

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

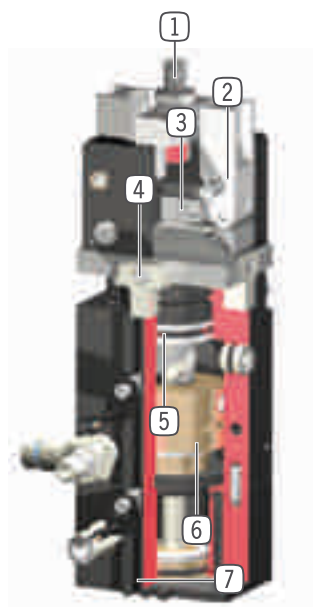
Installation size

DGK20N

| | |
|--|---|
|  1.5 million maintenance-free cycles (max.) | • |
|  Spring closing C | • |
|  Spring opening O | • |
|  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

| | Stroke | Gripping force | Weight | IP class |
|-------------------|--------|----------------|--------|----------|
| Installation size | [°] | [N] | [kg] | |
| 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.

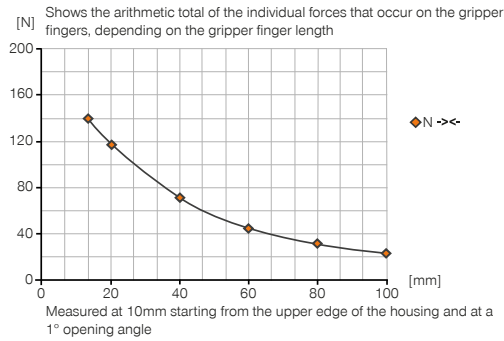
2-JAW ANGULAR ROTARY GRIPPERS

INSTALLATION SIZE DGK20

▶ PRODUCT SPECIFICATIONS

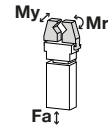


▶ Gripping force diagram



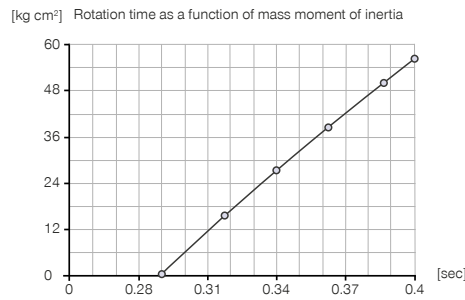
▶ Forces and moments

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



▶ 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 - 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 |
|--|----------------|
| | DGK20N |
| 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 [cm ³] | 9 |
| Air volume per cycle 90° [cm ³] | 4.6 |
| Air volume per cycle 180° [cm ³] | 9.2 |
| Weight [kg] | 0.55 |

