

Handling technology

Gripper series 5000

THE KNOW-HOW FACTORY

THE KNOW-HOW FACTORY

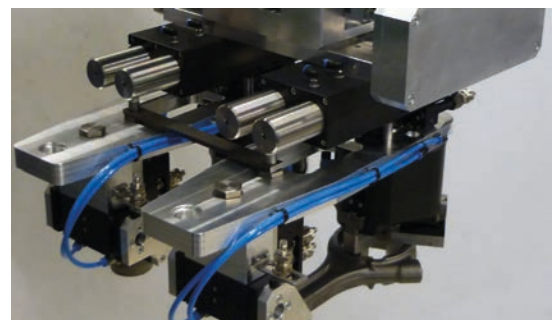
ZIMMER GROUP COMMITTED TO OUR CUSTOMERS

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

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

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

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



TECHNOLOGIES



HANDLING TECHNOLOGY

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

Components. More than 2,000 standardized grippers, swivel units, robotic accessories and much more. We offer a complete selection of technologically superior products that are ready for rapid delivery.

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



DAMPING TECHNOLOGY

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

Industrial damping technology.

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

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

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

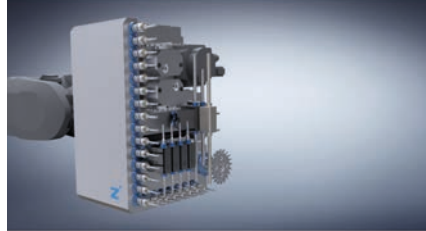


LINEAR TECHNOLOGY

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

Clamping and braking elements. We offer you more than 4,000 types for profiled and round rails as well as for a variety of guide systems from all manufacturers. It makes no difference whether you prefer manual, pneumatic, electric or hydraulic drive.

Flexibility. Our clamping and braking elements ensure that movable components such as Z-axes or machining tables maintain a fixed position and that machines and systems come to a stop as quickly as possible in an emergency.



PROCESS TECHNOLOGY

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

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

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

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

MACHINE TECHNOLOGY

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

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

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

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

SYSTEM TECHNOLOGY

ZIMMER GROUP IS ONE OF THE LEADING SPECIALISTS IN THE DEVELOPMENT OF CUSTOMIZED SYSTEM SOLUTIONS WORLDWIDE.

Customized. A team made up of more than 20 experienced designers and project engineers develop and produce customized solutions for special tasks in close collaboration with end customers and system integrators. It doesn't matter if it is a simple gripper and handling solution or a complex system solution.

Solutions. These system solutions are used in many industries, from mechanical engineering to the automotive and supplier industries to plastics engineering and consumer goods industries, all the way to foundries. The Know-how Factory helps countless companies to thrive competitively by increasing automation efficiency.

BETTER THAN THE REST

GUARANTEED - WITHOUT ANY FUSS

▶ THE VALUE PROMISE – CONSISTENT AND WITHOUT FINE PRINT

Other manufacturers offer a 36-month warranty, but exclude wear parts and parts that make contact with the workpiece. Zimmer Group, on the other hand, offers uncompromising "Made in Germany" quality for all of its GPP and GPD5000 grippers backed up by a 24-month warranty. This applies to ALL PARTS without fine print, regardless of the number of cycles! Our products equip your system to make money, 24/7.



▶ 24/7 – NON-STOP



THE ALTERNATIVE ALUMINUM LINEAR GUIDE

They are the best alternative as they technically outperform all T-slot grippers and are at least on par with multi-tooth guided grippers. As "everyday grippers", they are enough for handling most applications yet offer 15 million cycles of maintenance-free performance.



THE BEST STEEL LINEAR GUIDE

The gripper's Steel Linear Guide combines the proven linear guide method with the very latest sealing and coating technology. As a result, you benefit from the most robust grippers currently available on the market in combination with corrosion protection and protection class IP64. Producing up to 30 million cycles without maintenance is no problem for this gripper.

Price class	● ● ●
Robustness	● ● ● ●
Maintenance free	● ● ●
Environmental contamination	● ● ●

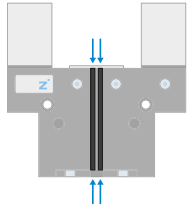
Price class	● ● ● ● ● ●
Robustness	● ● ● ● ● ●
Maintenance free	● ● ● ● ● ●
Environmental contamination	● ● ● ● ● ●



► BENEFITS IN DETAIL

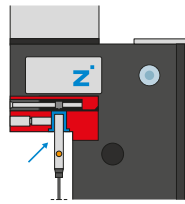
Transverse sensor grooves

The transverse sensor grooves mean you can change the piston position sensing quickly and easily, wherever the gripper is installed.



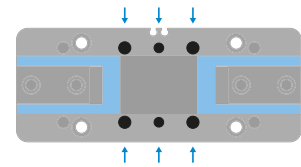
Limit stops for inductive sensors

Limit stops for inductive sensors ensure fast and reliable replacement. Sensing is adjusted using only a screw that does not require additional clamping.



Additional drilled holes

With additional pin holes underneath the cover plate for customer-specific attachments.

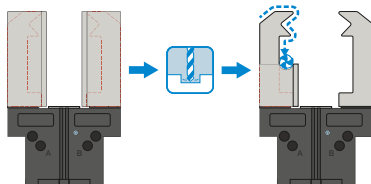


► RECOMMENDED ACCESSORIES

Universal jaws – UB5000

Can be used immediately or for individual reprocessing

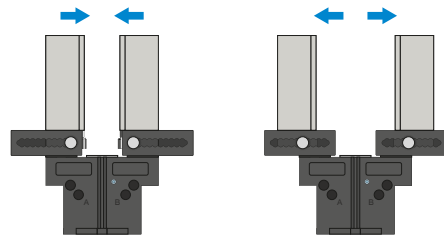
The gripper blanks are available in aluminum (AL) and steel (ST) versions and are installed directly on the gripper using the screws in the scope of delivery. The fits for the centering sleeves are already in place for this purpose. One universal jaw is required for each gripper jaw.



Adjustment jaws – EB5000

For tool-free adaptation of the gripper range

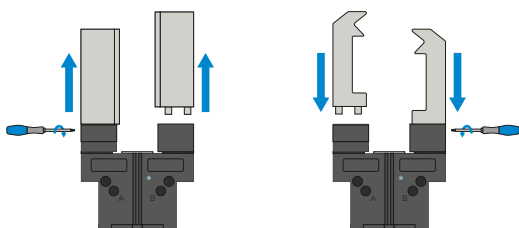
By manually activating the locking mechanism, which is pre-tensioned by a spring, the adjustment jaw can be moved within a grid of detent notches that has a number scale. Depending on the forces and torques that apply, the adjustment jaws are available in aluminum (AL) and steel (ST) versions. One adjustment jaw is required for each gripper jaw.



Interchangeable jaws – WB5000

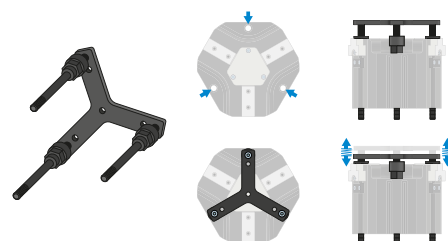
Enable fast change of individual gripper fingers

For each gripper jaw, a fixed part and at least one loose part set is needed, depending on the number of gripper fingers to be changed. Manual locking via the Torx wrench included in the scope of delivery of the fixed part can take place from two sides.



Pressure piece – ADS5000

When the gripper fingers are open, the pressure piece is used for spring-supported positioning of the workpiece against a limit stop. This greatly reduces the loads on the gripper that arise during joining.



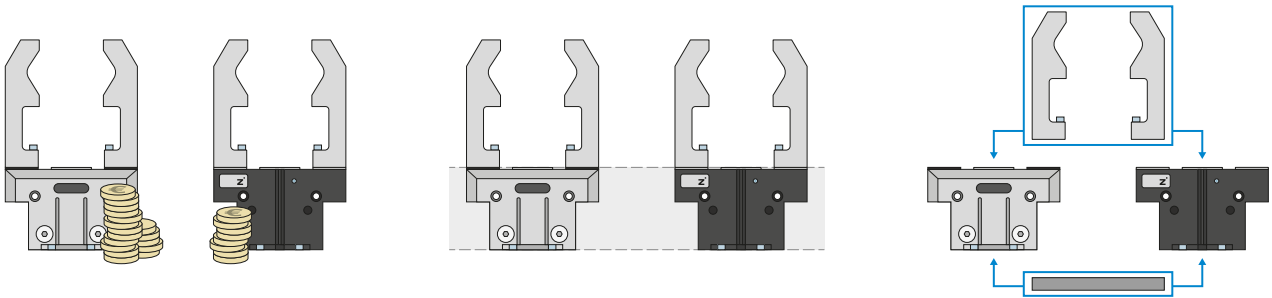
BETTER THAN THE REST

GUARANTEED - WITHOUT ANY FUSS

▶ THE MARKET CHECK

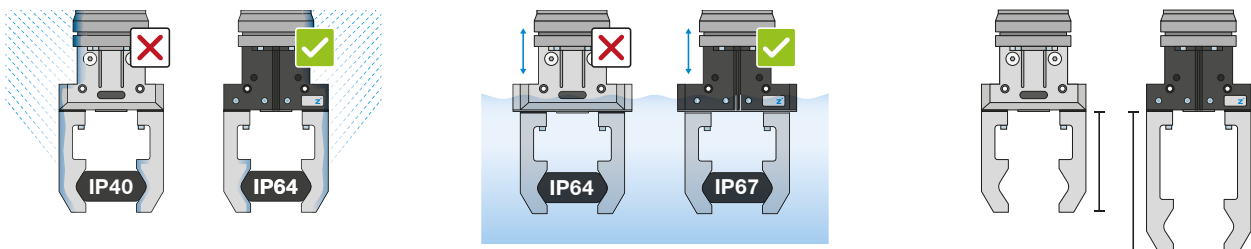
The ALternative – AL grippers packed with benefits

They are much more cost-effective than comparable grippers on the market and their standardized mounting options and dimensions make them easy to integrate into existing designs.



The premium grippers – Designed for universal use

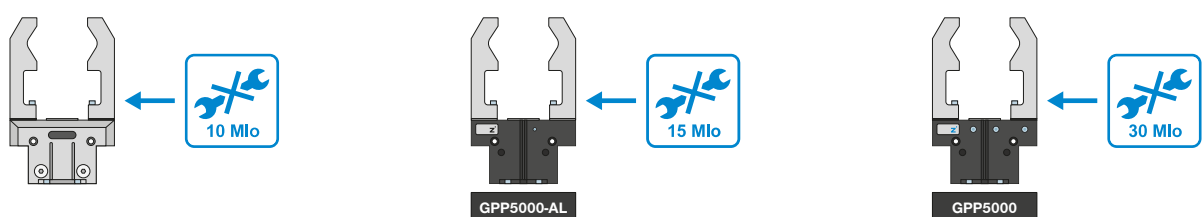
They are protected against corrosion and feature IP64 protection for ideal resistance to even the toughest environmental conditions. If this is not sufficient, the series offers temperature-resistant variants and protector variants with a protection class as high as IP67.



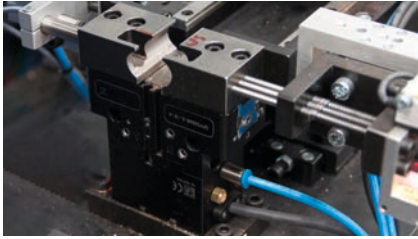
Maintenance free

With maintenance-free performance of up to 15 million gripping cycles, the AL grippers with their Aluminum Linear Guide offer a maintenance interval up to 50 percent higher than commonly available grippers.

The Steel Linear Guide premium grippers exceed these values, providing a maintenance interval up to 30 million cycles, and thus stand for long-term use and maximum system availability.



▶ REFERENCES



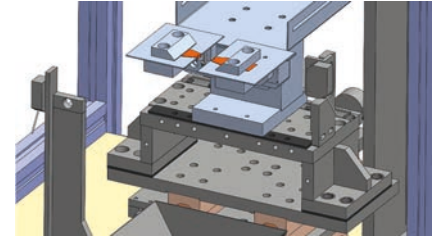
A ROBUST GRIPPER FOR A LOCK SYSTEM

Quite inconspicuously at the end of a street the company AUMAT Maschinenbau GmbH is located in an industrial area at the outskirts of Solingen.



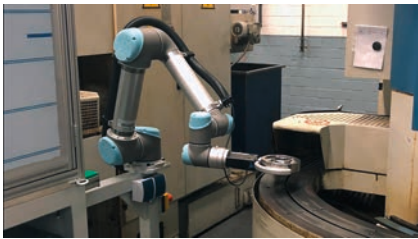
BRINGING HANDLING TECHNOLOGY TO LIFE

A project, supported by the German Federal Ministry of Education and Research, formed the basis for the research institute ICM e.V. to open a training and application center ("SchAz") in Chemnitz.



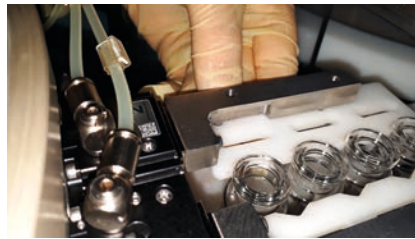
SAFE HANDLING OF BOLT BLANKS // GRIPPERS IN WELDING PRODUCTION

The metalworking industry is one of the most important manufacturing industries in the world. Welding technology plays a major role in the metalworking industry.



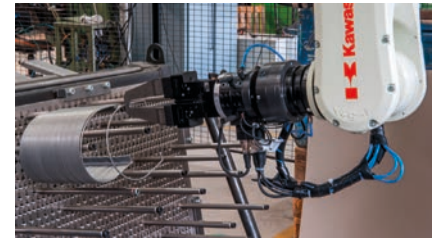
A SECURE GRIP ON THE GEARBOX - HANDLING OF A GEAR WHEEL

The automotive supplier LINAMAR SEISSEN-SCHMIDT Forging is breaking new ground for the machining of a transmission wheel: A cobot was placed between two machining machines and now works towards the machine operator.



LARGE-SCALE CLEANING - OR HOW GRIPPERS FROM ZIMMER GROUP AUTOMATE A CLEANING MACHINE FOR STERILE GLASS VIALS

The introduction of modern automation technology into the sensitive production areas of pharmaceutical and medical technology was rapid.



HANDLING AND END MACHINING FOR WIRE BENDING PARTS

At Bahner und Schäfer GmbH, everything revolves around technical springs and bent parts. Competence and technical experience have been passed on there since 1931 and for more than three generations.

▶ CUSTOMER QUOTES

GRINDING AND POLISHING OF METAL PARTS

Mr. Hakki Dogan, CEO Nurhak Metallbearbeitung/Velbert

„We have tried a few competitor products in the past. The GP5000 from Zimmer is clearly better! Other grippers wore out quickly and the gripping force diminished. Then they were no longer process-safe. The steel-on-steel guide is very low-wear and the plastic seal does not allow dirt to penetrate.“

PRODUCTION OF CYLINDER LOCKS

Mr. Hans-Stefan Csulits, CEO Heitec Auerbach GmbH & Co KG

„The durability of the grippers in adverse environments such as milling, drilling or broaching, both wet and dry, in our machines allows us to achieve the required process reliability. The freedom from maintenance of up to 30 million cycles saves our customers enormous maintenance and servicing costs, thereby guaranteeing higher machine output with lower production costs.“

LOADING AND UNLOADING HANDLING OF PROCESSING MACHINES

Mr. Karsten Krug, Mitec Automotive AG

„On existing loading and unloading handling systems of our machining centres, we have replaced existing grippers with grippers from the Zimmer Group's 5000 product family. Since then, the applications have been running smoothly and absolutely reliably.“








zimmer-group.com

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SERIES

PRODUCT FAMILY 5000

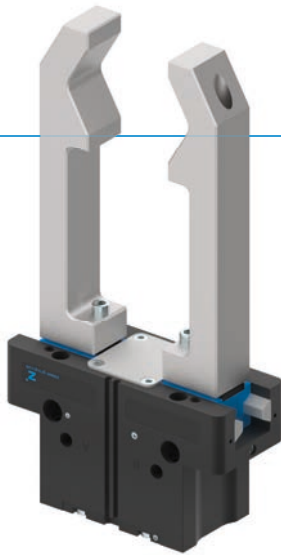
2-JAW PARALLEL GRIPPERS PNEUMATIC			1
	SERIES GPP5000	12	
2-JAW PARALLEL GRIPPERS PNEUMATICALLY INTELLIGENT			2
	SERIES GPP5000IL	88	
2-JAW PARALLEL GRIPPERS ELECTRIC			3
	SERIES GEP5000	120	
3-JAW CONCENTRIC GRIPPERS PNEUMATIC			4
	SERIES GPD5000	140	
3-JAW CONCENTRIC GRIPPERS PNEUMATICALLY INTELLIGENT			5
	SERIES GPD5000IL	214	
3-JAW CONCENTRIC GRIPPERS ELECTRIC			6
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	SERIES SCM	300	

2-JAW PARALLEL GRIPPERS

SERIES GPP5000

1

▶ PRODUCT ADVANTAGES



reddot design award
winner 2018

“The best”

▶ **Steel Linear Guide – The superior guidance system concept**

The steel / steel guide stands for lasting precision, durability and a long service life—featuring maintenance intervals of up to 30 million gripping cycles. Benefit from these features and increase the profitability and process reliability of your machine.

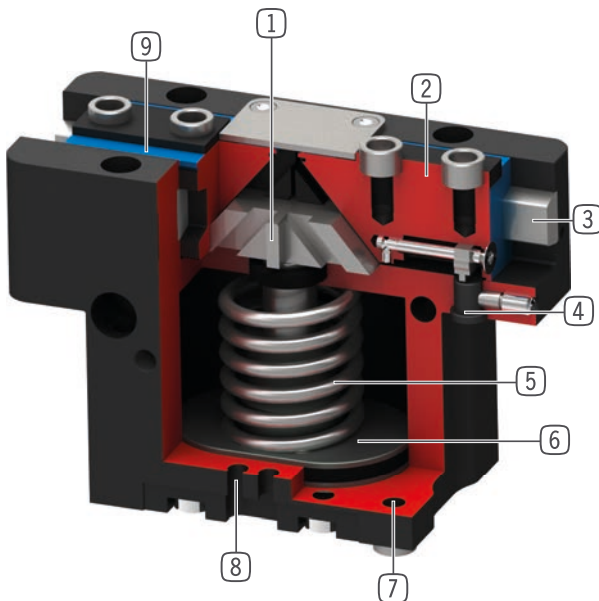
▶ **Leakproof and corrosion protected – The universal gripper**

Suitable for virtually all ambient conditions, with a sealed guide up to IP67 and corrosion protection as standard, you are able to use this gripper universally. As a result, the range of models in your production is reduced, along with a reduction in associated storage and process costs.

▶ **Aluminum Linear Guide – The alternative**

Reduced to those aspects which are the most important, the steel / aluminum guide variant offers significantly better performance when compared to a similar gripper with a T-groove travel guide, and is on par with the best principles of toothed guidance systems.

▶ BENEFITS IN DETAIL



① **Wedge hook mechanism**

- Supports to absorb high forces and moments
- Synchronized gripper jaw movement

② **Gripper jaw**

- Gripper fingers mounted using removable centering sleeves
- Lubricated for life via incorporated lubrication slots

③ **Steel Linear Guide**

- Steel in steel guide
- Enables use of extremely long gripper fingers
- Also available in steel / aluminum variant

④ **Mounting block**

- mounting for inductive proximity switch

⑤ **Integrated gripping force safety device**

- Spring built into cylinder chamber as an energy store

⑥ **Drive**

- Double-acting pneumatic rotor cylinder

⑦ **Mounting and positioning**

- Alternatively, on several sides for customized mounting
- Pneumatic and electrical versions identical apart from height

⑧ **Sensing slot**

- mounting and positioning of magnetic field sensors

⑨ **Dual lip seal**

- IP64 and up to IP67 (with purged air) for Protector version
- Prevents grease from being squeezed out, increasing service life



► SERIES CHARACTERISTICS

Installation size		Variants				
GPP50XX		-00	-20	-21	-24	-AL
N	Long stroke	•	•	•	•	•
NC	Long stroke / Spring closing	•	•	•	•	•
NO	Long stroke / Spring opening	•	•	•	•	•
S	High-strength	•	•	•	•	
SC	High-strength / Spring closing	•	•	•	•	
SO	High-strength / Spring opening	•	•	•	•	
	Steel Linear Guide	•	•	•	•	
	Aluminum Linear Guide					•
	15 million maintenance-free cycles (max.)					•
	30 million maintenance-free cycles (max.)	•	•	•	•	
	Inductive sensor	•	•	•	•	
	Magnetic field sensor	•	•	•	•	•
	Protected against corrosion	•	•	•	•	
	Purged air	•	•	•	•	•
	Temperature-resistant		•		•	
	IP40					•
	IP64	•	•			
	IP67*			•	•	

*with purged air (max. 0,5 bar)

► TECHNICAL DATA

Installation size	Stroke per jaw [mm]	Gripping force [N]	Weight [kg]	IP class
GPP5003	2,5	140 - 205	0,08 - 0,12	IP40 / IP64 / IP67*
GPP5004	2 - 4	200 - 630	0,15 - 0,3	IP40 / IP64 / IP67*
GPP5006	3 - 6	330 - 1080	0,28 - 0,44	IP40 / IP64 / IP67*
GPP5008	4 - 8	520 - 1670	0,53 - 0,76	IP40 / IP64 / IP67*
GPP5010	5 - 10	885 - 2890	0,85 - 1,31	IP40 / IP64 / IP67*
GPP5013	6 - 13	1410 - 4400	1,5 - 2,26	IP40 / IP64 / IP67*
GPP5016	8 - 16	2090 - 6600	2,9 - 4,4	IP40 / IP64 / IP67*
GPP5025	14 - 25	3280 - 9130	6,1 - 8,75	IP64 / IP67*
GPP5030	17 - 30	5000 - 13550	9,2 - 13,7	IP64 / IP67*
GPP5035	20 - 35	6100 - 15900	15,8 - 23,3	IP64 / IP67*
GPP5045	26 - 45	10200 - 26950	33 - 50	IP64 / IP67*

*with purged air (max. 0,5 bar)

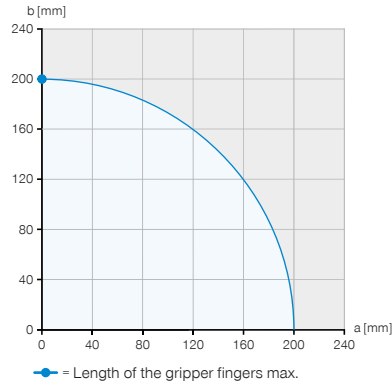
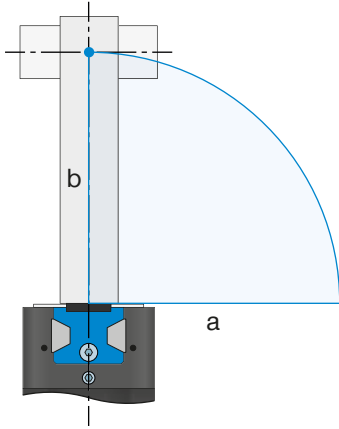
2-JAW PARALLEL GRIPPERS

SERIES GPP5000 GRIPPER FINGER LENGTH

1



MAXIMUM GRIPPER FINGER LENGTH

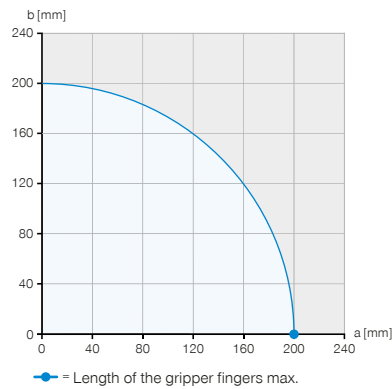
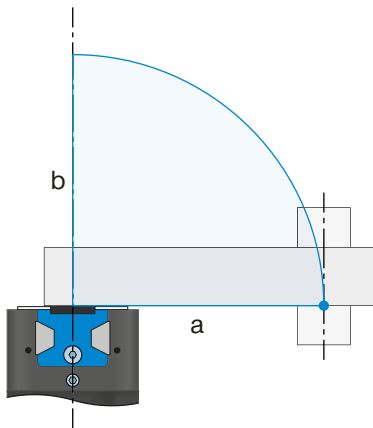


Example 1

Vertical force application point

$a = 0 \text{ mm}$

$b = 200 \text{ mm}$

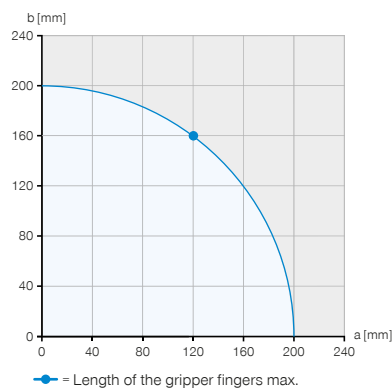
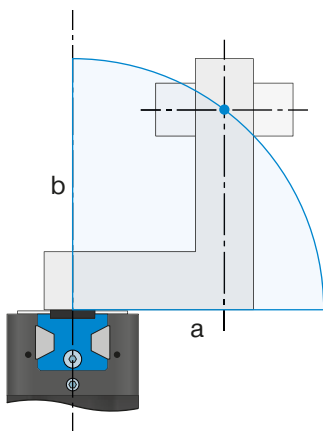


Example 2

Horizontal force application point

$a = 200 \text{ mm}$

$b = 0 \text{ mm}$



Example 3

Maximum permissible projection

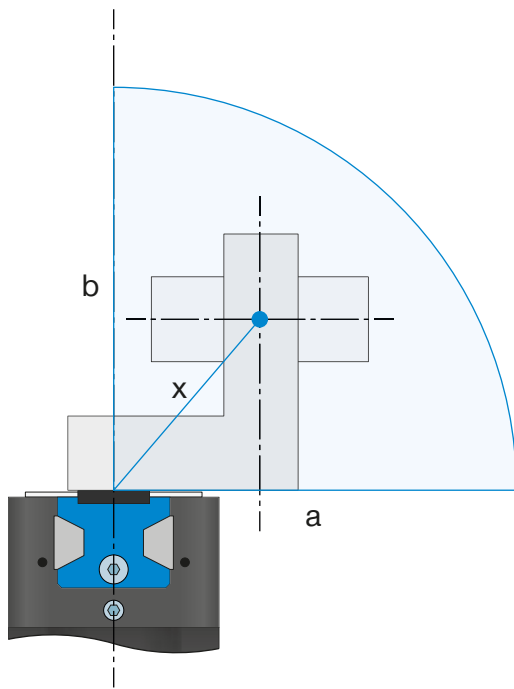
$a = 120 \text{ mm}$

$b = 160 \text{ mm}$

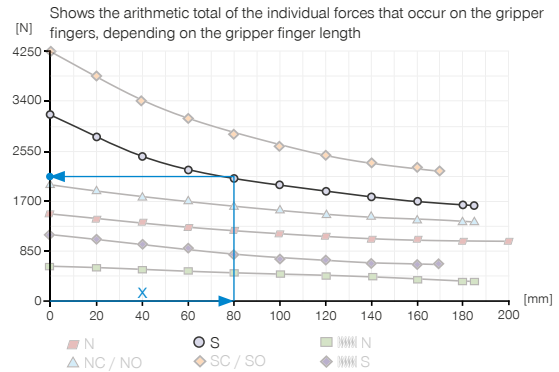
The examples show the maximum horizontal (a) and vertical (b) gripper finger length using the example of a GPP5013N-00-A, which is represented by the blue area.



GRIPPING FORCE AS A FUNCTION OF GRIPPER FINGER LENGTH



► Gripping force diagram



Example 4

Resulting gripper finger length for determining the gripping force

a = 55 mm

b = 58 mm

$$x = \sqrt{55^2 + 58^2} = 80 \Rightarrow 2125 \text{ N}$$



GUIDE CHARACTERISTICS

Steel / aluminum guide and steel / steel guide in comparison

In general, the maximum possible length of gripper fingers of a steel / aluminum guide is lower in comparison to the steel / steel guide, due to the lower yield point of aluminum. While the maximum gripper finger length in the horizontal (a) and vertical (b) direction can be fully utilized for the steel / steel guide, the maximum gripper finger length that is specified in the technical data for the steel / aluminum guide is reduced by 20% at a horizontal (a) projection. The lower efficiency of a steel / aluminum guide also leads to a higher decrease in gripping force at an increased gripping finger length and to a reduction in service life as a result of a lower resistance to wear.

Steel / aluminum guide

Steel / aluminum guides are very common worldwide. They are available in many different forms and are installed in virtually all commercially available grippers from an extremely wide variety of manufacturers. The steel / aluminum grippers from Zimmer Group are available as AL variants of the tried-and-tested 5000 Series. Their designs are geared toward the important aspects and they are very cost-effective.

Steel / steel guide

Steel / steel guides are the best and first choice wherever durability and robustness are essential. The Steel Linear Guide from Zimmer Group is also clearly distinguished from a steel / aluminum guide thanks to its exclusive design featuring higher material characteristics.

Steel Linear Guide – Added value in detail

- + Steel in steel guide
- + IP64 and up to IP67 (with sealing air) in the protector version
- + Corrosion protected
- + Up to 30 million maintenance-free cycles (max.)

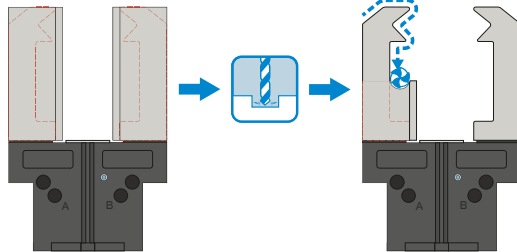
2-JAW PARALLEL GRIPPERS

SERIES GPP5000 FUNCTIONAL DESCRIPTION

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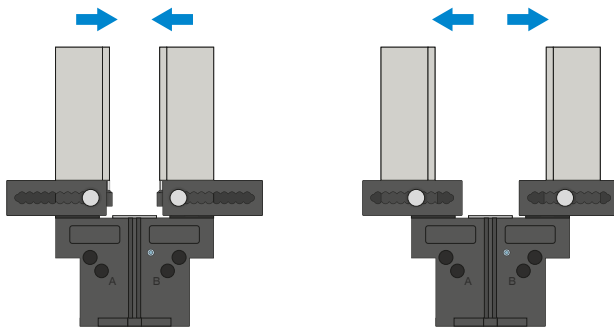
GRIPPING COMPONENTS



Universal jaws – UB5000

Can be used immediately or for individual reprocessing

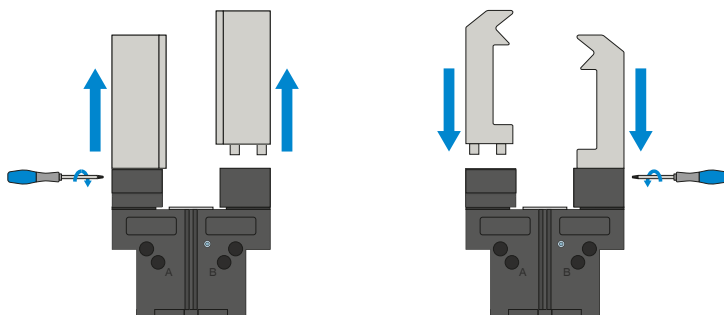
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Interchangeable jaws – WB5000

Enable fast change of individual gripper fingers

For each gripper jaw, a fixed part and at least one loose part set is needed, depending on the number of gripper fingers to be changed. Manual locking via the Torx wrench included in the scope of delivery of the fixed part can take place from two sides.



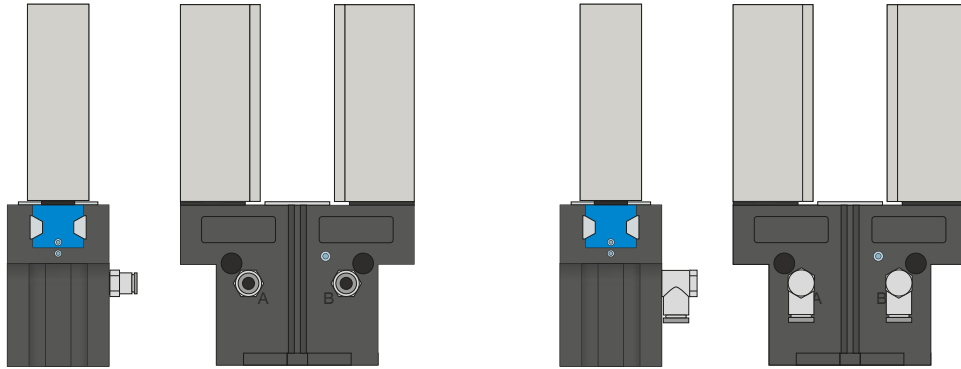
THE GRIPPING COMPONENTS CAN BE COMBINED!

The gripper components listed above can be combined with each other and are compatible with the various series of the 5000 gripper family.



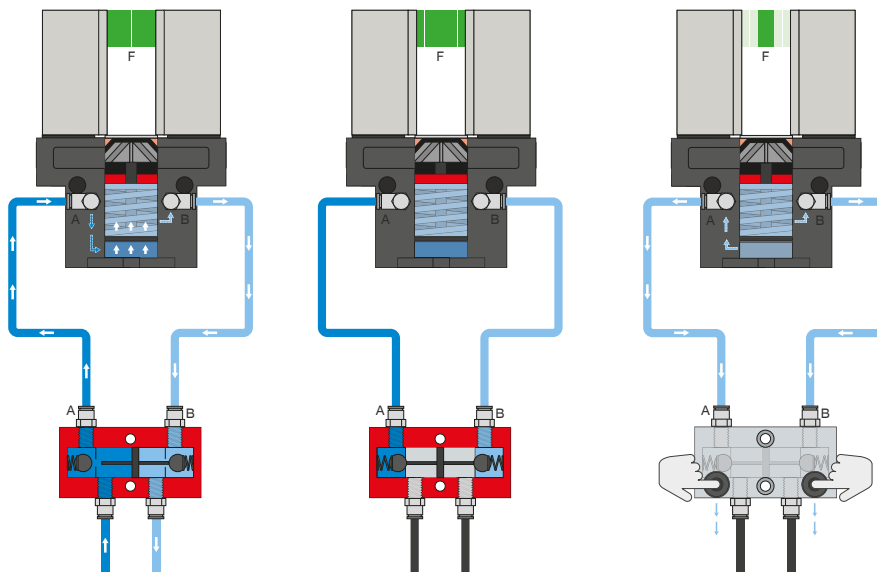
ENERGY SUPPLY

1



Pneumatic threaded connections

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



Pressure safety valve – DSV

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

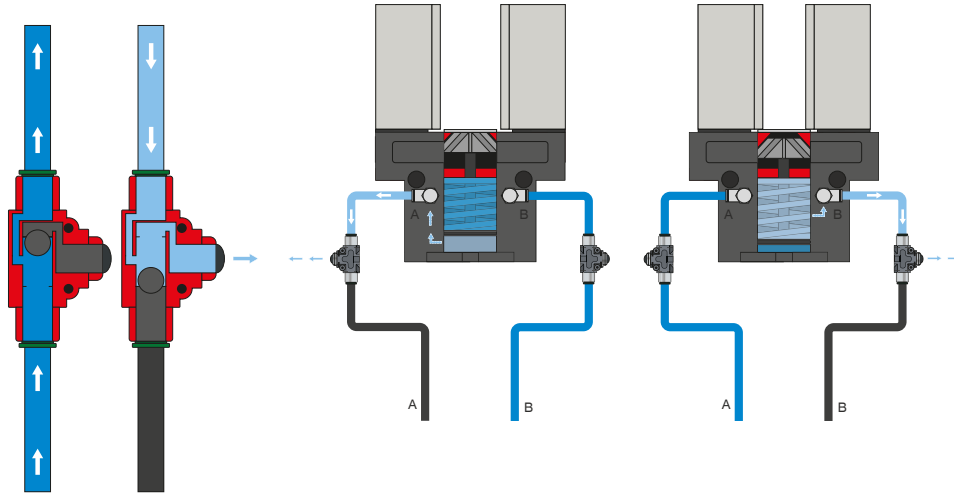
The integrated double check valve, which can be unlocked, retains the system pressure of the gripper in case of EMERGENCY STOP. To ensure the function, the valve must be installed as close to the gripper's air connection as possible. In variant E, two pushbuttons are installed that allow for controlled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

2-JAW PARALLEL GRIPPERS

SERIES GPP5000 FUNCTIONAL DESCRIPTION



ENERGY SUPPLY



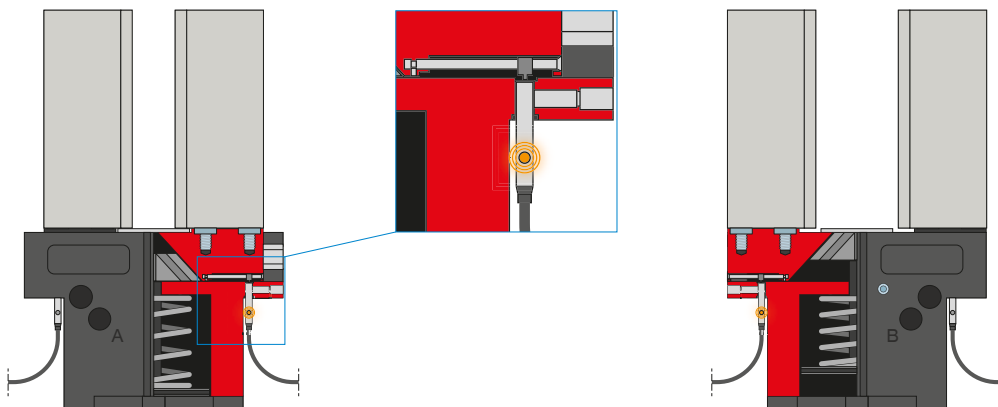
Quick exhaust valve – DEV

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.



SENSORS



Inductive sensors – NJ*

For direct position sensing of the gripper jaws

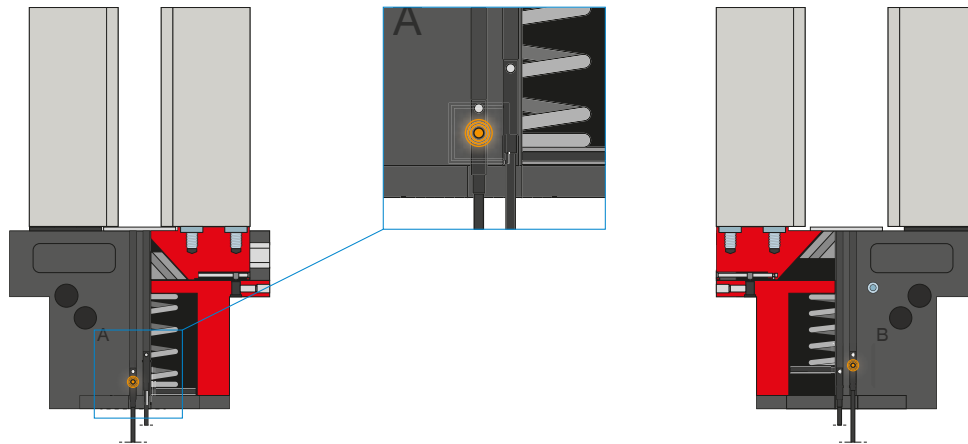
The sensor is guided into the intake as far as it will go and fixed in place using the lateral clamping screw. Tuning to the desired position then takes place by adjusting the cam switch. The sensors are available in versions with 5 m cables with exposed leads and 0,3 m cable with connector, as well as with direct plug orientation.

*Not for variant AL-A

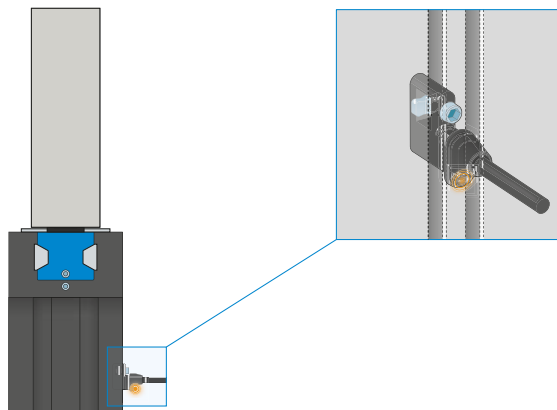


SENSORS

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.

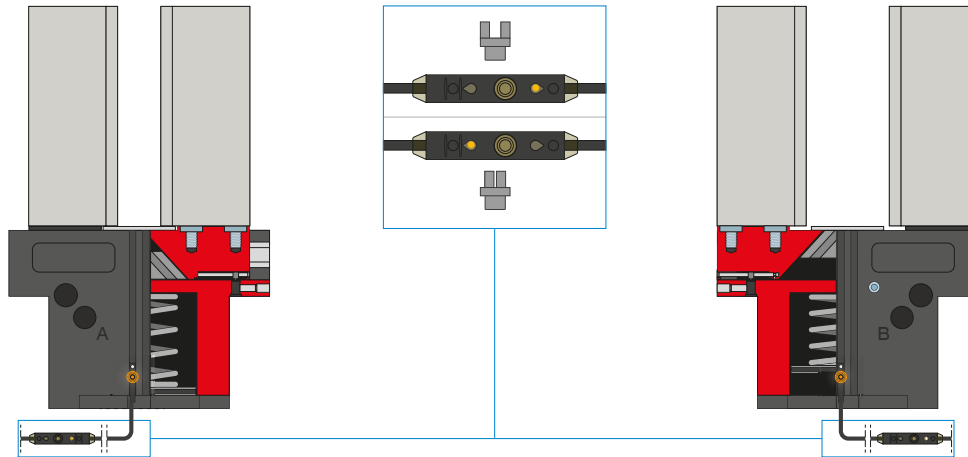
2-JAW PARALLEL GRIPPERS

SERIES GPP5000 FUNCTIONAL DESCRIPTION



SENSORS

MFS02



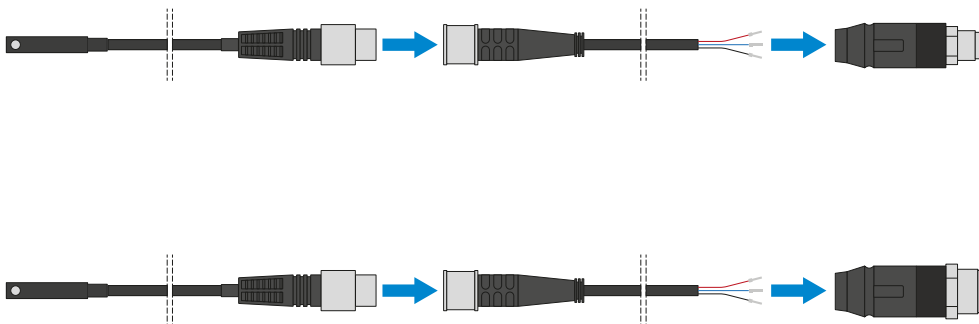
2-point magnetic field sensors - MFS

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.



CONNECTIONS / OTHER



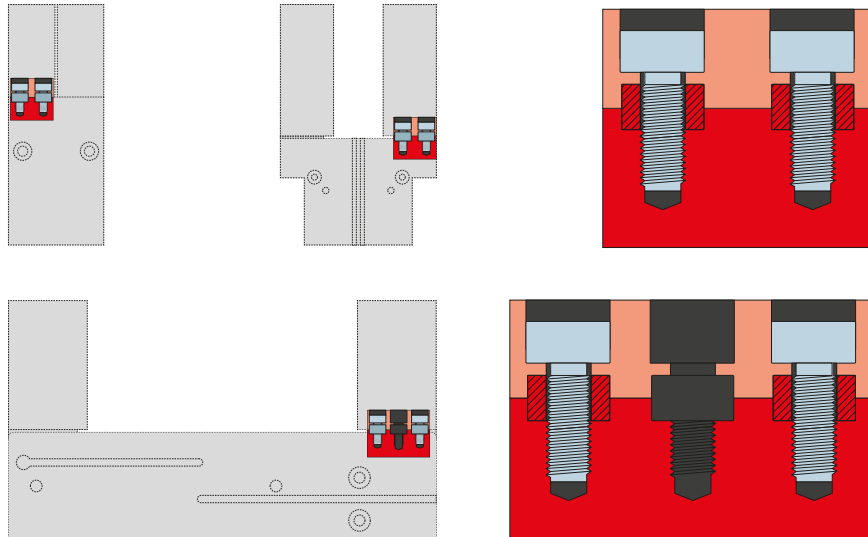
Plug-in connectors

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 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 PARALLEL GRIPPERS

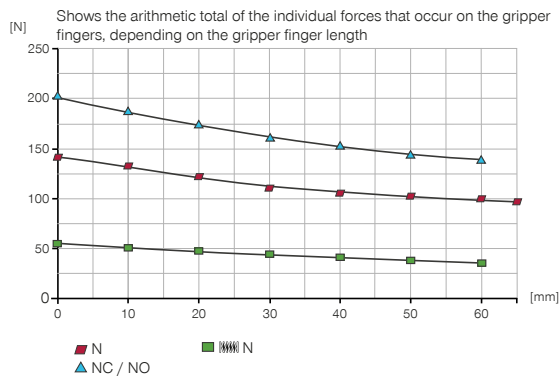
INSTALLATION SIZE GPP5003

▶ PRODUCT SPECIFICATIONS

-00-A / -20-A / -21-A / -24-A

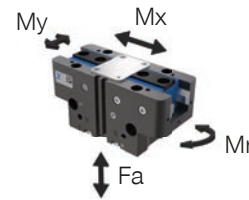
Steel / steel guide

▶ Gripping force diagram



▶ Forces and moments

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

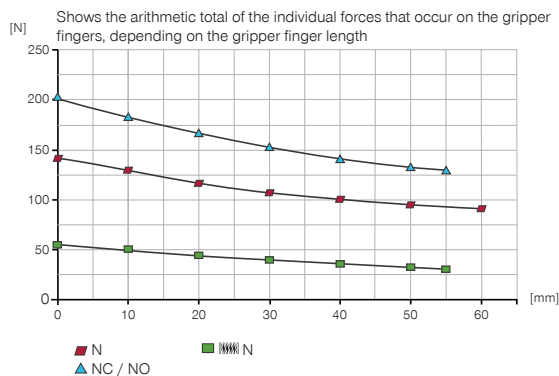


Mr [Nm]	7
Mx [Nm]	14
My [Nm]	13
Fa [N]	550

-AL-A

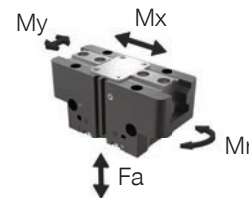
Steel / aluminum guide

▶ Gripping force diagram



▶ Forces and moments

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



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

▶ VARIANTS

-00-A / -20-A

Steel / steel guide

-21-A / -24-A

Steel / steel guide

-AL-A

Steel / aluminum guide



TECHNICAL DATA

Order no.	Technical data		
	GPP5003N-00-A	GPP5003NC-00-A	GPP5003NO-00-A
Stroke per jaw [mm]	2.5	2.5	2.5
Gripping force in closing [N]	140	195	
Gripping force in opening [N]	150		205
Gripping force secured by spring min. [N]		55	55
Closing time [s]	0.01	0.01	0.025
Opening time [s]	0.01	0.025	0.01
Dead weight of mounted gripper finger max. [kg]	0.12	0.12	0.12
Length of the gripper fingers max. [mm]	65	60	60
Repetition accuracy +/- [mm]	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4
Operating pressure max. [bar]	8	7	7
Nominal operating pressure [bar]	6	6	6
Operating temperature [°C]	-10 ... +90	-10 ... +90	-10 ... +90
Air volume per cycle [cm³]	2.1	4.8	4.8
Protection to IEC 60529	IP64	IP64	IP64
Protected against corrosion	Yes	Yes	Yes
Weight [kg]	0.08	0.1	0.1

Order no.	Technical Data - High Temperature Version		
	GPP5003N-20-A	GPP5003NC-20-A	GPP5003NO-20-A
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130

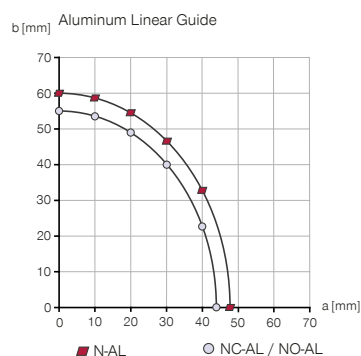
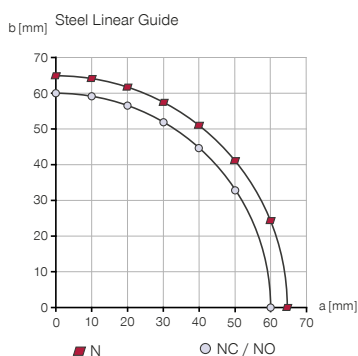
Order no.	Technical Data - Protector Version		
	GPP5003N-21-A	GPP5003NC-21-A	GPP5003NO-21-A
Protection to IEC 60529	IP67*	IP67*	IP67*
Weight [kg]	0.1	0.12	0.12

Order no.	Technical Data - High Temperature Protector Version		
	GPP5003N-24-A	GPP5003NC-24-A	GPP5003NO-24-A
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130
Protection to IEC 60529	IP67*	IP67*	IP67*
Weight [kg]	0.1	0.12	0.12

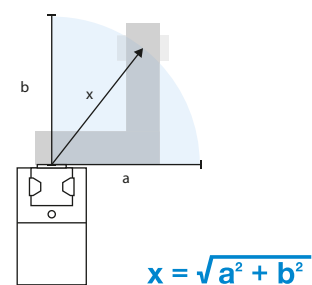
*with purged air (max. 0,5 bar)

Order no.	Technical data		
	GPP5003N-AL-A	GPP5003NC-AL-A	GPP5003NO-AL-A
Dead weight of mounted gripper finger max. [kg]	0.1	0.1	0.1
Length of the gripper fingers max. [mm]	60	55	55
Protection to IEC 60529	IP40	IP40	IP40
Protected against corrosion	No	No	No
Weight [kg]	0.08	0.1	0.1

Maximum gripper finger length



Resulting gripper finger length for determining the gripping force

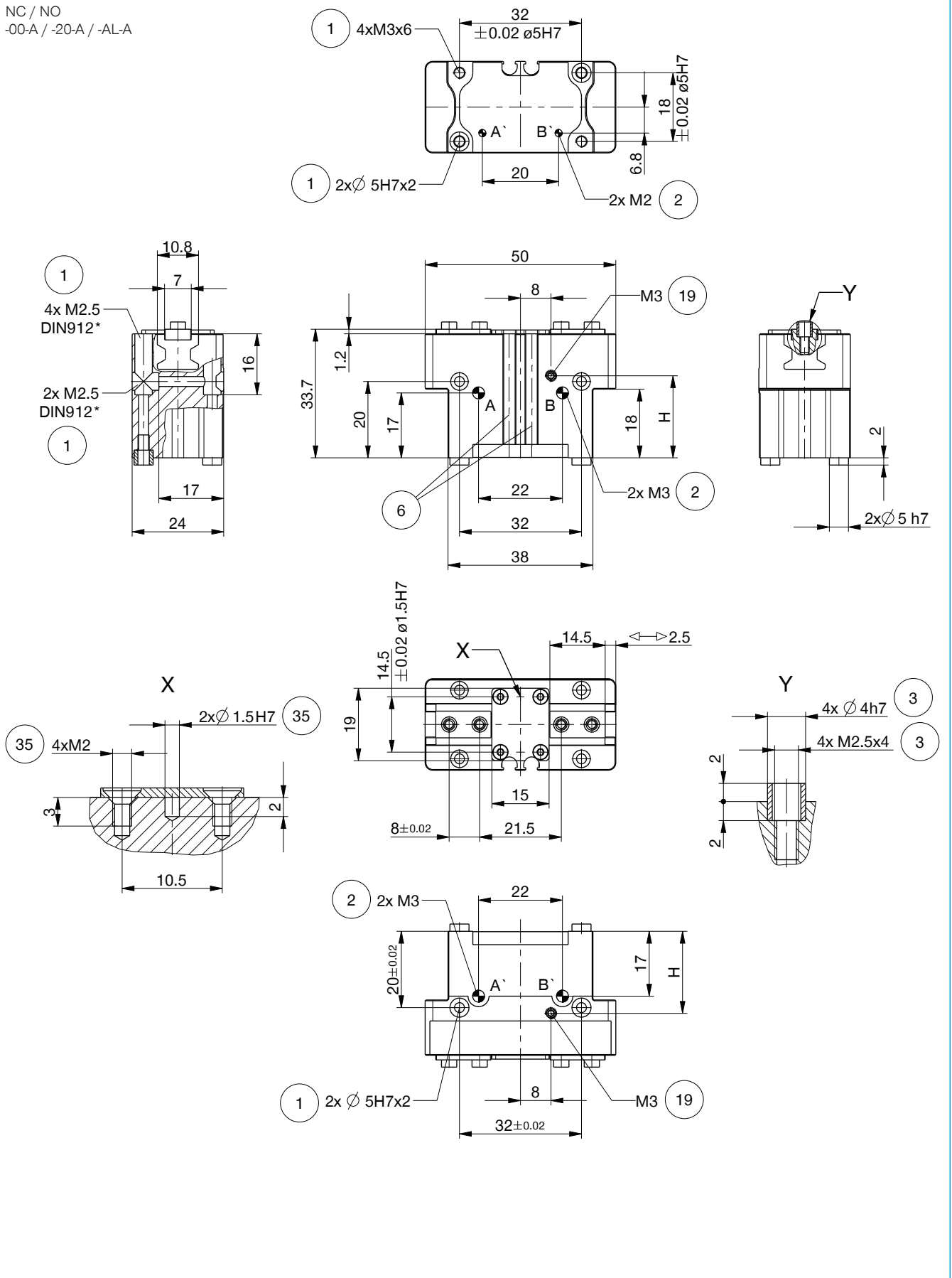


2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5003

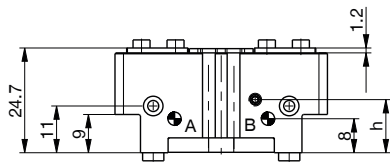
TECHNICAL DRAWINGS

NC / NO
-00-A / -20-A / -AL-A

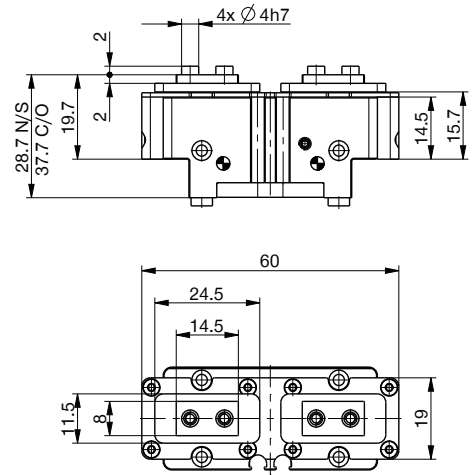


TECHNICAL DRAWINGS

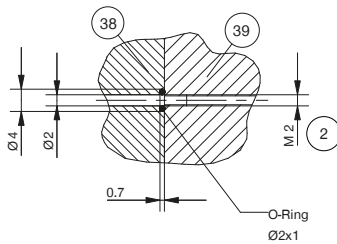
N
-00-A / -20-A / -AL-A



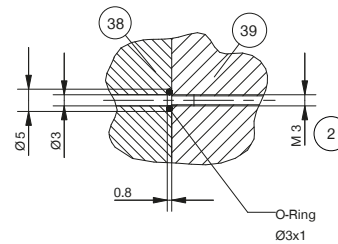
N / NC / NO
-21-A / -24-A



Hoseless air feed-through M2



Hoseless air feed-through M3



- ① Gripper attachment
 - ② Energy supply
 - ③ Fixing for gripper finger
 - ⑥ Integrated slot for magnetic field sensor
 - ⑱ Air purge connection option (max. 0,5 bar)
 - ⑳ Attachment option for customer-specific fittings
 - ㉘ Adapter
 - ㉙ Gripper
- Ⓐ Air connection (close)
 - Ⓑ Air connection (open)
 - Ⓐ Air connection, alternative (close)
 - Ⓑ Air connection, alternative (open)

► Position ⑱ sealing air connection option

Order no.	-00-A / -20-A / -21-A / -24-A	-AL-A
H [mm]	21.5	27.8
h [mm]	12.5	18.8

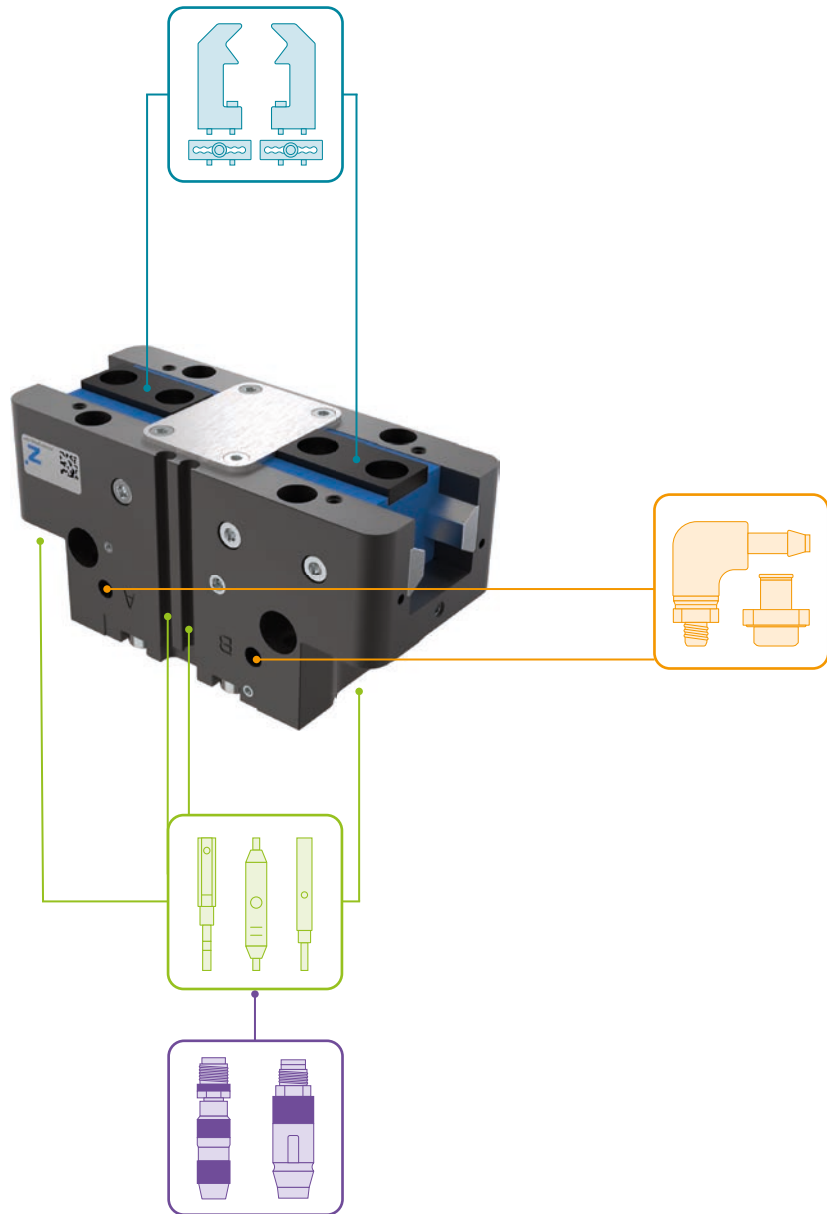


2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5003

1

▶ ACCESORIES



▶ INCLUDED IN DELIVERY



4 [piece]
Centering Disc

DST06510



2 [piece]
Centering Disc

015761

▶ RECOMMENDED ACCESSORIES



GRIPPING COMPONENTS



UB5003AL
Universal jaw aluminium



UB5003ST
Universal jaw steel



KF50N
Rubber Coated Tape
Knobbed



EB5003AL
Aluminum adjustment jaw



EB5003ST
Steel adjustment jaw



ENERGY SUPPLY



GVM3
Straight Fittings - Barb
Style Connection



WVM3
Angled Fittings - Barb
Style Connection



DEV04
Quick Exhaust Valve



DSV1-8
Pressure safety valve



DSV1-8E
Pressure safety valve with
quick exhaust



SENSORS



MFS01-S-KHC-P1-PNP
Magnetic field sensor angled,
cable 0.3 m - M8 connector



MFS02-S-KHC-P1-PNP
Magnetic field sensor straight,
cable 0.3 m - M8 connector



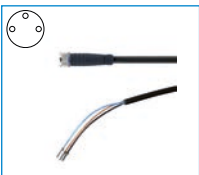
MFS01-S-KHC-P2-PNP
2-point sensor angled, ca-
ble 0.3 m - M8 connector



MFS02-S-KHC-P2-PNP
2-point sensor straight, ca-
ble 0.3 m - M8 connector



CONNECTIONS / OTHER



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



S8-G-3
Plug-in connector customiz-
able Straight - Connector M8



S12-G-3
Plug-in connector customiz-
able Straight - Connector M12

2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5004

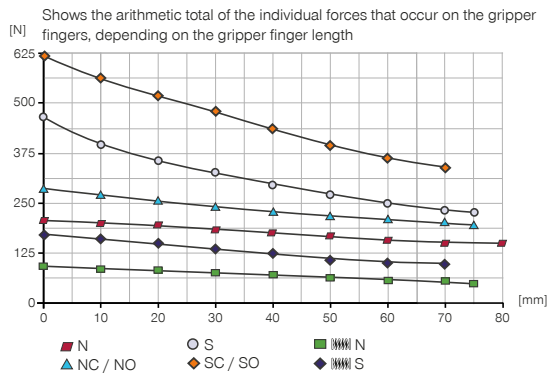
1

PRODUCT SPECIFICATIONS

-00-A / -20-A / -21-A / -24-A

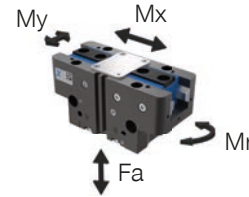
Steel / steel guide

Gripping force diagram



Forces and moments

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

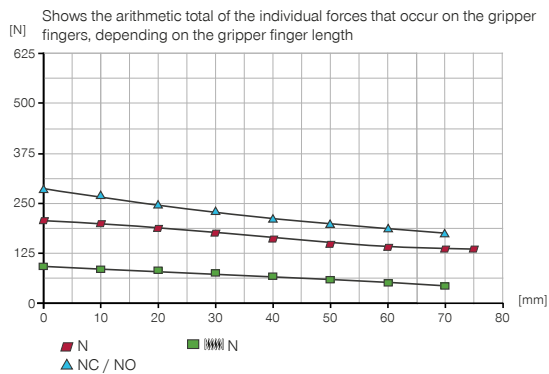


Mr [Nm]	14
Mx [Nm]	29
My [Nm]	23
Fa [N]	750

-AL-A

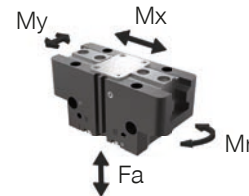
Steel / aluminum guide

Gripping force diagram



Forces and moments

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



Mr [Nm]	10
Mx [Nm]	25
My [Nm]	20
Fa [N]	700

VARIANTS

-00-A / -20-A

Steel / steel guide

-21-A / -24-A

Steel / steel guide

-AL-A

Steel / aluminum guide



TECHNICAL DATA

Order no.	Technical data					
	GPP5004N-00-A	GPP5004NC-00-A	GPP5004NO-00-A	GPP5004S-00-A	GPP5004SC-00-A	GPP5004SO-00-A
Stroke per jaw [mm]	4	4	4	2	2	2
Gripping force in closing [N]	200	280		440	600	
Gripping force in opening [N]	215		295	470		630
Gripping force secured by spring min. [N]		80	80		160	160
Closing time [s]	0.015	0.015	0.025	0.015	0.015	0.025
Opening time [s]	0.015	0.025	0.015	0.015	0.025	0.015
Dead weight of mounted gripper finger max. [kg]	0.2	0.2	0.2	0.2	0.2	0.2
Length of the gripper fingers max. [mm]	80	75	75	75	70	70
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Nominal operating pressure [bar]	6	6	6	6	6	6
Operating temperature [°C]	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90
Air volume per cycle [cm³]	5	12	12	5	12	12
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Protected against corrosion	Yes	Yes	Yes	Yes	Yes	Yes
Weight [kg]	0.16	0.21	0.21	0.16	0.21	0.21

Order no.	Technical Data - High Temperature Version					
	GPP5004N-20-A	GPP5004NC-20-A	GPP5004NO-20-A	GPP5004S-20-A	GPP5004SC-20-A	GPP5004SO-20-A
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130

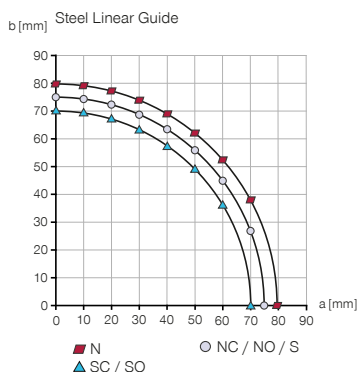
Order no.	Technical Data - Protector Version					
	GPP5004N-21-A	GPP5004NC-21-A	GPP5004NO-21-A	GPP5004S-21-A	GPP5004SC-21-A	GPP5004SO-21-A
Protection to IEC 60529	IP67*	IP67*	IP67*	IP67*	IP67*	IP67*
Weight [kg]	0.25	0.3	0.3	0.25	0.3	0.3

Order no.	Technical Data - High Temperature Protector Version					
	GPP5004N-24-A	GPP5004NC-24-A	GPP5004NO-24-A	GPP5004S-24-A	GPP5004SC-24-A	GPP5004SO-24-A
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130
Protection to IEC 60529	IP67*	IP67*	IP67*	IP67*	IP67*	IP67*
Weight [kg]	0.25	0.3	0.3	0.25	0.3	0.3

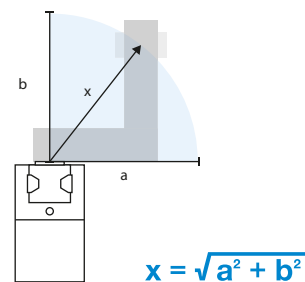
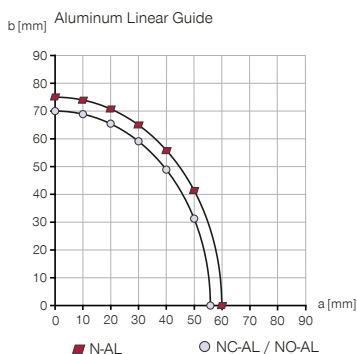
*with purged air (max. 0,5 bar)

Order no.	Technical data		
	GPP5004N-AL-A	GPP5004NC-AL-A	GPP5004NO-AL-A
Dead weight of mounted gripper finger max. [kg]	0.18	0.18	0.18
Length of the gripper fingers max. [mm]	75	70	70
Protection to IEC 60529	IP40	IP40	IP40
Protected against corrosion	No	No	No
Weight [kg]	0.15	0.2	0.2

Maximum gripper finger length



Resulting gripper finger length for determining the gripping force

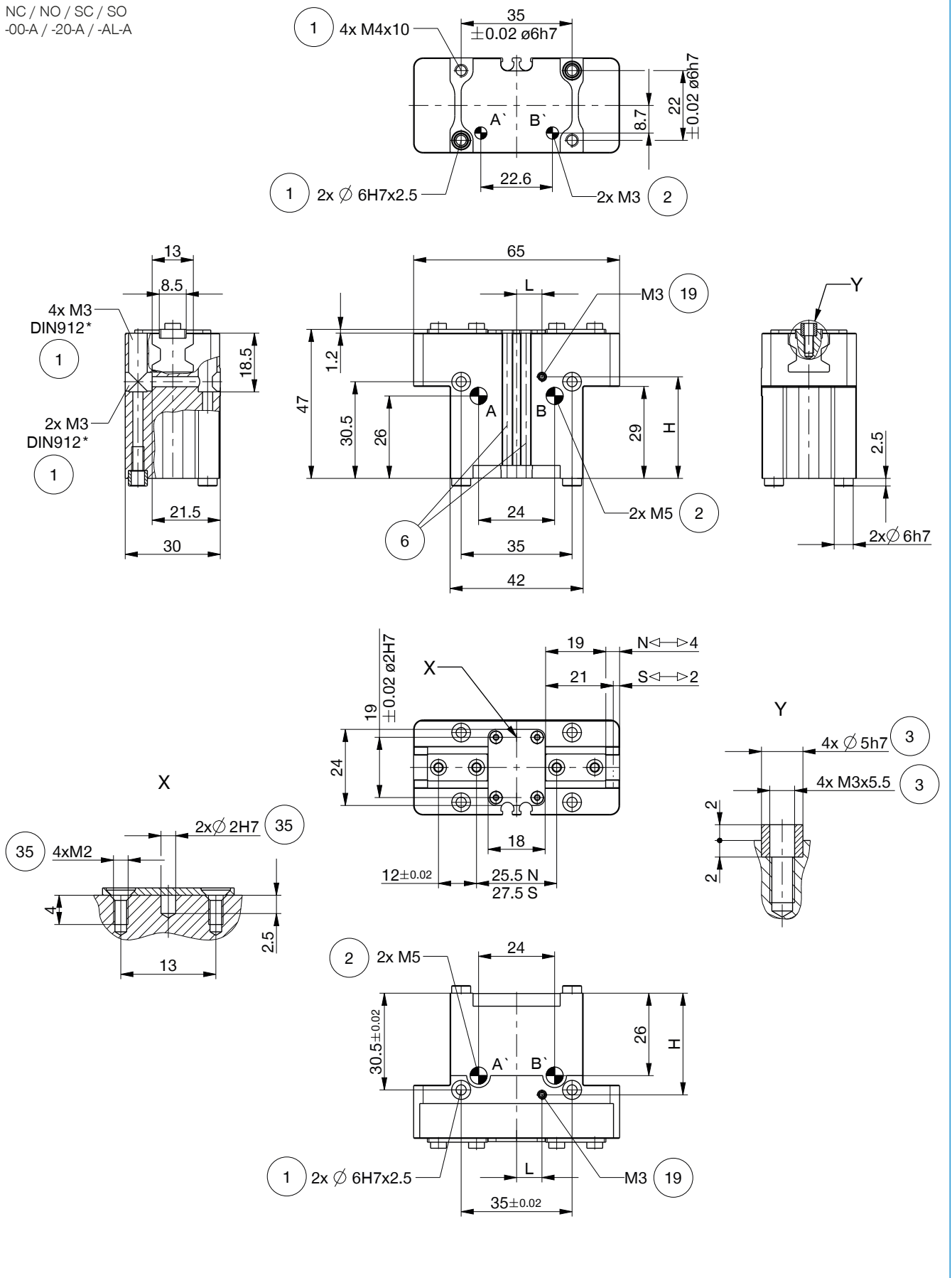


2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5004

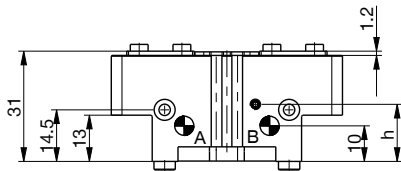
TECHNICAL DRAWINGS

NC / NO / SC / SO
-00-A / -20-A / -AL-A

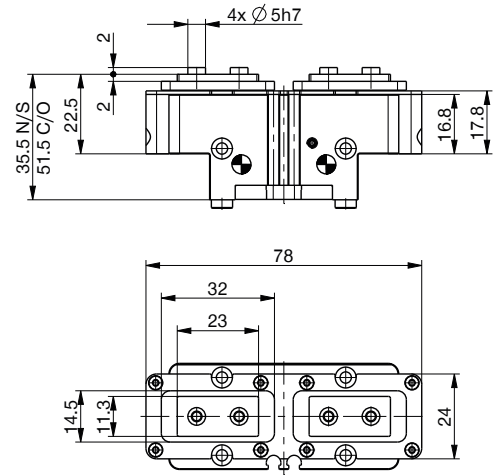


▶ TECHNICAL DRAWINGS

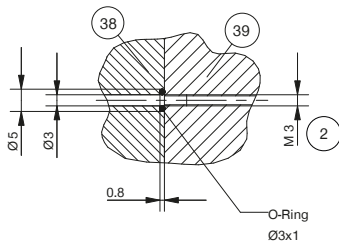
N / S
-00-A / -20-A / -AL-A



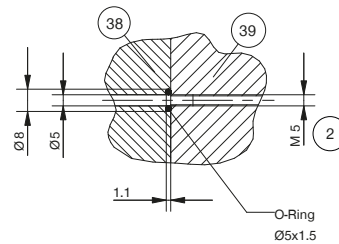
N / NC / NO / S / SC / SO
-21-A / -24-A



Hoseless air feed-through M3



Hoseless air feed-through M5



- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑥ Integrated slot for magnetic field sensor
- ⑱ Air purge connection option (max. 0,5 bar)
- ⑳ Attachment option for customer-specific fittings
- ㉘ Adapter
- ㉙ Gripper
- Ⓐ Air connection (close)
- Ⓑ Air connection (open)
- Ⓐ Air connection, alternative (close)
- Ⓑ Air connection, alternative (open)

▶ Position ⑱ sealing air connection option

Order no.	-00-A / -20-A / -21-A / -24-A	-AL-A
H [mm]	32	39.6
L [mm]	9	8
h [mm]	16	23.6

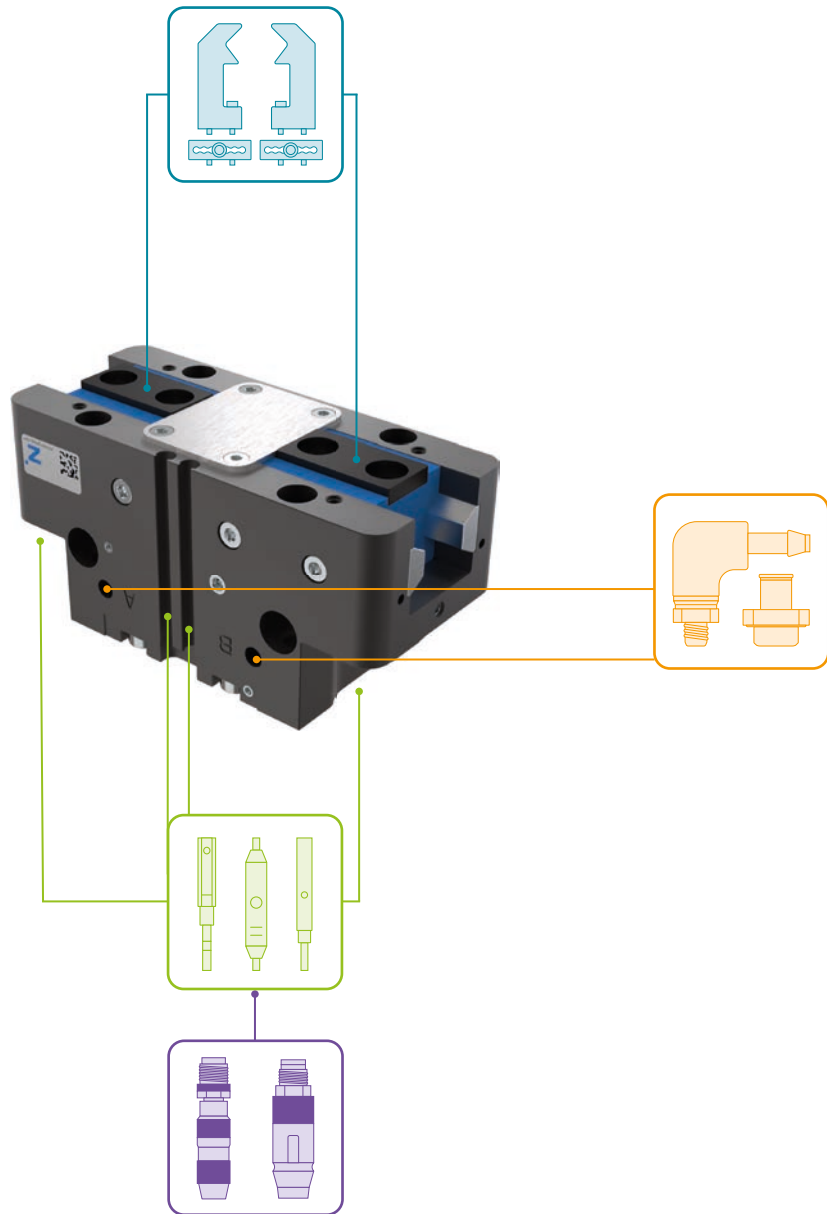


2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5004

1

▶ ACCESORIES



▶ INCLUDED IN DELIVERY



4 [piece]
Centering Disc

015761



2 [piece]
Centering Disc

024230

▶ RECOMMENDED ACCESSORIES



GRIPPING COMPONENTS



UB5004AL
Universal jaw aluminium



UB5004ST
Universal jaw steel



EB5004AL
Aluminum adjustment jaw



EB5004ST
Steel adjustment jaw



WB5004L
Changeable jaw, loose-part-set



WB5004F
Changeable jaw, fix-part



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-S-KHC-P1-PNP
Magnetic field sensor angled, cable 0.3 m - M8 connector



MFS02-S-KHC-P1-PNP
Magnetic field sensor straight, cable 0.3 m - M8 connector



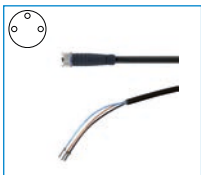
MFS01-S-KHC-P2-PNP
2-point sensor angled, cable 0.3 m - M8 connector



MFS02-S-KHC-P2-PNP
2-point sensor straight, cable 0.3 m - M8 connector



CONNECTIONS / OTHER



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



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

2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5006

1

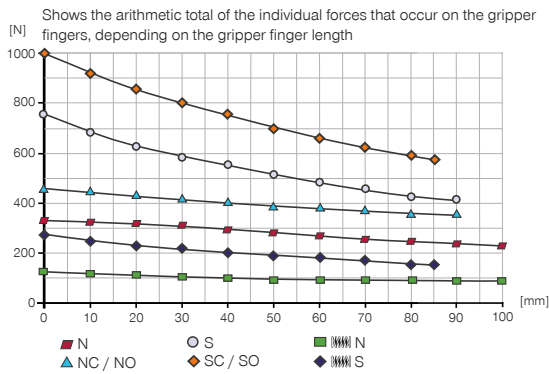
Installation size GPP5006 / 2-Jaw Parallel Grippers / pneumatic / Grippers

PRODUCT SPECIFICATIONS

-00-A / -20-A / -21-A / -24-A

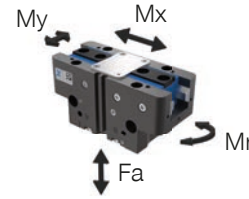
Steel / steel guide

Gripping force diagram



Forces and moments

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

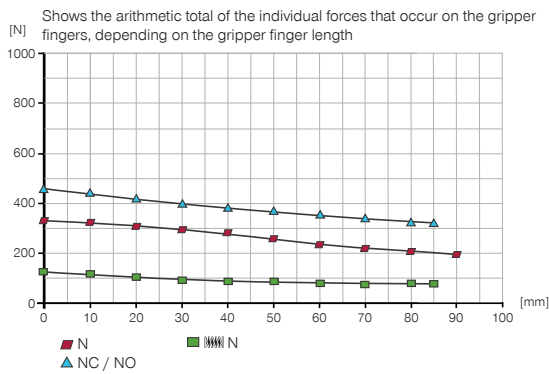


Mr [Nm]	43
Mx [Nm]	70
My [Nm]	46
Fa [N]	1250

-AL-A

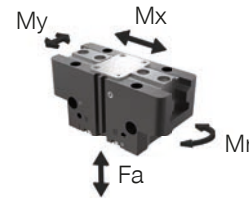
Steel / aluminum guide

Gripping force diagram



Forces and moments

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



Mr [Nm]	40
Mx [Nm]	60
My [Nm]	45
Fa [N]	1200

VARIANTS

-00-A / -20-A

Steel / steel guide

-21-A / -24-A

Steel / steel guide

-AL-A

Steel / aluminum guide



TECHNICAL DATA

Technical data

Order no.	GPP5006N-00-A	GPP5006NC-00-A	GPP5006NO-00-A	GPP5006S-00-A	GPP5006SC-00-A	GPP5006SO-00-A
Stroke per jaw [mm]	6	6	6	3	3	3
Gripping force in closing [N]	330	455		740	1020	
Gripping force in opening [N]	360		485	800		1080
Gripping force secured by spring min. [N]		125	125		280	280
Closing time [s]	0.025	0.015	0.035	0.025	0.015	0.035
Opening time [s]	0.025	0.035	0.015	0.025	0.035	0.015
Dead weight of mounted gripper finger max. [kg]	0.4	0.4	0.4	0.4	0.4	0.4
Length of the gripper fingers max. [mm]	100	90	90	90	85	85
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Nominal operating pressure [bar]	6	6	6	6	6	6
Operating temperature [°C]	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90
Air volume per cycle [cm³]	11	24	24	11	24	24
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Protected against corrosion	Yes	Yes	Yes	Yes	Yes	Yes
Weight [kg]	0.28	0.35	0.35	0.28	0.35	0.35

Technical Data - High Temperature Version

Order no.	GPP5006N-20-A	GPP5006NC-20-A	GPP5006NO-20-A	GPP5006S-20-A	GPP5006SC-20-A	GPP5006SO-20-A
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130

Technical Data - Protector Version

Order no.	GPP5006N-21-A	GPP5006NC-21-A	GPP5006NO-21-A	GPP5006S-21-A	GPP5006SC-21-A	GPP5006SO-21-A
Protection to IEC 60529	IP67*	IP67*	IP67*	IP67*	IP67*	IP67*
Weight [kg]	0.37	0.44	0.44	0.37	0.44	0.44

Technical Data - High Temperature Protector Version

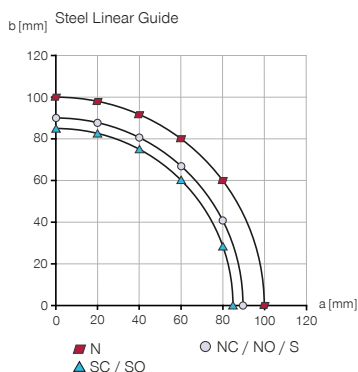
Order no.	GPP5006N-24-A	GPP5006NC-24-A	GPP5006NO-24-A	GPP5006S-24-A	GPP5006SC-24-A	GPP5006SO-24-A
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130
Protection to IEC 60529	IP67*	IP67*	IP67*	IP67*	IP67*	IP67*
Weight [kg]	0.37	0.44	0.44	0.37	0.44	0.44

*with purged air (max. 0,5 bar)

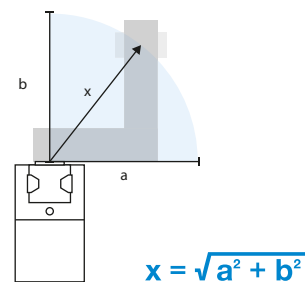
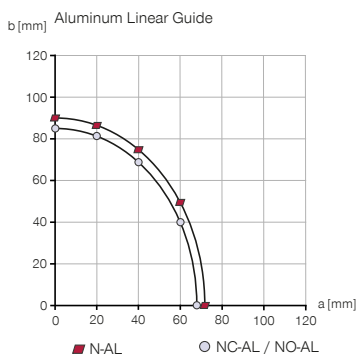
Technical data

Order no.	GPP5006N-AL-A	GPP5006NC-AL-A	GPP5006NO-AL-A
Dead weight of mounted gripper finger max. [kg]	0.35	0.35	0.35
Length of the gripper fingers max. [mm]	90	85	85
Protection to IEC 60529	IP40	IP40	IP40
Protected against corrosion	No	No	No
Weight [kg]	0.28	0.35	0.35

Maximum gripper finger length



Resulting gripper finger length for determining the gripping force

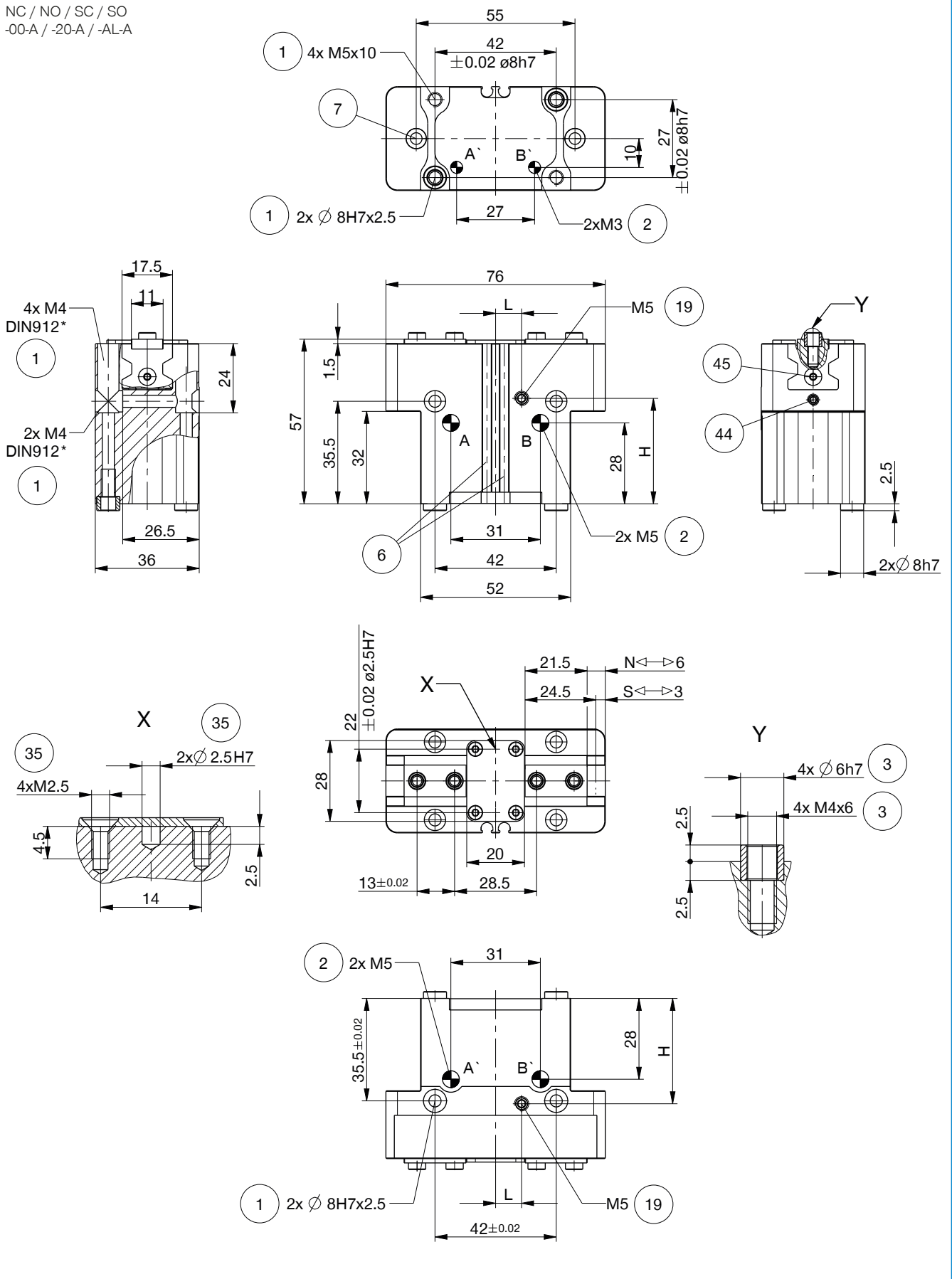


2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5006

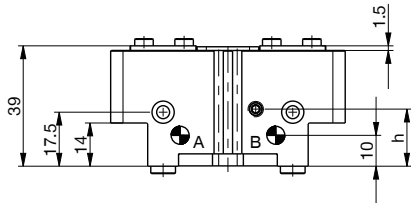
TECHNICAL DRAWINGS

NC / NO / SC / SO
-00-A / -20-A / -AL-A

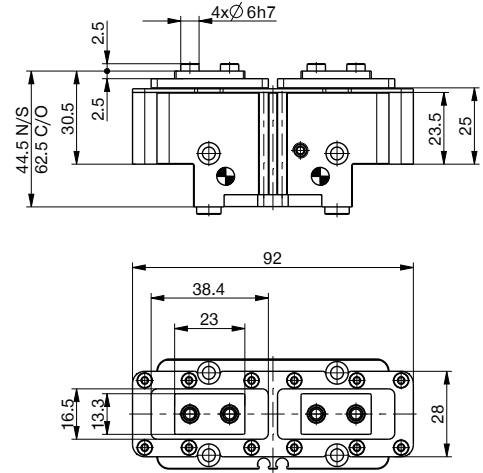


TECHNICAL DRAWINGS

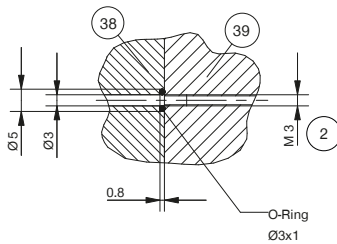
N / S
-00-A / -20-A / -AL-A



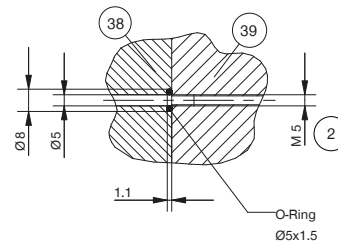
N / NC / NO / S / SC / SO
-21-A / -24-A



Hoseless air feed-through M3



Hoseless air feed-through M5



- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑥ Integrated slot for magnetic field sensor
- ⑦ Mounting block (not for variant AL-A)
- ⑱ Air purge connection option (max. 0,5 bar)
- ⑳ Attachment option for customer-specific fittings
- ㉔ Adapter
- ㉙ Gripper
- ㉜ Clamping sensor (not for variant AL-A)
- ㉝ Switch cam adjustment (not for variant AL-A)
- Ⓐ Air connection (close)
- Ⓑ Air connection (open)
- Ⓐ Air connection, alternative (close)
- Ⓑ Air connection, alternative (open)

► Position ⑱ sealing air connection option

Order no.	-00-A / -20-A / -21-A / -24-A	-AL-A
H [mm]	36.5	47.7
L [mm]	9	11
h [mm]	18.5	29.7

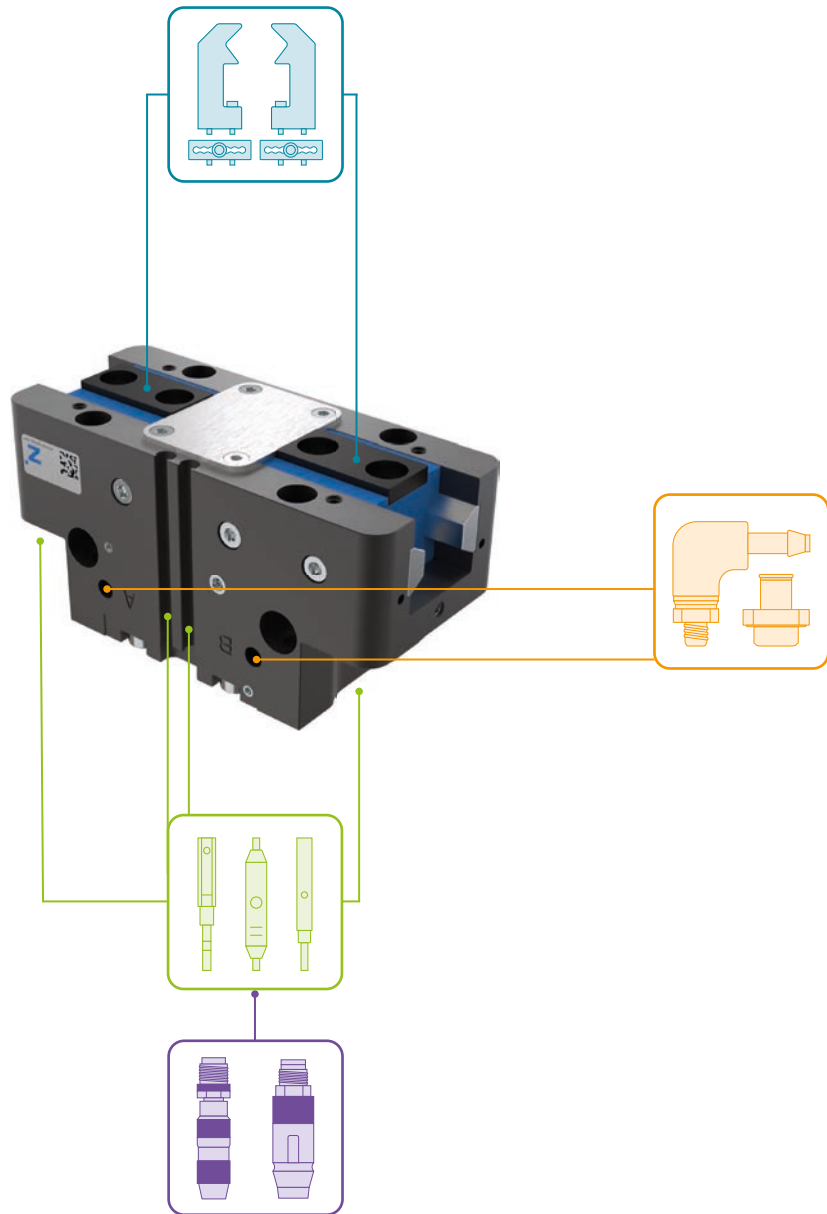


2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5006

1

▶ ACCESORIES



▶ INCLUDED IN DELIVERY



4 [piece]
Centering Disc

024230



2 [piece]
Centering Disc

024231

▶ RECOMMENDED ACCESSORIES



GRIPPING COMPONENTS



UB5006AL
Universal jaw aluminium



UB5006ST
Universal jaw steel



EB5006AL
Aluminum adjustment jaw



EB5006ST
Steel adjustment jaw



WB5006L
Changeable jaw, loose-part-set



WB5006F
Changeable jaw, fix-part



ENERGY SUPPLY



WVM5
Angled Fittings - Quick Connect Style



DSV1-8
Pressure safety valve



DSV1-8E
Pressure safety valve with quick exhaust



SENSORS



NJ4-E2SK-01
Inductive Proximity Switch
Cable 0,3 m - Connector M8

*Not for variant AL-A



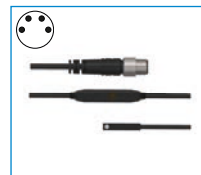
MFS01-S-KHC-P1-PNP
Magnetic field sensor angled,
cable 0.3 m - M8 connector



MFS02-S-KHC-P1-PNP
Magnetic field sensor straight,
cable 0.3 m - M8 connector



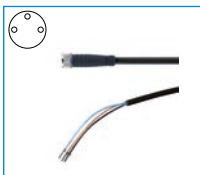
MFS01-S-KHC-P2-PNP
2-point sensor angled, ca-
ble 0.3 m - M8 connector



MFS02-S-KHC-P2-PNP
2-point sensor straight, ca-
ble 0.3 m - M8 connector



CONNECTIONS / OTHER



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

2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5008

1

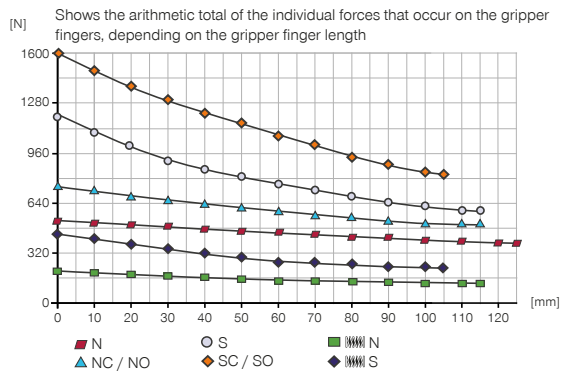
Installation size GPP5008 / 2-Jaw Parallel Grippers / pneumatic / Grippers

PRODUCT SPECIFICATIONS

-00-A / -20-A / -21-A / -24-A

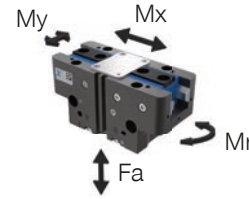
Steel / steel guide

Gripping force diagram



Forces and moments

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

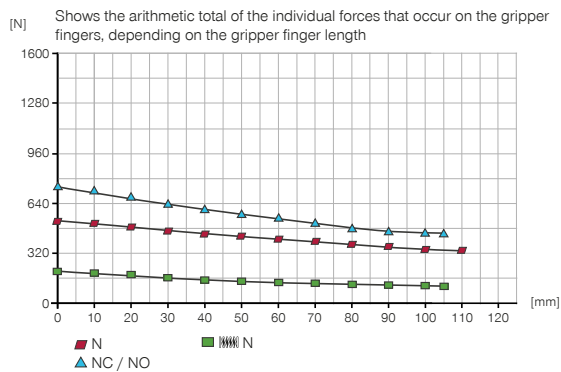


Mr [Nm]	60
Mx [Nm]	105
My [Nm]	65
Fa [N]	1900

-AL-A

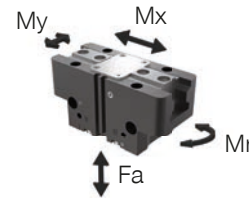
Steel / aluminum guide

Gripping force diagram



Forces and moments

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



Mr [Nm]	55
Mx [Nm]	95
My [Nm]	60
Fa [N]	1800

VARIANTS

-00-A / -20-A

Steel / steel guide

-21-A / -24-A

Steel / steel guide

-AL-A

Steel / aluminum guide



TECHNICAL DATA

Order no.	Technical data					
	GPP5008N-00-A	GPP5008NC-00-A	GPP5008NO-00-A	GPP5008S-00-A	GPP5008SC-00-A	GPP5008SO-00-A
Stroke per jaw [mm]	8	8	8	4	4	4
Gripping force in closing [N]	520	710		1150	1580	
Gripping force in opening [N]	560		750	1240		1670
Gripping force secured by spring min. [N]		190	190		430	430
Closing time [s]	0.035	0.025	0.045	0.035	0.025	0.045
Opening time [s]	0.035	0.045	0.025	0.035	0.045	0.025
Dead weight of mounted gripper finger max. [kg]	0.7	0.7	0.7	0.7	0.7	0.7
Length of the gripper fingers max. [mm]	125	115	115	115	105	105
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Nominal operating pressure [bar]	6	6	6	6	6	6
Operating temperature [°C]	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90
Air volume per cycle [cm³]	22	43	43	22	43	43
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Protected against corrosion	Yes	Yes	Yes	Yes	Yes	Yes
Weight [kg]	0.53	0.63	0.63	0.53	0.63	0.63

Order no.	Technical Data - High Temperature Version					
	GPP5008N-20-A	GPP5008NC-20-A	GPP5008NO-20-A	GPP5008S-20-A	GPP5008SC-20-A	GPP5008SO-20-A
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130

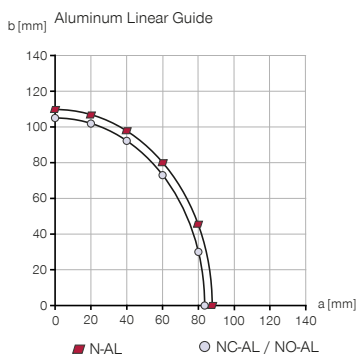
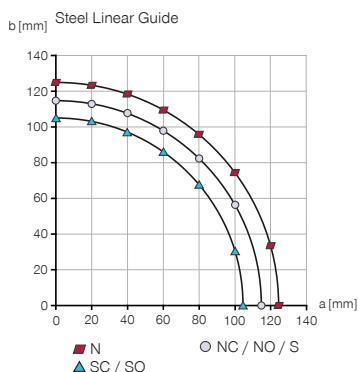
Order no.	Technical Data - Protector Version					
	GPP5008N-21-A	GPP5008NC-21-A	GPP5008NO-21-A	GPP5008S-21-A	GPP5008SC-21-A	GPP5008SO-21-A
Protection to IEC 60529	IP67*	IP67*	IP67*	IP67*	IP67*	IP67*
Weight [kg]	0.66	0.76	0.76	0.66	0.76	0.76

Order no.	Technical Data - High Temperature Protector Version					
	GPP5008N-24-A	GPP5008NC-24-A	GPP5008NO-24-A	GPP5008S-24-A	GPP5008SC-24-A	GPP5008SO-24-A
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130
Protection to IEC 60529	IP67*	IP67*	IP67*	IP67*	IP67*	IP67*
Weight [kg]	0.66	0.76	0.76	0.66	0.76	0.76

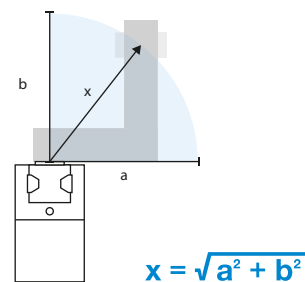
*with purged air (max. 0,5 bar)

Order no.	Technical data		
	GPP5008N-AL-A	GPP5008NC-AL-A	GPP5008NO-AL-A
Dead weight of mounted gripper finger max. [kg]	0.6	0.6	0.6
Length of the gripper fingers max. [mm]	110	105	105
Protection to IEC 60529	IP40	IP40	IP40
Protected against corrosion	No	No	No
Weight [kg]	0.53	0.61	0.61

Maximum gripper finger length



Resulting gripper finger length for determining the gripping force

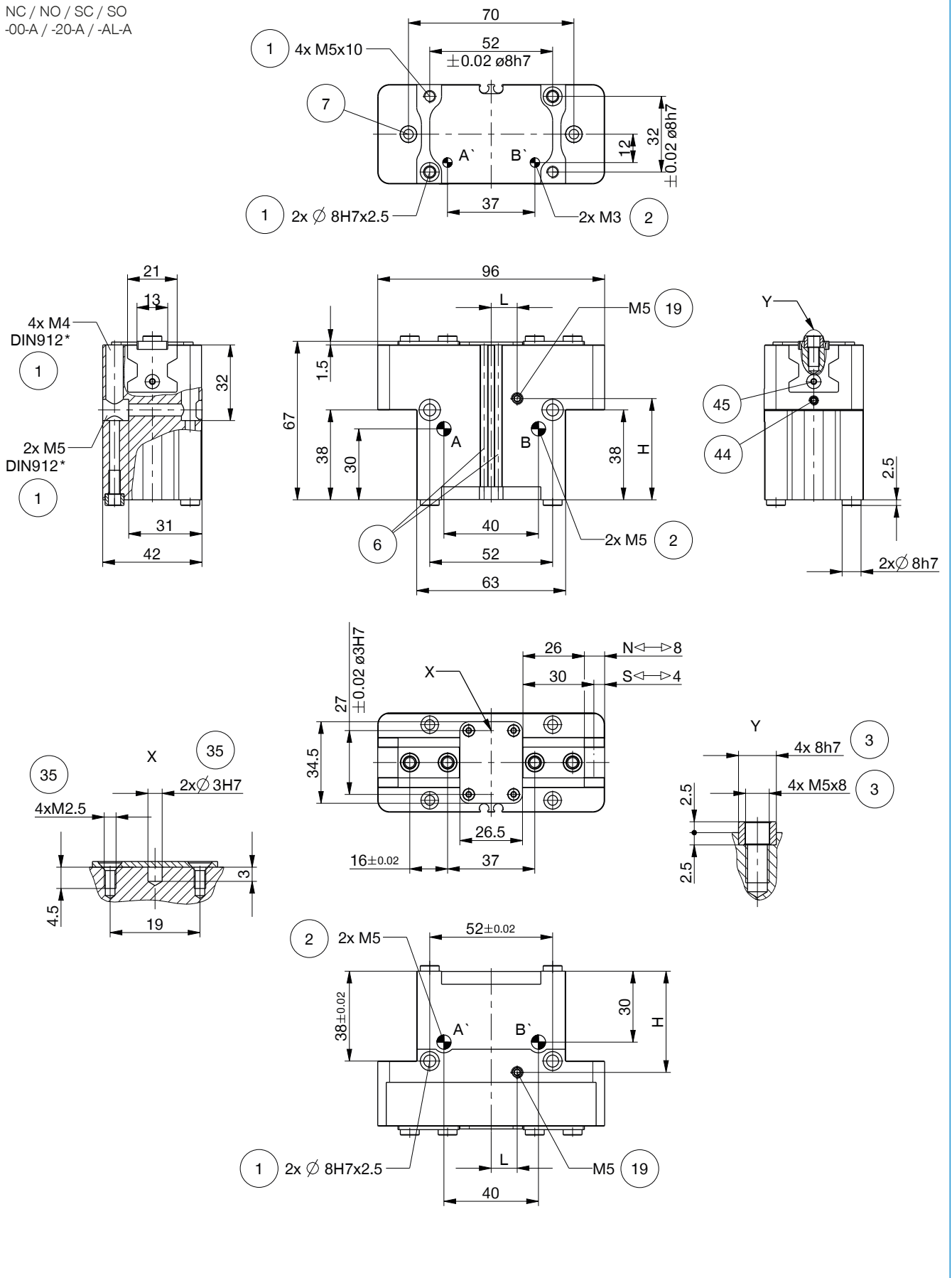


2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5008

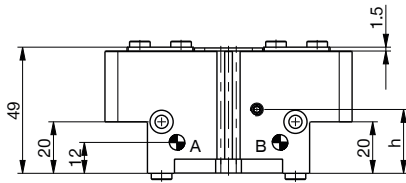
TECHNICAL DRAWINGS

NC / NO / SC / SO
-00-A / -20-A / -AL-A

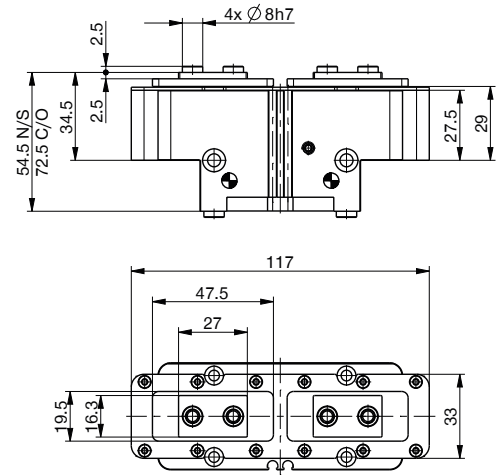


TECHNICAL DRAWINGS

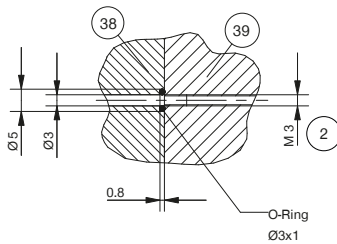
N / S
-00-A / -20-A / -AL-A



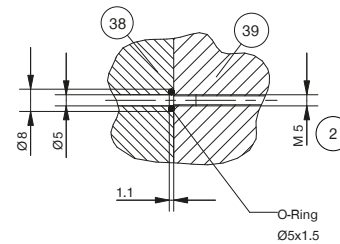
N / NC / NO / S / SC / SO
-21-A / -24-A



Hoseless air feed-through M3



Hoseless air feed-through M5



- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑥ Integrated slot for magnetic field sensor
- ⑦ Mounting block (not for variant AL-A)
- ⑱ Air purge connection option (max. 0,5 bar)
- ⑳ Attachment option for customer-specific fittings
- ㉔ Adapter
- ㉙ Gripper
- ㉛ Clamping sensor (not for variant AL-A)
- ㉜ Switch cam adjustment (not for variant AL-A)
- Ⓐ Air connection (close)
- Ⓑ Air connection (open)
- Ⓐ Air connection, alternative (close)
- Ⓑ Air connection, alternative (open)

► Position ⑱ sealing air connection option

Order no.	-00-A / -20-A / -21-A / -24-A	-AL-A
H [mm]	42.8	55.7
L [mm]	11	9
h [mm]	24.8	37.7

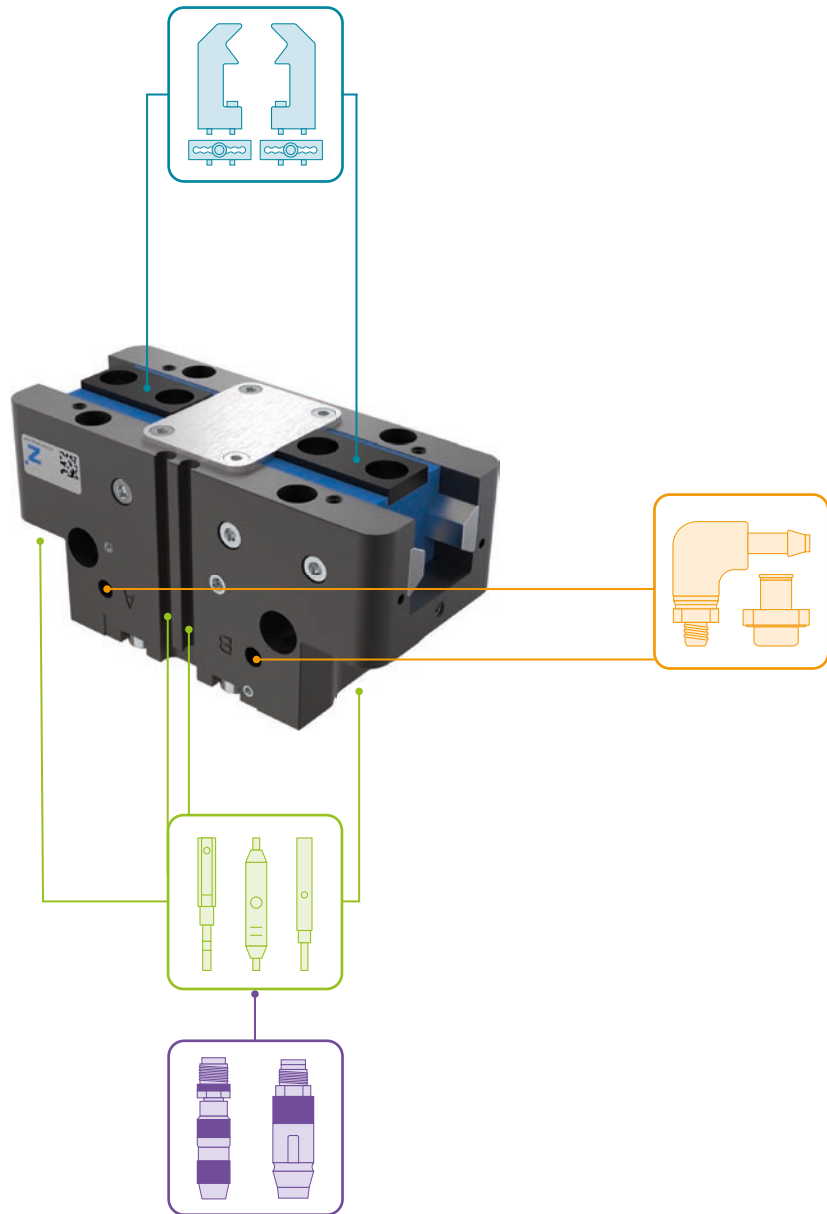


2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5008

1

▶ ACCESORIES



▶ INCLUDED IN DELIVERY



6 [piece]
Centering Disc

024231

▶ RECOMMENDED ACCESSORIES



GRIPPING COMPONENTS



UB5008AL
Universal jaw aluminium



UB5008ST
Universal jaw steel



EB5008AL
Aluminum adjustment jaw



EB5008ST
Steel adjustment jaw



WB5008L
Changeable jaw, loose-part-set



WB5008F
Changeable jaw, fix-part



ENERGY SUPPLY



WVM5
Angled Fittings - Quick Connect Style



DSV1-8
Pressure safety valve



DSV1-8E
Pressure safety valve with quick exhaust



SENSORS



NJ4-E2SK-01
Inductive Proximity Switch
Cable 0,3 m - Connector M8

*Not for variant AL-A



MFS01-S-KHC-P1-PNP
Magnetic field sensor angled,
cable 0.3 m - M8 connector



MFS02-S-KHC-P1-PNP
Magnetic field sensor straight,
cable 0.3 m - M8 connector



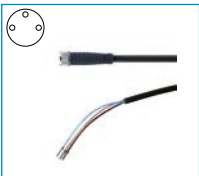
MFS01-S-KHC-P2-PNP
2-point sensor angled, cable 0.3 m - M8 connector



MFS02-S-KHC-P2-PNP
2-point sensor straight, cable 0.3 m - M8 connector



CONNECTIONS / OTHER



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

2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5010

1

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

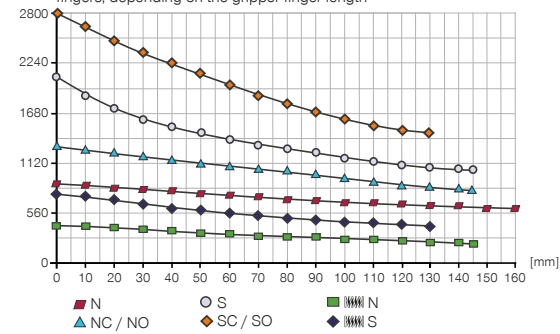
PRODUCT SPECIFICATIONS

-00-A / -20-A / -21-A / -24-A

Steel / steel guide

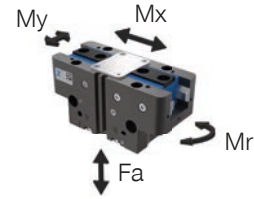
Gripping force diagram

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



Forces and moments

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



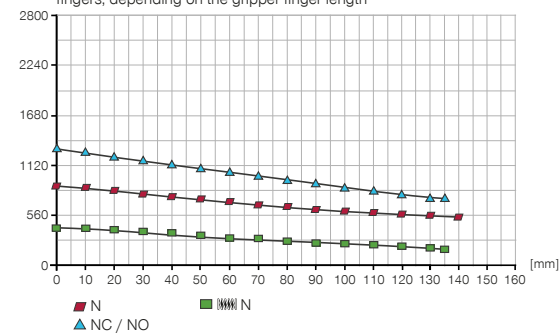
Mr [Nm]	75
Mx [Nm]	125
My [Nm]	95
Fa [N]	2700

-AL-A

Steel / aluminum guide

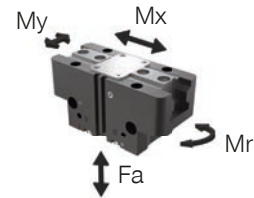
Gripping force diagram

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



Forces and moments

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



Mr [Nm]	75
Mx [Nm]	115
My [Nm]	90
Fa [N]	2500

VARIANTS

-00-A / -20-A

Steel / steel guide

-21-A / -24-A

Steel / steel guide

-AL-A

Steel / aluminum guide



TECHNICAL DATA

Order no.	Technical data					
	GPP5010N-00-A	GPP5010NC-00-A	GPP5010NO-00-A	GPP5010S-00-A	GPP5010SC-00-A	GPP5010SO-00-A
Stroke per jaw [mm]	10	10	10	5	5	5
Gripping force in closing [N]	885	1260		1940	2750	
Gripping force in opening [N]	945		1320	2080		2890
Gripping force secured by spring min. [N]		375	375		810	810
Closing time [s]	0.06	0.05	0.08	0.06	0.05	0.08
Opening time [s]	0.06	0.08	0.05	0.06	0.08	0.05
Dead weight of mounted gripper finger max. [kg]	1.3	1.3	1.3	1.3	1.3	1.3
Length of the gripper fingers max. [mm]	160	145	145	145	130	130
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Nominal operating pressure [bar]	6	6	6	6	6	6
Operating temperature [°C]	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90
Air volume per cycle [cm³]	44	92	92	44	92	92
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Protected against corrosion	Yes	Yes	Yes	Yes	Yes	Yes
Weight [kg]	0.87	1.09	1.09	0.87	1.09	1.09

Order no.	Technical Data - High Temperature Version					
	GPP5010N-20-A	GPP5010NC-20-A	GPP5010NO-20-A	GPP5010S-20-A	GPP5010SC-20-A	GPP5010SO-20-A
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130

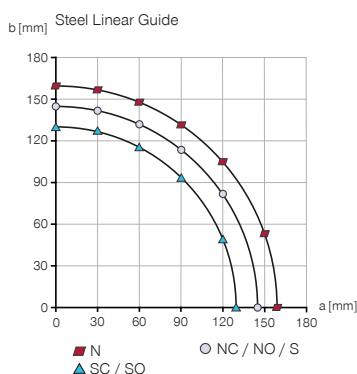
Order no.	Technical Data - Protector Version					
	GPP5010N-21-A	GPP5010NC-21-A	GPP5010NO-21-A	GPP5010S-21-A	GPP5010SC-21-A	GPP5010SO-21-A
Protection to IEC 60529	IP67*	IP67*	IP67*	IP67*	IP67*	IP67*
Weight [kg]	1.09	1.31	1.31	1.09	1.31	1.31

Order no.	Technical Data - High Temperature Protector Version					
	GPP5010N-24-A	GPP5010NC-24-A	GPP5010NO-24-A	GPP5010S-24-A	GPP5010SC-24-A	GPP5010SO-24-A
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130
Protection to IEC 60529	IP67*	IP67*	IP67*	IP67*	IP67*	IP67*
Weight [kg]	1.09	1.31	1.31	1.09	1.31	1.31

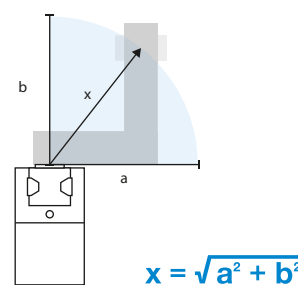
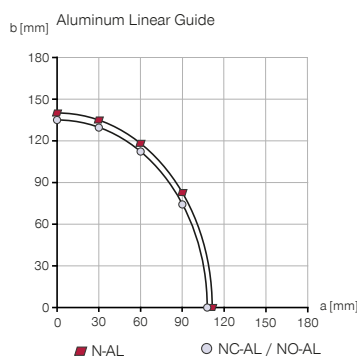
*with purged air (max. 0,5 bar)

Order no.	Technical data		
	GPP5010N-AL-A	GPP5010NC-AL-A	GPP5010NO-AL-A
Dead weight of mounted gripper finger max. [kg]	1.1	1.1	1.1
Length of the gripper fingers max. [mm]	140	135	135
Protection to IEC 60529	IP40	IP40	IP40
Protected against corrosion	No	No	No
Weight [kg]	0.85	1.09	1.09

Maximum gripper finger length



Resulting gripper finger length for determining the gripping force

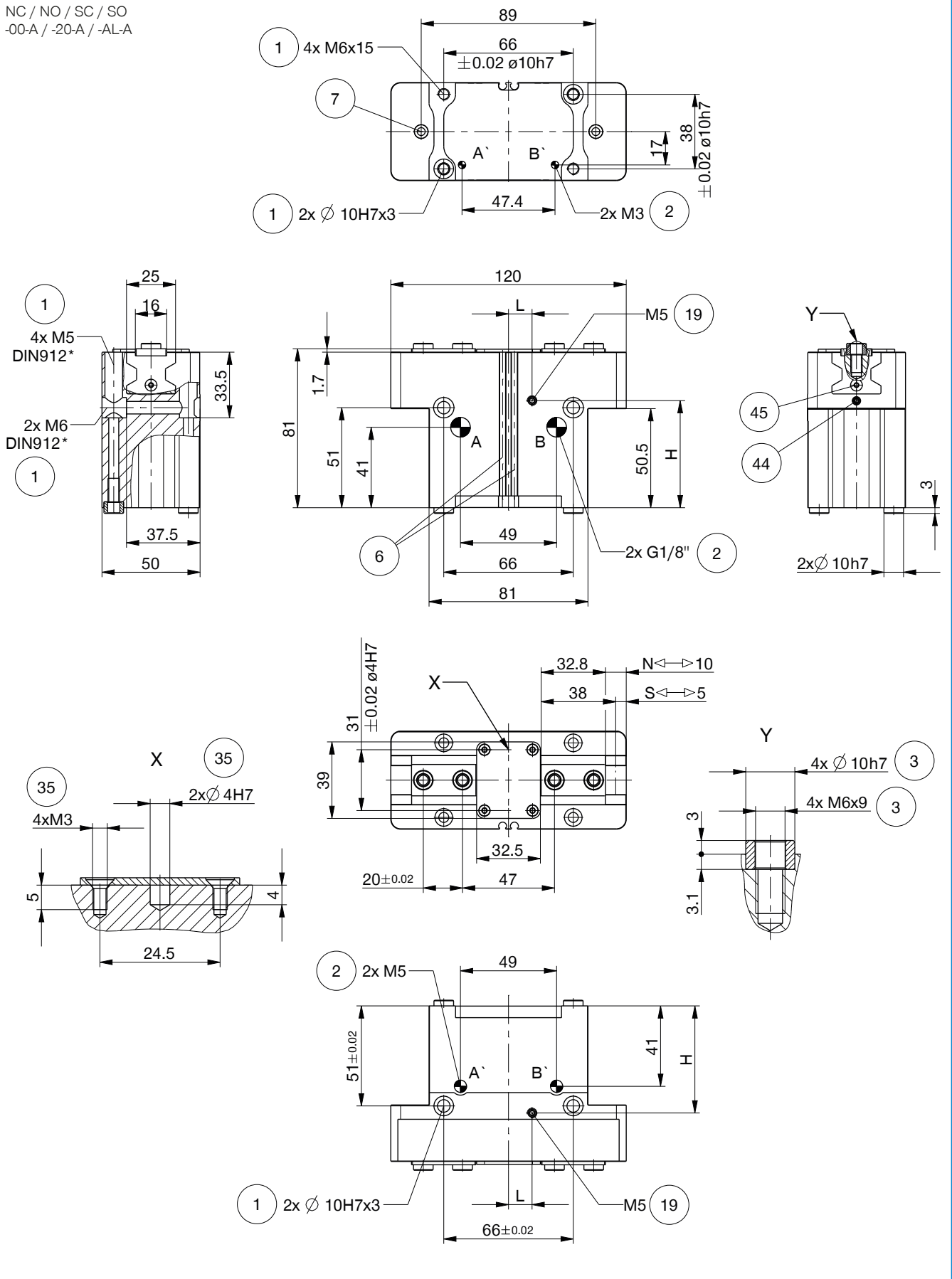


2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5010

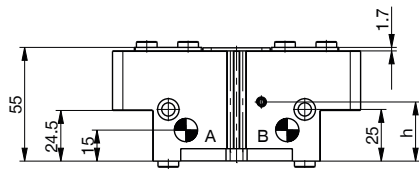
TECHNICAL DRAWINGS

NC / NO / SC / SO
-00-A / -20-A / -AL-A

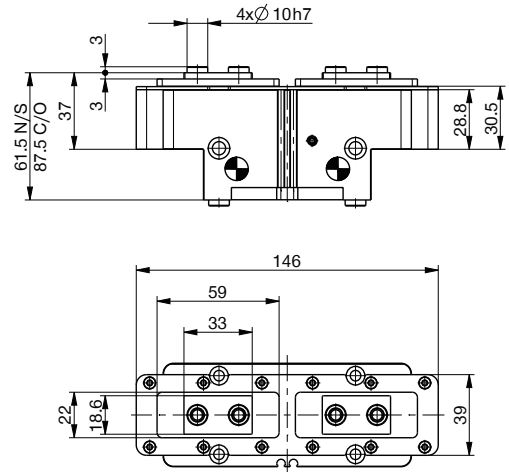


TECHNICAL DRAWINGS

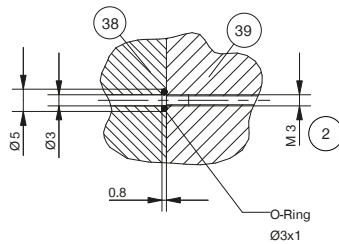
N / S
-00-A / -20-A / -AL-A



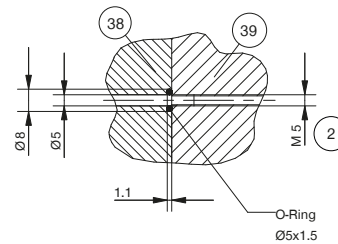
N / NC / NO / S / SC / SO
-21-A / -24-A



Hoseless air feed-through M3



Hoseless air feed-through M5



- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑥ Integrated slot for magnetic field sensor
- ⑦ Mounting block (not for variant AL-A)
- ⑲ Air purge connection option (max. 0,5 bar)
- ⑳ Attachment option for customer-specific fittings
- ㉔ Adapter
- ㉙ Gripper
- ㉚ Clamping sensor (not for variant AL-A)
- ㉛ Switch cam adjustment (not for variant AL-A)
- Ⓐ Air connection (close)
- Ⓑ Air connection (open)
- Ⓐ Air connection, alternative (close)
- Ⓑ Air connection, alternative (open)

► Position ⑲ sealing air connection option

Order no.	-00-A / -20-A / -21-A / -24-A	-AL-A
H [mm]	54.6	68.8
L [mm]	12	10
h [mm]	28.6	42.8

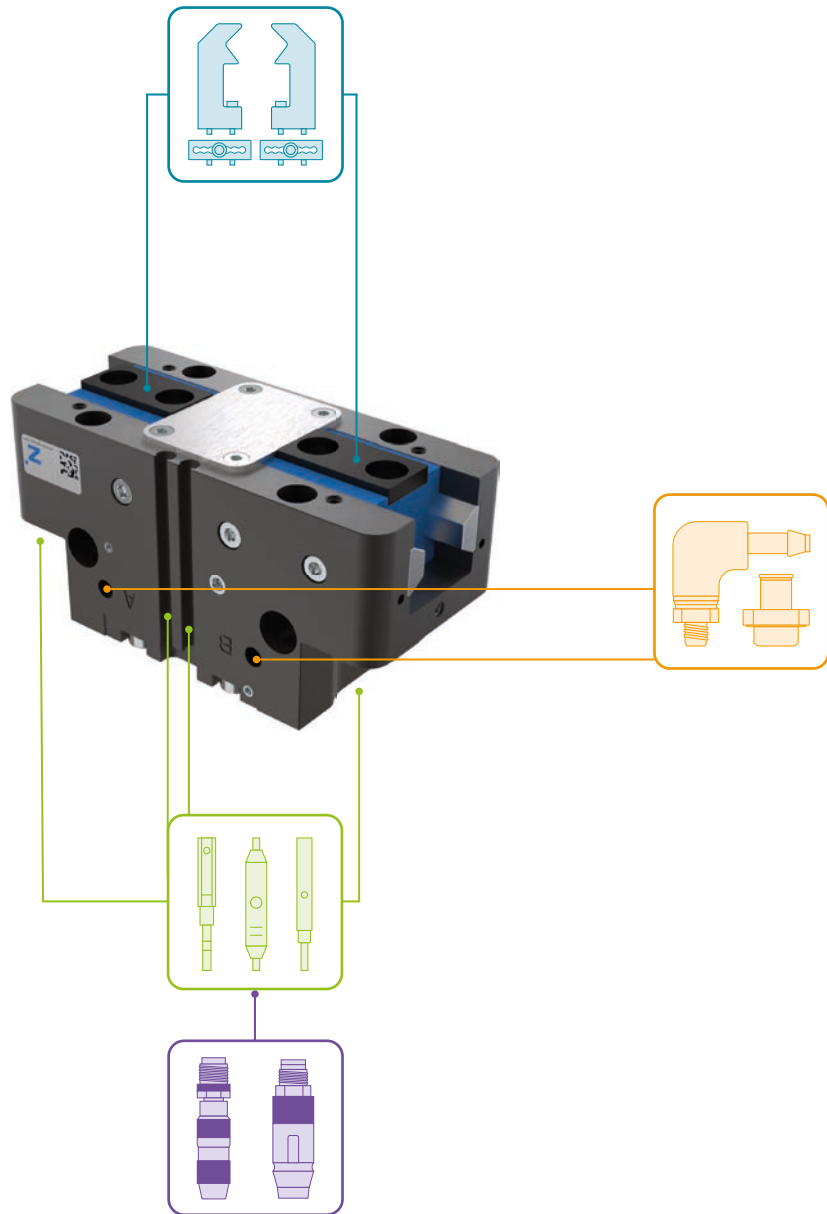


2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5010

1

▶ ACCESORIES



▶ INCLUDED IN DELIVERY



6 [piece]
Centering Disc

018187

▶ RECOMMENDED ACCESSORIES



GRIPPING COMPONENTS



UB5010AL
Universal jaw aluminium



UB5010ST
Universal jaw steel



EB5010AL
Aluminum adjustment jaw



EB5010ST
Steel adjustment jaw



WB5010L
Changeable jaw, loose-part-set



WB5010F
Changeable jaw, fix-part



ENERGY SUPPLY



WV1-8X8
Angled Fittings - Quick Connect Style



DSV1-8
Pressure safety valve



DSV1-8E
Pressure safety valve with quick exhaust



SENSORS



NJ4-E2SK-01
Inductive Proximity Switch
Cable 0,3 m - Connector M8

*Not for variant AL-A



MFS01-S-KHC-P1-PNP
Magnetic field sensor angled,
cable 0.3 m - M8 connector



MFS02-S-KHC-P1-PNP
Magnetic field sensor straight,
cable 0.3 m - M8 connector



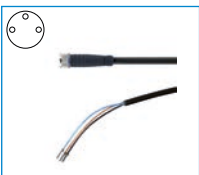
MFS01-S-KHC-P2-PNP
2-point sensor angled, cable 0.3 m - M8 connector



MFS02-S-KHC-P2-PNP
2-point sensor straight, cable 0.3 m - M8 connector



CONNECTIONS / OTHER



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

2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5013

1

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

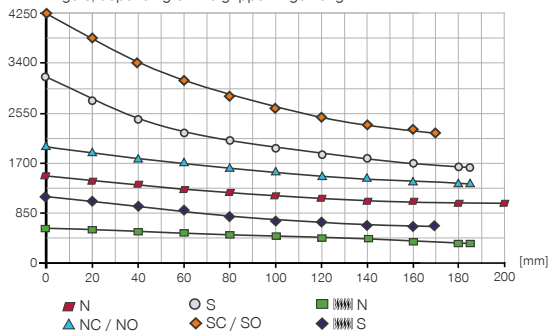
PRODUCT SPECIFICATIONS

-00-A / -20-A / -21-A / -24-A

Steel / steel guide

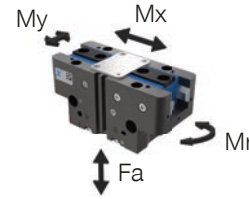
Gripping force diagram

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



Forces and moments

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



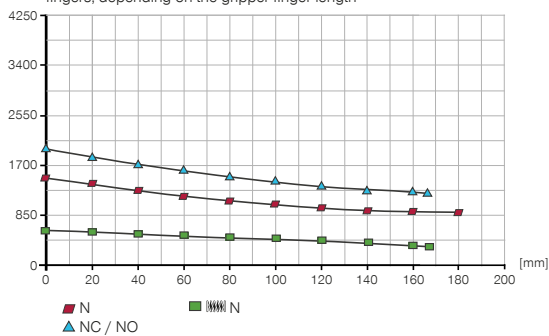
Mr [Nm]	110
Mx [Nm]	150
My [Nm]	130
Fa [N]	3300

-AL-A

Steel / aluminum guide

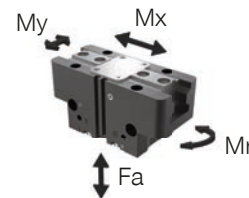
Gripping force diagram

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



Forces and moments

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



Mr [Nm]	100
Mx [Nm]	145
My [Nm]	120
Fa [N]	3200

VARIANTS

-00-A / -20-A

Steel / steel guide

-21-A / -24-A

Steel / steel guide

-AL-A

Steel / aluminum guide



TECHNICAL DATA

Order no.	Technical data					
	GPP5013N-00-A	GPP5013NC-00-A	GPP5013NO-00-A	GPP5013S-00-A	GPP5013SC-00-A	GPP5013SO-00-A
Stroke per jaw [mm]	13	13	13	6	6	6
Gripping force in closing [N]	1410	1920		3100	4220	
Gripping force in opening [N]	1490		1860	3280		4400
Gripping force secured by spring min. [N]		510	510		1120	1120
Closing time [s]	0.09	0.07	0.11	0.09	0.07	0.11
Opening time [s]	0.09	0.11	0.08	0.09	0.11	0.08
Dead weight of mounted gripper finger max. [kg]	2.4	2.4	2.4	2.4	2.4	2.4
Length of the gripper fingers max. [mm]	200	185	185	185	170	170
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Nominal operating pressure [bar]	6	6	6	6	6	6
Operating temperature [°C]	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90
Air volume per cycle [cm³]	88	171	171	88	171	171
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Protected against corrosion	Yes	Yes	Yes	Yes	Yes	Yes
Weight [kg]	1.5	1.9	1.9	1.5	1.9	1.9

Order no.	Technical Data - High Temperature Version					
	GPP5013N-20-A	GPP5013NC-20-A	GPP5013NO-20-A	GPP5013S-20-A	GPP5013SC-20-A	GPP5013SO-20-A
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130

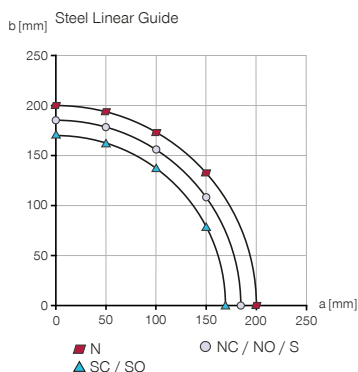
Order no.	Technical Data - Protector Version					
	GPP5013N-21-A	GPP5013NC-21-A	GPP5013NO-21-A	GPP5013S-21-A	GPP5013SC-21-A	GPP5013SO-21-A
Protection to IEC 60529	IP67*	IP67*	IP67*	IP67*	IP67*	IP67*
Weight [kg]	1.86	2.26	2.26	1.86	2.26	2.26

Order no.	Technical Data - High Temperature Protector Version					
	GPP5013N-24-A	GPP5013NC-24-A	GPP5013NO-24-A	GPP5013S-24-A	GPP5013SC-24-A	GPP5013SO-24-A
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130
Protection to IEC 60529	IP67*	IP67*	IP67*	IP67*	IP67*	IP67*
Weight [kg]	1.86	2.26	2.26	1.86	2.26	2.26

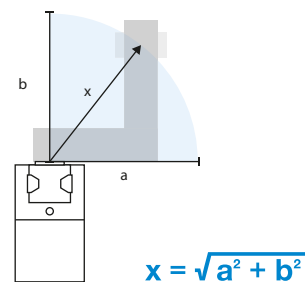
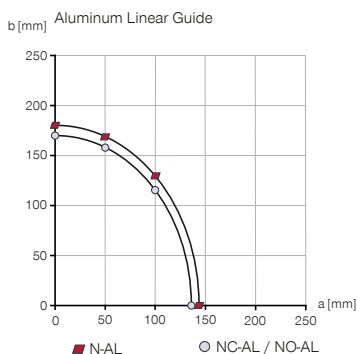
*with purged air (max. 0,5 bar)

Order no.	Technical data		
	GPP5013N-AL-A	GPP5013NC-AL-A	GPP5013NO-AL-A
Dead weight of mounted gripper finger max. [kg]	2.1	2.1	2.1
Length of the gripper fingers max. ** [mm]	180	170	170
IP class	IP40	IP40	IP40
Protected against corrosion	No	No	No
Weight [kg]	1.5	1.9	1.9

Maximum gripper finger length



Resulting gripper finger length for determining the gripping force

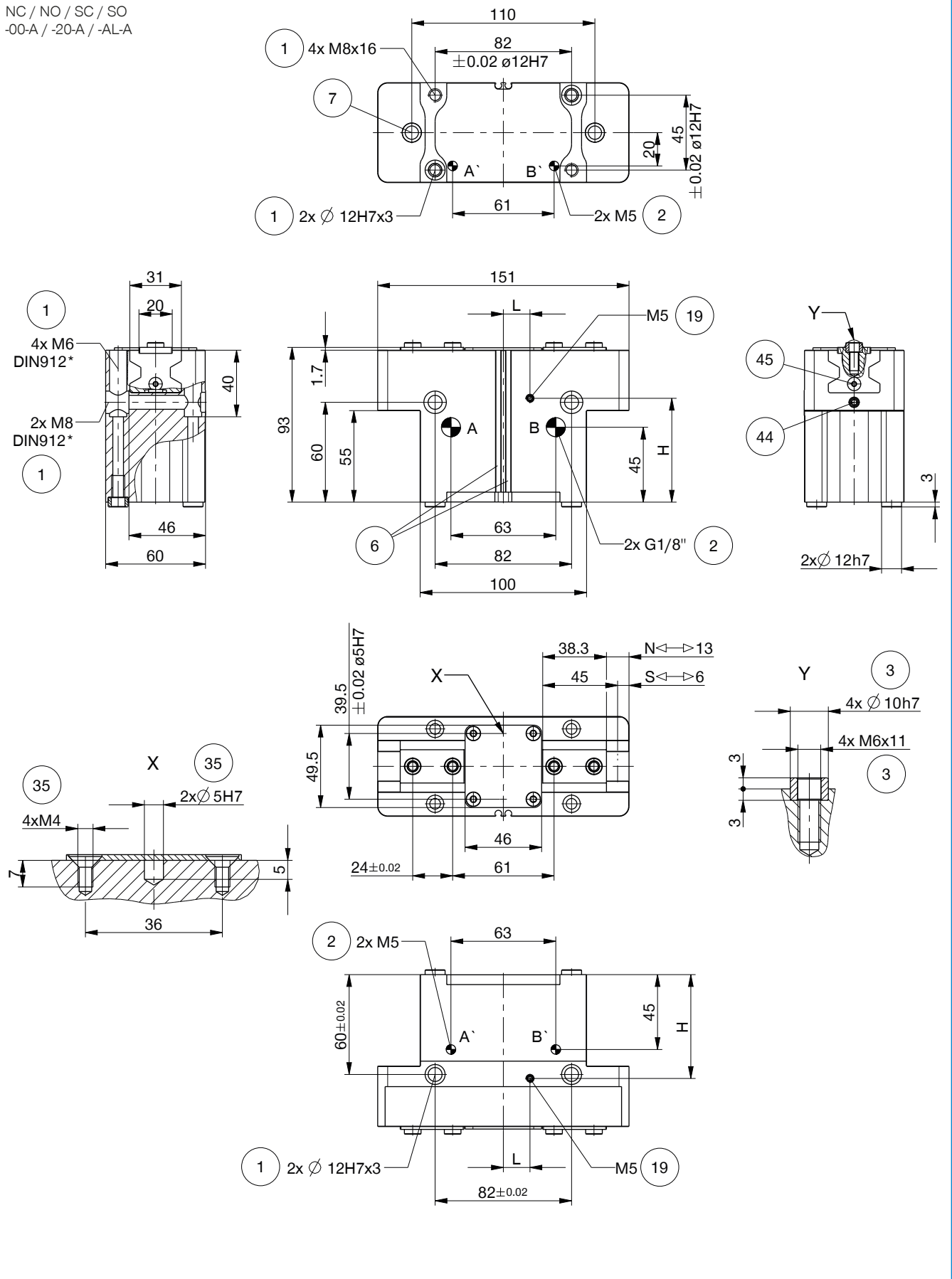


2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5013

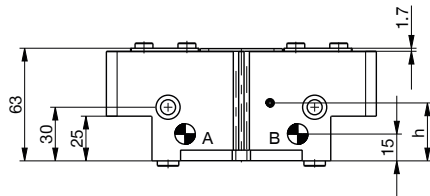
TECHNICAL DRAWINGS

NC / NO / SC / SO
-00-A / -20-A / -AL-A

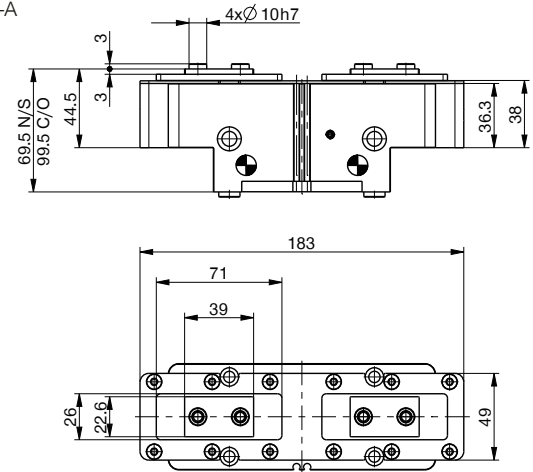


TECHNICAL DRAWINGS

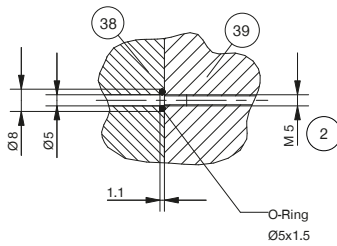
N / S
-00-A / -20-A / -AL-A



N / NC / NO / S / SC / SO
-21-A / -24-A



Hoseless air feed-through M5



- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑥ Integrated slot for magnetic field sensor
- ⑦ Mounting block (not for variant AL-A)
- ⑰ Air purge connection option (max. 0,5 bar)
- ⑳ Attachment option for customer-specific fittings
- ㉔ Adapter
- ㉙ Gripper
- ㉛ Clamping sensor (not for variant AL-A)
- ㉜ Switch cam adjustment (not for variant AL-A)
- Ⓐ Air connection (close)
- Ⓑ Air connection (open)
- Ⓐ Air connection, alternative (close)
- Ⓑ Air connection, alternative (open)

► Position ⑰ sealing air connection option

Order no.	-00-A / -20-A / -21-A / -24-A	-AL-A
H [mm]	62.4	78.6
L [mm]	16	10
h [mm]	32.4	48.6

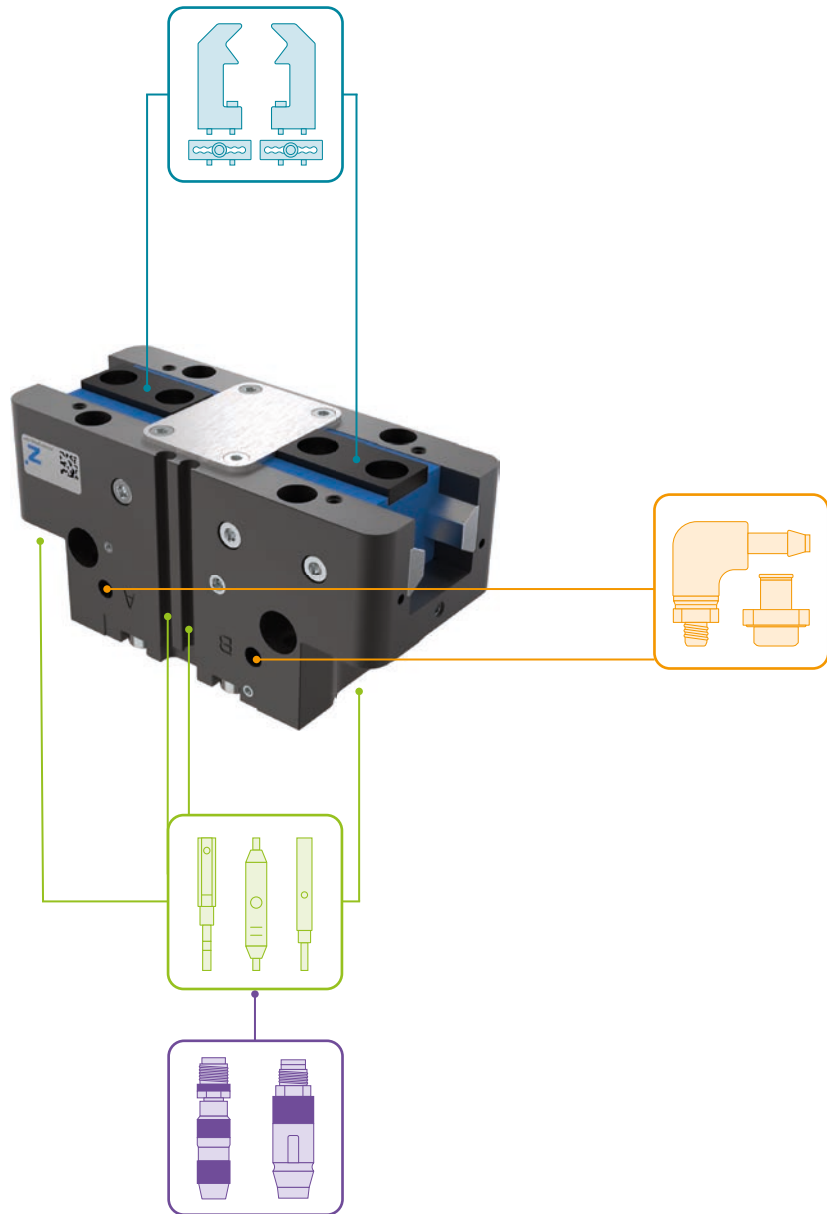


2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5013

1

▶ ACCESORIES



▶ INCLUDED IN DELIVERY



4 [piece]
Centering Disc

018187



2 [piece]
Centering Disc

019280

▶ RECOMMENDED ACCESSORIES



GRIPPING COMPONENTS



UB5013AL
Universal jaw aluminium



UB5013ST
Universal jaw steel



EB5013AL
Aluminum adjustment jaw



EB5013ST
Steel adjustment jaw



WB5013L
Changeable jaw, loose-part-set



WB5013F
Changeable jaw, fix-part



ENERGY SUPPLY



WV1-8X8
Angled Fittings - Quick Connect Style



DEV06
Quick Exhaust Valve



DSV1-8
Pressure safety valve



DSV1-8E
Pressure safety valve with quick exhaust



SENSORS



NJ8-E2S
Inductive proximity switch - Connector M8

*Not for variant AL-A



MFS01-S-KHC-P1-PNP
Magnetic field sensor angled, cable 0.3 m - M8 connector



MFS02-S-KHC-P1-PNP
Magnetic field sensor straight, cable 0.3 m - M8 connector



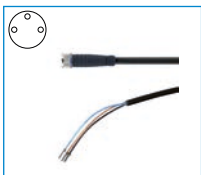
MFS01-S-KHC-P2-PNP
2-point sensor angled, cable 0.3 m - M8 connector



MFS02-S-KHC-P2-PNP
2-point sensor straight, cable 0.3 m - M8 connector



CONNECTIONS / OTHER



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



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

2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5016

1

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

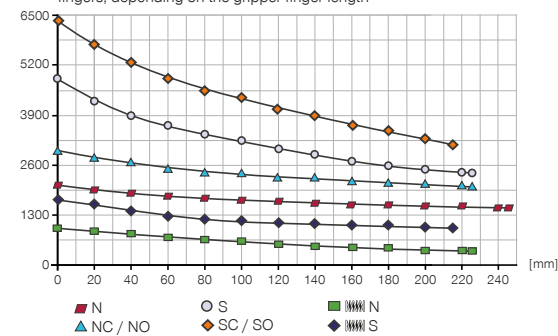
PRODUCT SPECIFICATIONS

-00-A / -20-A / -21-A / -24-A

Steel / steel guide

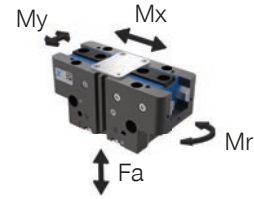
Gripping force diagram

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



Forces and moments

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



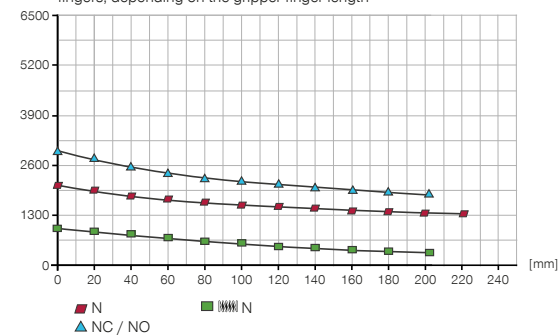
Mr [Nm]	145
Mx [Nm]	195
My [Nm]	185
Fa [N]	5200

-AL-A

Steel / aluminum guide

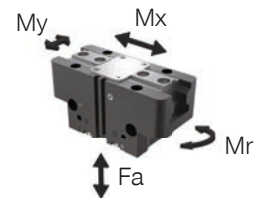
Gripping force diagram

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



Forces and moments

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



Mr [Nm]	140
Mx [Nm]	185
My [Nm]	180
Fa [N]	5000

VARIANTS

-00-A / -20-A

Steel / steel guide

-21-A / -24-A

Steel / steel guide

-AL-A

Steel / aluminum guide



TECHNICAL DATA

Technical data

Order no.	GPP5016N-00-A	GPP5016NC-00-A	GPP5016NO-00-A	GPP5016S-00-A	GPP5016SC-00-A	GPP5016SO-00-A
Stroke per jaw [mm]	16	16	16	8	8	8
Gripping force in closing [N]	2090	2860		4610	6310	
Gripping force in opening [N]	2220		2990	4900		6600
Gripping force secured by spring min. [N]		770	770		1700	1700
Closing time [s]	0.13	0.11	0.24	0.13	0.11	0.24
Opening time [s]	0.13	0.24	0.11	0.13	0.24	0.11
Dead weight of mounted gripper finger max. [kg]	3.8	3.8	3.8	3.8	3.8	3.8
Length of the gripper fingers max. [mm]	245	225	225	225	215	215
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Nominal operating pressure [bar]	6	6	6	6	6	6
Operating temperature [°C]	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90
Air volume per cycle [cm³]	166	332	332	166	332	332
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Protected against corrosion	Yes	Yes	Yes	Yes	Yes	Yes
Weight [kg]	2.9	3.7	3.7	2.9	3.7	3.7

Technical Data - High Temperature Version

Order no.	GPP5016N-20-A	GPP5016NC-20-A	GPP5016NO-20-A	GPP5016S-20-A	GPP5016SC-20-A	GPP5016SO-20-A
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130

Technical Data - Protector Version

Order no.	GPP5016N-21-A	GPP5016NC-21-A	GPP5016NO-21-A	GPP5016S-21-A	GPP5016SC-21-A	GPP5016SO-21-A
Protection to IEC 60529	IP67*	IP67*	IP67*	IP67*	IP67*	IP67*
Weight [kg]	3.6	4.4	4.4	3.6	4.4	4.4

Technical Data - High Temperature Protector Version

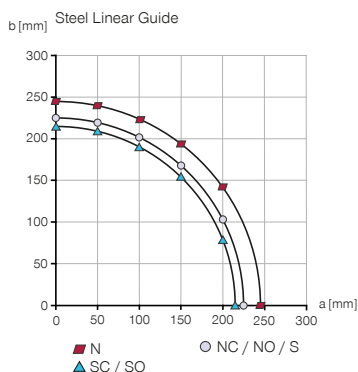
Order no.	GPP5016N-24-A	GPP5016NC-24-A	GPP5016NO-24-A	GPP5016S-24-A	GPP5016SC-24-A	GPP5016SO-24-A
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130
Protection to IEC 60529	IP67*	IP67*	IP67*	IP67*	IP67*	IP67*
Weight [kg]	3.6	4.4	4.4	3.6	4.4	4.4

*with purged air (max. 0,5 bar)

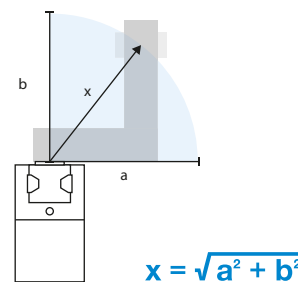
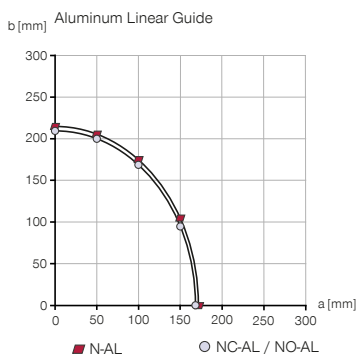
Technical data

Order no.	GPP5016N-AL-A	GPP5016NC-AL-A	GPP5016NO-AL-A
Dead weight of mounted gripper finger max. [kg]	3.5	3.5	3.5
Length of the gripper fingers max. ** [mm]	215	210	210
IP class	IP40	IP40	IP40
Protected against corrosion	No	No	No
Weight [kg]	2.9	3.6	3.6

Maximum gripper finger length



Resulting gripper finger length for determining the gripping force

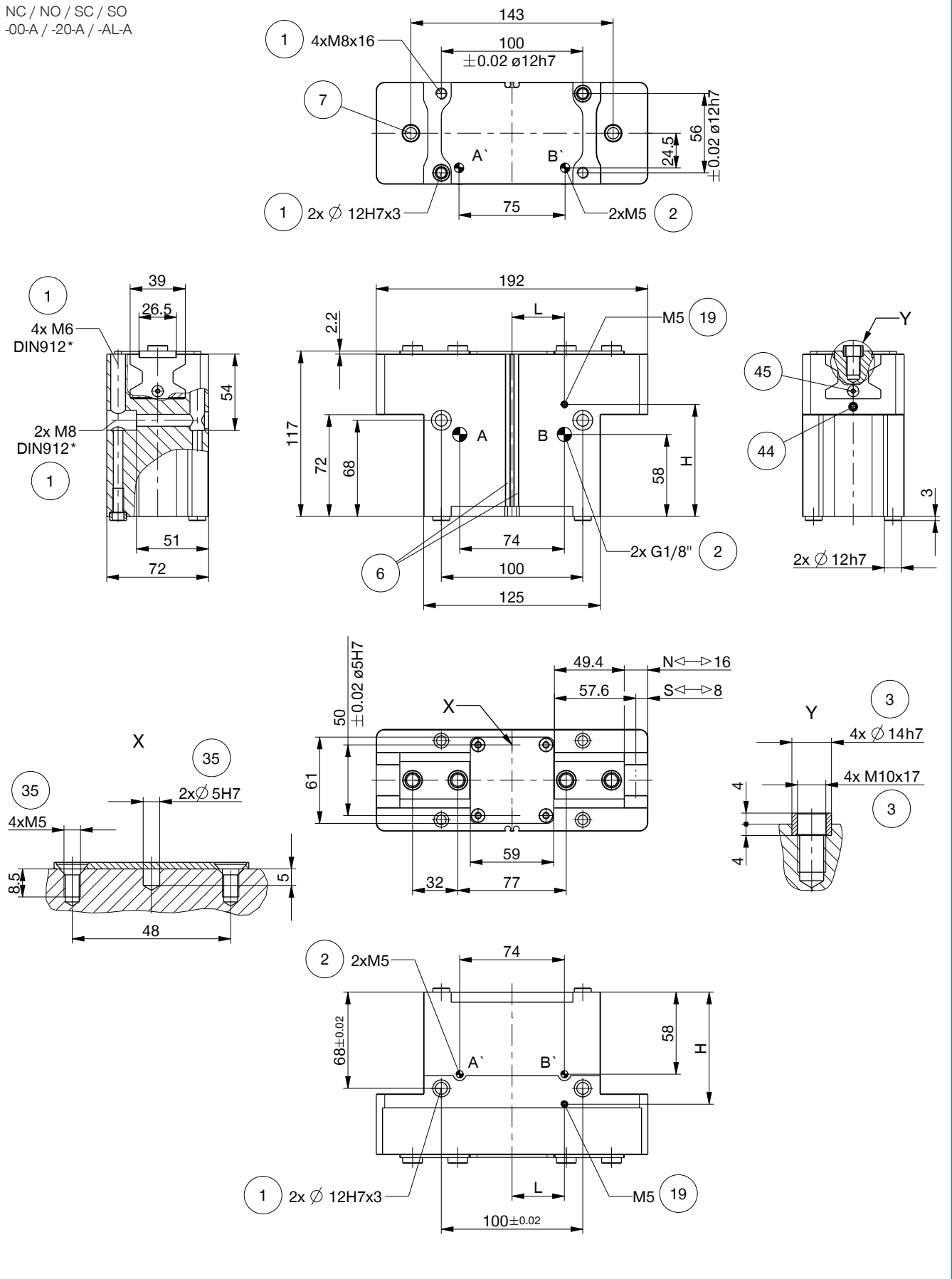


2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5016

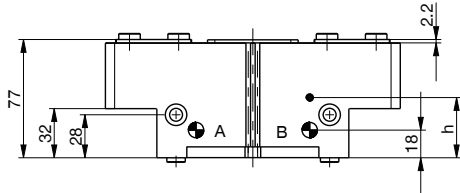
TECHNICAL DRAWINGS

NC / NO / SC / SO
-00-A / -20-A / -AL-A

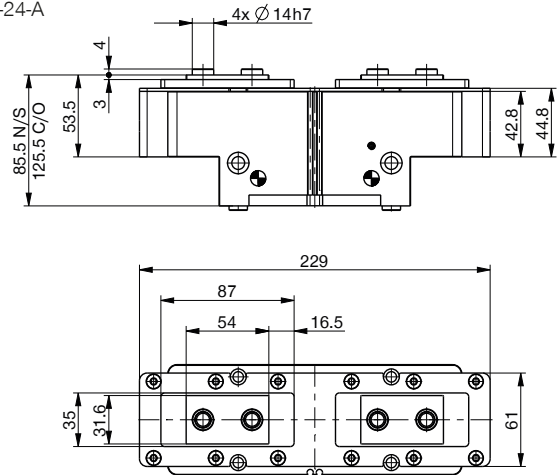


TECHNICAL DRAWINGS

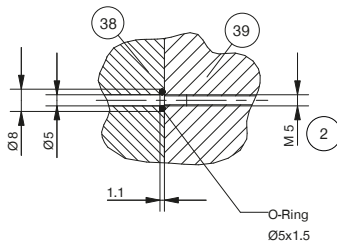
N / S
-00-A / -20-A / -AL-A



N / NC / NO / S / SC / SO
-21-A / -24-A



Hoseless air feed-through M5



- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑥ Integrated slot for magnetic field sensor
- ⑦ Mounting block (not for variant AL-A)
- ⑰ Air purge connection option (max. 0,5 bar)
- ⑳ Attachment option for customer-specific fittings
- ㉘ Adapter
- ㉙ Gripper
- ㉚ Clamping sensor (not for variant AL-A)
- ㉛ Switch cam adjustment (not for variant AL-A)
- Ⓐ Air connection (close)
- Ⓑ Air connection (open)
- Ⓐ Air connection, alternative (close)
- Ⓑ Air connection, alternative (open)

► Position ⑰ sealing air connection option

Order no.	-00-A / -20-A / -21-A / -24-A	-AL-A
H [mm]	79.2	99.1
L [mm]	37	10
h [mm]	39.2	59.1

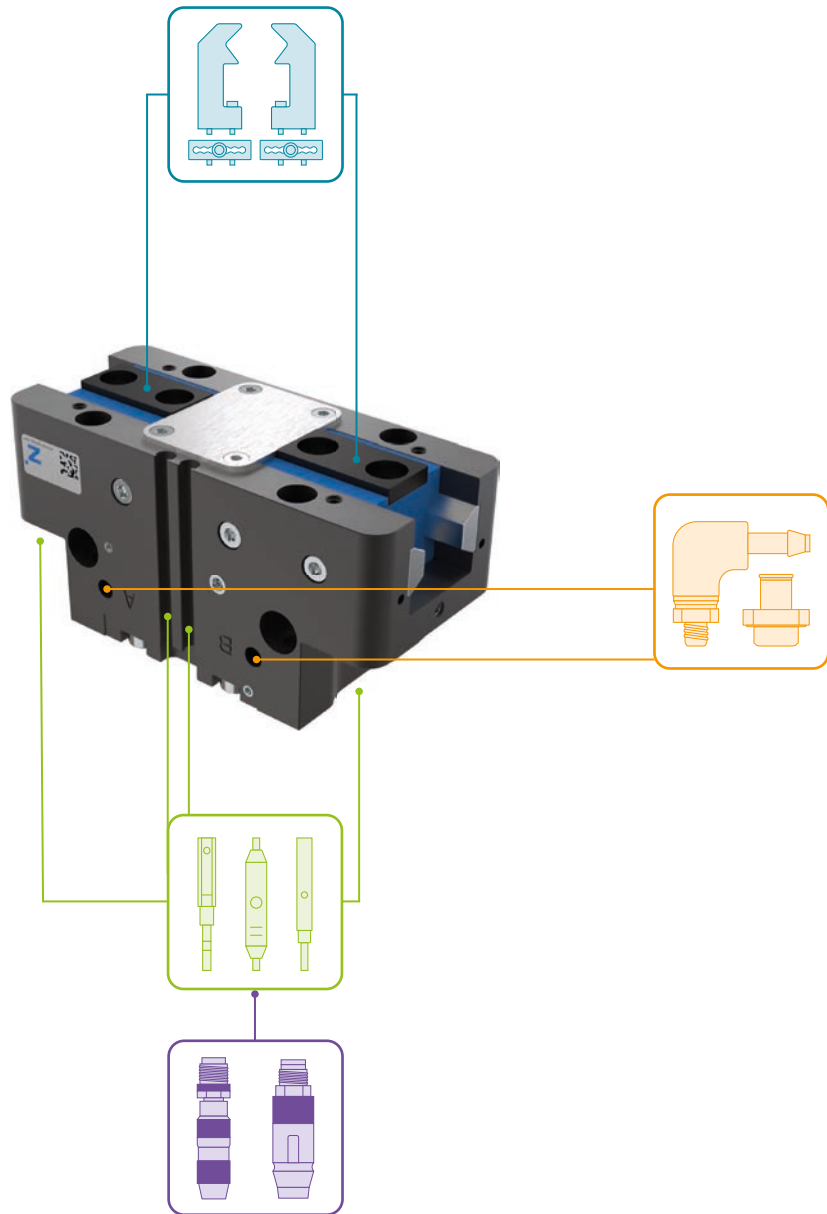


2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5016

1

▶ ACCESORIES



▶ INCLUDED IN DELIVERY



4 [piece]
Centering Disc

019387



2 [piece]
Centering Disc

019280

▶ RECOMMENDED ACCESSORIES



GRIPPING COMPONENTS



UB5016AL
Universal jaw aluminium



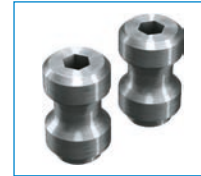
UB5016ST
Universal jaw steel



EB5016AL
Aluminum adjustment jaw



EB5016ST
Steel adjustment jaw



WB5016L
Changeable jaw, loose-part-set



WB5016F
Changeable jaw, fix-part



ENERGY SUPPLY



WV1-8X8
Angled Fittings - Quick Connect Style



DEV08
Quick Exhaust Valve



DSV1-8
Pressure safety valve



DSV1-8E
Pressure safety valve with quick exhaust



SENSORS



NJ8-E2S
Inductive proximity switch - Connector M8

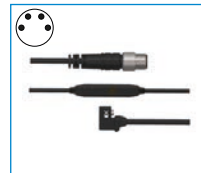
*Not for variant AL-A



MFS01-S-KHC-P1-PNP
Magnetic field sensor angled, cable 0.3 m - M8 connector



MFS02-S-KHC-P1-PNP
Magnetic field sensor straight, cable 0.3 m - M8 connector



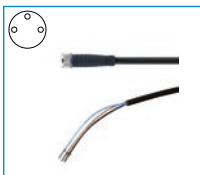
MFS01-S-KHC-P2-PNP
2-point sensor angled, cable 0.3 m - M8 connector



MFS02-S-KHC-P2-PNP
2-point sensor straight, cable 0.3 m - M8 connector



CONNECTIONS / OTHER



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



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

2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5025

1

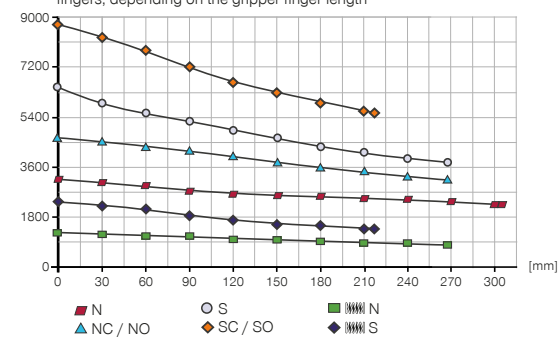
▶ PRODUCT SPECIFICATIONS

-00-A / -20-A / -21-A / -24-A

Steel / steel guide

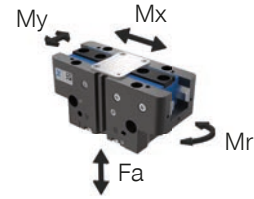
▶ Gripping force diagram

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



▶ Forces and moments

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



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

▶ VARIANTS

-00-A / -20-A

Steel / steel guide

-21-A / -24-A

Steel / steel guide



► TECHNICAL DATA

Order no.	► Technical data					
	GPP5025N-00-A	GPP5025NC-00-A	GPP5025NO-00-A	GPP5025S-00-A	GPP5025SC-00-A	GPP5025SO-00-A
Stroke per jaw [mm]	25	25	25	14	14	14
Gripping force in closing [N]	3280	4510		6360	8730	
Gripping force in opening [N]	3490		4710	6760		9130
Gripping force secured by spring min. [N]		1220	1220		2370	2370
Closing time [s]	0.33	0.28	0.57	0.33	0.28	0.57
Opening time [s]	0.33	0.57	0.28	0.33	0.57	0.28
Dead weight of mounted gripper finger max. [kg]	7	7	7	7	7	7
Length of the gripper fingers max. [mm]	310	265	265	265	220	220
Repetition accuracy +/- [mm]	0.02	0.02	0.02	0.02	0.02	0.02
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Nominal operating pressure [bar]	6	6	6	6	6	6
Operating temperature [°C]	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90
Air volume per cycle [cm³]	420	830	830	420	830	830
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Protected against corrosion	Yes	Yes	Yes	Yes	Yes	Yes
Weight [kg]	6.1	7.65	7.65	6.1	7.65	7.65

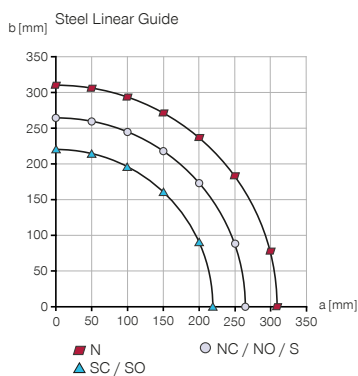
Order no.	► Technical Data - High Temperature Version					
	GPP5025N-20-A	GPP5025NC-20-A	GPP5025NO-20-A	GPP5025S-20-A	GPP5025SC-20-A	GPP5025SO-20-A
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130

Order no.	► Technical Data - Protector Version					
	GPP5025N-21-A	GPP5025NC-21-A	GPP5025NO-21-A	GPP5025S-21-A	GPP5025SC-21-A	GPP5025SO-21-A
Protection to IEC 60529	IP67*	IP67*	IP67*	IP67*	IP67*	IP67*
Weight [kg]	7.20	8.75	8.75	7.2	8.75	8.75

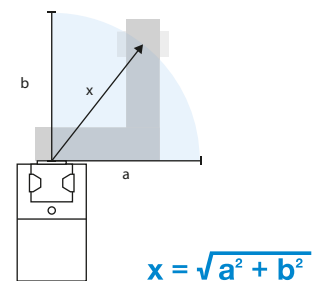
Order no.	► Technical Data - High Temperature Protector Version					
	GPP5025N-24-A	GPP5025NC-24-A	GPP5025NO-24-A	GPP5025S-24-A	GPP5025SC-24-A	GPP5025SO-24-A
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130
Protection to IEC 60529	IP67*	IP67*	IP67*	IP67*	IP67*	IP67*
Weight [kg]	7.20	8.75	8.75	7.2	8.75	8.75

*with purged air (max. 0,5 bar)

► Maximum gripper finger length



► Resulting gripper finger length for determining the gripping force

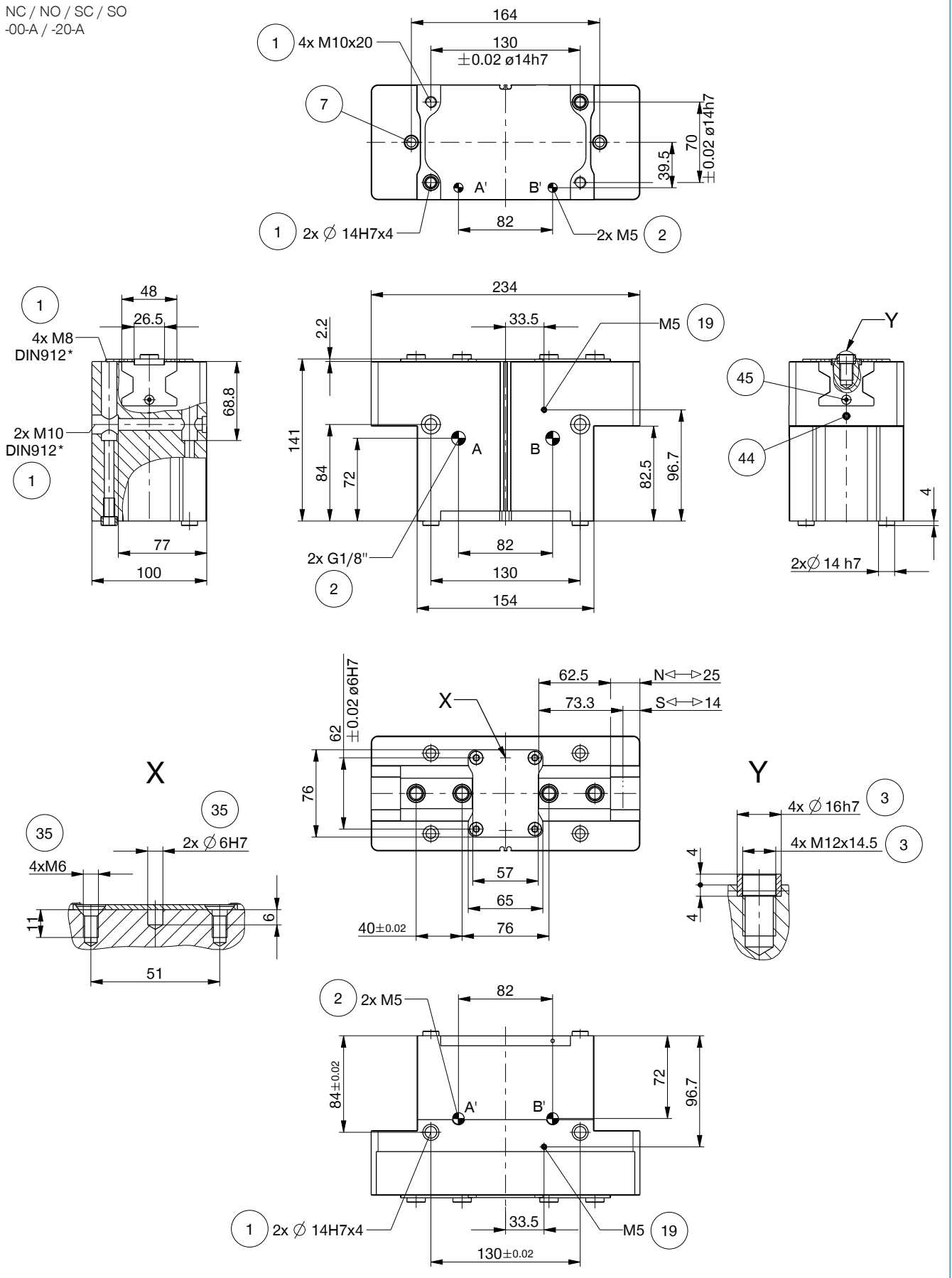


2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5025

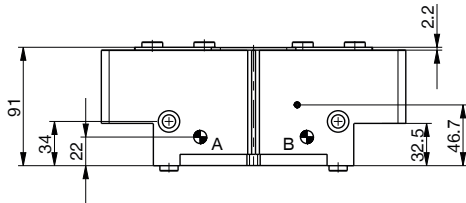
TECHNICAL DRAWINGS

NC / NO / SC / SO
-00-A / -20-A

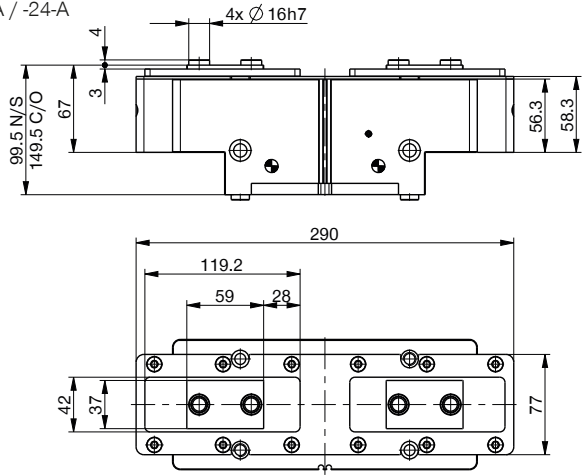


TECHNICAL DRAWINGS

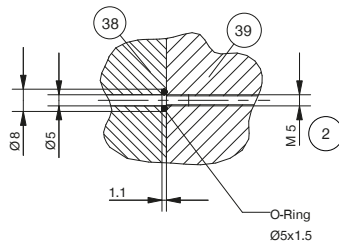
N / S
-00-A / -20-A



N / NC / NO / S / SC / SO
-21-A / -24-A



Hoseless air feed-through M5



- | | |
|----------------------------------------------------|-------------------------------------------------|
| ① Gripper attachment | ③⑨ Gripper |
| ② Energy supply | ④④ Clamping sensor (not for variant AL-A) |
| ③ Fixing for gripper finger | ④⑤ Switch cam adjustment (not for variant AL-A) |
| ⑥ Integrated slot for magnetic field sensor | Ⓐ Air connection (close) |
| ⑦ Mounting block (not for variant AL-A) | Ⓑ Air connection (open) |
| ⑱ Air purge connection option (max. 0,5 bar) | Ⓐ Air connection, alternative (close) |
| ⑳ Attachment option for customer-specific fittings | Ⓑ Air connection, alternative (open) |
| ⑳ Adapter | |

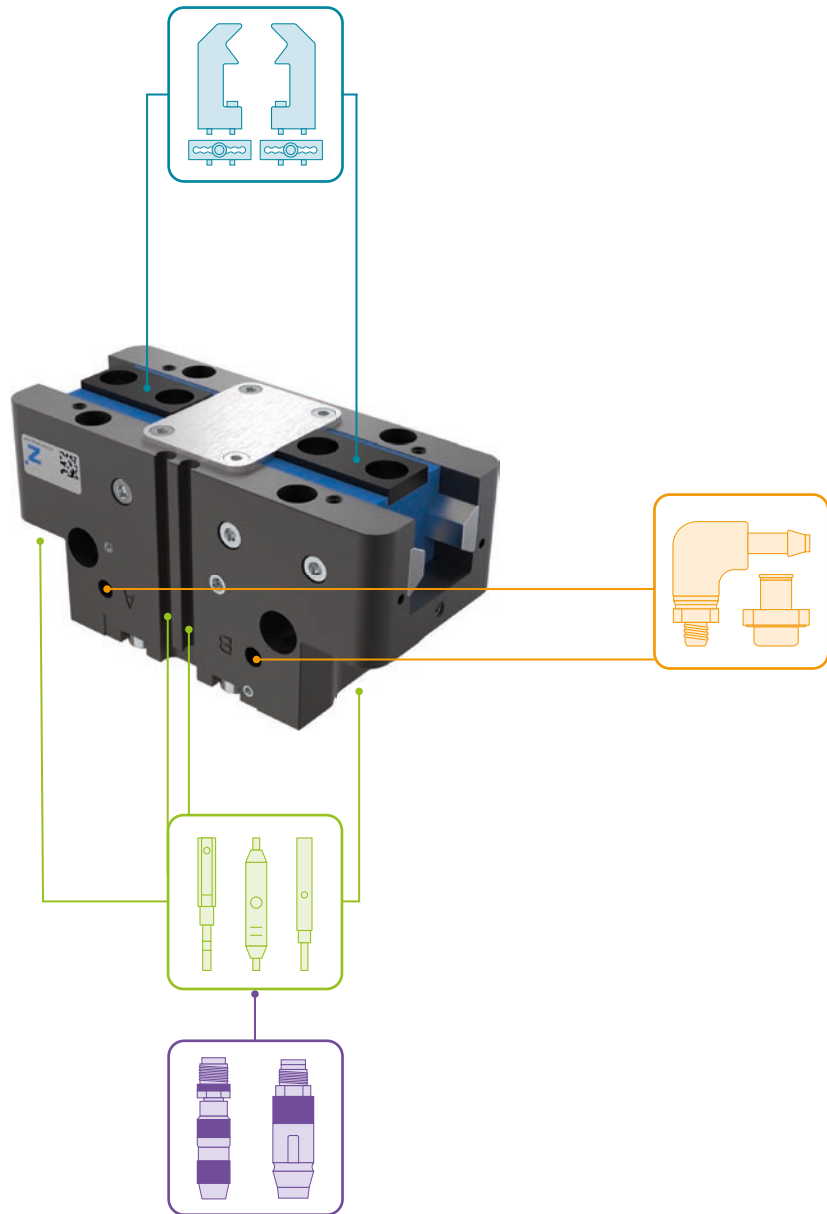


2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5025

1

▶ ACCESORIES



▶ INCLUDED IN DELIVERY



4 [piece]
Centering Disc

030529



2 [piece]
Centering Disc

019387

▶ RECOMMENDED ACCESSORIES



GRIPPING COMPONENTS



UB5025AL
Universal jaw aluminium



UB5025ST
Universal jaw steel



EB5025AL
Aluminum adjustment jaw



EB5025ST
Steel adjustment jaw



WB5025L
Changeable jaw, loose-part-set



WB5025F
Changeable jaw, fix-part



ENERGY SUPPLY



WV1-8X8
Angled Fittings - Quick Connect Style



DEV08
Quick Exhaust Valve



DSV1-8
Pressure safety valve



DSV1-8E
Pressure safety valve with quick exhaust



SENSORS



NJ8-E2S
Inductive proximity switch - Connector M8



MFS01-S-KHC-P1-PNP
Magnetic field sensor angled, cable 0.3 m - M8 connector



MFS02-S-KHC-P1-PNP
Magnetic field sensor straight, cable 0.3 m - M8 connector



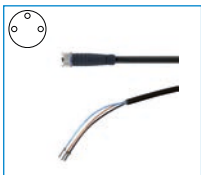
MFS01-S-KHC-P2-PNP
2-point sensor angled, cable 0.3 m - M8 connector



MFS02-S-KHC-P2-PNP
2-point sensor straight, cable 0.3 m - M8 connector



CONNECTIONS / OTHER



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



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

2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5030

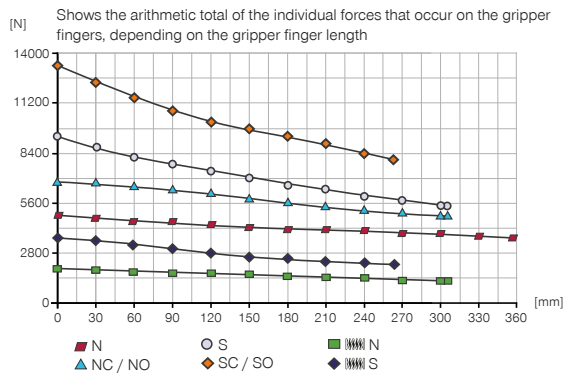
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PRODUCT SPECIFICATIONS

-00-A / -20-A / -21-A / -24-A

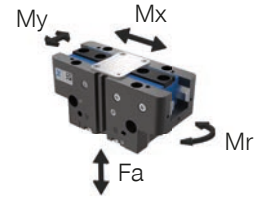
Steel / steel guide

Gripping force diagram



Forces and moments

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



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

VARIANTS

-00-A / -20-A

Steel / steel guide

-21-A / -24-A

Steel / steel guide



TECHNICAL DATA

Technical data

Order no.	GPP5030N-00-A	GPP5030NC-00-A	GPP5030NO-00-A	GPP5030S-00-A	GPP5030SC-00-A	GPP5030SO-00-A
Stroke per jaw [mm]	30	30	30	17	17	17
Gripping force in closing [N]	5000	6850		9600	13160	
Gripping force in opening [N]	5210		7060	9990		13550
Gripping force secured by spring min. [N]		1850	1850		3560	3560
Closing time [s]	0.4	0.35	0.65	0.4	0.35	0.65
Opening time [s]	0.4	0.65	0.35	0.4	0.65	0.35
Dead weight of mounted gripper finger max. [kg]	9.5	9.5	9.5	9.5	9.5	9.5
Length of the gripper fingers max. [mm]	355	305	305	305	260	260
Repetition accuracy +/- [mm]	0.04	0.04	0.04	0.04	0.04	0.04
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Nominal operating pressure [bar]	6	6	6	6	6	6
Operating temperature [°C]	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90
Air volume per cycle [cm³]	745	1430	1430	745	1430	1430
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Protected against corrosion	Yes	Yes	Yes	Yes	Yes	Yes
Weight [kg]	9.2	12	12	9.2	12	12

Technical Data - High Temperature Version

Order no.	GPP5030N-20-A	GPP5030NC-20-A	GPP5030NO-20-A	GPP5030S-20-A	GPP5030SC-20-A	GPP5030SO-20-A
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130

Technical Data - Protector Version

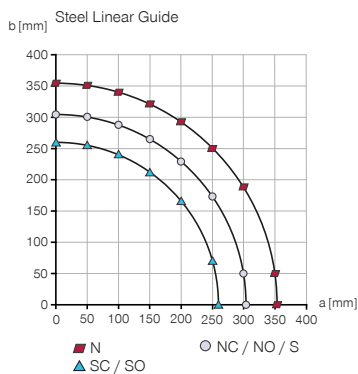
Order no.	GPP5030N-21-A	GPP5030NC-21-A	GPP5030NO-21-A	GPP5030S-21-A	GPP5030SC-21-A	GPP5030SO-21-A
Protection to IEC 60529	IP67*	IP67*	IP67*	IP67*	IP67*	IP67*
Weight [kg]	10.9	13.7	13.7	10.9	13.7	13.7

Technical Data - High Temperature Protector Version

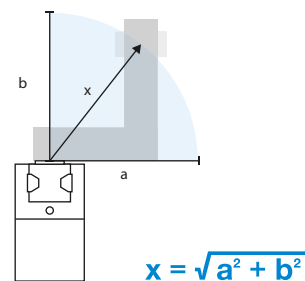
Order no.	GPP5030N-24-A	GPP5030NC-24-A	GPP5030NO-24-A	GPP5030S-24-A	GPP5030SC-24-A	GPP5030SO-24-A
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130
Protection to IEC 60529	IP67*	IP67*	IP67*	IP67*	IP67*	IP67*
Weight [kg]	10.9	13.7	13.7	10.9	13.7	13.7

*with purged air (max. 0,5 bar)

Maximum gripper finger length



Resulting gripper finger length for determining the gripping force

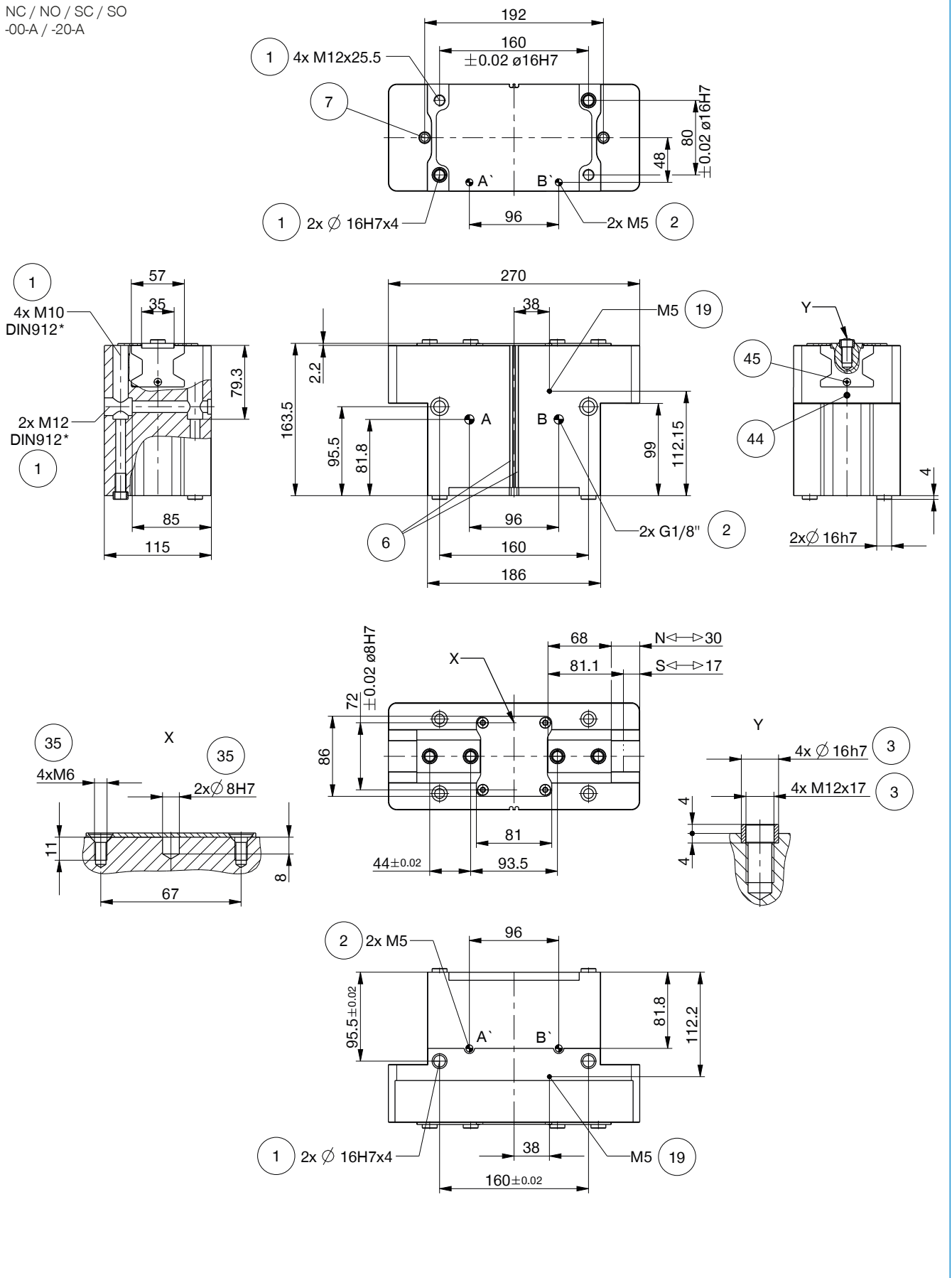


2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5030

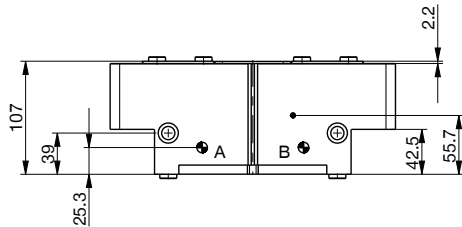
TECHNICAL DRAWINGS

NC / NO / SC / SO
-00-A / -20-A

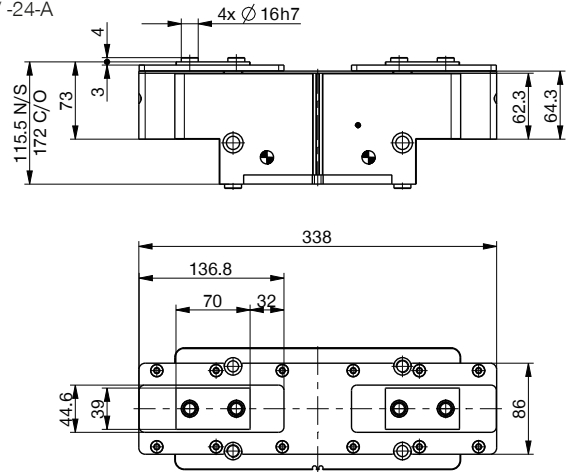


TECHNICAL DRAWINGS

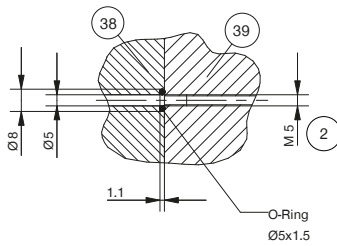
N / S
-00-A / -20-A



N / NC / NO / S / SC / SO
-21-A / -24-A



Hoseless air feed-through M5



- | | |
|-----------------------------------------------------|---------------------------------------|
| ① Gripper attachment | ③⑨ Gripper |
| ② Energy supply | ④④ Clamp for sensor |
| ③ Fixing for gripper finger | ④⑤ Switch cam adjustment |
| ⑥ Integrated slot for magnetic field sensor | Ⓐ Air connection (close) |
| ⑦ Mounting block | Ⓑ Air connection (open) |
| ①⑨ Air purge connection option (max. 0,5 bar) | Ⓐ Air connection, alternative (close) |
| ③⑤ Attachment option for customer-specific fittings | Ⓑ Air connection, alternative (open) |
| ③⑧ Adapter | |

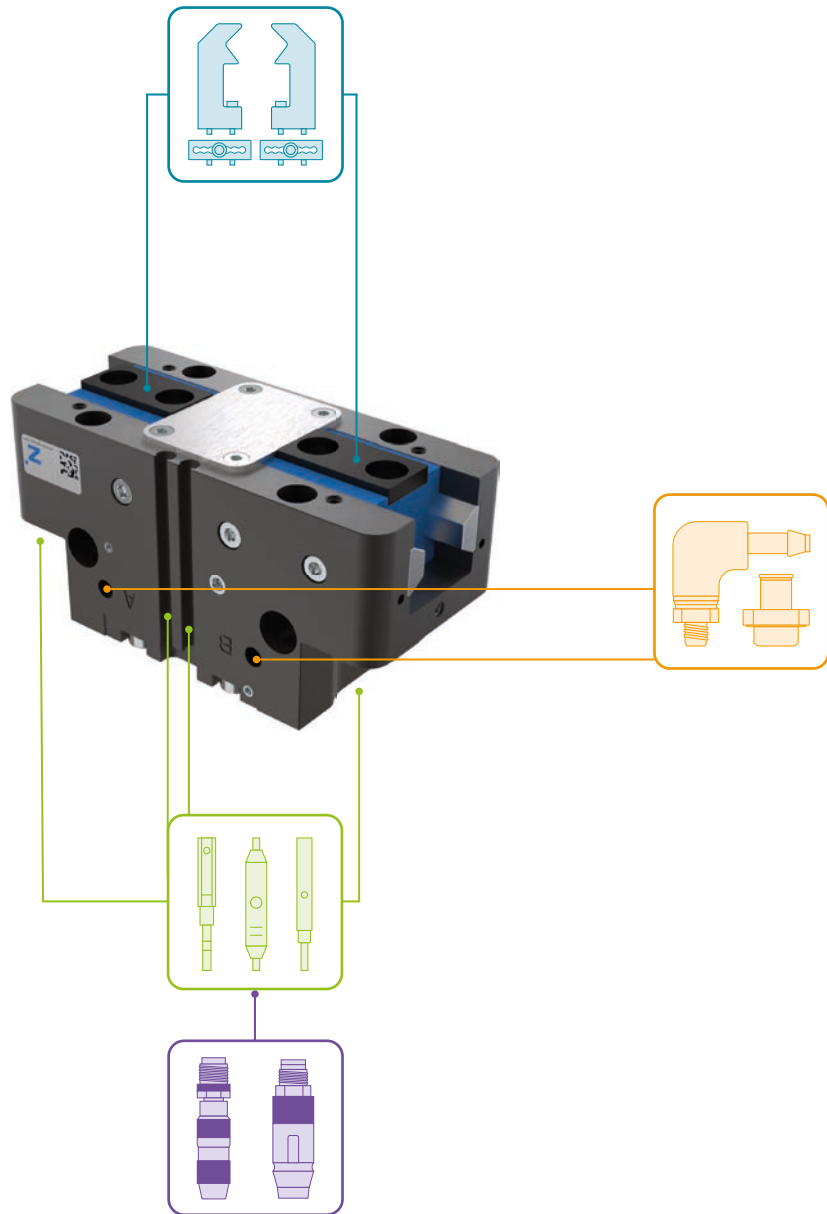


2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5030

1

▶ ACCESORIES



▶ INCLUDED IN DELIVERY



6 [piece]
Centering Disc

030529

▶ RECOMMENDED ACCESSORIES



GRIPPING COMPONENTS



UB5030AL
Universal jaw aluminium



UB5030ST
Universal jaw steel



EB5030AL
Aluminum adjustment jaw



EB5030ST
Steel adjustment jaw



WB5030L
Changeable jaw, loose-part-set



WB5030F
Changeable jaw, fix-part



ENERGY SUPPLY



WV1-8X8
Angled Fittings - Quick Connect Style



DEV08
Quick Exhaust Valve



DSV1-8
Pressure safety valve



DSV1-8E
Pressure safety valve with quick exhaust



SENSORS



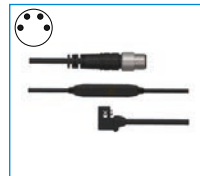
NJ8-E2S
Inductive proximity switch - Connector M8



MFS01-S-KHC-P1-PNP
Magnetic field sensor angled, cable 0.3 m - M8 connector



MFS02-S-KHC-P1-PNP
Magnetic field sensor straight, cable 0.3 m - M8 connector



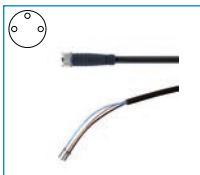
MFS01-S-KHC-P2-PNP
2-point sensor angled, cable 0.3 m - M8 connector



MFS02-S-KHC-P2-PNP
2-point sensor straight, cable 0.3 m - M8 connector



CONNECTIONS / OTHER



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



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

2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5035

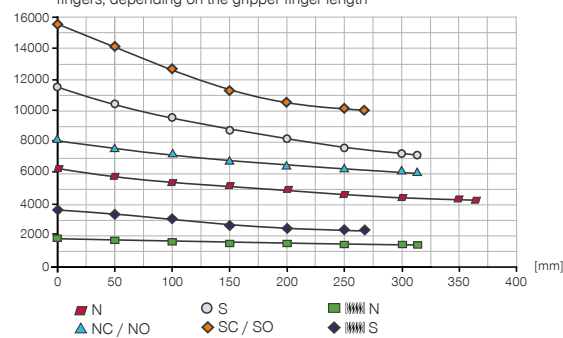
▶ PRODUCT SPECIFICATIONS

-00-A / -20-A / -21-A / -24-A

Steel / steel guide

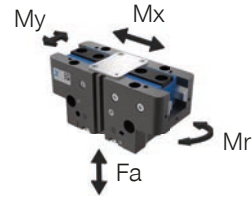
▶ Gripping force diagram

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



▶ Forces and moments

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



Mr [Nm]	260
Mx [Nm]	430
My [Nm]	450
Fa [N]	10400

▶ VARIANTS

-00-A / -20-A

Steel / steel guide

-21-A / -24-A

Steel / steel guide



TECHNICAL DATA

Technical data

Order no.	GPP5035N-00-A	GPP5035NC-00-A	GPP5035NO-00-A	GPP5035S-00-A	GPP5035SC-00-A	GPP5035SO-00-A
Stroke per jaw [mm]	35	35	35	20	20	20
Gripping force in closing [N]	6100	8000		11700	15500	
Gripping force in opening [N]	6300		8200	12100		15900
Gripping force secured by spring min. [N]		1900	1900		3700	3700
Closing time [s]	0.5	0.4	0.7	0.5	0.4	0.7
Opening time [s]	0.5	0.7	0.4	0.5	0.7	0.4
Dead weight of mounted gripper finger max. [kg]	12.5	12.5	12.5	12.5	12.5	12.5
Length of the gripper fingers max. [mm]	365	315	315	315	260	260
Repetition accuracy +/- [mm]	0.05	0.05	0.05	0.05	0.05	0.05
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	6.5	6.5	8	6.5	6.5
Nominal operating pressure [bar]	6	6	6	6	6	6
Operating temperature [°C]	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90
Air volume per cycle [cm³]	1185	2075	2075	1185	2075	2075
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Protected against corrosion	Yes	Yes	Yes	Yes	Yes	Yes
Weight [kg]	15.8	18.6	18.6	16.1	18.9	18.9

Technical Data - High Temperature Version

Order no.	GPP5035N-20-A	GPP5035NC-20-A	GPP5035NO-20-A	GPP5035S-20-A	GPP5035SC-20-A	GPP5035SO-20-A
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130

Technical Data - Protector Version

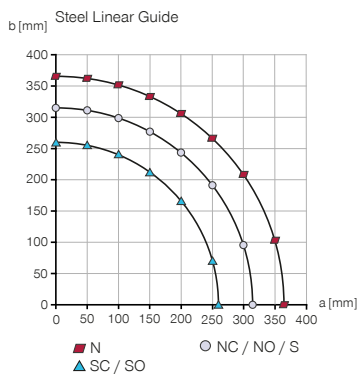
Order no.	GPP5035N-21-A	GPP5035NC-21-A	GPP5035NO-21-A	GPP5035S-21-A	GPP5035SC-21-A	GPP5035SO-21-A
Protection to IEC 60529	IP67*	IP67*	IP67*	IP67*	IP67*	IP67*
Weight [kg]	20.2	23	23	20.5	23.3	23.3

Technical Data - High Temperature Protector Version

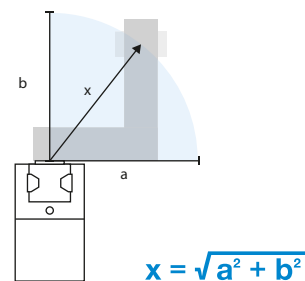
Order no.	GPP5035N-24-A	GPP5035NC-24-A	GPP5035NO-24-A	GPP5035S-24-A	GPP5035SC-24-A	GPP5035SO-24-A
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130
Protection to IEC 60529	IP67*	IP67*	IP67*	IP67*	IP67*	IP67*
Weight [kg]	20.2	23	23	20.5	23.3	23.3

*with purged air (max. 0,5 bar)

Maximum gripper finger length



Resulting gripper finger length for determining the gripping force

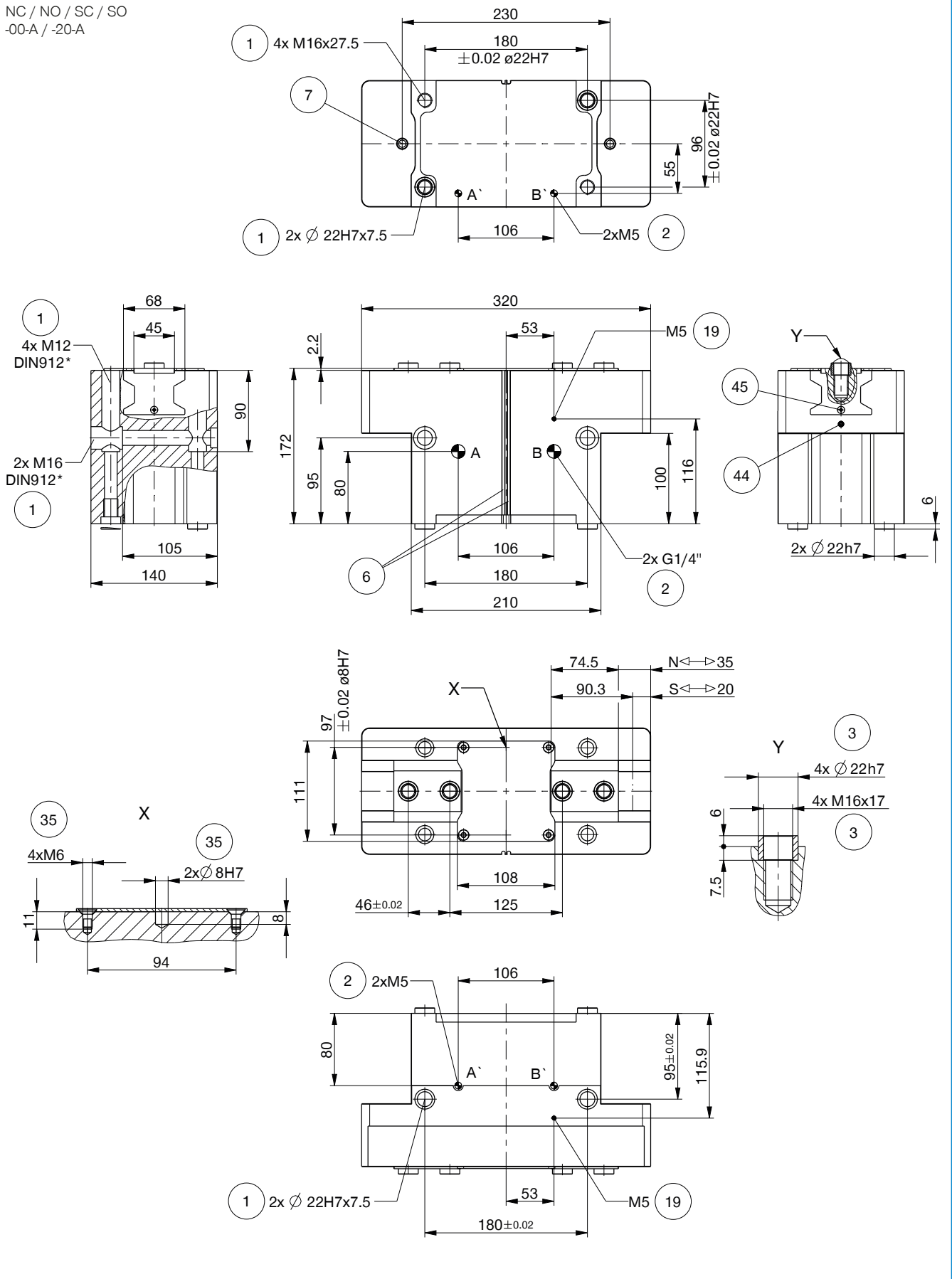


2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5035

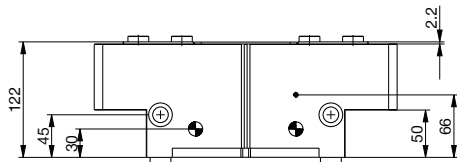
TECHNICAL DRAWINGS

NC / NO / SC / SO
-00-A / -20-A

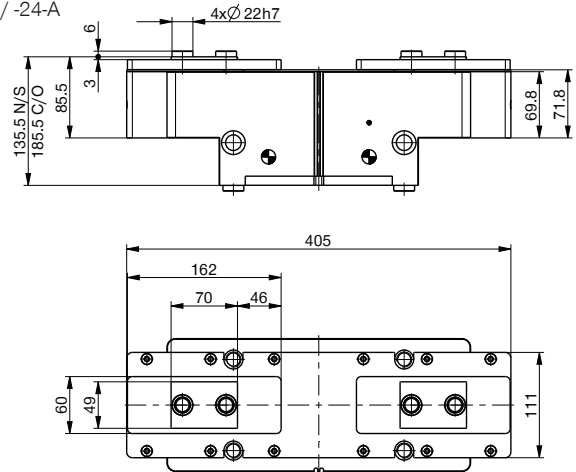


▶ TECHNICAL DRAWINGS

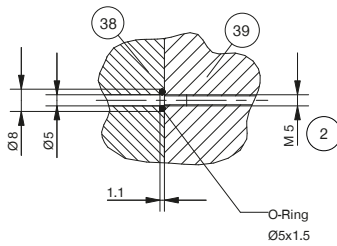
N / S
-00-A / -20-A



N / NC / NO / S / SC / SO
-21-A / -24-A



Hoseless air feed-through M5



- | | |
|-----------------------------------------------------|---------------------------------------|
| ① Gripper attachment | ③⑨ Gripper |
| ② Energy supply | ④④ Clamp for sensor |
| ③ Fixing for gripper finger | ④⑤ Switch cam adjustment |
| ⑥ Integrated slot for magnetic field sensor | Ⓐ Air connection (close) |
| ⑦ Mounting block | Ⓑ Air connection (open) |
| ①⑨ Air purge connection option (max. 0,5 bar) | Ⓐ Air connection, alternative (close) |
| ③⑤ Attachment option for customer-specific fittings | Ⓑ Air connection, alternative (open) |
| ③⑧ Adapter | |

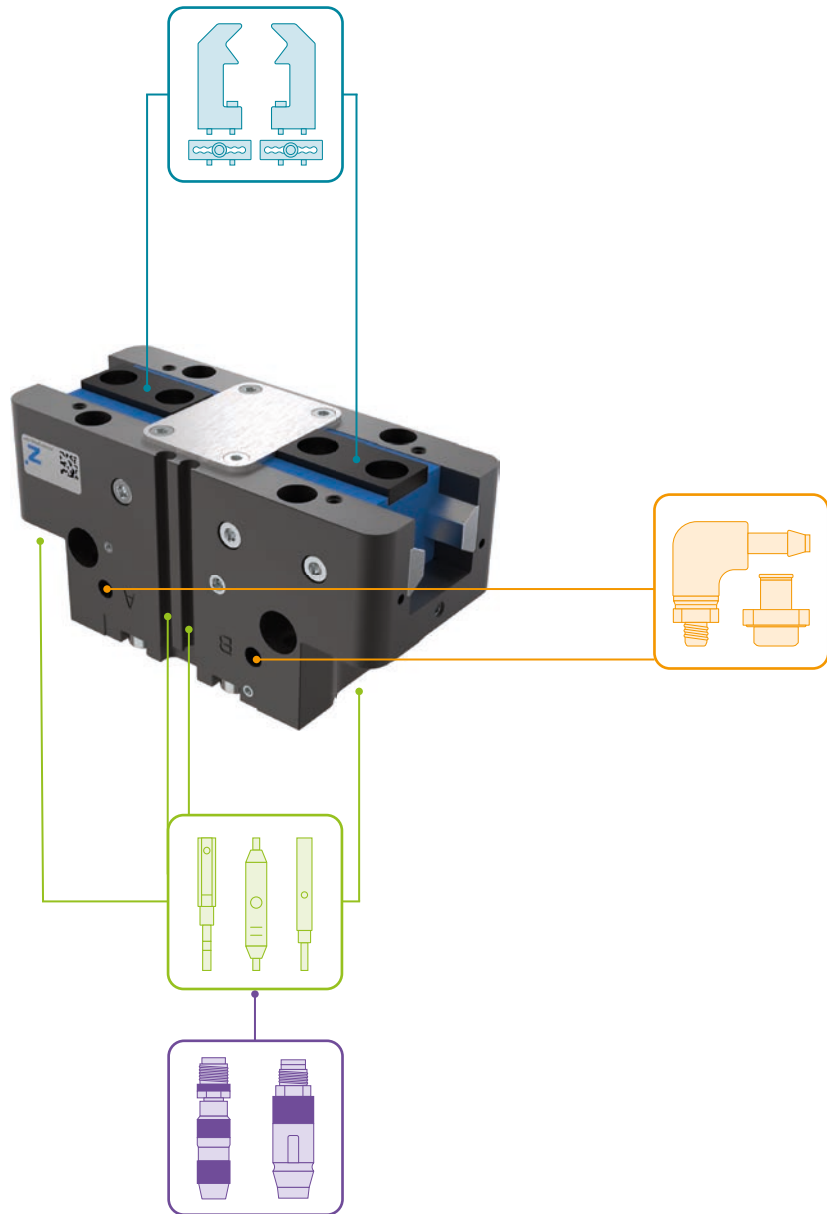


2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5035

1

▶ ACCESORIES



▶ INCLUDED IN DELIVERY



6 [piece]
Centering Disc

035358

▶ RECOMMENDED ACCESSORIES



ENERGY SUPPLY



GV1-4X8
Straight Fittings - Quick
Connect Style



WV1-4X8
Angled Fittings - Quick
Connect Style



DSV1-4
Pressure safety valve



DSV1-4E
Pressure safety valve with
quick exhaust



SENSORS



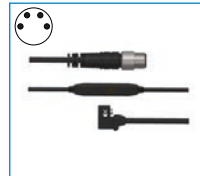
NJ8-E2S
Inductive proximity switch
- Connector M8



MFS01-S-KHC-P1-PNP
Magnetic field sensor angled,
cable 0.3 m - M8 connector



MFS02-S-KHC-P1-PNP
Magnetic field sensor straight,
cable 0.3 m - M8 connector



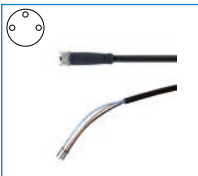
MFS01-S-KHC-P2-PNP
2-point sensor angled, ca-
ble 0.3 m - M8 connector



MFS02-S-KHC-P2-PNP
2-point sensor straight, ca-
ble 0.3 m - M8 connector



CONNECTIONS / OTHER



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



S8-G-3
Plug-in connector customiz-
able Straight - Connector M8

2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5045

1

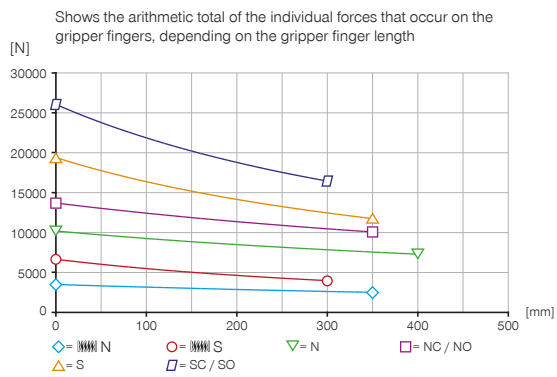
Installation size GPP5045 / 2-Jaw Parallel Grippers / pneumatic / Grippers

▶ PRODUCT SPECIFICATIONS

-00-A / -20-A / -21-A / -24-A

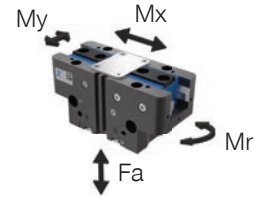
Steel / steel guide

▶ Gripping force diagram



▶ Forces and moments

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



Mr [Nm]	390
Mx [Nm]	580
My [Nm]	600
Fa [N]	11500

▶ VARIANTS

-00-A / -20-A

Steel / steel guide

-21-A / -24-A

Steel / steel guide



TECHNICAL DATA

Technical data

Order no.	GPP5045N-00-A	GPP5045NC-00-A	GPP5045NO-00-A	GPP5045S-00-A	GPP5045SC-00-A	GPP5045SO-00-A
Stroke per jaw [mm]	45	45	45	26	26	26
Gripping force in closing [N]	10200	13700		19400	26050	
Gripping force in opening [N]	10700		14200	20300		26950
Gripping force secured by spring min. [N]		3500	3500		6650	6650
Closing time [s]	0.55	0.55	0.9	0.55	0.55	0.9
Opening time [s]	0.55	0.9	0.55	0.55	0.9	0.55
Dead weight of mounted gripper finger max. [kg]	17	17	17	17	17	17
Length of the gripper fingers max. [mm]	400	350	350	350	300	300
Repetition accuracy +/- [mm]	0.05	0.05	0.05	0.05	0.05	0.05
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	6.5	6.5	8	6.5	6.5
Nominal operating pressure [bar]	6	6	6	6	6	6
Operating temperature [°C]	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90
Air volume per cycle [cm³]	2420	4400	4400	2420	4400	4400
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Protected against corrosion	Yes	Yes	Yes	Yes	Yes	Yes
Weight [kg]	33	40.5	40.5	34	41.5	41.5

Technical Data - High Temperature Version

Order no.	GPP5045N-20-A	GPP5045NC-20-A	GPP5045NO-20-A	GPP5045S-20-A	GPP5045SC-20-A	GPP5045SO-20-A
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130

Technical Data - Protector Version

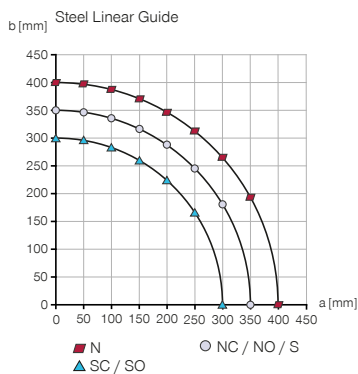
Order no.	GPP5045N-21-A	GPP5045NC-21-A	GPP5045NO-21-A	GPP5045S-21-A	GPP5045SC-21-A	GPP5045SO-21-A
Protection to IEC 60529	IP67*	IP67*	IP67*	IP67*	IP67*	IP67*
Weight [kg]	41.5	49	49	42.5	50	50

Technical Data - High Temperature Protector Version

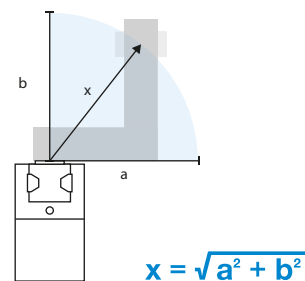
Order no.	GPP5045N-24-A	GPP5045NC-24-A	GPP5045NO-24-A	GPP5045S-24-A	GPP5045SC-24-A	GPP5045SO-24-A
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130
Protection to IEC 60529	IP67*	IP67*	IP67*	IP67*	IP67*	IP67*
Weight [kg]	41.5	49	49	42.5	50	50

*with purged air (max. 0,5 bar)

Maximum gripper finger length



Resulting gripper finger length for determining the gripping force

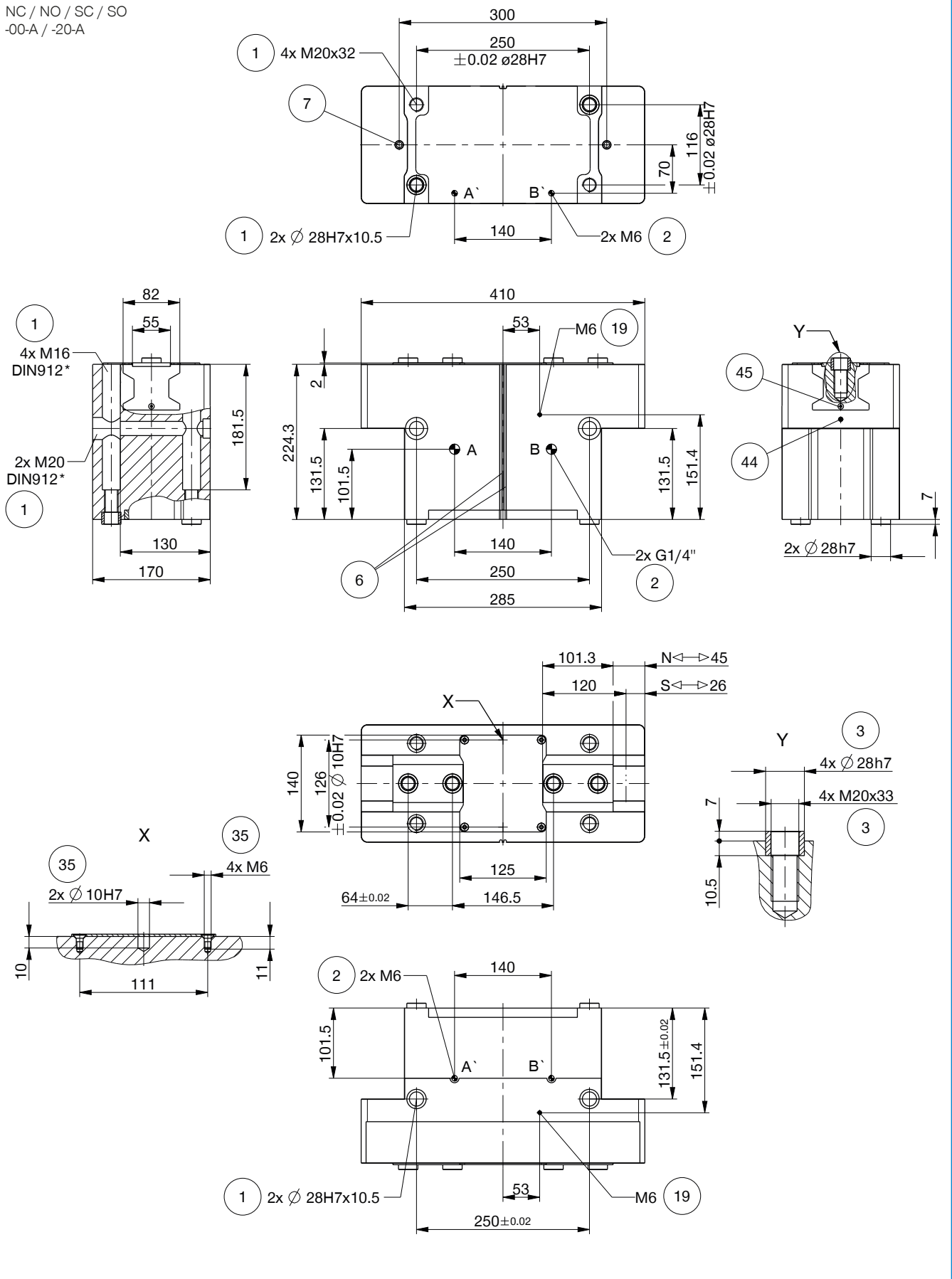


2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5045

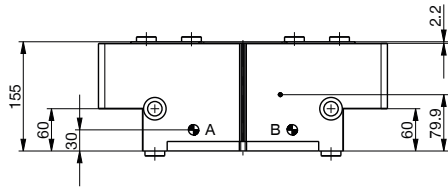
TECHNICAL DRAWINGS

NC / NO / SC / SO
-00-A / -20-A

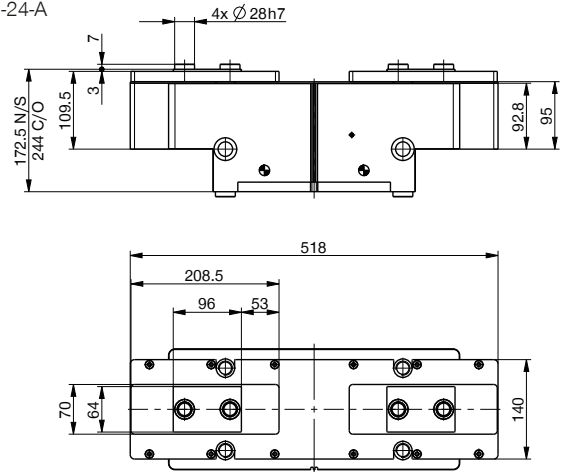


TECHNICAL DRAWINGS

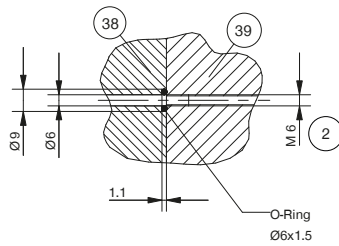
N / S
-00-A / -20-A



N / NC / NO / S / SC / SO
-21-A / -24-A



Hoseless air feed-through M6



- | | |
|-----------------------------------------------------|---------------------------------------|
| ① Gripper attachment | ③⑨ Gripper |
| ② Energy supply | ④④ Clamp for sensor |
| ③ Fixing for gripper finger | ④⑤ Switch cam adjustment |
| ⑥ Integrated slot for magnetic field sensor | Ⓐ Air connection (close) |
| ⑦ Mounting block | Ⓑ Air connection (open) |
| ①⑨ Air purge connection option (max. 0,5 bar) | Ⓐ Air connection, alternative (close) |
| ③⑤ Attachment option for customer-specific fittings | Ⓑ Air connection, alternative (open) |
| ③⑧ Adapter | |

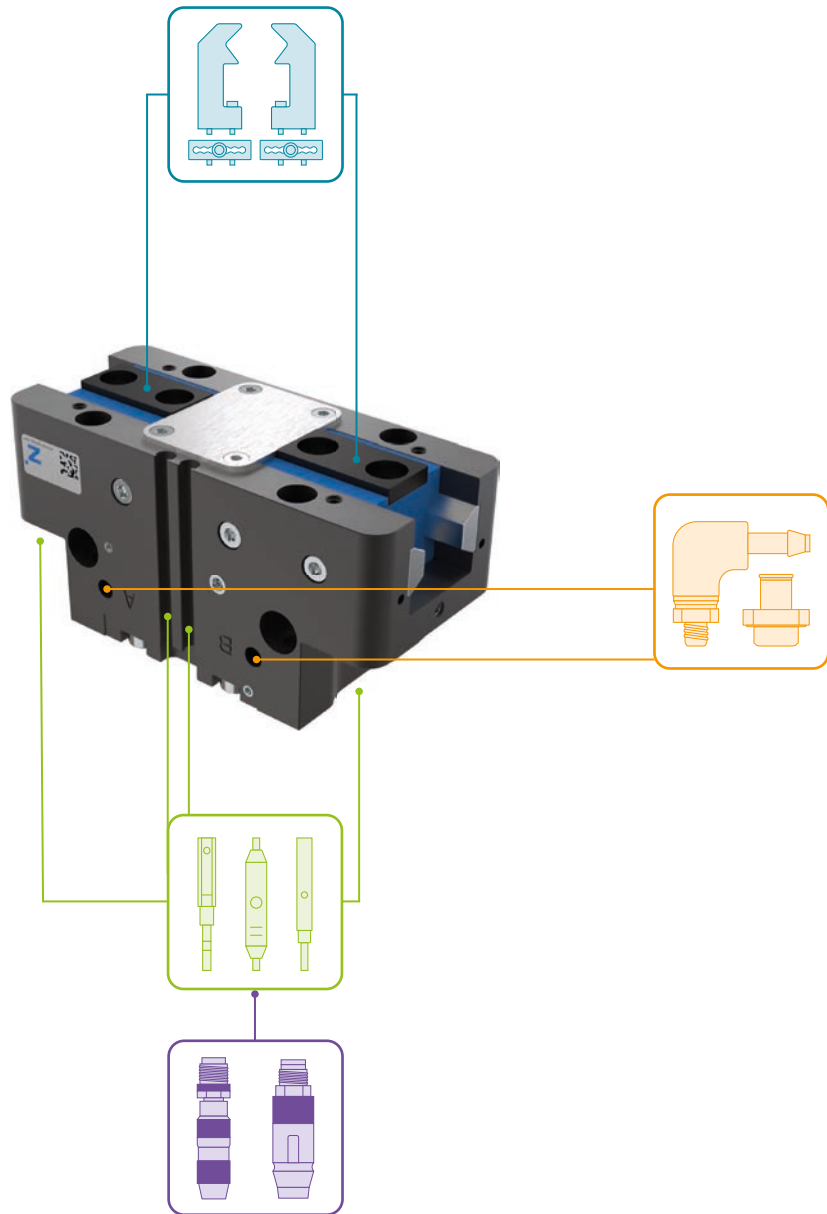


2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5045

1

▶ ACCESORIES



▶ INCLUDED IN DELIVERY



6 [piece]
Centering Disc

036784

▶ RECOMMENDED ACCESSORIES



ENERGY SUPPLY



GV1-4X8
Straight Fittings - Quick
Connect Style



WV1-4X8
Angled Fittings - Quick
Connect Style



DSV1-4
Pressure safety valve



DSV1-4E
Pressure safety valve with
quick exhaust



SENSORS



NJ8-E2S
Inductive proximity switch
- Connector M8



MFS01-S-KHC-P1-PNP
Magnetic field sensor angled,
cable 0.3 m - M8 connector



MFS02-S-KHC-P1-PNP
Magnetic field sensor straight,
cable 0.3 m - M8 connector



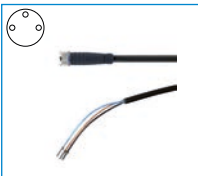
MFS01-S-KHC-P2-PNP
2-point sensor angled, ca-
ble 0.3 m - M8 connector



MFS02-S-KHC-P2-PNP
2-point sensor straight, ca-
ble 0.3 m - M8 connector



CONNECTIONS / OTHER



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

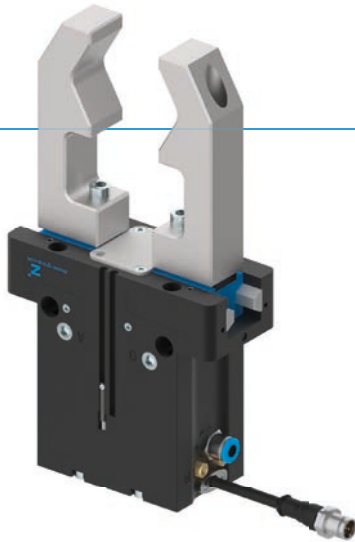


S8-G-3
Plug-in connector customiz-
able Straight - Connector M8

2-JAW PARALLEL GRIPPERS

SERIES GPP5000IL

▶ PRODUCT ADVANTAGES













🔗 IO-Link

“The hybrid”

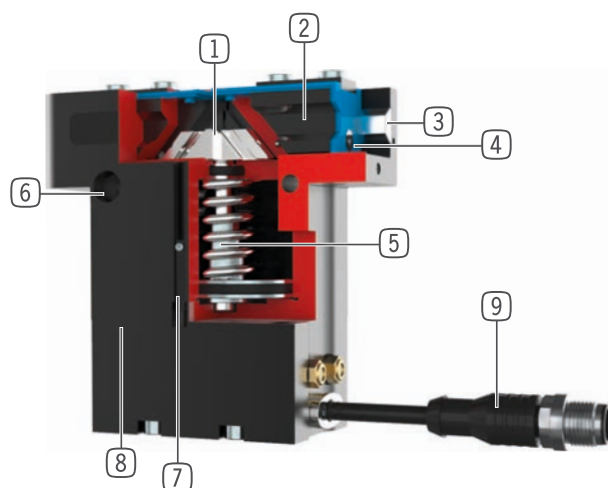
- ▶ Pneumatic drive combined with IO-Link technology
- ▶ Up to 50% reduction in cycle times and up to 90% less compressed air usage
- ▶ Connection over just one pneumatic line and IO-Link cable
- ▶ Integrated valve technology, sensor technology, status display, pressure monitoring and temperature monitoring
- ▶ Part detection down to +/- 0.05 mm for a tolerance range that can be taught for any value
- ▶ 32 workpieces data sets can be programmed
- ▶ Protected from corrosion and sealed in accordance with IP64
- ▶ Up to 30 million cycles without maintenance

▶ SERIES CHARACTERISTICS

Installation size	Version					
GPP50XXIL	N	NC	NO	S	SC	SO
 IO-Link	•	•	•	•	•	•
 Spring closing C		•			•	
 Spring opening O			•			•
 High-strength S				•	•	•
 30 million maintenance-free cycles (max.)	•	•	•	•	•	•
 Integrated sensing	•	•	•	•	•	•
 Integrated valve technology	•	•	•	•	•	•
 Protected against corrosion	•	•	•	•	•	•
 Purged air	•	•	•	•	•	•
 IP64	•	•	•	•	•	•



► BENEFITS IN DETAIL



- ① **Wedge hook mechanism**
 - Supports to absorb high forces and moments
 - Synchronized gripper jaw movement
- ② **Gripper jaw**
 - Gripper fingers mounted using removable centering sleeves
 - Lubricated for life via incorporated lubrication slots
- ③ **Steel Linear Guide**
 - Steel in steel guide
 - Enables use of extremely long gripper fingers
- ④ **Dual lip seal**
 - IP64
 - Prevents grease from being squeezed out, increasing service life
- ⑤ **Integrated gripping force safety device**
 - Spring built into cylinder chamber as an energy store
- ⑥ **Mounting and positioning**
 - Alternatively, on several sides for customized mounting
- ⑦ **Position sensing**
 - integrated Hall sensor
- ⑧ **Integrated valve technology**
 - Activation of the gripper by means of a compressed air supply
- ⑨ **Integrated control module**
 - Single-cable solution via IO-Link
 - Pressure, temperature, position and other parameters are readable

► TECHNICAL DATA

Installation size	Stroke per jaw [mm]	Gripping force [N]	Weight [kg]	IP class
GPP5006IL	3 - 6	330 - 1080	0,45 - 0,53	IP64
GPP5008IL	4 - 8	520 - 1670	0,75 - 0,87	IP64
GPP5010IL	5 - 10	885 - 2890	1,23 - 1,45	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.

2-JAW PARALLEL GRIPPERS

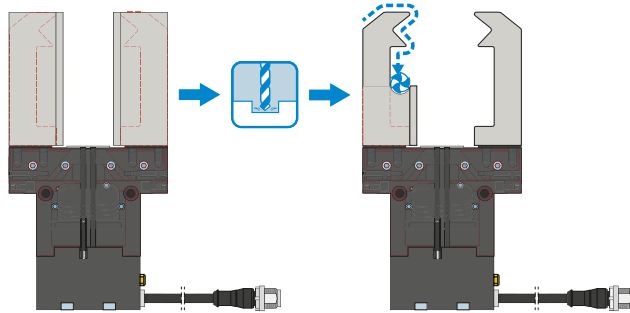
SERIES GPP5000IL FUNCTIONAL DESCRIPTION



GRIPPING COMPONENTS

2

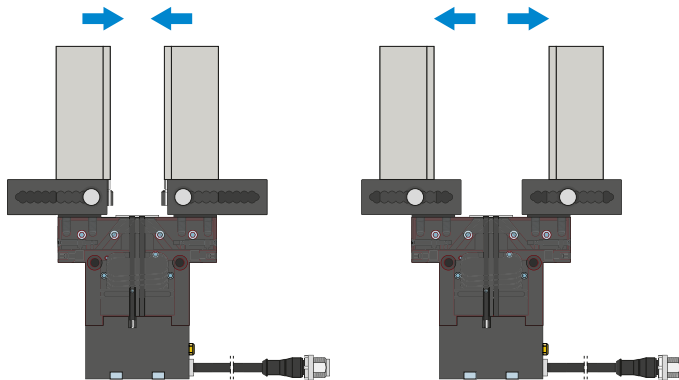
Series GPP5000IL / 2-Jaw Parallel Grippers / pneumatic / Grippers



Universal jaws – UB5000

Can be used immediately or for individual reprocessing

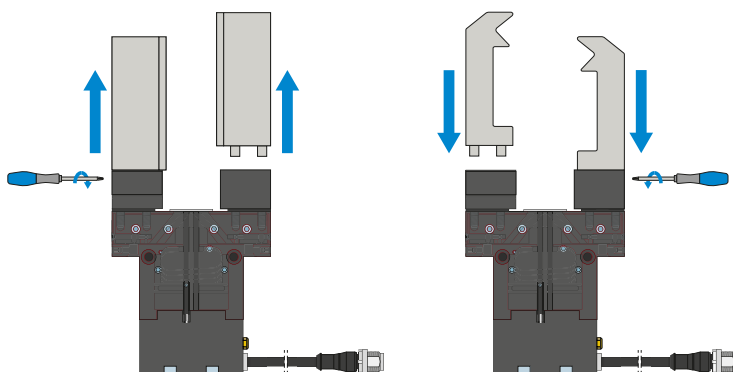
The gripper blanks are available in aluminum (AL) and steel (ST) versions and are installed directly on the gripper using the screws in the scope of delivery. The fits for the centering sleeves are already in place for this purpose. One universal jaw is required for each gripper jaw.



Adjustment jaws – EB5000

For tool-free adaptation of the gripper range

By manually activating the locking mechanism, which is pre-tensioned by a spring, the adjustment jaw can be moved within a grid of detent notches that has a number scale. Depending on the forces and torques that apply, the adjustment jaws are available in aluminum (AL) and steel (ST) versions. One adjustment jaw is required for each gripper jaw.



Interchangeable jaws – WB5000

Enable fast change of individual gripper fingers

For each gripper jaw, a fixed part and at least one loose part set is needed, depending on the number of gripper fingers to be changed. Manual locking via the Torx wrench included in the scope of delivery of the fixed part can take place from two sides.

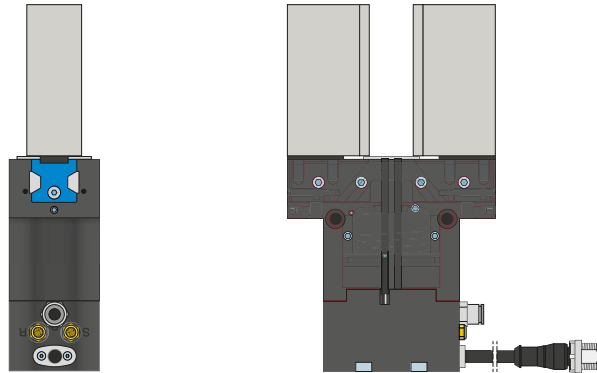


THE GRIPPING COMPONENTS CAN BE COMBINED!

The gripper components listed above can be combined with each other and are compatible with the various series of the 5000 gripper family.

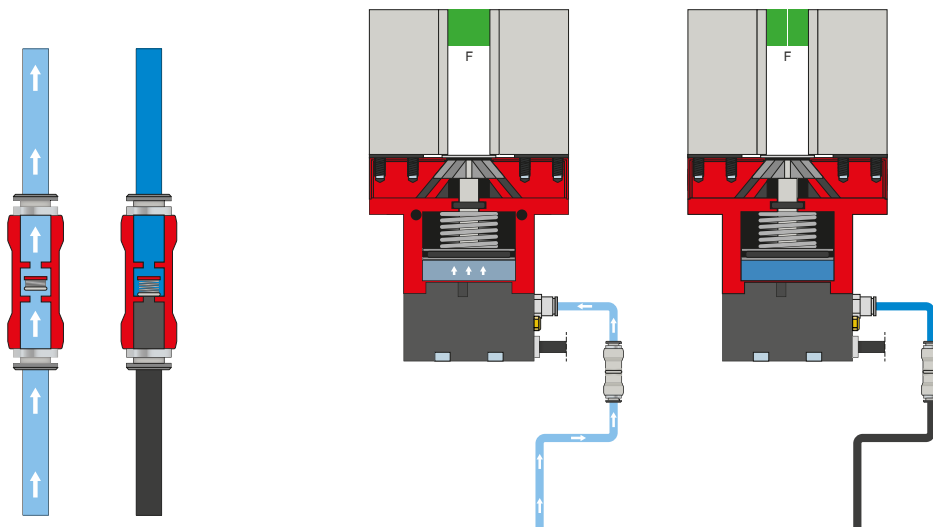


ENERGY SUPPLY



Pneumatic threaded connections

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



Pressure safety valve – DSV

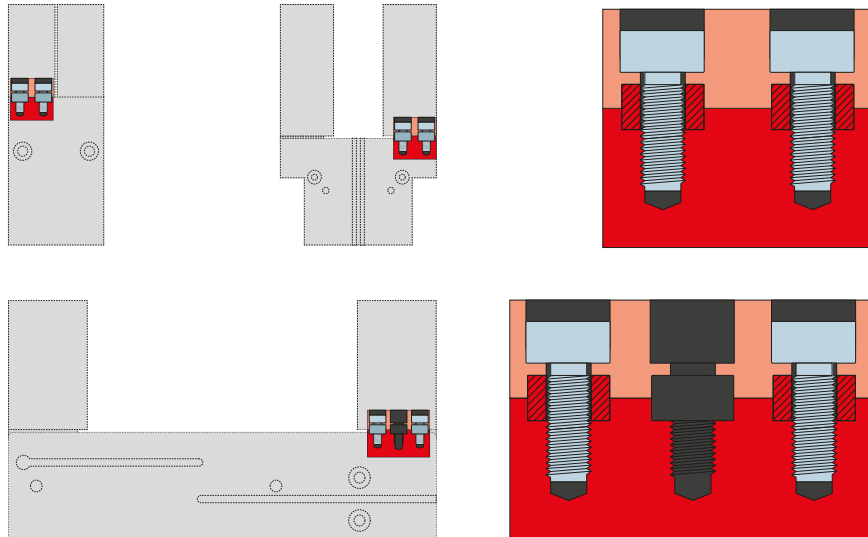
The throttle check valve integrated into the supply air line retains the system pressure in case of EMERGENCY STOP. To ensure the function, the valve must be installed as close to the gripper's air connection as possible. Control voltage and actuator voltage must be maintained for this purpose.

2-JAW PARALLEL GRIPPERS

SERIES GPP5000IL FUNCTIONAL DESCRIPTION



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.

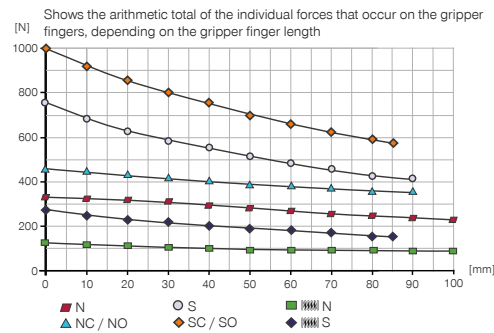
2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5006IL

PRODUCT SPECIFICATIONS

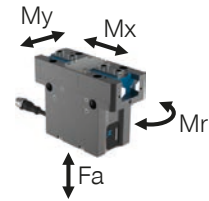


Gripping force diagram



Forces and moments

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



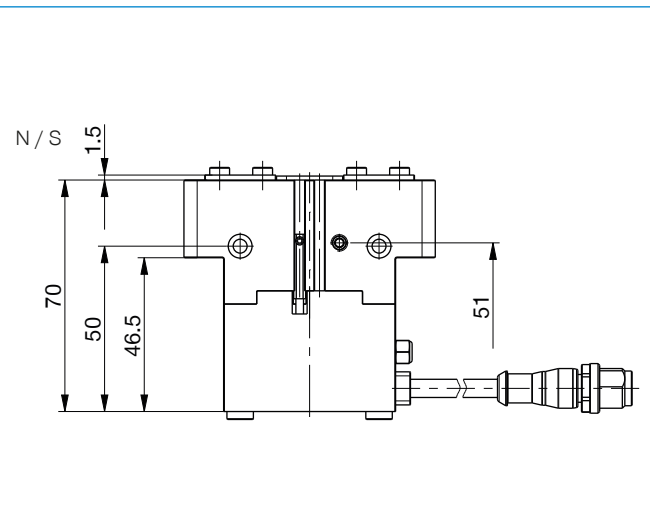
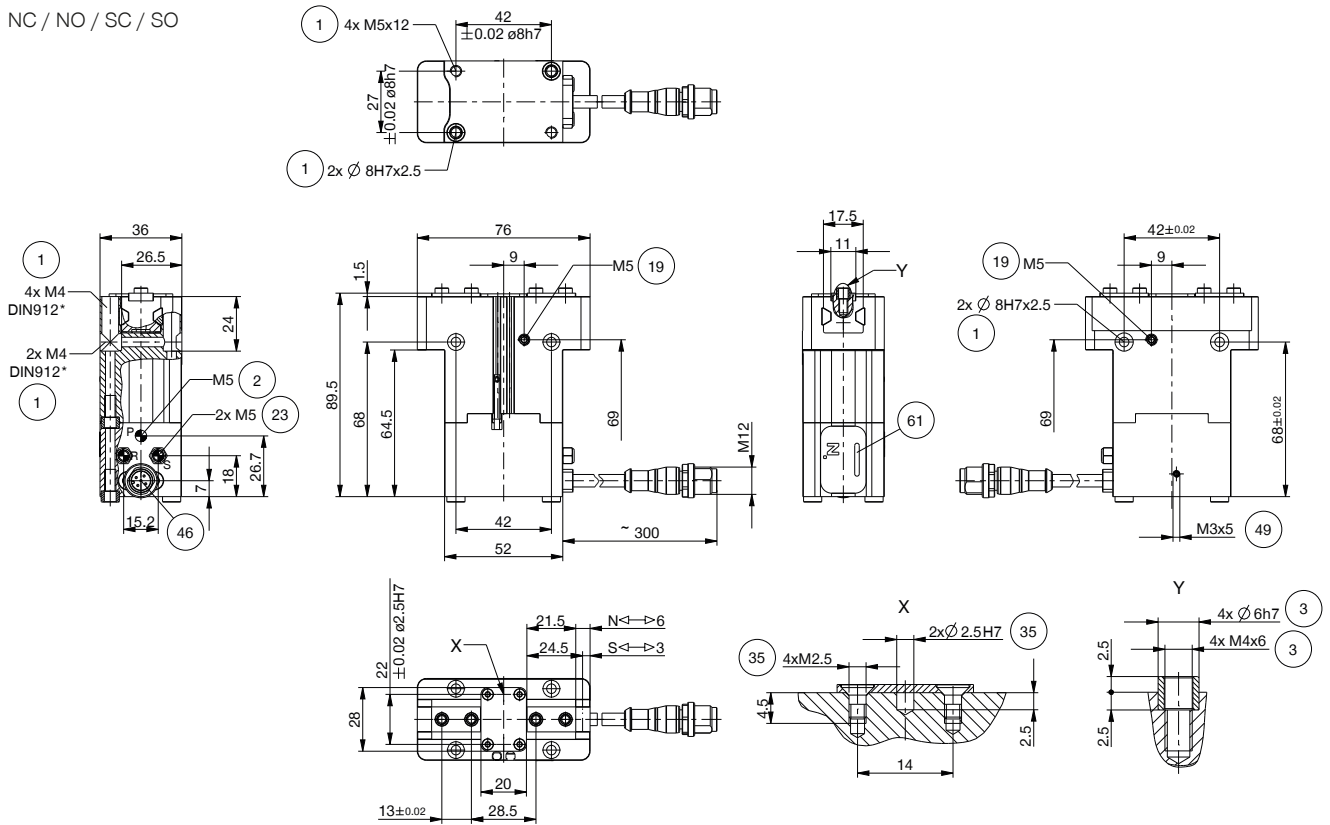
Mr [Nm]	43
Mx [Nm]	70
My [Nm]	46
Fa [N]	1250

TECHNICAL DATA

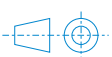
Order no.	Technical data					
	GPP5006N-IL-10-A	GPP5006NC-IL-10-A	GPP5006NO-IL-10-A	GPP5006S-IL-10-A	GPP5006SC-IL-10-A	GPP5006SO-IL-10-A
Control	IO-Link	IO-Link	IO-Link	IO-Link	IO-Link	IO-Link
Stroke per jaw [mm]	6	6	6	3	3	3
Gripping force in closing [N]	330	455		740	1020	
Gripping force in opening [N]	360		485	800		1080
Gripping force secured by spring min. [N]		125	125		280	280
Cycle count max. [cycle/min]	360	250	250	360	250	250
Dead weight of mounted gripper finger max. [kg]	0.4	0.4	0.4	0.4	0.4	0.4
Length of the gripper fingers max. [mm]	100	90	90	90	85	85
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Nominal operating pressure [bar]	6	6	6	6	6	6
Operating temperature [°C]	+5 ... +50	+5 ... +50	+5 ... +50	+5 ... +50	+5 ... +50	+5 ... +50
Air volume per cycle [cm³]	11	24	24	11	24	24
Integrated valve technology	Yes	Yes	Yes	Yes	Yes	Yes
Integrated position sensing	Yes	Yes	Yes	Yes	Yes	Yes
Voltage [V]	24	24	24	24	24	24
Current consumption max. [A]	0.10	0.10	0.10	0.10	0.10	0.10
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	0.45	0.53	0.53	0.45	0.53	0.53

TECHNICAL DRAWINGS

NC / NO / SC / SO



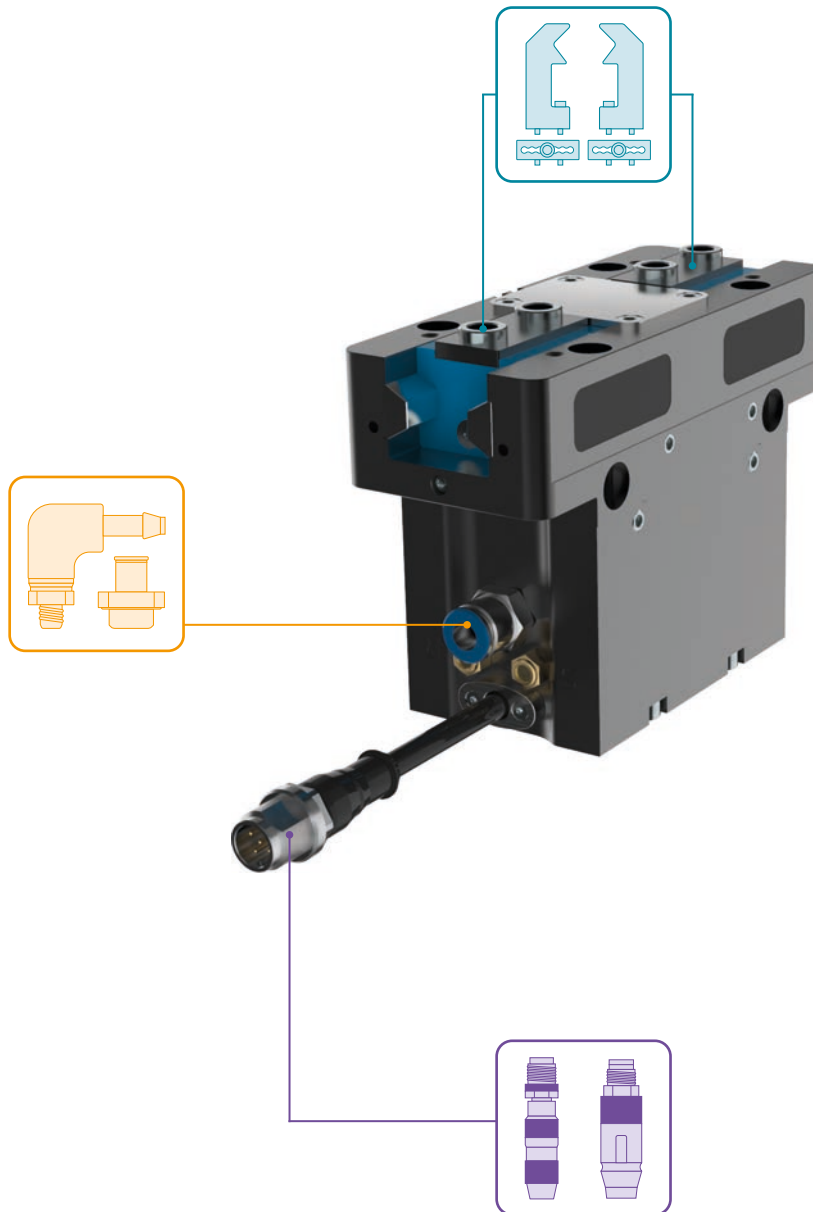
- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑱ Air purge connection option
- ⑳ Ventilation (R+S: In dirty environments, replace filters with actual exhaust hoses and move the exhaust air outlet to a clean environment)
- ㉓ Attachment option for customer-specific fittings
- ④⑥ Energy supply IO-Link (M12, 5-pole)
- ④⑨ Ground
- ⑥① Status display



2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5006IL

▶ ACCESORIES



▶ INCLUDED IN DELIVERY



4 [piece]
Centering Disc

024230



2 [piece]
Centering Disc

024231



2 [piece]
Filters

CFILT00010

▶ RECOMMENDED ACCESSORIES



GRIPPING COMPONENTS



UB5006AL
Universal jaw aluminium



UB5006ST
Universal jaw steel



EB5006AL
Aluminum adjustment jaw



EB5006ST
Steel adjustment jaw



WB5006L
Changeable jaw, loose-part-set



WB5006F
Changeable jaw, fix-part



ENERGY SUPPLY



GVM5
Straight Fittings - Quick Connect Style



DSV06
Return valve



CONNECTIONS / OTHER



KAG500IL
Plug-in connector straight
5 m - plug, socket M12



SCM-C-00-00-A
Smart Communication
Module

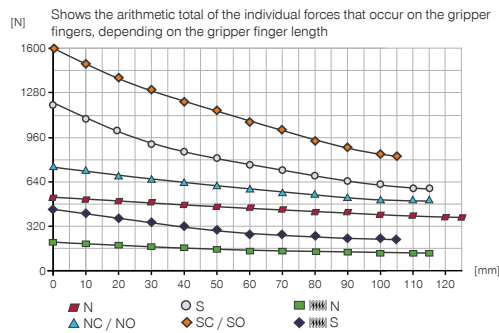
2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5008IL

PRODUCT SPECIFICATIONS

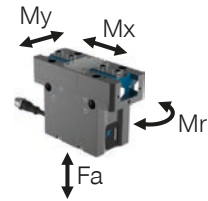


Gripping force diagram



Forces and moments

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



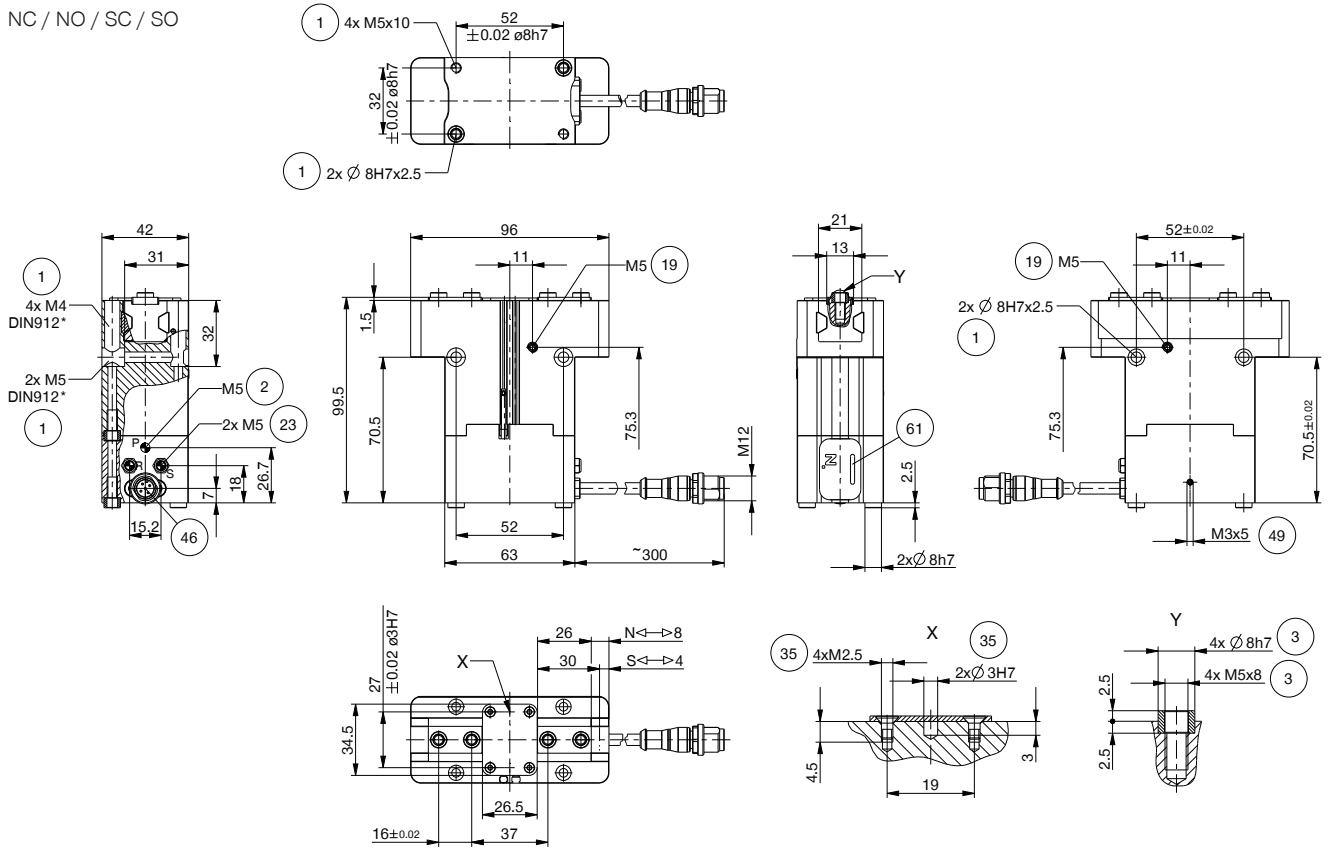
Mr [Nm]	60
Mx [Nm]	105
My [Nm]	65
Fa [N]	1900

TECHNICAL DATA

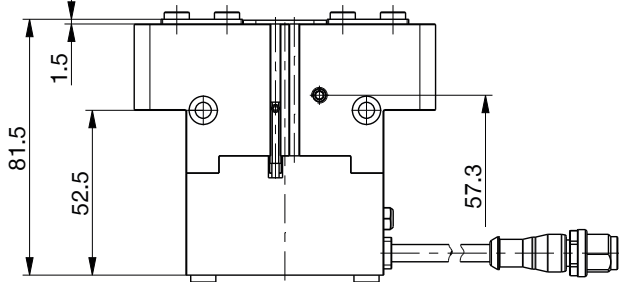
Order no.	Technical data					
	GPP5008N-IL-10-A	GPP5008NC-IL-10-A	GPP5008NO-IL-10-A	GPP5008S-IL-10-A	GPP5008SC-IL-10-A	GPP5008SO-IL-10-A
Control	IO-Link	IO-Link	IO-Link	IO-Link	IO-Link	IO-Link
Stroke per jaw [mm]	8	8	8	4	4	4
Gripping force in closing [N]	520	710		1150	1580	
Gripping force in opening [N]	560		750	1240		1670
Gripping force secured by spring min. [N]		190	190		430	430
Cycle count max. [cycle/min]	290	200	200	290	200	200
Dead weight of mounted gripper finger max. [kg]	0.7	0.7	0.7	0.7	0.7	0.7
Length of the gripper fingers max. [mm]	125	115	115	115	105	105
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Nominal operating pressure [bar]	6	6	6	6	6	6
Operating temperature [°C]	+5 ... +50	+5 ... +50	+5 ... +50	+5 ... +50	+5 ... +50	+5 ... +50
Air volume per cycle [cm³]	22	43	43	22	43	43
Integrated valve technology	Yes	Yes	Yes	Yes	Yes	Yes
Integrated position sensing	Yes	Yes	Yes	Yes	Yes	Yes
Voltage [V]	24	24	24	24	24	24
Current consumption max. [A]	0.10	0.10	0.10	0.10	0.10	0.10
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	0.75	0.87	0.87	0.75	0.87	0.87

TECHNICAL DRAWINGS

NC / NO / SC / SO



N / S

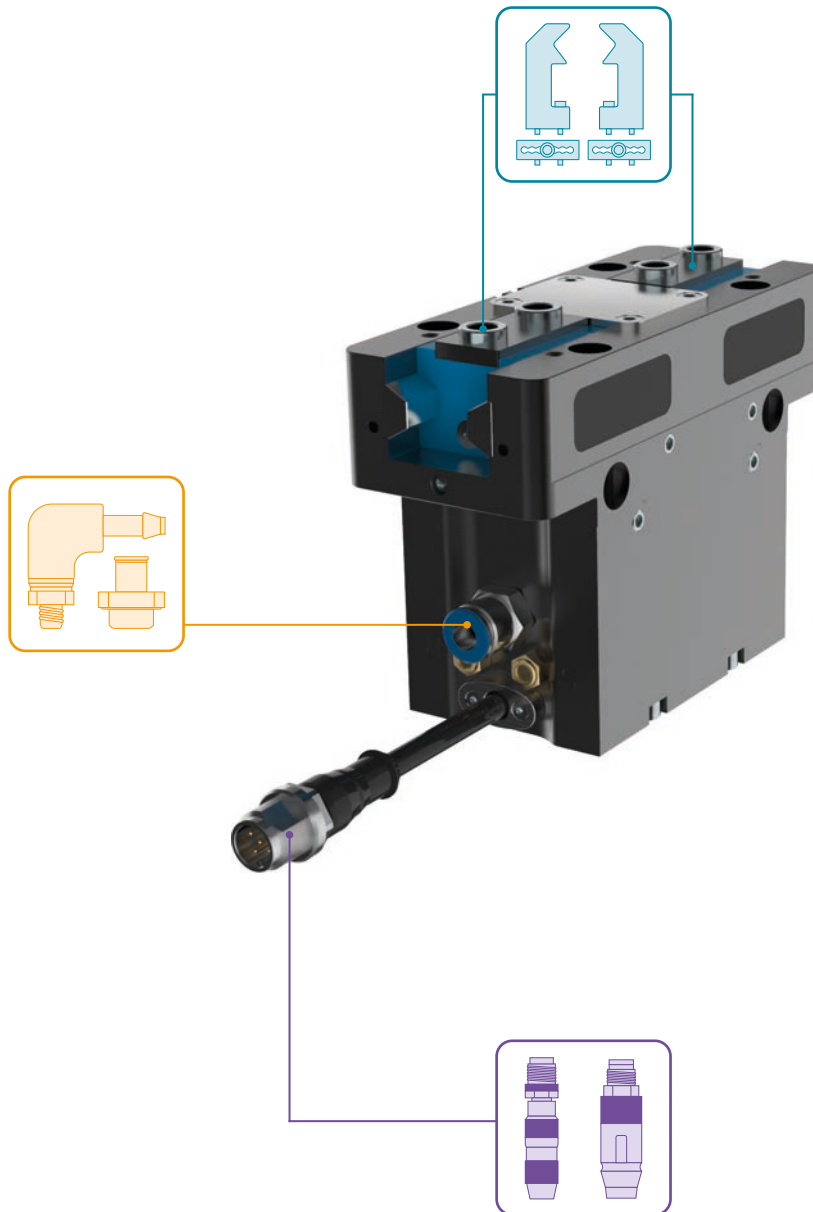


- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑱ Air purge connection option
- ⑳ Ventilation (R+S: In dirty environments, replace filters with actual exhaust hoses and move the exhaust air outlet to a clean environment)
- ㉓ Attachment option for customer-specific fittings
- ④⑥ Energy supply IO-Link (M12, 5-pole)
- ④⑨ Ground
- ⑥① Status display

2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5008IL

▶ ACCESORIES



▶ INCLUDED IN DELIVERY



6 [piece]
Centering Disc

024231



2 [piece]
Filters

CFILT00010

▶ RECOMMENDED ACCESSORIES



GRIPPING COMPONENTS



UB5008AL
Universal jaw aluminium



UB5008ST
Universal jaw steel



EB5008AL
Aluminum adjustment jaw



EB5008ST
Steel adjustment jaw



WB5008L
Changeable jaw, loose-part-set



WB5008F
Changeable jaw, fix-part



ENERGY SUPPLY



GVM5
Straight Fittings - Quick Connect Style



DSV06
Return valve



CONNECTIONS / OTHER



KAG500IL
Plug-in connector straight
5 m - plug, socket M12



SCM-C-00-00-A
Smart Communication
Module

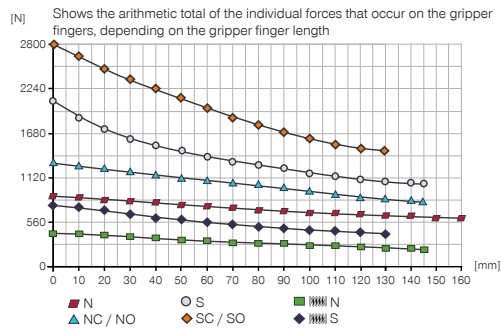
2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5010IL

PRODUCT SPECIFICATIONS

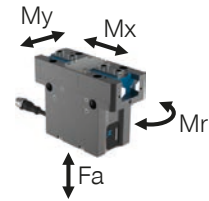


Gripping force diagram



Forces and moments

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



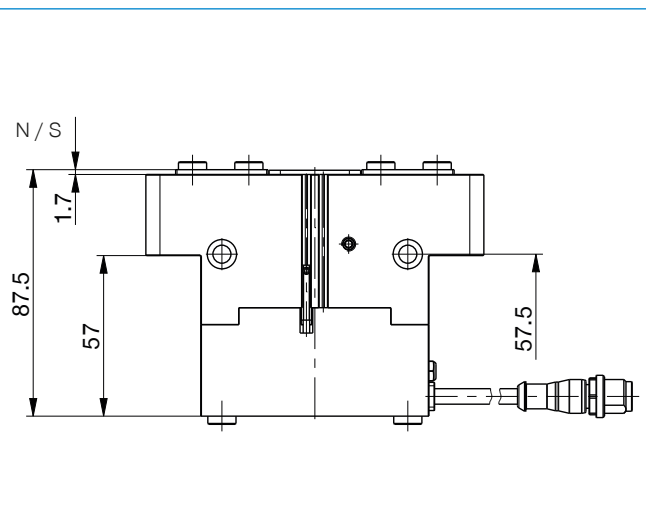
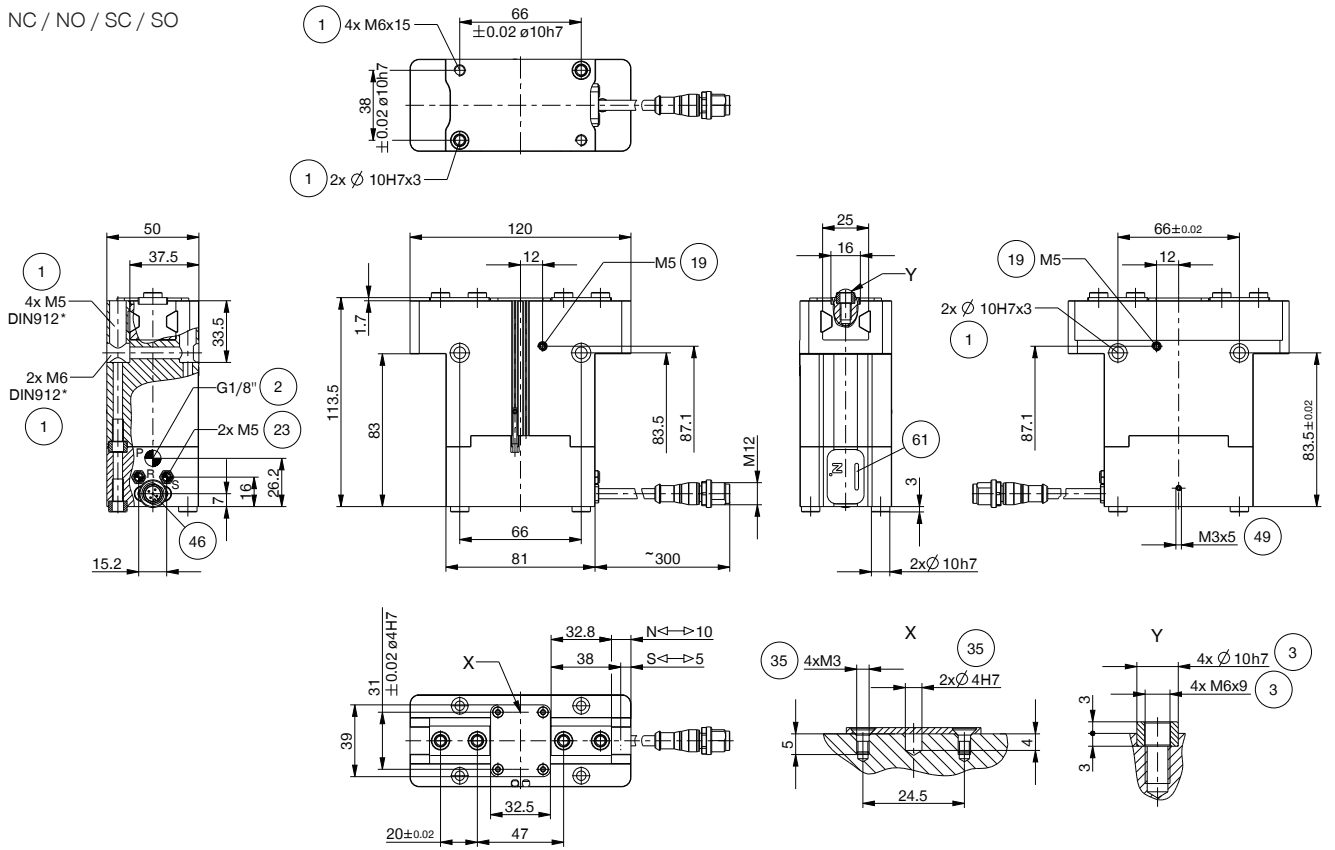
Mr [Nm]	75
Mx [Nm]	125
My [Nm]	95
Fa [N]	2700

TECHNICAL DATA

Order no.	Technical data					
	GPP5010N-IL-10-A	GPP5010NC-IL-10-A	GPP5010NO-IL-10-A	GPP5010S-IL-10-A	GPP5010SC-IL-10-A	GPP5010SO-IL-10-A
Control	IO-Link	IO-Link	IO-Link	IO-Link	IO-Link	IO-Link
Stroke per jaw [mm]	10	10	10	5	5	5
Gripping force in closing [N]	885	1260		1940	2750	
Gripping force in opening [N]	945		1320	2080		2890
Gripping force secured by spring min. [N]		375	375		810	810
Cycle count max. [cycle/min]	230	150	150	230	150	150
Dead weight of mounted gripper finger max. [kg]	1.3	1.3	1.3	1.3	1.3	1.3
Length of the gripper fingers max. [mm]	160	145	145	145	130	130
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Nominal operating pressure [bar]	6	6	6	6	6	6
Operating temperature [°C]	+5 ... +50	+5 ... +50	+5 ... +50	+5 ... +50	+5 ... +50	+5 ... +50
Air volume per cycle [cm³]	44	92	92	44	92	92
Integrated valve technology	Yes	Yes	Yes	Yes	Yes	Yes
Integrated position sensing	Yes	Yes	Yes	Yes	Yes	Yes
Voltage [V]	24	24	24	24	24	24
Current consumption max. [A]	0.10	0.10	0.10	0.10	0.10	0.10
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	1.23	1.45	1.45	1.23	1.45	1.45

TECHNICAL DRAWINGS

NC / NO / SC / SO

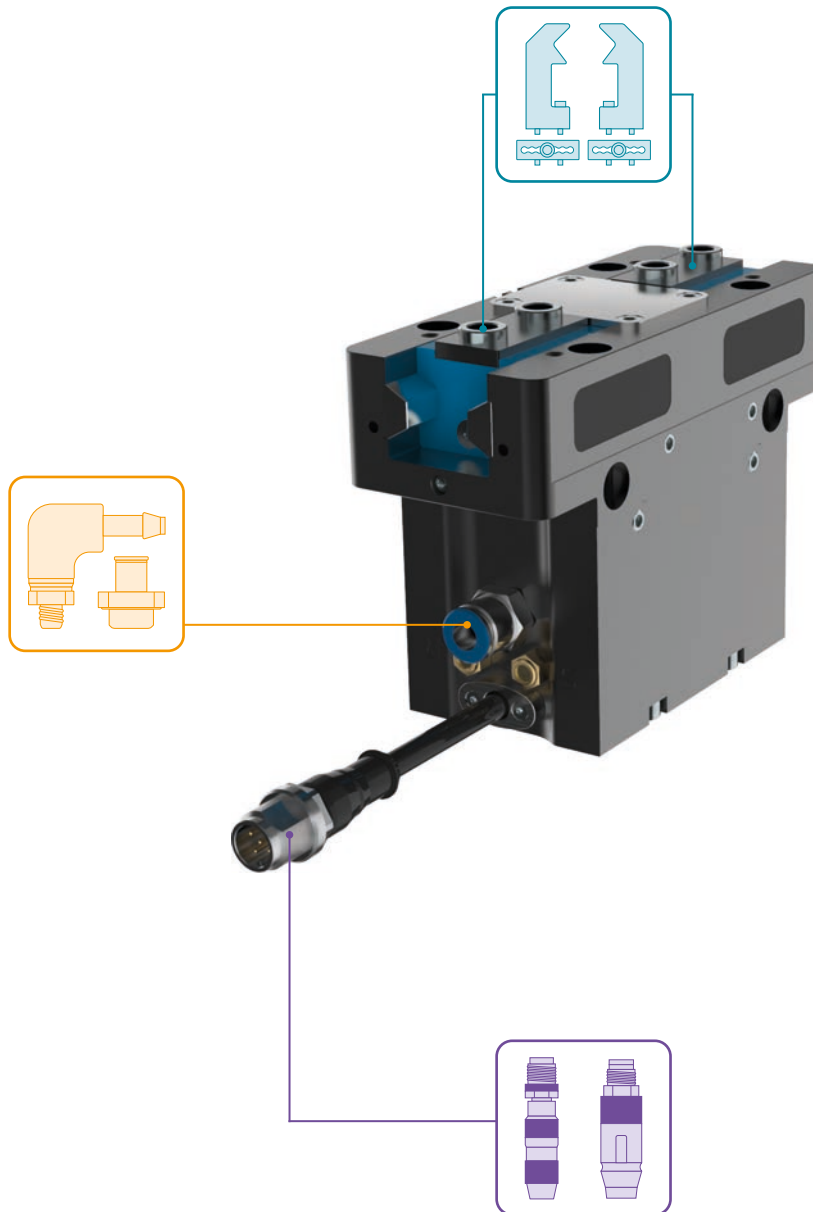


- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑱ Air purge connection option
- ⑲ Ventilation (R+S: In dirty environments, replace filters with actual exhaust hoses and move the exhaust air outlet to a clean environment)
- ⑳ Attachment option for customer-specific fittings
- ⑳ Energy supply IO-Link (M12, 5-pole)
- ⑳ Ground
- ⑳ Status display

2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5010IL

▶ ACCESORIES



▶ INCLUDED IN DELIVERY



6 [piece]
Centering Disc

018187



2 [piece]
Filters

CFILT00010

▶ RECOMMENDED ACCESSORIES



GRIPPING COMPONENTS



UB5010AL
Universal jaw aluminium



UB5010ST
Universal jaw steel



EB5010AL
Aluminum adjustment jaw



EB5010ST
Steel adjustment jaw



WB5010L
Changeable jaw, loose-part-set



WB5010F
Changeable jaw, fix-part



ENERGY SUPPLY



GV1-8X8
Straight Fittings - Quick Connect Style



CONNECTIONS / OTHER



KAG500IL
Plug-in connector straight
5 m - plug, socket M12



SCM-C-00-00-A
Smart Communication
Module

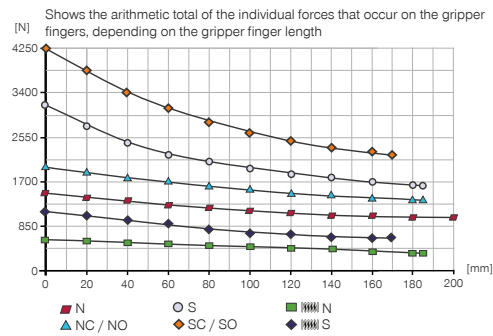
2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5013IL

PRODUCT SPECIFICATIONS

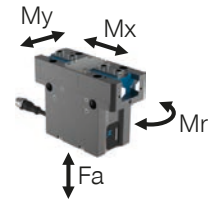


Gripping force diagram



Forces and moments

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



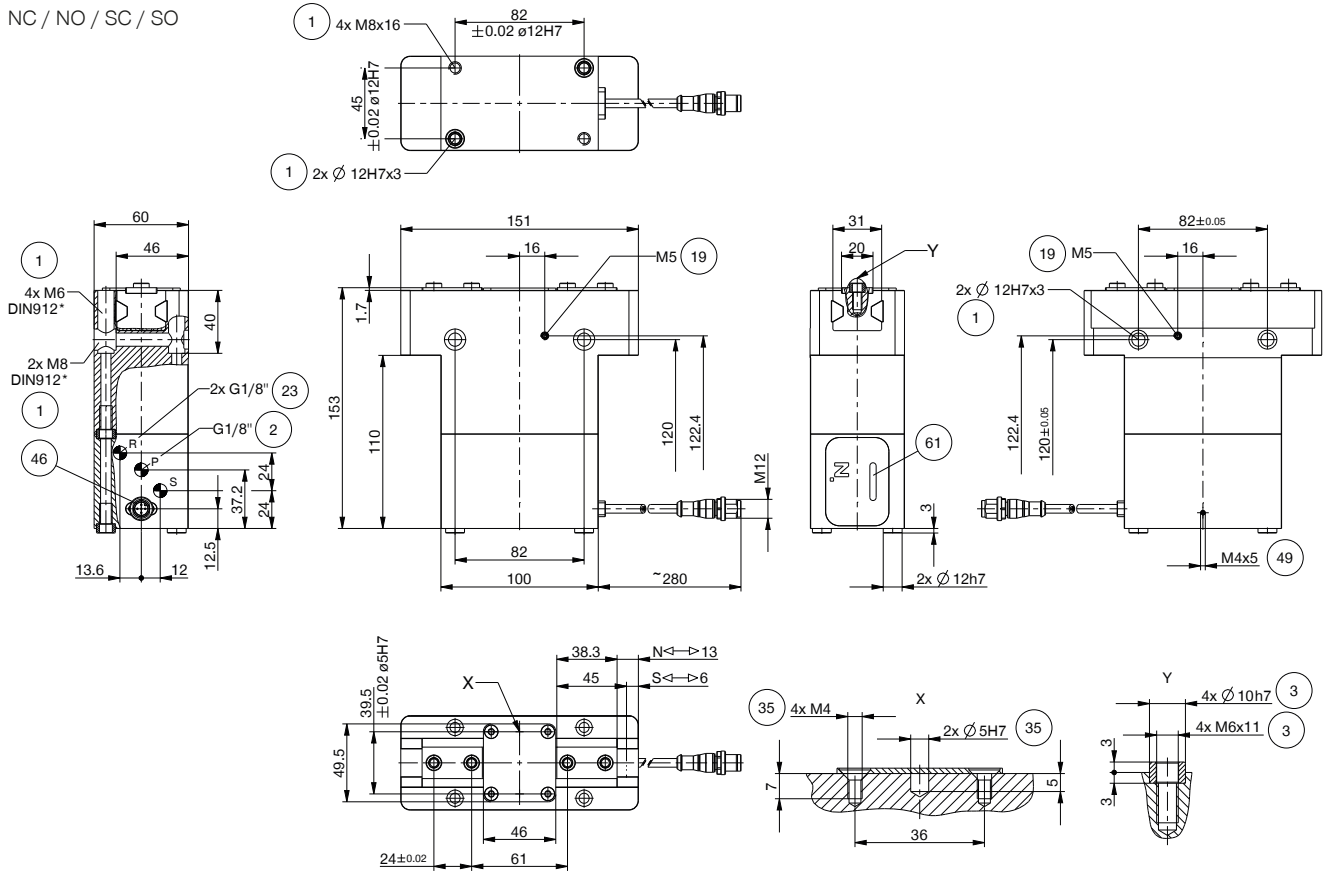
Mr [Nm]	110
Mx [Nm]	150
My [Nm]	130
Fa [N]	3300

TECHNICAL DATA

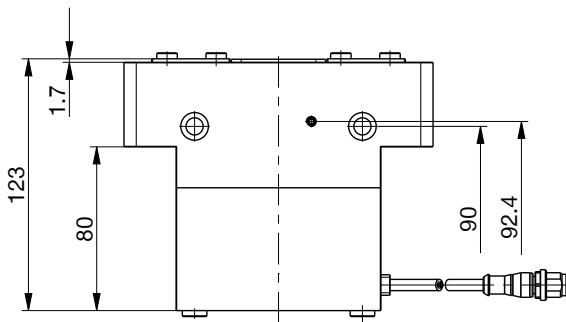
Order no.	Technical data					
	GPP5013N-IL-10-A	GPP5013NC-IL-10-A	GPP5013NO-IL-10-A	GPP5013S-IL-10-A	GPP5013SC-IL-10-A	GPP5013SO-IL-10-A
Control	IO-Link	IO-Link	IO-Link	IO-Link	IO-Link	IO-Link
Stroke per jaw [mm]	13	13	13	6	6	6
Gripping force in closing [N]	1410	1920		3100	4220	
Gripping force in opening [N]	1490		1860	3280		4400
Gripping force secured by spring min. [N]		510	510		1120	1120
Dead weight of mounted gripper finger max. [kg]	2.4	2.4	2.4	2.4	2.4	2.4
Length of the gripper fingers max. [mm]	200	185	185	185	170	170
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Nominal operating pressure [bar]	6	6	6	6	6	6
Operating temperature [°C]	+5 ... +50	+5 ... +50	+5 ... +50	+5 ... +50	+5 ... +50	+5 ... +50
Air volume per cycle [cm³]	88	171	171	88	171	171
Integrated valve technology	Yes	Yes	Yes	Yes	Yes	Yes
Integrated position sensing	Yes	Yes	Yes	Yes	Yes	Yes
Voltage [V]	24	24	24	24	24	24
Current consumption max. [A]	0.12	0.12	0.12	0.12	0.12	0.12
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	2.5	2.9	2.9	2.5	2.9	2.9

TECHNICAL DRAWINGS

NC / NO / SC / SO



N / S

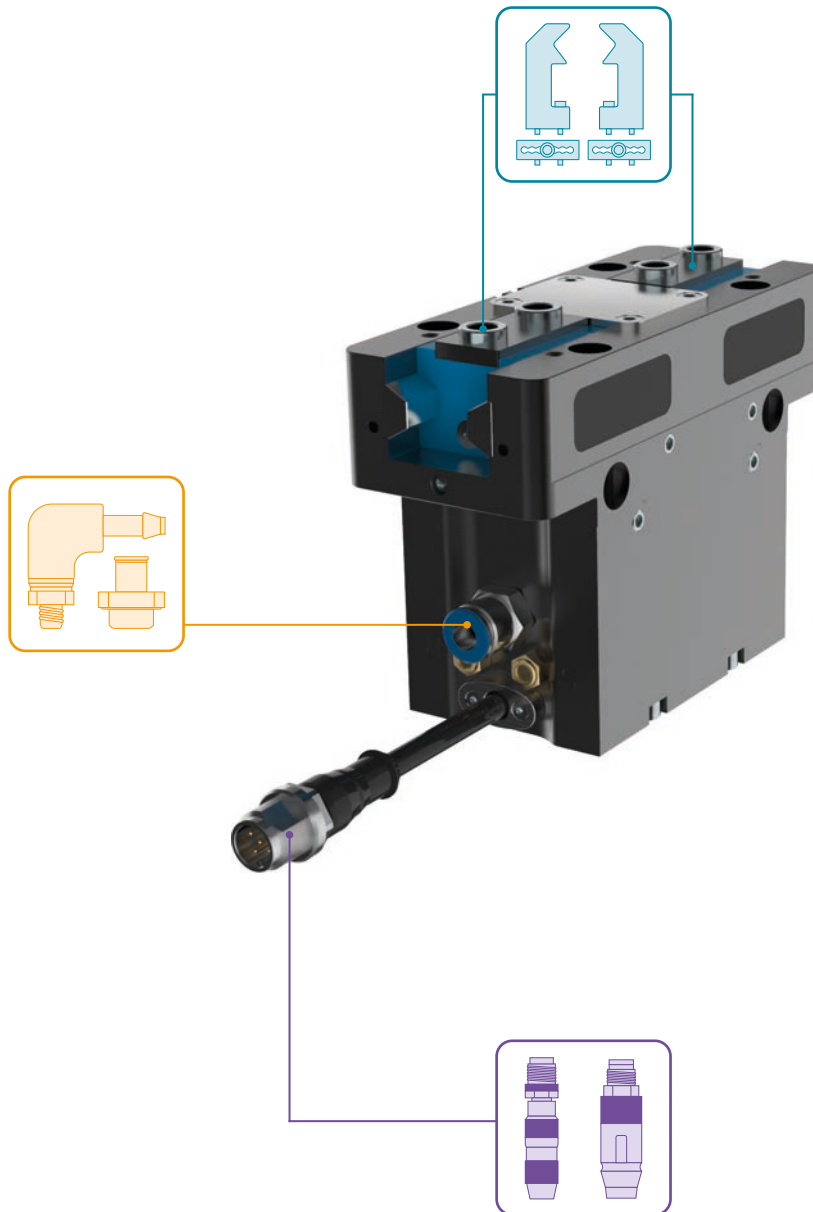


- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑱ Air purge connection option
- ⑳ Ventilation (R+S: In dirty environments, replace filters with actual exhaust hoses and move the exhaust air outlet to a clean environment)
- ㉓ Attachment option for customer-specific fittings
- ④⑥ Energy supply IO-Link (M12, 5-pole)
- ④⑨ Ground
- ⑥① Status display

2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5013IL

▶ ACCESORIES



▶ INCLUDED IN DELIVERY



6 [piece]
Centering Disc

018187



2 [piece]
Filters

CFILT00011

▶ RECOMMENDED ACCESSORIES



GRIPPING COMPONENTS



UB5013AL
Universal jaw aluminium



UB5013ST
Universal jaw steel



EB5013AL
Aluminum adjustment jaw



EB5013ST
Steel adjustment jaw



WB5013L
Changeable jaw, loose-part-set



WB5013F
Changeable jaw, fix-part



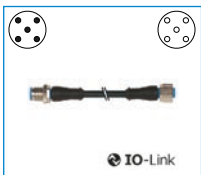
ENERGY SUPPLY



GV1-8X8
Straight Fittings - Quick Connect Style



CONNECTIONS / OTHER



KAG500IL
Plug-in connector straight
5 m - plug, socket M12



SCM-C-00-00-A
Smart Communication
Module

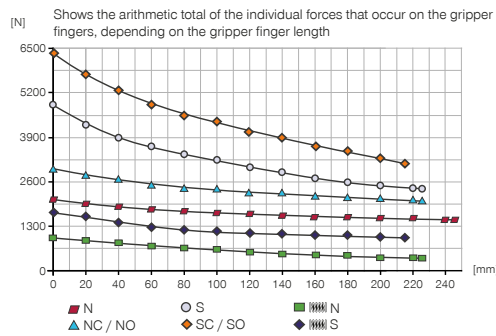
2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5016IL

▶ PRODUCT SPECIFICATIONS

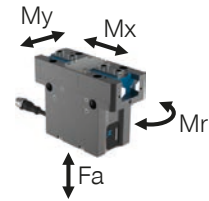


▶ Gripping force diagram



▶ Forces and moments

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



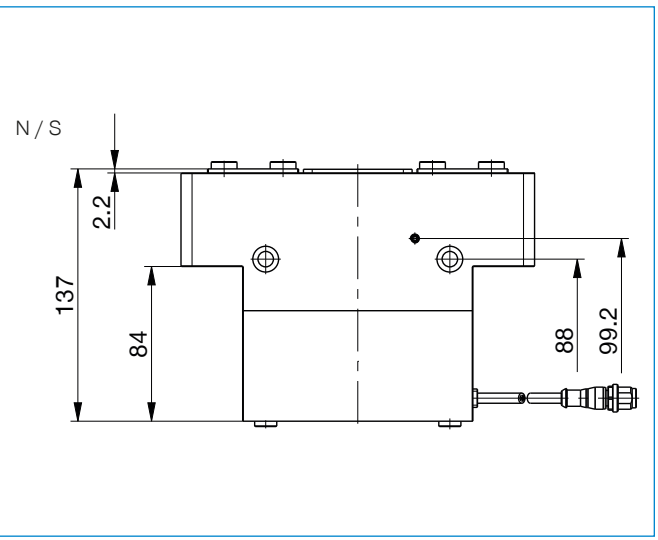
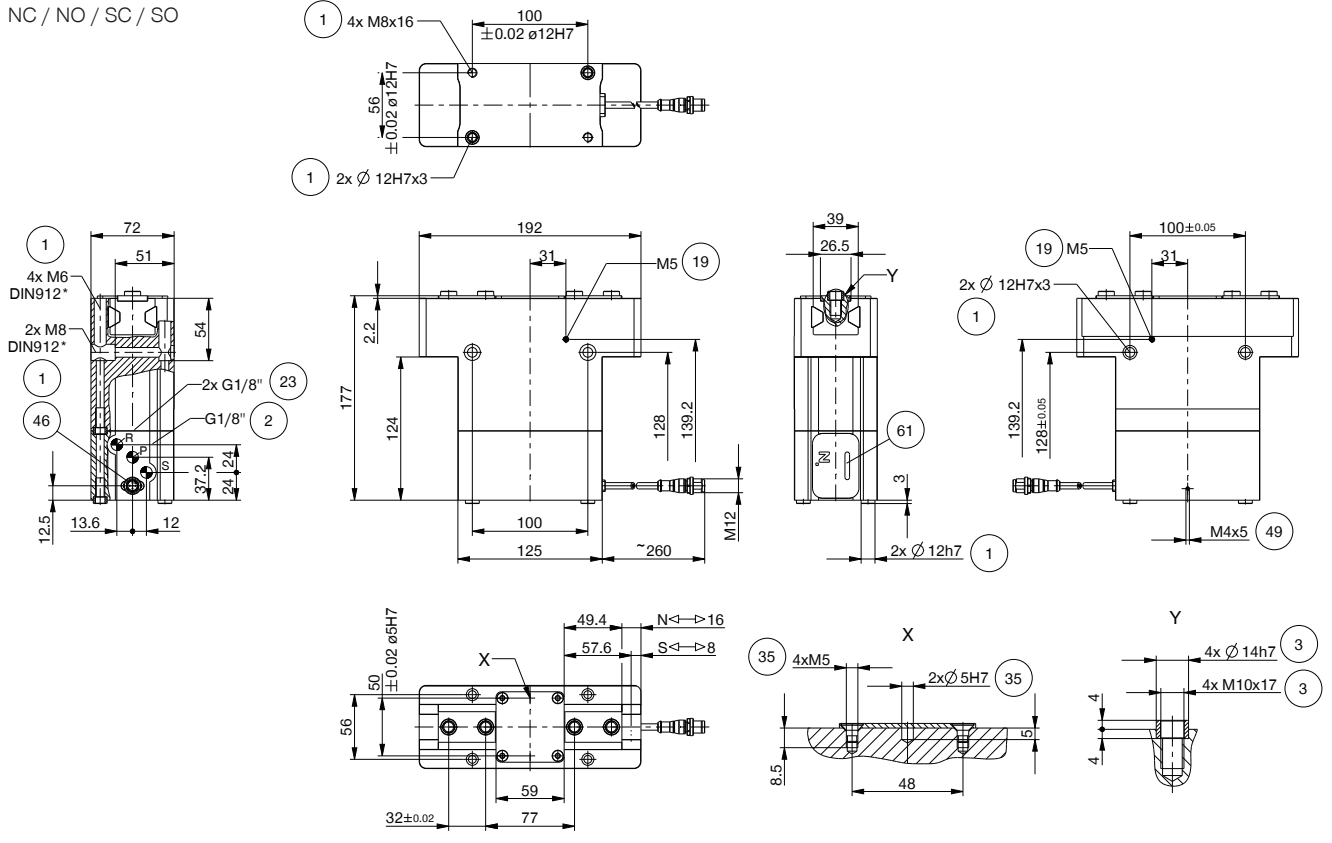
Mr [Nm]	145
Mx [Nm]	195
My [Nm]	185
Fa [N]	5200

▶ TECHNICAL DATA

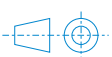
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	GPP5016N-IL-10-A	GPP5016NC-IL-10-A	GPP5016NO-IL-10-A	GPP5016S-IL-10-A	GPP5016SC-IL-10-A	GPP5016SO-IL-10-A
Control	IO-Link	IO-Link	IO-Link	IO-Link	IO-Link	IO-Link
Stroke per jaw [mm]	16	16	16	8	8	8
Gripping force in closing [N]	2090	2860		4610	6310	
Gripping force in opening [N]	2220		2990	4900		6600
Gripping force secured by spring min. [N]		770	770		1700	1700
Dead weight of mounted gripper finger max. [kg]	3.8	3.8	3.8	3.8	3.8	3.8
Length of the gripper fingers max. [mm]	245	225	225	225	215	215
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Nominal operating pressure [bar]	6	6	6	6	6	6
Operating temperature [°C]	+5 ... +50	+5 ... +50	+5 ... +50	+5 ... +50	+5 ... +50	+5 ... +50
Air volume per cycle [cm³]	166	332	332	166	332	332
Integrated valve technology	Yes	Yes	Yes	Yes	Yes	Yes
Integrated position sensing	Yes	Yes	Yes	Yes	Yes	Yes
Voltage [V]	24	24	24	24	24	24
Current consumption max. [A]	0.12	0.12	0.12	0.12	0.12	0.12
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	4.4	5.1	5.1	4.4	5.1	5.1

TECHNICAL DRAWINGS

NC / NO / SC / SO



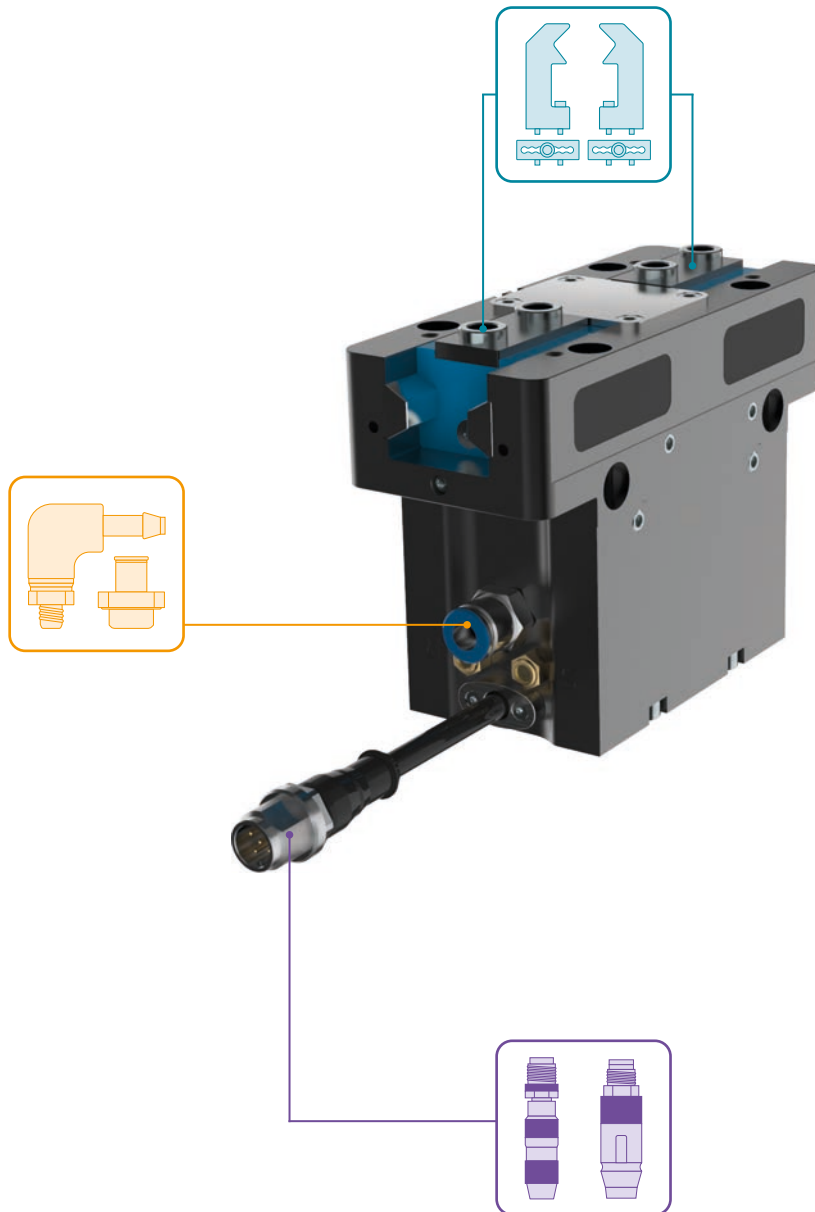
- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑱ Air purge connection option
- ⑳ Ventilation (R+S: In dirty environments, replace filters with actual exhaust hoses and move the exhaust air outlet to a clean environment)
- ㉓ Attachment option for customer-specific fittings
- ④⑥ Energy supply IO-Link (M12, 5-pole)
- ④⑨ Ground
- ⑥① Status display



2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5016IL

▶ ACCESORIES



▶ INCLUDED IN DELIVERY



6 [piece]
Centering Disc

019387



2 [piece]
Filters

CFILT00011

▶ RECOMMENDED ACCESSORIES



GRIPPING COMPONENTS



UB5016AL
Universal jaw aluminium



UB5016ST
Universal jaw steel



EB5016AL
Aluminum adjustment jaw



EB5016ST
Steel adjustment jaw



WB5016L
Changeable jaw, loose-part-set



WB5016F
Changeable jaw, fix-part



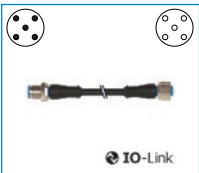
ENERGY SUPPLY



GV1-8X8
Straight Fittings - Quick Connect Style



CONNECTIONS / OTHER



KAG500IL
Plug-in connector straight
5 m - plug, socket M12



SCM-C-00-00-A
Smart Communication
Module

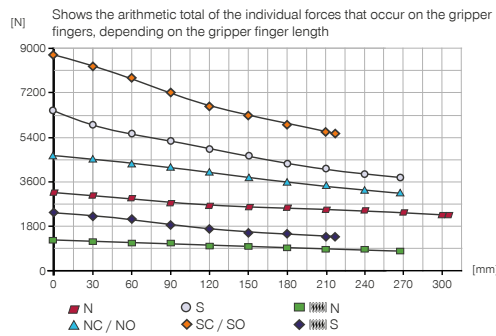
2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5025IL

▶ PRODUCT SPECIFICATIONS

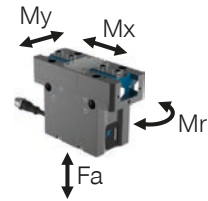


▶ Gripping force diagram



▶ Forces and moments

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



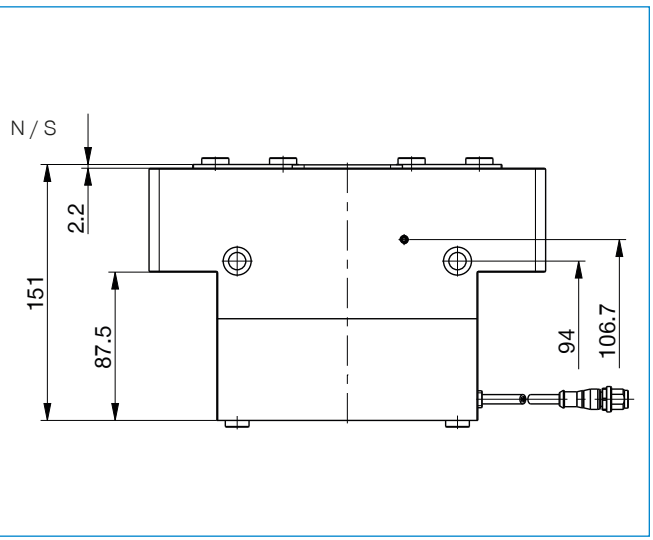
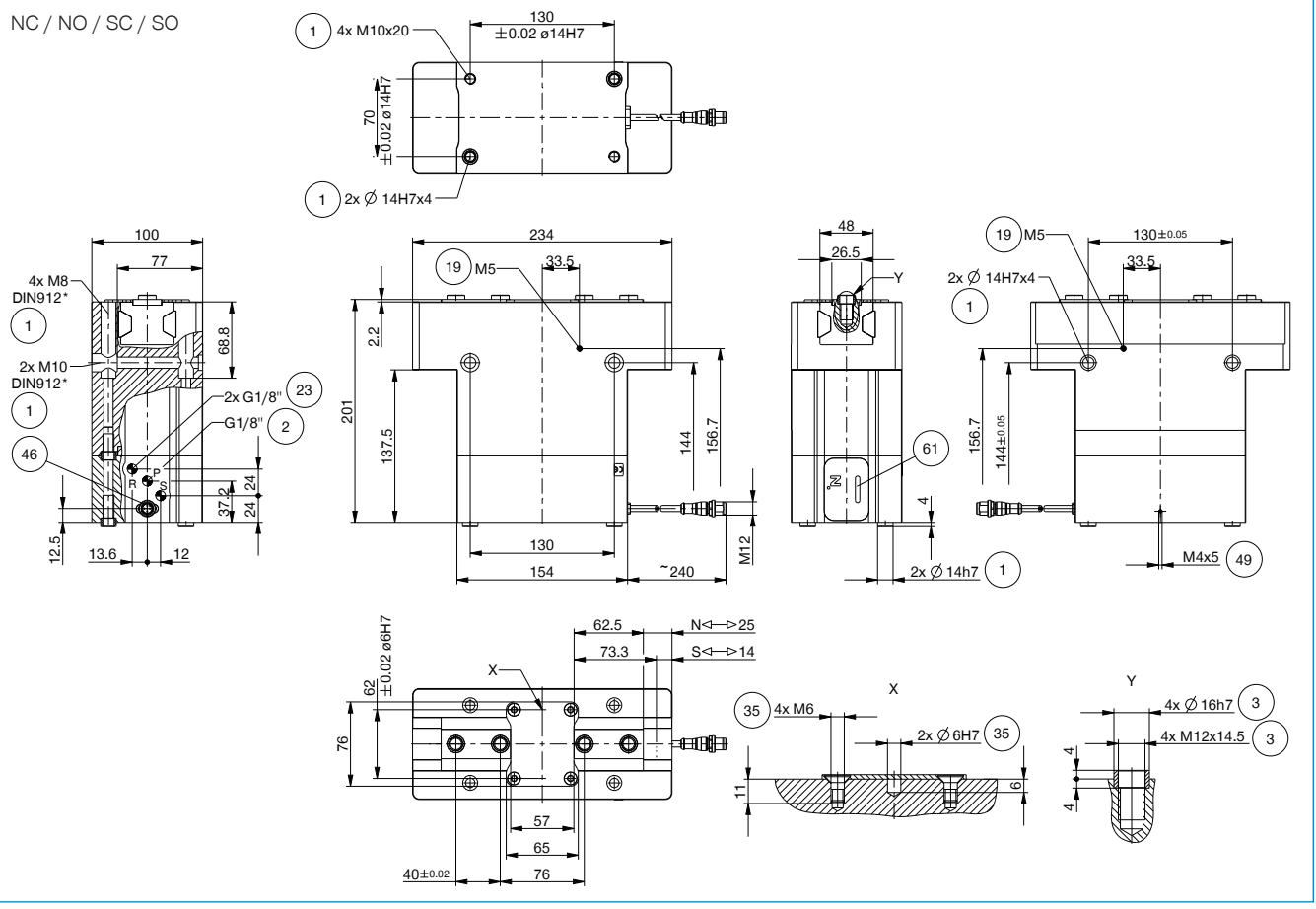
Mr [Nm]	180
Mx [Nm]	205
My [Nm]	225
Fa [N]	7500

▶ TECHNICAL DATA

Order no.	▶ Technical data					
	GPP5025N-IL-10-A	GPP5025NC-IL-10-A	GPP5025NO-IL-10-A	GPP5025S-IL-10-A	GPP5025SC-IL-10-A	GPP5025SO-IL-10-A
Control	IO-Link	IO-Link	IO-Link	IO-Link	IO-Link	IO-Link
Stroke per jaw [mm]	25	25	25	14	14	14
Gripping force in closing [N]	3280	4510		6360	8730	
Gripping force in opening [N]	3490		4710	6760		9130
Gripping force secured by spring min. [N]		1220	1220		2370	2370
Dead weight of mounted gripper finger max. [kg]	7	7	7	7	7	7
Length of the gripper fingers max. [mm]	310	265	265	265	220	220
Repetition accuracy +/- [mm]	0.02	0.02	0.02	0.02	0.02	0.02
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Nominal operating pressure [bar]	6	6	6	6	6	6
Operating temperature [°C]	+5 ... +50	+5 ... +50	+5 ... +50	+5 ... +50	+5 ... +50	+5 ... +50
Air volume per cycle [cm³]	420	830	830	420	830	830
Integrated valve technology	Yes	Yes	Yes	Yes	Yes	Yes
Integrated position sensing	Yes	Yes	Yes	Yes	Yes	Yes
Voltage [V]	24	24	24	24	24	24
Current consumption max. [A]	0.12	0.12	0.12	0.12	0.12	0.12
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	8.5	10.4	10.4	8.5	10.4	10.4

TECHNICAL DRAWINGS

NC / NO / SC / SO



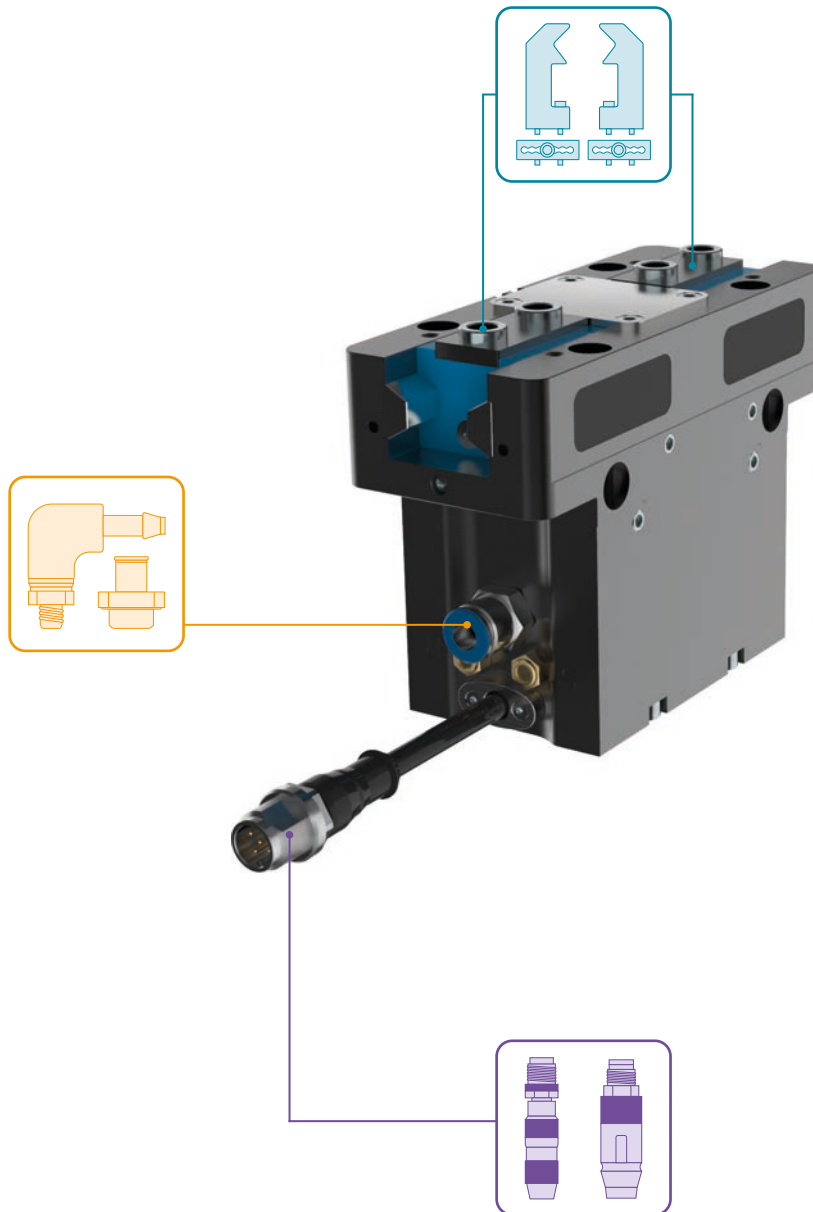
- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑱ Air purge connection option
- ⑳ Ventilation (R+S: In dirty environments, replace filters with actual exhaust hoses and move the exhaust air outlet to a clean environment)
- ㉓ Attachment option for customer-specific fittings
- ㉔ Energy supply IO-Link (M12, 5-pole)
- ㉕ Ground
- ㉖ Status display



2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5025IL

▶ ACCESORIES



▶ INCLUDED IN DELIVERY



6 [piece]
Centering Disc

030529



2 [piece]
Filters

CFILT00011

▶ RECOMMENDED ACCESSORIES



GRIPPING COMPONENTS



UB5025AL
Universal jaw aluminium



UB5025ST
Universal jaw steel



EB5025AL
Aluminum adjustment jaw



EB5025ST
Steel adjustment jaw



WB5025L
Changeable jaw, loose-part-set



WB5025F
Changeable jaw, fix-part



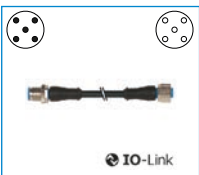
ENERGY SUPPLY



GV1-8X8
Straight Fittings - Quick Connect Style



CONNECTIONS / OTHER



KAG500IL
Plug-in connector straight
5 m - plug, socket M12

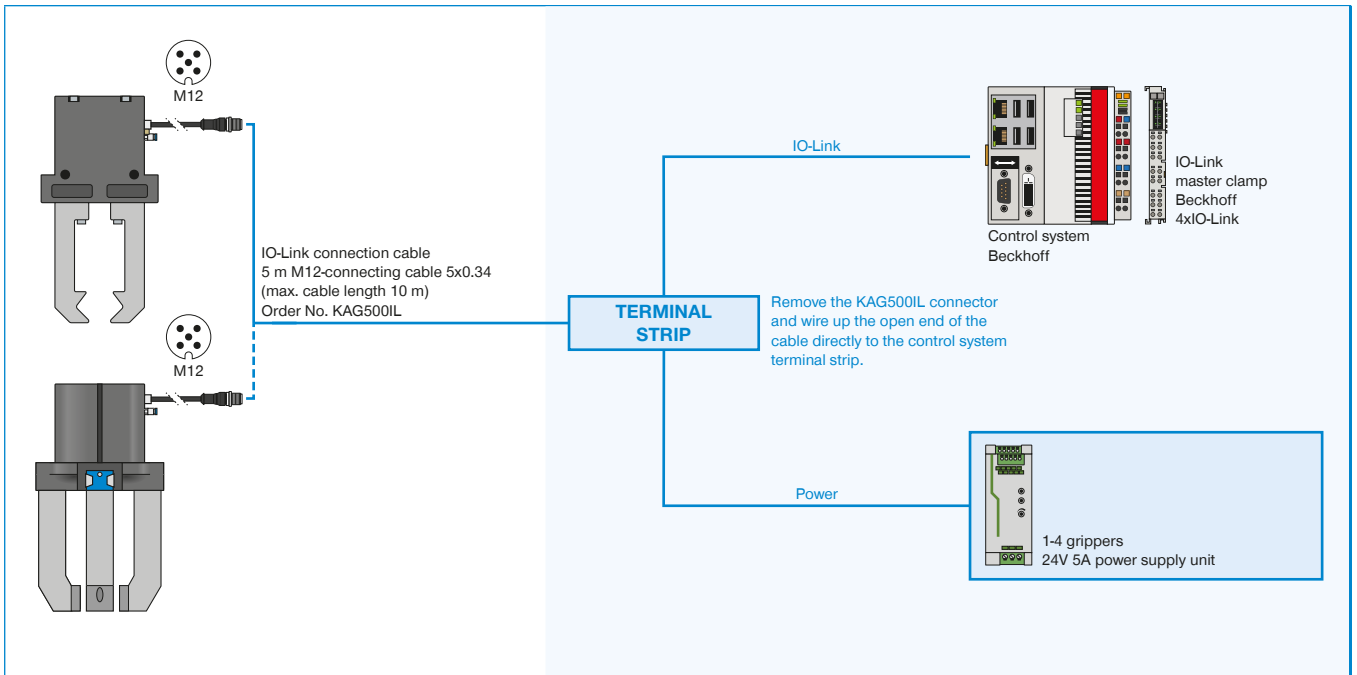


SCM-C-00-00-A
Smart Communication
Module

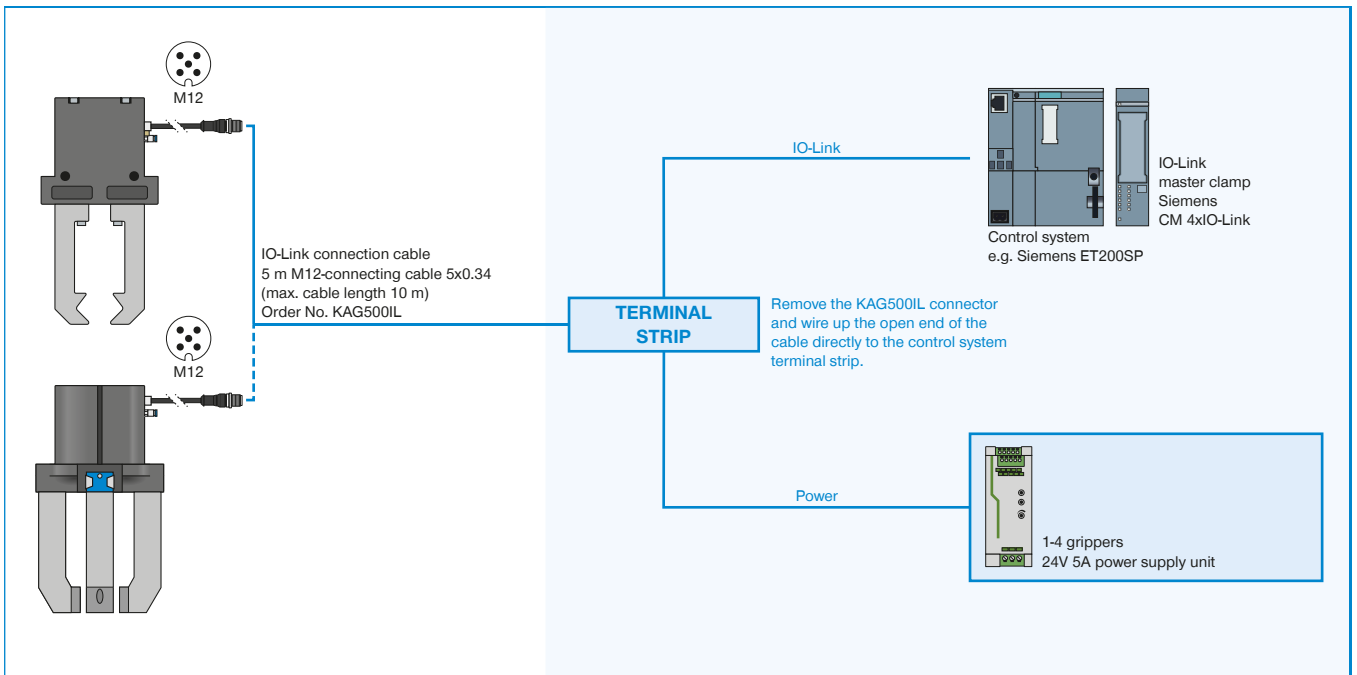
SECURED CONFIGURATION EXAMPLES

GPP5000IL / GPD5000IL SERIES

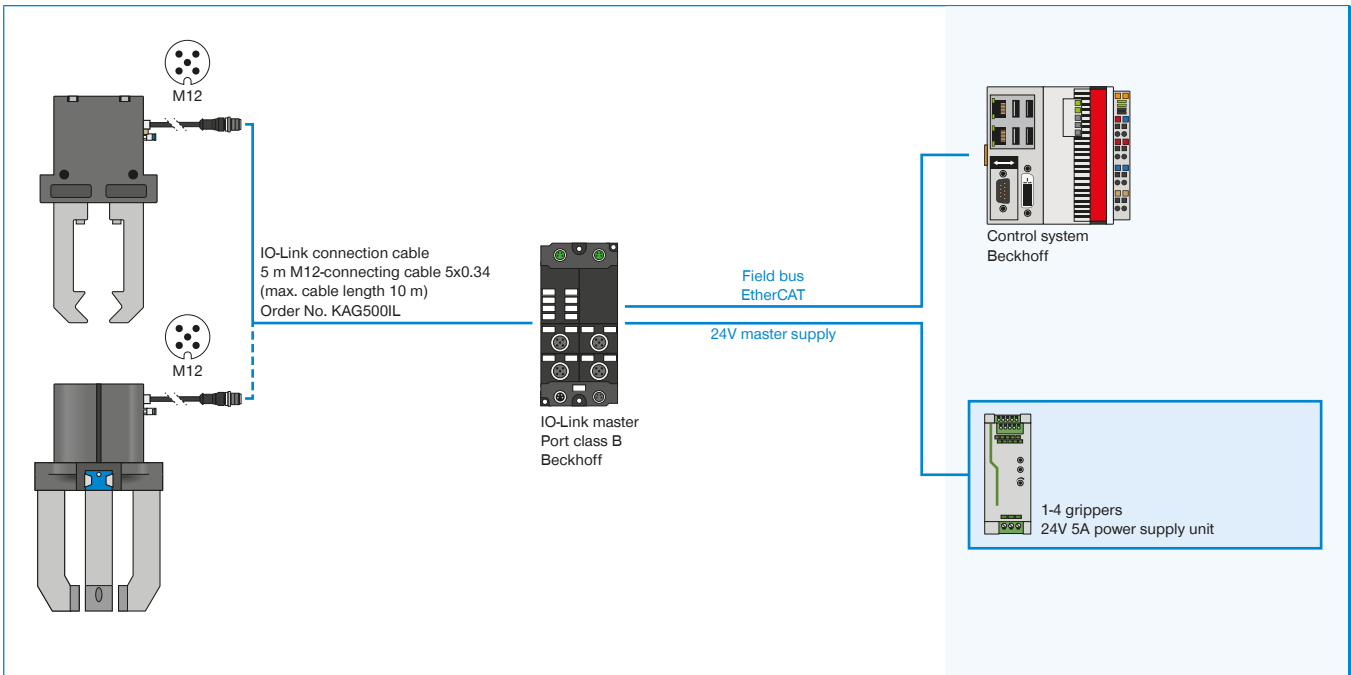
▶ GPP5000IL / GPD5000IL (IO-LINK) WIRING TO CONTROL CABINET (BECKHOFF)



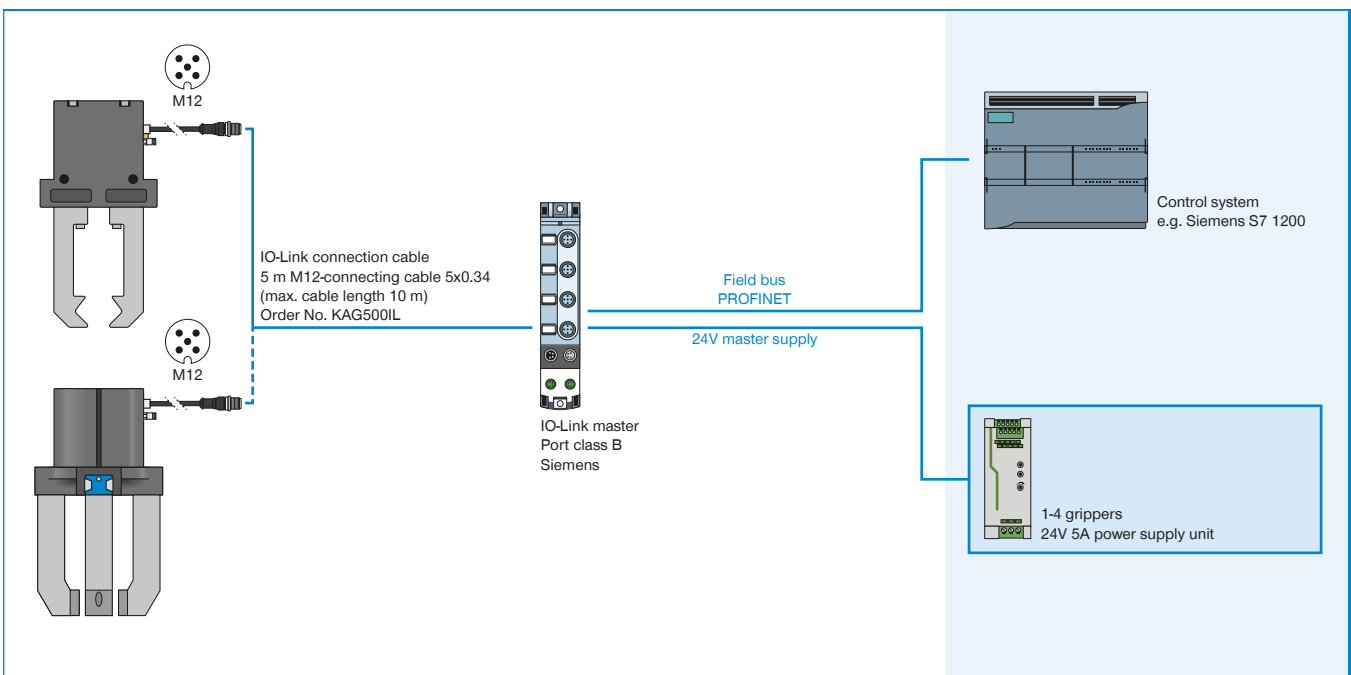
▶ GPP5000IL / GPD5000IL (IO-LINK) WIRING TO CONTROL CABINET (SIEMENS)



▶ GPP5000IL / GPD5000IL (IO-LINK) WIRING TO IO-LINK MASTER IP67 (BECKHOFF)



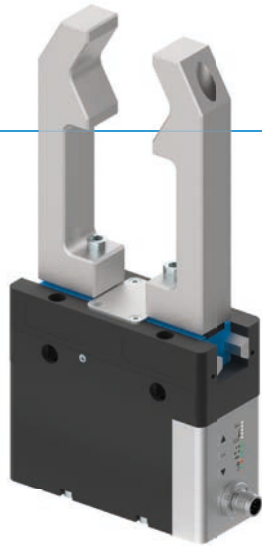
▶ GPP5000IL / GPD5000IL (IO-LINK) WIRING TO IO-LINK MASTER IP67 (SIEMENS)



2-JAW PARALLEL GRIPPERS

SERIES GEP5000

▶ PRODUCT ADVANTAGES



IO-Link

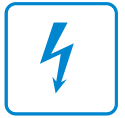
“ALL in ONE”

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



▶ SERIES CHARACTERISTICS

Installation size	Variants		
	GEP50XX	IL-00	IO-00
IO-Link	●		
Digital I/O			●
30 million maintenance-free cycles (max.)	●	●	●
Integrated sensing	●		●
Gripping force adjustable	●		●
Self locking mechanism	●		●
Protected against corrosion	●		●
Purged air	●		●
IP64	●		●



► BENEFITS IN DETAIL



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

► TECHNICAL DATA

Installation size	Stroke per jaw [mm]	Gripping force [N]	Weight [kg]	IP class
GEP5006	6	540 - 960	0.79	IP64*
GEP5008	8	650 - 1150	1.16	IP64*
GEP5010	10	980 - 1520	1.66	IP64*

*with purged air (max. 0,5 bar)

► FURTHER INFORMATION IS AVAILABLE ONLINE



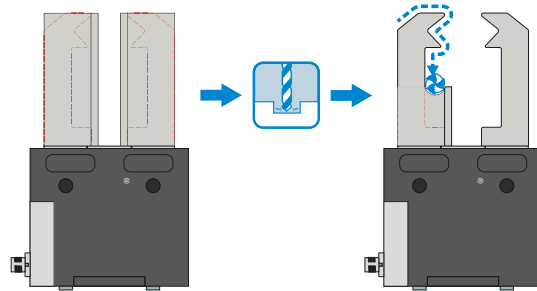
All information just a click away at: www.zimmer-group.com. Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product. Quick, clear and always up-to-date.

2-JAW PARALLEL GRIPPERS

SERIES GEP5000 FUNCTIONAL DESCRIPTION



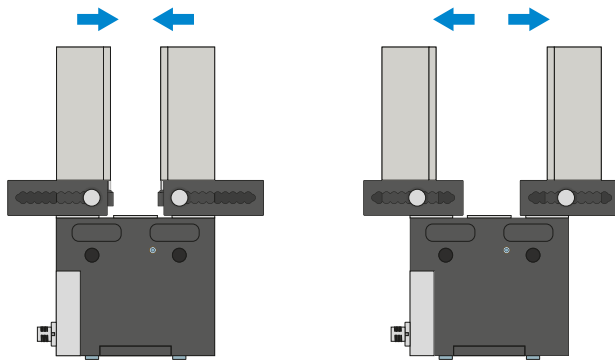
GRIPPING COMPONENTS



Universal jaws – UB5000

Can be used immediately or for individual reprocessing

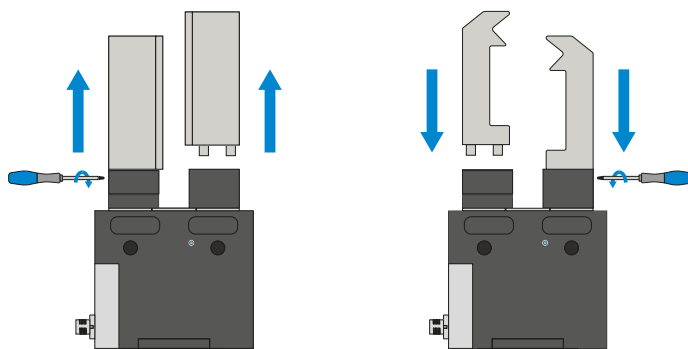
The gripper blanks are available in aluminum (AL) and steel (ST) versions and are installed directly on the gripper using the screws in the scope of delivery. The fits for the centering sleeves are already in place for this purpose. One universal jaw is required for each gripper jaw.



Adjustment jaws – EB5000

For tool-free adaptation of the gripper range

By manually activating the locking mechanism, which is pre-tensioned by a spring, the adjustment jaw can be moved within a grid of detent notches that has a number scale. Depending on the forces and torques that apply, the adjustment jaws are available in aluminum (AL) and steel (ST) versions. One adjustment jaw is required for each gripper jaw.



Interchangeable jaws – WB5000

Enable fast change of individual gripper fingers

For each gripper jaw, a fixed part and at least one loose part set is needed, depending on the number of gripper fingers to be changed. Manual locking via the Torx wrench included in the scope of delivery of the fixed part can take place from two sides.

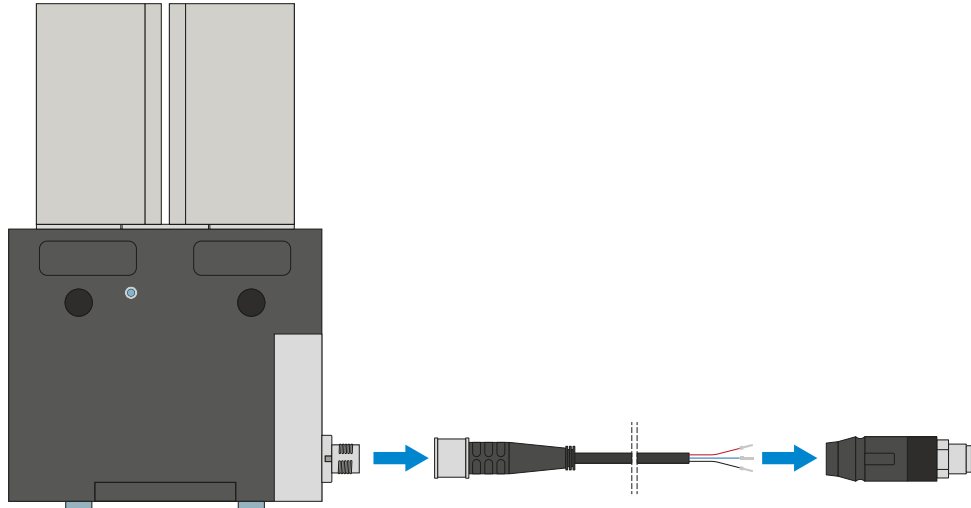


THE GRIPPING COMPONENTS CAN BE COMBINED!

The gripper components listed above can be combined with each other and are compatible with the various series of the 5000 gripper family.



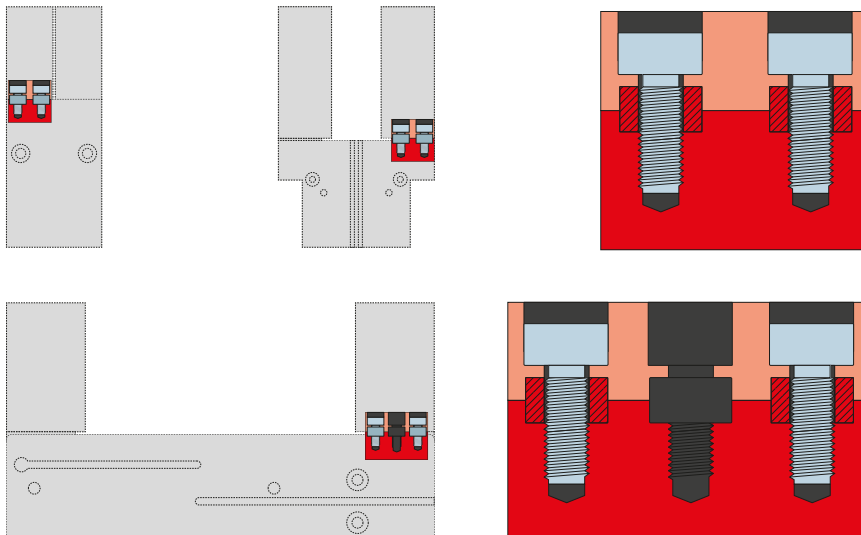
CONNECTIONS / OTHER



Plug-in connectors

For extending and fabricating the connection lines

Cables with a length of 10 m with exposed leads are available. Depending on the specific needs, the cables can be shortened or fabricated with connectors in sizes M12. A 5 m long cable with connector / socket is available for the IO-Link connection.



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.

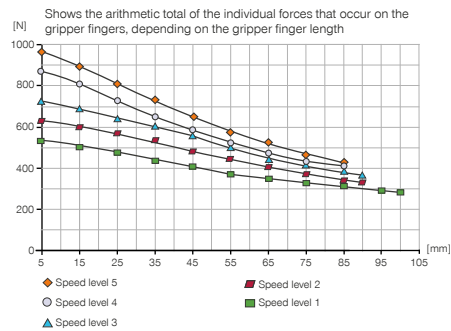
2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GEP5006

PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

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



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

TECHNICAL DATA - BASIC VERSION

Order no.	Technical data	
	GEP5006IL-00-A	GEP5006IO-00-A
Control	IO-Link	Digital I/O
Drive	BLDC motor	BLDC motor
Stroke per jaw [mm]	6	6
Self locking mechanism	mechanical	mechanical
Control time [s]	0.035	0.035
Dead weight of mounted gripper finger max. [kg]	0.4	0.4
Length of the gripper fingers max. [mm]	100	100
Repetition accuracy +/- [mm]	0.01	0.01
Operating temperature [°C]	5 ... 50	5 ... 50
Voltage [V]	24	24
Current consumption max. [A]	5	5
Protection to IEC 60529	IP64*	IP64*
Weight [kg]	0.79	0.79

* with purged air (max. 0,5 bar)

TECHNICAL DATA - MODES

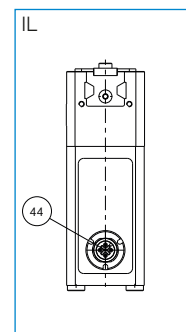
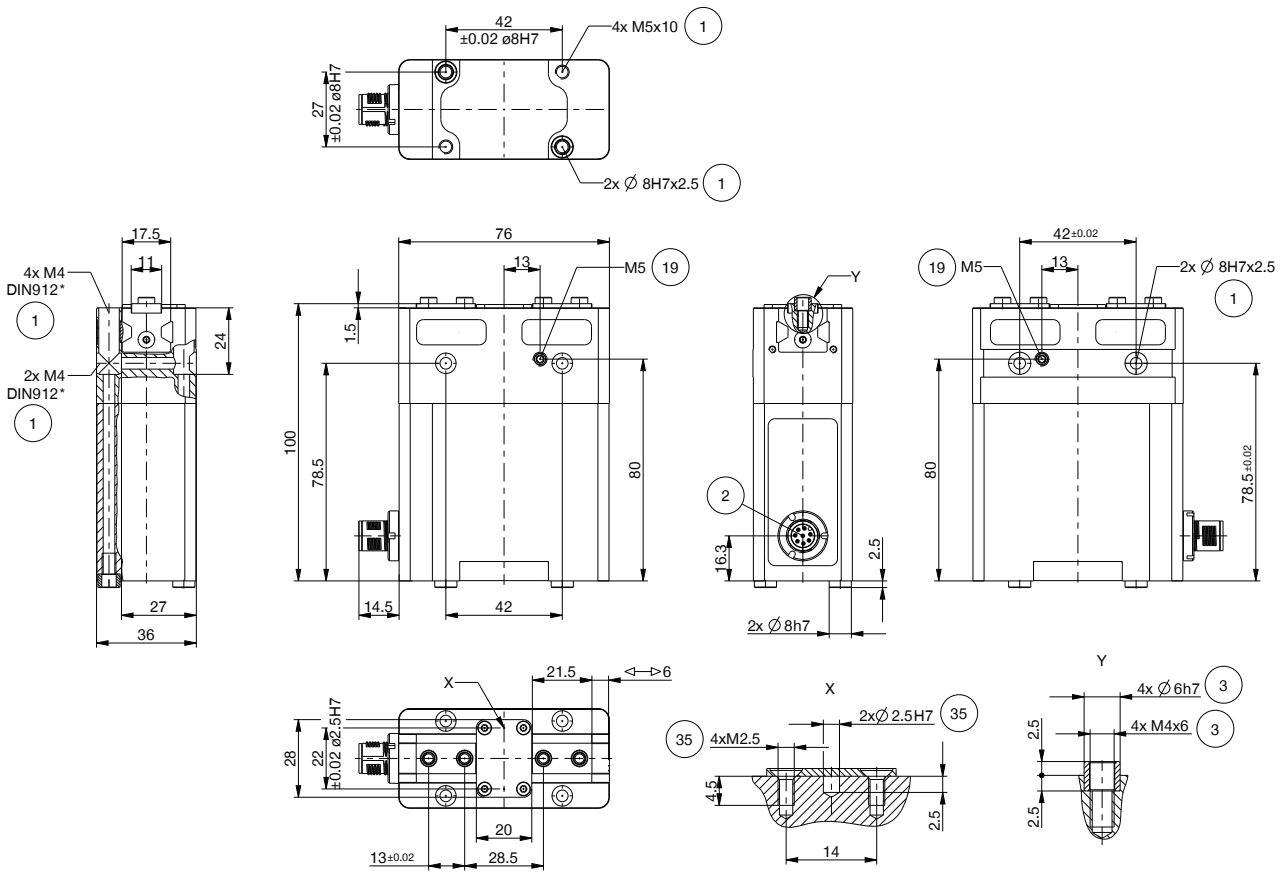
Order no.	Technical data - N mode	
	GEP5006IL-00-A	GEP5006IO-00-A
Gripping force → ← min. / max. [N]	540 / 960	540 / 960
Gripping force ←→ min. / max. [N]	540 / 960	540 / 960
Travel time → ← min. / max. [s]	0,15 / 0,22	0,15 / 0,22
Travel time ←→ min. / max. [s]	0,15 / 0,22	0,15 / 0,22

Order no.	Technical data - NC mode	
	GEP5006IL-00-A	GEP5006IO-00-A
Gripping force → ← min. / max. [N]	540 / 960	540 / 960
Gripping force ←→ min. / max. [N]	-	-
Travel time → ← min. / max. [s]	0,15 / 0,22	0,15 / 0,22
Travel time ←→ min. / max. [s]	0,13	0,13

Order no.	Technical data - NO mode	
	GEP5006IL-00-A	GEP5006IO-00-A
Gripping force → ← min. / max. [N]	-	-
Gripping force ←→ min. / max. [N]	540 / 960	540 / 960
Travel time → ← min. / max. [s]	0,13	0,13
Travel time ←→ min. / max. [s]	0,15 / 0,22	0,15 / 0,22

TECHNICAL DRAWINGS

- ① Gripper attachment
- ② Energy supply (M12, 8-pole)
- ③ Fixing for gripper finger
- ⑱ Air purge connection option
- ⑳ Attachment option for customer-specific fittings
- ㉔ Energy supply IO-Link (M12, 5-pole)



2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GEP5006

▶ ACCESORIES



▶ INCLUDED IN DELIVERY



4 [piece]
Centering Disc

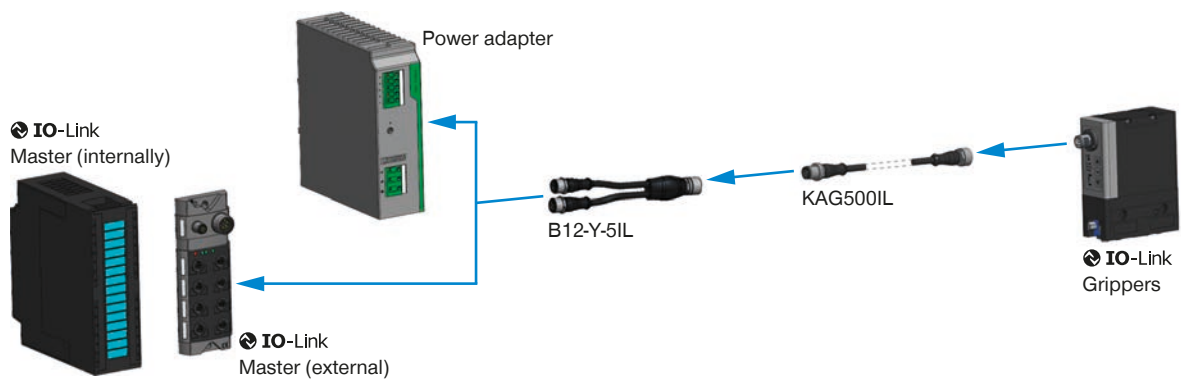
024230



2 [piece]
Centering Disc

024231

▶ INFRASTRUCTURE IO-LINK



IO-Link
Master (internally)

Power adapter

B12-Y-5IL

KAG500IL

IO-Link
Master (external)

IO-Link
Grippers

▶ RECOMMENDED ACCESSORIES



GRIPPING COMPONENTS



UB5006AL
Universal jaw aluminium



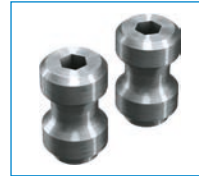
UB5006ST
Universal jaw steel



EB5006AL
Aluminum adjustment jaw



EB5006ST
Steel adjustment jaw



WB5006L
Changeable jaw, loose-part-set



WB5006F
Changeable jaw, fix-part

▶ RECOMMENDED ACCESSORY GEP5006IL-00-A



CONNECTIONS / OTHER



KAG5001L
Plug-in connector straight
5 m - plug, socket M12



B12-Y-5IL
Y-Plug-in Connector



SCM-C-00-00-A
Smart Communication
Module

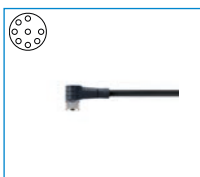
▶ RECOMMENDED ACCESSORY GEP5006IO-00-A



CONNECTIONS / OTHER



KAG1000B8
Plug-in Connector Straight
Cable 10 m - Female M12



KAW1000B8
Plug-in Connector Angled
Cable 10 m - Female M12

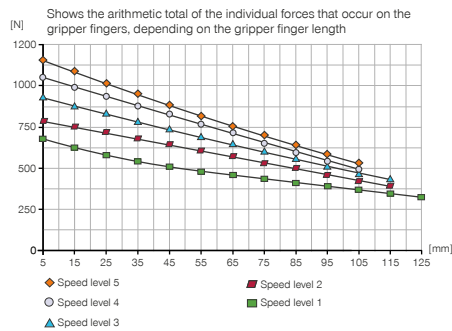
2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GEP5008

▶ PRODUCT SPECIFICATIONS

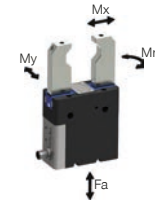


▶ Gripping force diagram



▶ Forces and moments

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



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

▶ TECHNICAL DATA - BASIC VERSION

Order no.	▶ Technical data	
	GEP5008IL-00-A	GEP5008IO-00-A
Control	IO-Link	Digital I/O
Drive	BLDC motor	BLDC motor
Stroke per jaw [mm]	8	8
Self locking mechanism	mechanical	mechanical
Control time [s]	0.035	0.035
Dead weight of mounted gripper finger max. [kg]	0.7	0.7
Length of the gripper fingers max. [mm]	125	125
Repetition accuracy +/- [mm]	0.01	0.01
Operating temperature [°C]	5 ... 50	5 ... 50
Voltage [V]	24	24
Current consumption max. [A]	5	5
Protection to IEC 60529	IP64*	IP64*
Weight [kg]	1.16	1.16

* with purged air (max. 0,5 bar)

▶ TECHNICAL DATA - MODES

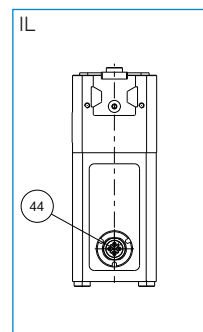
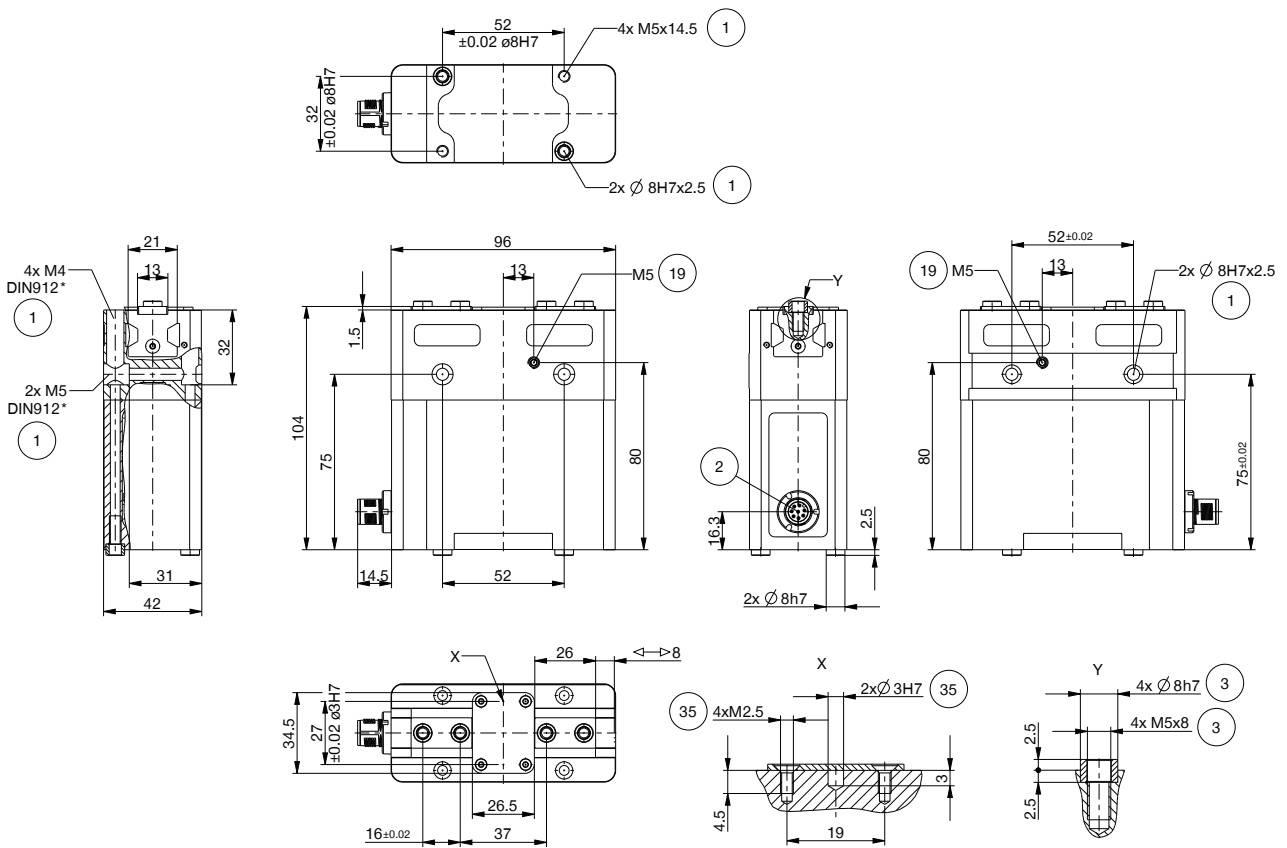
Order no.	▶ Technical data - N mode	
	GEP5008IL-00-A	GEP5008IO-00-A
Gripping force → ← min. / max. [N]	650 / 1150	650 / 1150
Gripping force ↔ min. / max. [N]	650 / 1150	650 / 1150
Travel time → ← min. / max. [s]	0,18 / 0,29	0,18 / 0,29
Travel time ↔ min. / max. [s]	0,18 / 0,29	0,18 / 0,29

Order no.	▶ Technical data - NC mode	
	GEP5008IL-00-A	GEP5008IO-00-A
Gripping force → ← min. / max. [N]	650 / 1150	650 / 1150
Gripping force ↔ min. / max. [N]	-	-
Travel time → ← min. / max. [s]	0,18 / 0,29	0,18 / 0,29
Travel time ↔ min. / max. [s]	0,15	0,15

Order no.	▶ Technical data - NO mode	
	GEP5008IL-00-A	GEP5008IO-00-A
Gripping force → ← min. / max. [N]	-	-
Gripping force ↔ min. / max. [N]	650 / 1150	650 / 1150
Travel time → ← min. / max. [s]	0,15	0,15
Travel time ↔ min. / max. [s]	0,18 / 0,29	0,18 / 0,29

▶ TECHNICAL DRAWINGS

- ① Gripper attachment
- ② Energy supply (M12, 8-pole)
- ③ Fixing for gripper finger
- ⑱ Air purge connection option
- ⑳ Attachment option for customer-specific fittings
- ㉔ Energy supply IO-Link (M12, 5-pole)



2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GEP5008

▶ ACCESORIES



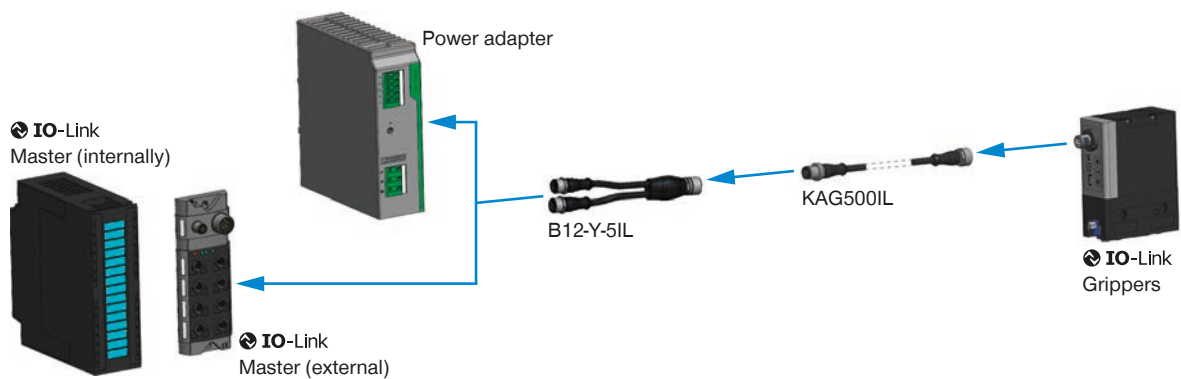
▶ INCLUDED IN DELIVERY



6 [piece]
Centering Disc

024231

▶ INFRASTRUCTURE IO-LINK



▶ RECOMMENDED ACCESSORIES



GRIPPING COMPONENTS



UB5008AL
Universal jaw aluminium



UB5008ST
Universal jaw steel



EB5008AL
Aluminum adjustment jaw



EB5008ST
Steel adjustment jaw



WB5008L
Changeable jaw, loose-part-set

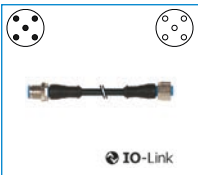


WB5008F
Changeable jaw, fix-part

▶ RECOMMENDED ACCESSORY GEP5008IL-00-A



CONNECTIONS / OTHER



KAG5001L
Plug-in connector straight
5 m - plug, socket M12



B12-Y-5IL
Y-Plug-in Connector

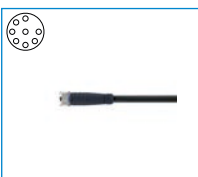


SCM-C-00-00-A
Smart Communication
Module

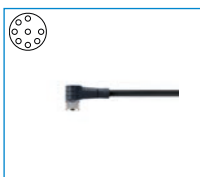
▶ RECOMMENDED ACCESSORY GEP5008IO-00-A



CONNECTIONS / OTHER



KAG1000B8
Plug-in Connector Straight
Cable 10 m - Female M12



KAW1000B8
Plug-in Connector Angled
Cable 10 m - Female M12

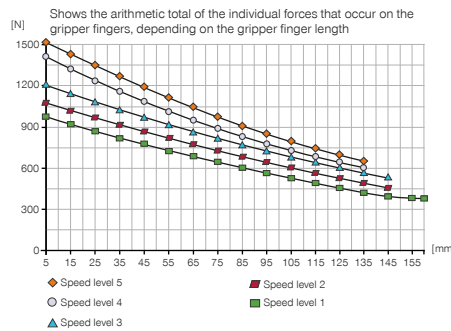
2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GEP5010

▶ PRODUCT SPECIFICATIONS



▶ Gripping force diagram



▶ Forces and moments

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



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

▶ TECHNICAL DATA - BASIC VERSION

Order no.	▶ Technical data	
	GEP5010IL-00-A	GEP5010IO-00-A
Control	IO-Link	Digital I/O
Drive	BLDC motor	BLDC motor
Stroke per jaw [mm]	10	10
Self locking mechanism	mechanical	mechanical
Control time [s]	0.035	0.035
Dead weight of mounted gripper finger max. [kg]	1.3	1.3
Length of the gripper fingers max. [mm]	160	160
Repetition accuracy +/- [mm]	0.01	0.01
Operating temperature [°C]	5 ... 50	5 ... 50
Voltage [V]	24	24
Current consumption max. [A]	5	5
Protection to IEC 60529	IP64*	IP64*
Weight [kg]	1.66	1.66

* with purged air (max. 0,5 bar)

▶ TECHNICAL DATA - MODES

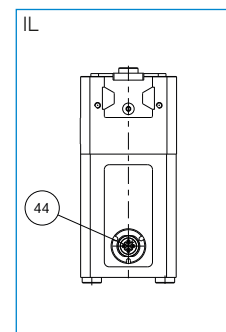
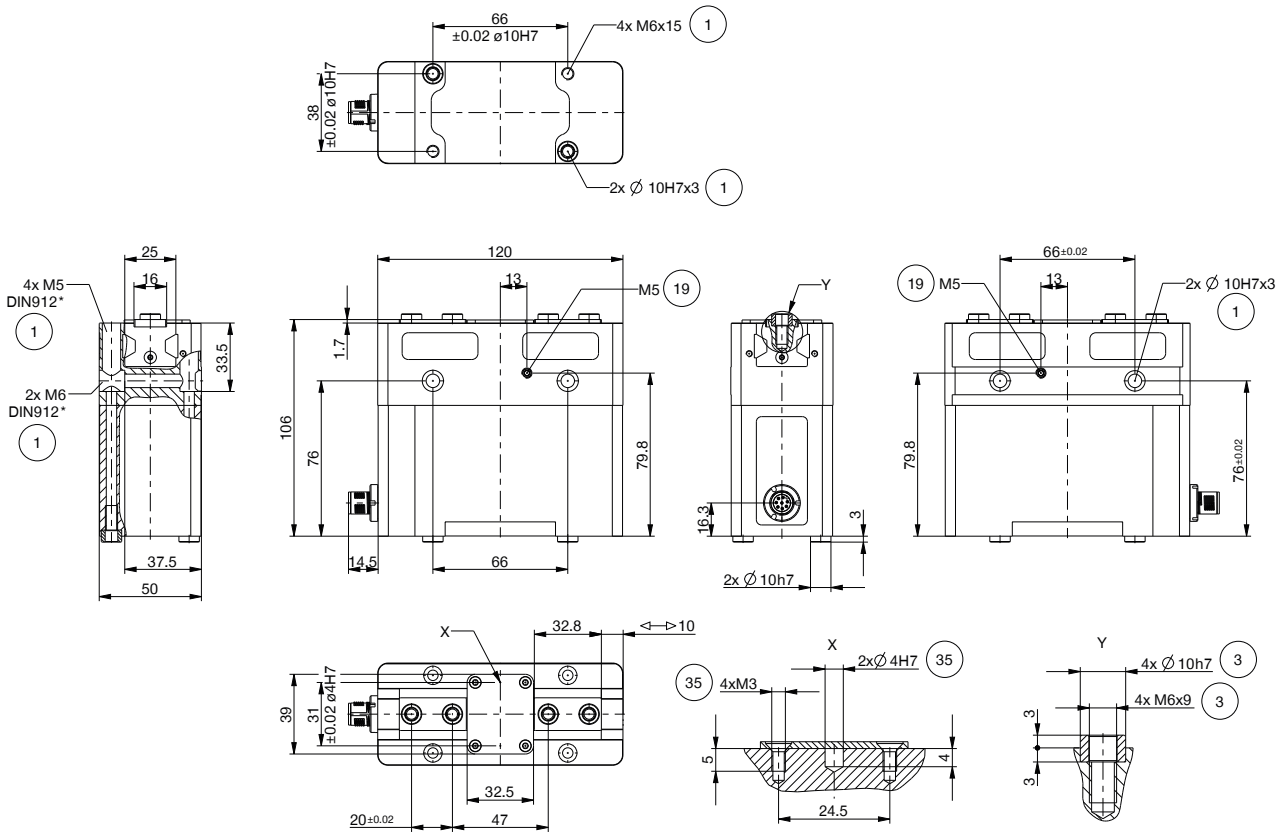
Order no.	▶ Technical data - N mode	
	GEP5010IL-00-A	GEP5010IO-00-A
Gripping force → ← min. / max. [N]	980 / 1520	980 / 1520
Gripping force ←→ min. / max. [N]	980 / 1520	980 / 1520
Travel time → ← min. / max. [s]	0,21 / 0,32	0,21 / 0,32
Travel time ←→ min. / max. [s]	0,21 / 0,32	0,21 / 0,32

Order no.	▶ Technical data - NC mode	
	GEP5010IL-00-A	GEP5010IO-00-A
Gripping force → ← min. / max. [N]	980 / 1520	980 / 1520
Gripping force ←→ min. / max. [N]	-	-
Travel time → ← min. / max. [s]	0,21 / 0,32	0,21 / 0,32
Travel time ←→ min. / max. [s]	0,16	0,16

Order no.	▶ Technical data - NO mode	
	GEP5010IL-00-A	GEP5010IO-00-A
Gripping force → ← min. / max. [N]	-	-
Gripping force ←→ min. / max. [N]	980 / 1520	980 / 1520
Travel time → ← min. / max. [s]	0,16	0,16
Travel time ←→ min. / max. [s]	0,21 / 0,32	0,21 / 0,32

TECHNICAL DRAWINGS

- ① Gripper attachment
- ② Energy supply (M12, 8-pole)
- ③ Fixing for gripper finger
- ⑱ Air purge connection option
- ⑳ Attachment option for customer-specific fittings
- ④④ Energy supply IO-Link (M12, 5-pole)



2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GEP5010

▶ ACCESORIES



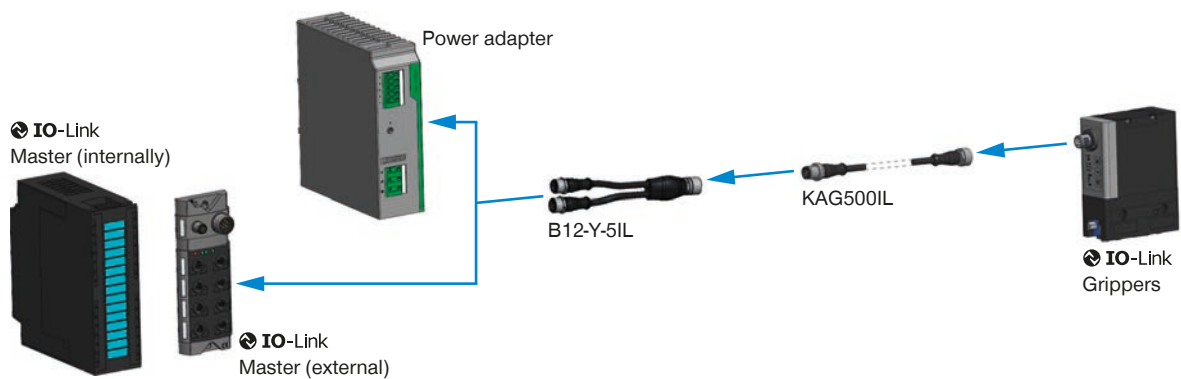
▶ INCLUDED IN DELIVERY



6 [piece]
Centering Disc

018187

▶ INFRASTRUCTURE IO-LINK



▶ **RECOMMENDED ACCESSORIES**



GRIPPING COMPONENTS



UB5010AL
Universal jaw aluminium



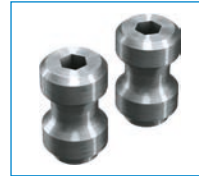
UB5010ST
Universal jaw steel



EB5010AL
Aluminum adjustment jaw



EB5010ST
Steel adjustment jaw



WB5010L
Changeable jaw, loose-part-set



WB5010F
Changeable jaw, fix-part

▶ **RECOMMENDED ACCESSORY GEP5010IL-00-A**



CONNECTIONS / OTHER



KAG500IL
Plug-in connector straight
5 m - plug, socket M12



B12-Y-5IL
Y-Plug-in Connector



SCM-C-00-00-A
Smart Communication
Module

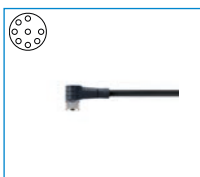
▶ **RECOMMENDED ACCESSORY GEP5010IO-00-A**



CONNECTIONS / OTHER



KAG1000B8
Plug-in Connector Straight
Cable 10 m - Female M12

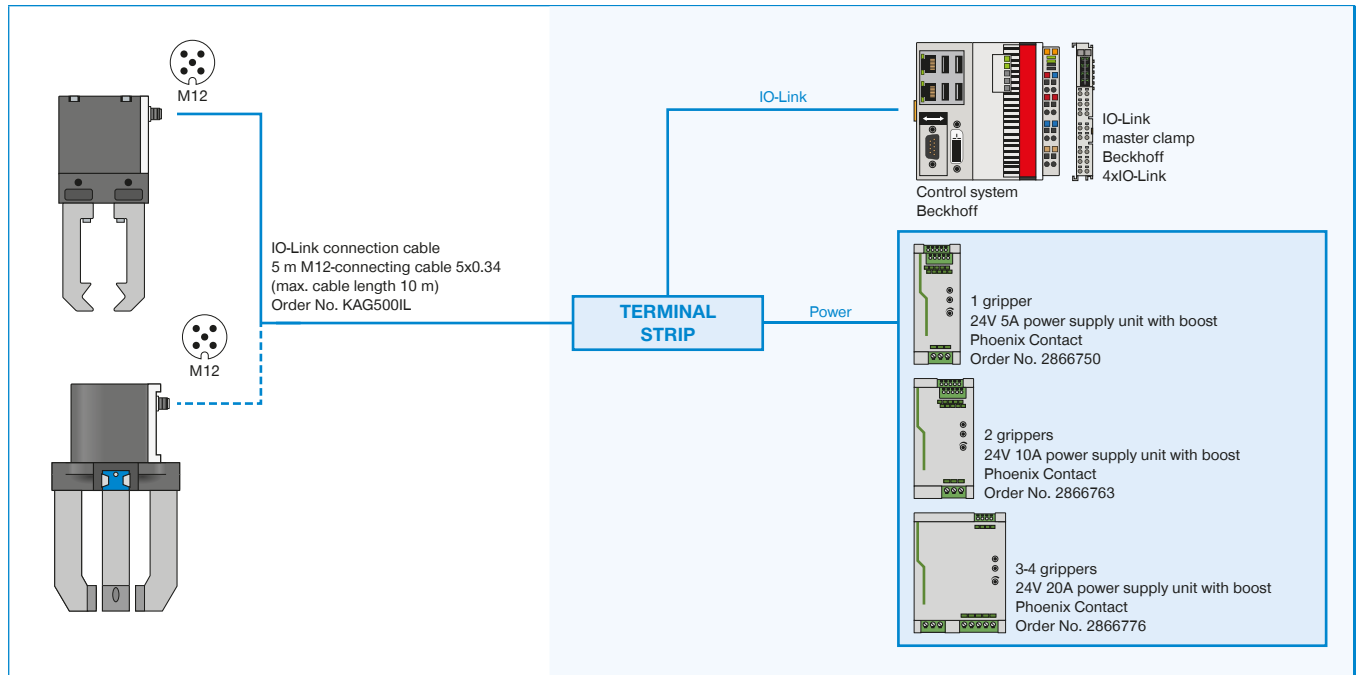


KAW1000B8
Plug-in Connector Angled
Cable 10 m - Female M12

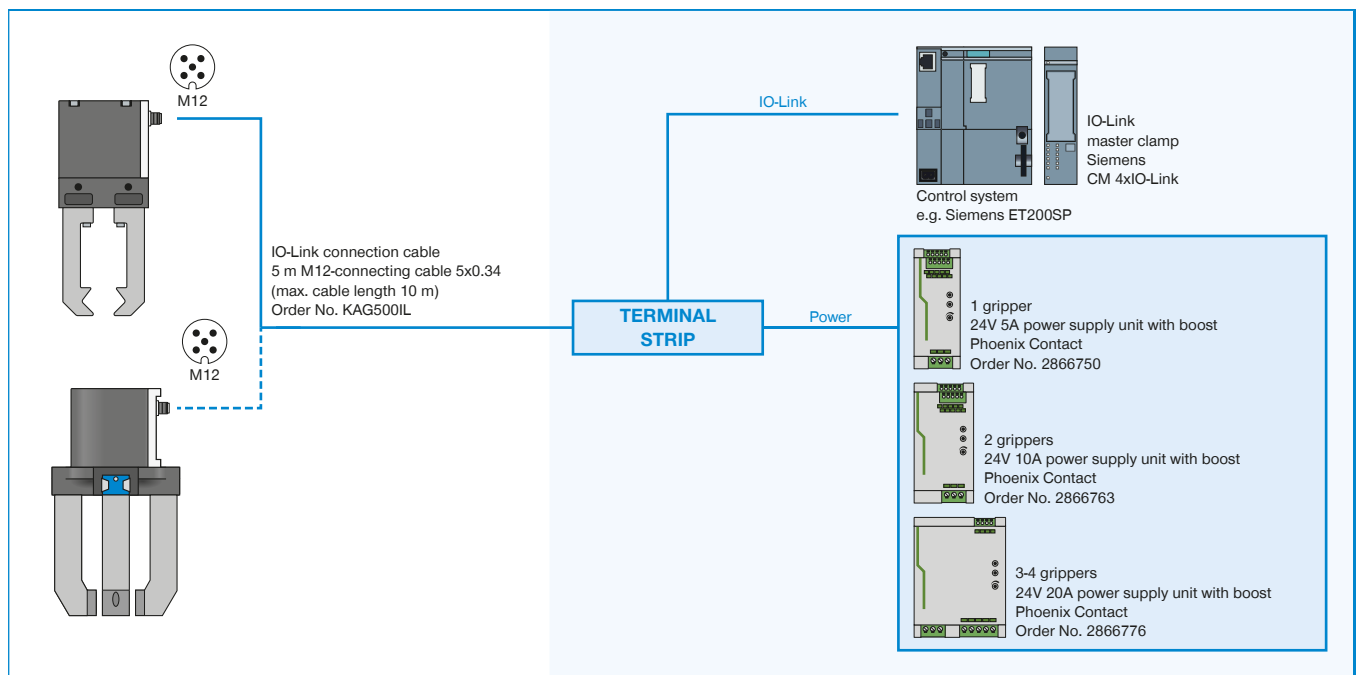
SECURED CONFIGURATION EXAMPLES

GEP5000 / GED5000 SERIES

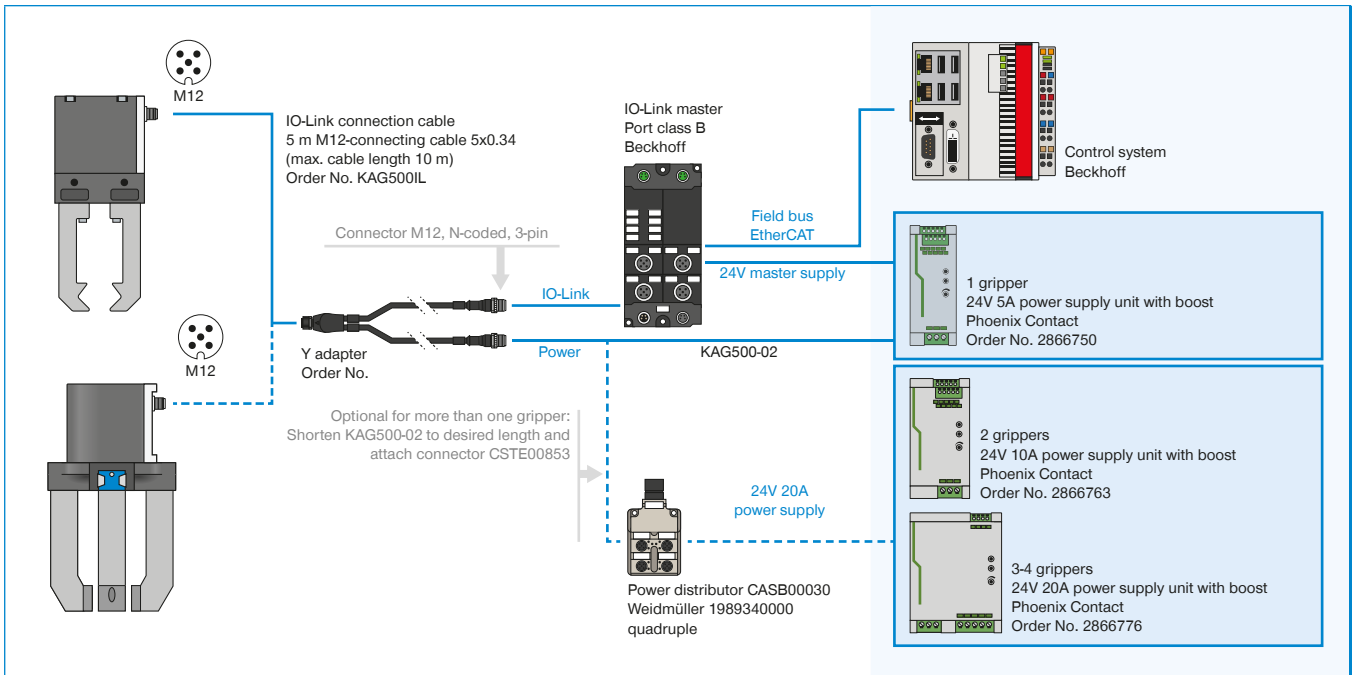
▶ GPP5000IL / GPD5000IL (IO-LINK) WIRING TO CONTROL CABINET (BECKHOFF)



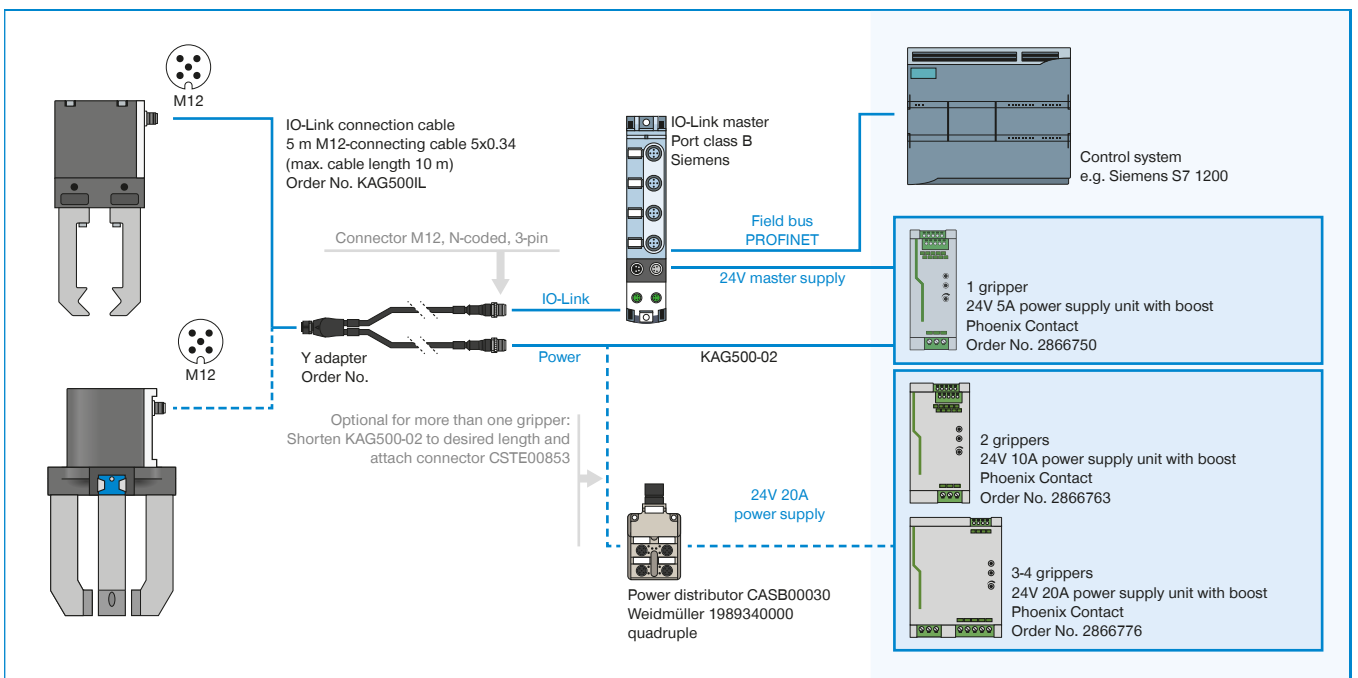
▶ GPP5000IL / GPD5000IL (IO-LINK) WIRING TO CONTROL CABINET (SIEMENS)



▶ GPP5000IL / GPD5000IL (IO-LINK) WIRING TO IO-LINK MASTER IP67 (BECKHOFF)



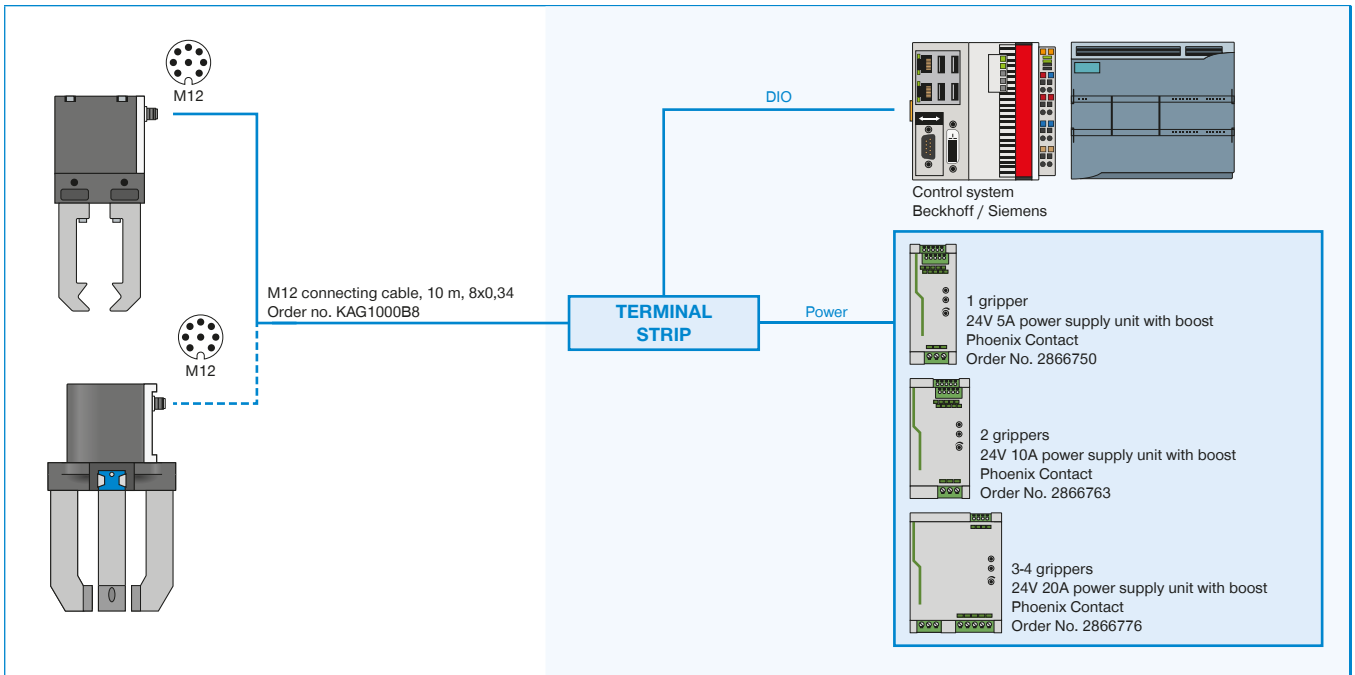
▶ GPP5000IL / GPD5000IL (IO-LINK) WIRING TO IO-LINK MASTER IP67 (BECKHOFF)



SECURED CONFIGURATION EXAMPLES

GEP5000 / GED5000 SERIES

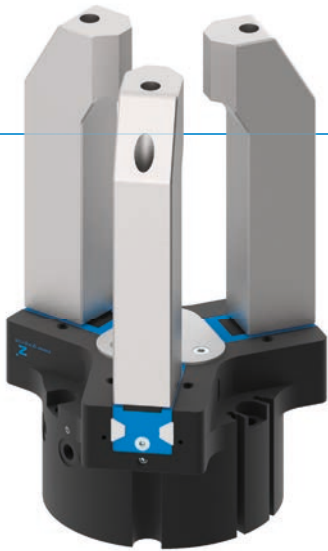
▶ GEP5000 / GED5000 (DIGITAL IO) WIRING TO CONTROL CABINET



3-JAW CONCENTRIC GRIPPERS

SERIES GPD5000

▶ PRODUCT ADVANTAGES



“The best”

▶ **Steel Linear Guide – The superior guidance system concept**

The steel / steel guide stands for lasting precision, durability and a long service life—featuring maintenance intervals of up to 30 million gripping cycles. Benefit from these features and increase the profitability and process reliability of your machine.

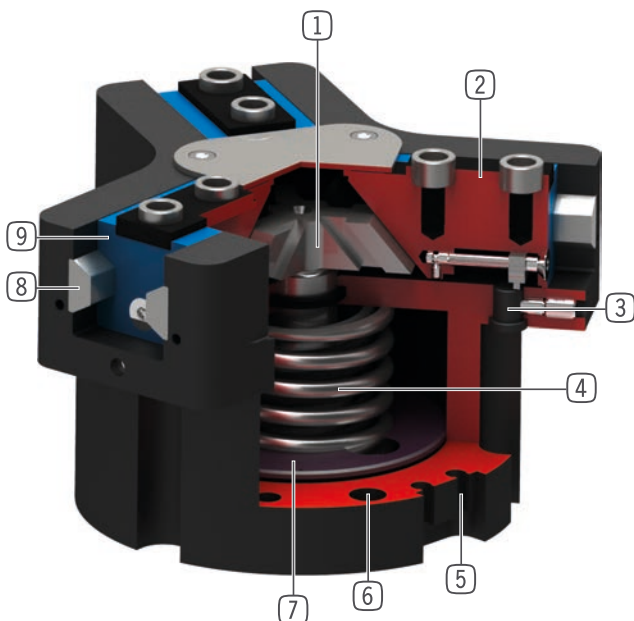
▶ **Leakproof and corrosion protected – The universal gripper**

Suitable for virtually all ambient conditions, with a sealed guide up to IP67 and corrosion protection as standard, you are able to use this gripper universally. As a result, the range of models in your production is reduced, along with a reduction in associated storage and process costs.

▶ **Aluminum Linear Guide – The alternative**

Reduced to those aspects which are the most important, the steel / aluminum guide variant offers significantly better performance when compared to a similar gripper with a T-groove travel guide, and is on par with the best principles of toothed guidance systems.

▶ BENEFITS IN DETAIL



① **Wedge hook mechanism**

- high forces and moments capacity
- Synchronized gripper jaw movement

② **Gripper jaw**

- Gripper fingers mounted using removable centering sleeves
- Lubricated for life via incorporated lubrication slots

③ **Mounting block**

- mounting for inductive proximity switch

④ **Integrated gripping force safety device**

- Spring built into cylinder chamber as an energy store

⑤ **Sensing slot**

- mounting and positioning of magnetic field sensors

⑥ **Mounting and positioning**

- Alternatively, on several sides for customized mounting
- Pneumatic and electrical versions identical apart from height

⑦ **Drive**

- Double-acting pneumatic rotor cylinder

⑧ **Steel Linear Guide**

- Steel in steel guide
- Enables use of extremely long gripper fingers
- Also available in steel / aluminum variant

⑨ **Dual lip seal**

- IP64 and up to IP67 (with purged air) for Protector version
- Prevents grease from being squeezed out, increasing service life



► SERIES CHARACTERISTICS

Installation size		Variants				
GPD50XX		-00	-20	-21	-24	-AL
N	Long stroke	•	•	•	•	•
NC	Long stroke / Spring closing	•	•	•	•	•
NO	Long stroke / Spring opening	•	•	•	•	•
S	High-strength	•	•	•	•	
SC	High-strength / Spring closing	•	•	•	•	
SO	High-strength / Spring opening	•	•	•	•	
	Steel Linear Guide	•	•	•	•	
	Aluminum Linear Guide					•
	15 million maintenance-free cycles (max.)					•
	30 million maintenance-free cycles (max.)	•	•	•	•	
	Inductive sensor	•	•	•	•	
	Magnetic field sensor	•	•	•	•	•
	Protected against corrosion	•	•	•	•	
	Purged air	•	•	•	•	•
	Temperature-resistant		•		•	
	IP40					•
	IP64	•	•			
	IP67*			•	•	

*with purged air (max. 0,5 bar)

► TECHNICAL DATA

Installation size	Stroke per jaw [mm]	Gripping force [N]	Weight [kg]	IP class
GPD5003	2,5	310 - 465	0,14 - 0,22	IP40 / IP64 / IP67*
GPD5004	2 - 4	460 - 1520	0,27 - 0,41	IP40 / IP64 / IP67*
GPD5006	3 - 6	740 - 2370	0,48 - 0,58	IP40 / IP64 / IP67*
GPD5008	4 - 8	1260 - 3910	0,83 - 1	IP40 / IP64 / IP67*
GPD5010	5 - 10	2290 - 7160	1,45 - 1,9	IP40 / IP64 / IP67*
GPD5013	6 - 13	3770 - 11450	2,6 - 3,7	IP64 / IP67*
GPD5016	8 - 16	6870 - 20330	5,7 - 7,5	IP64 / IP67*
GPD5025	14 - 25	8430 - 22850	11,8 - 15,4	IP64 / IP67*
GPD5030	17 - 30	12130 - 32400	21 - 27,5	IP64 / IP67*
GPD5035	20 - 35	16600 - 45200	37,8 - 42	IP64 / IP67*
GPD5045	26 - 45	27900 - 72500	78,6 - 99,9	IP64 / IP67*

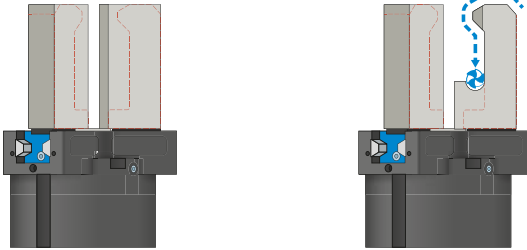
*with purged air (max. 0,5 bar)

3-JAW CONCENTRIC GRIPPERS

SERIES GPD5000 FUNCTIONAL DESCRIPTION



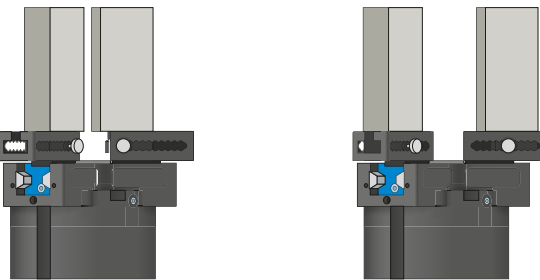
GRIPPING COMPONENTS



Universal jaws – UB5000

Can be used immediately or for individual reprocessing

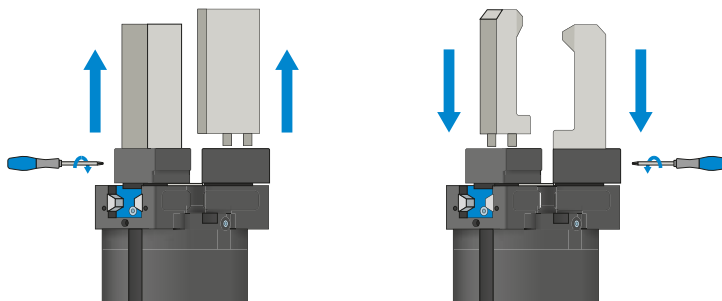
The gripper blanks are available in aluminum (AL) and steel (ST) versions and are installed directly on the gripper using the screws in the scope of delivery. The fits for the centering sleeves are already in place for this purpose. One universal jaw is required for each gripper jaw.



Adjustment jaws – EB5000

For tool-free adaptation of the gripper range

By manually activating the locking mechanism, which is pre-tensioned by a spring, the adjustment jaw can be moved within a grid of detent notches that has a number scale. Depending on the forces and torques that apply, the adjustment jaws are available in aluminum (AL) and steel (ST) versions. One adjustment jaw is required for each gripper jaw.



Interchangeable jaws – WB5000

Enable fast change of individual gripper fingers

For each gripper jaw, a fixed part and at least one loose part set is needed, depending on the number of gripper fingers to be changed. Manual locking via the Torx wrench included in the scope of delivery of the fixed part can take place from two sides.

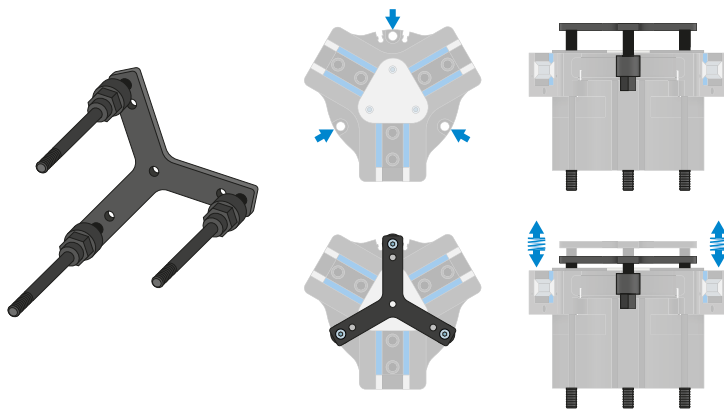


THE GRIPPING COMPONENTS CAN BE COMBINED!

The gripper components listed above can be combined with each other and are compatible with the various series of the 5000 gripper family.



GRIPPING COMPONENTS

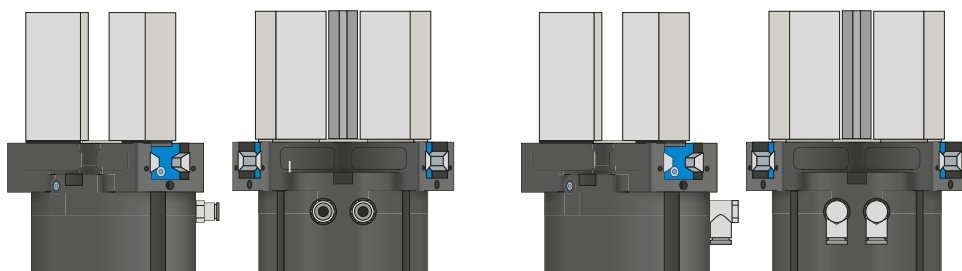


Pressure piece – ADS5000

When the gripper fingers are open, the pressure piece is used for spring-supported positioning of the workpiece against a limit stop. This greatly reduces the loads on the gripper that arise during joining.



ENERGY SUPPLY



Pneumatic threaded connections

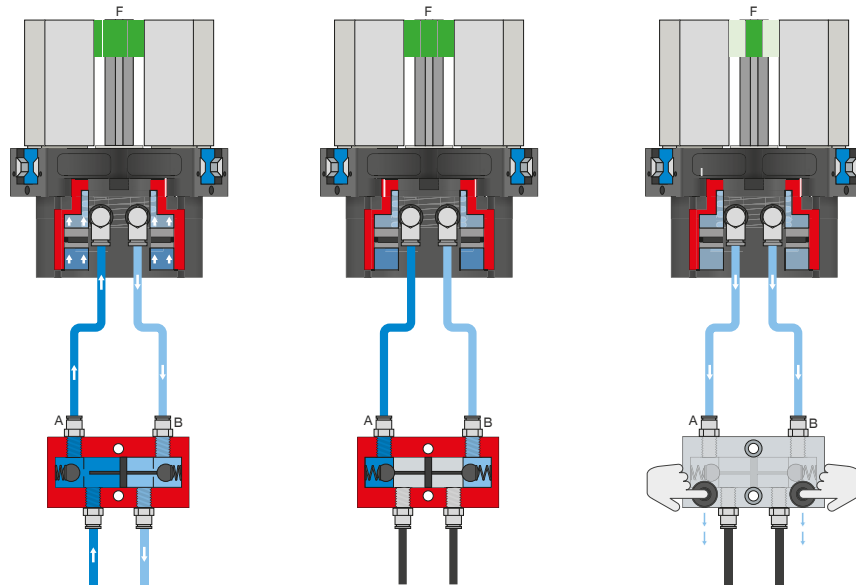
Available in straight and angled design. Can be chosen freely depending on the space conditions or installation situation.

3-JAW CONCENTRIC GRIPPERS

SERIES GPD5000 FUNCTIONAL DESCRIPTION



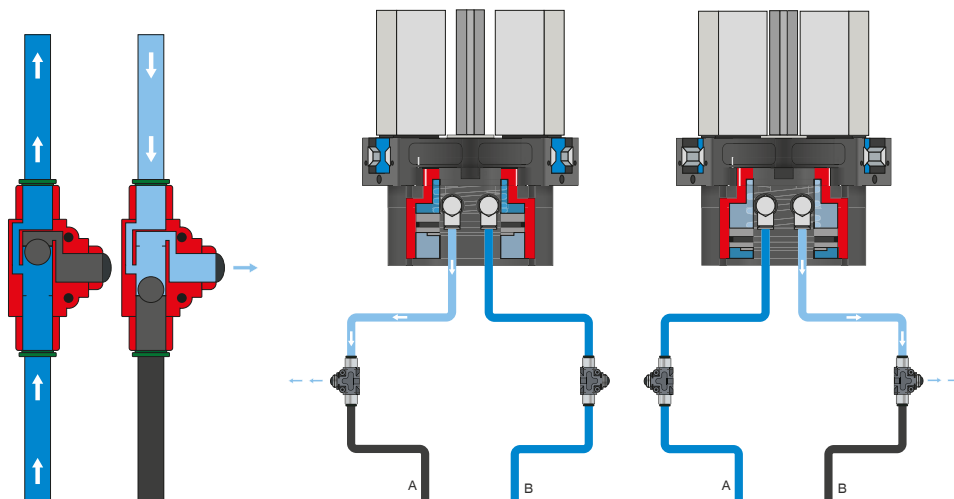
ENERGY SUPPLY



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 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.



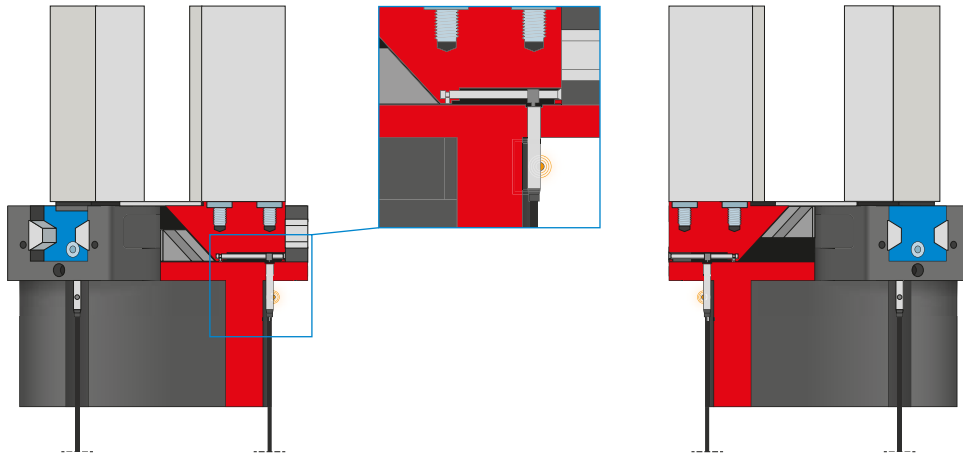
Quick exhaust valve – DEV

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.



SENSORS

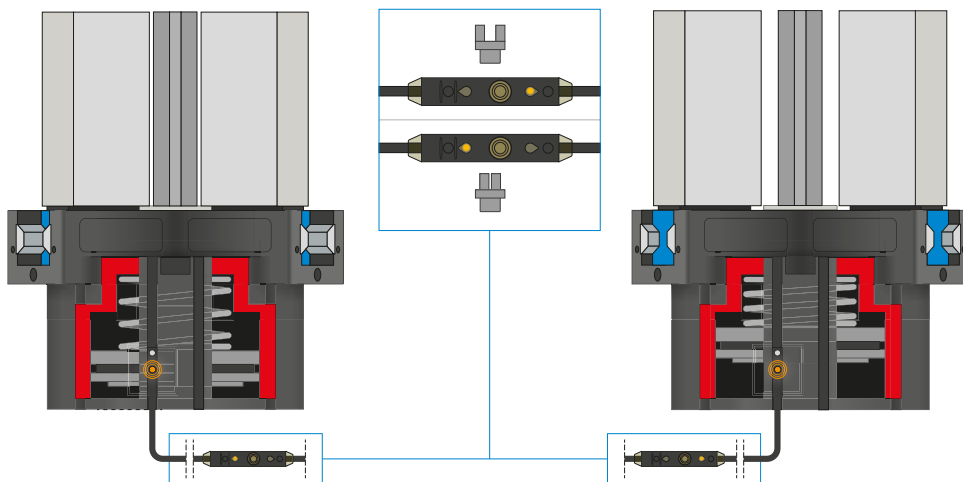


Inductive sensors – NJ*

For direct position sensing of the gripper jaws

The sensor is guided into the intake as far as it will go and fixed in place using the lateral clamping screw. Tuning to the desired position then takes place by adjusting the cam switch. 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.

*Not for variant AL-A



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.

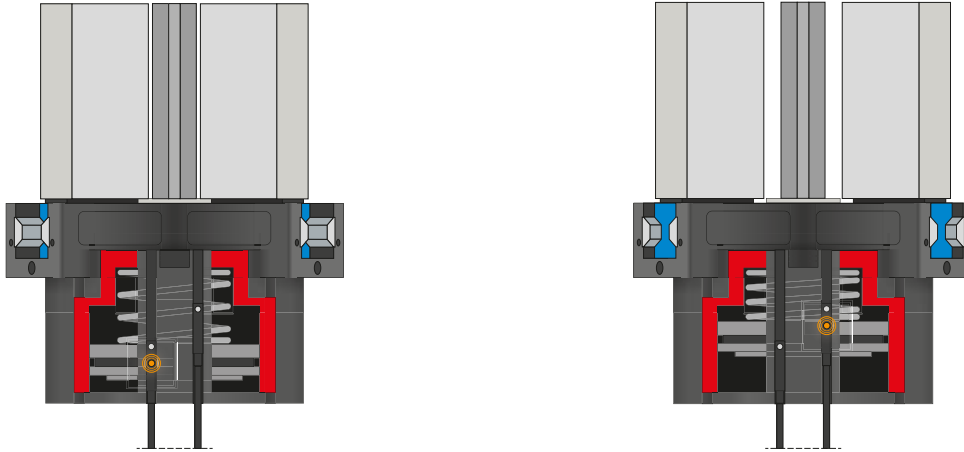
3-JAW CONCENTRIC GRIPPERS

SERIES GPD5000 FUNCTIONAL DESCRIPTION

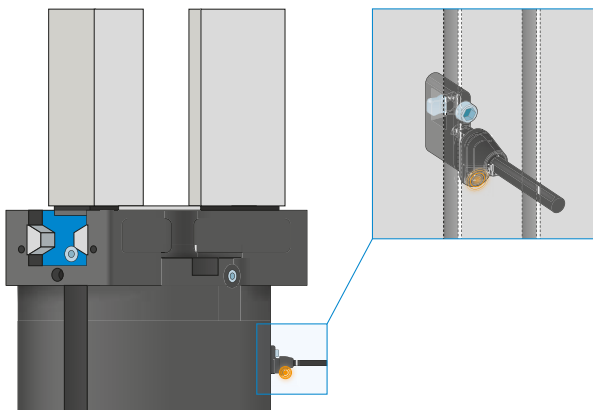


SENSORS

MFS02



MFS01



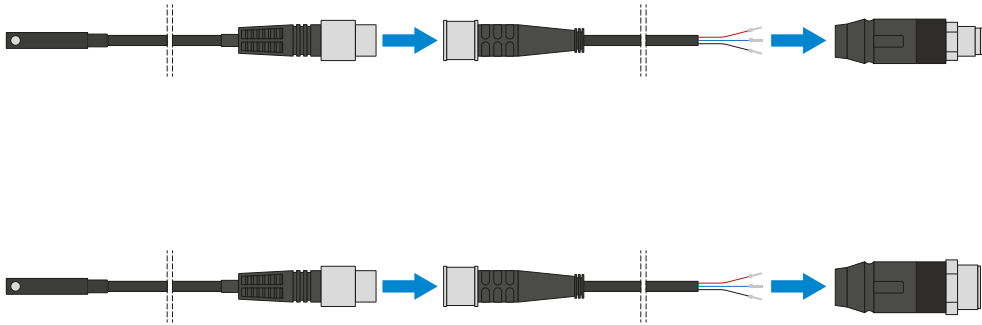
1-point magnetic field sensors – MFS

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.



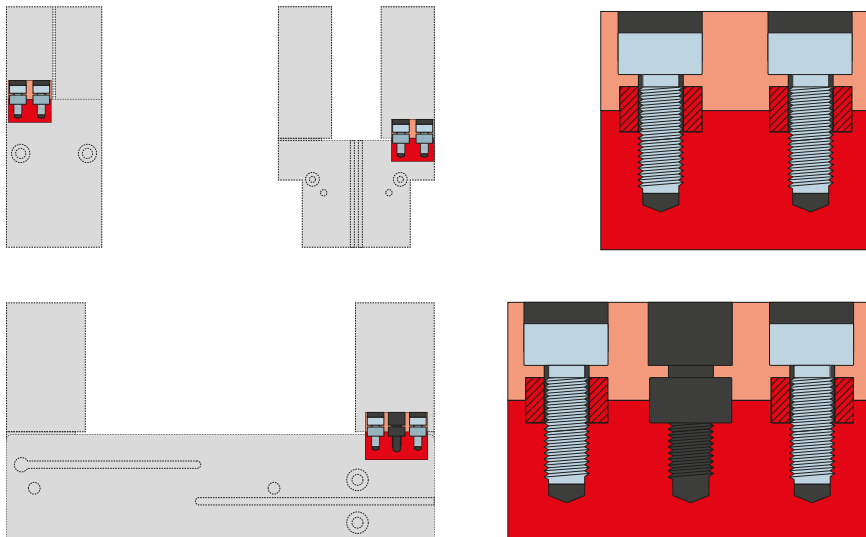
CONNECTIONS / OTHER



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.

3-JAW CONCENTRIC GRIPPERS

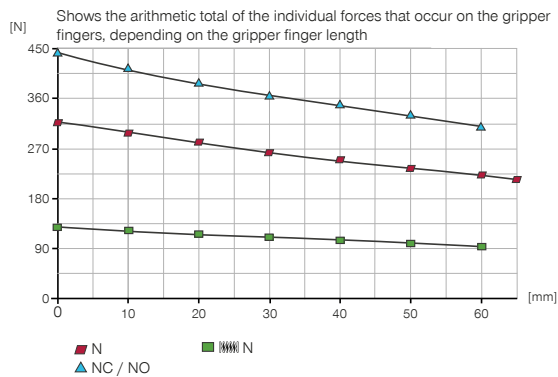
INSTALLATION SIZE GPD5003

▶ PRODUCT SPECIFICATIONS

-00-A / -20-A / -21-A / -24-A

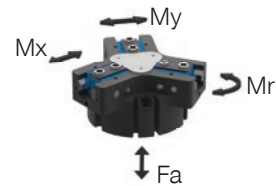
Steel / steel guide

▶ Gripping force diagram



▶ Forces and moments

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

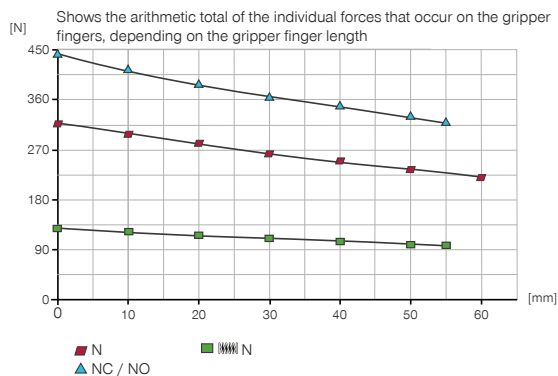


Mr [Nm]	7
Mx [Nm]	14
My [Nm]	13
Fa [N]	550

-AL-A

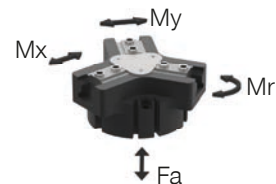
Steel / aluminum guide

▶ Gripping force diagram



▶ Forces and moments

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



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

▶ VARIANTS

-00-A / -20-A

Steel / steel guide

-21-A / -24-A

Steel / steel guide

-AL-A

Steel / aluminum guide



▶ TECHNICAL DATA

Order no.	▶ Technical data		
	GPD5003N-00-A	GPD5003NC-00-A	GPD5003NO-00-A
Stroke per jaw [mm]	2.5	2.5	2.5
Gripping force in closing [N]	310	440	
Gripping force in opening [N]	335		465
Gripping force secured by spring min. [N]		130	130
Closing time [s]	0.015	0.01	0.02
Opening time [s]	0.015	0.02	0.01
Dead weight of mounted gripper finger max. [kg]	0.12	0.12	0.12
Length of the gripper fingers max. [mm]	65	60	60
Repetition accuracy +/- [mm]	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4
Operating pressure max. [bar]	8	7	7
Nominal operating pressure [bar]	6	6	6
Operating temperature [°C]	-10 ... +90	-10 ... +90	10 ... +90
Air volume per cycle [cm ³]	4.2	9.5	9.5
Protection to IEC 60529	IP64	IP64	IP64
Weight [kg]	0.14	0.18	0.18

Order no.	▶ Technical Data - High Temperature Version		
	GPD5003N-20-A	GPD5003NC-20-A	GPD5003NO-20-A
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130

Order no.	▶ Technical Data - Protector Version		
	GPD5003N-21-A	GPD5003NC-21-A	GPD5003NO-21-A
Protection to IEC 60529	IP67*	IP67*	IP67*
Weight [kg]	0.18	0.22	0.22

Order no.	▶ Technical Data - High Temperature Protector Version		
	GPD5003N-24-A	GPD5003NC-24-A	GPD5003NO-24-A
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130
Protection to IEC 60529	IP67*	IP67*	IP67*
Weight [kg]	0.18	0.22	0.22

*with purged air (max. 0,5 bar)

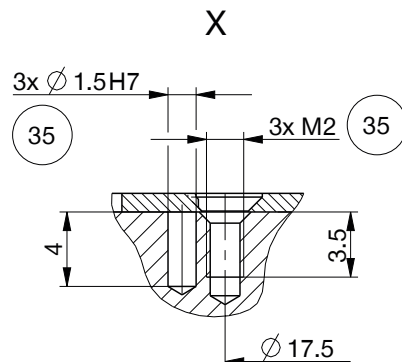
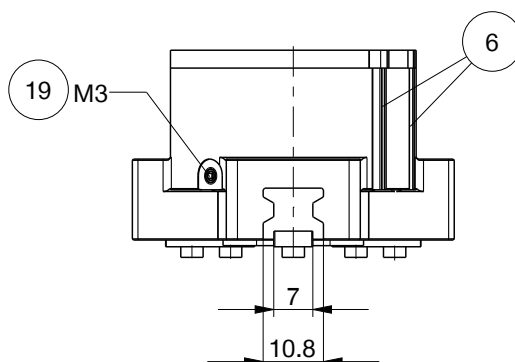
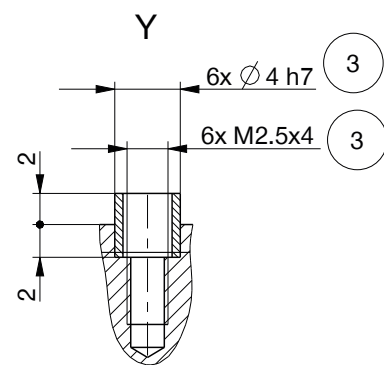
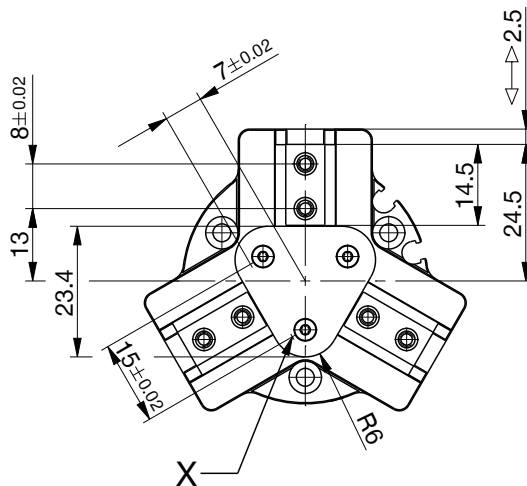
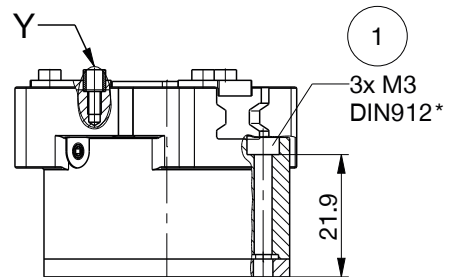
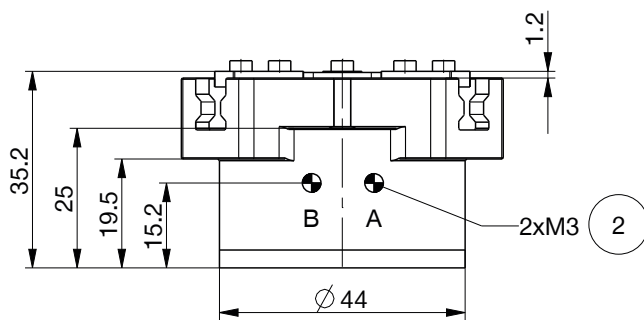
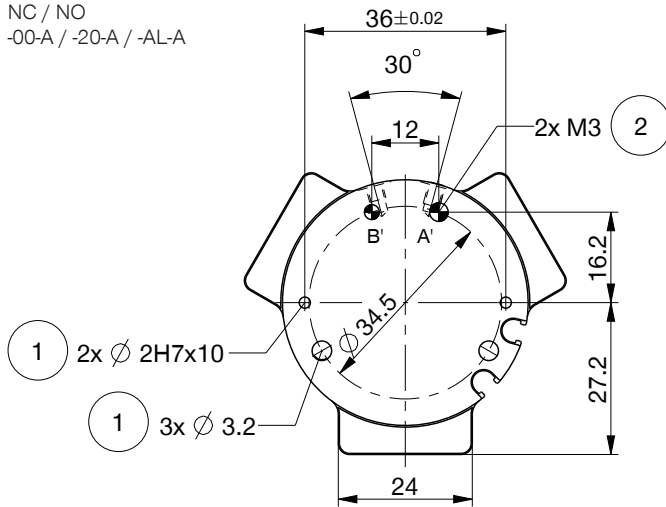
Order no.	▶ Technical data		
	GPD5003N-AL-A	GPD5003NC-AL-A	GPD5003NO-AL-A
Dead weight of mounted gripper finger max. [kg]	0.1	0.1	0.1
Length of the gripper fingers max. [mm]	60	55	55
Protection to IEC 60529	IP40	IP40	IP40
Protected against corrosion	No	No	No
Weight [kg]	0.14	0.17	0.17

3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5003

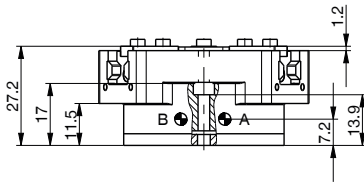
TECHNICAL DRAWINGS

NC / NO
-00-A / -20-A / -AL-A

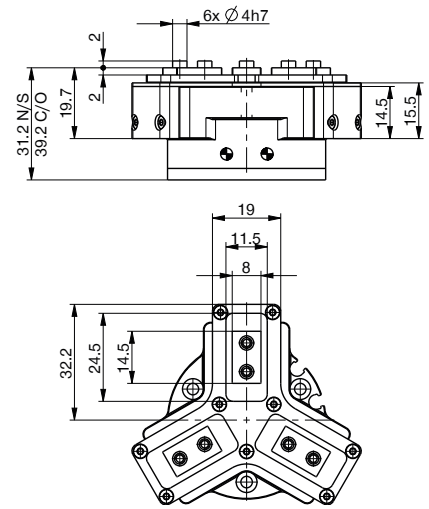


TECHNICAL DRAWINGS

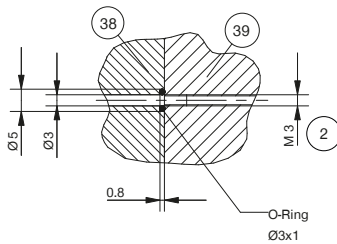
N
-00-A / -20-A / -AL-A



N / NC / NO
-21-A / -24-A



Hoseless air feed-through M3

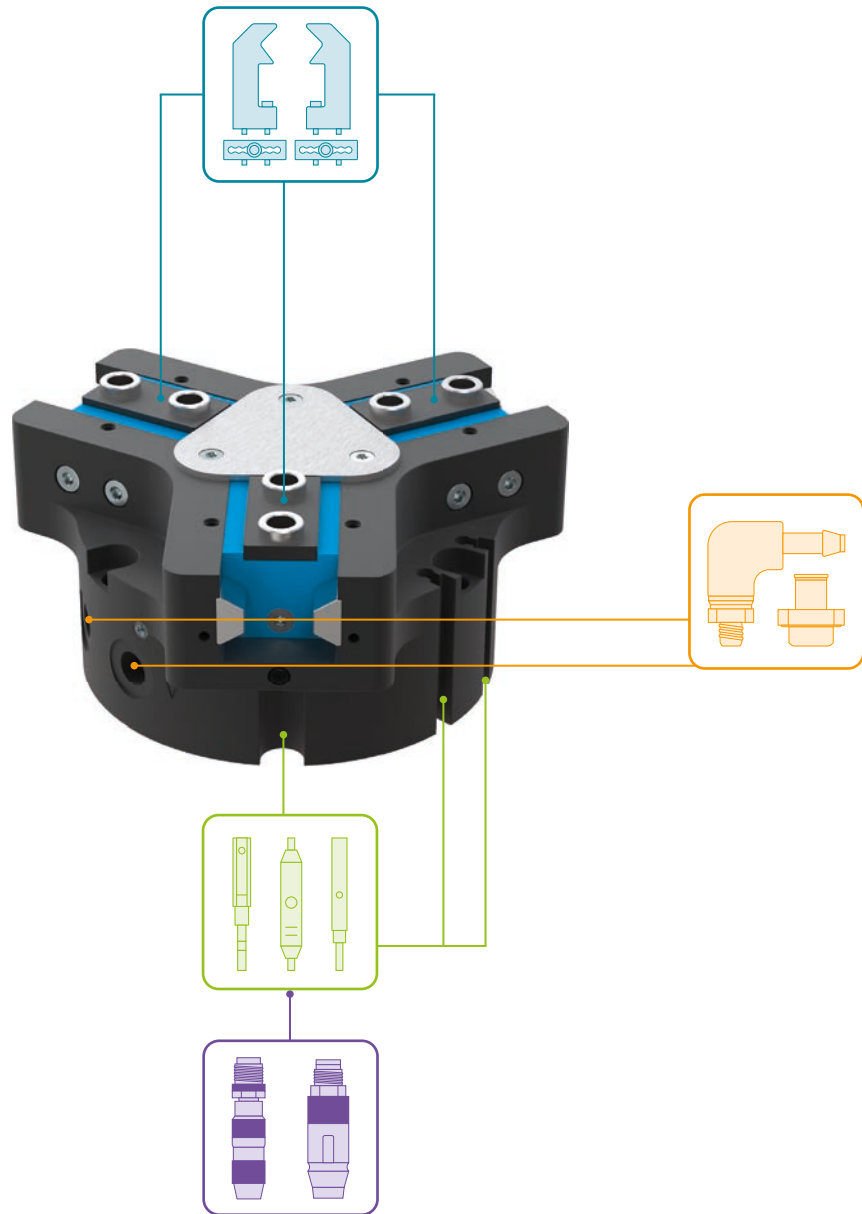


- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑥ Integrated slot for magnetic field sensor
- ⑱ Air purge connection option (max. 0,5 bar)
- ⑳ Attachment option for customer-specific fittings
- ㉘ Adapter
- ㉙ Gripper
- Ⓐ Air connection (close)
- Ⓑ Air connection (open)
- Ⓐ Air connection, alternative (close)
- Ⓑ Air connection, alternative (open)

3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5003

▶ ACCESORIES



▶ INCLUDED IN DELIVERY



6 [piece]
Centering Disc

DST06510

▶ RECOMMENDED ACCESSORIES



GRIPPING COMPONENTS



UB5003AL
Universal jaw aluminium



UB5003ST
Universal jaw steel



KF50N
Rubber Coated Tape
Knobbed



EB5003AL
Aluminum adjustment jaw



EB5003ST
Steel adjustment jaw



ADS5003-01
Pressure piece N / S



ADS5003-02
Pressure piece NC / NO
/ SC / SO



ENERGY SUPPLY



GVM3
Straight Fittings - Barb
Style Connection



WVM3
Angled Fittings - Barb
Style Connection



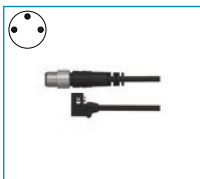
DSV1-8
Pressure safety valve



DSV1-8E
Pressure safety valve with
quick exhaust



SENSORS



MFS01-S-KHC-P1-PNP
Magnetic field sensor angled,
cable 0.3 m - M8 connector



MFS02-S-KHC-P1-PNP
Magnetic field sensor straight,
cable 0.3 m - M8 connector



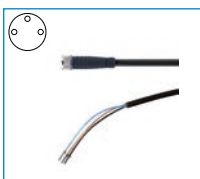
MFS01-S-KHC-P2-PNP
2-point sensor angled, ca-
ble 0.3 m - M8 connector



MFS02-S-KHC-P2-PNP
2-point sensor straight, ca-
ble 0.3 m - M8 connector



CONNECTIONS / OTHER



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



S12-G-3
Plug-in connector customiz-
able Straight - Connector M12

3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5004

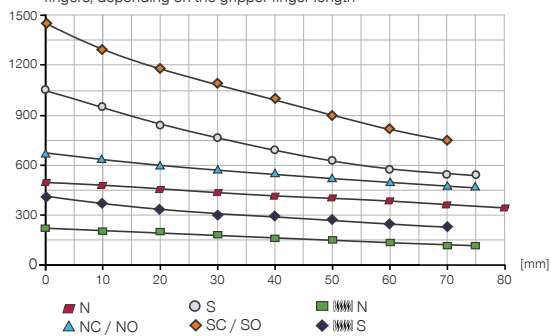
PRODUCT SPECIFICATIONS

-00-A / -20-A / -21-A / -24-A

Steel / steel guide

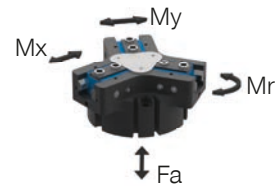
Gripping force diagram

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



Forces and moments

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



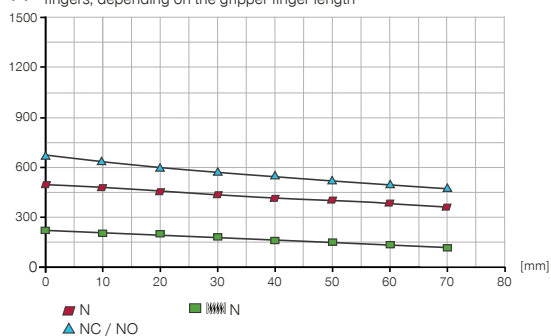
Mr [Nm]	14
Mx [Nm]	29
My [Nm]	23
Fa [N]	750

-AL-A

Steel / aluminum guide

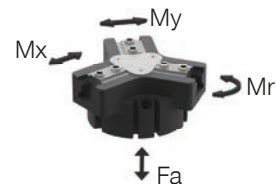
Gripping force diagram

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



Forces and moments

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



Mr [Nm]	10
Mx [Nm]	25
My [Nm]	20
Fa [N]	700

VARIANTS

-00-A / -20-A

Steel / steel guide

-21-A / -24-A

Steel / steel guide

-AL-A

Steel / aluminum guide



▶ TECHNICAL DATA

Order no.	▶ Technical data					
	GPD5004N-00-A	GPD5004NC-00-A	GPD5004NO-00-A	GPD5004S-00-A	GPD5004SC-00-A	GPD5004SO-00-A
Stroke per jaw [mm]	4	4	4	2	2	2
Gripping force in closing [N]	460	650		1010	1430	
Gripping force in opening [N]	500		690	1100		1520
Gripping force secured by spring min. [N]		190	190		420	420
Closing time [s]	0.025	0.018	0.028	0.025	0.018	0.028
Opening time [s]	0.025	0.028	0.018	0.025	0.028	0.018
Dead weight of mounted gripper finger max. [kg]	0.2	0.2	0.2	0.2	0.2	0.2
Length of the gripper fingers max. [mm]	80	75	75	75	70	70
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Nominal operating pressure [bar]	6	6	6	6	6	6
Operating temperature [°C]	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90
Air volume per cycle [cm ³]	11	21	21	11	21	21
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	0.27	0.33	0.33	0.27	0.33	0.33

Order no.	▶ Technical Data - High Temperature Version					
	GPD5004N-20-A	GPD5004NC-20-A	GPD5004NO-20-A	GPD5004S-20-A	GPD5004SC-20-A	GPD5004SO-20-A
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130

Order no.	▶ Technical Data - Protector Version					
	GPD5004N-21-A	GPD5004NC-21-A	GPD5004NO-21-A	GPD5004S-21-A	GPD5004SC-21-A	GPD5004SO-21-A
Protection to IEC 60529	IP67*	IP67*	IP67*	IP67*	IP67*	IP67*
Weight [kg]	0.35	0.41	0.41	0.35	0.41	0.41

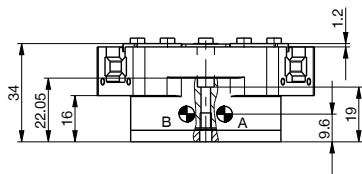
Order no.	▶ Technical Data - High Temperature Protector Version					
	GPD5004N-24-A	GPD5004NC-24-A	GPD5004NO-24-A	GPD5004S-24-A	GPD5004SC-24-A	GPD5004SO-24-A
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130
Protection to IEC 60529	IP67*	IP67*	IP67*	IP67*	IP67*	IP67*
Weight [kg]	0.35	0.41	0.41	0.35	0.41	0.41

*with purged air (max. 0,5 bar)

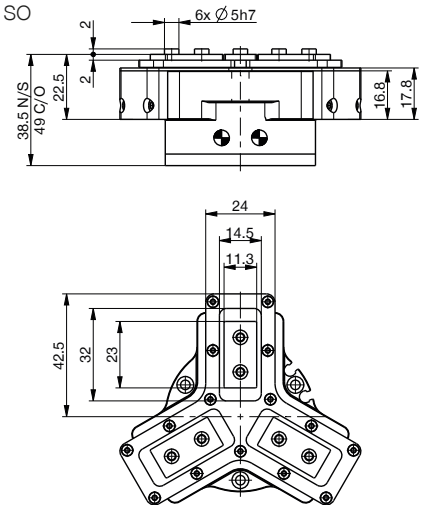
Order no.	▶ Technical data		
	GPD5004N-AL-A	GPD5004NC-AL-A	GPD5004NO-AL-A
Dead weight of mounted gripper finger max. [kg]	0.18	0.18	0.18
Length of the gripper fingers max. [mm]	70	70	70
Protection to IEC 60529	IP40	IP40	IP40
Protected against corrosion	No	No	No
Weight [kg]	0.27	0.32	0.32

▶ TECHNICAL DRAWINGS

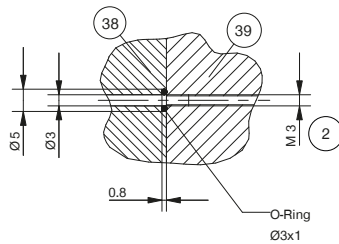
N / S
-00-A / -20-A / -AL-A



N / NC / NO / S / SC / SO
-21-A / -24-A



Hoseless air feed-through M3

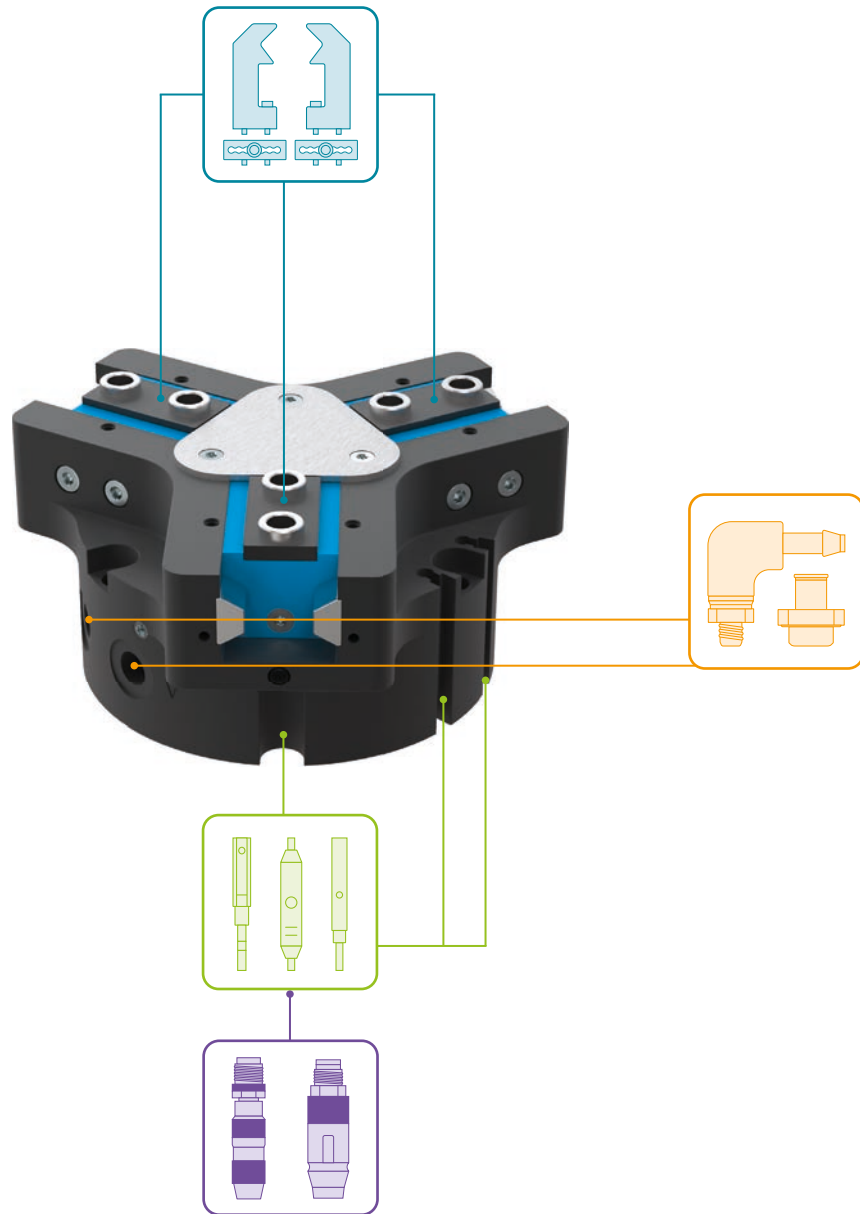


- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑥ Integrated slot for magnetic field sensor
- ⑱ Air purge connection option (max. 0,5 bar)
- ⑳ Attachment option for customer-specific fittings
- ㉘ Adapter
- ㉙ Gripper
- Ⓐ Air connection (close)
- Ⓑ Air connection (open)
- Ⓐ Air connection, alternative (close)
- Ⓑ Air connection, alternative (open)

3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5004

▶ ACCESORIES



▶ INCLUDED IN DELIVERY



6 [piece]
Centering Disc

015761

▶ RECOMMENDED ACCESSORIES



GRIPPING COMPONENTS



UB5004AL
Universal jaw aluminium



UB5004ST
Universal jaw steel



EB5004AL
Aluminum adjustment jaw



EB5004ST
Steel adjustment jaw



WB5004L
Changeable jaw, loose-part-set



WB5004F
Changeable jaw, fix-part



ADS5004-01
Pressure piece N / S



ADS5004-02
Pressure piece NC / NO / SC / SO



ENERGY SUPPLY



GVM5
Straight Fittings - Quick Connect Style



WVM5
Angled Fittings - Quick Connect Style



DSV1-8
Pressure safety valve



DSV1-8E
Pressure safety valve with quick exhaust



SENSORS



MFS01-S-KHC-P1-PNP
Magnetic field sensor angled, cable 0.3 m - M8 connector



MFS02-S-KHC-P1-PNP
Magnetic field sensor straight, cable 0.3 m - M8 connector



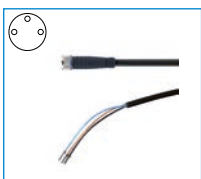
MFS01-S-KHC-P2-PNP
2-point sensor angled, cable 0.3 m - M8 connector



MFS02-S-KHC-P2-PNP
2-point sensor straight, cable 0.3 m - M8 connector



CONNECTIONS / OTHER



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

3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5006

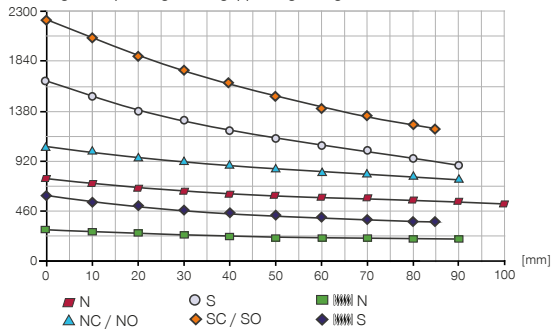
PRODUCT SPECIFICATIONS

-00-A / -20-A / -21-A / -24-A

Steel / steel guide

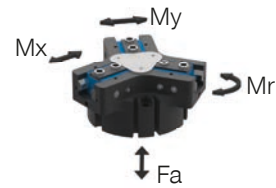
Gripping force diagram

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



Forces and moments

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



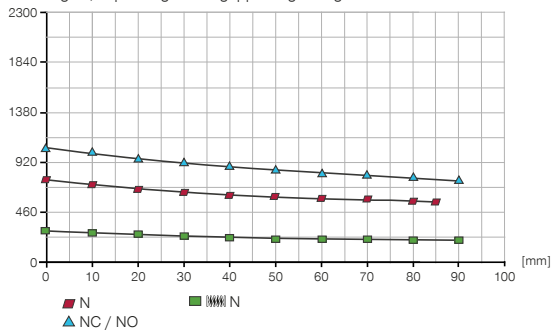
Mr [Nm]	43
Mx [Nm]	70
My [Nm]	46
Fa [N]	1250

-AL-A

Steel / aluminum guide

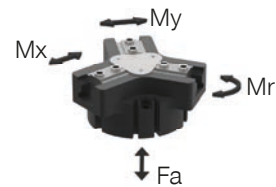
Gripping force diagram

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



Forces and moments

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



Mr [Nm]	40
Mx [Nm]	60
My [Nm]	45
Fa [N]	1200

VARIANTS

-00-A / -20-A

Steel / steel guide

-21-A / -24-A

Steel / steel guide

-AL-A

Steel / aluminum guide



▶ TECHNICAL DATA

Order no.	▶ Technical data					
	GPD5006N-00-A	GPD5006NC-00-A	GPD5006NO-00-A	GPD5006S-00-A	GPD5006SC-00-A	GPD5006SO-00-A
Stroke per jaw [mm]	6	6	6	3	3	3
Gripping force in closing [N]	740	1020		1620	2240	
Gripping force in opening [N]	800		1080	1750		2370
Gripping force secured by spring min. [N]		280	280		620	620
Closing time [s]	0.028	0.018	0.038	0.028	0.018	0.038
Opening time [s]	0.028	0.038	0.018	0.028	0.038	0.018
Dead weight of mounted gripper finger max. [kg]	0.4	0.4	0.4	0.4	0.4	0.4
Length of the gripper fingers max. [mm]	100	90	90	90	85	85
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Nominal operating pressure [bar]	6	6	6	6	6	6
Operating temperature [°C]	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90
Air volume per cycle [cm ³]	22	43	43	22	43	43
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	0.48	0.58	0.58	0.48	0.58	0.58

Order no.	▶ Technical Data - High Temperature Version					
	GPD5006N-20-A	GPD5006NC-20-A	GPD5006NO-20-A	GPD5006S-20-A	GPD5006SC-20-A	GPD5006SO-20-A
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130

Order no.	▶ Technical Data - Protector Version					
	GPD5006N-21-A	GPD5006NC-21-A	GPD5006NO-21-A	GPD5006S-21-A	GPD5006SC-21-A	GPD5006SO-21-A
Protection to IEC 60529	IP67*	IP67*	IP67*	IP67*	IP67*	IP67*
Weight [kg]	0.61	0.71	0.71	0.61	0.71	0.71

Order no.	▶ Technical Data - High Temperature Protector Version					
	GPD5006N-24-A	GPD5006NC-24-A	GPD5006NO-24-A	GPD5006S-24-A	GPD5006SC-24-A	GPD5006SO-24-A
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130
Protection to IEC 60529	IP67*	IP67*	IP67*	IP67*	IP67*	IP67*
Weight [kg]	0.61	0.71	0.71	0.61	0.71	0.71

*with purged air (max. 0,5 bar)

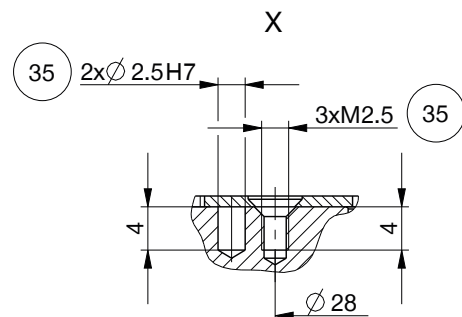
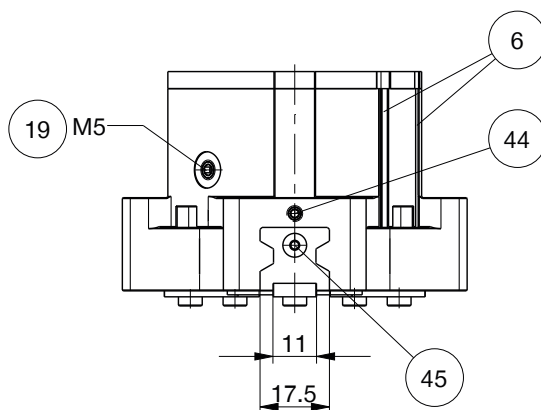
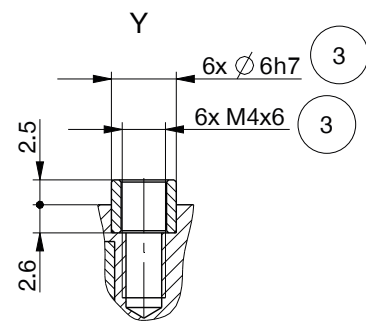
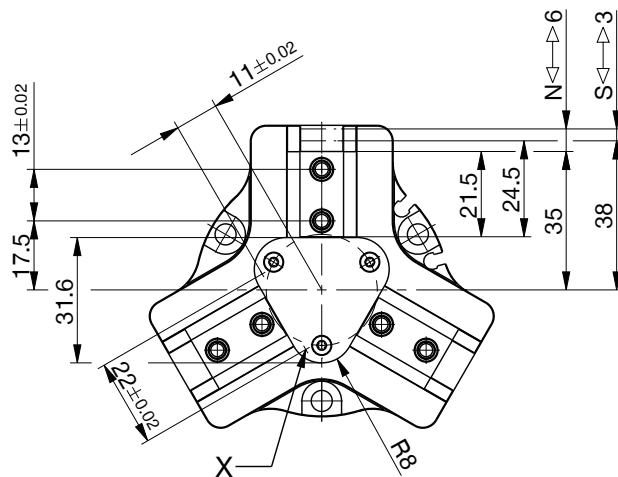
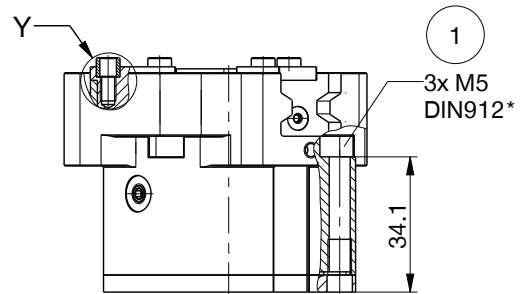
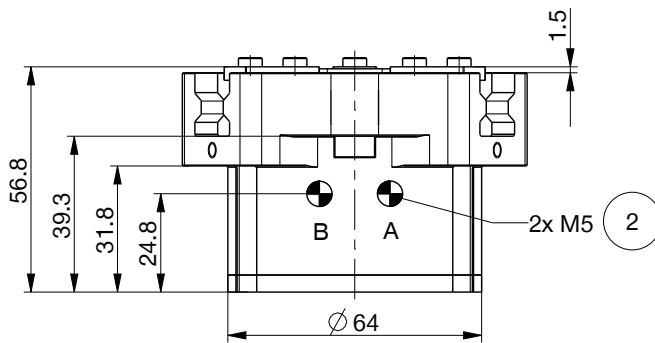
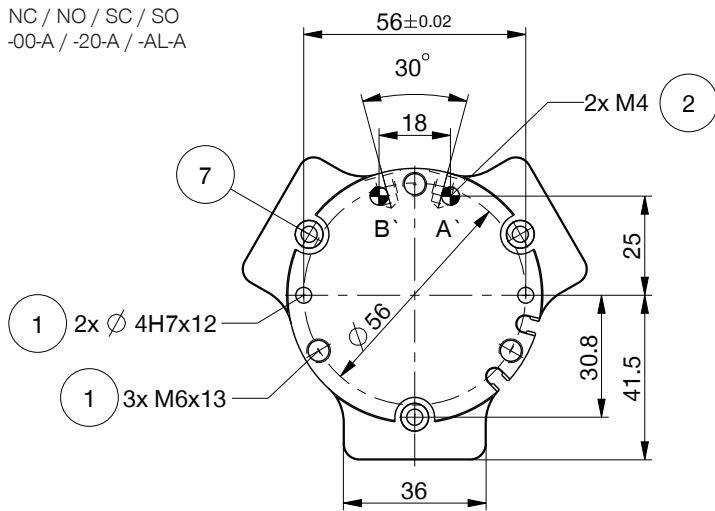
Order no.	▶ Technical data		
	GPD5006N-AL-A	GPD5006NC-AL-A	GPD5006NO-AL-A
Dead weight of mounted gripper finger max. [kg]	0.35	0.35	0.35
Length of the gripper fingers max. [mm]	90	85	85
Protection to IEC 60529	IP40	IP40	IP40
Protected against corrosion	No	No	No
Weight [kg]	0.47	0.57	0.57

3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5006

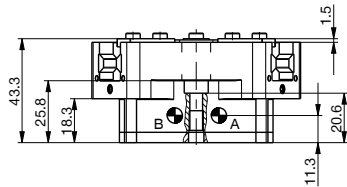
TECHNICAL DRAWINGS

NC / NO / SC / SO
-00-A / -20-A / -AL-A

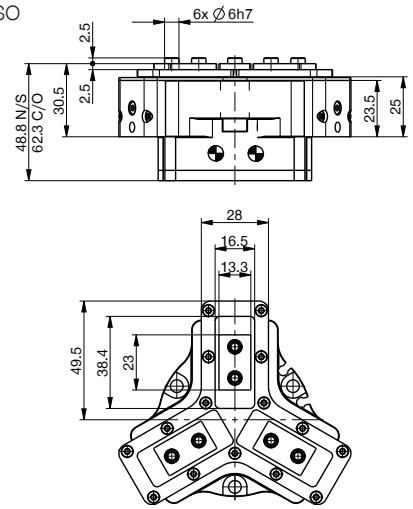


▶ TECHNICAL DRAWINGS

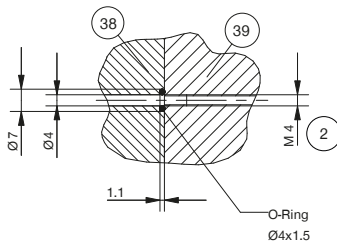
N / S
-00-A / -20-A / -AL-A



N / NC / NO / S / SC / SO
-21-A / -24-A



Hoseless air feed-through M4

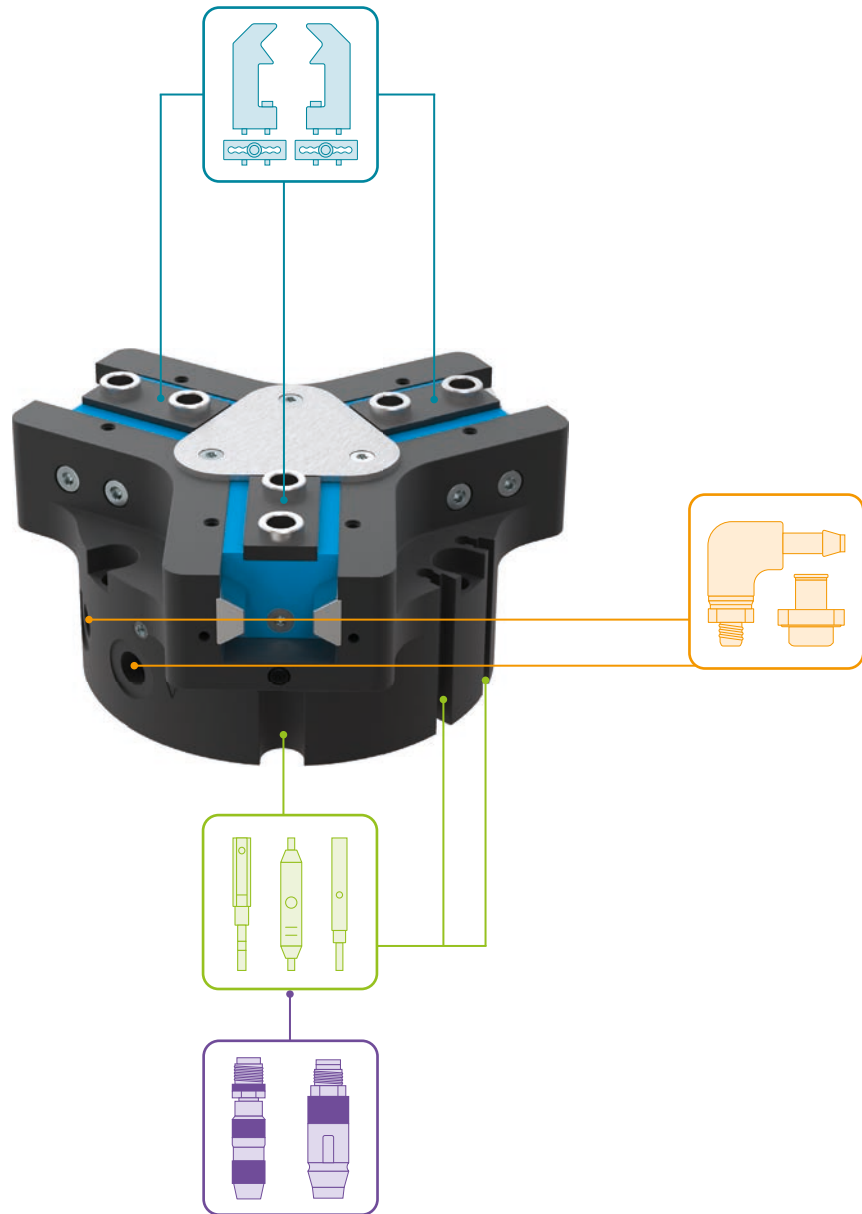


- | | |
|----------------------------------------------------|-------------------------------------------------|
| ① Gripper attachment | ③⑨ Gripper |
| ② Energy supply | ④④ Clamping sensor (not for variant AL-A) |
| ③ Fixing for gripper finger | ④⑤ Switch cam adjustment (not for variant AL-A) |
| ⑥ Integrated slot for magnetic field sensor | Ⓐ Air connection (close) |
| ⑦ Mounting block (not for variant AL-A) | Ⓑ Air connection (open) |
| ⑱ Air purge connection option (max. 0,5 bar) | Ⓐ Air connection, alternative (close) |
| ⑳ Attachment option for customer-specific fittings | Ⓑ Air connection, alternative (open) |
| ⑳ Adapter | |

3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5006

▶ ACCESORIES



▶ INCLUDED IN DELIVERY



6 [piece]
Centering Disc

024230

▶ RECOMMENDED ACCESSORIES



GRIPPING COMPONENTS



UB5006AL
Universal jaw aluminium



UB5006ST
Universal jaw steel



EB5006AL
Aluminum adjustment jaw



EB5006ST
Steel adjustment jaw



WB5006L
Changeable jaw, loose-part-set



WB5006F
Changeable jaw, fix-part



ADS5006-01
Pressure piece N / S



ADS5006-02
Pressure piece NC / NO / SC / SO



ENERGY SUPPLY



WVM5
Angled Fittings - Quick Connect Style



DSV1-8
Pressure safety valve



DSV1-8E
Pressure safety valve with quick exhaust



SENSORS



NJ4-E2SK-01
Inductive Proximity Switch
Cable 0,3 m - Connector M8

*Not for variant AL-A



MFS01-S-KHC-P1-PNP
Magnetic field sensor angled,
cable 0.3 m - M8 connector



MFS02-S-KHC-P1-PNP
Magnetic field sensor straight,
cable 0.3 m - M8 connector



MFS01-S-KHC-P2-PNP
2-point sensor angled, ca-
ble 0.3 m - M8 connector



MFS02-S-KHC-P2-PNP
2-point sensor straight, ca-
ble 0.3 m - M8 connector

3-JAW CONCENTRIC GRIPPERS

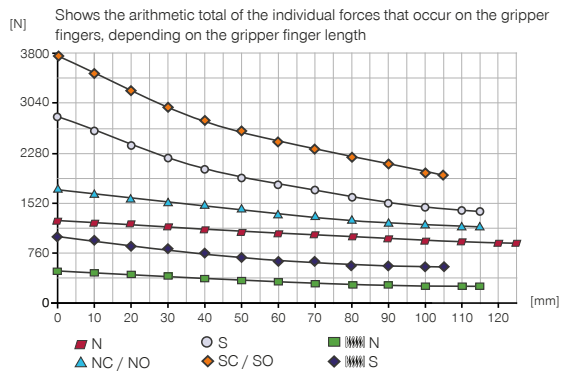
INSTALLATION SIZE GPD5008

PRODUCT SPECIFICATIONS

-00-A / -20-A / -21-A / -24-A

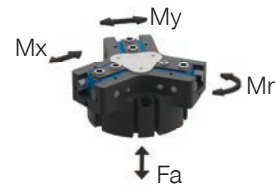
Steel / steel guide

Gripping force diagram



Forces and moments

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

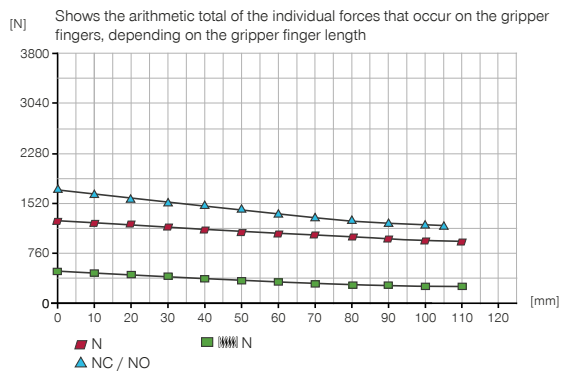


Mr [Nm]	60
Mx [Nm]	105
My [Nm]	65
Fa [N]	1900

-AL-A

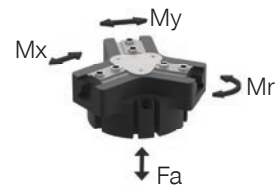
Steel / aluminum guide

Gripping force diagram



Forces and moments

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



Mr [Nm]	55
Mx [Nm]	95
My [Nm]	60
Fa [N]	1800

VARIANTS

-00-A / -20-A

Steel / steel guide

-21-A / -24-A

Steel / steel guide

-AL-A

Steel / aluminum guide



▶ TECHNICAL DATA

Order no.	▶ Technical data					
	GPD5008N-00-A	GPD5008NC-00-A	GPD5008NO-00-A	GPD5008S-00-A	GPD5008SC-00-A	GPD5008SO-00-A
Stroke per jaw [mm]	8	8	8	4	4	4
Gripping force in closing [N]	1260	1690		2780	3730	
Gripping force in opening [N]	1340		1770	2960		3910
Gripping force secured by spring min. [N]		430	430		950	950
Closing time [s]	0.048	0.035	0.055	0.048	0.035	0.055
Opening time [s]	0.048	0.055	0.035	0.048	0.055	0.035
Dead weight of mounted gripper finger max. [kg]	0.7	0.7	0.7	0.7	0.7	0.7
Length of the gripper fingers max. [mm]	125	115	115	115	105	105
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Nominal operating pressure [bar]	6	6	6	6	6	6
Operating temperature [°C]	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90
Air volume per cycle [cm ³]	51	90	90	51	90	90
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	0.83	1	1	0.83	1	1

Order no.	▶ Technical Data - High Temperature Version					
	GPD5008N-20-A	GPD5008NC-20-A	GPD5008NO-20-A	GPD5008S-20-A	GPD5008SC-20-A	GPD5008SO-20-A
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130

Order no.	▶ Technical Data - Protector Version					
	GPD5008N-21-A	GPD5008NC-21-A	GPD5008NO-21-A	GPD5008S-21-A	GPD5008SC-21-A	GPD5008SO-21-A
Protection to IEC 60529	IP67*	IP67*	IP67*	IP67*	IP67*	IP67*
Weight [kg]	1.03	1.2	1.2	1.03	1.2	1.2

Order no.	▶ Technical Data - High Temperature Protector Version					
	GPD5008N-24-A	GPD5008NC-24-A	GPD5008NO-24-A	GPD5008S-24-A	GPD5008SC-24-A	GPD5008SO-24-A
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130
Protection to IEC 60529	IP67*	IP67*	IP67*	IP67*	IP67*	IP67*
Weight [kg]	1.03	1.2	1.2	1.03	1.2	1.2

*with purged air (max. 0,5 bar)

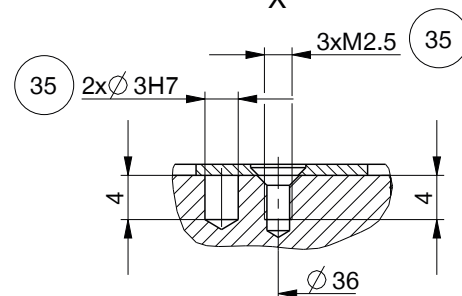
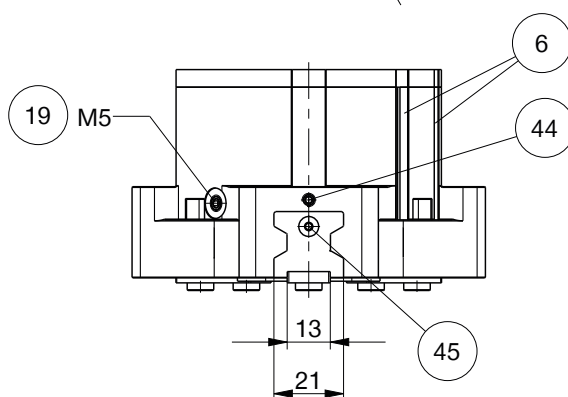
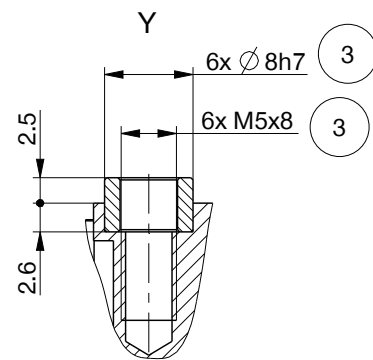
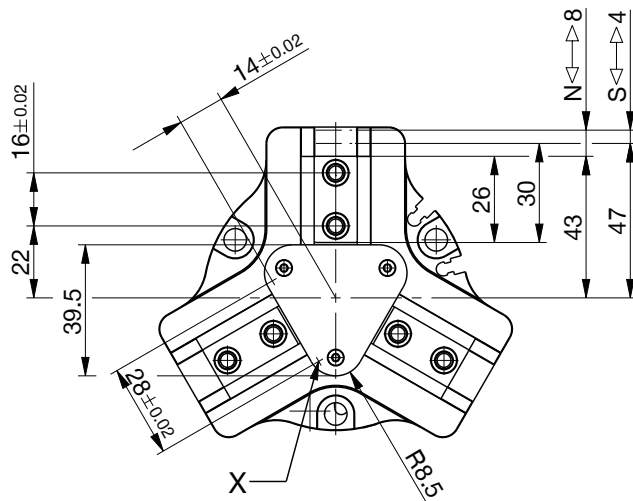
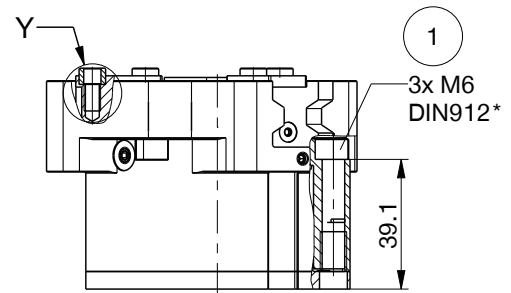
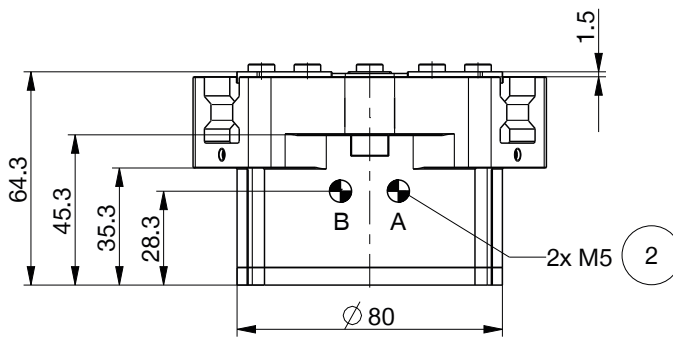
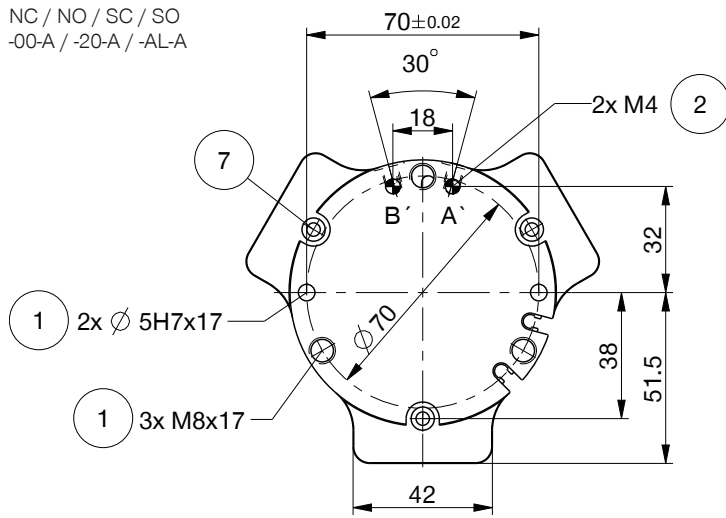
Order no.	▶ Technical data		
	GPD5008N-AL-A	GPD5008NC-AL-A	GPD5008NO-AL-A
Dead weight of mounted gripper finger max. [kg]	0.6	0.6	0.6
Length of the gripper fingers max. [mm]	110	105	105
Protection to IEC 60529	IP40	IP40	IP40
Protected against corrosion	No	No	No
Weight [kg]	0.83	1	1

3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5008

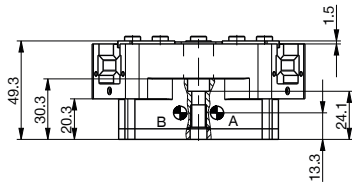
TECHNICAL DRAWINGS

NC / NO / SC / SO
-00-A / -20-A / -AL-A

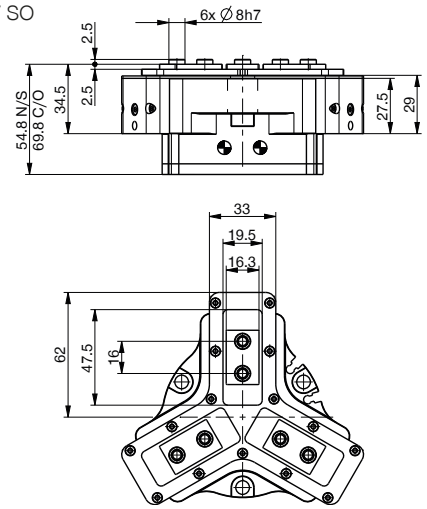


TECHNICAL DRAWINGS

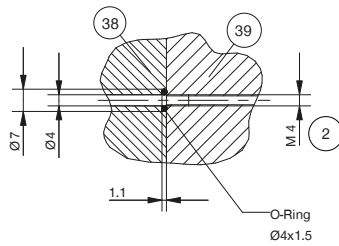
N / S
-00-A / -20-A / -AL-A



N / NC / NO / S / SC / SO
-21-A / -24-A



Hoseless air feed-through M4

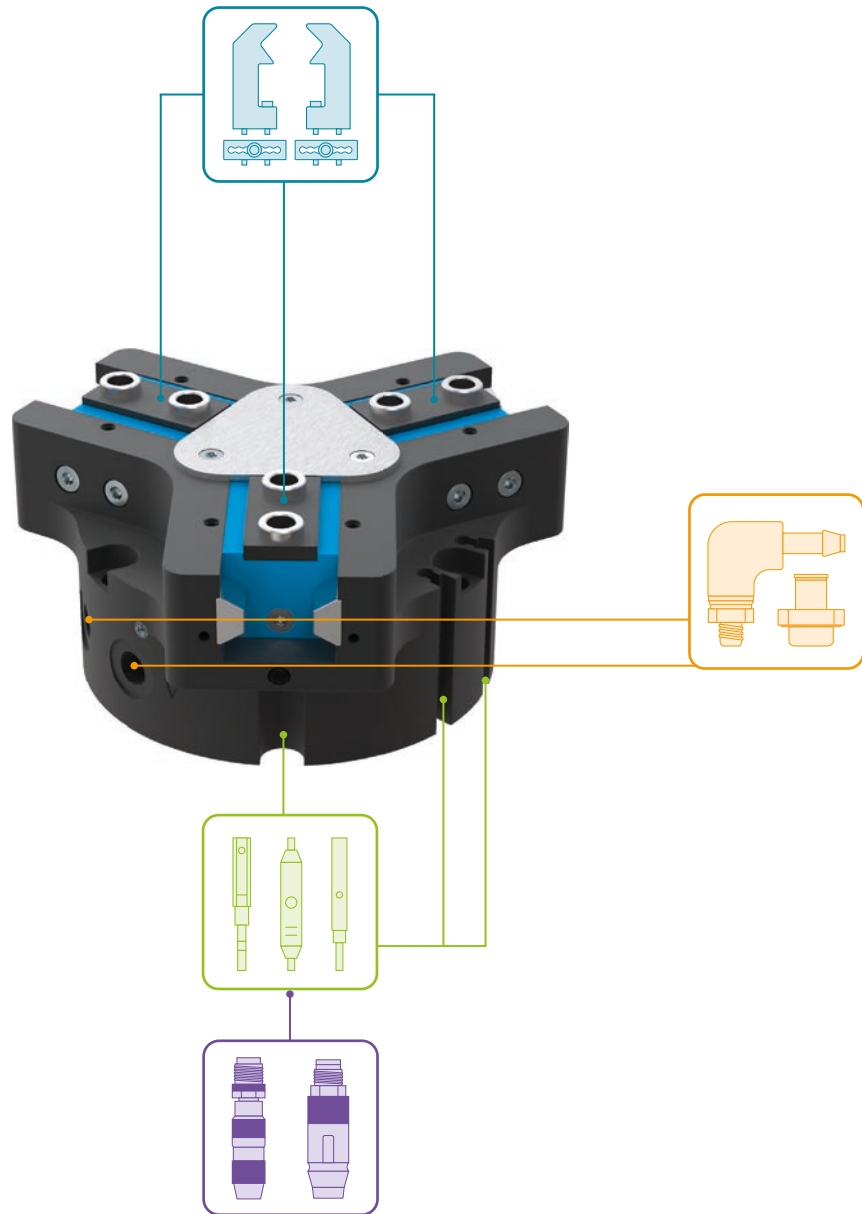


- | | |
|----------------------------------------------------|-------------------------------------------------|
| ① Gripper attachment | ③⑨ Gripper |
| ② Energy supply | ④④ Clamping sensor (not for variant AL-A) |
| ③ Fixing for gripper finger | ④⑤ Switch cam adjustment (not for variant AL-A) |
| ⑥ Integrated slot for magnetic field sensor | Ⓐ Air connection (close) |
| ⑦ Mounting block (not for variant AL-A) | Ⓑ Air connection (open) |
| ⑰ Air purge connection option (max. 0,5 bar) | Ⓐ Air connection, alternative (close) |
| ⑳ Attachment option for customer-specific fittings | Ⓑ Air connection, alternative (open) |
| ㉑ Adapter | |

3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5008

▶ ACCESORIES



▶ INCLUDED IN DELIVERY



6 [piece]
Centering Disc

024231

▶ RECOMMENDED ACCESSORIES



GRIPPING COMPONENTS



UB5008AL
Universal jaw aluminium



UB5008ST
Universal jaw steel



EB5008AL
Aluminum adjustment jaw



EB5008ST
Steel adjustment jaw



WB5008L
Changeable jaw, loose-part-set



WB5008F
Changeable jaw, fix-part



ADS5008-01
Pressure piece N / S



ADS5008-02
Pressure piece NC / NO / SC / SO



ENERGY SUPPLY



WVM5
Angled Fittings - Quick Connect Style



DSV1-8
Pressure safety valve



DSV1-8E
Pressure safety valve with quick exhaust



SENSORS



NJ4-E2SK-01
Inductive Proximity Switch
Cable 0,3 m - Connector M8

*Not for variant AL-A



MFS01-S-KHC-P1-PNP
Magnetic field sensor angled,
cable 0.3 m - M8 connector



MFS02-S-KHC-P1-PNP
Magnetic field sensor straight,
cable 0.3 m - M8 connector



MFS01-S-KHC-P2-PNP
2-point sensor angled, ca-
ble 0.3 m - M8 connector



MFS02-S-KHC-P2-PNP
2-point sensor straight, ca-
ble 0.3 m - M8 connector

3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5010

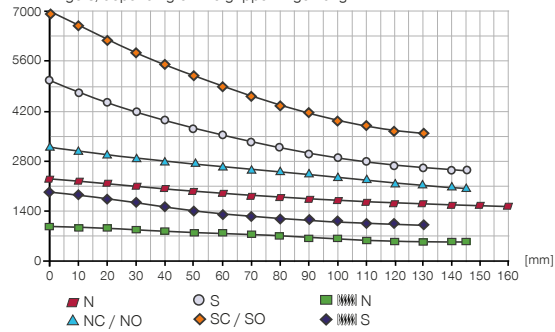
PRODUCT SPECIFICATIONS

-00-A / -20-A / -21-A / -24-A

Steel / steel guide

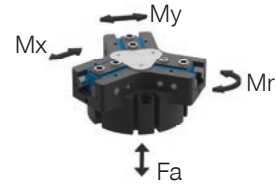
Gripping force diagram

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



Forces and moments

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



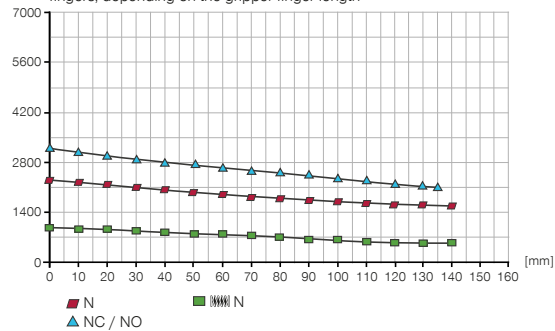
Mr [Nm]	75
Mx [Nm]	125
My [Nm]	95
Fa [N]	2700

-AL-A

Steel / aluminum guide

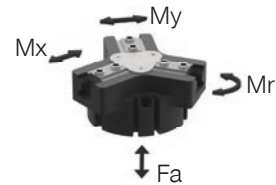
Gripping force diagram

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



Forces and moments

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



Mr [Nm]	75
Mx [Nm]	115
My [Nm]	90
Fa [N]	2500

VARIANTS

-00-A / -20-A

Steel / steel guide

-21-A / -24-A

Steel / steel guide

-AL-A

Steel / aluminum guide



▶ TECHNICAL DATA

Order no.	▶ Technical data					
	GPD5010N-00-A	GPD5010NC-00-A	GPD5010NO-00-A	GPD5010S-00-A	GPD5010SC-00-A	GPD5010SO-00-A
Stroke per jaw [mm]	10	10	10	5	5	5
Gripping force in closing [N]	2290	3140		5050	6930	
Gripping force in opening [N]	2400		3250	5280		7160
Gripping force secured by spring min. [N]		850	850		1880	1880
Closing time [s]	0.095	0.095	0.19	0.095	0.095	0.19
Opening time [s]	0.095	0.19	0.095	0.095	0.19	0.095
Dead weight of mounted gripper finger max. [kg]	1.3	1.3	1.3	1.3	1.3	1.3
Length of the gripper fingers max. [mm]	160	145	145	145	130	130
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Nominal operating pressure [bar]	6	6	6	6	6	6
Operating temperature [°C]	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90
Air volume per cycle [cm ³]	100	200	200	100	200	200
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	1.45	1.9	1.9	1.45	1.9	1.9

Order no.	▶ Technical Data - High Temperature Version					
	GPD5010N-20-A	GPD5010NC-20-A	GPD5010NO-20-A	GPD5010S-20-A	GPD5010SC-20-A	GPD5010SO-20-A
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130

Order no.	▶ Technical Data - Protector Version					
	GPD5010N-21-A	GPD5010NC-21-A	GPD5010NO-21-A	GPD5010S-21-A	GPD5010SC-21-A	GPD5010SO-21-A
Protection to IEC 60529	IP67*	IP67*	IP67*	IP67*	IP67*	IP67*
Weight [kg]	1.8	2.23	2.23	1.8	2.23	2.23

Order no.	▶ Technical Data - High Temperature Protector Version					
	GPD5010N-24-A	GPD5010NC-24-A	GPD5010NO-24-A	GPD5010S-24-A	GPD5010SC-24-A	GPD5010SO-24-A
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +90
Protection to IEC 60529	IP67*	IP67*	IP67*	IP67*	IP67*	IP67*
Weight [kg]	1.8	2.23	2.23	1.8	2.23	2.23

*with purged air (max. 0,5 bar)

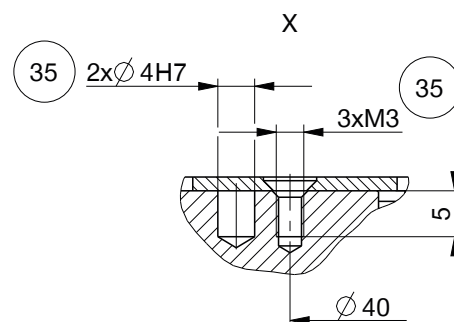
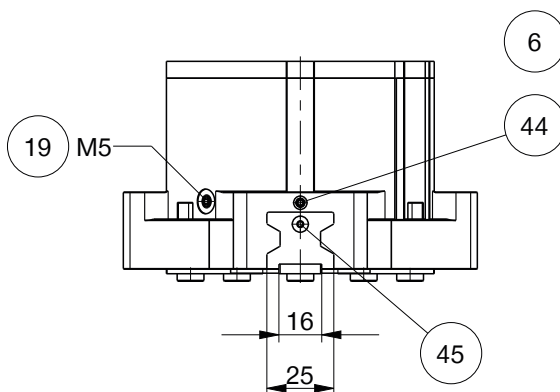
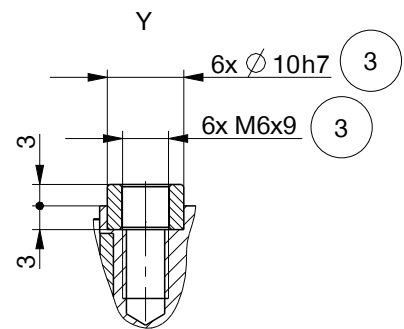
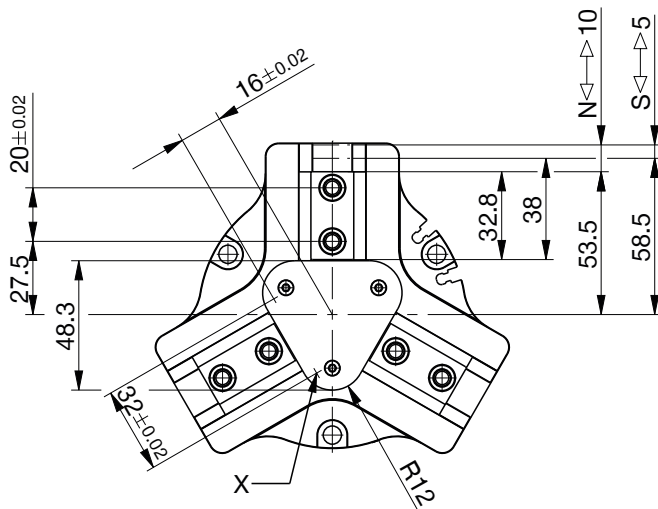
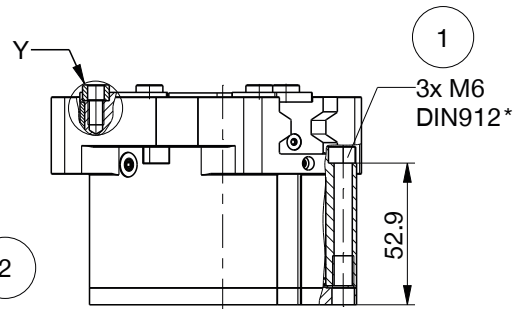
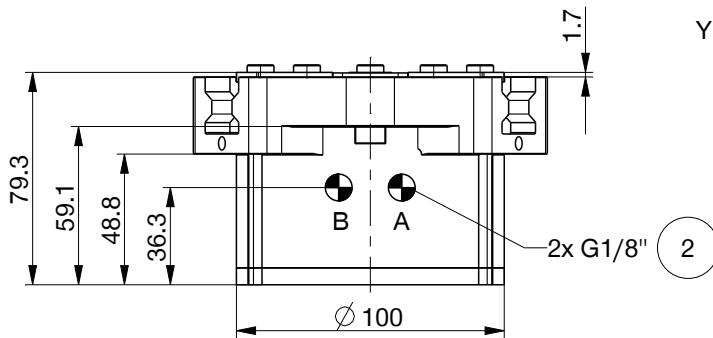
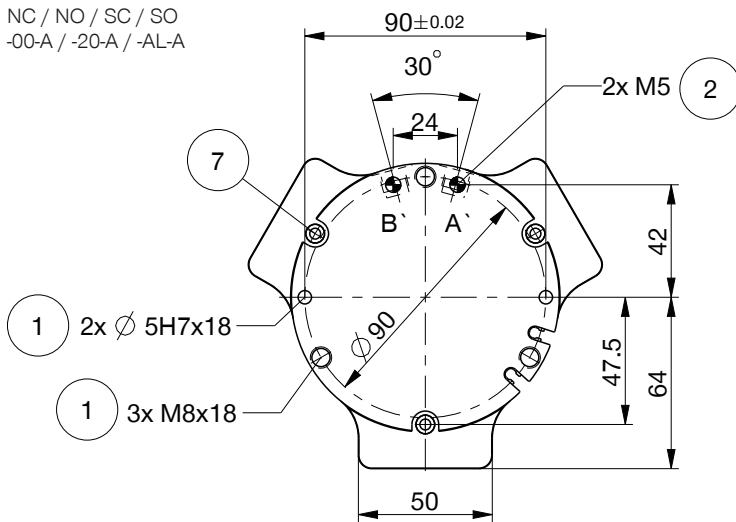
Order no.	▶ Technical data		
	GPD5010N-AL-A	GPD5010NC-AL-A	GPD5010NO-AL-A
Dead weight of mounted gripper finger max. [kg]	1.1	1.1	1.1
Length of the gripper fingers max. [mm]	140	135	135
Protection to IEC 60529	IP40	IP40	IP40
Protected against corrosion	No	No	No
Weight [kg]	1.4	1.8	1.8

3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5010

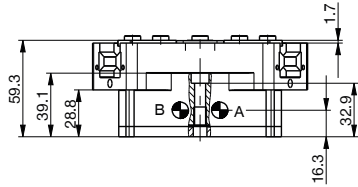
TECHNICAL DRAWINGS

NC / NO / SC / SO
-00-A / -20-A / -AL-A

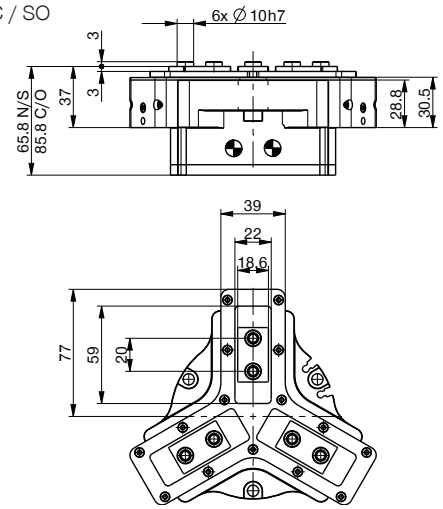


▶ TECHNICAL DRAWINGS

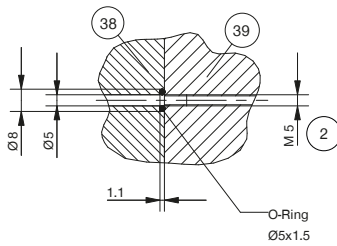
N / S
-00-A / -20-A / -AL-A



N / NC / NO / S / SC / SO
-21-A / -24-A



Hoseless air feed-through M5

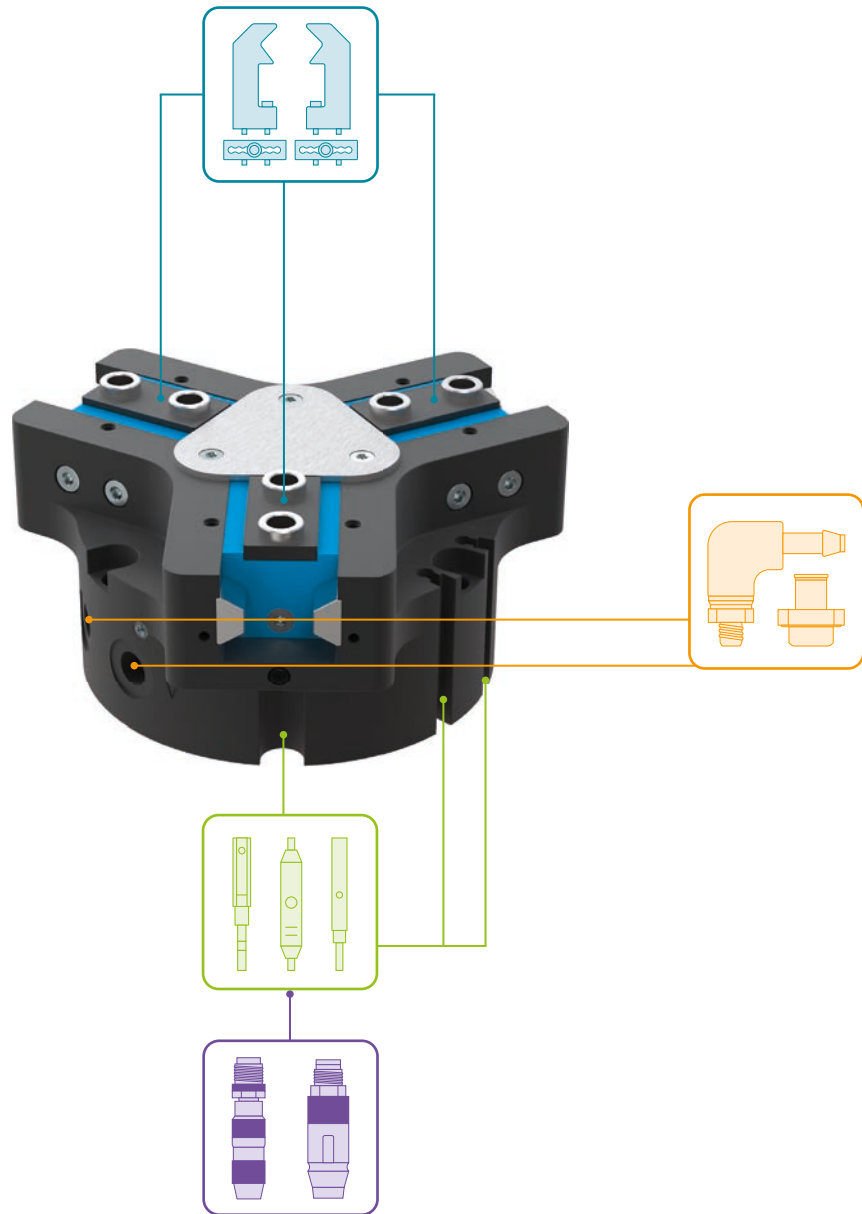


- | | |
|----------------------------------------------------|-------------------------------------------------|
| ① Gripper attachment | ③⑨ Gripper |
| ② Energy supply | ④④ Clamping sensor (not for variant AL-A) |
| ③ Fixing for gripper finger | ④⑤ Switch cam adjustment (not for variant AL-A) |
| ⑥ Integrated slot for magnetic field sensor | Ⓐ Air connection (close) |
| ⑦ Mounting block (not for variant AL-A) | Ⓑ Air connection (open) |
| ⑱ Air purge connection option (max. 0,5 bar) | Ⓐ Air connection, alternative (close) |
| ⑳ Attachment option for customer-specific fittings | Ⓑ Air connection, alternative (open) |
| ⑳ Adapter | |

3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5010

▶ ACCESORIES



▶ INCLUDED IN DELIVERY



6 [piece]
Centering Disc

018187

▶ RECOMMENDED ACCESSORIES



GRIPPING COMPONENTS



UB5010AL
Universal jaw aluminium



UB5010ST
Universal jaw steel



EB5010AL
Aluminum adjustment jaw



EB5010ST
Steel adjustment jaw



WB5010L
Changeable jaw, loose-part-set



WB5010F
Changeable jaw, fix-part



ADS5010-01
Pressure piece N / S



ADS5010-02
Pressure piece NC / NO / SC / SO



ENERGY SUPPLY



WV1-8X8
Angled Fittings - Quick Connect Style



DSV1-8
Pressure safety valve



DSV1-8E
Pressure safety valve with quick exhaust



SENSORS



NJ4-E2SK-01
Inductive Proximity Switch
Cable 0,3 m - Connector M8

*Not for variant AL-A



MFS01-S-KHC-P1-PNP
Magnetic field sensor angled,
cable 0.3 m - M8 connector



MFS02-S-KHC-P1-PNP
Magnetic field sensor straight,
cable 0.3 m - M8 connector



MFS01-S-KHC-P2-PNP
2-point sensor angled, ca-
ble 0.3 m - M8 connector



MFS02-S-KHC-P2-PNP
2-point sensor straight, ca-
ble 0.3 m - M8 connector

3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5013

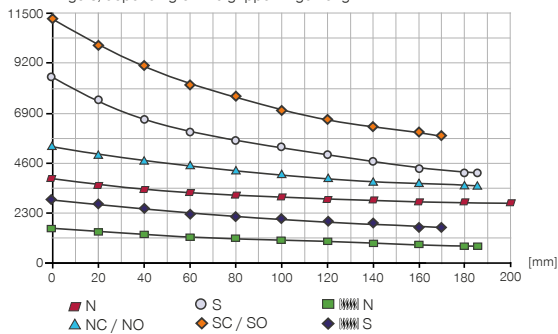
PRODUCT SPECIFICATIONS

-00-A / -20-A / -21-A / -24-A

Steel / steel guide

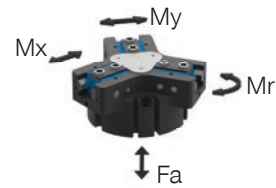
Gripping force diagram

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



Forces and moments

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



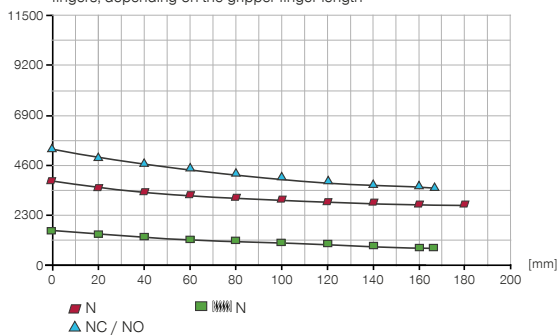
Mr [Nm]	110
Mx [Nm]	150
My [Nm]	130
Fa [N]	3300

-AL-A

Steel / aluminum guide

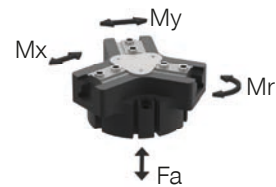
Gripping force diagram

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



Forces and moments

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



Mr [Nm]	100
Mx [Nm]	145
My [Nm]	120
Fa [N]	3200

VARIANTS

-00-A / -20-A

Steel / steel guide

-21-A / -24-A

Steel / steel guide

-AL-A

Steel / aluminum guide



▶ TECHNICAL DATA

Order no.	▶ Technical data					
	GPD5013N-00-A	GPD5013NC-00-A	GPD5013NO-00-A	GPD5013S-00-A	GPD5013SC-00-A	GPD5013SO-00-A
Stroke per jaw [mm]	13	13	13	6	6	6
Gripping force in closing [N]	3770	5060		8310	11160	
Gripping force in opening [N]	3910		5200	8600		11450
Gripping force secured by spring min. [N]		1290	1290		2850	2850
Closing time [s]	0.19	0.15	0.25	0.19	0.15	0.25
Opening time [s]	0.19	0.25	0.15	0.19	0.25	0.15
Dead weight of mounted gripper finger max. [kg]	2.4	2.4	2.4	2.4	2.4	2.4
Length of the gripper fingers max. [mm]	200	185	185	185	170	170
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Nominal operating pressure [bar]	6	6	6	6	6	6
Operating temperature [°C]	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90
Air volume per cycle [cm ³]	230	415	415	230	415	415
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	2.8	3.7	3.7	2.6	3.7	3.7

Order no.	▶ Technical Data - High Temperature Version					
	GPD5013N-20-A	GPD5013NC-20-A	GPD5013NO-20-A	GPD5013S-20-A	GPD5013SC-20-A	GPD5013SO-20-A
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130

Order no.	▶ Technical Data - Protector Version					
	GPD5013N-21-A	GPD5013NC-21-A	GPD5013NO-21-A	GPD5013S-21-A	GPD5013SC-21-A	GPD5013SO-21-A
Protection to IEC 60529	IP67*	IP67*	IP67*	IP67*	IP67*	IP67*
Weight [kg]	3.35	4.3	4.3	3.15	4.3	4.3

Order no.	▶ Technical Data - High Temperature Protector Version					
	GPD5013N-24-A	GPD5013NC-24-A	GPD5013NO-24-A	GPD5013S-24-A	GPD5013SC-24-A	GPD5013SO-24-A
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130
Protection to IEC 60529	IP67*	IP67*	IP67*	IP67*	IP67*	IP67*
Weight [kg]	3.35	4.3	4.3	3.15	4.3	4.3

*with purged air (max. 0,5 bar)

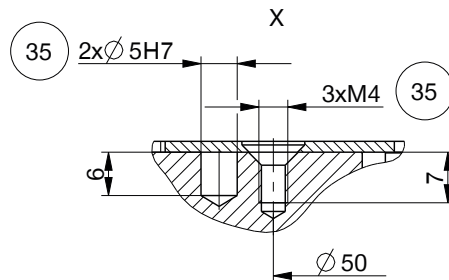
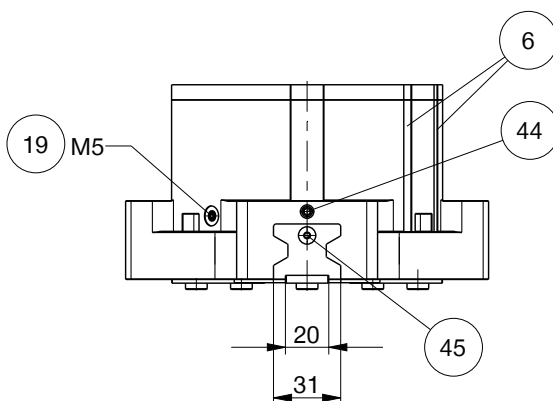
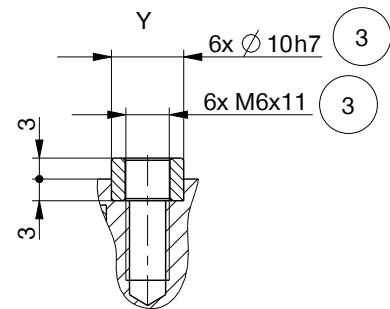
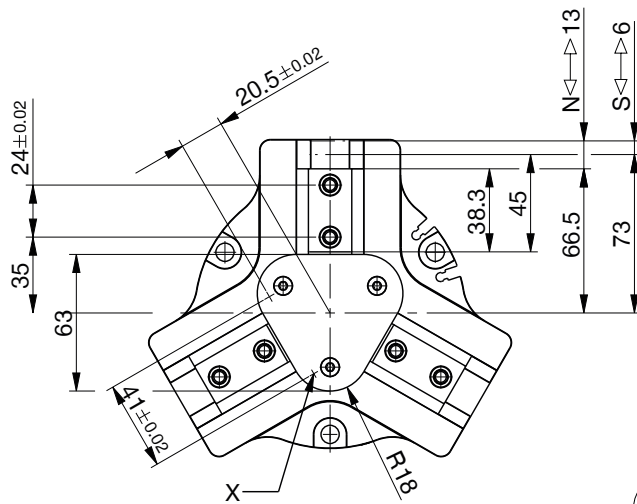
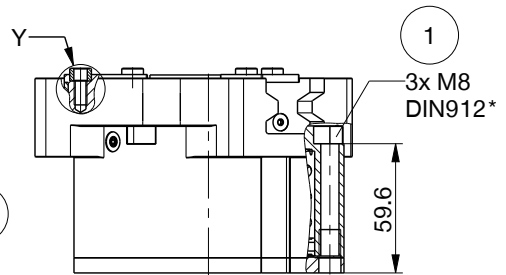
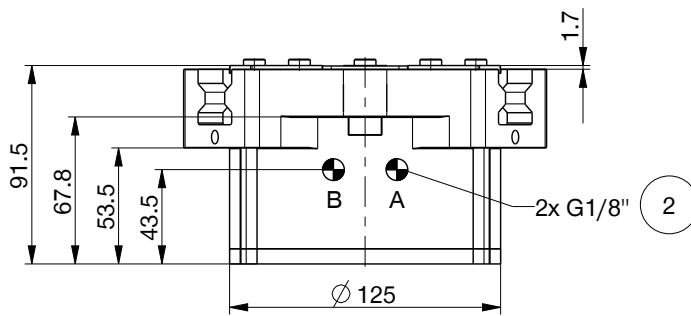
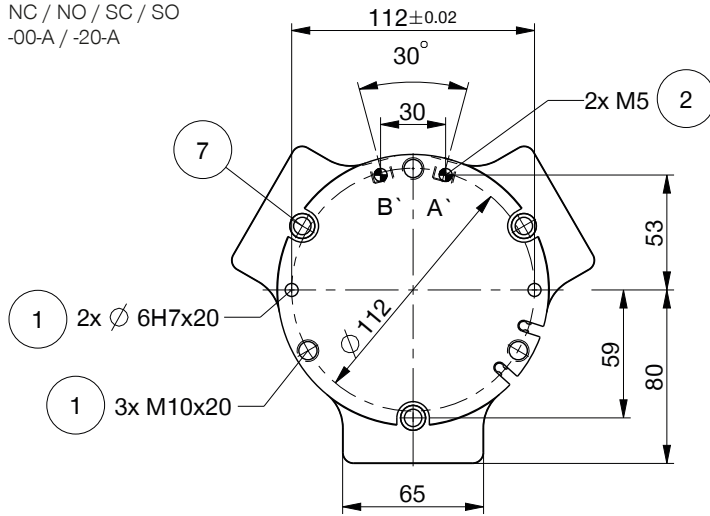
Order no.	▶ Technical data		
	GPD5013N-AL-A	GPD5013NC-AL-A	GPD5013NO-AL-A
Dead weight of mounted gripper finger max. [kg]	2.1	2.1	2.1
Length of the gripper fingers max. [mm]	180	170	170
Protection to IEC 60529	IP40	IP40	IP40
Protected against corrosion	No	No	No
Weight [kg]	2.7	3.6	3.6

3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5013

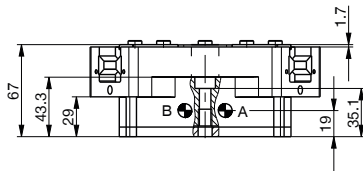
TECHNICAL DRAWINGS

NC / NO / SC / SO
-00-A / -20-A

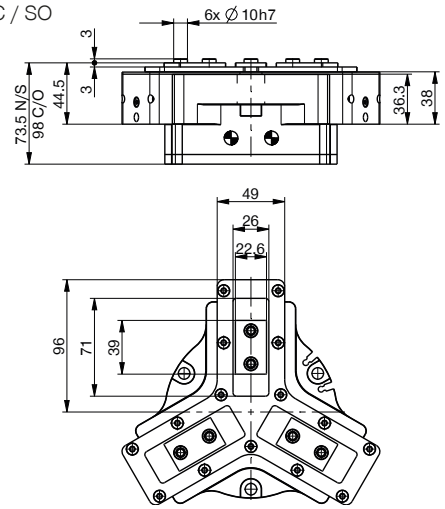


TECHNICAL DRAWINGS

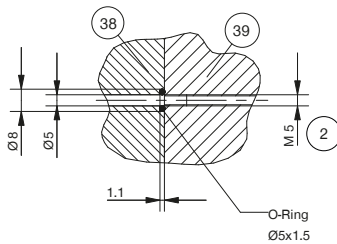
N / S
-00-A / -20-A



N / NC / NO / S / SC / SO
-21-A / -24-A



Hoseless air feed-through M5

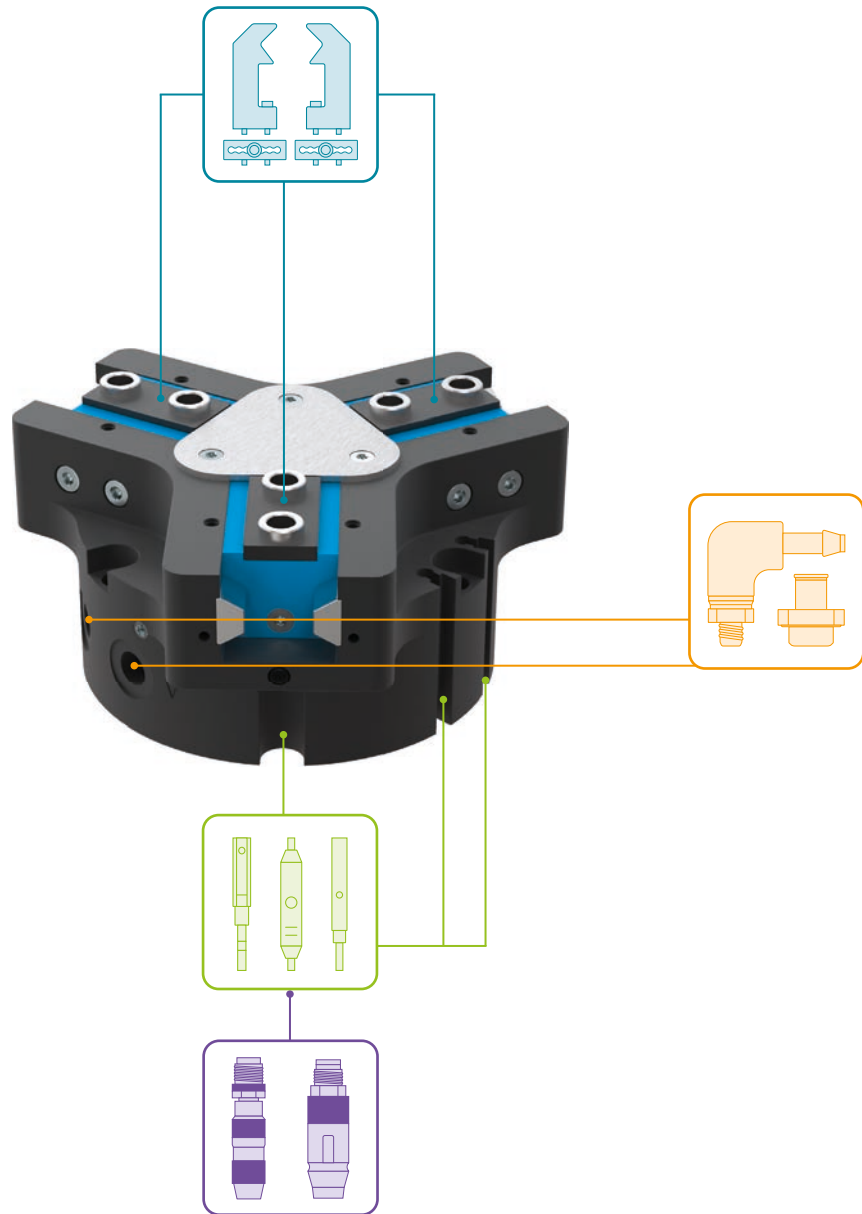


- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑥ Integrated slot for magnetic field sensor
- ⑦ Mounting block (not for variant AL-A)
- ⑱ Air purge connection option (max. 0,5 bar)
- ⑳ Attachment option for customer-specific fittings
- ㉔ Adapter
- ㉙ Gripper
- ㉛ Clamping sensor (not for variant AL-A)
- ㉜ Switch cam adjustment (not for variant AL-A)
- Ⓐ Air connection (close)
- Ⓑ Air connection (open)
- Ⓐ Air connection, alternative (close)
- Ⓑ Air connection, alternative (open)

3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5013

▶ ACCESORIES



▶ INCLUDED IN DELIVERY



6 [piece]
Centering Disc

018187

▶ RECOMMENDED ACCESSORIES



GRIPPING COMPONENTS



UB5013AL
Universal jaw aluminium



UB5013ST
Universal jaw steel



EB5013AL
Aluminum adjustment jaw



EB5013ST
Steel adjustment jaw



WB5013L
Changeable jaw, loose-part-set



WB5013F
Changeable jaw, fix-part



ADS5013-01
Pressure piece N / S



ADS5013-02
Pressure piece NC / NO / SC / SO



ENERGY SUPPLY



WV1-8X8
Angled Fittings - Quick Connect Style



DSV1-8
Pressure safety valve



DSV1-8E
Pressure safety valve with quick exhaust



SENSORS



NJ8-E2S
Inductive proximity switch - Connector M8



MFS01-S-KHC-P1-PNP
Magnetic field sensor angled, cable 0.3 m - M8 connector



MFS02-S-KHC-P1-PNP
Magnetic field sensor straight, cable 0.3 m - M8 connector



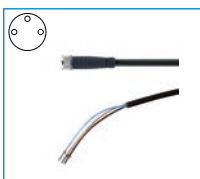
MFS01-S-KHC-P2-PNP
2-point sensor angled, cable 0.3 m - M8 connector



MFS02-S-KHC-P2-PNP
2-point sensor straight, cable 0.3 m - M8 connector



CONNECTIONS / OTHER



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

3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5016

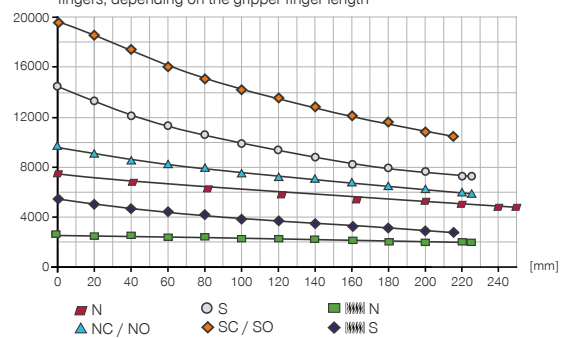
PRODUCT SPECIFICATIONS

-00-A / -20-A / -21-A / -24-A

Steel / steel guide

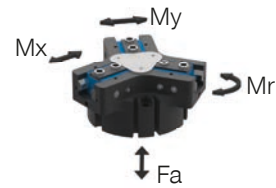
Gripping force diagram

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



Forces and moments

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



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

VARIANTS

-00-A / -20-A

Steel / steel guide



-21-A / -24-A

Steel / steel guide



▶ TECHNICAL DATA

Order no.	▶ Technical data					
	GPD5016N-00-A	GPD5016NC-00-A	GPD5016NO-00-A	GPD5016S-00-A	GPD5016SC-00-A	GPD5016SO-00-A
Stroke per jaw [mm]	16	16	16	8	8	8
Gripping force in closing [N]	6870	9240		14700	19780	
Gripping force in opening [N]	7120		9490	15250		20330
Gripping force secured by spring min. [N]		2370	2370		5080	5080
Closing time [s]	0.4	0.3	0.5	0.4	0.3	0.5
Opening time [s]	0.4	0.5	0.3	0.4	0.5	0.3
Dead weight of mounted gripper finger max. [kg]	3.8	3.8	3.8	3.8	3.8	3.8
Length of the gripper fingers max. [mm]	245	225	225	225	215	215
Repetition accuracy +/- [mm]	0.02	0.02	0.02	0.02	0.02	0.02
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Nominal operating pressure [bar]	6	6	6	6	6	6
Operating temperature [°C]	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90
Air volume per cycle [cm ³]	525	925	925	525	925	925
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	6.3	8.1	8.1	6.3	8.1	8.1

Order no.	▶ Technical Data - High Temperature Version					
	GPD5016N-20-A	GPD5016NC-20-A	GPD5016NO-20-A	GPD5016S-20-A	GPD5016SC-20-A	GPD5016SO-20-A
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130

Order no.	▶ Technical Data - Protector Version					
	GPD5016N-21-A	GPD5016NC-21-A	GPD5016NO-21-A	GPD5016S-21-A	GPD5016SC-21-A	GPD5016SO-21-A
Protection to IEC 60529	IP67*	IP67*	IP67*	IP67*	IP67*	IP67*
Weight [kg]	7.4	9.2	9.2	7.4	9.2	9.2

Order no.	▶ Technical Data - High Temperature Protector Version					
	GPD5016N-24-A	GPD5016NC-24-A	GPD5016NO-24-A	GPD5016S-24-A	GPD5016SC-24-A	GPD5016SO-24-A
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130
Protection to IEC 60529	IP67*	IP67*	IP67*	IP67*	IP67*	IP67*
Weight [kg]	7.4	9.2	9.2	7.4	9.2	9.2

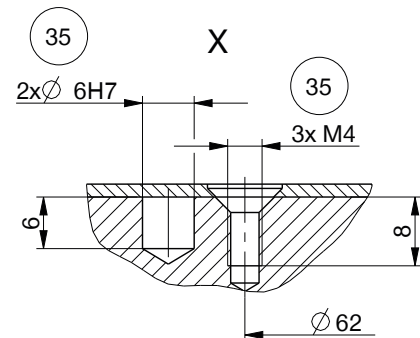
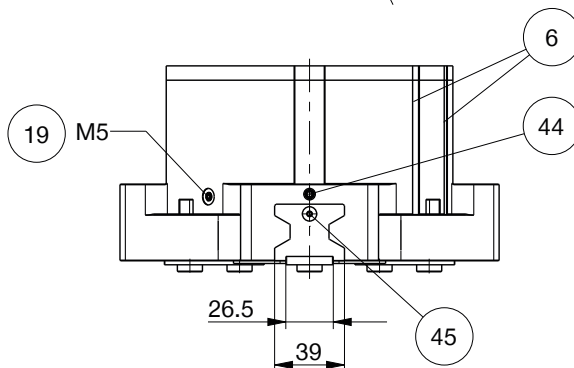
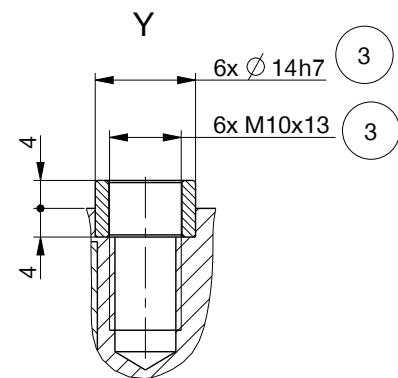
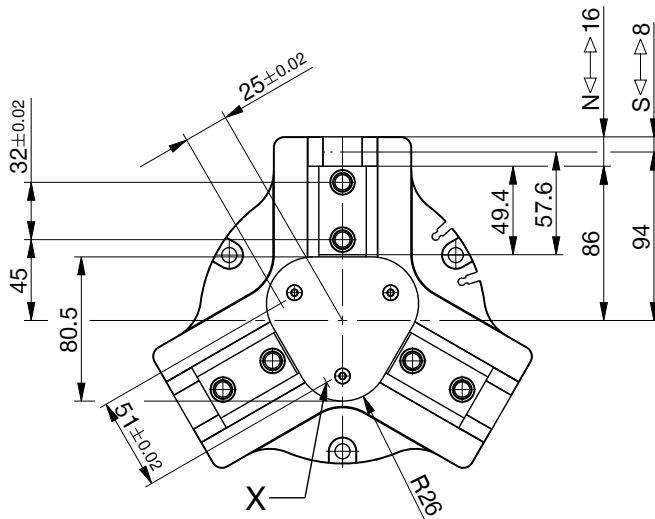
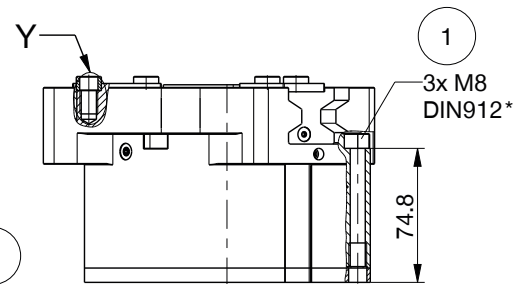
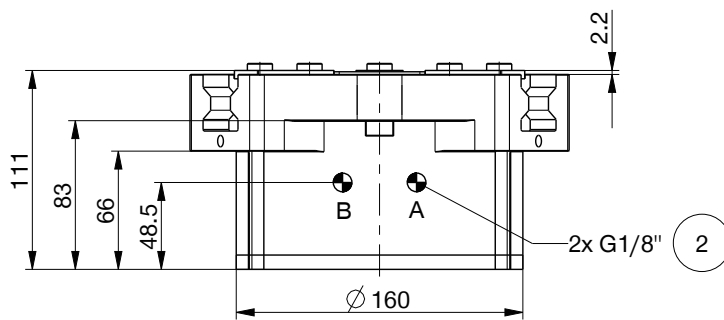
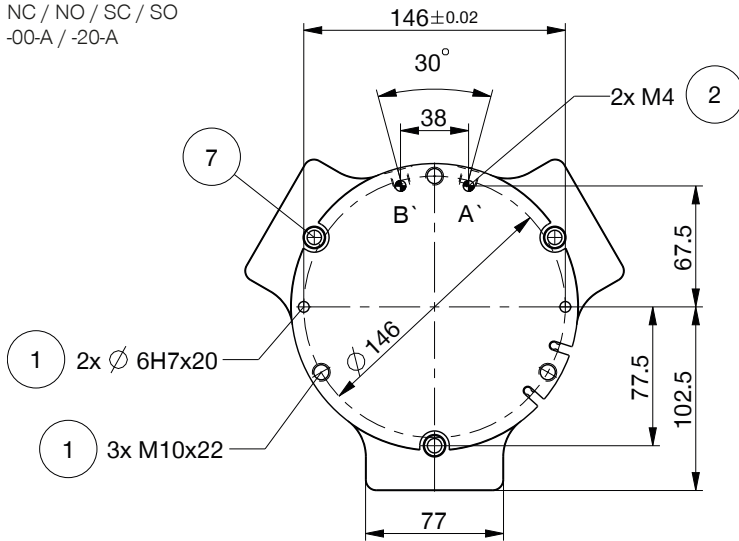
*with purged air (max. 0,5 bar)

3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5016

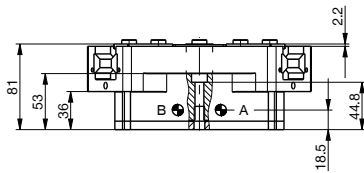
TECHNICAL DRAWINGS

NC / NO / SC / SO
-00-A / -20-A

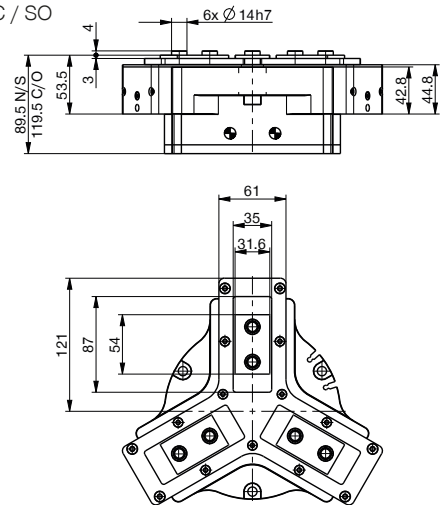


TECHNICAL DRAWINGS

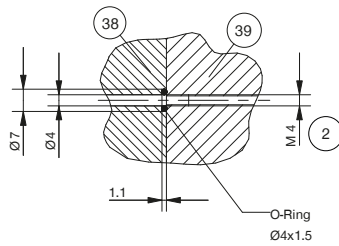
N / S
-00-A / -20-A



N / NC / NO / S / SC / SO
-21-A / -24-A



Hoseless air feed-through M4

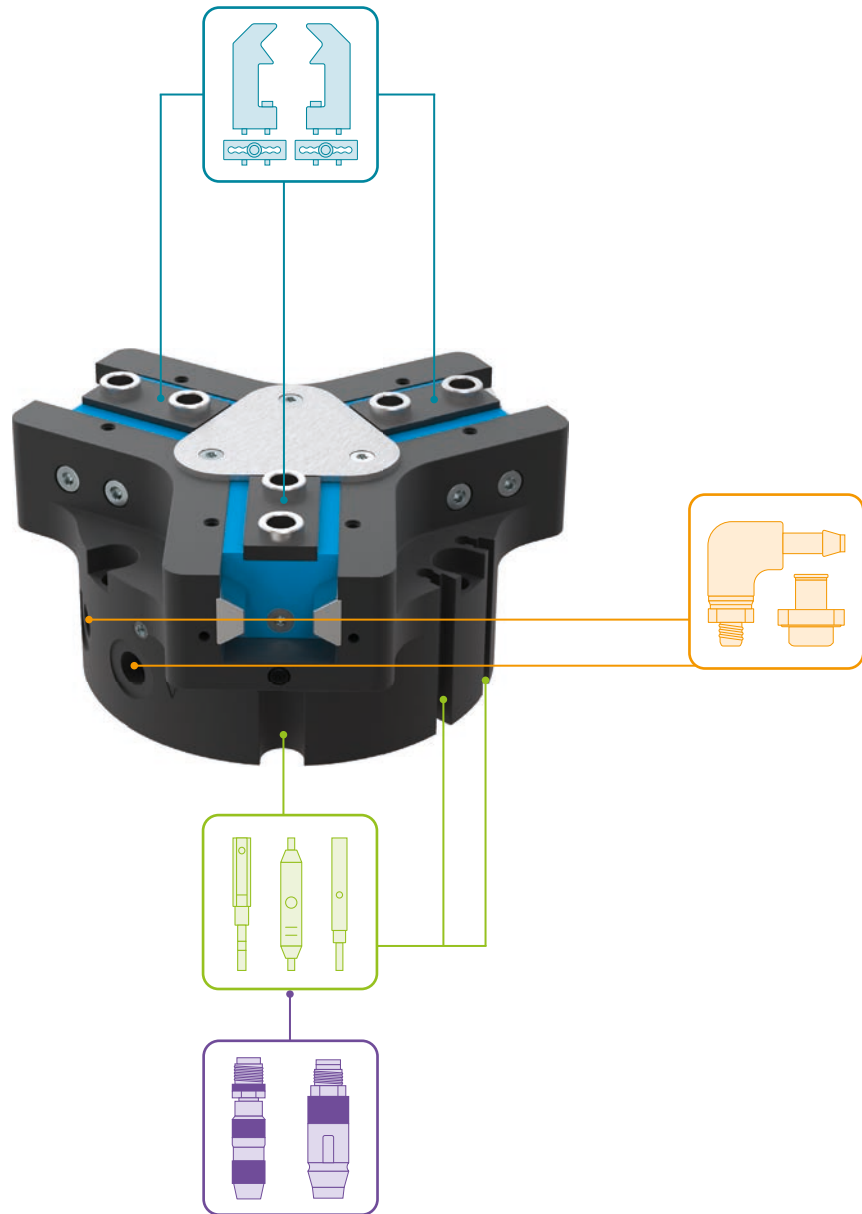


- | | |
|----------------------------------------------------|-------------------------------------------------|
| ① Gripper attachment | ③⑨ Gripper |
| ② Energy supply | ④④ Clamping sensor (not for variant AL-A) |
| ③ Fixing for gripper finger | ④⑤ Switch cam adjustment (not for variant AL-A) |
| ⑥ Integrated slot for magnetic field sensor | Ⓐ Air connection (close) |
| ⑦ Mounting block (not for variant AL-A) | Ⓑ Air connection (open) |
| ⑰ Air purge connection option (max. 0,5 bar) | Ⓐ Air connection, alternative (close) |
| ⑳ Attachment option for customer-specific fittings | Ⓑ Air connection, alternative (open) |
| ⑳ Adapter | |

3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5016

▶ ACCESORIES



▶ INCLUDED IN DELIVERY



6 [piece]
Centering Disc

019387

▶ RECOMMENDED ACCESSORIES



GRIPPING COMPONENTS



UB5016AL
Universal jaw aluminium



UB5016ST
Universal jaw steel



EB5016AL
Aluminum adjustment jaw



EB5016ST
Steel adjustment jaw



WB5016L
Changeable jaw, loose-part-set



WB5016F
Changeable jaw, fix-part



ADS5016-01
Pressure piece N / S



ADS5016-02
Pressure piece NC / NO / SC / SO



ENERGY SUPPLY



WV1-8X8
Angled Fittings - Quick Connect Style



DSV1-8
Pressure safety valve



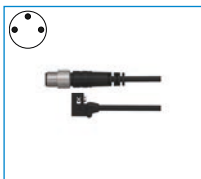
DSV1-8E
Pressure safety valve with quick exhaust



SENSORS



NJ8-E2S
Inductive proximity switch - Connector M8



MFS01-S-KHC-P1-PNP
Magnetic field sensor angled, cable 0.3 m - M8 connector



MFS02-S-KHC-P1-PNP
Magnetic field sensor straight, cable 0.3 m - M8 connector



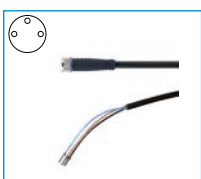
MFS01-S-KHC-P2-PNP
2-point sensor angled, cable 0.3 m - M8 connector



MFS02-S-KHC-P2-PNP
2-point sensor straight, cable 0.3 m - M8 connector



CONNECTIONS / OTHER



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

3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5025

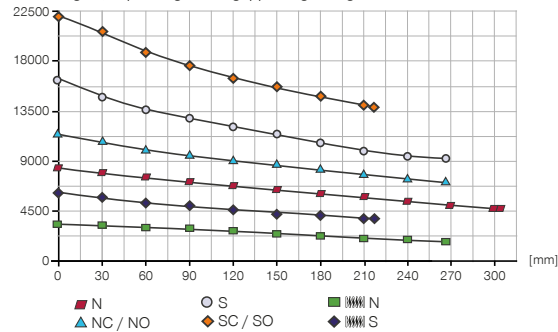
▶ PRODUCT SPECIFICATIONS

-00-A / -20-A / -21-A / -24-A

Steel / steel guide

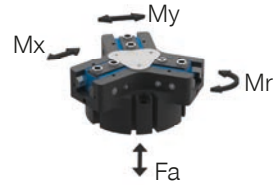
▶ Gripping force diagram

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



▶ Forces and moments

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



M_r [Nm]	180
M_x [Nm]	205
M_y [Nm]	225
F_a [N]	7500

▶ VARIANTS

-00-A / -20-A

Steel / steel guide



-21-A / -24-A

Steel / steel guide



▶ TECHNICAL DATA

Order no.	▶ Technical data					
	GPD5025N-00-A	GPD5025NC-00-A	GPD5025NO-00-A	GPD5025S-00-A	GPD5025SC-00-A	GPD5025SO-00-A
Stroke per jaw [mm]	25	25	25	14	14	14
Gripping force in closing [N]	8430	11560		16240	22270	
Gripping force in opening [N]	8730		11860	16820		22850
Gripping force secured by spring min. [N]		3130	3130		6030	6030
Closing time [s]	0.6	0.6	1.0	0.6	0.6	1.0
Opening time [s]	0.6	1.0	0.6	0.6	1.0	0.6
Dead weight of mounted gripper finger max. [kg]	7	7	7	7	7	7
Length of the gripper fingers max. [mm]	310	265	265	265	220	220
Repetition accuracy +/- [mm]	0.05	0.05	0.05	0.05	0.05	0.05
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Nominal operating pressure [bar]	6	6	6	6	6	6
Operating temperature [°C]	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90
Air volume per cycle [cm ³]	1025	1750	1750	1025	1750	1750
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	11.8	15.4	15.4	11.8	15.4	15.4

Order no.	▶ Technical Data - High Temperature Version					
	GPD5025N-20-A	GPD5025NC-20-A	GPD5025NO-20-A	GPD5025S-20-A	GPD5025SC-20-A	GPD5025SO-20-A
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130

Order no.	▶ Technical Data - Protector Version					
	GPD5025N-21-A	GPD5025NC-21-A	GPD5025NO-21-A	GPD5025S-21-A	GPD5025SC-21-A	GPD5025SO-21-A
Protection to IEC 60529	IP67*	IP67*	IP67*	IP67*	IP67*	IP67*
Weight [kg]	14	17.6	17.6	14	17.6	17.6

Order no.	▶ Technical Data - High Temperature Protector Version					
	GPD5025N-24-A	GPD5025NC-24-A	GPD5025NO-24-A	GPD5025S-24-A	GPD5025SC-24-A	GPD5025SO-24-A
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130
Protection to IEC 60529	IP67*	IP67*	IP67*	IP67*	IP67*	IP67*
Weight [kg]	14	17.6	17.6	14	17.6	17.6

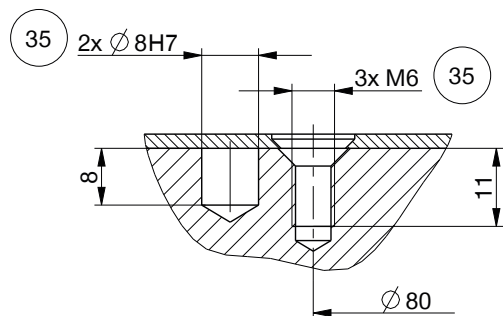
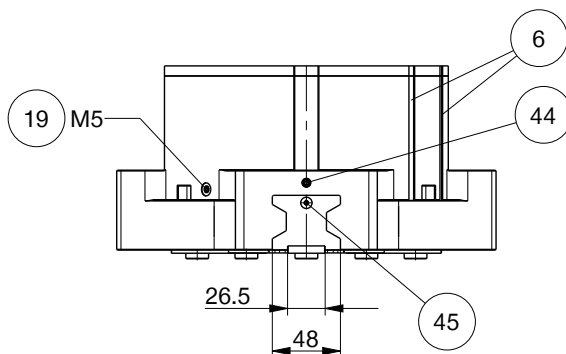
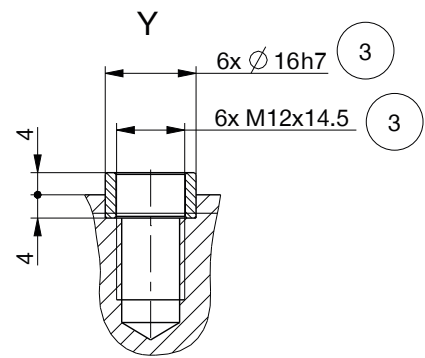
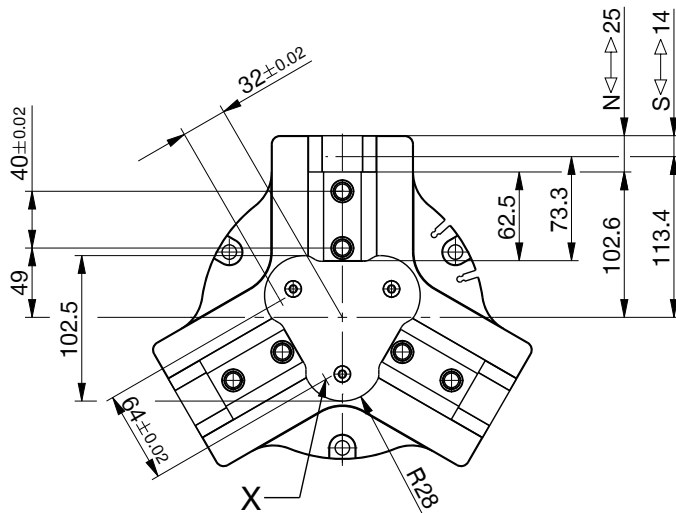
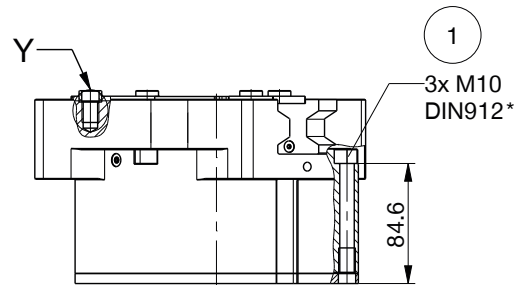
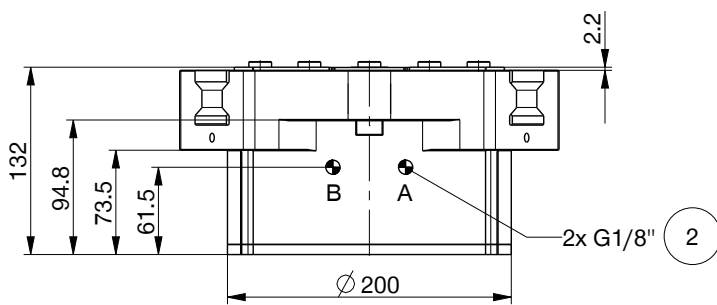
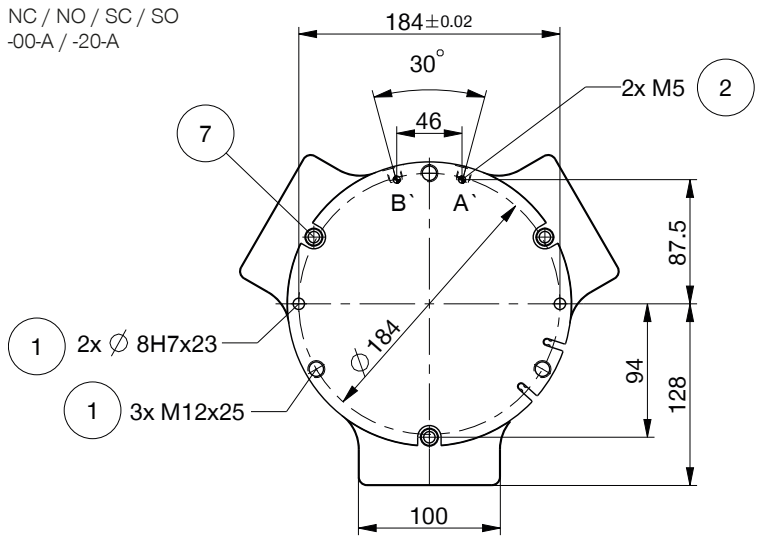
*with purged air (max. 0,5 bar)

3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5025

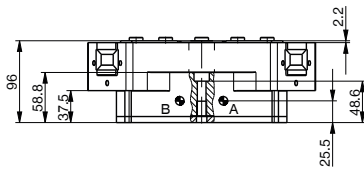
TECHNICAL DRAWINGS

NC / NO / SC / SO
-00-A / -20-A

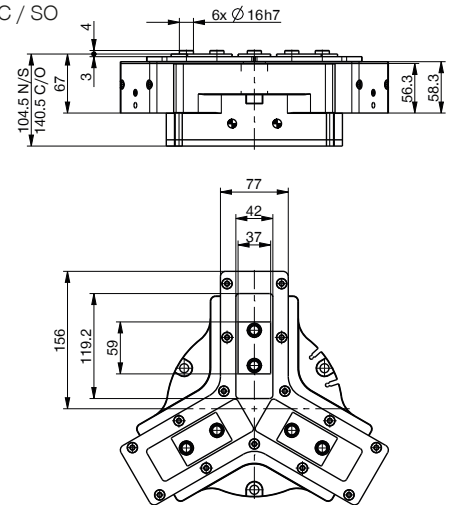


TECHNICAL DRAWINGS

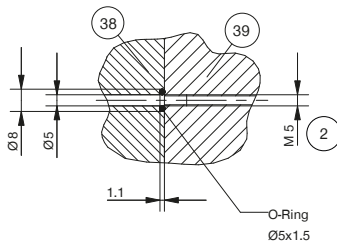
N / S
-00-A / -20-A



N / NC / NO / S / SC / SO
-21-A / -24-A



Hoseless air feed-through M5

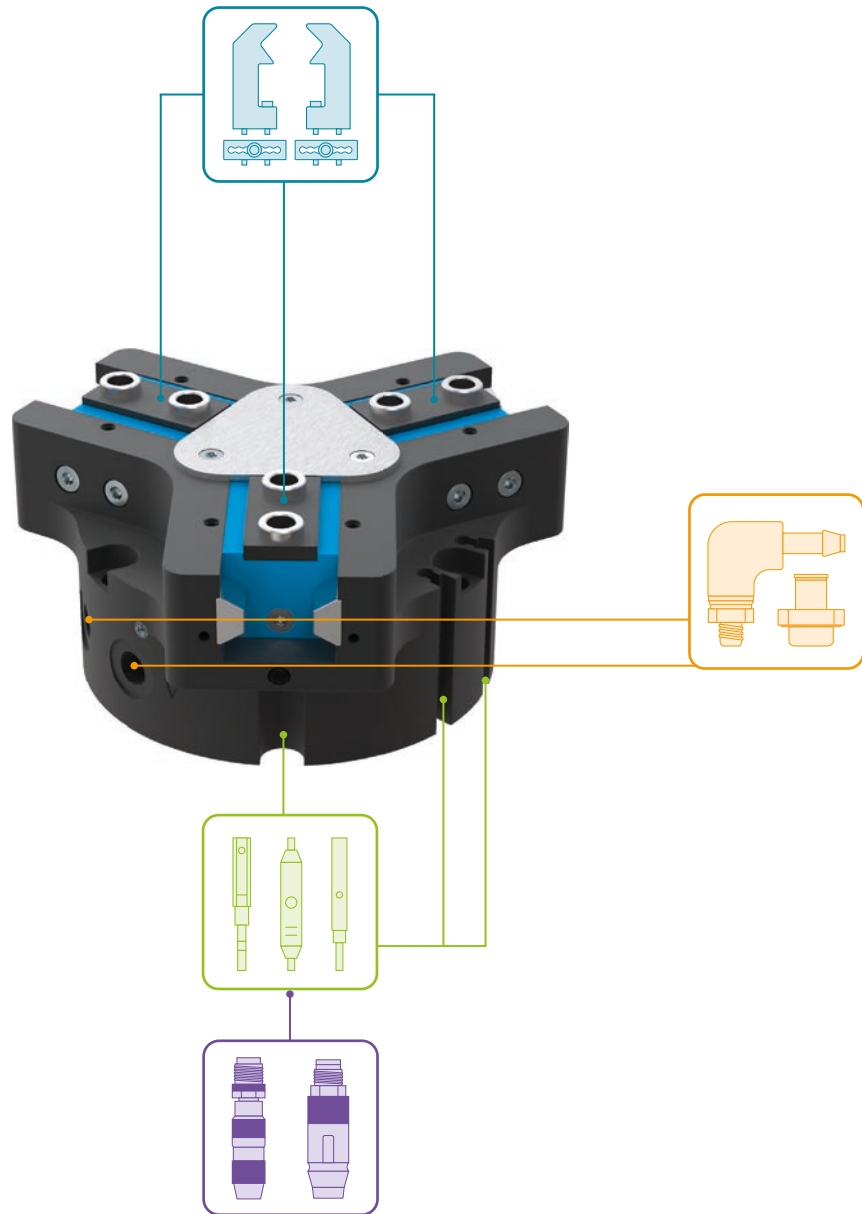


- | | |
|----------------------------------------------------|---------------------------------------|
| ① Gripper attachment | ③⑨ Gripper |
| ② Energy supply | ④④ Clamp for sensor |
| ③ Fixing for gripper finger | ④⑤ Switch cam adjustment |
| ⑥ Integrated slot for magnetic field sensor | Ⓐ Air connection (close) |
| ⑦ Mounting block | Ⓑ Air connection (open) |
| ⑱ Air purge connection option (max. 0,5 bar) | Ⓐ Air connection, alternative (close) |
| ⑳ Attachment option for customer-specific fittings | Ⓑ Air connection, alternative (open) |
| ⑳ Adapter | |

3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5025

▶ ACCESORIES



▶ INCLUDED IN DELIVERY



6 [piece]
Centering Disc

030529

▶ RECOMMENDED ACCESSORIES



GRIPPING COMPONENTS



UB5025AL
Universal jaw aluminium



UB5025ST
Universal jaw steel



EB5025AL
Aluminum adjustment jaw



EB5025ST
Steel adjustment jaw



WB5025L
Changeable jaw, loose-part-set



WB5025F
Changeable jaw, fix-part



ADS5025-01
Pressure piece N / S



ADS5025-02
Pressure piece NC / NO / SC / SO



ENERGY SUPPLY



WV1-8X8
Angled Fittings - Quick Connect Style



DSV1-8
Pressure safety valve



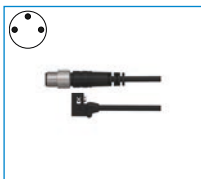
DSV1-8E
Pressure safety valve with quick exhaust



SENSORS



NJ8-E2S
Inductive proximity switch - Connector M8



MFS01-S-KHC-P1-PNP
Magnetic field sensor angled, cable 0.3 m - M8 connector



MFS02-S-KHC-P1-PNP
Magnetic field sensor straight, cable 0.3 m - M8 connector



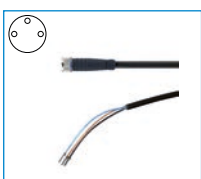
MFS01-S-KHC-P2-PNP
2-point sensor angled, cable 0.3 m - M8 connector



MFS02-S-KHC-P2-PNP
2-point sensor straight, cable 0.3 m - M8 connector



CONNECTIONS / OTHER



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

3-JAW CONCENTRIC GRIPPERS

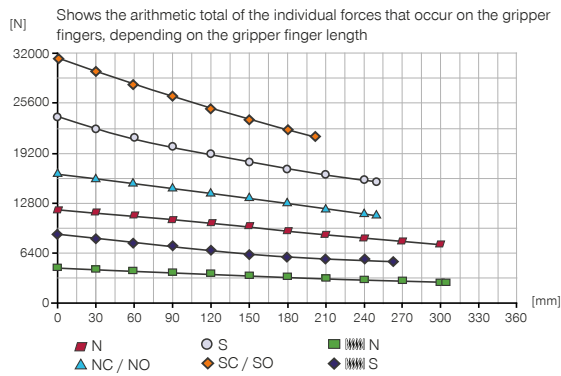
INSTALLATION SIZE GPD5030

PRODUCT SPECIFICATIONS

-00-A / -20-A / -21-A / -24-A

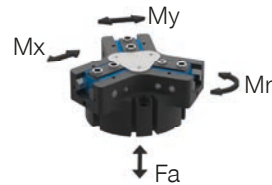
Steel / steel guide

Gripping force diagram



Forces and moments

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



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

VARIANTS

-00-A / -20-A

Steel / steel guide



-21-A / -24-A

Steel / steel guide



▶ TECHNICAL DATA

Order no.	▶ Technical data					
	GPD5030N-00-A	GPD5030NC-00-A	GPD5030NO-00-A	GPD5030S-00-A	GPD5030SC-00-A	GPD5030SO-00-A
Stroke per jaw [mm]	30	30	30	17	17	17
Gripping force in closing [N]	12130	16560		23150	31620	
Gripping force in opening [N]	12540		16970	23930		32400
Gripping force secured by spring min. [N]		4430	4430		8470	8470
Closing time [s]	1.13	1.0	1.9	1.13	1.0	1.9
Opening time [s]	1.13	1.9	1.0	1.13	1.9	1.0
Dead weight of mounted gripper finger max. [kg]	9.5	9.5	9.5	9.5	9.5	9.5
Length of the gripper fingers max. [mm]	300	250	250	250	200	200
Repetition accuracy +/- [mm]	0.05	0.05	0.05	0.05	0.05	0.05
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Nominal operating pressure [bar]	6	6	6	6	6	6
Operating temperature [°C]	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90
Air volume per cycle [cm ³]	1780	3000	3000	1780	3000	3000
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	21	27.5	27.5	21	27.5	27.5

Order no.	▶ Technical Data - High Temperature Version					
	GPD5030N-20-A	GPD5030NC-20-A	GPD5030NO-20-A	GPD5030S-20-A	GPD5030SC-20-A	GPD5030SO-20-A
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130

Order no.	▶ Technical Data - Protector Version					
	GPD5030N-21-A	GPD5030NC-21-A	GPD5030NO-21-A	GPD5030S-21-A	GPD5030SC-21-A	GPD5030SO-21-A
Protection to IEC 60529	IP67*	IP67*	IP67*	IP67*	IP67*	IP67*
Weight [kg]	24	30.5	30.5	24	30.5	30.5

Order no.	▶ Technical Data - High Temperature Protector Version					
	GPD5030N-24-A	GPD5030NC-24-A	GPD5030NO-24-A	GPD5030S-24-A	GPD5030SC-24-A	GPD5030SO-24-A
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130
Protection to IEC 60529	IP67*	IP67*	IP67*	IP67*	IP67*	IP67*
Weight [kg]	24	30.5	30.5	24	30.5	30.5

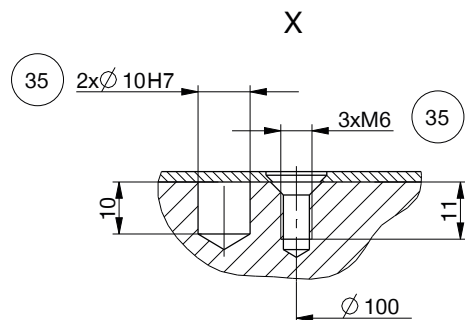
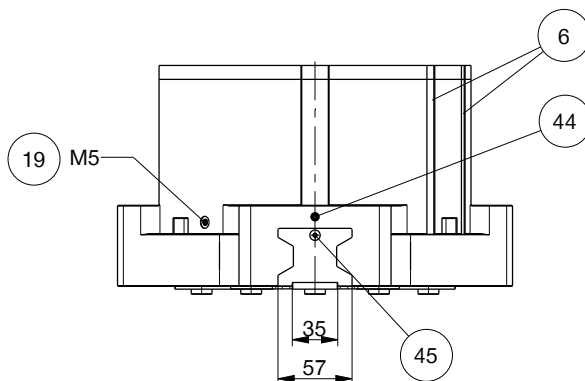
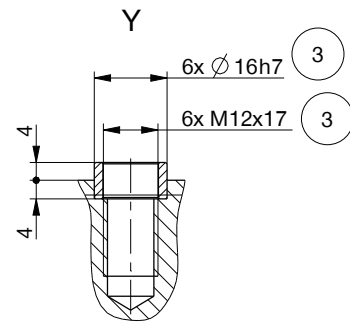
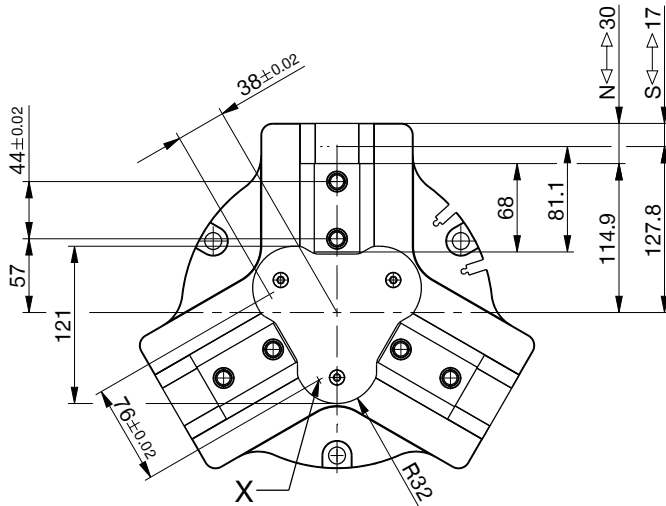
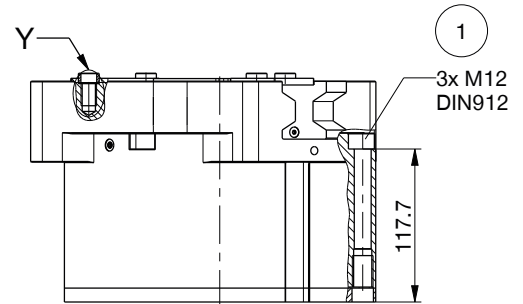
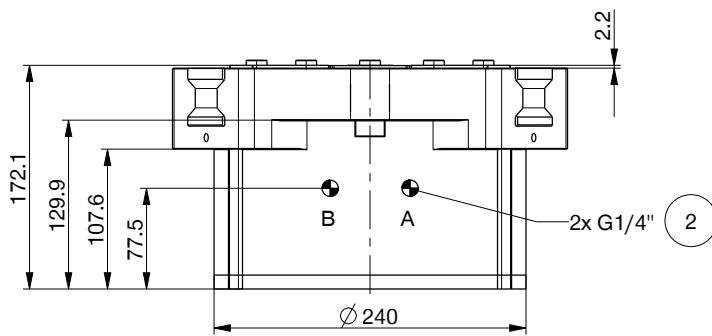
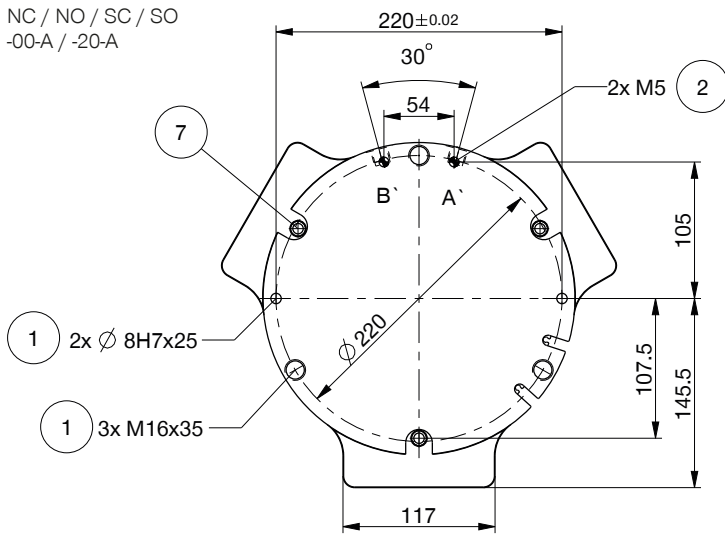
*with purged air (max. 0,5 bar)

3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5030

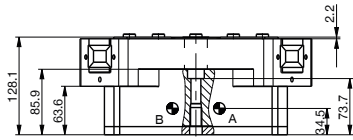
TECHNICAL DRAWINGS

NC / NO / SC / SO
-00-A / -20-A

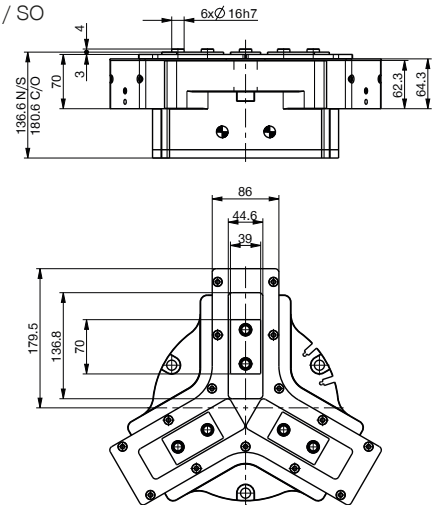


TECHNICAL DRAWINGS

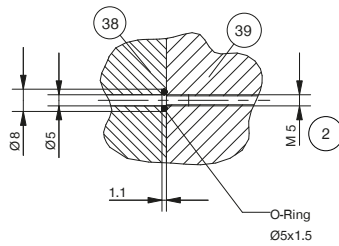
N / S
-00-A / -20-A



N / NC / NO / S / SC / SO
-21-A / -24-A



Hoseless air feed-through M5

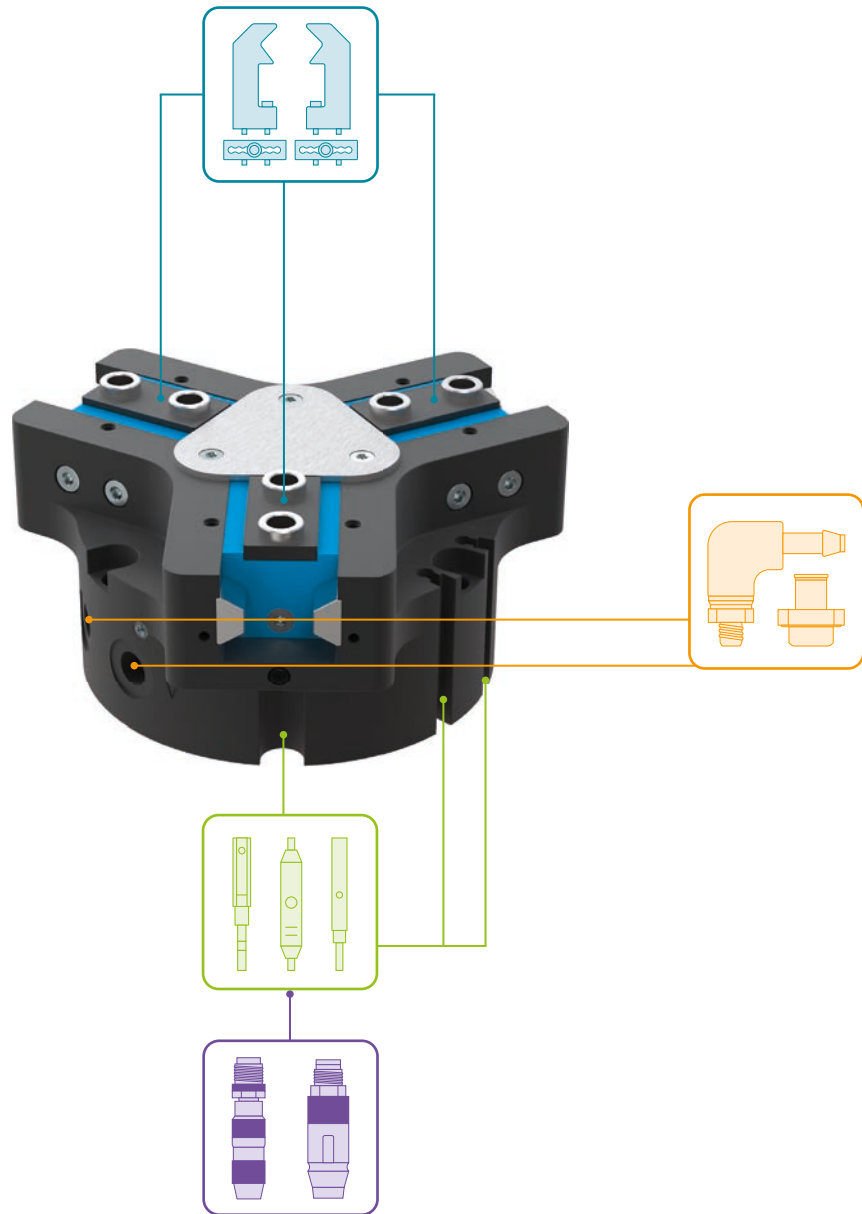


- | | |
|----------------------------------------------------|---------------------------------------|
| ① Gripper attachment | ③⑨ Gripper |
| ② Energy supply | ④④ Clamp for sensor |
| ③ Fixing for gripper finger | ④⑤ Switch cam adjustment |
| ⑥ Integrated slot for magnetic field sensor | Ⓐ Air connection (close) |
| ⑦ Mounting block | Ⓑ Air connection (open) |
| ⑰ Air purge connection option (max. 0,5 bar) | Ⓐ Air connection, alternative (close) |
| ⑳ Attachment option for customer-specific fittings | Ⓑ Air connection, alternative (open) |
| ⑳ Adapter | |

3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5030

▶ ACCESORIES



▶ INCLUDED IN DELIVERY



Centering Disc

030529

▶ RECOMMENDED ACCESSORIES



GRIPPING COMPONENTS



UB5030AL
Universal jaw aluminium



UB5030ST
Universal jaw steel



EB5030AL
Aluminum adjustment jaw



EB5030ST
Steel adjustment jaw



WB5030L
Changeable jaw, loose-part-set



WB5030F
Changeable jaw, fix-part



ADS5030-01
Pressure piece N / S



ADS5030-02
Pressure piece NC / NO / SC / SO



ENERGY SUPPLY



WV1-4X8
Angled Fittings - Quick Connect Style



DSV1-4
Pressure safety valve



DSV1-4E
Pressure safety valve with quick exhaust



SENSORS



NJ8-E2S
Inductive proximity switch - Connector M8



MFS01-S-KHC-P1-PNP
Magnetic field sensor angled, cable 0.3 m - M8 connector



MFS02-S-KHC-P1-PNP
Magnetic field sensor straight, cable 0.3 m - M8 connector



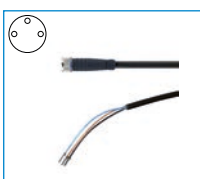
MFS01-S-KHC-P2-PNP
2-point sensor angled, cable 0.3 m - M8 connector



MFS02-S-KHC-P2-PNP
2-point sensor straight, cable 0.3 m - M8 connector



CONNECTIONS / OTHER



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

3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5035

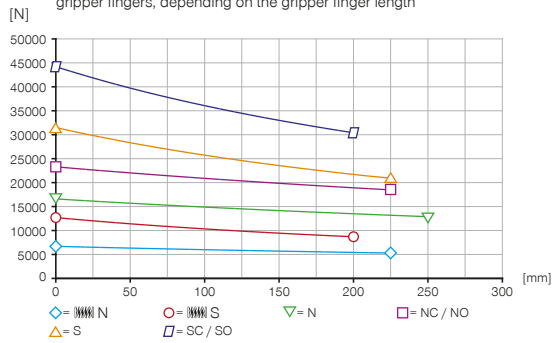
PRODUCT SPECIFICATIONS

-00-A / -20-A / -21-A / -24-A

Steel / steel guide

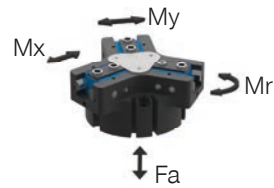
Gripping force diagram

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



Forces and moments

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



Mr [Nm]	260
Mx [Nm]	430
My [Nm]	450
Fa [N]	10400

VARIANTS

-00-A / -20-A

Steel / steel guide

-21-A / -24-A

Steel / steel guide



▶ TECHNICAL DATA

Order no.	▶ Technical data					
	GPD5035N-00-A	GPD5035NC-00-A	GPD5035NO-00-A	GPD5035S-00-A	GPD5035SC-00-A	GPD5035SO-00-A
Stroke per jaw [mm]	35	35	35	20	20	20
Gripping force in closing [N]	16600	23300		31500	44200	
Gripping force in opening [N]	17100		23800	32500		45200
Gripping force secured by spring min. [N]		6700	6700		12700	12700
Closing time [s]	1.2	1.1	2.3	1.2	1.1	2.3
Opening time [s]	1.2	2.3	1.2	1.2	2.3	1.2
Dead weight of mounted gripper finger max. [kg]	12.5	12.5	12.5	12.5	12.5	12.5
Length of the gripper fingers max. [mm]	250	225	225	225	200	200
Repetition accuracy +/- [mm]	0.05	0.05	0.05	0.05	0.05	0.05
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	6.5	6.5	8	6.5	6.5
Nominal operating pressure [bar]	6	6	6	6	6	6
Operating temperature [°C]	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90
Air volume per cycle [cm ³]	2904	5477	5477	2904	5477	5477
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	37.8	42	42	37.8	42	42

Order no.	▶ Technical Data - High Temperature Version					
	GPD5035N-20-A	GPD5035NC-20-A	GPD5035NO-20-A	GPD5035S-20-A	GPD5035SC-20-A	GPD5035SO-20-A
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130

Order no.	▶ Technical Data - Protector Version					
	GPD5035N-21-A	GPD5035NC-21-A	GPD5035NO-21-A	GPD5035S-21-A	GPD5035SC-21-A	GPD5035SO-21-A
Protection to IEC 60529	IP67*	IP67*	IP67*	IP67*	IP67*	IP67*
Weight [kg]	43.8	48	48	43.8	48	48

Order no.	▶ Technical Data - High Temperature Protector Version					
	GPD5035N-24-A	GPD5035NC-24-A	GPD5035NO-24-A	GPD5035S-24-A	GPD5035SC-24-A	GPD5035SO-24-A
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130
Protection to IEC 60529	IP67*	IP67*	IP67*	IP67*	IP67*	IP67*
Weight [kg]	43.8	48	48	43.8	48	48

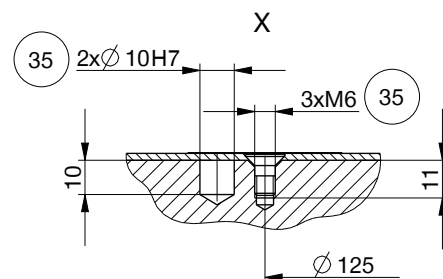
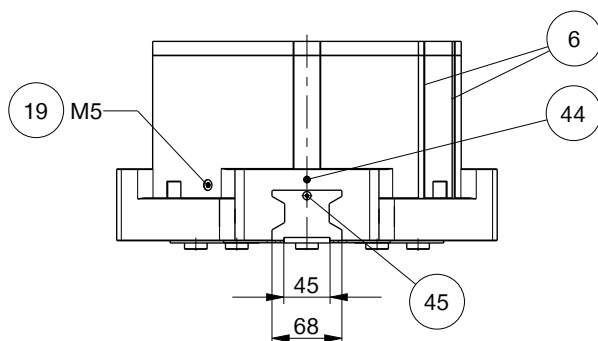
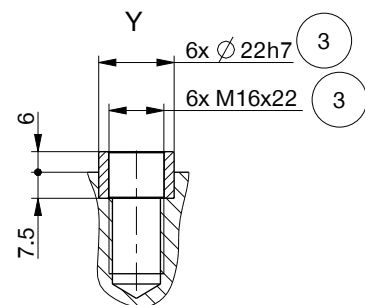
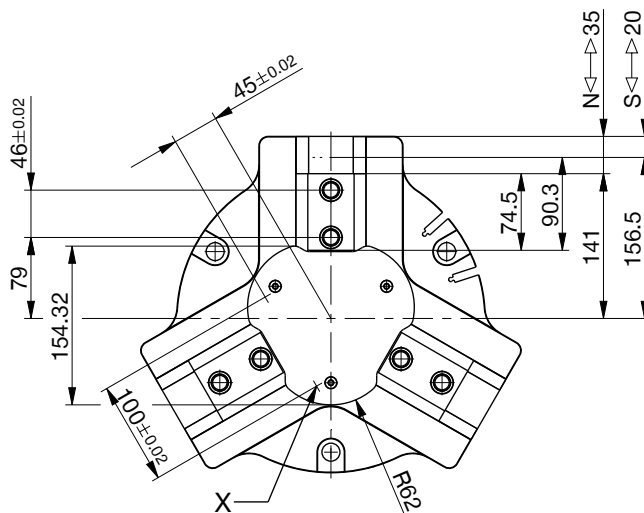
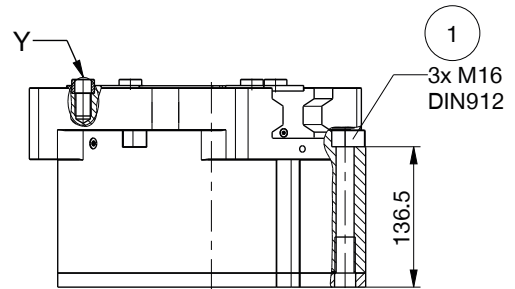
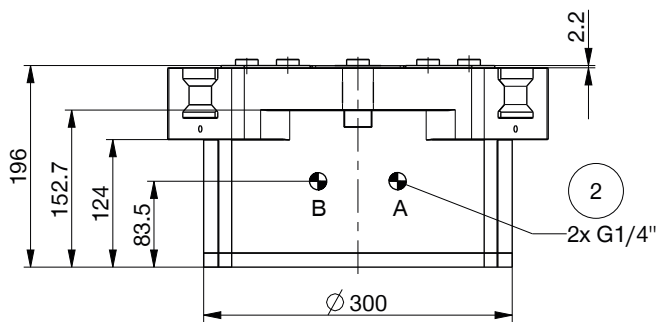
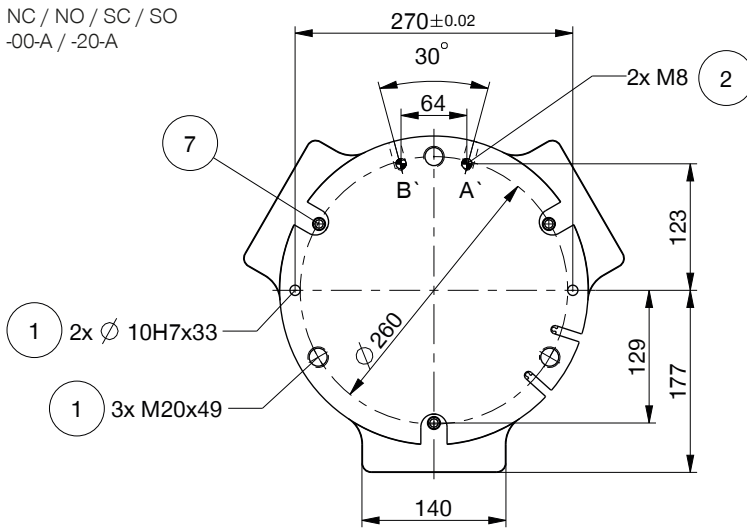
*with purged air (max. 0,5 bar)

3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5035

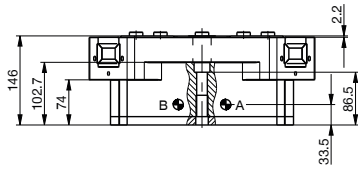
TECHNICAL DRAWINGS

NC / NO / SC / SO
-00-A / -20-A

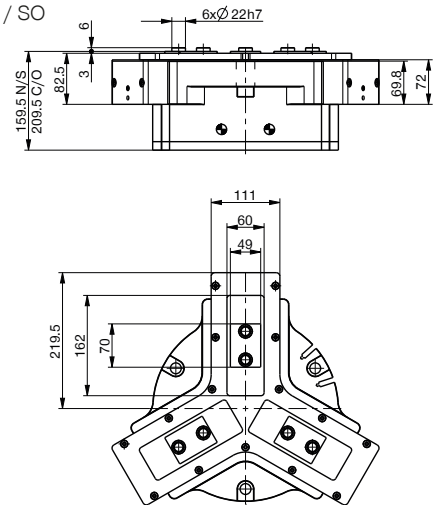


TECHNICAL DRAWINGS

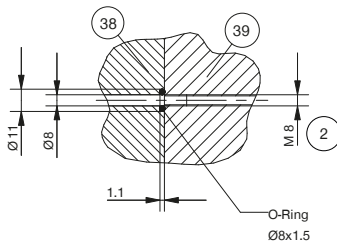
N / S
-00-A / -20-A



N / NC / NO / S / SC / SO
-21-A / -24-A



Hoseless air feed-through M8



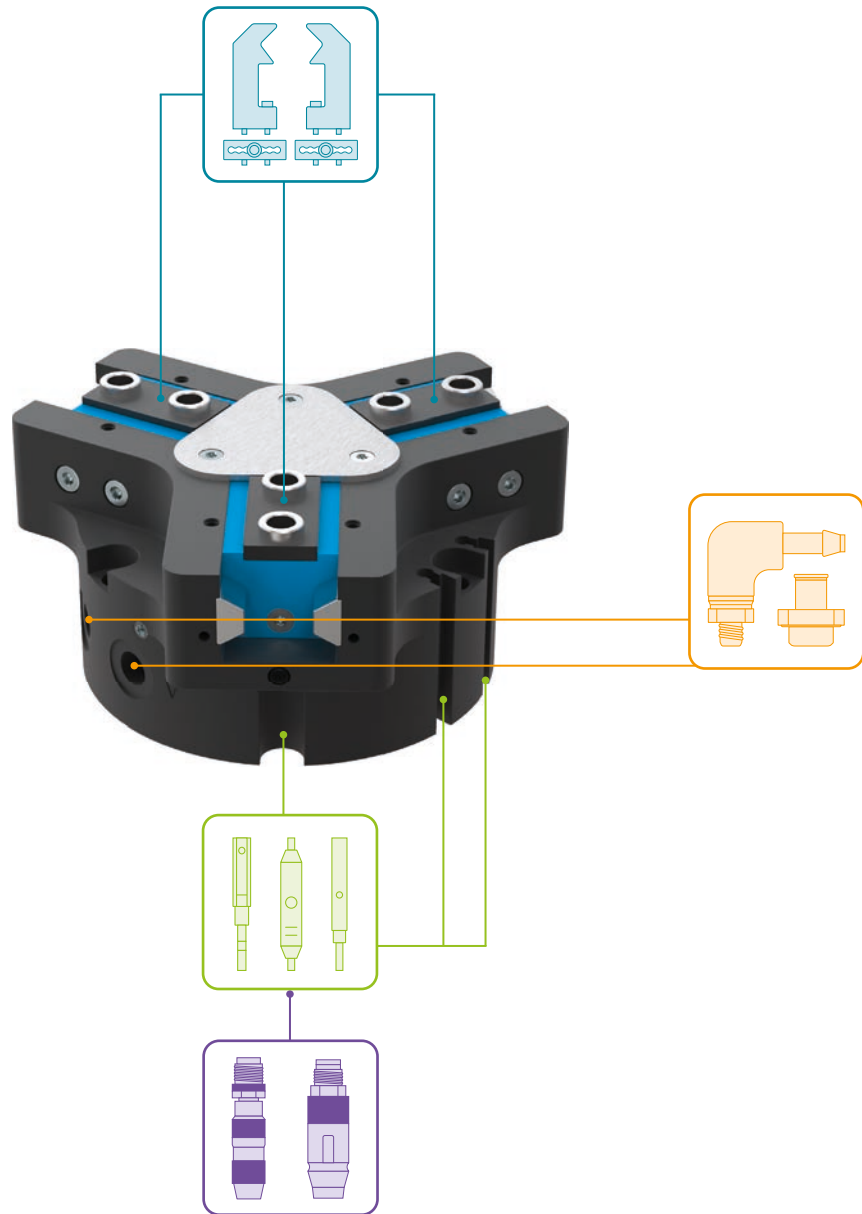
- | | |
|-----------------------------------------------------|---------------------------------------|
| ① Gripper attachment | ③⑨ Gripper |
| ② Energy supply | ④④ Clamp for sensor |
| ③ Fixing for gripper finger | ④⑤ Switch cam adjustment |
| ⑥ Integrated slot for magnetic field sensor | Ⓐ Air connection (close) |
| ⑦ Mounting block | Ⓑ Air connection (open) |
| ①⑨ Air purge connection option (max. 0,5 bar) | Ⓐ Air connection, alternative (close) |
| ③⑤ Attachment option for customer-specific fittings | Ⓑ Air connection, alternative (open) |
| ③⑧ Adapter | |



3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5035

▶ ACCESORIES



▶ INCLUDED IN DELIVERY



6 [piece]
Centering Disc

035358

▶ RECOMMENDED ACCESSORIES



ENERGY SUPPLY



GV1-4X8
Straight Fittings - Quick Connect Style



WV1-4X8
Angled Fittings - Quick Connect Style



DSV1-4
Pressure safety valve



DSV1-4E
Pressure safety valve with quick exhaust



SENSORS



NJ8-E2S
Inductive proximity switch - Connector M8



MFS01-S-KHC-P1-PNP
Magnetic field sensor angled, cable 0.3 m - M8 connector



MFS02-S-KHC-P1-PNP
Magnetic field sensor straight, cable 0.3 m - M8 connector



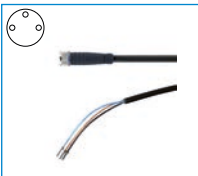
MFS01-S-KHC-P2-PNP
2-point sensor angled, cable 0.3 m - M8 connector



MFS02-S-KHC-P2-PNP
2-point sensor straight, cable 0.3 m - M8 connector



CONNECTIONS / OTHER



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



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

3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5045

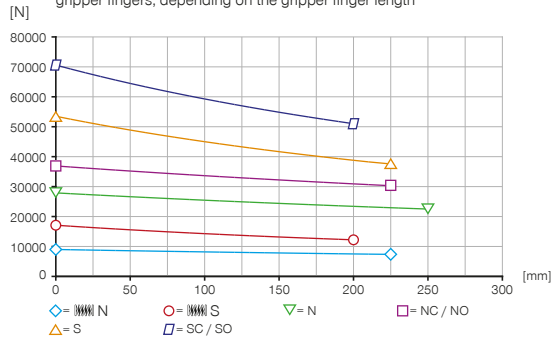
▶ PRODUCT SPECIFICATIONS

-00-A / -20-A / -21-A / -24-A

Steel / steel guide

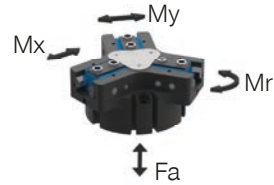
▶ Gripping force diagram

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



▶ Forces and moments

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



Mr [Nm]	390
Mx [Nm]	580
My [Nm]	600
Fa [N]	11500

▶ VARIANTS

-00-A / -20-A

Steel / steel guide



-21-A / -24-A

Steel / steel guide



▶ TECHNICAL DATA

Order no.	▶ Technical data					
	GPD5045N-00-A	GPD5045NC-00-A	GPD5045NO-00-A	GPD5045S-00-A	GPD5045SC-00-A	GPD5045SO-00-A
Stroke per jaw [mm]	45	45	45	26	26	26
Gripping force in closing [N]	27900	36900		53500	70600	
Gripping force in opening [N]	28850		37850	55400		72500
Gripping force secured by spring min. [N]		9000	9000		17100	17100
Closing time [s]	2.0	1.7	2.8	2.0	1.7	2.8
Opening time [s]	2.0	2.8	1.7	2.0	2.8	1.7
Dead weight of mounted gripper finger max. [kg]	12.5	12.5	12.5	12.5	12.5	12.5
Length of the gripper fingers max. [mm]	250	225	225	225	200	200
Repetition accuracy +/- [mm]	0.05	0.05	0.05	0.05	0.05	0.05
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	6.5	6.5	8	6.5	6.5
Nominal operating pressure [bar]	6	6	6	6	6	6
Operating temperature [°C]	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90
Air volume per cycle [cm ³]	6500	12400	12400	6500	12400	12400
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	78.6	86.5	86.5	80	88	88

Order no.	▶ Technical Data - High Temperature Version					
	GPD5045N-20-A	GPD5045NC-20-A	GPD5045NO-20-A	GPD5045S-20-A	GPD5045SC-20-A	GPD5045SO-20-A
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130

Order no.	▶ Technical Data - Protector Version					
	GPD5045N-21-A	GPD5045NC-21-A	GPD5045NO-21-A	GPD5045S-21-A	GPD5045SC-21-A	GPD5045SO-21-A
Protection to IEC 60529	IP67*	IP67*	IP67*	IP67*	IP67*	IP67*
Weight [kg]	90.5	98.4	98.4	91.9	99.9	99.9

Order no.	▶ Technical Data - High Temperature Protector Version					
	GPD5045N-24-A	GPD5045NC-24-A	GPD5045NO-24-A	GPD5045S-24-A	GPD5045SC-24-A	GPD5045SO-24-A
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130
Protection to IEC 60529	IP67*	IP67*	IP67*	IP67*	IP67*	IP67*
Weight [kg]	90.5	98.4	98.4	91.9	99.9	99.9

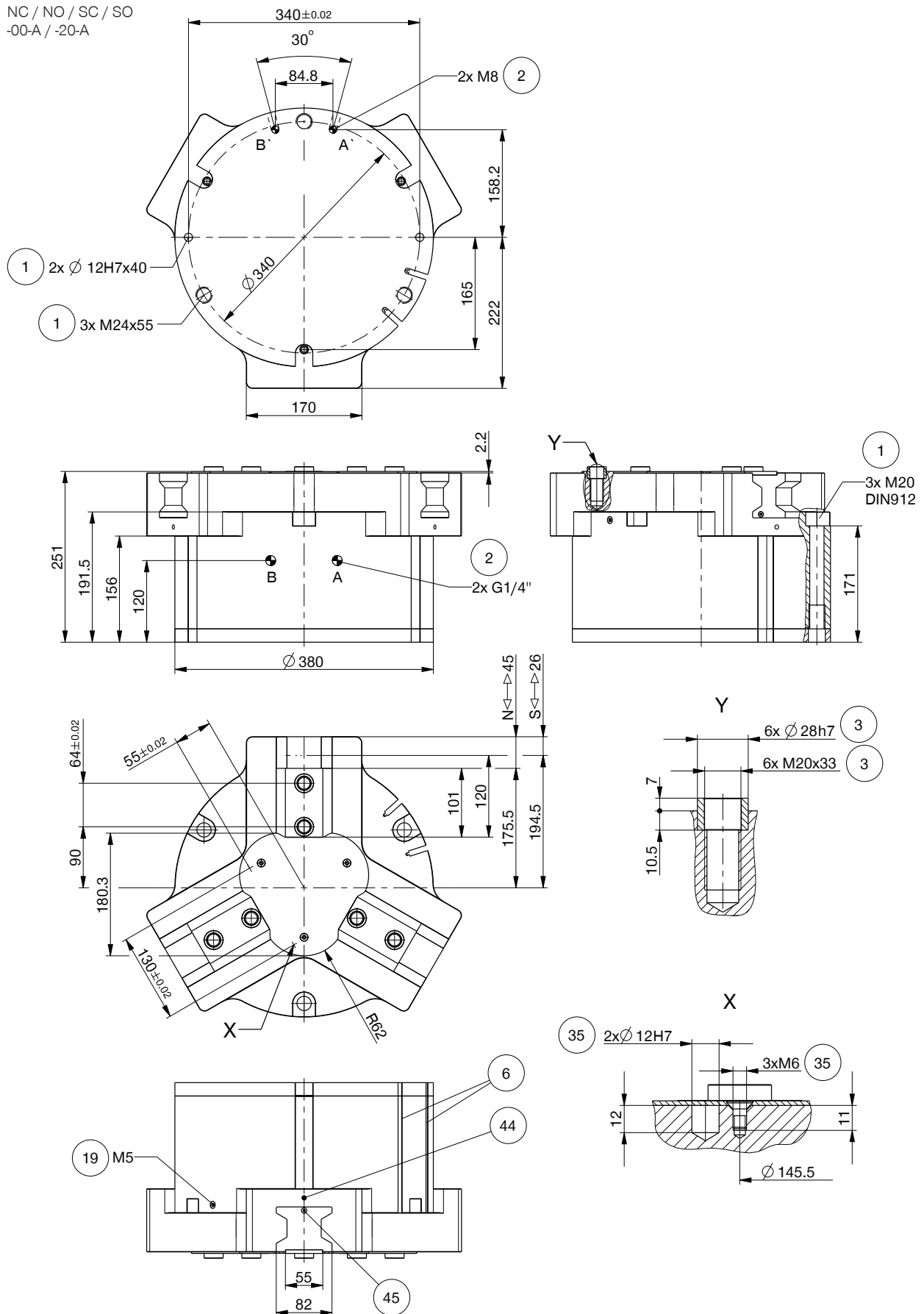
*with purged air (max. 0,5 bar)

3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5045

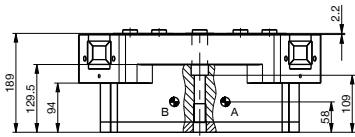
TECHNICAL DRAWINGS

NC / NO / SC / SO
-00-A / -20-A

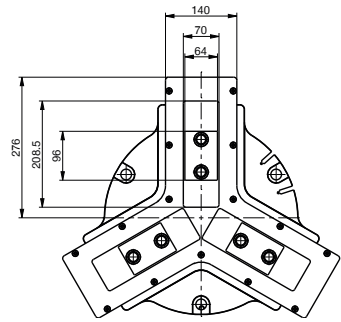
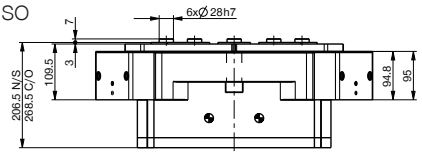


TECHNICAL DRAWINGS

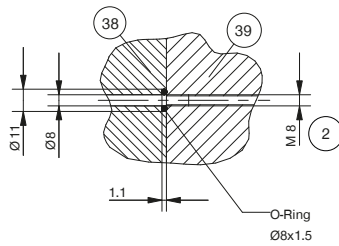
N / S
-00-A / -20-A



N / NC / NO / S / SC / SO
-21-A / -24-A



Hoseless air feed-through M8

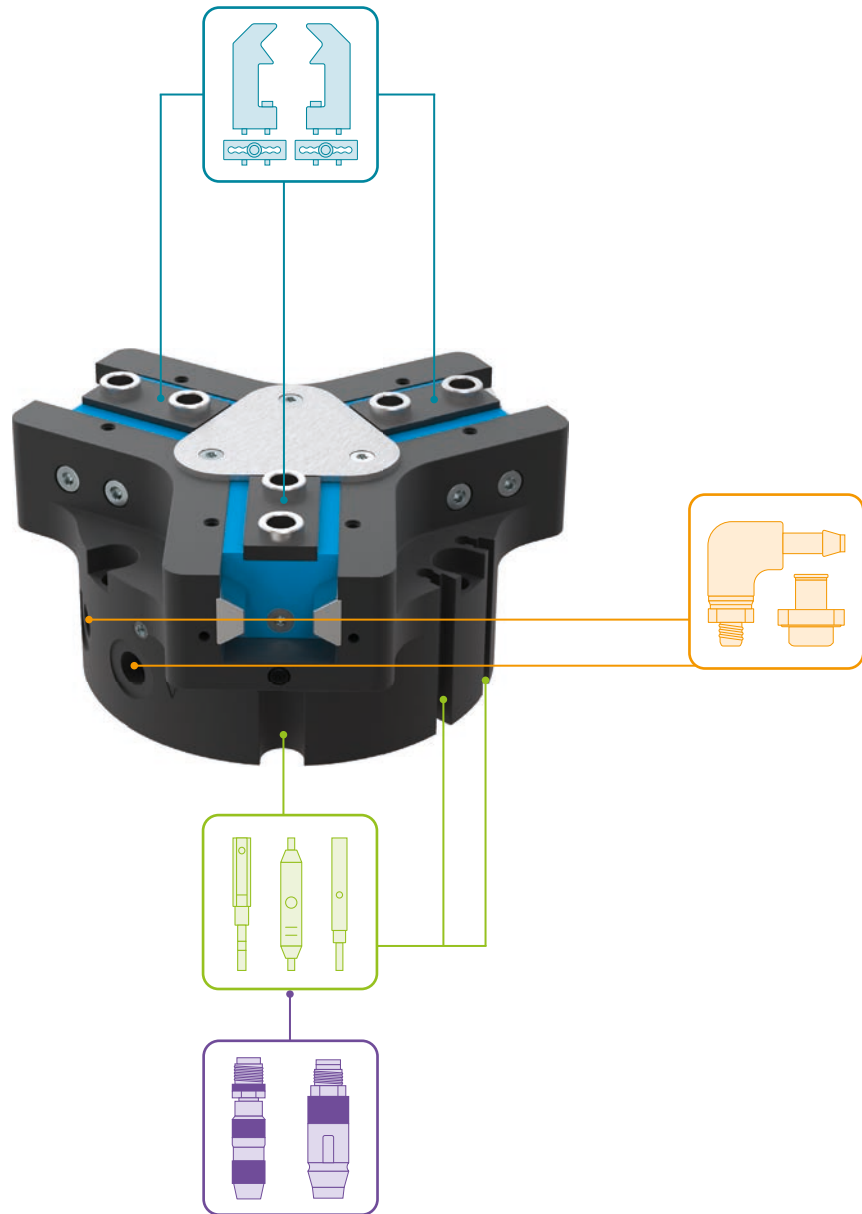


- | | |
|-----------------------------------------------------|---------------------------------------|
| ① Gripper attachment | ③⑨ Gripper |
| ② Energy supply | ④④ Clamp for sensor |
| ③ Fixing for gripper finger | ④⑤ Switch cam adjustment |
| ⑥ Integrated slot for magnetic field sensor | Ⓐ Air connection (close) |
| ⑦ Mounting block | Ⓑ Air connection (open) |
| ①⑨ Air purge connection option (max. 0,5 bar) | Ⓐ Air connection, alternative (close) |
| ③⑤ Attachment option for customer-specific fittings | Ⓑ Air connection, alternative (open) |
| ③⑧ Adapter | |

3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5045

▶ ACCESORIES



▶ INCLUDED IN DELIVERY



6 [piece]
Centering Disc

036784

▶ RECOMMENDED ACCESSORIES



ENERGY SUPPLY



GV1-4X8
Straight Fittings - Quick
Connect Style



WV1-4X8
Angled Fittings - Quick
Connect Style



DSV1-4
Pressure safety valve



DSV1-4E
Pressure safety valve with
quick exhaust



SENSORS



NJ8-E2S
Inductive proximity switch
- Connector M8



MFS01-S-KHC-P1-PNP
Magnetic field sensor angled,
cable 0.3 m - M8 connector



MFS02-S-KHC-P1-PNP
Magnetic field sensor straight,
cable 0.3 m - M8 connector



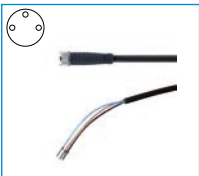
MFS01-S-KHC-P2-PNP
2-point sensor angled, ca-
ble 0.3 m - M8 connector



MFS02-S-KHC-P2-PNP
2-point sensor straight, ca-
ble 0.3 m - M8 connector



CONNECTIONS / OTHER



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

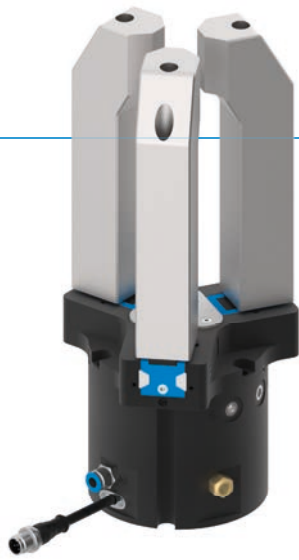


S8-G-3
Plug-in connector customiz-
able Straight - Connector M8

3-JAW CONCENTRIC GRIPPERS

SERIES GPD5000IL

▶ PRODUCT ADVANTAGES



IO-Link

“The hybrid”

- ▶ Pneumatic drive combined with IO-Link technology
- ▶ Up to 50% reduction in cycle times and up to 90% less compressed air usage
- ▶ Connection over just one pneumatic line and IO-Link cable
- ▶ Integrated valve technology, sensor technology, status display, pressure monitoring and temperature monitoring
- ▶ Part detection down to +/- 0.05 mm for a tolerance range that can be taught for any value
- ▶ 32 workpieces data sets can be programmed
- ▶ Protected from corrosion and sealed in accordance with IP64
- ▶ Up to 30 million cycles without maintenance



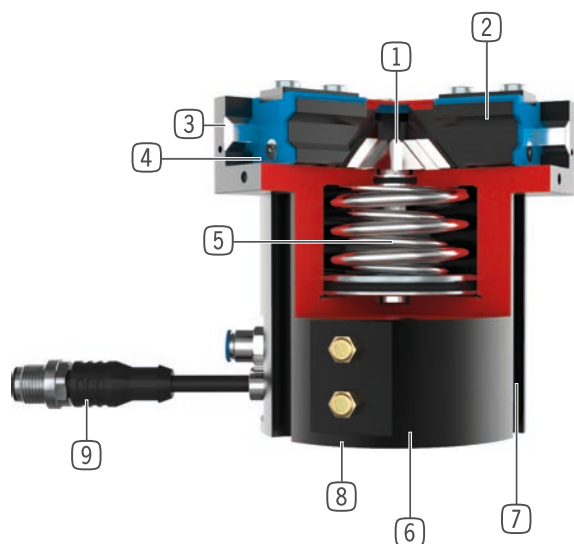
reddot design award winner 2018

▶ SERIES CHARACTERISTICS

Installation size	Version						
	GPD50XXIL	N	NC	NO	S	SC	SO
IO-Link	•	•	•	•	•	•	•
Spring closing C		•				•	
Spring opening O				•			•
High-strength S					•	•	•
30 million maintenance-free cycles (max.)	•	•	•	•	•	•	•
Integrated sensing	•	•	•	•	•	•	•
Integrated valve technology	•	•	•	•	•	•	•
Protected against corrosion	•	•	•	•	•	•	•
Purged air	•	•	•	•	•	•	•
IP64	•	•	•	•	•	•	•



► BENEFITS IN DETAIL



- ① **Wedge hook mechanism**
 - high forces and moments capacity
 - Synchronized gripper jaw movement
- ② **Gripper jaw**
 - Gripper fingers mounted using removable centering sleeves
 - Lubricated for life via incorporated lubrication slots
- ③ **Steel Linear Guide**
 - Steel in steel guide
 - Enables use of extremely long gripper fingers
- ④ **Dual lip seal**
 - IP64
 - Prevents grease from being squeezed out, increasing service life
- ⑤ **Integrated gripping force safety device**
 - Spring built into cylinder chamber as an energy store
- ⑥ **Mounting and positioning**
 - Alternatively, on several sides for customized mounting
- ⑦ **Position sensing**
 - integrated Hall sensor
- ⑧ **Integrated valve technology**
 - Activation of the gripper by means of a compressed air supply
- ⑨ **Integrated control module**
 - Single-cable solution via IO-Link
 - Pressure, temperature, position and other parameters are readable

► TECHNICAL DATA

Installation size	Stroke per jaw [mm]	Gripping force [N]	Weight [kg]	IP class
GPD5006IL	3 - 6	740 - 2370	0,75 - 0,85	IP64
GPD5008IL	4 - 8	1260 - 3910	1,25 - 1,45	IP64
GPD5010IL	5 - 10	2290 - 7160	2,1 - 2,5	IP64

► FURTHER INFORMATION IS AVAILABLE ONLINE



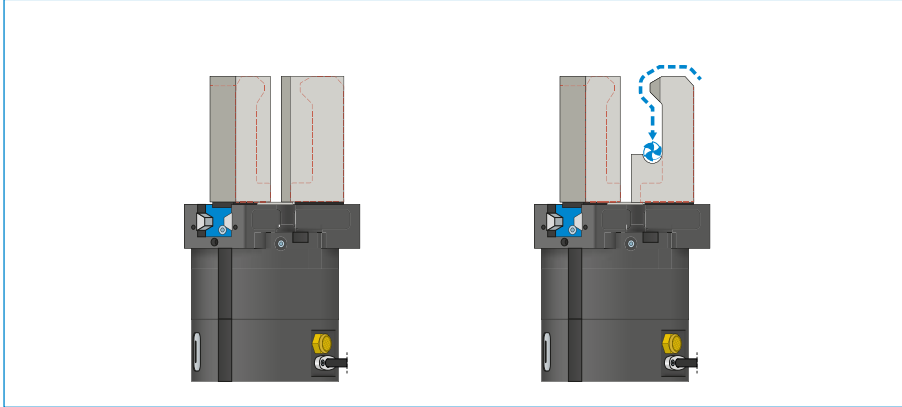
All information just a click away at: www.zimmer-group.com. Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product. Quick, clear and always up-to-date.

3-JAW CONCENTRIC GRIPPERS

SERIES GPD5000IL FUNCTIONAL DESCRIPTION



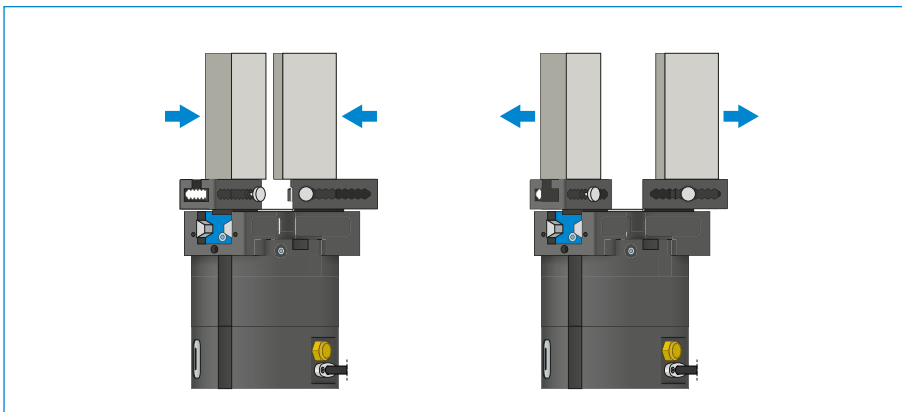
GRIPPING COMPONENTS



Universal jaws – UB5000

Can be used immediately or for individual reprocessing

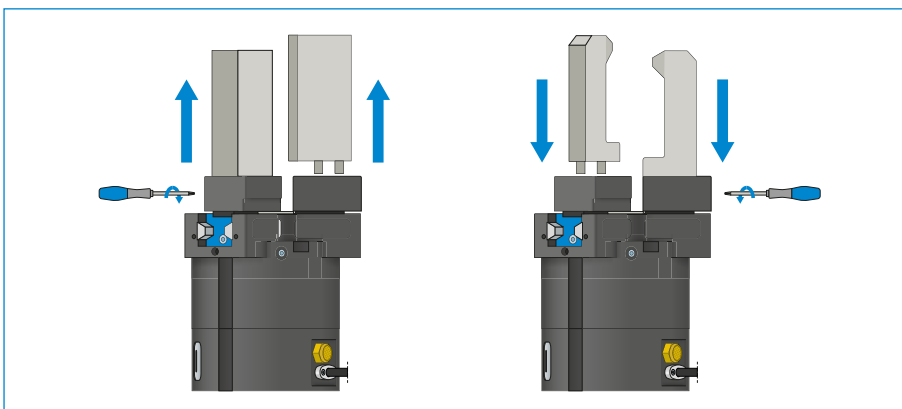
The gripper blanks are available in aluminum (AL) and steel (ST) versions and are installed directly on the gripper using the screws in the scope of delivery. The fits for the centering sleeves are already in place for this purpose. One universal jaw is required for each gripper jaw.



Adjustment jaws – EB5000

For tool-free adaptation of the gripper range

By manually activating the locking mechanism, which is pre-tensioned by a spring, the adjustment jaw can be moved within a grid of detent notches that has a number scale. Depending on the forces and torques that apply, the adjustment jaws are available in aluminum (AL) and steel (ST) versions. One adjustment jaw is required for each gripper jaw.



Interchangeable jaws – WB5000

Enable fast change of individual gripper fingers

For each gripper jaw, a fixed part and at least one loose part set is needed, depending on the number of gripper fingers to be changed. Manual locking via the Torx wrench included in the scope of delivery of the fixed part can take place from two sides.

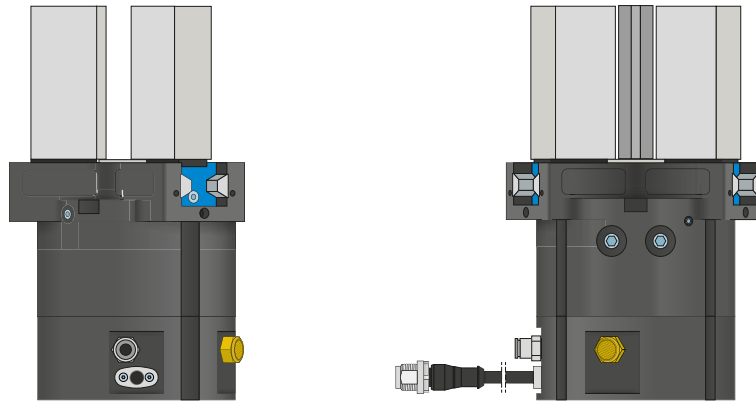


THE GRIPPING COMPONENTS CAN BE COMBINED!

The gripper components listed above can be combined with each other and are compatible with the various series of the 5000 gripper family.

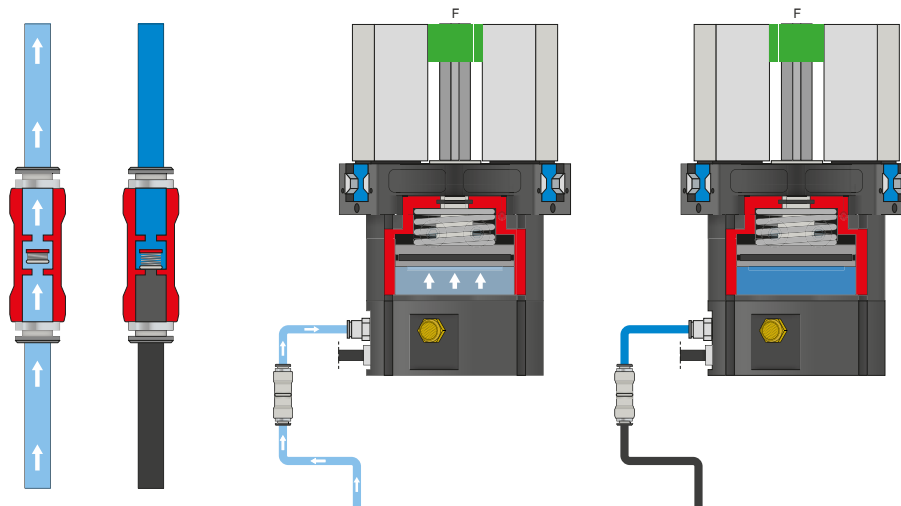


ENERGY SUPPLY



Pneumatic threaded connections

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



Pressure safety valve – DSV

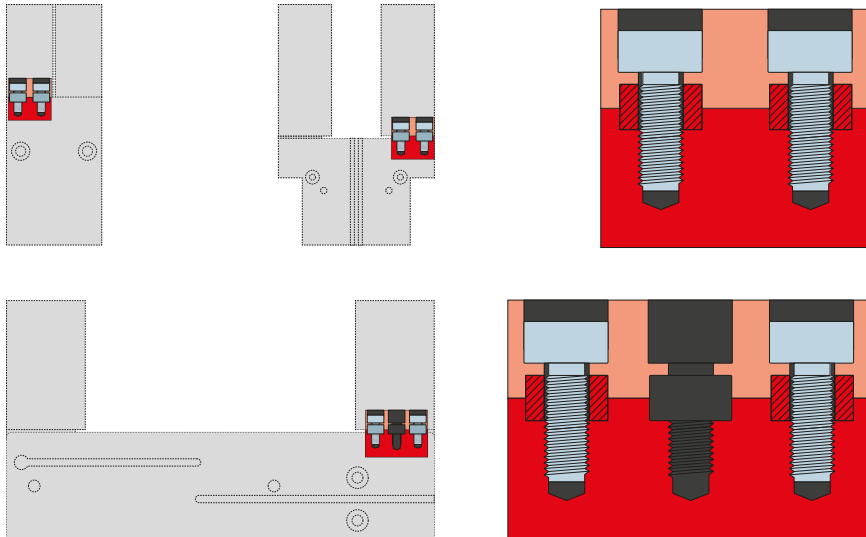
The throttle check valve integrated into the supply air line retains the system pressure in case of EMERGENCY STOP. To ensure the function, the valve must be installed as close to the gripper's air connection as possible. Control voltage and actuator voltage must be maintained for this purpose.

3-JAW CONCENTRIC GRIPPERS

SERIES GPD5000IL FUNCTIONAL DESCRIPTION



CONNECTIONS / OTHER



5

Centering sleeves

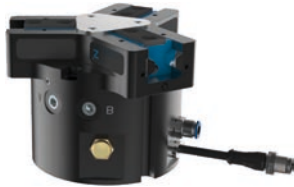
For defined position measurement of the gripper fingers

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.

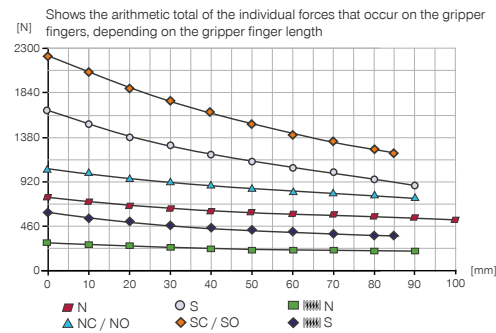
3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5006IL

▶ PRODUCT SPECIFICATIONS

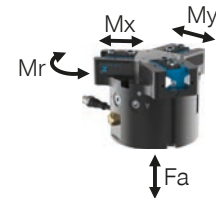


▶ Gripping force diagram



▶ Forces and moments

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



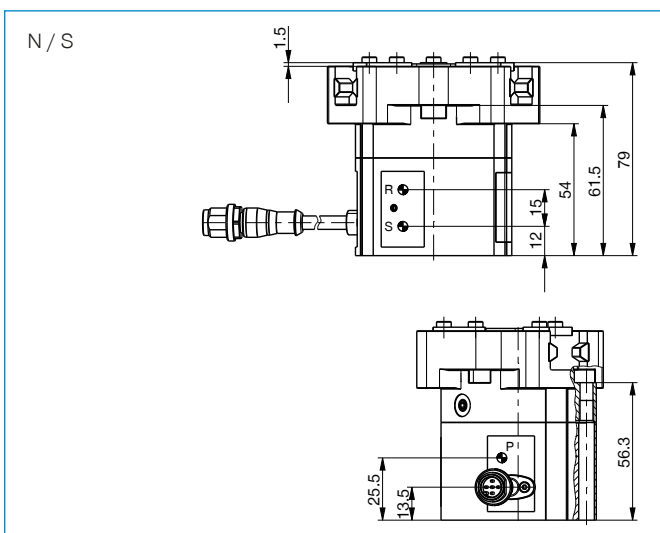
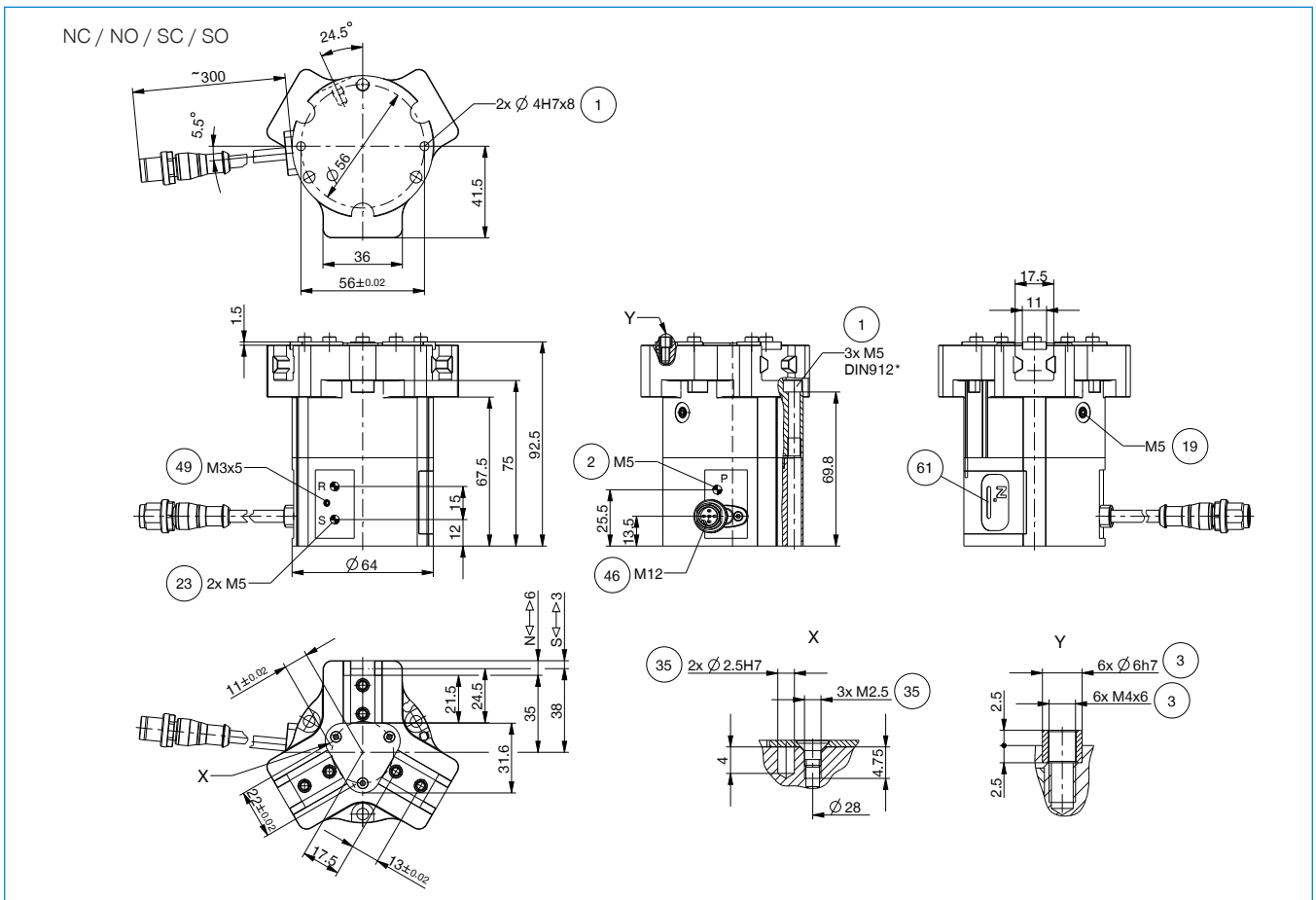
Mr [Nm]	43
Mx [Nm]	70
My [Nm]	46
Fa [N]	1250

▶ TECHNICAL DATA

▶ Technical data

Order no.	GPD5006N-IL-10-A	GPD5006NC-IL-10-A	GPD5006NO-IL-10-A	GPD5006S-IL-10-A	GPD5006SC-IL-10-A	GPD5006SO-IL-10-A
Control	IO-Link	IO-Link	IO-Link	IO-Link	IO-Link	IO-Link
Stroke per jaw [mm]	6	6	6	3	3	3
Gripping force in closing [N]	740	1020		1620	2240	
Gripping force in opening [N]	800		1080	1750		2370
Gripping force secured by spring min. [N]		280	280		620	620
Cycle count max. [cycle/min]	330	230	230	330	230	230
Dead weight of mounted gripper finger max. [kg]	0.4	0.4	0.4	0.4	0.4	0.4
Length of the gripper fingers max. [mm]	100	90	90	90	85	85
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Nominal operating pressure [bar]	6	6	6	6	6	6
Operating temperature [°C]	+5 ... +50	+5 ... +50	+5 ... +50	+5 ... +50	+5 ... +50	+5 ... +50
Air volume per cycle [cm ³]	22	43	43	22	43	43
Integrated valve technology	Yes	Yes	Yes	Yes	Yes	Yes
Integrated position sensing	Yes	Yes	Yes	Yes	Yes	Yes
Voltage [V]	24	24	24	24	24	24
Current consumption max. [A]	0.10	0.10	0.10	0.10	0.10	0.10
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	0.75	0.85	0.85	0.75	0.85	0.85

TECHNICAL DRAWINGS



- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑱ Air purge connection option
- ⑳ Ventilation (R+S: In dirty environments, replace filters with actual exhaust hoses and move the exhaust air outlet to a clean environment)
- ㉓ Attachment option for customer-specific fittings
- ㉔ Energy supply IO-Link (M12, 5-pole)
- ㉕ Ground
- ㉖ Status display



3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5006IL

▶ ACCESORIES



▶ INCLUDED IN DELIVERY



6 [piece]
Centering Disc

024230



2 [piece]
Filters

CFILT00010

▶ RECOMMENDED ACCESSORIES



GRIPPING COMPONENTS



UB5006AL
Universal jaw aluminium



UB5006ST
Universal jaw steel



EB5006AL
Aluminum adjustment jaw



EB5006ST
Steel adjustment jaw



WB5006L
Changeable jaw, loose-part-set



WB5006F
Changeable jaw, fix-part



ENERGY SUPPLY



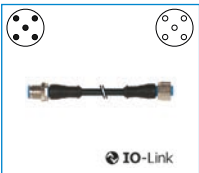
GVM5
Straight Fittings - Quick Connect Style



DSV06
Return valve



CONNECTIONS / OTHER



KAG500IL
Plug-in connector straight
5 m - plug, socket M12

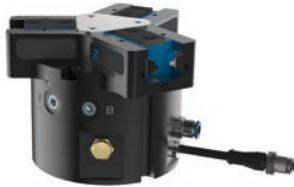


SCM-C-00-00-A
Smart Communication
Module

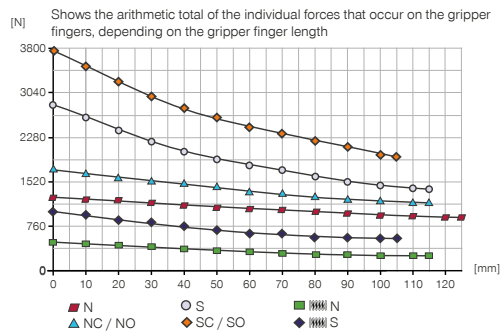
3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5008IL

▶ PRODUCT SPECIFICATIONS

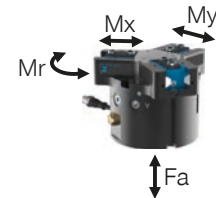


▶ Gripping force diagram



▶ Forces and moments

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



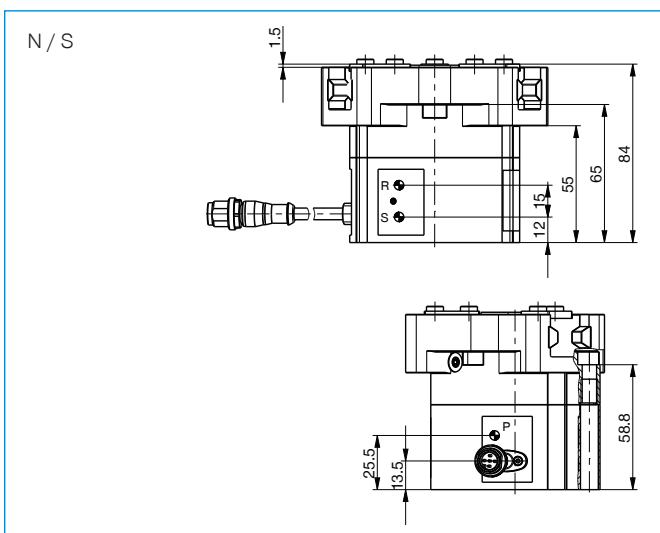
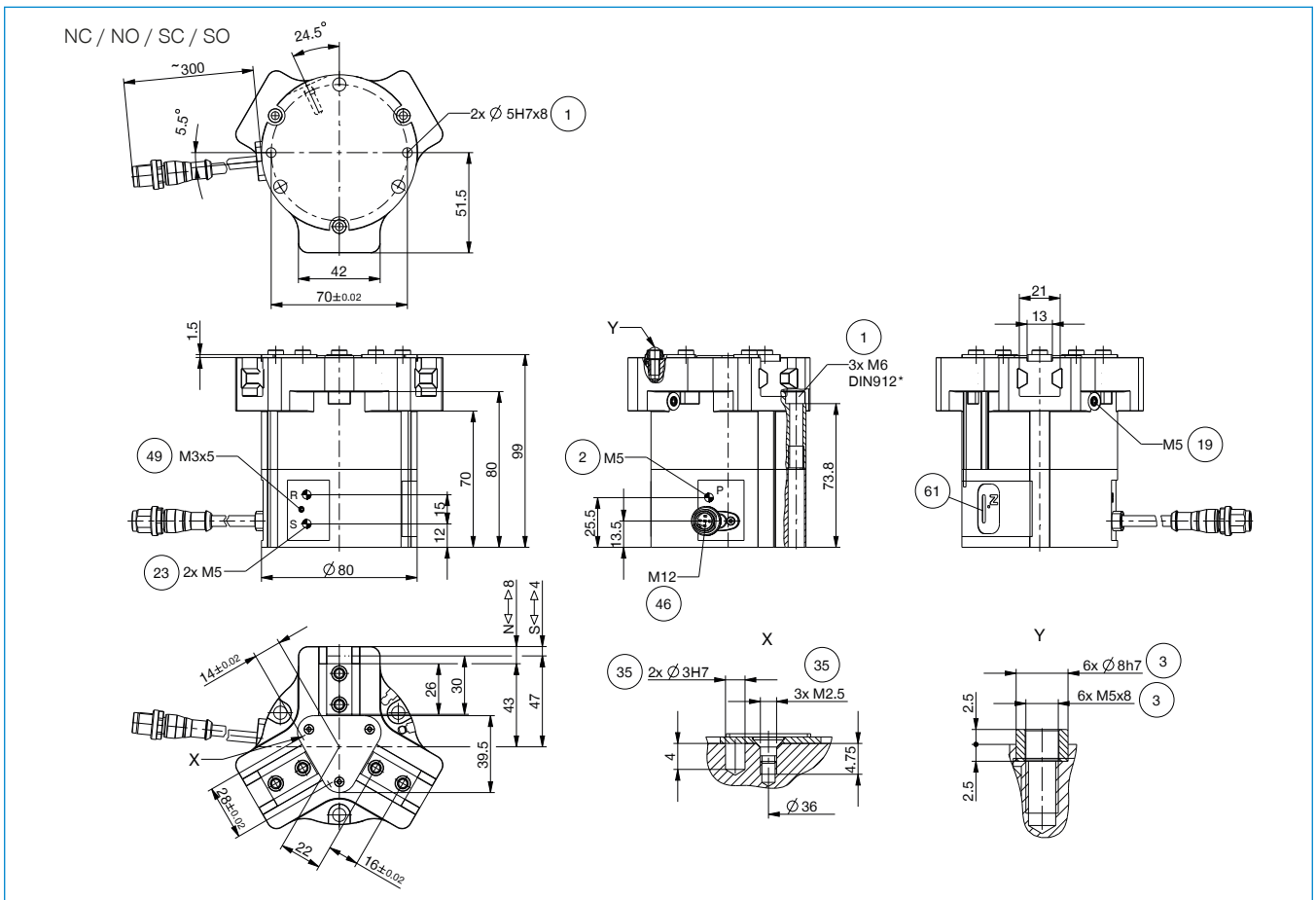
Mr [Nm]	60
Mx [Nm]	105
My [Nm]	65
Fa [N]	1900

▶ TECHNICAL DATA

▶ Technical data

Order no.	GPD5008N-IL-10-A	GPD5008NC-IL-10-A	GPD5008NO-IL-10-A	GPD5008S-IL-10-A	GPD5008SC-IL-10-A	GPD5008SO-IL-10-A
Control	IO-Link	IO-Link	IO-Link	IO-Link	IO-Link	IO-Link
Stroke per jaw [mm]	8	8	8	4	4	4
Gripping force in closing [N]	1260	1690		2780	3730	
Gripping force in opening [N]	1340		1770	2960		3910
Gripping force secured by spring min. [N]		430	430		950	950
Cycle count max. [cycle/min]	210	160	160	210	160	160
Dead weight of mounted gripper finger max. [kg]	0.7	0.7	0.7	0.7	0.7	0.7
Length of the gripper fingers max. [mm]	125	115	115	115	105	105
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Nominal operating pressure [bar]	6	6	6	6	6	6
Operating temperature [°C]	+5 ... +50	+5 ... +50	+5 ... +50	+5 ... +50	+5 ... +50	+5 ... +50
Air volume per cycle [cm³]	51	90	90	51	90	90
Integrated valve technology	Yes	Yes	Yes	Yes	Yes	Yes
Integrated position sensing	Yes	Yes	Yes	Yes	Yes	Yes
Voltage [V]	24	24	24	24	24	24
Current consumption max. [A]	0.10	0.10	0.10	0.10	0.10	0.10
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	1.25	1.45	1.45	1.25	1.45	1.45

TECHNICAL DRAWINGS



- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑱ Air purge connection option
- ⑳ Ventilation (R+S: In dirty environments, replace filters with actual exhaust hoses and move the exhaust air outlet to a clean environment)
- ㉓ Attachment option for customer-specific fittings
- ㉔ Energy supply IO-Link (M12, 5-pole)
- ㉕ Ground
- ㉖ Status display



3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5008IL

▶ ACCESORIES



▶ INCLUDED IN DELIVERY



6 [piece]
Centering Disc

024231



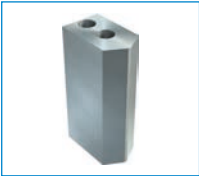
2 [piece]
Filters

CFILT00010

▶ RECOMMENDED ACCESSORIES



GRIPPING COMPONENTS



UB5008AL
Universal jaw aluminium



UB5008ST
Universal jaw steel



EB5008AL
Aluminum adjustment jaw



EB5008ST
Steel adjustment jaw



WB5008L
Changeable jaw, loose-part-set



WB5008F
Changeable jaw, fix-part



ENERGY SUPPLY



GVM5
Straight Fittings - Quick Connect Style



DSV06
Return valve



CONNECTIONS / OTHER



KAG500IL
Plug-in connector straight
5 m - plug, socket M12

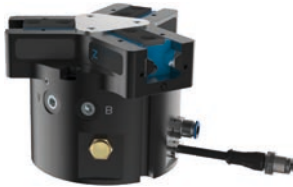


SCM-C-00-00-A
Smart Communication
Module

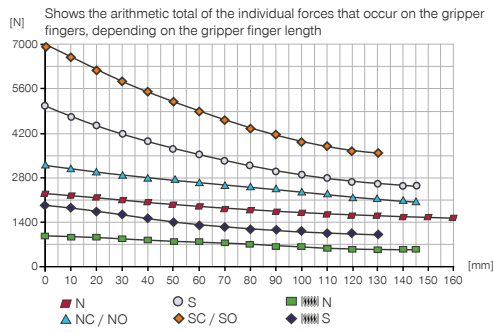
3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5010IL

▶ PRODUCT SPECIFICATIONS

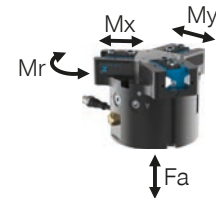


▶ Gripping force diagram



▶ Forces and moments

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



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

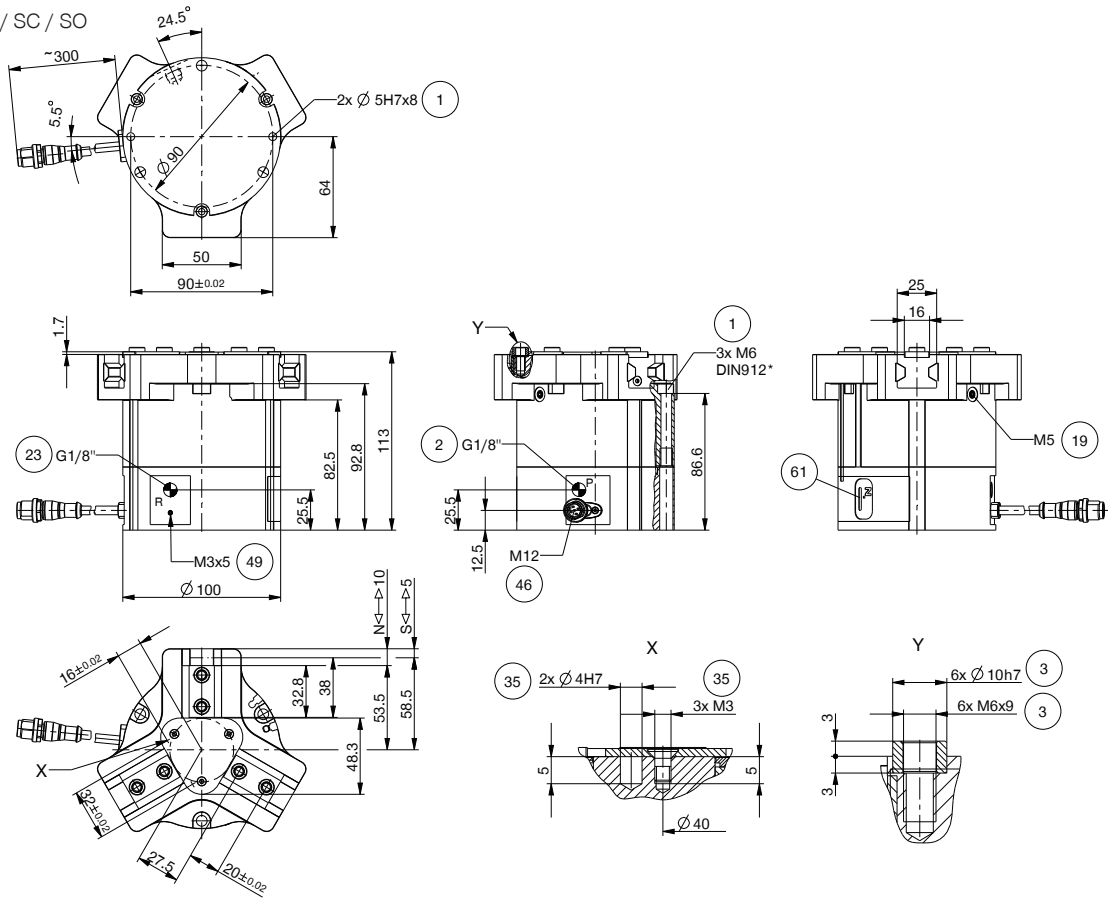
▶ TECHNICAL DATA

▶ Technical data

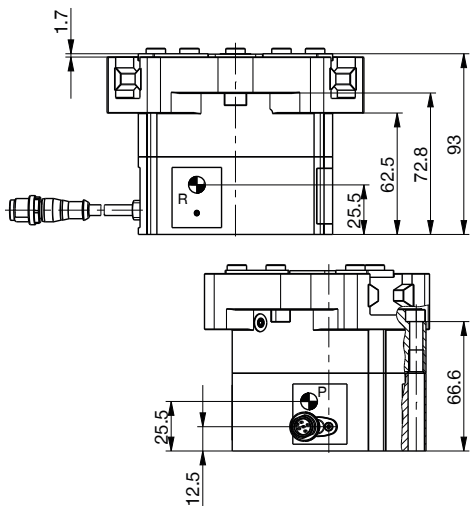
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Control	IO-Link	IO-Link	IO-Link	IO-Link	IO-Link	IO-Link
Stroke per jaw [mm]	10	10	10	5	5	5
Gripping force in closing [N]	2290	3140		5050	6930	
Gripping force in opening [N]	2400		3250	5280		7160
Gripping force secured by spring min. [N]		850	850		1880	1880
Cycle count max. [cycle/min]	130	100	100	130	100	100
Dead weight of mounted gripper finger max. [kg]	1.3	1.3	1.3	1.3	1.3	1.3
Length of the gripper fingers max. [mm]	160	145	145	145	130	130
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Nominal operating pressure [bar]	6	6	6	6	6	6
Operating temperature [°C]	+5 ... +50	+5 ... +50	+5 ... +50	+5 ... +50	+5 ... +50	+5 ... +50
Air volume per cycle [cm³]	100	200	200	100	200	200
Integrated valve technology	Yes	Yes	Yes	Yes	Yes	Yes
Integrated position sensing	Yes	Yes	Yes	Yes	Yes	Yes
Voltage [V]	24	24	24	24	24	24
Current consumption max. [A]	0.10	0.10	0.10	0.10	0.10	0.10
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	2.1	2.5	2.5	2.1	2.5	2.5

TECHNICAL DRAWINGS

NC / NO / SC / SO



N / S



- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑱ Air purge connection option
- ⑳ Ventilation (R+S: In dirty environments, replace filters with actual exhaust hoses and move the exhaust air outlet to a clean environment)
- ㉓ Attachment option for customer-specific fittings
- ㉔ Energy supply IO-Link (M12, 5-pole)
- ㉕ Ground
- ㉖ Status display



3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5010IL

▶ ACCESORIES



▶ INCLUDED IN DELIVERY



6 [piece]
Centering Disc

018187



1 [piece]
Filters

CFILT00011

▶ RECOMMENDED ACCESSORIES



GRIPPING COMPONENTS



UB5010AL
Universal jaw aluminium



UB5010ST
Universal jaw steel



EB5010AL
Aluminum adjustment jaw



EB5010ST
Steel adjustment jaw



WB5010L
Changeable jaw, loose-part-set



WB5010F
Changeable jaw, fix-part



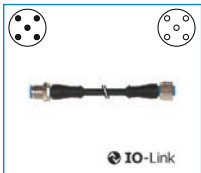
ENERGY SUPPLY



GV1-8X8
Straight Fittings - Quick
Connect Style



CONNECTIONS / OTHER



KAG500IL
Plug-in connector straight
5 m - plug, socket M12

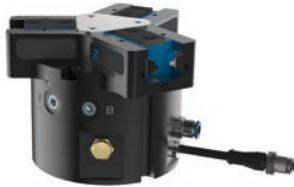


SCM-C-00-00-A
Smart Communication
Module

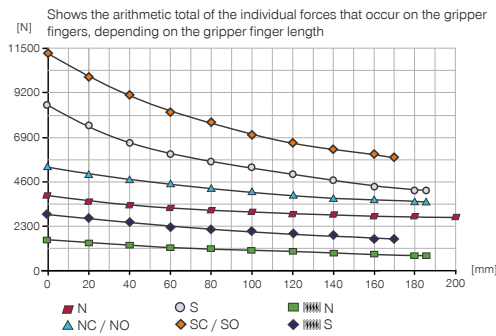
3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5013IL

▶ PRODUCT SPECIFICATIONS

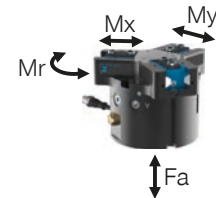


▶ Gripping force diagram



▶ Forces and moments

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



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

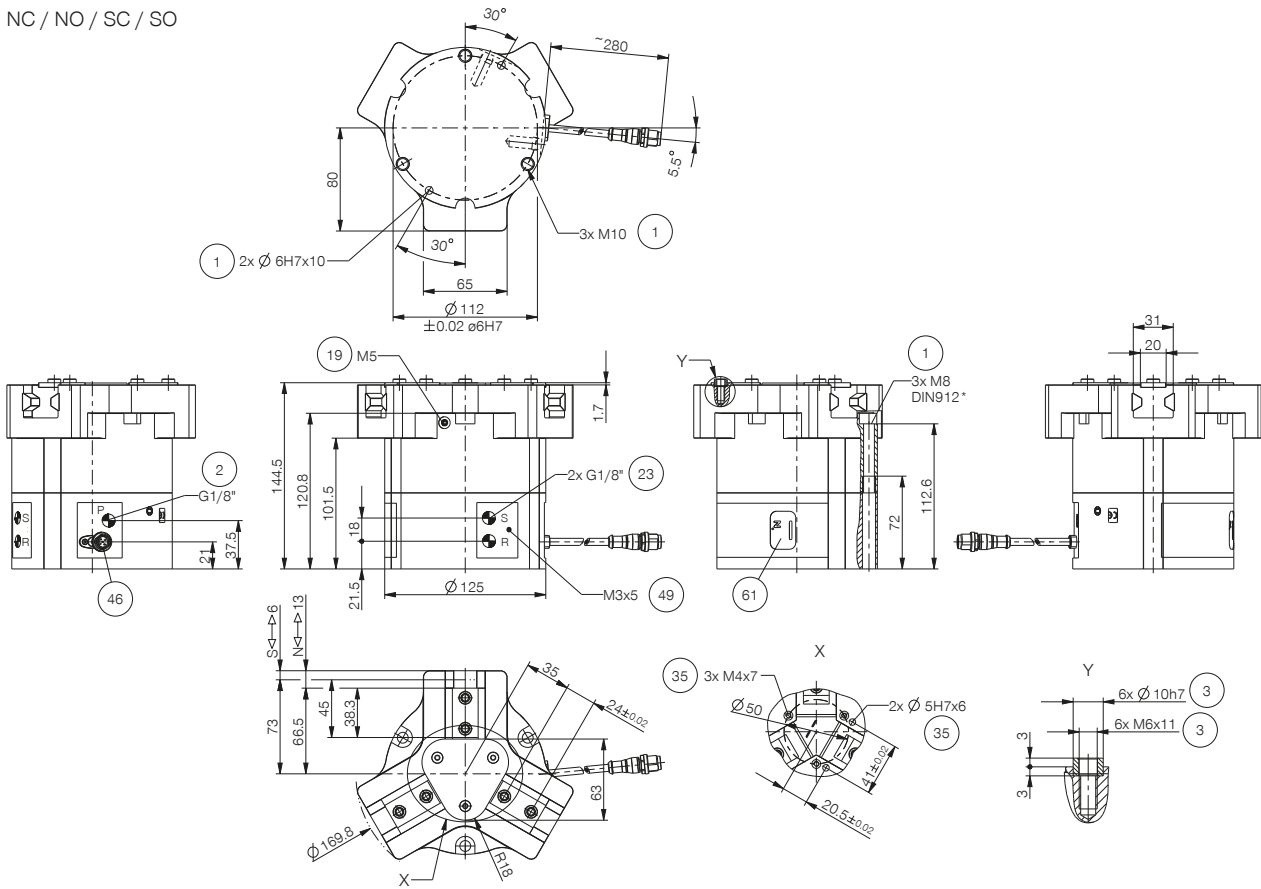
▶ TECHNICAL DATA

▶ Technical data

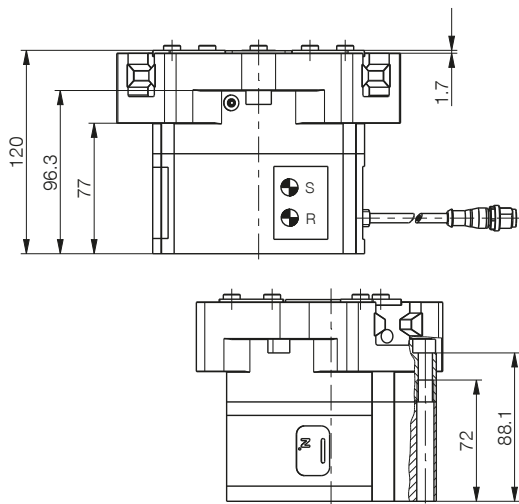
Order no.	GPD5013N-IL-10-A	GPD5013NC-IL-10-A	GPD5013NO-IL-10-A	GPD5013S-IL-10-A	GPD5013SC-IL-10-A	GPD5013SO-IL-10-A
Control	IO-Link	IO-Link	IO-Link	IO-Link	IO-Link	IO-Link
Stroke per jaw [mm]	13	13	13	6	6	6
Gripping force in closing [N]	3770	5060		8310	11160	
Gripping force in opening [N]	3910		5200	8600		11450
Gripping force secured by spring min. [N]		1290	1290		2850	2850
Dead weight of mounted gripper finger max. [kg]	2.4	2.4	2.4	2.4	2.4	2.4
Length of the gripper fingers max. [mm]	200	185	185	185	170	170
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Nominal operating pressure [bar]	6	6	6	6	6	6
Operating temperature [°C]	+5 ... +50	+5 ... +50	+5 ... +50	+5 ... +50	+5 ... +50	+5 ... +50
Air volume per cycle [cm³]	230	415	415	230	415	415
Integrated valve technology	Yes	Yes	Yes	Yes	Yes	Yes
Integrated position sensing	Yes	Yes	Yes	Yes	Yes	Yes
Voltage [V]	24	24	24	24	24	24
Current consumption max. [A]	0.12	0.12	0.12	0.12	0.12	0.12
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	4.4	5.3	5.3	4.6	5.3	5.3

TECHNICAL DRAWINGS

NC / NO / SC / SO



N / S



- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑱ Air purge connection option
- ⑲ Ventilation (R+S: In dirty environments, replace filters with actual exhaust hoses and move the exhaust air outlet to a clean environment)
- ⑳ Attachment option for customer-specific fittings
- ⑳ Energy supply IO-Link (M12, 5-pole)
- ⑳ Ground
- ㉑ Status display

3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5013IL

▶ ACCESORIES



▶ INCLUDED IN DELIVERY



6 [piece]
Centering Disc

018187



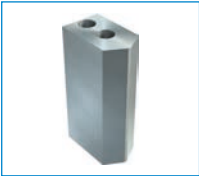
2 [piece]
Filters

CFILT00011

▶ RECOMMENDED ACCESSORIES



GRIPPING COMPONENTS



UB5013AL
Universal jaw aluminium



UB5013ST
Universal jaw steel



EB5013AL
Aluminum adjustment jaw



EB5013ST
Steel adjustment jaw



WB5013L
Changeable jaw, loose-part-set



WB5013F
Changeable jaw, fix-part



ENERGY SUPPLY



GV1-8X8
Straight Fittings - Quick Connect Style



CONNECTIONS / OTHER



KAG500IL
Plug-in connector straight
5 m - plug, socket M12

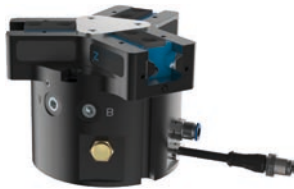


SCM-C-00-00-A
Smart Communication Module

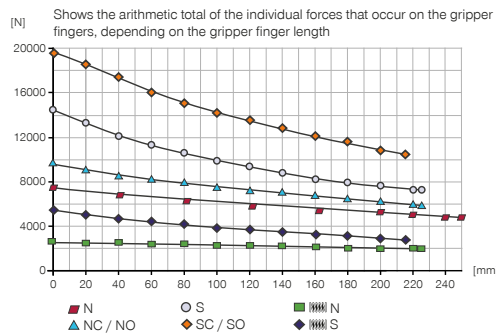
3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5016IL

▶ PRODUCT SPECIFICATIONS

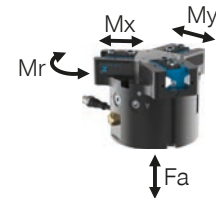


▶ Gripping force diagram



▶ Forces and moments

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



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

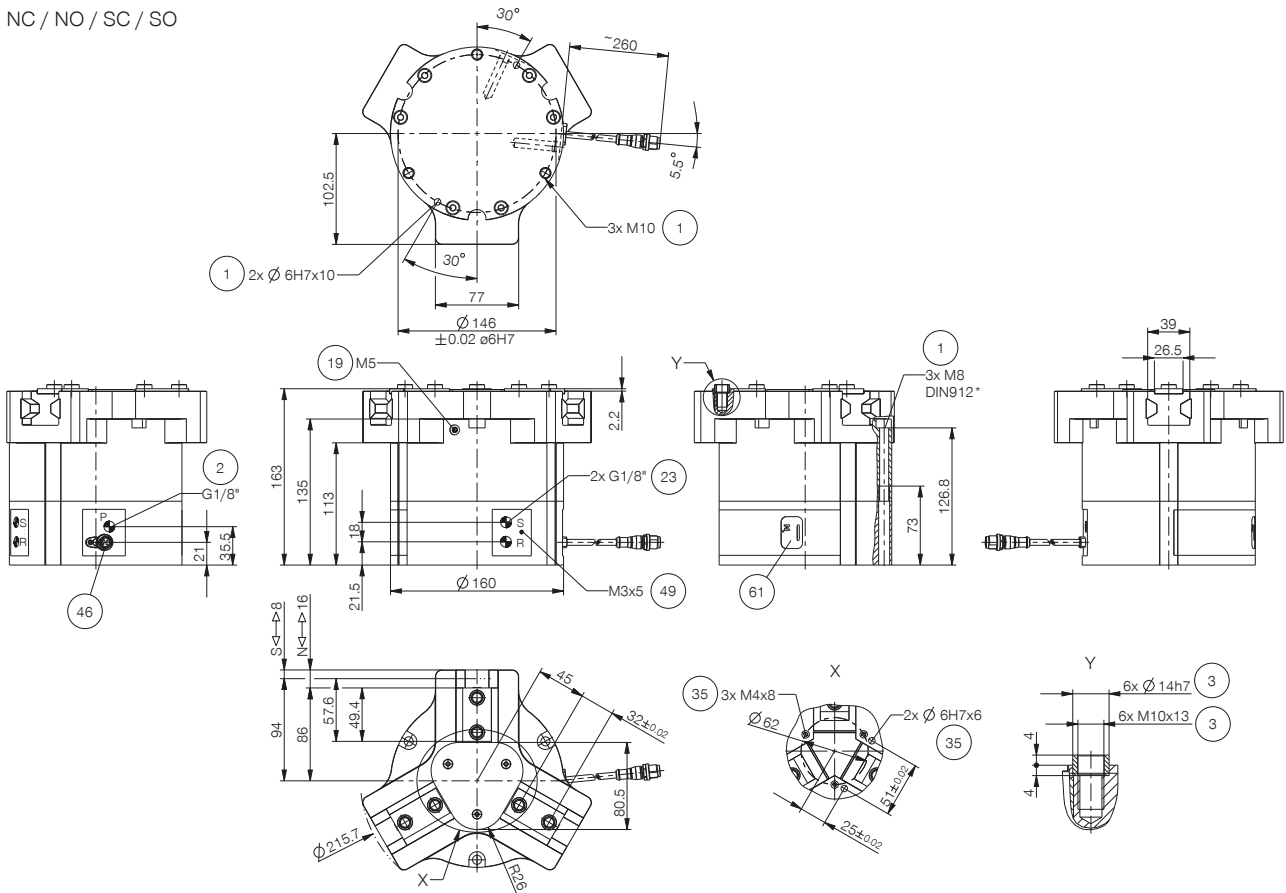
▶ TECHNICAL DATA

▶ Technical data

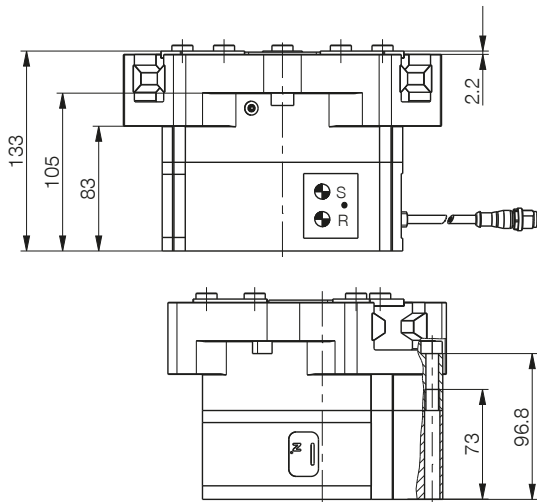
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Control	IO-Link	IO-Link	IO-Link	IO-Link	IO-Link	IO-Link
Stroke per jaw [mm]	16	16	16	8	8	8
Gripping force in closing [N]	6870	9240		14700	19780	
Gripping force in opening [N]	7120		9490	15250		20330
Gripping force secured by spring min. [N]		2370	2370		5080	5080
Dead weight of mounted gripper finger max. [kg]	3.8	3.8	3.8	3.8	3.8	3.8
Length of the gripper fingers max. [mm]	245	225	225	225	215	215
Repetition accuracy +/- [mm]	0.02	0.02	0.02	0.02	0.02	0.02
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Nominal operating pressure [bar]	6	6	6	6	6	6
Operating temperature [°C]	+5 ... +50	+5 ... +50	+5 ... +50	+5 ... +50	+5 ... +50	+5 ... +50
Air volume per cycle [cm³]	525	925	925	525	925	925
Integrated valve technology	Yes	Yes	Yes	Yes	Yes	Yes
Integrated position sensing	Yes	Yes	Yes	Yes	Yes	Yes
Voltage [V]	24	24	24	24	24	24
Current consumption max. [A]	0.12	0.12	0.12	0.12	0.12	0.12
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	8.3	9.8	9.8	8.3	9.8	9.8

TECHNICAL DRAWINGS

NC / NO / SC / SO



N / S



- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑱ Air purge connection option
- ⑲ Ventilation (R+S: In dirty environments, replace filters with actual exhaust hoses and move the exhaust air outlet to a clean environment)
- ⑳ Attachment option for customer-specific fittings
- ⑼ Energy supply IO-Link (M12, 5-pole)
- ⑺ Ground
- ⑽ Status display

3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5016IL

▶ ACCESORIES



▶ INCLUDED IN DELIVERY



6 [piece]
Centering Disc

019387



2 [piece]
Filters

CFILT00011

▶ RECOMMENDED ACCESSORIES



GRIPPING COMPONENTS



UB5016AL
Universal jaw aluminium



UB5016ST
Universal jaw steel



EB5016AL
Aluminum adjustment jaw



EB5016ST
Steel adjustment jaw



WB5016L
Changeable jaw, loose-part-set



WB5016F
Changeable jaw, fix-part



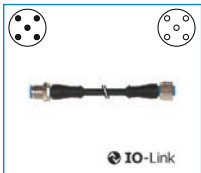
ENERGY SUPPLY



GV1-8X8
Straight Fittings - Quick Connect Style



CONNECTIONS / OTHER



KAG500IL
Plug-in connector straight
5 m - plug, socket M12

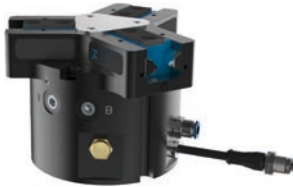


SCM-C-00-00-A
Smart Communication
Module

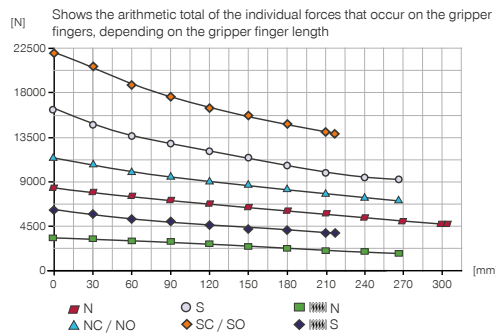
3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5025IL

▶ PRODUCT SPECIFICATIONS

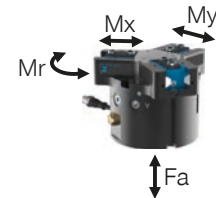


▶ Gripping force diagram



▶ Forces and moments

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



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

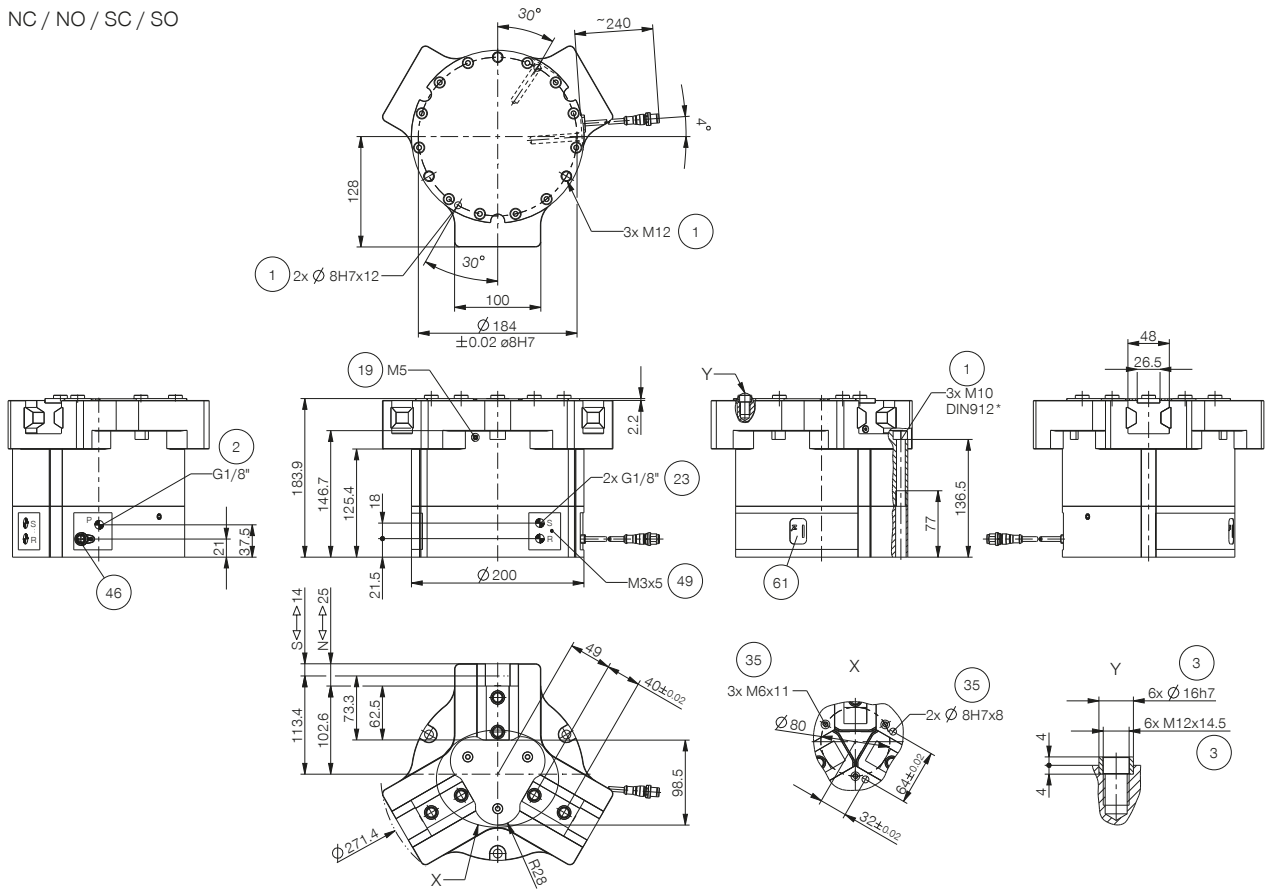
▶ TECHNICAL DATA

▶ Technical data

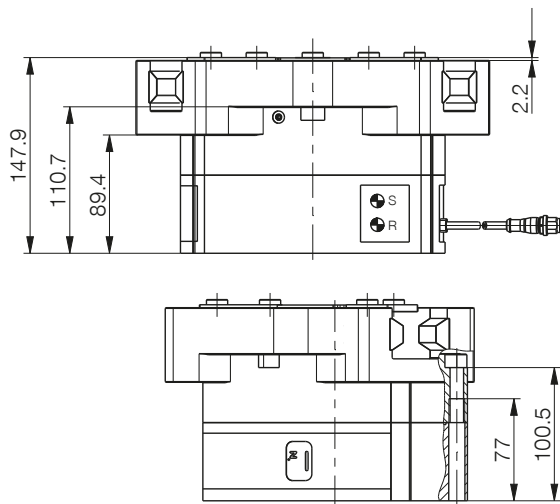
Order no.	GPD5025N-IL-10-A	GPD5025NC-IL-10-A	GPD5025NO-IL-10-A	GPD5025S-IL-10-A	GPD5025SC-IL-10-A	GPD5025SO-IL-10-A
Control	IO-Link	IO-Link	IO-Link	IO-Link	IO-Link	IO-Link
Stroke per jaw [mm]	25	25	25	14	14	14
Gripping force in closing [N]	8430	11560		16240	22270	
Gripping force in opening [N]	8730		11860	16820		22850
Gripping force secured by spring min. [N]		3130	3130		6030	6030
Dead weight of mounted gripper finger max. [kg]	7	7	7	7	7	7
Length of the gripper fingers max. [mm]	310	265	265	265	220	220
Repetition accuracy +/- [mm]	0.05	0.05	0.05	0.05	0.05	0.05
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Nominal operating pressure [bar]	6	6	6	6	6	6
Operating temperature [°C]	+5 ... +50	+5 ... +50	+5 ... +50	+5 ... +50	+5 ... +50	+5 ... +50
Air volume per cycle [cm³]	1025	1750	1750	1025	1750	1750
Integrated valve technology	Yes	Yes	Yes	Yes	Yes	Yes
Integrated position sensing	Yes	Yes	Yes	Yes	Yes	Yes
Voltage [V]	24	24	24	24	24	24
Current consumption max. [A]	0.12	0.12	0.12	0.12	0.12	0.12
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	14.9	18.6	18.6	14.9	18.6	18.6

TECHNICAL DRAWINGS

NC / NO / SC / SO



N / S



- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑱ Air purge connection option
- ⑳ Ventilation (R+S: In dirty environments, replace filters with actual exhaust hoses and move the exhaust air outlet to a clean environment)
- ㉓ Attachment option for customer-specific fittings
- ④⑥ Energy supply IO-Link (M12, 5-pole)
- ④⑨ Ground
- ⑥① Status display

3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5025IL

▶ ACCESORIES



▶ INCLUDED IN DELIVERY



6 [piece]
Centering Disc

030529



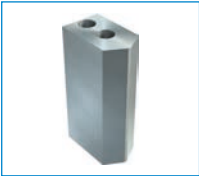
2 [piece]
Filters

CFILT00011

▶ RECOMMENDED ACCESSORIES



GRIPPING COMPONENTS



UB5025AL
Universal jaw aluminium



UB5025ST
Universal jaw steel



EB5025AL
Aluminum adjustment jaw



EB5025ST
Steel adjustment jaw



WB5025L
Changeable jaw, loose-part-set



WB5025F
Changeable jaw, fix-part



ENERGY SUPPLY



GV1-8X8
Straight Fittings - Quick Connect Style



CONNECTIONS / OTHER



KAG500IL
Plug-in connector straight
5 m - plug, socket M12

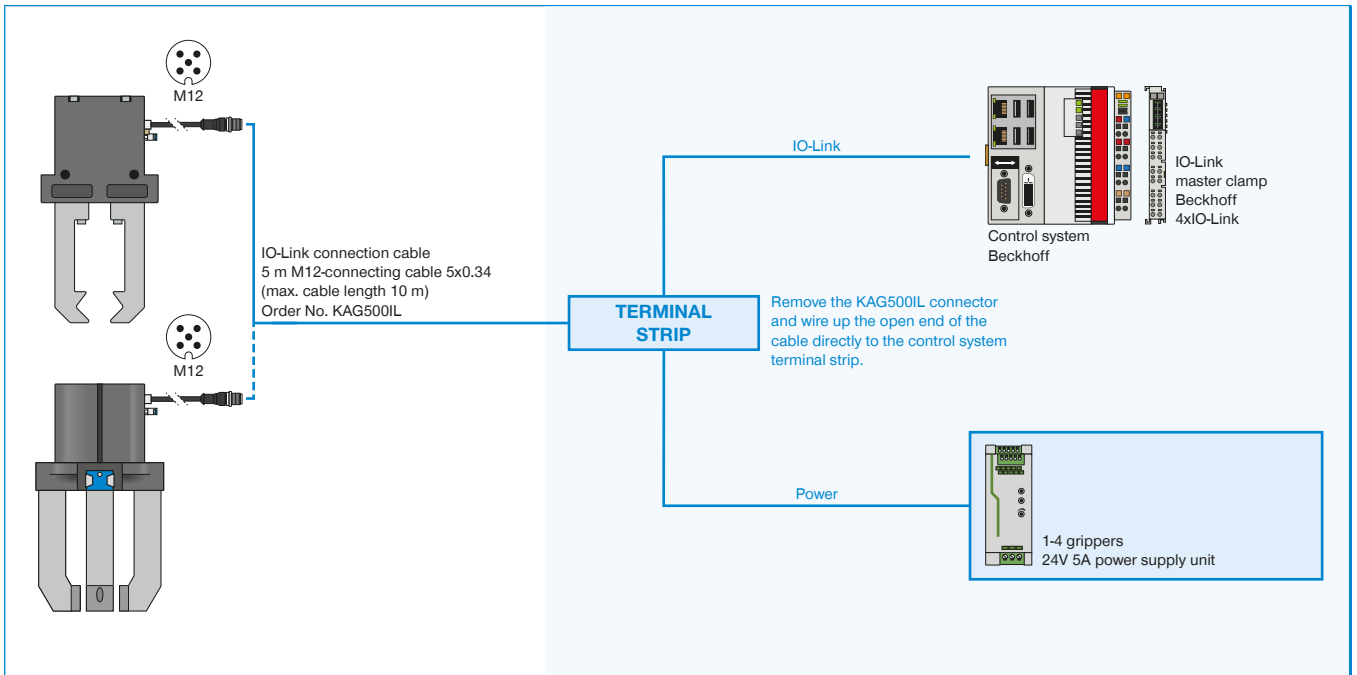


SCM-C-00-00-A
Smart Communication
Module

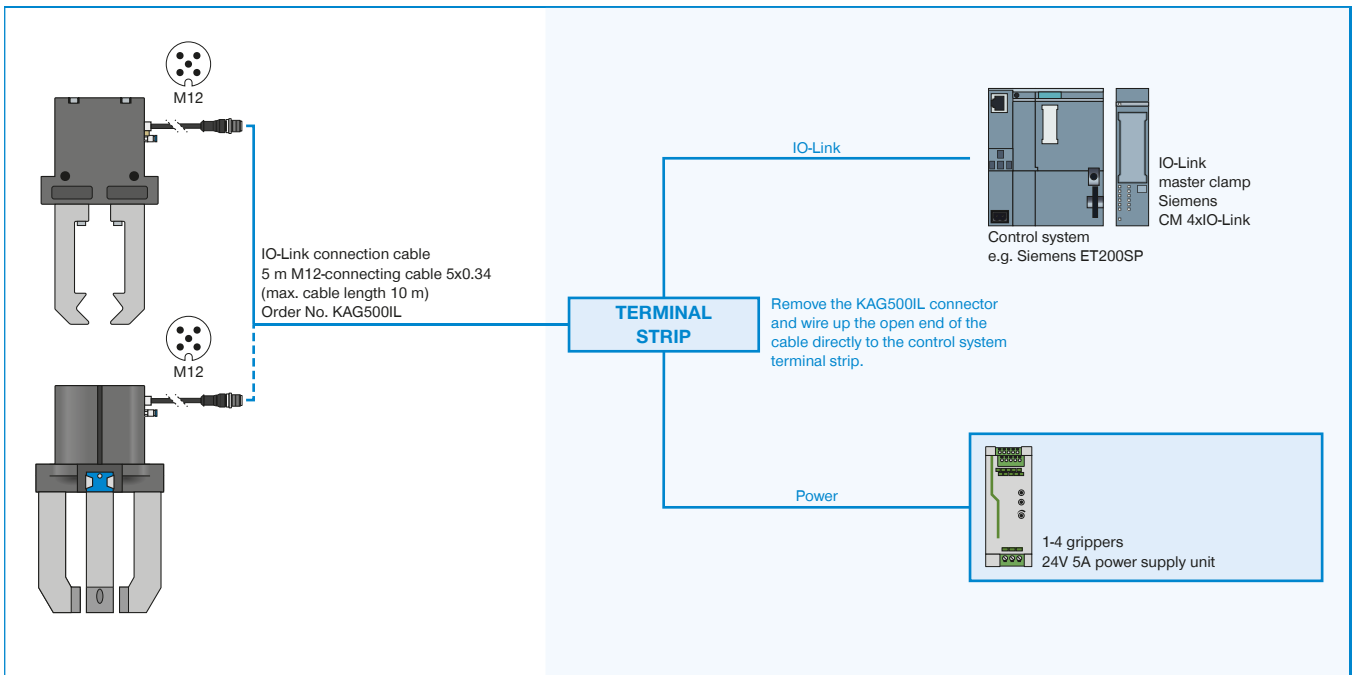
SECURED CONFIGURATION EXAMPLES

GPP5000IL / GPD5000IL SERIES

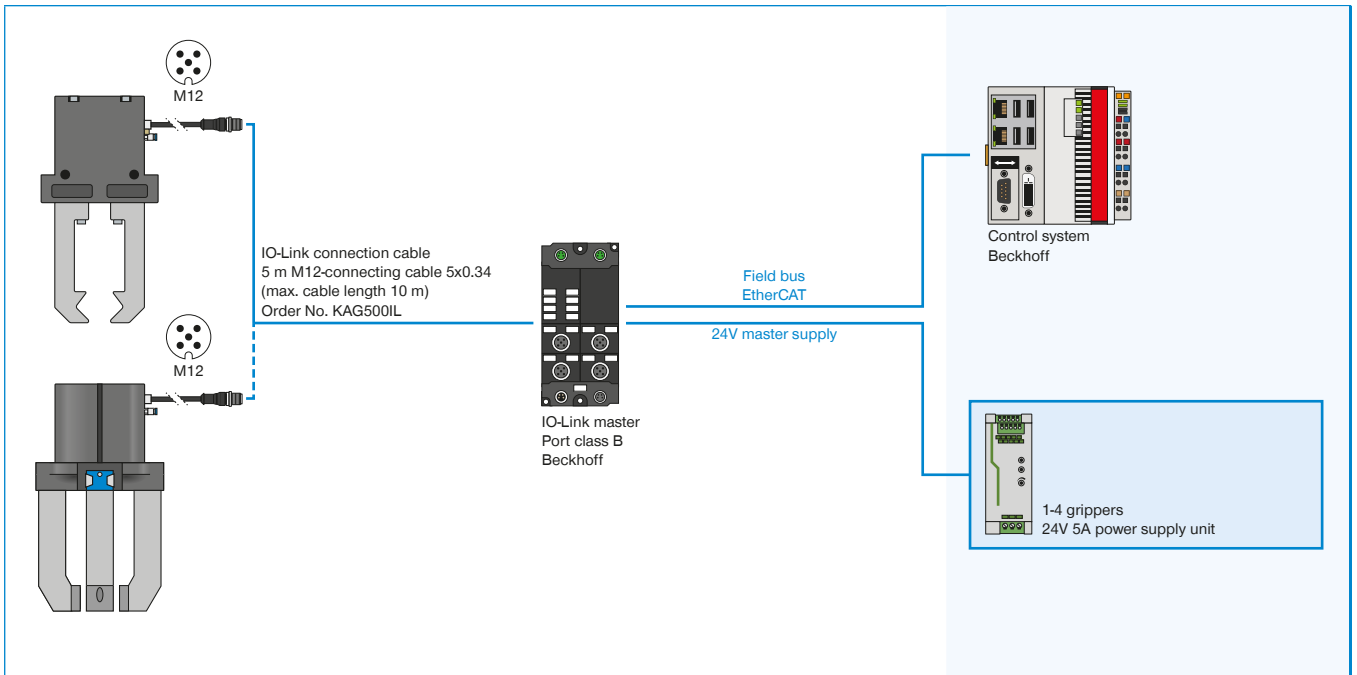
▶ GPP5000IL / GPD5000IL (IO-LINK) WIRING TO CONTROL CABINET (BECKHOFF)



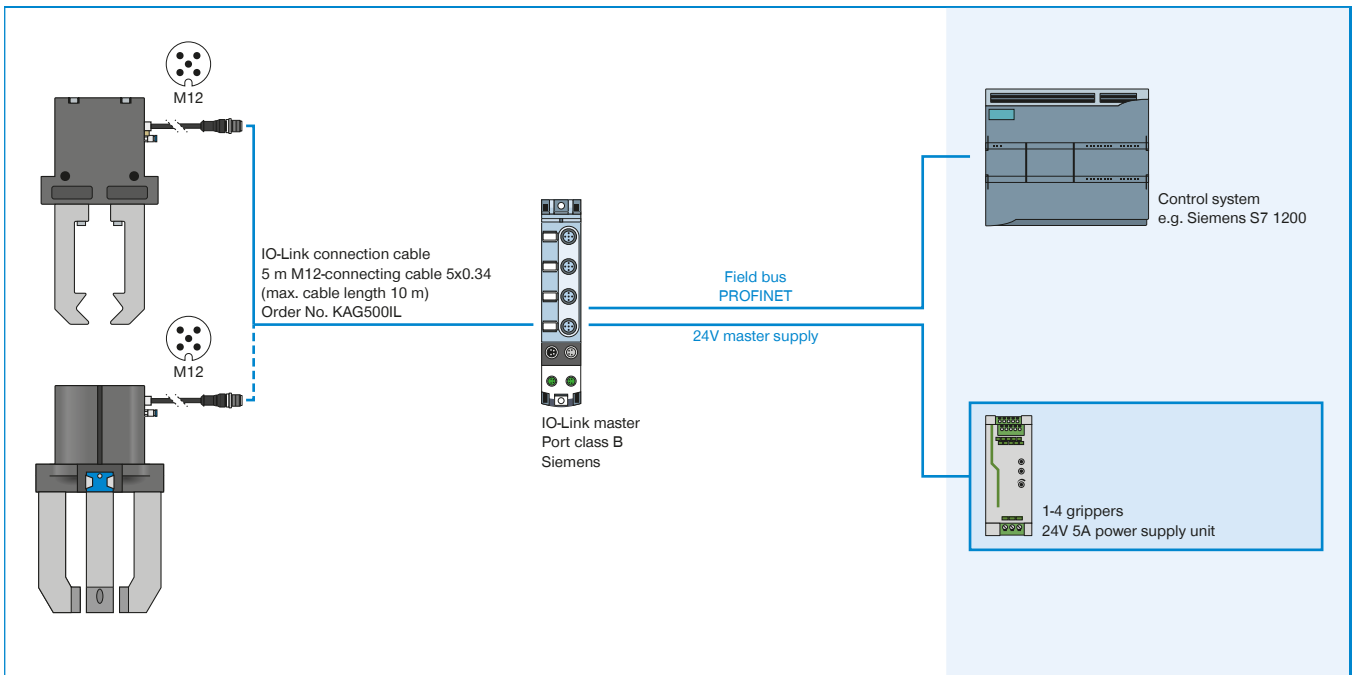
▶ GPP5000IL / GPD5000IL (IO-LINK) WIRING TO CONTROL CABINET (SIEMENS)



▶ GPP5000IL / GPD5000IL (IO-LINK) WIRING TO IO-LINK MASTER IP67 (BECKHOFF)



▶ GPP5000IL / GPD5000IL (IO-LINK) WIRING TO IO-LINK MASTER IP67 (SIEMENS)



3-JAW CONCENTRIC GRIPPERS

SERIES GED5000

▶ PRODUCT ADVANTAGES

IO-Link

“ALL in ONE”

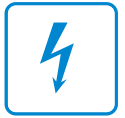
- ▶ Approximately the same gripping force as a comparable pneumatic gripper
- ▶ Self locking mechanism in case of power drop
- ▶ Same connection hole patterns as a comparable pneumatic gripper
- ▶ Plug and play – single-cable solution, supports incredibly easy control using I/O signals or IO-Link
- ▶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



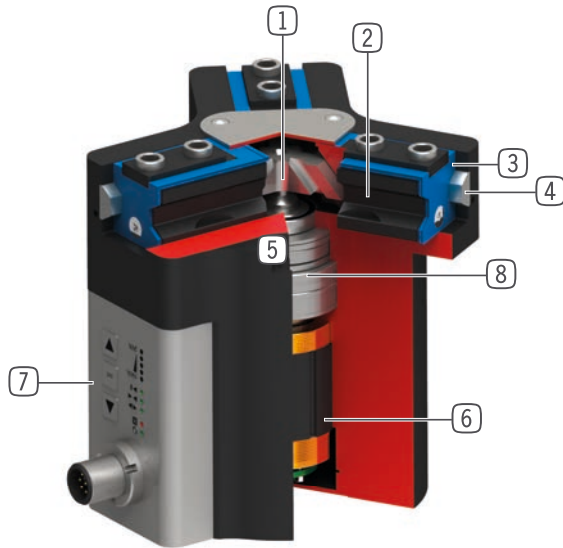
reddot design award
winner 2018

▶ SERIES CHARACTERISTICS

Installation size	Variants	
GED50XX	IL-00	IO-00
IO-Link	•	
Digital I/O		•
30 million maintenance-free cycles (max.)	•	•
Integrated sensing	•	•
Gripping force adjustable	•	•
Self locking mechanism	•	•
Protected against corrosion	•	•
Purged air	•	•
IP64	•	•



► BENEFITS IN DETAIL



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

► TECHNICAL DATA

Installation size	Stroke per jaw [mm]	Gripping force [N]	Weight [kg]	IP class
GED5006	6	540 - 960	1.09	IP64*
GED5008	8	650 - 1150	1.66	IP64*
GED5010	10	980 - 1520	2.33	IP64*

*with purged air (max. 0,5 bar)

► FURTHER INFORMATION IS AVAILABLE ONLINE



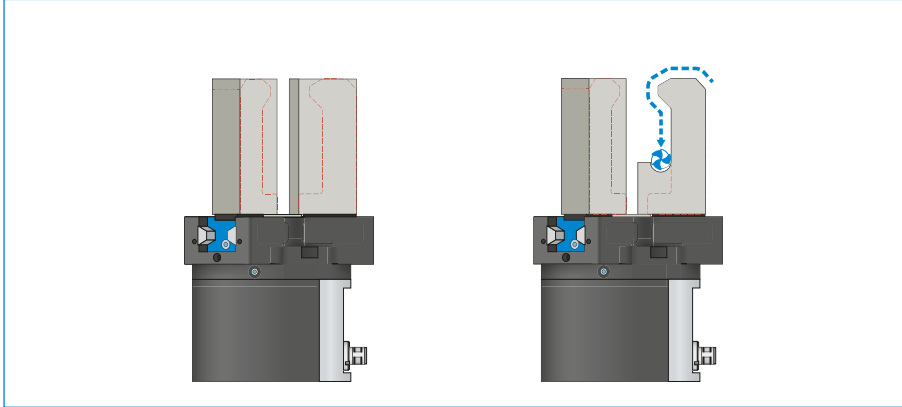
All information just a click away at: www.zimmer-group.com. Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product. Quick, clear and always up-to-date.

3-JAW CONCENTRIC GRIPPERS

SERIES GED5000 FUNCTIONAL DESCRIPTION



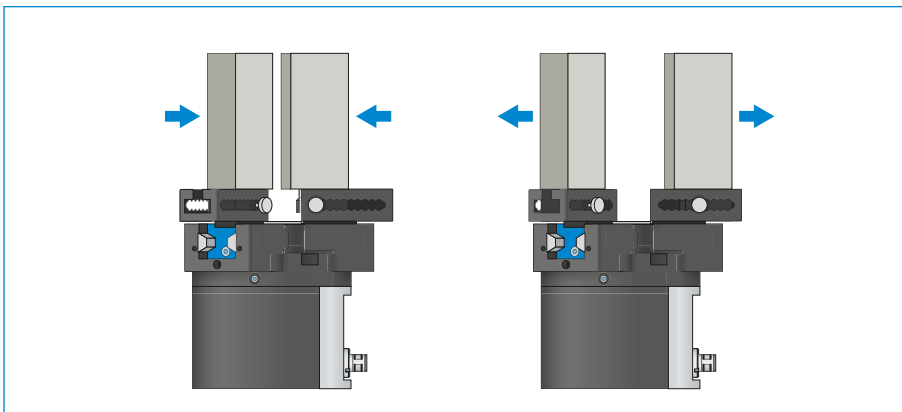
GRIPPING COMPONENTS



Universal jaws – UB5000

Can be used immediately or for individual reprocessing

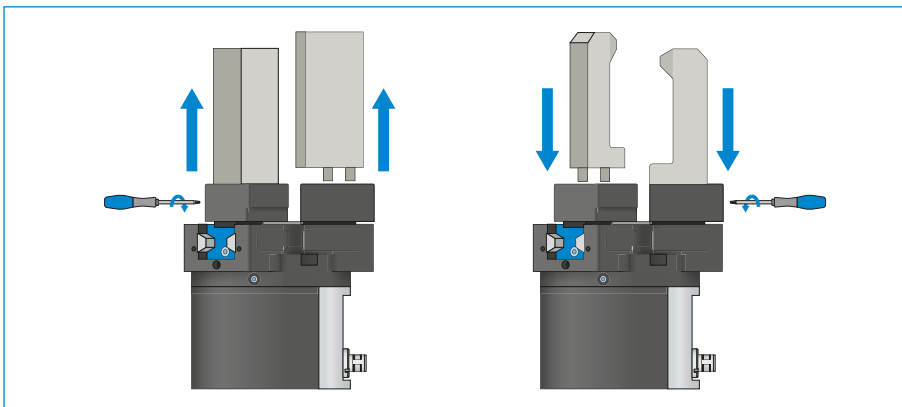
The gripper blanks are available in aluminum (AL) and steel (ST) versions and are installed directly on the gripper using the screws in the scope of delivery. The fits for the centering sleeves are already in place for this purpose. One universal jaw is required for each gripper jaw.



Adjustment jaws – EB5000

For tool-free adaptation of the gripper range

By manually activating the locking mechanism, which is pre-tensioned by a spring, the adjustment jaw can be moved within a grid of detent notches that has a number scale. Depending on the forces and torques that apply, the adjustment jaws are available in aluminum (AL) and steel (ST) versions. One adjustment jaw is required for each gripper jaw.



Interchangeable jaws – WB5000

Enable fast change of individual gripper fingers

For each gripper jaw, a fixed part and at least one loose part set is needed, depending on the number of gripper fingers to be changed. Manual locking via the Torx wrench included in the scope of delivery of the fixed part can take place from two sides.

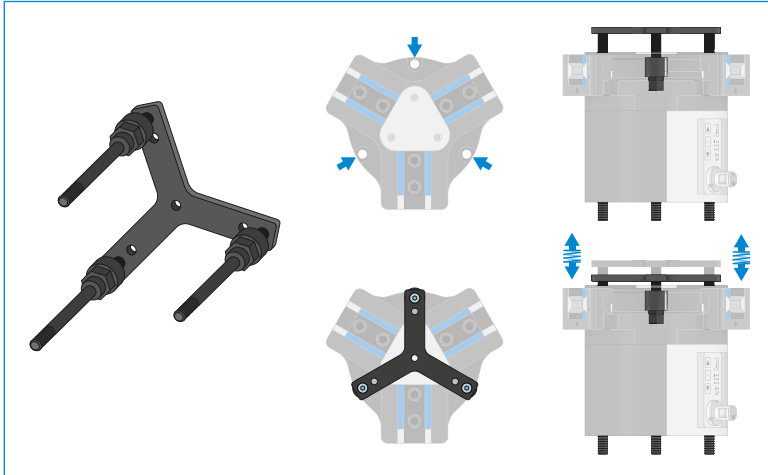


THE GRIPPING COMPONENTS CAN BE COMBINED!

The gripper components listed above can be combined with each other and are compatible with the various series of the 5000 gripper family.



GRIPPING COMPONENTS

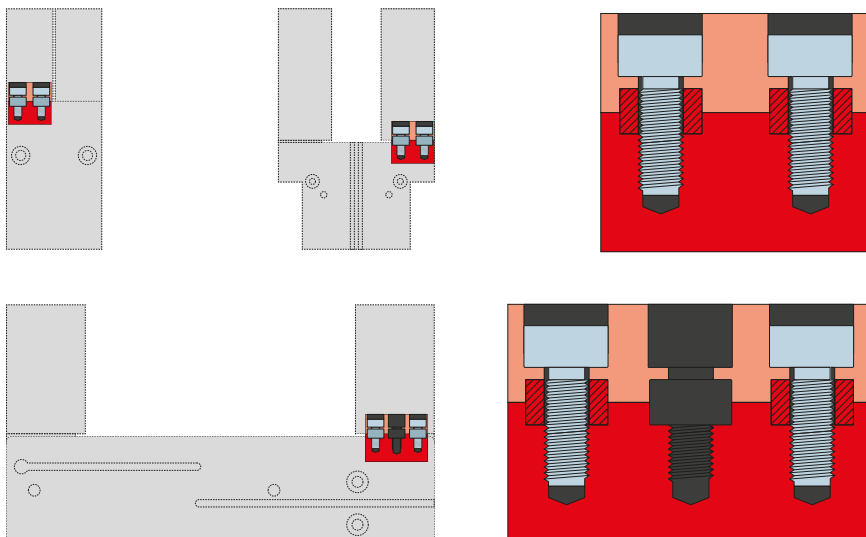


Pressure piece – ADS5000

When the gripper fingers are open, the pressure piece is used for spring-supported positioning of the workpiece against a limit stop. This greatly reduces the loads on the gripper that arise during joining.



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.

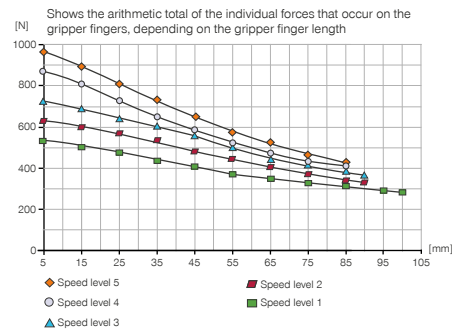
3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GED5006

▶ PRODUCT SPECIFICATIONS



▶ Gripping force diagram



▶ Forces and moments

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



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

▶ TECHNICAL DATA - BASIC VERSION

Order no.	▶ Technical data	
	GED5006IL-00-A	GED5006IO-00-A
Control	IO-Link	Digital I/O
Drive	BLDC motor	BLDC motor
Stroke per jaw [mm]	6	6
Self locking mechanism	mechanical	mechanical
Control time [s]	0.035	0.035
Dead weight of mounted gripper finger max. [kg]	0.4	0.4
Length of the gripper fingers max. [mm]	100	100
Repetition accuracy +/- [mm]	0.01	0.01
Operating temperature [°C]	5 ... 50	5 ... 50
Voltage [V]	24	24
Current consumption max. [A]	5	5
Protection to IEC 60529	IP64*	IP64*
Weight [kg]	1.09	1.09

*with purged air (max. 0,5 bar)

▶ TECHNICAL DATA - MODES

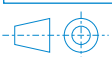
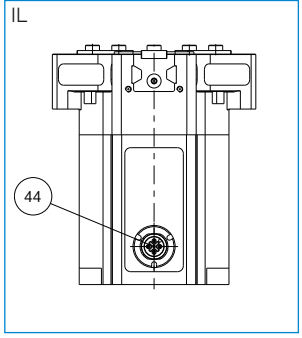
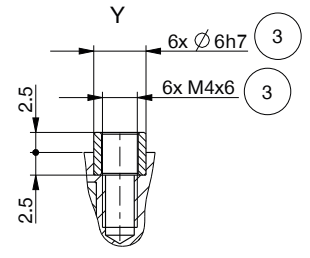
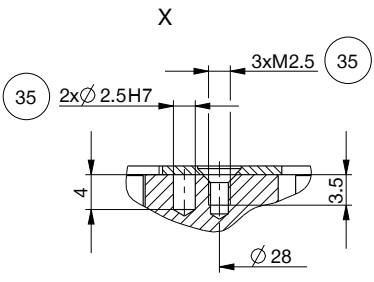
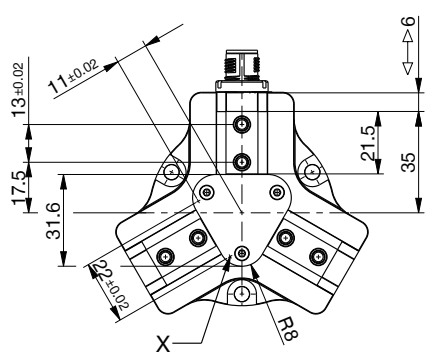
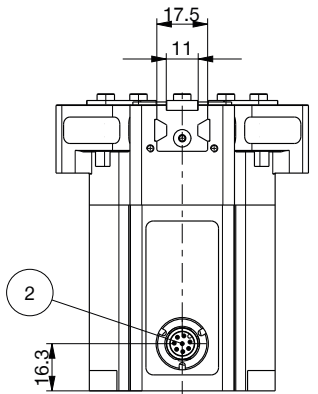
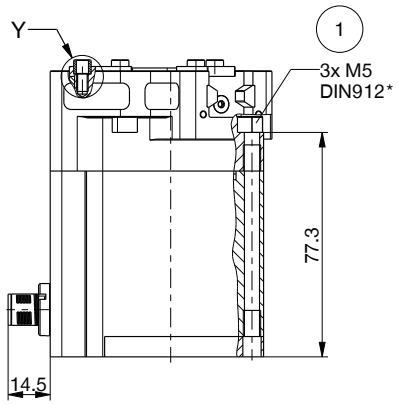
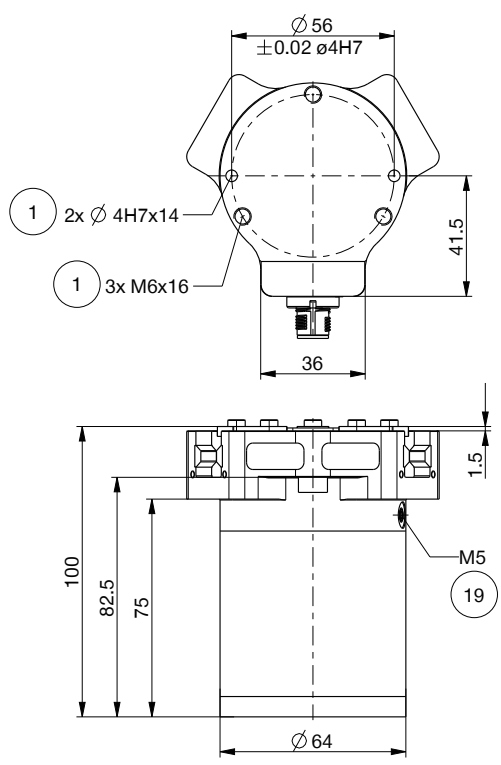
Order no.	▶ Technical data - N mode	
	GED5006IL-00-A	GED5006IO-00-A
Gripping force → ← min. / max. [N]	540 / 960	540 / 960
Gripping force ↔ min. / max. [N]	540 / 960	540 / 960
Travel time → ← min. / max. [s]	0,15 / 0,22	0,15 / 0,22
Travel time ↔ min. / max. [s]	0,15 / 0,22	0,15 / 0,22

Order no.	▶ Technical data - NC mode	
	GED5006IL-00-A	GED5006IO-00-A
Gripping force → ← min. / max. [N]	540 / 960	540 / 960
Gripping force ↔ min. / max. [N]	-	-
Travel time → ← min. / max. [s]	0,15 / 0,22	0,15 / 0,22
Travel time ↔ min. / max. [s]	0,13	0,13

Order no.	▶ Technical data - NO mode	
	GED5006IL-00-A	GED5006IO-00-A
Gripping force → ← min. / max. [N]	-	-
Gripping force ↔ min. / max. [N]	540 / 960	540 / 960
Travel time → ← min. / max. [s]	0,13	0,13
Travel time ↔ min. / max. [s]	0,15 / 0,22	0,15 / 0,22

▶ TECHNICAL DRAWINGS

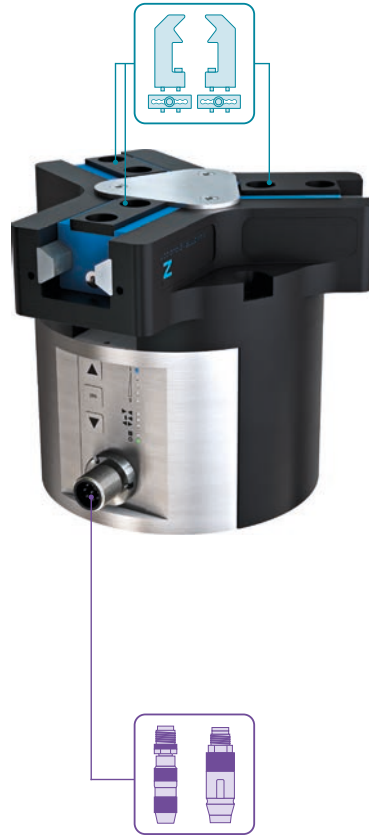
- ① Gripper attachment
- ② Energy supply (M12, 8-pole)
- ③ Fixing for gripper finger
- ⑱ Air purge connection option
- ⑳ Attachment option for customer-specific fittings
- ㉔ Energy supply IO-Link (M12, 5-pole)



3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GED5006

▶ ACCESORIES



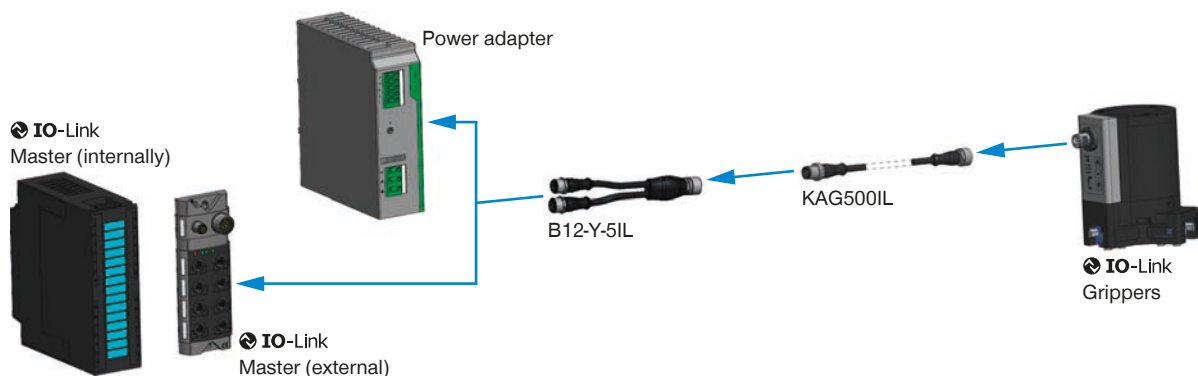
▶ INCLUDED IN DELIVERY



6 [piece]
Centering Disc

024230

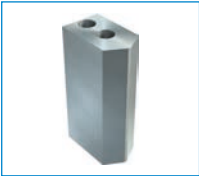
▶ INFRASTRUCTURE IO-LINK



▶ RECOMMENDED ACCESSORIES



GRIPPING COMPONENTS



UB5006AL
Universal jaw aluminium



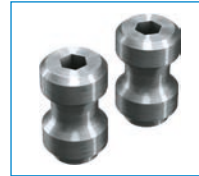
UB5006ST
Universal jaw steel



EB5006AL
Aluminum adjustment jaw



EB5006ST
Steel adjustment jaw



WB5006L
Changeable jaw, loose-part-set



WB5006F
Changeable jaw, fix-part



ADS5006-05
Pressure piece

▶ RECOMMENDED ACCESSORY GED5006IL-00-A



CONNECTIONS / OTHER



KAG500IL
Plug-in connector straight
5 m - plug, socket M12



B12-Y-5IL
Y-Plug-in Connector

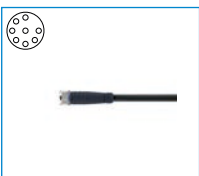


SCM-C-00-00-A
Smart Communication
Module

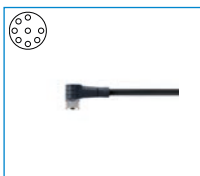
▶ RECOMMENDED ACCESSORY GED5006IO-00-A



CONNECTIONS / OTHER



KAG1000B8
Plug-in Connector Straight
Cable 10 m - Female M12



KAW1000B8
Plug-in Connector Angled
Cable 10 m - Female M12

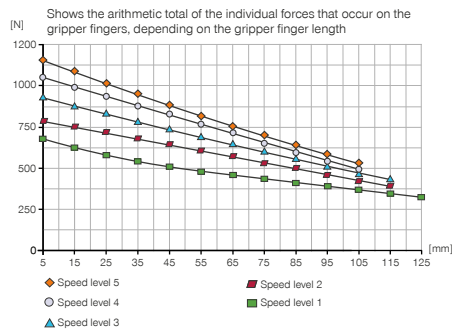
3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GED5008

PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

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



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

TECHNICAL DATA - BASIC VERSION

Order no.	Technical data	
	GED5008IL-00-A	GED5008IO-00-A
Control	IO-Link	Digital I/O
Drive	BLDC motor	BLDC motor
Stroke per jaw [mm]	8	8
Self locking mechanism	mechanical	mechanical
Control time [s]	0.035	0.035
Dead weight of mounted gripper finger max. [kg]	0.7	0.7
Length of the gripper fingers max. [mm]	125	125
Repetition accuracy +/- [mm]	0.01	0.01
Operating temperature [°C]	5 ... 50	5 ... 50
Voltage [V]	24	24
Current consumption max. [A]	5	5
Protection to IEC 60529	IP64*	IP64*
Weight [kg]	1.66	1.66

*with purged air (max. 0,5 bar)

TECHNICAL DATA - MODES

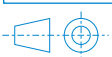
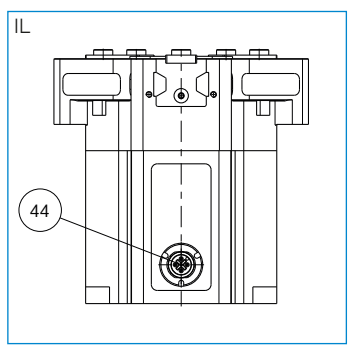
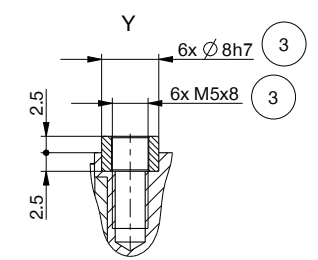
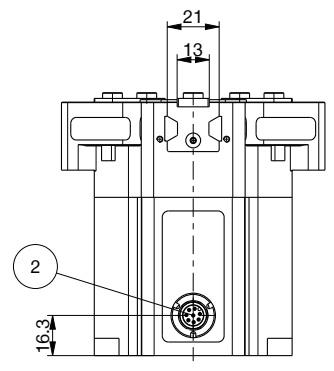
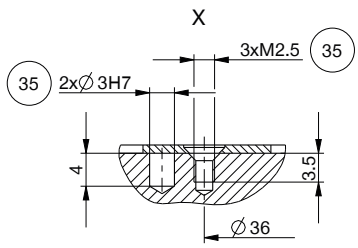
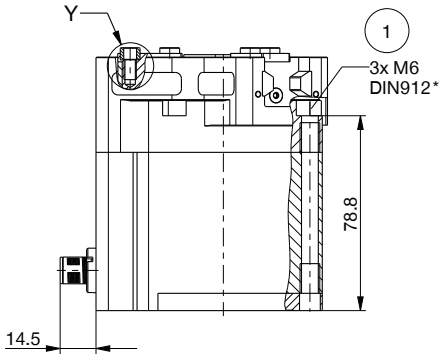
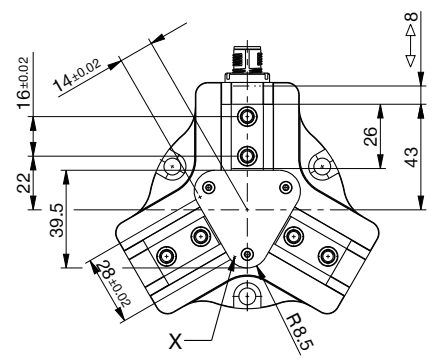
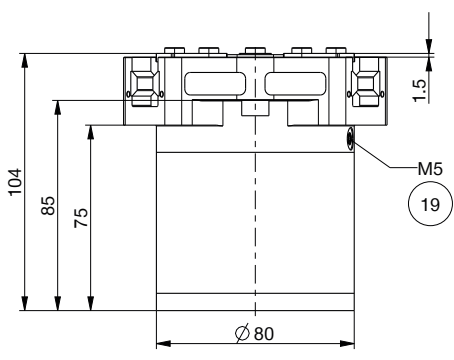
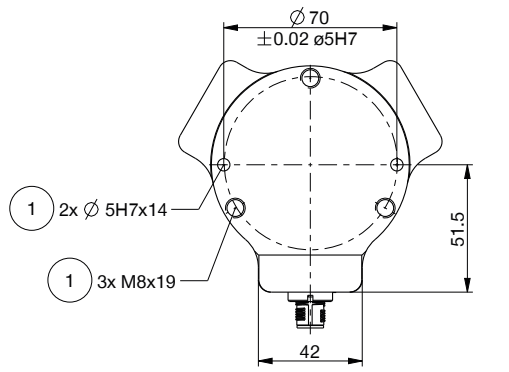
Order no.	Technical data - N mode	
	GED5008IL-00-A	GED5008IO-00-A
Gripping force → ← min. / max. [N]	650 / 1150	650 / 1150
Gripping force ↔ min. / max. [N]	650 / 1150	650 / 1150
Travel time → ← min. / max. [s]	0,18 / 0,29	0,18 / 0,29
Travel time ↔ min. / max. [s]	0,18 / 0,29	0,18 / 0,29

Order no.	Technical data - NC mode	
	GED5008IL-00-A	GED5008IO-00-A
Gripping force → ← min. / max. [N]	650 / 1150	650 / 1150
Gripping force ↔ min. / max. [N]	-	-
Travel time → ← min. / max. [s]	0,18 / 0,29	0,18 / 0,29
Travel time ↔ min. / max. [s]	0,15	0,15

Order no.	Technical data - NO mode	
	GED5008IL-00-A	GED5008IO-00-A
Gripping force → ← min. / max. [N]	-	-
Gripping force ↔ min. / max. [N]	650 / 1150	650 / 1150
Travel time → ← min. / max. [s]	0,15	0,15
Travel time ↔ min. / max. [s]	0,18 / 0,29	0,18 / 0,29

▶ TECHNICAL DRAWINGS

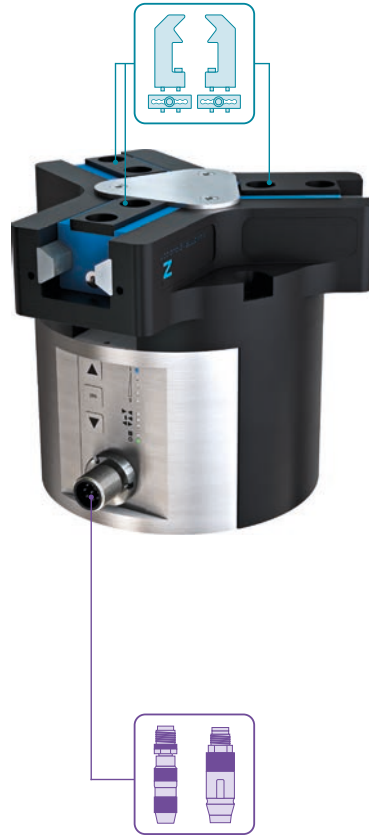
- ① Gripper attachment
- ② Energy supply (M12, 8-pole)
- ③ Fixing for gripper finger
- ⑱ Air purge connection option
- ⑳ Attachment option for customer-specific fittings
- ㉔ Energy supply IO-Link (M12, 5-pole)



3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GED5008

▶ ACCESORIES



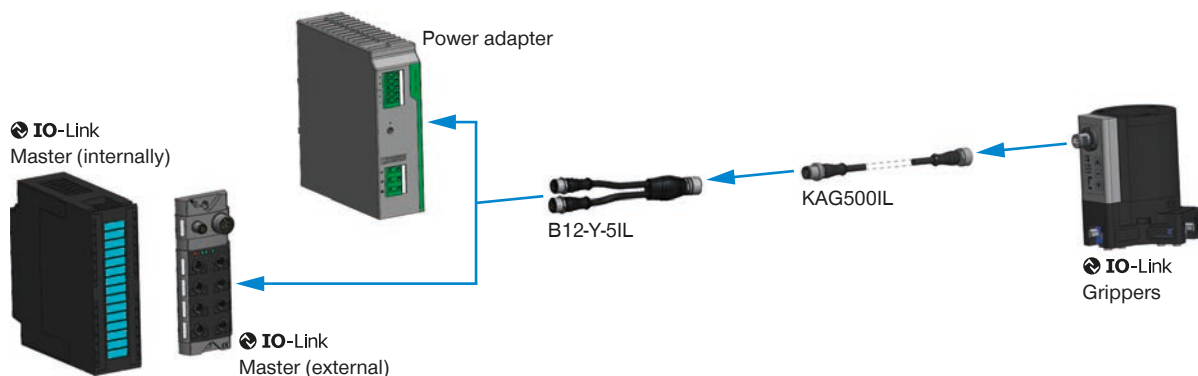
▶ INCLUDED IN DELIVERY



6 [piece]
Centering Disc

024231

▶ INFRASTRUCTURE IO-LINK



▶ RECOMMENDED ACCESSORIES



GRIPPING COMPONENTS



UB5008AL
Universal jaw aluminium



UB5008ST
Universal jaw steel



EB5008AL
Aluminum adjustment jaw



EB5008ST
Steel adjustment jaw



WB5008L
Changeable jaw, loose-part-set



WB5008F
Changeable jaw, fix-part



ADS5008-05
Pressure piece

▶ RECOMMENDED ACCESSORY GED5008IL-00-A



CONNECTIONS / OTHER



KAG500IL
Plug-in connector straight
5 m - plug, socket M12



B12-Y-5IL
Y-Plug-in Connector



SCM-C-00-00-A
Smart Communication
Module

▶ RECOMMENDED ACCESSORY GED5008IO-00-A



CONNECTIONS / OTHER



KAG1000B8
Plug-in Connector Straight
Cable 10 m - Female M12



KAW1000B8
Plug-in Connector Angled
Cable 10 m - Female M12

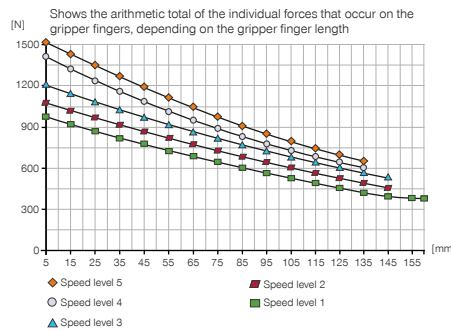
3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GED5010

PRODUCT SPECIFICATIONS



Gripping force diagram



Forces and moments

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



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

TECHNICAL DATA - BASIC VERSION

Order no.	Technical data	
	GED5010IL-00-A	GED5010IO-00-A
Control	IO-Link	Digital I/O
Drive	BLDC motor	BLDC motor
Stroke per jaw [mm]	10	10
Self locking mechanism	mechanical	mechanical
Control time [s]	0.035	0.035
Dead weight of mounted gripper finger max. [kg]	1.3	1.3
Length of the gripper fingers max. [mm]	160	160
Repetition accuracy +/- [mm]	0.01	0.01
Operating temperature [°C]	5 ... 50	5 ... 50
Voltage [V]	24	24
Current consumption max. [A]	5	5
Protection to IEC 60529	IP64*	IP64*
Weight [kg]	2.33	2.33

*with purged air (max. 0,5 bar)

TECHNICAL DATA - MODES

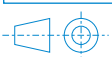
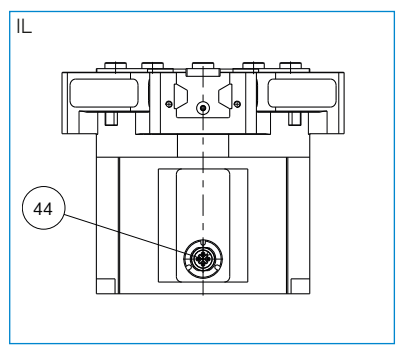
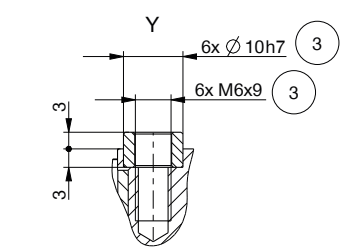
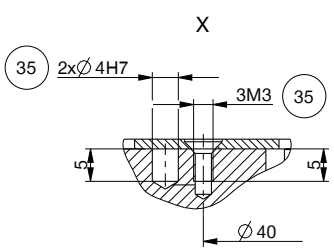
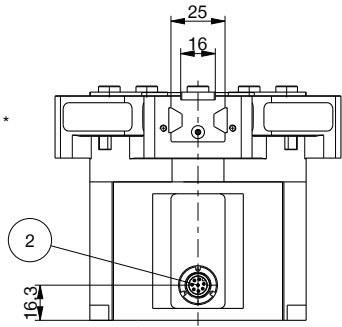
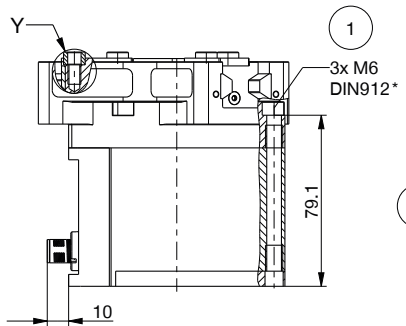
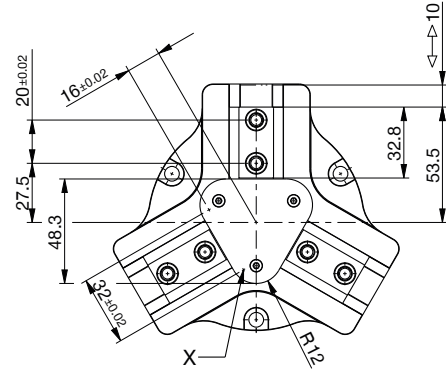
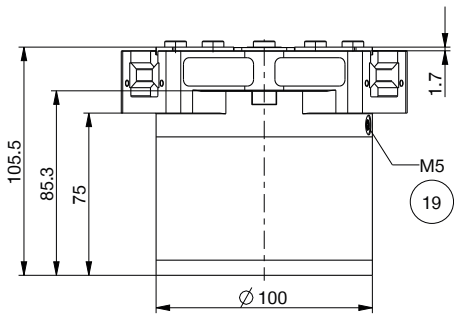
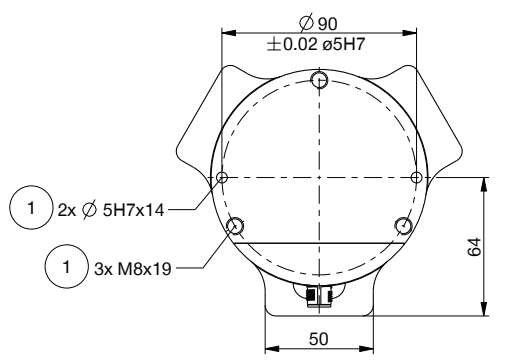
Order no.	Technical data - N mode	
	GED5010IL-00-A	GED5010IO-00-A
Gripping force → ← min. / max. [N]	980 / 1520	980 / 1520
Gripping force ↔ min. / max. [N]	980 / 1520	980 / 1520
Travel time → ← min. / max. [s]	0,21 / 0,32	0,21 / 0,32
Travel time ↔ min. / max. [s]	0,21 / 0,32	0,21 / 0,32

Order no.	Technical data - NC mode	
	GED5010IL-00-A	GED5010IO-00-A
Gripping force → ← min. / max. [N]	980 / 1520	980 / 1520
Gripping force ↔ min. / max. [N]	-	-
Travel time → ← min. / max. [s]	0,21 / 0,32	0,21 / 0,32
Travel time ↔ min. / max. [s]	0,16	0,16

Order no.	Technical data - NO mode	
	GED5010IL-00-A	GED5010IO-00-A
Gripping force → ← min. / max. [N]	-	-
Gripping force ↔ min. / max. [N]	980 / 1520	980 / 1520
Travel time → ← min. / max. [s]	0,16	0,16
Travel time ↔ min. / max. [s]	0,21 / 0,32	0,21 / 0,32

▶ TECHNICAL DRAWINGS

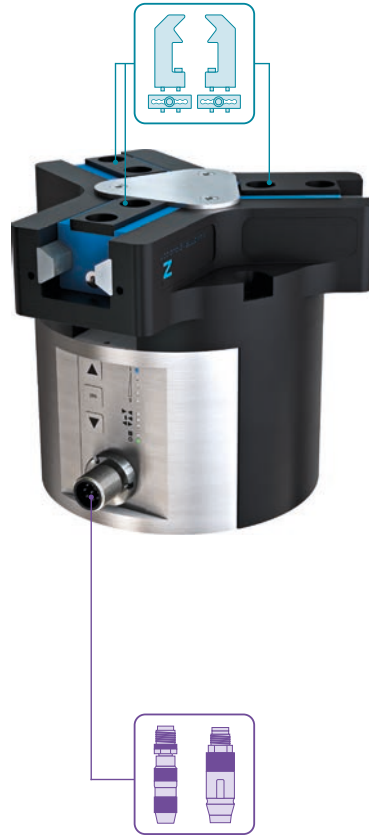
- ① Gripper attachment
- ② Energy supply (M12, 8-pole)
- ③ Fixing for gripper finger
- ⑱ Air purge connection option
- ⑳ Attachment option for customer-specific fittings
- ㉔ Energy supply IO-Link (M12, 5-pole)



3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GED5010

▶ ACCESORIES



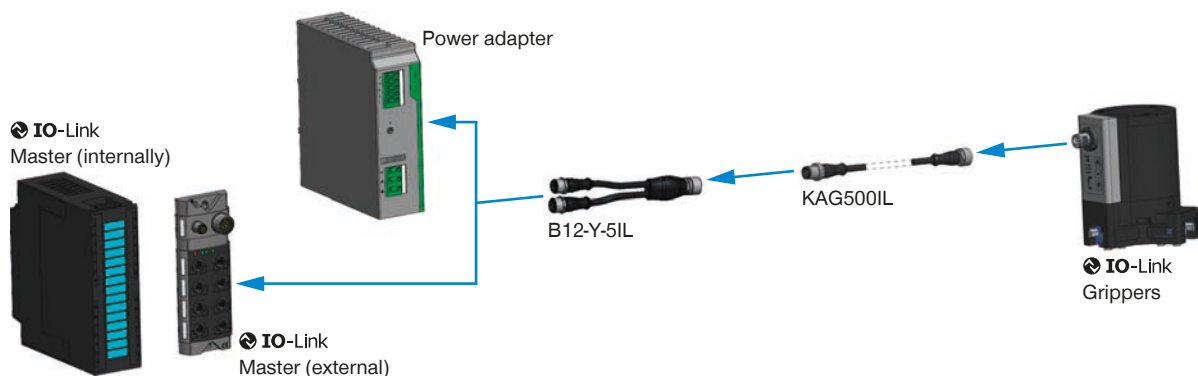
▶ INCLUDED IN DELIVERY



6 [piece]
Centering Disc

018187

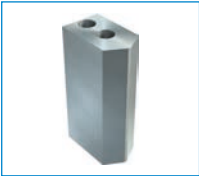
▶ INFRASTRUCTURE IO-LINK



▶ RECOMMENDED ACCESSORIES



GRIPPING COMPONENTS



UB5010AL
Universal jaw aluminium



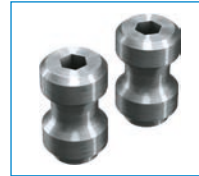
UB5010ST
Universal jaw steel



EB5010AL
Aluminum adjustment jaw



EB5010ST
Steel adjustment jaw



WB5010L
Changeable jaw, loose-part-set



WB5010F
Changeable jaw, fix-part



ADS5010-05
Pressure piece

▶ RECOMMENDED ACCESSORY GED5010IL-00-A



CONNECTIONS / OTHER



KAG500IL
Plug-in connector straight
5 m - plug, socket M12



B12-Y-5IL
Y-Plug-in Connector



SCM-C-00-00-A
Smart Communication
Module

▶ RECOMMENDED ACCESSORY GED5010IO-00-A



CONNECTIONS / OTHER



KAG1000B8
Plug-in Connector Straight
Cable 10 m - Female M12

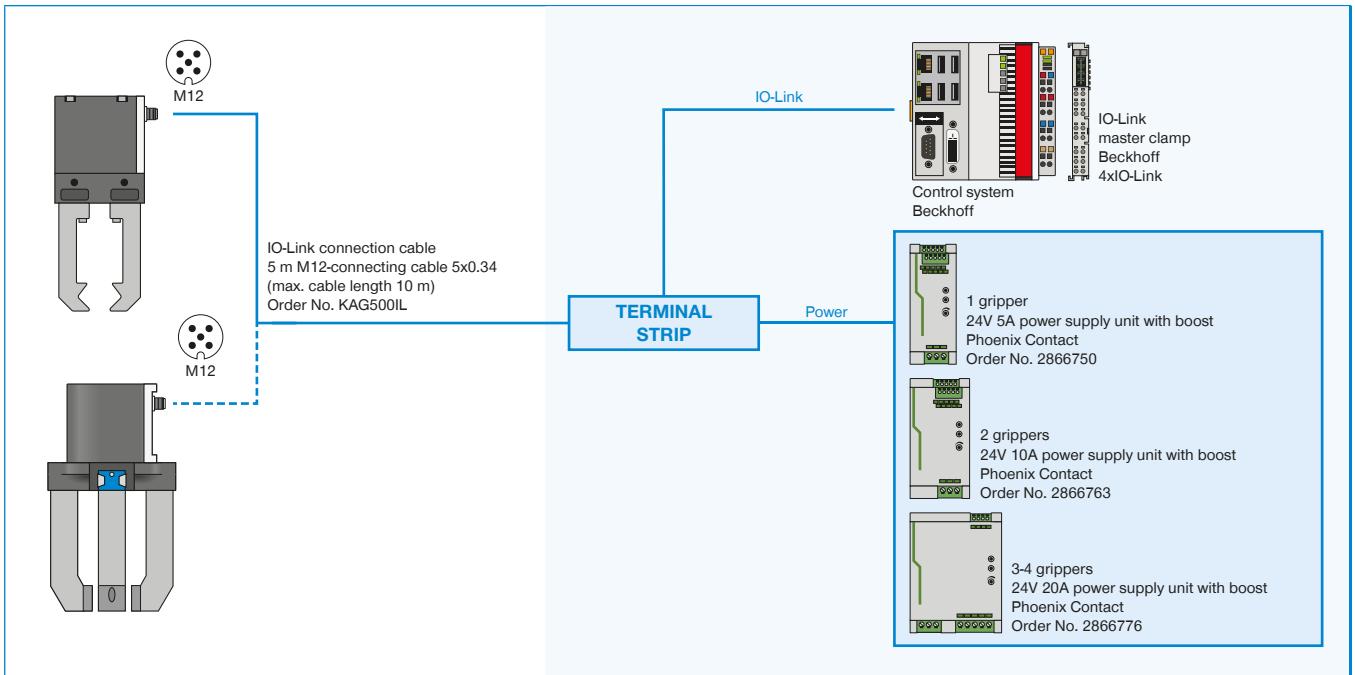


KAW1000B8
Plug-in Connector Angled
Cable 10 m - Female M12

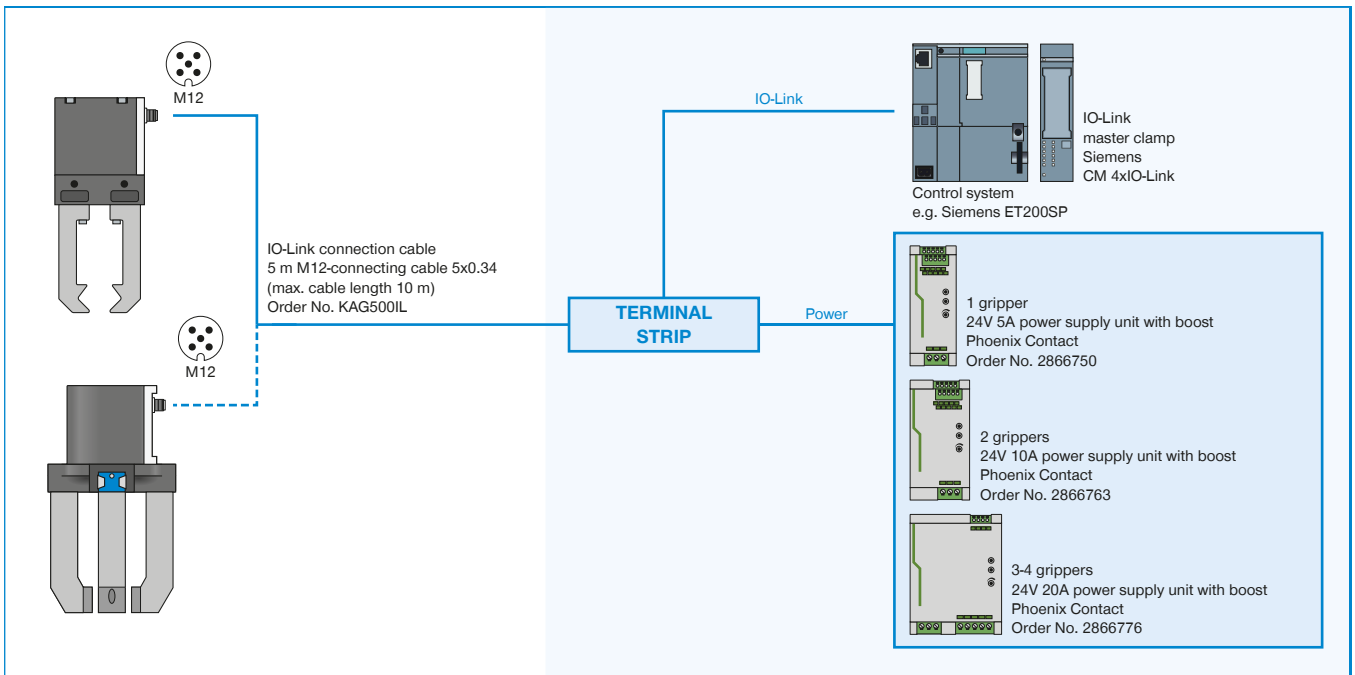
SECURED CONFIGURATION EXAMPLES

GEP5000 / GED5000 SERIES

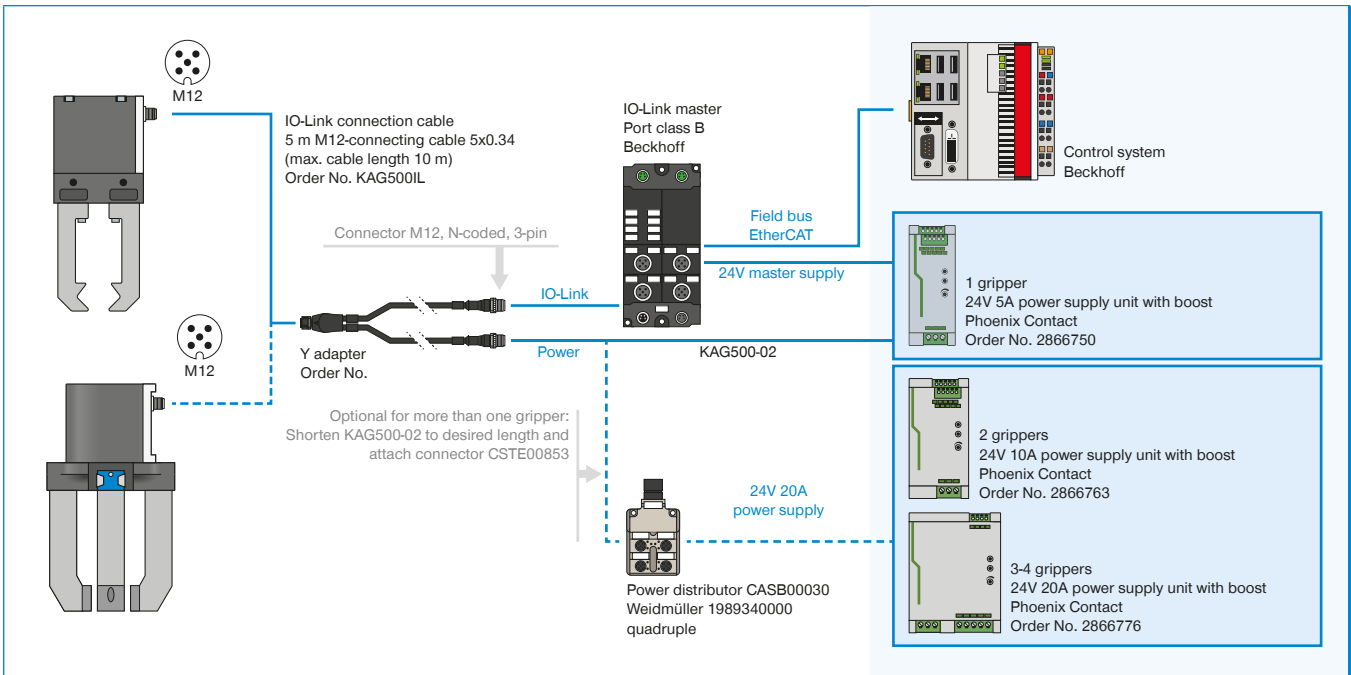
▶ GPP5000IL / GPD5000IL (IO-LINK) WIRING TO CONTROL CABINET (BECKHOFF)



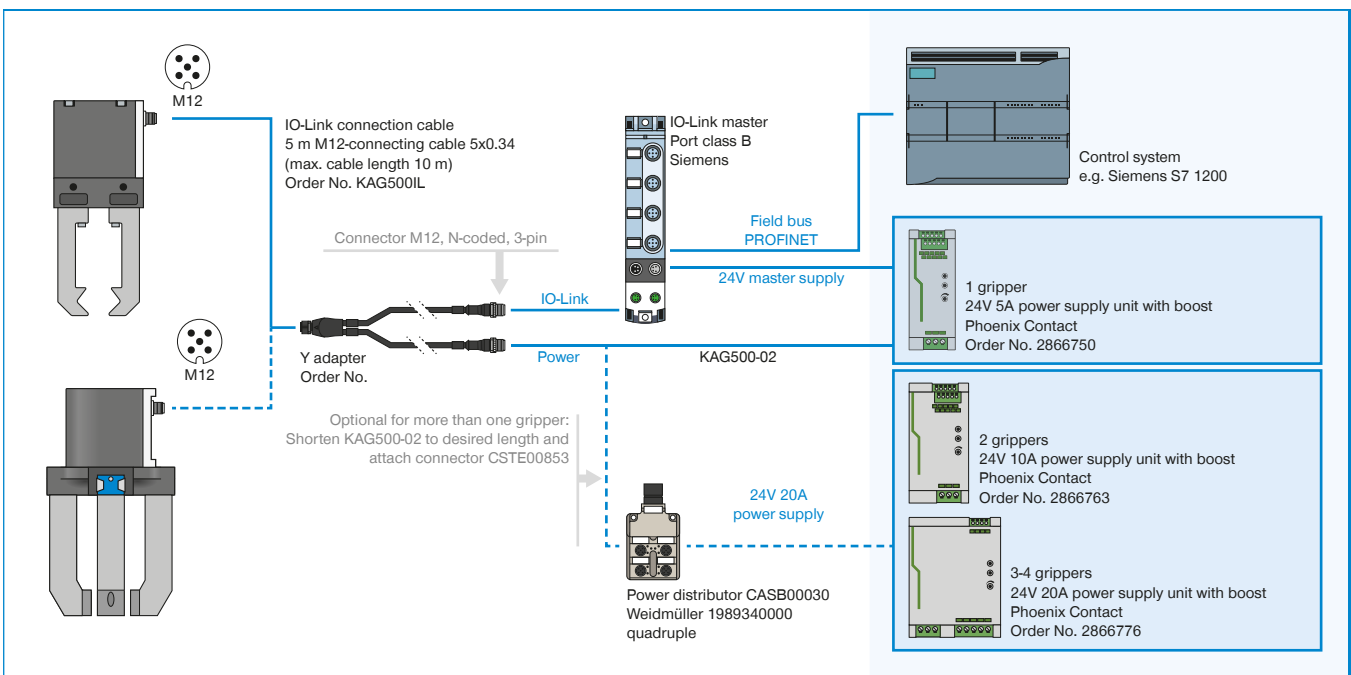
▶ GPP5000IL / GPD5000IL (IO-LINK) WIRING TO CONTROL CABINET (SIEMENS)



▶ GPP5000IL / GPD5000IL (IO-LINK) WIRING TO IO-LINK MASTER IP67 (BECKHOFF)



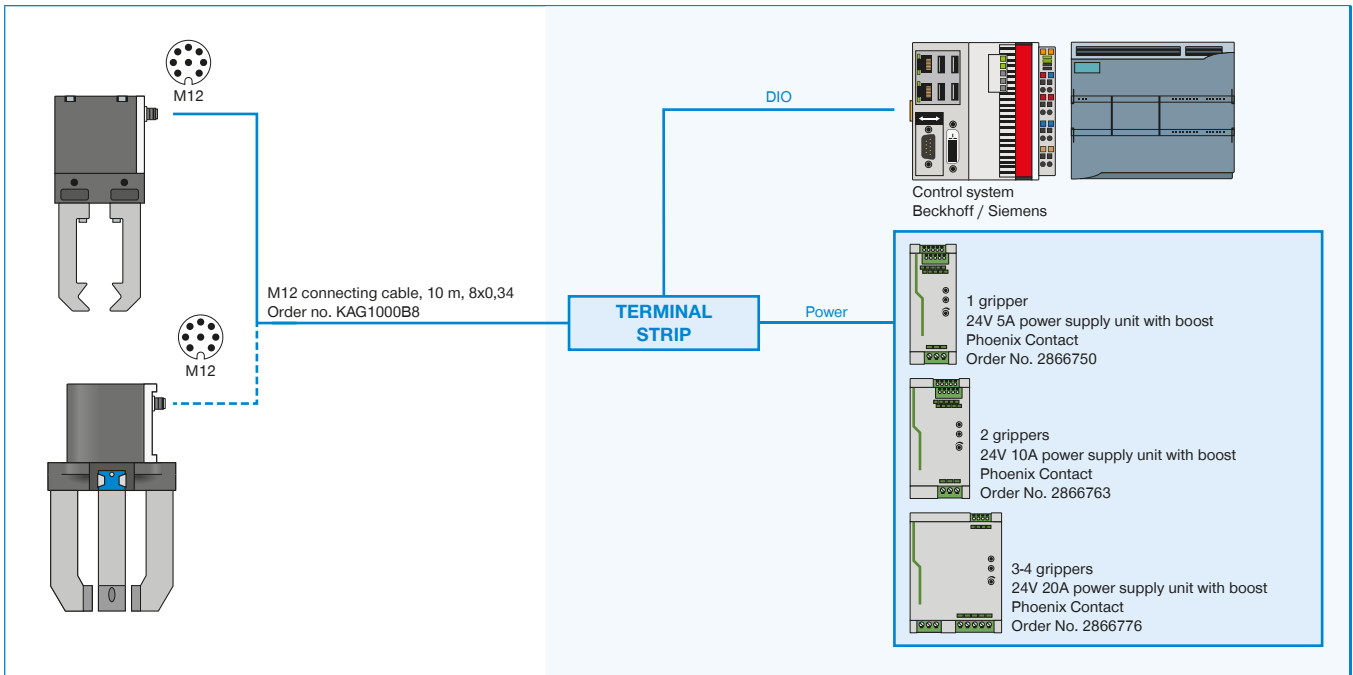
▶ GPP5000IL / GPD5000IL (IO-LINK) WIRING TO IO-LINK MASTER IP67 (BECKHOFF)



SECURED CONFIGURATION EXAMPLES

GEP5000 / GED5000 SERIES

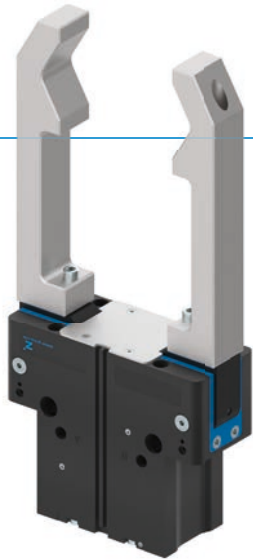
▶ GEP5000 / GED5000 (DIGITAL IO) WIRING TO CONTROL CABINET



2-JAW ANGULAR GRIPPERS

SERIES GPW5000

▶ PRODUCT ADVANTAGES



“The Universal One”

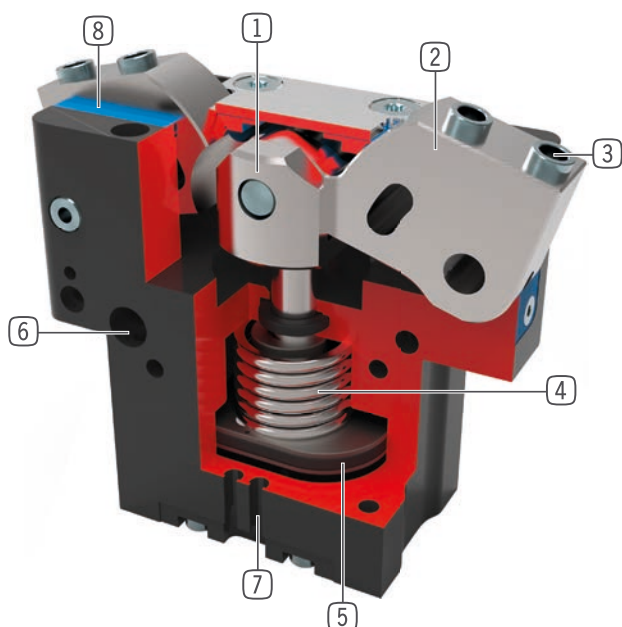
- ▶ **Highest performance with the smallest dimensions**
Features a one-of-a-kind ratio of net mass to gripper finger length and gripping moment. The performance of your machine is increased as a result.
- ▶ **Versatile applicability**
Thanks to standard functionality such as IP64 and corrosion protection, you are able to use these grippers in almost any of your applications. Even the toughest environments are no problem.
- ▶ **Robust and process-reliable**
Thanks to a maintenance-free design up to 30 million cycles and the most solid force transmission possible, process assurance is maximized.

▶ SERIES CHARACTERISTICS

Installation size	Base version	Variants	
GPW50XX	NC	-00	-20
Spring closing C	●	Basic equipment	High Temperature Version
30 million maintenance-free cycles (max.)	●		
Inductive sensor	●		
Magnetic field sensor	●		
Protected against corrosion	●		
Purged air	●		
IP64	●		
Temperature-resistant	●		



► BENEFITS IN DETAIL



- ① **Positively driven lever mechanism**
- synchronized the movement of the gripper jaws
- ② **Gripper jaw**
- Gripper fingers mounted using removable centering sleeves
- ③ **Removable centering sleeves**
- quick and economical positioning of the gripper fingers
- ④ **Integrated gripping force safety device**
- Spring built into cylinder chamber as an energy store
- ⑤ **Drive**
- Double-acting pneumatic rotor cylinder
- ⑥ **Mounting and positioning**
- Alternatively, on several sides for customized mounting
- ⑦ **Sensing slot**
- mounting and positioning of magnetic field sensors
- ⑧ **Dual lip seal**
- IP64
- Prevents grease from being squeezed out, increasing service life

► TECHNICAL DATA

Installation size	Stroke per jaw (+/-) [°]	Gripping force [N]	Weight [kg]	IP class
GPW5008	+15/-2	1450	0.9	IP64
GPW5013	+15/-2	4200	3	IP64
GPW5025	+15/-2	14500	12.1	IP64

► FURTHER INFORMATION IS AVAILABLE ONLINE



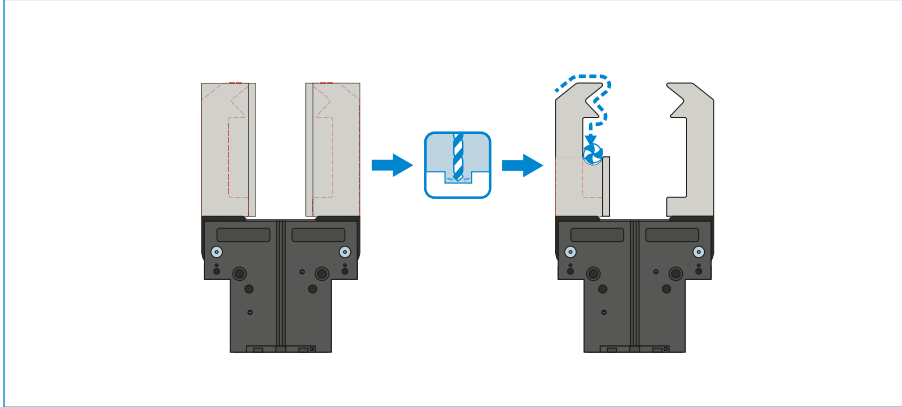
All information just a click away at: www.zimmer-group.com. Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product. Quick, clear and always up-to-date.

2-JAW ANGULAR GRIPPERS

SERIES GPW5000 FUNCTIONAL DESCRIPTION



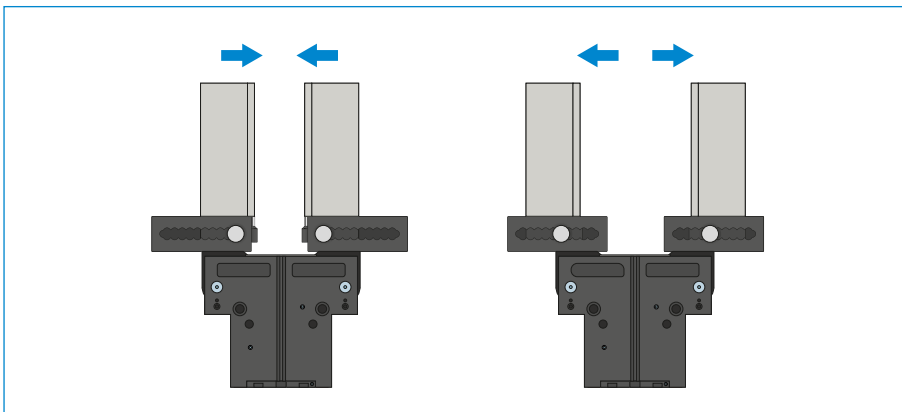
GRIPPING COMPONENTS



Universal jaws – UB5000

Can be used immediately or for individual reprocessing

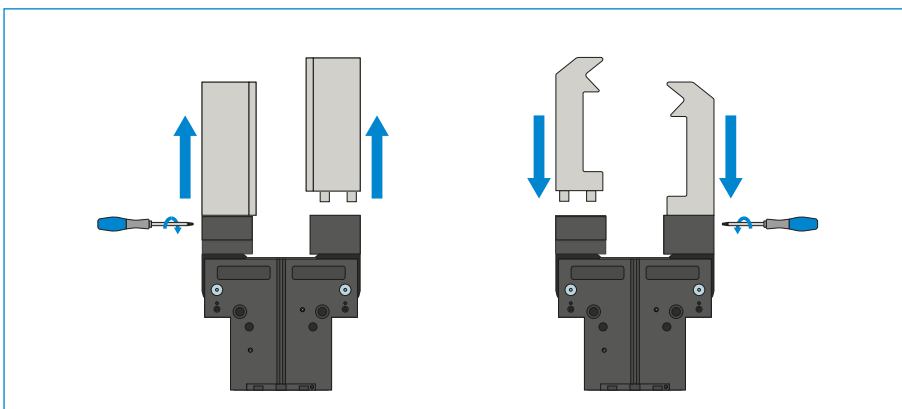
The gripper blanks are available in aluminum (AL) and steel (ST) versions and are installed directly on the gripper using the screws in the scope of delivery. The fits for the centering sleeves are already in place for this purpose. One universal jaw is required for each gripper jaw.



Adjustment jaws – EB5000

For tool-free adaptation of the gripper range

By manually activating the locking mechanism, which is pre-tensioned by a spring, the adjustment jaw can be moved within a grid of detent notches that has a number scale. Depending on the forces and torques that apply, the adjustment jaws are available in aluminum (AL) and steel (ST) versions. One adjustment jaw is required for each gripper jaw.



Interchangeable jaws – WB5000

Enable fast change of individual gripper fingers

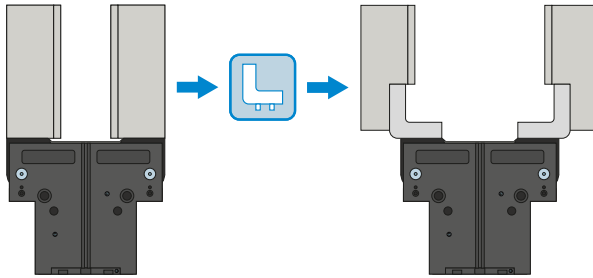
For each gripper jaw, a fixed part and at least one loose part set is needed, depending on the number of gripper fingers to be changed. Manual locking via the Torx wrench included in the scope of delivery of the fixed part can take place from two sides.



GRIPPING COMPONENTS

L-gripper jaw – LB5000

Fast and easy method for adapting and installing the gripper fingers on the sides.

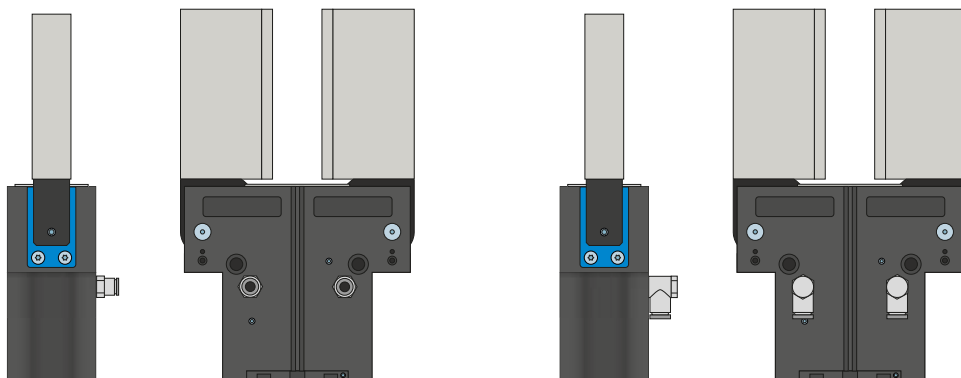


THE GRIPPING COMPONENTS CAN BE COMBINED!

The gripper components listed above can be combined with each other and are compatible with the various series of the 5000 gripper family.



ENERGY SUPPLY



Pneumatic threaded connections

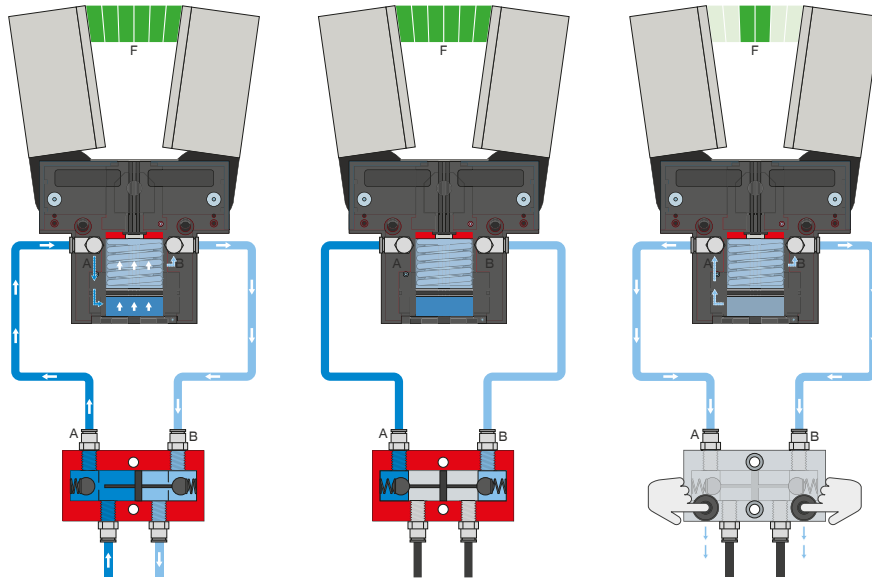
Available in straight and angled design. Can be chosen freely depending on the space conditions or installation situation.

2-JAW ANGULAR GRIPPERS

SERIES GPW5000 FUNCTIONAL DESCRIPTION



ENERGY SUPPLY



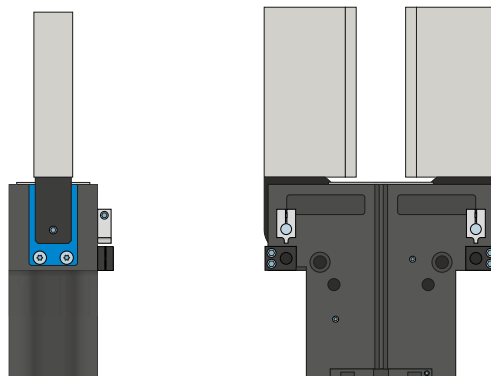
Pressure safety valve – DSV

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 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.



SENSORS

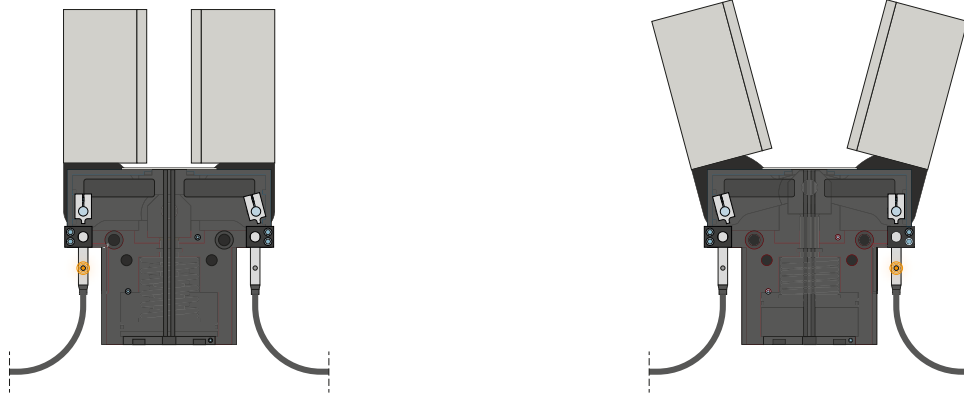


Attachment kit

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.



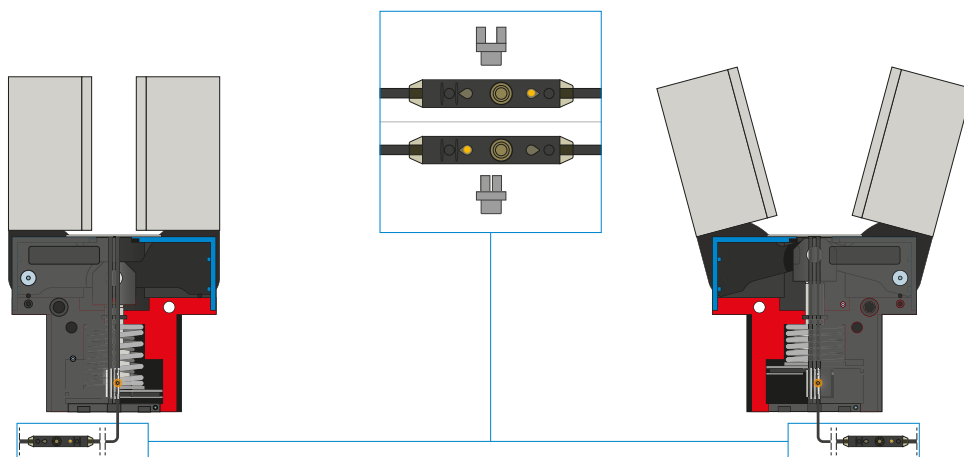
SENSORS



Inductive sensors – NJ

For direct position sensing of the gripper jaws

The sensor is guided into the intake as far as it will go and fixed in place using the lateral clamping screw. Tuning to the desired position then takes place by adjusting the cam switch. 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.

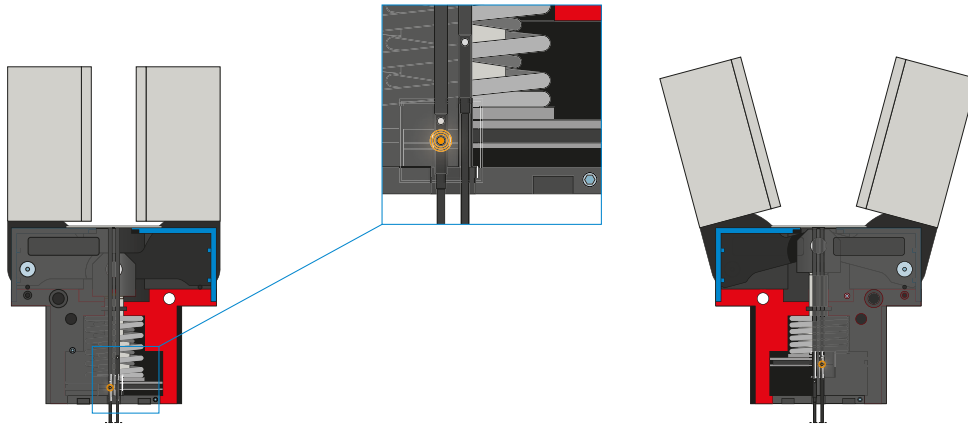
2-JAW ANGULAR GRIPPERS

SERIES GPW5000 FUNCTIONAL DESCRIPTION

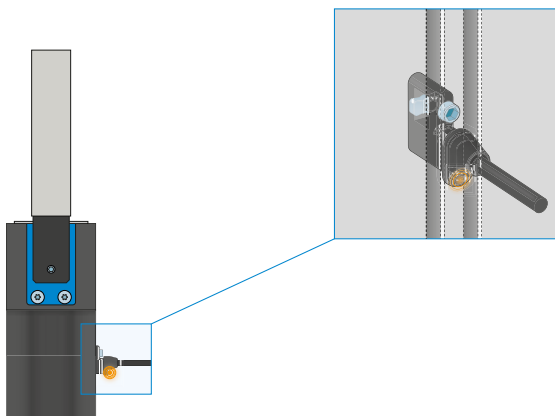


SENSORS

MFS02



MFS01



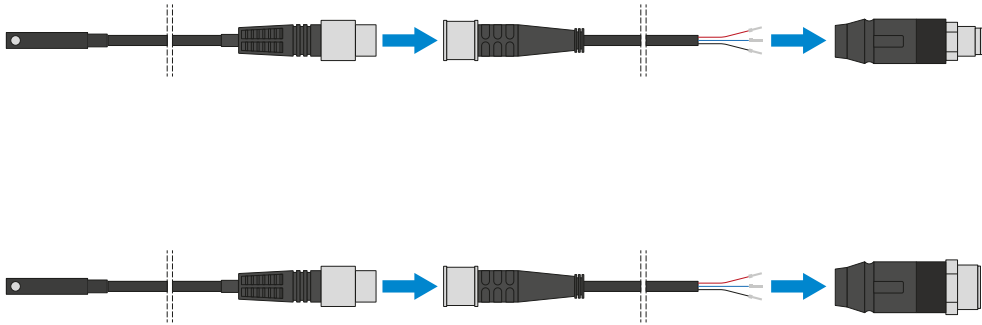
1-point magnetic field sensors – MFS

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.



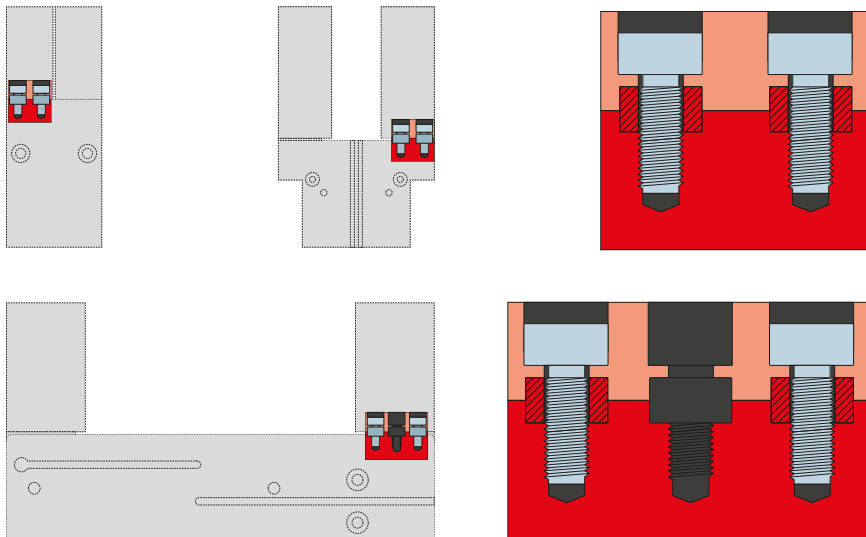
CONNECTIONS / OTHER



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.

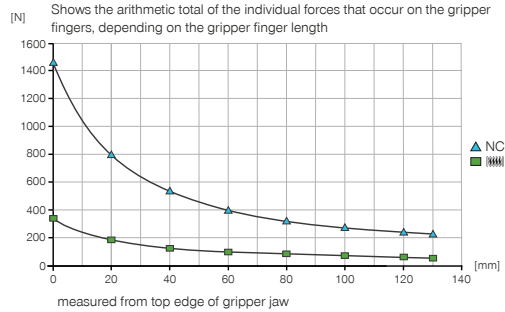
2-JAW ANGULAR GRIPPERS

INSTALLATION SIZE GPW5008

▶ PRODUCT SPECIFICATIONS

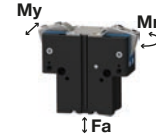


▶ Gripping force diagram



▶ Forces and moments

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



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

▶ TECHNICAL DATA

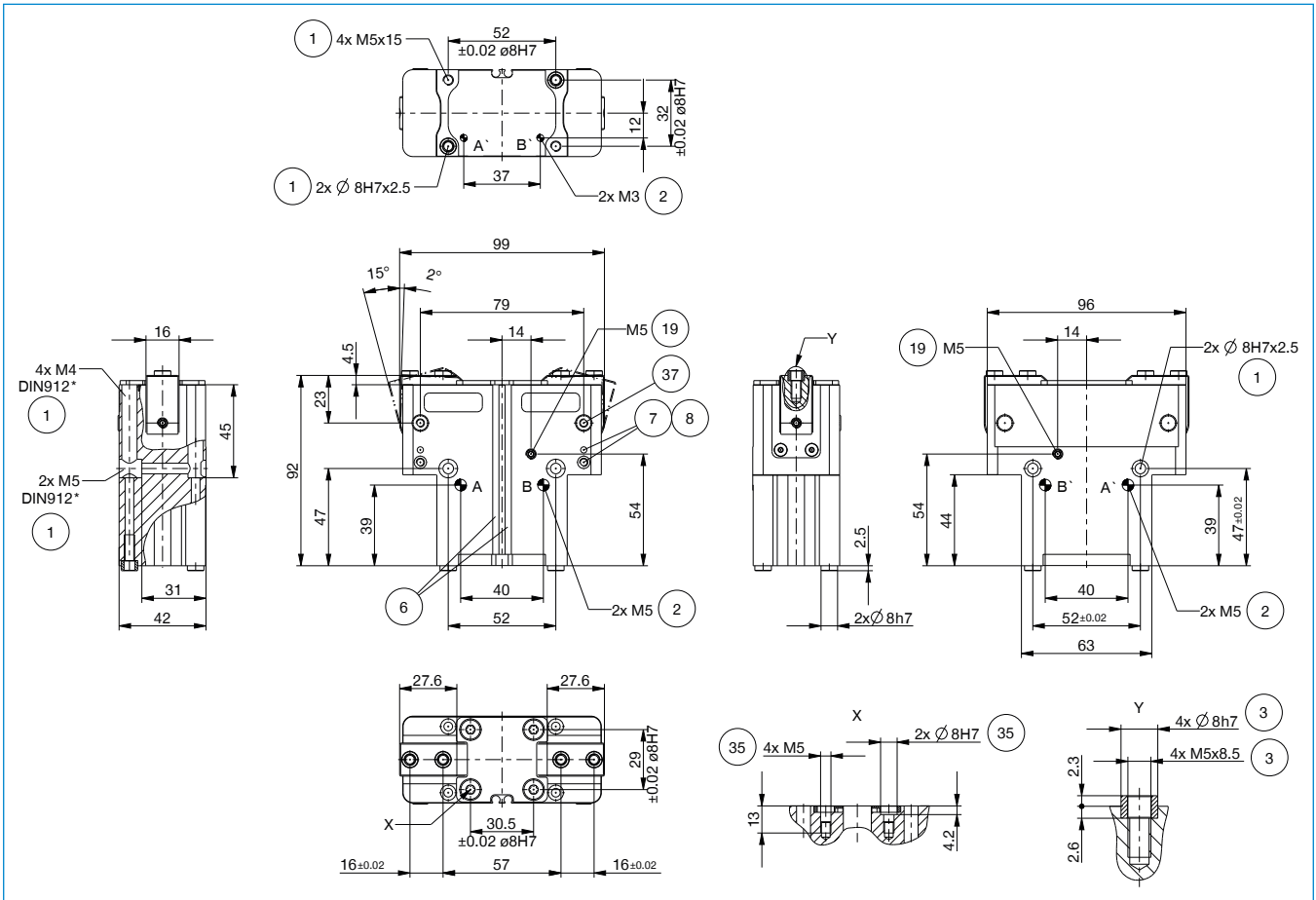
Order no.	Technical data
	GPW5008NC-00-A
Stroke per jaw (+/-) [°]	+15/-2
Gripping moment in closing max. [Nm]	33
Gripping moment secured by spring min. [Nm]	7.5
Gripping force in closing max. (at 0°) [N]*	1450
Closing time [s]	0.1
Opening time [s]	0.17
Dead weight of mounted gripper finger max. [kg]	0.7
Length of the gripper fingers max. [mm]	115
Repetition accuracy +/- [mm]	0.01
Operating pressure min. [bar]	4
Operating pressure max. [bar]	8
Nominal operating pressure [bar]	6
Operating temperature [°C]	-10 ... +90
Air volume per cycle [cm³]	35
Protection to IEC 60529	IP64
Weight [kg]	0.9

*measured from top edge of gripper jaw

▶ Technical Data - High Temperature Version

Order no.	Technical data
	GPW5008NC-20-A
Operating temperature [°C]	-10 ... +130

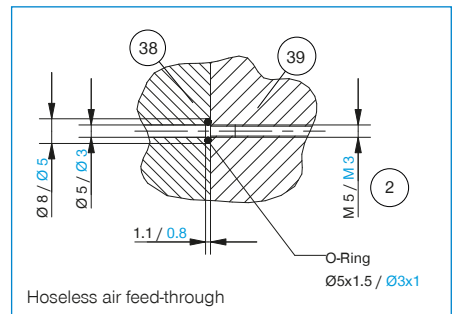
TECHNICAL DRAWINGS



- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑥ Integrated slot for magnetic field sensor
- ⑦ Fixing for mounting block
- ⑧ Fixing clamping bracket (KHA)
- ⑱ Air purge connection option
- ⑳ Mounting possibility for stroke adjustment

screwe

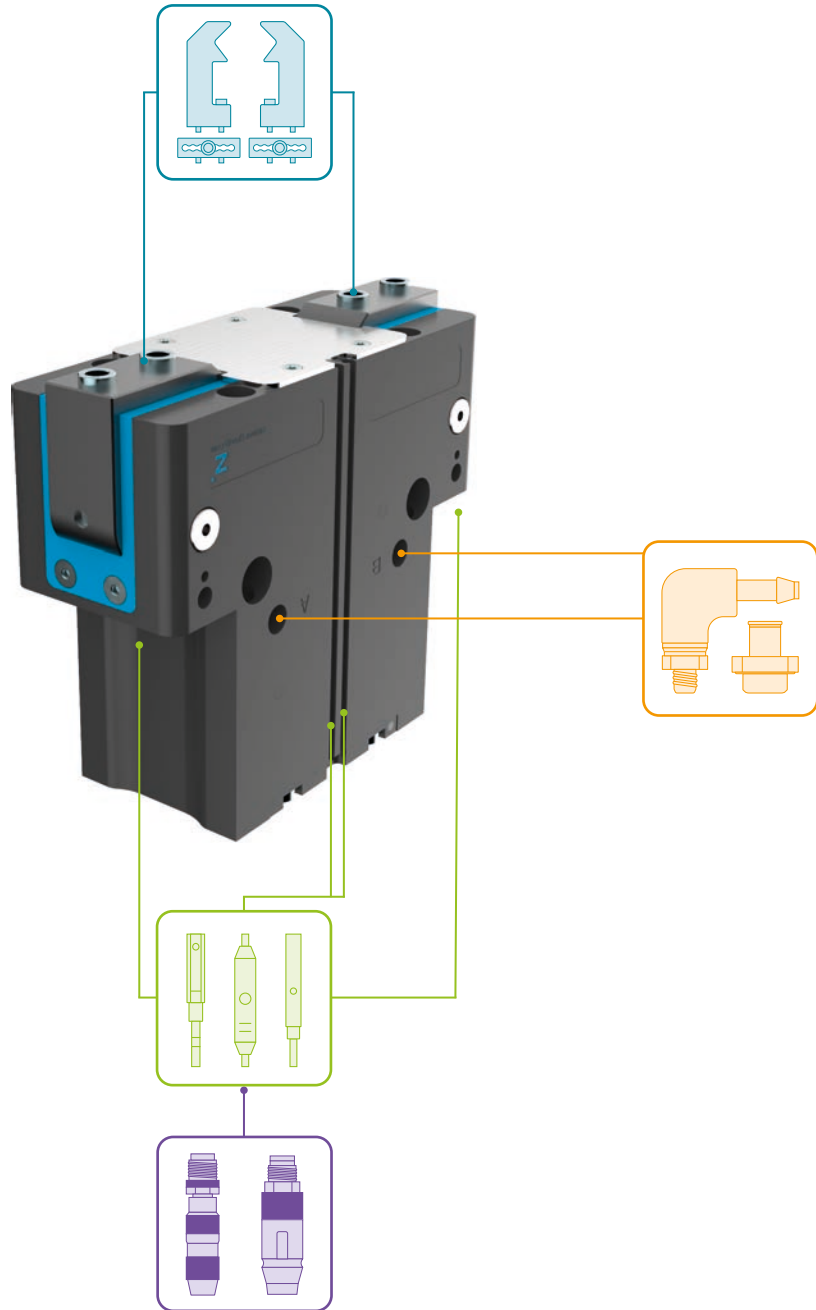
- ⑳ Mounting possibility for cam switch
- ㉑ Adapter
- ㉒ Gripper
- Ⓐ Air connection (close)
- Ⓑ Air connection (open)
- Ⓐ Air connection, alternative (close)
- Ⓑ Air connection, alternative (open)



2-JAW ANGULAR GRIPPERS

INSTALLATION SIZE GPW5008

▶ ACCESORIES



▶ INCLUDED IN DELIVERY



6 [piece]
Centering Disc

024231

► RECOMMENDED ACCESSORIES



GRIPPING COMPONENTS



UB5008AL
Universal jaw aluminium



UB5008ST
Universal jaw steel



EB5008AL
Aluminum adjustment jaw



EB5008ST
Steel adjustment jaw



LB5008
L-jaw



WB5008L
Changeable jaw, loose-part-set



WB5008F
Changeable jaw, fix-part



ENERGY SUPPLY



WVM5
Angled Fittings - Quick Connect Style



DSV1-8
Pressure safety valve



DSV1-8E
Pressure safety valve with quick exhaust



SENSORS



ANS0084
Attachment Kit for Inductive Proximity Switch



NJ8-E2S
Inductive proximity switch - Connector M8



MFS01-S-KHC-P1-PNP
Magnetic field sensor angled, cable 0.3 m - M8 connector



MFS02-S-KHC-P1-PNP
Magnetic field sensor straight, cable 0.3 m - M8 connector



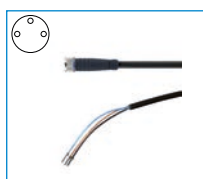
MFS01-S-KHC-P2-PNP
2-point sensor angled, cable 0.3 m - M8 connector



MFS02-S-KHC-P2-PNP
2-point sensor straight, cable 0.3 m - M8 connector



CONNECTIONS / OTHER



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

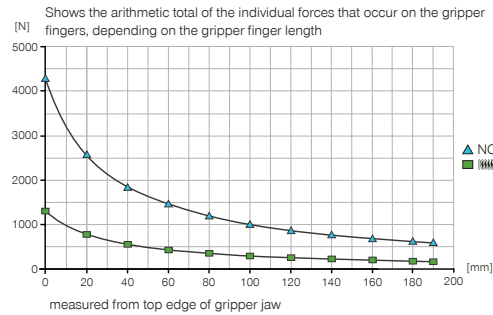
2-JAW ANGULAR GRIPPERS

INSTALLATION SIZE GPW5013

▶ PRODUCT SPECIFICATIONS

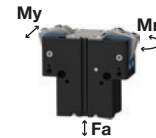


▶ Gripping force diagram



▶ Forces and moments

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



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

▶ TECHNICAL DATA

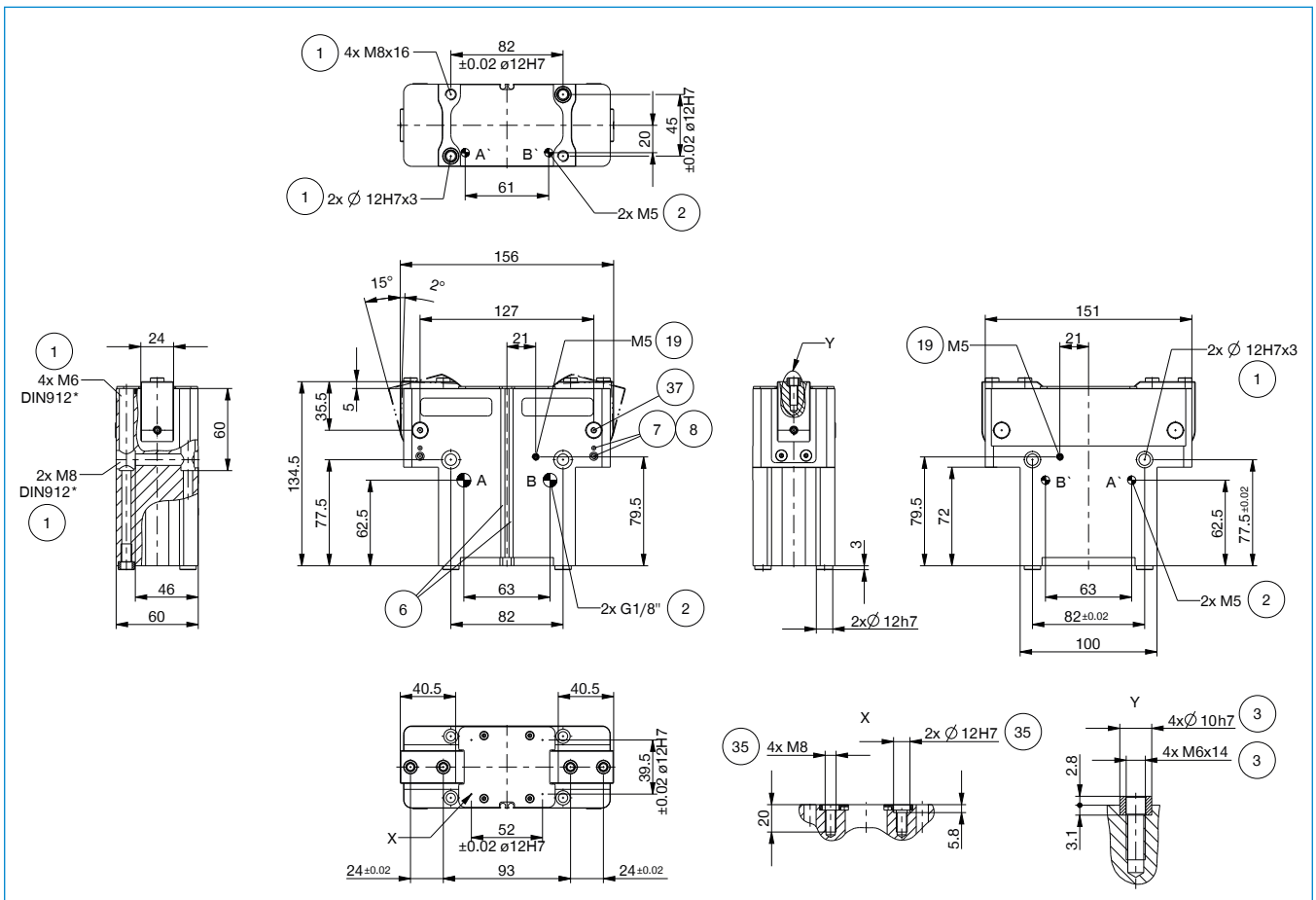
Order no.	Technical data
	GPW5013NC-00-A
Stroke per jaw (+/-) [°]	+15/-2
Gripping moment in closing max. [Nm]	130
Gripping moment secured by spring min. [Nm]	39.5
Gripping force in closing max. (at 0°) [N]*	4200
Closing time [s]	0.08
Opening time [s]	0.12
Dead weight of mounted gripper finger max. [kg]	2.4
Length of the gripper fingers max. [mm]	185
Repetition accuracy +/- [mm]	0.01
Operating pressure min. [bar]	4
Operating pressure max. [bar]	8
Nominal operating pressure [bar]	6
Operating temperature [°C]	-10 ... +90
Air volume per cycle [cm ³]	160
Protection to IEC 60529	IP64
Weight [kg]	3

*measured from top edge of gripper jaw

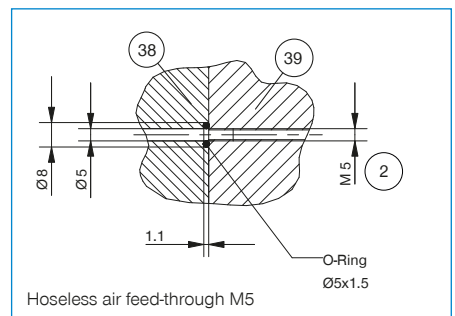
▶ Technical Data - High Temperature Version

Order no.	Technical data
	GPW5013NC-20-A
Operating temperature [°C]	-10 ... +130

TECHNICAL DRAWINGS



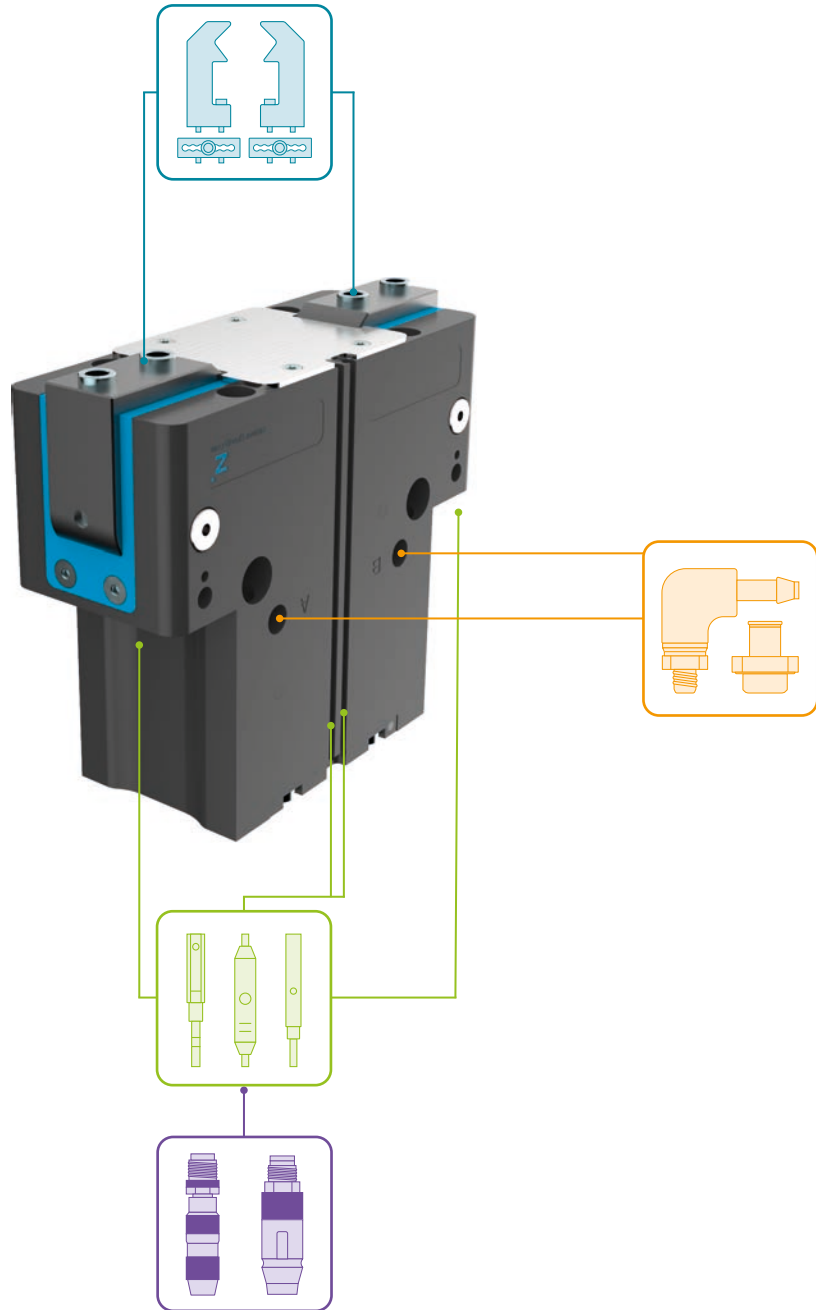
- | | |
|----------------------------------------------|----------------------------------------|
| ① Gripper attachment | screw |
| ② Energy supply | ③⑦ Mounting possibility for cam switch |
| ③ Fixing for gripper finger | ③⑧ Adapter |
| ⑥ Integrated slot for magnetic field sensor | ③⑨ Gripper |
| ⑦ Fixing for mounting block | Ⓐ Air connection (close) |
| ⑧ Fixing clamping bracket (KHA) | Ⓑ Air connection (open) |
| ⑱ Air purge connection option | Ⓐ Air connection, alternative (close) |
| ⑳ Mounting possibility for stroke adjustment | Ⓑ Air connection, alternative (open) |



2-JAW ANGULAR GRIPPERS

INSTALLATION SIZE GPW5013

▶ ACCESORIES



▶ INCLUDED IN DELIVERY



4 [piece]
Centering Disc

018187



2 [piece]
Centering Disc

019280

▶ RECOMMENDED ACCESSORIES



GRIPPING COMPONENTS



UB5013AL
Universal jaw aluminium



UB5013ST
Universal jaw steel



EB5013AL
Aluminum adjustment jaw



EB5013ST
Steel adjustment jaw



LB5013
L-jaw



WB5013L
Changeable jaw, loose-part-set



WB5013F
Changeable jaw, fix-part



ENERGY SUPPLY



WV1-8X8
Angled Fittings - Quick Connect Style



DSV1-8
Pressure safety valve



DSV1-8E
Pressure safety valve with quick exhaust



SENSORS



ANS0084
Attachment Kit for Inductive Proximity Switch



NJ8-E2S
Inductive proximity switch - Connector M8



MFS01-S-KHC-P1-PNP
Magnetic field sensor angled, cable 0.3 m - M8 connector



MFS02-S-KHC-P1-PNP
Magnetic field sensor straight, cable 0.3 m - M8 connector



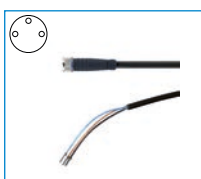
MFS01-S-KHC-P2-PNP
2-point sensor angled, cable 0.3 m - M8 connector



MFS02-S-KHC-P2-PNP
2-point sensor straight, cable 0.3 m - M8 connector



CONNECTIONS / OTHER



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

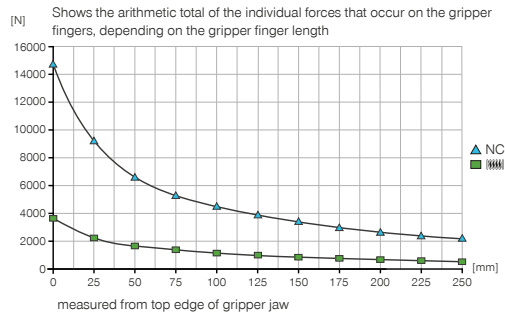
2-JAW ANGULAR GRIPPERS

INSTALLATION SIZE GPW5025

▶ PRODUCT SPECIFICATIONS

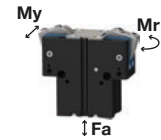


▶ Gripping force diagram



▶ Forces and moments

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



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

▶ TECHNICAL DATA

Order no.

Stroke per jaw (+/-) [°]	+15/-2
Gripping moment in closing max. [Nm]	620
Gripping moment secured by spring min. [Nm]	150
Gripping force in closing max. (at 0°) [N]*	14500
Closing time [s]	0.155
Opening time [s]	0.30
Dead weight of mounted gripper finger max. [kg]	7
Length of the gripper fingers max. [mm]	265
Repetition accuracy +/- [mm]	0.01
Operating pressure min. [bar]	4
Operating pressure max. [bar]	8
Nominal operating pressure [bar]	6
Operating temperature [°C]	-10 ... +90
Air volume per cycle [cm³]	780
Protection to IEC 60529	IP64
Weight [kg]	12.1

*measured from top edge of gripper jaw

▶ Technical data

GPW5025NC-00-A

▶ Technical Data - High Temperature Version

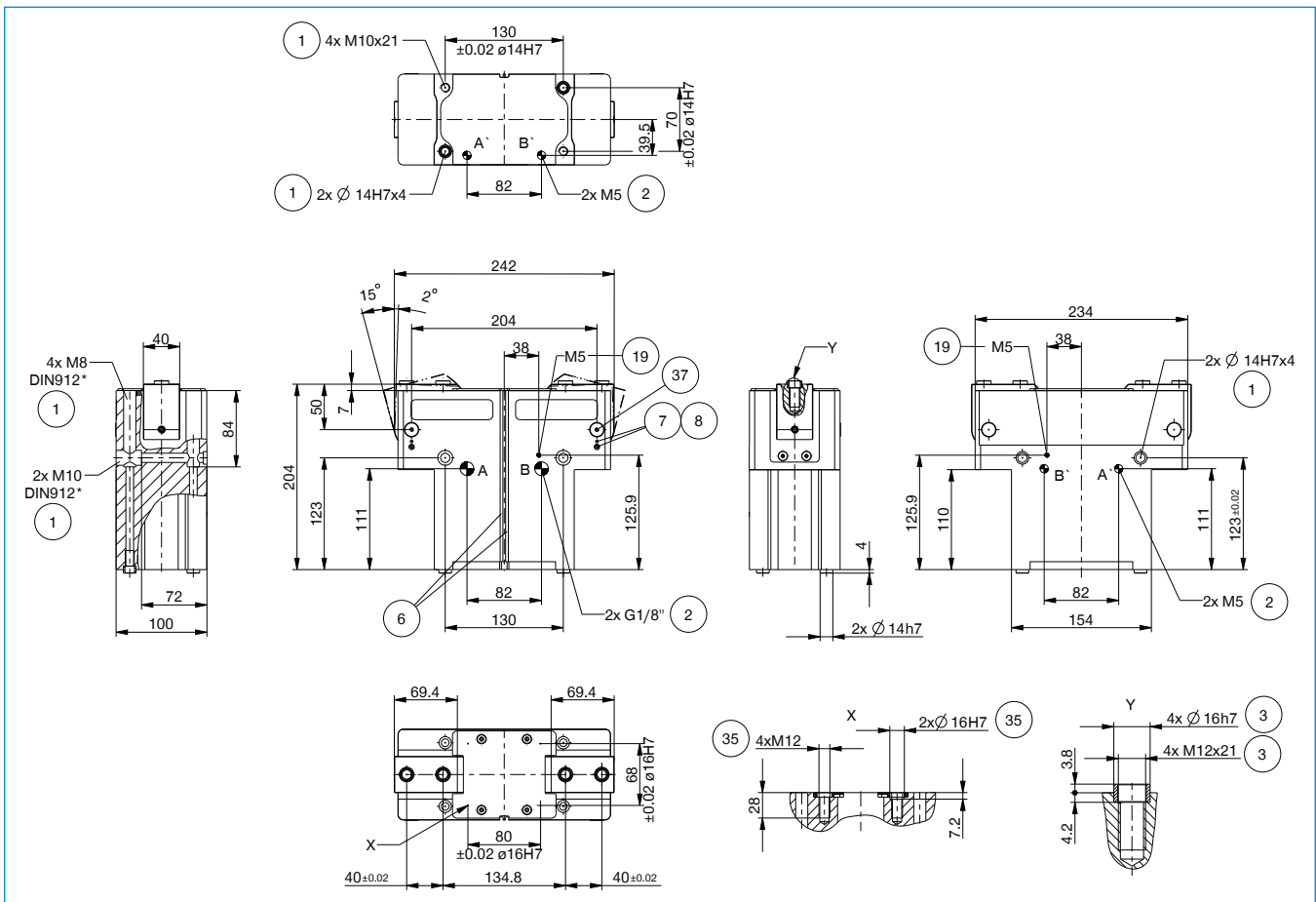
Order no.

Operating temperature [°C]	-10 ... +130
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GPW5025NC-20-A

-10 ... +130

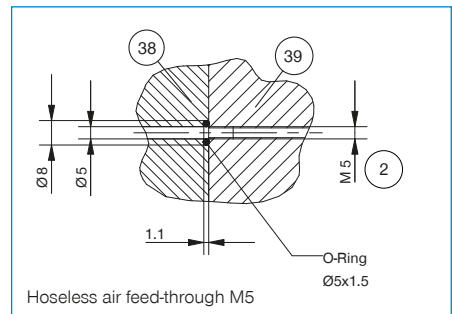
TECHNICAL DRAWINGS



- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑥ Integrated slot for magnetic field sensor
- ⑦ Fixing for mounting block
- ⑧ Fixing clamping bracket (KHA)
- ⑱ Air purge connection option
- ⑳ Mounting possibility for stroke adjustment

screwe

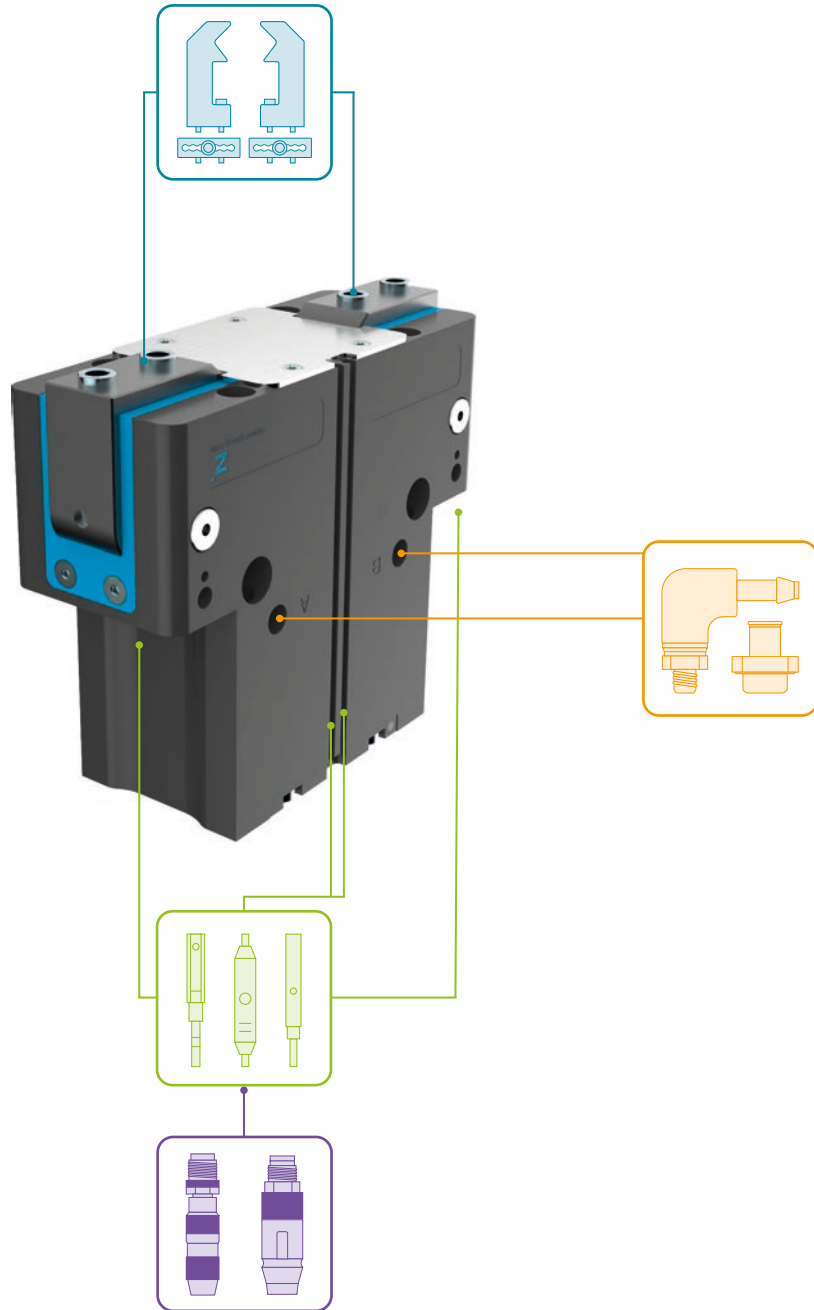
- ⑳ Mounting possibility for cam switch
- ㉑ Adapter
- ㉒ Gripper
- Ⓐ Air connection (close)
- Ⓑ Air connection (open)
- Ⓐ Air connection, alternative (close)
- Ⓑ Air connection, alternative (open)



2-JAW ANGULAR GRIPPERS

INSTALLATION SIZE GPW5025

▶ ACCESORIES



▶ INCLUDED IN DELIVERY



4 [piece]
Centering Disc

030529



2 [piece]
Centering Disc

019387

▶ RECOMMENDED ACCESSORIES



GRIPPING COMPONENTS



UB5025AL
Universal jaw aluminium



UB5025ST
Universal jaw steel



EB5025AL
Aluminum adjustment jaw



EB5025ST
Steel adjustment jaw



LB5025
L-jaw



WB5025L
Changeable jaw, loose-part-set



WB5025F
Changeable jaw, fix-part



ENERGY SUPPLY



WV1-8X8
Angled Fittings - Quick Connect Style



DSV1-8
Pressure safety valve



DSV1-8E
Pressure safety valve with quick exhaust



SENSORS



ANS0084
Attachment Kit for Inductive Proximity Switch



NJ8-E2S
Inductive proximity switch - Connector M8



MFS01-S-KHC-P1-PNP
Magnetic field sensor angled, cable 0.3 m - M8 connector



MFS02-S-KHC-P1-PNP
Magnetic field sensor straight, cable 0.3 m - M8 connector



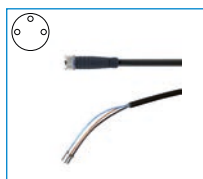
MFS01-S-KHC-P2-PNP
2-point sensor angled, cable 0.3 m - M8 connector



MFS02-S-KHC-P2-PNP
2-point sensor straight, cable 0.3 m - M8 connector



CONNECTIONS / OTHER



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

ADJUSTMENT JAWS

SERIES EB5000

▶ PRODUCT ADVANTAGES



▶ **Easy and fast**

Easy gripper finger adjustment to fit various workpieces saves time and money

▶ **Reproducible and durable**

The numbering of the detent notches allows you to easily configure the gripper finger length and FEM-calculated adjustment jaws guarantee maximum process reliability

- #### ▶ **You can install one and the same adjustment jaw within the same 5000 gripper range on various gripper types of identical size and combine it with the respective accessory parts. This increases flexibility and reduces the diversity of parts in equal measure, which in turn reduces the storage costs**

▶ THE BEST PRODUCT FOR YOUR APPLICATION



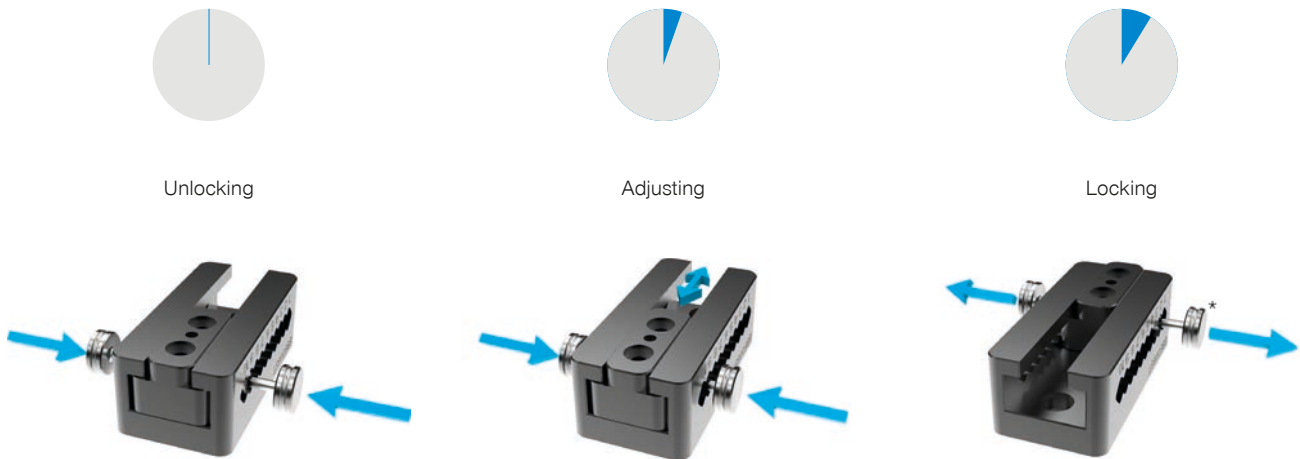
▶ **Our products welcome the challenge!**

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

Find the best product for your specific use:

www.zimmer-group.com

▶ SETTING THE GRIPPER FINGER POSITION IN UNDER 10 SECONDS



* Pressure pieces are screwed on and can be removed to minimize interference contours

▶ 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.

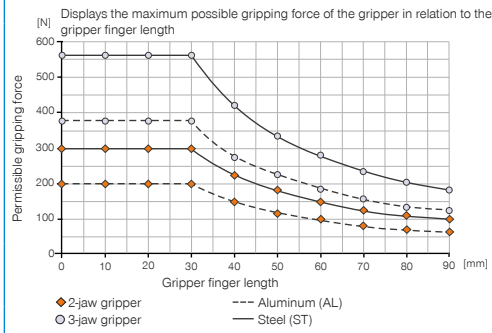
ADJUSTMENT JAWS

INSTALLATION SIZE EB5003

▶ PRODUCT SPECIFICATIONS

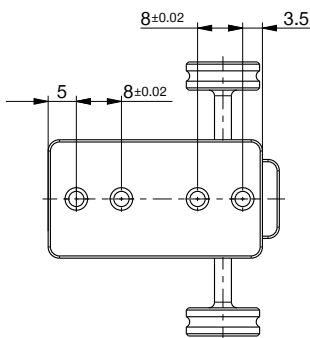


▶ Gripping force diagram

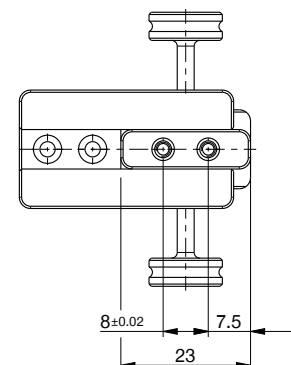
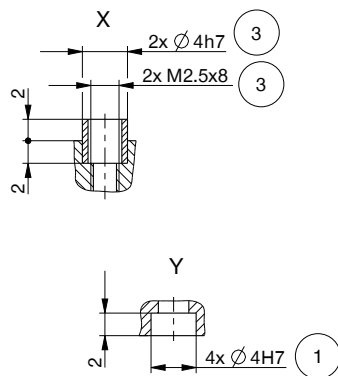
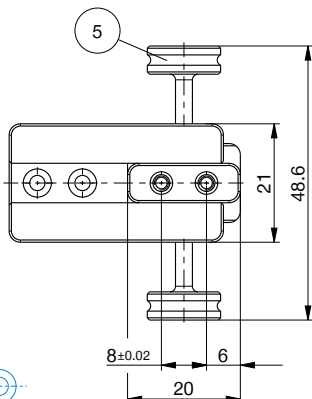
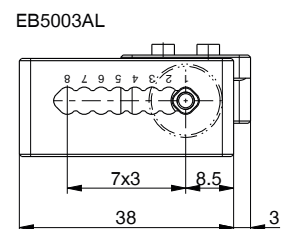
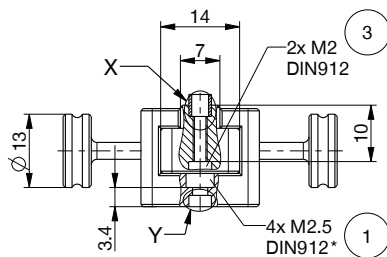
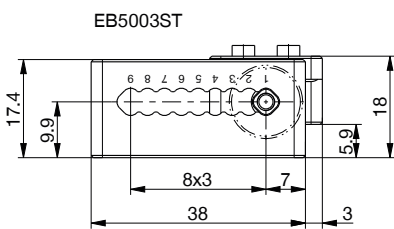


▶ Technical data

Order no.	EB5003AL	EB5003ST
compatible with installation size	GPP5003 / GPD5003	GPP5003 / GPD5003
Max. adjustment range [mm]	21	24
Spacing [mm]	7x3	8x3
Weight per adjustment jaw [kg]	0.04	0.09



- ① Fastening the adjustment jaw
- ③ Fixing for gripper finger
- ⑤ Adjustment mechanism (removable)



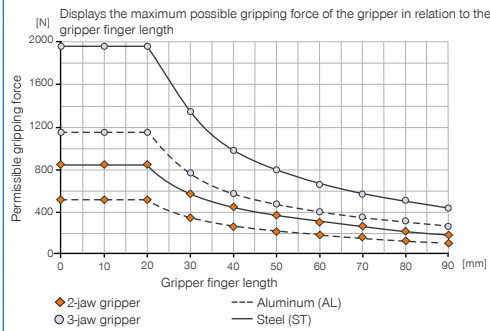
ADJUSTMENT JAWS

INSTALLATION SIZE EB5004

▶ PRODUCT SPECIFICATIONS

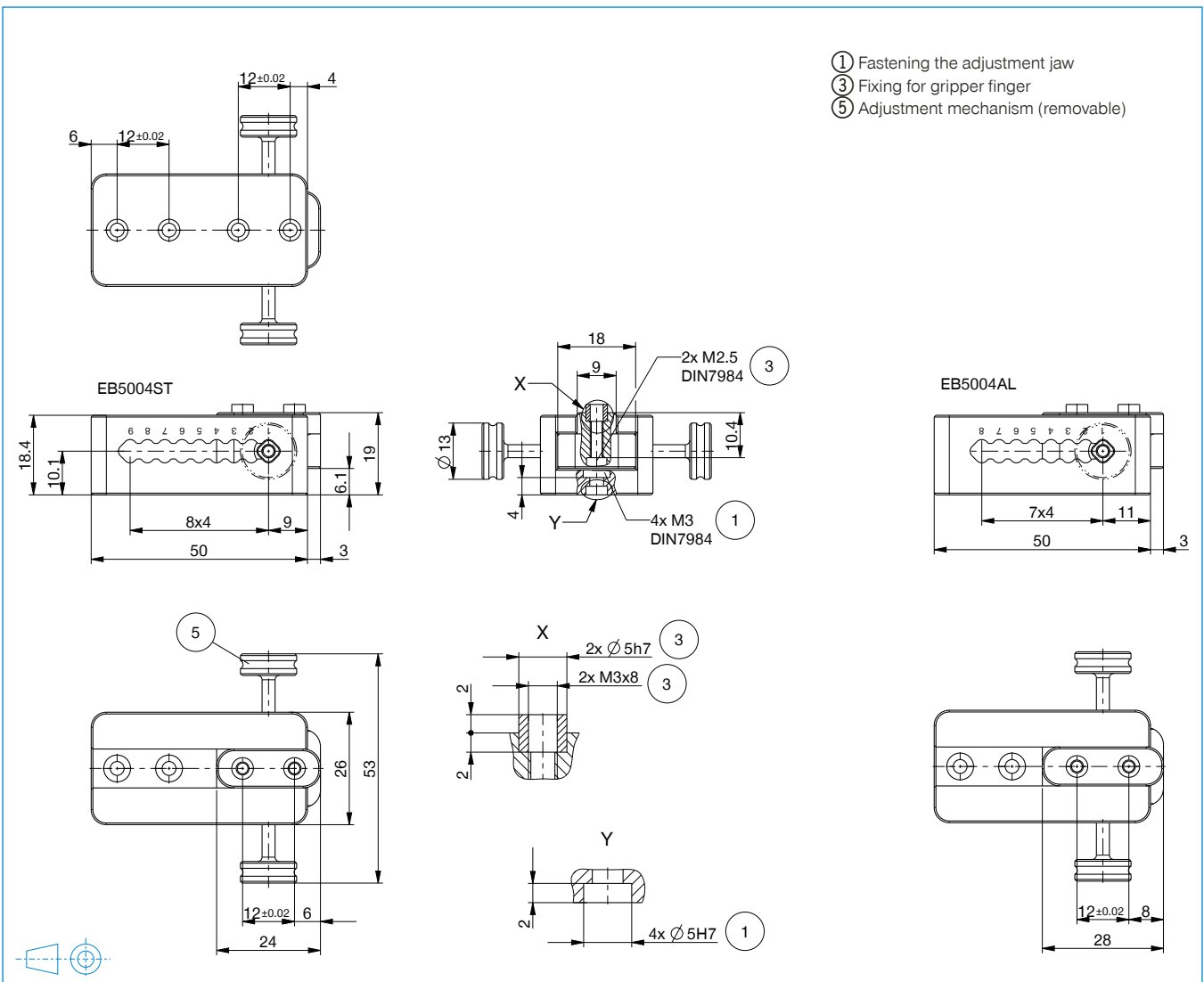


▶ Gripping force diagram



▶ Technical data

Order no.	EB5004AL	EB5004ST
compatible with installation size	GPP5004 / GPD5004	GPP5004 / GPD5004
Max. adjustment range [mm]	28	32
Spacing [mm]	7x4	8x4
Weight per adjustment jaw [kg]	0.06	0.13



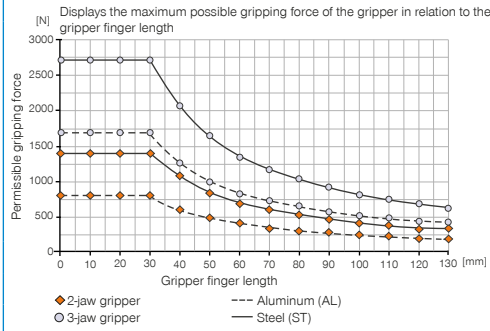
ADJUSTMENT JAWS

INSTALLATION SIZE EB5006

▶ PRODUCT SPECIFICATIONS

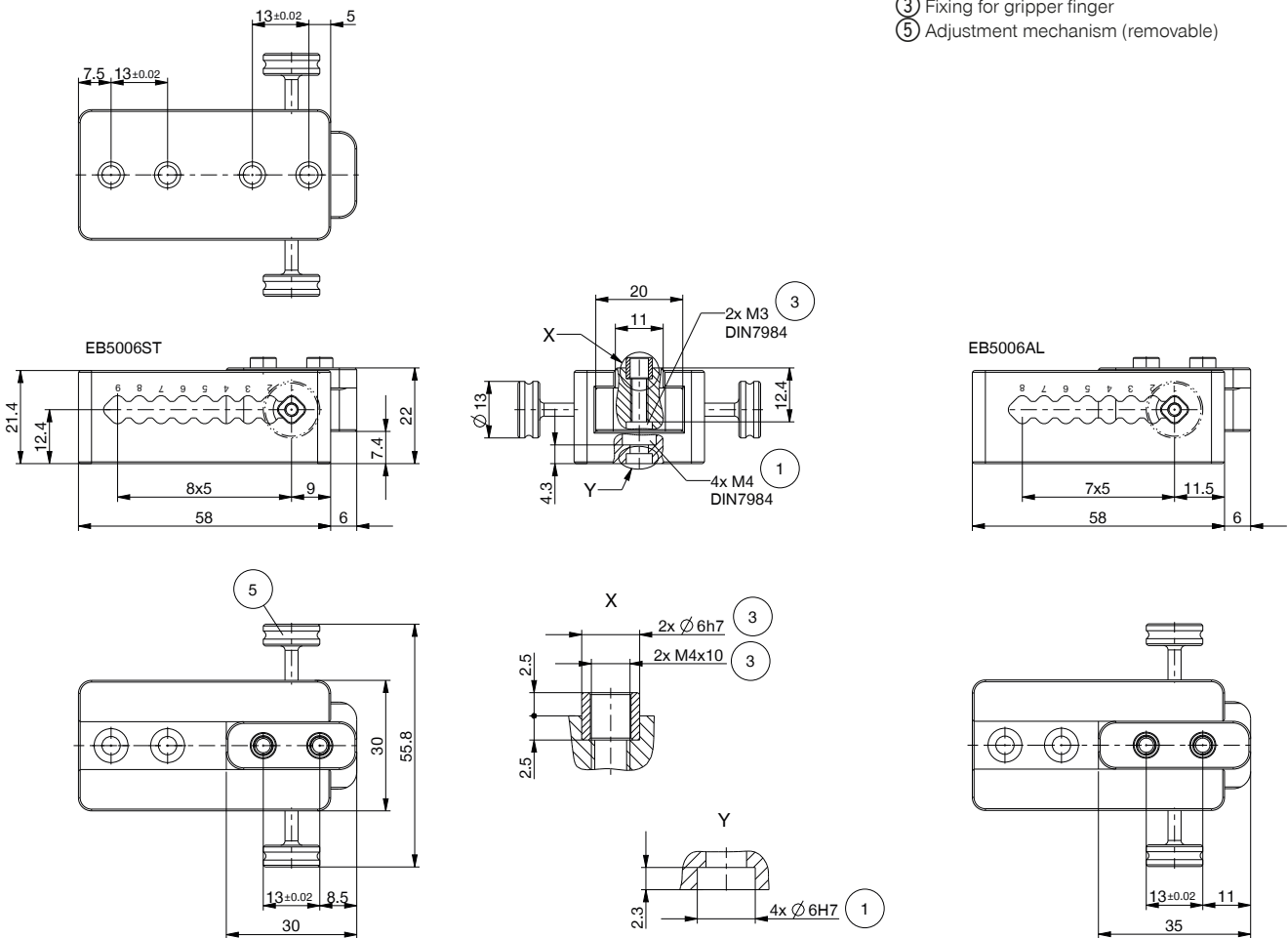


▶ Gripping force diagram



▶ Technical data

Order no.	EB5006AL	EB5006ST
compatible with installation size	GPP5006 / GEP5006 / GPD5006 / GED5006	GPP5006 / GEP5006 / GPD5006 / GED5006
Max. adjustment range [mm]	35	40
Spacing [mm]	7x5	8x5
Weight per adjustment jaw [kg]	0.10	0.20



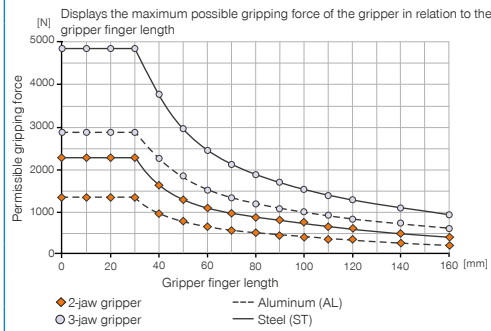
ADJUSTMENT JAWS

INSTALLATION SIZE EB5008

▶ PRODUCT SPECIFICATIONS



▶ Gripping force diagram



▶ Technical data

Order no.	EB5008AL	EB5008ST
compatible with installation size	GPP5008 / GEP5008 / GPD5008 / GED5008 / GPW5008	GPP5008 / GEP5008 / GPD5008 / GED5008 / GPW5008
Max. adjustment range [mm]	40	45
Spacing [mm]	8x5	9x5
Weight per adjustment jaw [kg]	0.14	0.34

① Fastening the adjustment jaw
 ③ Fixing for gripper finger
 ⑤ Adjustment mechanism (removable)

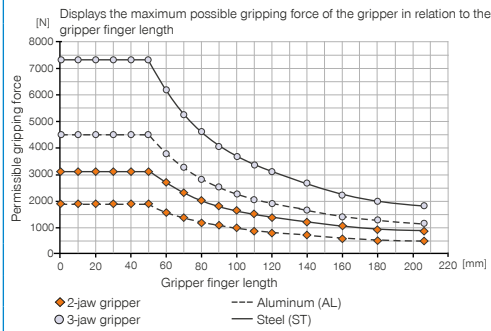
ADJUSTMENT JAWS

INSTALLATION SIZE EB5010

▶ PRODUCT SPECIFICATIONS



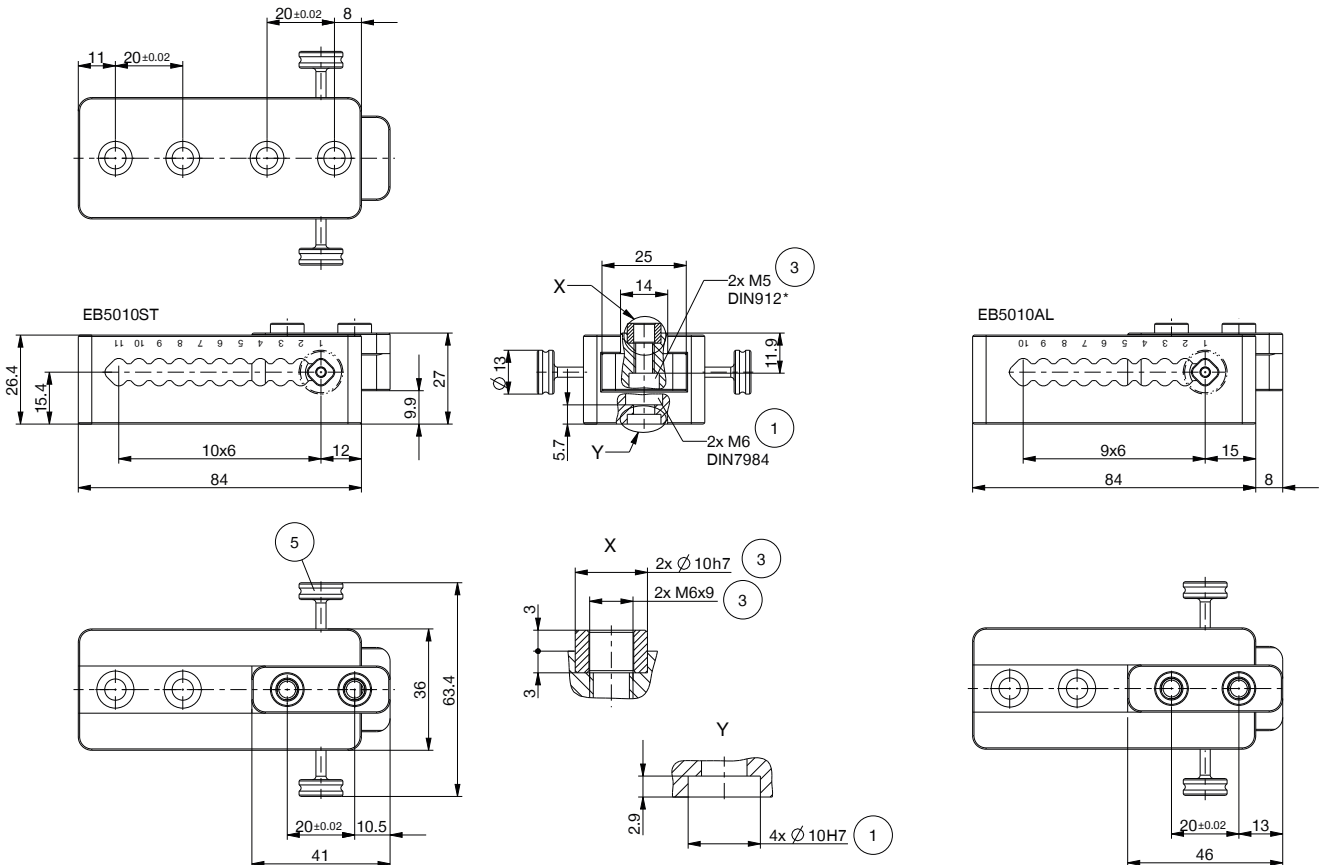
▶ Gripping force diagram



▶ Technical data

Order no.	EB5010AL	EB5010ST
compatible with installation size	GPP5010 / GEP5010 / GPD5010 / GED5010	GPP5010 / GEP5010 / GPD5010 / GED5010
Max. adjustment range [mm]	54	60
Spacing [mm]	9x6	10x6
Weight per adjustment jaw [kg]	0.19	0.45

- ① Fastening the adjustment jaw
- ③ Fixing for gripper finger
- ⑤ Adjustment mechanism (removable)



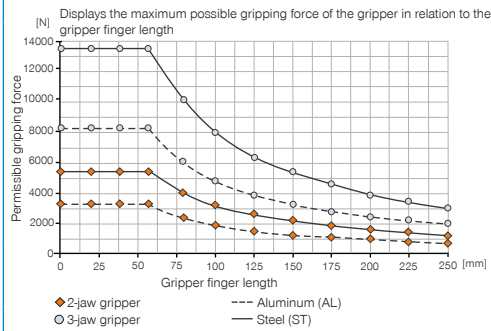
ADJUSTMENT JAWS

INSTALLATION SIZE EB5013

▶ PRODUCT SPECIFICATIONS



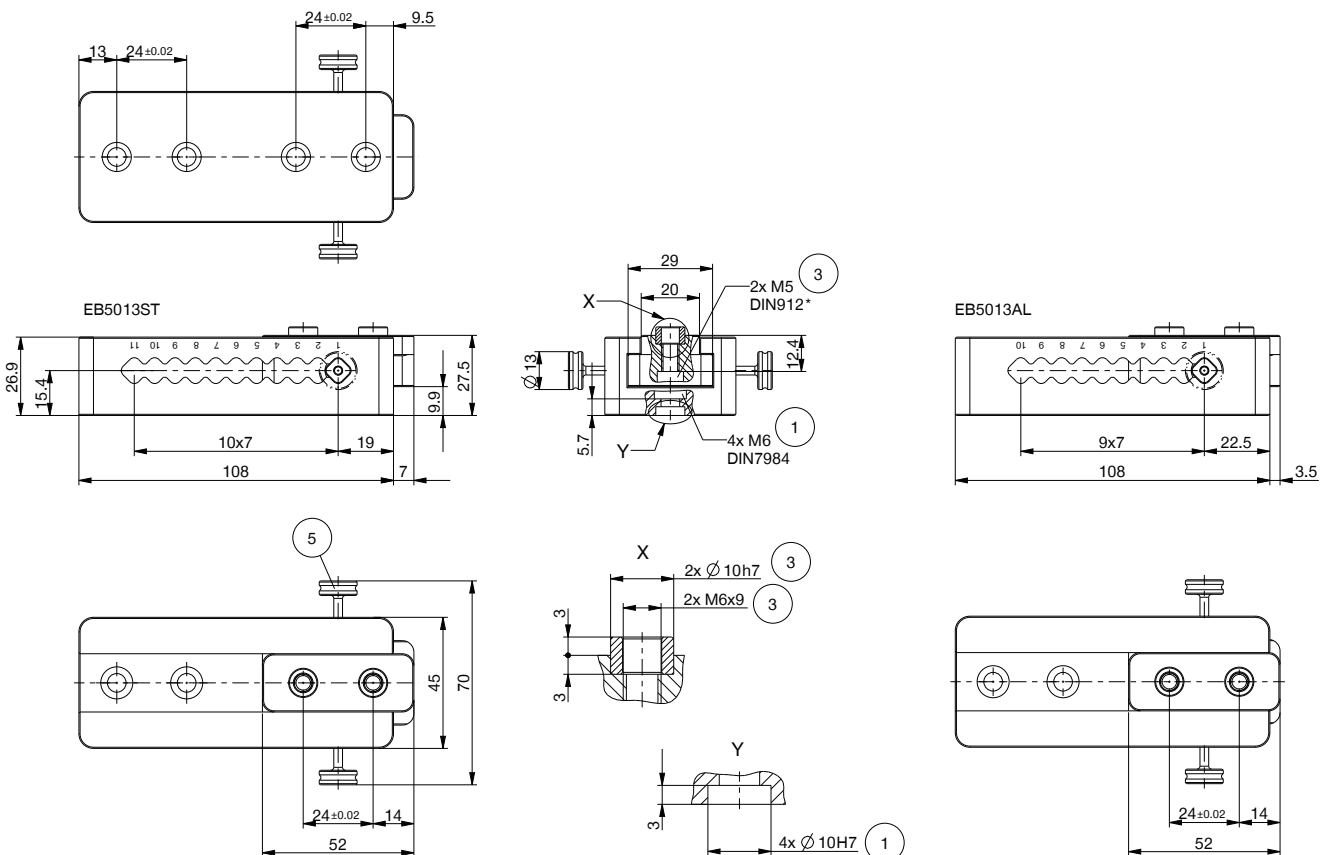
▶ Gripping force diagram



▶ Technical data

Order no.	EB5013AL	EB5013ST
compatible with installation size	GPP5013 / GPD5013 / GPW5013	GPP5013 / GPD5013 / GPW5013
Max. adjustment range [mm]	63	70
Spacing [mm]	9x7	10x7
Weight per adjustment jaw [kg]	0.30	0.75

- ① Fastening the adjustment jaw
- ③ Fixing for gripper finger
- ⑤ Adjustment mechanism (removable)



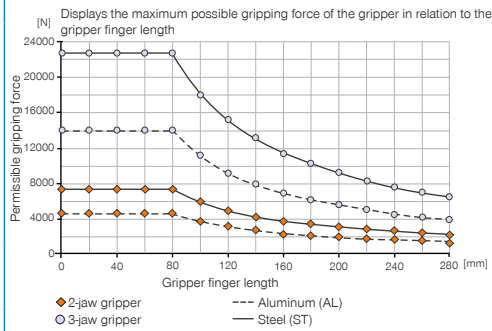
ADJUSTMENT JAWS

INSTALLATION SIZE EB5016

▶ PRODUCT SPECIFICATIONS

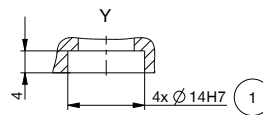
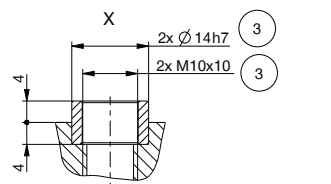
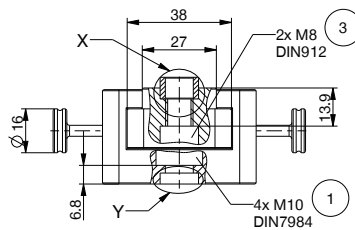
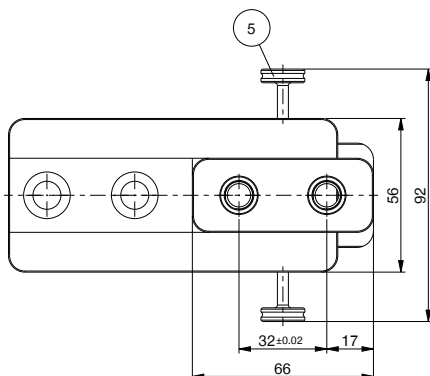
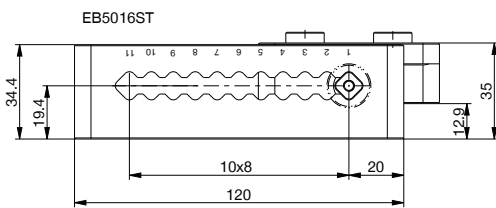
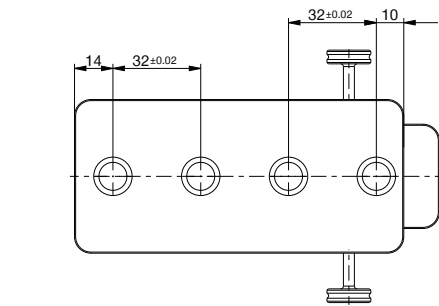


▶ Gripping force diagram

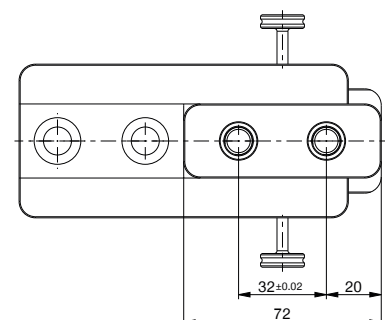
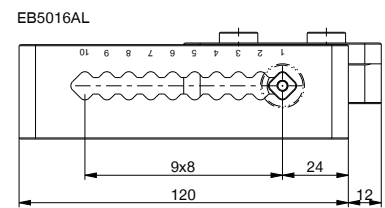


▶ Technical data

Order no.	EB5016AL	EB5016ST
compatible with installation size	GPP5016 / GPD5016	GPP5016 / GPD5016
Max. adjustment range [mm]	72	80
Spacing [mm]	9x8	10x8
Weight per adjustment jaw [kg]	0.56	1.35



- ① Fastening the adjustment jaw
- ③ Fixing for gripper finger
- ⑤ Adjustment mechanism (removable)



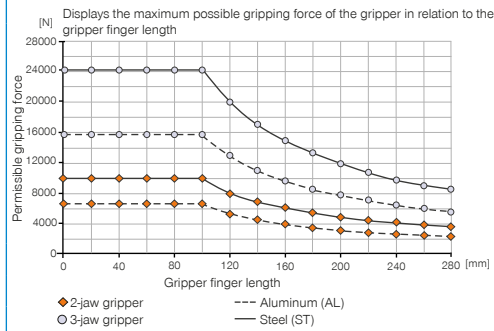
ADJUSTMENT JAWS

INSTALLATION SIZE EB5025

▶ PRODUCT SPECIFICATIONS



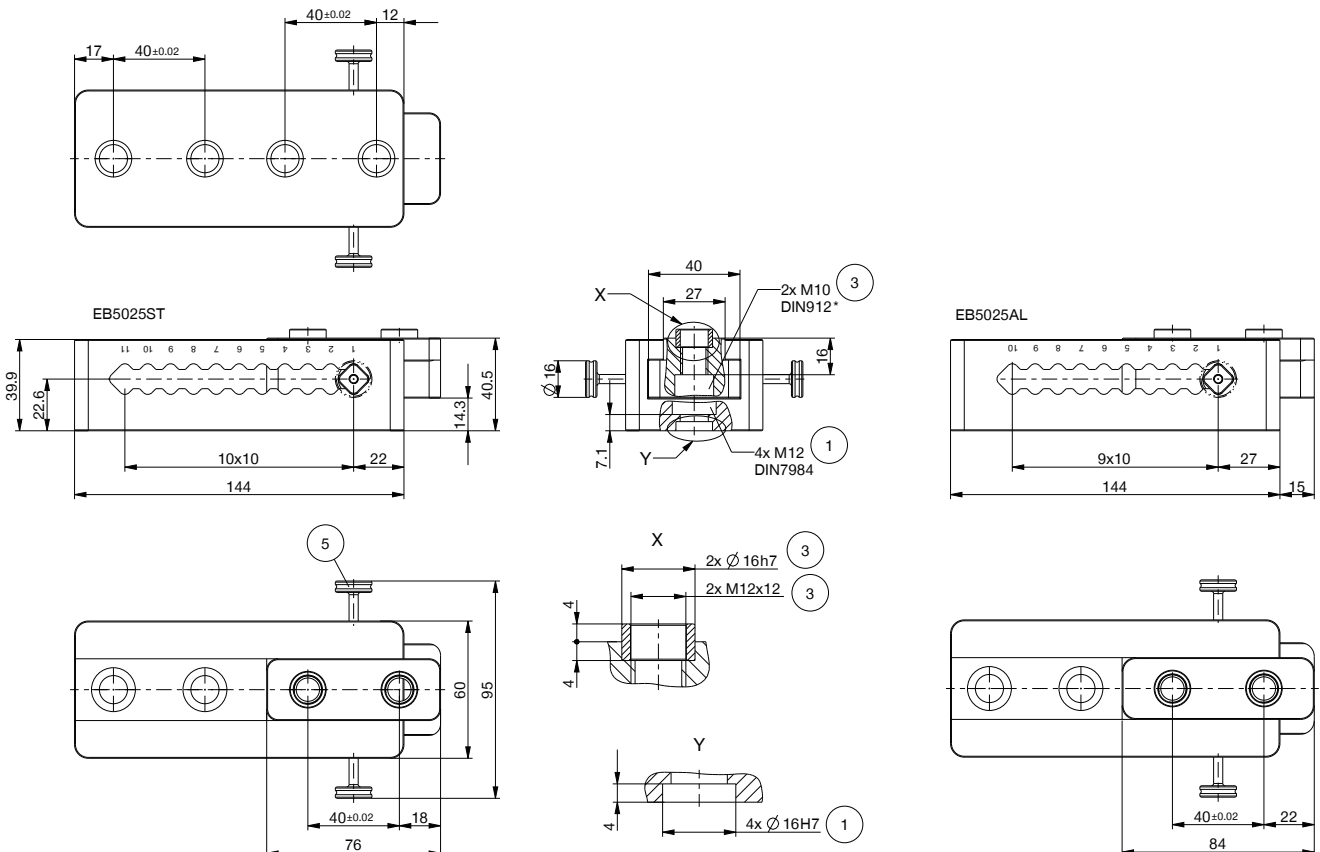
▶ Gripping force diagram



▶ Technical data

Order no.	EB5025AL	EB5025ST
compatible with installation size	GPP5025 / GPD5025 / GPW5025	GPP5025 / GPD5025 / GPW5025
Max. adjustment range [mm]	90	100
Spacing [mm]	9x10	10x10
Weight per adjustment jaw [kg]	0.81	1.95

- ① Fastening the adjustment jaw
- ③ Fixing for gripper finger
- ⑤ Adjustment mechanism (removable)



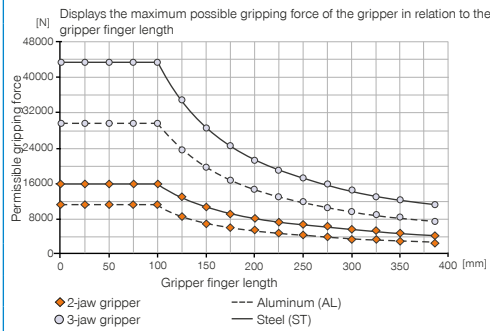
ADJUSTMENT JAWS

INSTALLATION SIZE EB5030

▶ PRODUCT SPECIFICATIONS



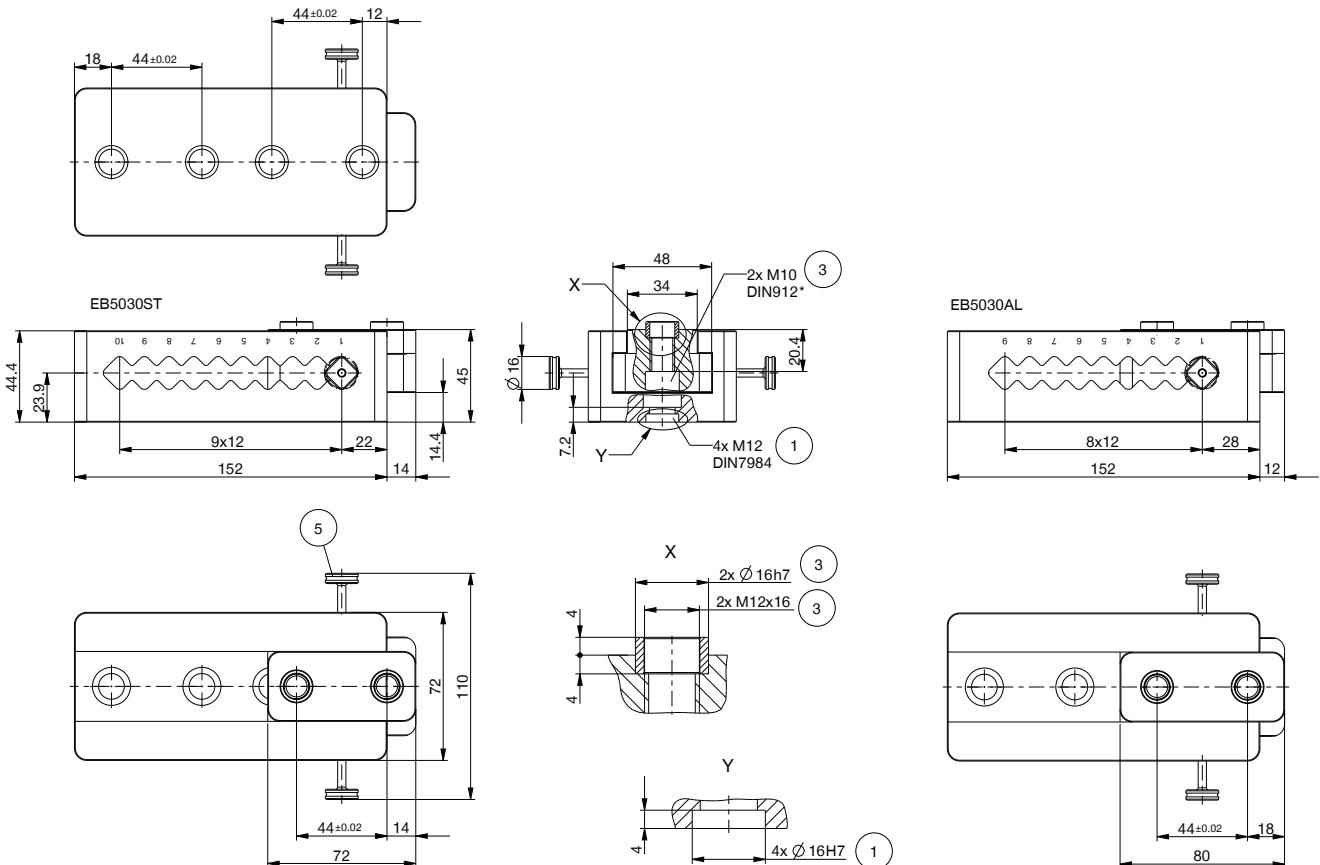
▶ Gripping force diagram



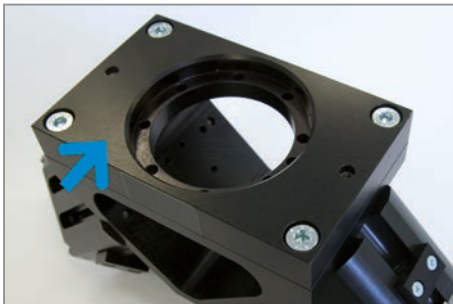
▶ Technical data

Order no.	EB5030AL	EB5030ST
compatible with installation size	GPP5030 / GPD5030	GPP5030 / GPD5030
Max. adjustment range [mm]	96	108
Spacing [mm]	8x12	9x12
Weight per adjustment jaw [kg]	1.07	2.63

- ① Fastening the adjustment jaw
- ③ Fixing for gripper finger
- ⑤ Adjustment mechanism (removable)



ANGLE FLANGE SERIES WFR



Flexible connection to your robot

Adapter plate manufactured according to EN ISO 9409-1 matches for a variety of 40 different types of robot manufacturers. In addition, also available for robots with hollow axle.

1st step: Select adapter plate

Simply define the type of robot and you get the appropriate adapter plate.



About 100 different variants

Adapter plates and angle flanges can be combined with 16 different grippers - with the result of more than 100 different varieties. Choose from our main catalog your appropriate gripper. There you will find the most diverse designs: some with other without gripping force safety device, protected from dust or temperature resistant.

2nd step: Select Angle flange

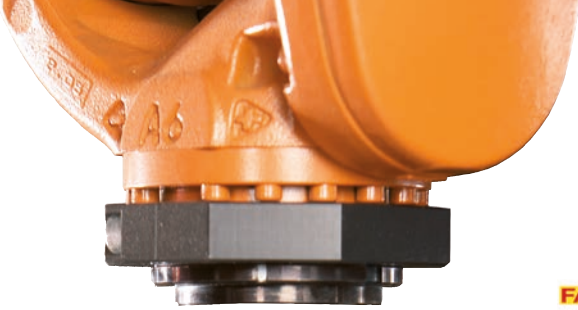
Choose a gripper and there follows the right angle flange.



Extend the functionality of your Angle flange

Cover plate, discharge nozzle or programming pins, with the extensive accessory, you can quickly and individually integrate additional functions.

3rd step: Select accessories



Order no.:
Adapter plate

1st step:



Adapter plate

adept
EPSON
FANUC
KUKA
MITSUBISHI
MOTOMAN
STÄUBLI

ABB
adept
COMAU
FANUC
Kawasaki
KUKA
MITSUBISHI
MOTOMAN
STÄUBLI

KUKA
LEIS
STÄUBLI
UNIVERSAL ROBOTS

COMAU
FANUC
KUKA
LEIS
FANUC

Connecting flange EN-ISO9409-1 TK 31,5
ViperS650
Pro Six
LR mate 200
KR5 sixx
RV1, RV2, RV3, RV4, RV5, RV6
HP3, HP5, HP6
RX60, TX40, TX60, RS20, RS40, RS60, RS80

APR05

Connecting flange EN-ISO9409-1 TK 40
140, 2400L, 1600-5, 1600-7
Viper S13400
smart six
M-6iB, M16iB, M710iC/20L
FS06, FC06, FA06, FS10C, FC10C
KR16L6 (KS)
RV12
UP6, HP6, HP20, IA20
RX90, RX130XL

APR01

Connecting flange EN-ISO9409-1 TK 50
KR6, KR16, KR30L16
RV10-6, RV20-6
RX130, TX90, RX160
UR3, UR5, UR10

APR02

Connecting flange EN-ISO9409-1 TK 100
NM 16-3.1, NM 25-2.2, NM 45-2.0
M-420iA, M710iC/50/70
KR30, KR60
RV60-40, RV60-60

APR03

M10iA

APR04

2nd step:



Angle flange

Order no.:
Angle flange

All other informations about your gripper, you will find in our catalog or online at: www.zimmer-group.com

Grippers to match for WFR03:
GPP5004
GPP5006
GEP5006
GPD5004
GPD5006
GED5006

WFR03

Grippers to match for WFR04:
GPP5008
GPP5010
GEP5008
GPD5008
GPD5010
GED5008
GPW5008

WFR04

3rd step:



Cover plate



Discharge nozzle



Programming pins

Order no.:
Accessories

WFR03
WFR04

ABWFR01
ABWFR02

WFR03 + WFR04

DUWFR01

WFR03 + WFR04

SPWFR01

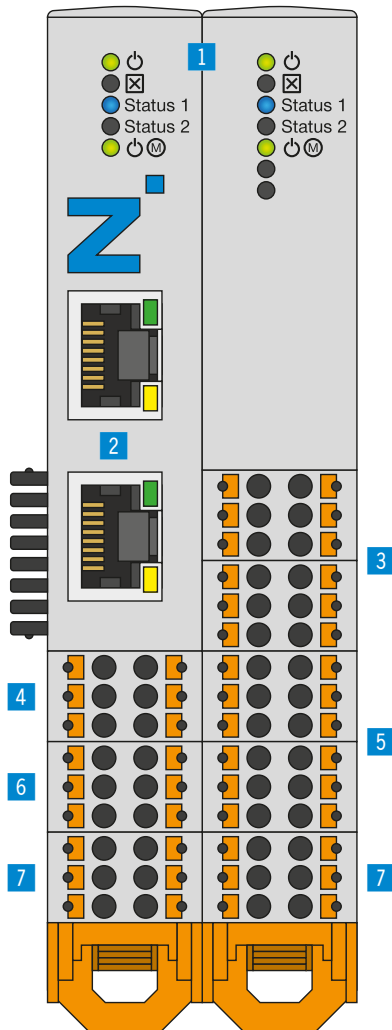
IO-LINK MEETS DIGITAL I/O

SMART COMMUNICATION MODULE

IO-Link meets digital I/O

The Smart Communication Module (SCM) is a master gateway that is suitable for all IO-Link components. With its two channels, the SCM can control two devices and on a functional level, offers the direct implementation of IO-Link to

digital I/O. The module thus makes it possible to integrate IO-Link devices into a digital infrastructure and utilize almost the full extended range of functions of the IO-Link device.



▶ PRODUCT ADVANTAGES

- ▶ Translates IO-Link to digital inputs and outputs digital I/O) and from digital I/O to IO-Link
- ▶ Easy control of intelligent IO-Link grippers via 24 V digital I/O
- ▶ Configuration and training take place using the corresponding intuitive guideZ software
- ▶ Can be used with one or two grippers depending on the flexibility required
- ▶ Up to 15 different workpieces can be trained for one gripper

▶ BENEFITS IN DETAIL

- 1 Status**
 - Status display of SCM and IO-Link device
- 2 Ethernet RJ45**
 - Temporary connection for gripper configuration
- 3 Digital input**
 - Digital inputs for controlling the gripper actuators
- 4 IO-Link / Device 1**
 - Gripper module 1 connection
- 5 Digital output**
 - Digital outputs for monitoring the gripper sensors
- 6 IO-Link / Device 2**
 - Gripper module 2 connection
- 7 Power supply**
 - Voltage supply SCM and gripper

Order no.	Technical Data
Control	Digital I/O
IO logic	PNP
Number of grippers, max.	2
Number of pins (control system input)	12
Number of pins (control system output)	12
Configuration for interface	Ethernet RJ45
Mounting options	35 mm top-hat rail
Voltage [V]	24
Load supply peak current [A]	10
Logic supply peak current [A]	1
Operating temperature [°C]	5 ... +50
Protection to IEC 60529	IP20
Weight [kg]	0.19

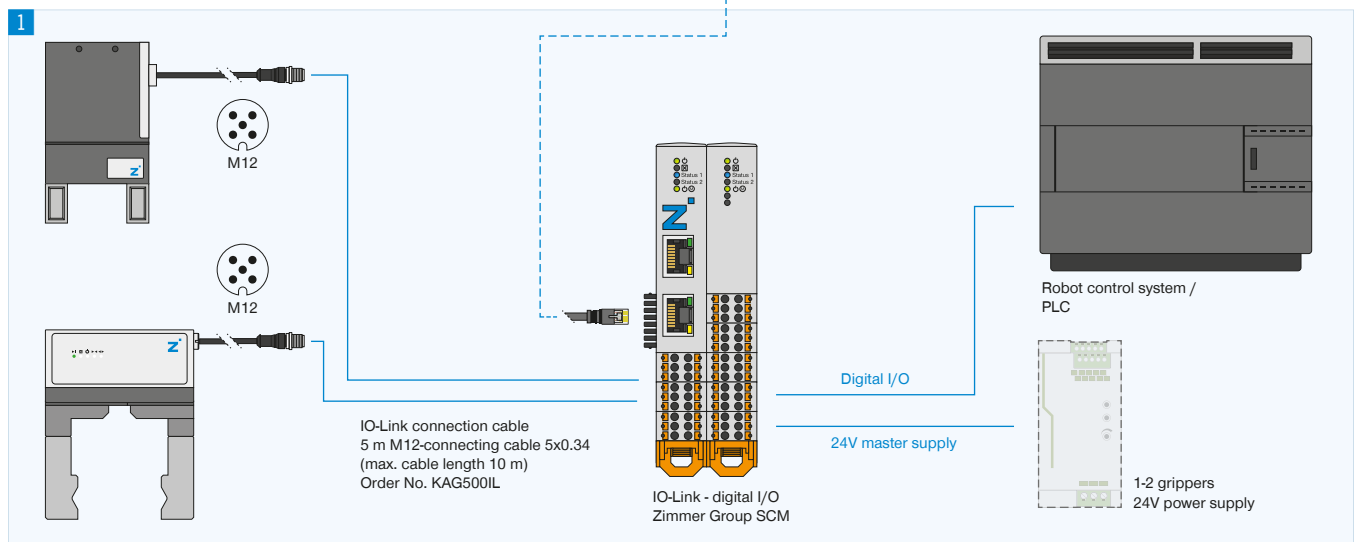
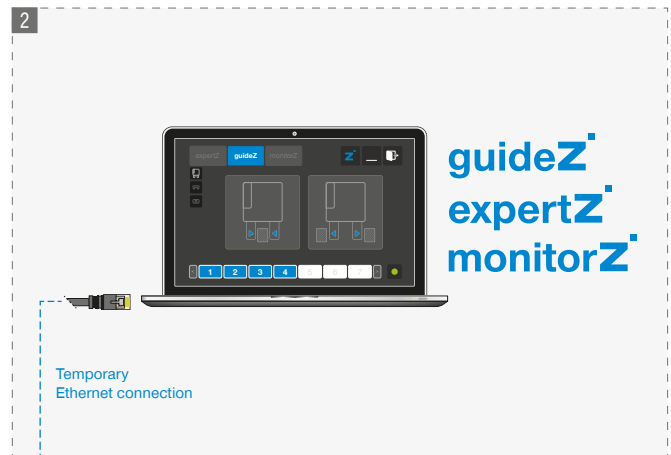
TOPOLOGY

CONNECTION

Configuration and operation

Up to two Zimmer IO-Link devices can be connected to one Smart Communication Module. The digital inputs and outputs are wired directly to the robot controller or PLC. Simple digital control enables bidirectional communication. To configure the gripper parameters, a temporary network connection is established to a commercially available PC.

As soon as the parameters have been configured intuitively, this connection is no longer necessary. Next, the handling unit is automatically controlled directly via robot controller or PLC.



1 Connection

- ▶ IO-Link gripper
- ▶ Digital I/Os on the robot control system/PLC
- ▶ Power supply

2 Configuration

Temporary network connection via PC for use of the guideZ, expertZ and monitorZ software

▶ 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.

CHECKLIST

GRIPPERS

Customer number Telephone number
Company Fax number
Contact E-mail

Mr. Mrs.

Request Desired date Request No.

Order Order No.

Parallel grippers Concentric grippers Angular Grippers

Other / if yes, which type

Drive

Pneumatic Electrical Hydraulic

Operating pressure [bar] Voltage [V]

Required stroke

Per jaw [mm] or Total stroke [mm]

Gripper finger length

Gripper top edge to force application point [mm]

Ambient conditions

Clean / Dry Small amount of swarf / Coolant overspray Large amount of swarf / Coolant under pressure / Grinding agent

Chemical substances / if yes, which

Temperature [°C] Cycles per minute

Required force

Gripping force [N] or Workpiece weight kg g

Gripping type

Internal gripping External gripping

Frictional fit Form fit

Prism angle [°] Friction coefficient Axis acceleration [m/s²]

Self-locking

Not required In closing In opening Pressure safety valve

Desired accessories

Inductive sensor Magnetic field sensor With Cable Plugable

Separate cable / if yes, how long [m]

Pressure safety valve

Pneumatic fittings / if yes, which

Straight fitting

Angled fitting

Air flow control valve

Notes / Comments

Editor / Date

Attachment

Sketch

3D model

Others

USAGE NOTE

GENERAL

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USAGE NOTE

INDIVIDUAL

DECLARATION OF INCORPORATION IN TERMS OF THE EC DIRECTIVE 2006/42/EC ON MACHINERY (ANNEX II 1 B)

We hereby declare that our elements meet the following basic requirements of the Machinery Directive 2006/42/EC as an incomplete machine

No.1.1.2., No.1.1.3., No.1.1.5., No.1.3.2, No. 1.3.4, No. 1.3.7, No.1.5.3, No.1.5.4, No.1.5.8., No.1.6.4, No.1.7.1, No.1.7.3, No.1.7.4.

We also declare that the specific technical documents were produced in accordance with Annex VII Part B of this Directive. We undertake to provide the market supervisory bodies with electronic versions of the incomplete machine's special documents via our documentation department should they have reason to request them.

The incomplete machine may only be commissioned if the machine or system in which the incomplete machine is to be installed has been determined to satisfy the conditions of the Machinery Directive 2006/42/EC and the EC Declaration of Conformity has been produced in accordance with Annex II A.

