

2-JAW ANGULAR ROTARY GRIPPERS

SERIES DGK

► PRODUCT ADVANTAGES



“TWO in ONE”

► Smooth stroke configuration

You can adjust the 180° opening angle to be unique to your application using an adjusting screw

► 2 in 1

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

► Individually adjustable

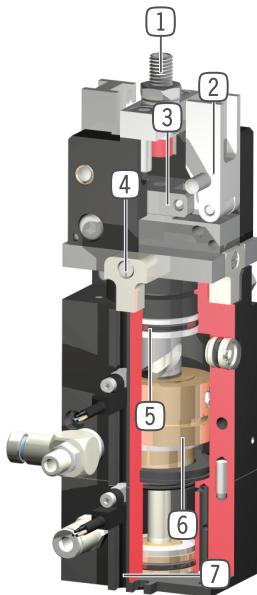
How you stay flexible: 90° or 180° swivel angle - You decide what your application requires on site

► SERIES CHARACTERISTICS

Installation size	
DGK20N	
 1.5 Mio	1.5 million maintenance-free cycles (max.)
 C	Spring closing C
 O	Spring opening O
 IP 40	IP40



► BENEFITS IN DETAIL



- ① **Stroke adjustment screw**
 - Infinitely adjustable opening stroke
- ② **Gripper jaw**
 - individual gripper finger mounting
- ③ **Guided toggle lever mechanism**
 - synchronized the movement of the gripper jaws
 - mechanically self-locking
- 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

► TECHNICAL DATA

Installation size	Stroke [°]	Gripping force [N]	Weight [kg]	IP class
DGK20	90	150	0.55	IP40

► FURTHER INFORMATION IS AVAILABLE ONLINE



All information just a click away at: 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 ANGULAR ROTARY GRIPPERS

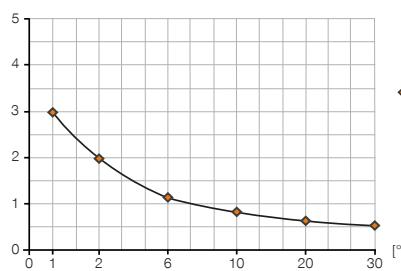
INSTALLATION SIZE DGK20

► PRODUCT SPECIFICATIONS



► Gripping moment diagram

[Nm] Gripping force as a function of opening angle.



► Forces and moments

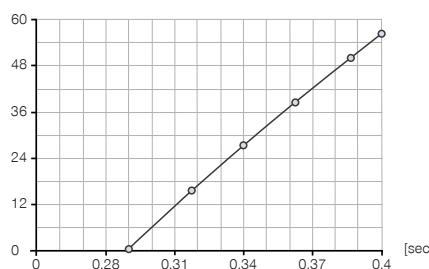
Displays static forces and moments that can also have an effect, besides the gripping force.



Mr [Nm]	0.8
Mx [Nm]	0.8
My [Nm]	1
Fa [N]	150

► Rotation time diagram

[kg cm²] Rotation time as a function of mass moment of inertia



► INCLUDED IN DELIVERY



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



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 - Connector M8



SENSORS



MFS01-K-KHC-P1-PNP
Magnetic field sensor Angled Cable 5 m



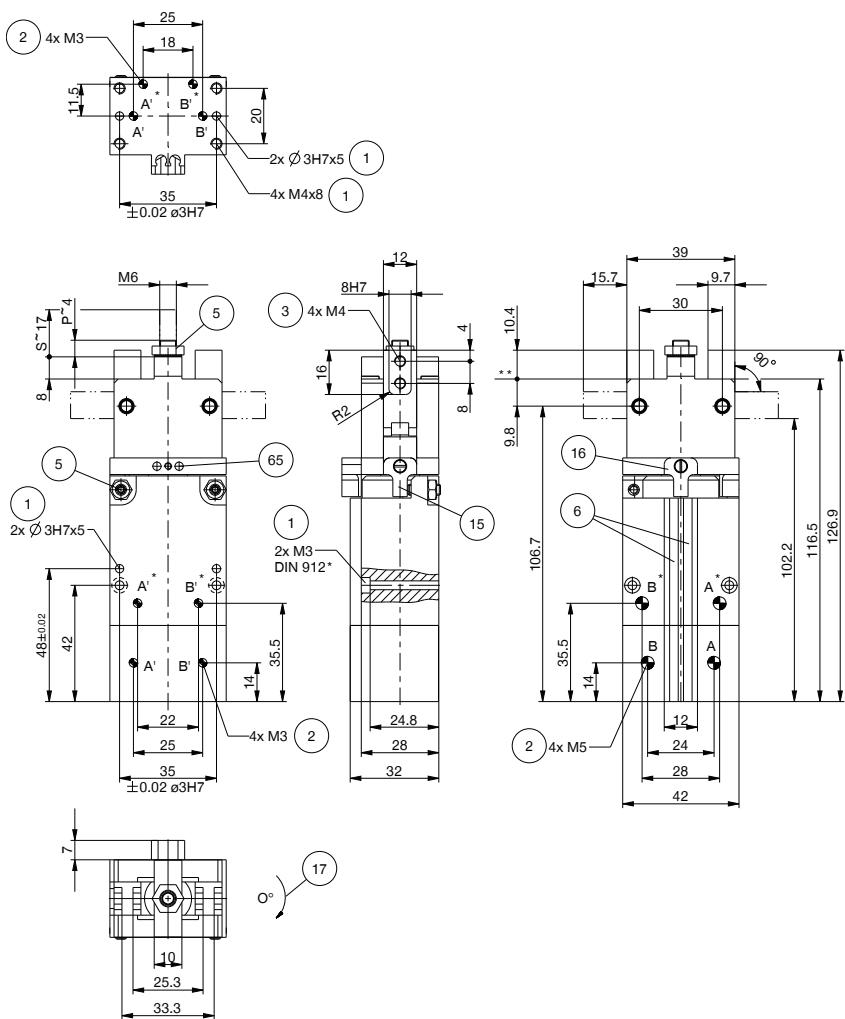
MFS02-K-KHC-P1-PNP
Magnetic field sensor Straight Cable 5 m



MFS02-S-KHC-P1-PNP
Magnetic field sensor Straight Cable 0,3 m - Connector M8

Order no.

Stroke per jaw [°]	90
Gripping force in closing [N]	150
Gripping moment in closing [Nm]	3
Closing time [s]	0.25
Opening time [s]	0.25
Torque [Nm]	0.5
Repetition accuracy +/- [mm]	0.1
Repetition accuracy +/- [°]	0.05
Axial bearing load [N]	960
Radial bearing load [Nm]	10
Operating pressure [bar]	3 ... 8
Nominal operating pressure [bar]	6
Operating temperature [°C]	5 ... +80
Air volume per cycle [cm³]	9
Air volume per cycle 90° [cm³]	4.6
Air volume per cycle 180° [cm³]	9.2
Weight [kg]	0.55

► Technical data**DGK20N**

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

