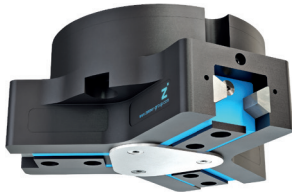


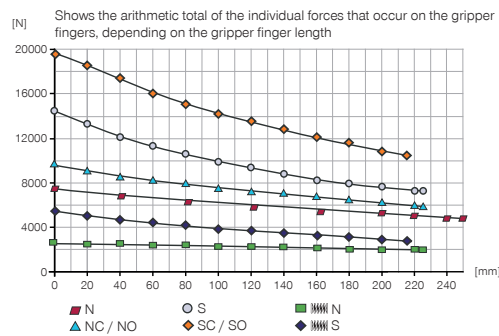
3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5016

PRODUCT SPECIFICATIONS

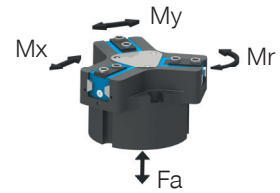


Gripping force diagram



Forces and moments

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



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

TECHNICAL DATA

Order no.	Technical data					
	GPD5016N-00-A	GPD5016NC-00-A	GPD5016NO-00-A	GPD5016S-00-A	GPD5016SC-00-A	GPD5016SO-00-A
Stroke per jaw [mm]	16	16	16	8	8	8
Gripping force in closing [N]	6870	9240		14700	19780	
Gripping force in opening [N]	7120		9490	15250		20330
Gripping force secured by spring min. [N]		2370	2370		5080	5080
Closing time [s]	0.4	0.3	0.5	0.4	0.3	0.5
Opening time [s]	0.4	0.5	0.3	0.4	0.5	0.3
Permissible 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
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]	525	925	925	525	925	925
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	6.3	8.1	8.1	6.3	8.1	8.1

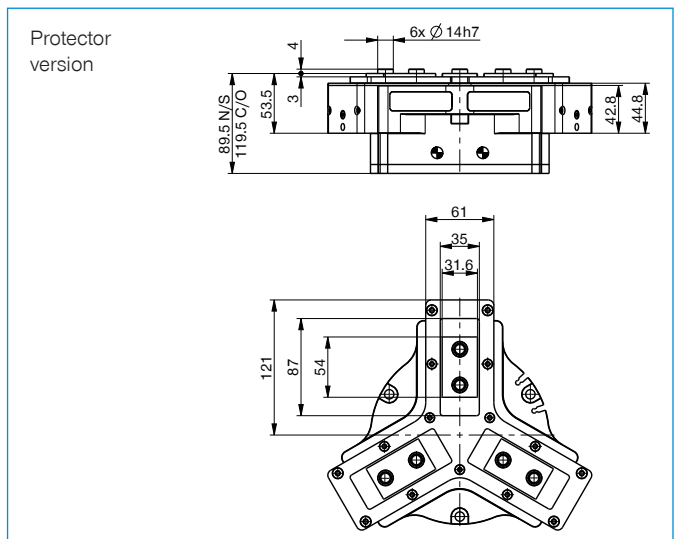
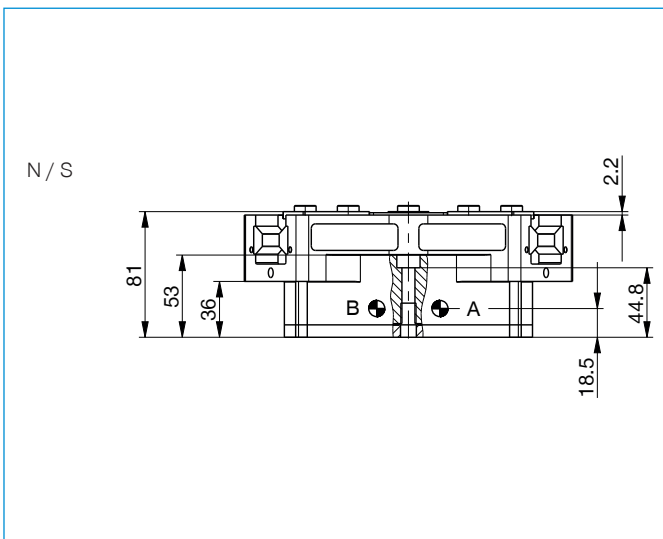
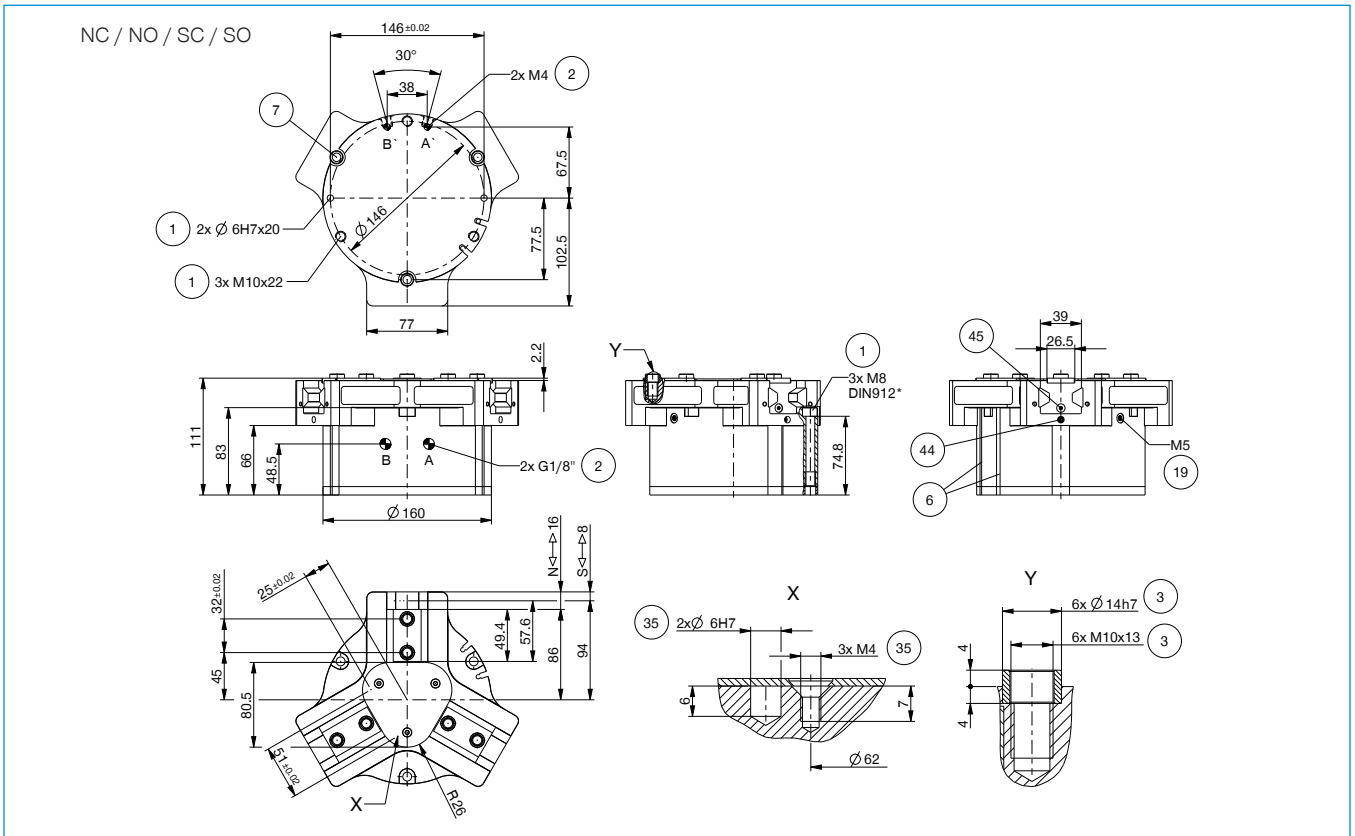
Order no.	Technical Data - High Temperature Version					
	GPD5016N-20-A	GPD5016NC-20-A	GPD5016NO-20-A	GPD5016S-20-A	GPD5016SC-20-A	GPD5016SO-20-A
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130

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

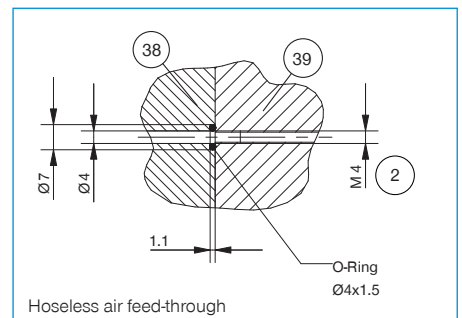
Order no.	Technical Data - High Temperature Protector Version					
	GPD5016N-24-A	GPD5016NC-24-A	GPD5016NO-24-A	GPD5016S-24-A	GPD5016SC-24-A	GPD5016SO-24-A
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130
Protection to IEC 60529	IP67 *	IP67 *	IP67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

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

TECHNICAL DRAWINGS

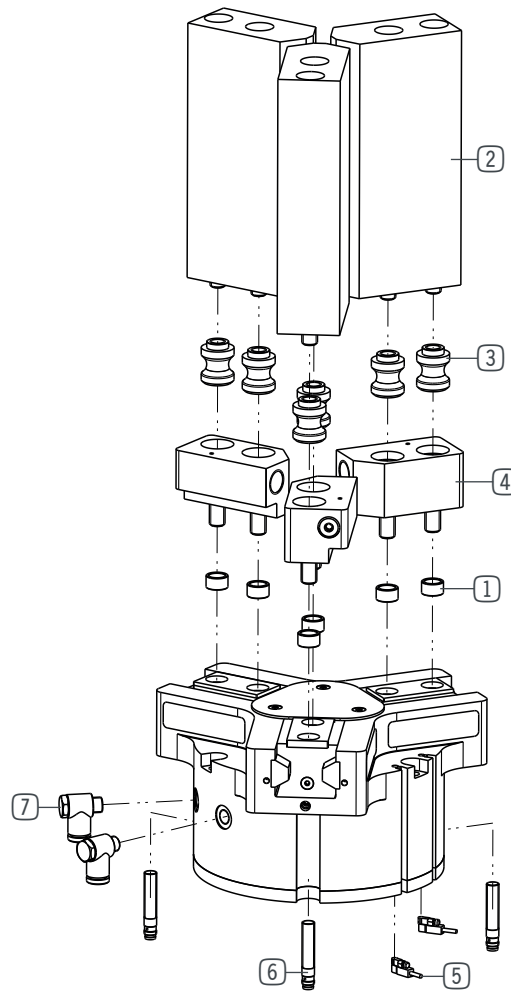


- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑥ Integrated slot for magnetic field sensor
- ⑦ Mounting block
- ⑱ Air purge connection option
- ⑳ Attachment option for customer-specific fittings
- ㉘ Adapter
- ㉙ Gripper
- ㉚ Clamp for sensor
- ㉛ Switch cam adjustment
- Ⓐ Air connection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



3-JAW CONCENTRIC GRIPPERS

INSTALLATION SIZE GPD5016



▶ INCLUDED IN DELIVERY



Centering Disc

019387

▶ RECOMMENDED ACCESSORIES



Universal jaw aluminium

UB5016AL



Universal jaw steel

UB5016ST



Aluminum adjustment jaw

EB5016AL



Steel adjustment jaw

EB5016ST



Changeable jaw, loose-part-set

WB5016L



Changeable jaw, fix-part

WB5016F



Pressure piece N / S

ADS5016-01



Pressure piece NC / NO / SC / SO

ADS5016-02



Inductive proximity switch - Connector M8

NJ8-E2S



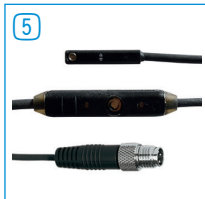
Magnetic field sensor Angled Cable 0,3 m - Connector M8

MFS103SKHC



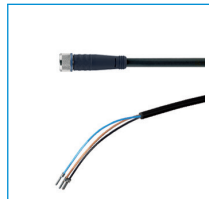
Magnetic field sensor Straight Cable 0,3 m - Connector M8

MFS204SKHC



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

MFSP2SKHC-02



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

KAG500



Angled Fittings - Quick Connect Style

WV1-8X8

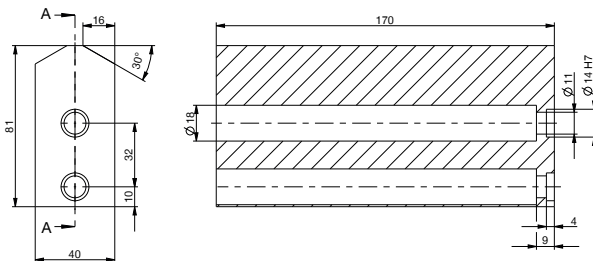


Pressure Safety Valve

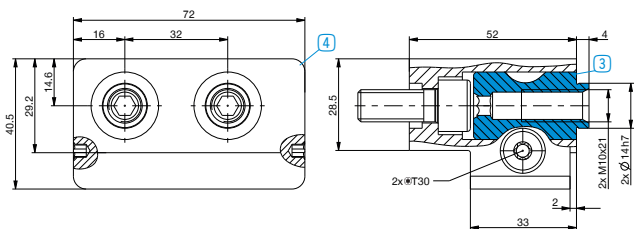
DSV1-8

▶ TECHNICAL DRAWINGS ACCESSORIES

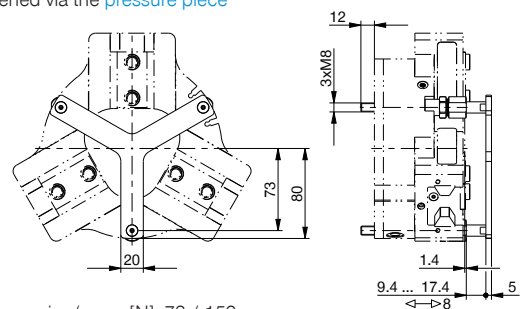
One universal jaw is required for each gripper jaw ⁽²⁾
A-A



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



Gripper is fastened via the **pressure piece**

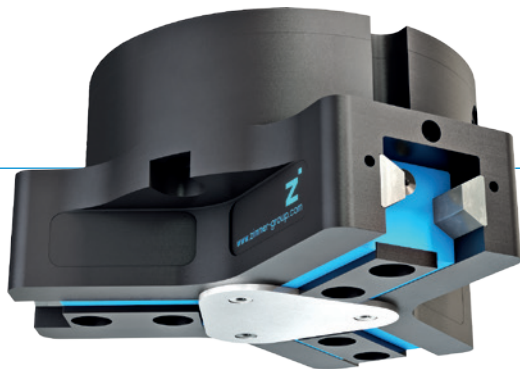


Total spring force min. / max. [N]: 73 / 159

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 welcome the challenge!

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

Find the best product for your specific use:

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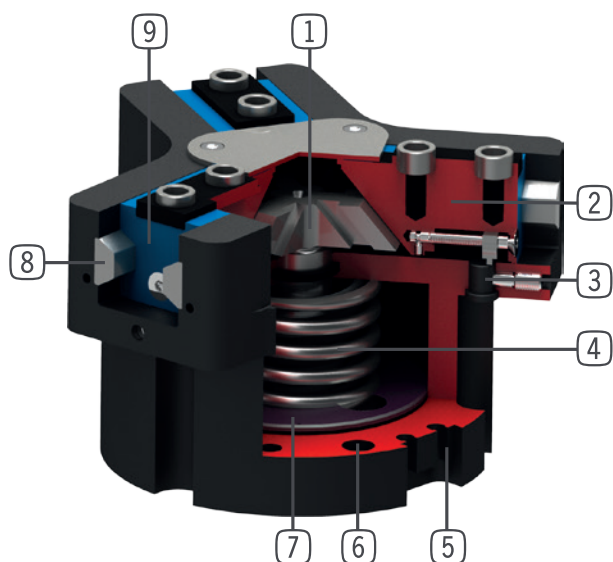
HOW TO ORDER CORRECTLY

- ▶ 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

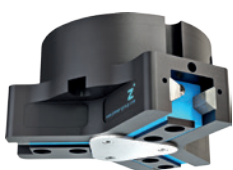


► BENEFITS IN DETAIL



- 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