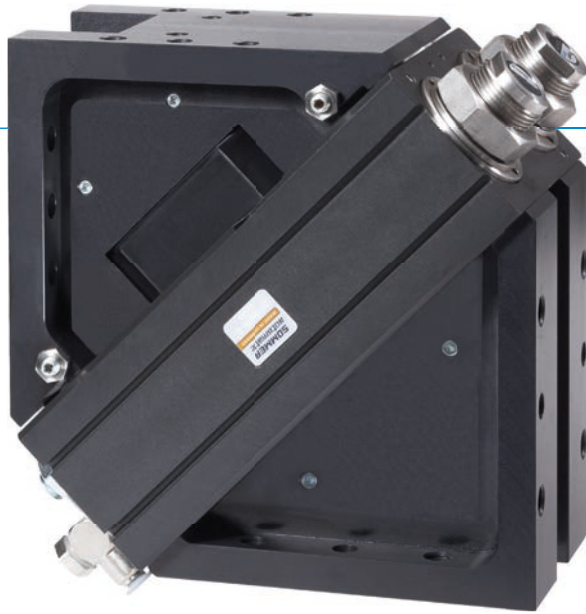
*All data measured at 6 bar



- ① Fixings for swivel unit
- ② Energy supply
- ⑧ Fixing tool side
- ③⑤ Integrated slot for magnetic field sensor
- ③⑦ Adjusting screw end position

ANGLE PIVOT UNITS SERIES SW

▶ PRODUCT ADVANTAGES



“The superior”

▶ Up to 100% more performance than the benchmark

Superior end position damping lets you swivel more mass in the shortest amount of time, increasing your machine's component output

▶ Includes two angle flanges

Reduce your design and manufacturing efforts with the angle pivot unit aligned on the machine loading system

▶ More than 100% higher radial bearing load than the benchmark

The generously scaled bearings stand for robustness and long service life and provide the highest process reliability for your application

▶ THE BEST PRODUCT FOR YOUR APPLICATION



▶ Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities:

Find the best product for your specific use:

www.zimmer-group.com

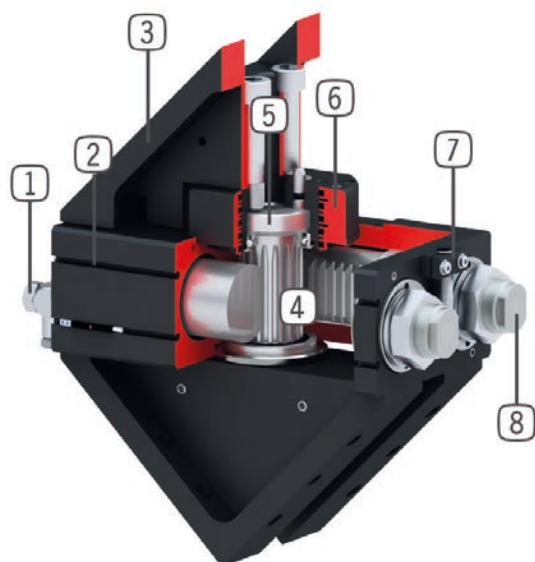
HOW TO ORDER CORRECTLY

- ▶ The product order numbers are arranged according to this diagram:

Order no.	SW50	<input type="checkbox"/>	-C	
two double acting pneumatic cylinders, hoseless pneumatic 4 way rotary distributor		D4		
two double acting pneumatic cylinders, hoseless pneumatic 8 way rotary distributor		D8		



► BENEFITS IN DETAIL



- ① **Air flow control valve**
- for speed regulation (included in the delivery)
- ② **Sensing slot**
- mounting and positioning of magnetic field sensors
- ③ **Robust, lightweight housing**
- hard coated aluminium alloy
- ④ **Force transfer**
- rack and pinion
- ⑤ **Two way ball bearing hollow shaft**
- for feedthrough cables and hoses
- high forces and moments capacity
- ⑥ **Up to 8 way integrated air feed-through**
- for hoseless air transfer
- hose package does not have to be pivoted
- ⑦ **Mounting block**
- mounting for inductive proximity switch
- ⑧ **Integrated and patented hydraulic shock absorbers**
- adjustable end position damping
- heating is prevented through installation in pneumatic pressure chamber

► SERIES CHARACTERISTICS



Number of installation sizes	6
Swivel angle	180°
Torque	1,5 Nm - 120 Nm
Weight	1,2 kg - 48,2 kg
AP class	3



Powerstop end position damping



Magnetic field sensor



10 million maintenance-free cycles (max.)



fluid feed-through



Positionability - 2 positions



Inductive sensor



IP64

ANGLE PIVOT UNITS

INSTALLATION SIZE SW50

▶ PRODUCT SPECIFICATIONS



▶ INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint
DRVM5X4



O-Ring
COR0050100

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Straight Cable 5 m
MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8
MFS204SKHC



Inductive proximity switch
- Cable 5 m
NJ8-E2



Inductive proximity switch
- Connector M8
NJ8-E2S



Attachment Kit
ANS0062



Plug-in connector Angled Ca-
ble 5m - Socket M8 (female)
KAW500



Plug-in connector Straight Ca-
ble 5m - Socket M8 (female)
KAG500



Plug-in connector customiz-
able Straight - Connector M8
S8-G-3



Plug-in connector customiz-
able Straight - Connector M12
S12-G-3



Pressure Safety Valve
DSV1-8

Order no.	SW50D4-C
Swivel angle [°]	180
Torque [Nm]	1.5
Repetition accuracy +/- [°]	0.01
Swivel time [s]**	0.3
Passage bore Ø [mm]	9
Axial bearing load [N]	490
Radial bearing load [Nm]	25
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature [°C]	5 ... 80
Air volume per cycle [cm³]	15
Weight [kg]	1.2

*All data measured at 6 bar
 **without extension load

Technical Data*

Order no. SW50D4-C

Swivel angle [°] 180
 Torque [Nm] 1.5
 Repetition accuracy +/- [°] 0.01
 Swivel time [s]** 0.3
 Passage bore Ø [mm] 9
 Axial bearing load [N] 490
 Radial bearing load [Nm] 25
 Operating pressure min. [bar] 3
 Operating pressure max. [bar] 8
 Operating temperature [°C] 5 ... 80
 Air volume per cycle [cm³] 15
 Weight [kg] 1.2

*All data measured at 6 bar
 **without extension load

1 Fixings for swivel unit
 2 Energy supply
 3 Integrated air feed-through
 5 Adjusting screw
 6 Shock absorber
 8 Fixing tool side
 12 Fixing ANS
 14 Switch cam 180°
 16 Fix stop 180°
 35 Integrated slot for magnetic field sensor
 38 Adapter
 39 Swivel unit
 A Air connection 180°
 B Air connection 0°
 A Alternate air connection (180°)
 B Alternate air connection (0°)

Hoseless pneumatic feed-through (tool)
 Hoseless pneumatic feed-through (machine)
 Hoseless energy supply (machine)

ANGLE PIVOT UNITS

INSTALLATION SIZE SW74

▶ PRODUCT SPECIFICATIONS



▶ INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint
DRV1-8X6



O-Ring
COR0050100

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Straight Cable 5 m
MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8
MFS204SKHC



Inductive proximity switch
- Cable 5 m
NJ8-E2



Inductive proximity switch
- Connector M8
NJ8-E2S



Attachment Kit
ANS0063



Plug-in connector Angled Ca-
ble 5m - Socket M8 (female)
KAW500



Plug-in connector Straight Ca-
ble 5m - Socket M8 (female)
KAG500



Plug-in connector customiz-
able Straight - Connector M8
S8-G-3



Plug-in connector customiz-
able Straight - Connector M12
S12-G-3

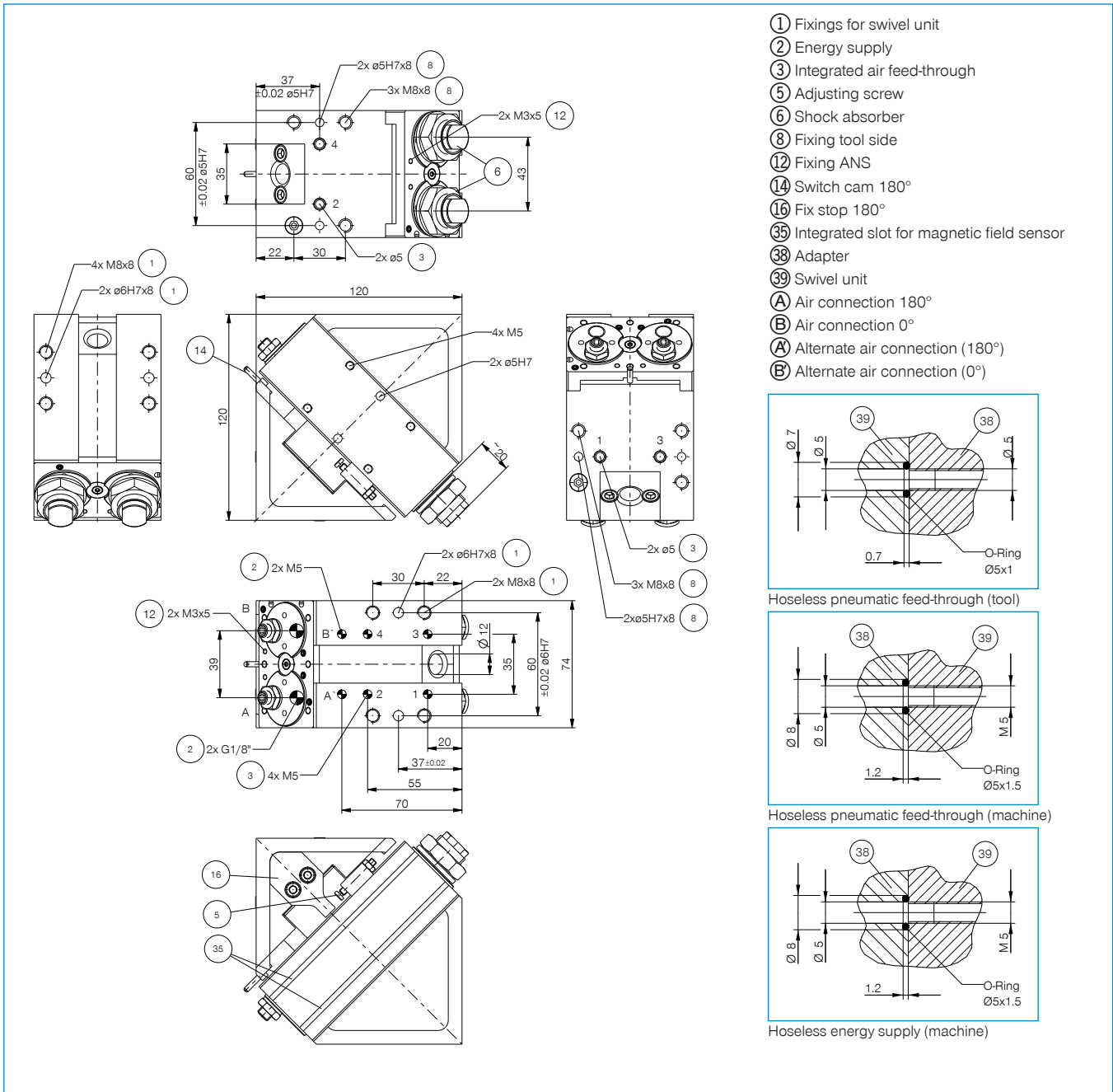


Pressure Safety Valve
DSV1-8

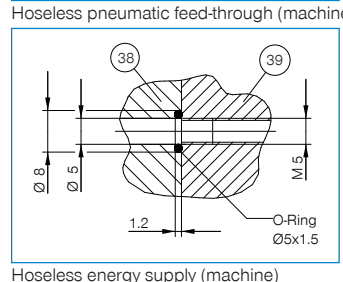
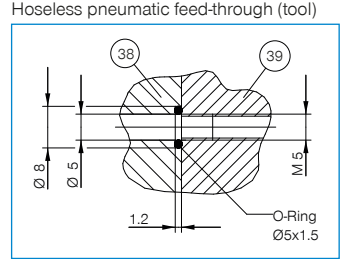
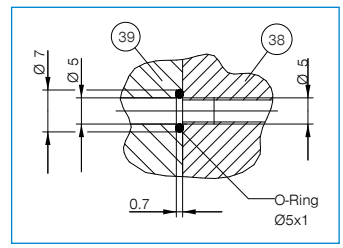
Order no.	SW74D4-C
Swivel angle [°]	180
Torque [Nm]	5.5
Repetition accuracy +/- [°]	0.01
Swivel time [s]**	0.3
Passage bore Ø [mm]	12
Axial bearing load [N]	1120
Radial bearing load [Nm]	90
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature [°C]	5 ... 80
Air volume per cycle [cm³]	42
Weight [kg]	2.6

*All data measured at 6 bar
 **without extension load

► Technical Data*



- ① Fixings for swivel unit
- ② Energy supply
- ③ Integrated air feed-through
- ⑤ Adjusting screw
- ⑥ Shock absorber
- ⑧ Fixing tool side
- ⑫ Fixing ANS
- ⑭ Switch cam 180°
- ⑯ Fix stop 180°
- ⑰ Integrated slot for magnetic field sensor
- ⑳ Adapter
- ㉑ Swivel unit
- A Air connection 180°
- B Air connection 0°
- Ⓐ Alternate air connection (180°)
- Ⓑ Alternate air connection (0°)



ANGLE PIVOT UNITS

INSTALLATION SIZE SW100

▶ PRODUCT SPECIFICATIONS



▶ INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint
DRV1-8X6



O-Ring
COR0050100

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Straight Cable 5 m
MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8
MFS204SKHC



Inductive proximity switch
- Cable 5 m
NJ8-E2



Inductive proximity switch
- Connector M8
NJ8-E2S



Attachment Kit
ANS0064



Plug-in connector Angled Ca-
ble 5m - Socket M8 (female)
KAW500



Plug-in connector Straight Ca-
ble 5m - Socket M8 (female)
KAG500



Plug-in connector customiz-
able Straight - Connector M8
S8-G-3



Plug-in connector customiz-
able Straight - Connector M12
S12-G-3

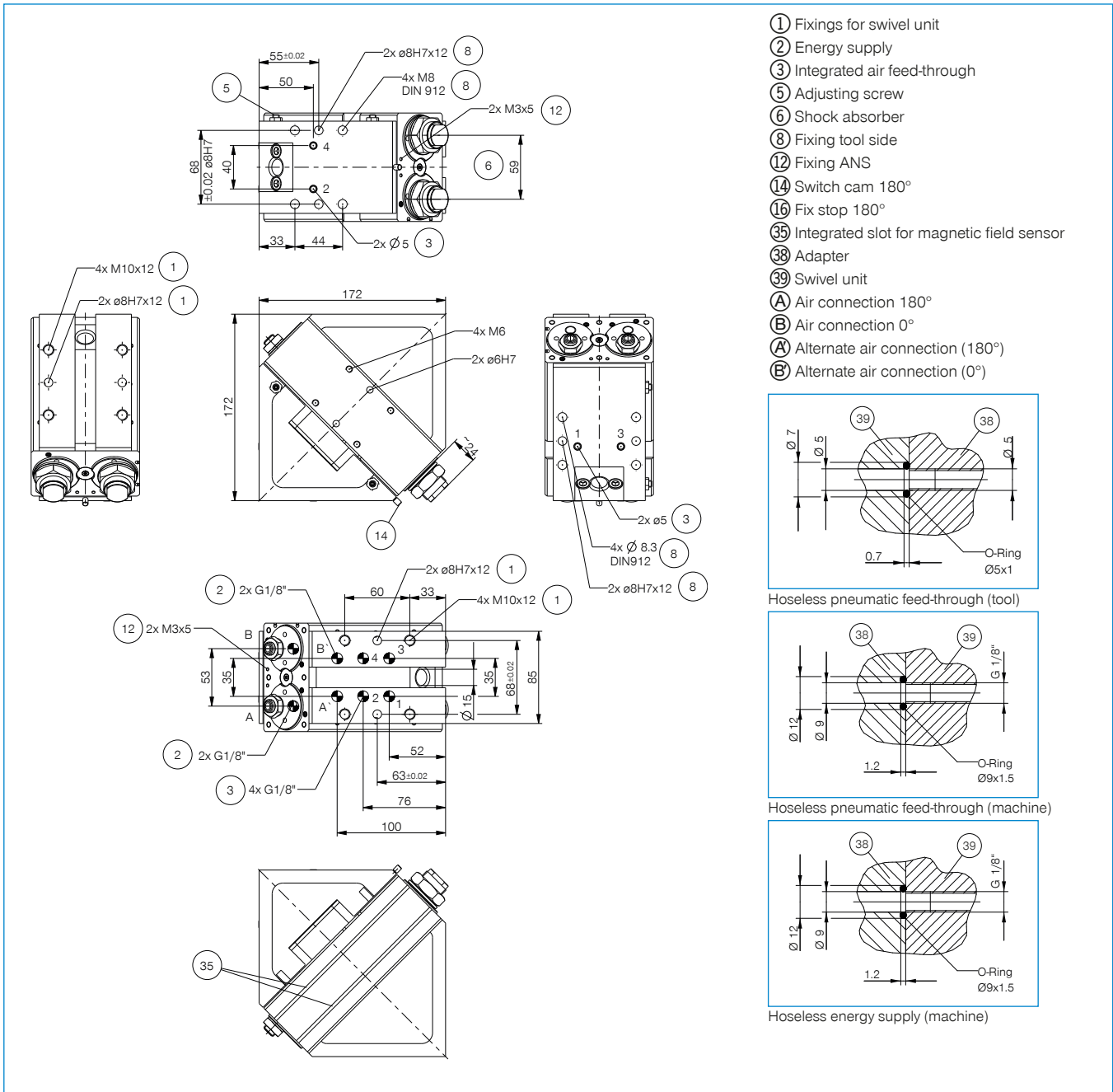


Pressure Safety Valve
DSV1-8

Order no.	SW100D4-C
Swivel angle [°]	180
Torque [Nm]	15
Repetition accuracy +/- [°]	0.01
Swivel time [s]**	0.5
Passage bore Ø [mm]	15
Axial bearing load [N]	2500
Radial bearing load [Nm]	155
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature [°C]	5 ... 80
Air volume per cycle [cm³]	108
Weight [kg]	6.3

*All data measured at 6 bar
 **without extension load

► **Technical Data***



ANGLE PIVOT UNITS

INSTALLATION SIZE SW125

▶ PRODUCT SPECIFICATIONS



▶ INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint
DRV1-4X8



O-Ring
COR0090150

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Straight Cable 5 m
MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8
MFS204SKHC



Inductive proximity switch
- Cable 5 m
NJ12-E2



Plug-in connector Angled
Cable 5m - Socket M8
(female)
KAW500



Plug-in connector
Straight Cable 5m - Socket
M8 (female)
KAG500



Plug-in connector customiz-
able Straight - Connector M8
S8-G-3



Plug-in connector customiz-
able Straight - Connector M12
S12-G-3

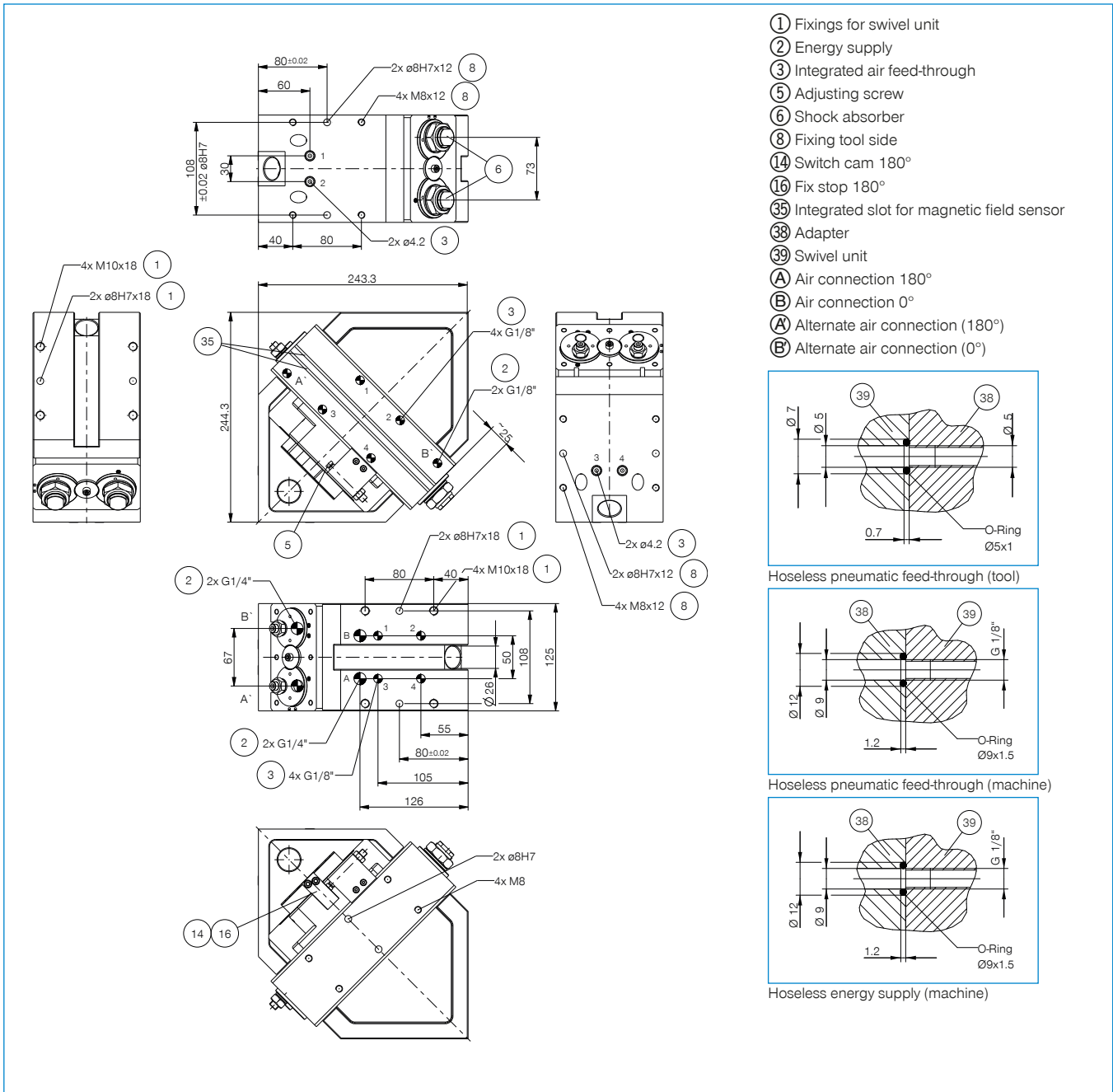


Pressure Safety Valve
DSV1-8

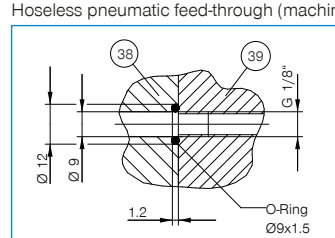
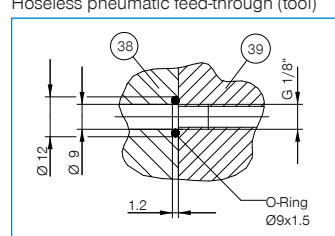
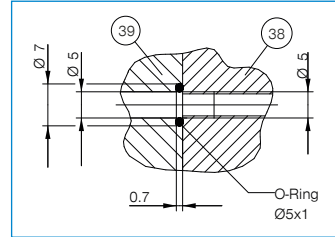
Order no.	SW125D4-C
Swivel angle [°]	180
Torque [Nm]	34
Repetition accuracy +/- [°]	0.01
Swivel time [s]**	0.6
Passage bore Ø [mm]	26
Axial bearing load [N]	3400
Radial bearing load [Nm]	390
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature [°C]	5 ... 80
Air volume per cycle [cm³]	440
Weight [kg]	15.3

*All data measured at 6 bar
 **without extension load

► Technical Data*



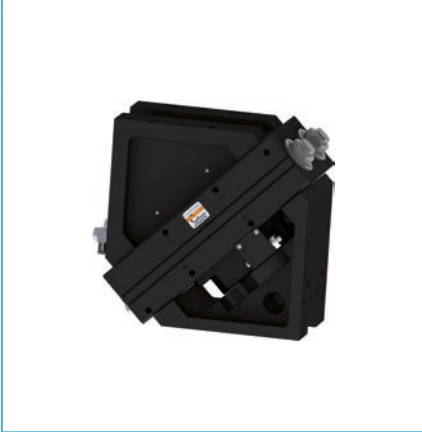
- ① Fixings for swivel unit
- ② Energy supply
- ③ Integrated air feed-through
- ⑤ Adjusting screw
- ⑥ Shock absorber
- ⑧ Fixing tool side
- ⑭ Switch cam 180°
- ⑮ Fix stop 180°
- ⑳ Integrated slot for magnetic field sensor
- ㉑ Adapter
- ㉒ Swivel unit
- Ⓐ Air connection 180°
- Ⓑ Air connection 0°
- Ⓐ Alternate air connection (180°)
- Ⓑ Alternate air connection (0°)



ANGLE PIVOT UNITS

INSTALLATION SIZE SW155

▶ PRODUCT SPECIFICATIONS



▶ INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint
DRV1-4X8



O-Ring
COR0090150

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Straight Cable 5 m
MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8
MFS204SKHC



Inductive proximity switch
- Cable 5 m
NJ12-E2



Plug-in connector Angled
Cable 5m - Socket M8
(female)
KAW500



Plug-in connector
Straight Cable 5m - Socket
M8 (female)
KAG500



Plug-in connector customiz-
able Straight - Connector M8
S8-G-3



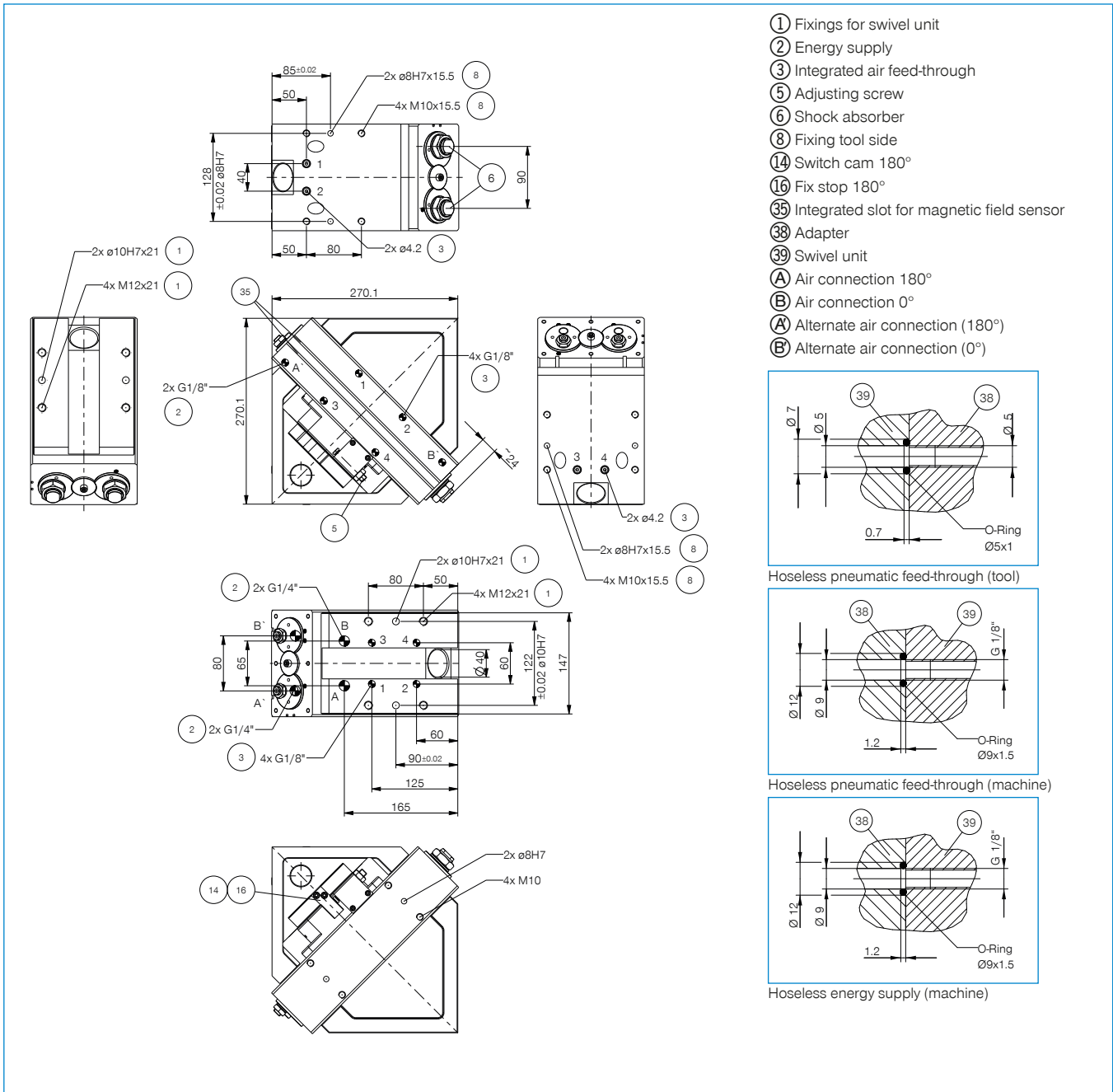
Plug-in connector customiz-
able Straight - Connector M12
S12-G-3



Pressure Safety Valve
DSV1-8

Order no.	
► Technical Data*	
SW155D4-C	
Swivel angle [°]	180
Torque [Nm]	58
Repetition accuracy +/- [°]	0.01
Swivel time [s]**	0.8
Passage bore Ø [mm]	40
Axial bearing load [N]	5900
Radial bearing load [Nm]	760
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature [°C]	5 ... 80
Air volume per cycle [cm ³]	730
Weight [kg]	25.3

*All data measured at 6 bar
 **without extension load



ANGLE PIVOT UNITS

INSTALLATION SIZE SW195

▶ PRODUCT SPECIFICATIONS



▶ INCLUDED IN DELIVERY



Flow Control Valves - with Swivel joint
DRV1-4X8



O-Ring
COR0120150

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Straight Cable 5 m
MFS204KHC



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8
MFS204SKHC



Inductive proximity switch
- Cable 5 m
NJ12-E2



Plug-in connector Angled
Cable 5m - Socket M8
(female)
KAW500



Plug-in connector
Straight Cable 5m - Socket
M8 (female)
KAG500



Plug-in connector customiz-
able Straight - Connector M8
S8-G-3



Plug-in connector customiz-
able Straight - Connector M12
S12-G-3

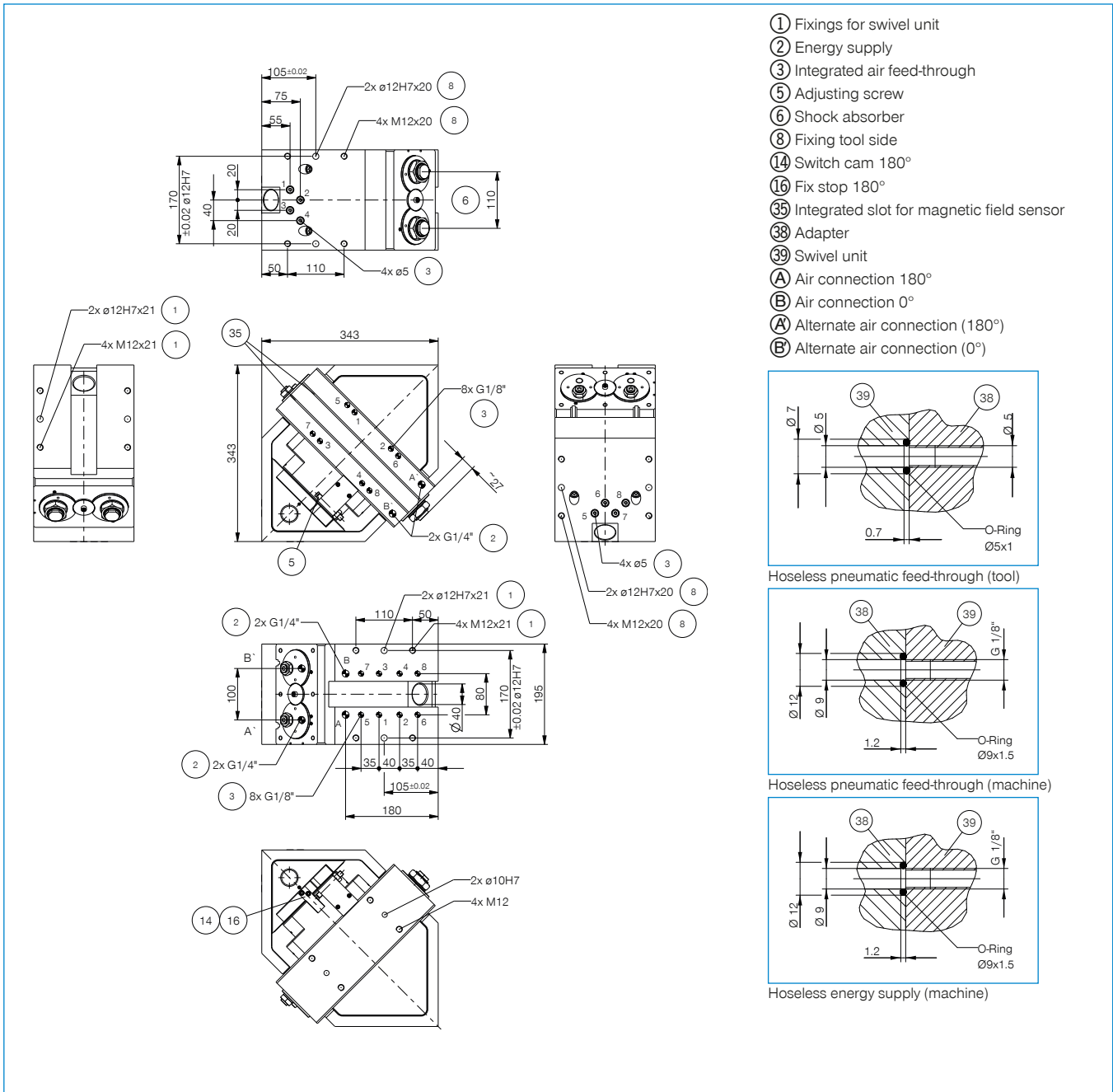


Pressure Safety Valve
DSV1-8

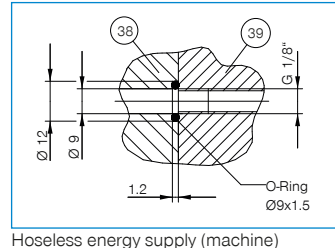
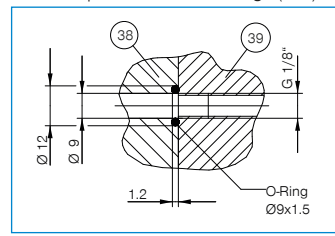
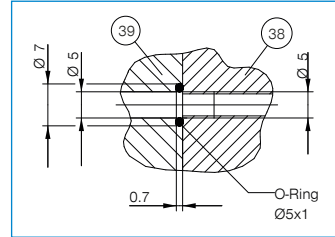
Order no.	SW195D8-C
Swivel angle [°]	180
Torque [Nm]	120
Repetition accuracy +/- [°]	0.01
Swivel time [s] **	1.1
Passage bore Ø [mm]	40
Axial bearing load [N]	7000
Radial bearing load [Nm]	1250
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature [°C]	5 ... 80
Air volume per cycle [cm³]	1520
Weight [kg]	48.2

* All data measured at 6 bar
 ** without extension load

► **Technical Data***

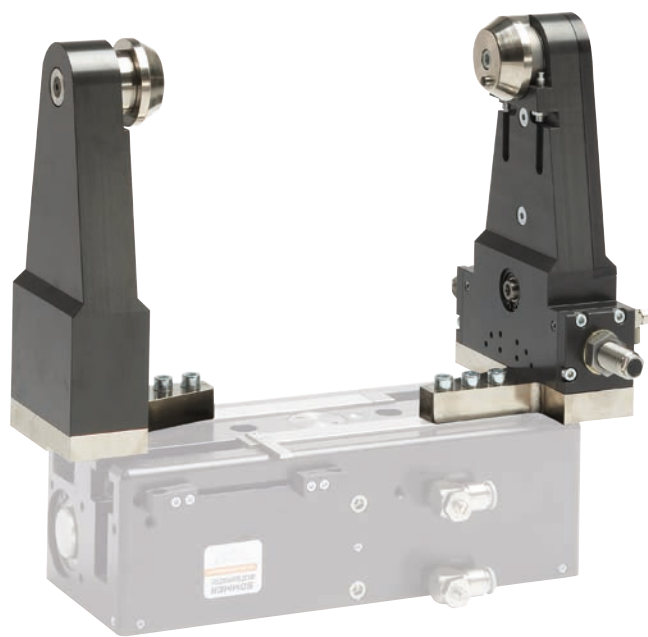


- ① Fixings for swivel unit
- ② Energy supply
- ③ Integrated air feed-through
- ⑤ Adjusting screw
- ⑥ Shock absorber
- ⑧ Fixing tool side
- ⑭ Switch cam 180°
- ⑯ Fix stop 180°
- ⑳ Integrated slot for magnetic field sensor
- ㉑ Adapter
- ㉒ Swivel unit
- Ⓐ Air connection 180°
- Ⓑ Air connection 0°
- Ⓐ' Alternate air connection (180°)
- Ⓑ' Alternate air connection (0°)



SWIVEL JAWS

OVERVIEW OF SERIES



▶ PNEUMATIC



Series SB

674

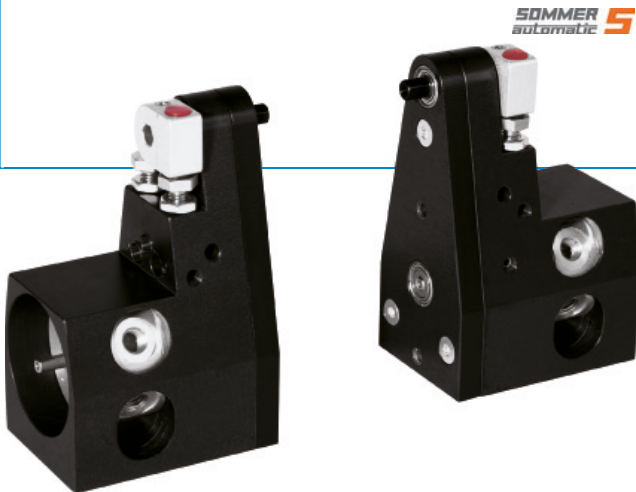


Series SBZ

682

SWIVEL JAWS SERIES SB

▶ PRODUCT ADVANTAGES



“The economical”

▶ Concentration on the essentials

The most cost-effective type of swivelling reduces your production costs

▶ Proven technology

We have more than 20 years of proven reliability, which ensures uninterrupted production for you

▶ Flexible swivel angle

90° or 180°; you decide which using the provided limit stops. This allows you to be flexible while only needing to maintain one product in your system

▶ THE BEST PRODUCT FOR YOUR APPLICATION



▶ Our products love the challenge!

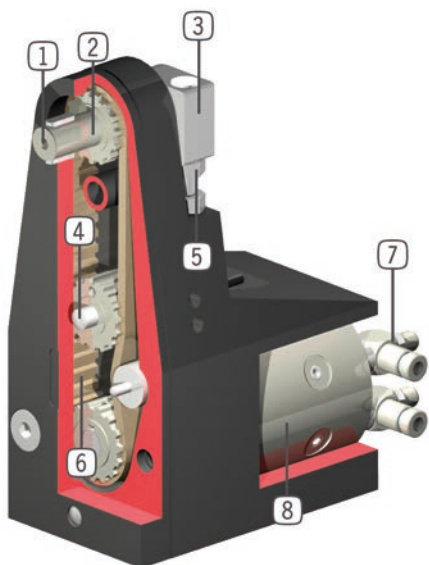
Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities:

Find the best product for your specific use:

www.zimmer-group.com



► BENEFITS IN DETAIL



- ① **Drive shaft**
 - as hexagonal or round shaft with feather key, depending on design
 - quick and cost effective positioning of application-specific workpiece intakes
- ② **Two way bearing drive shaft**
 - high forces and moments capacity
- ③ **Stop**
 - swivel angle of 90 and 180°
 - stable, with Fibroflex stop surface
- ④ **Position sensing**
 - inquiry of end positions 0° and 90° (or 180°) via inductive proximity switch
 - integrated in housing, therefore no additional interference contour
- ⑤ **End position**
 - +/- 3° adjustable end position
- ⑥ **Force transfer**
 - stable toothed belt with steel reinforcement
 - quiet, reliable, durable
- ⑦ **Energy supply**
 - possible from several sides
- ⑧ **Drive**
 - double-acting rotor cylinder

► SERIES CHARACTERISTICS



Number of installation sizes	3
Swivel angle	90° - 180°
Torque	0,1 Nm - 1,6 Nm
Weight (pair)	0,3 kg - 2,2 kg
AP class	2



Elastomer end position damping



Inductive sensor



Positionability - 2 positions



Adjustable swivel angle



IP54



10 million maintenance-free cycles (max.)

SWIVEL JAWS

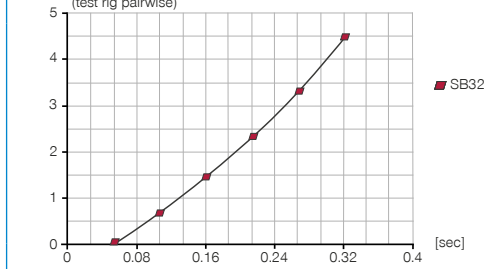
INSTALLATION SIZE SB32

▶ PRODUCT SPECIFICATIONS



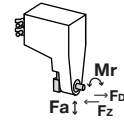
▶ Moment of inertia

[kg cm²] Shows the expected swivel time against the calculated moment of inertia (test rig pairwise)



▶ Forces and moments

Indicates the static load on the bearing.



Fa [N]	180
Mr [Nm]	2.1

▶ INCLUDED IN DELIVERY



Stop 90°

GEH03350



Stop 180°

GEH03340



Sleeve For Proximity Switch

DMS03210



Cylinder Pin

C632504100

▶ RECOMMENDED ACCESSORIES



Inductive proximity switch - Cable 5 m

NJ4-E2



Inductive Proximity Switch Cable 0,3 m - Connector M8

NJ4-E2SK



Basic jaw

SB32-1-B



Basic jaw

SB32-1-B-01



Basic Jaw Rubberized

SB32-2-B



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector customizable Straight - Connector M8

S8-G-3



Plug-in connector customizable Straight - Connector M12

S12-G-3

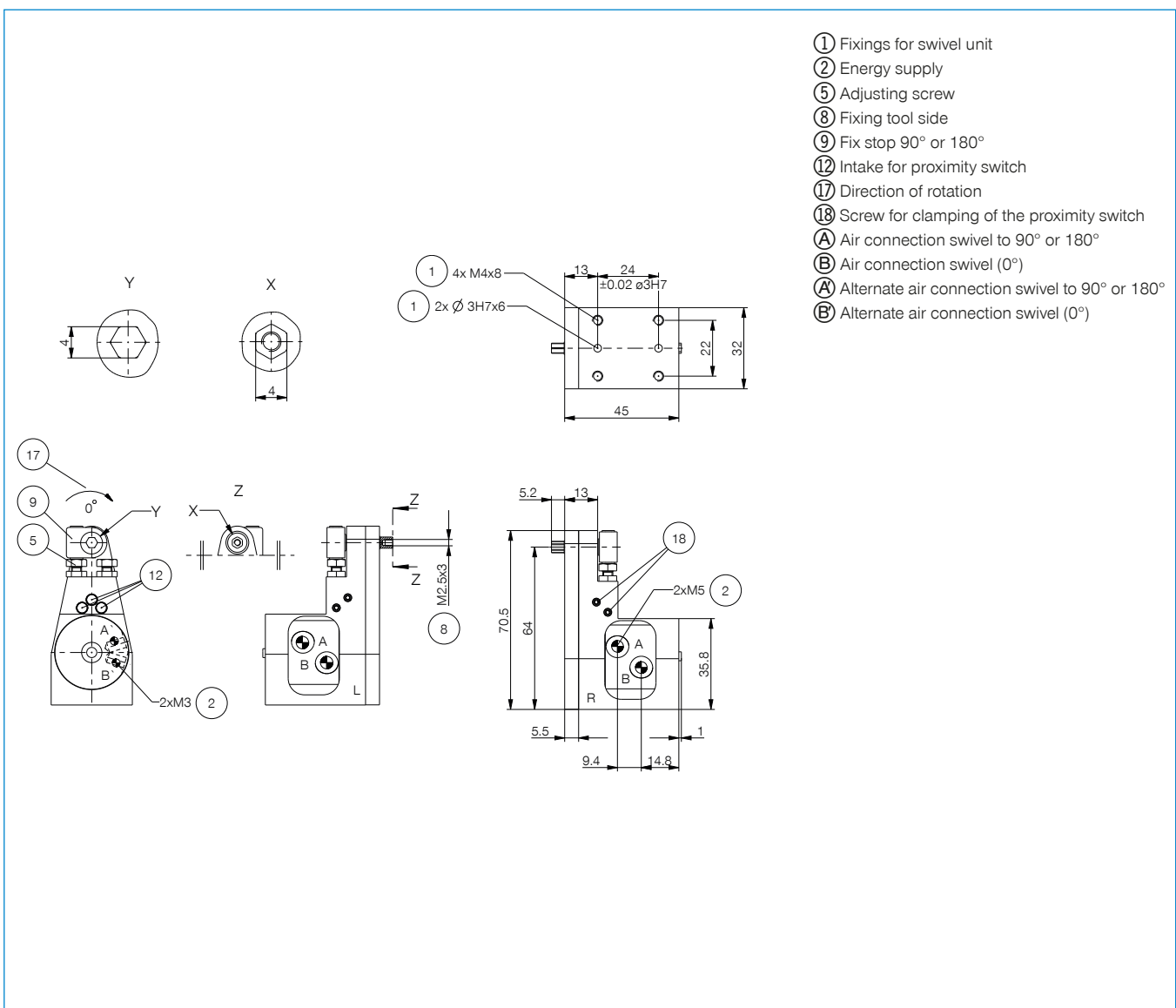


Pressure Safety Valve

DSV1-8

► Technical Data*	
Order no.	SB32-D
Swivel angle [°]	90 / 180
Torque per jaw [Nm]	0.1
Swivel angle regulable +/- [°]	3
Repetition accuracy +/- [°]	0.5
Operating pressure min. [bar]	3
Operating pressure max. [bar]	7
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	2
Weight (pair) [kg]	0.3
FD [N]**	90
FZ [N]**	90

*All data measured at 6 bar
 **Observe the gripper force



SWIVEL JAWS

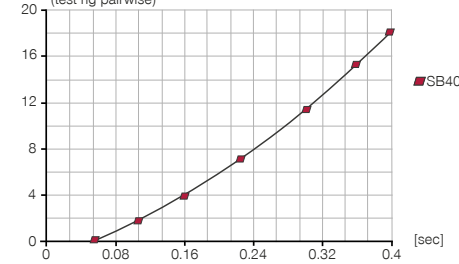
INSTALLATION SIZE SB40

▶ PRODUCT SPECIFICATIONS



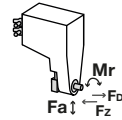
▶ Moment of inertia

[kg cm²] Shows the expected swivel time against the calculated moment of inertia (test rig pairwise)



▶ Forces and moments

Indicates the static load on the bearing.



Fa [N]	770
Mr [Nm]	10.8

▶ INCLUDED IN DELIVERY



Stop 90°

GEH04160



Stop 180°

GEH04150



Sleeve For Proximity Switch

DMS03210



Cylinder Pin

C632504100

▶ RECOMMENDED ACCESSORIES



Inductive proximity switch - Cable 5 m

NJ4-E2



Inductive Proximity Switch Cable 0,3 m - Connector M8

NJ4-E2SK



Basic jaw

SB40-1



Basic Jaw Rubberized

SB40-2



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector customizable Straight - Connector M8

S8-G-3



Plug-in connector customizable Straight - Connector M12

S12-G-3



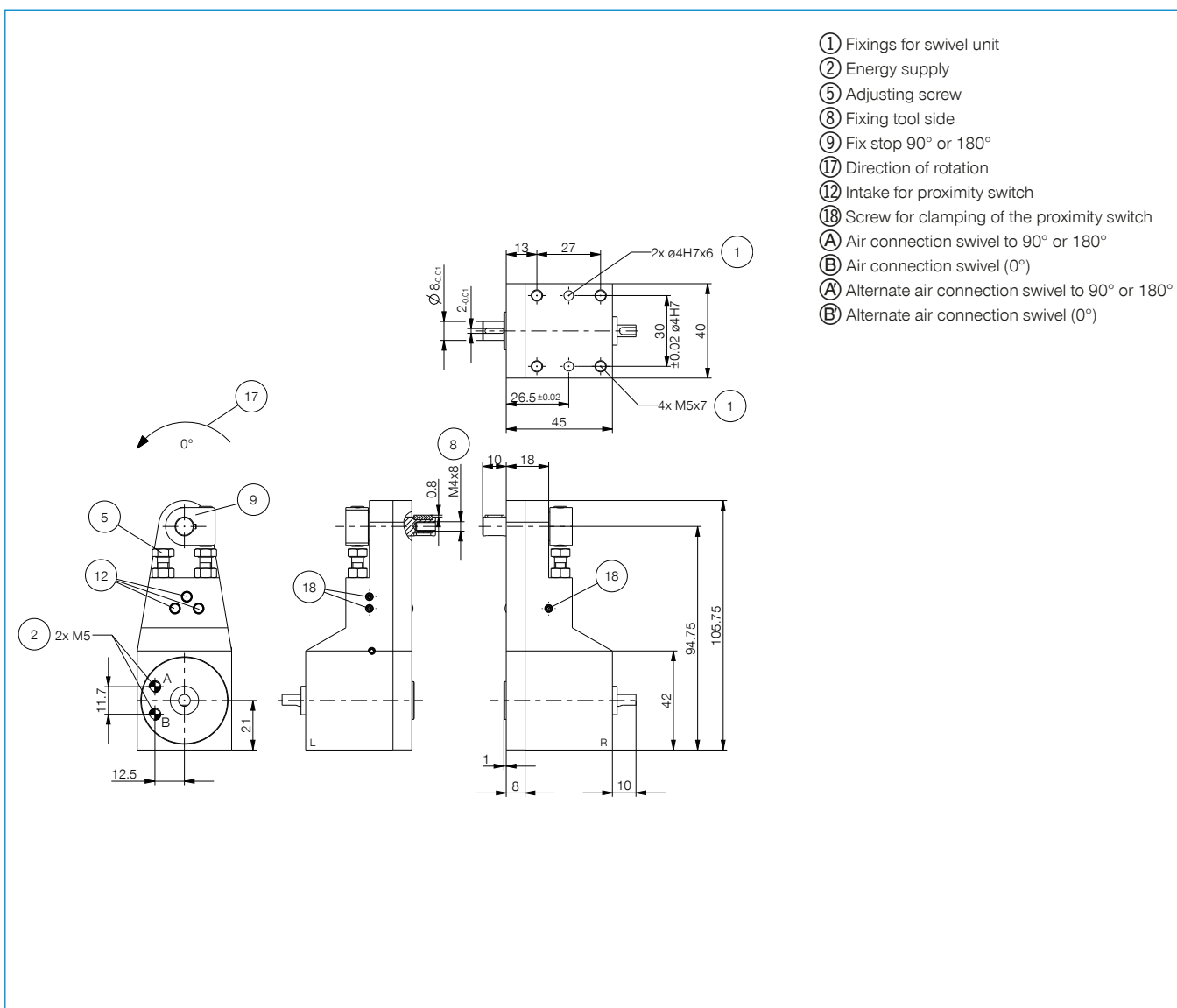
Pressure Safety Valve

DSV1-8

Order no.	SB40-B
Swivel angle [°]	90 / 180
Torque per jaw [Nm]	0.3
Swivel angle regulable +/- [°]	3
Repetition accuracy +/- [°]	0.5
Operating pressure min. [bar]	3
Operating pressure max. [bar]	7
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	4
Weight (pair) [kg]	0.7
FD [N]**	385
FZ [N]**	385

*All data measured at 6 bar

**Observe the gripper force



SWIVEL JAWS

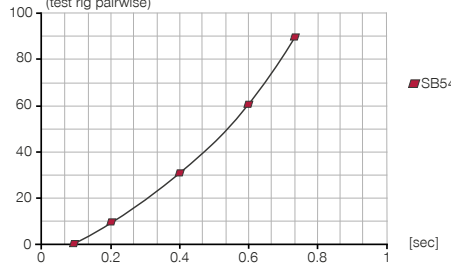
INSTALLATION SIZE SB54

▶ PRODUCT SPECIFICATIONS



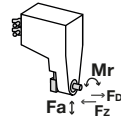
▶ Moment of inertia

[kg cm²] Shows the expected swivel time against the calculated moment of inertia (test rig pairwise)



▶ Forces and moments

Indicates the static load on the bearing.



Fa [N]	850
Mr [Nm]	15.3

▶ INCLUDED IN DELIVERY



Stop 90°

GEH05501



Stop 180°

GEH05491



Sleeve For Proximity Switch

DMS03210



Straight pin

KUN05410

▶ RECOMMENDED ACCESSORIES



Inductive proximity switch - Cable 5 m

NJ4-E2



Inductive Proximity Switch Cable 0,3 m - Connector M8

NJ4-E2SK



Basic jaw

SB54-1



Basic Jaw Rubberized

SB54-2



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector customizable Straight - Connector M8

S8-G-3



Plug-in connector customizable Straight - Connector M12

S12-G-3

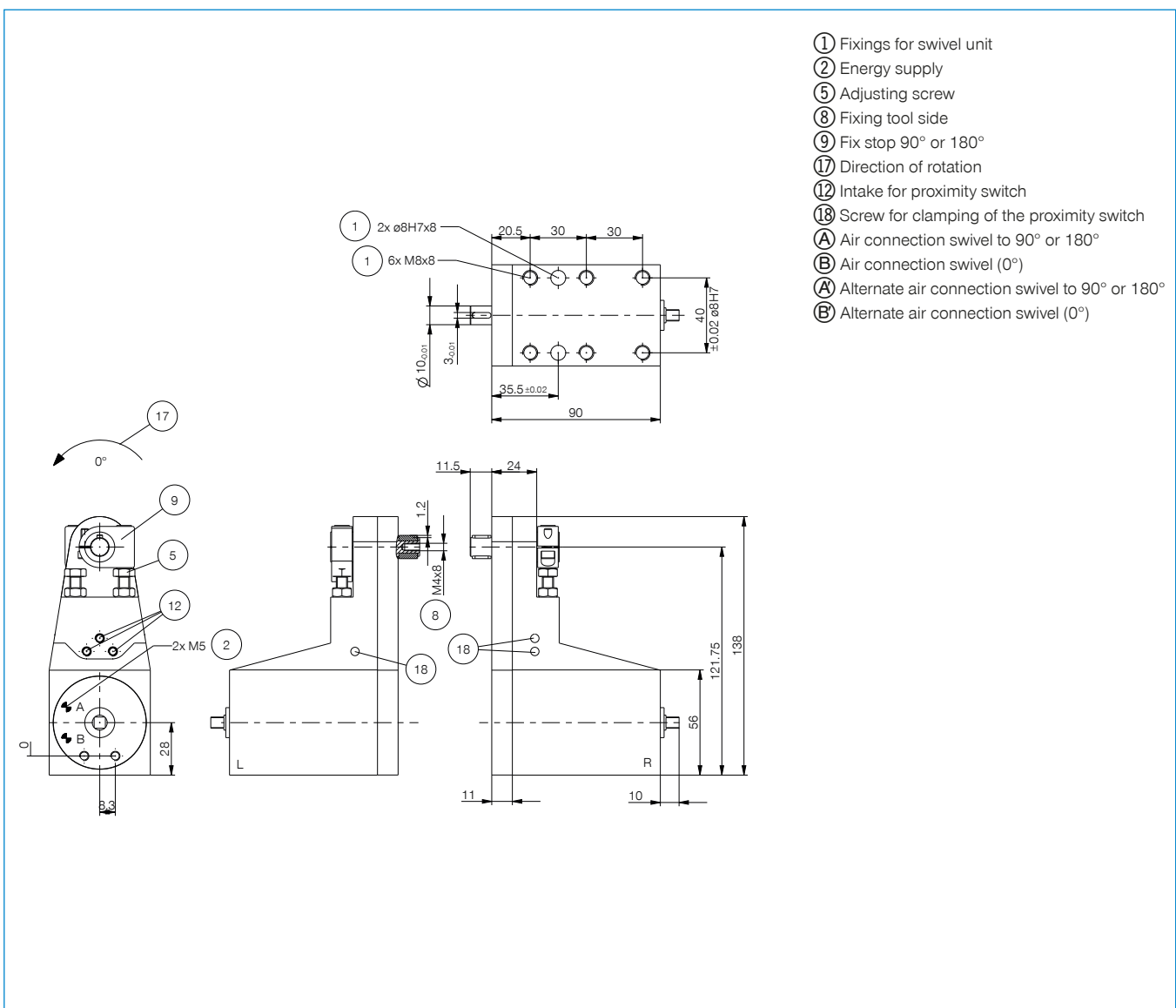


Pressure Safety Valve

DSV1-8

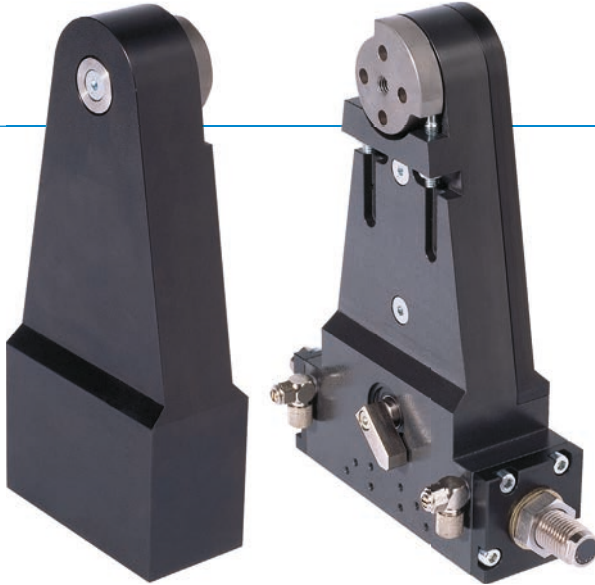
Order no.	▶ Technical Data*
Swivel angle [°]	90 / 180
Torque per jaw [Nm]	1.6
Swivel angle regulable +/- [°]	3
Repetition accuracy +/- [°]	0.5
Operating pressure min. [bar]	3
Operating pressure max. [bar]	7
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	16
Weight (pair) [kg]	2.2
FD [N]**	425
FZ [N]**	425

*All data measured at 6 bar
 **Observe the gripper force



SWIVEL JAWS SERIES SBZ

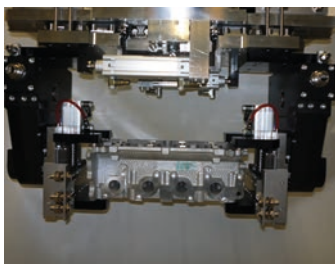
▶ PRODUCT ADVANTAGES



“The superior”

- ▶ **Shock absorber with spiral groove technology**
Superior end position damping lets you swivel more mass in the shortest amount of time, increasing your machine's component output
- ▶ **Force transmission via gear wheel set**
The robust gear wheels stand for precision, reliability and long service life and guarantee smooth operation
- ▶ **Failure-free continuous operation**
Our uncompromising “Made in Germany” quality guarantees up to 10 million maintenance-free gripping cycles

▶ THE BEST PRODUCT FOR YOUR APPLICATION



- ▶ **Our products love the challenge!**
Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities:
Find the best product for your specific use:
www.zimmer-group.com

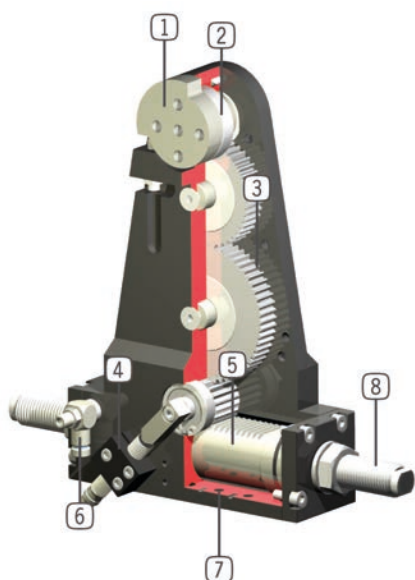
HOW TO ORDER CORRECTLY

- ▶ The product order numbers are arranged according to this diagram:

Order no.	SB100	<input type="checkbox"/>	<input type="checkbox"/>	-B
		G		
Rotation angle 90°			-90	
Rotation angle 180°			-180	



► BENEFITS IN DETAIL



- ① **Two way bearing drive shaft**
- high forces and moments capacity
- ② **Drive flange**
- large size drive flange with end stop and large central hole (from SB150)
- ③ **Force transfer**
- stable gear wheel set
- precise, reliable, durable
- ④ **Position sensing**
- inquiry of end positions 0° and 90° (or 180°) via inductive proximity switch
- adjustable on rotatable switch cam
- ⑤ **Drive**
- double-acting pneumatic cylinder
- ⑥ **Air flow control valve**
- for speed regulation (included in the delivery)
- ⑦ **Mounting and positioning**
- mounting possible from several sides for versatile positioning
- ⑧ **Integrated and patented hydraulic shock absorbers**
- adjustable end position damping

► SERIES CHARACTERISTICS



Number of installation sizes	5
Swivel angle	90° - 180°
Torque	1,2 Nm - 57 Nm
Weight	0,45 kg - 28 kg
AP class	3



Powerstop end position damping



IP54



Inductive sensor



10 million maintenance-free cycles (max.)



Positionability - 2 positions

SWIVEL JAWS

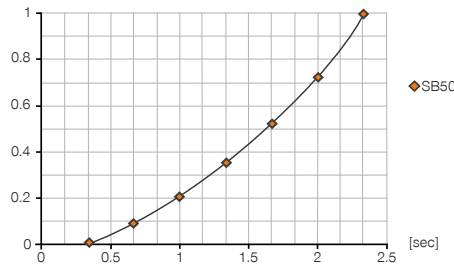
INSTALLATION SIZE SB50

▶ PRODUCT SPECIFICATIONS



▶ Moment of inertia

[kg m²] Shows the expected swivel time against the calculated moment of inertia



▶ Forces and moments

Indicates the static load on the bearing.



Fa [N]	1720
Mr [Nm]	15

▶ INCLUDED IN DELIVERY



Mounting block

KB8K-02



Flow Control Valves - with Swivel joint

DRVM5X4

▶ RECOMMENDED ACCESSORIES



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector customizable Straight - Connector M8

S8-G-3



Plug-in connector customizable Straight - Connector M12

S12-G-3



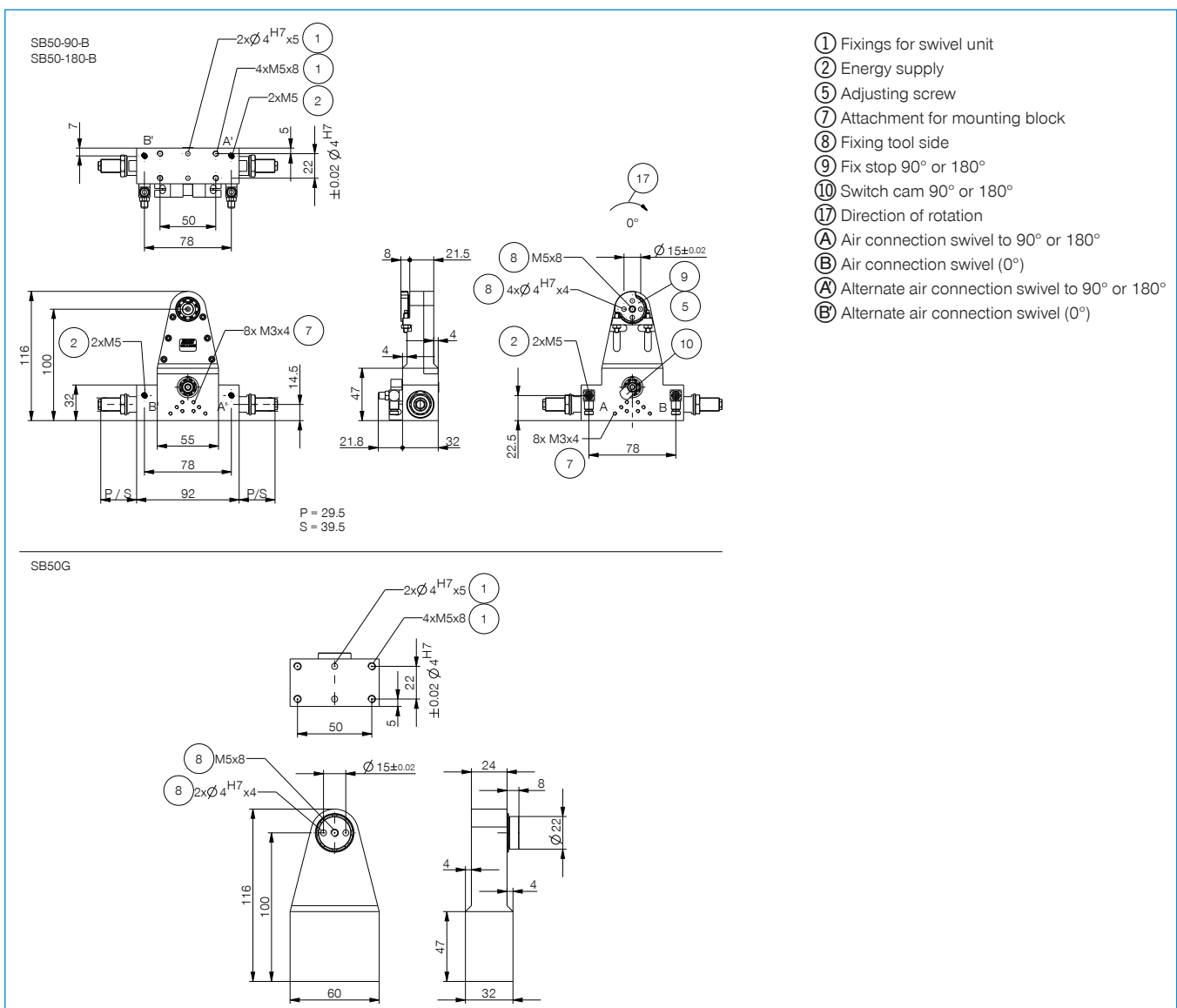
Pressure Safety Valve

DSV1-8

► Technical Data*

Order no.	SB50-90-B	SB50-180-B	SB50G
Swivel angle [°]	90	180	-
Torque per jaw [Nm]	1.2	1.2	-
Swivel angle regulable +/- [°]	3	3	-
Repetition accuracy +/- [°]	0.01	0.01	-
Operating pressure min. [bar]	3	3	-
Operating pressure max. [bar]	8	8	-
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	80	80	80
Air volume per cycle [cm ³]	5.5	7.5	-
Weight [kg]	0.75	0.75	0.45
FD [N]**	860	860	860
FZ [N]**	630	630	630

*All data measured at 6 bar
 **Observe the gripper force



SWIVEL JAWS

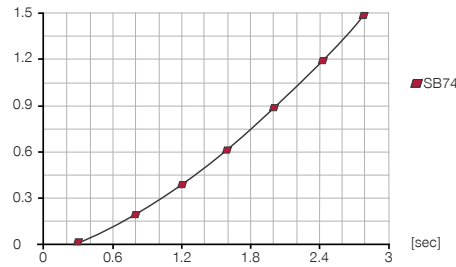
INSTALLATION SIZE SB74

▶ PRODUCT SPECIFICATIONS



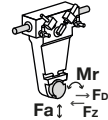
▶ Moment of inertia

[kg m²] Shows the expected swivel time against the calculated moment of inertia



▶ Forces and moments

Indicates the static load on the bearing.



Fa [N]	2400
Mr [Nm]	20

▶ INCLUDED IN DELIVERY



Mounting block

KB8K-02



Flow Control Valves - with Swivel joint

DRVM5X4

▶ RECOMMENDED ACCESSORIES



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector customizable Straight - Connector M8

S8-G-3



Plug-in connector customizable Straight - Connector M12

S12-G-3

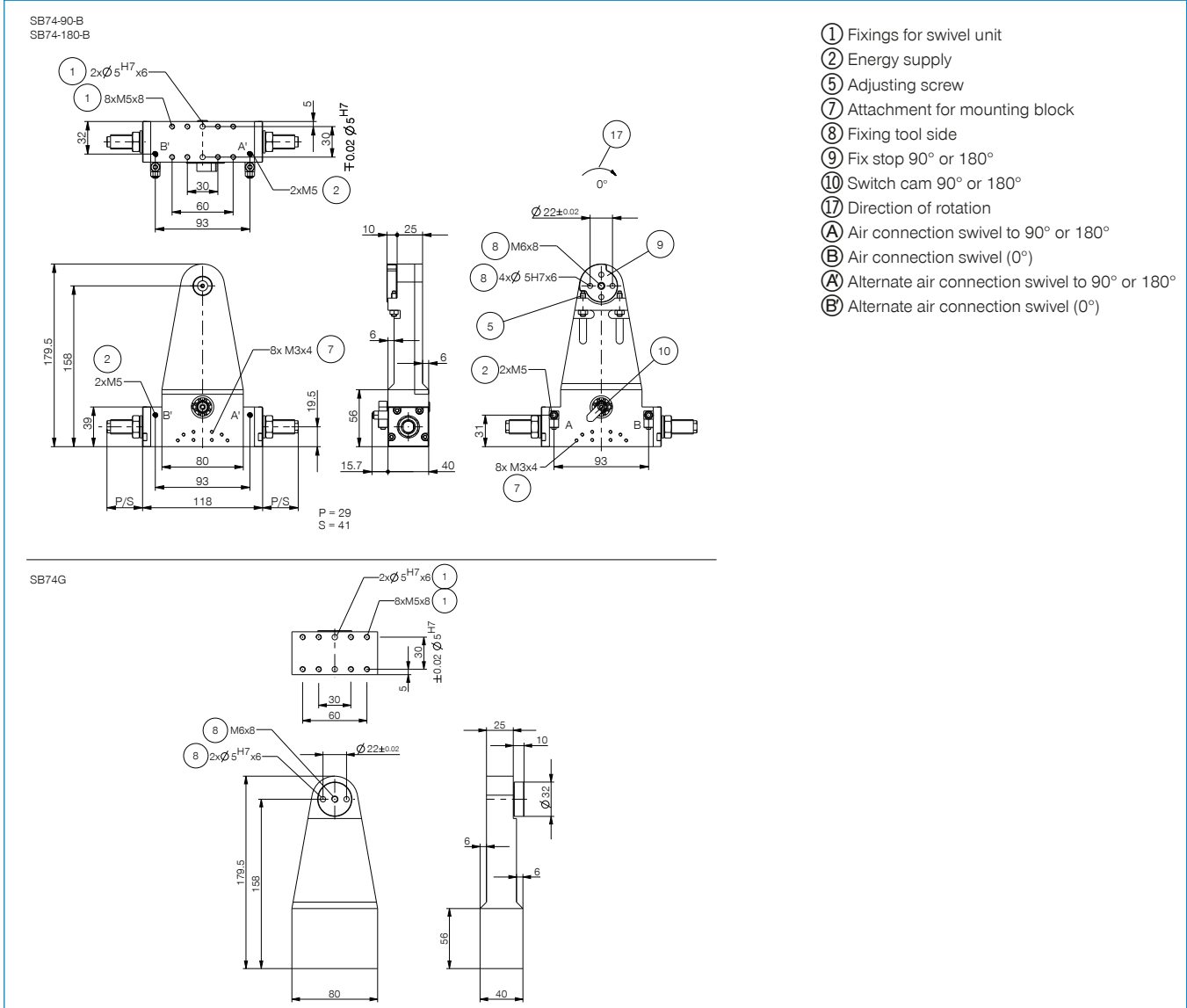


Pressure Safety Valve

DSV1-8

Order no.	► Technical Data*		
	SB74-90-B	SB74-180-B	SB74G
Swivel angle [°]	90	180	-
Torque per jaw [Nm]	3.5	3.5	-
Swivel angle regulable +/- [°]	3	3	-
Repetition accuracy +/- [°]	0.01	0.01	-
Operating pressure min. [bar]	3	3	-
Operating pressure max. [bar]	8	8	-
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	80	80	80
Air volume per cycle [cm ³]	16	21	-
Weight [kg]	1.7	1.7	1.1
FD [N]**	1200	1200	1200
FZ [N]**	630	630	630

* All data measured at 6 bar
 ** Observe the gripper force



SWIVEL JAWS

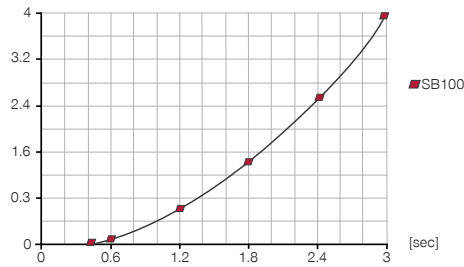
INSTALLATION SIZE SB100

▶ PRODUCT SPECIFICATIONS



▶ Moment of inertia

[kg m²] Shows the expected swivel time against the calculated moment of inertia



▶ Forces and moments

Indicates the static load on the bearing.



Fa [N]	4000
Mr [Nm]	70

▶ INCLUDED IN DELIVERY



Mounting block

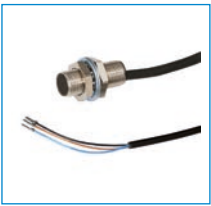
KB8K-02



Flow Control Valves - with Swivel joint

DRV1-8X6

▶ RECOMMENDED ACCESSORIES



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector customizable Straight - Connector M8

S8-G-3



Plug-in connector customizable Straight - Connector M12

S12-G-3



Pressure Safety Valve

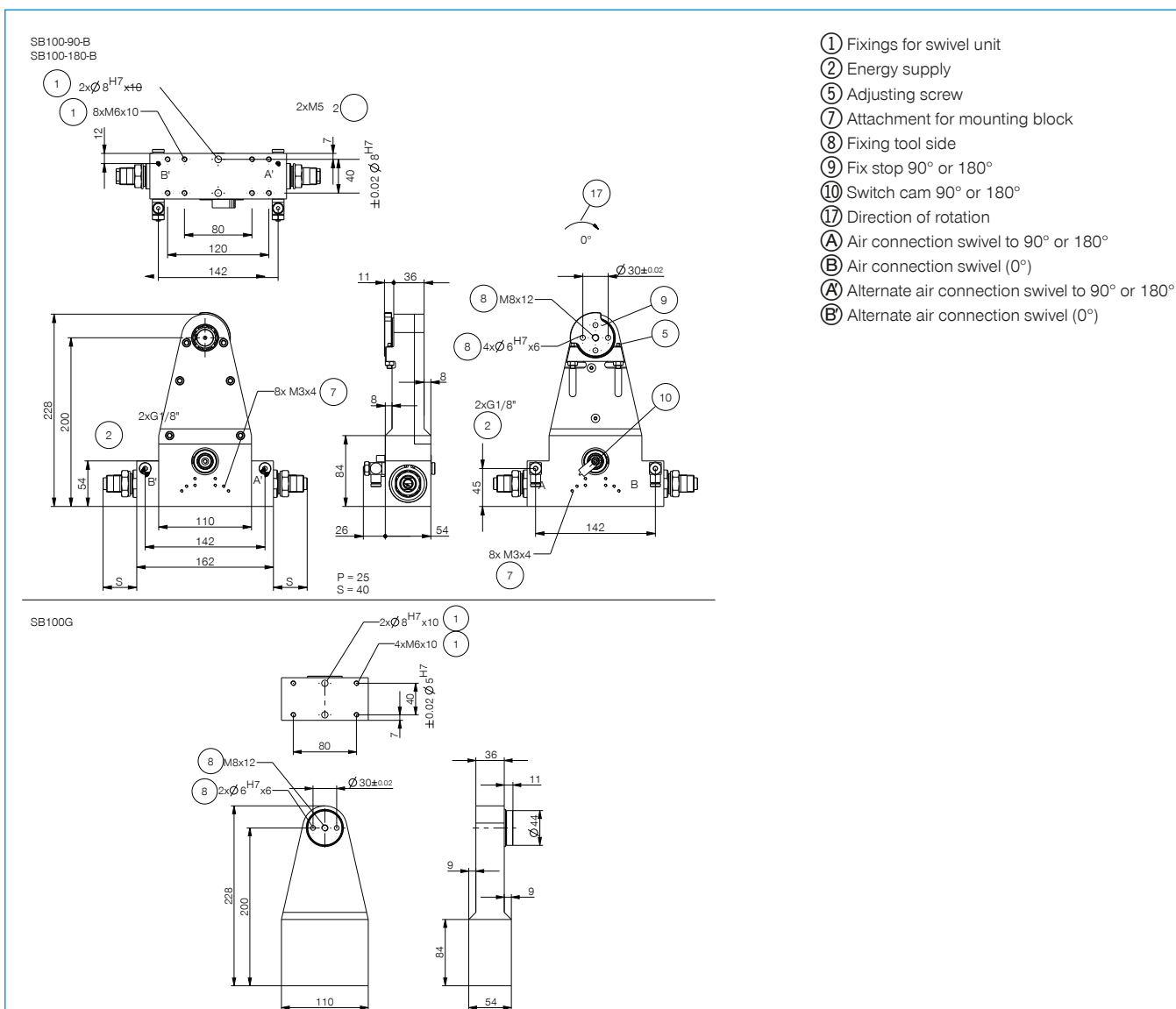
DSV1-8

► Technical Data*

Order no.	SB100-90-B	SB100-180-B	SB100G
Swivel angle [°]	90	180	-
Torque per jaw [Nm]	10	10	-
Swivel angle regulable +/- [°]	3	3	-
Repetition accuracy +/- [°]	0.01	0.01	-
Operating pressure min. [bar]	3	3	-
Operating pressure max. [bar]	8	8	-
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	80	80	80
Air volume per cycle [cm ³]	40	54	-
Weight [kg]	4	4	1.5
FD [N]**	2000	2000	2000
FZ [N]**	1200	1200	1200

*All data measured at 6 bar

**Observe the gripper force



SWIVEL JAWS

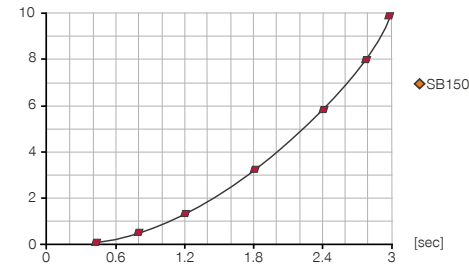
INSTALLATION SIZE SB150

▶ PRODUCT SPECIFICATIONS



▶ Moment of inertia

[kg m²] Shows the expected swivel time against the calculated moment of inertia



▶ Forces and moments

Indicates the static load on the bearing.



Fa [N]	15000
Mr [Nm]	270

▶ INCLUDED IN DELIVERY



Mounting block

KB8K



Flow Control Valves - with Swivel joint

DRV1-4X8

▶ RECOMMENDED ACCESSORIES



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector customizable Straight - Connector M8

S8-G-3



Plug-in connector customizable Straight - Connector M12

S12-G-3

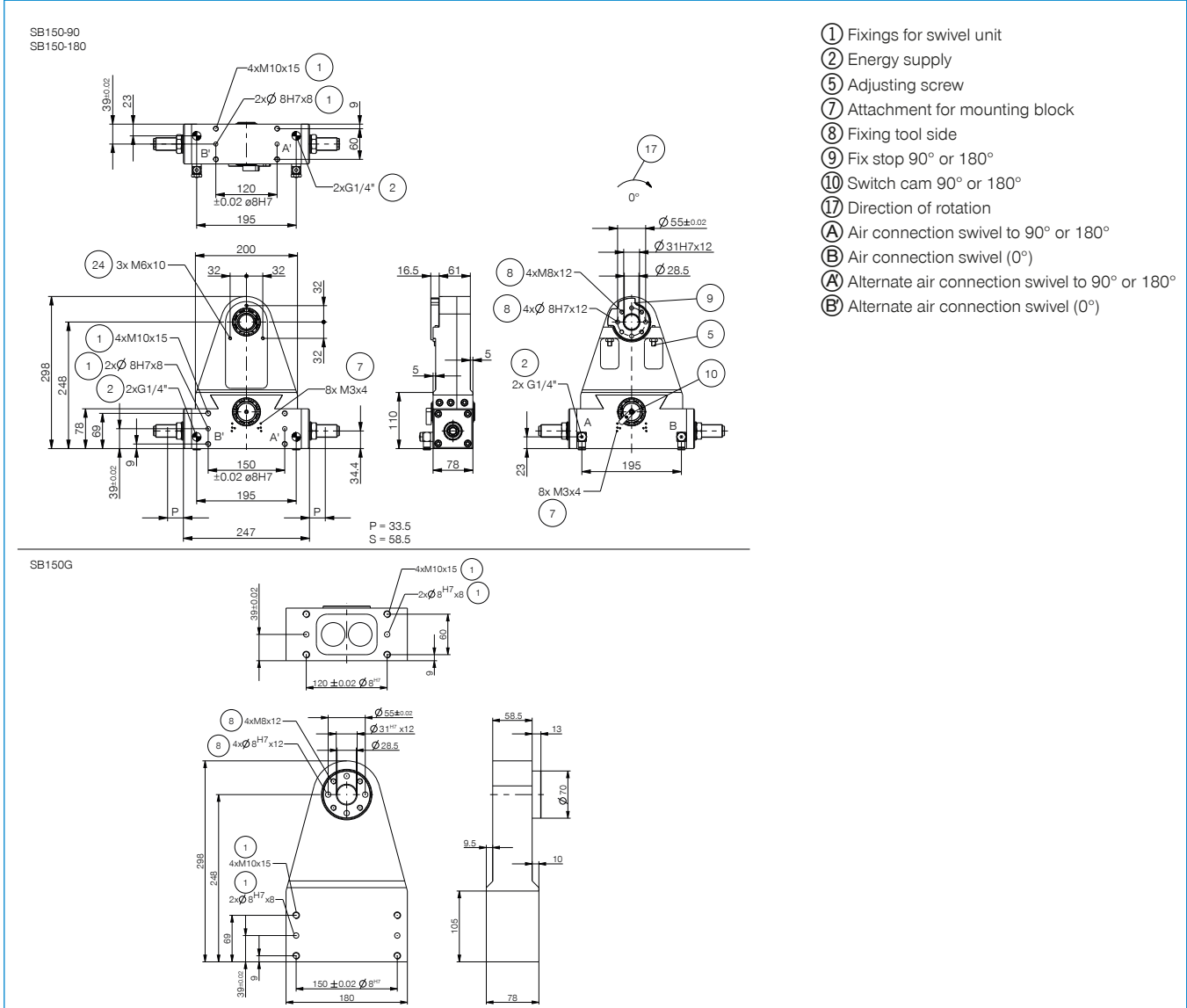


Pressure Safety Valve

DSV1-8

Order no.	Technical Data*		
	SB150-90	SB150-180	SB150G
Swivel angle [°]	90	180	-
Torque per jaw [Nm]	23	23	-
Swivel angle regulable +/- [°]	3	3	-
Repetition accuracy +/- [°]	0.01	0.01	0.01
Operating pressure min. [bar]	3	3	-
Operating pressure max. [bar]	8	8	-
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	80	80	80
Air volume per cycle [cm ³]	190	260	-
Weight [kg]	11	11	6.5
FD [N]**	7500	7500	7500
FZ [N]**	3700	3700	3700

*All data measured at 6 bar
 **Observe the gripper force



SWIVEL JAWS

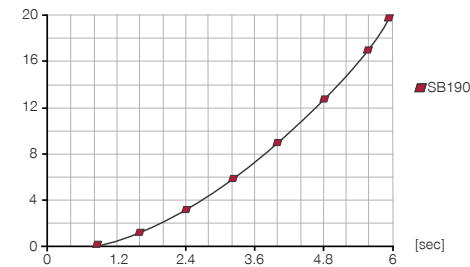
INSTALLATION SIZE SB190

▶ PRODUCT SPECIFICATIONS



▶ Moment of inertia

[kg m²] Shows the expected swivel time against the calculated moment of inertia



▶ Forces and moments

Indicates the static load on the bearing.



Fa [N]	25000
Mr [Nm]	600

▶ INCLUDED IN DELIVERY



Mounting block

KB12-03



Flow Control Valves - with Swivel joint

DRV1-4X8

▶ RECOMMENDED ACCESSORIES



Inductive proximity switch - Cable 5 m

NJ12-E2



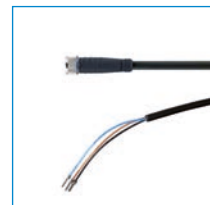
Inductive proximity switch - Connector M8

NJ12-E2S



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector customizable Straight - Connector M8

S8-G-3



Plug-in connector customizable Straight - Connector M12

S12-G-3

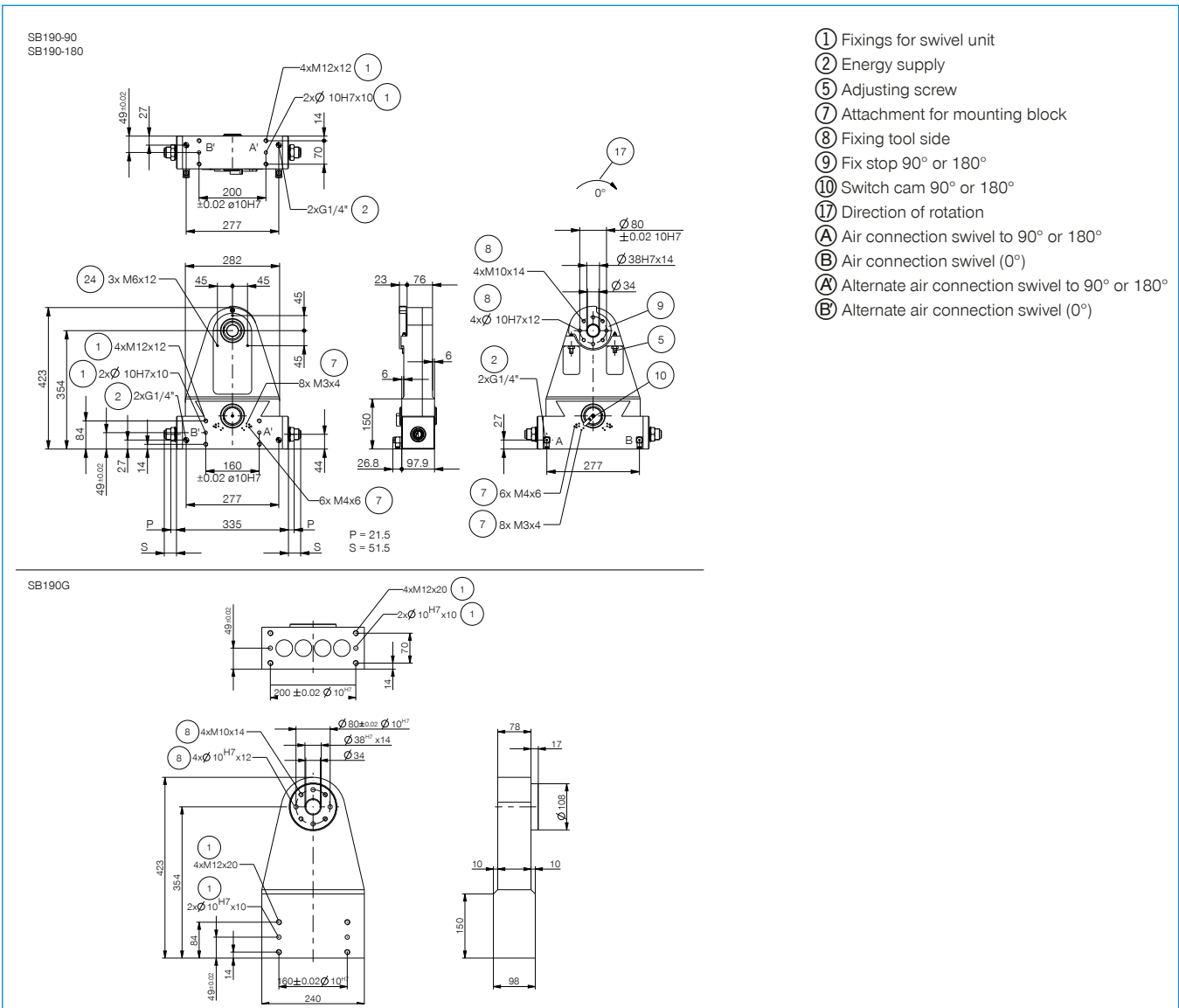


Pressure Safety Valve

DSV1-8

Order no.	► Technical Data*		
	SB190-90	SB190-180	SB190G
Swivel angle [°]	90	180	-
Torque per jaw [Nm]	57	57	-
Swivel angle regulable +/- [°]	3	3	-
Repetition accuracy +/- [°]	0.01	0.01	-
Operating pressure min. [bar]	3	3	-
Operating pressure max. [bar]	8	8	-
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	80	80	80
Air volume per cycle [cm ³]	320	320	-
Weight [kg]	28	28	19.5
FD [N]**	12500	12500	12500
FZ [N]**	6100	6100	6100

*All data measured at 6 bar
 **Observe the gripper force



LINEAR CYLINDERS

OVERVIEW OF SERIES

**▶ PNEUMATIC**

Series SHX

696



Series LI

702

LINEAR CYLINDERS

SERIES SHX

▶ PRODUCT ADVANTAGES



▶ Proven technology

We have more than 20 years of proven reliability, which ensures uninterrupted production for you

▶ Constant drive force

Equal force and travel time when retracting and extending increases your machine's process reliability

▶ Failure-free continuous operation

Our uncompromising "Made in Germany" quality guarantees up to 10 million maintenance-free cycles

▶ THE BEST PRODUCT FOR YOUR APPLICATION



▶ Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities:

Find the best product for your specific use:

www.zimmer-group.com

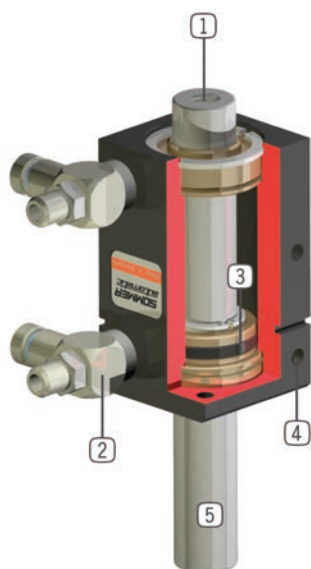
HOW TO ORDER CORRECTLY

- ▶ The product order numbers are arranged according to this diagram:

Order no.	SHX-	<input type="checkbox"/>	25	
Continuous piston rod		D		



► BENEFITS IN DETAIL



- ① **Connection to customer specific application**
 - possible from several sides on XD series
- ② **Energy supply**
 - reducing exhaust air is recommended
- ③ **Drive**
 - double-acting pneumatic cylinder
- ④ **Mounting and positioning**
 - mounting possible from several sides for versatile positioning
- ⑤ **Piston rod**
 - polished, hard chrome plated steel
 - continuous in design XD

► FURTHER INFORMATION IS AVAILABLE ONLINE



► Technical Information

All information just a click away at: www.zimmer-group.com
Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product.
Quick, clear and always up-to-date.



LINEAR CYLINDERS

INSTALLATION SIZE SH-X

▶ PRODUCT SPECIFICATIONS



▶ RECOMMENDED ACCESSORIES



Flow Control Valves - with Swivel joint

DRVM5X4



Inductive proximity switch - Cable 5 m

NJ3-E2



Inductive Proximity Switch Cable 0,3 m - Connector M8

NJ3-E2SK



Mounting block

KB3M



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector customizable Straight - Connector M8

S8-G-3



Plug-in connector customizable Straight - Connector M12

S12-G-3



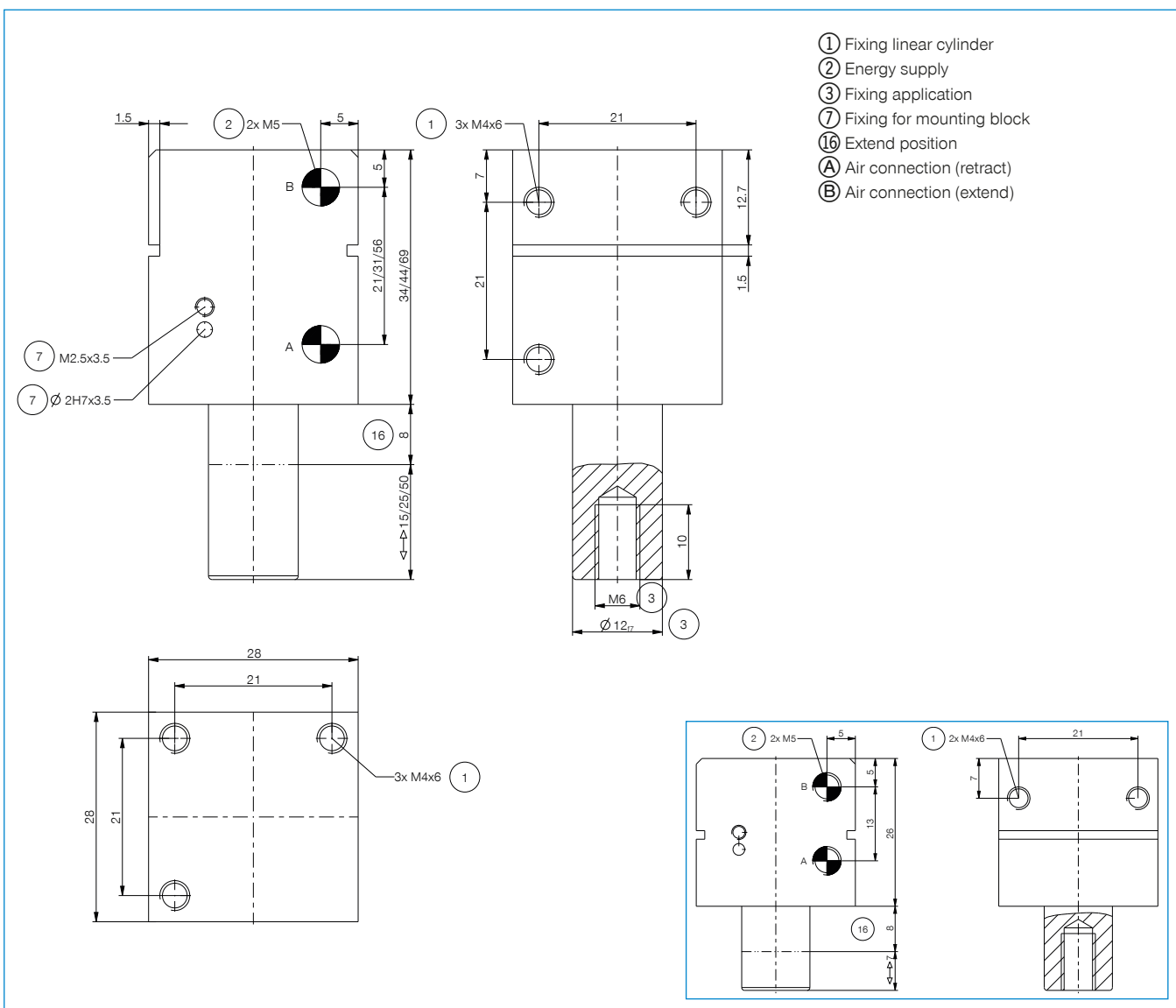
Pressure Safety Valve

DSV1-8

► Technical Data*

Order no.	SH-X7	SH-X15	SH-X25	SH-X50
Stroke [mm]	7	15	25	50
Retraction force [N]	100	100	100	100
Extension time [ms]	5	15	34	65
Retraction time [ms]	7.5	24	60	124
Operating temperature min. [°C]	5	5	5	5
Operating temperature max. [°C]	80	80	80	80
Air volume per cycle [cm³]	1.7	3.4	13.4	30
Weight [kg]	0.09	0.1	0.13	0.18

*All data measured at 6 bar



LINEAR CYLINDERS

INSTALLATION SIZE SH-XD

▶ PRODUCT SPECIFICATIONS



▶ RECOMMENDED ACCESSORIES



Flow Control Valves - with Swivel joint

DRVM5X4



Inductive proximity switch - Cable 5 m

NJ3-E2



Inductive Proximity Switch Cable 0,3 m - Connector M8

NJ3-E2SK



Mounting block

KB3M



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector customizable Straight - Connector M8

S8-G-3



Plug-in connector customizable Straight - Connector M12

S12-G-3

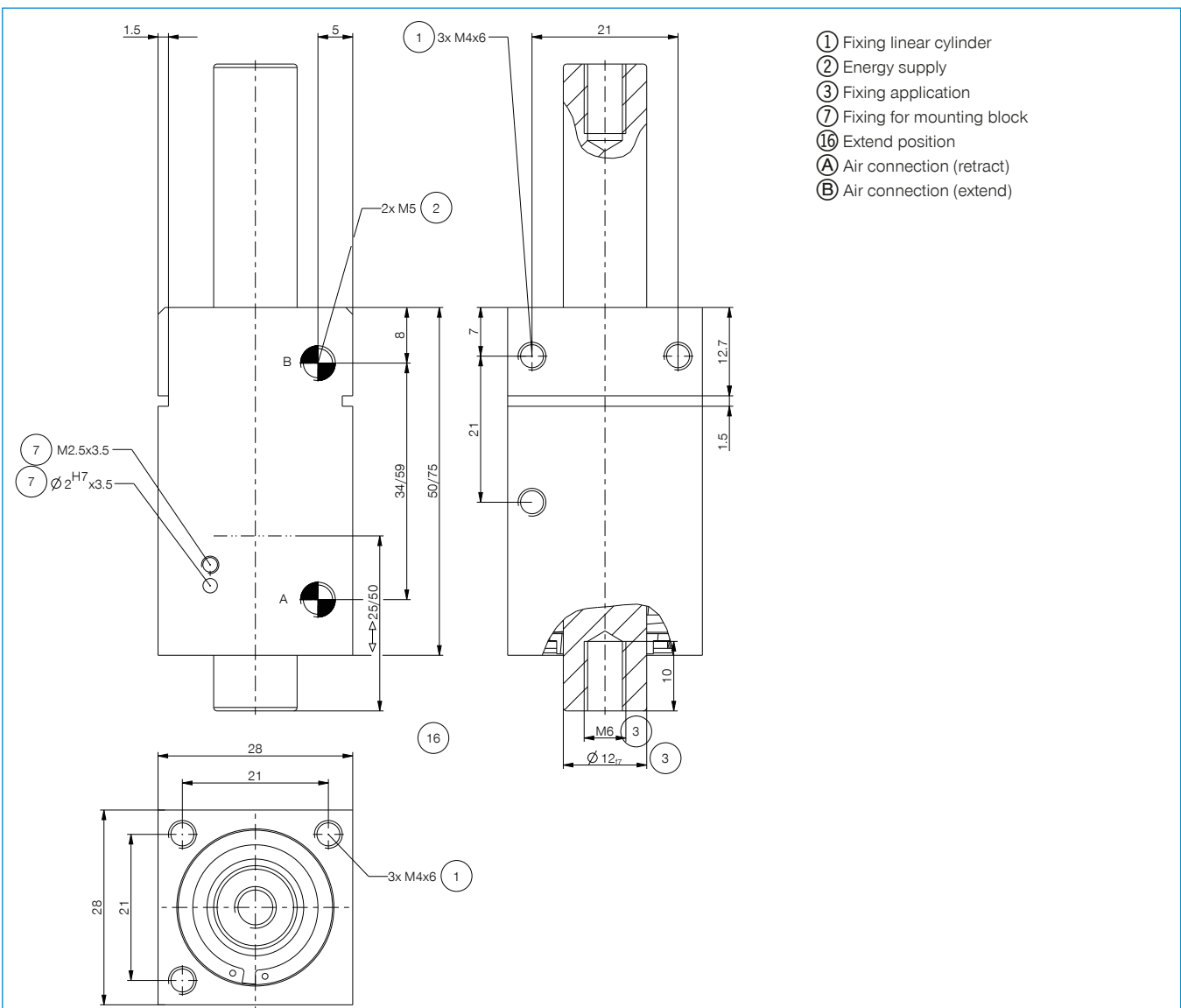


Pressure Safety Valve

DSV1-8

Order no.	Technical Data*	
	SH-XD25	SH-XD50
Stroke [mm]	25	50
Retraction force [N]	100	100
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm³]	12	25
Weight [kg]	0.19	0.27

*All data measured at 6 bar



LINEAR CYLINDERS

SERIES LI

▶ PRODUCT ADVANTAGES



▶ Large locating flange

The large mounting surface simplifies your design and allows secure attachment of follow-on tools

▶ Dampened end position

By using PowerStop shock absorbers, you can gently move up to the end positions, increasing the process reliability and durability of your application

▶ Failure-free continuous operation

Our uncompromising "Made in Germany" quality guarantees up to 10 million maintenance-free cycles

▶ THE BEST PRODUCT FOR YOUR APPLICATION



▶ Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities:

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www.zimmer-group.com

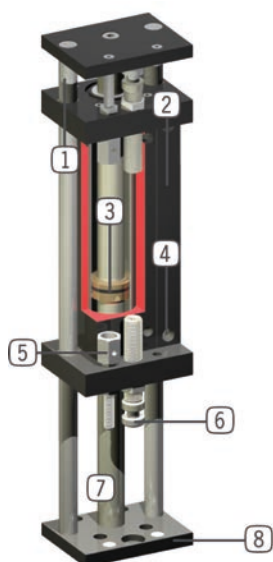
HOW TO ORDER CORRECTLY

- ▶ The product order numbers are arranged according to this diagram:

Order no.	LI40	<input type="checkbox"/>		
3 way guiding, continuous piston rod		D		
2 way guiding		S		



► BENEFITS IN DETAIL



- ① **Guide rod**
 - hardened, polished steel shaft
- ② **Mounting block**
 - mounting for inductive proximity switch
- ③ **Drive**
 - double-acting pneumatic cylinder
- ④ **Energy supply**
 - reducing exhaust air is recommended
- ⑤ **End stop confirmation screw**
 - direct flange position sensing
 - included in scope of delivery
- ⑥ **End position damping**
 - with elastomer absorber or patented hydraulic shock absorber
- ⑦ **Piston rod**
 - polished, hard chrome plated steel
 - continuous in design D
- ⑧ **Intake flange**
 - for connection to application-specific adapter plate (to be supplied by the customer)

► FURTHER INFORMATION IS AVAILABLE ONLINE



► Technical Information

All information just a click away at: www.zimmer-group.com
Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product.
Quick, clear and always up-to-date.



LINEAR CYLINDERS

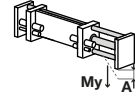
INSTALLATION SIZE LI16

▶ PRODUCT SPECIFICATIONS



▶ Forces and moments

Max allowable static forces and moments.



▶ RECOMMENDED ACCESSORIES



Flow Control Valves - with Swivel joint

DRVM5X4



Inductive proximity switch - Connector M8

NJ8-E2S



Centering Disc

ZE12H7X4



Adapter plate

AP16



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500

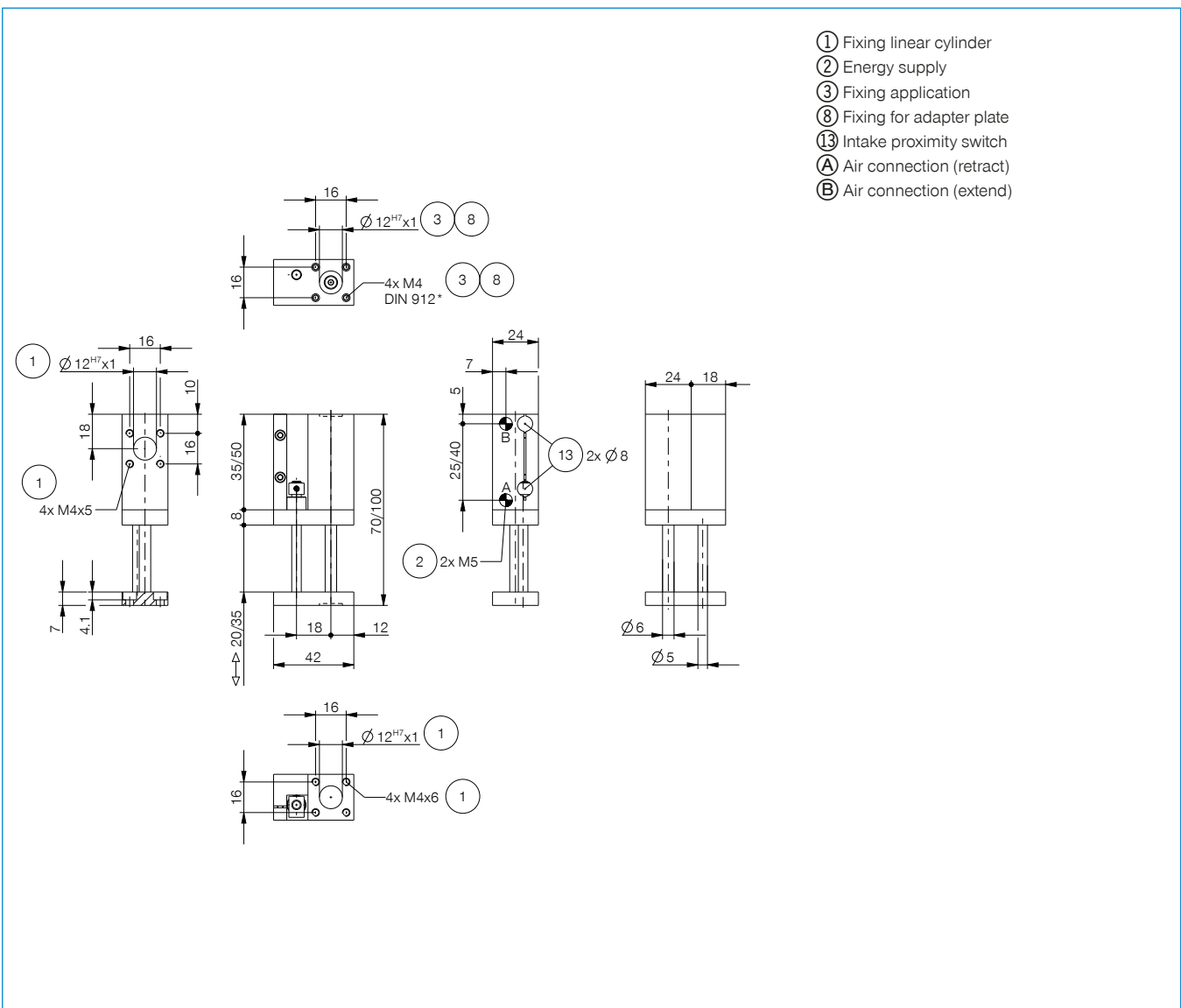


Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500

Order no.	► Technical Data*	
	LI16-20	LI16-35
Stroke [mm]	20	35
Pressure force max. [N]	100	100
Retraction force [N]	80	80
Travel time without external load [s]	0.04	0.07
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm ³]	5	13
Weight [kg]	0.15	0.18
Load My max. [N]	25	15
Max. deflection A [mm]	0.05	0.05

*All data measured at 6 bar



LINEAR CYLINDERS

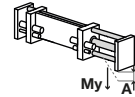
INSTALLATION SIZE LI16D

▶ PRODUCT SPECIFICATIONS



▶ Forces and moments

Max allowable static forces and moments.



▶ RECOMMENDED ACCESSORIES



Flow Control Valves - with Swivel joint

DRVM5X4



Inductive proximity switch - Connector M8

NJ8-E2S



Centering Disc

ZE12H7X4



Adapter plate

AP16



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500

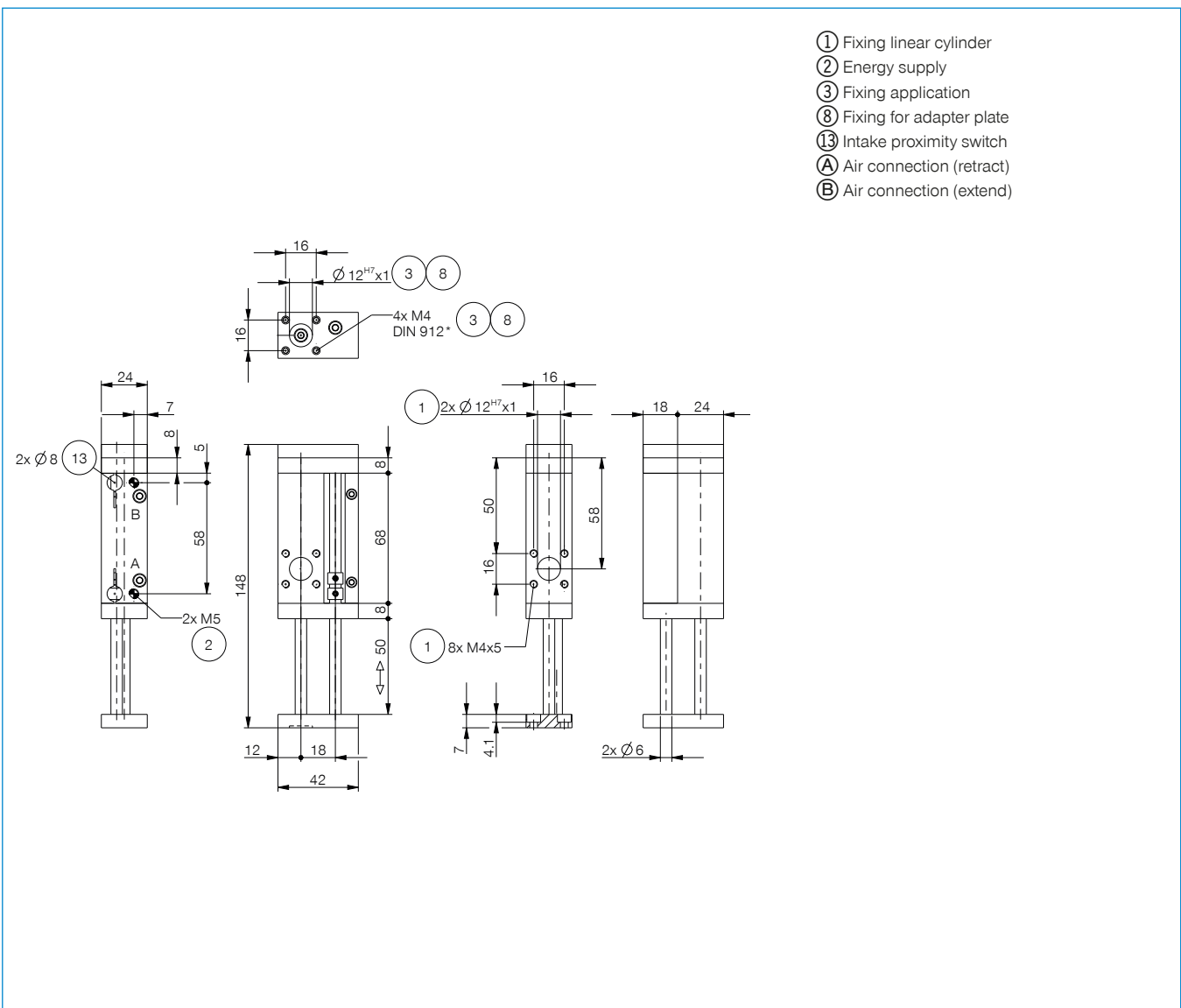


Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500

► Technical Data*	
Order no.	LI16-50D
Stroke [mm]	50
Pressure force max. [N]	80
Retraction force [N]	80
Travel time without external load [s]	0.1
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	15
Weight [kg]	0.3
Load My max. [N]	40
Max. deflection A [mm]	0.1

*All data measured at 6 bar



LINEAR CYLINDERS

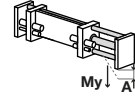
LI30-15 / LI30-30

▶ PRODUCT SPECIFICATIONS



▶ Forces and moments

Max allowable static forces and moments.



▶ RECOMMENDED ACCESSORIES



Flow Control Valves - with Swivel joint
DRV5X4



Inductive proximity switch - Connector M8
NJ12-E2S



Shock Absorbers
M10X1S



Shock Absorbers
AD-M10X1



Centering Disc
ZE20H7X4



Adapter plate
AP30



Plug-in connector Angled Cable 5m - Socket M8 (female)
KAW500



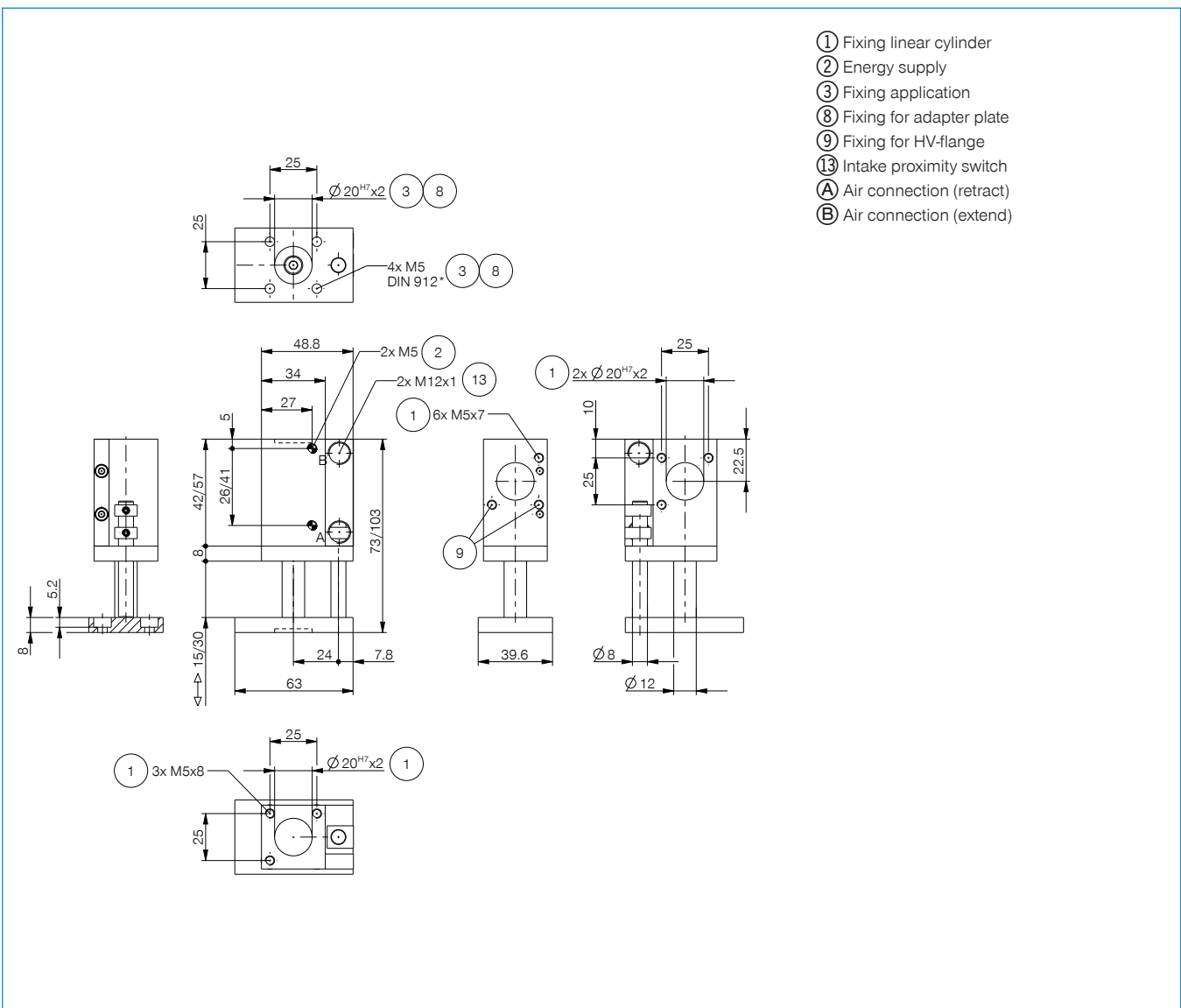
Plug-in connector Straight Cable 5m - Socket M8 (female)
KAG500



Absorber intake
HV30

Order no.	► Technical Data*	
	LI30-15	LI30-30
Stroke [mm]	15	30
Pressure force max. [N]	270	270
Retraction force [N]	200	200
Travel time without external load [s]	0.06	0.14
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm ³]	12	25
Weight [kg]	0.3	0.36
Load My max. [N]	70	50
Max. deflection A [mm]	0.05	0.05

*All data measured at 6 bar



LINEAR CYLINDERS

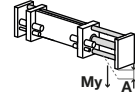
LI30-60 / LI30-90

▶ PRODUCT SPECIFICATIONS



▶ Forces and moments

Max allowable static forces and moments.



▶ RECOMMENDED ACCESSORIES



Flow Control Valves - with Swivel joint
DRVM5X4



Inductive proximity switch - Connector M8
NJ12-E2S



Shock Absorbers
M10X1S



Shock Absorbers
AD-M10X1



Centering Disc
ZE20H7X4



Adapter plate
AP30



Plug-in connector Angled Cable 5m - Socket M8 (female)
KAW500



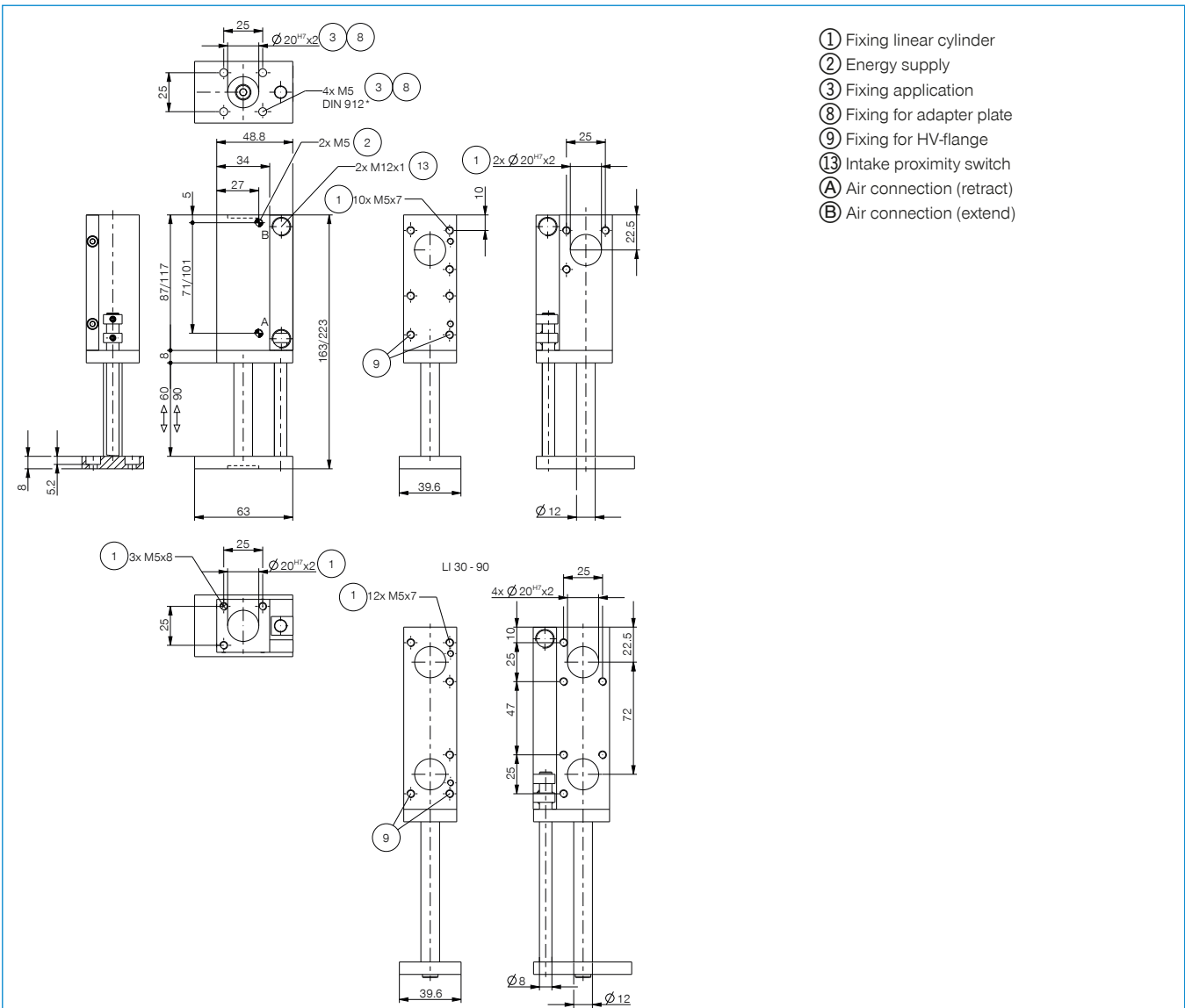
Plug-in connector Straight Cable 5m - Socket M8 (female)
KAG500



Absorber intake
HV30

Order no.	► Technical Data*	
	LI30-60	LI30-90
Stroke [mm]	60	90
Pressure force max. [N]	270	270
Retraction force [N]	200	200
Travel time without external load [s]	0.25	0.26
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm ³]	50	92
Weight [kg]	0.46	0.56
Load My max. [N]	30	20
Max. deflection A [mm]	0.05	0.05

* All data measured at 6 bar



LINEAR CYLINDERS

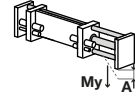
INSTALLATION SIZE LI30D

▶ PRODUCT SPECIFICATIONS



▶ Forces and moments

Max allowable static forces and moments.



▶ RECOMMENDED ACCESSORIES



Shock Absorbers

AD-M10X1



Adapter plate

AP30



Flow Control Valves - with Swivel joint

DRVM5X4



Absorber intake

HV30



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Shock Absorbers

M10X1S



Inductive proximity switch - Connector M8

NJ12-E2S

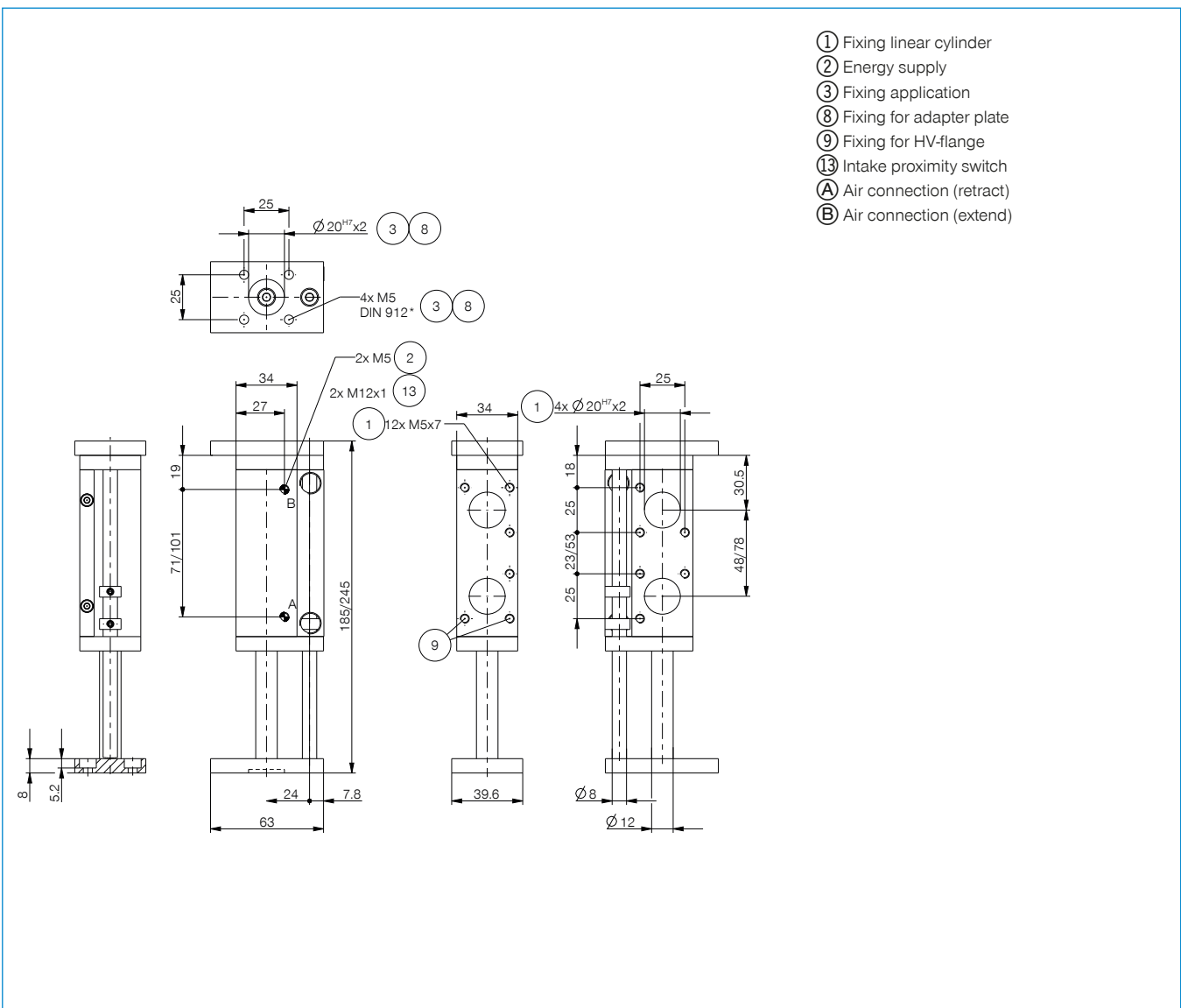


Centering Disc

ZE20H7X4

Order no.	► Technical Data*	
	LI30-60D	LI30-90D
Stroke [mm]	60	90
Pressure force max. [N]	200	200
Retraction force [N]	200	200
Travel time without external load [s]	0.21	0.25
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm³]	50	66
Weight [kg]	0.7	0.85
Load My max. [N]	80	60
Max. deflection A [mm]	0.1	0.1

* All data measured at 6 bar



LINEAR CYLINDERS

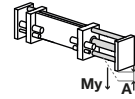
INSTALLATION SIZE LI40

▶ PRODUCT SPECIFICATIONS



▶ Forces and moments

Max allowable static forces and moments.



▶ RECOMMENDED ACCESSORIES



Flow Control Valves - with Swivel joint
DRVM5X4



Inductive proximity switch - Connector M8
NJ12-E2S



Shock Absorbers
M10X1S



Shock Absorbers
AD-M10X1



Centering Disc
ZE20H7X4



Adapter plate
AP40



Plug-in connector Angled Cable 5m - Socket M8 (female)
KAW500



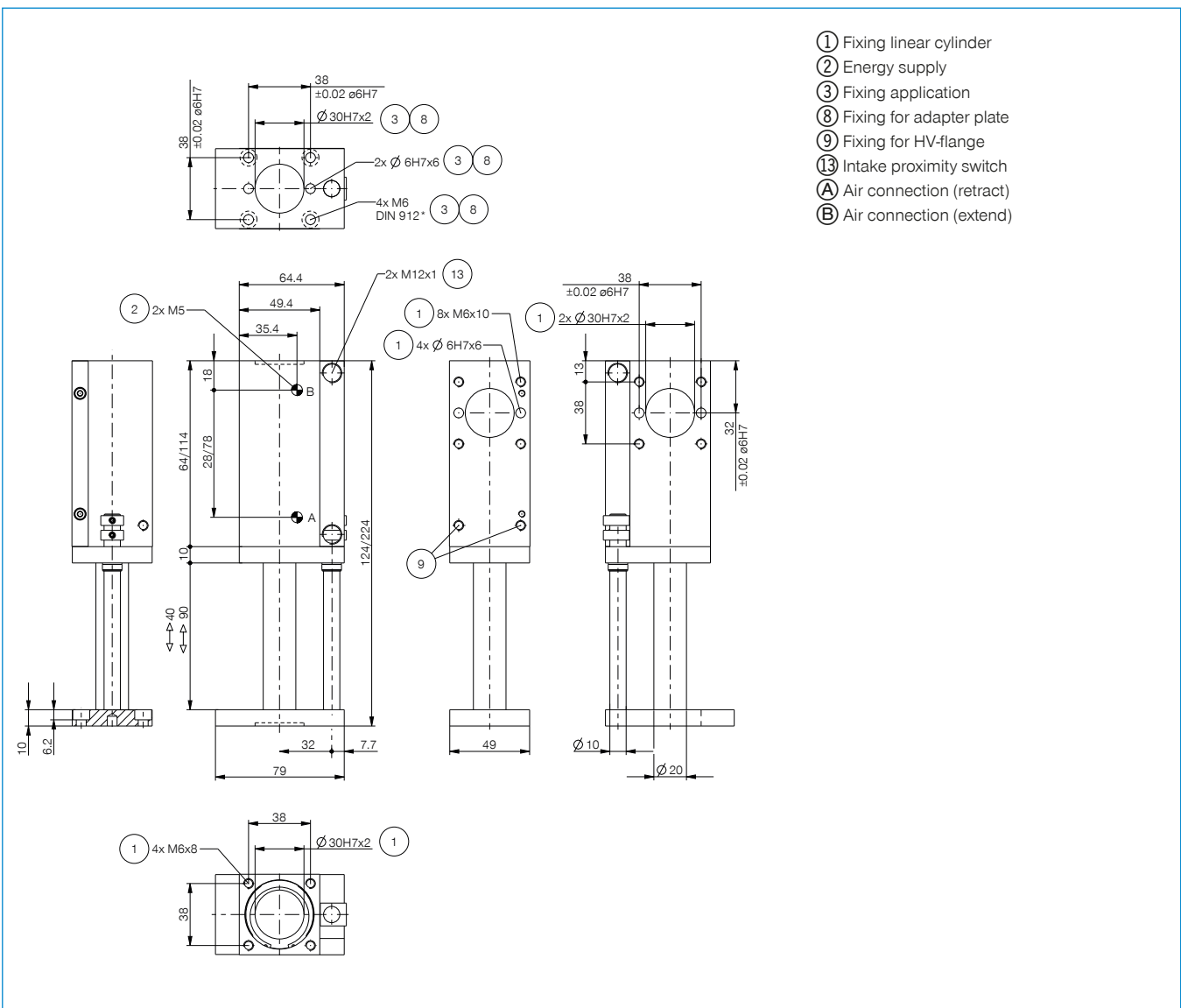
Plug-in connector Straight Cable 5m - Socket M8 (female)
KAG500



Absorber intake
HV40

Order no.	► Technical Data*	
	LI40-40	LI40-90
Stroke [mm]	40	90
Pressure force max. [N]	450	450
Retraction force [N]	270	270
Travel time without external load [s]	0.08	0.2
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm ³]	50	117
Weight [kg]	0.74	0.88
Load My max. [N]	80	30
Max. deflection A [mm]	0.05	0.05

*All data measured at 6 bar



LINEAR CYLINDERS

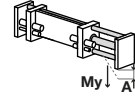
LI40-90S / LI40-130S / LI40-160S

▶ PRODUCT SPECIFICATIONS



▶ Forces and moments

Max allowable static forces and moments.



▶ RECOMMENDED ACCESSORIES



Flow Control Valves - with Swivel joint
DRV1-8X6



Inductive proximity switch - Connector M8
NJ12-E2S



Shock Absorbers
M14X1.5S



Shock Absorbers
AD-M14X1.5



Stop Stroke Adjustment Screws
AI-M8X1-53



Centering Disc
ZE30H7X4



Adapter plate
AP40-S



Plug-in connector Angled Cable 5m - Socket M8 (female)
KAW500

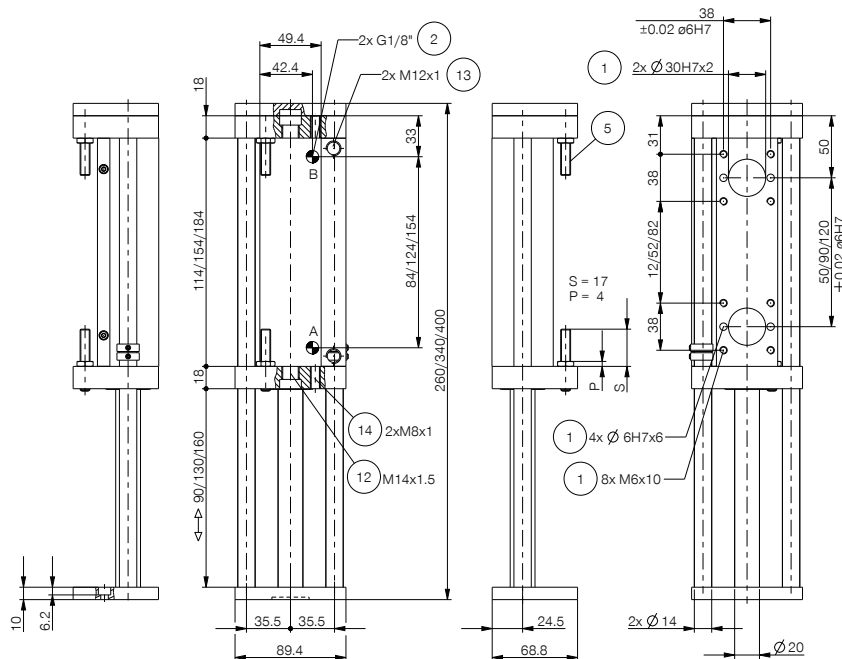


Plug-in connector Straight Cable 5m - Socket M8 (female)
KAG500

Order no.	Technical Data*		
	LI40-90S	LI40-130S	LI40-160S
Stroke [mm]	90	130	160
Pressure force max. [N]	270	270	270
Retraction force [N]	270	270	270
Travel time without external load [s]	0.09	0.13	0.16
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	80	80	80
Air volume per cycle [cm ³]	100	133	166
Weight [kg]	2.9	3.5	3.9
Load My max. [N]	300	230	150
Max. deflection A [mm]	0.09	0.13	0.16
Radial load Mr max. [Ncm]	600	400	320
Max. rotation D at 100 mm [mm]	0.1	0.1	0.1

*All data measured at 6 bar

- ① Fixing linear cylinder
- ② Energy supply
- ③ Fixing application
- ⑤ Stop screw for stroke limitation
- ⑧ Fixing for adapter plate
- ⑫ Intake for shock absorbers
- ⑬ Intake proximity switch
- ⑭ Intake for fix stop
- Ⓐ Air connection (retract)
- Ⓑ Air connection (extend)



LINEAR CYLINDERS

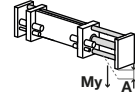
LI40-200S / LI40-250S / LI40-300S

▶ PRODUCT SPECIFICATIONS



▶ Forces and moments

Max allowable static forces and moments.



▶ RECOMMENDED ACCESSORIES



Flow Control Valves - with Swivel joint
DRV1-8X6



Inductive proximity switch - Connector M8
NJ12-E2S



Shock Absorbers
M14X1.5S



Shock Absorbers
AD-M14X1.5



Stop Stroke Adjustment Screws
AI-M8X1-53



Centering Disc
ZE30H7X4



Adapter plate
AP40-S



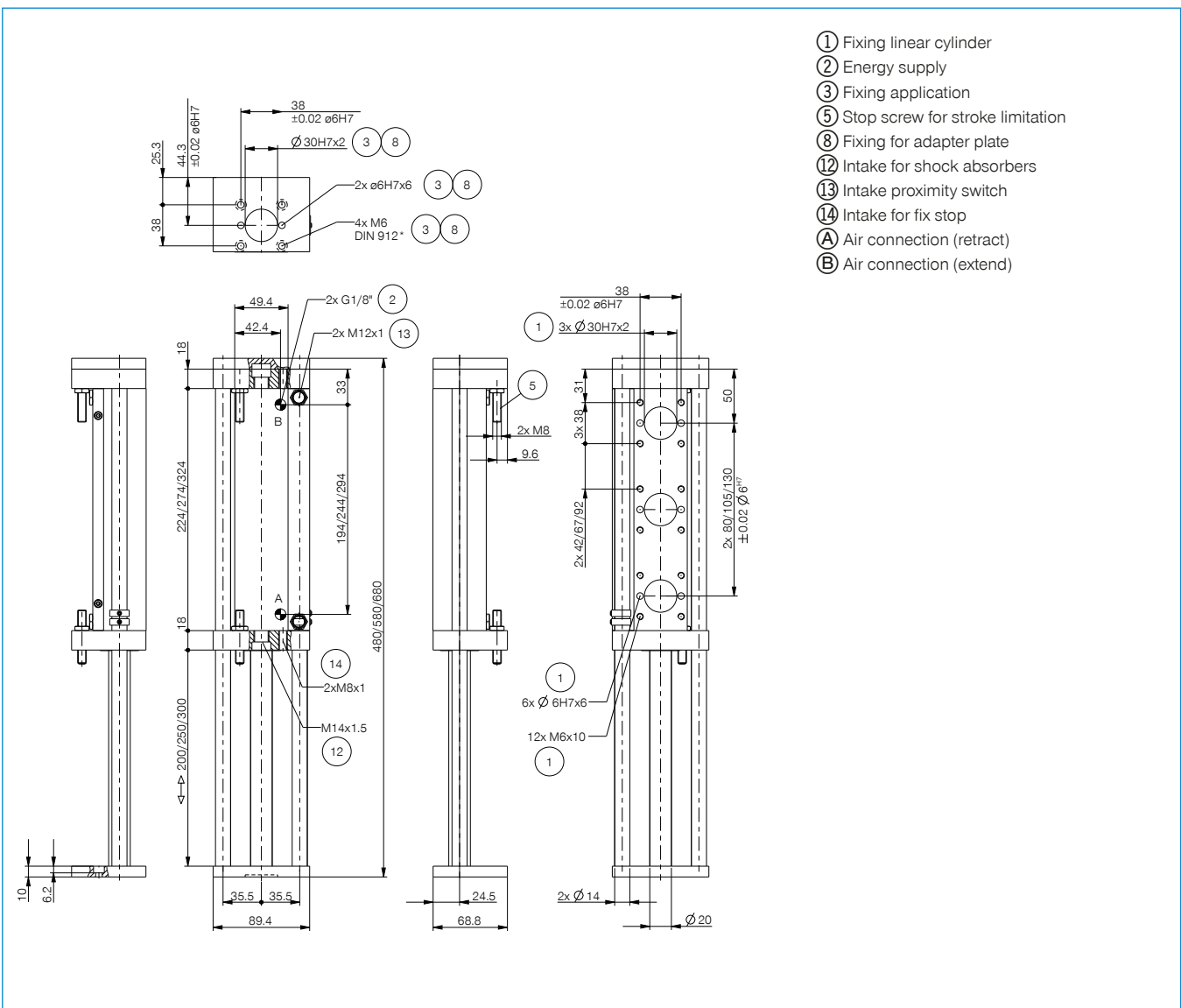
Plug-in connector Angled Cable 5m - Socket M8 (female)
KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)
KAG500

Order no.	► Technical Data*		
	LI40-200S	LI40-250S	LI40-300S
Stroke [mm]	200	250	300
Pressure force max. [N]	270	270	270
Retraction force [N]	270	270	270
Travel time without external load [s]	0.22	0.28	0.4
Radial load Mr max. [Ncm]	230	130	100
Max. rotation D at 100 mm [mm]	0.1	0.1	0.1
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	80	80	80
Air volume per cycle [cm ³]	216	266	316
Weight [kg]	4.5	5.2	5.9
Load My max. [N]	120	90	65
Max. deflection A [mm]	0.2	0.25	0.3

*All data measured at 6 bar



LINEAR CYLINDERS

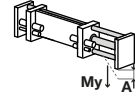
LI50-50S / LI50-90S

▶ PRODUCT SPECIFICATIONS



▶ Forces and moments

Max allowable static forces and moments.



▶ RECOMMENDED ACCESSORIES



Flow Control Valves - with Swivel joint
DRV1-8X6



Inductive proximity switch - Connector M8
NJ12-E2S



Shock Absorbers
M20X1.5S



Stop Stroke Adjustment Screws
AI-M8X1-53



Centering Disc
ZE30H7X4



Adapter plate
AP50-S



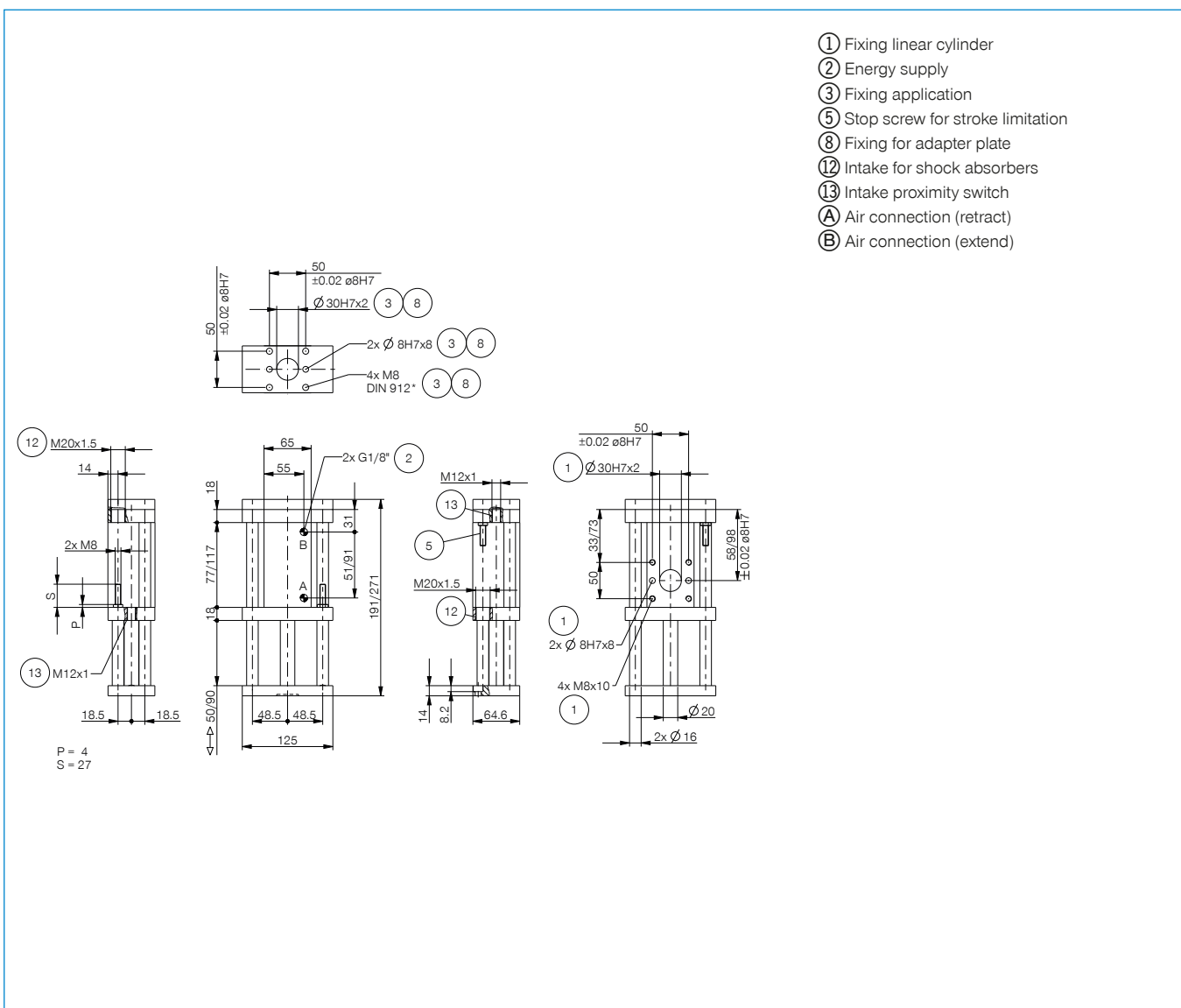
Plug-in connector Angled Cable 5m - Socket M8 (female)
KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)
KAG500

Order no.	► Technical Data*	
	LI50-50S	LI50-90S
Stroke [mm]	50	90
Pressure force max. [N]	950	950
Retraction force [N]	950	950
Travel time without external load [s]	0.13	0.24
Radial load Mr max. [Ncm]	1500	1100
Max. rotation D at 100 mm [mm]	0.08	0.08
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm ³]	166	300
Weight [kg]	2.9	3.6
Load My max. [N]	300	200
Max. deflection A [mm]	0.03	0.05

*All data measured at 6 bar



LINEAR CYLINDERS

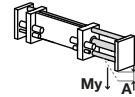
LI50-130S / LI50-160S / LI50-200S

▶ PRODUCT SPECIFICATIONS



▶ Forces and moments

Max allowable static forces and moments.



▶ RECOMMENDED ACCESSORIES



Flow Control Valves - with Swivel joint
DRV1-8X6



Inductive proximity switch - Connector M8
NJ12-E2S



Shock Absorbers
M20X1.5S



Stop Stroke Adjustment Screws
AI-M8X1-53



Centering Disc
ZE30H7X4



Adapter plate
AP50-S



Plug-in connector Angled Cable 5m - Socket M8 (female)
KAW500



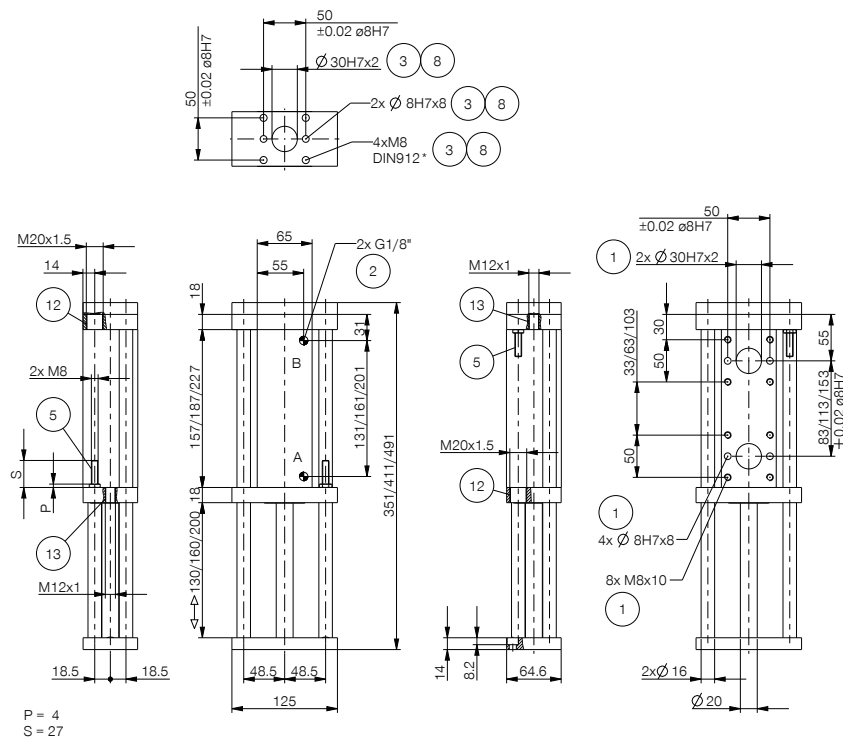
Plug-in connector Straight Cable 5m - Socket M8 (female)
KAG500

► **Technical Data***

Order no.	LI50-130S	LI50-160S	LI50-200S
Stroke [mm]	130	160	200
Pressure force max. [N]	950	950	950
Retraction force [N]	950	950	950
Travel time without external load [s]	0.34	0.42	0.48
Radial load Mr max. [Ncm]	900	750	400
Max. rotation D at 100 mm [mm]	0.1	0.1	0.1
Operating temperature min. [°C]	5	5	5
Operating temperature max. [°C]	80	80	80
Air volume per cycle [cm ³]	433	533	666
Weight [kg]	4.4	4.8	5.5
Load My max. [N]	130	100	90
Max. deflection A [mm]	0.05	0.08	0.1

*All data measured at 6 bar

- ① Fixing linear cylinder
- ② Energy supply
- ③ Fixing application
- ⑤ Stop screw for stroke limitation
- ⑧ Fixing for adapter plate
- ⑫ Intake for shock absorbers
- ⑬ Intake proximity switch
- Ⓐ Air connection (retract)
- Ⓑ Air connection (extend)



LINEAR CYLINDERS

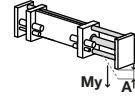
LI50-250S / LI50-300S

▶ PRODUCT SPECIFICATIONS



▶ Forces and moments

Max allowable static forces and moments.



▶ RECOMMENDED ACCESSORIES



Flow Control Valves - with Swivel joint
DRV1-8X6



Inductive proximity switch - Connector M8
NJ12-E2S



Shock Absorbers
M20X1.5S



Stop Stroke Adjustment Screws
AI-M8X1-53



Centering Disc
ZE30H7X4



Adapter plate
AP50-S



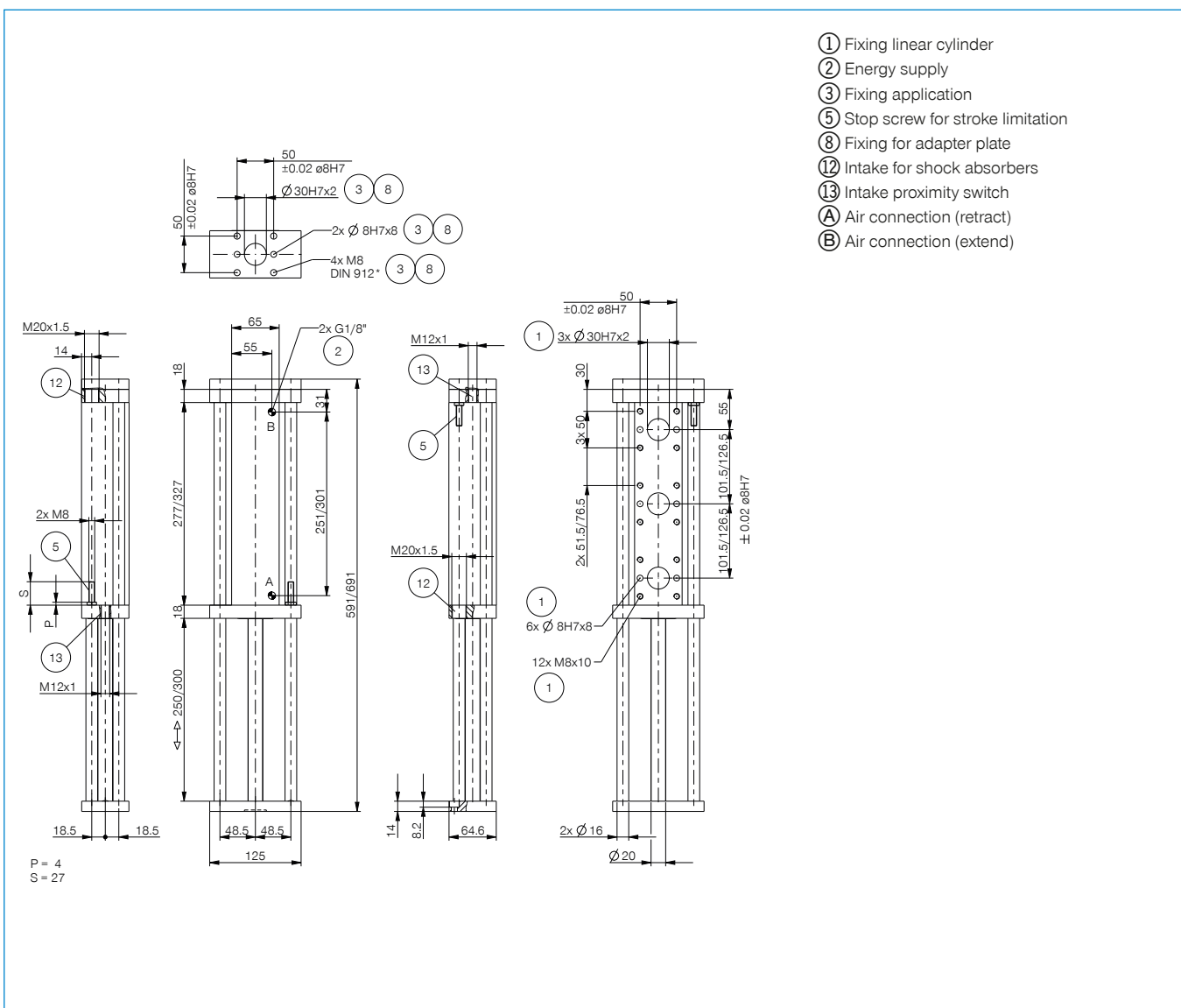
Plug-in connector Angled Cable 5m - Socket M8 (female)
KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)
KAG500

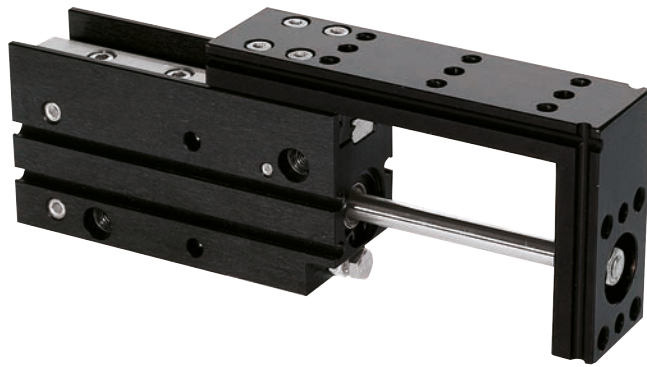
Order no.	Technical Data*	
	LI50-250S	LI50-300S
Stroke [mm]	250	300
Pressure force max. [N]	950	950
Retraction force [N]	950	950
Travel time without external load [s]	0.63	0.84
Radial load Mr max. [Ncm]	250	200
Max. rotation D at 100 mm [mm]	0.1	0.1
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Air volume per cycle [cm ³]	833	1000
Weight [kg]	6.4	7.2
Load My max. [N]	75	55
Max. deflection A [mm]	0.15	0.2

*All data measured at 6 bar



LINEAR RAIL SLIDES

OVERVIEW OF SERIES



▶ PNEUMATIC



Series LS

728



Series LSF

738



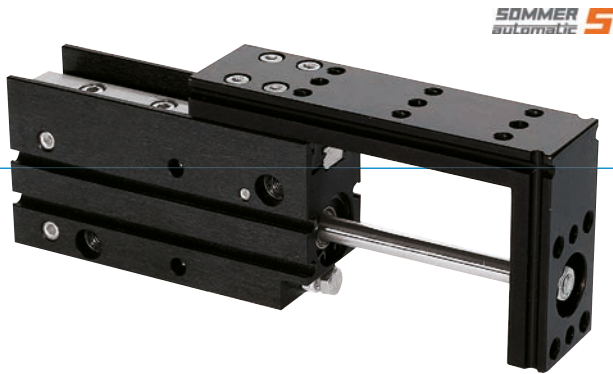
Series LSX

744

LINEAR RAIL SLIDES

SERIES LS

▶ PRODUCT ADVANTAGES



▶ **Precise profile guide**

The linear guide with ball bearing circulation and scrapers provides high precision and rigidity

▶ **Standardised adapter plate**

Reduce your manufacturing effort and ensure standardisation for your follow-on tools

▶ **Modular layout**

Makes it possible to combine several units directly to each other and to minimise your design effort

▶ THE BEST PRODUCT FOR YOUR APPLICATION



▶ **Our products love the challenge!**

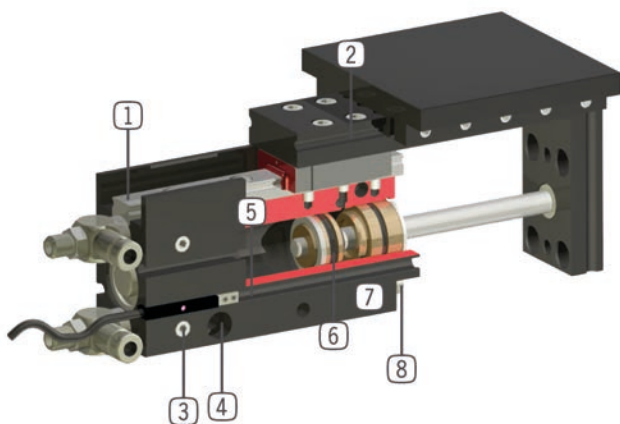
Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities:

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► BENEFITS IN DETAIL



- ① **Linear guide with recirculating ball and wiper**
 - dual linear guidance for high forces and moments capacity
- ② **Mounting groove**
 - quick and cost-effective positioning of adapter plates: Accessory, Art. No. AP...G
- ③ **Energy supply**
 - possible from several sides
- ④ **Mounting and positioning**
 - mounting possible from several sides for versatile positioning
- ⑤ **Mounting groove for magnetic field sensor integrated, space saving position sensing**
- ⑥ **Drive**
 - double-acting pneumatic cylinder
- ⑦ **Robust, lightweight housing**
 - hard coated aluminium alloy
- ⑧ **Stroke limiting screw**

► FURTHER INFORMATION IS AVAILABLE ONLINE



► Technical Information

All information just a click away at: www.zimmer-group.com

Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product.

Quick, clear and always up-to-date.



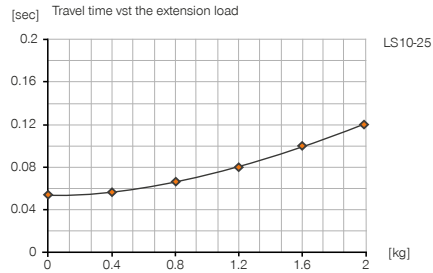
LINEAR RAIL SLIDES

LS10-25

▶ PRODUCT SPECIFICATIONS

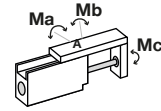


▶ Time diagram



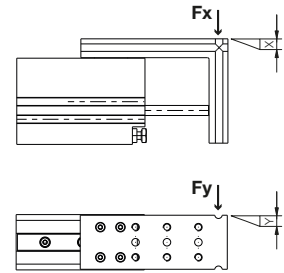
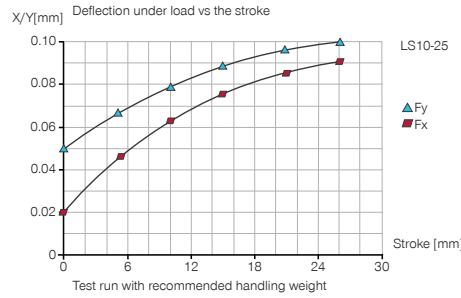
▶ Forces and moments

Max allowable static forces and moments on face A.



Ma [Nm]	3.2
Mb [Nm]	3.2
Mc [Nm]	5.1

▶ Load diagram



▶ RECOMMENDED ACCESSORIES



Flow Control Valves - with Swivel joint

DRVM3X4



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Adapter plate

APLS10G



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector customizable Straight - Connector M8

S8-G-3



Plug-in connector customizable Straight - Connector M12

S12-G-3



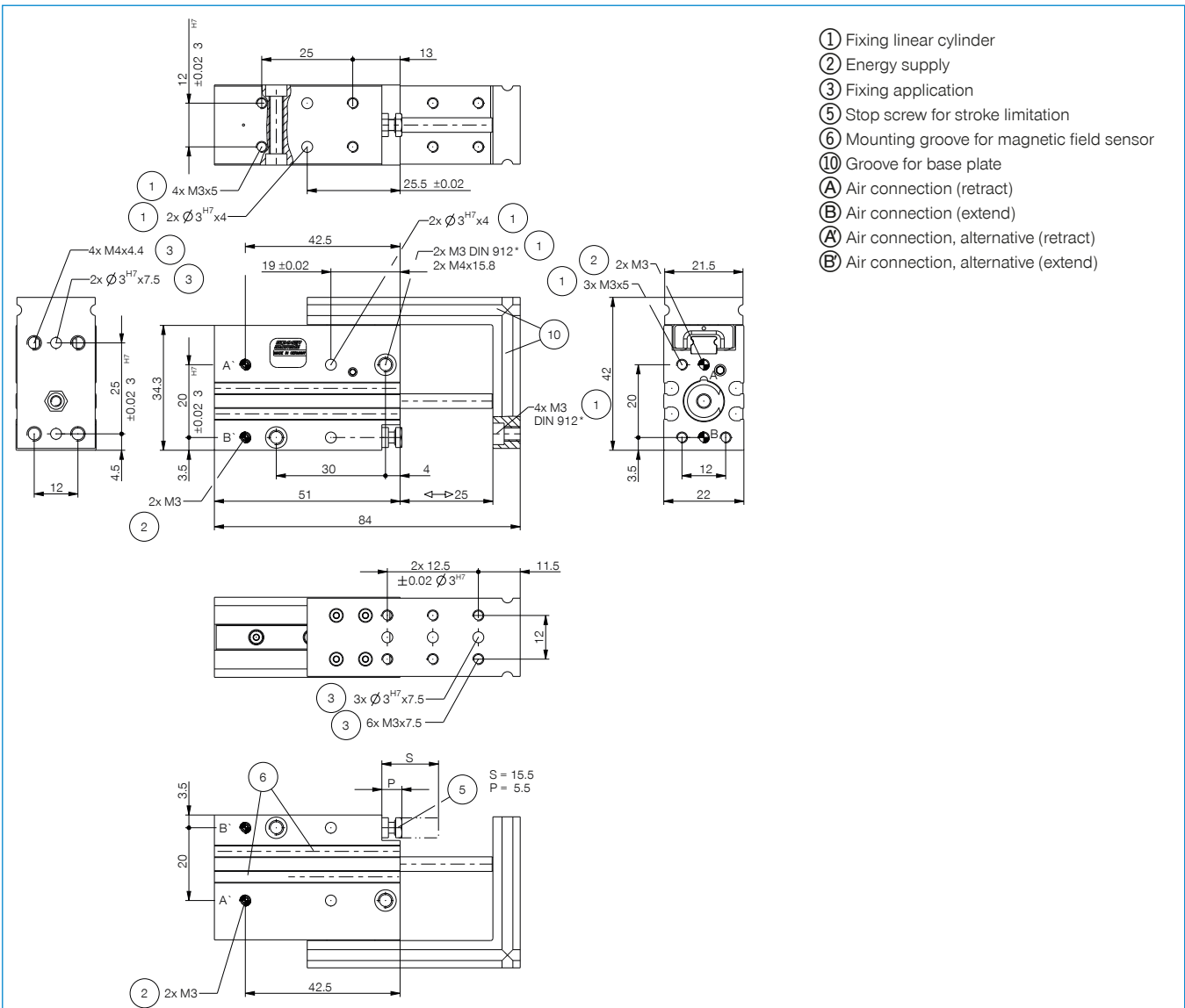
Pressure Safety Valve

DSV1-8

Order no.	LS10-25
Stroke [mm]	25
Pressure force max. [N]	40
Retraction force [N]	30
Piston diameter [mm]	10
Guide rail size [mm]	7
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	3.6
Weight [kg]	0.15

*All data measured at 6 bar

► Technical Data*



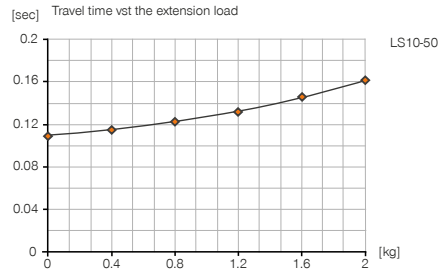
LINEAR RAIL SLIDES

LS10-50

▶ PRODUCT SPECIFICATIONS

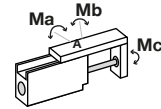


▶ Time diagram



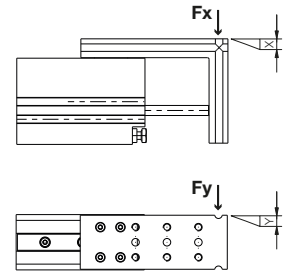
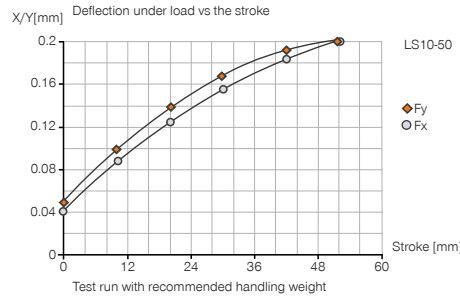
▶ Forces and moments

Max allowable static forces and moments on face A.



Ma [Nm]	3.2
Mb [Nm]	3.2
Mc [Nm]	5.1

▶ Load diagram



▶ RECOMMENDED ACCESSORIES



Flow Control Valves - with Swivel joint

DRVM3X4



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Adapter plate

APLS10G



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector customizable Straight - Connector M8

S8-G-3



Plug-in connector customizable Straight - Connector M12

S12-G-3



Pressure Safety Valve

DSV1-8

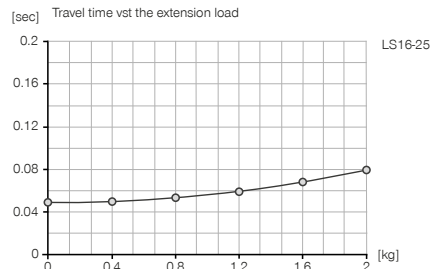
LINEAR RAIL SLIDES

LS16-25

▶ PRODUCT SPECIFICATIONS

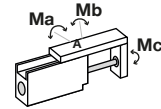


▶ Time diagram



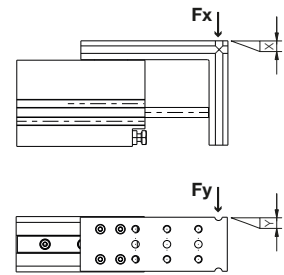
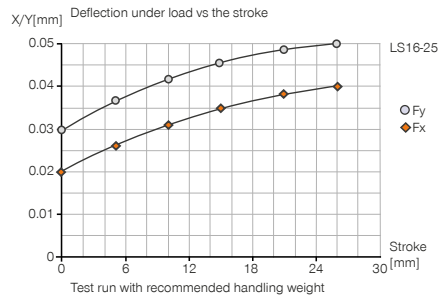
▶ Forces and moments

Max allowable static forces and moments on face A.



Ma [Nm]	6.4
Mb [Nm]	6.4
Mc [Nm]	9.6

▶ Load diagram



▶ RECOMMENDED ACCESSORIES



Flow Control Valves - with Swivel joint

DRVM5X4



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8

MFS204SKHC



Adapter plate

APLS16G



Plug-in connector Angled
Cable 5m - Socket M8
(female)

KAW500



Plug-in connector
Straight Cable 5m - Socket
M8 (female)

KAG500



Plug-in connector customiz-
able Straight - Connector M12

S12-G-3

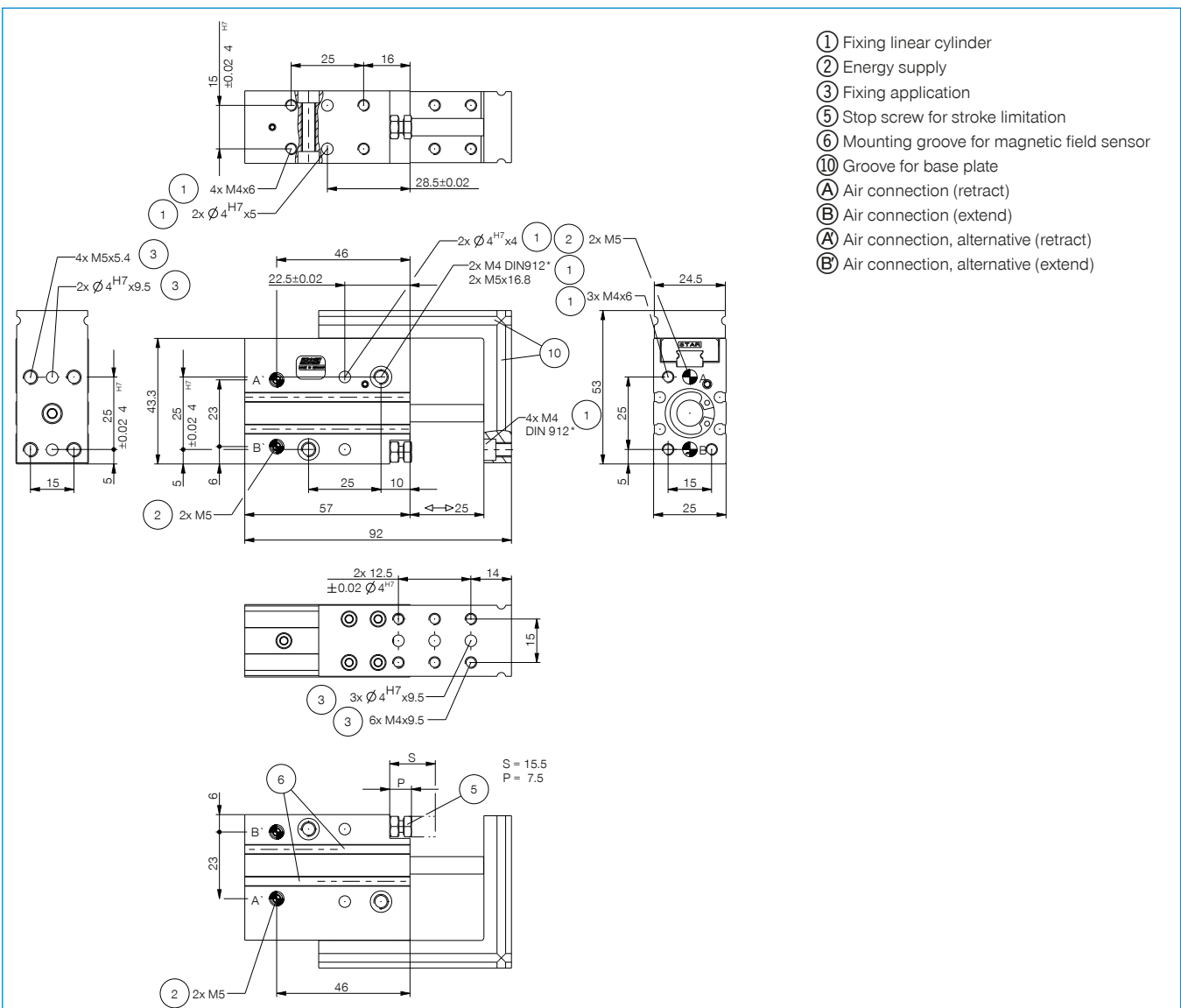


Pressure Safety Valve

DSV1-8

Order no.	LS16-25
Stroke [mm]	25
Pressure force max. [N]	100
Retraction force [N]	85
Piston diameter [mm]	16
Guide rail size [mm]	9
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	9.6
Weight [kg]	0.25

*All data measured at 6 bar



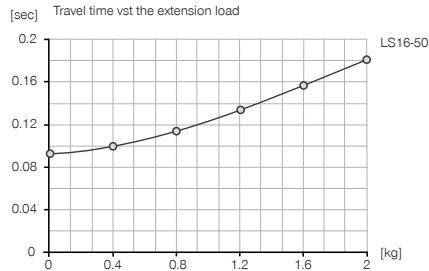
LINEAR RAIL SLIDES

LS16-50

▶ PRODUCT SPECIFICATIONS

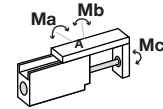


▶ Time diagram



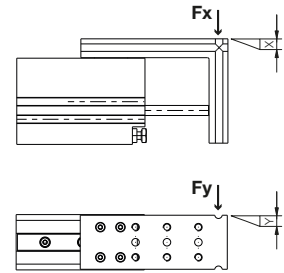
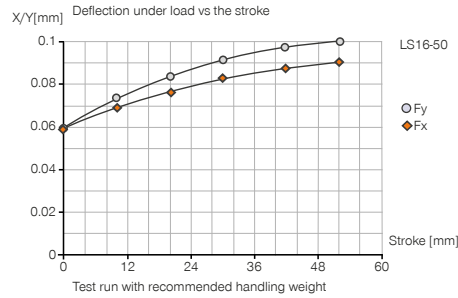
▶ Forces and moments

Max allowable static forces and moments on face A.



Ma [Nm]	6.4
Mb [Nm]	6.4
Mc [Nm]	9.6

▶ Load diagram



▶ RECOMMENDED ACCESSORIES



Flow Control Valves - with Swivel joint

DRVM5X4



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Adapter plate

APLS16G



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector customizable Straight - Connector M12

S12-G-3



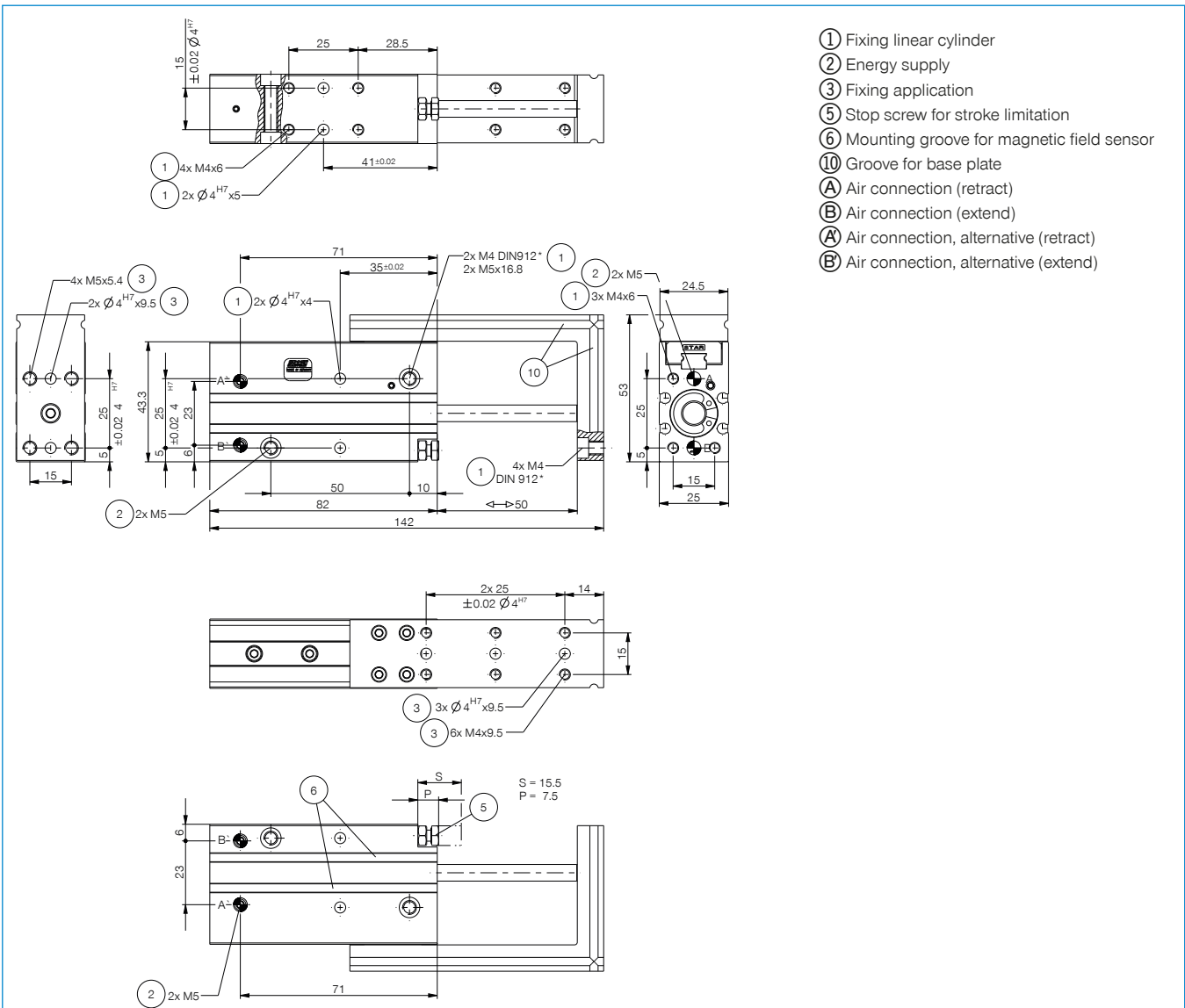
Pressure Safety Valve

DSV1-8

Order no.	LS16-50
Stroke [mm]	50
Pressure force max. [N]	100
Retraction force [N]	85
Piston diameter [mm]	16
Guide rail size [mm]	9
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	19.2
Weight [kg]	0.3

*All data measured at 6 bar

► Technical Data*

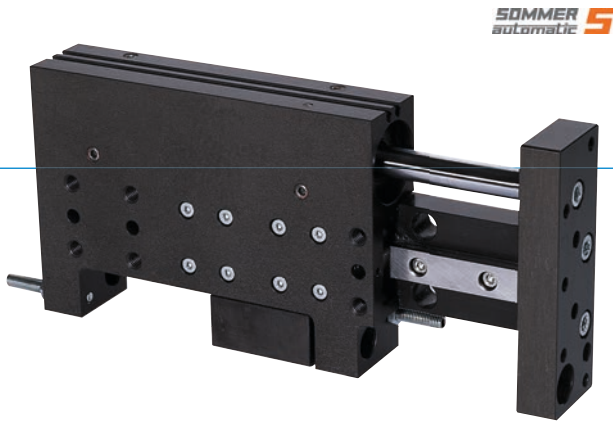


- ① Fixing linear cylinder
- ② Energy supply
- ③ Fixing application
- ⑤ Stop screw for stroke limitation
- ⑥ Mounting groove for magnetic field sensor
- ⑩ Groove for base plate
- Ⓐ Air connection (retract)
- Ⓑ Air connection (extend)
- Ⓐ Air connection, alternative (retract)
- Ⓑ Air connection, alternative (extend)

LINEAR RAIL SLIDES

SERIES LSF

▶ PRODUCT ADVANTAGES



▶ **Precise profile guide**

The linear guide with ball bearing circulation and scrapers provides high precision and rigidity

▶ **Dampened end position**

By using PowerStop shock absorbers, you can gently move up to the end positions, increasing the process reliability and durability of your application

▶ **Flat structure**

Reduces the interference contours for your application

▶ THE BEST PRODUCT FOR YOUR APPLICATION



▶ **Our products love the challenge!**

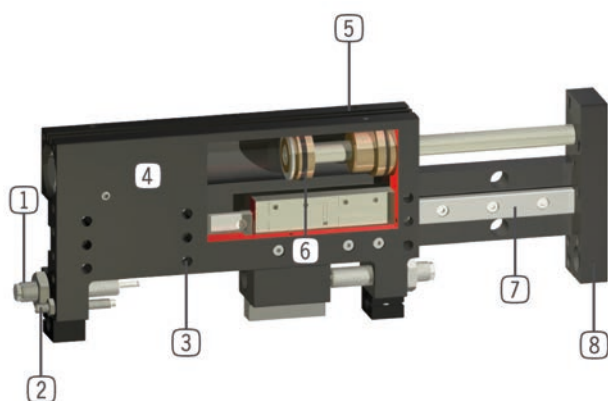
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► BENEFITS IN DETAIL



- ① **Patented, hydraulic shock absorber**
 - adjustable end position damping
 - included in scope of delivery
- ② **Stroke limiting screw**
- ③ **Mounting and positioning**
 - possible from several sides
- ④ **Robust, lightweight and extremely flat structure housing**
 - hard coated aluminium alloy
- ⑤ **Mounting groove for magnetic field sensor**
 - integrated, space saving position sensing
- ⑥ **Drive**
 - double-acting pneumatic cylinder
- ⑦ **Linear guide with recirculating ball and wiper**
 - dual linear guidance for high forces and moments capacity
- ⑧ **Intake flange**
 - simple application connection

► FURTHER INFORMATION IS AVAILABLE ONLINE



► Technical Information

All information just a click away at: www.zimmer-group.com
Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product.
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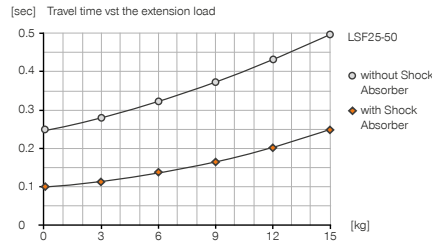
LINEAR RAIL SLIDES

LSF25-50

PRODUCT SPECIFICATIONS

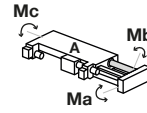


Time diagram



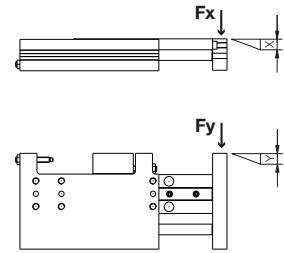
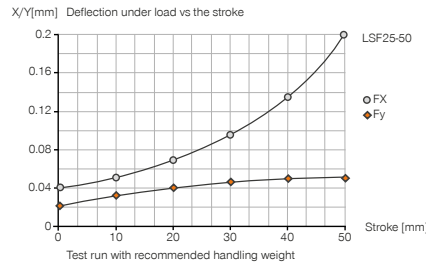
Forces and moments

Max allowable static forces and moments on face A.



Ma [Nm]	100
Mb [Nm]	100
Mc [Nm]	40

Load diagram



RECOMMENDED ACCESSORIES



Flow Control Valves - with Swivel joint

DRVM5X4



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8
MFS204SKHC



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S



Mounting block

KB8



Switch cam + screws

SN09



Plug-in connector Angled Cable 5m - Socket M8 (female)
KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)
KAG500



Shock Absorbers

M12X1S

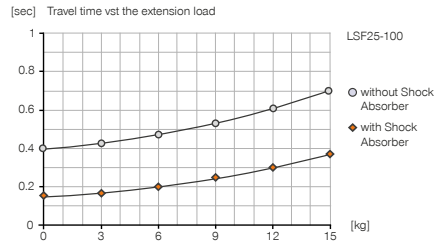
LINEAR RAIL SLIDES

LSF25-100

PRODUCT SPECIFICATIONS

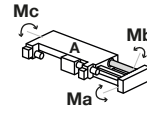


Time diagram



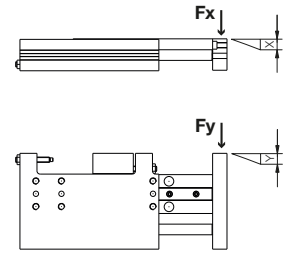
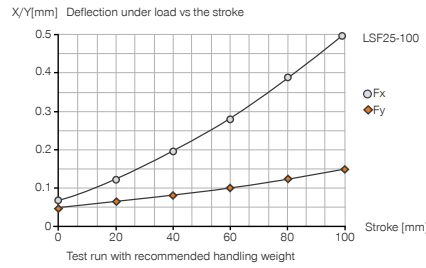
Forces and moments

Max allowable static forces and moments on face A.



Ma [Nm]	100
Mb [Nm]	100
Mc [Nm]	40

Load diagram



RECOMMENDED ACCESSORIES



Flow Control Valves - with Swivel joint

DRVM5X4



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S



Mounting block

KB8



Switch cam + screws

SN09



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



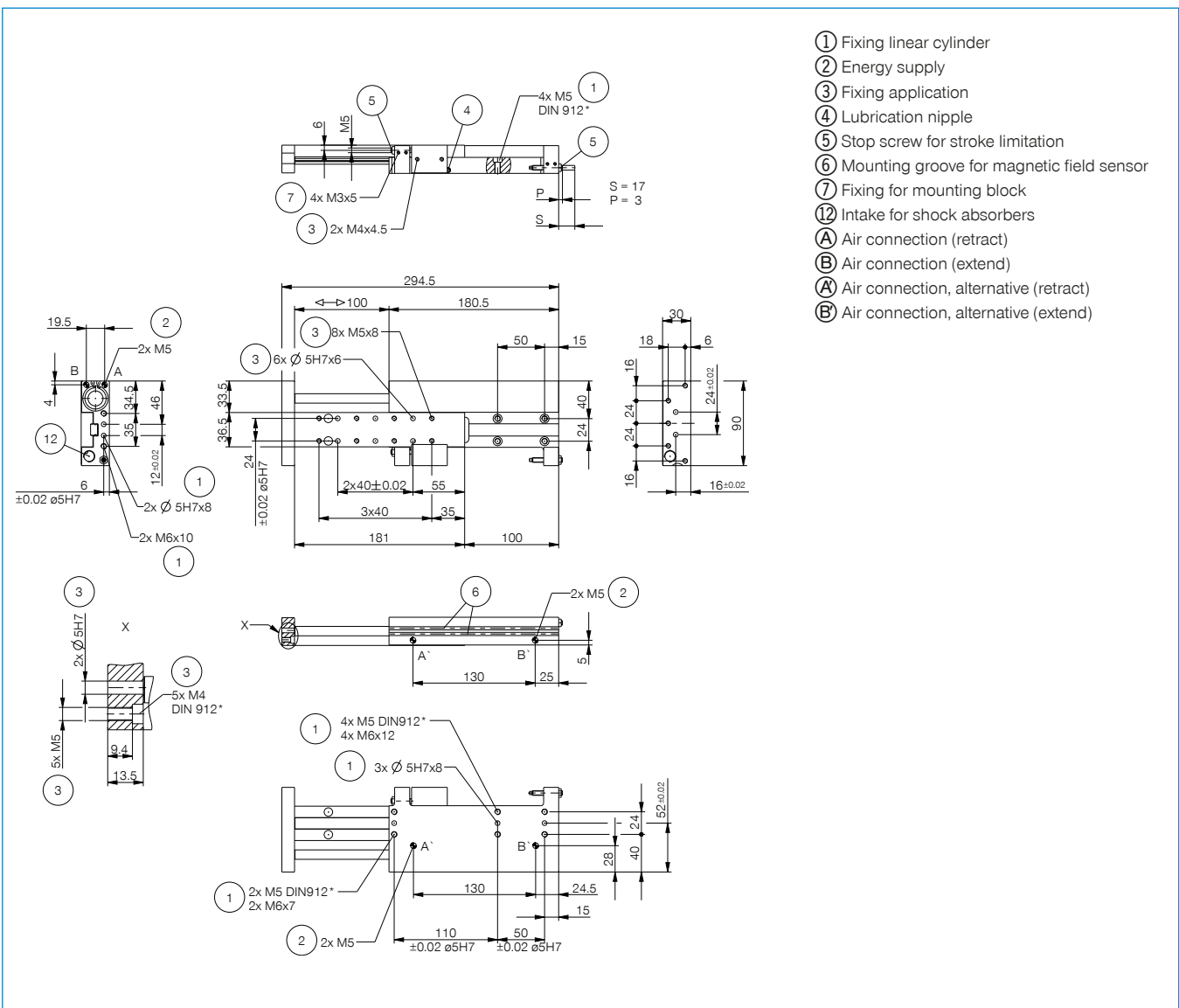
Shock Absorbers

M12X1S

Order no.	LSF25-100
Stroke [mm]	100
Pressure force max. [N]	265
Retraction force [N]	220
Piston diameter [mm]	25
Guide rail size [mm]	12
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	90
Weight [kg]	1.3

*All data measured at 6 bar

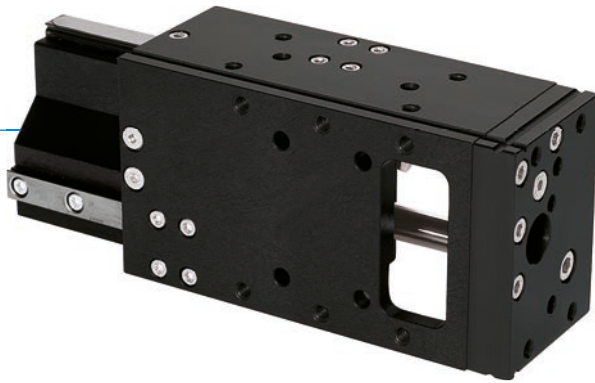
► Technical Data*



LINEAR RAIL SLIDES

SERIES LSX

▶ PRODUCT ADVANTAGES



▶ **Precise double rail profile guide**

The linear guide with ball bearing circulation and scrapers provides high precision and rigidity

▶ **Dampened end position**

By using PowerStop shock absorbers, you can gently move up to the end positions, increasing the process reliability and durability of your application

▶ **Failure-free continuous operation**

Our uncompromising "Made in Germany" quality guarantees up to 10 million maintenance-free cycles

▶ THE BEST PRODUCT FOR YOUR APPLICATION



▶ **Our products love the challenge!**

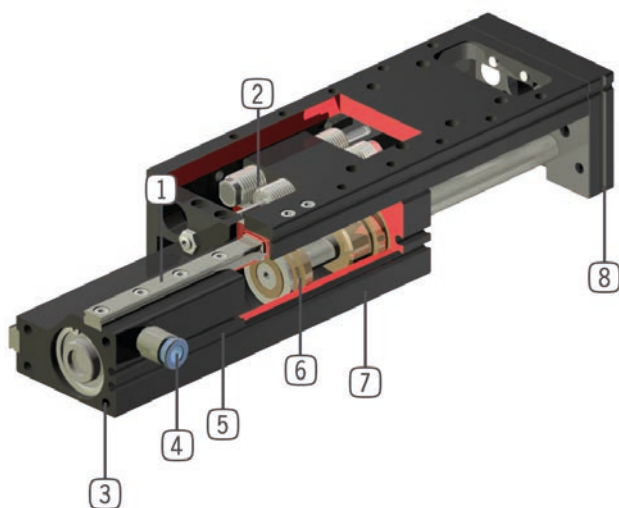
Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities:

Find the best product for your specific use:

www.zimmer-group.com



► BENEFITS IN DETAIL



- ① **Linear guide with recirculating ball and wiper**
 - two way linear guide for forces and moments capacity
- ② **Patented, hydraulic shock absorber**
 - adjustable end position damping
 - included in scope of delivery
- ③ **Mounting and positioning**
 - mounting possible from several sides for versatile positioning
- ④ **Energy supply**
 - possible from several sides
- ⑤ **Mounting groove for magnetic field sensor**
 - integrated, space saving position sensing
- ⑥ **Robust, lightweight housing**
 - hard coated aluminium alloy
- ⑦ **Drive**
 - double-acting pneumatic cylinder
- ⑧ **Intake flange**
 - quick and cost-effective positioning of adapter plates: Accessory, Art. No. AP...G and AP...V

► FURTHER INFORMATION IS AVAILABLE ONLINE



► Technical Information

All information just a click away at: www.zimmer-group.com

Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product.

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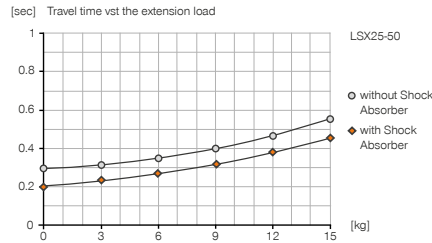
LINEAR RAIL SLIDES

LSX25-50

▶ PRODUCT SPECIFICATIONS

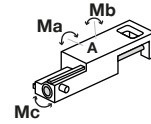


▶ Time diagram



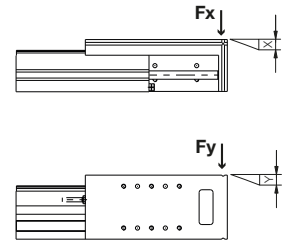
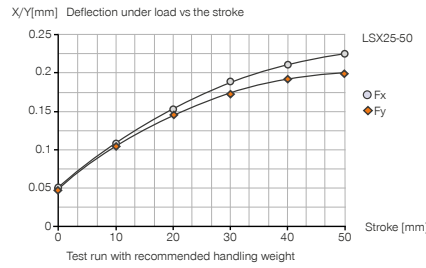
▶ Forces and moments

Max allowable static forces and moments on face A.



Ma [Nm]	55
Mb [Nm]	55
Mc [Nm]	55

▶ Load diagram



▶ RECOMMENDED ACCESSORIES



Flow Control Valves - with Swivel joint

DRV1-8X6



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Shock Absorbers

M12X1S



Adapter plate

APLSX25V



Adapter plate

APLSX25G



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector customizable Straight - Connector M8

S8-G-3



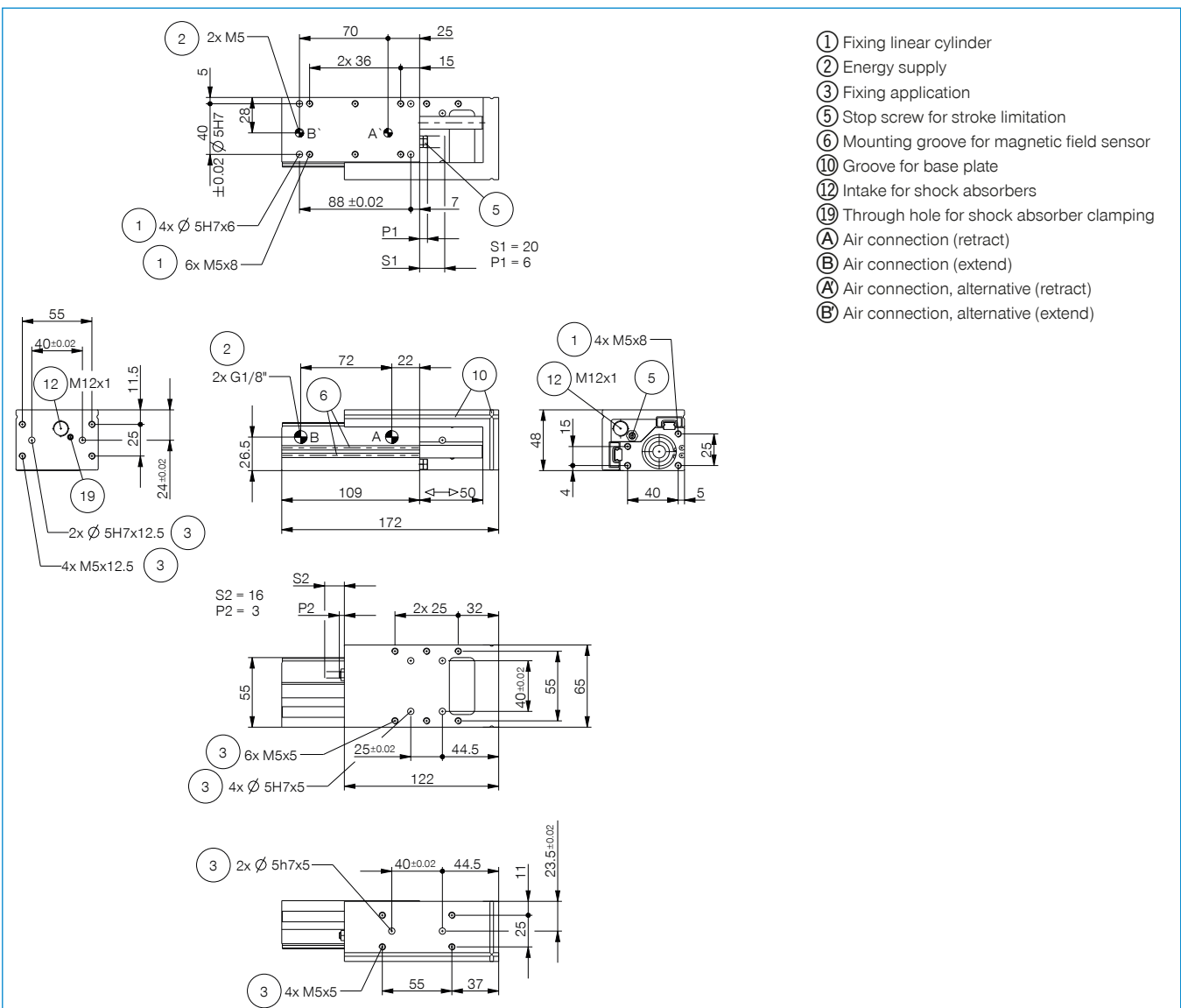
Plug-in connector customizable Straight - Connector M12

S12-G-3

Order no.	LSX25-50
Stroke [mm]	50
Pressure force max. [N]	265
Retraction force [N]	220
Recommended handling weight [kg]	15
Piston diameter [mm]	25
Guide rail size [mm]	18
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	45
Weight [kg]	1

*All data measured at 6 bar

► Technical Data*



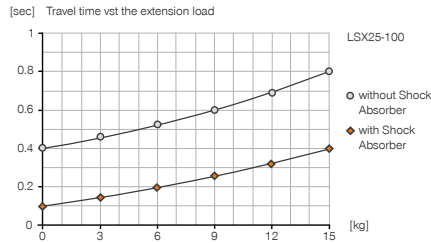
LINEAR RAIL SLIDES

LSX25-100

PRODUCT SPECIFICATIONS

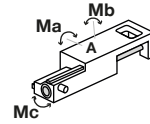


Time diagram



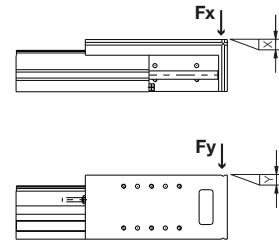
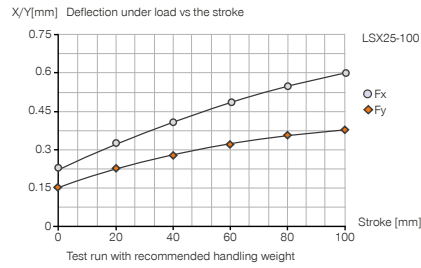
Forces and moments

Max allowable static forces and moments on face A.



Ma [Nm]	55
Mb [Nm]	55
Mc [Nm]	55

Load diagram



RECOMMENDED ACCESSORIES



Flow Control Valves - with Swivel joint

DRV1-8X6



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Shock Absorbers

M12X1S



Adapter plate

APLSX25V



Adapter plate

APLSX25G



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector customizable Straight - Connector M8

S8-G-3



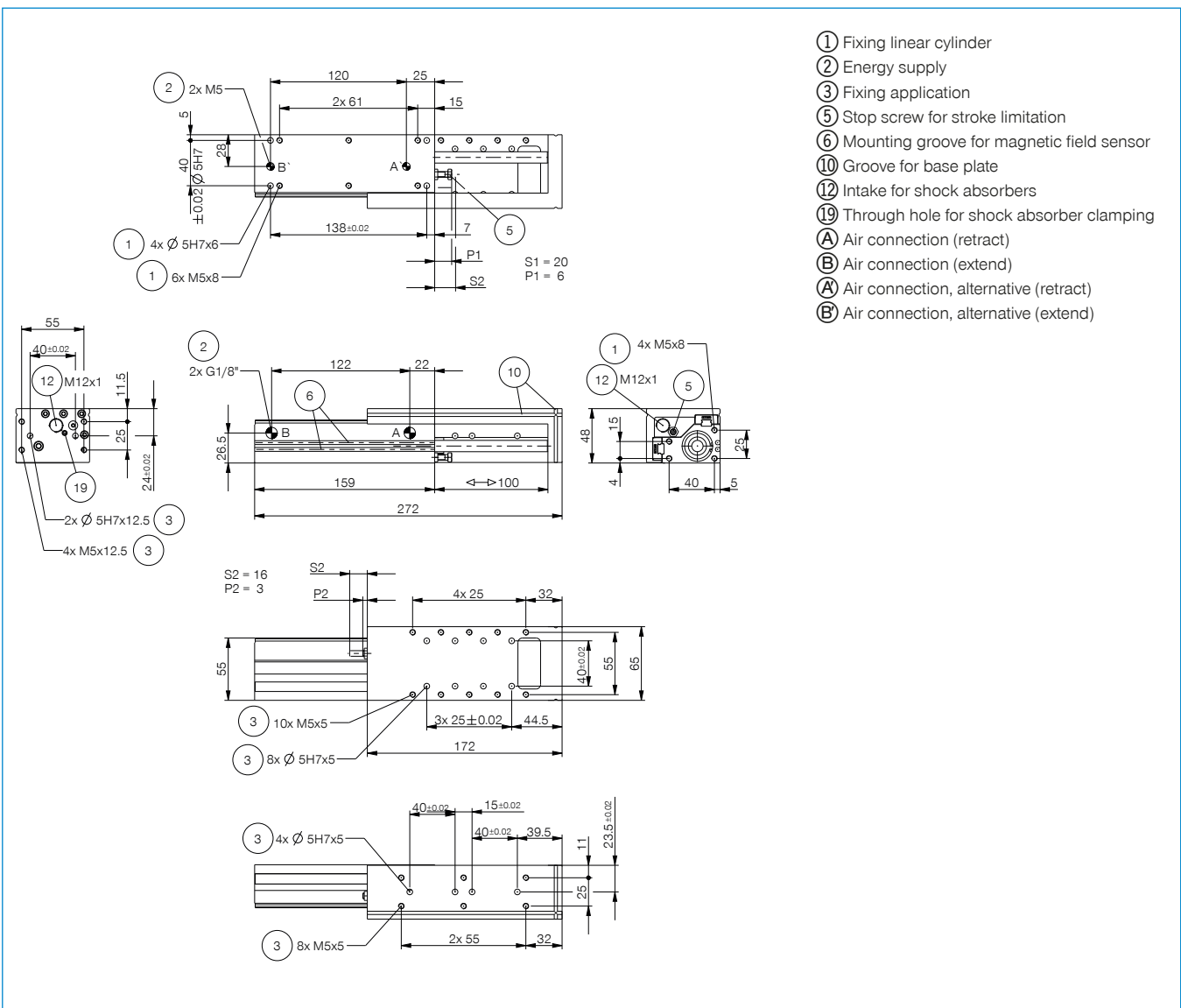
Plug-in connector customizable Straight - Connector M12

S12-G-3

Order no.	LSX25-100
Stroke [mm]	100
Pressure force max. [N]	265
Retraction force [N]	220
Recommended handling weight [kg]	15
Piston diameter [mm]	25
Guide rail size [mm]	18
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	90
Weight [kg]	1.3

* All data measured at 6 bar

► Technical Data*



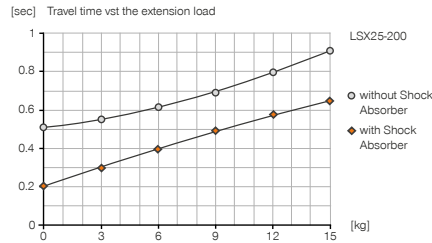
LINEAR RAIL SLIDES

LSX25-200

▶ PRODUCT SPECIFICATIONS

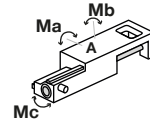


▶ Time diagram



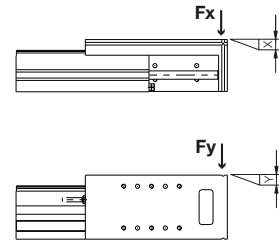
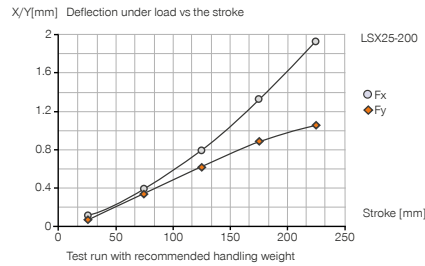
▶ Forces and moments

Max allowable static forces and moments on face A.



Ma [Nm]	55
Mb [Nm]	55
Mc [Nm]	55

▶ Load diagram



▶ RECOMMENDED ACCESSORIES



Flow Control Valves - with Swivel joint

DRV1-8X6



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Shock Absorbers

M12X1S



Adapter plate

APLSX25V



Adapter plate

APLSX25G



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector customizable Straight - Connector M8

S8-G-3



Plug-in connector customizable Straight - Connector M12

S12-G-3

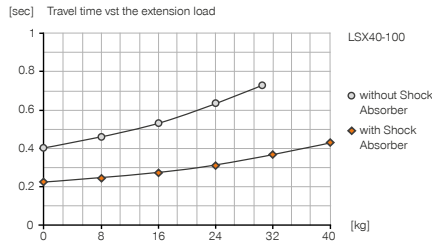
LINEAR RAIL SLIDES

LSX40-100

PRODUCT SPECIFICATIONS

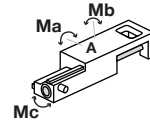


Time diagram



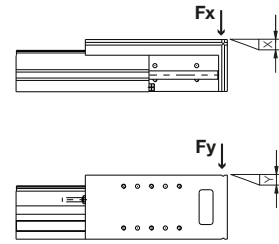
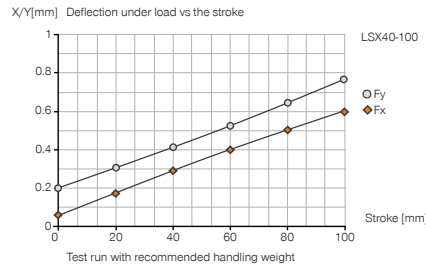
Forces and moments

Max allowable static forces and moments on face A.



Ma [Nm]	200
Mb [Nm]	200
Mc [Nm]	200

Load diagram



RECOMMENDED ACCESSORIES



Flow Control Valves - with Swivel joint

DRV1-8X6



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Shock Absorbers

M20X1.5S



Adapter plate

APLSX40V



Adapter plate

APLSX40G



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector customizable Straight - Connector M8

S8-G-3



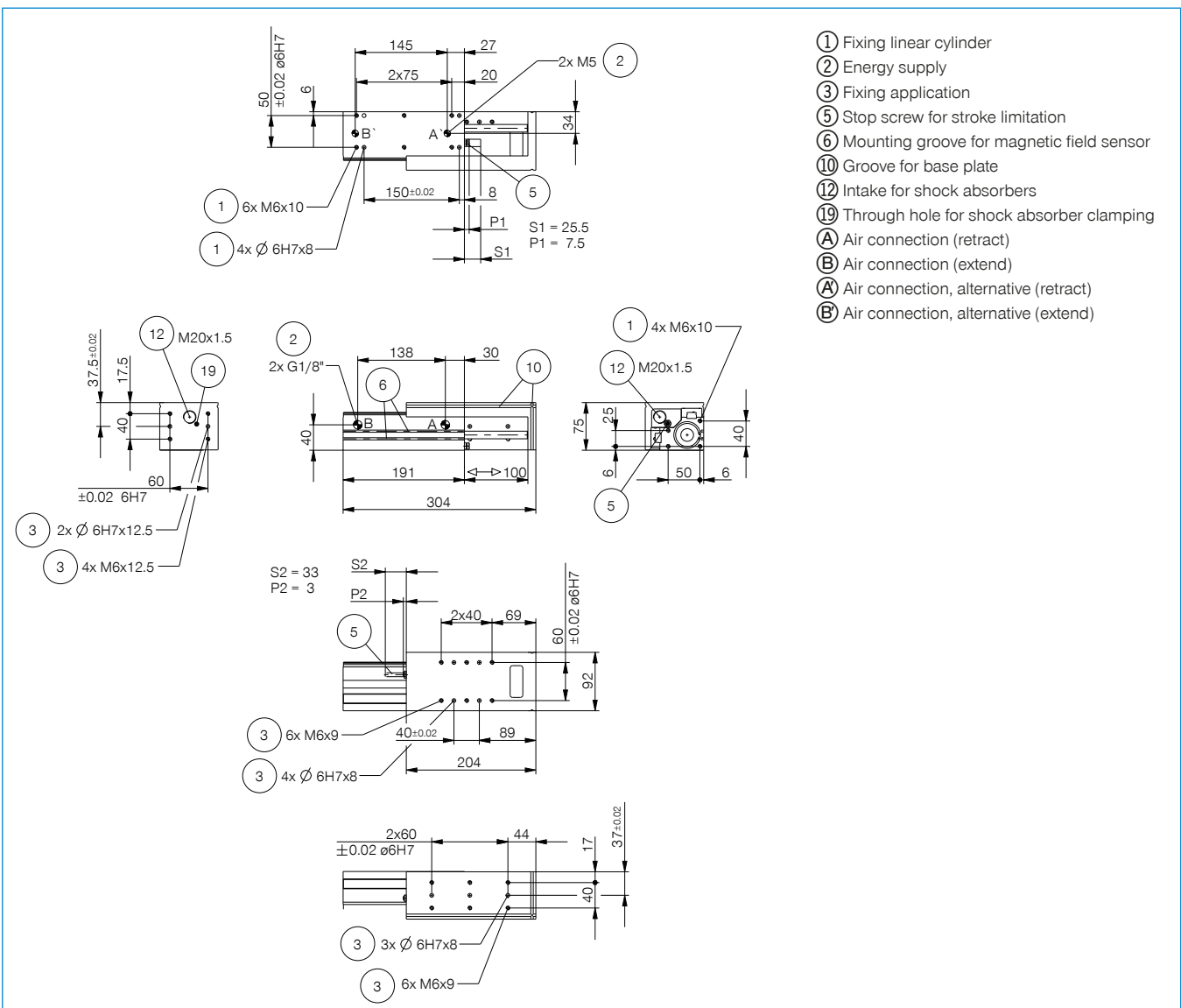
Plug-in connector customizable Straight - Connector M12

S12-G-3

Order no.	LSX40-100
Stroke [mm]	100
Pressure force max. [N]	750
Retraction force [N]	680
Recommended handling weight [kg]	40
Piston diameter [mm]	40
Guide rail size [mm]	30
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	235
Weight [kg]	3.2

*All data measured at 6 bar

► Technical Data*



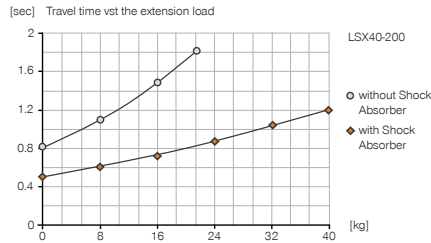
LINEAR RAIL SLIDES

LSX40-200

▶ PRODUCT SPECIFICATIONS

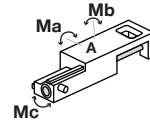


▶ Time diagram



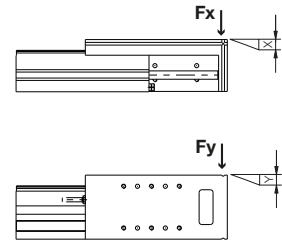
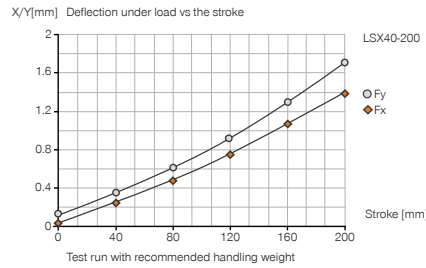
▶ Forces and moments

Max allowable static forces and moments on face A.



Ma [Nm]	200
Mb [Nm]	200
Mc [Nm]	200

▶ Load diagram



▶ RECOMMENDED ACCESSORIES



Flow Control Valves - with Swivel joint

DRV1-8X6



Magnetic field sensor Straight Cable 5 m

MFS204KHC



Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



Shock Absorbers

M20X1.5S



Adapter plate

APLSX40V



Adapter plate

APLSX40G



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector customizable Straight - Connector M8

S8-G-3



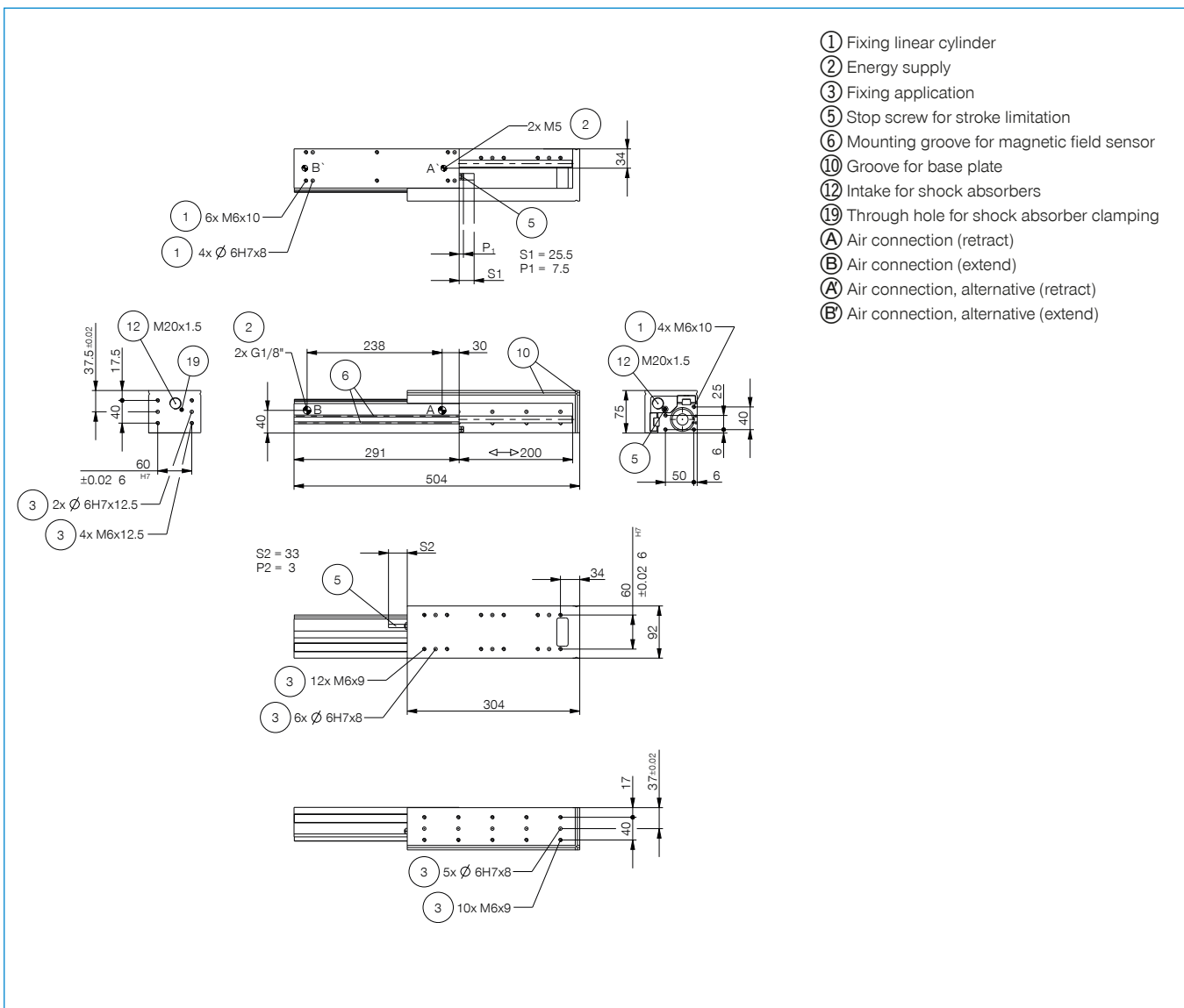
Plug-in connector customizable Straight - Connector M12

S12-G-3

Order no.	LSX40-200
Stroke [mm]	200
Pressure force max. [N]	750
Retraction force [N]	680
Recommended handling weight [kg]	40
Piston diameter [mm]	40
Guide rail size [mm]	30
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	235
Weight [kg]	4.4

*All data measured at 6 bar

► Technical Data*



LIFTING CYLINDERS

OVERVIEW OF SERIES



► PNEUMATIC



Series HZ

758

LIFTING CYLINDERS SERIES HZ

▶ PRODUCT ADVANTAGES



SOMMER
automatic **S**

▶ Hoseless air passage

Eliminates undefined interference contours and wear-prone hoses and increases the safety of your application in the process

▶ Dampened end position

By using PowerStop shock absorbers, you can gently move up to the end positions, increasing the process reliability and durability of your application

▶ Very robust

Two ground and hard chrome-plated guide rods guarantee a secure process sequence with their rigidity and long service life

▶ THE BEST PRODUCT FOR YOUR APPLICATION



▶ Our products love the challenge!

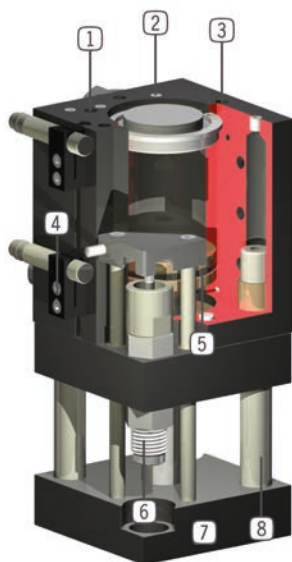
Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities:

Find the best product for your specific use:

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► BENEFITS IN DETAIL



- ① **Integrated air feed-through**
 - for hoseless air transfer
- ② **Energy supply**
 - possible from several sides
- ③ **Mounting and positioning**
 - mounting possible from several sides for versatile positioning
- ④ **Mounting block**
 - mounting for inductive proximity switch
- ⑤ **Drive**
 - double-acting pneumatic cylinder
- ⑥ **Patented, hydraulic shock absorber**
 - adjustable end position damping
- ⑦ **Intake flange**
 - for fixing to the customer specific application
- ⑧ **Two guide rods**
 - high forces and moments capacity

► FURTHER INFORMATION IS AVAILABLE ONLINE



► **Technical Information**

All information just a click away at: www.zimmer-group.com

Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product.

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LIFTING CYLINDERS

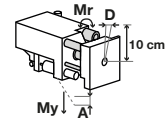
INSTALLATION SIZE HZ40

▶ PRODUCT SPECIFICATIONS



▶ Forces and moments

Max allowable static forces and moments.



▶ INCLUDED IN DELIVERY



Mounting block

KB8-28



Shock Absorbers

M14X1.5S



Stop sleeve

DST01491

▶ RECOMMENDED ACCESSORIES



Flow Control Valves - with Swivel joint

DRV1-8X6



Inductive proximity switch - Cable 5 m

NJ8-E2



Inductive proximity switch - Connector M8

NJ8-E2S



Plug-in connector Angled Cable 5m - Socket M8 (female)

KAW500



Plug-in connector Straight Cable 5m - Socket M8 (female)

KAG500



Plug-in connector customizable Straight - Connector M8

S8-G-3



Plug-in connector customizable Straight - Connector M12

S12-G-3



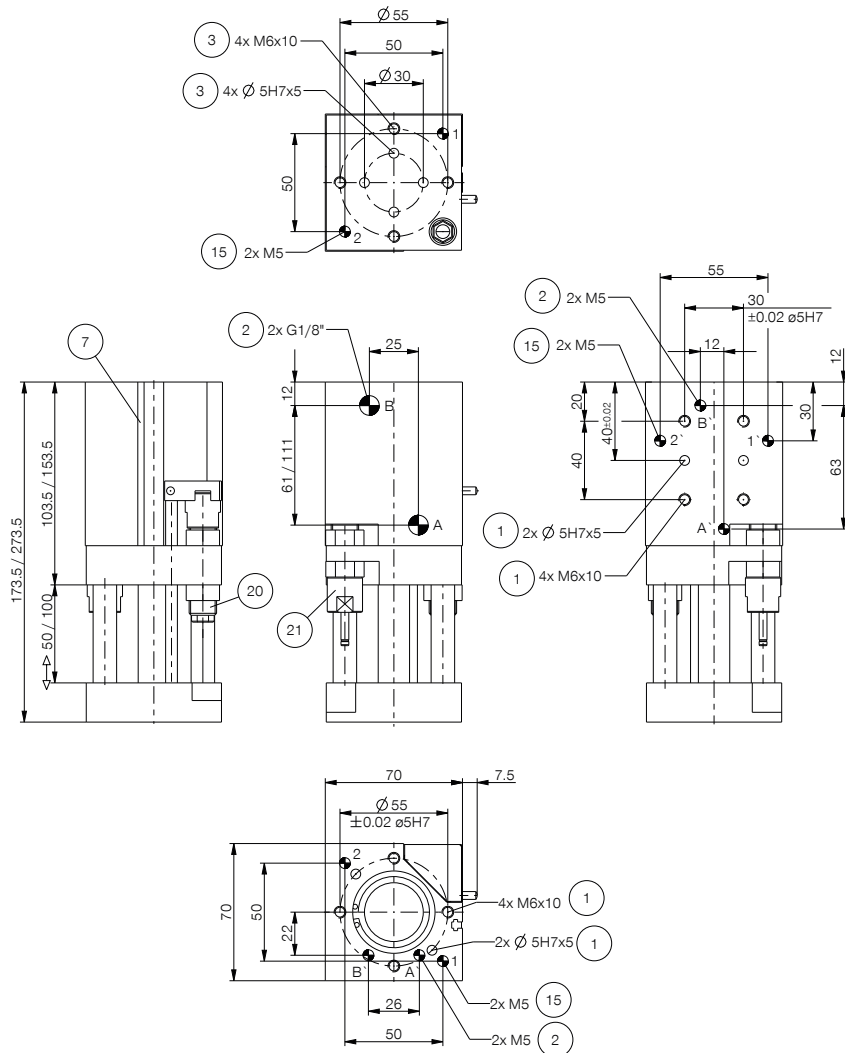
Pressure Safety Valve

DSV1-8

Order no.	► Technical Data*	
	HZ40-50D2	HZ40-100D2
Stroke [mm]	50	100
Pressure force max. [N]	720	720
Retraction force [N]	600	600
Air feed-through [Quantity]	2	2
Air volume per cycle [cm ³]	116	232
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	80	80
Weight [kg]	2	2.7
Deviation D for Mr 5 N [mm]		0.5
Deviation D for Mr 10 N [mm]	0.1	
Deviation D for Mr 15 N [mm]		0.15
Deviation D for Mr 70 N [mm]	0.5	
Deflection A for My 60 N [mm]	0.05	0.1
Deflection A for My 100 N [mm]	0.1	0.15

*All data measured at 6 bar

- ① Fixing linear cylinder
- ② Energy supply
- ③ Fixing application
- ⑦ Fixing for mounting block
- ⑮ Integrated air feed-through
- ⑳ Shock absorber
- ㉑ Stop sleeve
- A Air connection (retract)
- B Air connection (extend)
- A' Air connection, alternative (retract)
- B' Air connection, alternative (extend)



CUTTING TONGS

OVERVIEW OF SERIES



▶ PNEUMATIC



Series ZK1000

764



Series ZK

776

CUTTING TONGS

SERIES ZK1000

▶ PRODUCT ADVANTAGES

SOMMER
automatic **S**



▶ Extremely lightweight

This light weight generally allows the use of a smaller moving axis, reducing the overall costs of the application in the process

▶ Integrated magnetic field sensing

One of the few cutting tongs on the market that can have its position queried and transferred to the control system with process reliability

▶ Decide for yourself!

Sprue or steel wire: The variety of cutting geometries and materials ensure you always find the correct cuttings

▶ THE BEST PRODUCT FOR YOUR APPLICATION



▶ Our products love the challenge!

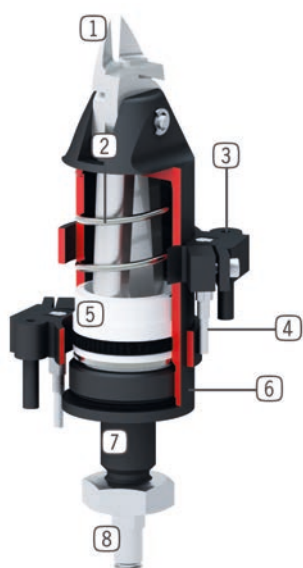
Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities:

Find the best product for your specific use:

www.zimmer-group.com



► BENEFITS IN DETAIL



- ① **Cutting insert**
 - flexible applicable due to specific cutting geometry
- ② **Return spring**
 - to open the cuttings
- ③ **Mounting clamp**
 - mounting and positioning of magnetic field sensors
- ④ **Magnetic field sensor**
 - for position sensing
- ⑤ **Drive**
 - single-acting pneumatic cylinder
- ⑥ **Housing**
 - hard coated aluminium alloy
- ⑦ **Mounting and positioning**
 - via fit, thread and lock nut
- ⑧ **Energy supply**

► FURTHER INFORMATION IS AVAILABLE ONLINE



► **Technical Information**

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Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product.

Quick, clear and always up-to-date.



CUTTING TONGS

INSTALLATION SIZE ZK1030

▶ PRODUCT SPECIFICATIONS



▶ INCLUDED IN DELIVERY



Lockung nut

C093610009

▶ RECOMMENDED ACCESSORIES



Angled Fittings - Barb Style Connection

WVM3



Straight Fittings - Barb Style Connection

GVM3



Sensor holder

KHD30



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8

MFS204SKHC



Magnetic field sensor
Straight Cable 5 m

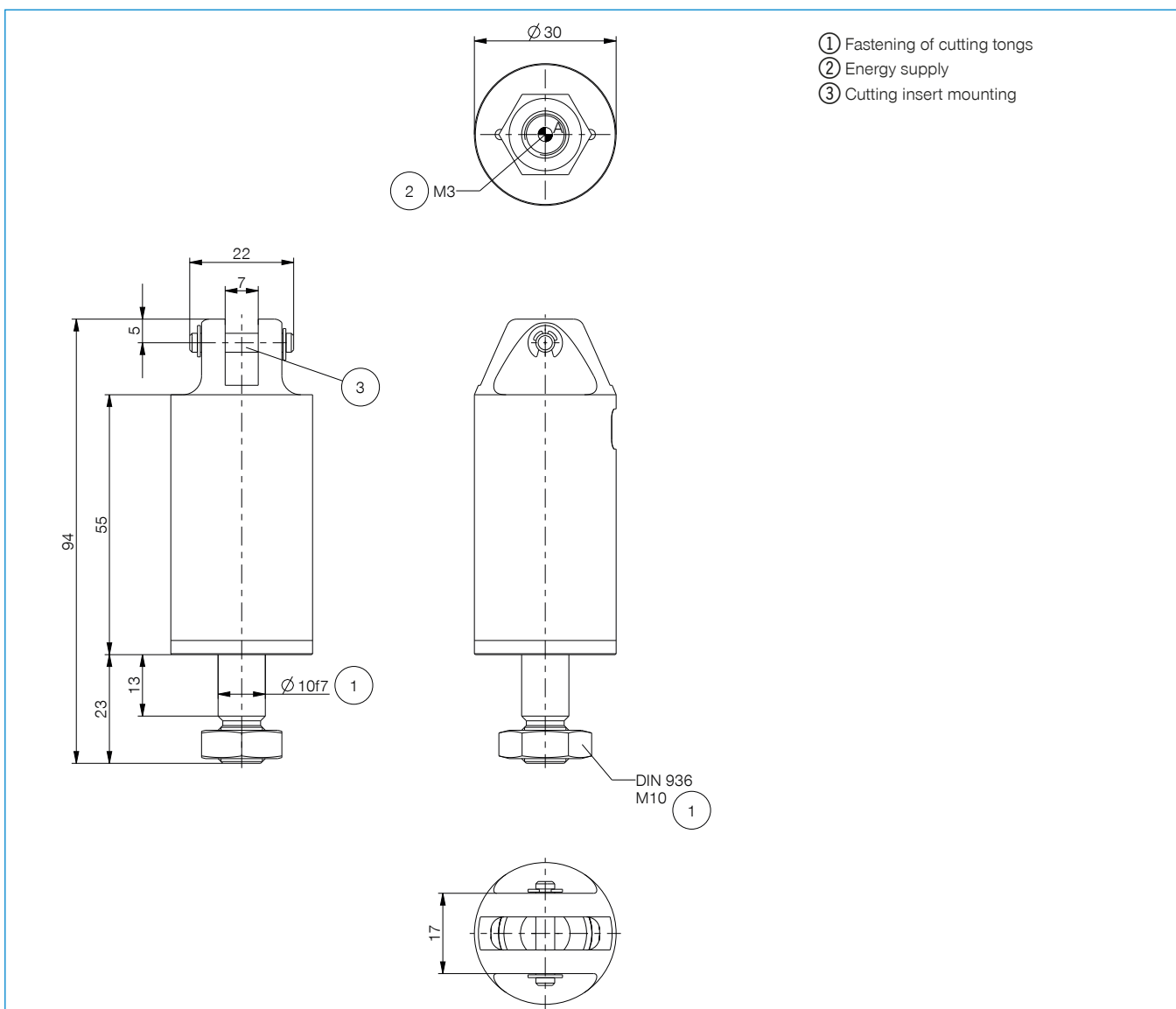
MFS204KHC



Cutting inserts, see
page 774

► Technical Data*	
Order no.	ZK1030
Stroke per jaw [°]	4.25
Gripping moment in closing [Nm]	14
Closing time [s]	0.01
Opening time [s]	0.1
Operating pressure min. [bar]	2
Operating pressure max. [bar]	6
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	5
Weight [kg]	0.08
Possible cutting diameters	
possible cut-Ø max. hard-plastic [mm]	
possible cut-Ø max. piano wire [mm]	0.3
possible cut-Ø max. plastics [mm]	2
possible cut-Ø max. copper [mm]	1
possible cut-Ø max. steel [mm]	0.5

*All data measured at 6 bar



CUTTING TONGS

INSTALLATION SIZE ZK1036

▶ PRODUCT SPECIFICATIONS



▶ INCLUDED IN DELIVERY



Lockung nut

C093614159

▶ RECOMMENDED ACCESSORIES



Angled Fittings - Quick Connect Style

WVM5



Straight Fittings - Quick Connect Style

GVM5



Sensor holder

KHD36



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8
MFS204SKHC



Magnetic field sensor
Straight Cable 5 m

MFS204KHC

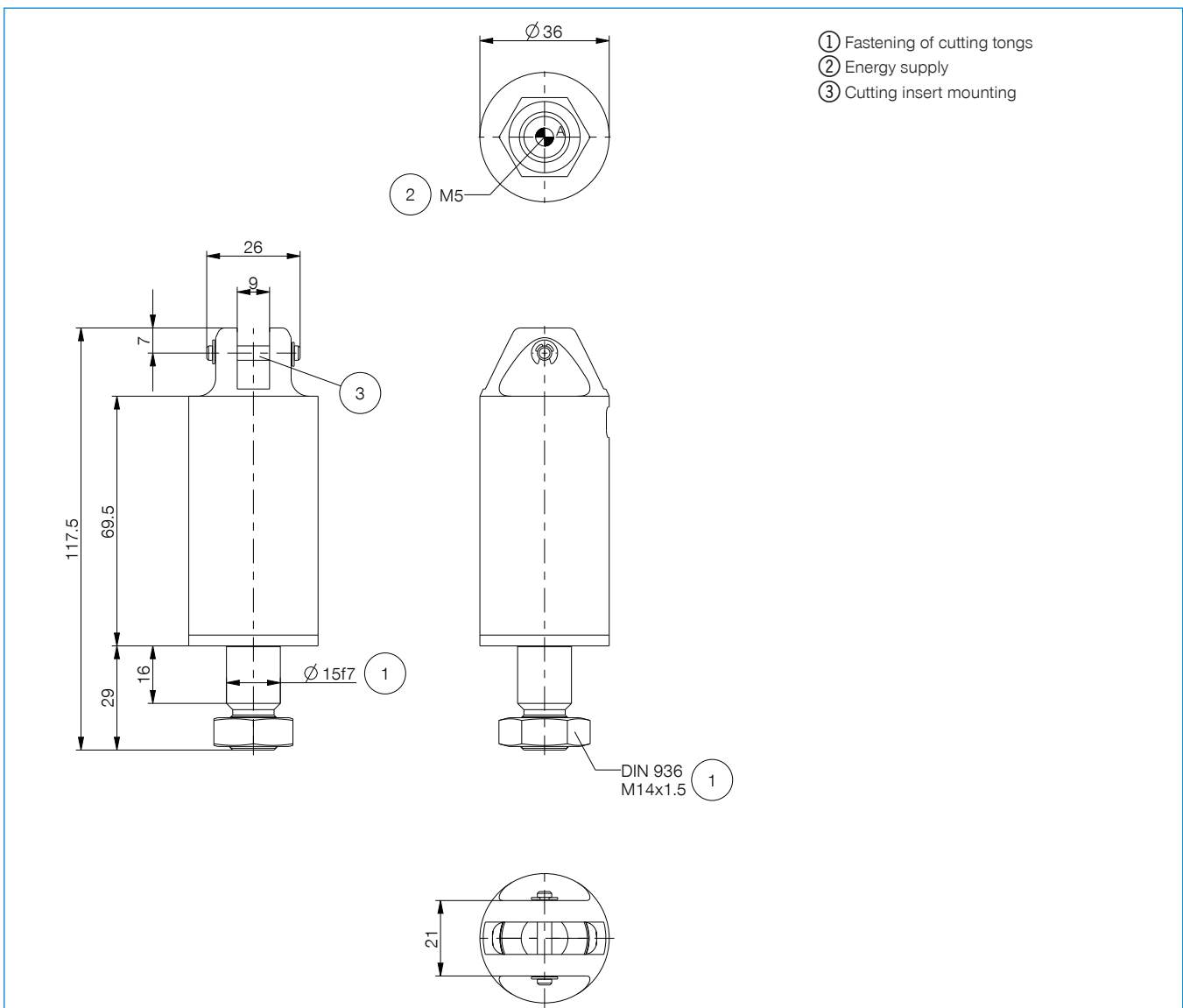


Cutting inserts, see
page 774

► Technical Data*	
Order no.	ZK1036
Stroke per jaw [°]	5
Gripping moment in closing [Nm]	40
Closing time [s]	0.04
Opening time [s]	0.15
Operating pressure min. [bar]	2
Operating pressure max. [bar]	6
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	9.2
Weight [kg]	0.13

Possible cutting diameters	
possible cut-Ø max. hard-plastic [mm]	2.6
possible cut-Ø max. piano wire [mm]	0.5
possible cut-Ø max. plastics [mm]	4
possible cut-Ø max. copper [mm]	1.6
possible cut-Ø max. steel [mm]	1

*All data measured at 6 bar



CUTTING TONGS

INSTALLATION SIZE ZK1045

▶ PRODUCT SPECIFICATIONS



▶ INCLUDED IN DELIVERY



Lockung nut

C093620159

▶ RECOMMENDED ACCESSORIES



Angled Fittings - Quick Connect Style

WV1-8X6



Straight Fittings - Quick Connect Style

GV1-8X6



Sensor holder

KHD45



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8

MFS204SKHC



Magnetic field sensor
Straight Cable 5 m

MFS204KHC

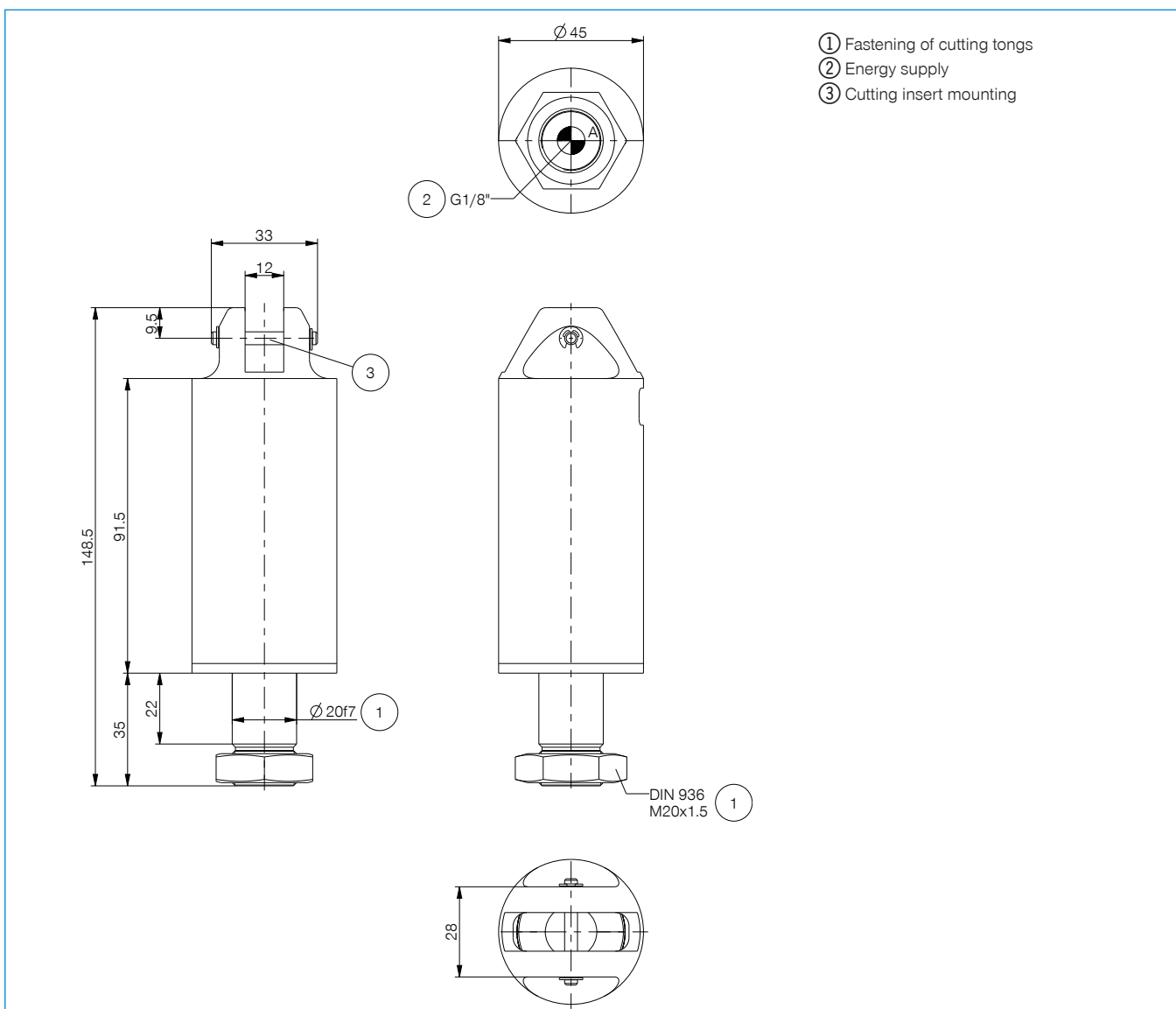


Cutting inserts, see
page 774

► Technical Data*	
Order no.	ZK1045
Stroke per jaw [°]	8.5
Gripping moment in closing [Nm]	98
Closing time [s]	0.06
Opening time [s]	0.2
Operating pressure min. [bar]	2
Operating pressure max. [bar]	6
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	32
Weight [kg]	0.24

Possible cutting diameters	
possible cut-Ø max. hard-plastic [mm]	5
possible cut-Ø max. piano wire [mm]	1
possible cut-Ø max. plastics [mm]	7
possible cut-Ø max. copper [mm]	2.6
possible cut-Ø max. steel [mm]	2

*All data measured at 6 bar



CUTTING TONGS

INSTALLATION SIZE ZK1065

▶ PRODUCT SPECIFICATIONS



▶ INCLUDED IN DELIVERY



Lockung nut

C093620159

▶ RECOMMENDED ACCESSORIES



Angled Fittings - Quick Connect Style

WV1-8X6



Straight Fittings - Quick Connect Style

GV1-8X6



Sensor holder

KHD65



Magnetic field sensor
Straight Cable 0,3 m -
Connector M8

MFS204SKHC



Magnetic field sensor
Straight Cable 5 m

MFS204KHC

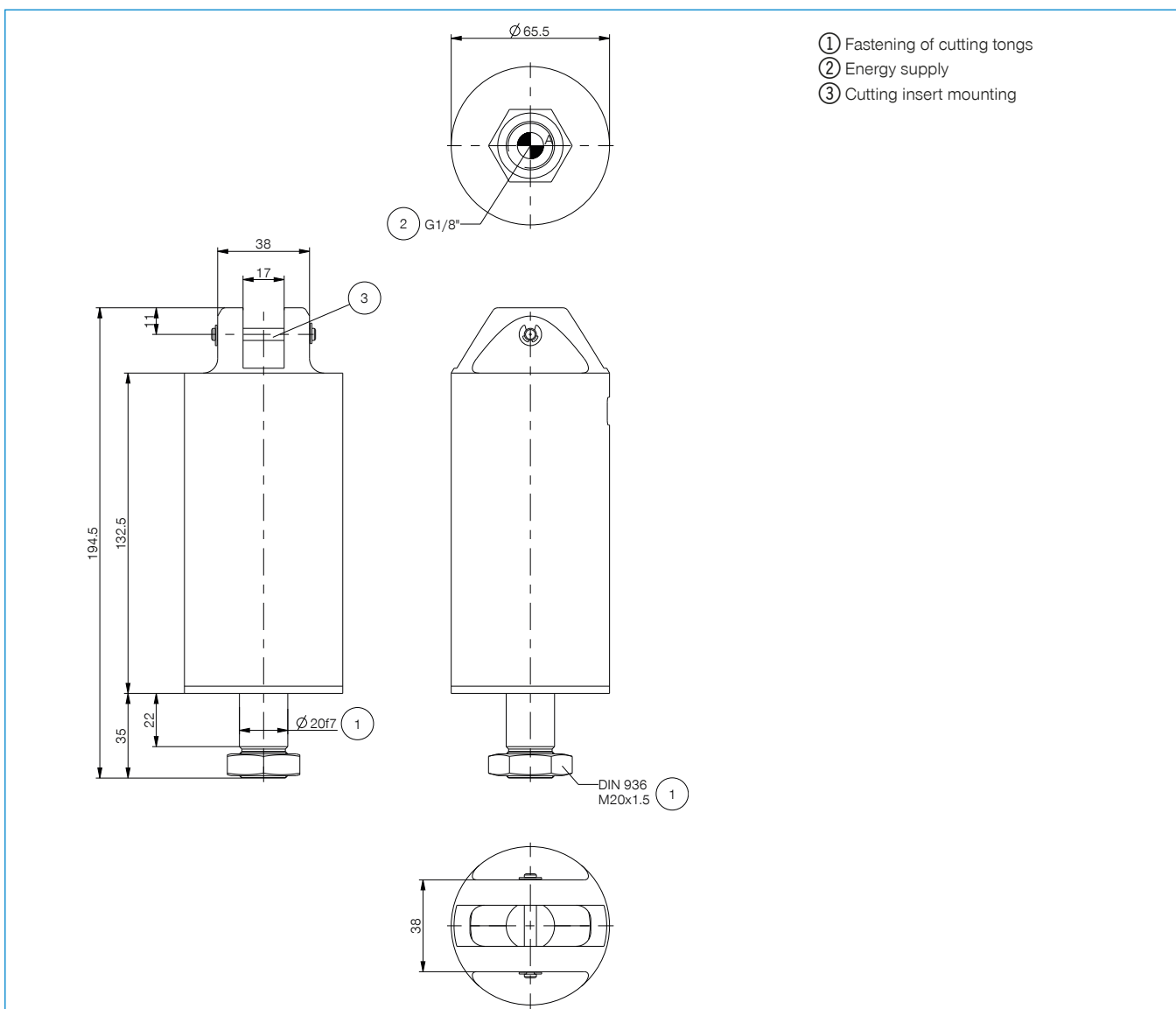


Cutting inserts, see
page 774

► Technical Data*	
Order no.	ZK1065
Stroke per jaw [°]	13
Gripping moment in closing [Nm]	400
Closing time [s]	0.1
Opening time [s]	0.4
Operating pressure min. [bar]	2
Operating pressure max. [bar]	6
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	130
Weight [kg]	0.67

Possible cutting diameters	
possible cut-Ø max. hard-plastic [mm]	8
possible cut-Ø max. piano wire [mm]	
possible cut-Ø max. plastics [mm]	11
possible cut-Ø max. copper [mm]	6
possible cut-Ø max. steel [mm]	4

*All data measured at 6 bar



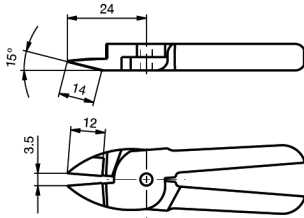
CUTTING TONGS

ZK1000 SERIES CUTTING INSERTS

▶ CUTTING INSERTS FOR ZK1030

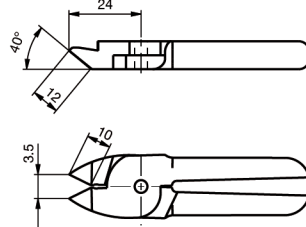
Cutting Insert 15° for plastics

BK1030-01



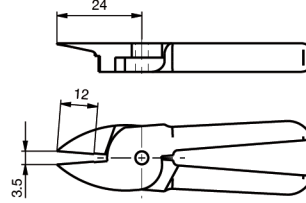
Cutting Insert 40° For Plastics

BK1030-02



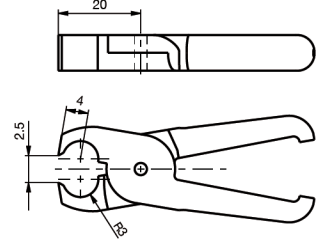
Cutting Insert 0° For Plastics

BK1030-03



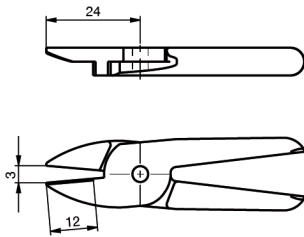
Cutting Tong For Plastics

BK1030-04



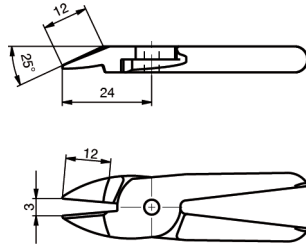
Cutting Insert 0° For Steel

BK1030-05



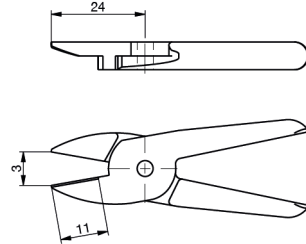
Cutting Insert 25° For Steel

BK1030-06



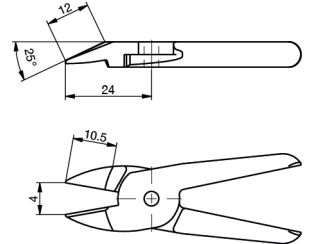
Carbide Cutting Insert 0° For Steel

BK1030-07



Carbide Cutting Insert 25° For Steel

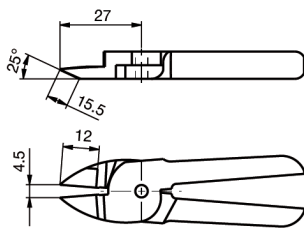
BK1030-08



▶ CUTTING INSERTS FOR ZK1036

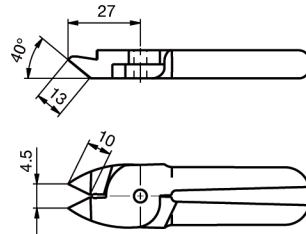
Cutting Insert 25° For Plastics

BK1036-01



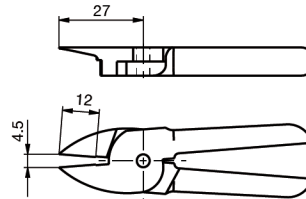
Cutting Insert 40° For Plastics

BK1036-02



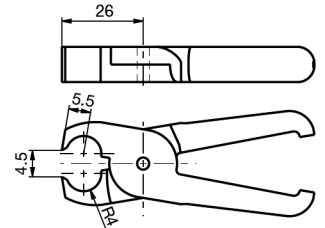
Cutting Insert 0° For Plastics

BK1036-03



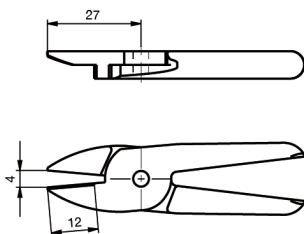
Cutting Tong For Plastics

BK1036-04



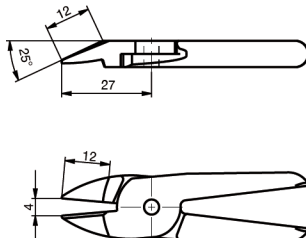
Cutting Insert 0° For Steel

BK1036-05



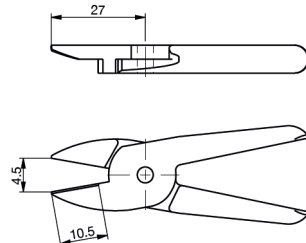
Cutting Insert 25° For Steel

BK1036-06



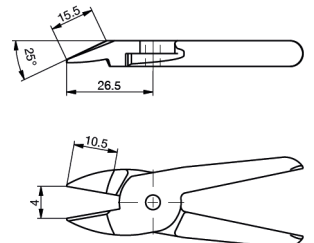
Carbide Cutting Insert 0° For Steel

BK1036-07



Carbide Cutting Insert 25° For Steel

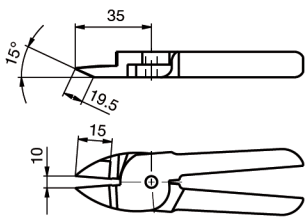
BK1036-08



CUTTING INSERTS FOR ZK1045

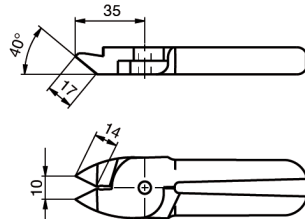
Cutting Insert 15° for plastics

BK1045-01



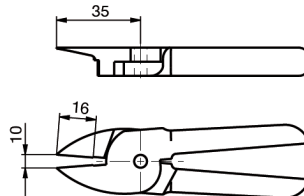
Cutting Insert 40° For Plastics

BK1045-02



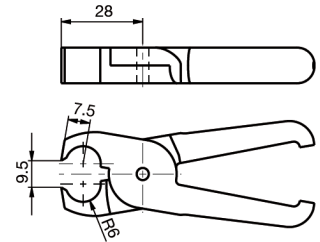
Cutting Insert 0° For Plastics

BK1045-03



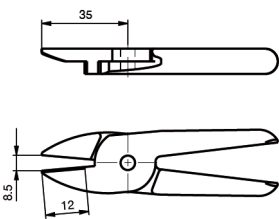
Cutting Tong For Plastics

BK1045-04



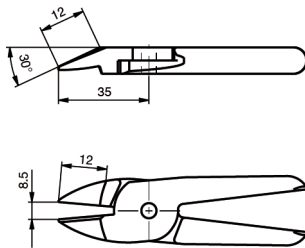
Cutting Insert 0° For Steel

BK1045-05



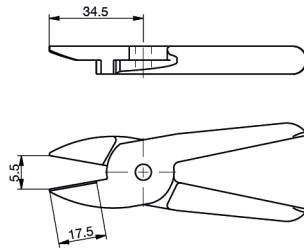
Cutting Insert 30° For Steel

BK1045-06



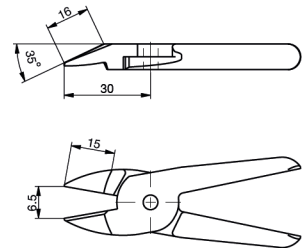
Carbide Cutting Insert 0° For Steel

BK1045-07



Carbide Cutting Insert 35° For Steel

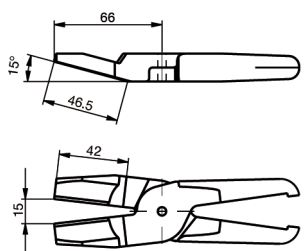
BK1045-08



CUTTING INSERTS FOR ZK1065

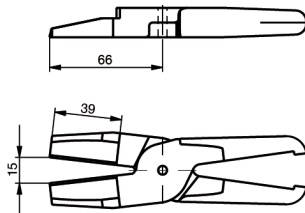
Cutting Insert 15° for plastics

BK1065-01



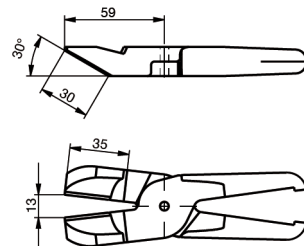
Cutting Insert 0° For Plastics

BK1065-02



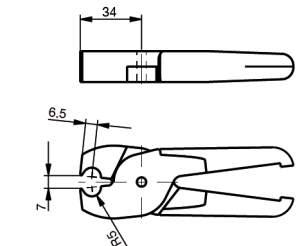
Cutting Insert 30° For Plastics

BK1065-03



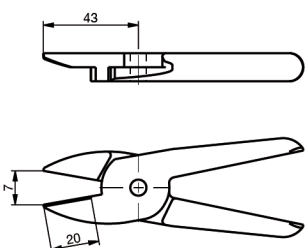
Cutting Tong For Plastics

BK1065-04



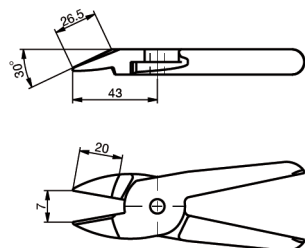
Cutting Insert 0° For Steel

BK1065-05



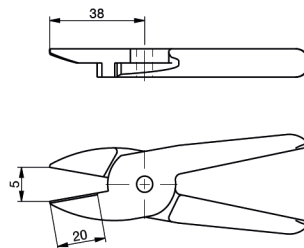
Cutting Insert 30° For Steel

BK1065-06



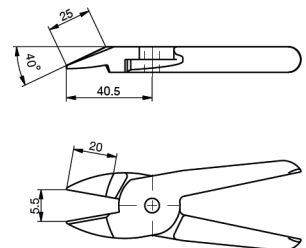
Carbide Cutting Insert 0° For Steel

BK1065-07



Carbide Cutting Insert 40° For Steel

BK1065-08



CUTTING TONGS

SERIES ZK

▶ PRODUCT ADVANTAGES

SOMMER
automatic **S**



▶ Flat structure

Reduces the interference contours and enables simple integration into your machine design

▶ Decide for yourself!

The gripper jaw holder provides the option to adapt standard cutting, gripper jaws or your own design

▶ Failure-free continuous operation

Our uncompromising "Made in Germany" quality guarantees up to 5 million maintenance-free gripping cycles

▶ THE BEST PRODUCT FOR YOUR APPLICATION



▶ Our products love the challenge!

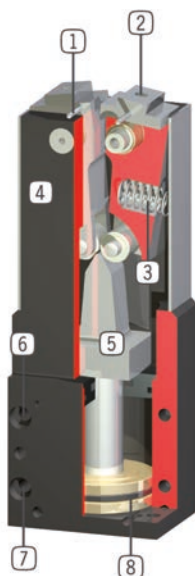
Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities:

Find the best product for your specific use:

www.zimmer-group.com



► BENEFITS IN DETAIL



- ① **Switch cam**
 - for position sensing
- ② **Mounting**
 - for individual jaws, knives, chucks and similar
- ③ **Integrated spring**
 - supports jaw return (ZK33)
- ④ **Robust, lightweight housing**
 - hard coated aluminium alloy
- ⑤ **Force transfer**
 - via wedge and rollers
- ⑥ **Mounting and positioning**
 - mounting possible from several sides for versatile positioning
- ⑦ **Energy supply**
 - possible from several sides
- ⑧ **Drive**
 - double-acting pneumatic cylinder

► FURTHER INFORMATION IS AVAILABLE ONLINE



► Technical Information

All information just a click away at: www.zimmer-group.com

Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product.

Quick, clear and always up-to-date.



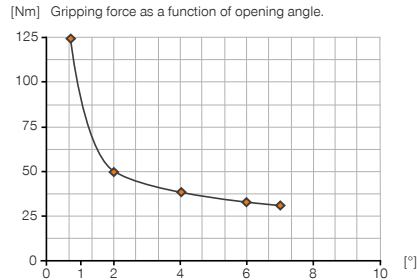
CUTTING TONGS

INSTALLATION SIZE ZK22

▶ PRODUCT SPECIFICATIONS

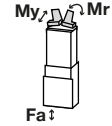


▶ Gripping moment diagram



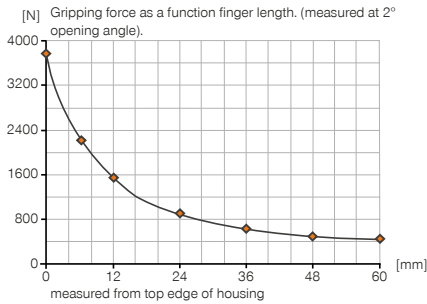
▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	20
My [Nm]	30
Fa [N]	600

▶ Gripping force diagram



▶ RECOMMENDED ACCESSORIES



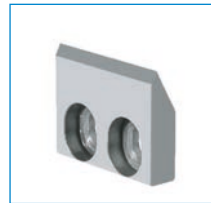
Universal Jaw Steel

UB22



Cutter mounting set

BK22



Cutter set with double ground cutting edge

BK22-1



Cutter set with single ground cutting edge

BK22-2



Cutter set with shearing blades

BK22-3



Mounting block

KB3



Inductive proximity switch - Cable 5 m

NJ3-E2



Inductive Proximity Switch Cable 0,3 m - Connector M8

NJ3-E2SK



Angled Fittings - Quick Connect Style

WVM5



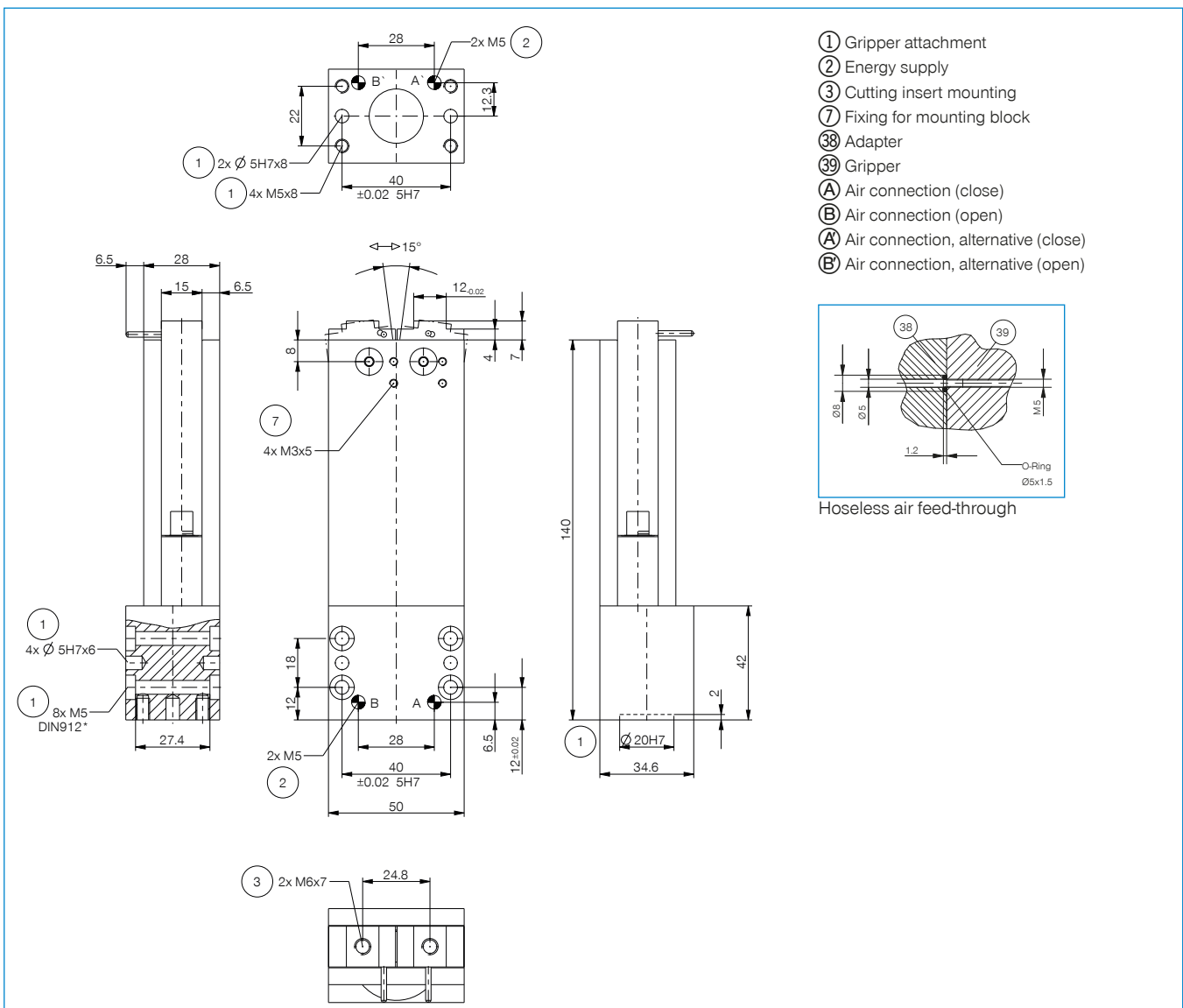
Straight Fittings - Quick Connect Style

GVM5

Order no.	ZK22
Stroke per jaw [°]	7.5
Gripping moment in closing [Nm]**	54
Gripping force in closing [N]	3600
Closing time [s]	0.15
Opening time [s]	0.15
Repetition accuracy +/- [mm]	0.1
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	10
Weight [kg]	0.79

*All data measured at 6 bar

**measured at 2° opening angle



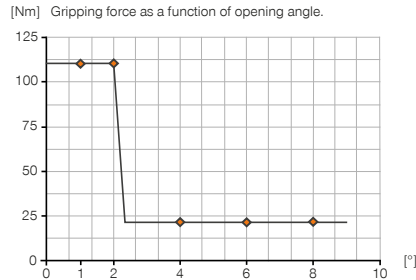
CUTTING TONGS

INSTALLATION SIZE ZK33

▶ PRODUCT SPECIFICATIONS

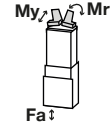


▶ Gripping moment diagram



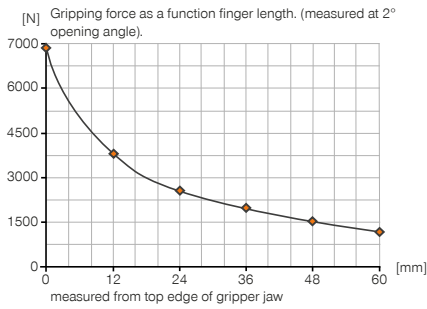
▶ Forces and moments

Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	26
My [Nm]	40
Fa [N]	720

▶ Gripping force diagram



▶ RECOMMENDED ACCESSORIES



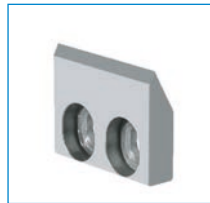
Universal Jaw Steel

UB22



Cutter mounting set

BK22



Cutter set with double ground cutting edge

BK22-1



Cutter set with single ground cutting edge

BK22-2



Cutter set with shearing blades

BK22-3



Mounting block

KB3



Inductive proximity switch - Cable 5 m

NJ3-E2



Inductive Proximity Switch Cable 0,3 m - Connector M8

NJ3-E2SK



Angled Fittings - Quick Connect Style

WVM5



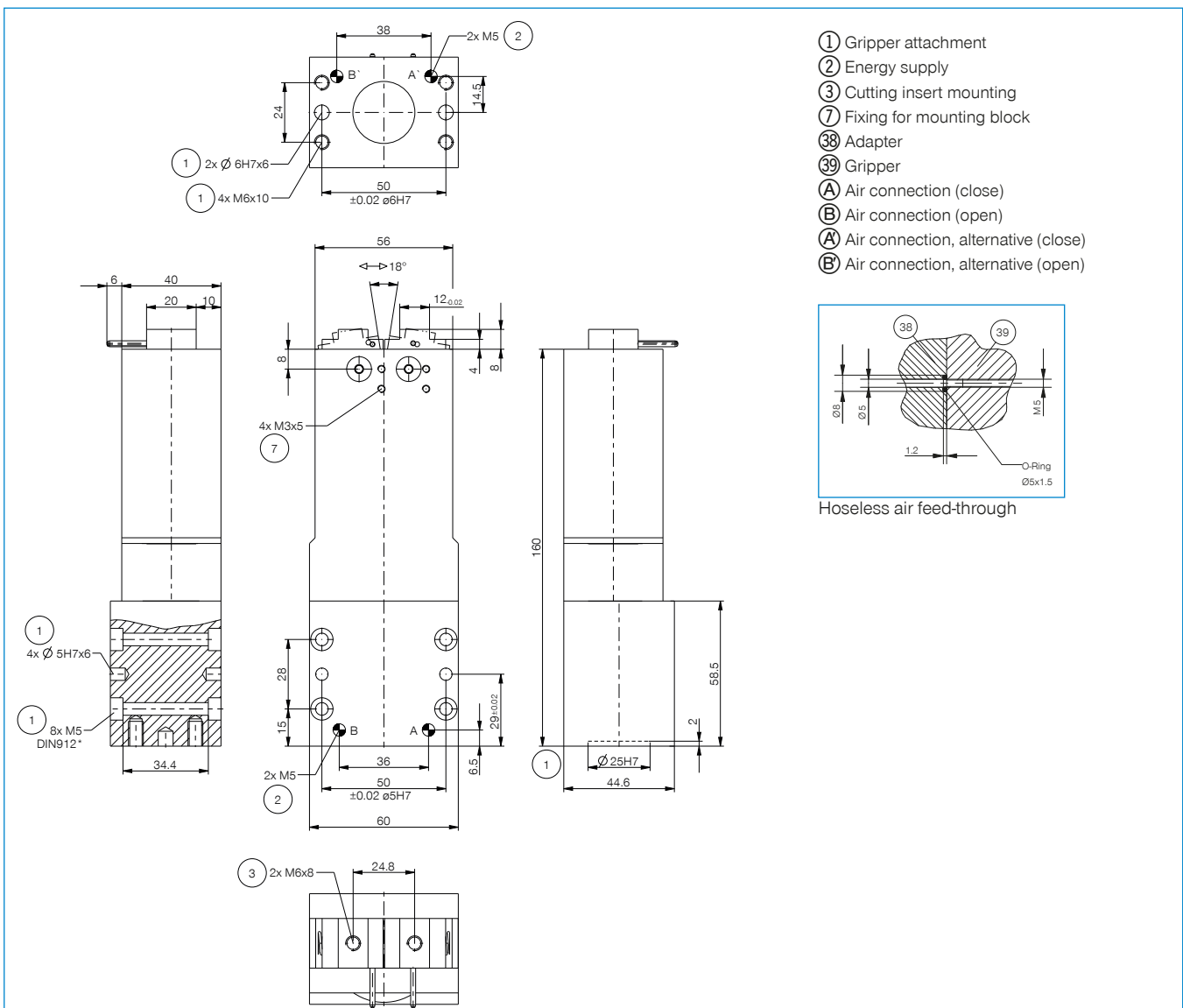
Straight Fittings - Quick Connect Style

GVM5

Order no.	ZK33
Stroke per jaw [°]	9
Gripping moment in closing [Nm]**	110
Gripping force in closing [N]	6800
Closing time [s]	0.2
Opening time [s]	0.2
Repetition accuracy +/- [mm]	0.1
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	73
Weight [kg]	1.3

*All data measured at 6 bar

**measured at 2° opening angle



SEPARATORS

OVERVIEW OF SERIES



▶ PNEUMATIC

	Series VEG	784
	Series VE	796

SEPARATORS

SERIES VEG

▶ PRODUCT ADVANTAGES



▶ **Hardened stainless steel guide**

This guide is robust, reliable and durable: Exactly what you need for your application!

▶ **Decide for yourself!**

Sensing via magnetic field sensors or inductive proximity switches: Unlike the benchmark, you are free to choose!

▶ **Failure-free continuous operation**

Our uncompromising "Made in Germany" quality guarantees up to 10 million maintenance-free cycles

▶ THE BEST PRODUCT FOR YOUR APPLICATION



▶ **Our products love the challenge!**

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities:

Find the best product for your specific use:

www.zimmer-group.com



► BENEFITS IN DETAIL



- ① **Tapped rod**
 - hardened steel
- ② **Mounting**
 - individual separator finger mounting
- ③ **Square guide**
 - rugged, high forces and moments capacity
- ④ **Mounting and positioning**
 - mounting possible from several sides for versatile positioning
- ⑤ **Drive**
 - double-acting pneumatic cylinder
- ⑥ **Energy supply**
- ⑦ **Sensing**
 - groove for positioning of the magnetic field sensor
- ⑧ **Permanent magnet**
 - installed in piston area

► FURTHER INFORMATION IS AVAILABLE ONLINE



► Technical Information

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Quick, clear and always up-to-date.



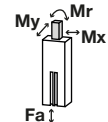
SEPARATOR SIZE VEG10

▶ PRODUCT SPECIFICATIONS



▶ Forces and moments

Shows static forces and torques that may be present on the plunger



Mr [Nm]	3
My [Nm]	3
Mx [Nm]	3
Fa [N]	75

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Angled Cable 5 m
MFS103KHC



Magnetic field sensor Angled
Cable 0,3 m - Connector M8
MFS103SKHC



Magnetic field sensor
Straight Cable 5 m
MFS204KHC



Magnetic field sensor Straight
Cable 0,3 m - Connector M8
MFS204SKHC



Straight Fittings - Quick
Connect Style
GVM5



Angled Fittings - Quick
Connect Style
WVM5



Plug-in connector Straight Ca-
ble 5m - Socket M8 (female)
KAG500



Plug-in connector Angled Ca-
ble 5m - Socket M8 (female)
KAW500



Inductive proximity switch
- Cable 5 m
NJ8-E2



Inductive proximity
switch - Connector M8
NJ8-E2S



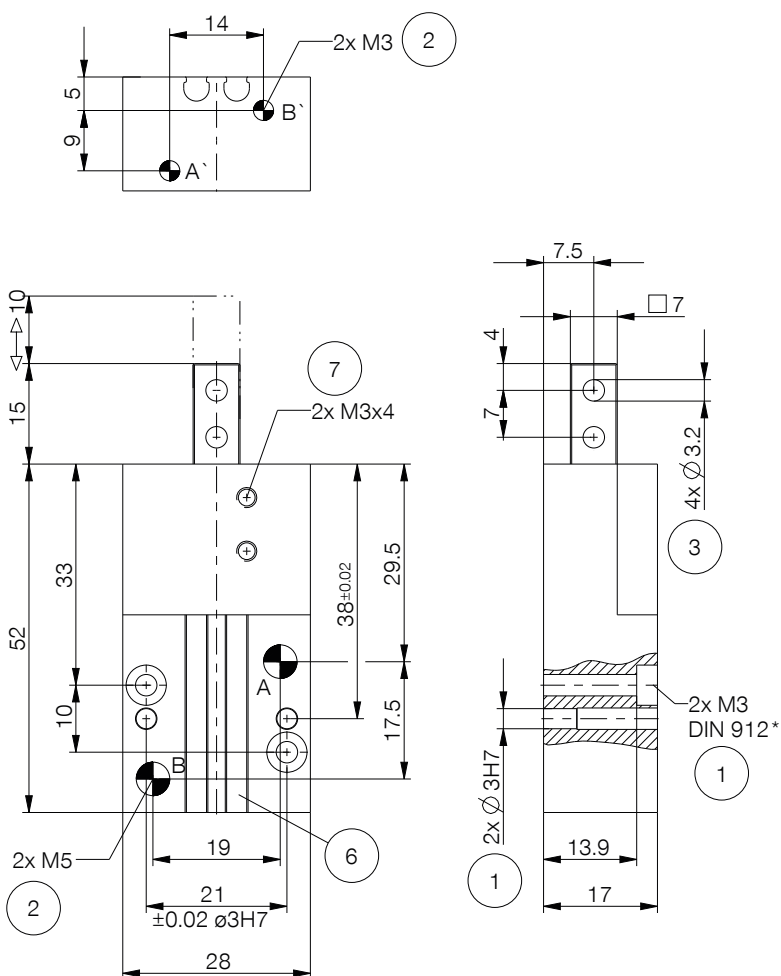
Mounting block

KB8-20

Order no.	VEG10-B
Stroke per tapped rod [mm]	10
Force in retract [N]	30
Force in extend [N]	40
Cycle count [s]	0.04
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	1.5
Weight [kg]	0.075

*All data measured at 6 bar

► Technical Data*



- ① Fixing Separators
- ② Energy supply
- ③ Fixing jaw
- ⑥ Integrated slot for magnetic field sensor
- ⑦ Fixing for mounting block
- A Air connection (retract)
- B Air connection (extend)

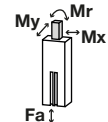
SEPARATOR SIZE VEG14

▶ PRODUCT SPECIFICATIONS



▶ Forces and moments

Shows static forces and torques that may be present on the plunger



Mr [Nm]	5
My [Nm]	5
Mx [Nm]	5
Fa [N]	100

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Angled Cable 5 m
MFS103KHC



Magnetic field sensor Angled
Cable 0,3 m - Connector M8
MFS103SKHC



Magnetic field sensor
Straight Cable 5 m
MFS204KHC



Magnetic field sensor Straight
Cable 0,3 m - Connector M8
MFS204SKHC



Straight Fittings - Quick
Connect Style
GVM5



Angled Fittings - Quick
Connect Style
WVM5



Plug-in connector Straight Ca-
ble 5m - Socket M8 (female)
KAG500



Plug-in connector Angled Ca-
ble 5m - Socket M8 (female)
KAW500



Inductive proximity switch
- Cable 5 m
NJ8-E2



Inductive proximity
switch - Connector M8
NJ8-E2S



Mounting block

KB8-20

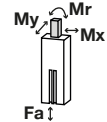
SEPARATOR SIZE VEG15

▶ PRODUCT SPECIFICATIONS



▶ Forces and moments

Shows static forces and torques that may be present on the plunger



Mr [Nm]	5
My [Nm]	5
Mx [Nm]	5
Fa [N]	100

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Angled Cable 5 m
MFS103KHC



Magnetic field sensor Angled
Cable 0,3 m - Connector M8
MFS103SKHC



Magnetic field sensor
Straight Cable 5 m
MFS204KHC



Magnetic field sensor Straight
Cable 0,3 m - Connector M8
MFS204SKHC



Straight Fittings - Quick
Connect Style
GVM5



Angled Fittings - Quick
Connect Style
WVM5



Plug-in connector Straight Ca-
ble 5m - Socket M8 (female)
KAG500



Plug-in connector Angled Ca-
ble 5m - Socket M8 (female)
KAW500



Inductive proximity switch
- Cable 5 m
NJ8-E2



Inductive proximity
switch - Connector M8
NJ8-E2S

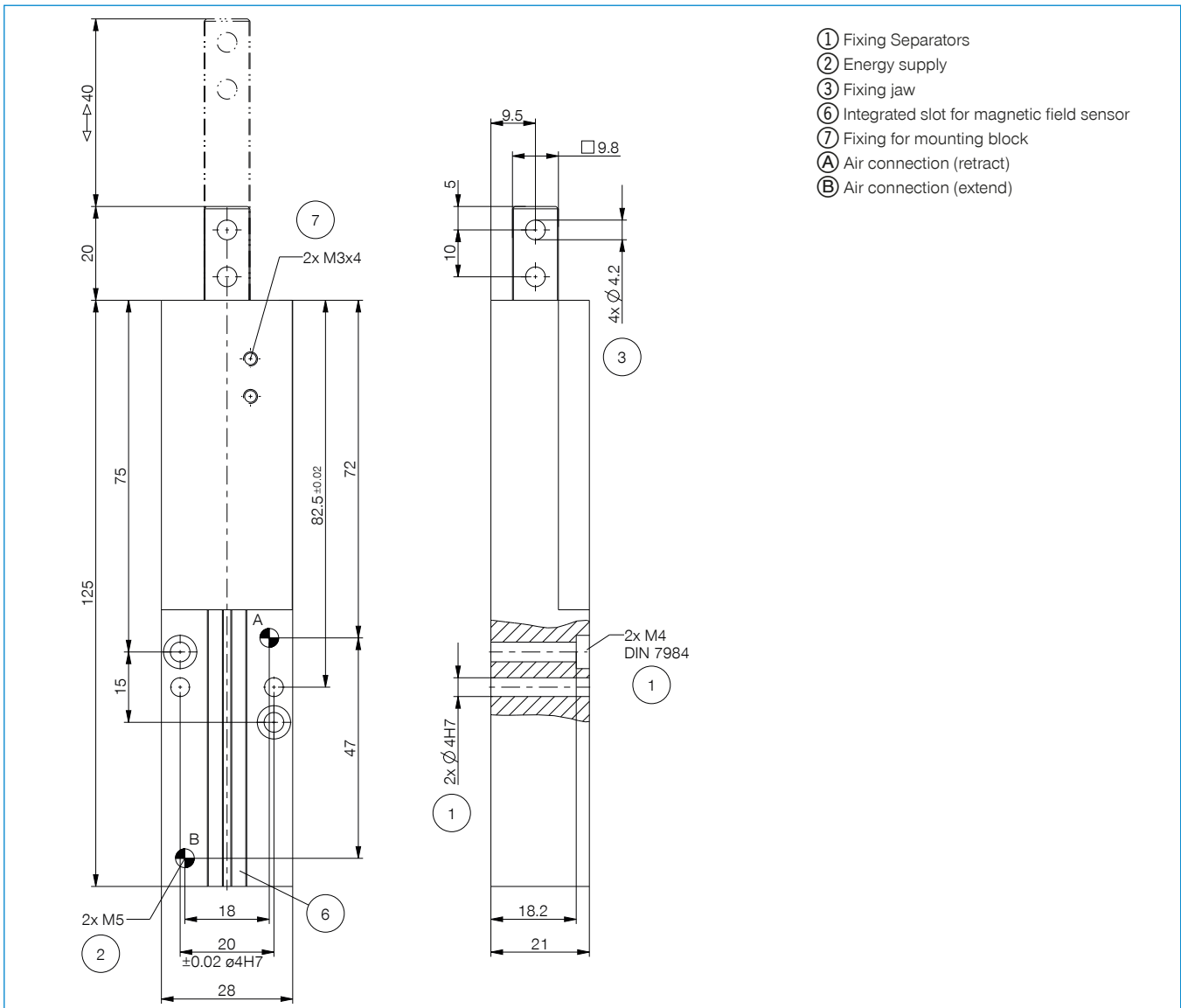


Mounting block

KB8-20

Order no.	VEG15-B
Stroke per tapped rod [mm]	40
Force in retract [N]	65
Force in extend [N]	80
Cycle count [s]	0.1
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	11
Weight [kg]	0.2

*All data measured at 6 bar



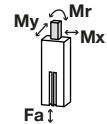
SEPARATOR SIZE VEG22

▶ PRODUCT SPECIFICATIONS



▶ Forces and moments

Shows static forces and torques that may be present on the plunger



Mr [Nm]	9
My [Nm]	9
Mx [Nm]	9
Fa [N]	180

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Angled Cable 5 m
MFS103KHC



Magnetic field sensor Angled
Cable 0,3 m - Connector M8
MFS103SKHC



Magnetic field sensor
Straight Cable 5 m
MFS204KHC



Magnetic field sensor Straight
Cable 0,3 m - Connector M8
MFS204SKHC



Straight Fittings - Quick
Connect Style
GVM5



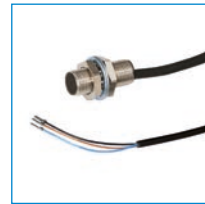
Angled Fittings - Quick
Connect Style
WVM5



Plug-in connector Straight Ca-
ble 5m - Socket M8 (female)
KAG500



Plug-in connector Angled Ca-
ble 5m - Socket M8 (female)
KAW500



Inductive proximity switch
- Cable 5 m
NJ8-E2



Inductive proximity
switch - Connector M8
NJ8-E2S



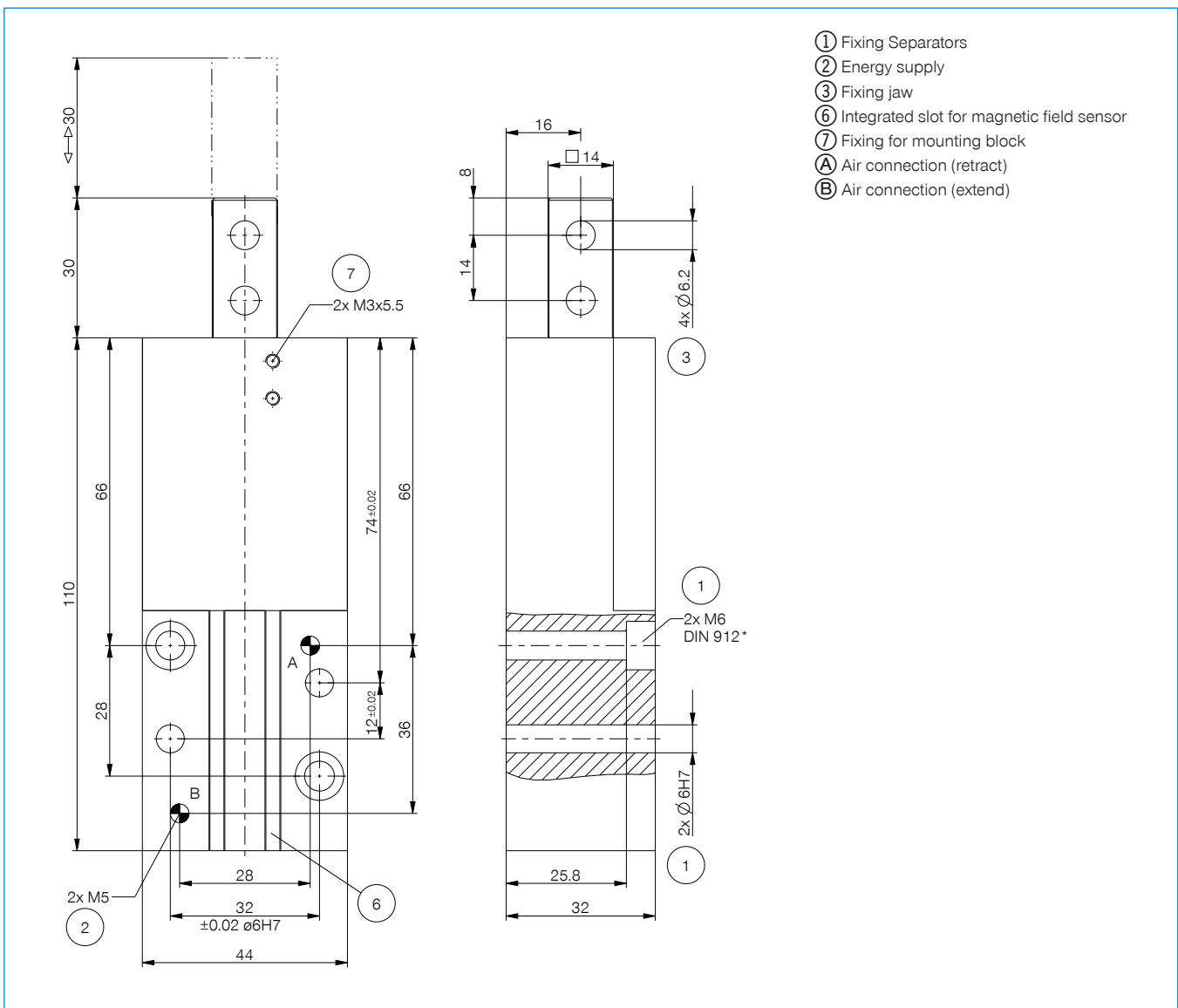
Mounting block

KB8-20

► **Technical Data***

Order no.	VEG22-B
Stroke per tapped rod [mm]	30
Force in retract [N]	170
Force in extend [N]	220
Cycle count [s]	0.08
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	20
Weight [kg]	0.5

*All data measured at 6 bar



- ① Fixing Separators
- ② Energy supply
- ③ Fixing jaw
- ⑥ Integrated slot for magnetic field sensor
- ⑦ Fixing for mounting block
- Ⓐ Air connection (retract)
- Ⓑ Air connection (extend)

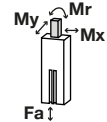
SEPARATOR SIZE VEG23

▶ PRODUCT SPECIFICATIONS



▶ Forces and moments

Shows static forces and torques that may be present on the plunger



Mr [Nm]	9
My [Nm]	9
Mx [Nm]	9
Fa [N]	180

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Angled Cable 5 m
MFS103KHC



Magnetic field sensor Angled
Cable 0,3 m - Connector M8
MFS103SKHC



Magnetic field sensor
Straight Cable 5 m
MFS204KHC



Magnetic field sensor Straight
Cable 0,3 m - Connector M8
MFS204SKHC



Straight Fittings - Quick
Connect Style
GVM5



Angled Fittings - Quick
Connect Style
WVM5



Plug-in connector Straight Ca-
ble 5m - Socket M8 (female)
KAG500



Plug-in connector Angled Ca-
ble 5m - Socket M8 (female)
KAW500



Inductive proximity switch
- Cable 5 m
NJ8-E2



Inductive proximity
switch - Connector M8
NJ8-E2S

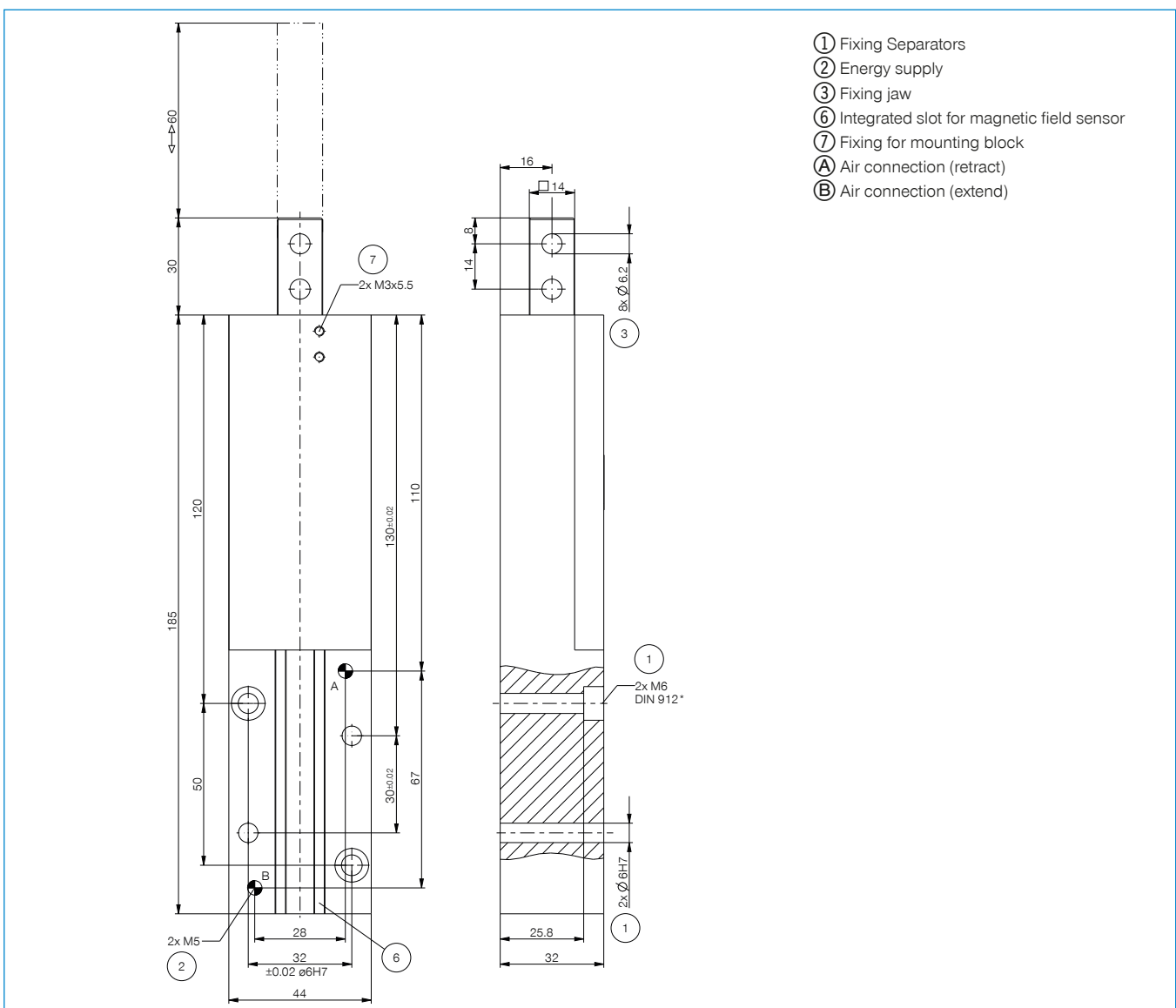


Mounting block

KB8-20

Order no.	Technical Data*
Stroke per tapped rod [mm]	60
Force in retract [N]	170
Force in extend [N]	220
Cycle count [s]	0.12
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	42
Weight [kg]	0.75

*All data measured at 6 bar



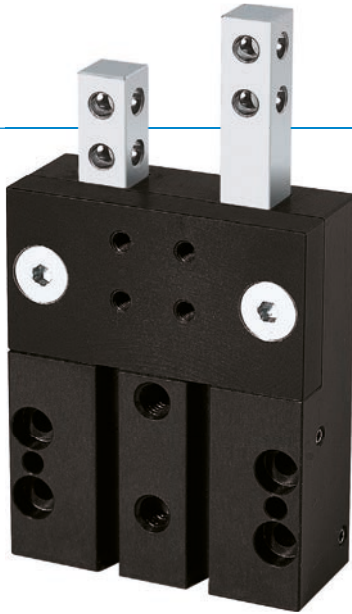
- ① Fixing Separators
- ② Energy supply
- ③ Fixing jaw
- ⑥ Integrated slot for magnetic field sensor
- ⑦ Fixing for mounting block
- A Air connection (retract)
- B Air connection (extend)

SEPARATORS

SERIES VE

▶ PRODUCT ADVANTAGES

SOMMER
automatic **S**



▶ Mechanical forced control

Guarantees process reliability for your application since only one workpiece can be separated and guided through at a time

▶ Decide for yourself!

Sensing via magnetic field sensors or inductive proximity switches: Unlike the benchmark, you are free to choose!

▶ Failure-free continuous operation

Our uncompromising "Made in Germany" quality guarantees up to 10 million maintenance-free cycles

▶ THE BEST PRODUCT FOR YOUR APPLICATION



▶ Our products love the challenge!

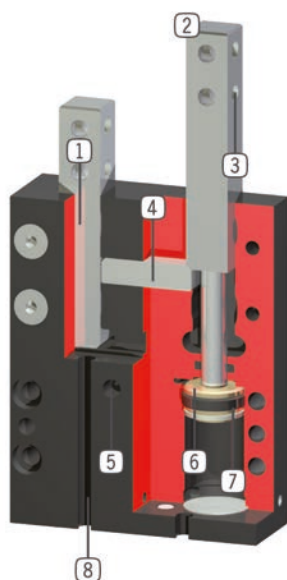
Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities:

Find the best product for your specific use:

www.zimmer-group.com



► BENEFITS IN DETAIL



- ① **Square guide**
 - rugged, high forces and moments capacity
- ② **Tapped rod**
 - hardened steel
- ③ **Mounting**
 - individual separator finger mounting
- ④ **Locking**
 - integrated, mechanical locking
- ⑤ **Energy supply**
 - possible from several sides
- ⑥ **Drive**
 - two double-acting pneumatic cylinders
- ⑦ **Permanent magnet**
 - installed in piston area
- ⑧ **Sensing**
 - groove for positioning of the magnetic field sensor

► FURTHER INFORMATION IS AVAILABLE ONLINE



► Technical Information

All information just a click away at: www.zimmer-group.com

Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product.

Quick, clear and always up-to-date.



SEPARATOR

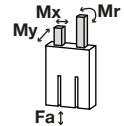
SIZE VE10

▶ PRODUCT SPECIFICATIONS



▶ Forces and moments

Shows static forces and torques that may be present on the plunger



Mr [Nm]	3
My [Nm]	3
Mx [Nm]	3
Fa [N]	75

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Angled Cable 5 m
MFS103KHC



Magnetic field sensor Angled
Cable 0,3 m - Connector M8
MFS103SKHC



Magnetic field sensor
Straight Cable 5 m
MFS204KHC



Magnetic field sensor Straight
Cable 0,3 m - Connector M8
MFS204SKHC



Straight Fittings - Quick
Connect Style
GVM5



Angled Fittings - Quick
Connect Style
WVM5



Plug-in connector Straight Ca-
ble 5m - Socket M8 (female)
KAG500



Plug-in connector Angled Ca-
ble 5m - Socket M8 (female)
KAW500



Inductive proximity switch
- Cable 5 m
NJ8-E2



Inductive proximity
switch - Connector M8
NJ8-E2S



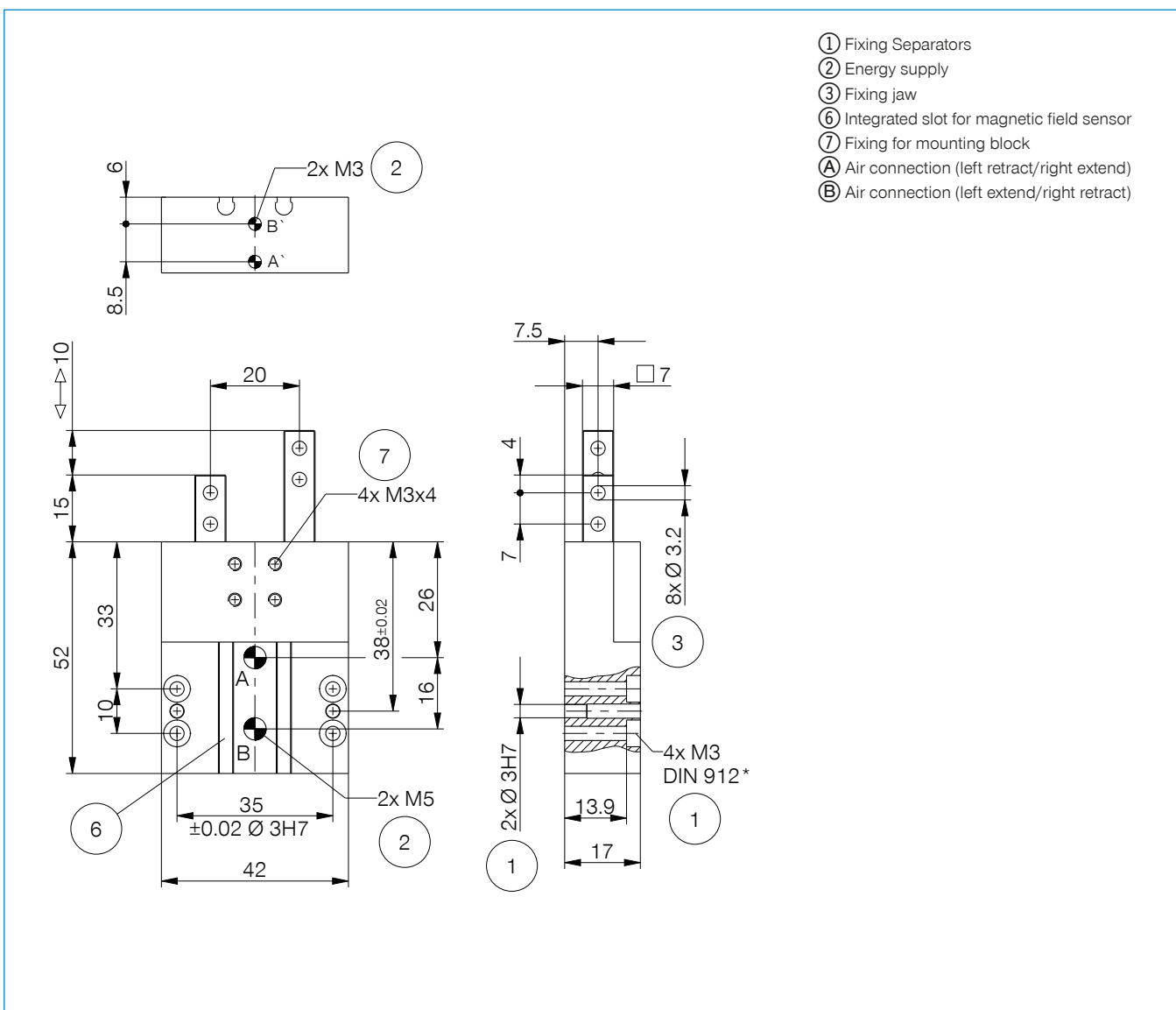
Mounting block

KB8-20

Order no.	VE10-B
Stroke per tapped rod [mm]	10
Force in retract [N]	30
Force in extend [N]	40
Self limitation	mechanical
Cycle count [s]	0.04
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	3
Weight [kg]	0.12

*All data measured at 6 bar

► Technical Data*



SEPARATOR

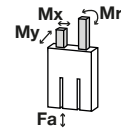
SIZE VE14

▶ PRODUCT SPECIFICATIONS



▶ Forces and moments

Shows static forces and torques that may be present on the plunger



Mr [Nm]	5
My [Nm]	5
Mx [Nm]	5
Fa [N]	100

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Angled Cable 5 m
MFS103KHC



Magnetic field sensor Angled
Cable 0,3 m - Connector M8
MFS103SKHC



Magnetic field sensor
Straight Cable 5 m
MFS204KHC



Magnetic field sensor Straight
Cable 0,3 m - Connector M8
MFS204SKHC



Straight Fittings - Quick
Connect Style
GVM5



Angled Fittings - Quick
Connect Style
WVM5



Plug-in connector Straight Ca-
ble 5m - Socket M8 (female)
KAG500



Plug-in connector Angled Ca-
ble 5m - Socket M8 (female)
KAW500



Inductive proximity switch
- Cable 5 m
NJ8-E2



Inductive proximity
switch - Connector M8
NJ8-E2S

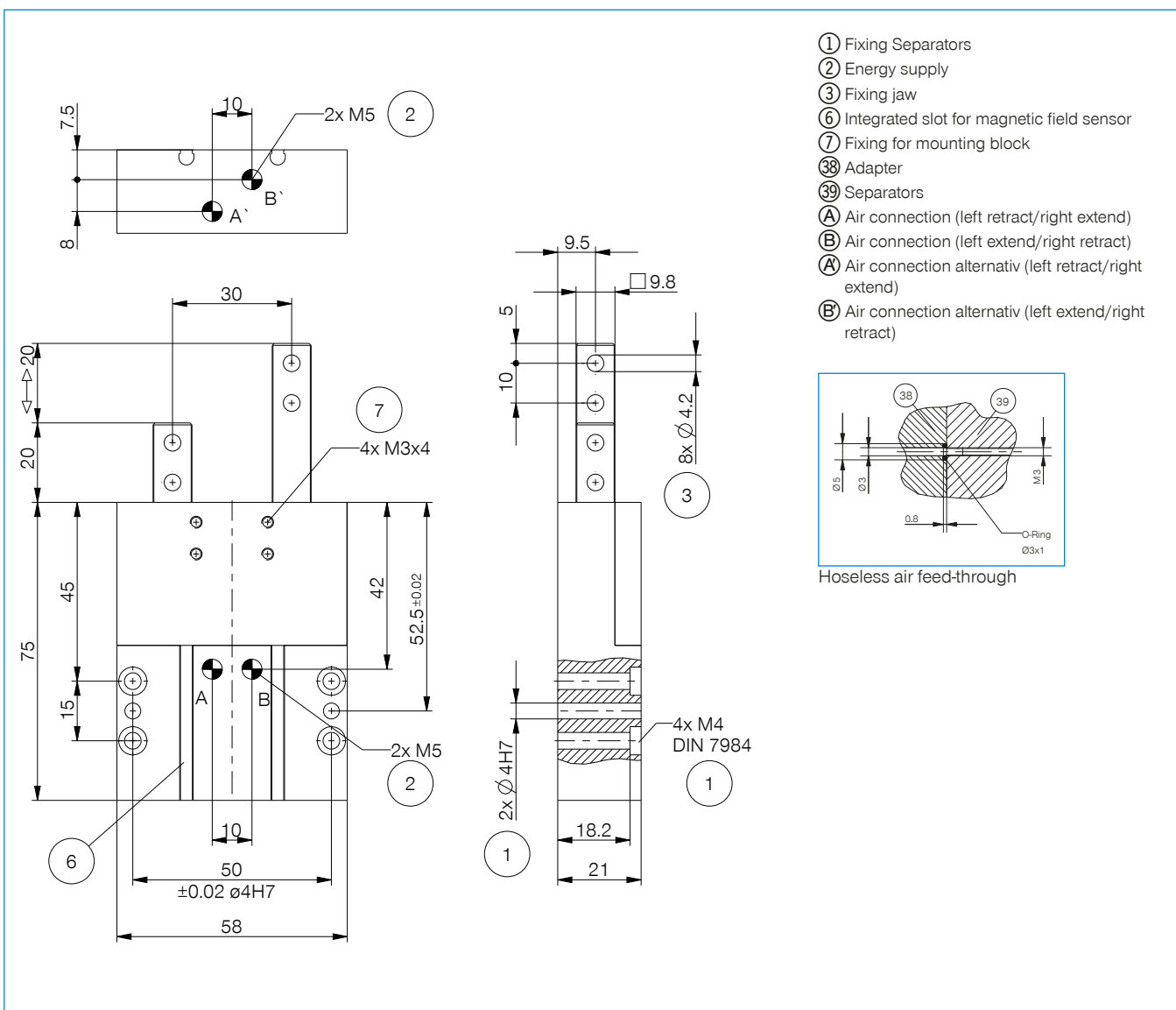


Mounting block

KB8-20

Order no.	Technical Data*
Stroke per tapped rod [mm]	20
Force in retract [N]	65
Force in extend [N]	80
Self limitation	mechanical
Cycle count [s]	0.05
Repetition accuracy +/- [mm]	0.1
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	11
Weight [kg]	0.3

*All data measured at 6 bar



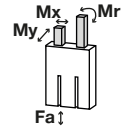
SEPARATOR SIZE VE15

▶ PRODUCT SPECIFICATIONS



▶ Forces and moments

Shows static forces and torques that may be present on the plunger



Mr [Nm]	5
My [Nm]	5
Mx [Nm]	5
Fa [N]	100

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Angled Cable 5 m
MFS103KHC



Magnetic field sensor Angled
Cable 0,3 m - Connector M8
MFS103SKHC



Magnetic field sensor
Straight Cable 5 m
MFS204KHC



Magnetic field sensor Straight
Cable 0,3 m - Connector M8
MFS204SKHC



Straight Fittings - Quick
Connect Style
GVM5



Angled Fittings - Quick
Connect Style
WVM5



Plug-in connector Straight Ca-
ble 5m - Socket M8 (female)
KAG500



Plug-in connector Angled Ca-
ble 5m - Socket M8 (female)
KAW500



Inductive proximity switch
- Cable 5 m
NJ8-E2



Inductive proximity
switch - Connector M8
NJ8-E2S

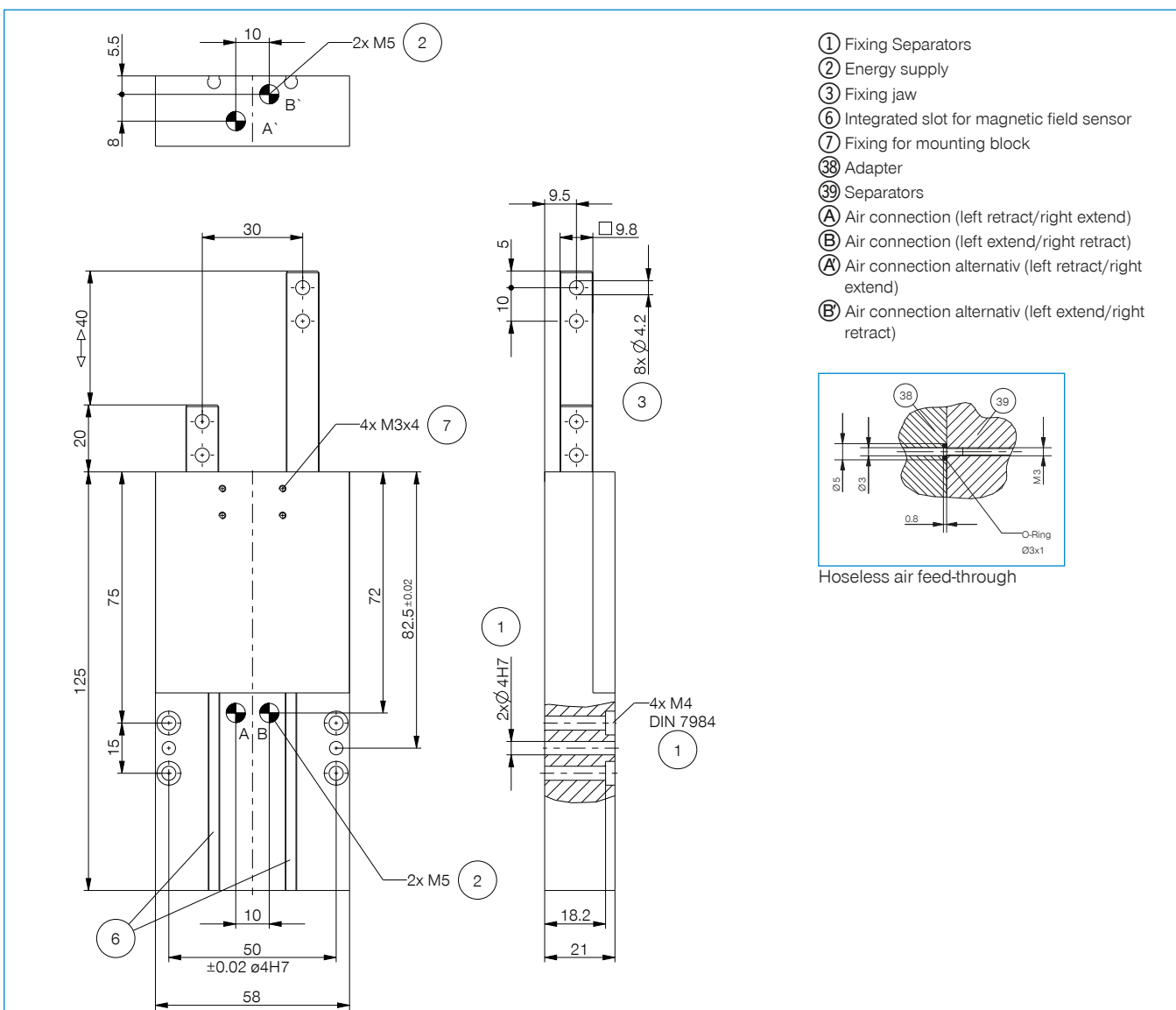


Mounting block

KB8-20

Order no.	Technical Data*
Stroke per tapped rod [mm]	40
Force in retract [N]	65
Force in extend [N]	80
Self limitation	mechanical
Cycle count [s]	0.1
Repetition accuracy +/- [mm]	0.1
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	23
Weight [kg]	0.48

*All data measured at 6 bar



SEPARATOR

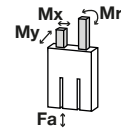
SIZE VE22

▶ PRODUCT SPECIFICATIONS



▶ Forces and moments

Shows static forces and torques that may be present on the plunger



Mr [Nm]	9
My [Nm]	9
Mx [Nm]	9
Fa [N]	180

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Angled Cable 5 m
MFS103KHC



Magnetic field sensor Angled
Cable 0,3 m - Connector M8
MFS103SKHC



Magnetic field sensor
Straight Cable 5 m
MFS204KHC



Magnetic field sensor Straight
Cable 0,3 m - Connector M8
MFS204SKHC



Straight Fittings - Quick
Connect Style
GVM5



Angled Fittings - Quick
Connect Style
WVM5



Plug-in connector Straight Ca-
ble 5m - Socket M8 (female)
KAG500



Plug-in connector Angled Ca-
ble 5m - Socket M8 (female)
KAW500



Inductive proximity switch
- Cable 5 m
NJ8-E2



Inductive proximity
switch - Connector M8
NJ8-E2S

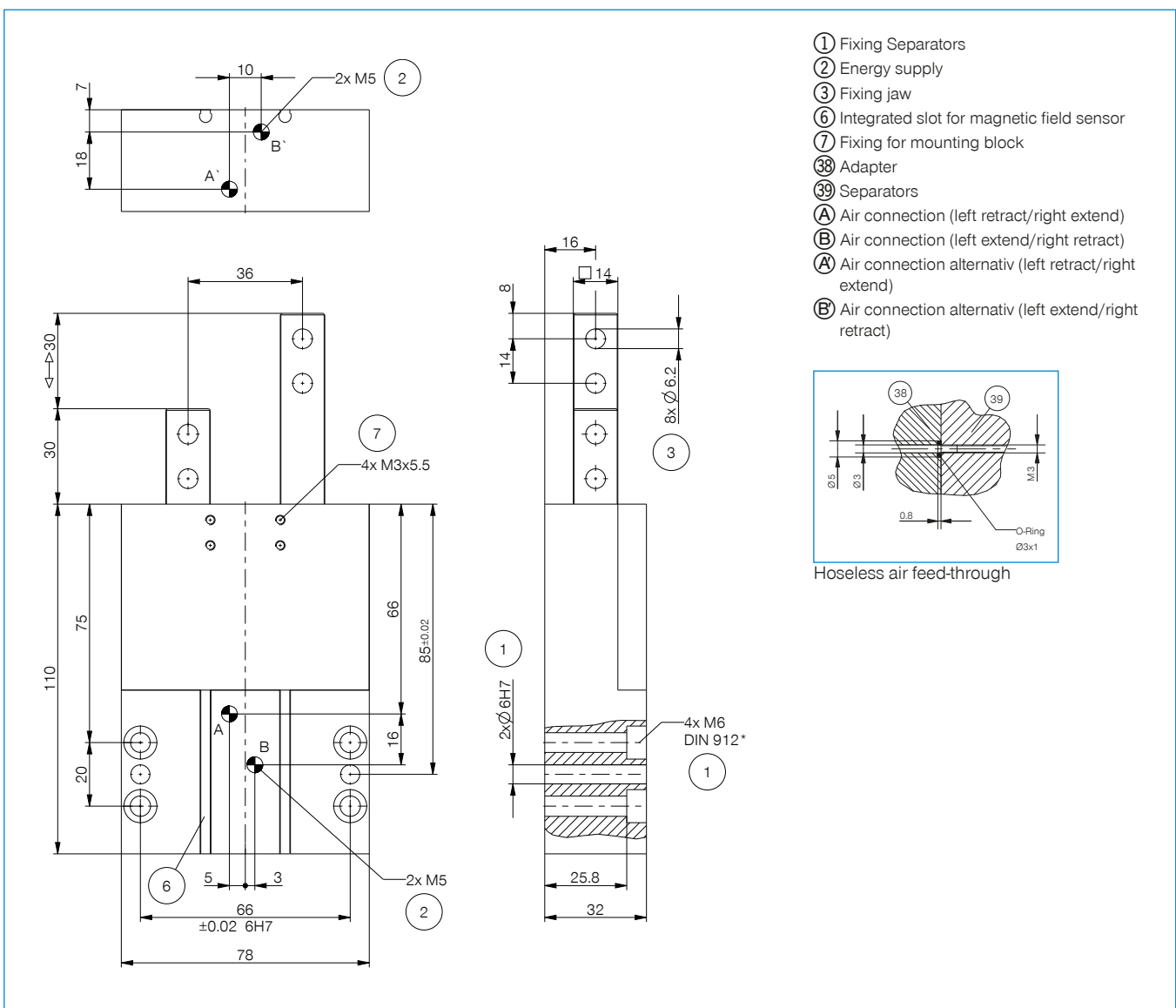


Mounting block

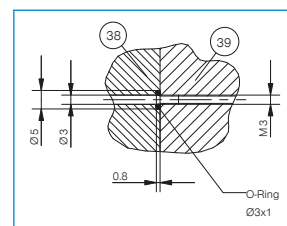
KB8-20

Order no.	▶ Technical Data*
Stroke per tapped rod [mm]	30
Force in retract [N]	170
Force in extend [N]	220
Self limitation	mechanical
Cycle count [s]	0.08
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	42
Weight [kg]	0.915

*All data measured at 6 bar



- ① Fixing Separators
- ② Energy supply
- ③ Fixing jaw
- ⑥ Integrated slot for magnetic field sensor
- ⑦ Fixing for mounting block
- ③⑧ Adapter
- ③⑨ Separators
- Ⓐ Air connection (left retract/right extend)
- Ⓑ Air connection (left extend/right retract)
- Ⓐ Air connection alternativ (left retract/right extend)
- Ⓑ Air connection alternativ (left extend/right retract)



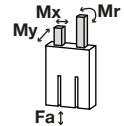
SEPARATOR SIZE VE23

▶ PRODUCT SPECIFICATIONS



▶ Forces and moments

Shows static forces and torques that may be present on the plunger



Mr [Nm]	9
My [Nm]	9
Mx [Nm]	9
Fa [N]	180

▶ RECOMMENDED ACCESSORIES



Magnetic field sensor
Angled Cable 5 m
MFS103KHC



Magnetic field sensor Angled
Cable 0,3 m - Connector M8
MFS103SKHC



Magnetic field sensor
Straight Cable 5 m
MFS204KHC



Magnetic field sensor Straight
Cable 0,3 m - Connector M8
MFS204SKHC



Straight Fittings - Quick
Connect Style
GVM5



Angled Fittings - Quick
Connect Style
WVM5



Plug-in connector Straight Ca-
ble 5m - Socket M8 (female)
KAG500



Plug-in connector Angled Ca-
ble 5m - Socket M8 (female)
KAW500



Inductive proximity switch
- Cable 5 m
NJ8-E2



Inductive proximity
switch - Connector M8
NJ8-E2S

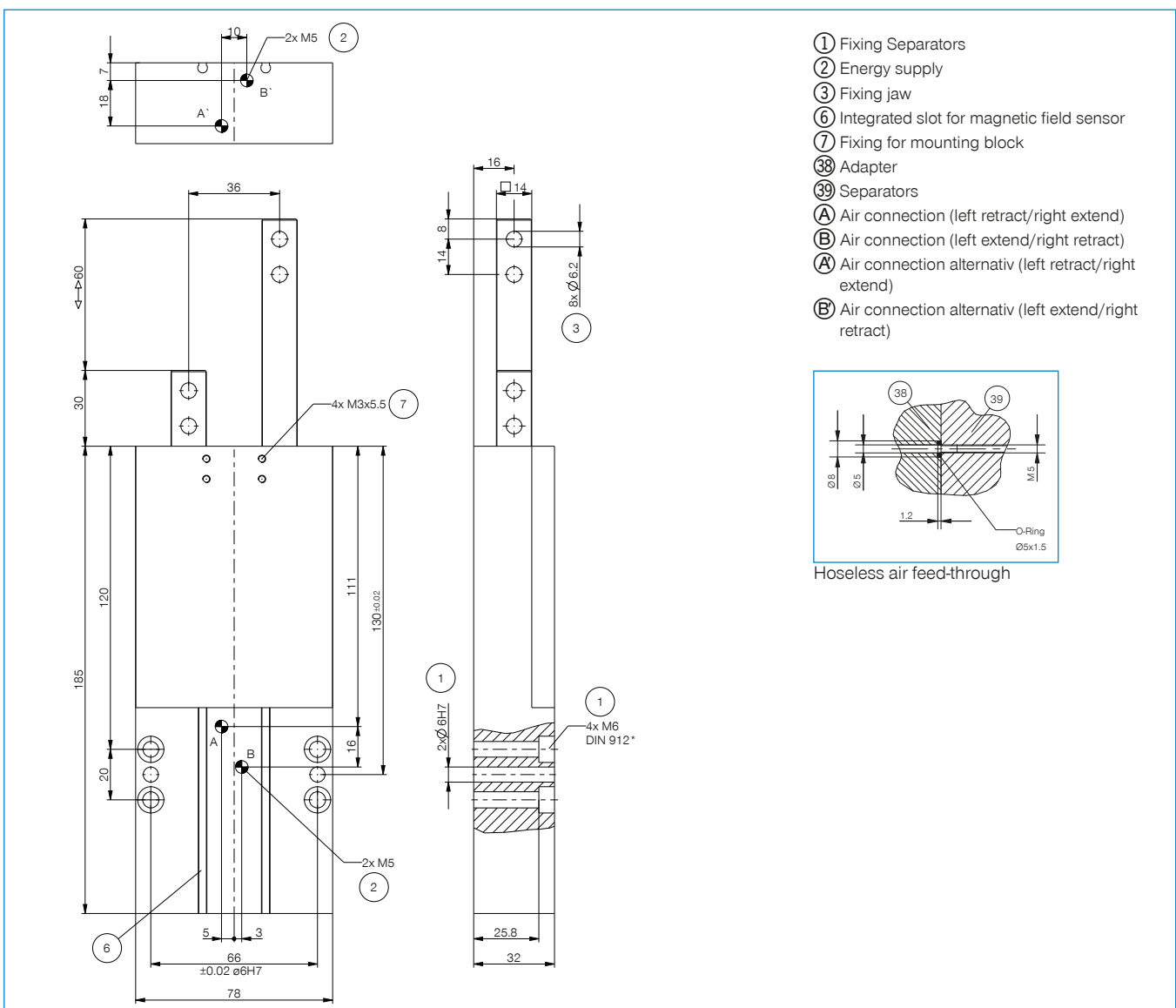


Mounting block

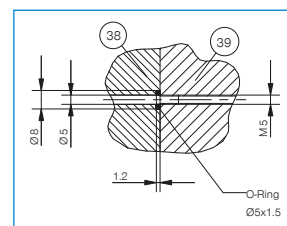
KB8-20

Order no.	Technical Data*
Stroke per tapped rod [mm]	60
Force in retract [N]	170
Force in extend [N]	220
Self limitation	mechanical
Cycle count [s]	0.15
Repetition accuracy +/- [mm]	0.05
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Operating temperature min. [°C]	5
Operating temperature max. [°C]	80
Air volume per cycle [cm ³]	83
Weight [kg]	1.5

*All data measured at 6 bar



- ① Fixing Separators
- ② Energy supply
- ③ Fixing jaw
- ⑥ Integrated slot for magnetic field sensor
- ⑦ Fixing for mounting block
- ③⑧ Adapter
- ③⑨ Separators
- Ⓐ Air connection (left retract/right extend)
- Ⓑ Air connection (left extend/right retract)
- Ⓐ Air connection alternativ (left retract/right extend)
- Ⓑ Air connection alternativ (left extend/right retract)



Hoseless air feed-through

SEPARATORS

OVERVIEW OF SERIES



▶ ELECTRICAL



Series VEE9200

810

SEPARATORS

SERIES VEE9200

▶ PRODUCT ADVANTAGES

SOMMER
automatic **S**



▶ 250 cycles per minute

If speed is the key, nothing beats this unit. This lets you increase your component output and lower your unit costs,

▶ Saving energy with pulse control

You only have to supply current briefly when retracting and extending the plunger. No energy is required at the end positions

▶ Plug and Play

Reduce your design and programming effort to a minimum with the integrated control system and the 2-position query

▶ THE BEST PRODUCT FOR YOUR APPLICATION



▶ Our products love the challenge!

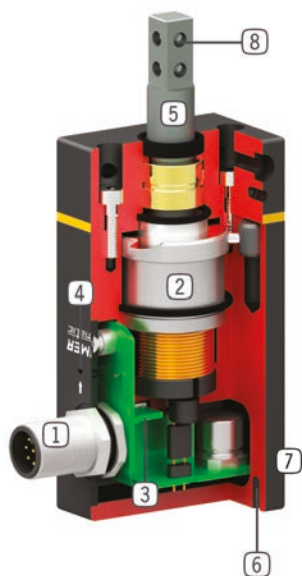
Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities:

Find the best product for your specific use:

www.zimmer-group.com



► BENEFITS IN DETAIL



- ① **Energy supply**
 - standardized interface M12 round connector
- ② **Drive**
 - via Pot magnet and coil bobbin according to the coil system principle
 - energy consumption only at impulse <25 ms
- ③ **Position sensing**
 - integrated Hallsensor
 - 2 positions monitorable
- ④ **Status control**
 - optical LED position display
- ⑤ **Tapped rod**
 - Aluminium hardcoated
- ⑥ **Mounting and positioning**
 - mounting possible from several sides for versatile positioning
- ⑦ **Robust, lightweight housing**
 - hard coated aluminium alloy
- ⑧ **Mounting**
 - individual separator finger mounting

► FURTHER INFORMATION IS AVAILABLE ONLINE



► Technical Information

All information just a click away at: www.zimmer-group.com
Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product.
Quick, clear and always up-to-date.



SEPARATOR

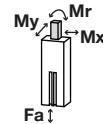
SIZE VEE9200

▶ PRODUCT SPECIFICATIONS



▶ Forces and moments

Shows static forces and torques that may be present on the plunger



Mr [Nm]	0.3
My [Nm]	0.3
Mx [Nm]	0.3
Fa [N]	50

▶ RECOMMENDED ACCESSORIES



Plug-in Connector Angled
Cable 10 m - Female M12

KAW1000B8



Plug-in Connector
Straight Cable 10 m -
Female M12

KAG1000B8

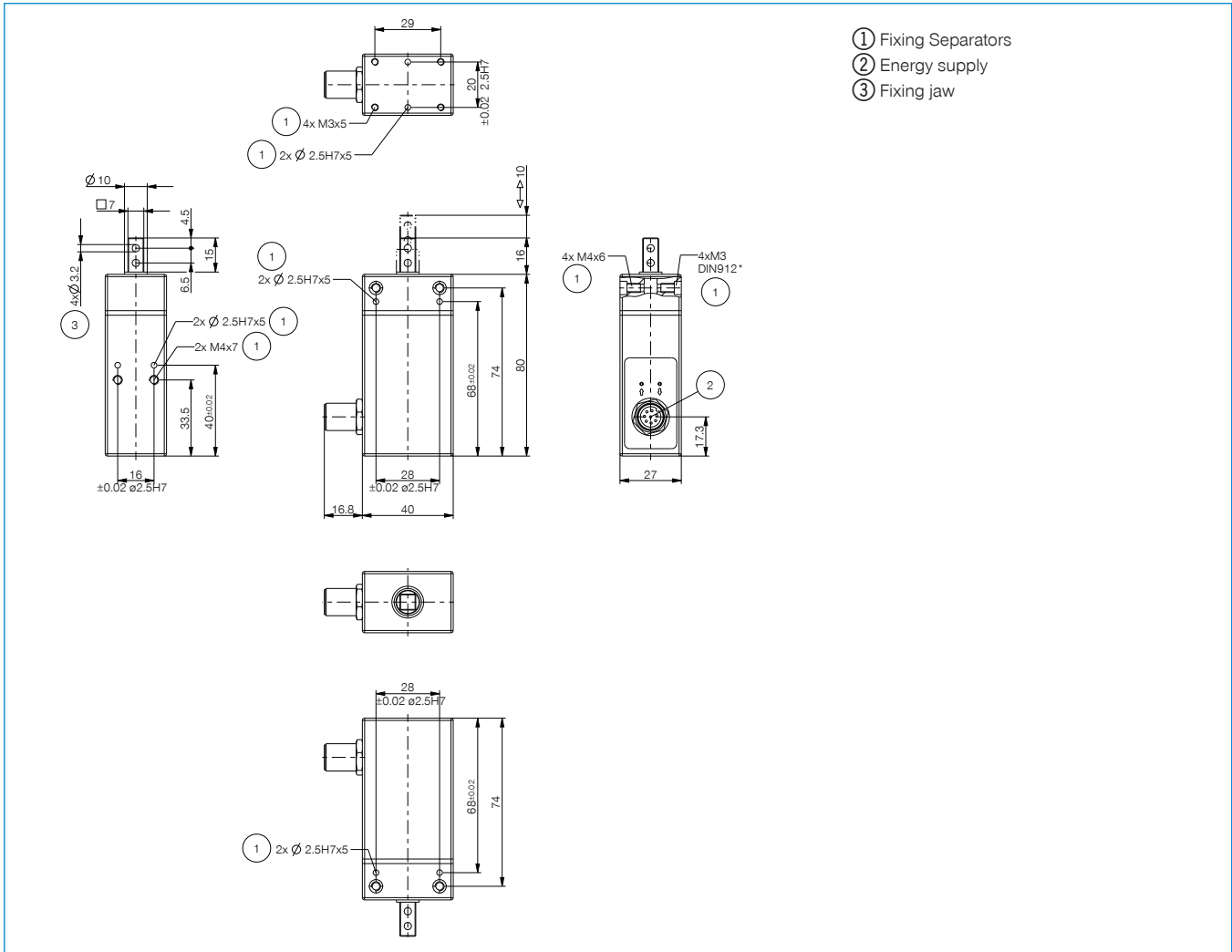


Busbox
see page 839

ZUBBOX9000-01

Order no.	► Technical Data*	
	VEE9210	VEE9220
Permissible unevenness of mounting surface [mm]	<0.02	<0.02
Fixing for separator / Tightening torque	M3 / 1.5	M3 / 1.5
Replacement accuracy [mm]	<0,2	<0,2
Stroke [mm]	10	20
Force in retract [N]	10	8
Force in extend [N]	10	8
Permanent operation cycle count max. [cycle/min]	200	200
Cycle count max. [cycle/min]	250	250
Operating time [ms]	<18	<30
Repetition accuracy +/- [mm]	0.1	0.1
Weight of tappet extension, max. [g]	20	20
Fixing for extension piece / Tightening torque [Nm]	M3 / 1.5	M3 / 1.5
Pulse time in retract [ms]	25	35
Pulse time in extend [ms]	25	35
Debounce time [ms]	10	10
Current consumption per pulse max. [A]	5	5
Current consumption in a stand-by mode [A]	0.02	0.02
Protection to IEC 60529	IP40	IP40
Certification	CE	CE
Noise level [db(A)]	<70	<70
Operating temperature [°C]	10 ... +50	10 ... +50
Weight [kg]	0.24	0.30

*All data measured at 6 bar



BALL JOINTS

SERIES KG

▶ PRODUCT ADVANTAGES



SOMMER
automatic **S**

▶ Lockable displacement position

Be flexible in your application, customise the handling to your workpiece and lock the displacement position with process reliability

▶ Large locating flange

The large mounting surface simplifies your design and allows secure attachment of add-on components

▶ Steel design

The highest force and torque measurement enables flexible for maximum dynamics

▶ THE BEST PRODUCT FOR YOUR APPLICATION



▶ Our products love the challenge!

Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities:

Find the best product for your specific use:

www.zimmer-group.com

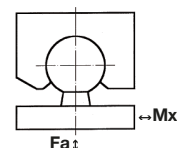


▶ PRODUCT SPECIFICATIONS

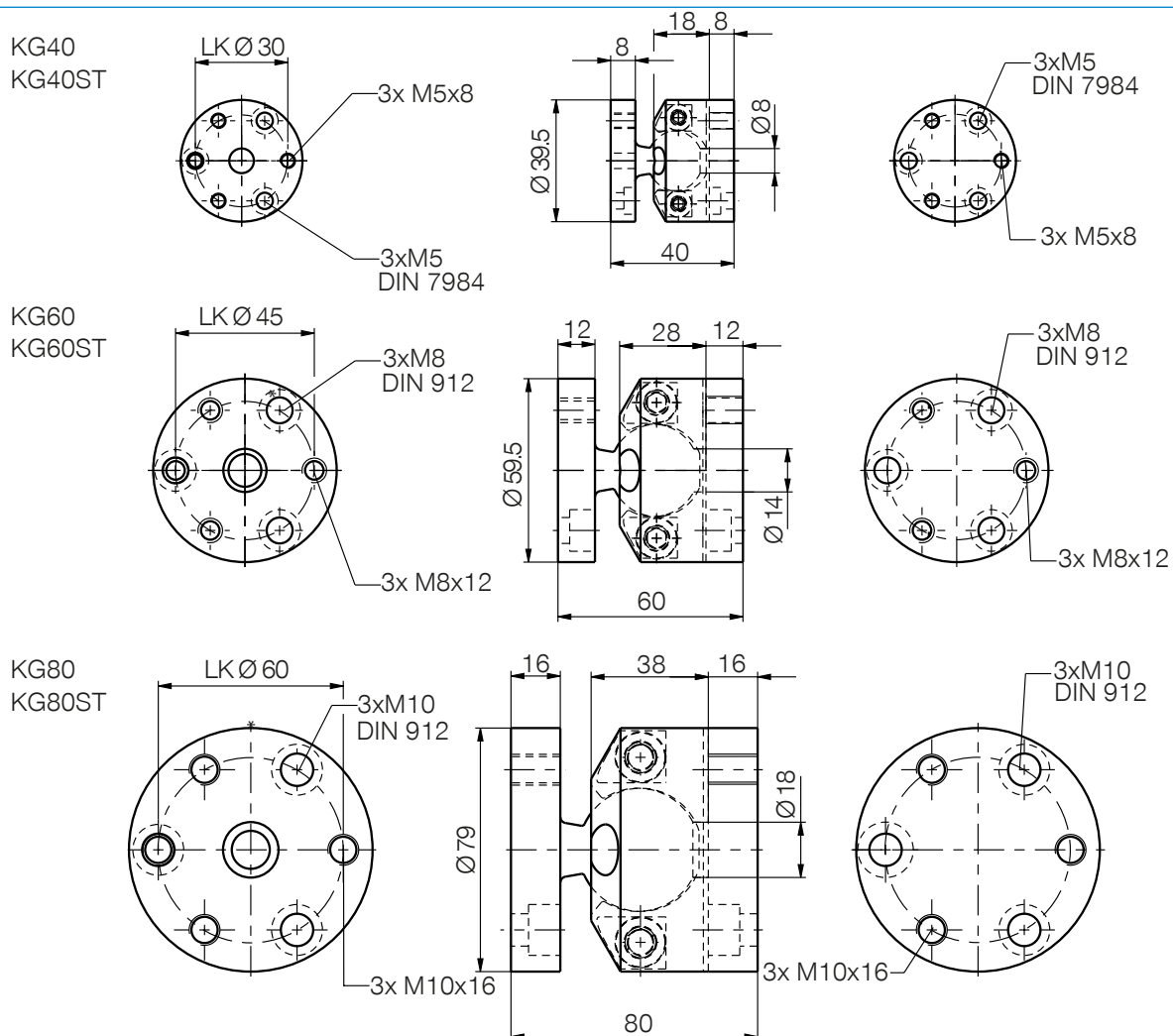











▶ Forces and moments

Shows static forces and torques which may impact on the ball joint



Order no.	▶ Technical Data					
	KG40	KG40ST	KG60	KG60ST	KG80	KG80ST
Swivel angle [°]	30	30	30	30	30	30
Mx [Nm]	18	18	55	55	124	124
Fa [N]	7500	18000	15000	45000	28000	70000
Weight [kg]	0.1	0.3	0.3	0.9	0.8	2.3



▶ MAGNETIC FIELD SENSORS		
	Series MFS	818
	Series MFSP	819
▶ INDUCTIVE PROXIMITY SWITCHES		
	Series NJ	820
▶ SENSOR CABLES		
	Series KAW	822
	Series KAG	822
	Series S	823
▶ STOP STROKE ADJUSTMENT SCREWS		
	Series AI	824
	Series AO	824
▶ HOLDERS		
	Series KB	825

SENSORS AND HOLDERS

MAGNETIC FIELD SENSORS

► SERIES MFS - MAGNETIC FIELD SENSORS



- For monitoring piston position on pneumatic cylinders
- Non-contacting and wear-free for long service life

► Technical Data

Order no.	MFS103KHC	MFS103SKHC
Assured switching field strength [kA/m]	<2	<2
Hysteresis of %	<45	<45
Supply voltage [V DC]	10...30	10...30
Voltage drop [V]	<2	<2
Load current capacity [mA]	100	100
Current consumption max. [mA]	<8	<8
Protected against polarity reversal	Yes	Yes
Short-circuit-proof	Yes	Yes
Ambient temperature range [°C]	-25 ... +70	-25 ... +70
Protection to IEC 60529	IP67	IP67
Housing Material	LCP	LCP
Fixing types	Cable	Cable/Connector M8
Cable length [m]	5	0.3
Certification	CE	CE

Get all needed parts in just one sensor-set!

The sets include all sensors, cables and plugs for trouble-free installation position sensing of a gripper with integrated magnetic field sensors.

Set 1: Order no.: MFS103S-01

consisting of:

- 2x Magnetic Field Sensors: MFS103SKHC
- 2x Plug-in Connector: KAG500
- 2x Plug-in Connector: S8-G-3

Set 2: Order no.: MFS103S-02

consisting of:

- 2x Magnetic Field Sensors: MFS103SKHC
- 1x Y-Plug-in Connector: S8-Y-4
- 1x Plug-in Connector: KAG500B4
- 1x Plug-in Connector: S12-G-4

► SERIES MFS - MAGNETIC FIELD SENSORS



- For monitoring piston position on pneumatic cylinders
- Non-contacting and wear-free for long service life

► Technical Data

Order no.	MFS204KHC	MFS204SKHC
Assured switching field strength [kA/m]	2	2
Hysteresis of %	<45	<45
Supply voltage [V DC]	10...30	10...30
Voltage drop [V]	<2	<2
Load current capacity [mA]	100	100
Current consumption max. [mA]	<12	<12
Protected against polarity reversal	Yes	Yes
Short-circuit-proof	Yes	Yes
Ambient temperature range [°C]	-25 ... +70	-25 ... +70
Protection to IEC 60529	IP67	IP67
Housing Material	LCP	LCP
Fixing types	Cable	Cable/Connector M8
Cable length [m]	5	0.3
Certification	CE	CE

Get all needed parts in just one sensor-set!

The sets include all sensors, cables and plugs for trouble-free installation position sensing of a gripper with integrated magnetic field sensors.

Set 3: Order no.: MFS204S-01

consisting of:

- 2x Magnetic Field Sensors: MFS204SKHC
- 2x Plug-in Connector: KAG500
- 2x Plug-in Connector: S8-G-3

Set 4: Order no.: MFS204S-02

consisting of:

- 2x Magnetic Field Sensors: MFS204SKHC
- 1x Y-Plug-in Connector: S8-Y-4
- 1x Plug-in Connector: KAG500B4
- 1x Plug-in Connector: S12-G-4

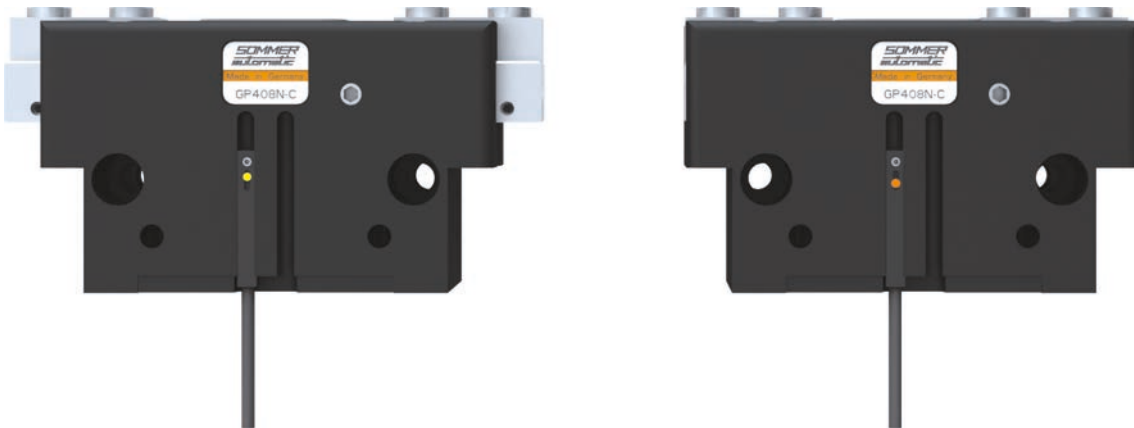
► SERIES MFSP - MAGNETIC FIELD SENSORS



- Two freely programmable switching points
- Straightforward teach-in procedure
- Reduced installation and wiring requirements

► Technical Data

Order no.	MFSP2KHC-01	MFSP2SKHC-01
Supply voltage [V DC]	10...30	10...30
Voltage drop [V]	<2	<2
Load current capacity [mA]	<50	<50
Current consumption max. [mA]	<10	<10
Protected against polarity reversal	Yes	Yes
Short-circuit-proof	Yes	Yes
Operating temperature [°C]	-20 ... 80	-20 ... 80
Protection to IEC 60529	IP67	IP67
Housing Material	GV-5H (PA)	GV-5H (PA)
Fixing types	Cable	Cable/Connector M8
Cable length [m]	5	0.3
Certification	CE	CE



SENSORS AND HOLDERS

INDUCTIVE PROXIMITY SWITCHES

► SERIES NJ - INDUCTIVE PROXIMITY SWITCHES



- Contact-free, wear-free and short-circuit proof
- Available starting at 3 mm Ø

► Technical Data

Order no.	NJ3-E2	NJ3-E2SK	NJ4-E2	NJ4-E2SK	NJ5-E2	NJ5-E2SK
Sensor-Ø [mm]	3	3	4	4	5	5
Installation type	flush	flush	flush	flush	flush	flush
Rated operating distance Sn [mm]	1	1	0.8	0.8	0.8	0.8
Assured switching distance Sa [mm]	0...0,8	0...0,8	0...0,6	0...0,8	0...0,6	0...0,6
Supply voltage [V DC]	10...30	10...30	10...30	10...30	10...30	10...30
Load current capacity [mA]	100	100	100	100	100	100
Current consumption max. [mA]	<12	<12	<12	<12	<12	<12
Protected against polarity reversal	Yes	Yes	Yes	Yes	Yes	Yes
Short-circuit-proof	No	No	Yes	Yes	Yes	Yes
Repetition accuracy [%]	<5	<5	<5	<5	<5	<5
Ambient temperature range [°C]	-25 ... +70	-25 ... +70	-25 ... +70	-25 ... +70	-25 ... +70	-25 ... +70
Switching frequency [Hz]	5000	5000	3000	3000	3000	3000
Protection to IEC 60529	IP67	IP67	IP67	IP67	IP67	IP67
Housing Material	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
Active surface material	POM	POM	POM	POM	POM	POM
Fixing types	Cable	Cable/Connector M8	Cable	Cable/Connector M8	Cable	Cable/Connector M8
Cable length [m]	5	0.3	5	0.3	5	0.3
Certification	CE	CE	CE	CE	CE	CE

► Technical Data

Order no.	NJ6.5-E2-01	NJ6.5-E2-02	NJ6.5-E2S	NJ8-E2	NJ8-E2-01
Sensor-Ø [mm]	6.5	6.5	6.5	8	8
Installation type	flush	flush	flush	flush	flush
Rated operating distance Sn [mm]	1.5	1.5	1.5	1.5	2
Assured switching distance Sa [mm]	0...1,2	0...1,2	0...1,2	0...1,2	0...1,6
Supply voltage [V DC]	10...30	10...30	10...30	10...30	10...30
Load current capacity [mA]	200	200	200	200	200
Current consumption max. [mA]	<25	<25	<25	<8	<25
Protected against polarity reversal	Yes	Yes	Yes	Yes	Yes
Short-circuit-proof	Yes	Yes	Yes	Yes	Yes
Repetition accuracy [%]	<5	<5	<5	<5	<5
Ambient temperature range [°C]	-25 ... +70	-25 ... +70	-25 ... +70	-25 ... +70	-25 ... +70
Switching frequency [Hz]	1500	1500	1500	3000	1000
Protection to IEC 60529	IP67	IP67	IP67	IP67	IP67
Housing Material	Stainless steel	CuZn nickel plated	Stainless steel	Stainless steel	Stainless steel
Active surface material	PBT	PBT	PBT	PBT	PBT
Fixing types	Cable	Cable	Connector M8	Cable/Connector M8	Cable
Cable length [m]	5	5		5	5
Certification	CE	CE	CE	CE	CE

Order no.	► Technical Data			
	NJ8-E2S	NJ8-E2S-05	NJ12-E2	NJ12-E2S
Sensor-Ø [mm]	8	8	12	12
Installation type	flush	flush	flush	flush
Rated operating distance Sn [mm]	2	1.5	2	2
Assured switching distance Sa [mm]	0...1,6	0...1,2	0...1,6	0...1,6
Supply voltage [V DC]	10...30	10...30	10...30	10...30
Load current capacity [mA]	200	200	200	130
Current consumption max. [mA]	<25	<8	<12	<25
Protected against polarity reversal	Yes	Yes	Yes	Yes
Short-circuit-proof	Yes	Yes	Yes	Yes
Repetition accuracy [%]	<5	<5	<5	<5
Ambient temperature range [°C]	-25 ... +70	-25 ... +70	-25 ... +70	-25 ... +70
Switching frequency [Hz]	1000	3000	5000	1000
Protection to IEC 60529	IP67	IP67	IP67	IP67
Housing Material	Stainless steel	Stainless steel	CuZn nickel plated	CuZn nickel plated
Active surface material	PBT	PBT	PBT	PA12
Fixing types	Connector M8	Connector M8	Cable	Connector M8
Cable length [m]			5	
Certification	CE	CE	CE	CE

SENSORS AND HOLDERS

SENSOR CABLES

► SERIES KAW - PLUG-IN CONNECTOR ANGLED WITH CABLE



- Plug-in Connector angled with Cable
- with 3 and 4 poles, with M8 or M12 connection thread size
- Halogen, silicone and PVC free
- Suitable for drag chains (10xØ)

► Technical Data

Order no.	KAW500	KAW500-12	KAW500S4	KAW500B4	KAW1000B8
Fixing thread	M8	M12	M8	M8	M8
No. of contacts	3	3	4	4	8
Cable length [m]	5	5	5	5	10
Cable-Ø [mm]	4.3	4.3	4.7	4.7	4.7
Cable sheath material	PUR	PUR	PUR	PUR	PUR
Bend radius	10xØ	10xØ	10xØ	10xØ	10xØ
Protection to IEC 60529	IP67	IP67	IP67	IP67	IP67
Connection type			Male	Female	Female
Version [Type]	Angle	Angle	Angle	Angle	Angle

► SERIES KAG - PLUG-IN CONNECTOR STRAGHT WITH CABLE



- Plug-in Connector angled with Cable
- with 3 and 4 poles, with M8 or M12 connection thread size
- Halogen, silicone and PVC free
- Suitable for drag chains (10xØ)

► Technical Data

Order no.	KAG500	KAG500-02	KAG500S4	KAG500B4	KAG1000B8
Fixing thread	M8	M12	M8	M8	M8
No. of contacts	3	3	4	4	8
Cable length [m]	5	5	5	5	10
Cable-Ø [mm]	4.3	4.3	4.7	4.7	4.7
Cable sheath material	PUR	PUR	PUR	PUR	PUR
Bend radius	10xØ	10xØ	10xØ	10xØ	10xØ
Protection to IEC 60529	IP67	IP67	IP67	IP67	IP67
Connection type			Male	Female	Female
Version [Type]	Straight	Straight	Straight	Straight	Straight

► SERIES S - PLUG-IN CONNECTOR CUSTOMIZABLE WITH SCREW-CUT-TERMINAL



- Plug-in connector for flexible fabrication on-site
- Time-saving fabrication without stripping insulation from individual wires

► Technical Data

Order no.	S8-G-3	S8-G-4	B8-G-4	S12-G-3	S12-G-4	S12-G-8
Fixing types	Connector	Connector	Female	Connector	Connector	Connector
Fixing thread	M8	M8	M8	M12	M12	M12
No. of contacts	3	4	4	3	4	8
Protection to IEC 60529	IP67	IP67	IP67	IP67	IP67	IP67
Version [Type]	Straight	Straight	Straight	Straight	Straight	Straight

► SERIES S - PLUG-IN CONNECTOR CUSTOMIZABLE WITH SOLDER CONNECTION



- Plug-in connector for flexible fabrication on-site

► Technical Data

Order no.	S8-W-3	S8-W-4	S12-W-8	B8-W-4
Fixing types	Connector	Connector	Connector	Female
Fixing thread	M8	M8	M12	M8
No. of contacts	3	4	8	4
Protection to IEC 60529	IP67	IP67	IP67	IP67
Version [Type]	Angle	Angle	Angle	Angle

► SERIES S - Y-PLUG-IN CONNECTOR



► Technical Data

Order no.	B8-Y-4	S8-Y-4
Fixing types	Plug / socket / plug	Socket / plug / socket
Fixing thread	M8	M8
No. of contacts	3 / 4 / 3	3 / 4 / 3
Protection to IEC 60529	IP67	IP67
Version [Type]	Y-Plug-in Connector	Y-Plug-in Connector

SENSORS AND HOLDERS

STOP STROKE ADJUSTMENT SCREWS

► SERIES AI - STOP STROKE ADJUSTMENT SCREWS



- Stop stroke adjustment screw for M12 sensor mount
- Stop stroke adjustment screw with customizable sensor mount

Order no.	► Technical Data		
	AI-M8X1-38	AI-M8X1-53	AI-M10X1-70
Fixing thread	M8X1	M8X1	M10X1
to match for Sensors-Ø [mm]	M12X1	M12X1	M12X1

► SERIES AO - STOP STROKE ADJUSTMENT SCREWS



- Stop stroke adjustment screw with customizable sensor mount

Order no.	► Technical Data		
	AO-M8X1-38	AO-M8X1-53	AO-M10X1-70
Fixing thread	M8X1	M8X1	M10X1
to match for Sensors-Ø [mm]	customizable	customizable	customizable

SENSORS & HOLDERS

HOLDERS

► SERIES KB - MOUNTING BLOCK



- Mounting for inductive proximity switch
- Available starting at \varnothing 3 mm

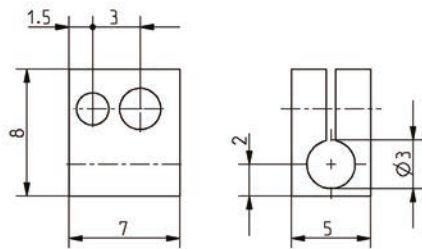
► Technical Data

Order no.

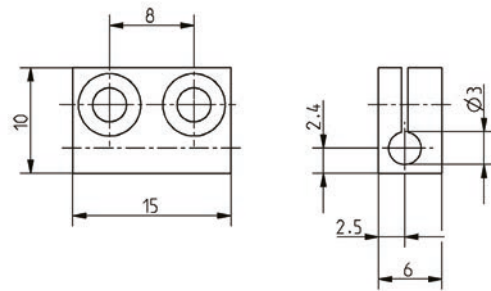
to match for Sensors- \varnothing [mm]

KB3	KB3M	KB4	KB5	KB6.5	KB8	KB12
3	3	4	5	6,5	8	12

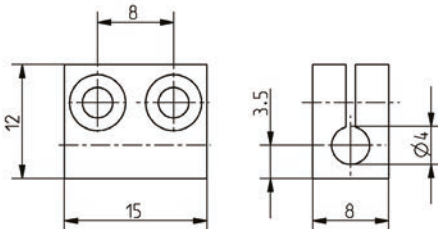
KB3M



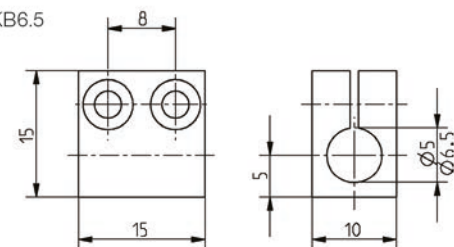
KB3



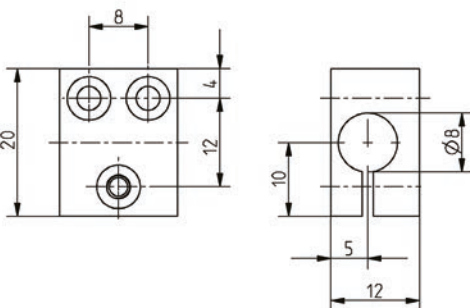
KB4



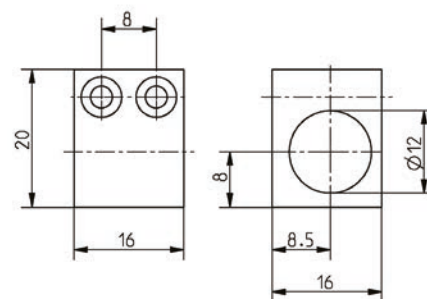
KB5/KB6.5



KB8



KB12



VALVES, FITTINGS, ACCESSORIES

OVERVIEW OF SERIES



▶ FITTINGS



Series GV

828



Series WV

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▶ VALVES



Series DRV

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Series DSV

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Series DEV

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▶ JAW ACCESSORIES



Series DG

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Series GR

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Series J

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Series GU

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Series GU800

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▶ JAW EXTENSIONS



Series GBV

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▶ ROTARY DISTRIBUTORS



Series DV

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▶ BUSBOX SEE PAGE 839



Series ZUBBOX9000

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VALVES, FITTINGS, ACCESSORIES

FITTINGS

► SERIES GV - STRAIGHT FITTINGS - BARB-STYLE CONNECTION



- For assembling with hose clips
- Straight version

Order no.	► Technical Data				
	GVM3	GV1-8X5ID	GV1-8X6ID	GV1-8X8ID	GV1-4X8ID
Fixing thread	M3	1/8"	1/8"	1/8"	1/4"
Inside-Ø for hose [mm]	3	5	6	8	8
Length [mm]	9.9	30	30	30	32.5

Order no.	► Technical Data			
	GV1-4X10ID	GV3-8X13ID	GV1-2X13ID	GV1-2X16ID
Fixing thread	1/4"	3/8"	1/2"	1/2"
Inside-Ø for hose [mm]	10	13	13	16
Length [mm]	32.5	33.5	35	39.5

► SERIES GV - STRAIGHT FITTINGS - QUICK CONNECT STYLE



- Cost reduction through quick assembly and disassembly
- Straight version

Order no.	► Technical Data					
	GVM5	GV1-8X4	GV1-8X6	GV1-8X8	GV1-4X6	GV1-4X8
Fixing thread	M5	1/8"	1/8"	1/8"	1/4"	1/4"
Outside-Ø for hose [mm]	4	4	6	8	6	8
Length [mm]	20	19	20	25	21.5	23

► **SERIES WV - ANGLED FITTING, BARB STYLE CONNECTION**



- For assembling with hose clips
- Angled version

► **Technical Data**

Order no.	WVM3
Fixing thread	M3
Inside-Ø for hose [mm]	3

► **WV SERIES - ANGLED FITTINGS- QUICK CONNECT STYLE**



- Cost reduction through quick assembly and disassembly
- Angled and swivel-mounted

► **Technical Data**

Order no.	WVM5	WV1-8X4	WV1-8X6	WV1-8X8	WV1-4X6	WV1-4X8
Fixing thread	M5	1/8"	1/8"	1/8"	1/4"	1/4"
Outside-Ø for hose [mm]	4	4	6	8	6	8

VALVES, FITTINGS, ACCESSORIES

VALVES

► SERIES DRV - FLOW CONTROL VALVES - WITH SWIVEL JOINT



- Configurable flow control valves for regulating the exhaust air
- Optimal for regulating the speeds during piston movements
- Angled version

► Technical Data

Order no.	DRVM5X4	DRV1-8X6	DRV1-8X8	DRV1-4X8
Fixing thread	M5	1/8"	1/8"	1/4"
Outside-Ø for hose [mm]	4	6	8	8
Length [mm]	25.5	35	35	38.5
Operating pressure [bar]	0.2 / 10	0.2 / 10	0.2 / 10	0.2 / 10
Operating temperature [°C]	5 ... 80	5 ... 80	5 ... 80	5 ... 80

► DRV SERIES - FLOW CONTROL VALVES - INLINE



- Configurable flow control valves for regulating the exhaust air
- Optimal for regulating the speeds during piston movements

► Technical Data

Order no.	DRV1-4I	DRV1-8I
Fixing thread	1/4"	1/8"
Length [mm]	58	48
Operating pressure [bar]	0.2 / 10	0.2 / 10
Operating temperature [°C]	5 ... 80	5 ... 80

► SERIES DSV - PRESSURE SAFETY VALVE



- For maintaining the position of a double-acting cylinder if the operating pressure drops
- The valve consists of 2 check valves that are unlocked pneumatically

► Technical Data

Order no.	DSV1-8
Nominal diameter [mm]	4
Operating pressure [bar]	0.5 / 10
Operating temperature [°C]	0 ... +80

► SERIES DEV - QUICK EXHAUST VALVE



- For higher piston speeds for cylinders
- To bring about quick-action ventilation, the valve must be installed as close to the cylinder's air connection as possible

► Technical Data

Order no.	DEV04	DEV06	DEV08
Outside-Ø for hose [mm]	4	6	8
Operating pressure max. [bar]	10	10	10
Operating temperature [°C]	-5 ... +50	-5 ... +50	-5 ... +50

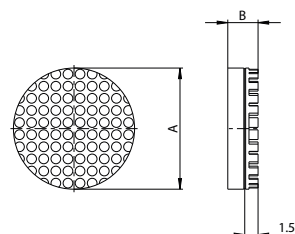
VALVES, FITTINGS, ACCESSORIES

JAW ACCESSORIES

► SERIES DG - RUBBER JAW PADS



- Available in different versions
- A packaging unit includes 6 pcs.



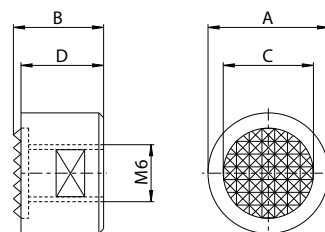
► Technical Data

Order no.	DG6	DG6SI	DG10	DG10SI	DG16	DG16SI	DG20	DG20SI
A [mm]	6	6	10	10	16	16	20	20
B [mm]	5	5	5	5	5	5	5	5
Material	Neoprene	Silicone	Neoprene	Silicone	Neoprene	Silicone	Neoprene	Silicone

► SERIES GR - HARD JAW INSERTS



- Available in different versions



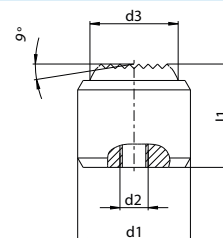
► Technical Data

Order no.	GR4	GR4A	GR4C	GR5	GR6
A [mm]	12.7	12.7	12.7	15.8	19
B [mm]	9.5	12.7	16.5	9.5	9.5
C [mm]	9.5	9.5	9.5	12.7	15.8
D [mm]	8.7	11.9	15.8	8.7	8.7

► SERIES J - HARD JAW INSERTS, FLOATING



- Available in different versions



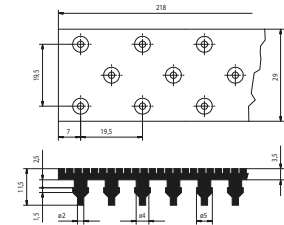
► Technical Data

Order no.	J712	J718	J728
Ø- d1	12h6	18h6	28h6
Ø- d2 [mm]	M3	M4	M5
Ø- d3 [mm]	7	10	20
L1 [mm]	10	16	25

► SERIES GU - RUBBER JAW LINERS



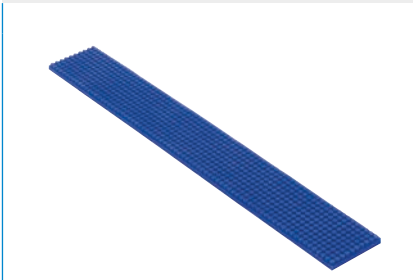
- Available in different versions
- GU1: Basic jaw with infeed knobs
- Receiver holes for infeed knobs - 4.5 mm



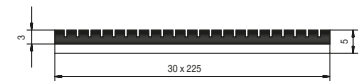
► Technical Data

Order no.	GU1	GU1SI
Resistance DIN53504 min. [N/mm ²]	10	10
Material	Neoprene	Silicone
Color	Black	Blue
Operating temperature max. [°C]	120	200
Shore hardness	65 +/- 3	60 +/- 5

► SERIES GU - RUBBER JAW LINERS



- Available in different versions
- Rubber jaw with baseplate made of aluminum



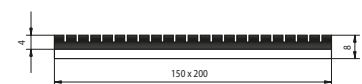
► Technical Data

Order no.	GU2	GU2SI
Resistance DIN53504 min. [N/mm ²]	10	10
Material	Neoprene	Silicone
Color	Black	Blue
Operating temperature max. [°C]	120	200
Shore hardness	65 +/- 3	60 +/- 5

► SERIES GU - RUBBER JAW LINERS



- Available in different versions
- Rubber jaw with baseplate made of aluminum



► Technical Data

Order no.	GU2G	GU2GSI
Resistance DIN53504 min. [N/mm ²]	10	10
Material	Neoprene	Silicone
Color	Black	Blue
Operating temperature max. [°C]	120	200
Shore hardness	65 +/- 3	60 +/- 5

VALVES, FITTINGS, ACCESSORIES

JAW ACCESSORIES

► SERIES KF - RUBBER COATED TAPE



- Smooth surface or knobbed surface Adjusts itself optimally to the shape of the gripper jaw ideal coefficients of friction and compensates for variations in tolerances
- Resistant against adhesive materials

Order no.	► Technical Data	
	KF50G	KF50N
Size [mm]	500 x 100	500 x 100
Material	Impregnated cotton fabric with special coating	Impregnated cotton fabric with special coating
Surface	smooth	knobbed
Material thickness [mm]	0,48	0,48
Max. permitted temperature range [°C]	+60 (briefly up to +100 °C)	+60 (briefly up to +100 °C)
Tensile strength	0.9	0.9
Adhesive strength	22	22

► SERIES BGM - EPOXY JAW COMPOUND

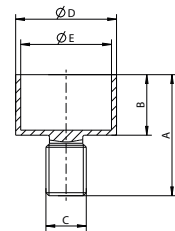


- For your individual gripper jaws in a few steps
- Hard as metal and can be used for the most sensitive parts due to silicone filling
- Sufficient for approximately 10 medium-sized jaw cups

► SERIES BN - JAW CUPS FOR EPOXY JAW COMPOUND



- Jaw Cups for Epoxy Jaw Compound (BGM)



Order no.	► Technical Data			
	BN8	BN12	BN16	BN20
A [mm]	8	12	16	20
B [mm]	4	6	8	10
C1	M3	M4	M5	M6
Ø- D [mm]	6	10	16	20
Ø- E [mm]	5	9	15	19

► SERIES GU800 - RUBBER MOULDING COMPOUND



- For complicated gripper fingers with boreholes, seals and roller coatings
- Repairs to conveyor belts, solid rubber tires, transport casters, pipes, vibration protection on machines and insulation protection

► Technical Data

Order no.

GU800

Mix ratio	100:50
Shore hardness level after hardening (ISO 868)	80
Sealed	1.04
Tensile strength (ISO 37) [N/mm ²]	8,5
Elongation at break (ISO 37)	900
Tear resistance (DIN 53356)	17
Permitted temperature range [°C]	-60 ... +90

VALVES, FITTINGS, ACCESSORIES

JAW EXTENSIONS

► SERIES GBV - JAW EXTENSIONS

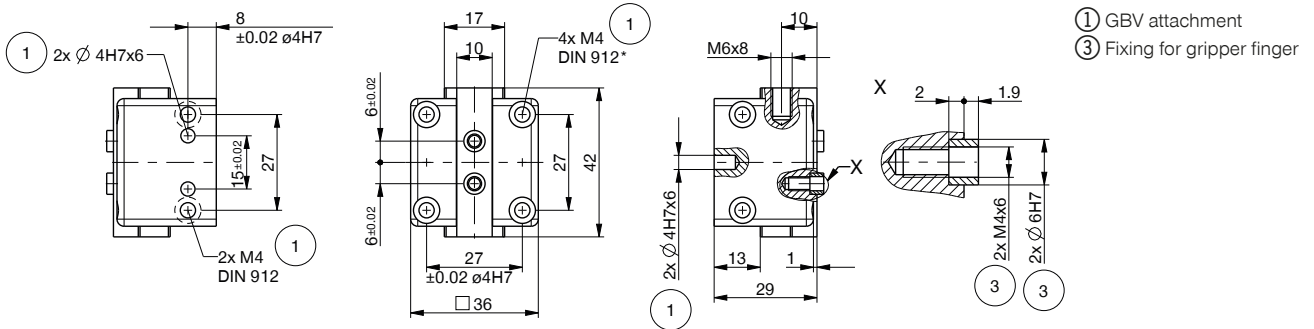


- GBV guide elements can be positioned at any desired distance from the gripper, including different distances
- Connection to gripper is made via threaded rods

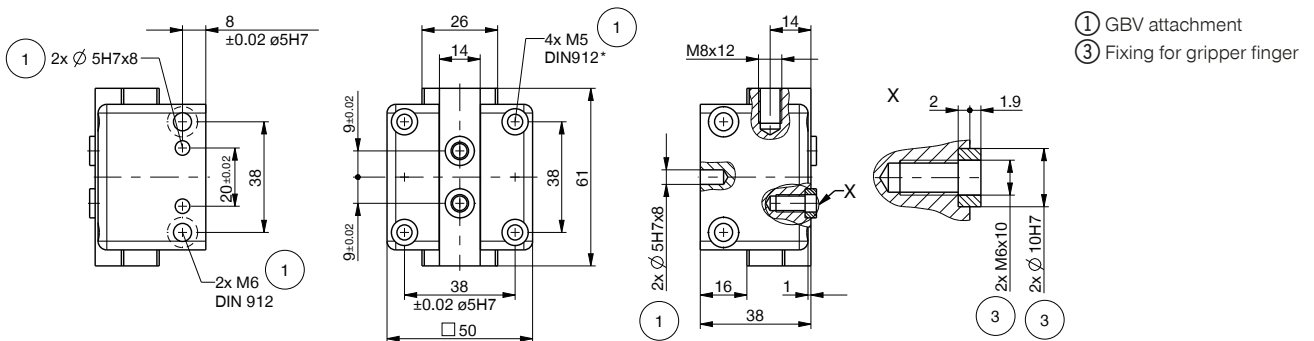
► Technical Data

Order no.	GBV36	GBV50	GBV72
Weight [kg]	0.14	0.4	1.3
Mr [Nm]	20	45	80
Mx [Nm]	50	110	160
My [Nm]	32	65	120
Fa [N]	650	1500	4000

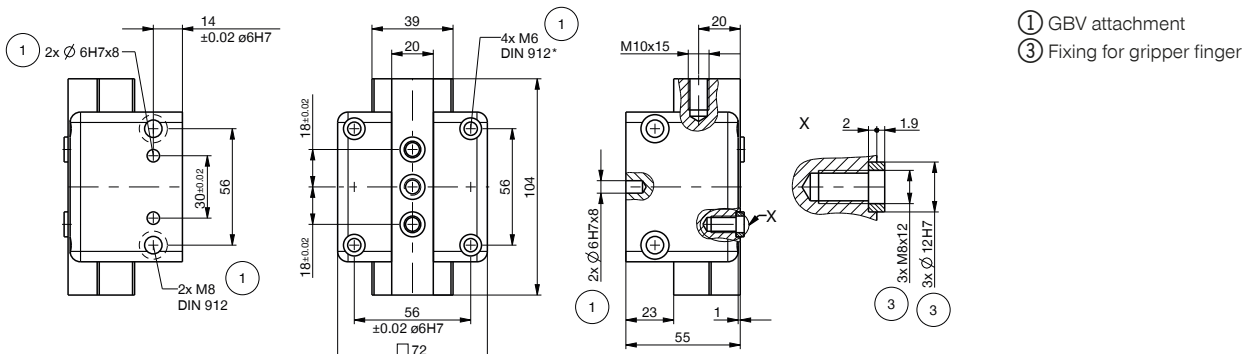
GBV36



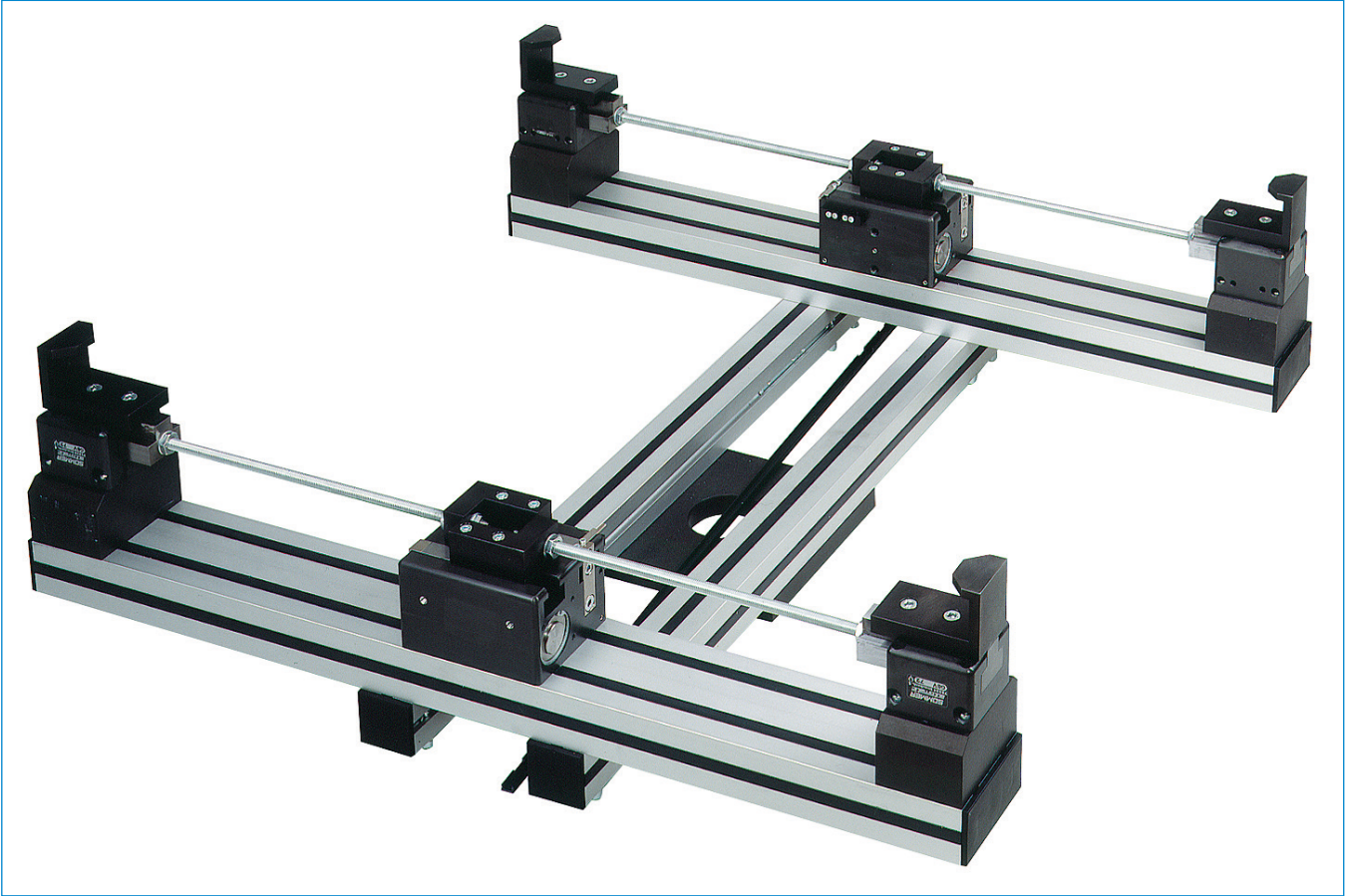
GBV50



GBV72



▶ APPLICATION EXAMPLE



VALVES, FITTINGS, ACCESSORIES

PNEUMATIC ROTARY MANIFOLDS

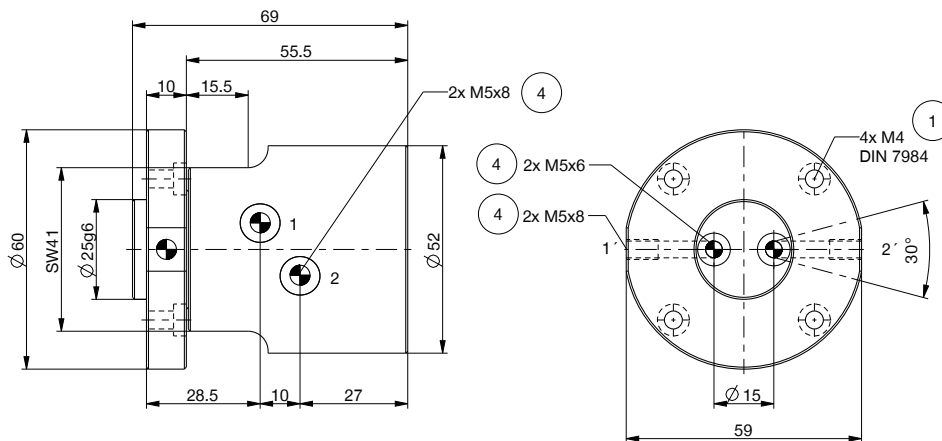
► SERIE DV - ROTARY DISTRIBUTOR



► available with 2 or 4 pneumatic feedthroughs

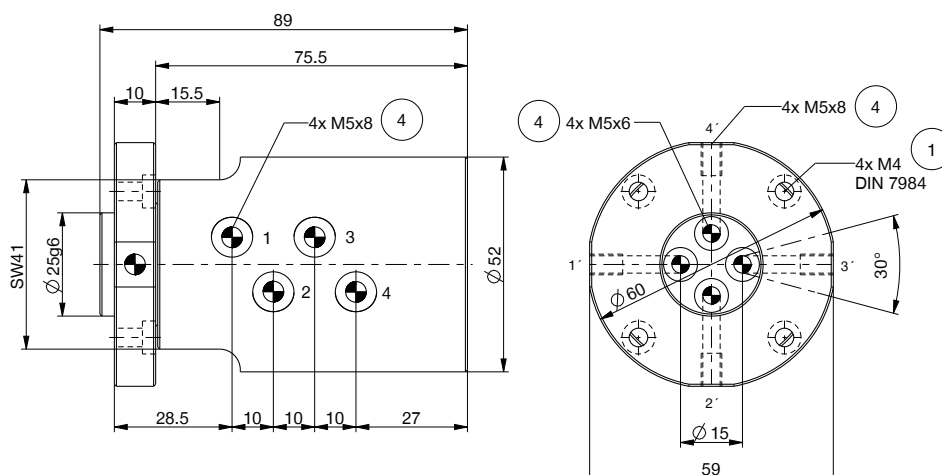
Order no.	► Technical Data	
	DV2N-B	DV4N-B
Air feed-through [Quantity]	2	4
Maximum acceleration [m/s ²]	22	22
Maximum speed [°/s]	720	720
Axial bearing load [N]	1300	1300
Radial bearing load [Nm]	104	156
Operating pressure max. [bar]	10	10
Operating temperature [°C]	5 ... 80	5 ... 80
Weight [kg]	0.45	0.55

DV2N-B



- ① Rotary distributor attachment
- ④ pneumatic feed-through

DV4N-B



- ① Rotary distributor attachment
- ④ pneumatic feed-through

VALVES, FITTINGS, ACCESSORIES

BUSBOX

► SERIES ZUBBOX9000-01

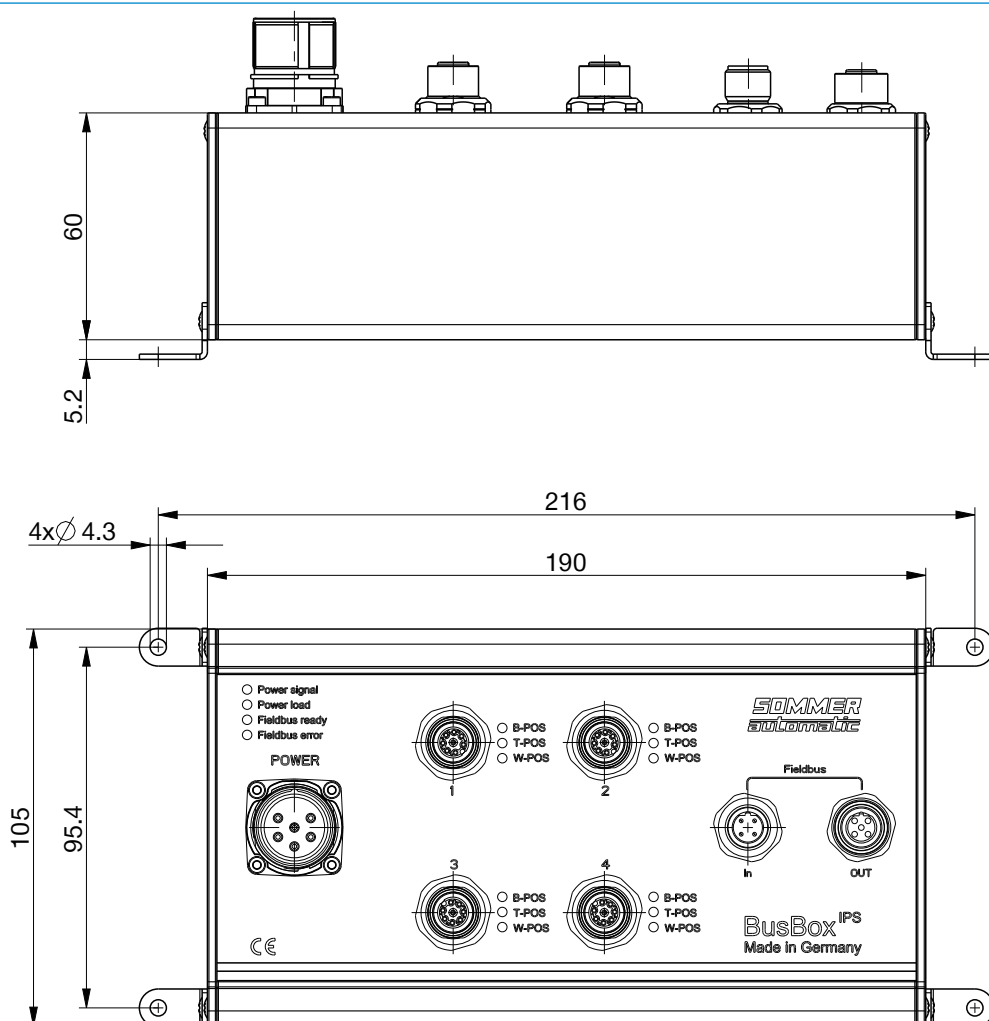


- Control via Profibus
- 4 actuators of the series GEP, GEN and VEE can be connected
- Intelligent Power Supply - IPC
- Power storage via condensers

► Technical Data

ZUBBOX9000-01

Order no.	ZUBBOX9000-01
Fieldbus type	Profibus
Actuator connectors max.	4
Signal voltage [V DC]	24
Load voltage [V DC]	24
Current feed min. [A]	5
Current feed max. [A]	10
Operating temperature [°C]	0 ... +50
Protection to IEC 60529	IP64
Certification	CE
Weight [kg]	1.1



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USAGE NOTE

INDIVIDUAL

DECLARATION OF INCORPORATION IN TERMS OF THE EC DIRECTIVE 2006/42/EC ON MACHINERY (ANNEX II 1 B)

We hereby declare that our elements meet the following basic requirements of the Machinery Directive 2006/42/EC as an incomplete machine

No.1.1.2., No.1.1.3., No.1.1.5., No.1.3.2, No. 1.3.4, No. 1.3.7, No.1.5.3, No.1.5.4, No.1.5.8., No.1.6.4, No.1.7.1, No.1.7.3, No.1.7.4.

We also declare that the specific technical documents were produced in accordance with Annex VII Part B of this Directive. We undertake to provide the market supervisory bodies with electronic versions of the incomplete machine's special documents via our documentation department should they have reason to request them.

The incomplete machine may only be commissioned if the machine or system in which the incomplete machine is to be installed has been determined to satisfy the conditions of the Machinery Directive 2006/42/EC and the EC Declaration of Conformity has been produced in accordance with Annex II A.

CHECKLIST GRIPPER

Customer number	<input type="text"/>	Telephone number	<input type="text"/>
Company	<input type="text"/>	Fax number	<input type="text"/>
Contact Mr. <input type="checkbox"/> Mrs. <input type="checkbox"/>	<input type="text"/>	E-Mail	<input type="text"/>
<input type="checkbox"/> Request	Desired date	<input type="text"/>	Req. No. <input type="text"/>
<input type="checkbox"/> Order			Ord No. <input type="text"/>
<input type="checkbox"/> Parallel gripper	<input type="checkbox"/> Three-jaw gripper	<input type="checkbox"/> Angular gripper	
<input type="checkbox"/> Other / If yes, which type	<input type="text"/>		

Drive

Pneumatic Electric Hydraulic

Operating pressure bar Voltage Volts

Required stroke

Per jaw mm or Total stroke mm

Gripper finger length

Gripper top edge to force application point mm

Ambient conditions

Clean / Dry Small amount of swarf
Coolant overspray Large amount of swarf Coolant
under pressure of grinding agents

Chemical substances / If yes, which

Temperature °C Cycles per minute

Required force

Gripping force N or Workpiece weight kg g

Gripping type

Gripping inward Gripping outward

Frictional fit Form fit

Prism angle ° Coefficient of friction Axis acceleration m/s²

Self Locking

Not required When closing When opening Pressure safety valve

Desired accessories

- Inductive sensor
- Magnetic field sensor
- With cable
- Pluggable
- Separate cable / If yes, how long m
- Straight fitting
- Angled fitting
- Pressure safety valve
- Pneumatic fittings / If yes, which
 - Straight
 - Angled
 - Flow control valve

Notes/comments

Editor/Date

Desired accessories

- Sketch
- 3D model
- Other