

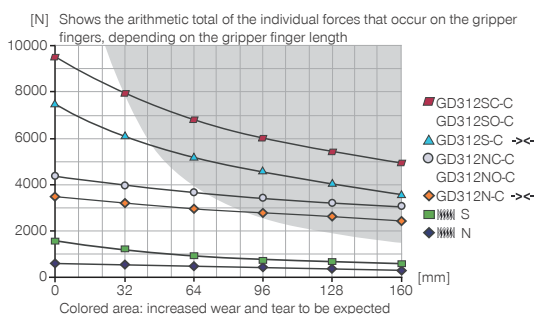
3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GD312

PRODUCT SPECIFICATIONS

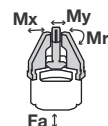


Gripping force diagram



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



3 [piece]
Mounting block
KB8-32



6 [piece]
Centering Disc
DST41000

RECOMMENDED ACCESSORIES



GRIPPING COMPONENTS



UB312
Universal jaw set aluminium



UB312ST
Universal jaw set steel



ADS312N-S
Pressure piece N / S



ADS312C-O
Pressure piece NC / NO / SC / SO



ENERGY SUPPLY



DSV1-8E
Pressure safety valve with quick exhaust



SENSORS



KHA312-B-8
Alternate proximity bracket



NJ8-E2S
Inductive proximity switch - Connector M8



MFS01-S-KHC-P1-PNP
Magnetic field sensor Angled Cable 0,3 m - Connector M8



MFS02-S-KHC-P1-PNP
Magnetic field sensor Straight Cable 0,3 m - Connector M8



ENERGY SUPPLY



GV1-8X8
Straight Fittings - Quick Connect Style



DSV1-8
Pressure safety valve

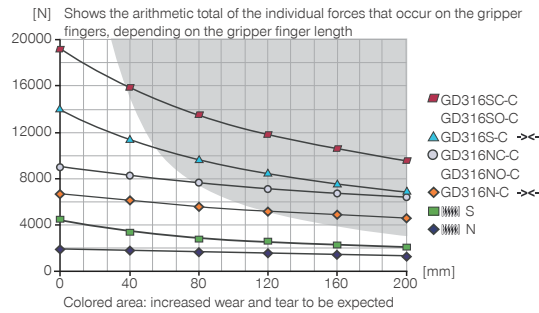
3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GD316

PRODUCT SPECIFICATIONS

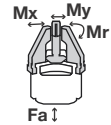


Gripping force diagram



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



3 [piece]
Mounting block
KB8-33



6 [piece]
Centering Disc
DST41600

RECOMMENDED ACCESSORIES



GRIPPING COMPONENTS



UB316
Universal jaw set aluminium



UB316ST
Universal jaw set steel



ADS316N-S
Pressure piece N / S



ADS316C-O
Pressure piece NC / NO / SC / SO



ENERGY SUPPLY



DSV1-8E
Pressure safety valve with quick exhaust



SENSORS



KHA316-B-8
Alternate proximity bracket



NJ8-E2S
Inductive proximity switch - Connector M8



MFS01-S-KHC-P1-PNP
Magnetic field sensor Angled Cable 0,3 m - Connector M8



MFS02-S-KHC-P1-PNP
Magnetic field sensor Straight Cable 0,3 m - Connector M8



ENERGY SUPPLY



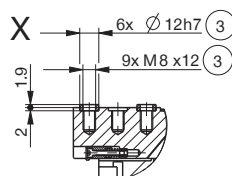
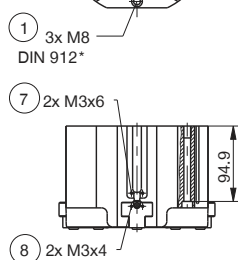
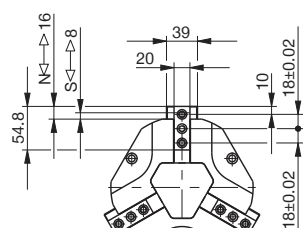
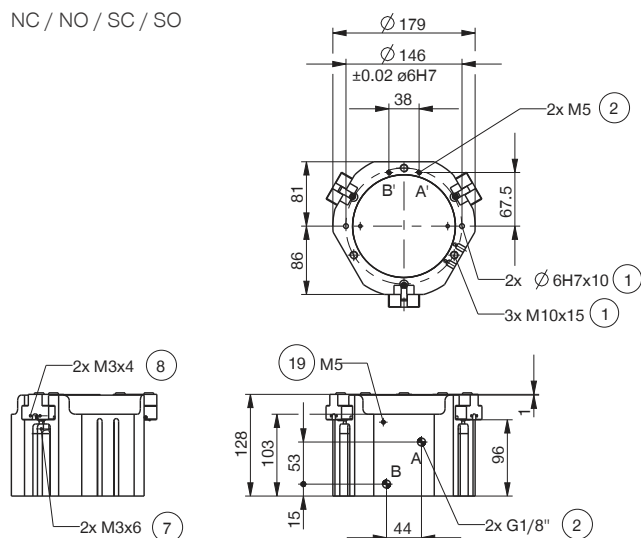
GV1-8X8
Straight Fittings - Quick Connect Style



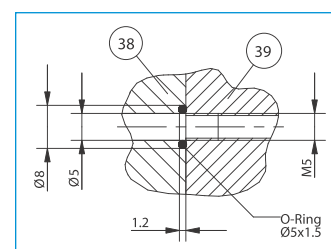
DSV1-8
Pressure safety valve

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
Nominal operating pressure [bar]	6	6	6	6	6	6
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

NC / NO / SC / SO

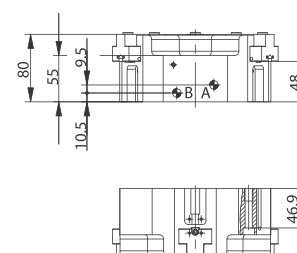


- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑦ Fixing for mounting block
- ⑧ Fixing clamping bracket (KHA)
- ⑨ Air purge connection option
- ⑩ Adapter
- ⑪ Gripper
- ⑫ Air connection (close)
- ⑬ Air connection (open)
- ⑭ Air connection, alternative (close)
- ⑮ Air connection, alternative (open)



Hoseless air feed-through

N / S



3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GD320

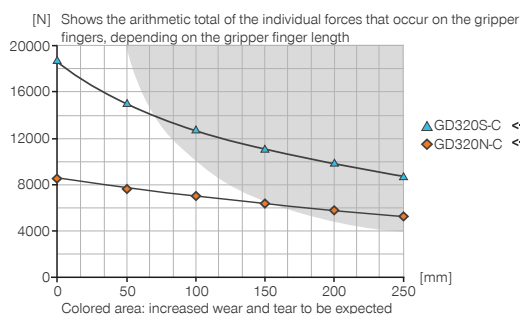
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Installation size GD320 / 3-Jaw Concentric Grippers / pneumatic / Grippers

PRODUCT SPECIFICATIONS

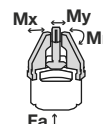


Gripping force diagram



Forces and moments

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



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

INCLUDED IN DELIVERY



3 [piece]
Mounting block
KB8-34



6 [piece]
Centering Disc
DST42000

RECOMMENDED ACCESSORIES



GRIPPING COMPONENTS



UB320
Universal jaw set aluminium



UB320ST
Universal jaw set steel



ADS320N-S
Pressure piece N / S



ADS320C-O
Pressure piece NC / NO / SC / SO



ENERGY SUPPLY



DSV1-8E
Pressure safety valve with quick exhaust



SENSORS



KHA320-B-8
Alternate proximity bracket



NJ8-E2S
Inductive proximity switch - Connector M8



MFS01-S-KHC-P1-PNP
Magnetic field sensor Angled Cable 0,3 m - Connector M8



MFS02-S-KHC-P1-PNP
Magnetic field sensor Straight Cable 0,3 m - Connector M8



ENERGY SUPPLY



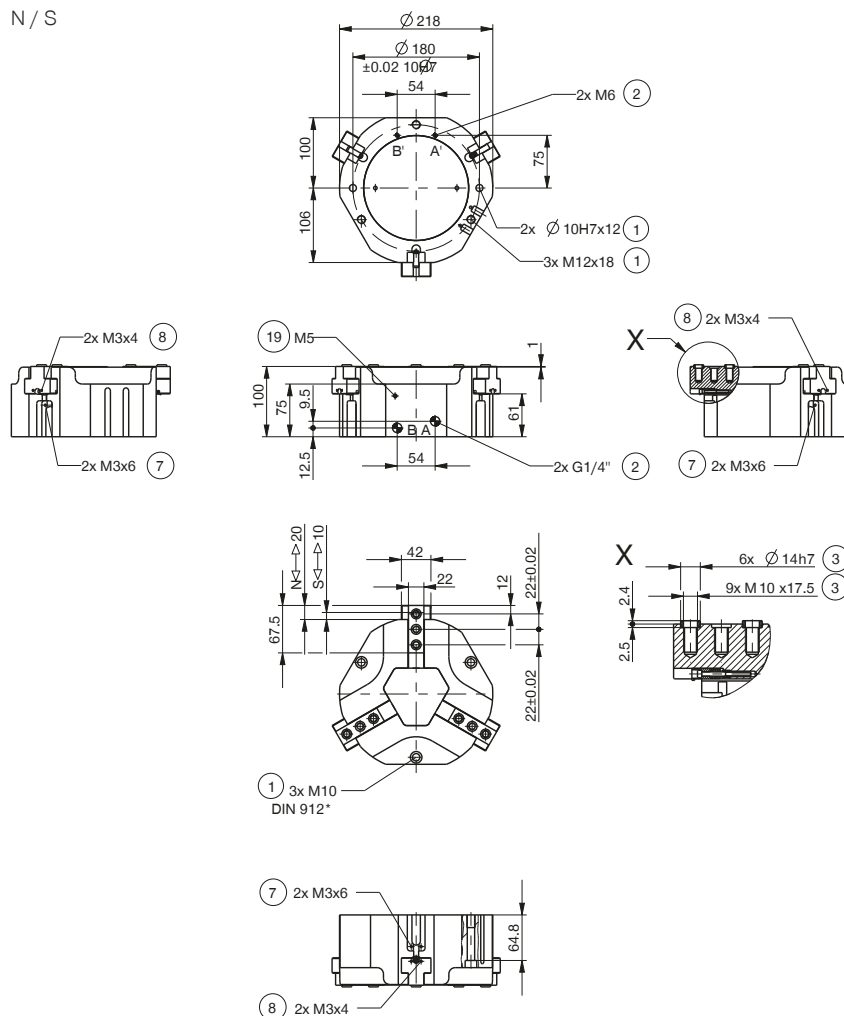
GV1-4X8
Straight Fittings - Quick Connect Style



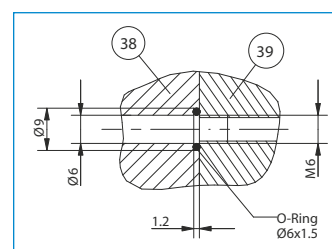
DSV1-8
Pressure safety valve

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
Nominal operating pressure [bar]	6	6
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

N / S



- 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
- Ⓐ Air connection (close)
- Ⓑ Air connection (open)
- Ⓐ Air connection, alternative (close)
- Ⓑ Air connection, alternative (open)



Hoseless air feed-through

3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GD330

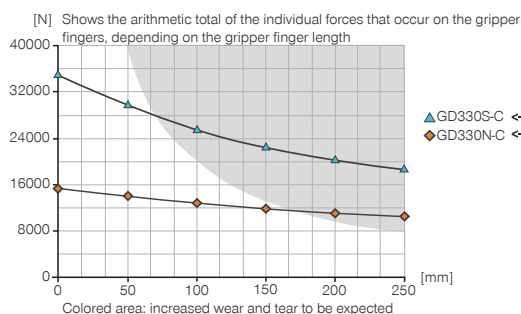
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Installation size GD330 / 3-Jaw Concentric Grippers / pneumatic / Grippers

PRODUCT SPECIFICATIONS

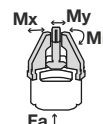


Gripping force diagram



Forces and moments

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



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

INCLUDED IN DELIVERY



3 [piece]
Mounting block
KB8-34



6 [piece]
Centering Disc
DST43000

RECOMMENDED ACCESSORIES



GRIPPING COMPONENTS



UB330
Universal jaw set aluminium



UB330ST
Universal jaw set steel



SENSORS



KHA330-B-8
Alternate proximity bracket



NJ8-E2S
Inductive proximity switch - Connector M8



MFS01-S-KHC-P1-PNP
Magnetic field sensor Angled Cable 0,3 m - Connector M8



MFS02-S-KHC-P1-PNP
Magnetic field sensor Straight Cable 0,3 m - Connector M8



ENERGY SUPPLY



GV1-4X8
Straight Fittings - Quick Connect Style



WV1-4X8
Angled Fittings - Quick Connect Style



DSV1-8
Pressure safety valve



DSV1-8E
Pressure safety valve with quick exhaust



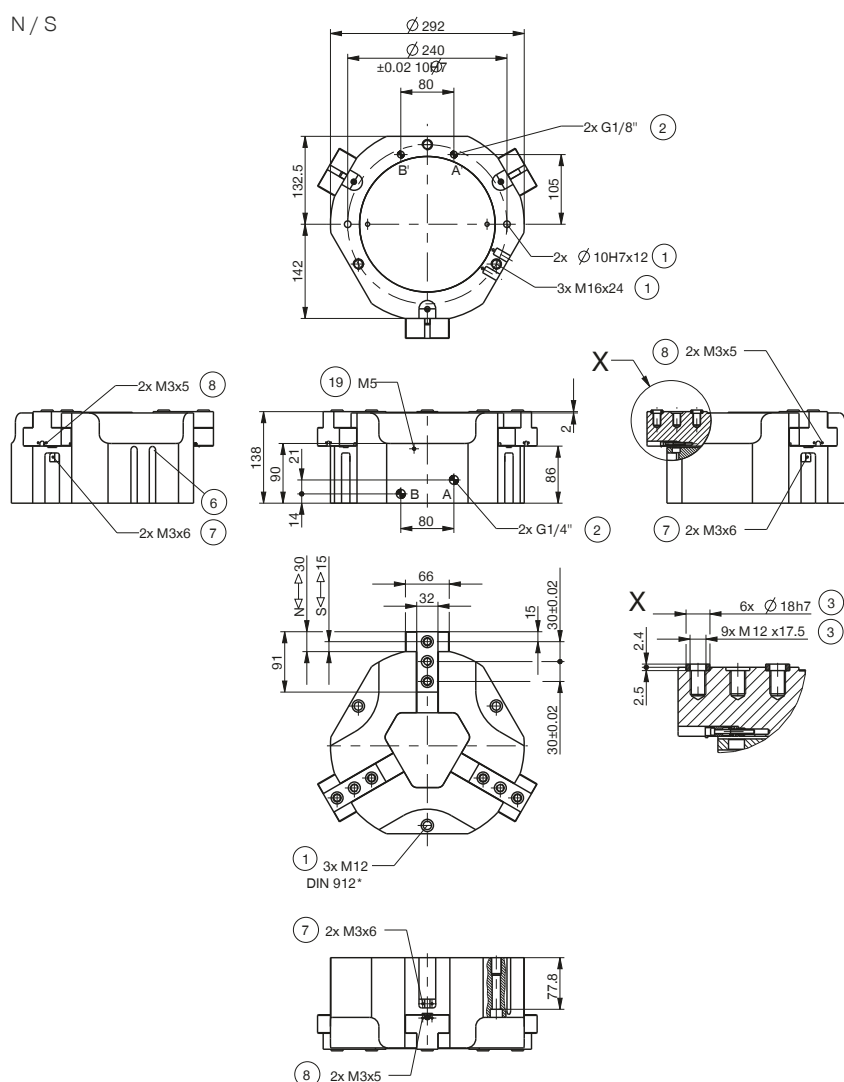
CONNECTIONS / OTHER



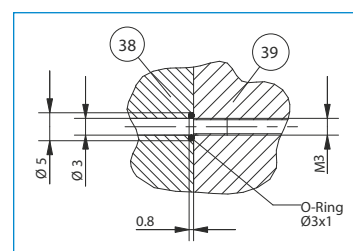
KAG500
Plug-in connector Straight Cable 5m - Socket M8 (female)

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
Nominal operating pressure [bar]	6	6
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	2270	2270
Weight [kg]	24	24

N / S



- 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
- ⑫ Air connection (close)
- ⑬ Air connection (open)
- ⑭ Air connection, alternative (close)
- ⑮ Air connection, alternative (open)

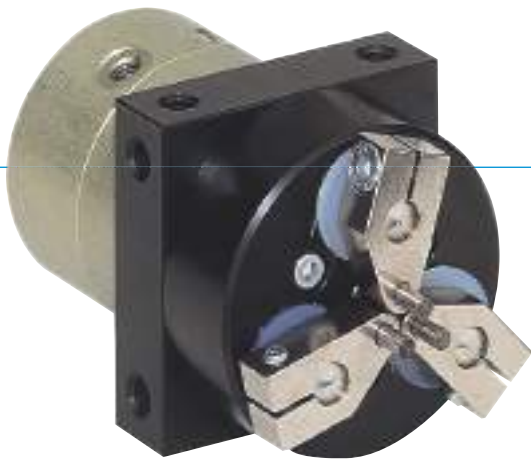


Hoseless air feed-through

3-JAW CONCENTRIC GRIPPERS

SERIES GD




▶ PRODUCT ADVANTAGES



“The flexible”

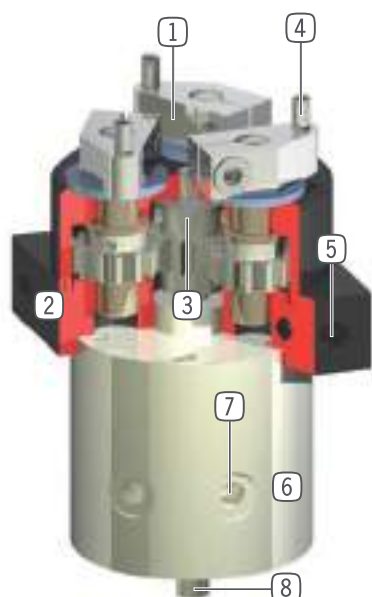
- ▶ **Largest stroke in small installation space**
You can cover numerous application variants with just one gripper type
- ▶ **Gripper jaws included in the delivery**
Reduces your design effort, manufacturing costs and setup time
- ▶ **Smooth stroke configuration**
Using the optionally available stroke limit, you can customise the stroke to your application, even stroke sensing is possible

▶ SERIES CHARACTERISTICS

Installation size		
GDXX		
 10 million maintenance-free cycles (max.)		●
 Inductive sensor		●
 IP 40		●



► BENEFITS IN DETAIL



- ① **Gripping movement on rotation**
 - for various workpiece diameters
- ② **Robust, lightweight housing**
 - Hard-coated aluminum 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

► TECHNICAL DATA

Installation size	Stroke [°]	Gripping moment [Nm]	Weight [kg]	IP class
GD1	130	0,12	0.08	IP40
GD10	180	1	0.35	IP40
GD50	120	9	2	IP40

► FURTHER INFORMATION IS AVAILABLE ONLINE




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

OVERVIEW OF SERIES



	ELECTRICAL		
	Series GED1300		182

3-JAW CONCENTRIC GRIPPERS

SERIES GED1300






▶ PRODUCT ADVANTAGES



“The robust”

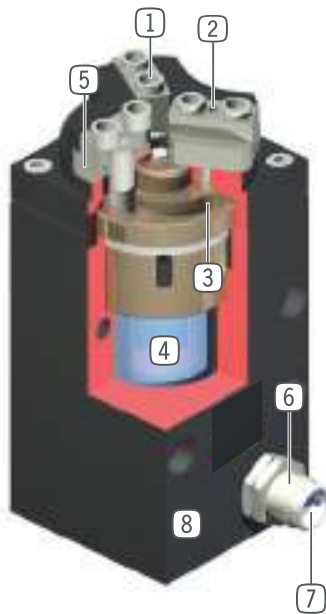
- ▶ **Proven T slot guide**
This established and proven guiding technology stands for the highest process reliability like no other
- ▶ **Integrated position sensing**
You can detect the gripper status safely via the motor current using your control system
- ▶ **The simplest activation**
The included control unit is controlled easily via plus and minus buttons, while you can optionally adjust the gripping force using the potentiometer

▶ SERIES CHARACTERISTICS

Installation size		Version		
GED130X			C	O
 Digital I/O		•	•	•
 External gripping			•	
 Internal gripping				•
 5 million maintenance-free cycles (max.)		•	•	•
 IP 40		•	•	•



► 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 aluminum alloy

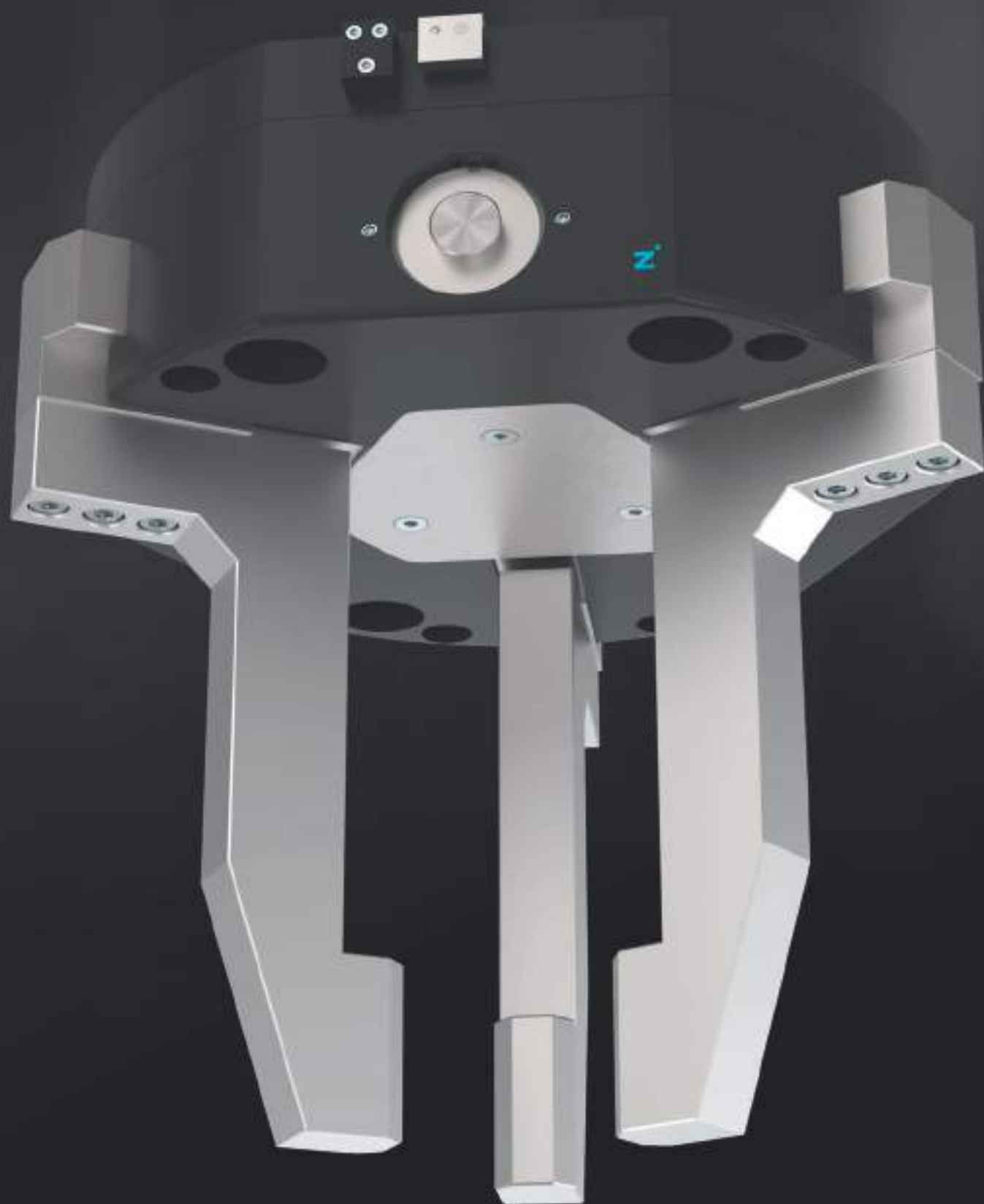
► TECHNICAL DATA

Installation size	Stroke per jaw [mm]	Gripping force [N]	Weight [kg]	IP class
GED1302	2	140	0.25	IP40
GED1306	6	350	1.7	IP40

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3-JAW CONCENTRIC GRIPPERS WITH LONG STROKE

OVERVIEW OF SERIES



PNEUMATIC



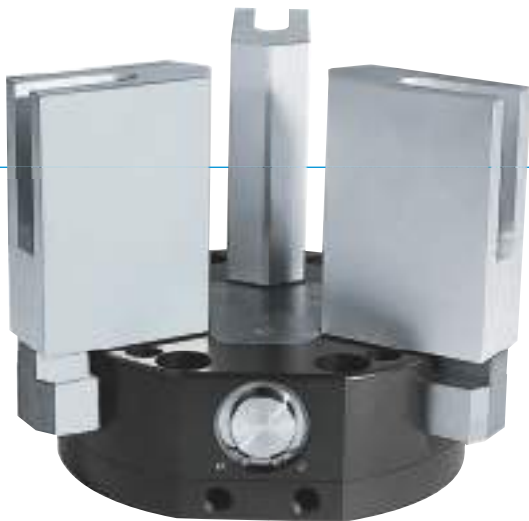
Series GD500

186

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**

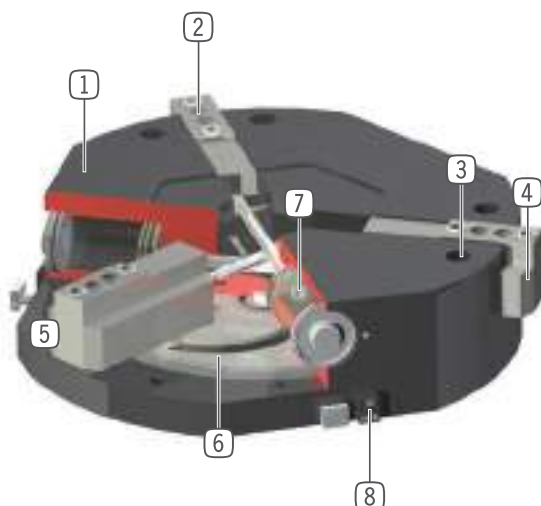
Our uncompromising “Made in Germany” quality guarantees up to 10 million maintenance-free cycles

▶ SERIES CHARACTERISTICS

Installation size		
GD5XX		
 10 million maintenance-free cycles (max.)		•
 Inductive sensor		•
 IP40		•



► BENEFITS IN DETAIL



- ① **Robust, lightweight housing**
- Hard-coated aluminum 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

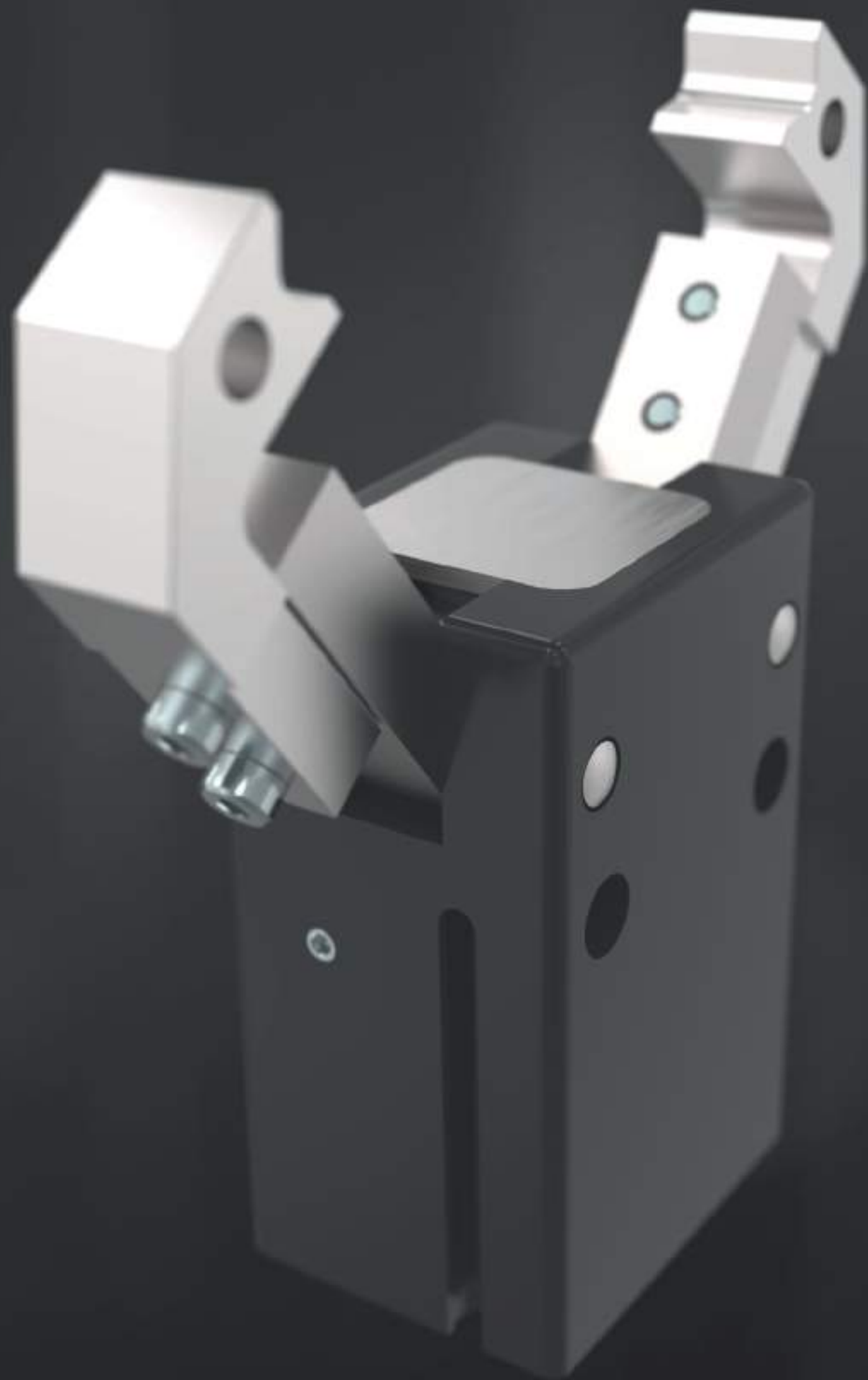
► TECHNICAL DATA

Installation size	Stroke per jaw [mm]	Gripping force [N]	Weight [kg]	IP class
GD530	30	1300	7.4	IP40
GD540	40	2480	22.3	IP40
GD560	60	2480	34.3	IP40

► FURTHER INFORMATION IS AVAILABLE ONLINE



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 ANGULAR GRIPPERS

OVERVIEW OF SERIES



PNEUMATIC



Series MGW800

190



Series GZ1000

212

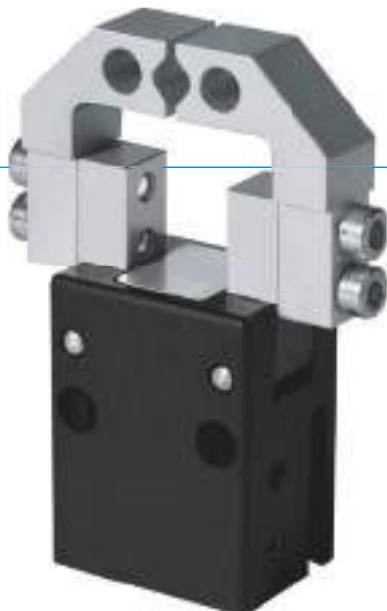
2-JAW ANGULAR GRIPPERS

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

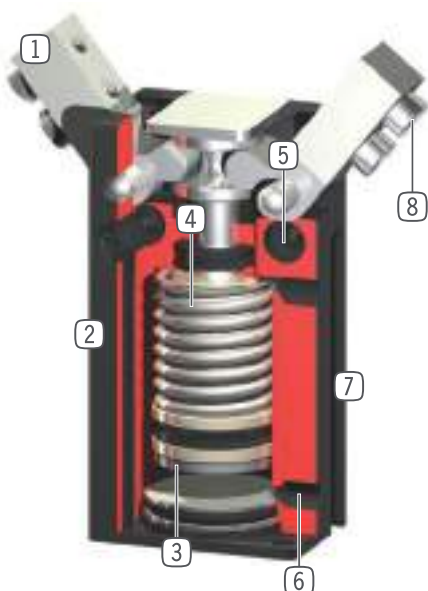
Our uncompromising “Made in Germany” quality guarantees up to 10 million maintenance-free cycles

▶ SERIES CHARACTERISTICS

Installation size	Version	
MGW8XX	N	NC
 Spring closing C		•
 10 million maintenance-free cycles (max.)	•	•
 Magnetic field sensor	•	•
 IP30	•	•



► BENEFITS IN DETAIL



- ① **Gripper jaw**
 - individual gripper finger mounting
- ② **Robust, lightweight housing**
 - Hard-coated aluminum 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

► TECHNICAL DATA

Installation size	Stroke [°]	Gripping force [N]	Weight [kg]	IP class
MGW801	37.5	5 - 7,5	0,01	IP30
MGW802	37.5	9 - 10	0,015	IP30
MGW803	37.5	33 - 49	0,025 - 0,04	IP30
MGW804	37.5	51 - 72	0,05 - 0,08	IP30
MGW806	37.5	91 - 118	0,1 - 0,12	IP30
MGW808	37.5	148 - 190	0,18 - 0,19	IP30
MGW810	37.5	205 - 270	0,28 - 0,31	IP30
MGW812	37.5	255 - 325	0,4 - 0,45	IP30

► FURTHER INFORMATION IS AVAILABLE ONLINE



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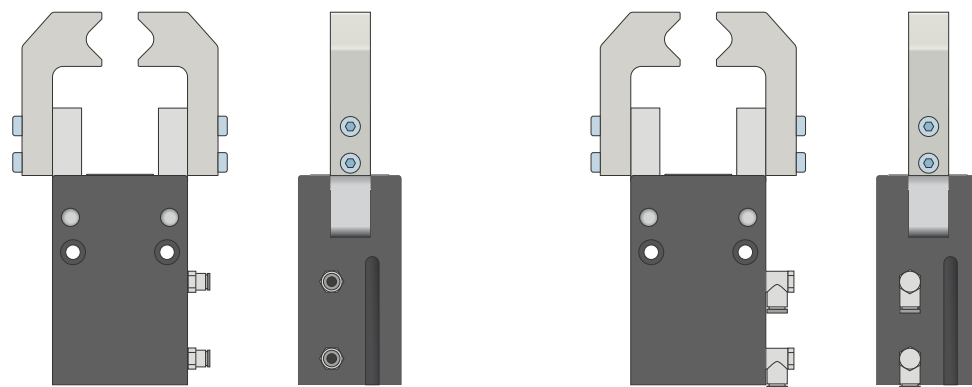
2-JAW ANGULAR GRIPPERS

SERIES MGW800 FUNCTIONAL DESCRIPTION

1

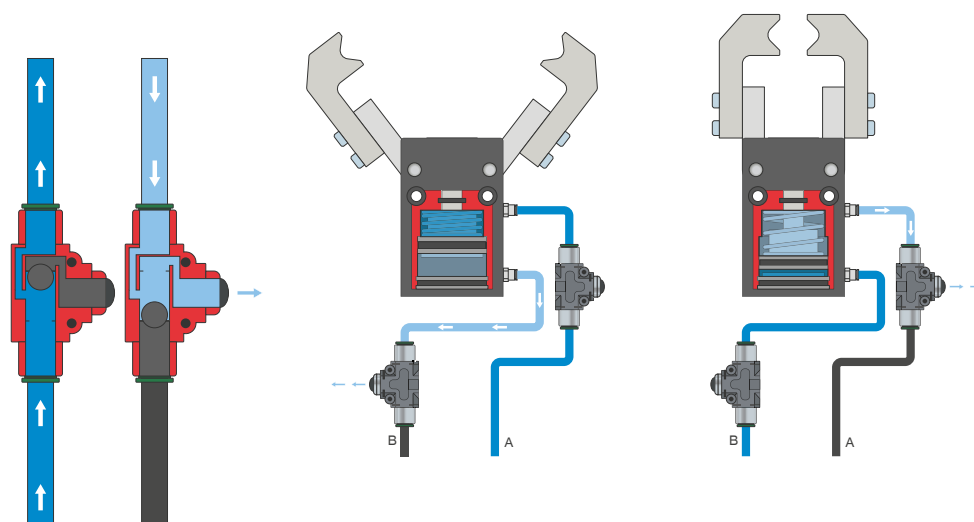


ENERGY SUPPLY



Pneumatic threaded connections

Available in straight and angled design. Can be chosen freely depending on the space conditions or installation situation.



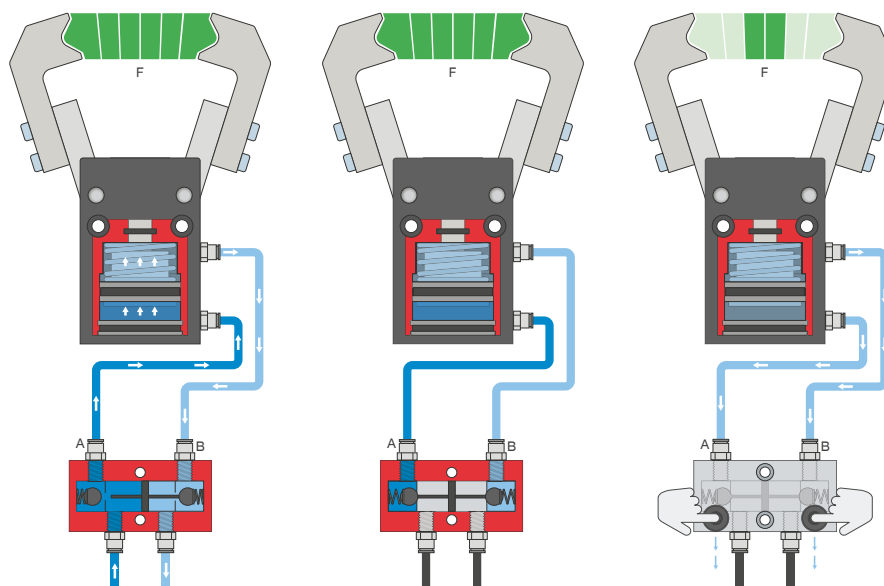
Quick exhaust valve – DEV

For rapid bleeding of the compressed air and preventing back pressure

The inline valves make a faster cycle time possible and prevent the formation of condensate in grippers with a small cylinder volume. To ensure the function, the valve must be installed as close to the gripper's air connection as possible.



ENERGY SUPPLY



Pressure safety valve – DSV

Ensures safe retention of force and position if the system pressure drops

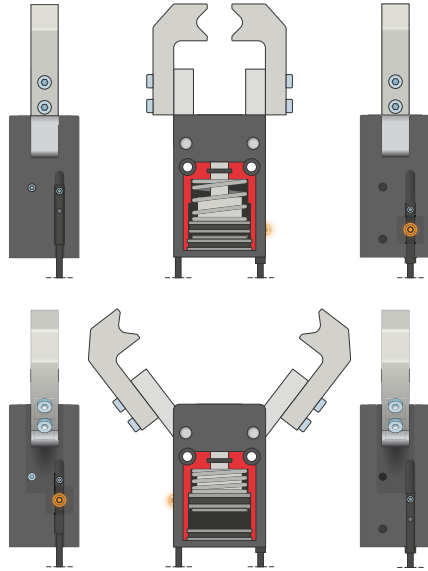
The integrated double check valve, which can be unlocked, retains the system pressure of the gripper in case of EMERGENCY STOP. To ensure the function, the valve must be installed as close to the gripper's air connection as possible. In variant E, two pushbuttons are installed that allow for controlled bleeding of the gripper.

2-JAW ANGULAR GRIPPERS

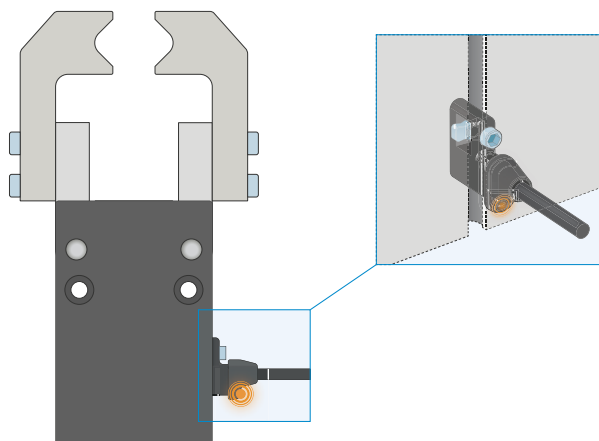
SERIES MGW800 FUNCTIONAL DESCRIPTION

SENSORS

MFS02



MFS01



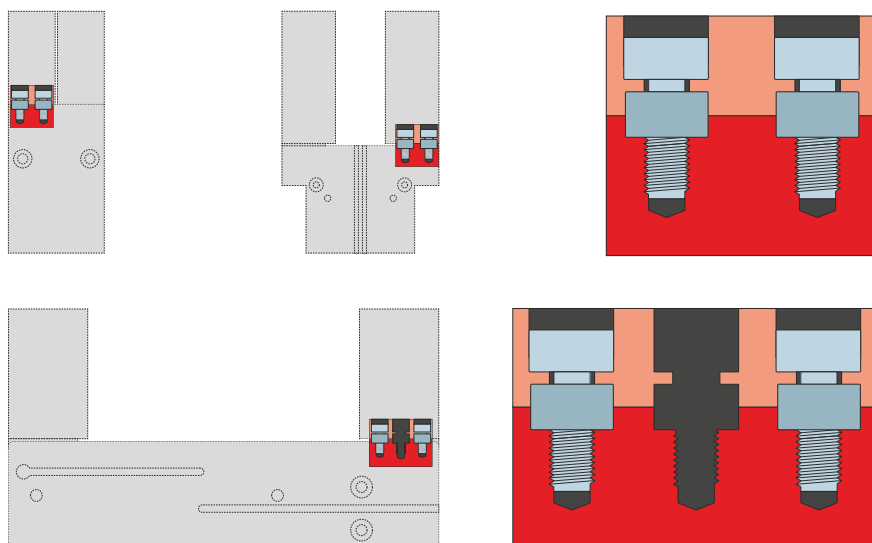
1-point magnetic field sensors – MFS

For non-contact sensing of the piston position

These sensors are installed in the C-groove of the gripper and detect the magnet attached to the piston of the gripper. To ensure use in a wide variety of space conditions, the sensors are available in two variants. While the horizontal MFS02, with straight cable outlet, disappears into the C-groove of the gripper almost completely, the vertical MFS01 is taller, but has a cable outlet that is offset at an angle of 90°. The variants are available in versions with 5 m cables with exposed leads and 0,3 m cable with connector.



CONNECTIONS / OTHER



Centering sleeves

For defined position measurement of the gripper fingers

The centering sleeves are inserted into the fits of the gripper jaws to define the position of the gripper fingers. The centering sleeves are comparable to a pin connection.

2-JAW ANGULAR GRIPPERS

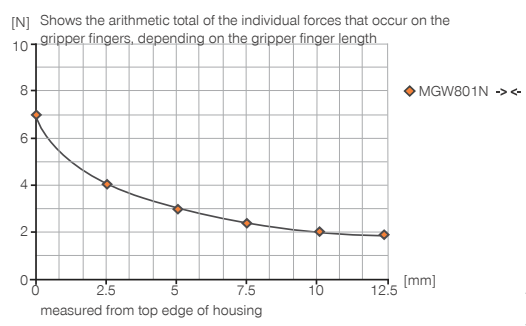
INSTALLATION SIZE MGW801

1
Installation size MGW801 / 2-Jaw Angular Grippers / pneumatic / Grippers

PRODUCT SPECIFICATIONS

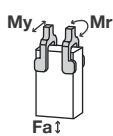


Gripping force diagram



Forces and moments

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



Mr [Nm]	0.2
My [Nm]	0.2
Fa [N]	37

INCLUDED IN DELIVERY



4 [piece]
Centering Disc
DST80100

RECOMMENDED ACCESSORIES



ENERGY SUPPLY



GVM3
Straight Fittings - Barb Style Connection



WVM3
Angled Fittings - Barb Style Connection

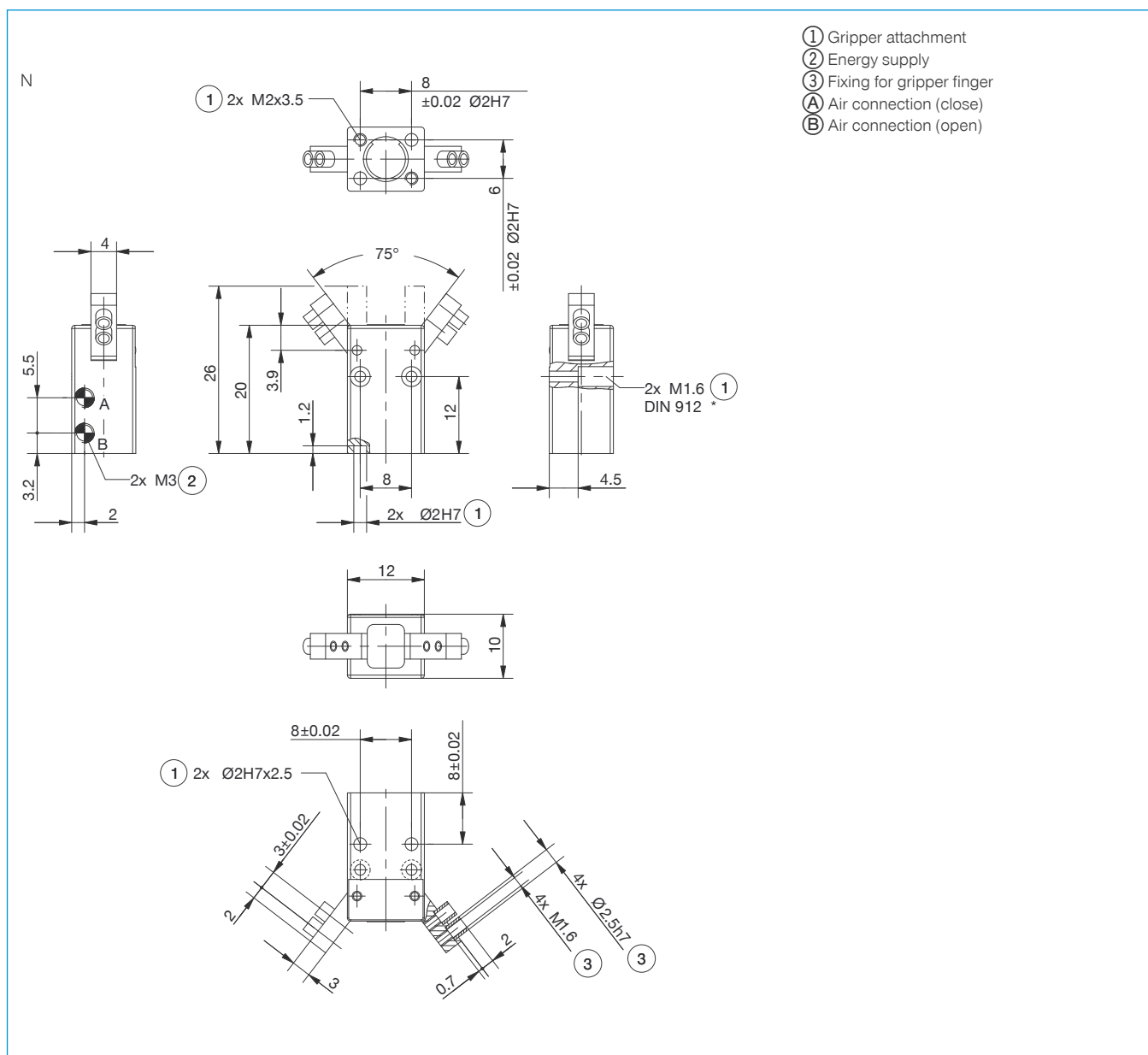


ENERGY SUPPLY



DEV04
Quick Exhaust Valve

Order no.	Technical data
	MGW801N
Stroke per jaw [°]	37.5
Gripping moment in closing [Nm]	0.025
Gripping moment in opening [Nm]	0.03
Gripping moment secured by spring min. [Nm]	
Gripping force in closing [N]	5
Gripping force in opening [N]	7.5
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
Nominal operating pressure [bar]	6
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	0.14
Weight [kg]	0.01



2-JAW ANGULAR GRIPPERS

INSTALLATION SIZE MGW802

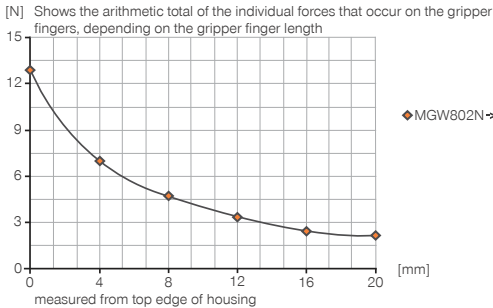
1

Installation size MGW802 / 2-Jaw Angular Grippers / pneumatic / Grippers

PRODUCT SPECIFICATIONS

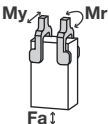


Gripping force diagram



Forces and moments

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



Mr [Nm]	0.3
My [Nm]	0.3
Fa [N]	60

INCLUDED IN DELIVERY



4 [piece]
Centering Disc
DST80200

RECOMMENDED ACCESSORIES



ENERGY SUPPLY



GVM3
Straight Fittings - Barb Style Connection



WVM3
Angled Fittings - Barb Style Connection



ENERGY SUPPLY



DEV04
Quick Exhaust Valve

2-JAW ANGULAR GRIPPERS

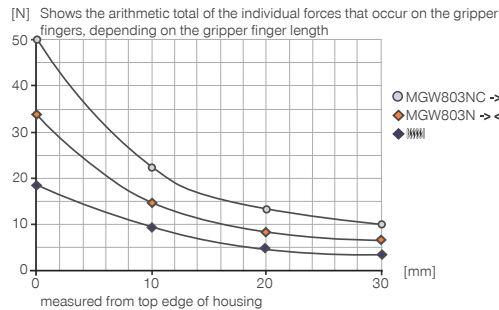
INSTALLATION SIZE MGW803

1

PRODUCT SPECIFICATIONS

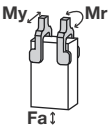


Gripping force diagram



Forces and moments

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



Mr [Nm]	0.4
My [Nm]	0.4
Fa [N]	90

INCLUDED IN DELIVERY



4 [piece]
Centering Disc
DST80320

RECOMMENDED ACCESSORIES



ENERGY SUPPLY



GVM3
Straight Fittings - Barb Style Connection



WVM3
Angled Fittings - Barb Style Connection



DEV04
Quick Exhaust Valve



SENSORS



MFS01-K-KHC-P1-PNP
Magnetic field sensor Angled Cable 5 m



MFS01-S-KHC-P1-PNP
Magnetic field sensor Angled Cable 0,3 m - Connector M8

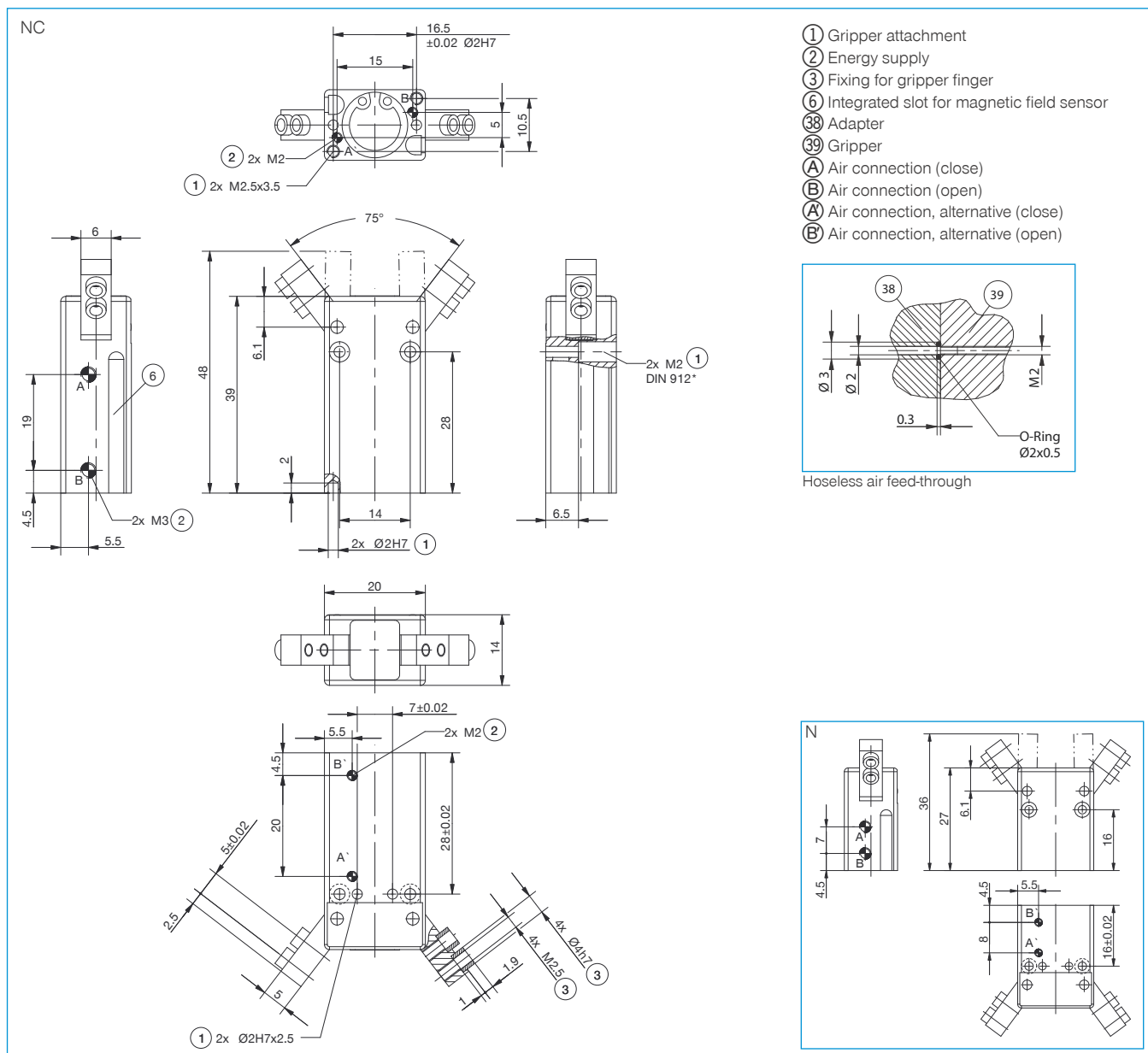


MFS02-K-KHC-P1-PNP
Magnetic field sensor Straight Cable 5 m



MFS02-S-KHC-P1-PNP
Magnetic field sensor Straight Cable 0,3 m - Connector M8

Order no.	Technical data	
	MGW803N	MGW803NC
Stroke per jaw [°]	37.5	37.5
Gripping moment in closing [Nm]	0.2	0.3
Gripping moment in opening [Nm]	0.23	
Gripping moment secured by spring min. [Nm]		0.1
Gripping force in closing [N]	33	49
Gripping force in opening [N]	38	
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
Nominal operating pressure [bar]	6	6
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	0.64	1
Weight [kg]	0.025	0.04



2-JAW ANGULAR GRIPPERS

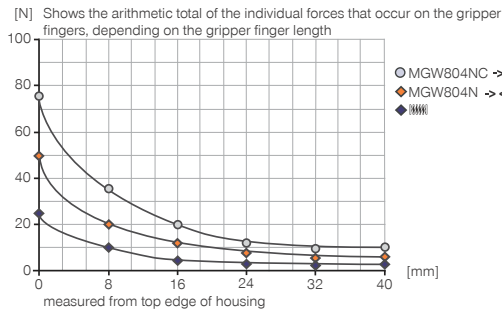
INSTALLATION SIZE MGW804

1

PRODUCT SPECIFICATIONS

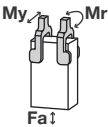


Gripping force diagram



Forces and moments

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



Mr [Nm]	0.5
My [Nm]	0.5
Fa [N]	150

INCLUDED IN DELIVERY



4 [piece]
Centering Disc
DST40400

RECOMMENDED ACCESSORIES



ENERGY SUPPLY



GVM3
Straight Fittings - Barb Style Connection



WVM3
Angled Fittings - Barb Style Connection



DEV04
Quick Exhaust Valve



SENSORS



MFS01-K-KHC-P1-PNP
Magnetic field sensor Angled Cable 5 m



MFS01-S-KHC-P1-PNP
Magnetic field sensor Angled Cable 0,3 m - Con-
nector M8

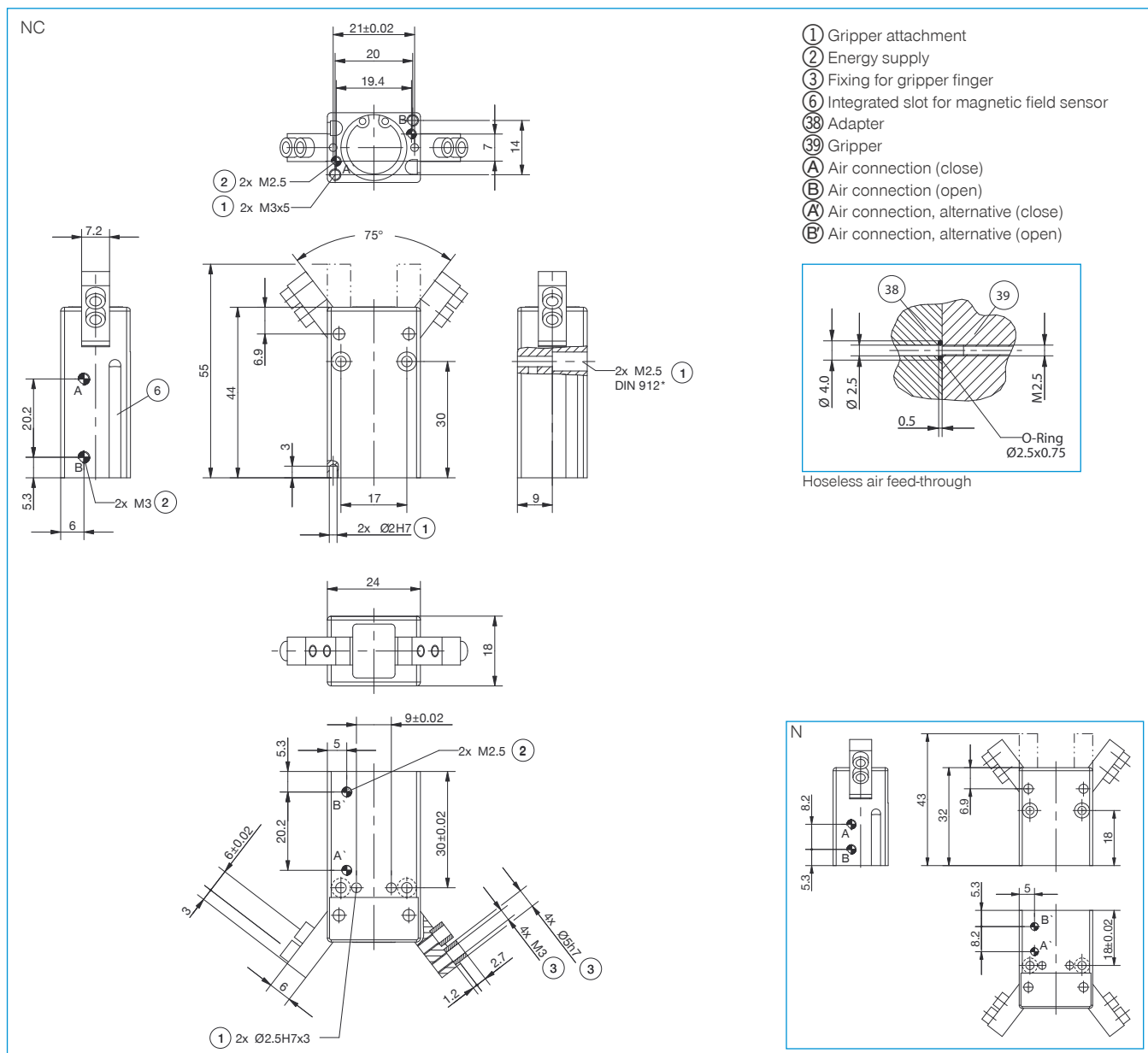


MFS02-K-KHC-P1-PNP
Magnetic field sensor Straight Cable 5 m



MFS02-S-KHC-P1-PNP
Magnetic field sensor Straight Cable 0,3 m - Con-
nector M8

Order no.	Technical data	
	MGW804N	MGW804NC
Stroke per jaw [°]	37.5	37.5
Gripping moment in closing [Nm]	0.35	0.5
Gripping moment in opening [Nm]	0.41	
Gripping moment secured by spring min. [Nm]		0.15
Gripping force in closing [N]	51	72
Gripping force in opening [N]	59	
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
Nominal operating pressure [bar]	6	6
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm ³]	1.4	2
Weight [kg]	0.05	0.08



2-JAW ANGULAR GRIPPERS

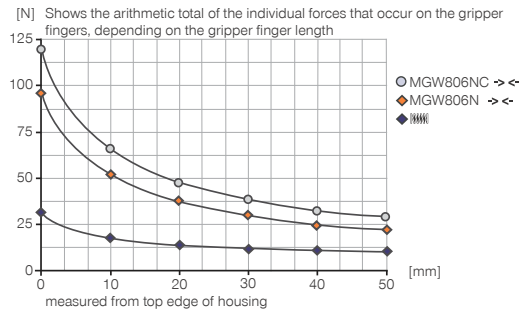
INSTALLATION SIZE MGW806

1

PRODUCT SPECIFICATIONS

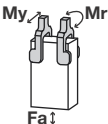


Gripping force diagram



Forces and moments

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



Mr [Nm]	0.7
My [Nm]	0.7
Fa [N]	260

INCLUDED IN DELIVERY



4 [piece]
Centering Disc
DST40600

RECOMMENDED ACCESSORIES



ENERGY SUPPLY



GVM3
Straight Fittings - Barb Style Connection



WVM3
Angled Fittings - Barb Style Connection



DEV04
Quick Exhaust Valve



SENSORS



MFS01-K-KHC-P1-PNP
Magnetic field sensor Angled Cable 5 m



MFS01-S-KHC-P1-PNP
Magnetic field sensor Angled Cable 0,3 m - Connector M8



MFS02-K-KHC-P1-PNP
Magnetic field sensor Straight Cable 5 m



MFS02-S-KHC-P1-PNP
Magnetic field sensor Straight Cable 0,3 m - Connector M8

2-JAW ANGULAR GRIPPERS

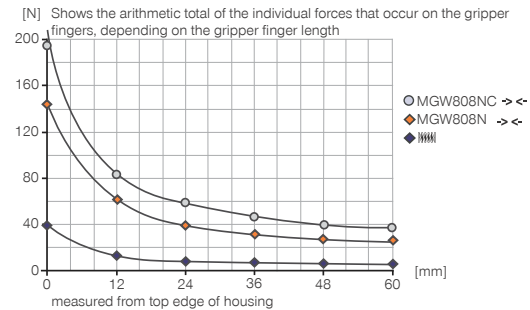
INSTALLATION SIZE MGW808

1

PRODUCT SPECIFICATIONS

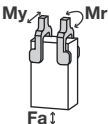


Gripping force diagram



Forces and moments

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



Mr [Nm]	1.3
My [Nm]	1.3
Fa [N]	430

INCLUDED IN DELIVERY



4 [piece]
Centering Disc
DST40600

RECOMMENDED ACCESSORIES



ENERGY SUPPLY



GVM3
Straight Fittings - Barb Style Connection



WVM3
Angled Fittings - Barb Style Connection



DEV04
Quick Exhaust Valve



SENSORS



MFS01-K-KHC-P1-PNP
Magnetic field sensor Angled Cable 5 m



MFS01-S-KHC-P1-PNP
Magnetic field sensor Angled Cable 0,3 m - Con-
nector M8

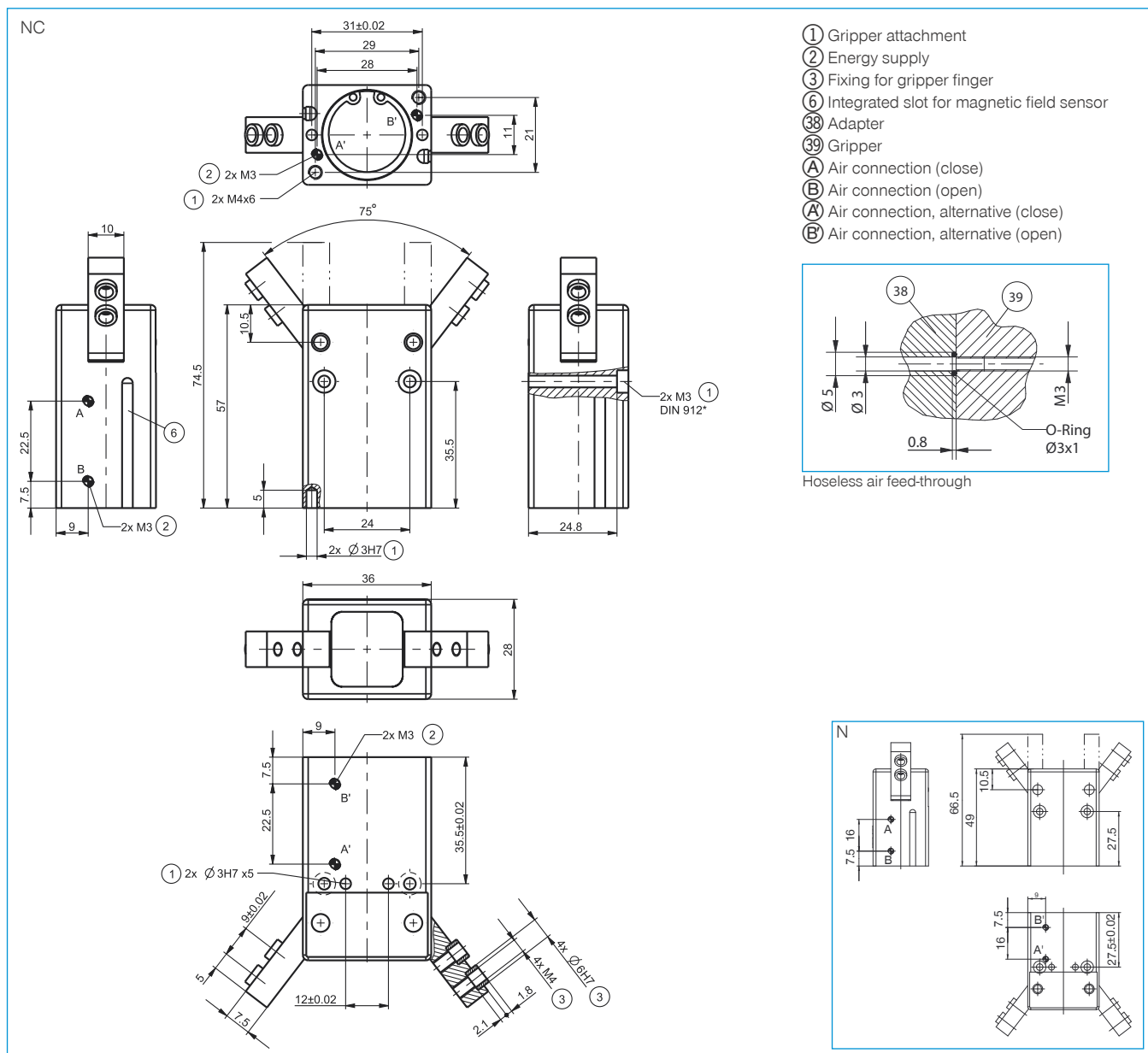


MFS02-K-KHC-P1-PNP
Magnetic field sensor Straight Cable 5 m



MFS02-S-KHC-P1-PNP
Magnetic field sensor Straight Cable 0,3 m - Con-
nector M8

Order no.	► Technical data	
	MGW808N	MGW808NC
Stroke per jaw [°]	37.5	37.5
Gripping moment in closing [Nm]	1.55	2
Gripping moment in opening [Nm]	1.76	
Gripping moment secured by spring min. [Nm]		0.45
Gripping force in closing [N]	148	190
Gripping force in opening [N]	168	
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
Nominal operating pressure [bar]	6	6
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm³]	8.1	10.5
Weight [kg]	0.18	0.19



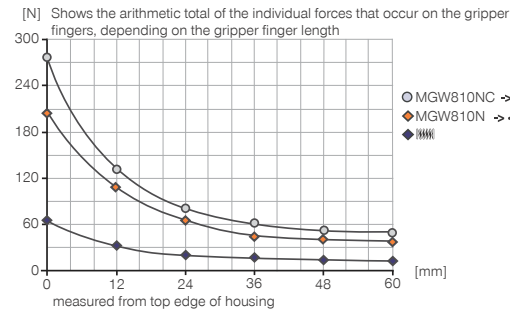
2-JAW ANGULAR GRIPPERS

INSTALLATION SIZE MGW810

1 PRODUCT SPECIFICATIONS

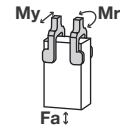


Gripping force diagram



Forces and moments

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



Mr [Nm]	1.6
My [Nm]	1.6
Fa [N]	500

INCLUDED IN DELIVERY



4 [piece]
Centering Disc
DST07540

RECOMMENDED ACCESSORIES



ENERGY SUPPLY



GVM5
Straight Fittings - Quick Connect Style



WVM5
Angled Fittings - Quick Connect Style



DEV04
Quick Exhaust Valve



DSV1-8
Pressure safety valve



DSV1-8E
Pressure safety valve with quick exhaust



SENSORS



MFS01-K-KHC-P1-PNP
Magnetic field sensor Angled Cable 5 m



MFS01-S-KHC-P1-PNP
Magnetic field sensor Angled Cable 0,3 m - Connector M8



MFS02-K-KHC-P1-PNP
Magnetic field sensor Straight Cable 5 m



MFS02-S-KHC-P1-PNP
Magnetic field sensor Straight Cable 0,3 m - Connector M8

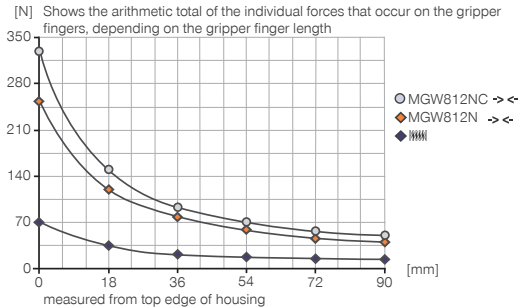
2-JAW ANGULAR GRIPPERS

INSTALLATION SIZE MGW812

1 PRODUCT SPECIFICATIONS

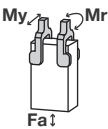


Gripping force diagram



Forces and moments

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



Mr [Nm]	2.3
My [Nm]	2.3
Fa [N]	720

INCLUDED IN DELIVERY



4 [piece]
Centering Disc
DST07540

RECOMMENDED ACCESSORIES



ENERGY SUPPLY



GVM5
Straight Fittings - Quick Connect Style



WVM5
Angled Fittings - Quick Connect Style



DEV04
Quick Exhaust Valve



DSV1-8
Pressure safety valve



DSV1-8E
Pressure safety valve with quick exhaust



SENSORS



MFS01-K-KHC-P1-PNP
Magnetic field sensor Angled Cable 5 m



MFS01-S-KHC-P1-PNP
Magnetic field sensor Angled Cable 0,3 m - Connector M8



MFS02-K-KHC-P1-PNP
Magnetic field sensor Straight Cable 5 m



MFS02-S-KHC-P1-PNP
Magnetic field sensor Straight Cable 0,3 m - Connector M8

2-JAW ANGULAR GRIPPERS

SERIES GZ1000

▶ 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

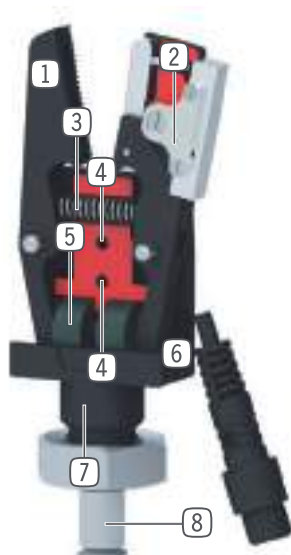
Unlike many other established products on the market, you can even differentiate between “Component present” and “Component not present”

▶ SERIES CHARACTERISTICS

Installation size		Version		
GZ10XX		-01	-02	-03
	Saw tooth jaw without query	•		
	Saw tooth jaw with query		•	
	Version for attaching customer-specific gripper fingers			•
	2 million maintenance-free cycles (max.)	•	•	•
	Inductive sensor		•	
	IP30	•	•	•



► 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**

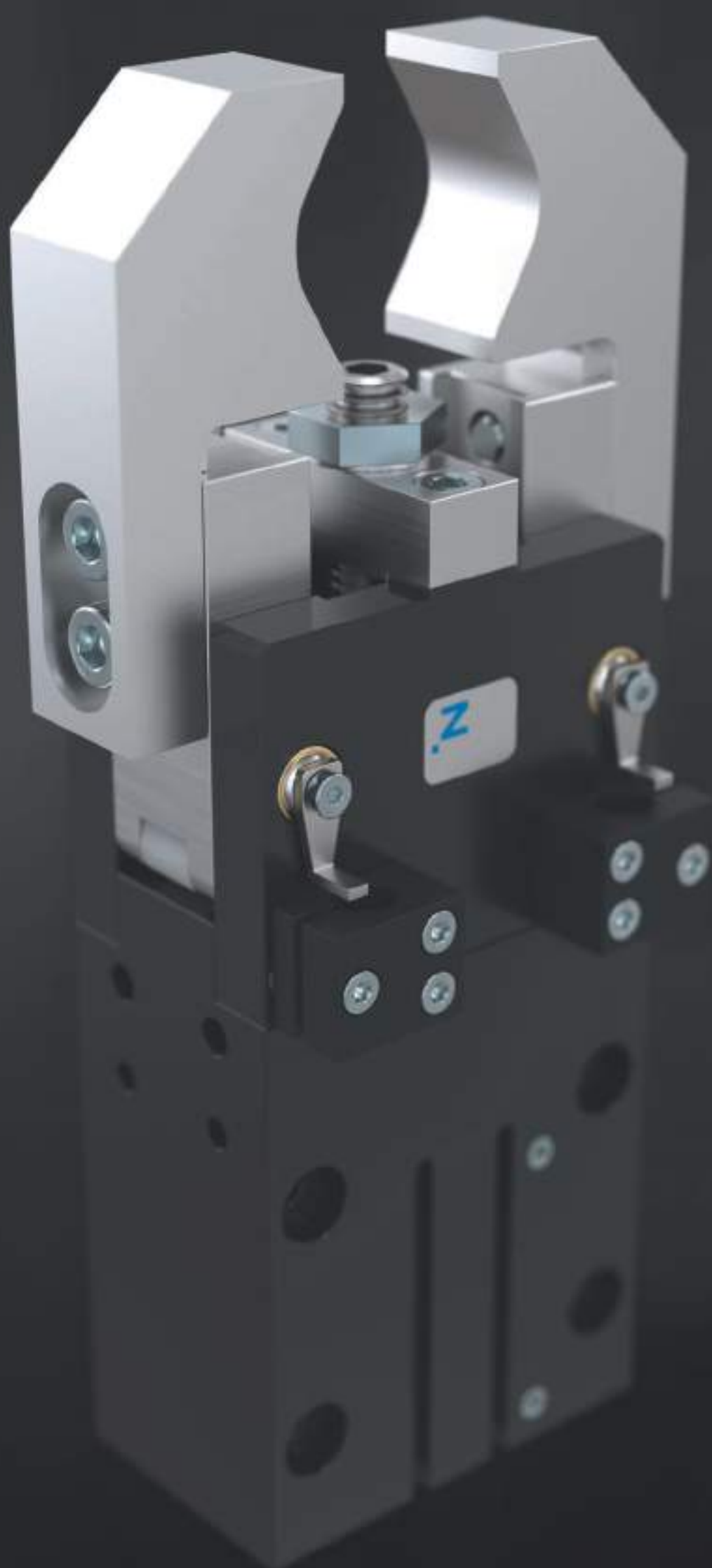
► TECHNICAL DATA

Installation size	Stroke [°]	Gripping force [N]	Weight [kg]	IP class
GZ1020	8	62	0,015 - 0,03	IP30
GZ1030	11	130	0,046 - 0,063	IP30
GZ1040	10	315	0,105 - 0,125	IP30

► FURTHER INFORMATION IS AVAILABLE ONLINE






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 RADIAL GRIPPER

THE SERIES AT A GLANCE



	PNEUMATIC		
	Series GK		216
	Series GG4000		234

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

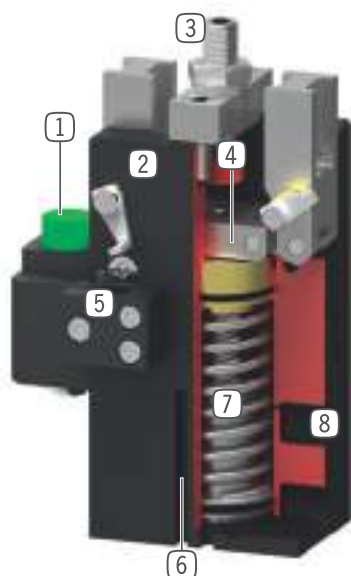
You can adjust the 180° opening angle to be unique to your application using an adjusting screw

▶ SERIES CHARACTERISTICS

Installation size	Version	
GKXX	N	NC
 Spring closing C		•
 10 million maintenance-free cycles (max.)	•	•
 Magnetic field sensor	•	•
 Self locking mechanism	•	•
 IP 20	•	•



► BENEFITS IN DETAIL



- ① **Buffer stop**
 - absorption of kinetic energy for heavy and long gripper fingers
- ② **Robust, lightweight housing**
 - Hard-coated aluminum 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

► TECHNICAL DATA

Installation size	Stroke [°]	Gripping force [N]	Weight [kg]	IP class
GK15	90	70 - 100	0,1 - 0,12	IP20
GK20	90	150 - 210	0,23 - 0,3	IP20
GK25	90	440 - 610	0,42 - 0,58	IP20
GK35	90	950 - 1250	0,9 - 1,2	IP20
GK40	90	1400 - 1820	1,7 - 2,2	IP20
GK50	90	3500 - 4250	3,5 - 4,1	IP20

► FURTHER INFORMATION IS AVAILABLE ONLINE



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.

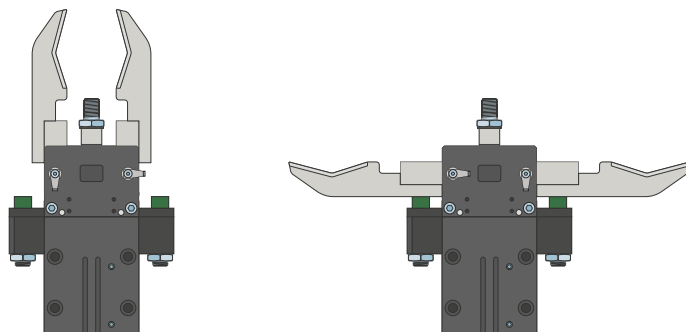
2-JAW RADIAL GRIPPERS

SERIES GK FUNCTIONAL DESCRIPTION

1



GRIPPING COMPONENTS



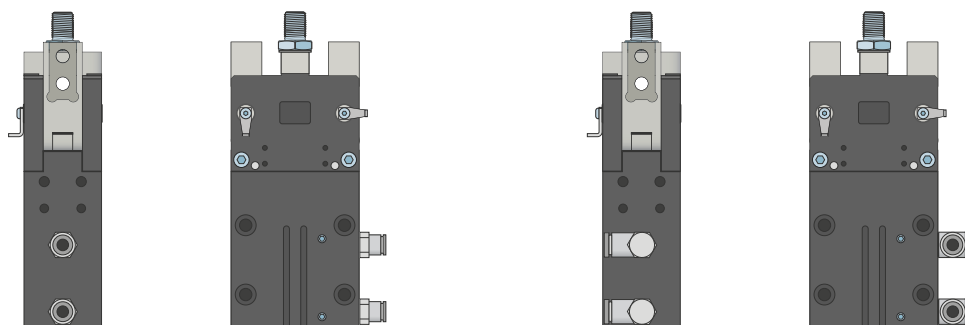
Buffer stop – PB

Absorption of kinetic energy for heavy and long gripper fingers

The buffer stops are used primarily for fast, unthrottled jaw movements. They are equally suitable for long gripper fingers, high jaw mass and for cycle time optimization. The energy is absorbed by an elastomer damper.



ENERGY SUPPLY



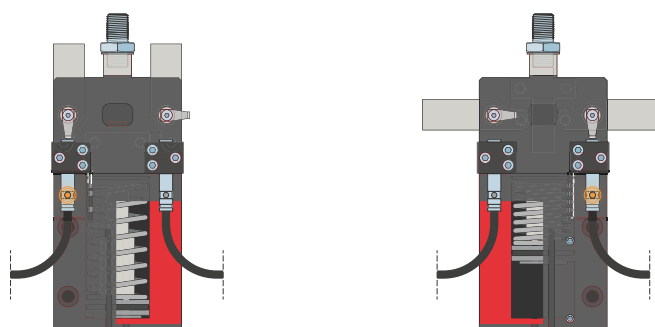
Pneumatic threaded connections

Available in straight and angled design. Can be chosen freely depending on the space conditions or installation situation.



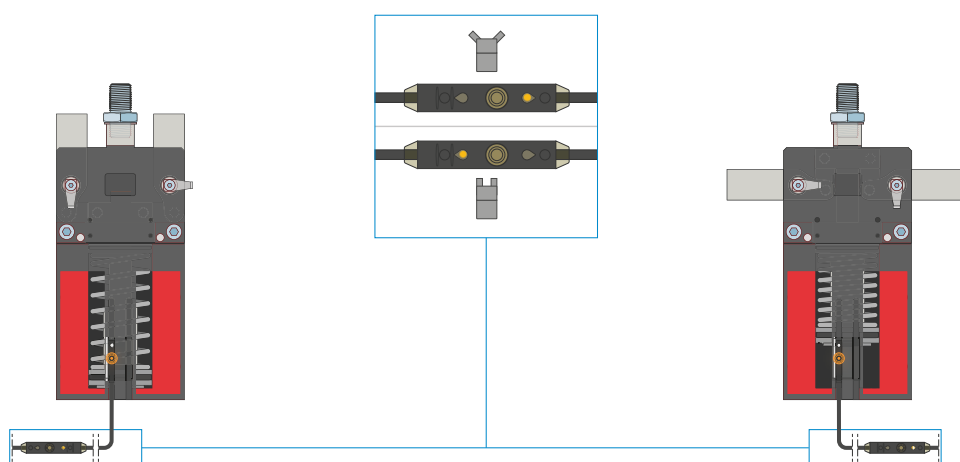
SENSORS

1



Inductive sensors – NJ

The mounting block is aligned to the cam switch, and the sensor is guided into the mounting block until the required switching distance to the cam switch is reached. Fine adjustment can be made by moving the mounting block again. The sensors are available in versions with 5 m cables with exposed leads and 0,3 m cable with connector, as well as with direct plug orientation.



2-point magnetic field sensors – MFS

With two freely programmable switching points

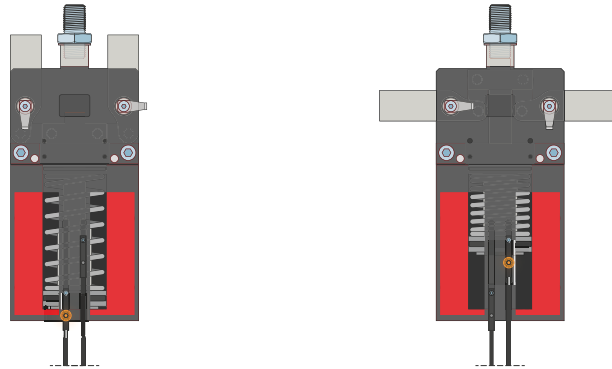
Using the programming unit integrated in the cable, two switch points can be freely defined for this sensor. To do so, the sensor is clamped in the C-groove, the gripper approaches position one and the position is taught in using the teach button. Afterwards, the second position is approached with the gripper and programmed. To ensure use in a wide variety of space conditions, the sensors are available in two variants. While the horizontal MFS02, with straight cable outlet, disappears into the C-groove of the gripper almost completely, the vertical MFS01 is taller, but has a cable outlet that is offset at an angle of 90°. The sensors are available in versions with 5 m cables with exposed leads and 0,3 m cable with connector.

2-JAW RADIAL GRIPPERS

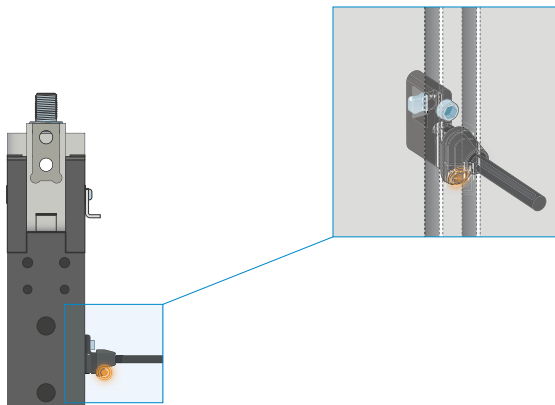
SERIES GK FUNCTIONAL DESCRIPTION

SENSORS

MFS02



MFS01



1-point magnetic field sensors – MFS

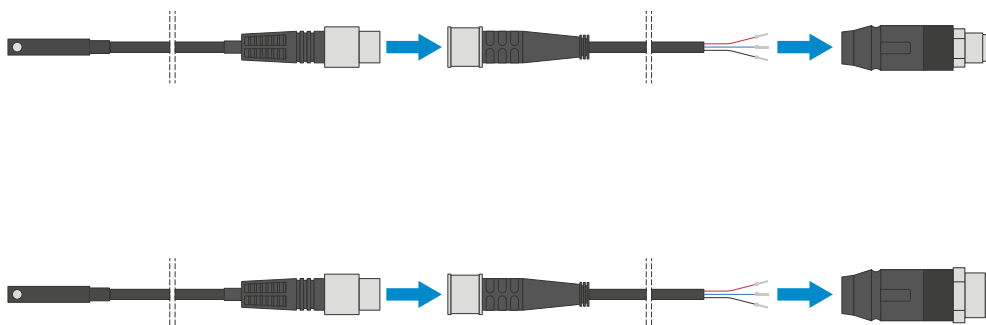
For non-contact sensing of the piston position

These sensors are installed in the C-groove of the gripper and detect the magnet attached to the piston of the gripper. To ensure use in a wide variety of space conditions, the sensors are available in two variants. While the horizontal MFS02, with straight cable outlet, disappears into the C-groove of the gripper almost completely, the vertical MFS01 is taller, but has a cable outlet that is offset at an angle of 90°. The variants are available in versions with 5 m cables with exposed leads and 0,3 m cable with connector.



CONNECTIONS / OTHER

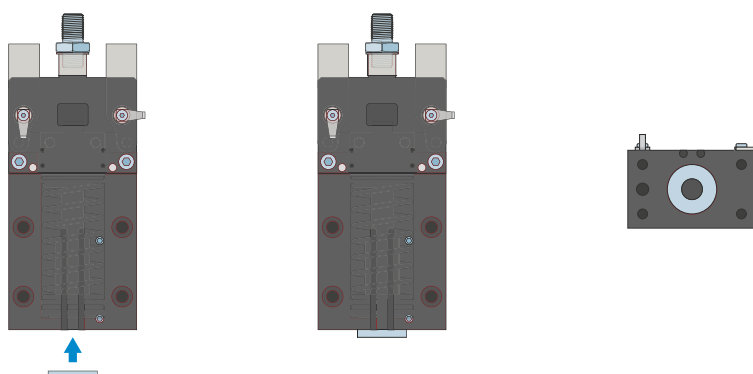
1



Plug-in connectors

For extending and fabricating the connection lines for the sensors

Cables with a length of 5 m with exposed leads are available. Depending on the specific needs, the cables can be shortened or fabricated with connectors in sizes M8 and M12.



Centering disk

Is required in connection with an alignment pin to define the position of the gripper.

2-JAW RADIAL GRIPPER

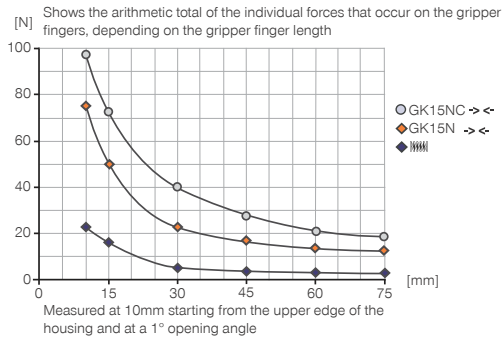
INSTALLATION SIZE GK15

1

PRODUCT SPECIFICATIONS

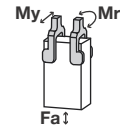


Gripping force diagram



Forces and moments

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



Mr [Nm]	0.4
My [Nm]	0.4
Fa [N]	75

RECOMMENDED ACCESSORIES



GRIPPING COMPONENTS



PB15N
Buffer stop



ENERGY SUPPLY



GVM5
Straight Fittings - Quick Connect Style



SENSORS



KB3
Mounting block



NJ3-E2
Inductive proximity switch - Cable 5 m



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



SENSORS



MFS01-K-KHC-P1-PNP
Magnetic field sensor Angled Cable 5 m



MFS01-S-KHC-P1-PNP
Magnetic field sensor Angled Cable 0,3 m - Connector M8



CONNECTIONS / OTHER



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



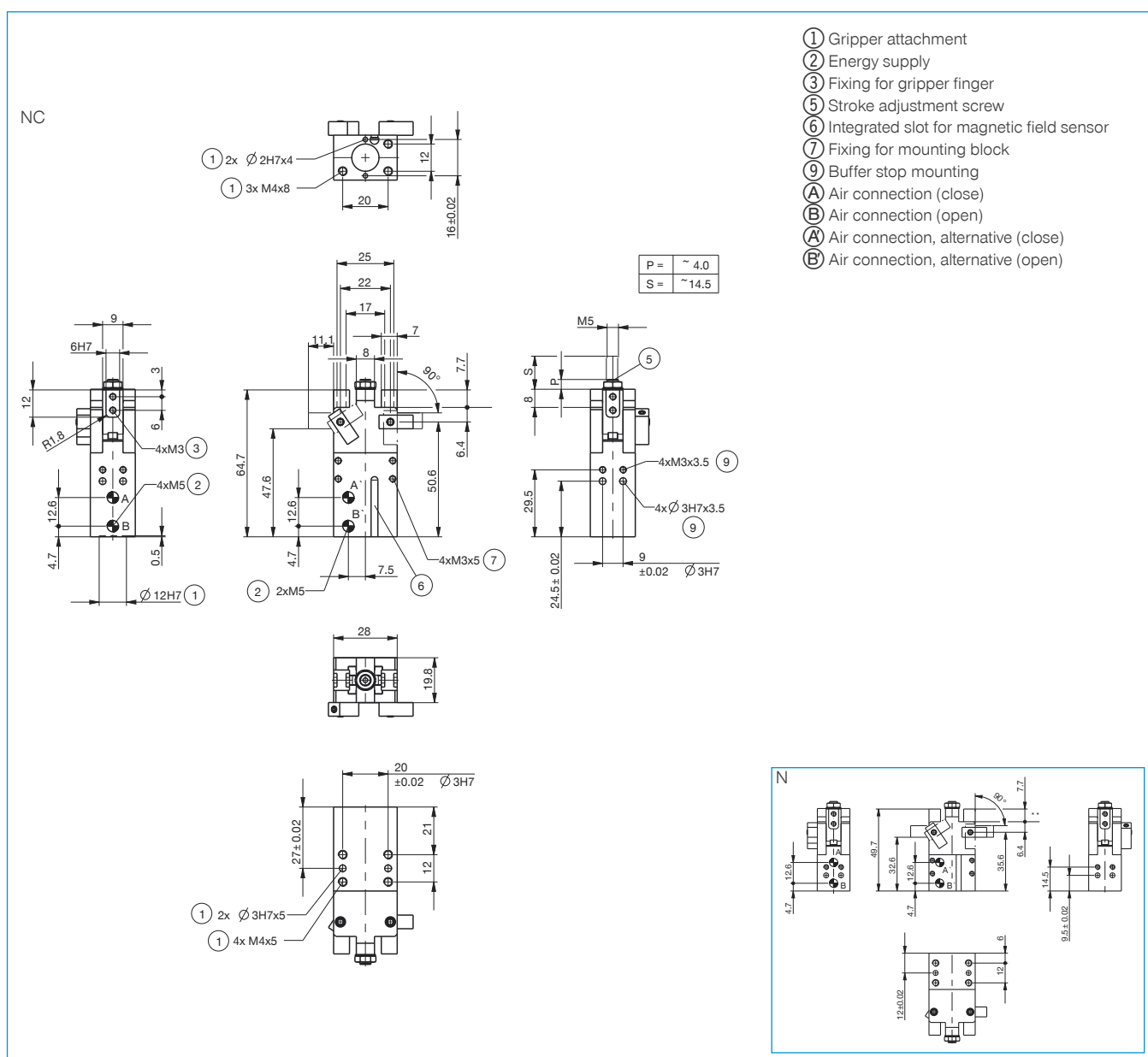
KAW500
Plug-in connector Angled Cable 5m - Socket M8 (female)



ZE12H7X4
Centering Disc

Order no.	Technical data	
	GK15N-B	GK15NC-B
Stroke per jaw [°]	90	90
Gripping moment in closing [Nm]	1.2	1.6
Gripping moment secured by spring min. [Nm]		0.4
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
Nominal operating pressure [bar]	6	6
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

*Measured from top edge of housing



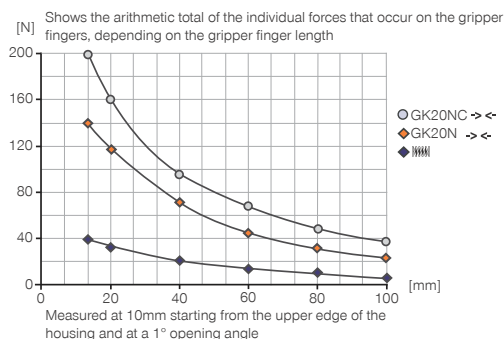
2-JAW RADIAL GRIPPER

INSTALLATION SIZE GK20

PRODUCT SPECIFICATIONS

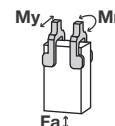


Gripping force diagram



Forces and moments

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



Mr [Nm]	0.8
My [Nm]	1
Fa [N]	150

INCLUDED IN DELIVERY



2 [piece]
Mounting block
KB8K

RECOMMENDED ACCESSORIES



GRIPPING COMPONENTS



PB20N
Buffer stop



SENSORS



MFS01-S-KHC-P1-PNP
Magnetic field sensor Angled Cable 0,3 m - Connector M8



ENERGY SUPPLY



MFS02-S-KHC-P1-PNP
Magnetic field sensor Straight Cable 0,3 m - Connector M8



GVM5
Straight Fittings - Quick Connect Style



CONNECTIONS / OTHER



DRVM5X4
Flow Control Valves - with Swivel joint



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



SENSORS



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



NJ8-E2
Inductive proximity switch - Cable 5 m



ZE20H7X4
Centering Disc



NJ8-E2S
Inductive proximity switch - Connector M8



* Measured from top edge of housing



2-JAW RADIAL GRIPPER

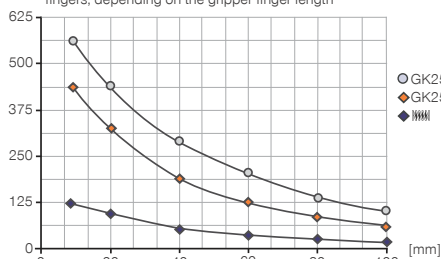
INSTALLATION SIZE GK25

PRODUCT SPECIFICATIONS



Gripping force diagram

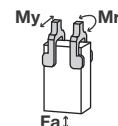
Shows the arithmetic total of the individual forces that occur on the gripper fingers, depending on the gripper finger length



Measured at 10mm starting from the upper edge of the housing and at a 1° opening angle

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



2 [piece]
Mounting block
KB8K

RECOMMENDED ACCESSORIES



GRIPPING COMPONENTS



PB25N
Buffer stop



SENSORS



MFS01-S-KHC-P1-PNP
Magnetic field sensor Angled Cable 0,3 m - Connector M8



ENERGY SUPPLY



GVM5
Straight Fittings - Quick Connect Style



MFS02-S-KHC-P1-PNP
Magnetic field sensor Straight Cable 0,3 m - Connector M8



CONNECTIONS / OTHER



DRVM5X4
Flow Control Valves - with Swivel joint



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



SENSORS



NJ8-E2
Inductive proximity switch - Cable 5 m



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



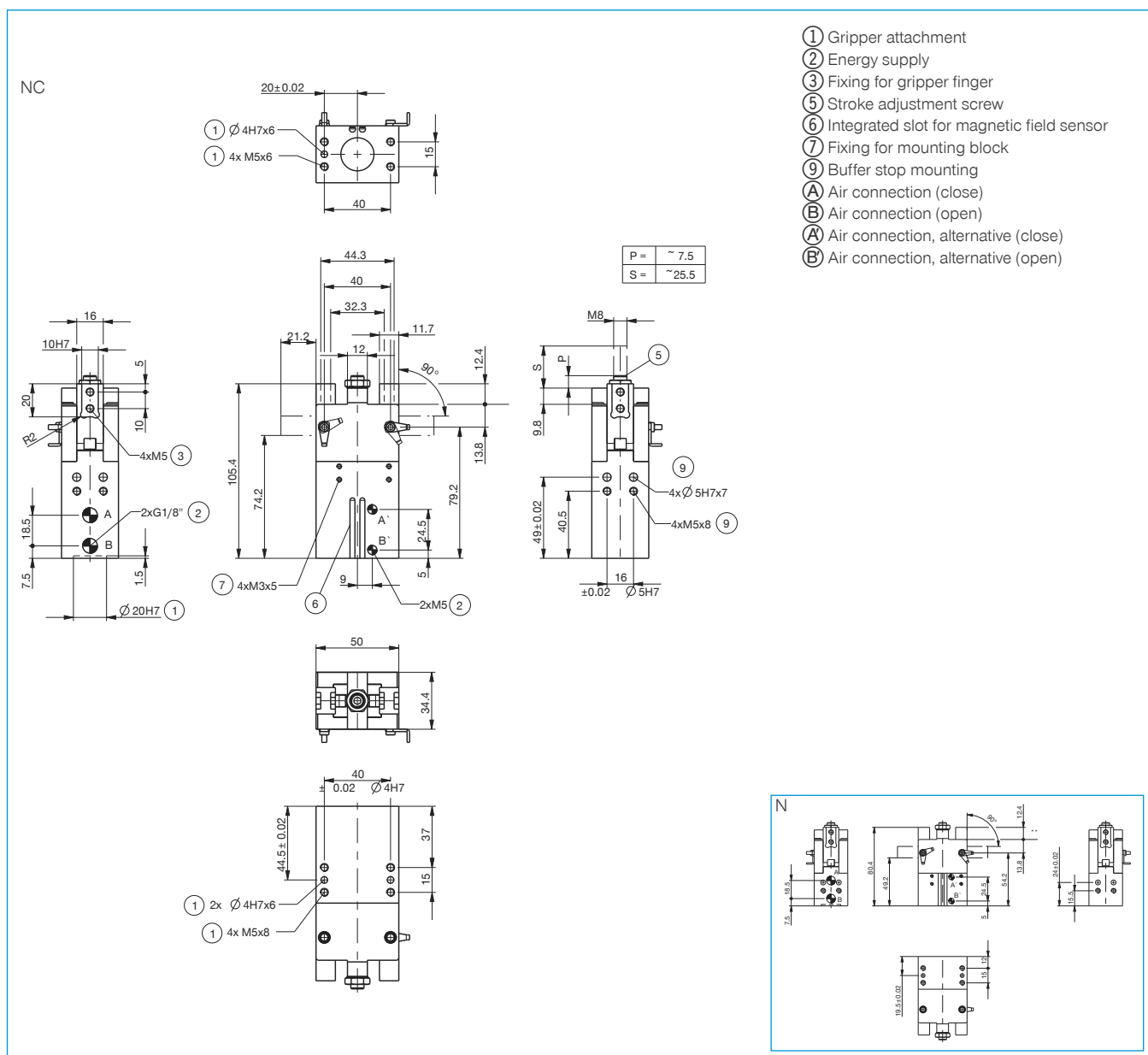
NJ8-E2S
Inductive proximity switch - Connector M8



ZE20H7X4
Centering Disc

Order no.	Technical data	
	GK25N-B	GK25NC-B
Stroke per jaw [°]	90	90
Gripping moment in closing [Nm]	10.5	14.5
Gripping moment secured by spring min. [Nm]		4
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
Nominal operating pressure [bar]	6	6
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

*Measured from top edge of housing



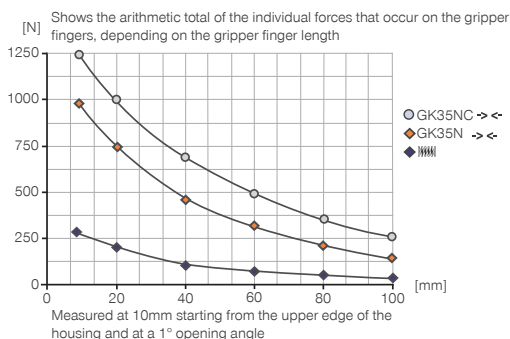
2-JAW RADIAL GRIPPER

INSTALLATION SIZE GK35

PRODUCT SPECIFICATIONS

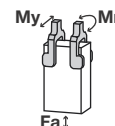


Gripping force diagram



Forces and moments

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



Mr [Nm]	12
My [Nm]	20
Fa [N]	400

INCLUDED IN DELIVERY



2 [piece]
Mounting block
KB8K

RECOMMENDED ACCESSORIES



GRIPPING COMPONENTS



PB35N
Buffer stop



SENSORS



MFS01-S-KHC-P1-PNP
Magnetic field sensor Angled Cable 0,3 m - Connector M8



ENERGY SUPPLY



GVM5
Straight Fittings - Quick Connect Style



MFS02-S-KHC-P1-PNP
Magnetic field sensor Straight Cable 0,3 m - Connector M8



CONNECTIONS / OTHER



DRVM5X4
Flow Control Valves - with Swivel joint



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



SENSORS



NJ8-E2
Inductive proximity switch - Cable 5 m



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

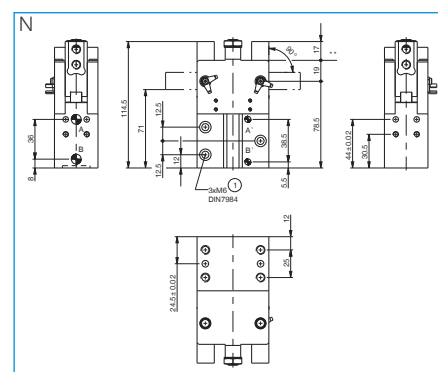


NJ8-E2S
Inductive proximity switch - Connector M8



ZE25H7X6
Centering Disc

* Measured from top edge of housing



2-JAW RADIAL GRIPPER

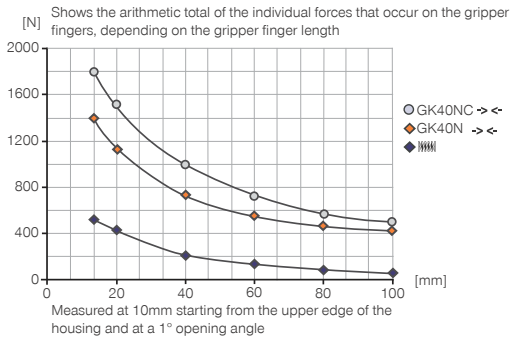
INSTALLATION SIZE GK40

1

PRODUCT SPECIFICATIONS

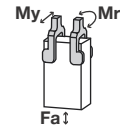


Gripping force diagram



Forces and moments

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



Mr [Nm]	17
My [Nm]	30
Fa [N]	600

INCLUDED IN DELIVERY



2 [piece]
Mounting block
KB8K

RECOMMENDED ACCESSORIES



GRIPPING COMPONENTS



PB40N
Buffer stop



SENSORS



MFS01-S-KHC-P1-PNP
Magnetic field sensor Angled Cable 0,3 m - Con-
nector M8



ENERGY SUPPLY



GVM5
Straight Fittings - Quick Connect Style



MFS02-S-KHC-P1-PNP
Magnetic field sensor Straight Cable 0,3 m - Con-
nector M8



CONNECTIONS / OTHER



DRVM5X4
Flow Control Valves - with Swivel joint



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



SENSORS



NJ8-E2
Inductive proximity switch - Cable 5 m



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



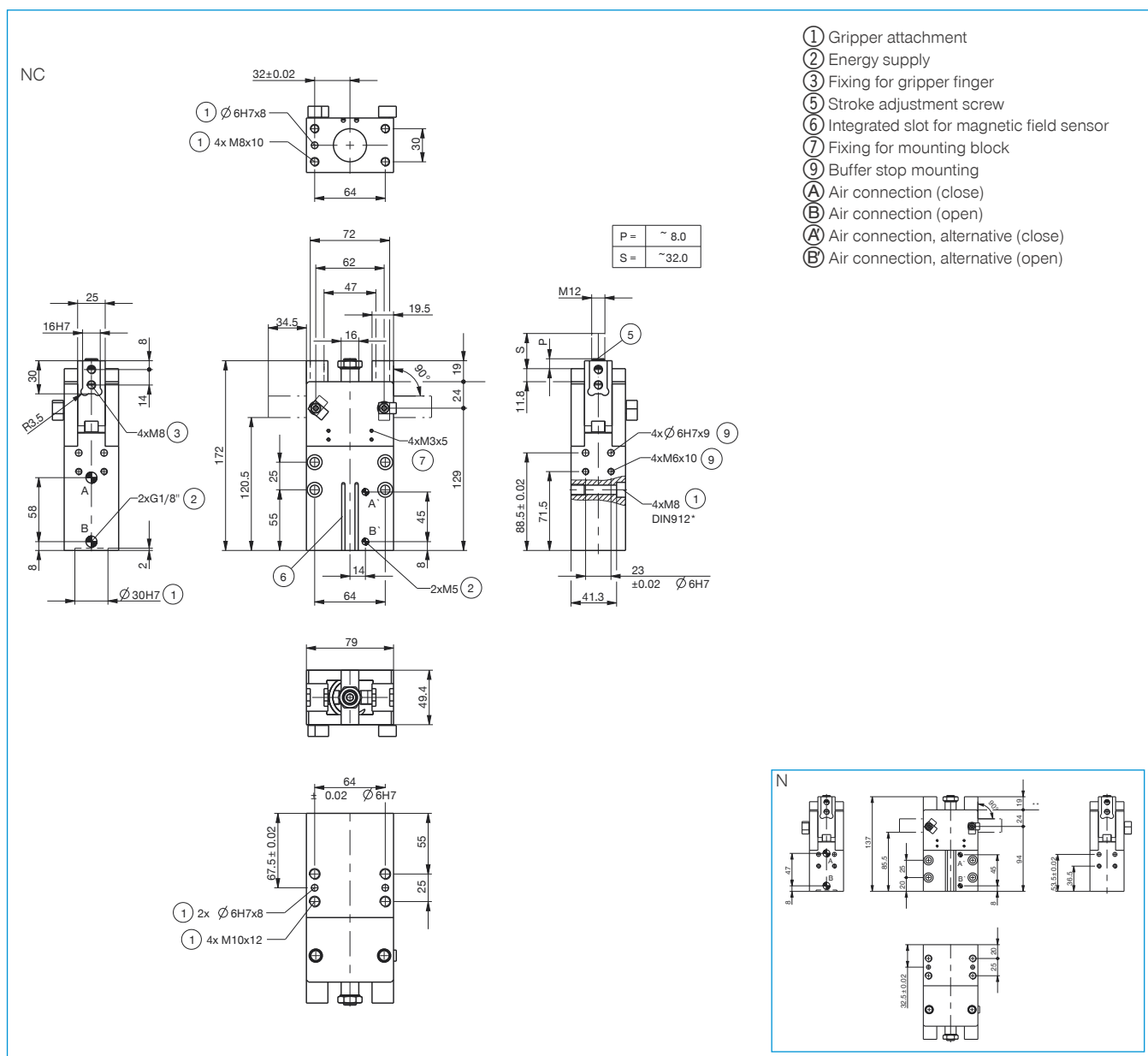
NJ8-E2S
Inductive proximity switch - Connector M8



ZE30H7X4
Centering Disc

Order no.	► Technical data	
	GK40N-B	GK40NC-B
Stroke per jaw [°]	90	90
Gripping moment in closing [Nm]	47	62
Gripping moment secured by spring min. [Nm]		15
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
Nominal operating pressure [bar]	6	6
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

*Measured from top edge of housing



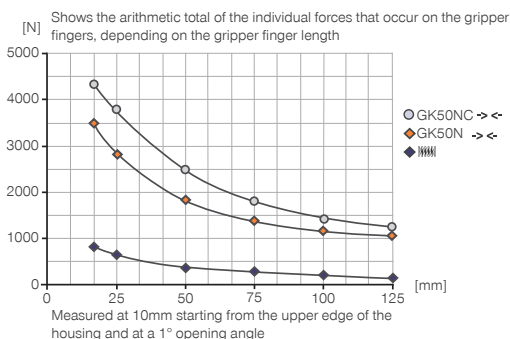
2-JAW RADIAL GRIPPER

INSTALLATION SIZE GK50

PRODUCT SPECIFICATIONS

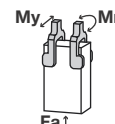


Gripping force diagram



Forces and moments

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



Mr [Nm]	28
My [Nm]	40
Fa [N]	800

INCLUDED IN DELIVERY



2 [piece]
Mounting block
KB8K

RECOMMENDED ACCESSORIES



ENERGY SUPPLY



GV1-8X8
Straight Fittings - Quick Connect Style



DRV1-8X6
Flow Control Valves - with Swivel joint



SENSORS



NJ8-E2
Inductive proximity switch - Cable 5 m



NJ8-E2S
Inductive proximity switch - Connector M8



MFS01-S-KHC-P1-PPN
Magnetic field sensor Angled Cable 0,3 m - Connector M8



SENSORS



MFS02-S-KHC-P1-PPN
Magnetic field sensor Straight Cable 0,3 m - Connector M8



CONNECTIONS / OTHER



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



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



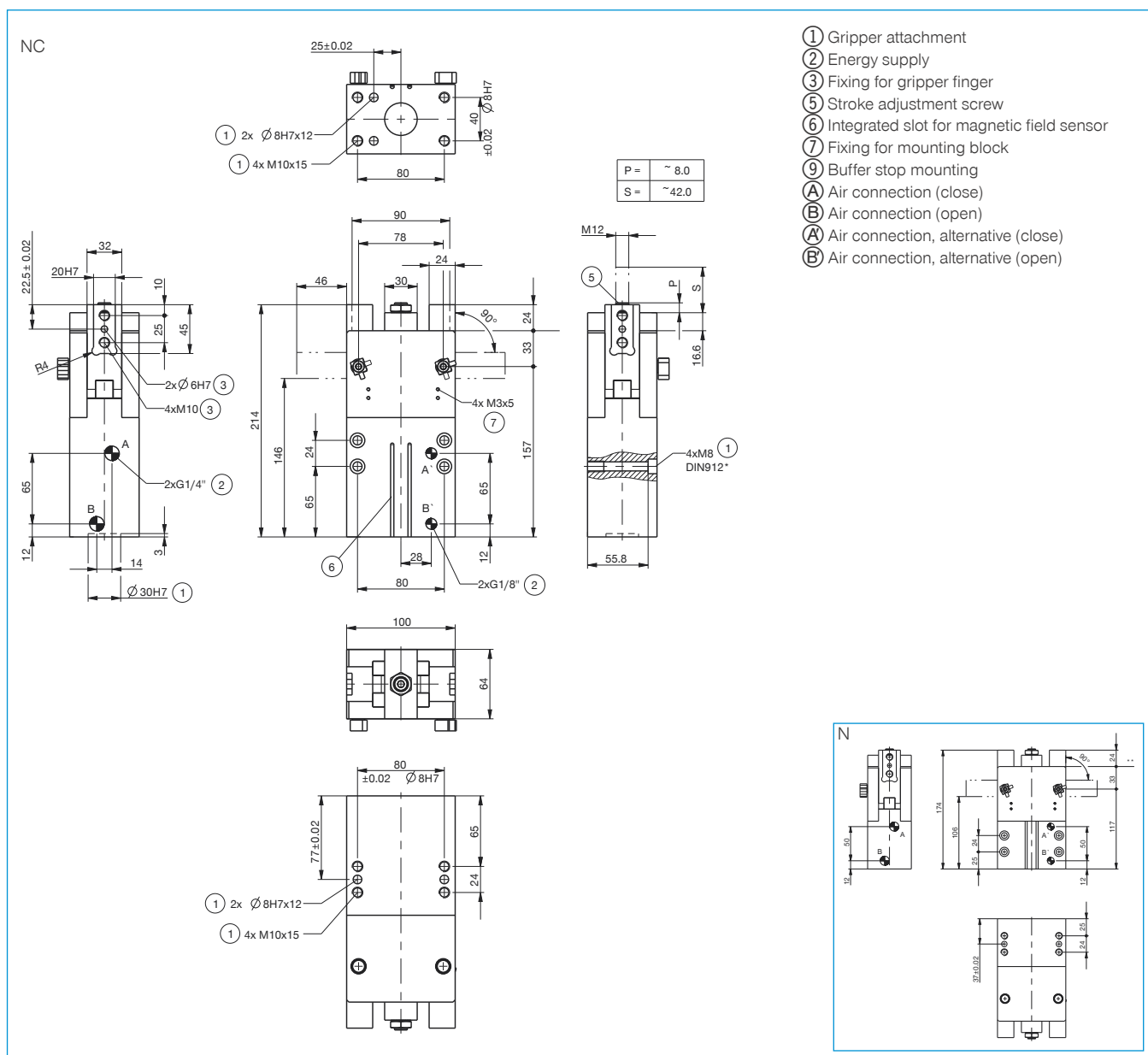
S8-G-3
Plug-in connector customizable Straight - Connector M8



ZE30H7X6
Centering Disc

Order no.	Technical data	
	GK50N-B	GK50NC-B
Stroke per jaw [°]	90	90
Gripping moment in closing [Nm]	150	183
Gripping moment secured by spring min. [Nm]		33
Gripping force in closing [N] *	3500	4250
Closing time [s]	0.4	0.5
Opening time [s]	0.4	0.5
Repetition accuracy +/- [mm]	0.05	0.05
Operating pressure min. [bar]	3	5
Operating pressure max. [bar]	8	8
Nominal operating pressure [bar]	6	6
Operating temperature min. [°C]	5	5
Operating temperature max. [°C]	+80	+80
Air volume per cycle [cm ³]	160	200
Weight [kg]	3.5	4.1

*Measured from top edge of housing



2-JAW RADIAL GRIPPER

SERIES GG4000

▶ 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

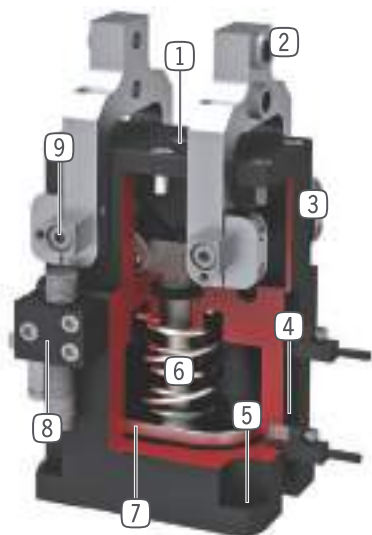
Our uncompromising “Made in Germany” quality guarantees up to 10 million maintenance-free cycles

▶ SERIES CHARACTERISTICS

Installation size	Version	
GG40XX	NC	SC
 Spring closing C	•	•
 High-strength S		•
 10 million maintenance-free cycles (max.)	•	•
 Inductive sensor	•	•
 Magnetic field sensor	•	•
 Purged air	•	•
 IP64	•	•



► 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 aluminum 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

► TECHNICAL DATA

Installation size	Stroke per jaw [°]	Gripping force [N]	Weight [kg]	IP class
GG4032	20 - 90	430 - 460	0,25	IP64
GG4040	20 - 90	700 - 800	0,5	IP64
GG4049	20 - 90	1000 - 1150	0,85	IP64
GG4058	20 - 90	1650 - 1900	1,4	IP64
GG4072	20 - 90	1950 - 2700	2,45	IP64
GG4084	20 - 90	3500 - 4000	4,5	IP64

► FURTHER INFORMATION IS AVAILABLE ONLINE



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.



GRIPPERS FOR SPECIFIC TASKS

OVERVIEW OF SERIES



PNEUMATIC

	Series ST	238
	Series GS	246
	Series GSI	258
	Series LGS	264
	Series LG1000	266
	Series LGG	268
	Series RG	270
	Series SCH	272
	Series HM1000	274

NEEDLE GRIPPER

SERIES ST

1

Series ST / Needle gripper / pneumatic / Grippers

▶ PRODUCT ADVANTAGES



▶ **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**

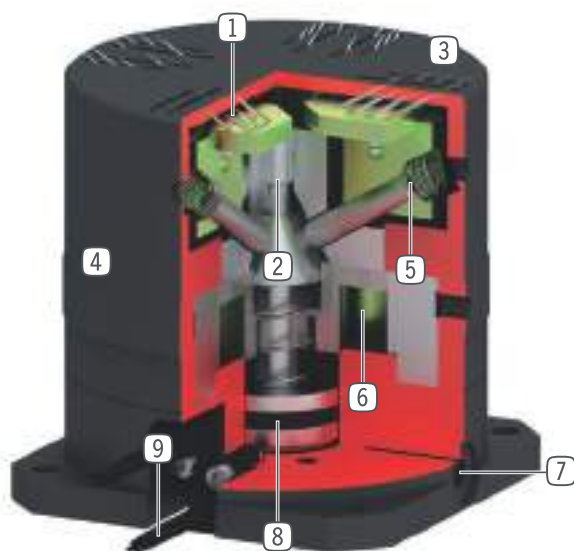
Detecting the end position allows you to have shorter cycle times and an integrated control system

▶ SERIES CHARACTERISTICS

Installation size		
STXX		
 5 million maintenance-free cycles (max.)		●
 Magnetic field sensor		●
 IP 30		●



► 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

► TECHNICAL DATA

Installation size	Needle stroke adjustable [mm]	Needle diameter [mm]	Weight [kg]	IP class
ST36	0 - 1,5	0.7	0.21	IP30
ST40	0 - 2	0.7	0.49	IP30

► FURTHER INFORMATION IS AVAILABLE ONLINE



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.

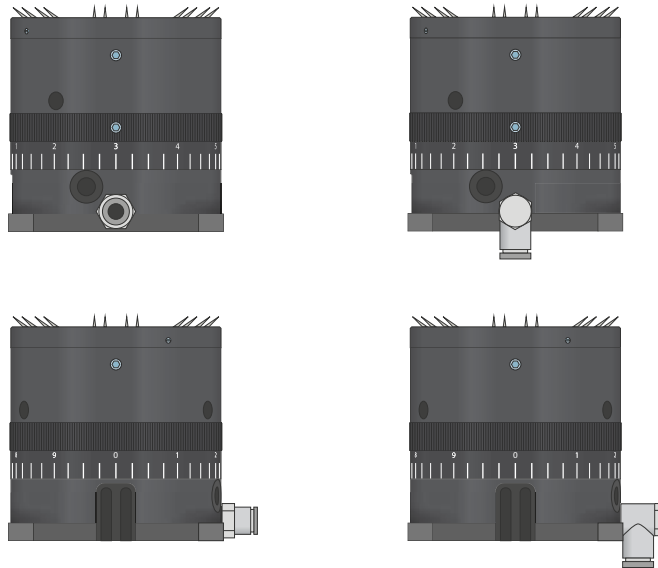
NEEDLE GRIPPERS

SERIES ST FUNCTIONAL DESCRIPTION

1



ENERGY SUPPLY



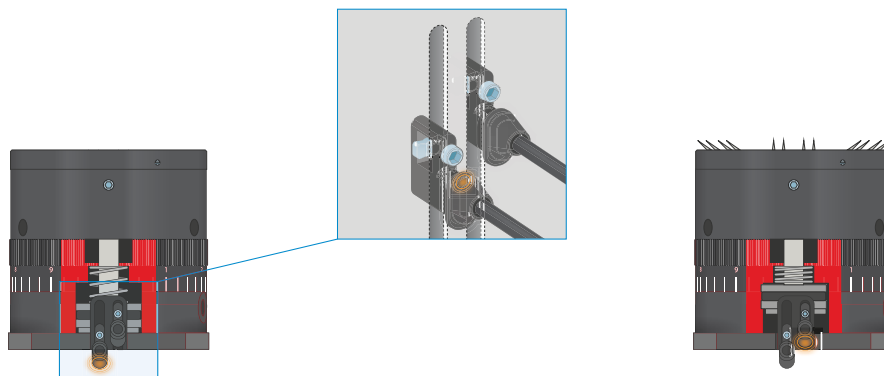
Pneumatic threaded connections

Available in straight and angled design. Can be chosen freely depending on the space conditions or installation situation.



SENSORS

MFS01



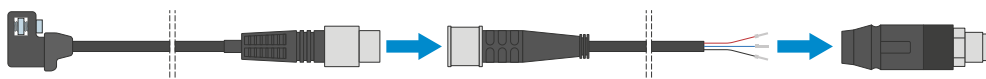
1-point magnetic field sensors – MFS

For non-contact sensing of the piston position

The sensor is clamped in the C-groove of the gripper and detects the magnet attached to the gripper jaws. The MFS01 is available in versions with 5 m cables with exposed leads and 0,3 m cable with connector.



CONNECTIONS / OTHER



Plug-in connectors

For extending and fabricating the connection lines for the sensors

Cables with a length of 5 m with exposed leads are available. Depending on the specific needs, the cables can be shortened or fabricated with connectors in sizes M8 and M12.

NEEDLE GRIPPER

INSTALLATION SIZE ST36

▶ PRODUCT SPECIFICATIONS



▶ RECOMMENDED ACCESSORIES



ENERGY SUPPLY



GVM5
Straight Fittings - Quick Connect Style



SENSORS



MFS01-K-KHC-P1-PNP
Magnetic field sensor Angled Cable 5 m



MFS01-S-KHC-P1-PNP
Magnetic field sensor Angled Cable 0,3 m - Connector M8



CONNECTIONS / OTHER

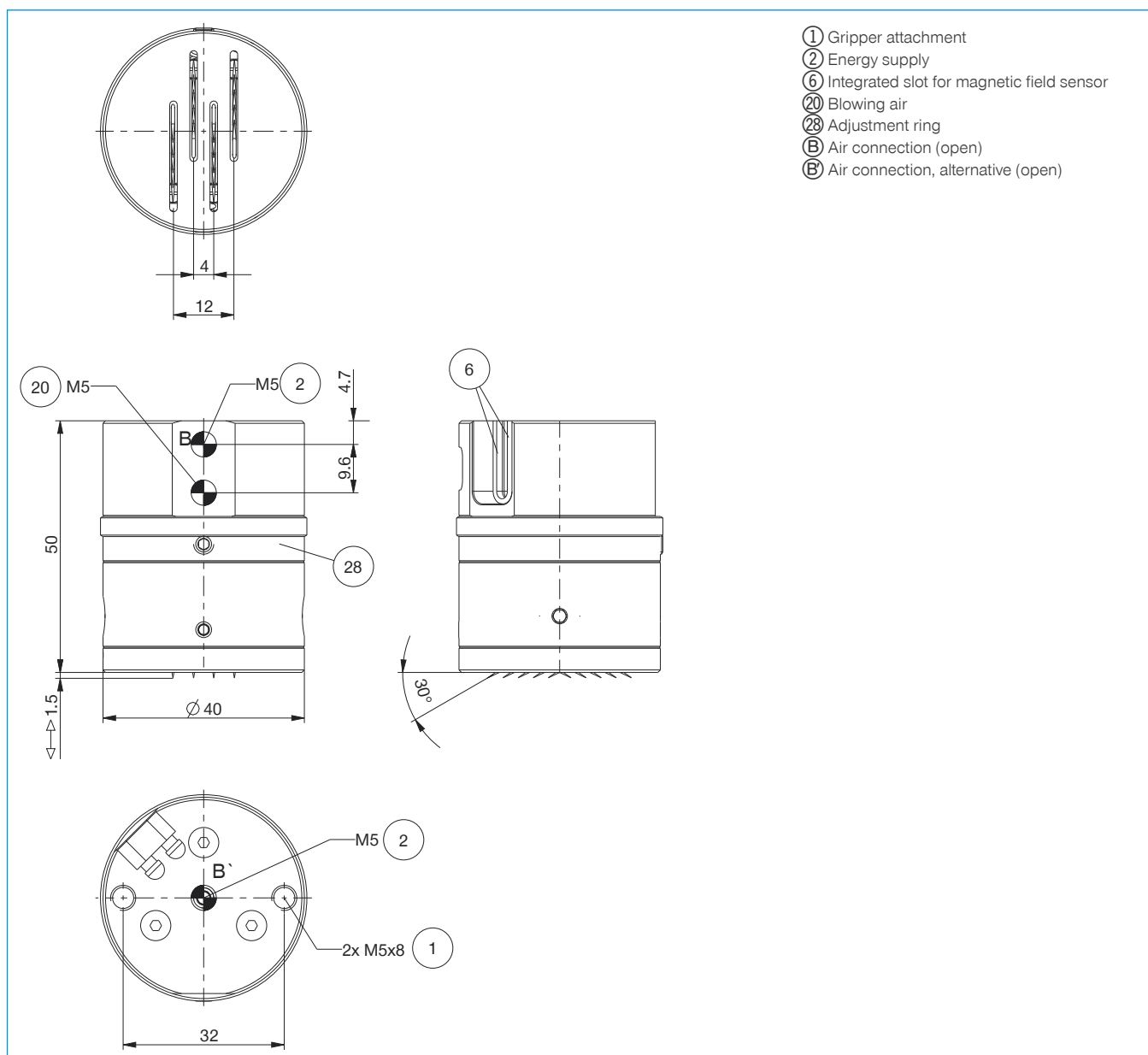


S8-G-3
Plug-in connector customizable Straight - Connector M8



S12-G-3
Plug-in connector customizable Straight - Connector M12

Order no.	Technical data
	ST36-B
Needle stroke adjustable min. [mm]	0
Needle stroke adjustable max. [mm]	1.5
Number of needles [piece]	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
Nominal operating pressure [bar]	6
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	1
Weight [kg]	0.21



NEEDLE GRIPPER

INSTALLATION SIZE ST40

▶ PRODUCT SPECIFICATIONS



▶ RECOMMENDED ACCESSORIES



ENERGY SUPPLY



GVM5
Straight Fittings - Quick Connect Style



SENSORS



MFS01-K-KHC-P1-PNP
Magnetic field sensor Angled Cable 5 m



MFS01-S-KHC-P1-PNP
Magnetic field sensor Angled Cable 0,3 m - Connector M8



CONNECTIONS / OTHER



S8-G-3
Plug-in connector customizable Straight - Connector M8

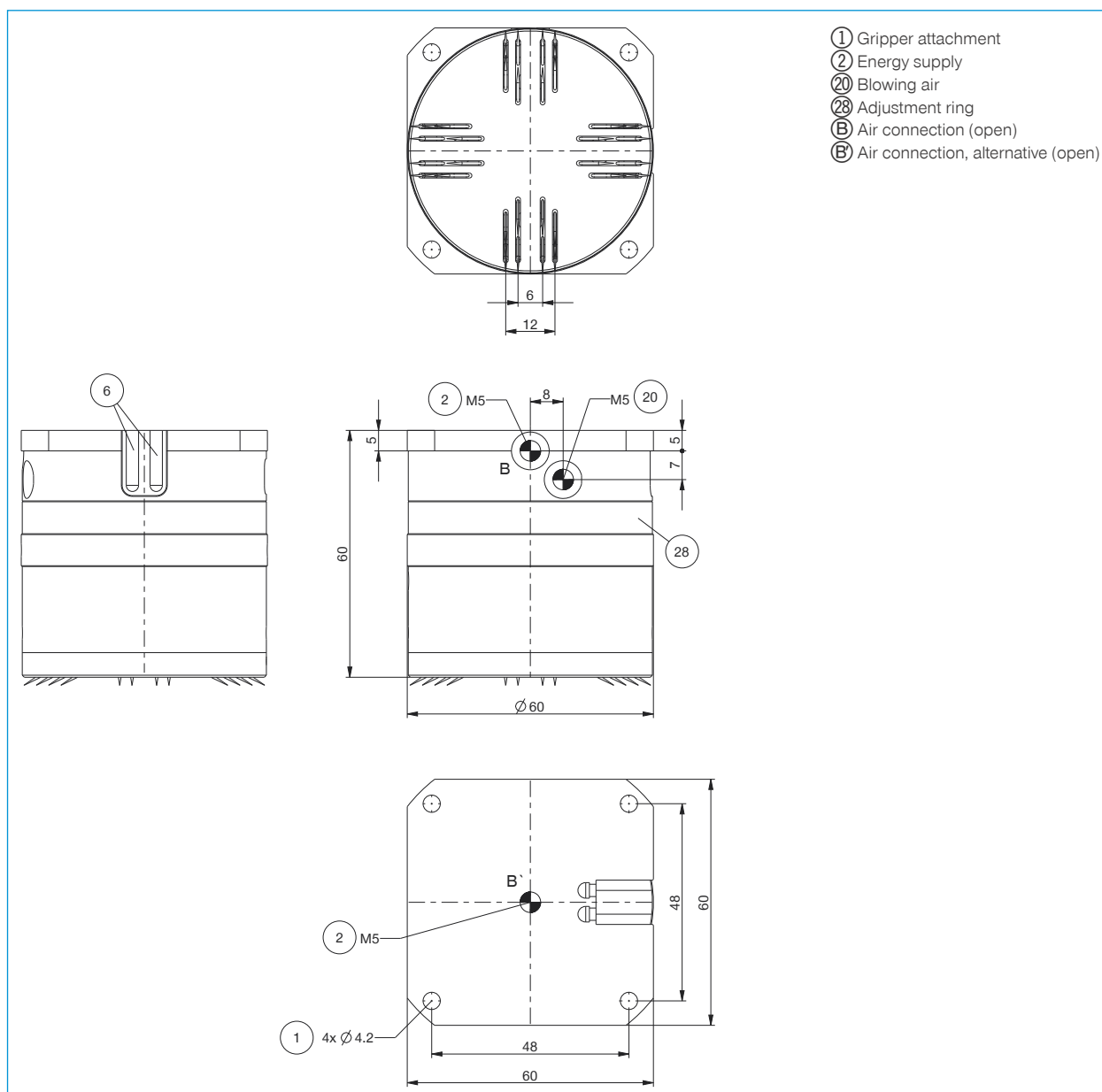


S12-G-3
Plug-in connector customizable Straight - Connector M12

Order no.	ST40-B
Needle stroke adjustable min. [mm]	0
Needle stroke adjustable max. [mm]	2
Number of needles [piece]	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
Nominal operating pressure [bar]	6
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm ³]	3
Weight [kg]	0.49

► Technical data

ST40-B



O-RING ASSEMBLY GRIPPER, OUTER

SERIES GS





1

▶ PRODUCT ADVANTAGES



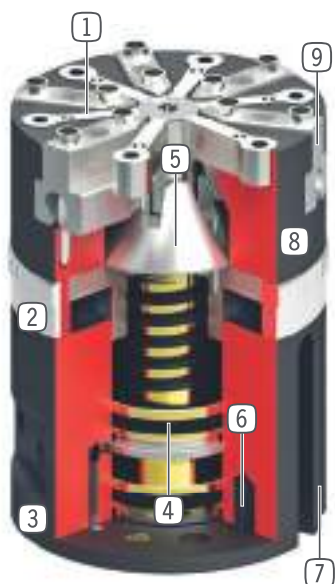
- ▶ **Proven technology**
We have more than 20 years of proven reliability, which ensures uninterrupted production for you
- ▶ **Adjustable expanding stroke**
Prevents the O-ring from overexpanding and ensures consistent production quality
- ▶ **Query about magnetic field sensor technology**
Detecting the end position allows you to have shorter cycle times and an integrated control system

▶ SERIES CHARACTERISTICS

Installation size	
GSXXX	
 5 Mio	5 million maintenance-free cycles (max.)
	Inductive sensor
	Magnetic field sensor
	IP30



► 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 aluminum alloy
- ⑨ **Gripper jaw**
 - individual gripper finger mounting

► TECHNICAL DATA

Installation size	Opening stroke adjustable per jaw	Recommended O-ring diameter	Weight	IP class
	[mm]	[mm]	[kg]	
GS65	3 - 6	4 - 60	0.5	IP30
GS810	4 - 8	30 - 120	2.5	IP30
GS1015	1.6 - 10	40 - 150	5.4	IP30

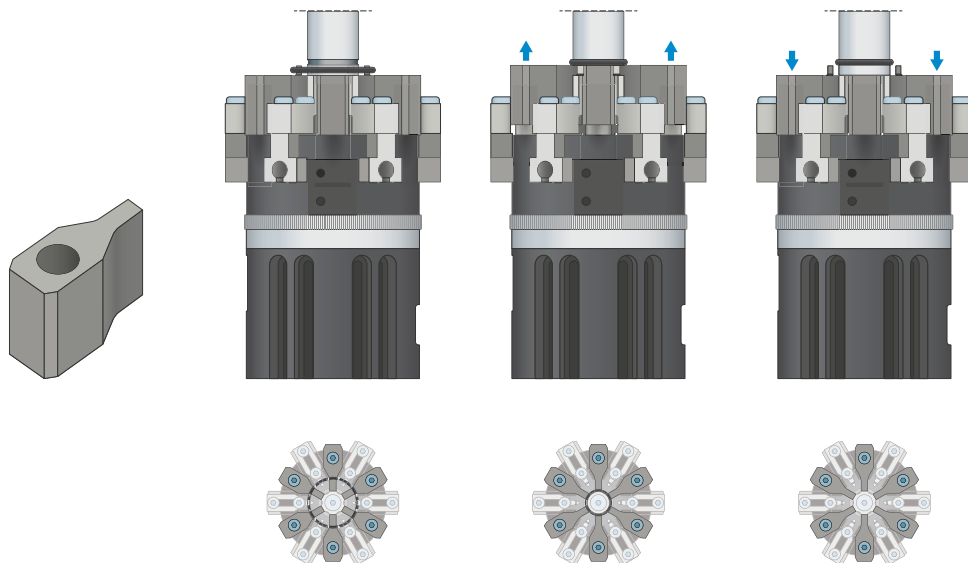
► FURTHER INFORMATION IS AVAILABLE ONLINE



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.

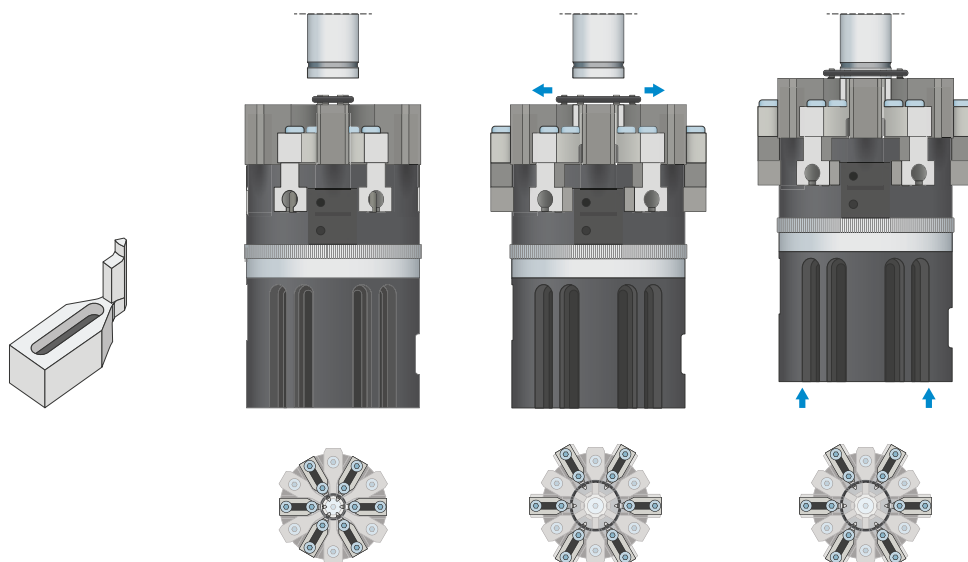
O-RING ASSEMBLY GRIPPER, OUTER SERIES GS FUNCTIONAL DESCRIPTION

GRIPPING COMPONENTS



Removal jaws

The removal jaws remove the spread O-ring on the workpiece.

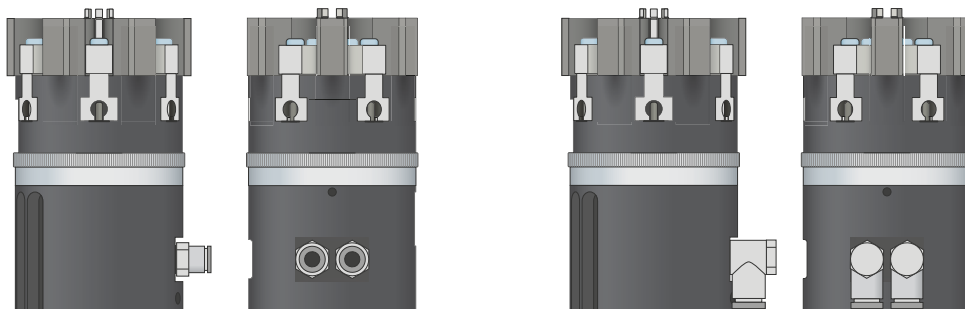


Clamping jaws

Using the clamping jaws, the O-ring is expanded to the expanding stroke set previously on the gripper via the adjustment ring.



ENERGY SUPPLY

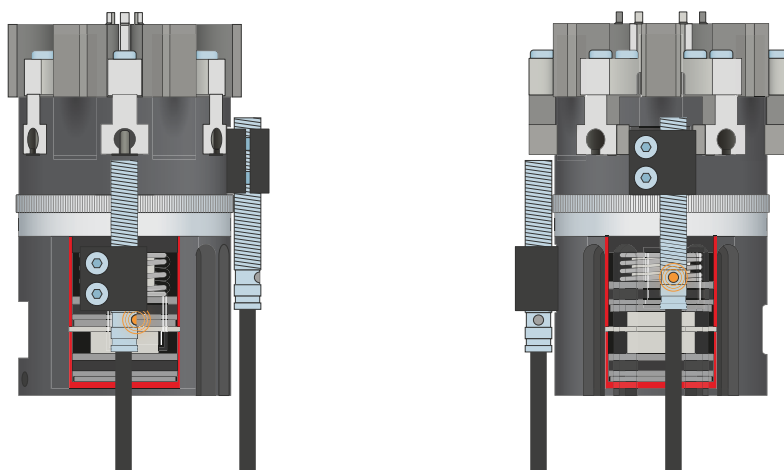


Pneumatic threaded connections

Available in straight and angled design. Can be chosen freely depending on the space conditions or installation situation.



SENSORS



Inductive sensors – NJ

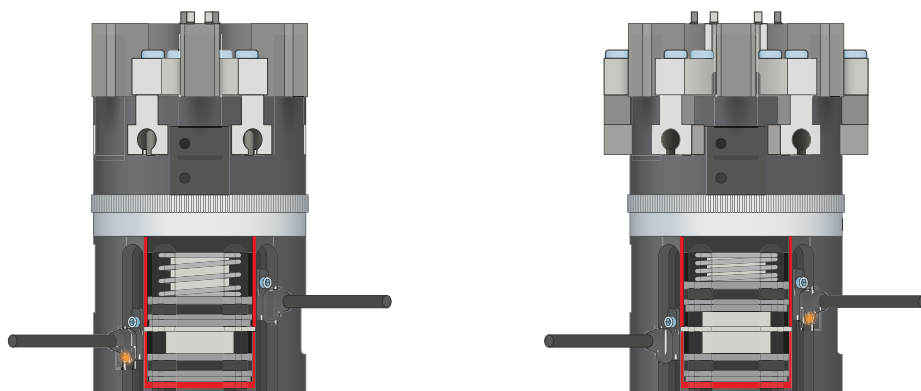
The expanding stroke can be sensed using an inductive sensor in combination with a mounting block. The cam switch must be manufactured on an application-specific basis.

O-RING ASSEMBLY GRIPPER, OUTER

SERIES GS FUNCTIONAL DESCRIPTION

SENSORS

MFS01

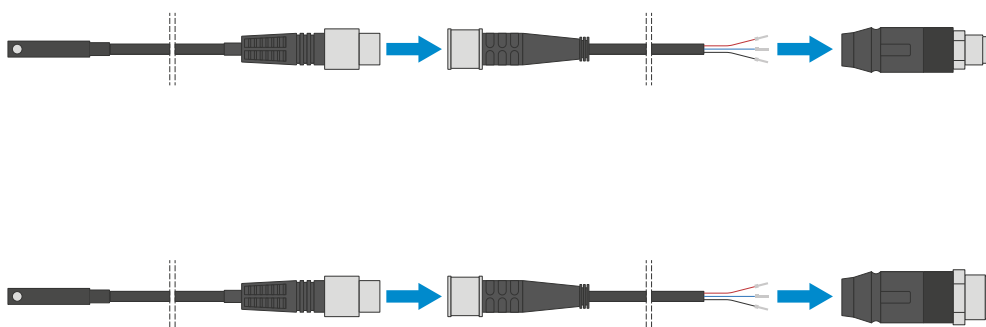


1-point magnetic field sensors – MFS

For non-contact sensing of the piston position

The sensor is clamped in the C-groove of the gripper and detects the magnet attached to the gripper jaws. The MFS01 is available in versions with 5 m cables with exposed leads and 0,3 m cable with connector.

CONNECTIONS / OTHER



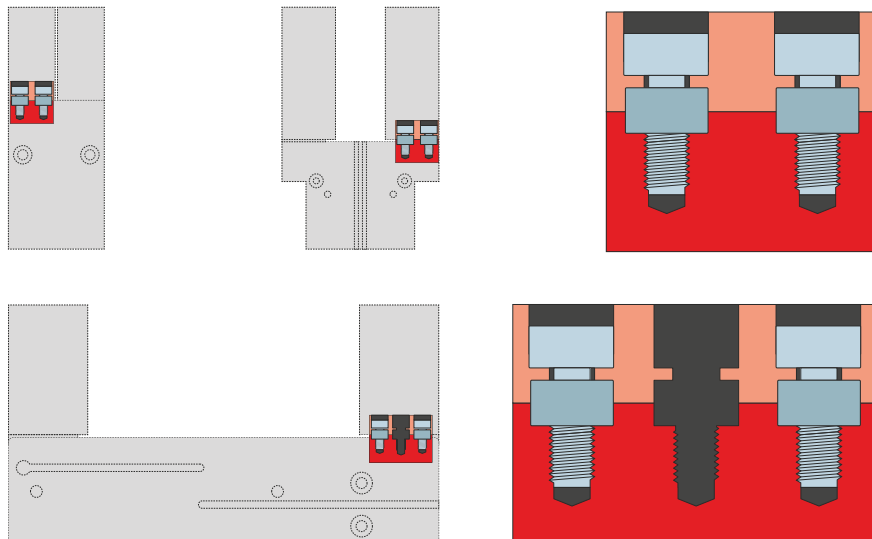
Plug-in connectors

For extending and fabricating the connection lines for the sensors

Cables with a length of 5 m with exposed leads are available. Depending on the specific needs, the cables can be shortened or fabricated with connectors in sizes M8 and M12.



CONNECTIONS / OTHER



Centering sleeves

For defined position measurement of the spread jaws

The centering sleeves are inserted into the fits of the gripper jaws to define the position of the spread jaws. The centering sleeves are comparable to a pin connection.

O-RING ASSEMBLY GRIPPER, OUTER INSTALLATION SIZE GS65

1

▶ PRODUCT SPECIFICATIONS



▶ INCLUDED IN DELIVERY



12 [piece]
Centering Disc
DST06510

▶ RECOMMENDED ACCESSORIES



GRIPPING COMPONENTS



UB65-3
Ejector jaw set aluminium



UB65-4
Expanding jaw set steel



ENERGY SUPPLY



GVM5
Straight Fittings - Quick Connect Style



SENSORS



KB6.5-02
Mounting block



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



SENSORS



NJ6.5-E2S
Inductive proximity switch - Connector M8



MFS01-K-KHC-P1-PNP
Magnetic field sensor Angled Cable 5 m



MFS01-S-KHC-P1-PNP
Magnetic field sensor Angled Cable 0,3 m - Connector M8



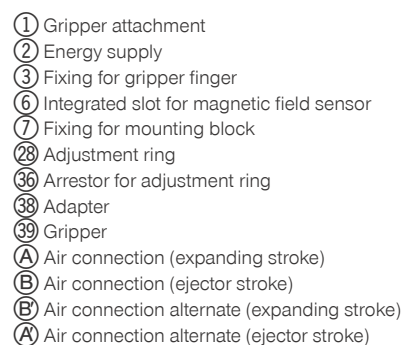
CONNECTIONS / OTHER



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



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



O-RING ASSEMBLY GRIPPER, OUTER

INSTALLATION SIZE GS810

▶ PRODUCT SPECIFICATIONS



▶ INCLUDED IN DELIVERY



16 [piece]
Centering Disc
DST40600

▶ RECOMMENDED ACCESSORIES



GRIPPING COMPONENTS



UB810-3
Ejector jaw set aluminium



UB810-4
Expanding jaw set steel



ENERGY SUPPLY



GV1-8X8
Straight Fittings - Quick Connect Style



SENSORS



KB6.5-02
Mounting block



NJ8-E2
Inductive proximity switch - Cable 5 m



SENSORS



NJ8-E2S
Inductive proximity switch - Connector M8



MFS01-K-KHC-P1-PNP
Magnetic field sensor Angled Cable 5 m



MFS01-S-KHC-P1-PNP
Magnetic field sensor Angled Cable 0,3 m - Connector M8



CONNECTIONS / OTHER

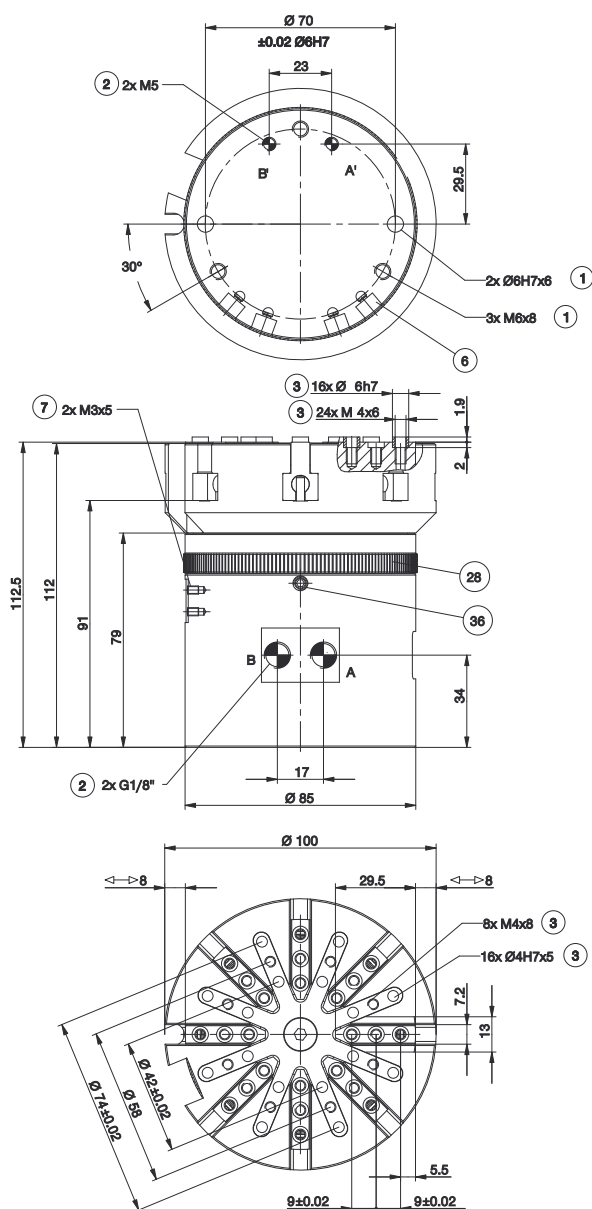


KAG500
Plug-in connector Straight Cable 5m - Socket M8 (female)

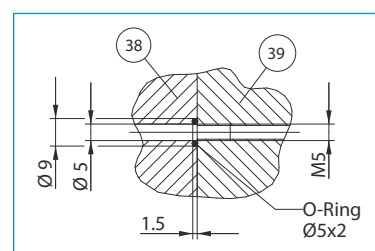


KAW500
Plug-in connector Angled Cable 5m - Socket M8 (female)

Order no.	Technical data
	GS810-B
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
Nominal operating pressure [bar]	6
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Weight [kg]	2.5



- 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
- ⑬ Air connection (expanding stroke)
- ⑭ Air connection (ejector stroke)
- ⑮ Air connection alternate (expanding stroke)
- ⑯ Air connection alternate (ejector stroke)



Hoseless air feed-through

O-RING ASSEMBLY GRIPPER, OUTER

INSTALLATION SIZE GS1015

1

▶ PRODUCT SPECIFICATIONS



▶ INCLUDED IN DELIVERY



2 [piece]
Mounting block
KB8K



20 [piece]
Centering Disc
DST60800

▶ RECOMMENDED ACCESSORIES



GRIPPING COMPONENTS



UB1015-3
Ejector jaw set aluminium



UB1015-4
Expanding jaw set steel



SENSORS



MFS01-K-KHC-P1-PNP
Magnetic field sensor Angled Cable 5 m



MFS01-S-KHC-P1-PNP
Magnetic field sensor Angled Cable 0,3 m - Con-
nector M8



ENERGY SUPPLY



GV1-8X8
Straight Fittings - Quick Connect Style



CONNECTIONS / OTHER



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



SENSORS



NJ8-E2
Inductive proximity switch - Cable 5 m



NJ8-E2S
Inductive proximity switch - Connector M8



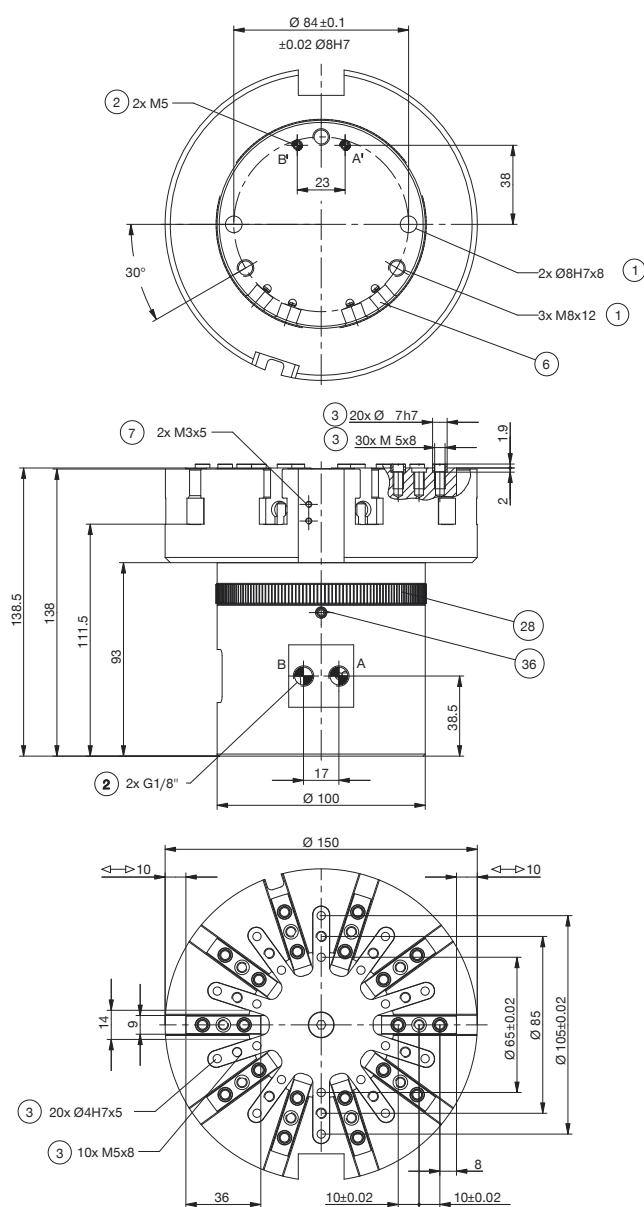
KAW500
Plug-in connector Angled Cable 5m - Socket M8
(female)



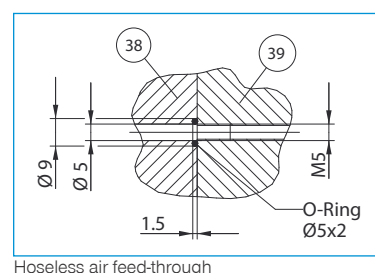
S8-G-3
Plug-in connector customizable Straight - Con-
nector M8



Order no.	Technical data
	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
Nominal operating pressure [bar]	6
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Weight [kg]	5.4



- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑥ Integrated slot for magnetic field sensor
- ⑦ Fixing for mounting block
- ②⑧ Adjustment ring
- ③⑥ Arrestor for adjustment ring
- ③⑧ Adapter
- ③⑨ Gripper
- Ⓐ Air connection (expanding stroke)
- Ⓑ Air connection (ejector stroke)
- Ⓑ Air connection alternate (expanding stroke)
- Ⓐ Air connection alternate (ejector stroke)



O-RING ASSEMBLY GRIPPER, INNER

SERIES GSI




1

▶ PRODUCT ADVANTAGES



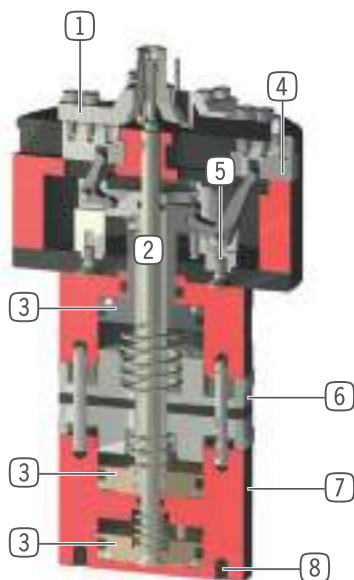
- ▶ **Concentration on the essentials**
Only pay for what you need - individual standard gripper specific to O-ring inside assembly
- ▶ **Adjustable expanding stroke**
Prevents the O-ring from overexpanding and ensures consistent production quality
- ▶ **Query about magnetic field sensor technology**
Detecting the end position allows you to have shorter cycle times and an integrated control system

▶ SERIES CHARACTERISTICS

Installation size		
GSIXXX		
 5 Mio	5 million maintenance-free cycles (max.)	●
	Magnetic field sensor	●
	IP30	●



► 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

► TECHNICAL DATA

Installation size	Opening stroke adjustable per jaw	Recommended O-ring diameter	Weight	IP class
	[mm]	[mm]	[kg]	
GSI206	1 - 6	11 - 130	1.1	IP30

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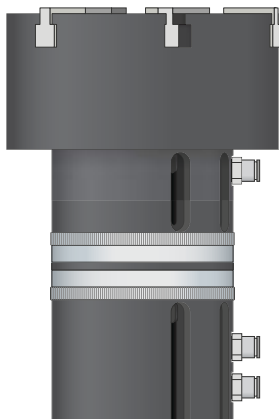
O-RING ASSEMBLY GRIPPER, INNER

SERIES GSI FUNCTIONAL DESCRIPTION

1



ENERGY SUPPLY



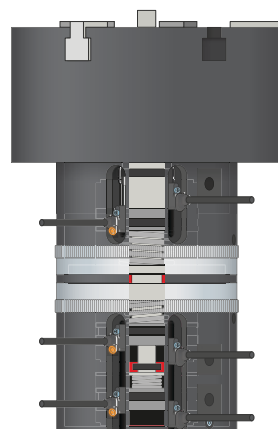
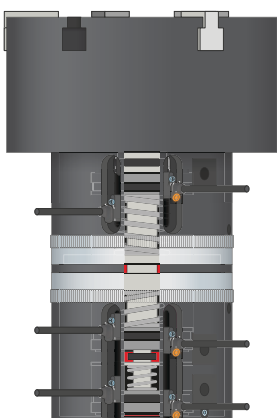
Pneumatic threaded connections

Available in straight and angled design. Can be chosen freely depending on the space conditions or installation situation.



SENSORS

MFS01



1-point magnetic field sensors – MFS

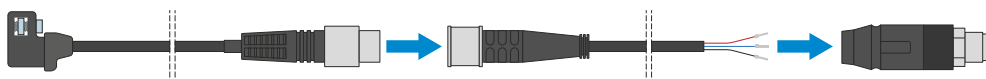
For non-contact sensing of the piston position

The sensor is clamped in the C-groove of the gripper and detects the magnet attached to the gripper jaws. The MFS01 is available in versions with 5 m cables with exposed leads and 0,3 m cable with connector.



CONNECTIONS / OTHER

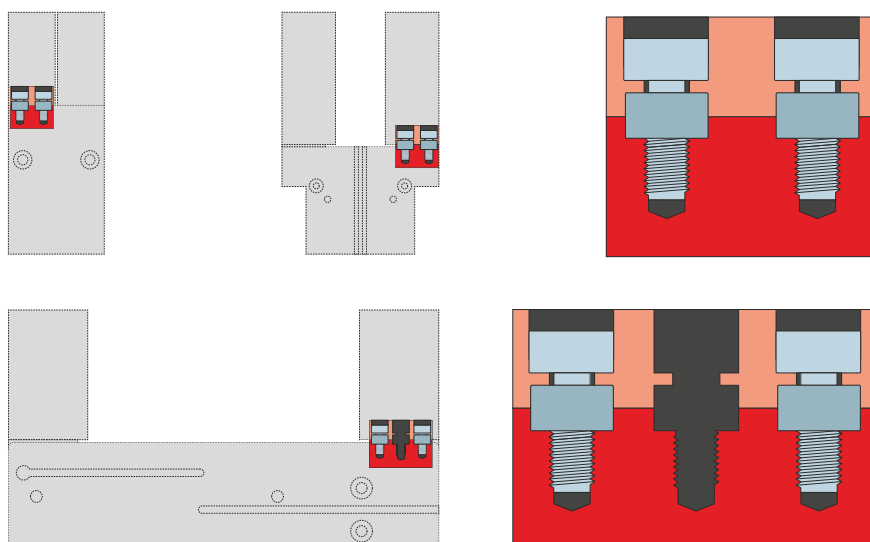
1



Plug-in connectors

For extending and fabricating the connection lines for the sensors

Cables with a length of 5 m with exposed leads are available. Depending on the specific needs, the cables can be shortened or fabricated with connectors in sizes M8 and M12.



Centering sleeves

For defined position measurement of the gripper fingers

The centering sleeves are inserted into the fits of the gripper jaws to define the position of the gripper fingers. The centering sleeves are comparable to a pin connection.

O-RING ASSEMBLY GRIPPER, INNER

INSTALLATION SIZE GSI206

▶ PRODUCT SPECIFICATIONS



▶ INCLUDED IN DELIVERY



12 [piece]
Centering Disc
DST06510

▶ RECOMMENDED ACCESSORIES



ENERGY SUPPLY



GVM5
Straight Fittings - Quick Connect Style



SENSORS



MFS01-K-KHC-P1-PNP
Magnetic field sensor Angled Cable 5 m



MFS01-S-KHC-P1-PNP
Magnetic field sensor Angled Cable 0,3 m - Connector M8



CONNECTIONS / OTHER



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



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



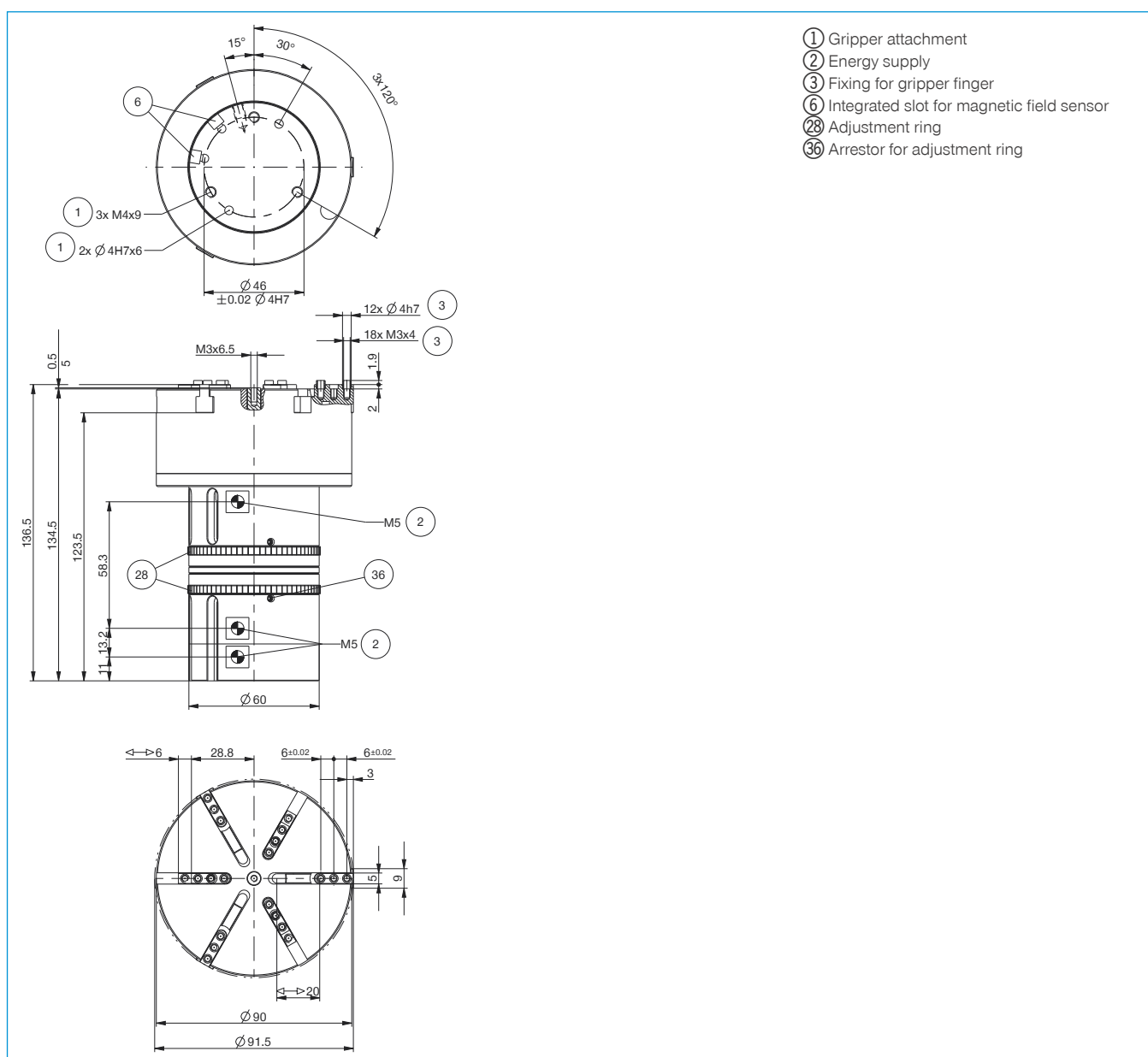
S8-G-3
Plug-in connector customizable Straight - Connector M8



S12-G-3
Plug-in connector customizable Straight - Connector M12



Order no.	Technical data
	GSI206
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
Nominal operating pressure [bar]	6
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Weight [kg]	1.1



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

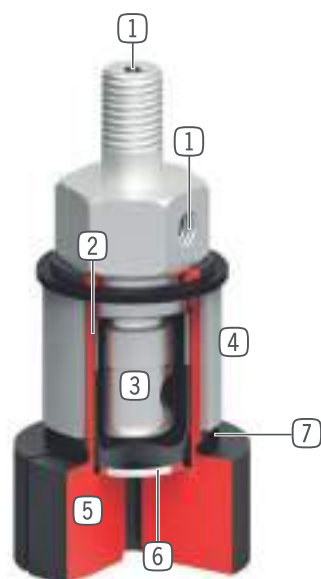
The control system with only one pneumatic line reduces installation effort and interference contours

► SERIES CHARACTERISTICS

Installation size		Version	
LGXX-XX		-	V
 Collet Chuck		•	
 Extended collet chuck			•
 Maintenance free		•	•
 IP 40	IP40	•	•



► 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

► TECHNICAL DATA

Installation size	Total stroke in Ø [mm]	Gripping moment [Nm]	Weight [kg]	IP class
LG4-20	1	0,5	0,075 - 0,115	IP40
LG20-30	1	2	0,16 - 0,29	IP40
LG30-50	1	3	0,46	IP40

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INTERNAL GRIPPER





SERIES LG1000

▶ 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 gripping diameters, the membrane provides ideal protection from damage

▶ SERIES CHARACTERISTICS

Installation size	Version	
LG10XX	-01SI	-02SI
 Axial energy supply	●	
 Radial energy supply, through-hole		●
 Maintenance free	●	●
 IP 54	●	●



► BENEFITS IN DETAIL

1

Series LG1000 / Internal gripper / pneumatic / Grippers

Version-01

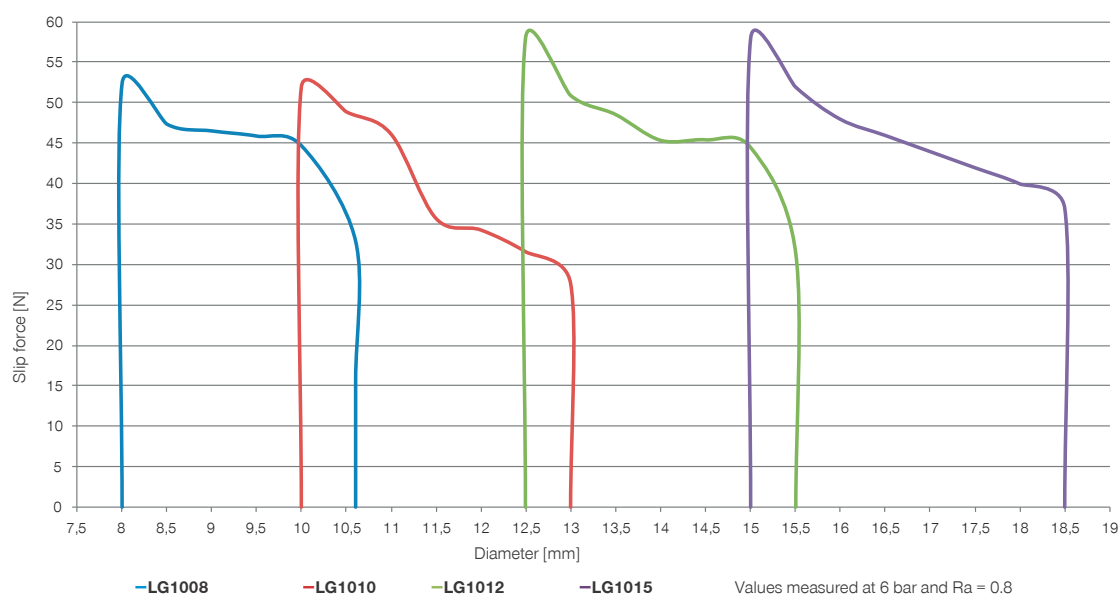


Version-02



- 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 aluminum 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)

► SLIP FORCE DIAGRAM



INTERNAL GRIPPER

SERIES LGG

1

Series LGG / Internal gripper / pneumatic / Grippers

▶ 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

▶ SERIES CHARACTERISTICS

Installation size

LGXX-XX



Maintenance free

•

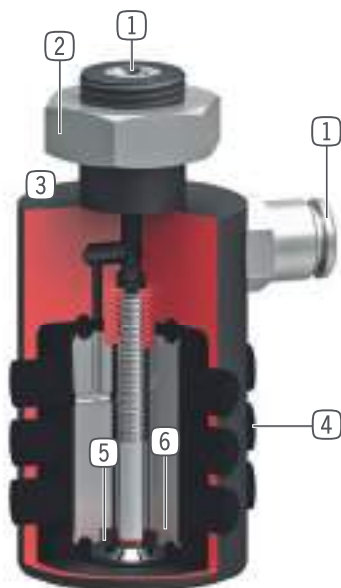


IP54

•



► 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 aluminum 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)

► TECHNICAL DATA

Installation size	Total stroke in Ø [mm]	Gripping force [N]	Weight [kg]	IP class
LG15-18	2.5	100	0.031	IP54
LG18-22	4	100	0.035	IP54
LG22-26	4	150	0.051	IP54
LG26-30	4	150	0.071	IP54
LG30-35	5	200	0.09	IP54
LG35-39	4.5	300	0.13	IP54
LG40-45	6.5	400	0.178	IP54
LG46-51	6	500	0.26	IP54
LG51-56	7	750	0.37	IP54
LG56-62	7.5	900	0.373	IP54
LG63-70	8	1100	0.53	IP54
LG71-80	10.5	1500	0.69	IP54
LG76-84	8.5	1700	0.8	IP54
LG81-90	11	2000	1	IP54
LG91-100	10	2500	1.3	IP54
LG100-110	11	2800	1.9	IP54
LG110-120	11	3500	2.3	IP54
LG120-135	16	3500	2.7	IP54

EXTERNAL GRIPPER

SERIES RG

▶ 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

▶ SERIES CHARACTERISTICS

Installation size

RGXX-XX



Maintenance free

•



IP67

•



► 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 aluminum alloy

► TECHNICAL DATA

Installation size	Gripper hole diameter	Gripping force [N]	Weight [kg]	IP class
RG0-30	0 - 28	350	0.28	IP67
RG10-60	10 - 58	1000	0.85	IP67

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NEEDLE GRIPPER




SERIES SCH

▶ PRODUCT ADVANTAGES



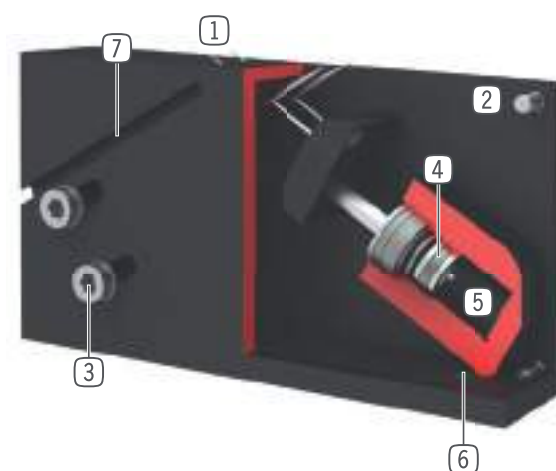
- ▶ **Smooth stroke configuration**
Adjust the needle stroke individually and smoothly via the direct needle setting
- ▶ **Flat structure**
Due to its compact design, you save precious space in your machine
- ▶ **Query about magnetic field sensor technology**
Detecting the end position allows you to have faster cycle times and an integrated control system

▶ SERIES CHARACTERISTICS

Installation size		
SCHXX		
 5 million maintenance-free cycles (max.)		●
 Magnetic field sensor		●
 IP 30		●



► BENEFITS IN DETAIL



- ① **Extending needles**
 - gripping by penetration
- ② **Robust, lightweight housing**
 - Hard-coated aluminum 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

► TECHNICAL DATA

Installation size	Needle stroke adjustable	Needle diameter	Weight	IP class
	[mm]	[mm]	[kg]	
SCH20	0 - 6	1.2	0.35	IP30
SCH23	0 - 6	3	0.37	IP30

► FURTHER INFORMATION IS AVAILABLE ONLINE



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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**

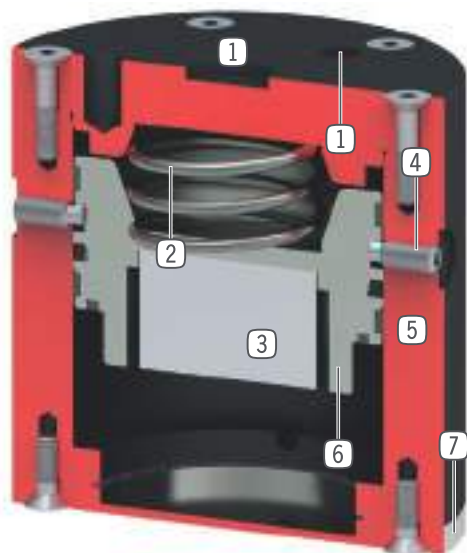
The demagnetised contact surface safeguards the process reliability of dropping off your workpiece

▶ SERIES CHARACTERISTICS

Installation size		Version	
HM10XX		NC	
 5 Mio	5 million maintenance-free cycles (max.)	●	
 IP 30	IP30	●	



► 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 aluminum 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

► TECHNICAL DATA

Installation size	Adhesive force max.	Weight	IP class
	[N]	[kg]	
HM1030	27	0.06	IP30
HM1046	65	0.28	IP30
HM1078	220	1.2	IP30
HM1097	450	2.2	IP30

► FURTHER INFORMATION IS AVAILABLE ONLINE





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.



GRIPPERS FOR SPECIFIC TASKS

OVERVIEW OF SERIES



 ELECTRICAL		
	Series GEN9100	278
	Series HEM1000	280

NEEDLE GRIPPER

SERIES GEN9100

1



Series GEN9100 / Needle gripper / electrical / Grippers

▶ PRODUCT ADVANTAGES



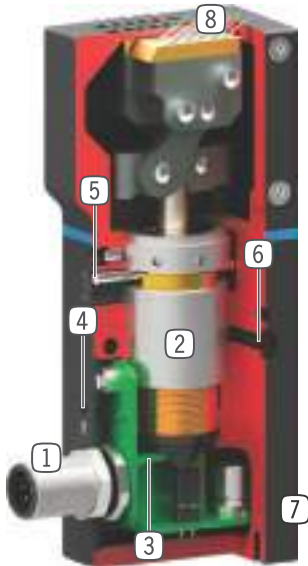
- ▶ **Plug and play**
Reduce programming and assembly costs to a minimum with the integrated control system and the 2 position query
- ▶ **Saving energy with pulse control**
You only have to supply current briefly when retracting and extending the needle; no energy is required when transporting the workpiece
- ▶ **Smooth stroke configuration**
The needle stroke is displayed via a scale. You can smoothly adjust the needle stroke to fit your application

▶ SERIES CHARACTERISTICS

Installation size		
GEN9102		
I/O	Digital I/O	•
	5 million maintenance-free cycles (max.)	•
	Integrated sensing	•
IP 50	IP50	•



► 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 aluminum alloy
- ⑧ Extending needles**
 - gripping by penetration

► TECHNICAL DATA

Installation size	Needle stroke adjustable [mm]	Pulse time [ms]	Weight [kg]	IP class
GEN9102	0 - 2	20 -25	0.33	IP50

► FURTHER INFORMATION IS AVAILABLE ONLINE



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.

MAGNETIC GRIPPER

SERIES HEM1000

1

Series HEM1000 / Magnetic gripper / electrical / Grippers

▶ 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

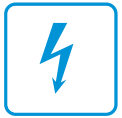
You only have to supply current briefly when releasing the workpiece; no energy is required when transporting the workpiece

▶ Secure hold during EMERGENCY STOP

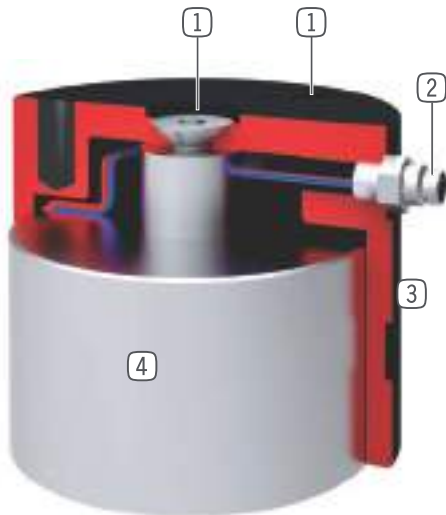
The magnet provides full holding force when it is not powered, preventing the loss of the workpiece if there is a voltage drop

▶ SERIES CHARACTERISTICS

Installation size		Version	
HEM10XX		NC	
I/O	Digital I/O		•
5 Mio	5 million maintenance-free cycles (max.)		•
IP 30	IP30		•



► 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 aluminum alloy
- ④ **Holding solenoid**
 - with electrical switch off

► TECHNICAL DATA

Installation size	Adhesive force max. *	Max. residual retention force	Weight	IP class
	[N]	[N]	[kg]	
HEM1030	40	1.2	0.09	IP30
HEM1042	160	4.8	0.28	IP30
HEM1062	420	12.6	0.66	IP30
HEM1080	720	21.6	1.3	IP30

*St37-100%, St34 -88%, St 50-81%, St70-75%, GT-65%, 20MnCr5-55%, GG-35%

► FURTHER INFORMATION IS AVAILABLE ONLINE



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.



ANGULAR GRIP & ROTATE MODULES

OVERVIEW OF SERIES



PNEUMATIC



Series DGK

284



Series DGP400

286

2-JAW ANGULAR ROTARY GRIPPERS

SERIES DGK





▶ PRODUCT ADVANTAGES



“TWO in ONE”

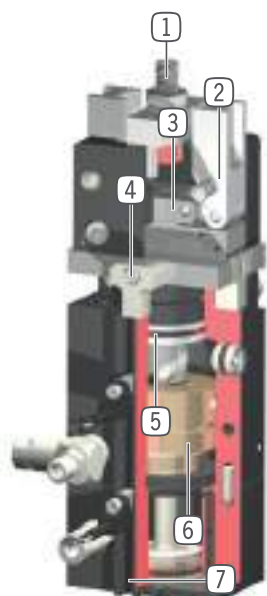
- ▶ **Smooth stroke configuration**
You can adjust the 180° opening angle to be unique to your application using an adjusting screw
- ▶ **2 in 1**
Gripping and swivelling in a module allows optimum utilisation of the installation space
- ▶ **Individually adjustable**
How you stay flexible: 90° or 180° swivel angle - You decide what your application requires on site

▶ SERIES CHARACTERISTICS

Installation size	
DGK20N	
 1.5 million maintenance-free cycles (max.)	•
 Spring closing C	•
 Spring opening O	•
 IP40	•



► 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

► TECHNICAL DATA

Installation size	Stroke [°]	Gripping force [N]	Weight [kg]	IP class
DGK20	90	150	0.55	IP40

► FURTHER INFORMATION IS AVAILABLE ONLINE



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 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

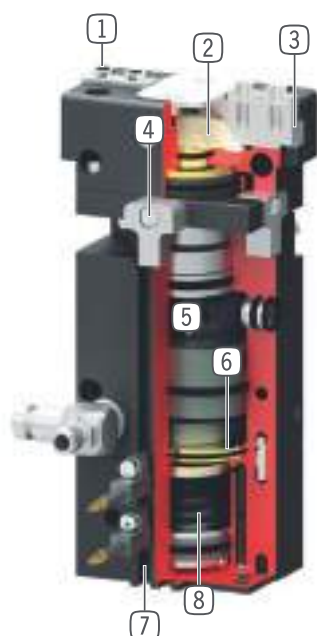
How you stay flexible: 90° or 180° swivel angle - You decide what your application requires on site

▶ SERIES CHARACTERISTICS

Installation size		Version		
DGP40X		N	NC	NO
 1.5 Mio	1.5 million maintenance-free cycles (max.)	•	•	•
	Spring closing C		•	
	Spring opening O			•
	IP40	•	•	•



► 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)

► TECHNICAL DATA

Installation size	Stroke per jaw [mm]	Gripping force [N]	Weight [kg]	IP class
DGP404	4	115 - 155	0,44 - 0,48	IP40

► FURTHER INFORMATION IS AVAILABLE ONLINE



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.

SWIVEL- AND ROTARY MODULES

OVERVIEW OF SERIES

3

Products	Torque [Nm]	Swivel angle [°]	Number of installation sizes
Rotary Cylinders pneumatic Page 290			
Series PRN	0,15 247	90 270	● ● ● ● ● ● ● ● ● ●
Series SH	0,59-7,2	0 360	● ●
Flat Swivel Units pneumatic Page 296			
Series SF-C	1,5 130	0 180	● ● ● ● ● ●
Series MSF	0,3-1,2	90-180	● ● ●
Flat Swivel Units electric Page 374			
Series DES	10 64	∞	● ●
Angle Pivot Units pneumatic Page 378			
Series SW	1,5 120	180	● ● ● ● ● ●
Series SWM1000	7 150	90	● ● ● ● ● ●
Swivel Jaws pneumatic Page 400			
Series SB *	0,1-1,6	90-180	● ● ●
Series SBZ	1,2 57	90-180	● ● ● ● ● ●

*Specifications for setup in pairs

Control	Position sensing			Positionability				Options						Safety characteristics	Maintenance	
Multibus	Inductive sensor	Magnetic field 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	Self locking mechanism	Maintenance-free cycles (max.)	Maintenance-free revolutions (max.)
	•			•		•				•	54				1.5 million	
											54				1.5 million	
	•	•		•	•				•	•	64	•			10 million	
		•		•				•	•	•	41	•			10 million	
•			•				•			•	54	•	•	•		5 million
	•	•		•					•		64	•			10 million	
		•		•					•		30				10 million	
	•			•				•			54				10 million	
	•			•					•		54				10 million	



ROTARY CYLINDERS

OVERVIEW OF SERIES



PNEUMATIC



Series PRN

292



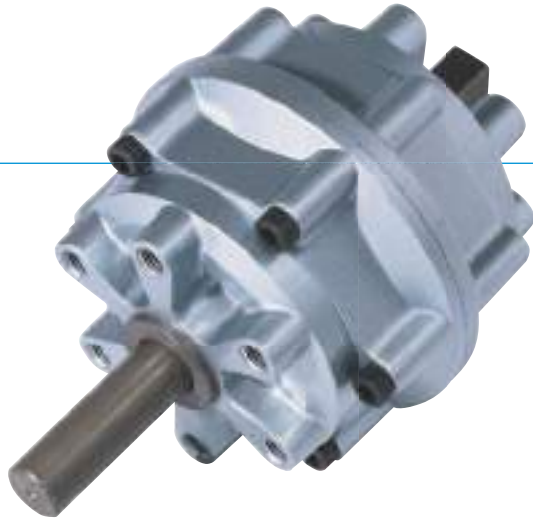
Series SH

294

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

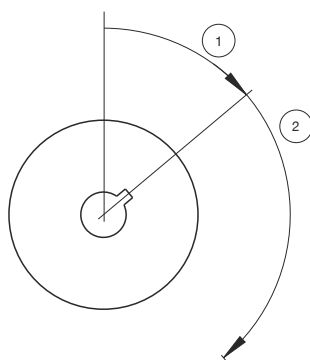
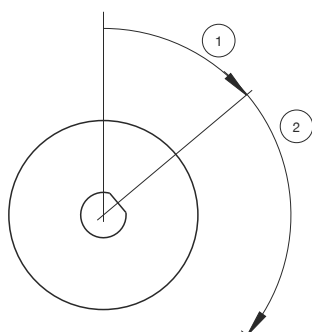
This shaft is not only robust, but can be individually adjusted

▶ SERIES CHARACTERISTICS

Installation size		Version				
LIXX		-90	-100	-180	-270	-280
 1.5 million maintenance-free cycles (max.)		•	•	•	•	•
 IP54		•	•	•	•	•
 Inductive sensor		•	•	•	•	•
 Positionability - 2 positions		•	•	•	•	•
 Rotation angle 90°		•				
 Rotation angle 100°			•			
 Rotation angle 180°				•		
 Rotation angle 270°					•	
 Rotation angle 280°						•



► STARTING ANGLE



- ① Starting angle
- ② Swivel angle



Installation size

PRN1

PRN20

PRN3

PRN30

PRN10

PRN50

PRN150

PRN300

PRN800

► TECHNICAL DATA

Installation size	Swivel angle [°]	Torque [Nm]	Weight [kg]	IP class
PRN1	90 - 270	0,15	0,04	IP54
PRN3	90 - 270	0,38	0,07	IP54
PRN10	90 - 270	1,2	0,14	IP54
PRN20	90 - 270	2,1	0,25	IP54
PRN30	90 - 270	4,1	0,5	IP54
PRN50	90 - 270	5,9 - 12,8	0,75 - 0,8	IP54
PRN150	90 - 270	18 - 41,5	1,6 - 1,9	IP54
PRN300	90 - 270	34,5 - 83	3,6 - 4,1	IP54
PRN800	90 - 270	123 - 247	11 - 12,5	IP54

► FURTHER INFORMATION IS AVAILABLE ONLINE



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ROTARY CYLINDERS

SERIES SH

3
Series SH / Rotary Cylinders / pneumatic / Swivel- and Rotary Modules

▶ PRODUCT ADVANTAGES



“The flexible”

▶ **Movable to four positions**

The two separately or jointly controlled rotors provide you with the greatest flexibility in positioning your work-pieces





▶ **High torque rating**

The optimal ratio of installation space and torque reduces interference contours and creates precious space in your application

▶ **360° swivel angle**

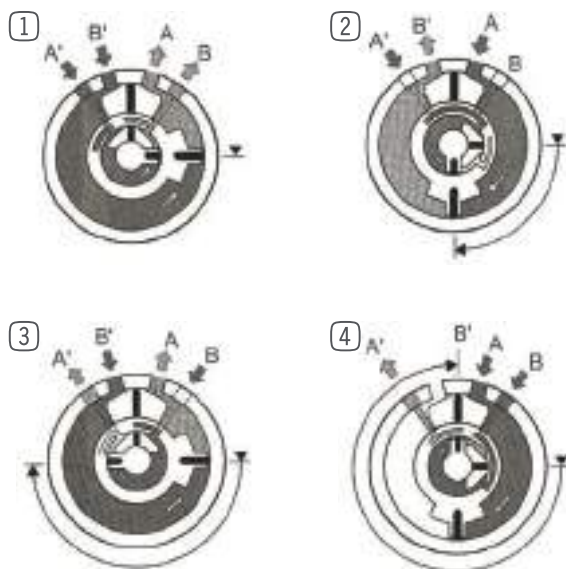
Do you want your application to be flexible and individualised? The infinitely variable 360° adjustable swivel angle lets you!

▶ SERIES CHARACTERISTICS

Installation size	
SH-XX	
 1.5 million maintenance-free cycles (max.)	●
 IP54	●
 Positionability - 4 positions	●
 Adjustable swivel angle	●



► 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°.

► TECHNICAL DATA

Installation size	Swivel angle	Torque	Weight	IP class
	[°]	[Nm]	[kg]	
SH-5	360	0,59 - 2,73	0.52	IP54
SH-20	360	2,35 - 7,2	1.13	IP54

► FURTHER INFORMATION IS AVAILABLE ONLINE



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FLAT SWIVEL UNITS

OVERVIEW OF SERIES



PNEUMATIC



Series SF-C

298



Series MSF

372

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

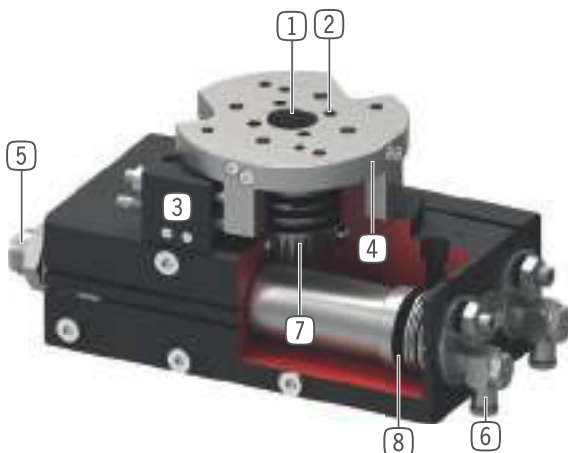
▶ Large centre bore

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

▶ 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 shock absorbers with spiral groove technology

- 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

Installation size		Version									
SFXXX		-90N	-180N	N	-90DX	-180DX	DX	ML	MLDX	M	MDX
	10 million maintenance-free cycles (max.)	●	●	●	●	●	●	●	●	●	●
	IP64	●	●	●	●	●	●	●	●	●	●
	Inductive sensor	●	●	●	●	●	●	●	●	●	●
	Magnetic field sensor	●	●	●	●	●	●	●	●	●	●
	Flange	●	●	●	●	●	●	●	●	●	●
	Powerstop end position damping	●	●	●	●	●	●	●	●	●	●
	End positions adjustable +/- 3	●	●	●	●	●	●	●	●	●	●
	Positionability - 2 positions	●	●	●	●	●	●				
	Positionability - 3 positions							●	●		
	Positionability - 3 positions locked									●	●
	Rotation angle 90°	●			●			●	●	●	●
	Rotation angle 180°		●			●		●	●	●	●
	Swivel angle 180° freely adjustable			●			●				
	Fluid feed-through				●	●	●		●		●

► TECHNICAL DATA

Installation size	Swivel angle [°]	Torque [Nm]	Weight [kg]	IP class
SF50	0 - 180	1,5 - 2,4	0,6 - 1,14	IP64
SF74	0 - 180	4,5 - 7,3	1,6 - 2,6	IP64
SF100	0 - 180	13 - 20	3,7 - 5,8	IP64
SF125	0 - 180	32 - 38	8,8 - 12,9	IP64
SF155	0 - 180	54 - 62	15 - 21,8	IP64
SF195	0 - 180	120 - 130	27,5 - 41,1	IP64

► FURTHER INFORMATION IS AVAILABLE ONLINE



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FLAT SWIVEL UNITS

SERIES SF-C

► HOW TO ORDER CORRECTLY

Order no.	SF	<input type="checkbox"/>	<input type="checkbox"/>	-C
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)**

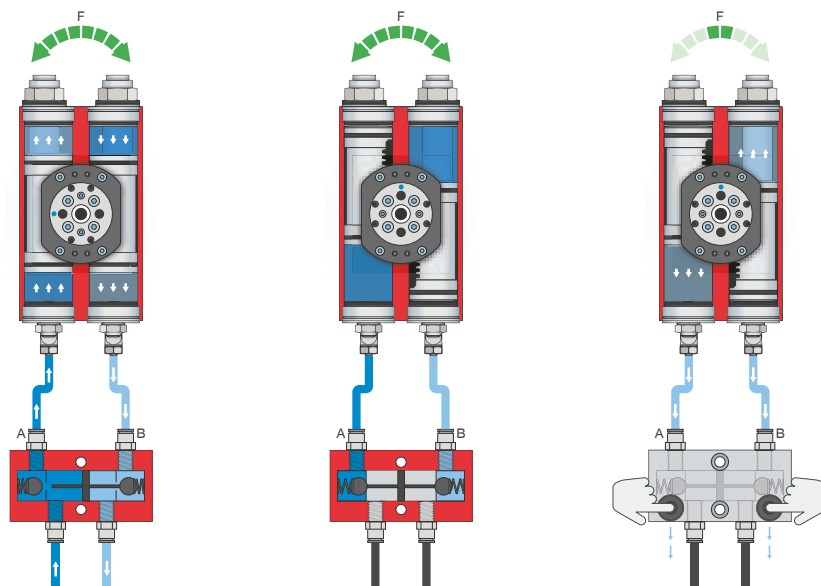


FLAT SWIVEL UNITS

SERIES SF-C FUNCTIONAL DESCRIPTION



ENERGY SUPPLY



Pressure safety valve – DSV

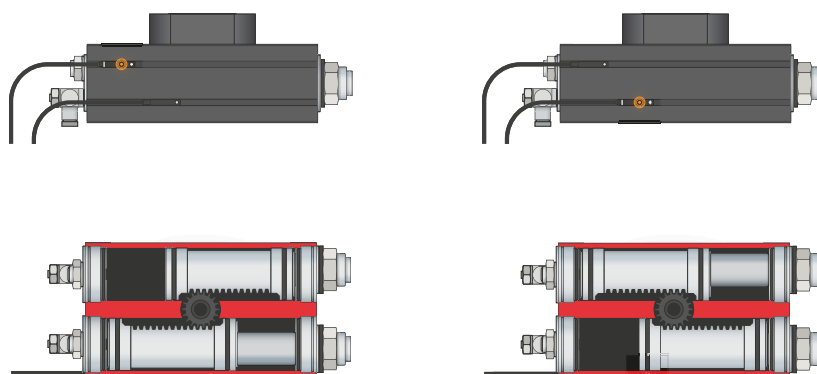
Ensures safe retention of force and position if the system pressure drops

The integrated double check valve, which can be unlocked, retains the system pressure of the swivel unit in case of EMERGENCY STOP. To ensure the function, the valve must be installed as close to the swivel unit's air connection as possible. In variant E, two pushbuttons are installed that allow for controlled bleeding of the swivel unit.



SENSORS

MFS02



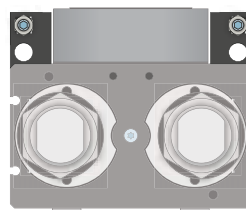
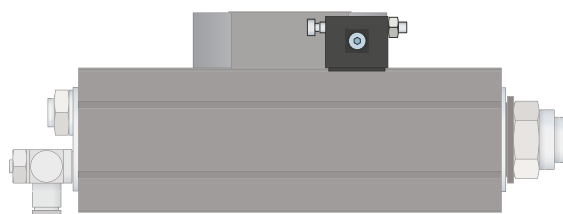
1-point magnetic field sensors – MFS

For non-contact sensing of the piston position

These sensors are clamped in the C-groove of the swivel unit and detect the magnet attached to the piston of the swivel unit. To ensure use in a wide variety of space conditions, the sensors are available in two versions. While the horizontal MFS02, with straight cable outlet, disappears into the C-groove of the swivel unit almost completely, the vertical MSF01 is taller, but has a cable outlet that is offset at an angle of 90°. The variants are available in versions with 5 m cables with exposed leads and 0,3 m cable with connector.

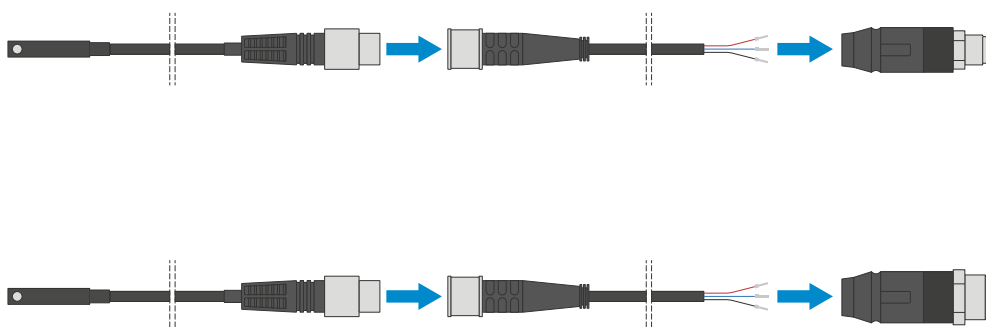


CONNECTIONS / OTHER



Attachment kit

The attachment kit is installed on the gripper using the fastening material included in the scope of delivery. The attachment kit enables sensing of the gripper positions via inductive proximity switches.



Plug-in connectors

For extending and fabricating the connection lines for the sensors

Cables with a length of 5 m with exposed leads are available. Depending on the specific needs, the cables can be shortened or fabricated with connectors in sizes M8 and M12.

FLAT SWIVEL UNITS

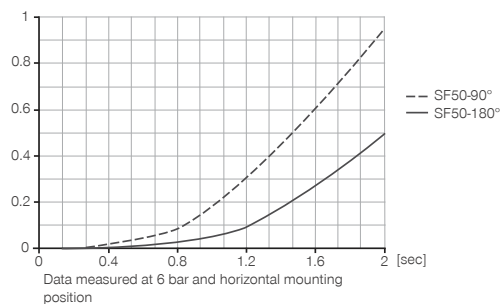
INSTALLATION SIZE SF50N-C

▶ PRODUCT SPECIFICATIONS



▶ Moment of inertia

[kg m²] Shows the expected swivel time vs the calculated moment of inertia



▶ INCLUDED IN DELIVERY



2 [piece]
Flow Control Valves - with Swivel joint
DRVM5X4

▶ RECOMMENDED ACCESSORIES



ENERGY SUPPLY



DSV1-8
Pressure safety valve



DSV1-8E
Pressure safety valve with quick exhaust



SENSORS



MFS02-S-KHC-P1-PNP
Magnetic field sensor Straight Cable 0,3 m - Connector M8



MFS02-S-KHC-P2-PNP
2-Position-Sensor Cable 0,3 m - Connector M8



CONNECTIONS / OTHER



ANS0006
Attachment Kit



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



S8-G-3
Plug-in connector customizable Straight - Connector M8

▶ RECOMMENDED ACCESSORY ATTACHMENT KIT



NJ8-E2
Inductive proximity switch - Cable 5 m

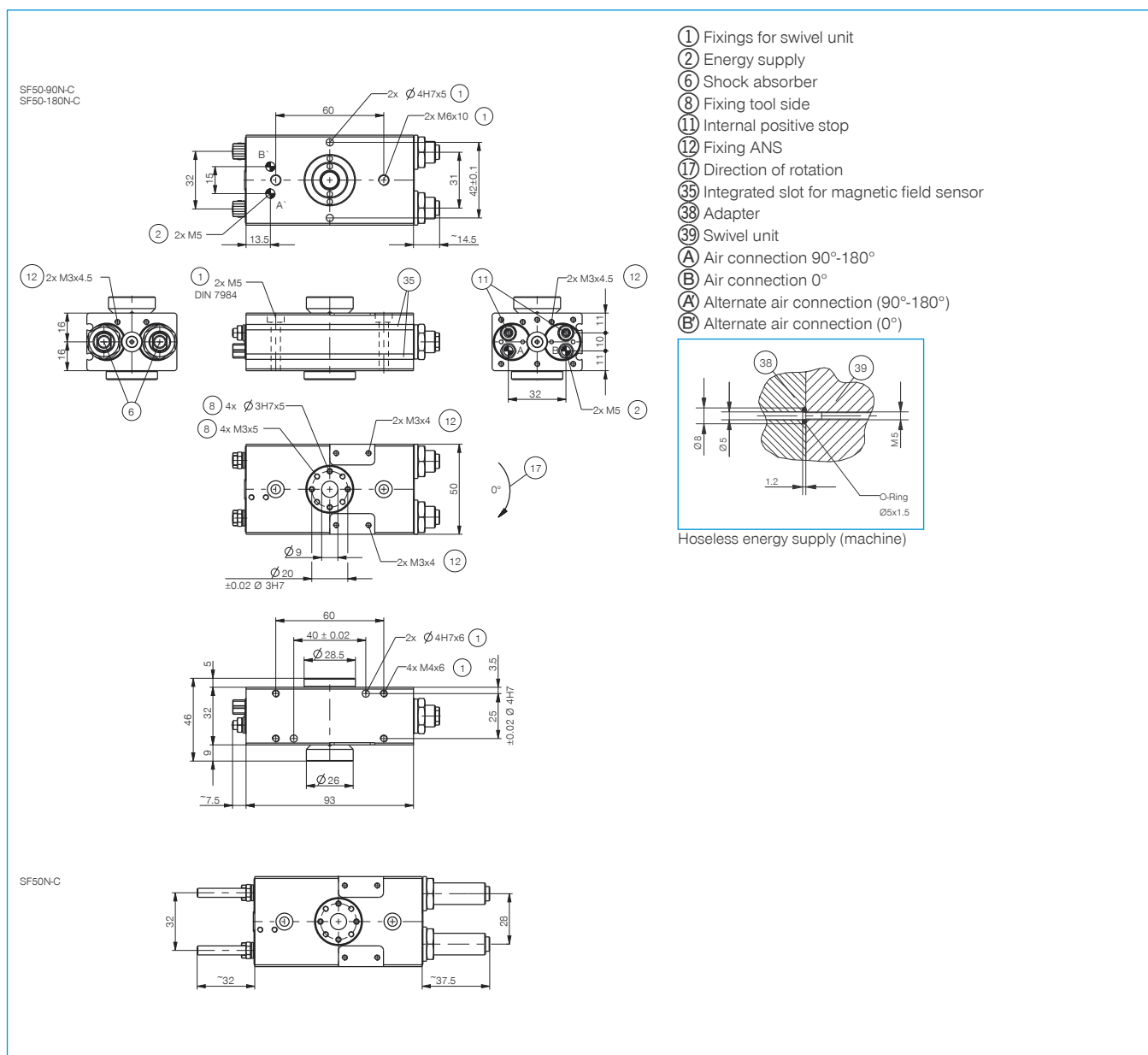


NJ8-E2S
Inductive proximity switch - Connector M8



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

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
Passage bore Ø [mm]	9	9	9
Axial bearing load [N]	490	490	490
Radial bearing load [Nm]	24	24	24
Repetition accuracy +/- [°]	0.01	0.01	0.01
Operating pressure min. [bar]	3	3	3
Operating pressure max. [bar]	8	8	8
Nominal operating pressure [bar]	6	6	6
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



FLAT SWIVEL UNITS

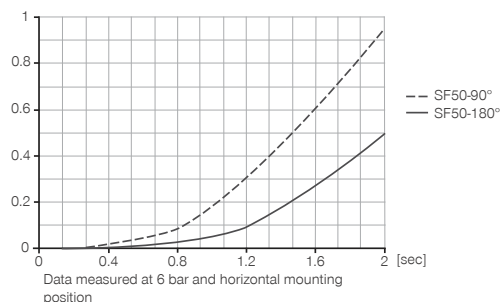
INSTALLATION SIZE SF50D4-C

▶ PRODUCT SPECIFICATIONS



▶ Moment of inertia

[kg m²] Shows the expected swivel time vs the calculated moment of inertia



▶ INCLUDED IN DELIVERY



2 [piece]
Flow Control Valves - with Swivel joint
DRVM5X4



4 [piece]
O-Ring
COR0020100

▶ RECOMMENDED ACCESSORIES



ENERGY SUPPLY



DSV1-8
Pressure safety valve



DSV1-8E
Pressure safety valve with quick exhaust



SENSORS



MFS02-S-KHC-P1-PNP
Magnetic field sensor Straight Cable 0,3 m - Connector M8



MFS02-S-KHC-P2-PNP
2-Position-Sensor Cable 0,3 m - Connector M8



CONNECTIONS / OTHER



ANS0008
Attachment Kit



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



S8-G-3
Plug-in connector customizable Straight - Connector M8

▶ RECOMMENDED ACCESSORY ATTACHMENT KIT



NJ8-E2
Inductive proximity switch - Cable 5 m

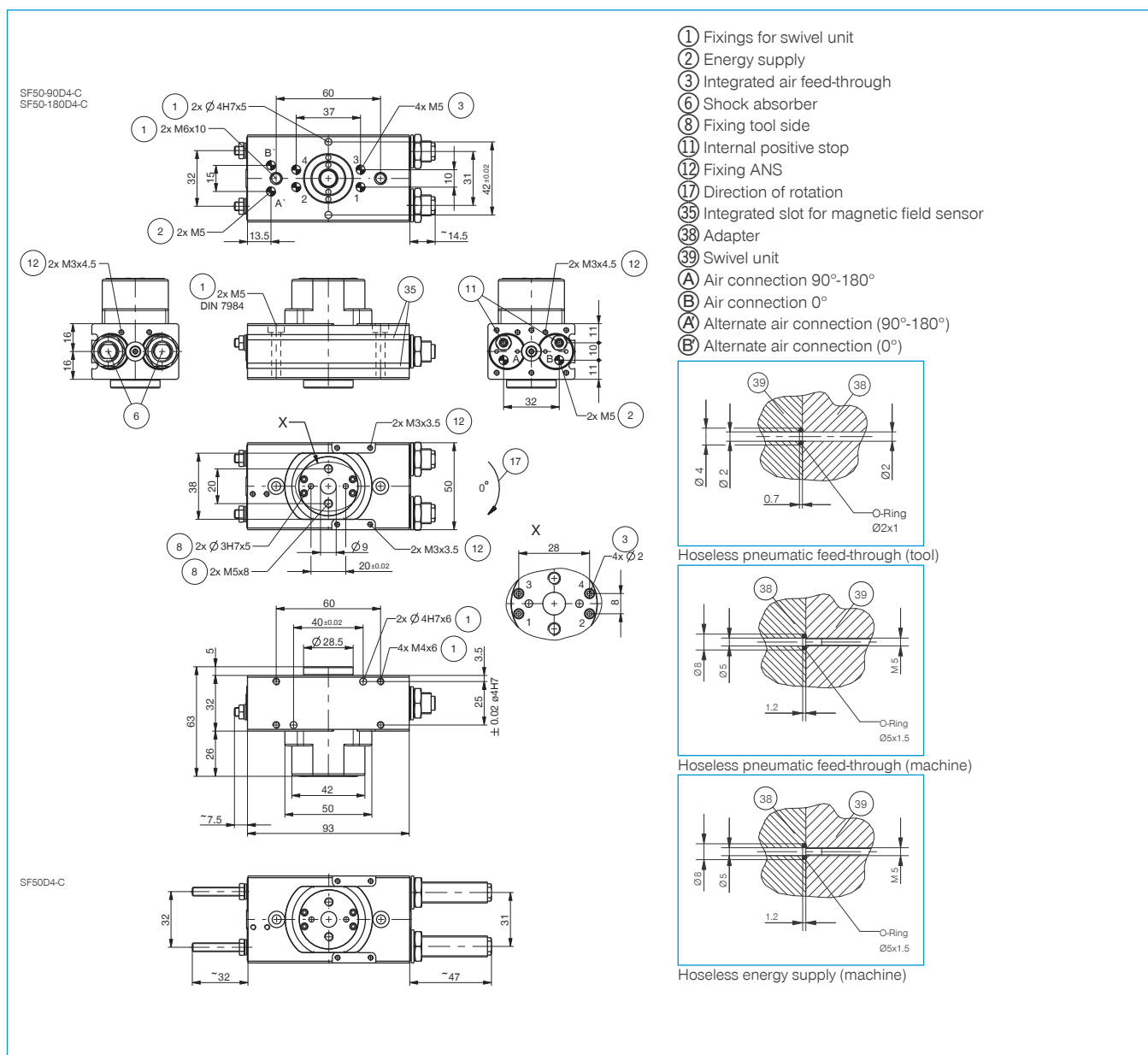


KAW500
Plug-in connector Angled Cable 5m - Socket M8 (female)



NJ8-E2S
Inductive proximity switch - Connector M8

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
Passage bore Ø [mm]	9	9	9
Pneumatic energy transfer [Quantity]	4	4	4
Axial bearing load [N]	490	490	490
Radial bearing load [Nm]	24	24	24
Repetition accuracy +/- [°]	0.01	0.01	0.01
Operating pressure min. [bar]	3	3	3
Operating pressure max. [bar]	8	8	8
Nominal operating pressure [bar]	6	6	6
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



FLAT SWIVEL UNITS

INSTALLATION SIZE SF50ML-C

PRODUCT SPECIFICATIONS



Moment of inertia

[kg m²] Shows the expected swivel time vs the calculated moment of inertia



INCLUDED IN DELIVERY



2 [piece]
Flow Control Valves - with Swivel joint
DRVM5X4



1 [piece]
Attachment Kit
ANS0066



1 [piece]
Commissioning USB
052650

RECOMMENDED ACCESSORIES



ENERGY SUPPLY



DSV1-8
Pressure safety valve



DSV1-8E
Pressure safety valve with quick exhaust



SENSORS



MFS02-K-KHC-P1-PNP
Magnetic field sensor Straight Cable 5 m



SENSORS



MFS02-S-KHC-P1-PNP
Magnetic field sensor Straight Cable 0,3 m - Connector M8



CONNECTIONS / OTHER



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



S8-G-3
Plug-in connector customizable Straight - Connector M8

RECOMMENDED ACCESSORY ATTACHMENT KIT



NJ3-E2
Inductive proximity switch - Cable 5 m

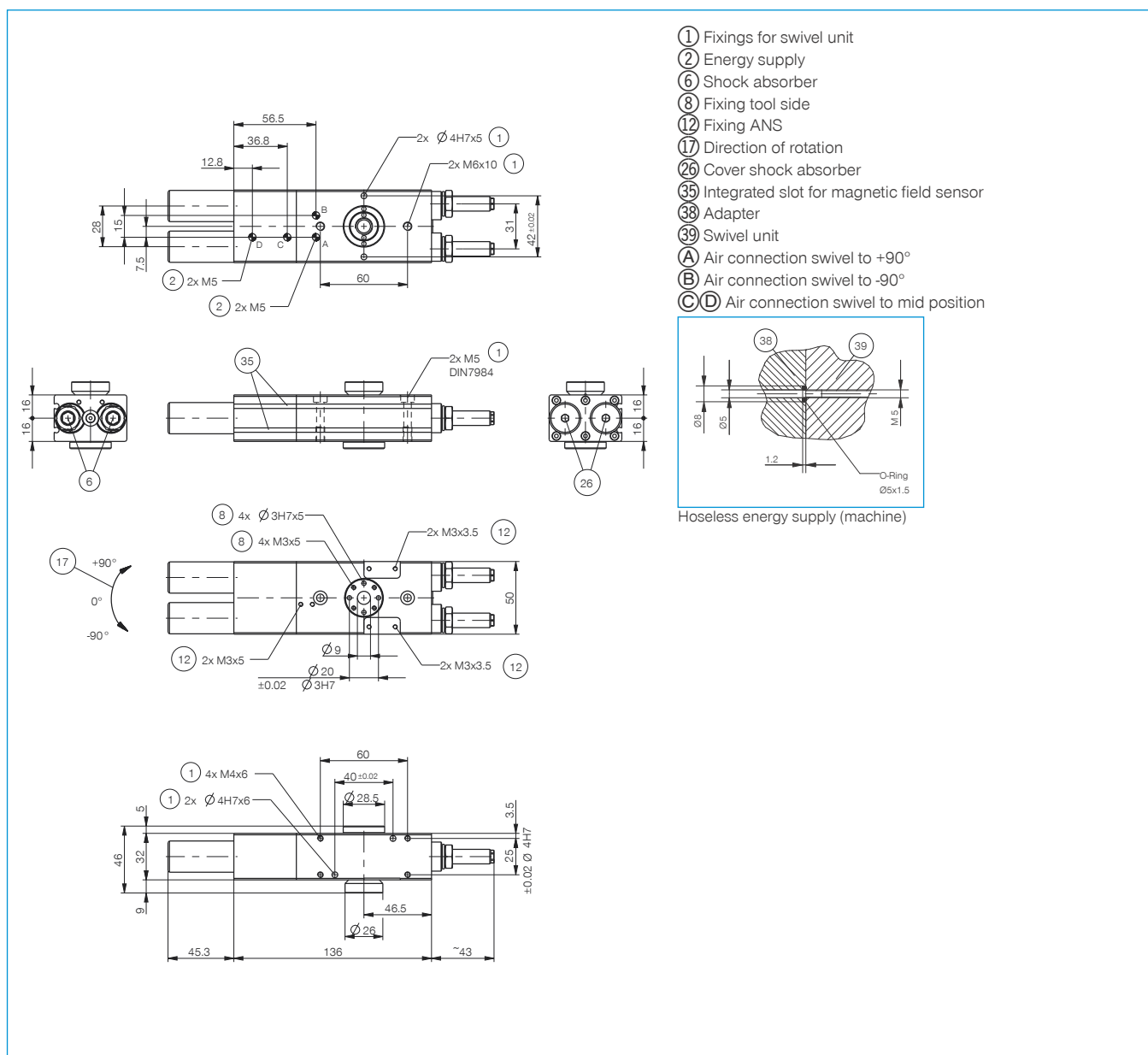


KAW500
Plug-in connector Angled Cable 5m - Socket M8 (female)



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

Order no.	Technical data
	SF50ML-C
Swivel angle [°]	-90 / 0 / +90
Torque [Nm]	2.4
Swivel angle regulable +/- [°]	3
Passage bore Ø [mm]	9
Axial bearing load [N]	490
Radial bearing load [Nm]	24
Repetition accuracy +/- [°]	0.01
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Nominal operating pressure [bar]	6
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm ³]	44
Weight [kg]	0.98



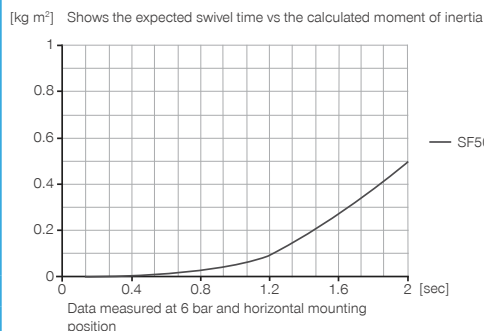
FLAT SWIVEL UNITS

INSTALLATION SIZE SF50MLD4-C

▶ PRODUCT SPECIFICATIONS



▶ Moment of inertia



▶ INCLUDED IN DELIVERY



2 [piece]
Flow Control Valves - with Swivel joint
DRVM5X4



4 [piece]
O-Ring
COR0020100



1 [piece]
Attachment Kit
ANS0067



1 [piece]
Commissioning USB
052650

▶ RECOMMENDED ACCESSORIES



ENERGY SUPPLY



DSV1-8
Pressure safety valve



DSV1-8E
Pressure safety valve with quick exhaust



SENSORS



MFS02-S-KHC-P1-PNP
Magnetic field sensor Straight Cable 0,3 m - Connector M8



CONNECTIONS / OTHER



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



S8-G-3
Plug-in connector customizable Straight - Connector M8



SENSORS



MFS02-K-KHC-P1-PNP
Magnetic field sensor Straight Cable 5 m

▶ RECOMMENDED ACCESSORY ATTACHMENT KIT



NJ3-E2
Inductive proximity switch - Cable 5 m



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



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

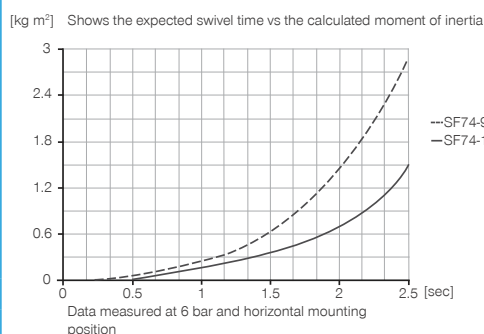
FLAT SWIVEL UNITS

INSTALLATION SIZE SF74N-C

▶ PRODUCT SPECIFICATIONS



▶ Moment of inertia



▶ INCLUDED IN DELIVERY



2 [piece]
 Flow Control Valves - with Swivel joint
DRV1-8X6

▶ RECOMMENDED ACCESSORIES



ENERGY SUPPLY



DSV1-8
 Pressure safety valve



DSV1-8E
 Pressure safety valve with quick exhaust



SENSORS



MFS02-S-KHC-P1-PNP
 Magnetic field sensor Straight Cable 0,3 m - Connector M8



MFS02-S-KHC-P2-PNP
 2-Position-Sensor Cable 0,3 m - Connector M8



CONNECTIONS / OTHER



ANS0010
 Attachment Kit



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



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

▶ RECOMMENDED ACCESSORY ATTACHMENT KIT



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



NJ8-E2
 Inductive proximity switch - Cable 5 m

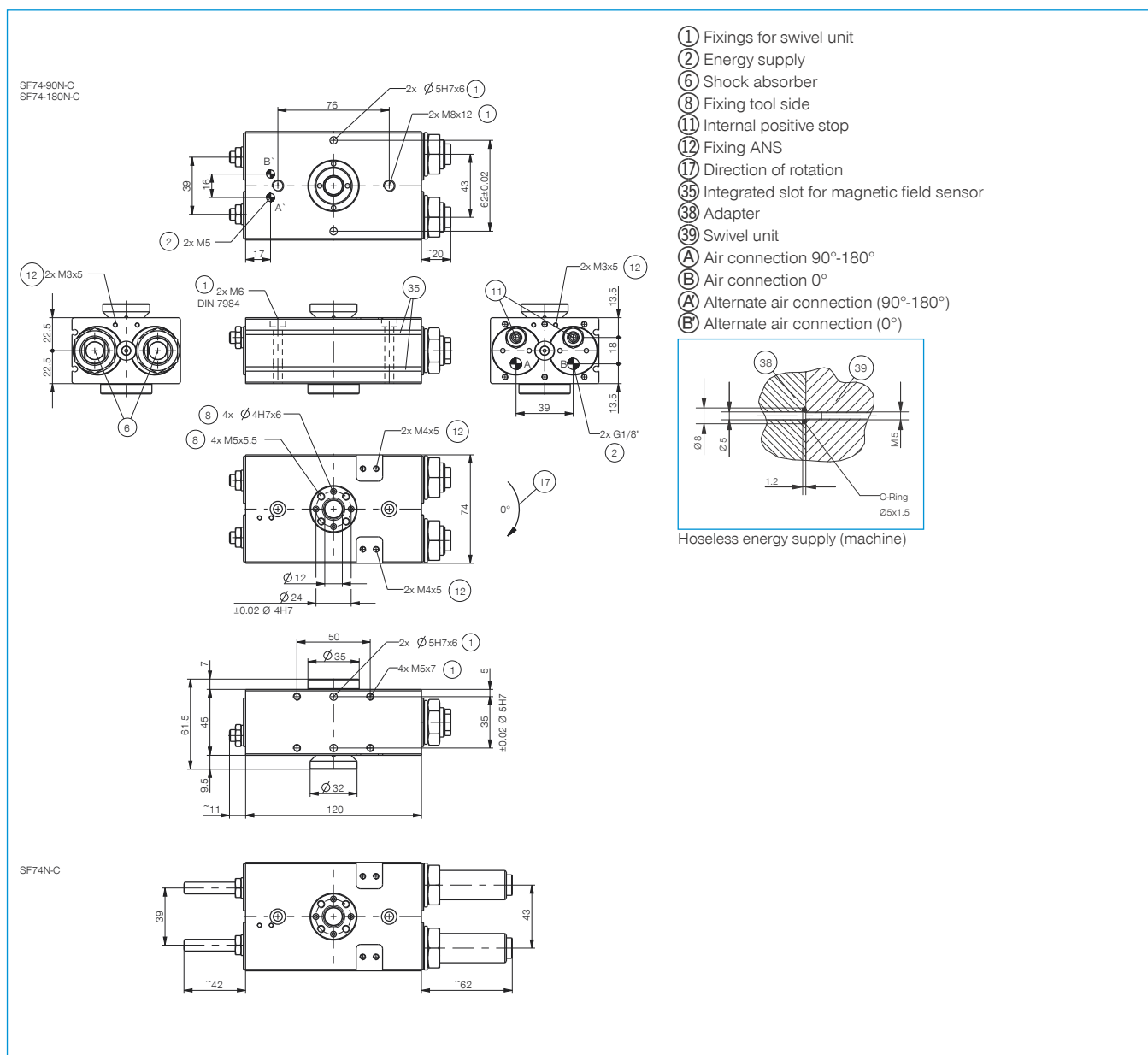


NJ6.5-E2S
 Inductive proximity switch - Connector M8



NJ8-E2S
 Inductive proximity switch - Connector M8

Order no.	Technical data		
	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
Passage bore Ø [mm]	12	12	12
Axial bearing load [N]	1120	1120	1120
Radial bearing load [Nm]	88	88	88
Repetition accuracy +/- [°]	0.01	0.01	0.01
Operating pressure min. [bar]	3	3	3
Operating pressure max. [bar]	8	8	8
Nominal operating pressure [bar]	6	6	6
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



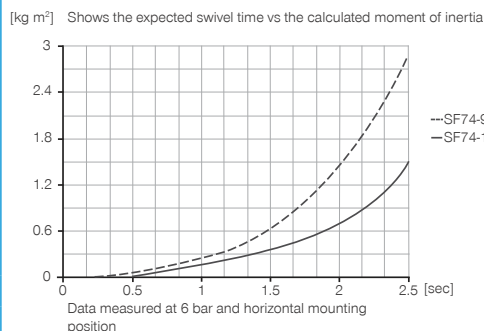
FLAT SWIVEL UNITS

INSTALLATION SIZE SF74D4-C

► PRODUCT SPECIFICATIONS



► Moment of inertia



► INCLUDED IN DELIVERY



2 [piece]
 Flow Control Valves - with Swivel joint
DRV1-8X6



4 [piece]
 O-Ring
COR0020100

► RECOMMENDED ACCESSORIES



ENERGY SUPPLY



DSV1-8
 Pressure safety valve



DSV1-8E
 Pressure safety valve with quick exhaust



SENSORS



MFS02-S-KHC-P1-PNP
 Magnetic field sensor Straight Cable 0,3 m - Connector M8



MFS02-S-KHC-P2-PNP
 2-Position-Sensor Cable 0,3 m - Connector M8



CONNECTIONS / OTHER



ANS0012
 Attachment Kit



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



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

► RECOMMENDED ACCESSORY ATTACHMENT KIT



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



NJ8-E2
 Inductive proximity switch - Cable 5 m

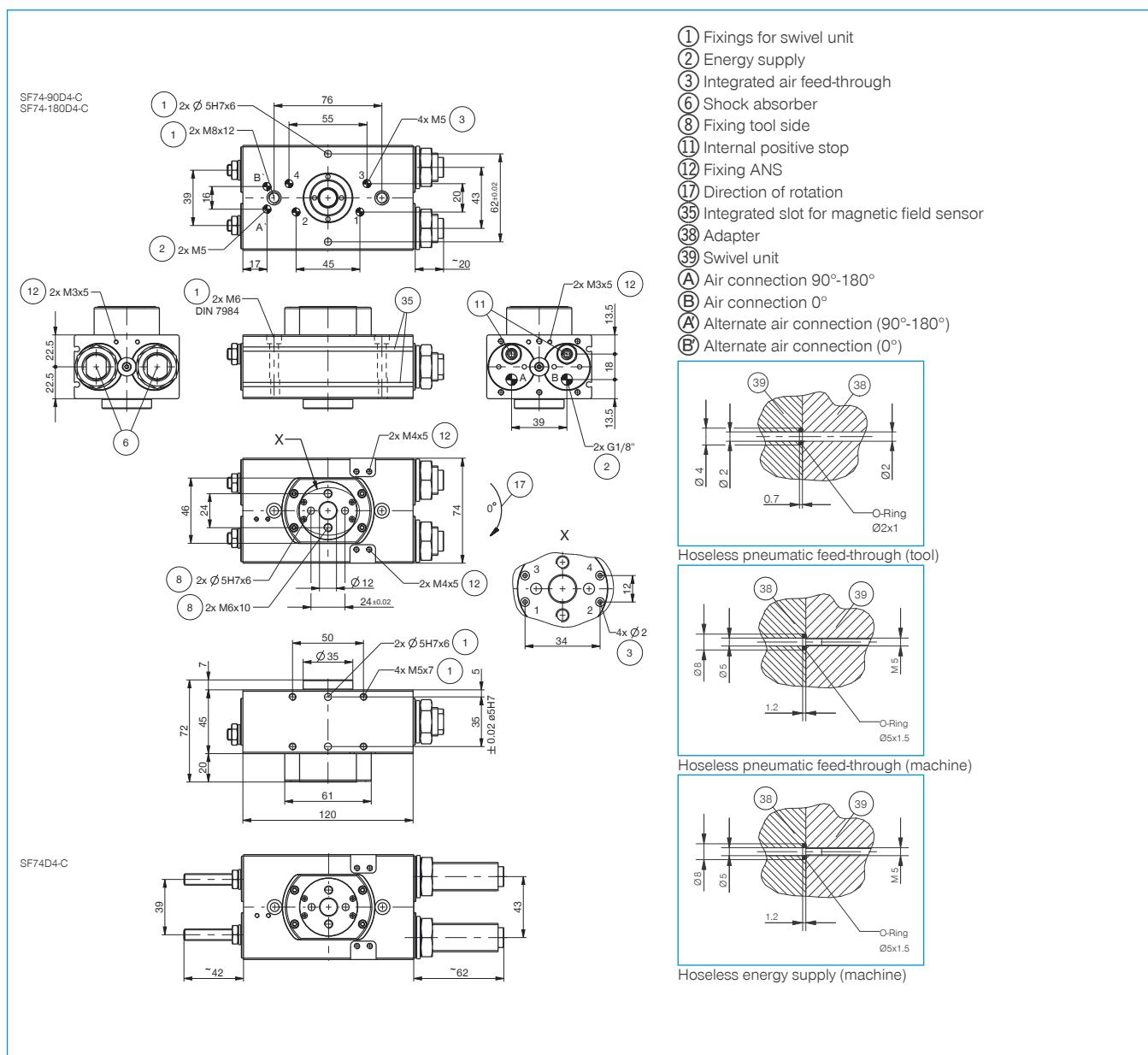


NJ6.5-E2S
 Inductive proximity switch - Connector M8



NJ8-E2S
 Inductive proximity switch - Connector M8

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
Passage bore Ø [mm]	12	12	12
Pneumatic energy transfer [Quantity]	4	4	4
Axial bearing load [N]	1120	1120	1120
Radial bearing load [Nm]	88	88	88
Repetition accuracy +/- [°]	0.01	0.01	0.01
Operating pressure min. [bar]	3	3	3
Operating pressure max. [bar]	8	8	8
Nominal operating pressure [bar]	6	6	6
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



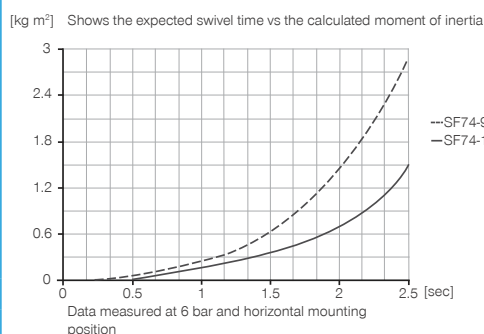
FLAT SWIVEL UNITS

INSTALLATION SIZE SF74D6-C

► PRODUCT SPECIFICATIONS



► Moment of inertia



► INCLUDED IN DELIVERY



2 [piece]
 Flow Control Valves - with Swivel joint
DRV1-8X6



6 [piece]
 O-Ring
COR0020100

► RECOMMENDED ACCESSORIES



ENERGY SUPPLY



DSV1-8
 Pressure safety valve



DSV1-8E
 Pressure safety valve with quick exhaust



SENSORS



MFS02-S-KHC-P1-PNP
 Magnetic field sensor Straight Cable 0,3 m - Connector M8



MFS02-S-KHC-P2-PNP
 2-Position-Sensor Cable 0,3 m - Connector M8



CONNECTIONS / OTHER



ANS0012
 Attachment Kit



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



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

► RECOMMENDED ACCESSORY ATTACHMENT KIT



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



NJ8-E2
 Inductive proximity switch - Cable 5 m

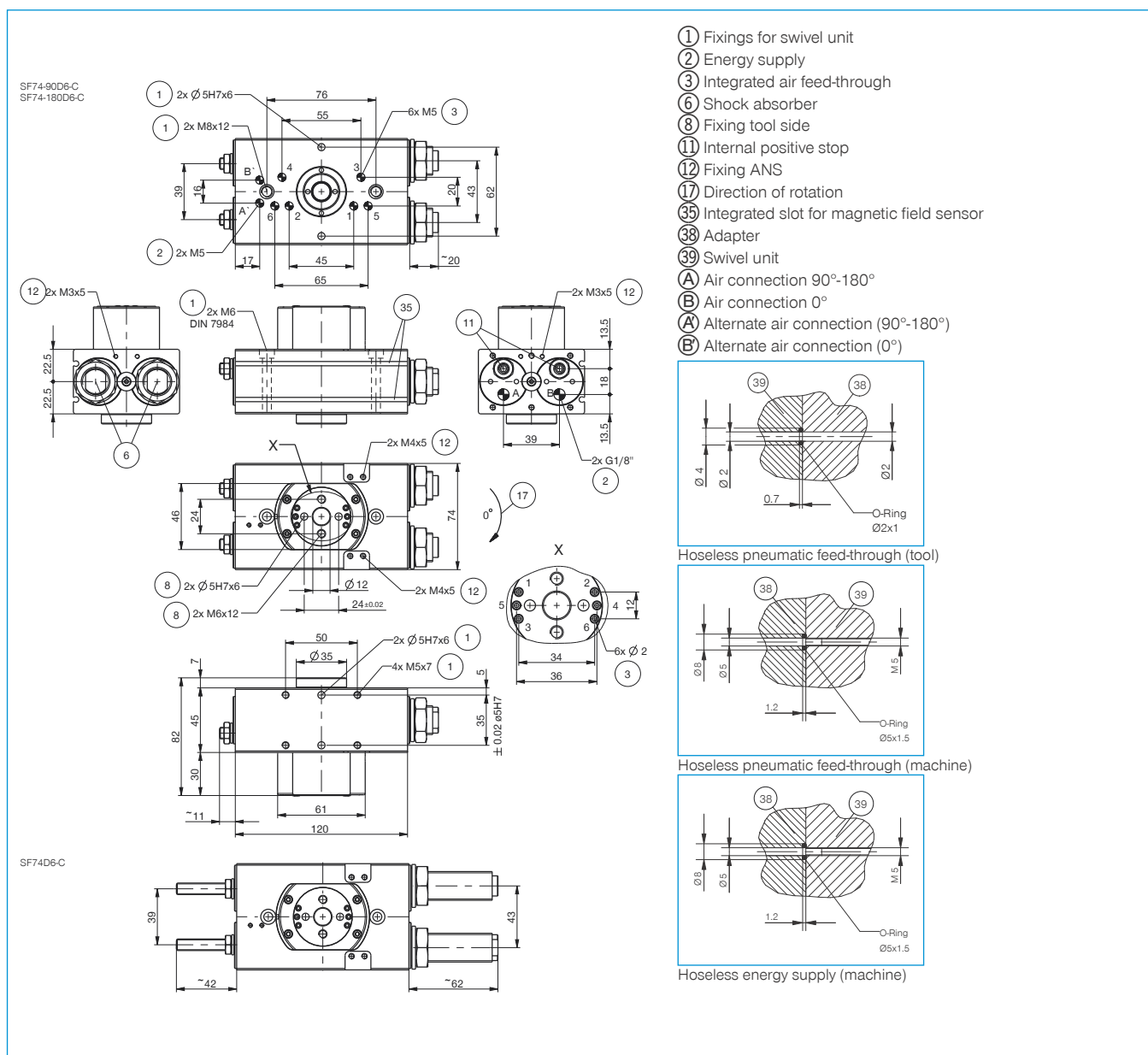


NJ6.5-E2S
 Inductive proximity switch - Connector M8



NJ8-E2S
 Inductive proximity switch - Connector M8

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
Passage bore Ø [mm]	12	12	12
Pneumatic energy transfer [Quantity]	6	6	6
Axial bearing load [N]	1120	1120	1120
Radial bearing load [Nm]	88	88	88
Repetition accuracy +/- [°]	0.01	0.01	0.01
Operating pressure min. [bar]	3	3	3
Operating pressure max. [bar]	8	8	8
Nominal operating pressure [bar]	6	6	6
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



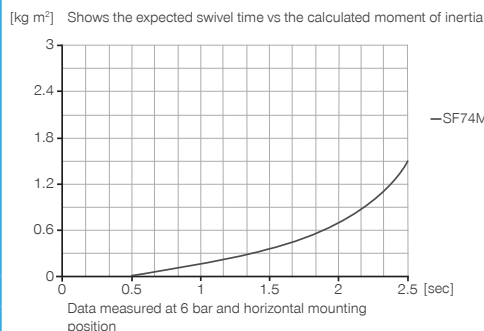
FLAT SWIVEL UNITS

INSTALLATION SIZE SF74ML-C

PRODUCT SPECIFICATIONS



Moment of inertia



INCLUDED IN DELIVERY



2 [piece]
Flow Control Valves - with Swivel joint
DRV1-8X6



1 [piece]
Attachment Kit
ANS0068



1 [piece]
Commissioning USB
052650

RECOMMENDED ACCESSORIES



ENERGY SUPPLY



DSV1-8
Pressure safety valve



DSV1-8E
Pressure safety valve with quick exhaust



SENSORS



MFS02-S-KHC-P1-PNP
Magnetic field sensor Straight Cable 0,3 m - Connector M8



CONNECTIONS / OTHER



SENSORS



MFS02-K-KHC-P1-PNP
Magnetic field sensor Straight Cable 5 m



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



S8-G-3
Plug-in connector customizable Straight - Connector M8

RECOMMENDED ACCESSORY ATTACHMENT KIT



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



NJ8-E2
Inductive proximity switch - Cable 5 m



NJ6.5-E2S
Inductive proximity switch - Connector M8



NJ8-E2S
Inductive proximity switch - Connector M8

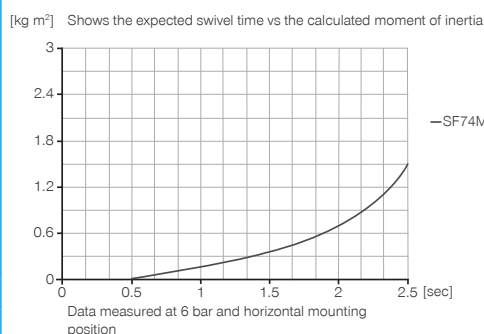
FLAT SWIVEL UNITS

INSTALLATION SIZE SF74MLD4-C

PRODUCT SPECIFICATIONS



Moment of inertia



INCLUDED IN DELIVERY



2 [piece]
Flow Control Valves - with Swivel joint
DRV1-8X6



4 [piece]
O-Ring
COR0020100



1 [piece]
Attachment Kit
ANS0069



1 [piece]
Commissioning USB
052650

RECOMMENDED ACCESSORIES



ENERGY SUPPLY



DSV1-8
Pressure safety valve



DSV1-8E
Pressure safety valve with quick exhaust



SENSORS



MFS02-S-KHC-P1-PNP
Magnetic field sensor Straight Cable 0,3 m - Connector M8



CONNECTIONS / OTHER



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



SENSORS



MFS02-K-KHC-P1-PNP
Magnetic field sensor Straight Cable 5 m



S8-G-3
Plug-in connector customizable Straight - Connector M8

RECOMMENDED ACCESSORY ATTACHMENT KIT



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



NJ8-E2
Inductive proximity switch - Cable 5 m



NJ6.5-E2S
Inductive proximity switch - Connector M8



NJ8-E2S
Inductive proximity switch - Connector M8

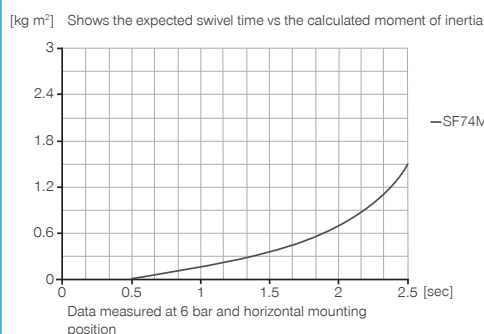
FLAT SWIVEL UNITS

INSTALLATION SIZE SF74MLD6-C

PRODUCT SPECIFICATIONS



Moment of inertia



INCLUDED IN DELIVERY



2 [piece]
Flow Control Valves - with Swivel joint
DRV1-8X6



6 [piece]
O-Ring
COR0020100



1 [piece]
Attachment Kit
ANS0070



1 [piece]
Commissioning USB
052650

RECOMMENDED ACCESSORIES



ENERGY SUPPLY



DSV1-8
Pressure safety valve



DSV1-8E
Pressure safety valve with quick exhaust



SENSORS



MFS02-S-KHC-P1-PNP
Magnetic field sensor Straight Cable 0,3 m - Connector M8



CONNECTIONS / OTHER



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



S8-G-3
Plug-in connector customizable Straight - Connector M8



SENSORS



MFS02-K-KHC-P1-PNP
Magnetic field sensor Straight Cable 5 m

RECOMMENDED ACCESSORY ATTACHMENT KIT



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



NJ8-E2
Inductive proximity switch - Cable 5 m

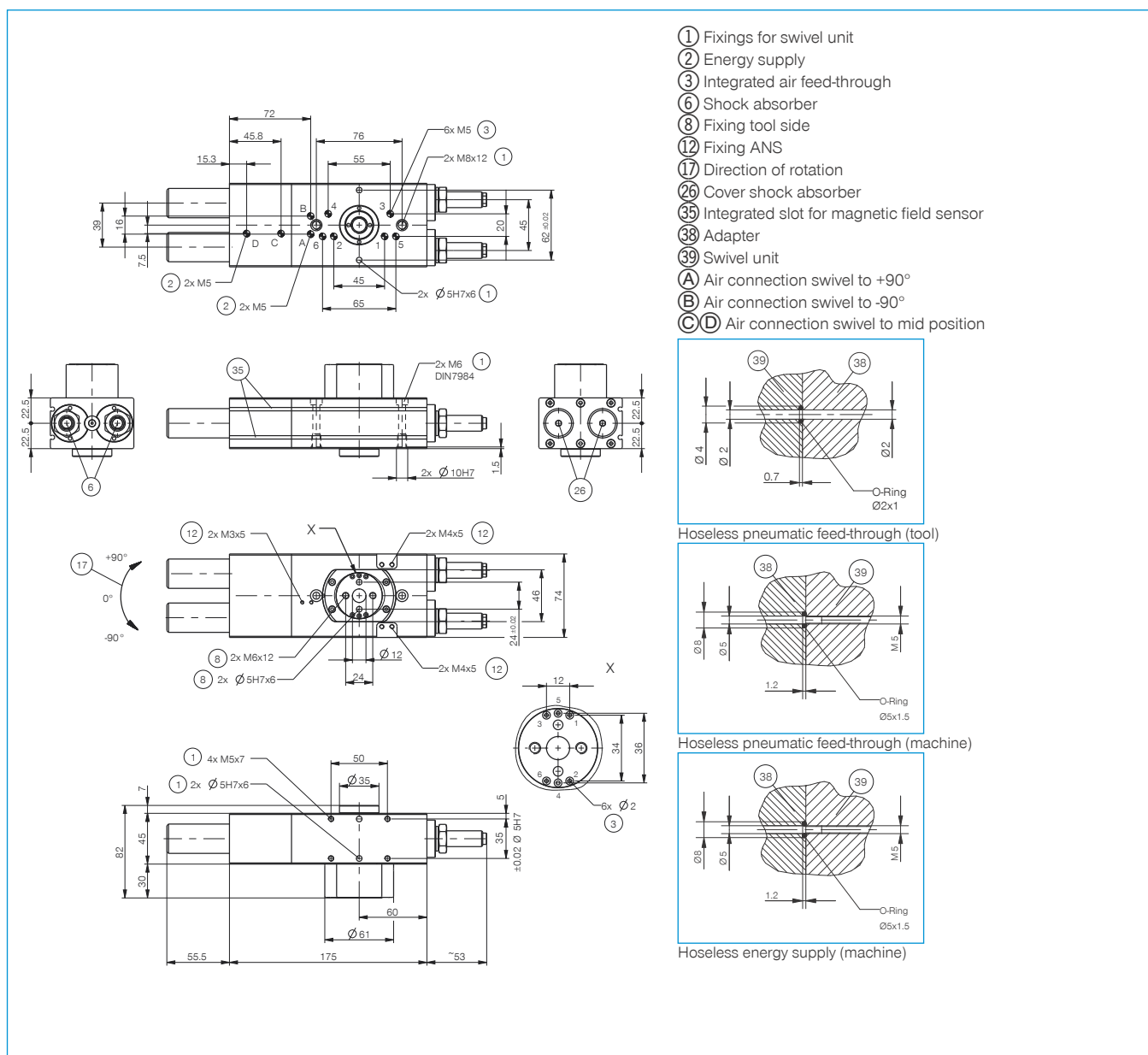


NJ6.5-E2S
Inductive proximity switch - Connector M8



NJ8-E2S
Inductive proximity switch - Connector M8

Order no.	Technical data
	SF74MLD6-C
Swivel angle [°]	-90 / 0 / +90
Torque [Nm]	4.5
Swivel angle regulable +/- [°]	3
Passage bore Ø [mm]	12
Pneumatic energy transfer [Quantity]	6
Axial bearing load [N]	1120
Radial bearing load [Nm]	88
Repetition accuracy +/- [°]	0.01
Operating pressure min. [bar]	3
Operating pressure max. [bar]	8
Nominal operating pressure [bar]	6
Operating temperature min. [°C]	5
Operating temperature max. [°C]	+80
Air volume per cycle [cm³]	125
Weight [kg]	2.6



FLAT SWIVEL UNITS

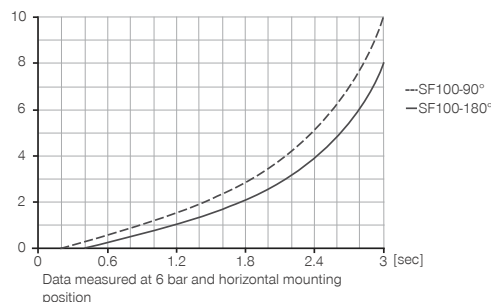
INSTALLATION SIZE SF100N-C

▶ PRODUCT SPECIFICATIONS



▶ Moment of inertia

[kg m²] Shows the expected swivel time vs the calculated moment of inertia



▶ INCLUDED IN DELIVERY



2 [piece]
Flow Control Valves - with Swivel joint
DRV1-8X6

▶ RECOMMENDED ACCESSORIES



ENERGY SUPPLY



DSV1-8
Pressure safety valve



DSV1-8E
Pressure safety valve with quick exhaust



SENSORS



MFS02-K-KHC-P1-PNP
Magnetic field sensor Straight Cable 5 m



MFS02-S-KHC-P1-PNP
Magnetic field sensor Straight Cable 0,3 m - Connector M8



CONNECTIONS / OTHER



ANS0015
Attachment Kit



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



S8-G-3
Plug-in connector customizable Straight - Connector M8

▶ RECOMMENDED ACCESSORY ATTACHMENT KIT



NJ8-E2
Inductive proximity switch - Cable 5 m

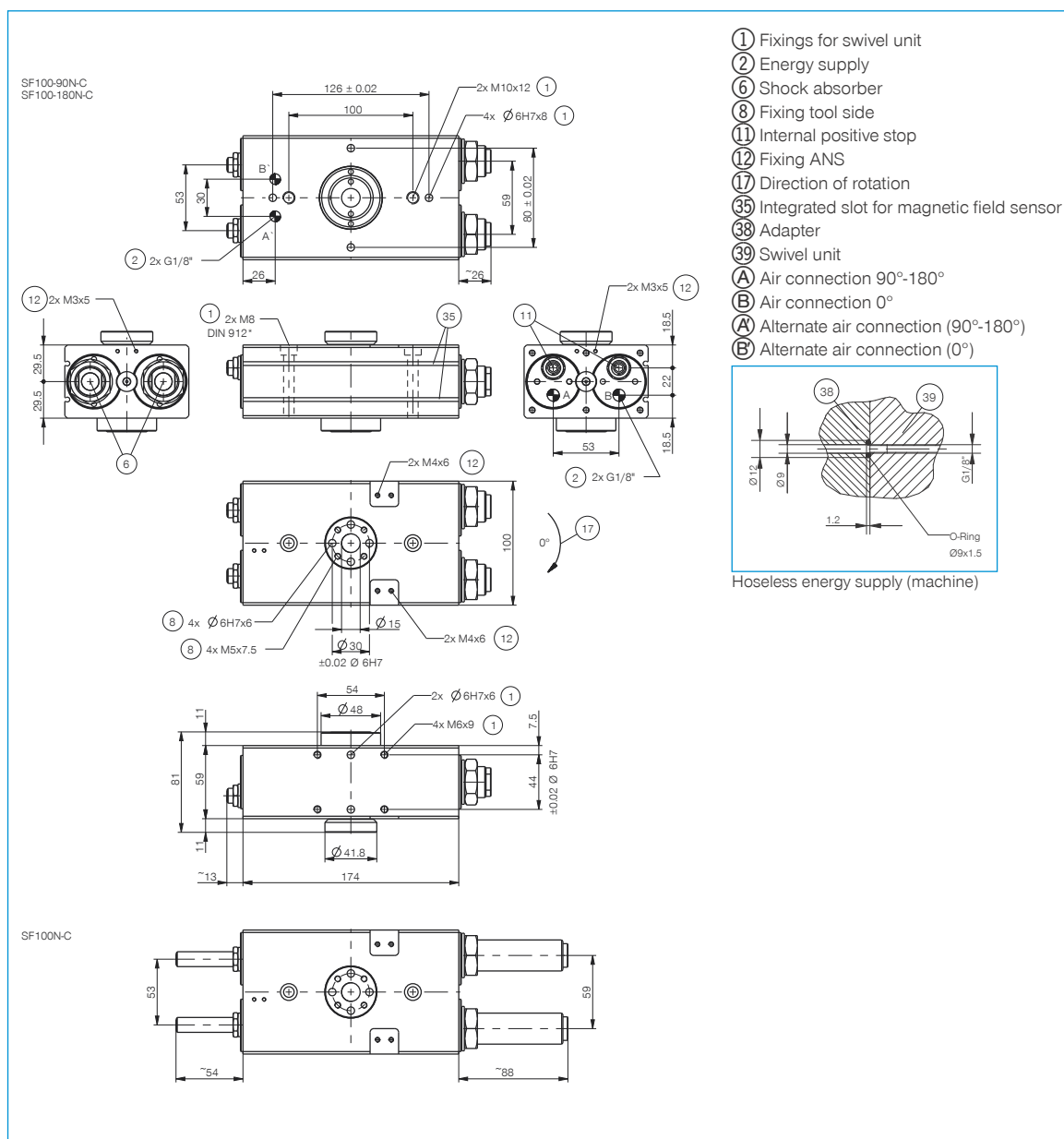


KAW500
Plug-in connector Angled Cable 5m - Socket M8 (female)



NJ8-E2S
Inductive proximity switch - Connector M8

Order no.	Technical data		
	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
Passage bore Ø [mm]	15	15	15
Axial bearing load [N]	2500	2500	2500
Radial bearing load [Nm]	155	155	155
Repetition accuracy +/- [°]	0.01	0.01	0.01
Operating pressure min. [bar]	3	3	3
Operating pressure max. [bar]	8	8	8
Nominal operating pressure [bar]	6	6	6
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



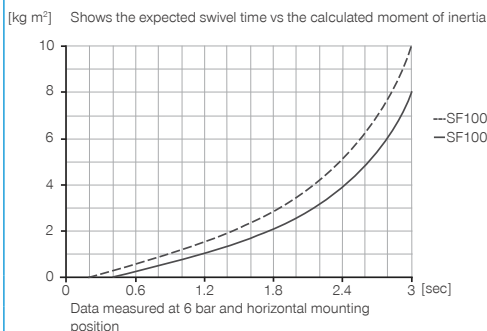
FLAT SWIVEL UNITS

INSTALLATION SIZE SF100D4-C

▶ PRODUCT SPECIFICATIONS



▶ Moment of inertia



▶ INCLUDED IN DELIVERY



2 [piece]
 Flow Control Valves - with Swivel joint
DRV1-8X6



4 [piece]
 O-Ring
COR0030100

▶ RECOMMENDED ACCESSORIES



ENERGY SUPPLY



DSV1-8
 Pressure safety valve



DSV1-8E
 Pressure safety valve with quick exhaust



SENSORS



MFS02-K-KHC-P1-PNP
 Magnetic field sensor Straight Cable 5 m



MFS02-S-KHC-P1-PNP
 Magnetic field sensor Straight Cable 0,3 m - Connector M8



CONNECTIONS / OTHER



ANS0017
 Attachment Kit



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



S8-G-3
 Plug-in connector customizable Straight - Connector M8

▶ RECOMMENDED ACCESSORY ATTACHMENT KIT



NJ8-E2
 Inductive proximity switch - Cable 5 m

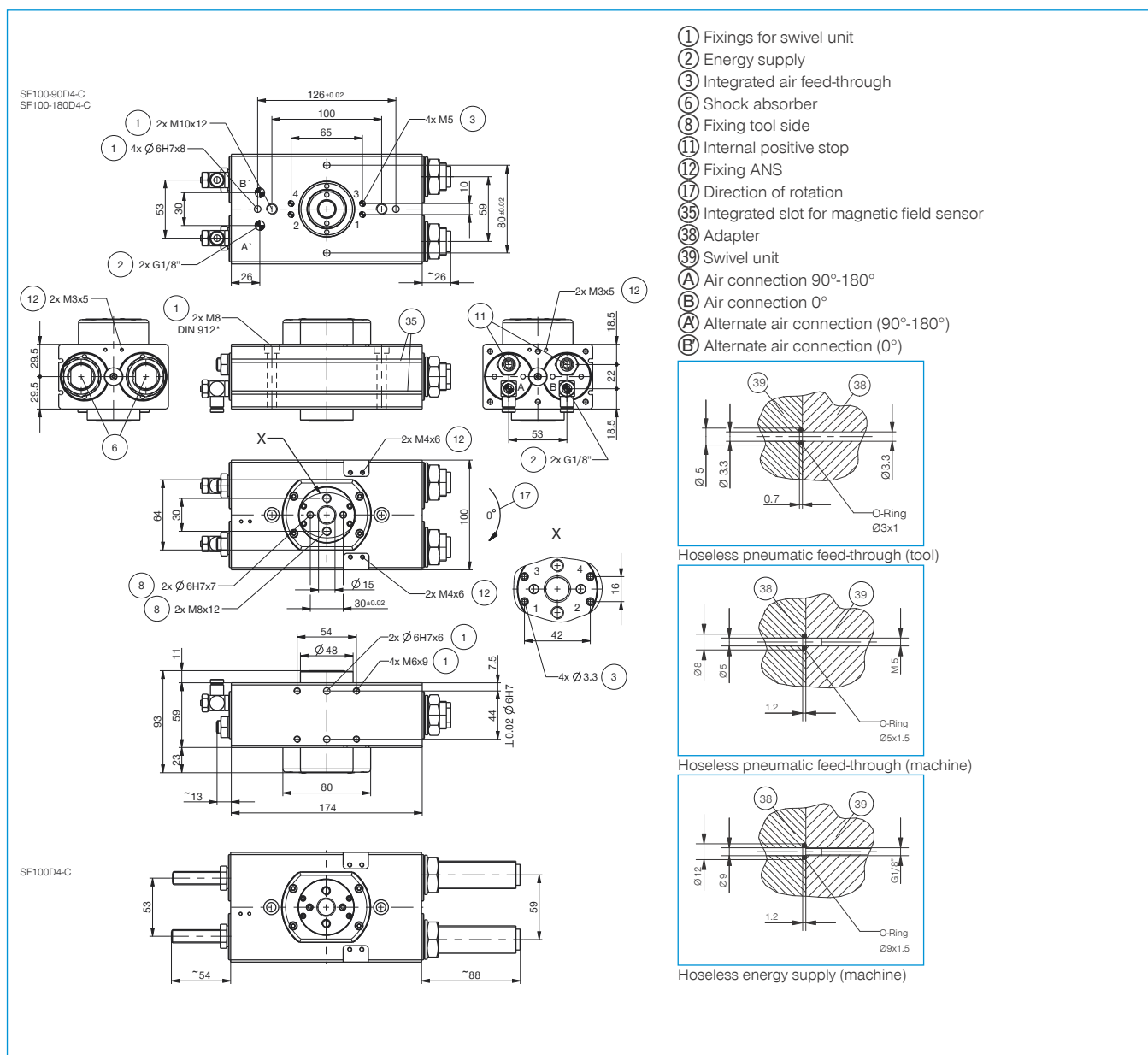


KAW500
 Plug-in connector Angled Cable 5m - Socket M8 (female)



NJ8-E2S
 Inductive proximity switch - Connector M8

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
Passage bore Ø [mm]	15	15	15
Pneumatic energy transfer [Quantity]	4	4	4
Axial bearing load [N]	2500	2500	2500
Radial bearing load [Nm]	155	155	155
Repetition accuracy +/- [°]	0.01	0.01	0.01
Operating pressure min. [bar]	3	3	3
Operating pressure max. [bar]	8	8	8
Nominal operating pressure [bar]	6	6	6
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



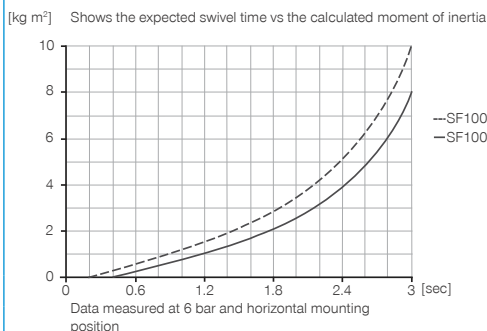
FLAT SWIVEL UNITS

INSTALLATION SIZE SF100D6-C

▶ PRODUCT SPECIFICATIONS



▶ Moment of inertia



▶ INCLUDED IN DELIVERY



2 [piece]
 Flow Control Valves - with Swivel joint
DRV1-8X6



6 [piece]
 O-Ring
COR0030100

▶ RECOMMENDED ACCESSORIES



ENERGY SUPPLY



DSV1-8
 Pressure safety valve



DSV1-8E
 Pressure safety valve with quick exhaust



SENSORS



MFS02-K-KHC-P1-PNP
 Magnetic field sensor Straight Cable 5 m



MFS02-S-KHC-P1-PNP
 Magnetic field sensor Straight Cable 0,3 m - Connector M8



CONNECTIONS / OTHER



ANS0017
 Attachment Kit



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



S8-G-3
 Plug-in connector customizable Straight - Connector M8

▶ RECOMMENDED ACCESSORY ATTACHMENT KIT



NJ8-E2
 Inductive proximity switch - Cable 5 m

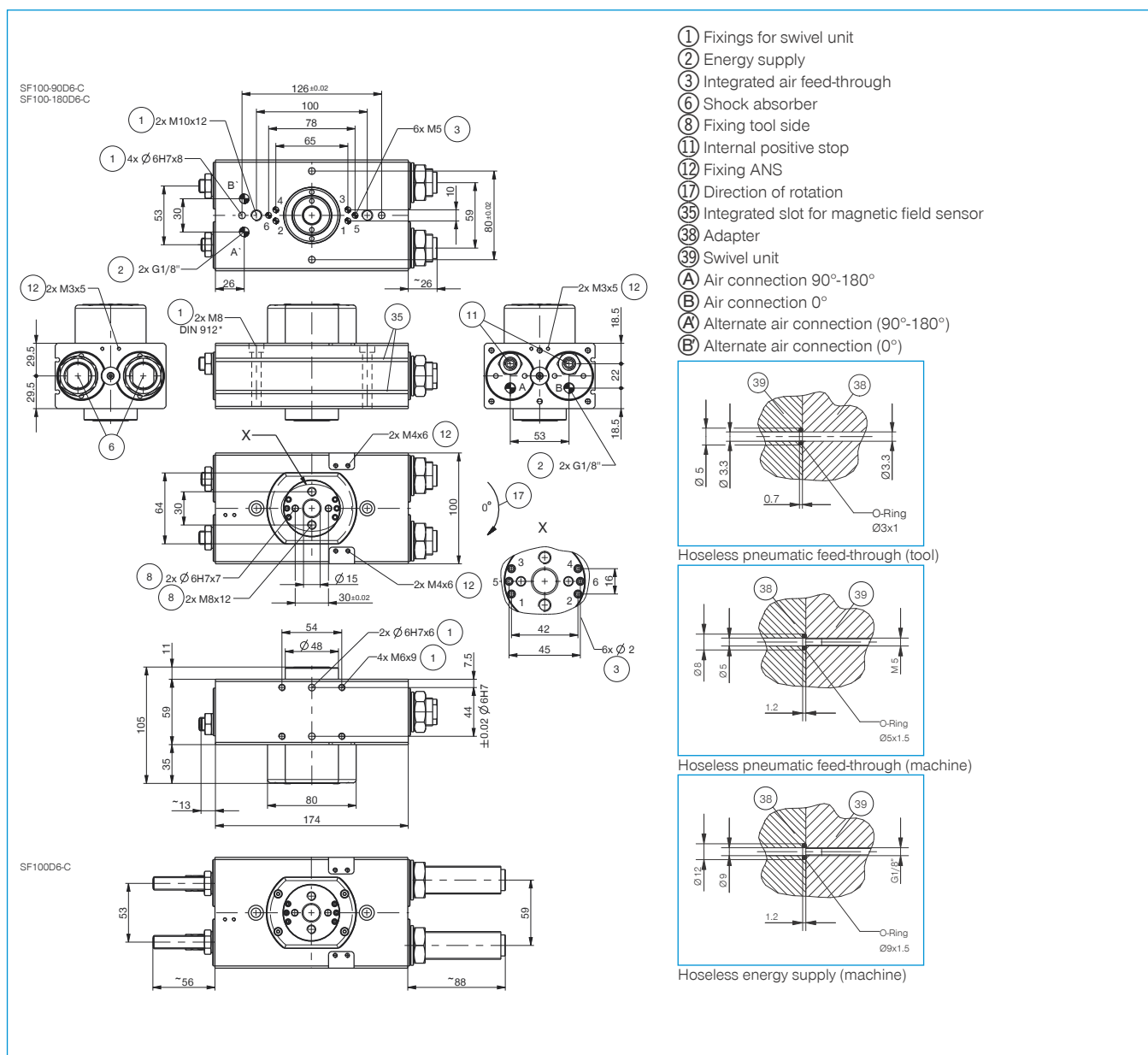


KAW500
 Plug-in connector Angled Cable 5m - Socket M8 (female)



NJ8-E2S
 Inductive proximity switch - Connector M8

Order no.	Technical data		
	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
Passage bore Ø [mm]	15	15	15
Pneumatic energy transfer [Quantity]	6	6	6
Axial bearing load [N]	2500	2500	2500
Radial bearing load [Nm]	155	155	155
Repetition accuracy +/- [°]	0.01	0.01	0.01
Operating pressure min. [bar]	3	3	3
Operating pressure max. [bar]	8	8	8
Nominal operating pressure [bar]	6	6	6
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



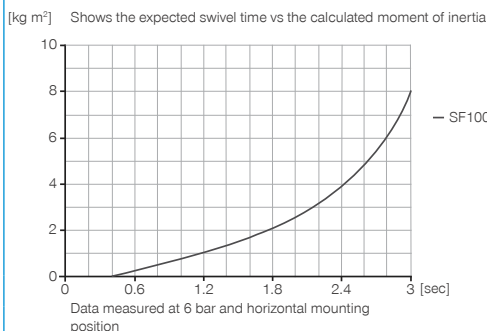
FLAT SWIVEL UNITS

INSTALLATION SIZE SF100ML-C

▶ PRODUCT SPECIFICATIONS



▶ Moment of inertia



▶ INCLUDED IN DELIVERY



2 [piece]
Flow Control Valves - with Swivel joint
DRV1-8X6



1 [piece]
Attachment Kit
ANS0071



1 [piece]
Commissioning USB
052650

▶ RECOMMENDED ACCESSORIES



ENERGY SUPPLY



DSV1-8
Pressure safety valve



DSV1-8E
Pressure safety valve with quick exhaust



SENSORS



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Magnetic field sensor Straight Cable 5 m



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S8-G-3
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▶ RECOMMENDED ACCESSORY ATTACHMENT KIT



NJ8-E2
Inductive proximity switch - Cable 5 m



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



NJ8-E2S
Inductive proximity switch - Connector M8