

Three-jaw gripper with center thru hole

GD312MB

things worth knowing

Advantages and uses

... high-grip force in combination with robust T-slot guide ...

... all variations available with grip force fail-safe ...

Highlight

- ▶ high reliability and long service life
 - ▶ compact design and minimal weight
 - ▶ centrally opening and closing
 - ▶ high precision
 - ▶ any desired installation position
 - ▶ position sensing possible through inductive proximity switch
- ... large center thru hole! ...

Characteristics

Function

Drive: double-acting pneumatic cylinder
Power transfer: wedge and piston principle
Guide: T-groove guide for high momenta absorption from all sides

Material

Housing: hard-anodized aluminum
Moving parts: nitrided steel

Maintenance

Recommended at: 1.5 million cycles
Actuation: filtered high-pressure air (10 μ m), dry or oiled
Maintenance of the mechanics: via integrated lubrication nipple – see owners' manual –

Basic explanations

Terms and illustrations

Grip force safety device: required during pressure failure for maintaining position of workpiece
– pneumatic: through pressure retention (one-way valve required DSV 1/8)
Total power: arithmetic sum of the individual elements on the gripper jaws
Closing and opening times: required time for the gripper jaws to cover the maximum stroke length

Accessories

Included with purchase:

- ▶ Centering sleeves
- ▶ Bracket for inductive proximity switch

Accessory recommendation:

- ▶ Inductive proximity switch Page 428
- ▶ Pneumatic fittings Page 442
- ▶ Tubing Page 444
- ▶ Control valves Page 445
- ▶ Pressure safety valves Page 447

