# 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

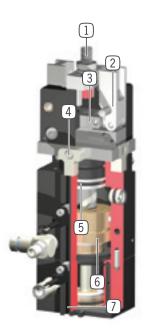
How you stay flexible: 90° or 180° swivel angle - You decide what your application requires on site

# > SERIES CHARACTERISTICS

Installation size		
	DGK20N	
1.5 million maintenance-free cycles (max.)	•	
Spring closing C	•	
Spring opening O	•	
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**

	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**

80

## PRODUCT SPECIFICATIONS



### **Gripping force diagram**

fingers, depending on the gripper finger length 200 160 ♦N >< 120

Shows the arithmetic total of the individual forces that occur on the gripper

100 [mm] Measured at 10mm starting from the upper edge of the housing and at a 1° opening angle

### Forces and moments

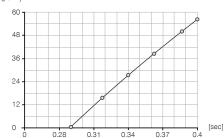
Displays static forces and moments that can also have an effect, besides the gripping force.



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

#### Rotation time diagram

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**



## **SENSORS**



GVM5

Straight Fittings - Quick Connect Style



MFS01-S-KHC-P1-PNP

Magnetic field sensor angled, cable 0.3 m - M8 connector



**SENSORS** 



MFS02-K-KHC-P1-PNP

Magnetic field sensor straight, cable 5 m



MFS01-K-KHC-P1-PNP

Magnetic field sensor angled, cable 5 m



MFS02-S-KHC-P1-PNP

Magnetic field sensor straight, cable 0.3 m - M8 connector

	► Technical data
Order no.	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]	38
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

