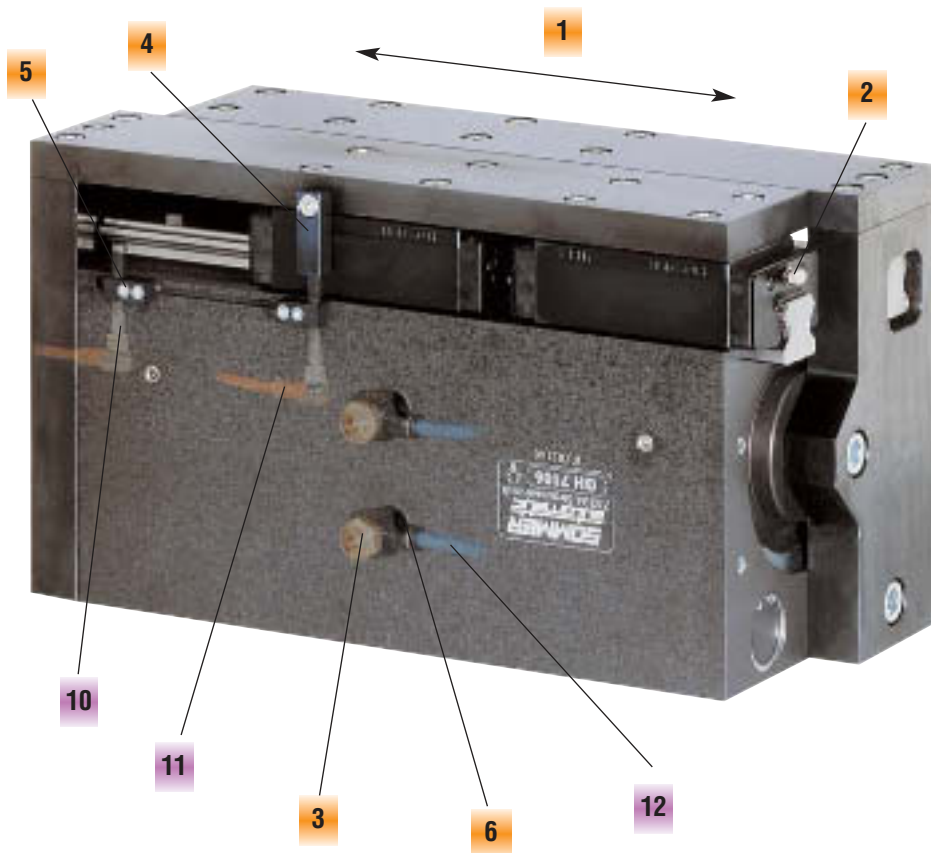


Long-stroke gripper

with linear guide



Features

- 1 Stroke
- 2 Lubricating nipple for carriage
- 3 One-way valve (supplied)
- 4 Trip dog
- 5 Sensor mount
- 6 Air connection at the front and rear

Accessories

- 10 Proximity switch, plug-in
- 11 Cable, plug-in
- 12 PU hose

The heavyweight

This gripper plays a supporting role, especially when the weight of the workpiece (e. g. an engine block) is getting larger. Safety and precision are ensured with these hard-coated aluminum grippers with a highly accurate ball and linear guide. Ideal for the highest demands in respect to side forces and loads.

The grippers need no servicing up to 1.5 million operations, after which we recommend regreasing. The jaws are mounted from the top. The air connections for opening and closing are at the front and bottom of the gripper.

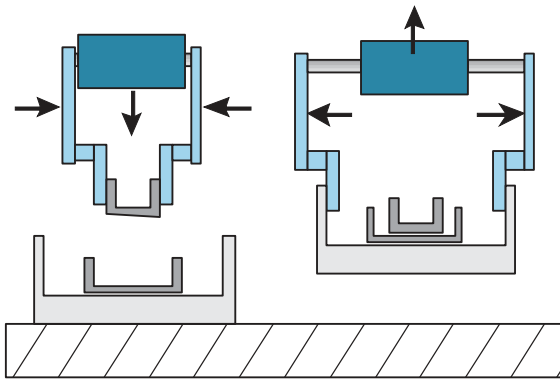
The connections at the bottom are sealed with grub screws and they can be used for hoseless type connections.

Sensing is by means of a trip dog attached to the jaw. Below it are attached two sensor mounts, which can be adjusted in a longitudinal slot, with an 8 mm mount, which is best for the recommended "NJ8-E2S/04" plug-in proximity switch.

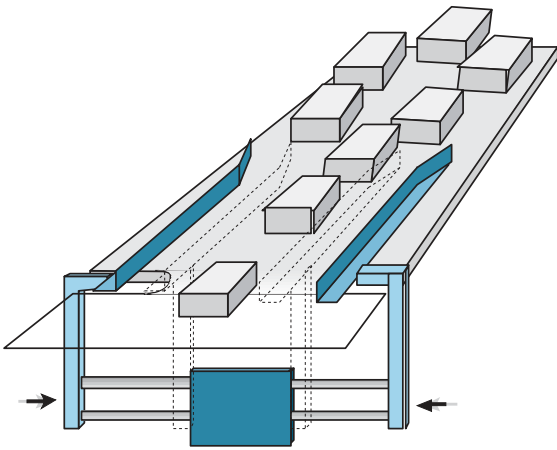
More details on the proximity switch and other accessories can be found on the accessory pages.



Application Ideas



Because of its long stroke, high guiding stability and compact design, this gripper can handle a wide range of part shapes and sizes without having to change jaws.

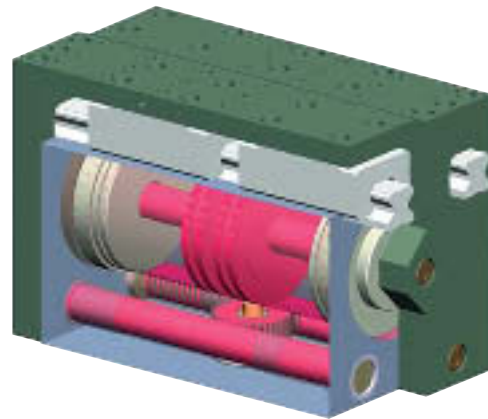
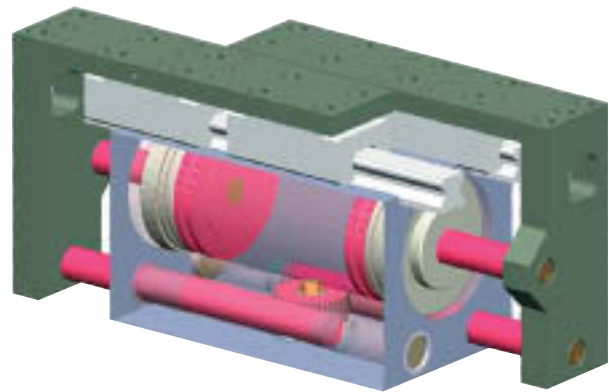
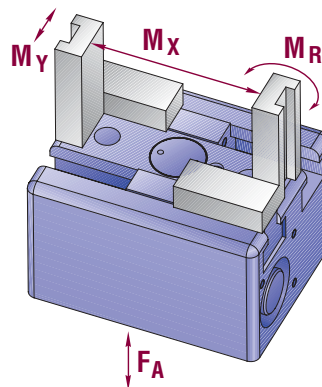


Parts which may have been laid at random on a conveyor belt can be pushed by the long stroke gripper to the middle to a properly centered position.



Schematic...

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



Operation

(patented)

Two double-acting pneumatic cylinders (red) close and open the jaws in parallel. The jaws are synchronized by a pinion and two racks running past each other and attached to the cylinders. A ball guide ensures high accuracy and stability.



Heavy-duty long-stroke gripper with linear guide

GH7665/ GH76100



things worth knowing

Advantages and uses

... high-grip force, combined with long stroke ... linear guide for high moment absorption ... economic with high reliability and long service life ...

- ▶ centrally opening and closing
 - ▶ high precision
 - ▶ any desired installation position
 - ▶ position sensing possible through inductive proximity switch
 - ▶ with wiper on bearing

... ideal for large moments and loads!

- 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 double-acting pneumatic cylinders
 Power transfer: through synchronized rack-and-pinion drive
 Guide: linear guide

Material

Housing: hard-anodized aluminum
 Moving parts: nitrided steel

Maintenance

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

Basic explanations

Terms and illustrations

Grip force safety device: arithmetic sum of the individual elements on the grab jaws prehensile
 Power fuse: required during pressure loss for maintaining position of work piece
 – pneumatic: through pressure retention
 Closing and opening time: required time for the grab jaws to cover the maximum stroke length

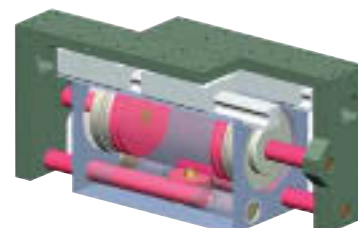
Accessories

Included with purchase:

- ▶ 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



Parallel gripper

Three-jaw gripper

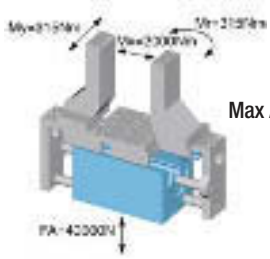
Angle gripper

Internal-hole gripper

Other grippers

Electric gripper

GH7665 **GH76100**

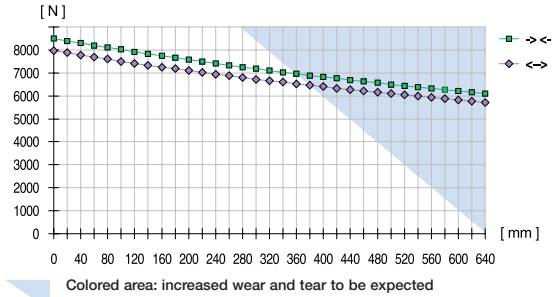


Max Allowable Forces on Jaws

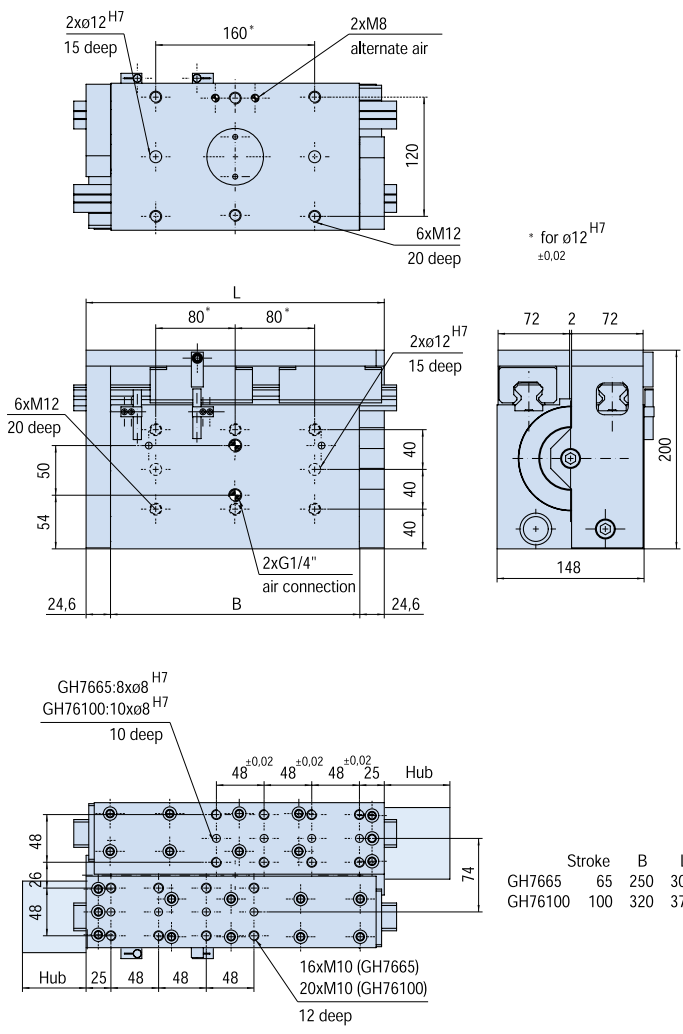
Heavy-duty long-stroke gripper with linear guide

Advantages, benefits, comparisons and tips! Stacks of information all about this product are on page 99.

Gripping force as a function of jaw length



- 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



Order no.:		GH7665	GH76100				
Drive:		pneum.	pneum.				
Stroke per jaw [mm]:		65	100				
Gripping force in closing [N]:		8000	8000				
Gripping force in opening [N]:		8500	8500				
Self-locking via:		DSV1/8	DSV1/8				
Closing time/opening time [s]:		0,6	0,7				
Repeatability ± [mm]:		0,05	0,05				
Min./max. operating pressure [bar]:		3 / 8	3 / 8				
Air volume per cycle [cm ³]:		900	1500				
Min./max. operating temperature [°C]:		5 / 80	5 / 80				
Temp. resistant version up to 150° C [add to part number]:		T5	T5				
Piston diameter [mm]:		100	100				
Weight [kg]:		30,9	35,2				

All data measured at 6 bar.

See Page 99 for Accessory list.

	Stroke	B	L
GH7665	65	250	300
GH76100	100	320	370