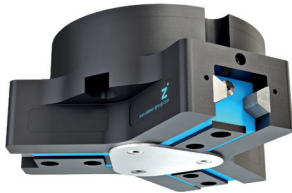


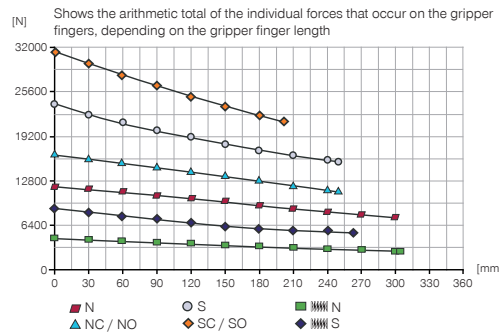
# 3-JAW CONCENTRIC GRIPPERS

## INSTALLATION SIZE GPD5030

### PRODUCT SPECIFICATIONS

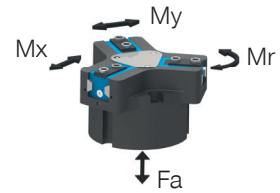


#### Gripping force diagram



#### Forces and moments

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



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

### TECHNICAL DATA

Order no.	Technical data					
	GPD5030N-00-A	GPD5030NC-00-A	GPD5030NO-00-A	GPD5030S-00-A	GPD5030SC-00-A	GPD5030SO-00-A
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
Permissible weight per jaw max [kg]	9.5	9.5	9.5	9.5	9.5	9.5
Length of the gripper fingers max. [mm]	300	250	250	250	200	200
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]	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

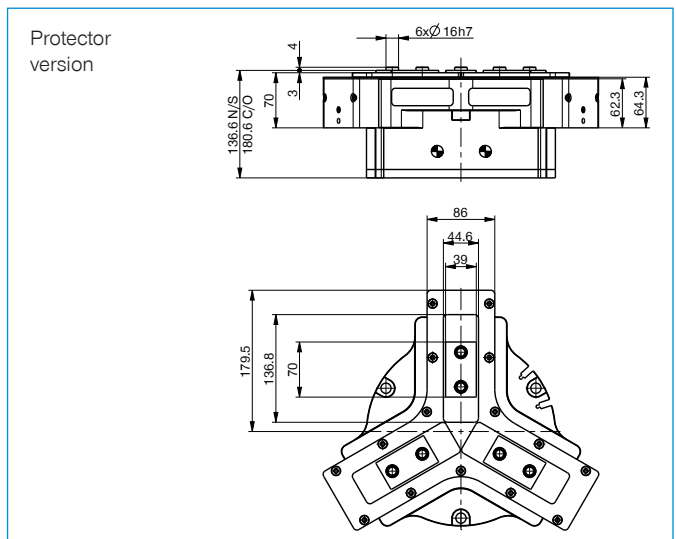
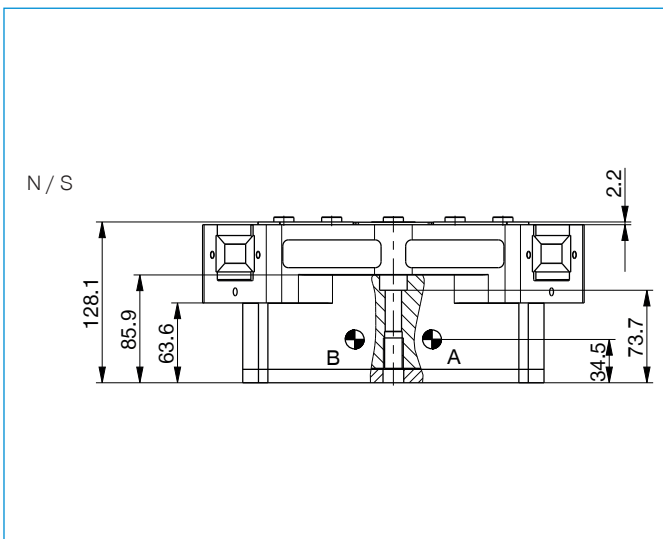
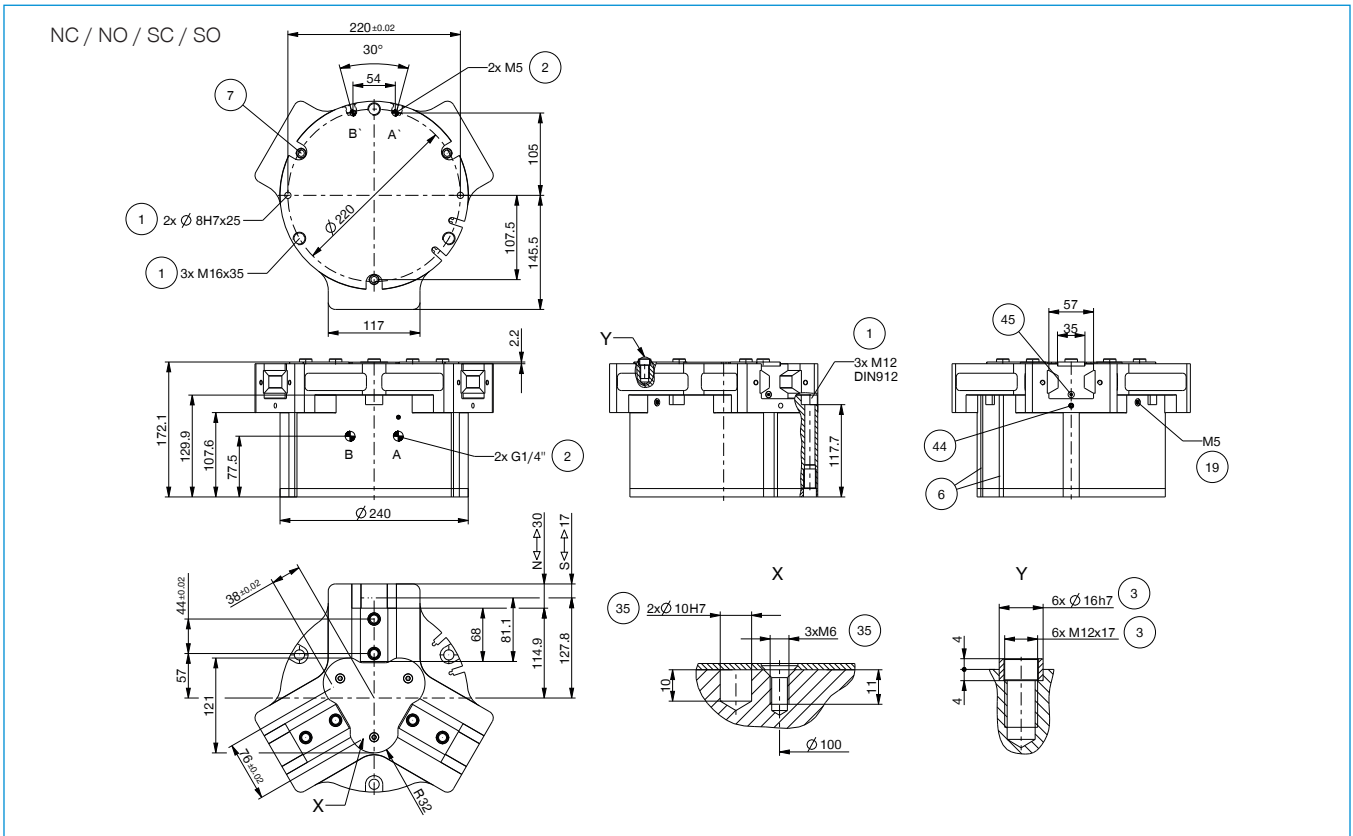
Order no.	Technical Data - High Temperature Version					
	GPD5030N-20-A	GPD5030NC-20-A	GPD5030NO-20-A	GPD5030S-20-A	GPD5030SC-20-A	GPD5030SO-20-A
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130

Order no.	Technical Data - Protector Version					
	GPD5030N-21-A	GPD5030NC-21-A	GPD5030NO-21-A	GPD5030S-21-A	GPD5030SC-21-A	GPD5030SO-21-A
Protection to IEC 60529	IP67 *	IP67 *	IP67 *	IP67 *	IP67 *	IP67 *
Weight [kg]	24	30.5	30.5	24	30.5	30.5

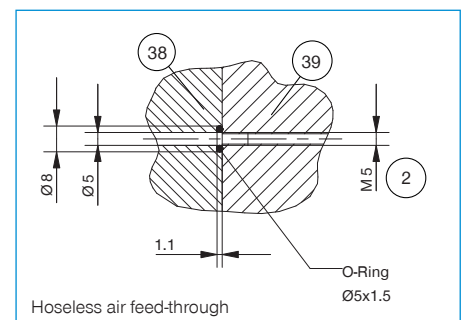
Order no.	Technical Data - High Temperature Protector Version					
	GPD5030N-24-A	GPD5030NC-24-A	GPD5030NO-24-A	GPD5030S-24-A	GPD5030SC-24-A	GPD5030SO-24-A
Operating temperature [°C]	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130	-10 ... +130
Protection to IEC 60529	IP67 *	IP67 *	IP67 *	IP67 *	IP67 *	IP67 *
Weight [kg]	24	30.5	30.5	24	30.5	30.5

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

## TECHNICAL DRAWINGS

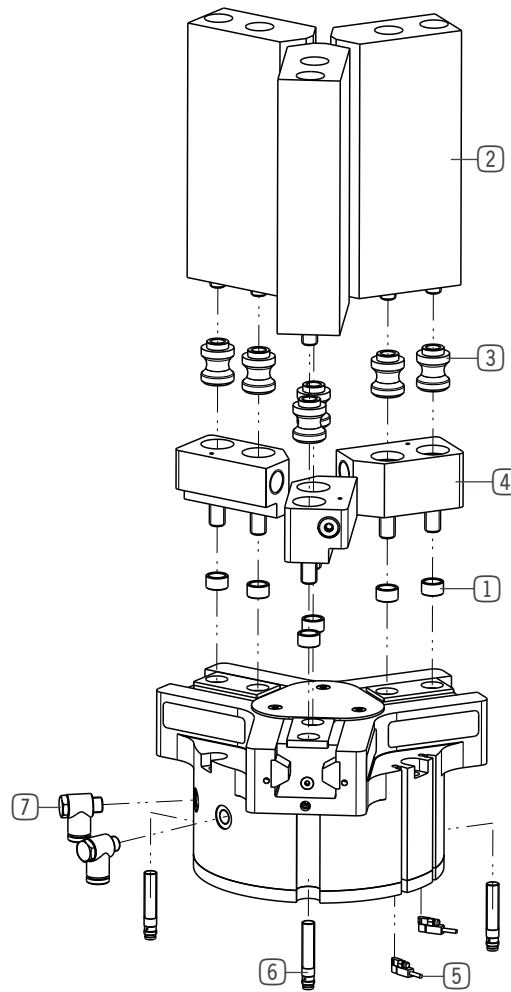


- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ⑥ Integrated slot for magnetic field sensor
- ⑦ Mounting block
- ⑱ Air purge connection option
- ⑳ Attachment option for customer-specific fittings
- ㉘ Adapter
- ㉙ Gripper
- ㉚ Clamp for sensor
- ㉛ Switch cam adjustment
- Ⓐ Air connection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



# 3-JAW CONCENTRIC GRIPPERS

## INSTALLATION SIZE GPD5030



### ▶ INCLUDED IN DELIVERY



Centering Disc

030529

## ▶ RECOMMENDED ACCESSORIES



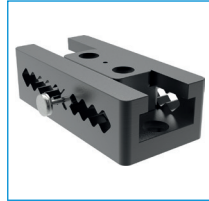
Universal jaw aluminium

UB5030AL



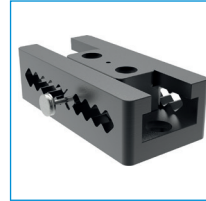
Universal jaw steel

UB5030ST



Aluminum adjustment jaw

EB5030AL



Steel adjustment jaw

EB5030ST



Changeable jaw, loose-part-set

WB5030L



Changeable jaw, fix-part

WB5030F



Pressure piece N / S

ADS5030-01



Pressure piece NC / NO / SC / SO

ADS5030-02



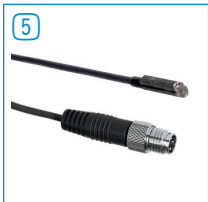
Inductive proximity switch - Connector M8

NJ8-E2S



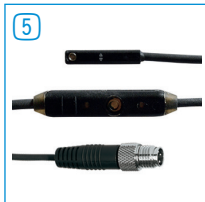
Magnetic field sensor Angled Cable 0,3 m - Connector M8

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

WV1-4X8



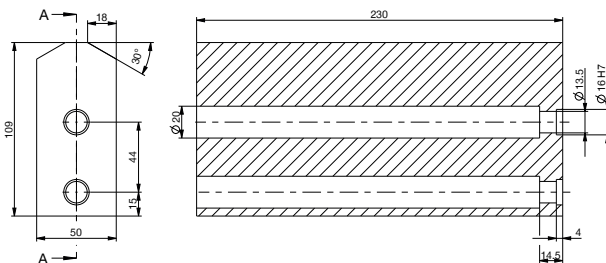
Pressure Safety Valve

DSV1-8

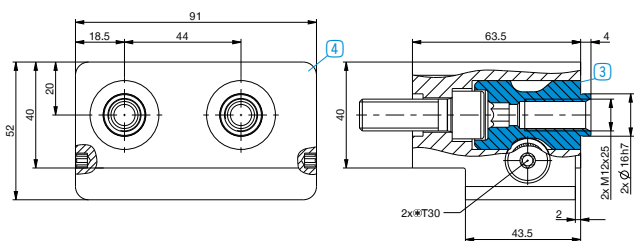
## ▶ TECHNICAL DRAWINGS ACCESSORIES

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

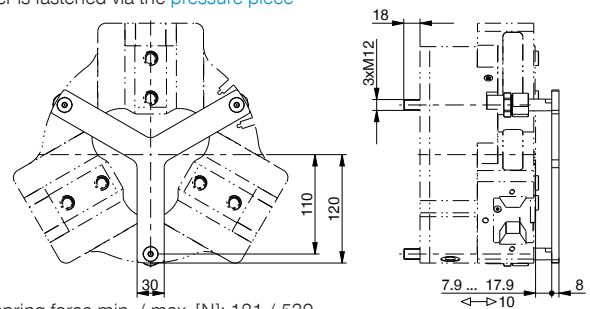
A-A



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**

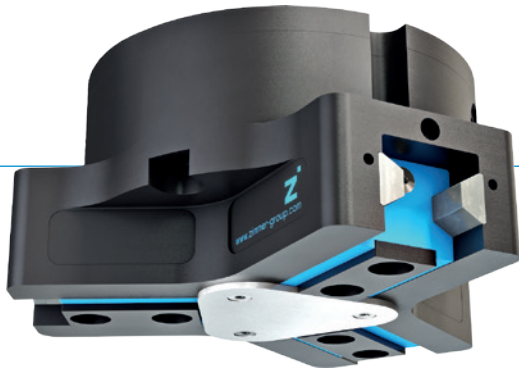


Total spring force min. / max. [N]: 121 / 539

# 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)

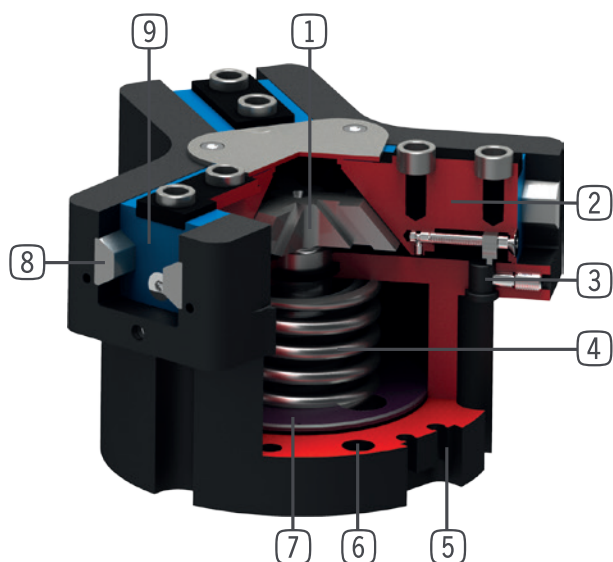
#### HOW TO ORDER CORRECTLY

- ▶ 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

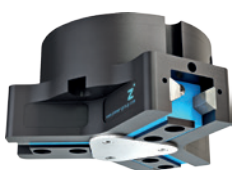


## ► BENEFITS IN DETAIL



- 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