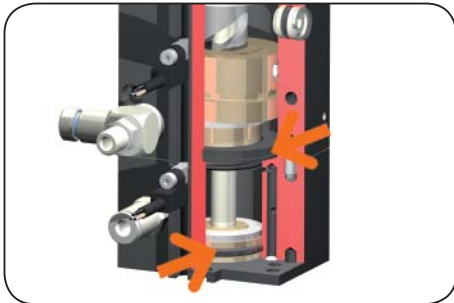


2-Jaw Angular Rotary Grippers

Highlights



Drive

Gripping

- double acting pneumatic cylinder for maximum power in opening and closing

Rotation

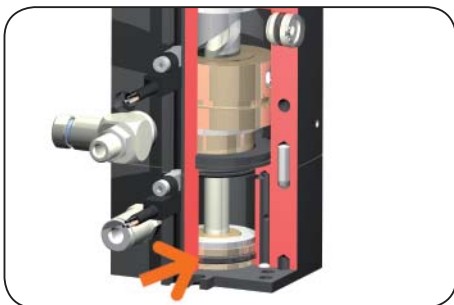
- Double acting pneumatic cylinder with oval piston for maximum torque during rotation



Position sensing

Built-in mount for magnetic field sensors

- sensing of the piston position
- compact - all sensors and cables are outside the swivel area
- stable, separate sensing of the gripping and rotating positions
- for magnetic field sensors with bracket for C-Nut



Gripping force safety device

Energy retention through spring mounted in cylinder

- reliable mechanical grip force retention
- compact design

N external pressure retention safety valve

- gripping force retention through the use of optional pressure retention safety valve (Part Nr. DSV1/8).



Rotation angle

90° or 180° individually adjustable

- simple relocation of endstop
- both stops included in delivery
- easily adaptable from one application to the next

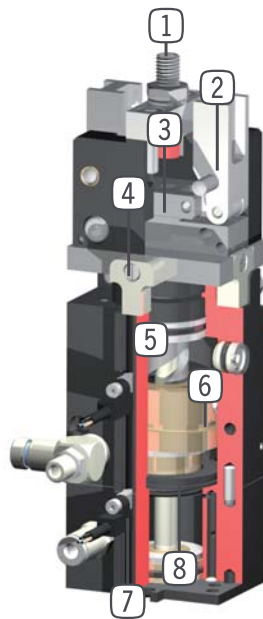


Terms

Gripping force:	arithmetic sum of the individual forces occurring at the jaws
Closing/opening time:	required time for the gripper jaws to cover the maximum stroke distance
Repeatability:	dispersion at end stop positions during 50/100 consecutive cycles
Cycle:	one complete movement of the piston forward and back
Maintenance:	<p>maintenance free to 1.5 mil. cycles</p> <p>(please see the owner's manual for details, download at www.sommer-automatic.com)</p> <ul style="list-style-type: none"> - long maintenance intervals keep costs down - long durability

Design

- | | |
|--|---|
| <p>① Stroke adjustment screw</p> <ul style="list-style-type: none"> - infinite adjustment of opening angle | <p>⑤ Rotating-drive mechanism</p> <ul style="list-style-type: none"> - robust, wear-resistant |
| <p>② Gripper finger mounting</p> <ul style="list-style-type: none"> - mounting of the tooling fingers | <p>⑥ Drive</p> <ul style="list-style-type: none"> - two double acting pneumatic cylinders |



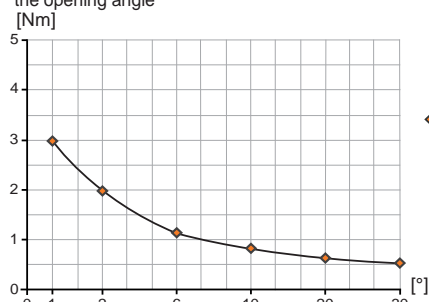
- | | |
|--|--|
| <p>③ Guided toggle lever gear mechanism</p> <ul style="list-style-type: none"> - synchronized gripping jaw movement - mechanically self-locking | <p>⑦ Slot for magnetic field sensor</p> <ul style="list-style-type: none"> - sensing of the rotational position and gripper jaw position |
| <p>④ Endposition 0°/90°/180° adjustment</p> <ul style="list-style-type: none"> - endstops for 0°/90°/180° included with purchase | |

2-Jaw Angular Rotary Grippers



Picture shows DGK20N

Gripping moment diagram
Shows the gripping moment as a function of the opening angle



Forces and torques

Max allowable static forces and moments on jaws.



Mr [Nm]:	FA ↓	0,8
Mx [Nm]:		0,8
My [Nm]:		1
Fa [N]:		150

Included with purchase



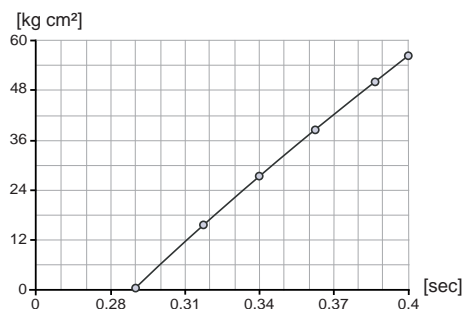
Pneumatic fittings
Order no.: **DRVM5X4**



Endstop 90° + 180°
Order no.: **ANS0065**

Rotation time diagram

Rotation time as a function of mass moment of inertia.



Recommended accessories



Pneumatic fittings
Order no.: **WVM5**



Pneumatic fittings
Order no.: **GVM5**



Magnetic field sensor
Order no.: **MFS103KHC**



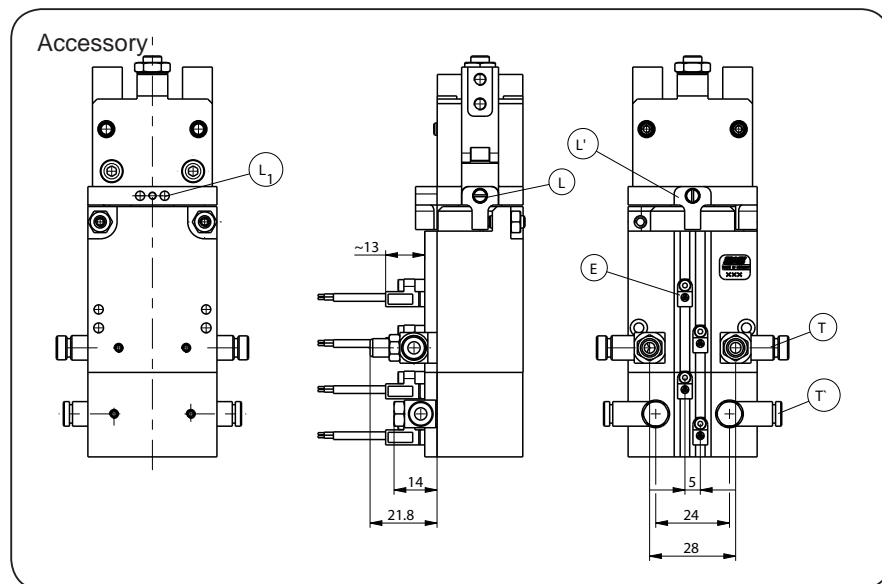
Magnetic field sensor
Order no.: **MFS204KHC**



Plug 3- pole
Order no.: **S12-G-3**



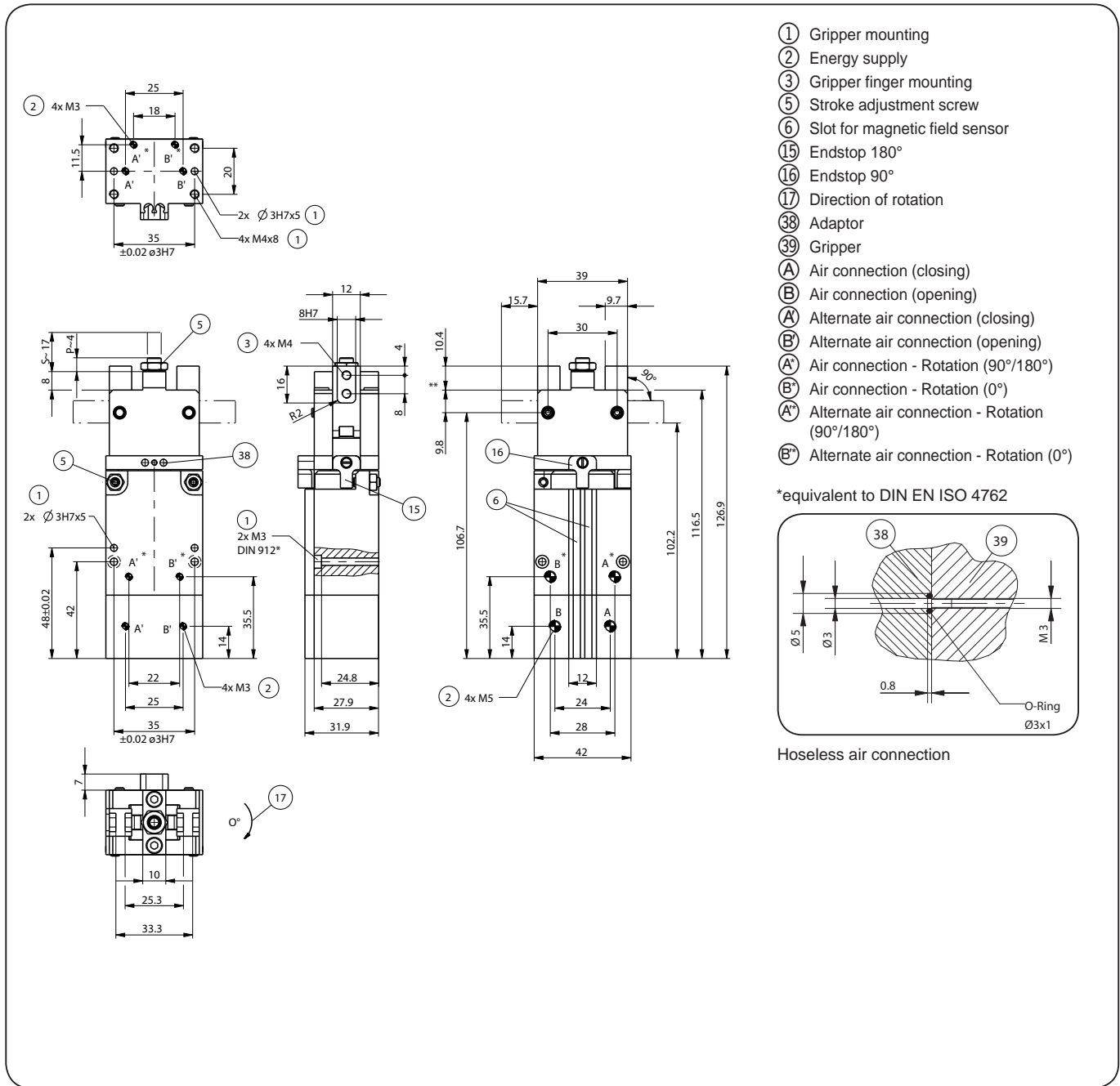
Pressure safety valve
Order no.: **DSV1/8**



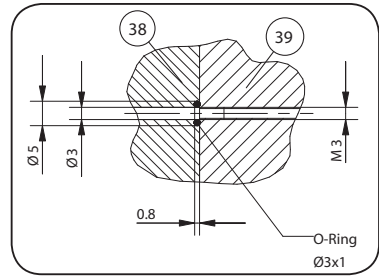
Subject to change without prior notice

Order no.:	DGK20N
Stroke per jaw [mm]:	90
Gripping force in opening [N]:	3
Closing time / opening time [s]:	0,25
Repeatability +/- [mm]:	0,1
Air volume per cycle [cm³]:	9
Torque [Nm]:	0,5
Repeatability +/- [°]:	0,05
Axial bearing load [N]:	960
Radial bearing load [Nm]:	10
Air volume per cycle 90° [cm³]:	4,6
Air volume per cycle 180° [cm³]:	9,2
Operating pressure min. [bar]:	3
Operating pressure max. [bar]:	8
Operating temperature [°C]:	5-80
Weight [kg]:	0,550

All data measured at 6 bar



*equivalent to DIN EN ISO 4762



Hoseless air connection

Subject to change without prior notice