

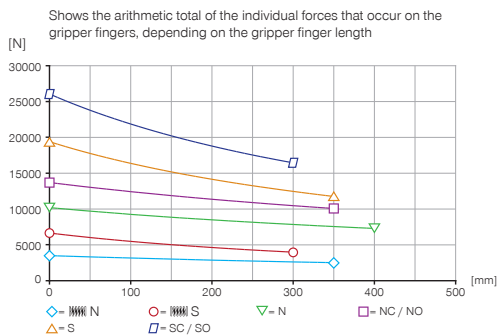
2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5045

1 PRODUCT SPECIFICATIONS

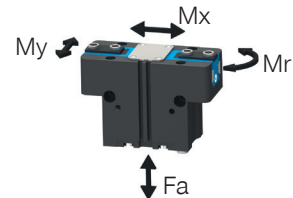


Gripping force diagram



Forces and moments

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



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

TECHNICAL DATA

Order no.	Technical data					
	GPP5045N-00-A	GPP5045NC-00-A	GPP5045NO-00-A	GPP5045S-00-A	GPP5045SC-00-A	GPP5045SO-00-A
Stroke per jaw [mm]	45	45	45	26	26	26
Gripping force in closing [N]	10200	13700		19400	26050	
Gripping force in opening [N]	10700		14200	20300		26950
Gripping force secured by spring min. [N]		3500	3500		6650	6650
Closing time [s]	0.55	0.45	0.7	0.55	0.45	0.7
Opening time [s]	0.55	0.7	0.45	0.55	0.7	0.45
Permissible weight per jaw max [kg]	17	17	17	17	17	17
Length of the gripper fingers max. [mm]	400	350	350	350	300	300
Repetition accuracy +/- [mm]	0.05	0.05	0.05	0.05	0.05	0.05
Operating pressure min. [bar]	3	4	4	3	4	4
Operating pressure max. [bar]	8	6.5	6.5	8	6.5	6.5
Nominal operating pressure [bar]	6	6	6	6	6	6
Operating temperature [°C]	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90	-10 ... +90
Air volume per cycle [cm³]	2420	4400	4400	2420	4400	4400
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	33	40.5	40.5	34	41.5	41.5

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

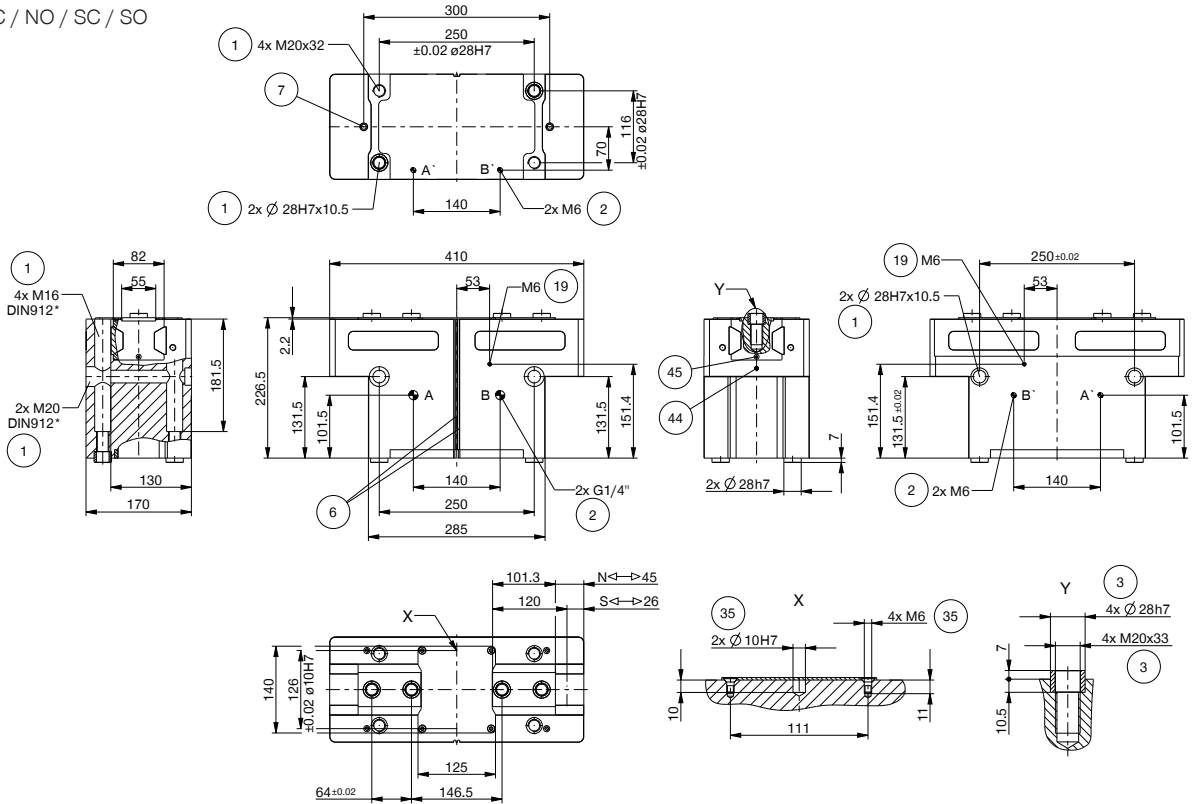
Order no.	Technical Data - Protector Version					
	GPP5045N-21-A	GPP5045NC-21-A	GPP5045NO-21-A	GPP5045S-21-A	GPP5045SC-21-A	GPP5045SO-21-A
Protection to IEC 60529	IP67 *	IP67 *	IP67 *	IP67 *	IP67 *	IP67 *
Weight [kg]	41.5	49	49	42.5	50	50

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

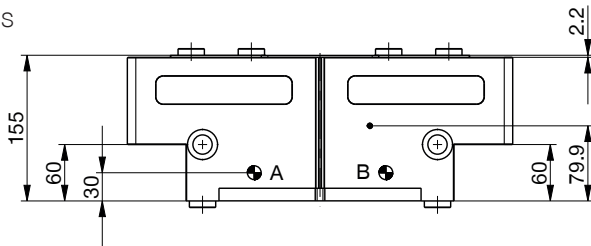
*with purged air (max. 0,5 bar)

TECHNICAL DRAWINGS

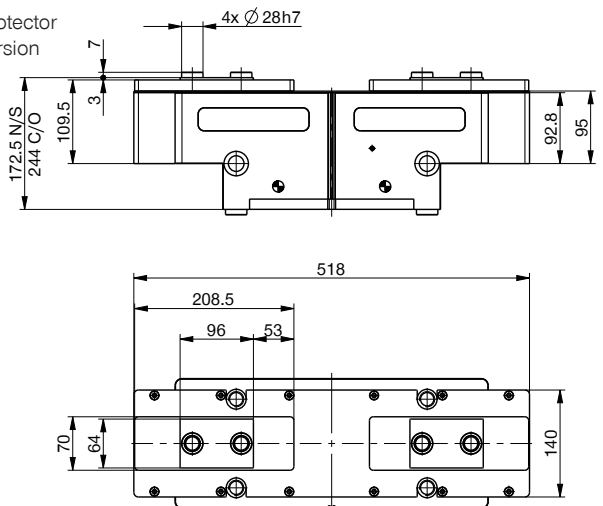
NC / NO / SC / SO



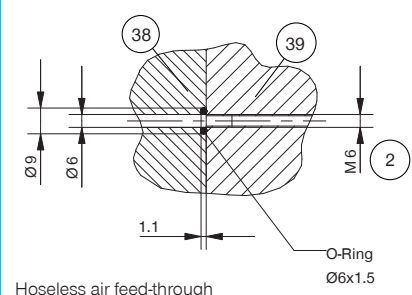
N / S



Protector version



- | | |
|---|---------------------------------------|
| ① Gripper attachment | ③⑨ Gripper |
| ② Energy supply | ④④ Clamp for sensor |
| ③ Fixing for gripper finger | ④⑤ Switch cam adjustment |
| ⑥ Integrated slot for magnetic field sensor | Ⓐ Air connection (close) |
| ⑦ Mounting block | Ⓑ Air connection (open) |
| ⑱ Air purge connection option | Ⓐ Air connection, alternative (close) |
| ③⑤ Attachment option for customer-specific fittings | Ⓑ Air connection, alternative (open) |
| ③⑧ Adapter | |

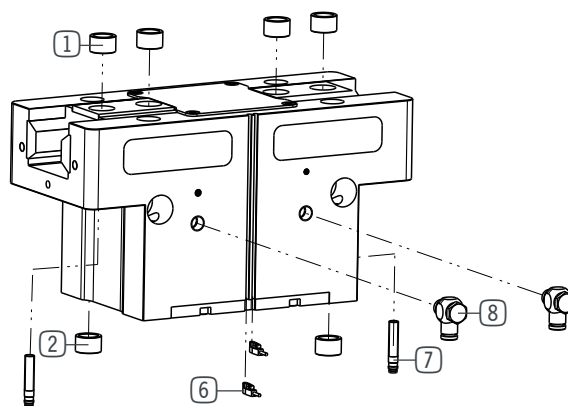


2-JAW PARALLEL GRIPPERS

INSTALLATION SIZE GPP5045

1

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



▶ INCLUDED IN DELIVERY



Centering Disc

036784

▶ RECOMMENDED ACCESSORIES



7

Inductive proximity switch - Connector M8
NJ8-E2S



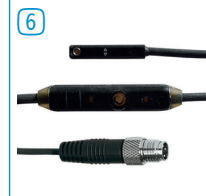
6

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



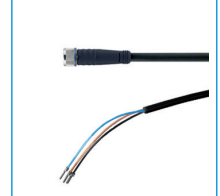
6

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



6

2-Position-Sensor Cable 0,3 m - Connector M8
MFSP2SKHC-02



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



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



8

Straight Fittings - Quick Connect Style
GV1-4X8



8

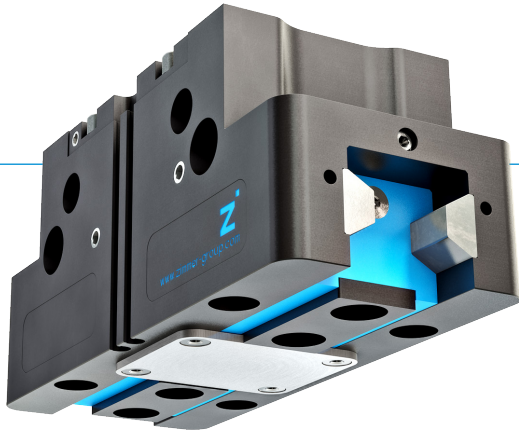
Angled Fittings - Quick Connect Style
WV1-4X8

2-JAW PARALLEL GRIPPERS

SERIES GPP5000

1

▶ 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



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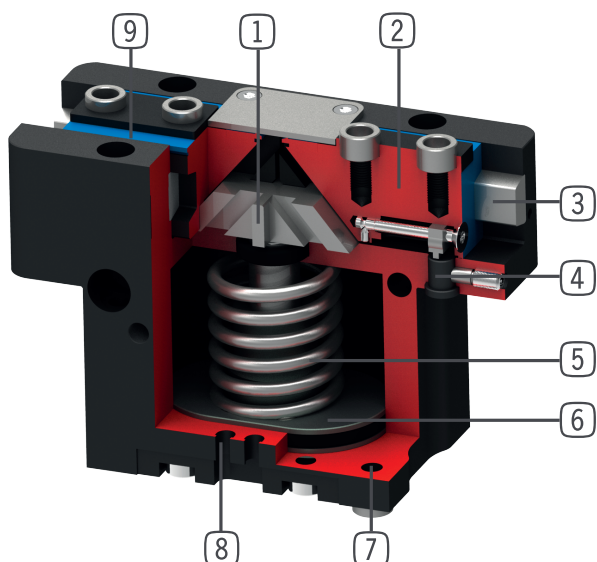
HOW TO ORDER CORRECTLY

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

Order no.	GPP5010	<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**
 - Supports to absorb high forces and moments
 - Synchronized gripper jaw movement
- ② **Gripper jaw**
 - 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
- ⑥ **Drive**
 - Double-acting pneumatic rotor cylinder
- ⑦ **Mounting and positioning**
 - Alternatively, on several sides for customized mounting
 - Pneumatic and electrical versions identical apart from height
- ⑧ **Sensing slot**
 - mounting and positioning of magnetic field sensors
- ⑨ **Dual lip seal**
 - IP64 and up to IP67 (with purged air) for Protector version
 - Prevents grease from being squeezed out, increasing service life

► SERIES CHARACTERISTICS



Number of installation sizes	11
Stroke per jaw	2,5 mm - 45 mm
Gripping force	140 N - 26950 N
Weight	0,08 kg - 41,5 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