

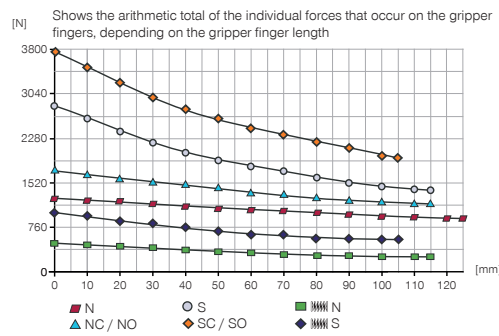
3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5008

PRODUCT SPECIFICATIONS

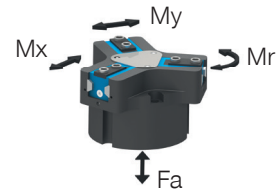


Gripping force diagram



Forces and moments

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



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

TECHNICAL DATA

Order no.	Technical data					
	GPD5008N-00-A	GPD5008NC-00-A	GPD5008NO-00-A	GPD5008S-00-A	GPD5008SC-00-A	GPD5008SO-00-A
Stroke per jaw [mm]	8	8	8	4	4	4
Gripping force in closing [N]	1260	1690		2780	3730	
Gripping force in opening [N]	1340		1770	2960		3910
Gripping force secured by spring min. [N]		430	430		950	950
Closing time [s]	0.048	0.035	0.055	0.048	0.035	0.055
Opening time [s]	0.048	0.055	0.035	0.048	0.055	0.035
Permissible 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
Nominal operating pressure [bar]	6	6	6	6	6	6
Operating temperature [°C]	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90
Air volume per cycle [cm³]	51	90	90	51	90	90
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	0.83	1	1	0.83	1	1

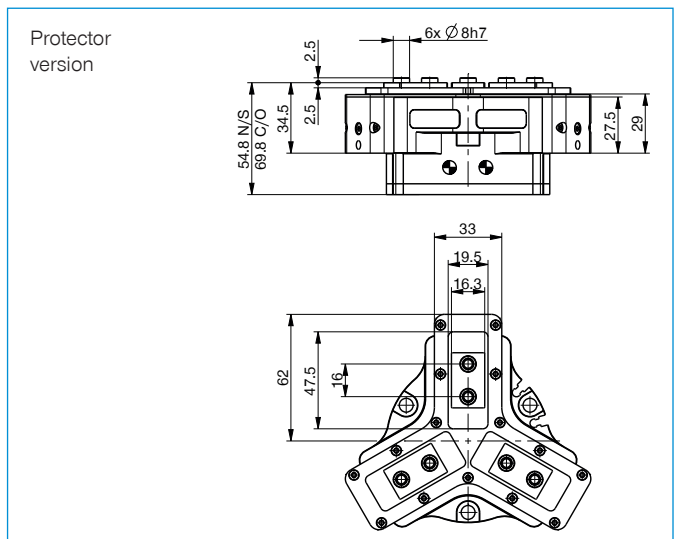
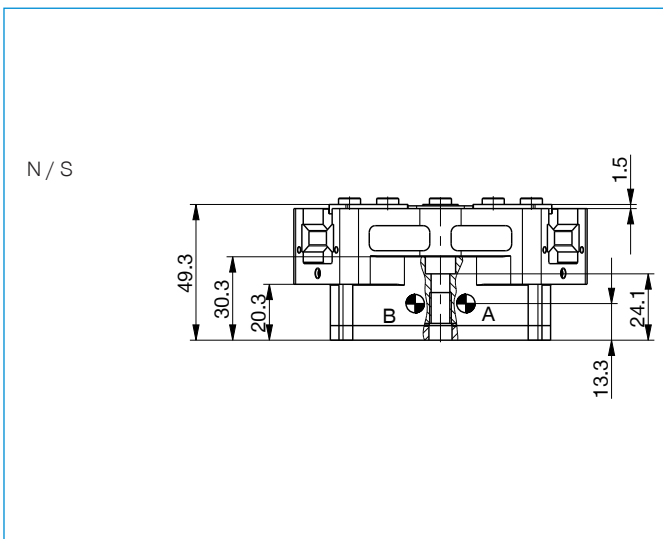
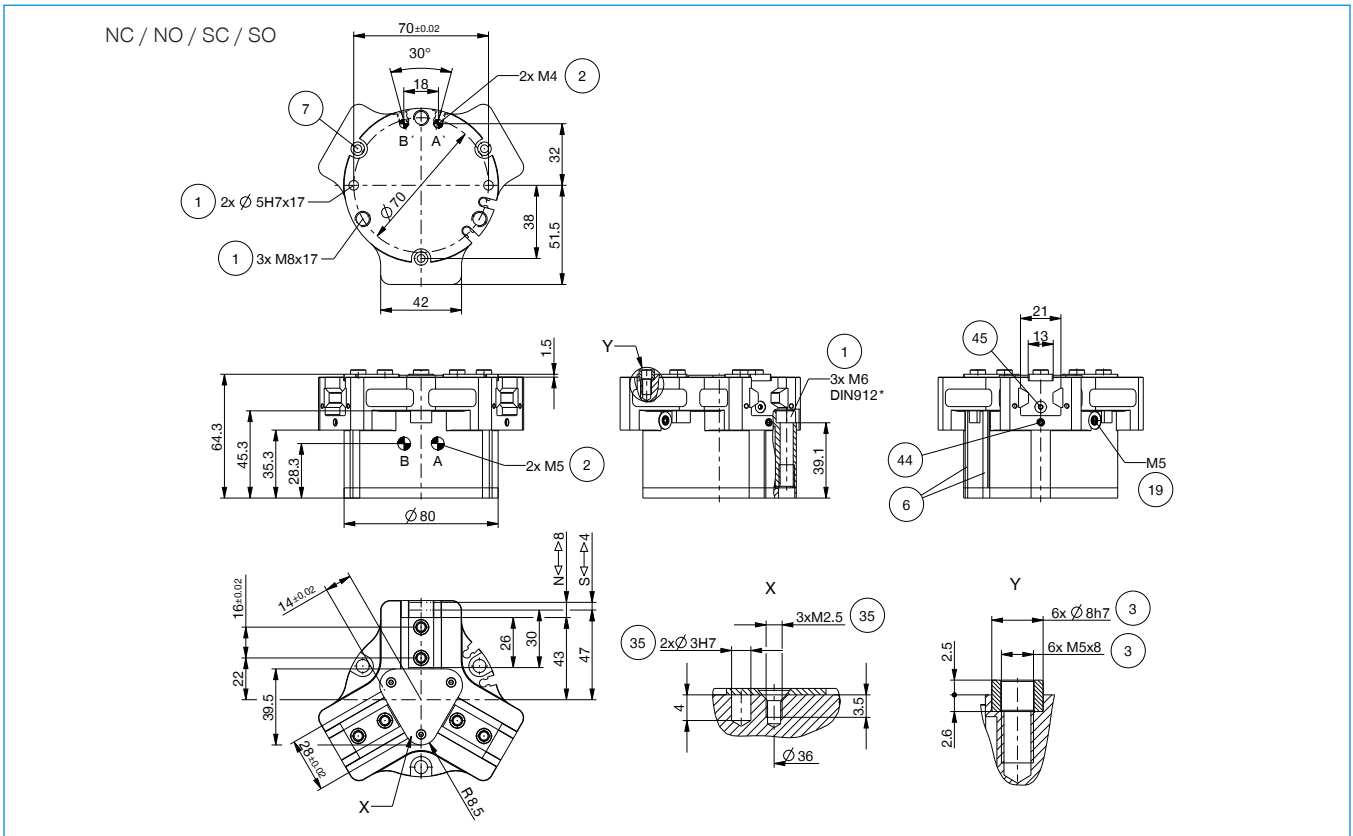
Order no.	Technical Data - High Temperature Version					
	GPD5008N-20-A	GPD5008NC-20-A	GPD5008NO-20-A	GPD5008S-20-A	GPD5008SC-20-A	GPD5008SO-20-A
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130

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

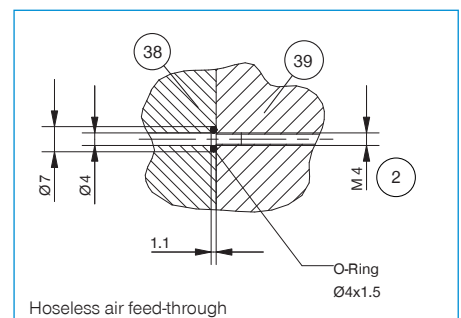
Order no.	Technical Data - High Temperature Protector Version					
	GPD5008N-24-A	GPD5008NC-24-A	GPD5008NO-24-A	GPD5008S-24-A	GPD5008SC-24-A	GPD5008SO-24-A
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130
Protection to IEC 60529	IP67 *	IP67 *	IP67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

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

TECHNICAL DRAWINGS

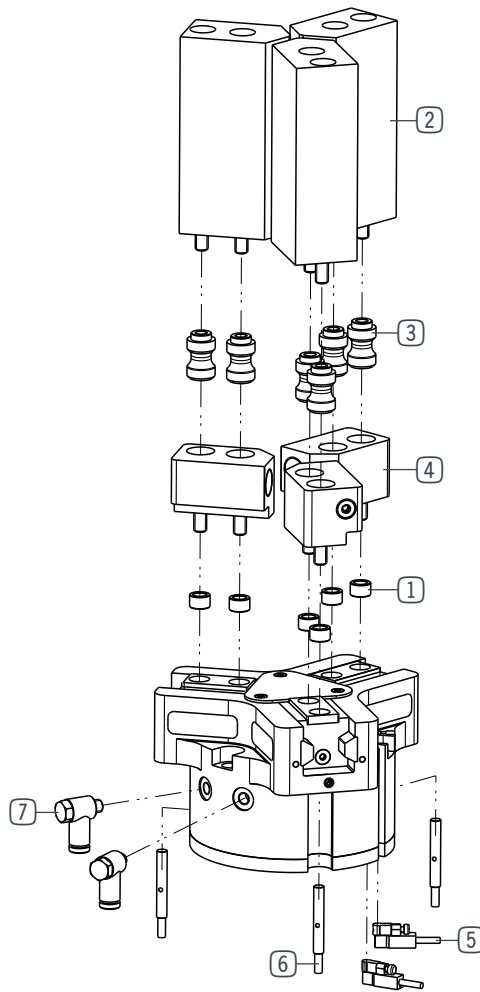


- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑥ Integrated slot for magnetic field sensor
- ⑦ Mounting block
- ⑱ Air purge connection option
- ⑳ Attachment option for customer-specific fittings
- ㉘ Adapter
- ㉙ Gripper
- ㉚ Clamp for sensor
- ㉛ Switch cam adjustment
- Ⓐ Air connection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



3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5008



► INCLUDED IN DELIVERY



Centering Disc

024231

▶ RECOMMENDED ACCESSORIES



Universal jaw aluminium

UB5008AL



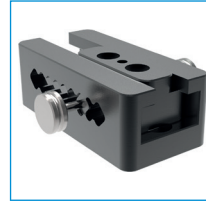
Universal jaw steel

UB5008ST



Aluminum adjustment jaw

EB5008AL



Steel adjustment jaw

EB5008ST



Changeable jaw, loose-part-set

WB5008L



Changeable jaw, fix-part

WB5008F



Pressure piece N / S

ADS5008-01



Pressure piece NC / NO / SC / SO

ADS5008-02



Inductive Proximity Switch Cable 0,3 m - Connector M8

NJ4-E2SK-01



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

MFS103SKHC



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

MFS204SKHC



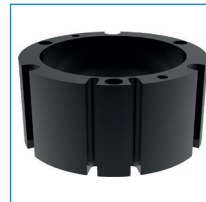
2-Position-Sensor Cable 0,3 m - Connector M8

MFSP2SKHC-02



Angled Fittings - Quick Connect Style

WVM5



Compensation module N / S

ZUB5008DNS

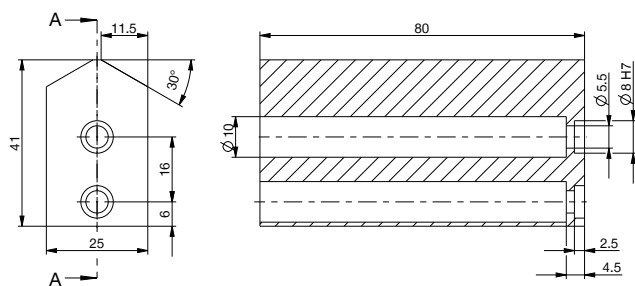


Compensation module NC / NO / SC / SO

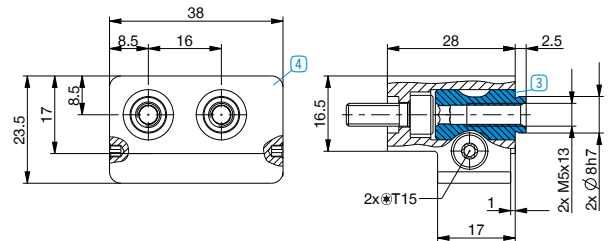
ZUB5008DCO

▶ TECHNICAL DRAWINGS ACCESSORIES

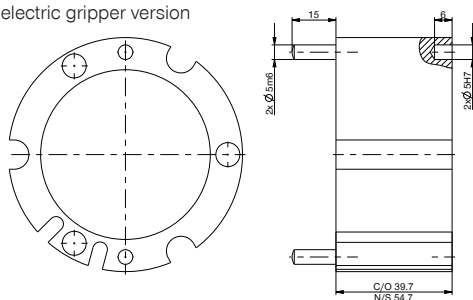
One universal jaw is required for each gripper jaw **(3)**



For each gripper jaw, one interchangeable jaw loose part set **(3)** and one interchangeable jaw fixed part **(4)** are needed



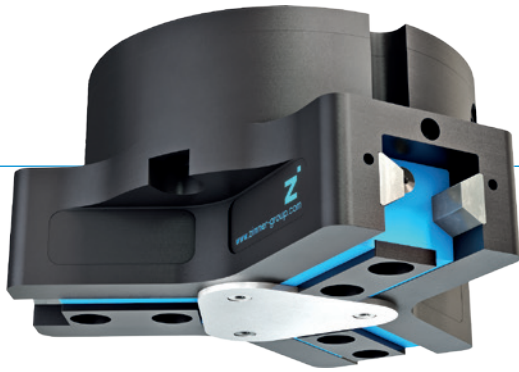
Compensation module for compensating for the height differences between the pneumatic and electric gripper version



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

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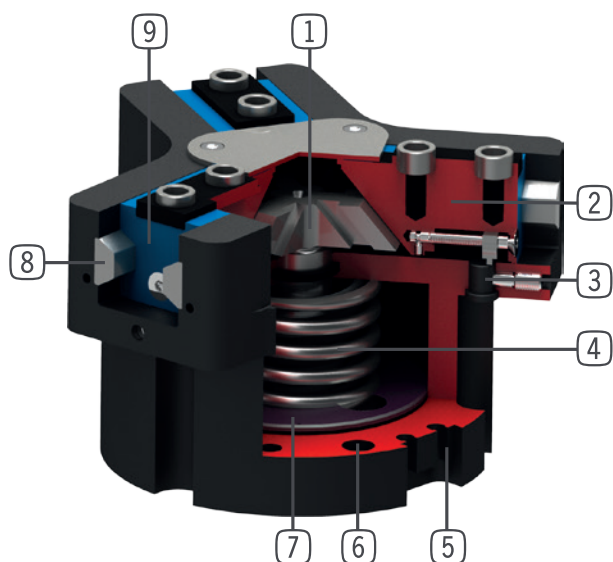
HOW TO ORDER CORRECTLY

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

Order no.	GPD5010	<input type="checkbox"/>	<input type="checkbox"/>	- <input type="checkbox"/>	-A
Basis version	N				
High force	S				
For external gripping, self-locking, spring closing			C		
For internal gripping, self-locking, spring opening			O		
temperature-resistant version to 130 °C					20
Protector version IP67 for use in adverse environments (with purged air)					21
temperature-resistant protector version IP67 for use in adverse environments (with purged air) to 130 °C					24

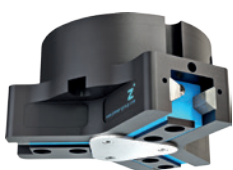


► BENEFITS IN DETAIL



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

► SERIES CHARACTERISTICS



Number of installation sizes	11
Stroke per jaw	2,5 mm - 45 mm
Gripping force	310 N - 72500 N
Weight	0,14 kg - 88 kg
AP class	5



30 million maintenance-free cycles (max.)



High-strength S



IP67



Temperature-resistant



Spring closing C



Inductive sensor



Corrosion resistance



Purged air



Spring opening O



IP64



Magnetic field sensor