Parallel gripper with center thru hole

Features

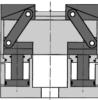
- 1 Stroke
 - Hole for camera, sensor or cylinder
 - Trip doa

Air connection at the front, bottom Δ and side)

Accessories

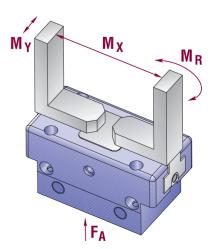


Two double-acting pneumatic cylinders move the jaws in parallel to the open and closed positions. The jaws are synchronized by a sliding joint and guided firmly in a slot in the housing.



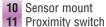
Schematic...

On every product page, you will find the following schematic which helps describe the max allowable forces and movements for that particular model.



2

3



Operation



With a sensor or a camera fitted in the center of the gripper, it is possible to sense parts directly while being protected against external damage.

A Smart Fellow...

10

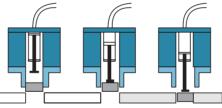
11

... among grippers - with a clear vision. A camera, other sensor equipment or a cylinder can be installed in the center, where it is protected against external disturbing edges. No more tangled cables around the gripper since they emanate from the center.

Air connections for opening and closing can be attached to ports on the back or side. The gripper is double-acting and has two cylinders, which are arranged off-center. Both cylinders are linked to each other pneumatically so that only one connection each for A and B are required.

The lever slides attached to the cylinders are also guided in the slide plates at the top so that both cylinders are aligned with each other. The jaws are guided in a T-slot. The sliding parts are made of hard-anodized aluminum, which provides a high surface hardness and good sliding characteristics. As on nearly all gripper models, adjustable trip dogs are mounted on the jaws. The M3 holes underneath the dogs are for attaching sensor mount "KB 12". Proximity switch "NJ 12-E2" fits here for sensing the open and closed positions. More details are in the accessories section.

Applications Ideas



By installing a cylinder in the center of the gripper,

several work steps can be carried out simultaneously.

For example, in the diagram above a part is being pressed after being laid in a die.

Parallel gripper with center thru hole. **GP325** things worth knowing Advantages and uses Highlight ... large center bore ... mechanical self-locking in the end position (close) high reliability and long service life ideal for the integration of a centrally closing sensor or camera! ... any desired installation position > position sensing possible through inductive proximity switch **Characteristics** Function two synchronized, double-acting pneumatic cylinders Drive: Power transfer: piston and toggle linkage flat guide for high moment absorption on all sides Guide: **Material** hard-anodized aluminum Housing: hard-anodized aluminum Gripper jaws: Moving parts: nitrided steel and nonferrous metal (Rg7) Maintenance Recommended at: 1.5 million cycles Actuation: filtered high-pressure air (10 μ m), dry or oiled Maintenance

– see owners' manual –

Basic explanations

of the mechanics:

Terms and illustrations

Grip force safety device:	required during pressure loss for maintaining position of workpiece
– pneumatic:	through pressure retention (one-way valve required DSV 1/8)
– mechanical:	through toggle linkage during external gripping
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
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Accessories

Accessory recommendation:

Page 428
Page 432
Page 442
Page 444
Page 445
Page 447



