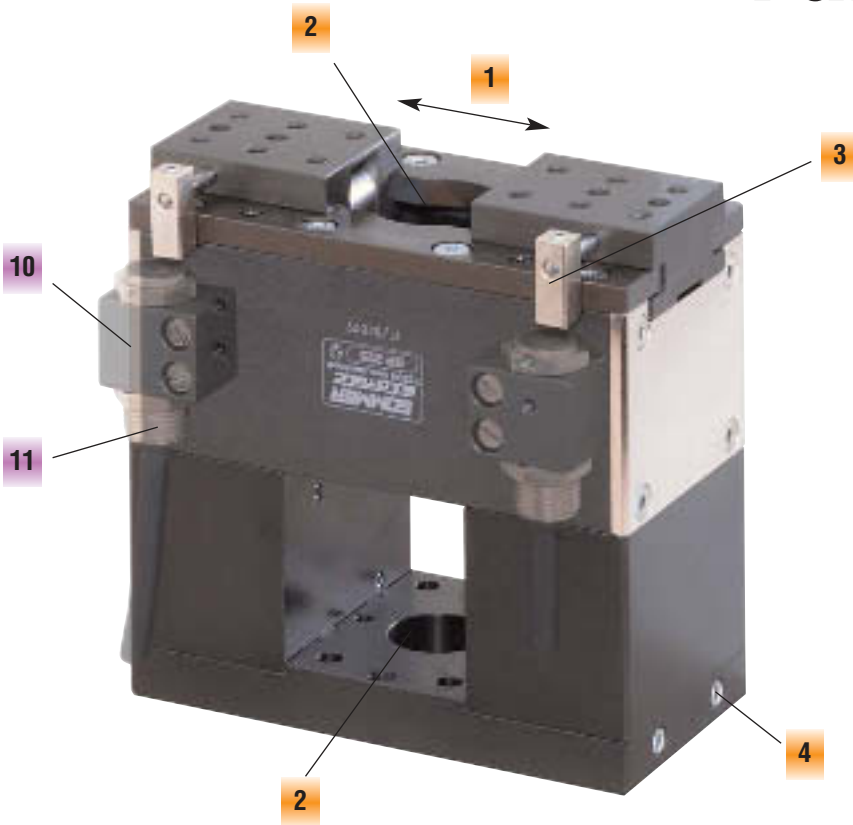


Parallel gripper

with center thru hole



Features

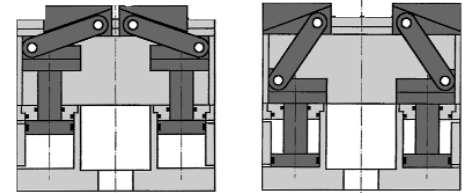
- 1 Stroke
- 2 Hole for camera, sensor or cylinder
- 3 Trip dog
- 4 Air connection at the front, bottom and side)

Accessories

- 10 Sensor mount
- 11 Proximity switch

Operation

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.



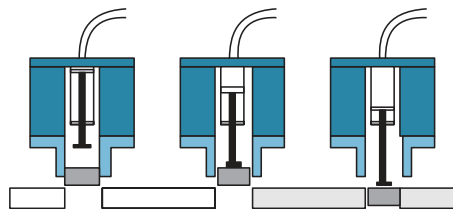
A Smart Fellow...

... 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.

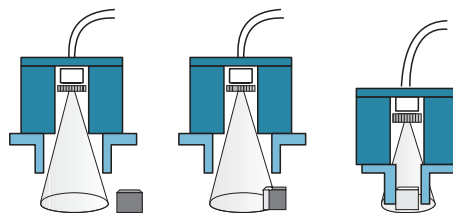
Air connections for opening and closing can be attached to ports on the back or side. The gripper is double-acting and has two cylinders, which are arranged off-center. Both cylinders are linked to each other pneumatically so that only one connection each for A and B are required.

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



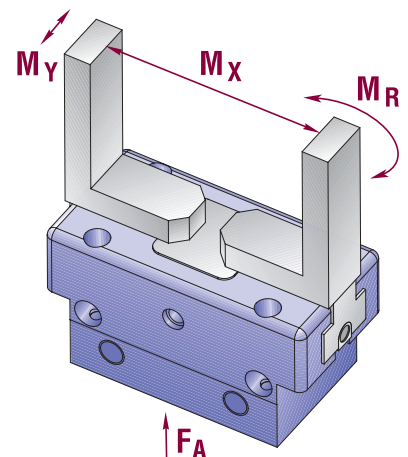
By installing a cylinder in the center of the gripper, several work steps can be carried out simultaneously. For example, in the diagram above a part is being pressed after being laid in a die.



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.

Schematic...

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



Parallel gripper with center thru hole

GP325



things worth knowing

Advantages and uses

- ... large center bore ... mechanical self-locking in the end position (close) ...
- ... high reliability and long service life ...

- ▶ centrally closing
 - ▶ any desired installation position
 - ▶ position sensing possible through inductive proximity switch

... ideal for the integration of a sensor or camera! ...

- Sommer-automatic
- Grippers**
- Separators
- Swivel units
- Rotating jaws
- Axial compensators
- Tool changers
- Linear cylinders
- Shock absorbers
- Rotary cylinders
- Air vane motors
- Vacuum components
- Accessories
- Quick finder

Characteristics

Function

Drive:	two synchronized, double-acting pneumatic cylinders
Power transfer:	piston and toggle linkage
Guide:	flat guide for high moment absorption on all sides

Material

Housing:	hard-anodized aluminum
Gripper jaws:	hard-anodized aluminum
Moving parts:	nitrided steel and nonferrous metal (Rg7)

Maintenance

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

Basic explanations

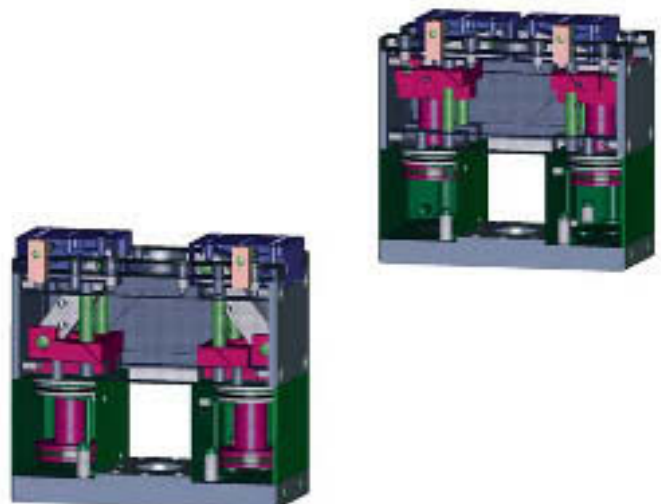
Terms and illustrations

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

Accessories

Accessory recommendation:

▶ Inductive proximity switch	Page 428
▶ Bracket for inductive proximity switch	Page 432
▶ Pneumatic fittings	Page 442
▶ Tubing	Page 444
▶ Control valves	Page 445
▶ Pressure safety valves	Page 447



Parallel gripper

Three-jaw gripper

Angle gripper

Internal-hole gripper

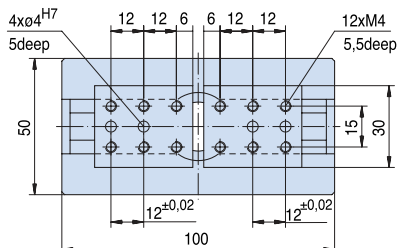
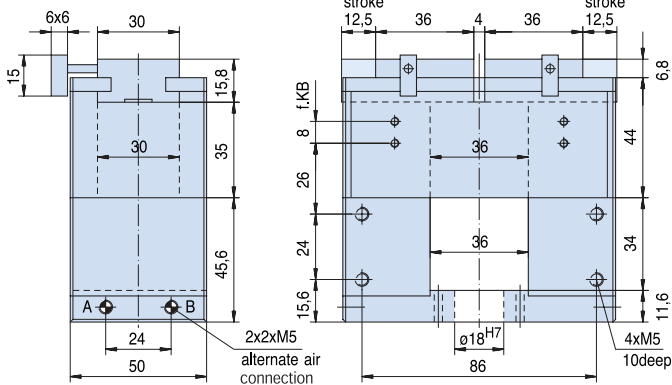
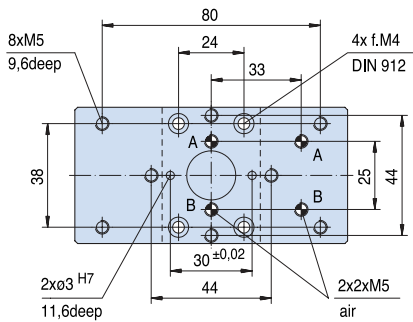
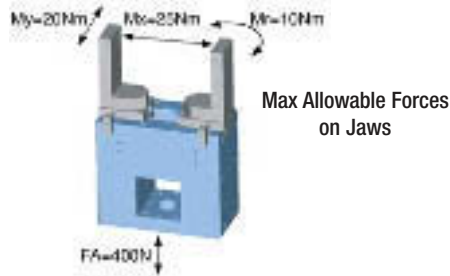
Other grippers

Electric gripper

GP325



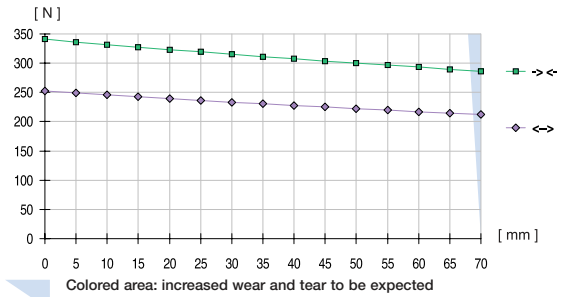
- Sommer-automatic
- Grippers**
- Separators
- Swivel units
- Rotating jaws
- Axial compensators
- Tool changers
- Linear cylinders
- Shock absorbers
- Rotary cylinders
- Air vane motors
- Vacuum components
- Accessories
- Quick finder



Parallel gripper with thru hole

Advantages, benefits, comparisons and tips! Stacks of information all about this product are on page 83.

Gripping force as a function of jaw length



Order no.:	GP325
Drive:	pneum.
Stroke per jaw [mm]:	12,5
Gripping force in closing [N]:	340
Gripping force in opening [N]:	250
Self-locking via:	mech.
Closing time/opening time [s]:	0,15
Repeatability ± [mm]:	0,05
Min./max. operating pressure [bar]:	3 / 8
Air volume per cycle [cm³]:	20
Min./max. operating temperature [°C]:	5 / 80
Temp. resistant version up to 150° C [add to part number]:	T3
Piston diameter [mm]:	2 x 25
Weight [kg]:	0,98

All data measured at 6 bar.

See Page 83 for Accessory list.