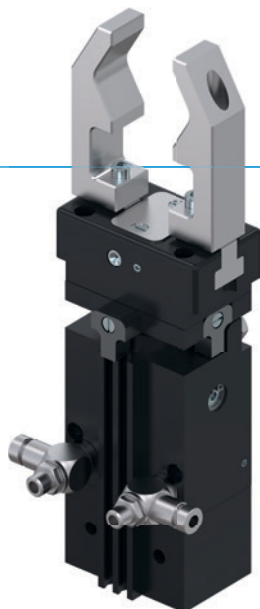


# 2-JAW PARALLEL ROTARY GRIPPERS

## SERIES DGP400

### ▶ PRODUCT ADVANTAGES



#### “TWO in ONE”

##### ▶ Proven T slot guide

This established and proven guiding technology stands for the highest process reliability like no other








##### ▶ 2 in 1

Gripping and swivelling in a module allows optimum utilisation of the installation space

##### ▶ Individually adjustable

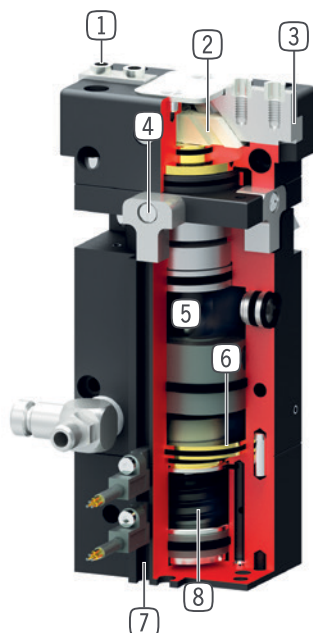
How you stay flexible: 90° or 180° swivel angle - You decide what your application requires on site

### ▶ SERIES CHARACTERISTICS

Installation size		Version		
DGP40X		N	NC	NO
 1.5 million maintenance-free cycles (max.)		•	•	•
 Spring closing C			•	
 Spring opening O				•
 Magnetic field sensor		•	•	•
 Rotation angle 90°		•	•	•
 Rotation angle 180°		•	•	•
 IP 40		•	•	•



## ► BENEFITS IN DETAIL



- ① **Removable centering sleeves**
  - quick and economical positioning of the gripper fingers
- ② **Wedge hook mechanism**
  - synchronized the movement of the gripper jaws
- ③ **Precise T-Slot guide**
  - high forces and moments capacity
- ④ **Endposition 0°/90°/180° adjustment**
  - endstops for 0°/90°/180° included with purchase
- ⑤ **Rotating-drive mechanism**
  - robust, wear-resistant
- ⑥ **Drive**
  - two double-acting pneumatic cylinders
- ⑦ **Slot for magnetic field sensor**
  - sensing of the rotational position and gripper jaw position
- ⑧ **Integrated gripping force safety device**
  - optional via integrated spring (C or O models)

## ► TECHNICAL DATA

	Stroke per jaw [mm]	Gripping force [N]	Weight [kg]	IP class
Installation size <b>DGP404</b>	4	115 - 155	0,44 - 0,48	IP40

## ► FURTHER INFORMATION IS AVAILABLE ONLINE



All information just a click away at: [www.zimmer-group.com](http://www.zimmer-group.com). Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product. Quick, clear and always up-to-date.

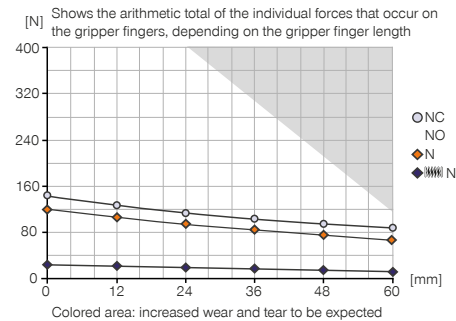
# 2-JAW PARALLEL ROTARY GRIPPERS

## INSTALLATION SIZE DGP404

### ▶ PRODUCT SPECIFICATIONS

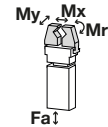


#### ▶ Gripping force diagram



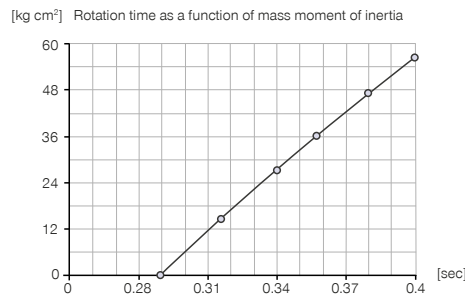
#### ▶ Forces and moments

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



Mr [Nm]	8
Mx [Nm]	15
My [Nm]	10
Fa [N]	300

#### ▶ Rotation time diagram



### ▶ INCLUDED IN DELIVERY



2 [piece]  
Flow Control Valves - with Swivel joint  
**DRVM5X4**



4 [piece]  
Centering Disc  
**DST40400**



1 [piece]  
Stop 90° + 180°  
**ANS0065**

### ▶ RECOMMENDED ACCESSORIES



#### ENERGY SUPPLY



**GVM5**  
Straight Fittings - Quick Connect Style



#### SENSORS



**MFS01-S-KHC-P1-PNP**  
Magnetic field sensor angled, cable 0.3 m - M8 connector



#### SENSORS



**MFS01-K-KHC-P1-PNP**  
Magnetic field sensor angled, cable 5 m

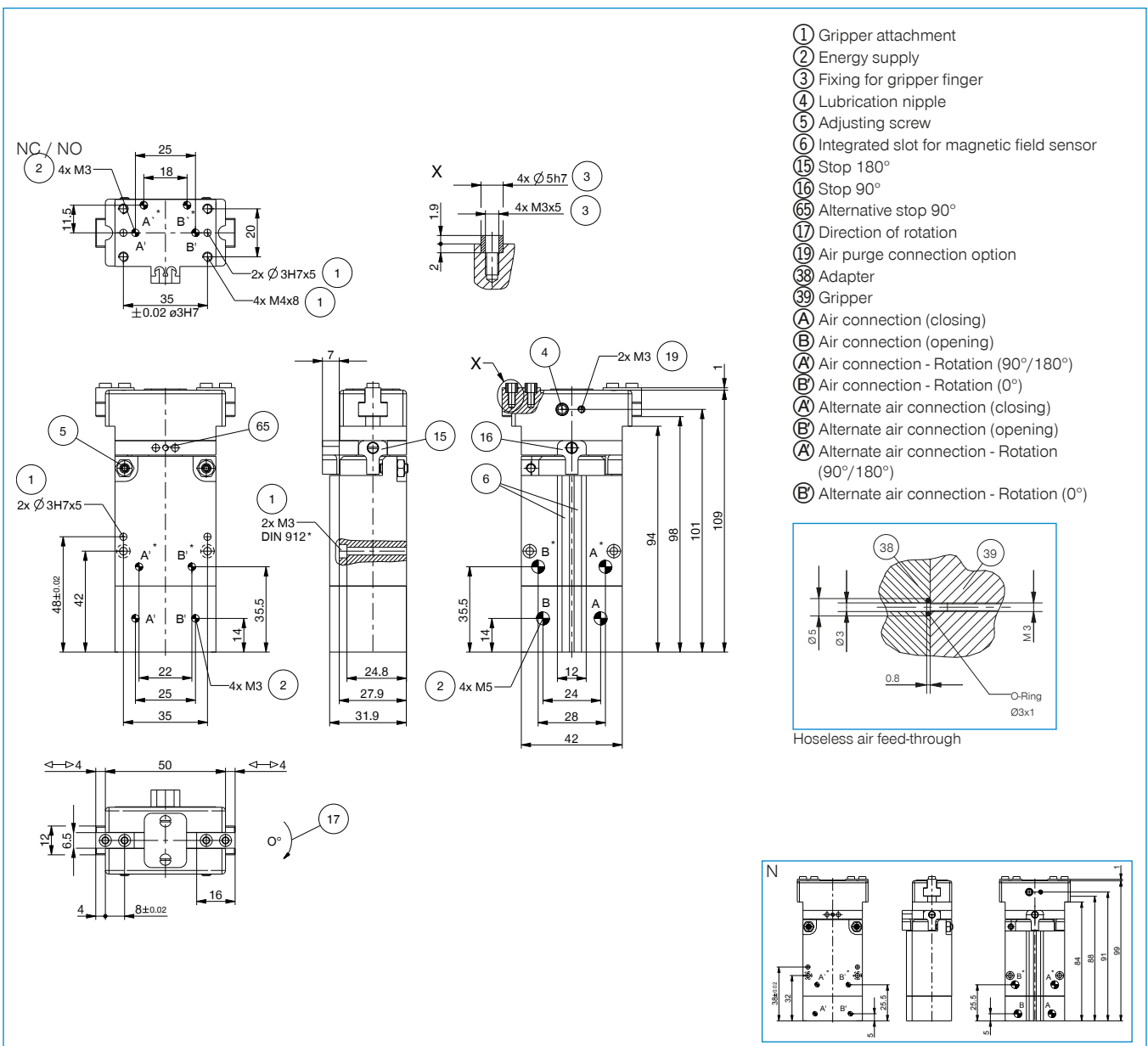


**MFS02-K-KHC-P1-PNP**  
Magnetic field sensor straight, cable 5 m



**MFS02-S-KHC-P1-PNP**  
Magnetic field sensor straight, cable 0.3 m - M8 connector

Order no.	► Technical data		
	DGP404N	DGP404NC	DGP404NO
Stroke per jaw [mm]	4	4	4
Gripping force in closing [N]	115	155	
Gripping force in opening [N]	115		155
Gripping force secured by spring min. [N]		40	40
Closing time / Opening time [s]	0.01 / 0.01	0.015 / 0.015	0.015 / 0.015
Torque [Nm]	0.5	0.5	0.5
Repetition accuracy +/- [mm]	0.05	0.05	0.05
Repetition accuracy +/- [°]	0.05	0.05	0.05
Axial bearing load [N]	960	960	960
Radial bearing load [Nm]	10	10	10
Operating pressure [bar]	3 ... 8	3 ... 8	3 ... 8
Nominal operating pressure [bar]	6	6	6
Operating temperature [°C]	5 ... +80	5 ... +80	5 ... +80
Air volume per cycle [cm <sup>3</sup> ]	3	5	5
Air volume per cycle 90° [cm <sup>3</sup> ]	4.5	4.5	4.5
Air volume per cycle 180° [cm <sup>3</sup> ]	9	9	9
Protection to IEC 60529	IP40	IP40	IP40
Weight [kg]	0.44	0.47	0.47



- ① Gripper attachment
- ② Energy supply
- ③ Fixing for gripper finger
- ④ Lubrication nipple
- ⑤ Adjusting screw
- ⑥ Integrated slot for magnetic field sensor
- 15 Stop 180°
- 16 Stop 90°
- 65 Alternative stop 90°
- 17 Direction of rotation
- 19 Air purge connection option
- 38 Adapter
- 39 Gripper
- A Air connection (closing)
- B Air connection (opening)
- A Air connection - Rotation (90°/180°)
- B Air connection - Rotation (0°)
- A Alternate air connection (closing)
- B Alternate air connection (opening)
- A Alternate air connection - Rotation (90°/180°)
- B Alternate air connection - Rotation (0°)