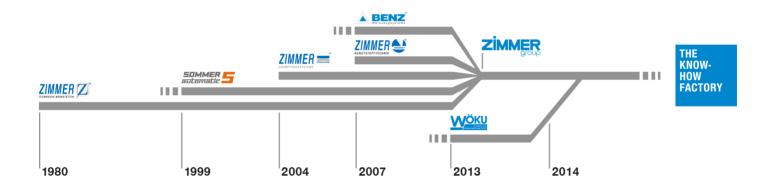
## ZIMMER GROUP COMMITTED TO OUR CUSTOMERS



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

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

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

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

## **TECHNOLOGIES**



#### HANDLING TECHNOLOGY

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

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

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

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





DAMPING TECHNOLOGY

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

#### Industrial damping technology.

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

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

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



LINEAR TECHNOLOGY

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

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

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







#### PROCESS TECHNOLOGY

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

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

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

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





#### TOOLING TECHNOLOGY

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

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

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

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



MACHINE TOOLING TECHNOLOGY

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

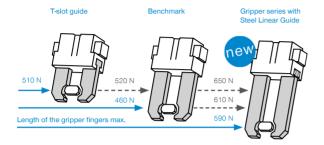
**Development partner.** We accompany you from brainstorming to inspection of the final machine, always according to your expectations.

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

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

# PRODUCT BENEFITS OF THE GRIPPER SERIES GPP5000 / GPD5000 / GEP5000 / GED5000

#### **Gripper Series 5000**



## Is installing the most powerful components important to you?

- Increase the safety of your machine by installing a gripper from this series
- ► It offers you up to 30% higher gripping force and up to 10% higher static forces and moments
- ➤ Using it means you can install gripper fingers that are up to 10% longer than the best-known models in the market
- And you can be sure that these grippers give you the same performance as electrically driven grippers



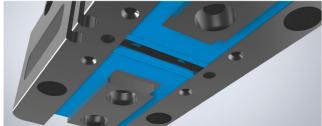




#### Do you want to use one gripper for any task?

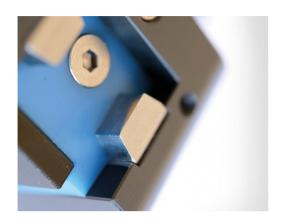
- ► Cut the number of articles you manage
- And so reduce your design and stock-keeping costs to a minimum
- ➤ The gripper guarantees you process reliability, no matter what the environmental conditions
- Corrosion protection included
- Select either a pneumatic or electrical drive, to give you maximum flexibility when creating your design





#### Are details important to you?

- The transverse sensor grooves mean you can change the piston position sensing quickly and easily, wherever the gripper is installed
- Only one interference contour check required, because a spacer compensates for the height difference between the electrical and pneumatic gripper
- With additional pin holes underneath the cover plate for customer-specific attachments
- ► With integrated lubrication reservoir



## Do you want state-of-the-art technology in your machine?

- ➤ The gripper's Steel Linear Guide combines proven linear guide principles with the very latest sealing and DLC technology
- ➤ You benefit from one of the most robust and longlasting grippers currently available on the market, with a maintenance-free working life of up to 30 million cycles



Universal jaw aluminium



Changeable jaw, loose-



Changeable jaw, fix-part



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



Inductive Proximity Switch
Cable 0,3 m - Connector M8



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



Angled Fittings - Quick Connect Style



Quick Exhaust Valve

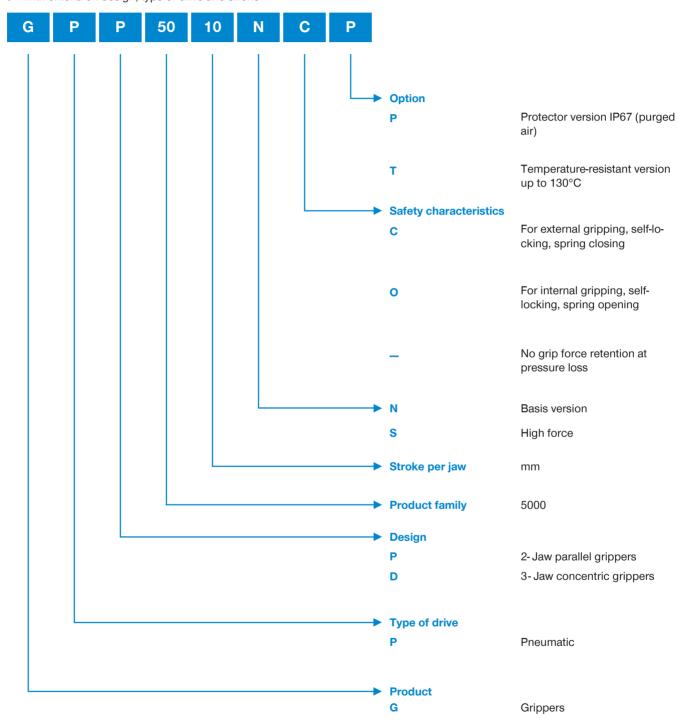
## Do you want a wide range of accessories, perfectly tailored to your gripper?

- Our product range has quick-release jaws that fit every Series 5000 gripper, so you can reduce setup times to a minimum
- 2-position sensors that enables you to space saving position sensing
- Our multitude of tools and accessories means you get everything you need for your gripper from one source

## PRODUCT KEY GPP5000 / GPD5000

#### **Selection of Grippers**

with criteria on design, type of drive and stroke



## SERIES GPP5000 / GPD5000 / GEP5000 / GED5000 OVERVIEW OF INSTALLATION SIZES

2-JAW PARALLEL GRIF	PPER PNEUMATIC	
	SERIES GPP5000	10
	Size GPP5003	12
	Size GPP5004	16
	Size GPP5006	20
i	Size GPP5008	24
	Size GPP5010	28
	Size GPP5013	32
	Size GPP5016	36
	Size GPP5025	40
	Size GPP5030	44
JAW CONCENTRIC G	RIPPER PNEUMATIC	
	SERIES GPD5000	48
	Size GPD5003	50
	Size GPD5004	54
	Size GPD5006	58
i	Size GPD5008	62
	Size GPD5010	66
	Size GPD5013	70
	Size GPD5016	74
	Size GPD5025	78
	Size GPD5030	82
JAW PARALLEL GRIF	PPER ELECTRIC	
120		
	SERIES GEP5000	86
	Size GEP5006	88
	Size GEP5008	92
	Size GEP5010	96
-JAW CONCENTRIC G	RIPPER ELECTRIC	
1	SERIES GED5000	100
	Size GED5006	102
2	Size GED5008	106
	Size GED5010	110

### **SERIES GPP5000**

#### **▶ PRODUCT ADVANTAGES**



#### "The Universal One"

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

#### **▶** THE BEST PRODUCT FOR YOUR APPLICATION



Our products love the challenge!

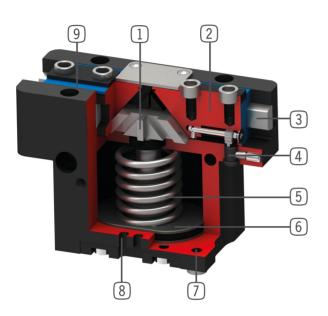
Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities: Find the best product for your specific use: www.zimmer-group.com

## HOW TO ORDER CORRECTLY

 The product order numbers are arranged according to this diagram:

Order no.	GPP5010			
Basis version		N		
High force		S		
For external gripping, self-locking, spring closing			С	
For internal gripping, self-locking, spring opening			0	
Protector version IP67 for use in adverse environments (with purged air)				P
temperature-resistant version to 130 °C				т

#### **BENEFITS IN DETAIL**



#### 1 Positively driven wedge hook transmission

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

#### (2) Gripper jaw

- DLC coated to protect against corrosion
- Gripper fingers mounted using removable centring sleeves
- Lubricated for life via incorporated lubrication slots

#### 3 Steel Linear Guide

- Steel in steel guide
- Enables use of extremely long gripper fingers

#### 4 Mounting block

- mounting for inductive proximity switch

#### (5) Integrated gripping force safety device

- Spring built into cylinder chamber as an energy store

- 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

#### **TERMS**

**Gripping force:** 

Maintenance:

arithmetic sum of the individual forces occuring at the jaws

Time required for the gripper jaws to travel the entire stroke distance Closing/opening time:

Repeatability: at end stops after 50/100 consecutive cycles

Cycle: Path that the pistons travel for a complete opening and closing movement

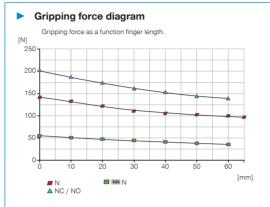
> recommended at 30 mil. cycles (please see the installation instructions, download from www. zimmer-group.com)

11

## **INSTALLATION SIZE GPP5003**

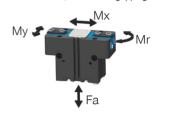
#### **▶ PRODUCT SPECIFICATIONS**





#### Forces and moments

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



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

#### TECHNICAL DATA

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

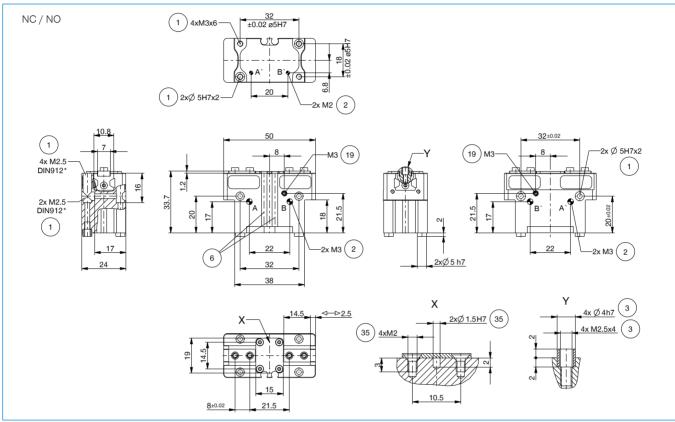
	► Technical Data - Protector Version				
Order no.	GPP5003NP	GPP5003NCP	GPP5003NOP		
Protection to IEC 60529	IP67**	IP67**	IP67**		
Weight [kg]	0.1	0.12	0.12		

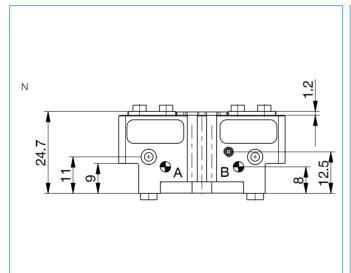
	► Technical Data - High Temperature Version			
Order no.	GPP5003NT	GPP5003NCT	GPP5003NOT	
Operating temperature [°C]	-10 +130	-10 +130	-10 +130	

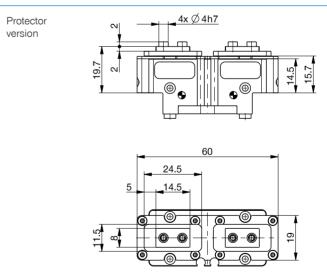
<sup>\*</sup>All data measured at 6 bar

<sup>\* \*</sup> with purged air

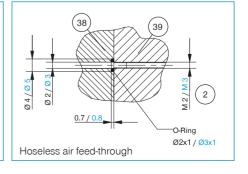
#### **TECHNICAL DRAWINGS**



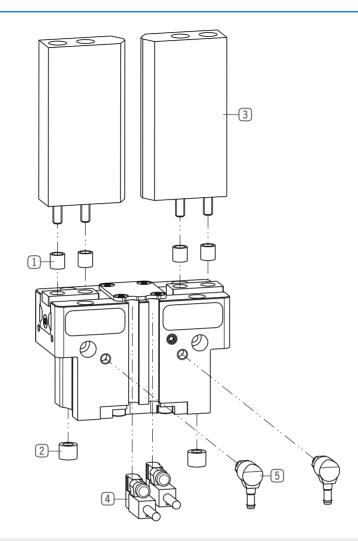




- ① Gripper attachment
- 2 Energy supply
- 3 Fixing for gripper finger
- 6 Integrated slot for magnetic field sensor
- (19) Air purge connection option
- 35 Attachment option for customer-specific fittings
- 38 Adapter
- 39 Gripper
- Air connection (close)
- B Air connection (open)
- Air connection,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



## **INSTALLATION SIZE GPP5003**



#### **► INCLUDED IN DELIVERY**



Centering Disc



Centering Disc

DST06510

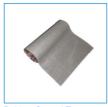
#### **▶** RECOMMENDED ACCESSORIES



UB5003AL

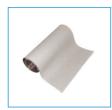


Universal jaw steel **UB5003ST** 



**Rubber Coated Tape** 

KF50G



**Rubber Coated Tape** Knobbed

KF50N



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

MFS103SKHC



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

MFS204SKHC



0,3 m - Connector M8 MFSP2SKHC-01

2-Position-Sensor Cable



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

KAW500



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

KAG500



Plug-in connector customizable Straight - Connector M8

S8-G-3



able Straight - Connector M12

S12-G-3



Angled Fittings - Barb Style Connection WVM3



Straight Fittings - Barb Style Connection

GVM3



Quick Exhaust Valve

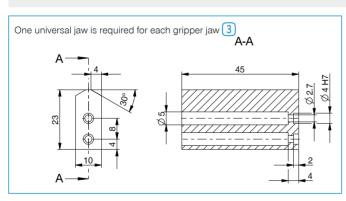
DEV04



Pressure Safety Valve

DSV1-8

#### **▶ TECHNICAL DRAWINGS ACCESSORIES**



## **INSTALLATION SIZE GPP5004**

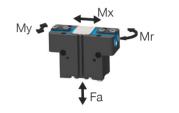
#### **▶ PRODUCT SPECIFICATIONS**



## Gripping force diagram Gripping force as a function finger length 375 125

#### Forces and moments

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



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

#### TECHNICAL DATA

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

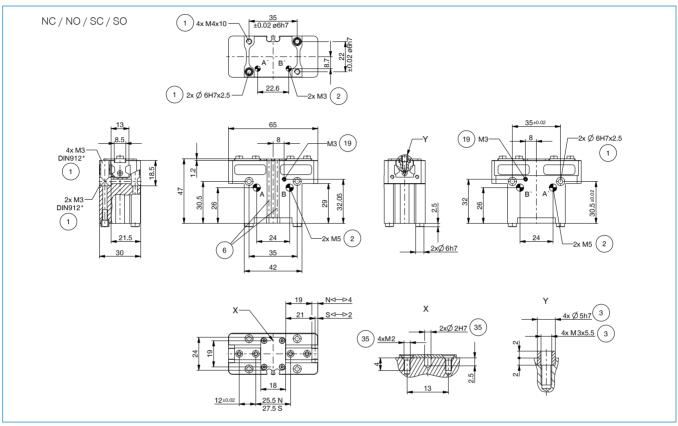
	► Technical Data - Protector Version					
Order no.	GPP5004NP	GPP5004NCP	GPP5004NOP	GPP5004SP	GPP5004SCP	GPP5004SOP
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**
Weight [kg]	0.25	0.3	0.3	0.25	0.3	0.3

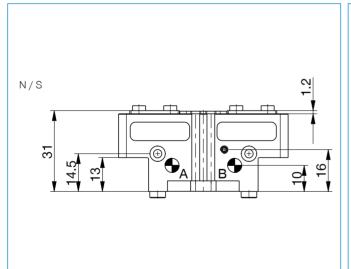
	► Technical Data - High Temperature Version					
Order no.	GPP5004NT	GPP5004NCT	GPP5004NOT	GPP5004ST	GPP5004SCT	GPP5004SOT
Operating temperature [°C]	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130

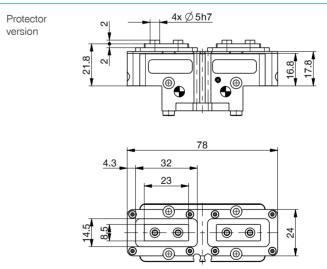
<sup>\*</sup>All data measured at 6 bar

<sup>\* \*</sup> with purged air

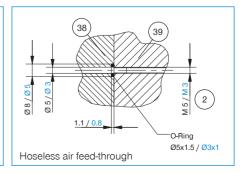
#### **TECHNICAL DRAWINGS**



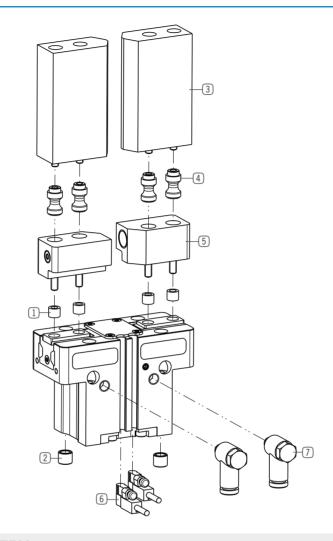




- 1 Gripper attachment
- 2 Energy supply
- 3 Fixing for gripper finger
- 6 Integrated slot for magnetic field sensor
- (19) Air purge connection option
- 35 Attachment option for customer-specific fittings
- 38 Adapter
- 39 Gripper
- Air connection (close)
- B Air connection (open)
- Air connection,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



## **INSTALLATION SIZE GPP5004**



#### **► INCLUDED IN DELIVERY**



015761





Centering Disc

024230

#### **▶** RECOMMENDED ACCESSORIES



UB5004AL



Universal jaw steel

**UB5004ST** 



part-set WB5004L



Changeable jaw, fix-part



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

WB5004F







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



2-Position-Sensor Cable 0,3 m - Connector M8 MFSP2SKHC-01



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



Plug-in connector Straight Ca-

KAG500



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



able Straight - Connector M12 S12-G-3



Angled Fittings - Quick Connect Style WVM5



Straight Fittings - Quick Connect Style GVM5



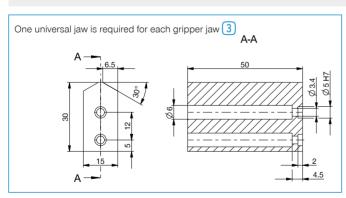
Quick Exhaust Valve

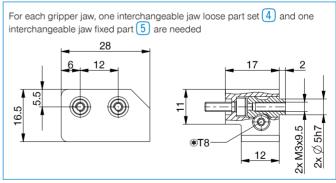
DEV04



DSV1-8

#### > TECHNICAL DRAWINGS ACCESSORIES

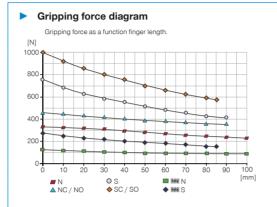




## **INSTALLATION SIZE GPP5006**

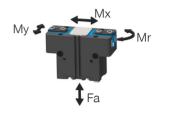
#### **▶ PRODUCT SPECIFICATIONS**





#### 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.	GPP5006N	GPP5006NC	GPP5006NO	GPP5006S	GPP5006SC	GPP5006SO
Stroke per jaw [mm]	6	6	6	3	3	3
Gripping force in closing [N]	330	455		740	1020	
Gripping force in opening [N]	360		485	800		1080
Gripping force secured by spring min. [N]		125	125		280	280
Closing time [s]	0.025	0.015	0.035	0.025	0.015	0.035
Opening time [s]	0.025	0.035	0.015	0.025	0.035	0.015
Weight per jaw max. [kg]	0.4	0.4	0.4	0.4	0.4	0.4
Length of the gripper fingers max. [mm]	100	90	90	90	85	85
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Operating temperature [°C]	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90
Air volume per cycle [cm³]	11	24	24	11	24	24
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	0.28	0.35	0.35	0.28	0.35	0.35

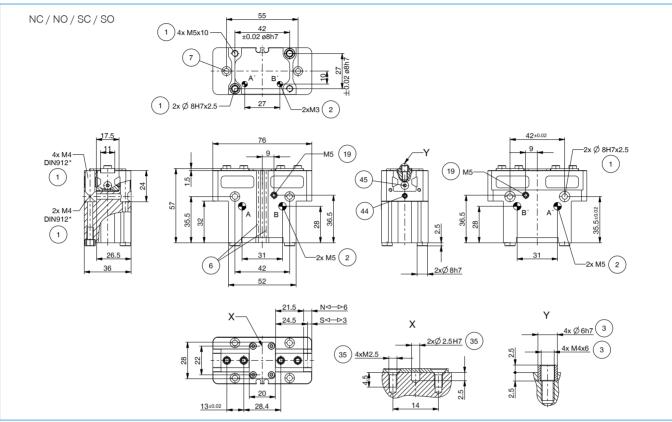
	Technical	► Technical Data - Protector Version							
Order no.	GPP5006NP	GPP5006NCP	GPP5006NOP	GPP5006SP	GPP5006SCP	GPP5006SOP			
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**			
Weight [kg]	0.37	0.44	0.44	0.37	0.44	0.44			

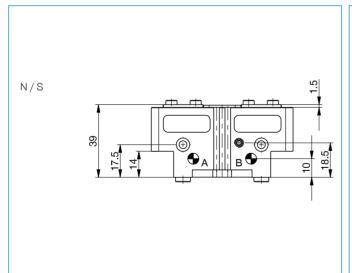
	Technical Data - High Temperature Version							
Order no.	GPP5006NT	GPP5006NCT	GPP5006NOT	GPP5006ST	GPP5006SCT	GPP5006SOT		
Operating temperature [°C]	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130		

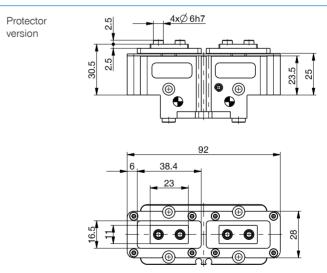
<sup>\*</sup>All data measured at 6 bar

<sup>\* \*</sup> with purged air

#### **TECHNICAL DRAWINGS**

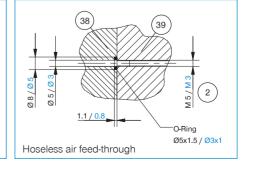




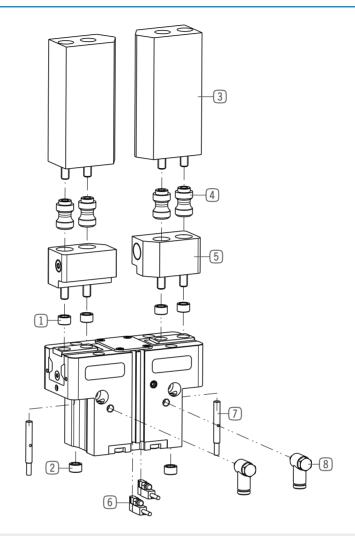


- 1 Gripper attachment
- 2 Energy supply
- 3 Fixing for gripper finger
- 6 Integrated slot for magnetic field sensor
- 7 Mounting block
- 19 Air purge connection option
- 35 Attachment option for customer-specific fittings
- 38 Adapter

- 39 Gripper
- (4) Clamp for sensor
- 45 Switch cam adjustment
- (A) Air connection (close)
- B Air connection (open)
- Air connection, alternative (close)
- B Air connection, alternative (open)



## **INSTALLATION SIZE GPP5006**



#### **► INCLUDED IN DELIVERY**





Centering Disc

024230

#### ► RECOMMENDED ACCESSORIES



UB5006AL



Universal jaw steel

**UB5006ST** 



part-set

WB5006L



Changeable jaw, fix-part

WB5006F



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

MFS103SKHC



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

MFS204SKHC



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

MFSP2SKHC-01



Inductive Proximity Switch

NJ4-E2SK-01



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

KAW500



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

KAG500



Angled Fittings - Quick Connect Style

WVM5



Straight Fittings - Quick Connect Style

GVM5



**DSV1-8** 



Compensation module N / S

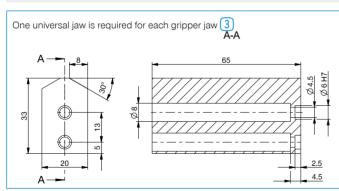
ZUB5006PNS

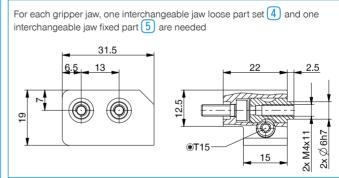


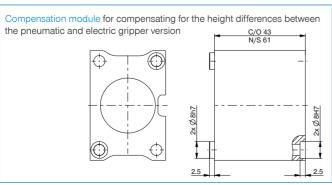
Compensation module NC / NO / SC / SO

ZUB5006PCO

#### **▶ TECHNICAL DRAWINGS ACCESSORIES**



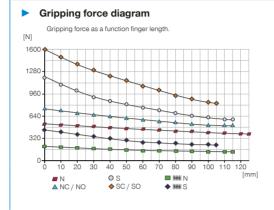




## **INSTALLATION SIZE GPP5008**

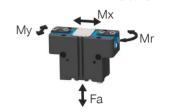
#### **▶ PRODUCT SPECIFICATIONS**





#### 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.	GPP5008N	GPP5008NC	GPP5008NO	GPP5008S	GPP5008SC	GPP5008SO	
Stroke per jaw [mm]	8	8	8	4	4	4	
Gripping force in closing [N]	520	710		1150	1580		
Gripping force in opening [N]	560		750	1240		1670	
Gripping force secured by spring min. [N]		190	190		430	430	
Closing time [s]	0.035	0.025	0.045	0.035	0.025	0.045	
Opening time [s]	0.035	0.045	0.025	0.035	0.045	0.025	
Weight per jaw max. [kg]	0.7	0.7	0.7	0.7	0.7	0.7	
Length of the gripper fingers max. [mm]	125	115	115	115	105	105	
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01	
Operating pressure min. [bar]	3	4	4	3	4	4	
Operating pressure max. [bar]	8	7	7	8	7	7	
Operating temperature [°C]	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90	
Air volume per cycle [cm³]	22	43	43	22	43	43	
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64	
Weight [kg]	0.53	0.63	0.63	0.53	0.63	0.63	

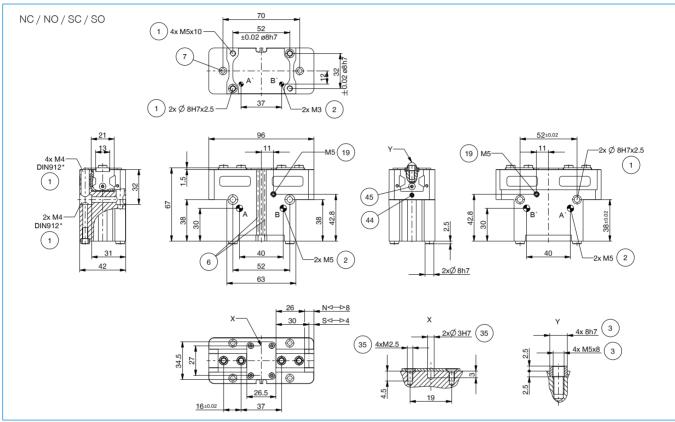
	► Technical Data - Protector Version							
Order no.	GPP5008NP	GPP5008NCP	GPP5008NOP	GPP5008SP	GPP5008SCP	GPP5008SOP		
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**		
Weight [kg]	0.66	0.76	0.76	0.66	0.76	0.76		

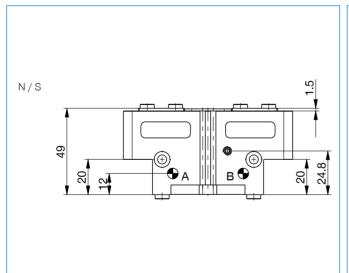
	► Technical Data - High Temperature Version							
Order no.	GPP5008NT	GPP5008NCT	GPP5008NOT	GPP5008ST	GPP5008SCT	GPP5008SOT		
Operating temperature [°C]	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130		

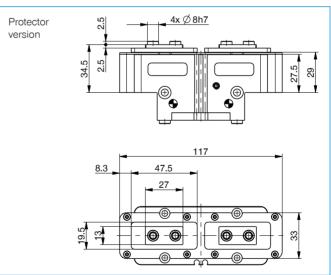
<sup>\*</sup>All data measured at 6 bar

<sup>\* \*</sup> with purged air

#### **TECHNICAL DRAWINGS**

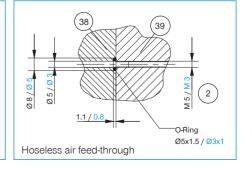




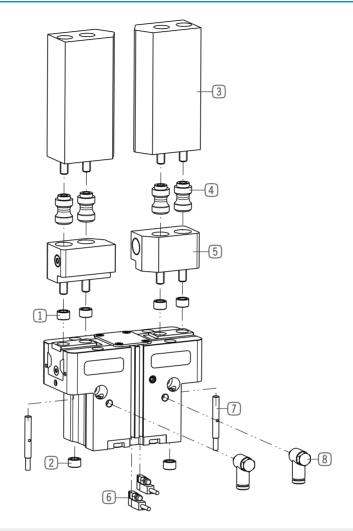


- 1 Gripper attachment
- 2 Energy supply
- 3 Fixing for gripper finger
- 6 Integrated slot for magnetic field sensor
- 7 Mounting block
- 19 Air purge connection option
- 35 Attachment option for customer-specific fittings
- 38 Adapter

- 39 Gripper
- (4) Clamp for sensor
- 45 Switch cam adjustment
- Air connection (close)
- B Air connection (open)
- Air connection, alternative (close)
- B Air connection, alternative (open)



## **INSTALLATION SIZE GPP5008**



#### **► INCLUDED IN DELIVERY**



Centering Disc

024231

#### ► RECOMMENDED ACCESSORIES



UB5008AL



Universal jaw steel

**UB5008ST** 



Changeable jaw, loose part-set WB5008L



Changeable jaw, fix-part



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

WB5008F



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



2-Position-Sensor Cable 0,3 m - Connector M8 MFSP2SKHC-01



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



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



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

KAW500



Angled Fittings - Quick Connect Style WVM5

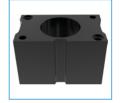


Straight Fittings - Quick Connect Style **GVM5** 



Pressure Safety Valve

**DSV1-8** 



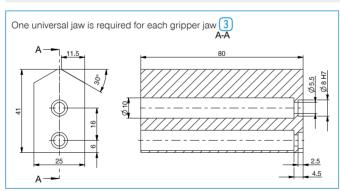
Compensation module N / S

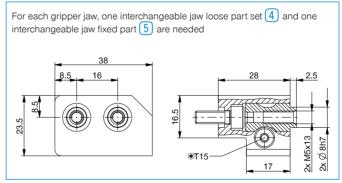


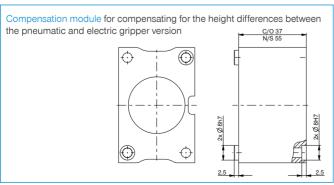
Compensation module NC / NO / SC / SO ZUB5008PCO

ZUB5008PNS

#### **TECHNICAL DRAWINGS ACCESSORIES**



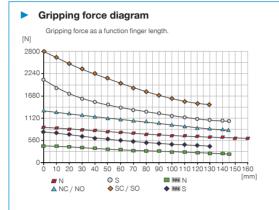




## **INSTALLATION SIZE GPP5010**

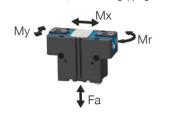
#### **▶ PRODUCT SPECIFICATIONS**





#### 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

GPP5010SOP IP67\*\* 1.31

#### TECHNICAL DATA

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

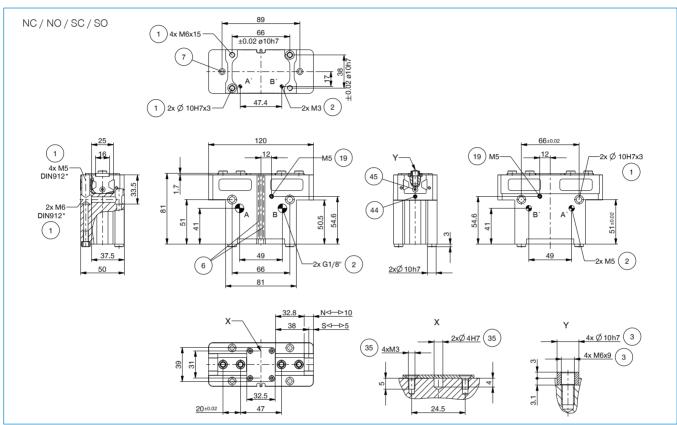
	► Technical Data - Protector Version							
Order no.	GPP5010NP	GPP5010NCP	GPP5010NOP	GPP5010SP	GPP5010SCP			
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**			
Weight [kg]	0.99	1.31	1.31	0.99	1.31			

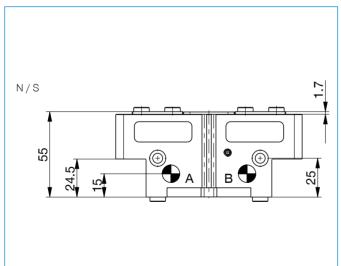
	Technical	Technical Data - High Temperature Version						
Order no.	GPP5010NT	GPP5010NCT	GPP5010NOT	GPP5010ST	GPP5010SCT	GPP5010SOT		
Operating temperature [°C]	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130		

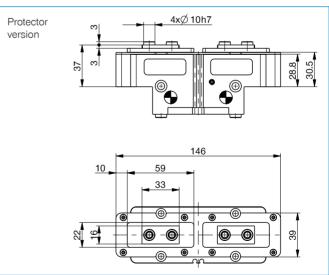
<sup>\*</sup>All data measured at 6 bar

<sup>\* \*</sup> with purged air

#### **TECHNICAL DRAWINGS**

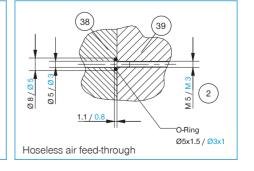




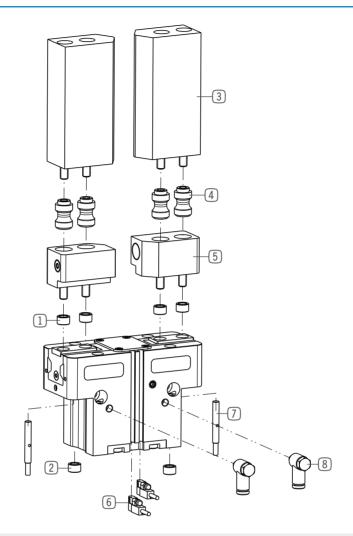


- 1 Gripper attachment
- 2 Energy supply
- 3 Fixing for gripper finger
- 6 Integrated slot for magnetic field sensor
- 7 Mounting block
- Air purge connection option
- 35 Attachment option for customer-specific fittings
- 38 Adapter

- 39 Gripper
- (4) Clamp for sensor
- 45 Switch cam adjustment
- Air connection (close)
- (apen)
- Air connection, alternative (close)
- Air connection, alternative (open)



## **INSTALLATION SIZE GPP5010**



#### **► INCLUDED IN DELIVERY**



Centering Disc

018187

#### ► RECOMMENDED ACCESSORIES



ormrorour jurr un

**UB5010AL** 

3

Universal jaw steel

**UB5010ST** 



Changeable jaw, loose part-set

WB5010L



Changeable jaw, fix-part

WB5010F



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

MFS103SKHC



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



2-Position-Sensor Cable 0,3 m - Connector M8 MFSP2SKHC-01



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



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

KAW500



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

KAG500



Angled Fittings - Quick Connect Style WV1-8X6



Straight Fittings - Quick Connect Style **GV1-8X6** 



Pressure Safety Valve

**DSV1-8** 



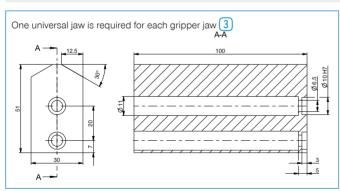
Compensation module N / S

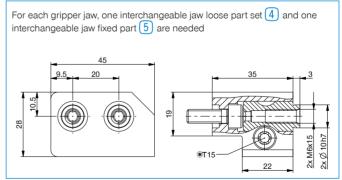


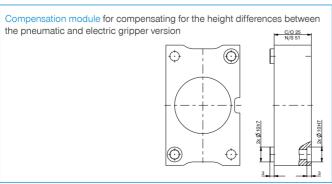
Compensation module NC / NO / SC / SO ZUB5010PCO

ZUB5010PNS

#### ► TECHNICAL DRAWINGS ACCESSORIES



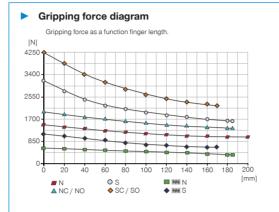




## **INSTALLATION SIZE GPP5013**

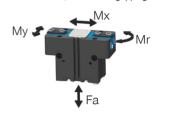
#### **▶ PRODUCT SPECIFICATIONS**





#### 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.	GPP5013N	GPP5013NC	GPP5013NO	GPP5013S	GPP5013SC	GPP5013SO	
Stroke per jaw [mm]	13	13	13	6	6	6	
Gripping force in closing [N]	1410	1920		3100	4220		
Gripping force in opening [N]	1490		1860	3280		4400	
Gripping force secured by spring min. [N]		510	510		1120	1120	
Closing time [s]	0.09	0.07	0.11	0.09	0.07	0.11	
Opening time [s]	0.09	0.11	0.08	0.09	0.11	0.08	
Weight per jaw max. [kg]	2.4	2.4	2.4	2.4	2.4	2.4	
Length of the gripper fingers max. [mm]	200	185	185	185	170	170	
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01	
Operating pressure min. [bar]	3	4	4	3	4	4	
Operating pressure max. [bar]	8	7	7	8	7	7	
Operating temperature [°C]	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90	
Air volume per cycle [cm³]	88	171	171	88	171	171	
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64	
Weight [kg]	1.5	1.9	1.9	1.5	1.9	1.9	

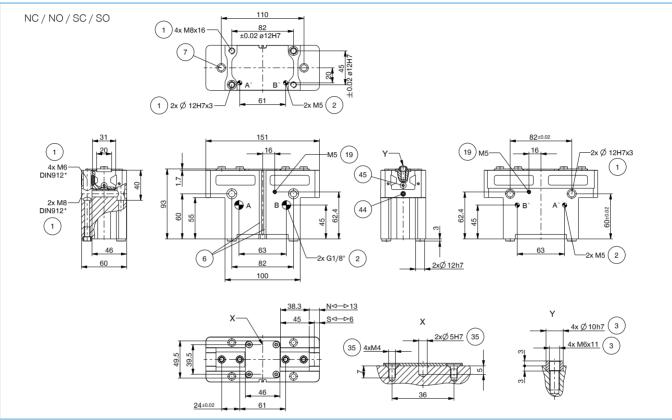
	► Technical Data - Protector Version							
Order no.	GPP5013NP	GPP5013NCP	GPP5013NOP	GPP5013SP	GPP5013SCP	GPP5013SOP		
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**		
Weight [kg]	1.86	2.26	2.26	1.86	2.26	2.26		

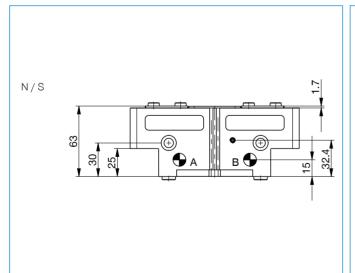
	Technical Data - High Temperature Version							
Order no.	GPP5013NT	GPP5013NCT	GPP5013NOT	GPP5013ST	GPP5013SCT	GPP5013SOT		
Operating temperature [°C]	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130		

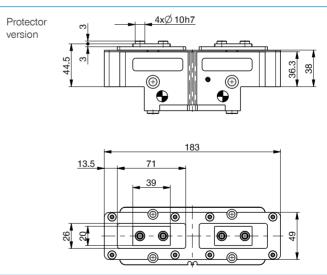
<sup>\*</sup>All data measured at 6 bar

<sup>\* \*</sup> with purged air

#### **TECHNICAL DRAWINGS**

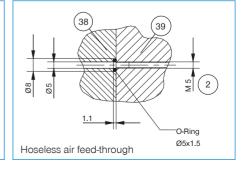






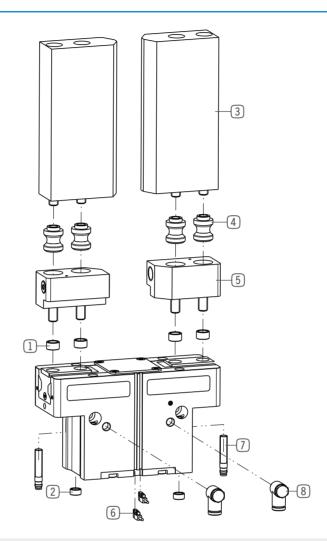
- 1 Gripper attachment
- 2 Energy supply
- 3 Fixing for gripper finger
- 6 Integrated slot for magnetic field sensor
- 7 Mounting block
- 19 Air purge connection option
- 35 Attachment option for customer-specific fittings
- 38 Adapter

- 39 Gripper
- (4) Clamp for sensor
- 45 Switch cam adjustment
- Air connection (close)
- (apen)
- Air connection, alternative (close)
- Air connection, alternative (open)



33

## **INSTALLATION SIZE GPP5013**



#### **► INCLUDED IN DELIVERY**



Centering Disc





019280

#### **▶** RECOMMENDED ACCESSORIES



UB5013AL



Universal jaw steel

UB5013ST



part-set

WB5013L



Changeable jaw, fix-part

WB5013F



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

MFS103SKHC



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

MFS204SKHC



2-Position-Sensor Cable 0,3 m - Connector M8 MFSP2SKHC-01



Inductive proximity switch

NJ8-E2S



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

KAW500



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

KAG500



able Straight - Connector M8

S8-G-3



Angled Fittings - Quick Connect Style WV1-8X6



Connect Style



GV1-8X6



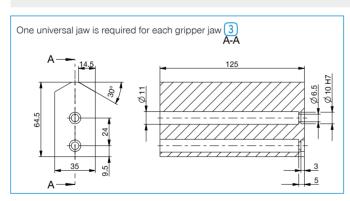
Quick Exhaust Valve

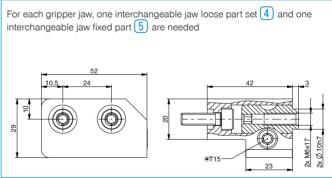
DEV06



#### DSV1-8

#### > TECHNICAL DRAWINGS ACCESSORIES

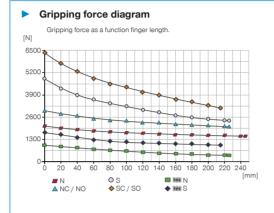




## **INSTALLATION SIZE GPP5016**

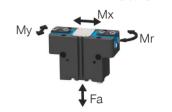
#### **▶ PRODUCT SPECIFICATIONS**





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

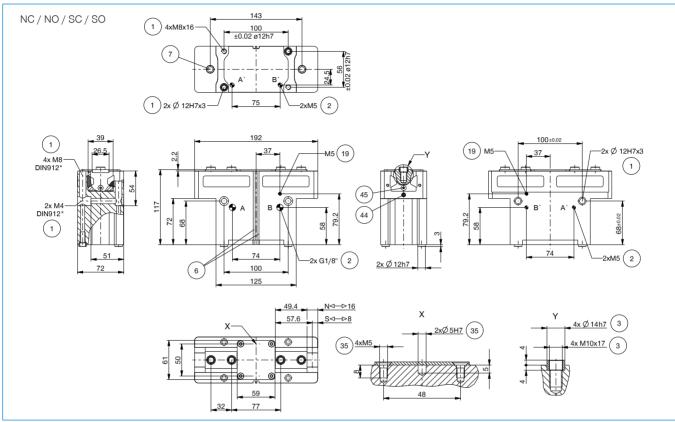
	► Technical Data - Protector Version						
Order no.	GPP5016NP	GPP5016NCP	GPP5016NOP	GPP5016SP	GPP5016SCP	GPP5016SOP	
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**	
Weight [kg]	3.6	4.4	4.4	3.6	4.4	4.4	

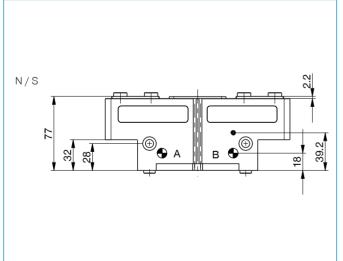
	lechnical Data - High Temperature Version						
Order no.	GPP5016NT	GPP5016NCT	GPP5016NOT	GPP5016ST	GPP5016SCT	GPP5016SOT	
Operating temperature [°C]	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130	

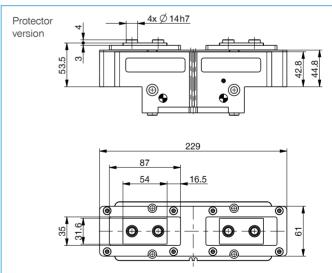
<sup>\*</sup>All data measured at 6 bar

<sup>\* \*</sup> with purged air

#### **TECHNICAL DRAWINGS**

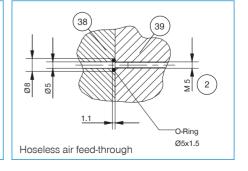




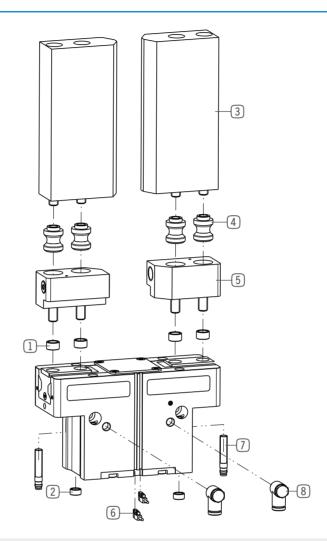


- 1 Gripper attachment
- 2 Energy supply
- 3 Fixing for gripper finger
- 6 Integrated slot for magnetic field sensor
- 7 Mounting block
- 19 Air purge connection option
- 35 Attachment option for customer-specific fittings
- 38 Adapter

- 39 Gripper
- (4) Clamp for sensor
- 45 Switch cam adjustment
- Air connection (close)
- B Air connection (open)
- Air connection, alternative (close)
- B Air connection, alternative (open)



## **INSTALLATION SIZE GPP5016**



#### **► INCLUDED IN DELIVERY**



Centering Disc





Centering Disc

019280

### **▶** RECOMMENDED ACCESSORIES



UB5016AL



Universal jaw steel

**UB5016ST** 



part-set WB5016L



Changeable jaw, fix-part



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

WB5016F





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



2-Position-Sensor Cable 0,3 m - Connector M8 MFSP2SKHC-01



Inductive proximity switch NJ8-E2S



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



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

MFS204SKHC





Angled Fittings - Quick Connect Style WV1-8X6



Straight Fittings - Quick Connect Style



Quick Exhaust Valve



Pressure Safety Valve

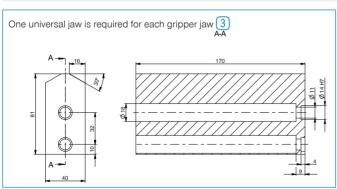
able Straight - Connector M8 S8-G-3

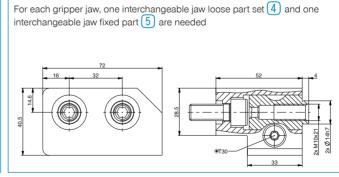
GV1-8X6

DEV06

DSV1-8

#### > TECHNICAL DRAWINGS ACCESSORIES



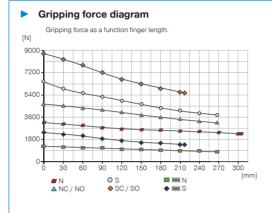


# 2-JAW PARALLEL GRIPPERS

# **INSTALLATION SIZE GPP5025**

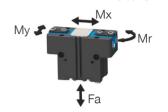
#### **▶ PRODUCT SPECIFICATIONS**





#### Forces and moments

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



0
5
5
00
2

### TECHNICAL DATA

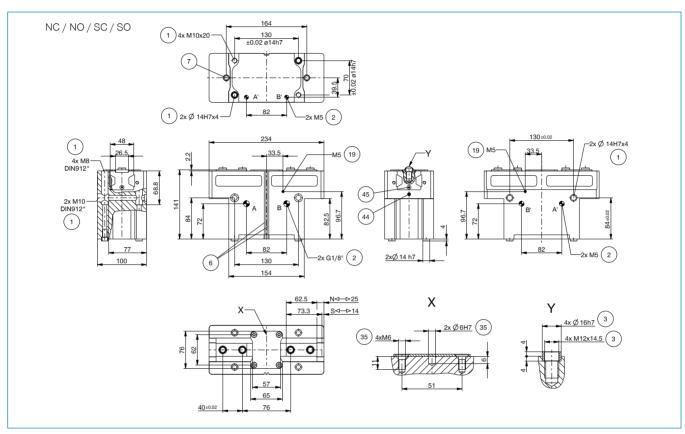
	Technical	Data*				
Order no.	GPP5025N	GPP5025NC	GPP5025NO	GPP5025S	GPP5025SC	GPP5025SO
Stroke per jaw [mm]	25	25	25	14	14	14
Gripping force in closing [N]	3280	4510		6360	8730	
Gripping force in opening [N]	3490		4710	6760		9130
Gripping force secured by spring min. [N]		1220	1220		2370	2370
Closing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

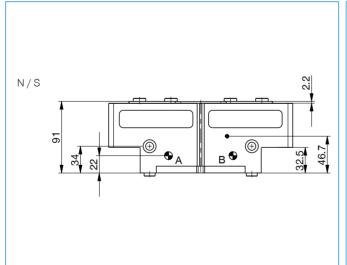
	► Technical Data - Protector Version					
Order no.	GPP5025NP	GPP5025NCP	GPP5025NOP	GPP5025SP	GPP5025SCP	GPP5025SOP
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**
Weight [kg]	7.20	8.75	8.75	7.2	8.75	8.75

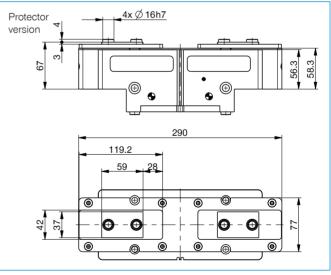
	lechnical Data - High Temperature Version					
Order no.	GPP5025NT	GPP5025NCT	GPP5025NOT	GPP5025ST	GPP5025SCT	GPP5025SOT
Operating temperature [°C]	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130

<sup>\*</sup>All data measured at 6 bar

<sup>\* \*</sup> with purged air

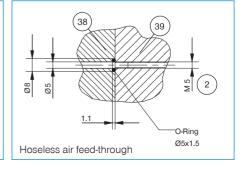






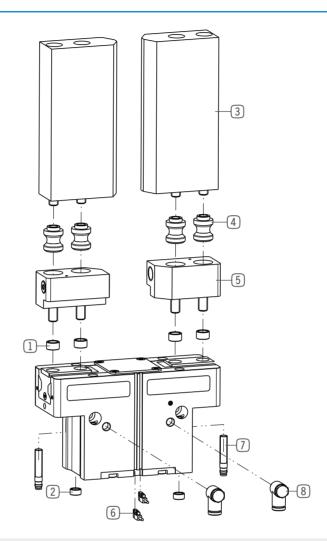
- 1 Gripper attachment
- 2 Energy supply
- 3 Fixing for gripper finger
- 6 Integrated slot for magnetic field sensor
- 7 Mounting block
- 19 Air purge connection option
- 35 Attachment option for customer-specific fittings
- 38 Adapter

- 39 Gripper
- (4) Clamp for sensor
- 45 Switch cam adjustment
- Air connection (close)
- B Air connection (open)
- Air connection, alternative (close)
- B Air connection, alternative (open)



# 2-JAW PARALLEL GRIPPERS

# **INSTALLATION SIZE GPP5025**



### **► INCLUDED IN DELIVERY**







Centering Disc

019387

### **▶** RECOMMENDED ACCESSORIES



UB5025AL



Universal jaw steel

UB5025ST



part-set WB5025L



Changeable jaw, fix-part



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

WB5025F





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



2-Position-Sensor Cable 0,3 m - Connector M8 MFSP2SKHC-01



Inductive proximity switch NJ8-E2S



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



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

KAW500



able Straight - Connector M8 S8-G-3



Angled Fittings - Quick Connect Style WV1-8X8



Straight Fittings - Quick Connect Style GV1-8X8



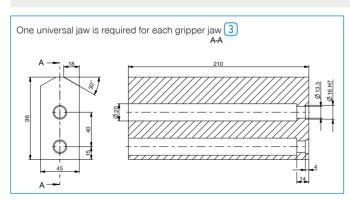
Quick Exhaust Valve

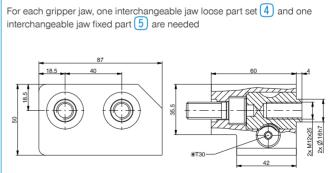


DSV1-8

DEV08

#### > TECHNICAL DRAWINGS ACCESSORIES



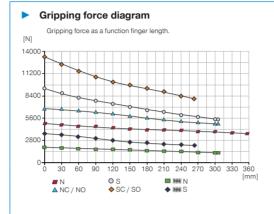


# 2-JAW PARALLEL GRIPPERS

# **INSTALLATION SIZE GPP5030**

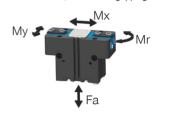
#### **▶ PRODUCT SPECIFICATIONS**





#### Forces and moments

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



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

### TECHNICAL DATA

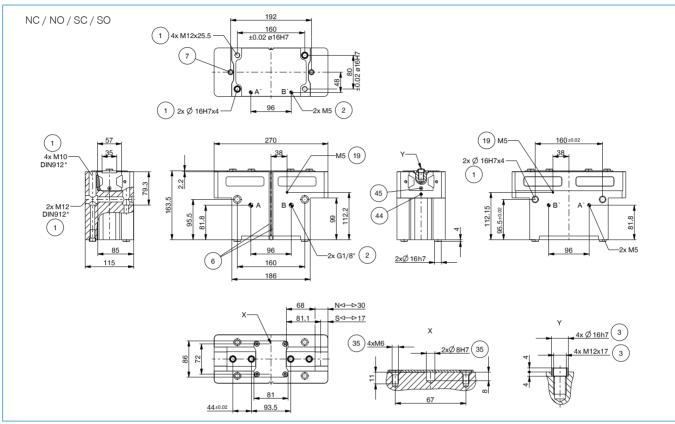
	Technical	Data*				
Order no.	GPP5030N	GPP5030NC	GPP5030NO	GPP5030S	GPP5030SC	GPP5030SO
Stroke per jaw [mm]	30	30	30	17	17	17
Gripping force in closing [N]	5000	6850		9600	13160	
Gripping force in opening [N]	5210		7060	9990		13550
Gripping force secured by spring min. [N]		1850	1850		3560	3560
Closing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

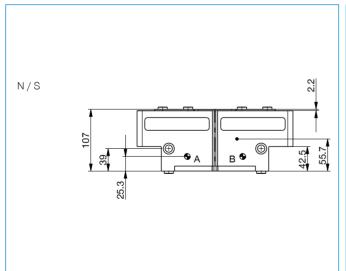
	► Technical Data - Protector Version					
Order no.	GPP5030NP	GPP5030NCP	GPP5030NOP	GPP5030SP	GPP5030SCP	GPP5030SOP
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**
Weight [kg]	10.9	13.7	13.7	10.9	13.7	13.7

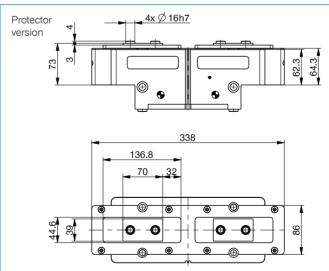
	Technical Data - High Temperature Version					
Order no.	GPP5030NT	GPP5030NCT	GPP5030NOT	GPP5030ST	GPP5030SCT	GPP5030SOT
Operating temperature [°C]	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130

<sup>\*</sup>All data measured at 6 bar

<sup>\* \*</sup> with purged air

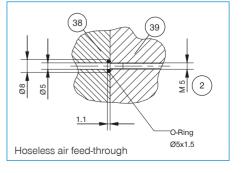






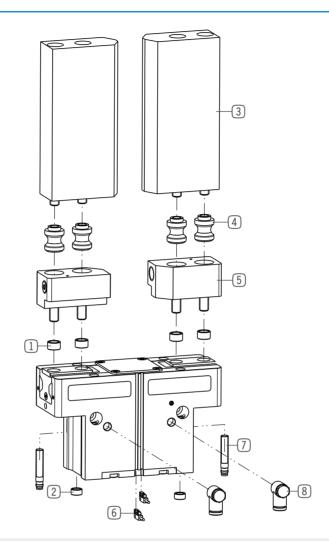
- 1 Gripper attachment
- 2 Energy supply
- 3 Fixing for gripper finger
- 6 Integrated slot for magnetic field sensor
- 7 Mounting block
- 19 Air purge connection option
- 35 Attachment option for customer-specific fittings
- 38 Adapter

- 39 Gripper
- (4) Clamp for sensor
- 45 Switch cam adjustment
- Air connection (close)
- B Air connection (open)
- Air connection, alternative (close)
- B Air connection, alternative (open)



# 2-JAW PARALLEL GRIPPERS

# **INSTALLATION SIZE GPP5030**



### **► INCLUDED IN DELIVERY**



Centering Disc

030529

### **▶** RECOMMENDED ACCESSORIES



UB5030AL



Universal jaw steel

**UB5030ST** 



part-set WB5030L



Changeable jaw, fix-part



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

WB5030F



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



2-Position-Sensor Cable 0,3 m - Connector M8 MFSP2SKHC-01



Inductive proximity switch NJ8-E2S



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



ble 5m - Socket M8 (female) KAG500

KAW500



able Straight - Connector M8

S8-G-3



Angled Fittings - Quick Connect Style WV1-8X8



Straight Fittings - Quick Connect Style GV1-8X8



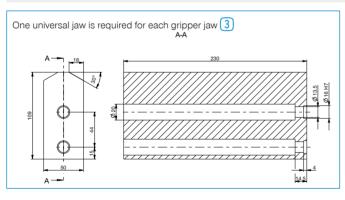
Quick Exhaust Valve

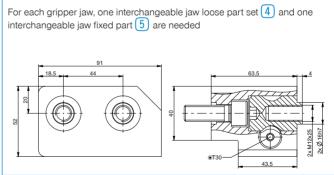


DSV1-8

DEV08

#### > TECHNICAL DRAWINGS ACCESSORIES





# 3-JAW CONCENTRIC GRIPPERS SERIES GPD5000

#### **▶ PRODUCT ADVANTAGES**



#### "The Universal One"

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

### ► THE BEST PRODUCT FOR YOUR APPLICATION



Our products love the challenge!

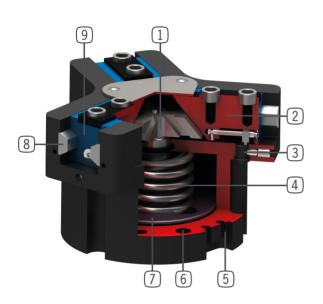
Extreme conditions, all over the world—our tried and tested components and systems give you limitless possibilities: Find the best product for your specific use: www.zimmer-group.com

# HOW TO ORDER CORRECTLY

 The product order numbers are arranged according to this diagram:

Order no.	GPD5010			
Basis version		N		
High force		S		
For external gripping, self-locking, spring closing			С	
For internal gripping, self-locking, spring opening			0	
Protector version IP67 for use in adverse environments (wi	th purged air)			Р
temperature-resistant version to 130 °C				Т

#### **BENEFITS IN DETAIL**



#### 1 Positively driven wedge hook transmission

- high forces and moments capacity
- Synchronized gripper jaw movement

#### (2) Gripper jaw

- DLC coated to protect against corrosion
- Gripper fingers mounted using removable centring sleeves
- Lubricated for life via incorporated lubrication slots

#### 3 Mounting block

- mounting for inductive proximity switch

#### 4 Integrated gripping force safety device

- Spring built into cylinder chamber as an energy store

#### (5) Sensing slot

- mounting and positioning of magnetic field sensors

#### 6 Mounting and positioning

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

- Double-acting pneumatic rotor cylinder

#### 8 Steel Linear Guide

- Steel in steel guide
- Enables use of extremely long gripper fingers

#### 9 Dual lip seal

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

#### **TERMS**

**Gripping force:** 

arithmetic sum of the individual forces occuring at the jaws

Closing/opening time:

Time required for the gripper jaws to travel the entire stroke distance

Repeatability:

at end stops after 50/100 consecutive cycles

Cycle: Maintenance: Path that the pistons travel for a complete opening and closing movement

recommended at 30 mil. cycles (please see the installation instructions, download from www. zimmer-group.com)

# **INSTALLATION SIZE GPD5003**

#### **▶ PRODUCT SPECIFICATIONS**



# Gripping force diagram Gripping force as a function finger length 270 180 ■ N ▲ NC / NO

#### Forces and moments

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



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

### ► TECHNICAL DATA

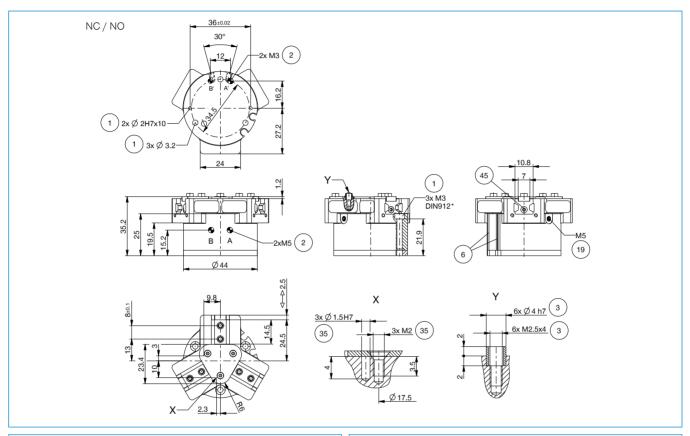
	► Technical Data*		
Order no.	GPD5003N	GPD5003NC	GPD5003NO
Stroke per jaw [mm]	2.5	2.5	2.5
Gripping force in closing [N]	310	440	
Gripping force in opening [N]	335		465
Gripping force secured by spring min. [N]		130	130
Closing time [s]	0.015	0.01	0.02
Opening time [s]	0.015	0.02	0.01
Weight per jaw max. [kg]	0.12	0.12	0.12
Length of the gripper fingers max. [mm]	65	60	60
Repetition accuracy +/- [mm]	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4
Operating pressure max. [bar]	8	7	7
Operating temperature [°C]	-10 +90	-10 +90	10 +90
Air volume per cycle [cm3]	4.2	9.5	9.5
Protection to IEC 60529	IP64	IP64	IP64
Weight [kg]	0.14	0.18	0.18

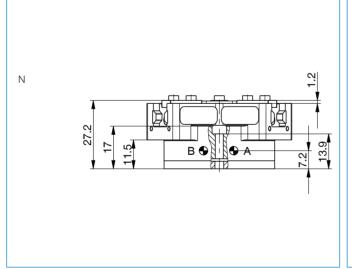
	► Technical Data - Protector Version				
Order no.	GPD5003NP	GPD5003NCP	GPD5003NOP		
Protection to IEC 60529	IP67**	IP67**	IP67**		
Weight [kg]	0.18	0.22	0.22		

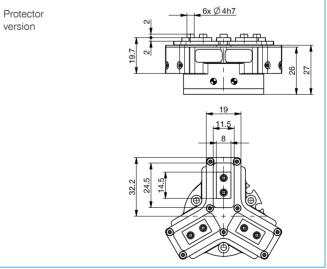
	► Technical Data - High Temperature Version						
Order no.	GPD5003NT	GPD5003NCT	GPD5003NOT				
Operating temperature [°C]	-10 +130	-10 +130	-10 +130				

<sup>\*</sup>All data measured at 6 bar

<sup>\* \*</sup> with purged air

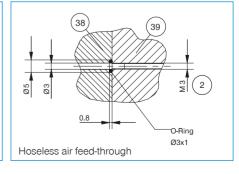




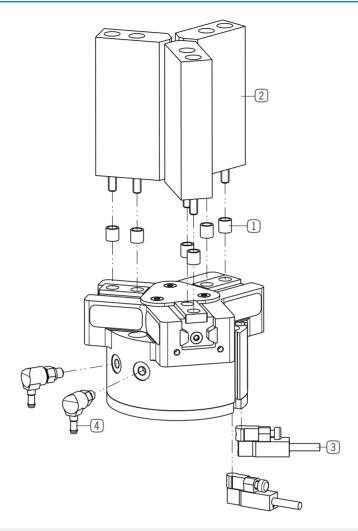


- 1 Gripper attachment
- 2 Energy supply
- 3 Fixing for gripper finger
- 6 Integrated slot for magnetic field sensor
- (19) Air purge connection option
- 35 Attachment option for customer-specific fittings
- 38 Adapter

- 39 Gripper
- 45 Switch cam adjustment
- Air connection (close)
- B Air connection (open)
- Air connection, alternative (close)
- Air connection, alternative (open)



# **INSTALLATION SIZE GPD5003**



### **► INCLUDED IN DELIVERY**



Centering Disc

DST06510

### **▶** RECOMMENDED ACCESSORIES



UB5003AL



Universal jaw steel

**UB5003ST** 



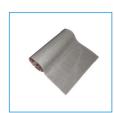
Pressure piece N / S

ADS5004-01



Pressure piece NC / NO / SC / SO

ADS5004-02



Rubber Coated Tape Smooth

KF50G



Rubber Coated Tape

KF50N



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

MFS103SKHC



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

MFS204SKHC



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

MFSP2SKHC-01



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

KAW500



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

KAG500



able Straight - Connector M12

S12-G-3



Angled Fittings - Barb Style Connection WVM3



Straight Fittings - Barb Style Connection

GVM3

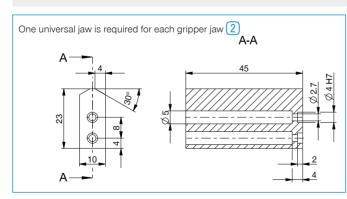
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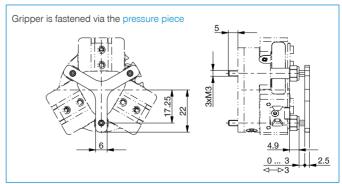


Pressure Safety Valve

DSV1-8

# **▶ TECHNICAL DRAWINGS ACCESSORIES**





# **INSTALLATION SIZE GPD5004**

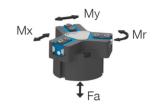
#### **▶ PRODUCT SPECIFICATIONS**



# Gripping force diagram 1500 900 600 300

#### Forces and moments

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



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

### TECHNICAL DATA

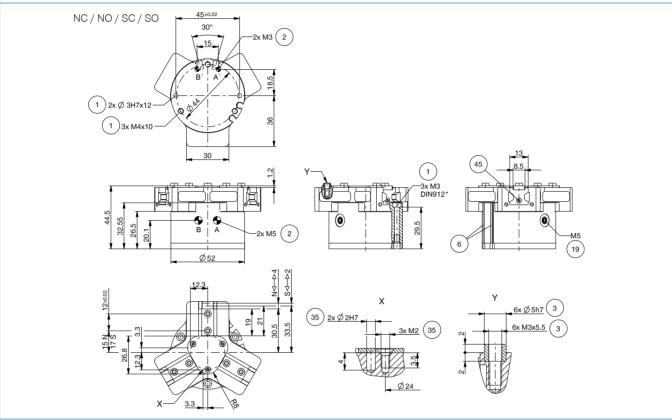
	► Technical Data*					
Order no.	GPD5004N	GPD5004NC	GPD5004NO	GPD5004S	GPD5004SC	GPD5004SO
Stroke per jaw [mm]	4	4	4	2	2	2
Gripping force in closing [N]	460	650		1010	1430	
Gripping force in opening [N]	500		690	1100		1520
Gripping force secured by spring min. [N]		190	190		420	420
Closing time [s]	0.025	0.018	0.028	0.025	0.018	0.028
Opening time [s]	0.025	0.028	0.018	0.025	0.028	0.018
Weight per jaw max. [kg]	0.2	0.2	0.2	0.2	0.2	0.2
Length of the gripper fingers max. [mm]	80	75	75	75	70	70
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Operating temperature [°C]	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90
Air volume per cycle [cm³]	11	21	21	11	21	21
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	0.27	0.33	0.33	0.27	0.33	0.33

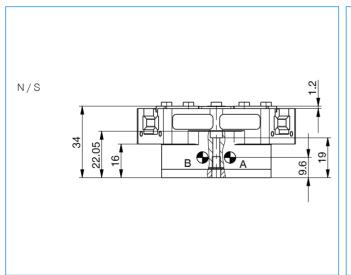
	► Technical Data - Protector Version							
Order no.	GPD5004NP	GPD5004NCP	GPD5004NOP	GPD5004SP	GPD5004SCP	GPD5004SOP		
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**		
Weight [kg]	0.35	0.41	0.41	0.35	0.41	0.41		

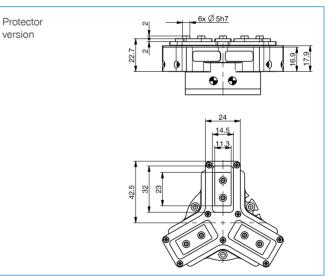
	► Technical Data - High Temperature Version						
Order no.	GPD5004NT	GPD5004NCT	GPD5004NOT	GPD5004ST	GPD5004SCT	GPD5004SOT	
Operating temperature [°C]	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130	

<sup>\*</sup>All data measured at 6 bar

<sup>\* \*</sup> with purged air

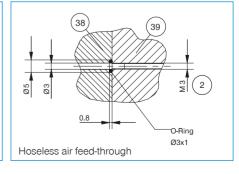




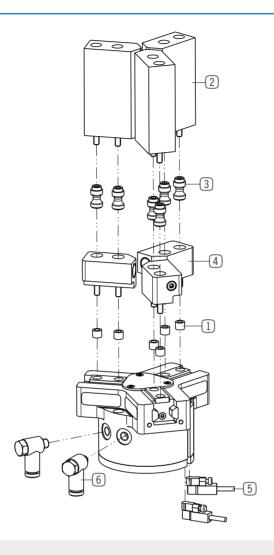


- 1 Gripper attachment
- 2 Energy supply
- 3 Fixing for gripper finger
- 6 Integrated slot for magnetic field sensor
- (19) Air purge connection option
- 35 Attachment option for customer-specific fittings
- 38 Adapter

- 39 Gripper
- 45 Switch cam adjustment
- Air connection (close)
- B Air connection (open)
- Air connection, alternative (close)
- Air connection, alternative (open)



# **INSTALLATION SIZE GPD5004**



### **► INCLUDED IN DELIVERY**



Centering Disc

015761

### **▶** RECOMMENDED ACCESSORIES



UB5004AL



Universal jaw steel

**UB5004ST** 



Pressure piece N / S

ADS5004-01



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



part-set

WB5004L



Changeable jaw. fix-part

WB5004F



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



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



2-Position-Sensor Cable 0,3 m - Connector M8 MFSP2SKHC-01



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

KAW500



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

KAG500



able Straight - Connector M12 S12-G-3



Angled Fittings - Quick Connect Style WVM5



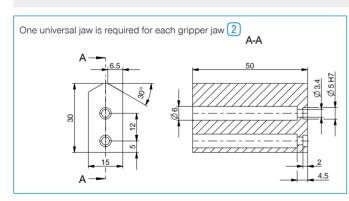
Straight Fittings - Quick Connect Style GVM5

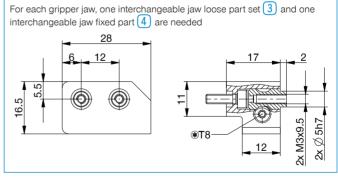


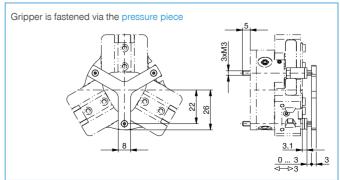
Pressure Safety Valve

**DSV1-8** 

#### **▶ TECHNICAL DRAWINGS ACCESSORIES**



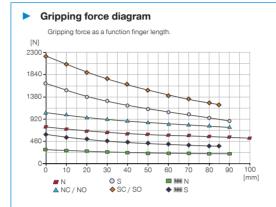




# **INSTALLATION SIZE GPD5006**

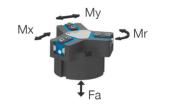
#### **▶ PRODUCT SPECIFICATIONS**





#### 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

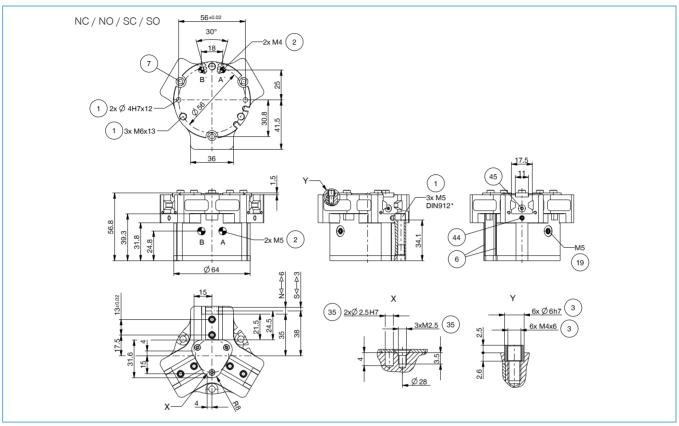
	► Technical Data*					
Order no.	GPD5006N	GPD5006NC	GPD5006NO	GPD5006S	GPD5006SC	GPD5006SO
Stroke per jaw [mm]	6	6	6	3	3	3
Gripping force in closing [N]	740	1020		1620	2240	
Gripping force in opening [N]	800		1080	1750		2370
Gripping force secured by spring min. [N]		280	280		620	620
Closing time [s]	0.028	0.018	0.038	0.028	0.018	0.038
Opening time [s]	0.028	0.038	0.018	0.028	0.038	0.018
Weight per jaw max. [kg]	0.4	0.4	0.4	0.4	0.4	0.4
Length of the gripper fingers max. [mm]	100	90	90	90	85	85
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Operating temperature [°C]	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90
Air volume per cycle [cm³]	22	43	43	22	43	43
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	0.48	0.58	0.58	0.48	0.58	0.58

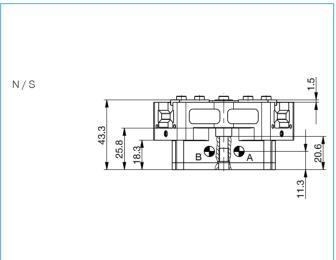
	► Technical Data - Protector Version						
Order no.	GPD5006NP	GPD5006NCP	GPD5006NOP	GPD5006SP	GPD5006SCP	GPD5006SOP	
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**	
Weight [kg]	0.61	0.71	0.71	0.61	0.71	0.71	

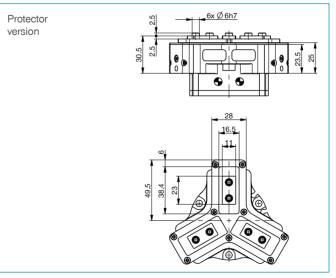
	Technical Data - High Temperature Version							
Order no.	GPD5006NT	GPD5006NCT	GPD5006NOT	GPD5006ST	GPD5006SCT	GPD5006SOT		
Operating temperature [°C]	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130		

<sup>\*</sup>All data measured at 6 bar

<sup>\* \*</sup> with purged air

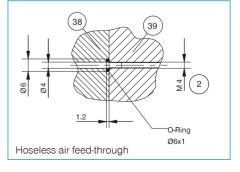




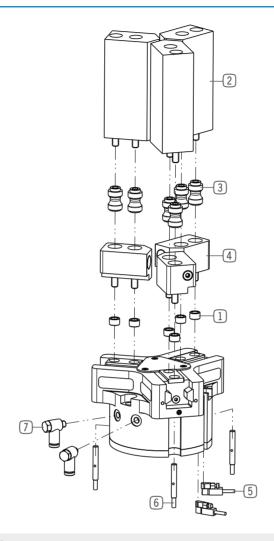


- 1 Gripper attachment
- 2 Energy supply
- 3 Fixing for gripper finger
- 6 Integrated slot for magnetic field sensor
- 7 Mounting block
- (19) Air purge connection option
- 35 Attachment option for customer-specific fittings
- 38 Adapter

- 39 Gripper
- (4) Clamp for sensor
- 45 Switch cam adjustment
- Air connection (close)
- B Air connection (open)
- Air connection, alternative (close)
- B Air connection, alternative (open)



# **3-JAW CONCENTRIC GRIPPERS INSTALLATION SIZE GPD5006**



### **► INCLUDED IN DELIVERY**



Centering Disc

024230

### ► RECOMMENDED ACCESSORIES



Universal jaw aluminium

UB5006AL



Universal jaw steel

**UB5006ST** 



Pressure piece N / S

ADS5004-01



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



part-set

WB5006L



Changeable jaw. fix-part



Magnetic field sensor Angled MFS103SKHC



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



2-Position-Sensor Cable 0,3 m - Connector M8 MFSP2SKHC-01



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

WB5006F

KAG500



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



Angled Fittings - Quick Connect Style WVM5



Pressure Safety Valve



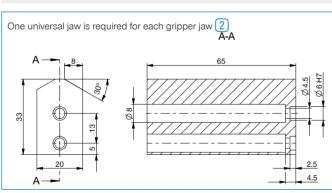
Compensation module N / S

ZUB5006DNS

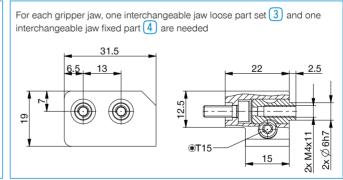


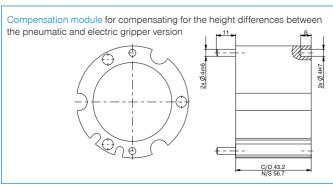
Compensation module NC / NO / SC / SO ZUB5006DCO

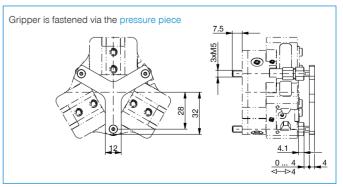
**DSV1-8** 



**▶ TECHNICAL DRAWINGS ACCESSORIES** 



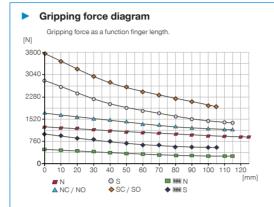




# **INSTALLATION SIZE GPD5008**

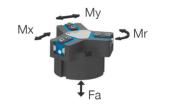
#### **▶ PRODUCT SPECIFICATIONS**





#### Forces and moments

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



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

### ► TECHNICAL DATA

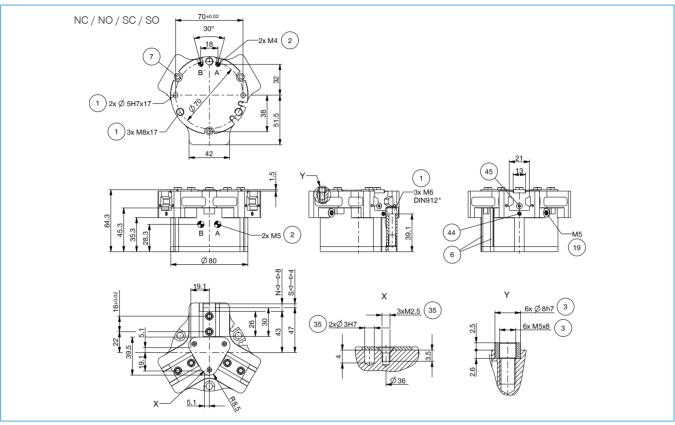
	Technical	Data*				
Order no.	GPD5008N	GPD5008NC	GPD5008NO	GPD5008S	GPD5008SC	GPD5008SO
Stroke per jaw [mm]	8	8	8	4	4	4
Gripping force in closing [N]	1260	1690		2780	3730	
Gripping force in opening [N]	1340		1770	2960		3910
Gripping force secured by spring min. [N]		430	430		950	950
Closing time [s]	0.048	0.035	0.055	0.048	0.035	0.055
Opening time [s]	0.048	0.055	0.035	0.048	0.055	0.035
Weight per jaw max. [kg]	0.7	0.7	0.7	0.7	0.7	0.7
Length of the gripper fingers max. [mm]	125	115	115	115	105	105
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Operating temperature [°C]	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90
Air volume per cycle [cm³]	51	90	90	51	90	90
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	0.83	1	1	0.83	1	1

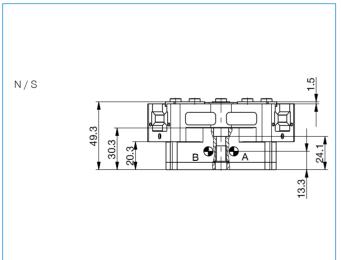
	► Technical Data - Protector Version						
Order no.	GPD5008NP	GPD5008NCP	GPD5008NOP	GPD5008SP	GPD5008SCP	GPD5008SOP	
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**	
Weight [kg]	1.03	1.2	1.2	1.03	1.2	1.2	

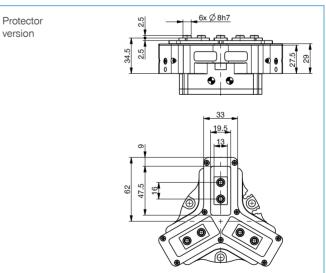
	Technical Data - High Temperature Version								
Order no.	GPD5008NT	GPD5008NCT	GPD5008NOT	GPD5008ST	GPD5008SCT	GPD5008SOT			
Operating temperature [°C]	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130			

<sup>\*</sup>All data measured at 6 bar

<sup>\* \*</sup> with purged air

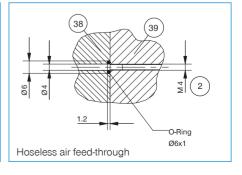




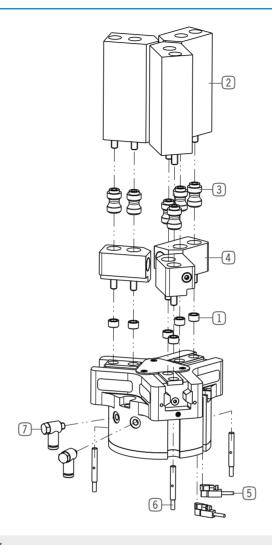


- 1 Gripper attachment
- 2 Energy supply
- 3 Fixing for gripper finger
- 6 Integrated slot for magnetic field sensor
- 7 Mounting block
- (19) Air purge connection option
- 35 Attachment option for customer-specific fittings
- 38 Adapter

- 39 Gripper
- (4) Clamp for sensor
- 45 Switch cam adjustment
- Air connection (close)
- B Air connection (open)
- Air connection, alternative (close)
- B Air connection, alternative (open)



# **INSTALLATION SIZE GPD5008**



### **► INCLUDED IN DELIVERY**



Centering Disc

024231

### ► RECOMMENDED ACCESSORIES



UB5008AL



Universal jaw steel

**UB5008ST** 



Pressure piece N / S

ADS5004-01



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



part-set

WB5008L



Changeable jaw. fix-part

WB5008F



Magnetic field sensor Angled MFS103SKHC



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



2-Position-Sensor Cable 0,3 m - Connector M8 MFSP2SKHC-01



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



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

(7)

Angled Fittings - Quick Connect Style WVM5



Pressure Safety Valve

**DSV1-8** 



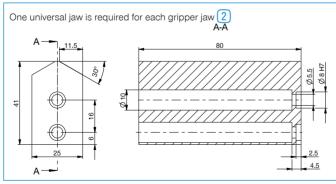
Compensation module N / S

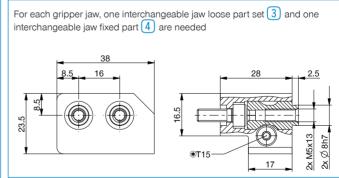


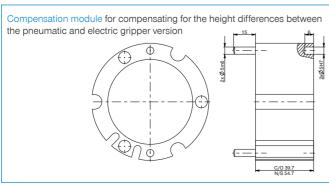
Compensation module NC / NO / SC / SO ZUB5008DCO

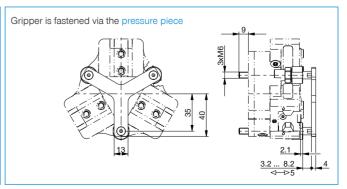
ZUB5008DNS

# > TECHNICAL DRAWINGS ACCESSORIES









# **INSTALLATION SIZE GPD5010**

#### **▶ PRODUCT SPECIFICATIONS**



# Gripping force diagram 7000 4200

#### 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

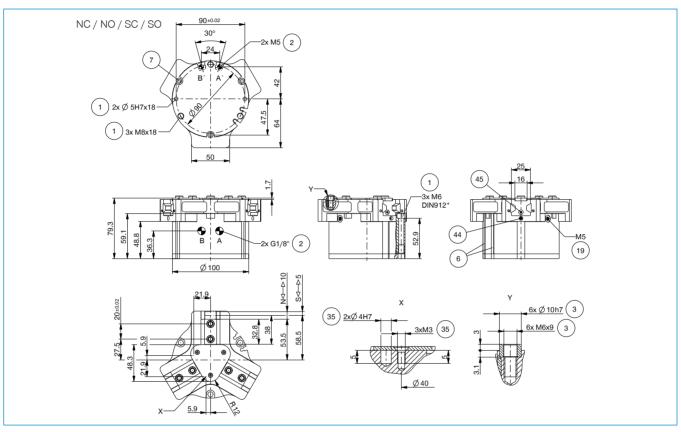
	► Technical Data*							
Order no.	GPD5010N	GPD5010NC	GPD5010NO	GPD5010S	GPD5010SC	GPD5010SO		
Stroke per jaw [mm]	10	10	10	5	5	5		
Gripping force in closing [N]	2290	3140		5050	6930			
Gripping force in opening [N]	2400		3250	5280		7160		
Gripping force secured by spring min. [N]		850	850		1880	1880		
Closing time [s]	0.095	0.095	0.19	0.095	0.095	0.19		
Opening time [s]	0.095	0.19	0.095	0.095	0.19	0.095		
Weight per jaw max. [kg]	1.3	1.3	1.3	1.3	1.3	1.3		
Length of the gripper fingers max. [mm]	160	145	145	145	130	130		
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01		
Operating pressure min. [bar]	3	4	4	3	4	4		
Operating pressure max. [bar]	8	7	7	8	7	7		
Operating temperature [°C]	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90		
Air volume per cycle [cm³]	100	200	200	100	200	200		
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64		
Weight [kg]	1.45	1.9	1.9	1.45	1.9	1.9		

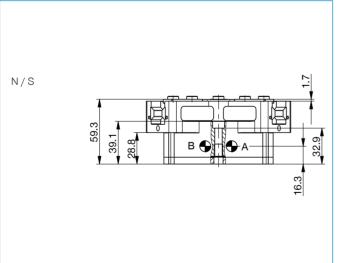
	► Technical Data - Protector Version								
Order no.	GPD5010NP	GPD5010NCP	GPD5010NOP	GPD5010SP	GPD5010SCP	GPD5010SOP			
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**			
Weight [kg]	1.8	2.23	2.23	1.8	2.23	2.23			

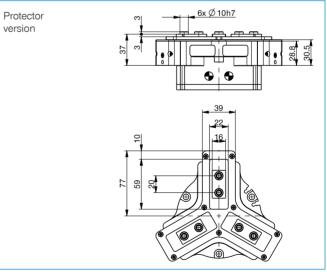
	► Technical Data - High Temperature Version							
Order no.	GPD5010NT	GPD5010NCT	GPD5010NOT	GPD5010ST	GPD5010SCT	GPD5010SOT		
Operating temperature [°C]	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130		

<sup>\*</sup>All data measured at 6 bar

<sup>\* \*</sup> with purged air

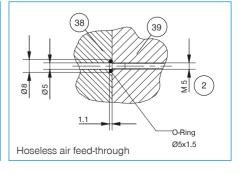




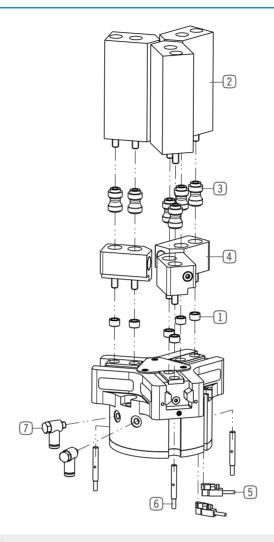


- 1 Gripper attachment
- 2 Energy supply
- 3 Fixing for gripper finger
- 6 Integrated slot for magnetic field sensor
- 7 Mounting block
- (19) Air purge connection option
- 35 Attachment option for customer-specific fittings
- 38 Adapter

- 39 Gripper
- (4) Clamp for sensor
- 45 Switch cam adjustment
- Air connection (close)
- B Air connection (open)
- Air connection, alternative (close)
- B Air connection, alternative (open)



# **3-JAW CONCENTRIC GRIPPERS INSTALLATION SIZE GPD5010**



### **► INCLUDED IN DELIVERY**



Centering Disc

018187

### ► RECOMMENDED ACCESSORIES



**UB5010AL** 



Universal jaw steel

**UB5010ST** 



ADS5004-01



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



part-set

WB5010L



Changeable jaw, fix-part

WB5010F



Magnetic field sensor Angled MFS103SKHC



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



2-Position-Sensor Cable 0,3 m - Connector M8 MFSP2SKHC-01



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



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

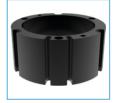


Angled Fittings - Quick Connect Style WV1-8X6



Pressure Safety Valve

**DSV1-8** 



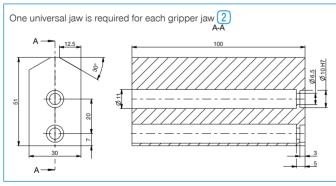
Compensation module N / S

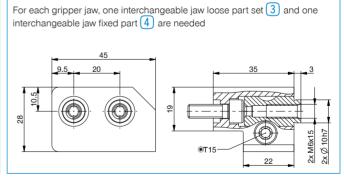


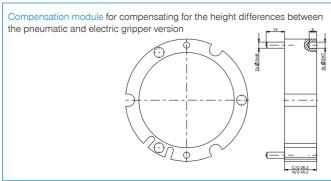
Compensation module NC / NO / SC / SO ZUB5010DCO

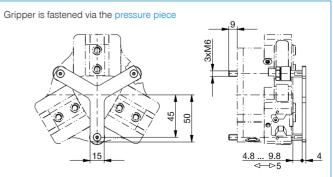
ZUB5010DNS

# **▶ TECHNICAL DRAWINGS ACCESSORIES**





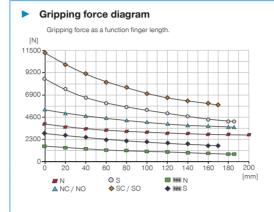




# **INSTALLATION SIZE GPD5013**

#### **▶ PRODUCT SPECIFICATIONS**





#### 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

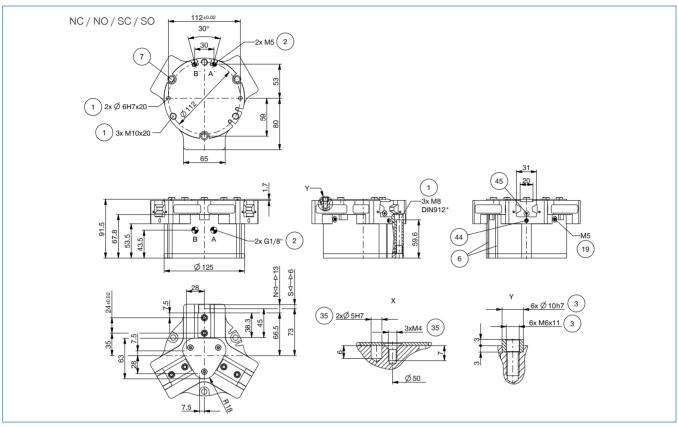
	► Technical Data*							
Order no.	GPD5013N	GPD5013NC	GPD5013NO	GPD5013S	GPD5013SC	GPD5013SO		
Stroke per jaw [mm]	13	13	13	6	6	6		
Gripping force in closing [N]	3770	5060		8310	11160			
Gripping force in opening [N]	3910		5200	8600		11450		
Gripping force secured by spring min. [N]		1290	1290		2850	2850		
Closing time [s]	0.19	0.15	0.25	0.19	0.15	0.25		
Opening time [s]	0.19	0.25	0.15	0.19	0.25	0.15		
Weight per jaw max. [kg]	2.4	2.4	2.4	2.4	2.4	2.4		
Length of the gripper fingers max. [mm]	200	185	185	185	170	170		
Repetition accuracy +/- [mm]	0.01	0.01	0.01	0.01	0.01	0.01		
Operating pressure min. [bar]	3	4	4	3	4	4		
Operating pressure max. [bar]	8	7	7	8	7	7		
Operating temperature [°C]	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90		
Air volume per cycle [cm³]	230	415	415	230	415	415		
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64		
Weight [kg]	2.6	3.5	3.5	2.6	3.5	3.5		

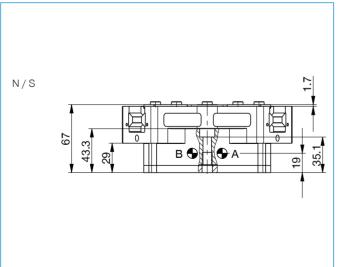
	► Technical Data - Protector Version							
Order no.	GPD5013NP	GPD5013NCP	GPD5013NOP	GPD5013SP	GPD5013SCP	GPD5013SOP		
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**		
Weight [kg]	3.15	4.05	4.05	3.15	4.05	4.05		

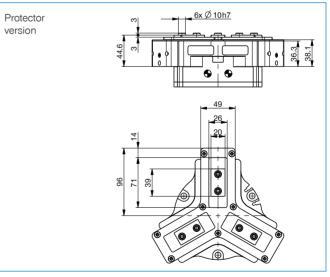
	► Technical Data - High Temperature Version							
Order no.	GPD5013NT	GPD5013NCT	GPD5013NOT	GPD5013ST	GPD5013SCT	GPD5013SOT		
Operating temperature [°C]	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130		

<sup>\*</sup>All data measured at 6 bar

<sup>\* \*</sup> with purged air

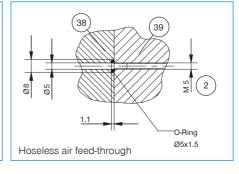




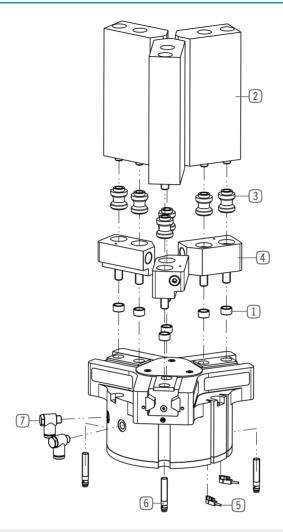


- 1 Gripper attachment
- 2 Energy supply
- 3 Fixing for gripper finger
- 6 Integrated slot for magnetic field sensor
- 7 Mounting block
- (19) Air purge connection option
- 35 Attachment option for customer-specific fittings
- 38 Adapter

- 39 Gripper
- (4) Clamp for sensor
- 45 Switch cam adjustment
- Air connection (close)
- B Air connection (open)
- Air connection, alternative (close)
- B Air connection, alternative (open)



# **INSTALLATION SIZE GPD5013**



### **► INCLUDED IN DELIVERY**



Centering Disc

018187

### **▶** RECOMMENDED ACCESSORIES



UB5013AL



Universal jaw steel

UB5013ST



Pressure piece N / S

ADS5004-01



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



part-set



**6** 



Changeable jaw, fix-part

WB5013F



Magnetic field sensor Angled MFS103SKHC



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



2-Position-Sensor Cable 0,3 m - Connector M8 MFSP2SKHC-01







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



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



Angled Fittings - Quick Connect Style WV1-8X6



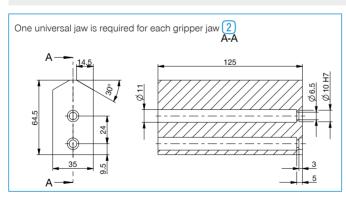
Straight Fittings - Quick Connect Style GV1-8X6

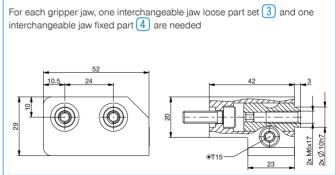


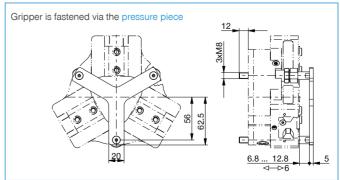
Pressure Safety Valve

DSV1-8

# > TECHNICAL DRAWINGS ACCESSORIES



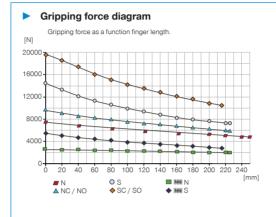




# **INSTALLATION SIZE GPD5016**

#### **▶ PRODUCT SPECIFICATIONS**





#### 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*						
Order no.	GPD5016N	GPD5016NC	GPD5016NO	GPD5016S	GPD5016SC	GPD5016SO	
Stroke per jaw [mm]	16	16	16	8	8	8	
Gripping force in closing [N]	6870	9240		14700	19780		
Gripping force in opening [N]	7120		9490	15250		20330	
Gripping force secured by spring min. [N]		2370	2370		5080	5080	
Closing time [s]	0.4	0.3	0.5	0.4	0.3	0.5	
Opening time [s]	0.4	0.5	0.3	0.4	0.5	0.3	
Weight per jaw max. [kg]	3.8	3.8	3.8	3.8	3.8	3.8	
Length of the gripper fingers max. [mm]	245	225	225	225	215	215	
Repetition accuracy +/- [mm]	0.02	0.02	0.02	0.02	0.02	0.02	
Operating pressure min. [bar]	3	4	4	3	4	4	
Operating pressure max. [bar]	8	7	7	8	7	7	
Operating temperature [°C]	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90	
Air volume per cycle [cm³]	525	925	925	525	925	925	
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64	
Weight [kg]	5.7	7.5	7.5	5.7	7.5	7.5	

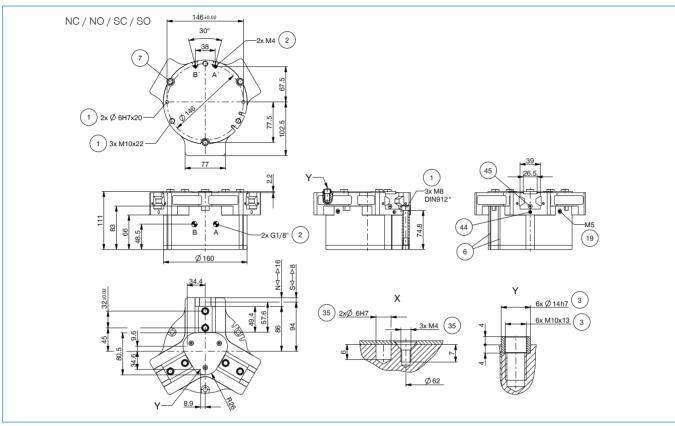
	► Technical Data - Protector Version								
Order no.	GPD5016NP	GPD5016NCP	GPD5016NOP	GPD5016SP	GPD5016SCP	GPD5016SOP			
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**			
Weight [kg]	6.8	8.6	8.6	6.8	8.6	8.6			

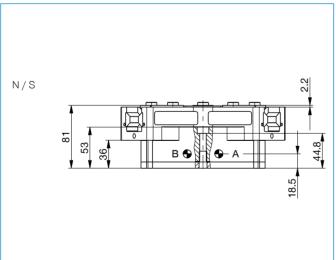
	► Technical Data - High Temperature Version					
Order no.	GPD5016NT	GPD5016NCT	GPD5016NOT	GPD5016ST	GPD5016SCT	GPD5016SOT
Operating temperature [°C]	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130

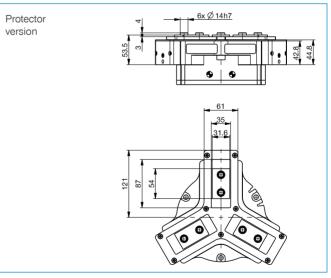
<sup>\*</sup>All data measured at 6 bar

<sup>\* \*</sup> with purged air

## **TECHNICAL DRAWINGS**

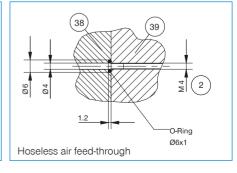






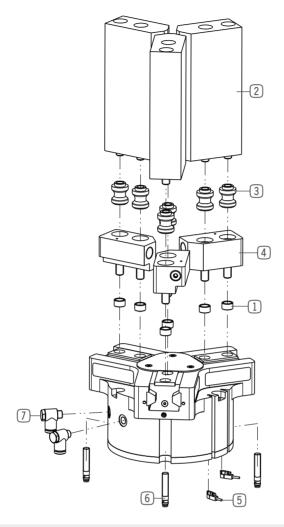
- 1 Gripper attachment
- 2 Energy supply
- 3 Fixing for gripper finger
- 6 Integrated slot for magnetic field sensor
- 7 Mounting block
- (19) Air purge connection option
- 35 Attachment option for customer-specific fittings
- 38 Adapter

- 39 Gripper
- (4) Clamp for sensor
- 45 Switch cam adjustment
- Air connection (close)
- B Air connection (open)
- Air connection, alternative (close)
- B Air connection, alternative (open)



# **3-JAW CONCENTRIC GRIPPERS**

# **INSTALLATION SIZE GPD5016**



# **► INCLUDED IN DELIVERY**



Centering Disc

## **▶** RECOMMENDED ACCESSORIES



UB5016AL



Universal jaw steel

**UB5016ST** 



Pressure piece N / S

ADS5004-01



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



part-set

WB5016L

**6** 



Changeable jaw, fix-part

WB5016F



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



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



2-Position-Sensor Cable 0,3 m - Connector M8 MFSP2SKHC-01



Inductive proximity switch - Connector M8

NJ8-E2S



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



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



Angled Fittings - Quick Connect Style WV1-8X8



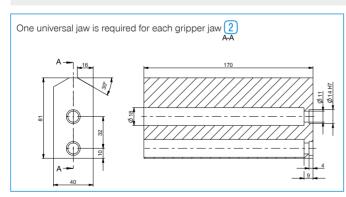
Straight Fittings - Quick Connect Style GV1-8X8

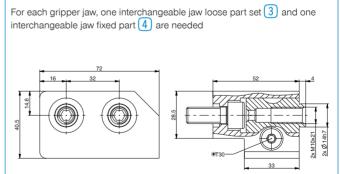


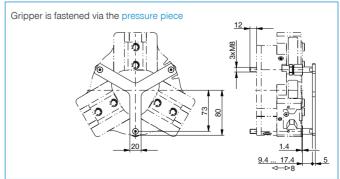
Pressure Safety Valve

DSV1-8

# > TECHNICAL DRAWINGS ACCESSORIES





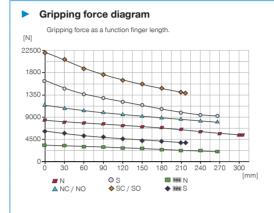


# **3-JAW CONCENTRIC GRIPPERS**

# **INSTALLATION SIZE GPD5025**

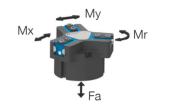
#### **▶ PRODUCT SPECIFICATIONS**





#### 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	GPD5025NC	GPD5025NO	GPD5025S	GPD5025SC	GPD5025SO
Stroke per jaw [mm]	25	25	25	14	14	14
Gripping force in closing [N]	8430	11560		16240	22270	
Gripping force in opening [N]	8730		11860	16820		22850
Gripping force secured by spring min. [N]		3130	3130		6030	6030
Closing time [s]	0.6	0.6	1.0	0.6	0.6	1.0
Opening time [s]	0.6	1.0	0.6	0.6	1.0	0.6
Weight per jaw max. [kg]	7	7	7	7	7	7
Length of the gripper fingers max. [mm]	310	265	265	265	220	220
Repetition accuracy +/- [mm]	0.05	0.05	0.05	0.05	0.05	0.05
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Operating temperature [°C]	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90
Air volume per cycle [cm³]	1025	1750	1750	1025	1750	1750
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	11.8	15.4	15.4	11.8	15.4	15.4

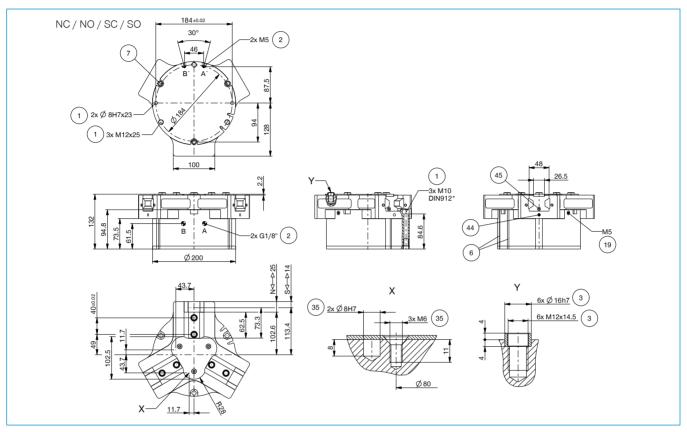
► Technical Data - Protector Version						
Order no.	GPD5025NP	GPD5025NCP	GPD5025NOP	GPD5025SP	GPD5025SCP	GPD5025SOP
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**
Weight [kg]	14	17.6	17.6	14	17.6	17.6

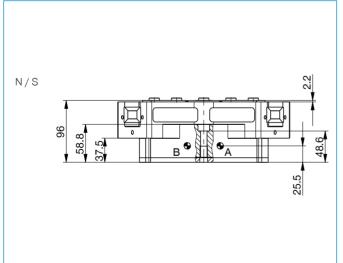
	Technical	Data - High Tem	perature Version	l		
Order no.	GPD5025NT	GPD5025NCT	GPD5025NOT	GPD5025ST	GPD5025SCT	GPD5025SOT
Operating temperature [°C]	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130

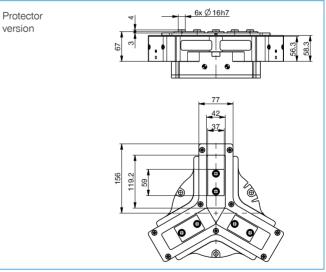
<sup>\*</sup>All data measured at 6 bar

<sup>\* \*</sup> with purged air

## **TECHNICAL DRAWINGS**

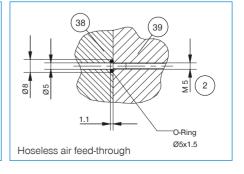






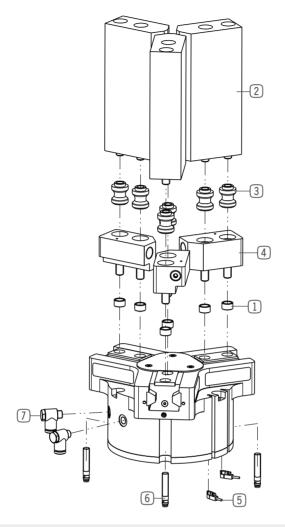
- 1 Gripper attachment
- 2 Energy supply
- 3 Fixing for gripper finger
- 6 Integrated slot for magnetic field sensor
- 7 Mounting block
- (19) Air purge connection option
- 35 Attachment option for customer-specific fittings
- 38 Adapter

- 39 Gripper
- (4) Clamp for sensor
- 45 Switch cam adjustment
- Air connection (close)
- B Air connection (open)
- Air connection, alternative (close)
- B Air connection, alternative (open)



# **3-JAW CONCENTRIC GRIPPERS**

# **INSTALLATION SIZE GPD5025**



# **► INCLUDED IN DELIVERY**



Centering Disc

## **▶** RECOMMENDED ACCESSORIES



Universal jaw aluminium UB5025AL

(2)

Universal jaw steel

UB5025ST



Pressure piece N / S

ADS5004-01



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



part-set

WB5025L



Changeable jaw. fix-part



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



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



2-Position-Sensor Cable 0,3 m - Connector M8 MFSP2SKHC-01



Inductive proximity switch - Connector M8

NJ8-E2S



KAW500



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



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



Angled Fittings - Quick Connect Style WV1-8X8



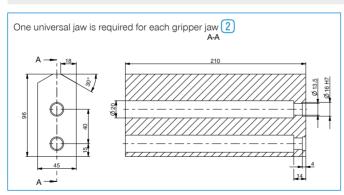
Straight Fittings - Quick Connect Style GV1-8X8

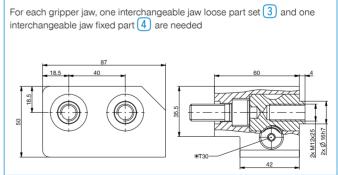


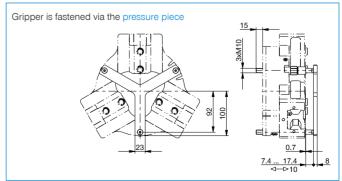
Pressure Safety Valve

DSV1-8

#### > TECHNICAL DRAWINGS ACCESSORIES





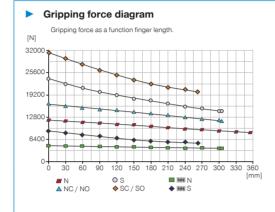


# **3-JAW CONCENTRIC GRIPPERS**

# **INSTALLATION SIZE GPD5030**

#### **▶ PRODUCT SPECIFICATIONS**





#### Forces and moments

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



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

## ► TECHNICAL DATA

	► Technical Data*					
Order no.	GPD5030N	GPD5030NC	GPD5030NO	GPD5030S	GPD5030SC	GPD5030SO
Stroke per jaw [mm]	30	30	30	17	17	17
Gripping force in closing [N]	12130	16560		23150	31620	
Gripping force in opening [N]	12540		16970	23930		32400
Gripping force secured by spring min. [N]		4430	4430		8470	8470
Closing time [s]	1.13	1.0	1.9	1.13	1.0	1.9
Opening time [s]	1.13	1.9	1.0	1.13	1.9	1.0
Weight per jaw max. [kg]	9.5	9.5	9.5	9.5	9.5	9.5
Length of the gripper fingers max. [mm]	355	305	305	305	260	260
Repetition accuracy +/- [mm]	0.05	0.05	0.05	0.05	0.05	0.05
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	7	7	8	7	7
Operating temperature [°C]	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90	-10 +90
Air volume per cycle [cm³]	1780	3000	3000	1780	3000	3000
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	21	27.5	27.5	21	27.5	27.5

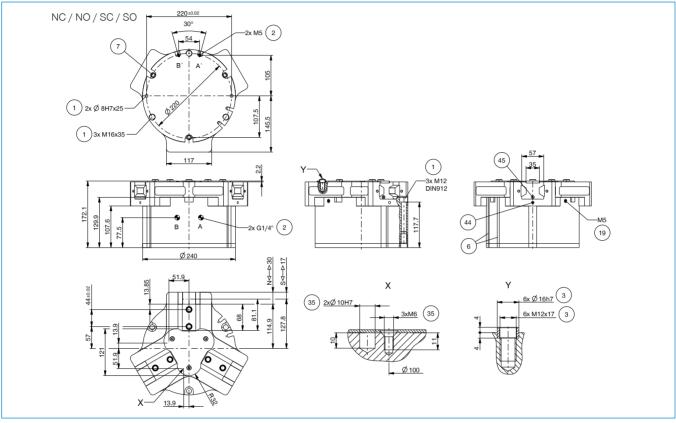
► Technical Data - Protector Version						
Order no.	GPD5030NP	GPD5030NCP	GPD5030NOP	GPD5030SP	GPD5030SCP	GPD5030SOP
Protection to IEC 60529	IP67**	IP67**	IP67**	IP67**	IP67**	IP67**
Weight [kg]	24	30.5	30.5	24	30.5	30.5

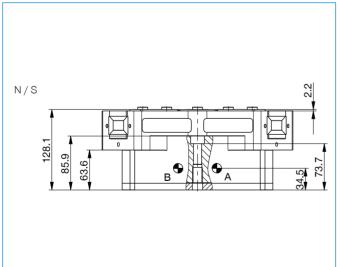
► Technical Data - High Temperature Version						
Order no.	GPD5030NT	GPD5030NCT	GPD5030NOT	GPD5030ST	GPD5030SCT	GPD5030SOT
Operating temperature [°C]	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130	-10 +130

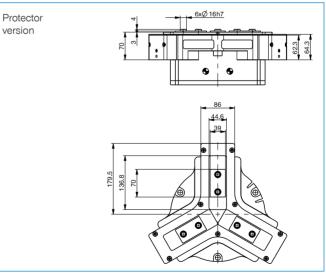
<sup>\*</sup>All data measured at 6 bar

<sup>\* \*</sup> with purged air

## **TECHNICAL DRAWINGS**

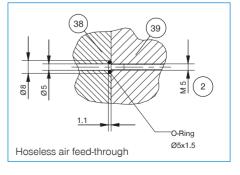






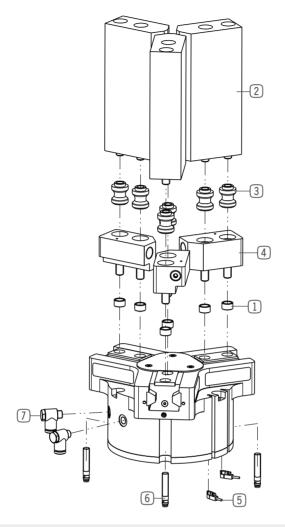
- 1 Gripper attachment
- 2 Energy supply
- 3 Fixing for gripper finger
- 6 Integrated slot for magnetic field sensor
- 7 Mounting block
- (19) Air purge connection option
- 35 Attachment option for customer-specific fittings
- 38 Adapter

- 39 Gripper
- (4) Clamp for sensor
- 45 Switch cam adjustment
- Air connection (close)
- B Air connection (open)
- Air connection, alternative (close)
- B Air connection, alternative (open)



# **3-JAW CONCENTRIC GRIPPERS**

# **INSTALLATION SIZE GPD5030**



# **► INCLUDED IN DELIVERY**



Centering Disc

## **▶** RECOMMENDED ACCESSORIES



UB5030AL



Universal jaw steel

**UB5030ST** 



Pressure piece N / S

ADS5004-01



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



part-set







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



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



2-Position-Sensor Cable 0,3 m - Connector M8 MFSP2SKHC-01



Inductive proximity switch - Connector M8

NJ8-E2S





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



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



Angled Fittings - Quick Connect Style WV1-4X8



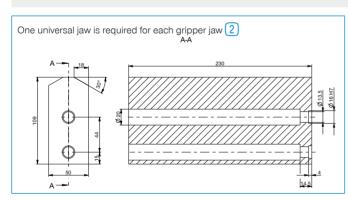
Straight Fittings - Quick Connect Style GV1-4X8

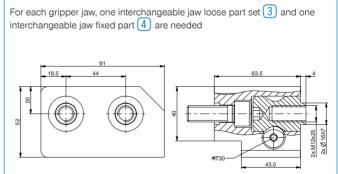


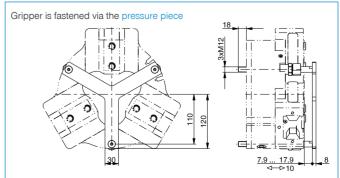
Pressure Safety Valve

DSV1-8

#### > TECHNICAL DRAWINGS ACCESSORIES







# 2-JAW PARALLEL GRIPPERS

# **SERIES GEP5000**

#### **▶ PRODUCT ADVANTAGES**



#### "ALL in ONE"

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

## ► THE BEST PRODUCT FOR YOUR APPLICATION



Our products love the challenge!

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

#### **BENEFITS IN DETAIL**



#### 1 Positively driven wedge hook transmission

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

#### 2 Gripper jaw

- DLC coated to protect against corrosion
- Gripper fingers mounted using removable centring sleeves
- Lubricated for life via incorporated lubrication slots

#### 3 Dual lip seal

- Enables IP64
- Prevents grease from being squeezed out, increasing service life

#### 4 Steel Linear Guide

- Steel in steel guide
- Enables use of extremely long gripper fingers

#### (5) Mounting and positioning

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

#### 6 BLDC motor

- Wear-resistant brushless DC motor

#### 7 Advanced control module

- Integrated control module with single-cable solution
- Gripping force, travel time and query programmable via the control panel on the housing

#### 8 Drive train

- Combination of trapezoidal spindle and gear
- Durable and robust

## **TERMS**

**Gripping force:** arithmetic sum of the individual forces occuring at the jaws

**Gripping direction:** Movement toward the workpiece to be gripped

→|-: Gripping direction of external gripper

**|**←→**|**: Gripping direction of internal gripper

**Travel time:** Time required for the complete stroke movement of the gripper jaws

**Control time:** Response time of the gripping system

Work time: Time from signal input until the signal output message, including travel time

Mode: Travel time optimization by adapting to the gripping direction (N / NC / NO mode)

**Repeatability:** at end stops after 50/100 consecutive cycles

**Cycle:** Path that the gripper jaws travel for a complete opening and closing movement

**Maintenance:** recommended at 30 mil. cycles (please see the installation instructions, download from www.

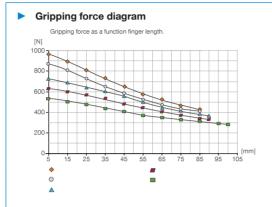
zimmer-group.com)

# 2-JAW PARALLEL GRIPPERS

# **INSTALLATION SIZE GEP5006**

#### **▶ PRODUCT SPECIFICATIONS**





#### 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

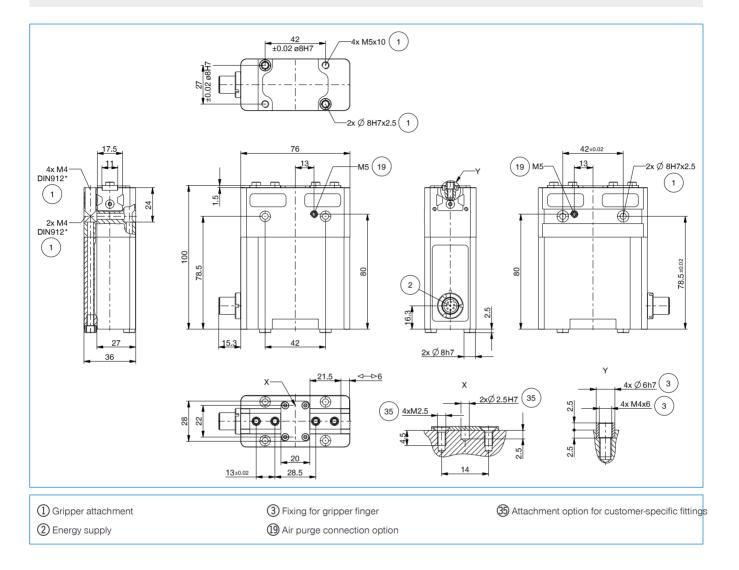
	► Technical Data
Order no.	GEP5006N
Stroke per jaw [mm]	6
Control time [s]	0.035
Weight per jaw max. [kg]	0.4
Length of the gripper fingers max. [mm]*	100
Repetition accuracy +/- [mm]	0.01
Voltage [V]	24
Current consumption max. [A]	5
Operating temperature min. [°C]	5
Operating temperature max. [°C]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

<sup>\*</sup>Depending on speed level selected

## **TECHNICAL DATA - MODES**

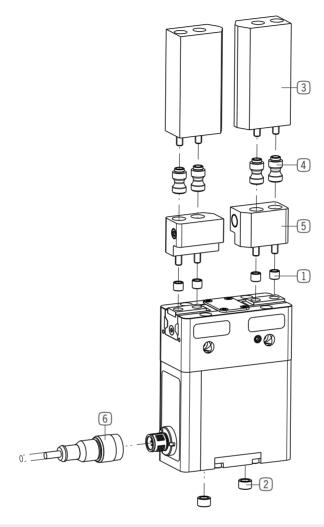
	► Technical data - N mode
Order no.	GEP5006N
Gripping force →   ← min. / max. [N]	540 / 960
Gripping force   ←→   min. / max. [N]	540 / 960
Travel time →   ← min. / max. [s]	0,15 / 0,22
Travel time   ←→   min. / max. [s]	0,15 / 0,22
	► Technical data - NC mode
Order no.	GEP5006N
Gripping force →   ←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

## **TECHNICAL DRAWINGS**



# 2-JAW PARALLEL GRIPPERS

# **INSTALLATION SIZE GEP5006**



# **► INCLUDED IN DELIVERY**



Centering Disc





Centering Disc

## **▶** RECOMMENDED ACCESSORIES



UB5006AL



Universal jaw steel

**UB5006ST** 



part-set WB5006L



Changeable jaw, fix-part



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

WB5006F

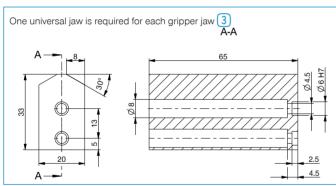


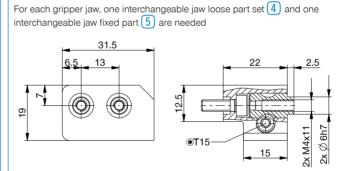


Plug-in Connector Straight Cable 10 m - Female M12

KAG1000B8

## **▶ TECHNICAL DRAWINGS ACCESSORIES**



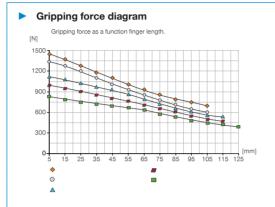


# 2-JAW PARALLEL GRIPPERS

# **INSTALLATION SIZE GEP5008**

#### **▶** PRODUCT SPECIFICATIONS





#### 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

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

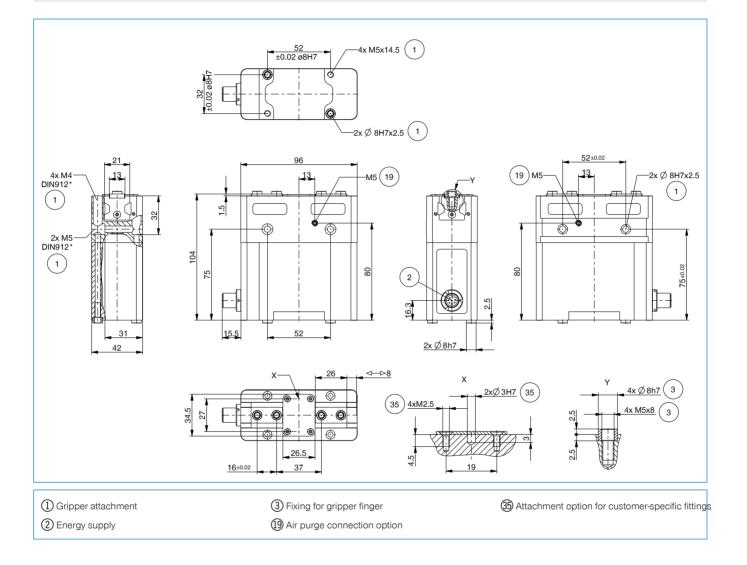
<sup>\*</sup>Depending on speed level selected

## **▶ TECHNICAL DATA - MODES**

	► Technical data - N mode	
Order no.	GEP5008N	
Gripping force →   ← min. / max. [N]	800 / 1450	
Gripping force   ←→   min. / max. [N]	800 / 1450	
Travel time →   ← min. / max. [s]	0,18 / 0,29	
Travel time   ←→   min. / max. [s]	0,18 / 0,29	
N T 1 : 11 : NO 1		
	Technical data - NC mode	
Order no.	GEP5008N	
Gripping force →   ← min. / max. [N]	800 / 1450	
Gripping force   ←→   min. / max. [N]	-	
Travel time →   ← min. / max. [s]	0,18 / 0,29	
Travel time   ←→   min. / max. [s]	0,15	
	Technical data - NO mode	
Order no.	GEP5008N	
Gripping force →   ← min. / max. [N]	-	
Gripping force   ←→   min. / max. [N]	800 / 1450	
Travel time →   ← min. / max. [s]	0,15	
Travel time   ←→   min. / max. [s]	0,18 / 0,29	

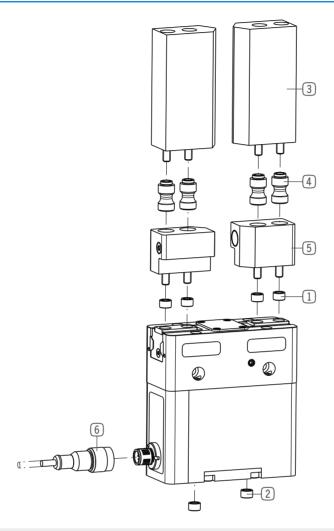
93

## **TECHNICAL DRAWINGS**



# 2-JAW PARALLEL GRIPPERS

# **INSTALLATION SIZE GEP5008**



# **► INCLUDED IN DELIVERY**



Centering Disc

## ► RECOMMENDED ACCESSORIES



UB5008AL



Universal jaw steel

**UB5008ST** 



Changeable jaw, loose part-set WB5008L



Changeable jaw, fix-part



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

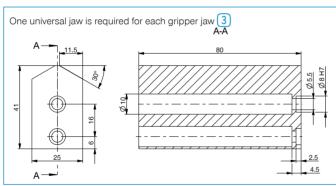
WB5008F

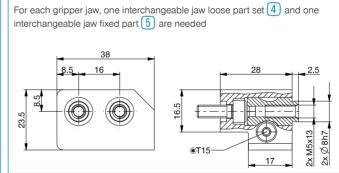


Plug-in Connector Straight Cable 10 m - Female M12

KAG1000B8

## **▶ TECHNICAL DRAWINGS ACCESSORIES**



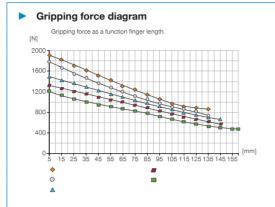


# 2-JAW PARALLEL GRIPPERS

# **INSTALLATION SIZE GEP5010**

#### **▶ PRODUCT SPECIFICATIONS**





#### Forces and moments

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



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

## ► TECHNICAL DATA - BASIC VERSION

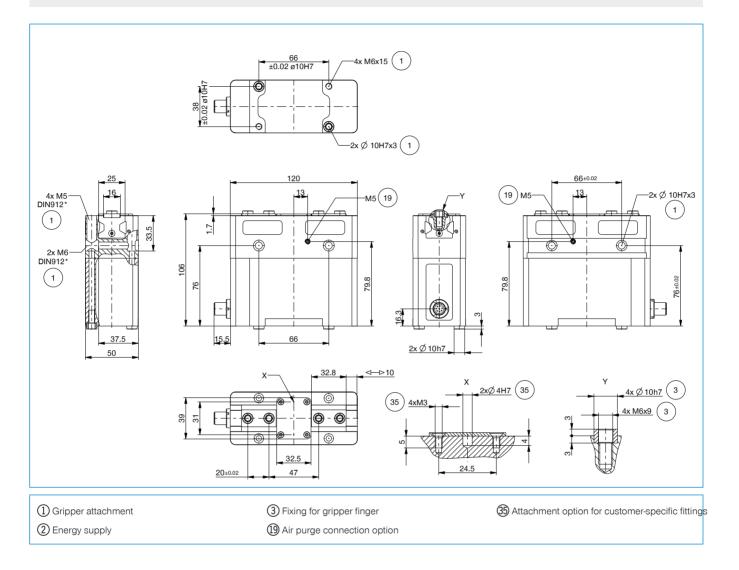
	► Technical Data
Order no.	GEP5010N
Stroke per jaw [mm]	10
Control time [s]	0.035
Weight per jaw max. [kg]	1.3
Length of the gripper fingers max. [mm]*	160
Repetition accuracy +/- [mm]	0.01
Voltage [V]	24
Current consumption max. [A]	5
Operating temperature min. [°C]	5
Operating temperature max. [°C]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

<sup>\*</sup>Depending on speed level selected

## **▶ TECHNICAL DATA - MODES**

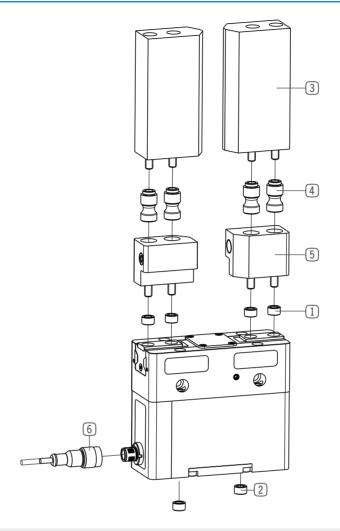
	► Technical data - N mode	
Order no.	GEP5010N	
Gripping force →   ← min. / max. [N]	1200 / 1900	
Gripping force   ← →   min. / max. [N]	1200 / 1900	
Travel time →   ← min. / max. [s]	0,21 / 0,32	
Travel time   ←→   min. / max. [s]	0,21 / 0,32	
	► Technical data - NC mode	
Order no.	GEP5010N	
Gripping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

## **TECHNICAL DRAWINGS**



# 2-JAW PARALLEL GRIPPERS

# **INSTALLATION SIZE GEP5010**



# **► INCLUDED IN DELIVERY**



Centering Disc

## **▶** RECOMMENDED ACCESSORIES



UB5010AL



Universal jaw steel

**UB5010ST** 



part-set WB5010L



Changeable jaw, fix-part



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

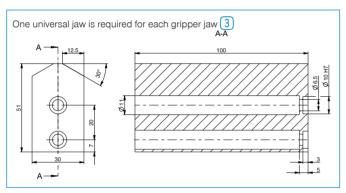
WB5010F

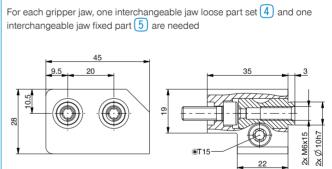


Plug-in Connector Straight Cable 10 m - Female M12

KAG1000B8

## **▶ TECHNICAL DRAWINGS ACCESSORIES**





# **3-JAW CONCENTRIC GRIPPERS SERIES GED5000**

#### **▶ PRODUCT ADVANTAGES**



#### "ALL in ONE"

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

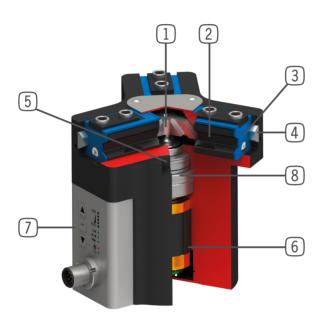
#### **▶ THE BEST PRODUCT FOR YOUR APPLICATION**



Our products love the challenge!

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

#### **BENEFITS IN DETAIL**



#### 1 Positively driven wedge hook transmission

- high forces and moments capacity
- Synchronized gripper jaw movement

#### (2) Gripper jaw

- DLC coated to protect against corrosion
- Gripper fingers mounted using removable centring sleeves
- Lubricated for life via incorporated lubrication slots

#### 3 Dual lip seal

- Enables IP64
- Prevents grease from being squeezed out, increasing service life

#### 4 Steel Linear Guide

- Steel in steel guide
- Enables use of extremely long gripper fingers

#### (5) Mounting and positioning

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

#### 6 BLDC motor

- Wear-resistant brushless DC motor

#### 7 Advanced control module

- Integrated control module with single-cable solution
- Gripping force, travel time and query programmable via the control panel on the housing

#### (8) Drive train

- Combination of trapezoidal spindle and gear
- Durable and robust

## **TERMS**

**Gripping force:** arithmetic sum of the individual forces occuring at the jaws

**Gripping direction:** Movement toward the workpiece to be gripped

**→|←:** Gripping direction of external gripper

|---|: Gripping direction of internal gripper

Travel time: Time required for the complete stroke movement of the gripper jaws

Control time: Response time of the gripping system

Work time: Time from signal input until the signal output message, including travel time

Mode: Travel time optimization by adapting to the gripping direction (N / NC / NO mode)

Repeatability: at end stops after 50/100 consecutive cycles

Cycle: Path that the gripper jaws travel for a complete opening and closing movement

Maintenance: recommended at 30 mil. cycles (please see the installation instructions, download from www.

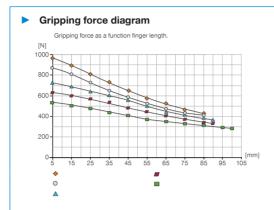
zimmer-group.com)

# **3-JAW CONCENTRIC GRIPPERS**

# **INSTALLATION SIZE GED5006**







#### 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

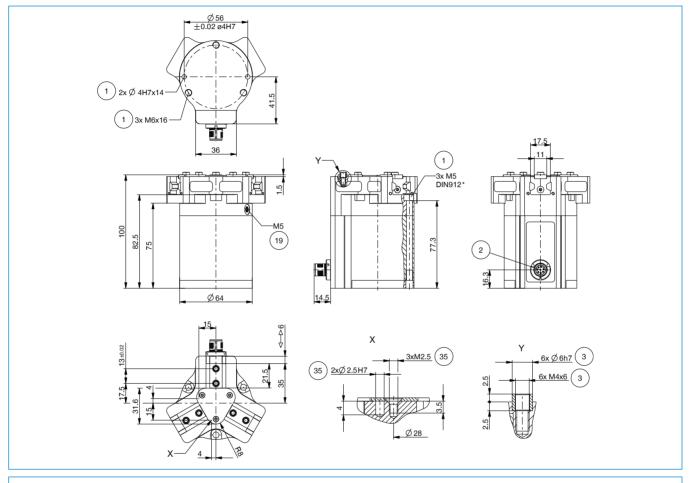
	► Technical Data
Order no.	GED5006N
Stroke per jaw [mm]	6
Control time [s]	0.035
Weight per jaw max. [kg]	0.4
Length of the gripper fingers max. [mm]*	100
Repetition accuracy +/- [mm]	0.01
Voltage [V]	24
Current consumption max. [A]	5
Operating temperature min. [°C]	5
Operating temperature max. [°C]	50
Protection to IEC 60529	IP64
Weight [kg]	1.09

<sup>\*</sup>Depending on speed level selected

#### ► TECHNICAL DATA - MODES

	► Technical data - N mode
Order no.	GED5006N
Gripping force →   ← min. / max. [N]	540 / 960
Gripping force   ← →   min. / max. [N]	540 / 960
Travel time →   ← min. / max. [s]	0,15 / 0,22
Travel time   ←→   min. / max. [s]	0,15 / 0,22
	N T 1 : 11 : NO 1
	Technical data - NC mode
Order no.	GED5006N
Gripping force →   ← min. / max. [N]	540 / 960
Gripping force   ← →   min. / max. [N]	-
Travel time →   ← min. / max. [s]	0,15 / 0,22
Travel time   ←→   min. / max. [s]	0,13
	N. Technical data NO media
	Technical data - NO mode
Order no.	GED5006N
Gripping force →   ← min. / max. [N]	-
Gripping force   ← →   min. / max. [N]	540 / 960
Travel time →   ← min. / max. [s]	0,13
Travel time   ←→   min. / max. [s]	0,15 / 0,22

## **TECHNICAL DRAWINGS**

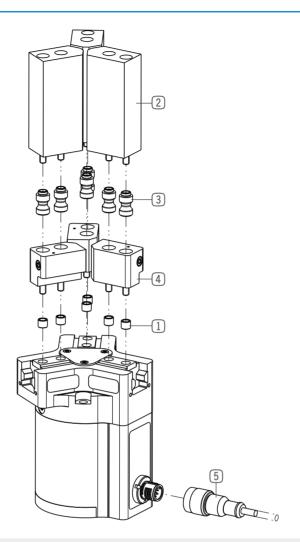


① Gripper attachment

2 Energy supply

- 3 Fixing for gripper finger
- 35 Attachment option for customer-specific fittings
- (19) Air purge connection option

# **3-JAW CONCENTRIC GRIPPERS INSTALLATION SIZE GED5006**



# **► INCLUDED IN DELIVERY**



Centering Disc

## **▶** RECOMMENDED ACCESSORIES



Universal jaw aluminium



Universal jaw steel





part-set



Changeable jaw, fix-part

UB5006AL











Plug-in Connector Angled Cable 10 m - Female M12

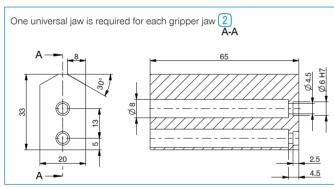
KAW1000B8

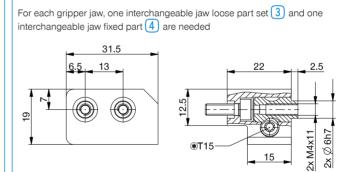


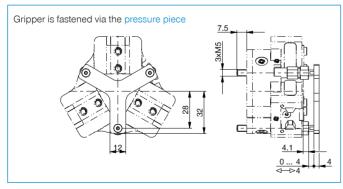
Plug-in Connector Straight Cable 10 m - Female M12

KAG1000B8

## **▶ TECHNICAL DRAWINGS ACCESSORIES**





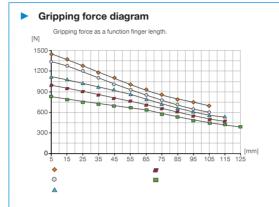


# **3-JAW CONCENTRIC GRIPPERS**

# **INSTALLATION SIZE GED5008**







#### 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

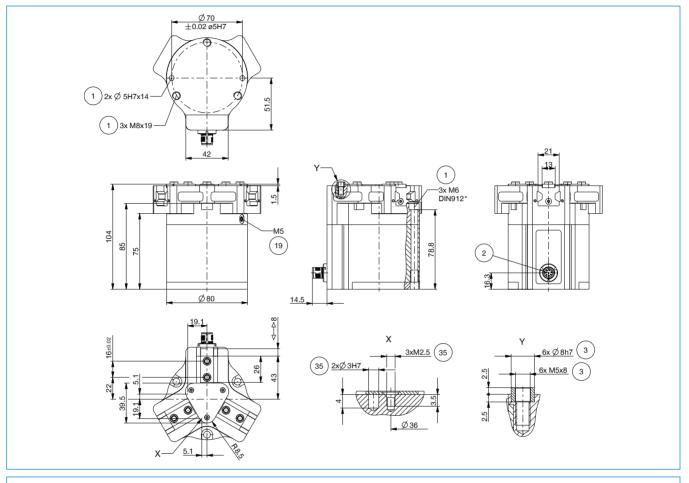
	► Technical Data
Order no.	GED5008N
Stroke per jaw [mm]	8
Control time [s]	0.035
Weight per jaw max. [kg]	0.7
Length of the gripper fingers max. [mm]*	125
Repetition accuracy +/- [mm]	0.01
Voltage [V]	24
Current consumption max. [A]	5
Operating temperature min. [°C]	5
Operating temperature max. [°C]	50
Protection to IEC 60529	IP64
Weight [kg]	1.66

<sup>\*</sup>Depending on speed level selected

#### **► TECHNICAL DATA - MODES**

	Technical data - N mode		
Order no.	GED5008N		
Gripping force →   ← min. / max. [N]	800 / 1450		
Gripping force   ← →   min. / max. [N]	800 / 1450		
Travel time →   ← min. / max. [s]	0,18 / 0,29		
Travel time   ←→   min. / max. [s]	0,18 / 0,29		
	► Technical data - NC mode		
Order no.	GED5008N		
Gripping force →   ← min. / max. [N]	800 / 1450		
Gripping force   ← →   min. / max. [N]	-		
Travel time →   ← min. / max. [s]	0,18 / 0,29		
Travel time   ←→   min. / max. [s]	0,15		
► Technical data - NO mode			
Order no.	GED5008N		
	GEDSOON		
Gripping force →   ← min. / max. [N]	-		
Gripping force   ←→   min. / max. [N]	800 / 1450		
Travel time →   ← min. / max. [s]	0,15		
Travel time   ←→   min. / max. [s]	0,18 / 0,29		

# **► TECHNICAL DRAWINGS**

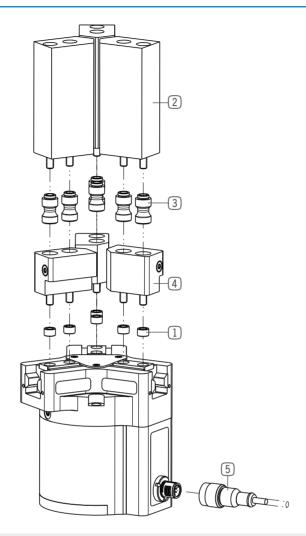


① Gripper attachment

2 Energy supply

- 3 Fixing for gripper finger
- 35 Attachment option for customer-specific fittings
- (19) Air purge connection option

# **3-JAW CONCENTRIC GRIPPERS INSTALLATION SIZE GED5008**



## **► INCLUDED IN DELIVERY**



Centering Disc

## **▶** RECOMMENDED ACCESSORIES



Universal jaw aluminium



Universal jaw steel





part-set



Changeable jaw, fix-part

UB5008AL





WB5008L





Plug-in Connector Angled Cable 10 m - Female M12

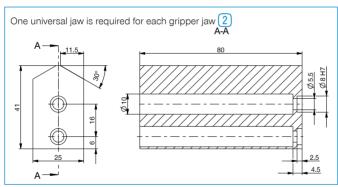
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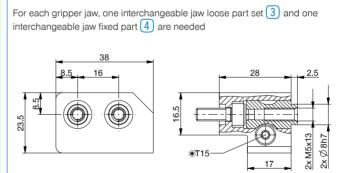


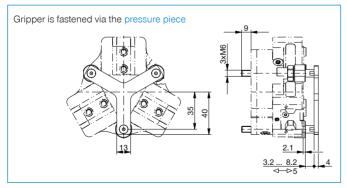
Plug-in Connector Straight Cable 10 m - Female M12

KAG1000B8

## **▶ TECHNICAL DRAWINGS ACCESSORIES**







# **3-JAW CONCENTRIC GRIPPERS**

# **INSTALLATION SIZE GED5010**

#### **▶ PRODUCT SPECIFICATIONS**



# 

#### Forces and moments

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



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

## ► TECHNICAL DATA - BASIC VERSION

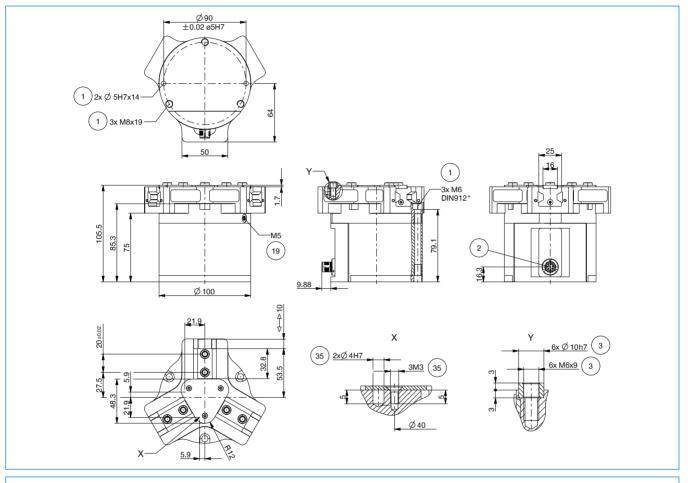
	► Technical Data
Order no.	GED5010N
Stroke per jaw [mm]	10
Control time [s]	0.035
Weight per jaw max. [kg]	1.3
Length of the gripper fingers max. [mm]*	160
Repetition accuracy +/- [mm]	0.01
Voltage [V]	24
Current consumption max. [A]	5
Operating temperature min. [°C]	5
Operating temperature max. [°C]	50
Protection to IEC 60529	IP64
Weight [kg]	2.33

<sup>\*</sup>Depending on speed level selected

#### ► TECHNICAL DATA - MODES

	► Technical data - N mode
Order no.	GED5010N
Gripping force →   ← min. / max. [N]	1200 / 1900
Gripping force   ←→   min. / max. [N]	1200 / 1900
Travel time →   ← min. / max. [s]	0,21 / 0,32
Travel time   ←→   min. / max. [s]	0,21 / 0,32
	► Technical data - NC mode
Order no.	GED5010N
Gripping force →   ← min. / max. [N]	1200 / 1900
Gripping force   ← →   min. / max. [N]	-
Travel time →   ← min. / max. [s]	0,21 / 0,32
Travel time   ←→   min. / max. [s]	0,16
	► Technical data - NO mode
Order no.	GED5010N
Gripping force →   ← min. / max. [N]	-
Gripping force   ←→   min. / max. [N]	1200 / 1900
Travel time →   ← min. / max. [s]	0,16
Travel time   ←→   min. / max. [s]	0,21 / 0,32

## **TECHNICAL DRAWINGS**

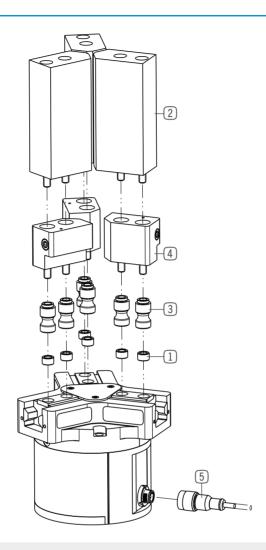


① Gripper attachment

2 Energy supply

- 3 Fixing for gripper finger
- 35 Attachment option for customer-specific fittings
- (19) Air purge connection option

# **3-JAW CONCENTRIC GRIPPERS INSTALLATION SIZE GED5010**



# **► INCLUDED IN DELIVERY**



Centering Disc

## **▶** RECOMMENDED ACCESSORIES



Universal jaw aluminium



Universal jaw steel





part-set



Changeable jaw, fix-part

UB5010AL





WB5010L





Plug-in Connector Angled Cable 10 m - Female M12

KAW1000B8

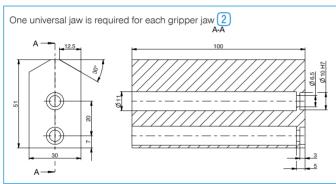


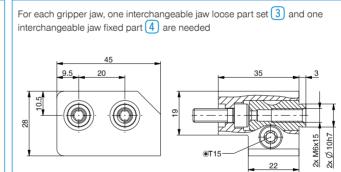


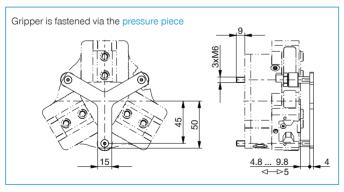
Plug-in Connector Straight Cable 10 m - Female M12

KAG1000B8

## **▶ TECHNICAL DRAWINGS ACCESSORIES**







# CHECKLIST GRIPPER



Customer number			Telephone number			
Company			Fax number			
Contact Mr. Mrs.			E-Mail			
Request	Desired date		Req. No. Ord No.			
Parallel gripper  Other / If yes, which types	ре	Three-jaw grippe	r	Angular gripp	er	
Drive Pneumatic		Electric	Hyc	Iraulic		
Operating pressure		bar	Voltage			Volts
Required stroke						
Per jaw		mm or	Total str	oke		mm
Gripper finger length						
Gripper top edge to force ap	oplication point		mm			
Ambient conditions						
Clean / Dry		Small amount of swar	' '	ge amount of swarf er pressure of grind		
Chemical substances / If	yes, which					
Temperature		°C	Cycles			per minute
Required force						
Gripping force	N	or	Workpiece v	woight		kg 🔲 g 🔲
Chipping 10100	IN	OI .	Workpiece	veigni		Ng 🔲 g 🔲
Gripping type						
Gripping inward		Gripping outward				
Frictional fit		Form fit				
Prism angle	° Coe	efficient of friction		Axis acceleration		m/s²
Self Locking						
Not required	Whe	n closing	When opening		Pressure	safety valve



Desired accessories				
Inductive sensor	Magnetio	c field sensor	With cable	
Separate cable / If yes, how long			m	
		Straight fitting		
		Angled fitting		
Pressure safety valve				
Pneumatic fittings / If yes, which		Straight		
		Angled		
		Flow control va	alve	
		_		
Notes/comments				
Editor/Date				
Desired accessories				
Sketch	3D model		Other	

# USAGE NOTE GENERAL

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Furthermore, the respective laws, guidelines from TÜV, guidelines from the respective trade association and VDE stipulations shall apply.

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#### **STANDARDS**

Zimmer Group has a quality management system certified in accordance with ISO 9001:2008. Zimmer Group has an environmental management system certified in accordance with ISO 14001:2004.

# 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.