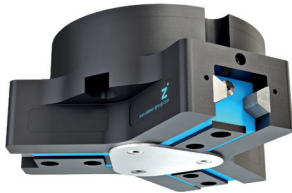


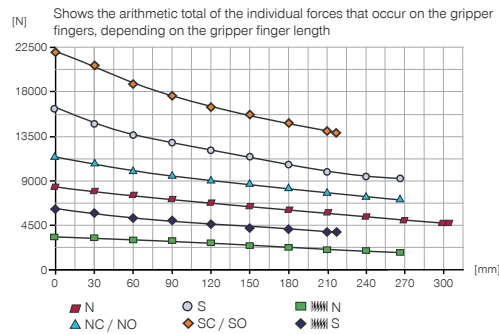
# 3-JAW CONCENTRIC GRIPPERS

## INSTALLATION SIZE GPD5025

### ▶ PRODUCT SPECIFICATIONS

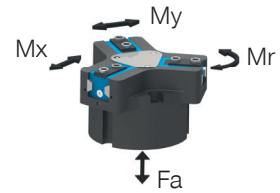


#### ▶ Gripping force diagram



#### ▶ Forces and moments

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



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

### ▶ TECHNICAL DATA

Order no.	▶ Technical data					
	GPD5025N-00-A	GPD5025NC-00-A	GPD5025NO-00-A	GPD5025S-00-A	GPD5025SC-00-A	GPD5025SO-00-A
Stroke per jaw [mm]	25	25	25	14	14	14
Gripping force in closing [N]	8430	11560		16240	22270	
Gripping force in opening [N]	8730		11860	16820		22850
Gripping force secured by spring min. [N]		3130	3130		6030	6030
Closing time [s]	0.6	0.6	1.0	0.6	0.6	1.0
Opening time [s]	0.6	1.0	0.6	0.6	1.0	0.6
Permissible 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
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]	1025	1750	1750	1025	1750	1750
Protection to IEC 60529	IP64	IP64	IP64	IP64	IP64	IP64
Weight [kg]	11.8	15.4	15.4	11.8	15.4	15.4

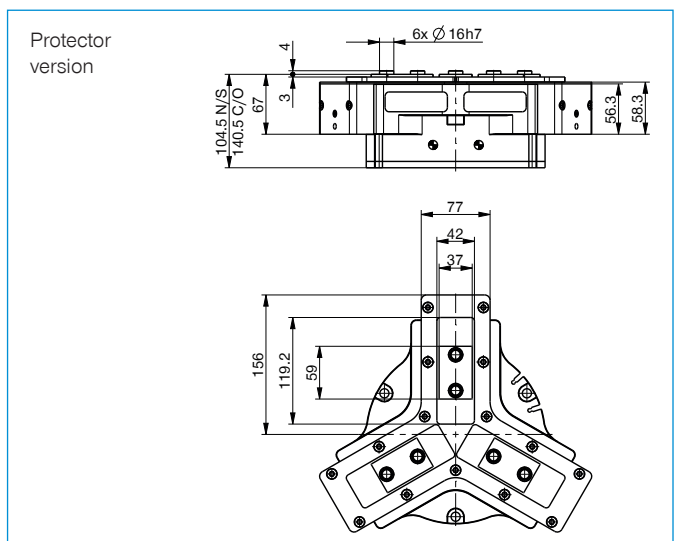
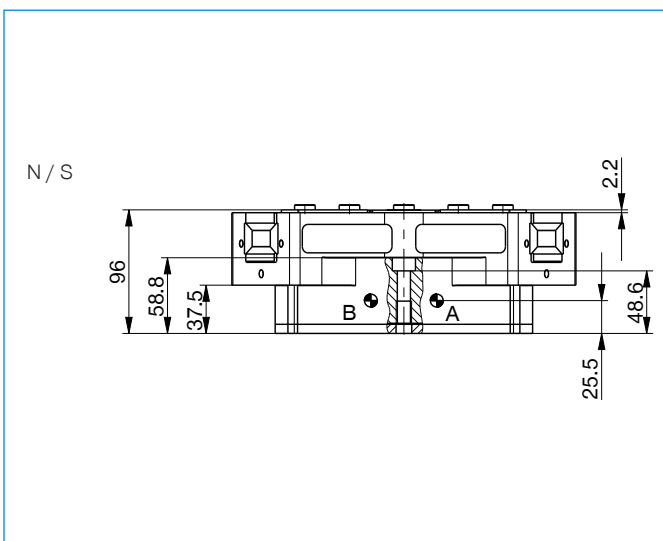
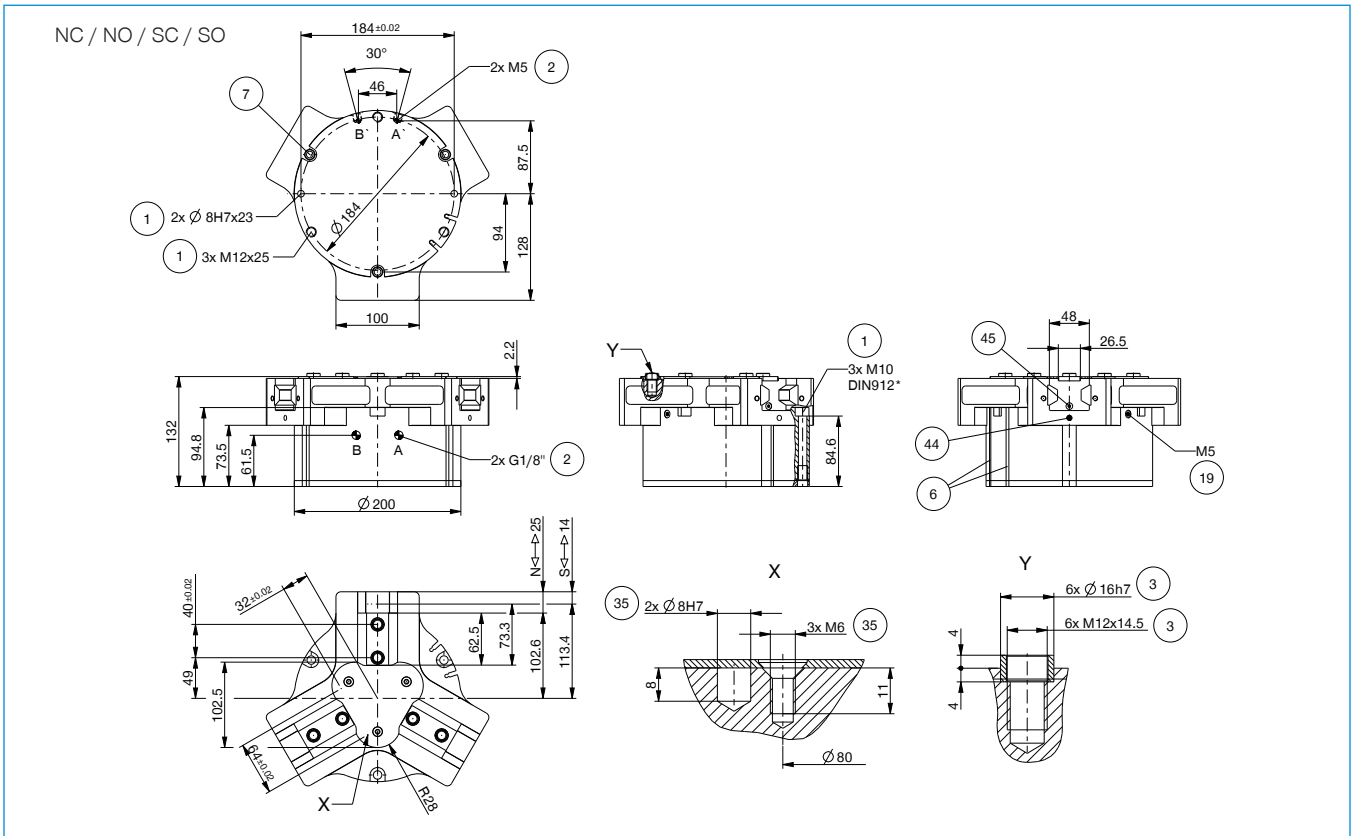
Order no.	▶ Technical Data - High Temperature Version					
	GPD5025N-20-A	GPD5025NC-20-A	GPD5025NO-20-A	GPD5025S-20-A	GPD5025SC-20-A	GPD5025SO-20-A
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130

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

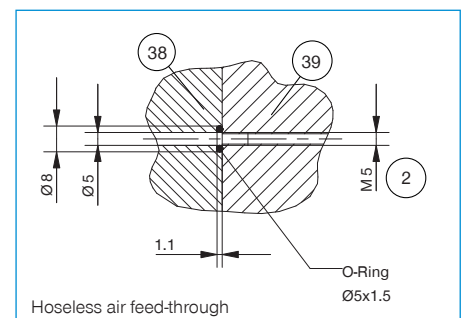
Order no.	▶ Technical Data - High Temperature Protector Version					
	GPD5025N-24-A	GPD5025NC-24-A	GPD5025NO-24-A	GPD5025S-24-A	GPD5025SC-24-A	GPD5025SO-24-A
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130
Protection to IEC 60529	IP67 *	IP67 *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

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

## TECHNICAL DRAWINGS

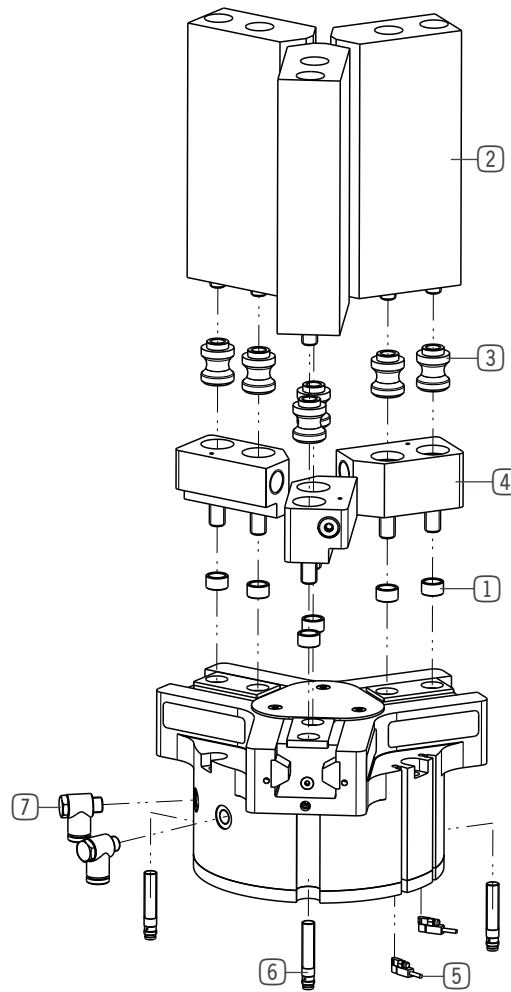


- |   |   |
|---|---|
| ① Gripper attachment                                | ③⑨ Gripper                              |
| ② Energy supply                                     | ④④ Clamp for sensor                     |
| ③ Fixing for gripper finger                         | ④⑤ Switch cam adjustment                |
| ⑥ Integrated slot for magnetic field sensor         | ④ A Air connection (close)              |
| ⑦ Mounting block                                    | ④ B Air connection (open)               |
| ①⑨ Air purge connection option                      | ④ A Air connection, alternative (close) |
| ③⑤ Attachment option for customer-specific fittings | ④ B Air connection, alternative (open)  |
| ③⑧ Adapter  |   |



# 3-JAW CONCENTRIC GRIPPERS

## INSTALLATION SIZE GPD5025



### ▶ INCLUDED IN DELIVERY



Centering Disc

030529

## ▶ RECOMMENDED ACCESSORIES



Universal jaw aluminium

**UB5025AL**



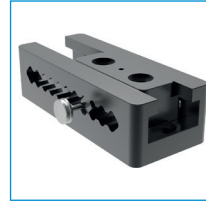
Universal jaw steel

**UB5025ST**



Aluminum adjustment jaw

**EB5025AL**



Steel adjustment jaw

**EB5025ST**



Changeable jaw, loose-part-set

**WB5025L**



Changeable jaw, fix-part

**WB5025F**



Pressure piece N / S

**ADS5025-01**



Pressure piece NC / NO / SC / SO

**ADS5025-02**



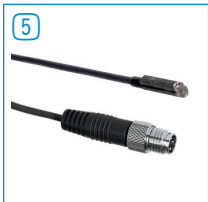
Inductive proximity switch - Connector M8

**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**



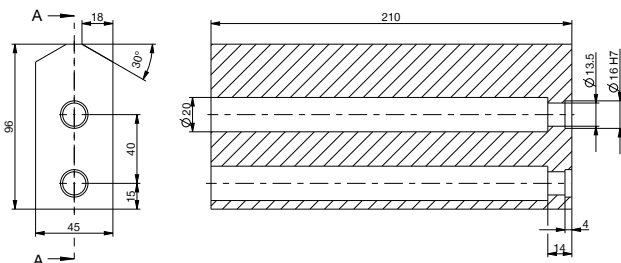
Pressure Safety Valve

**DSV1-8**

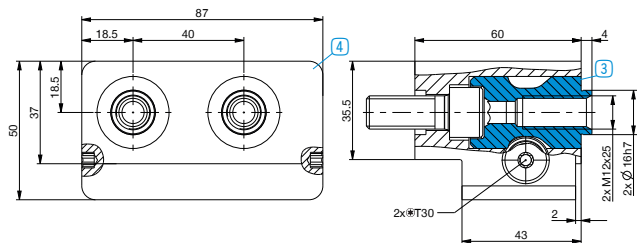
## ▶ TECHNICAL DRAWINGS ACCESSORIES

One universal jaw is required for each gripper jaw **2**

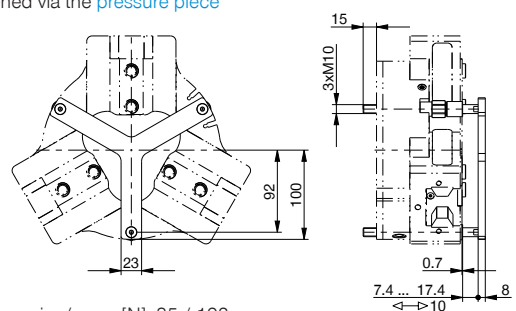
A-A



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**

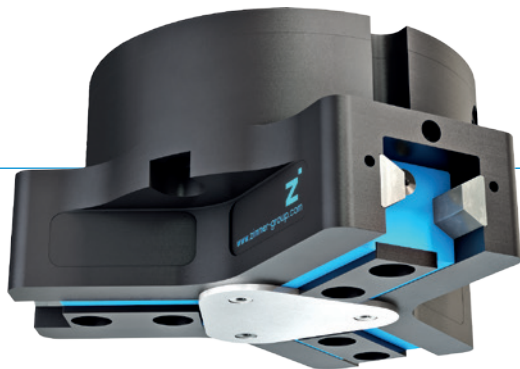


Total spring force min. / max. [N]: 85 / 192

# 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:

[www.zimmer-group.de](http://www.zimmer-group.de)

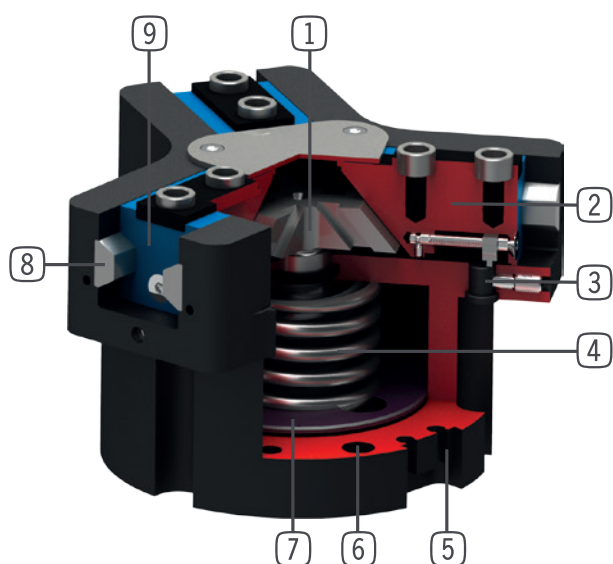
#### HOW TO ORDER CORRECTLY

- ▶ 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

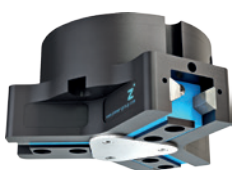


## ► BENEFITS IN DETAIL



- 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