

HGPP Precision Parallel Gripper

FESTO



Extreme Precision

Ideal for precise positioning and assembly. With its backlash-free roller bearings in the gripper jaw, the HGPP precision parallel gripper offers precise, repeatable gripping throughout the torque load envelope.

High Torque Load Resistance

High torque load capacity and gripping force – despite its low profile.

Minimal Gripper Weight

Gripper housing and gripper jaws made of special aluminum alloy.

High Process Reliability

Optional gripping force retention via spring and integrated Hall sensor offer precise sensing of several gripper positions. Comes with either standard adapter or facility for direct connection to other components and interfaces on handling and assembly modules.

A Low-Cost Alternative

Inductive sensors for sensing a maximum of two gripper positions.

Flexibility

Grippers can be mounted from above or below. Versatile compressed air connections, variable gripping action – internal/external.

Typical Applications

- Handling applications requiring high gripping and repetition accuracy
- Electronic assembly
- Semiconductor manufacturing
- High precision packaging tasks

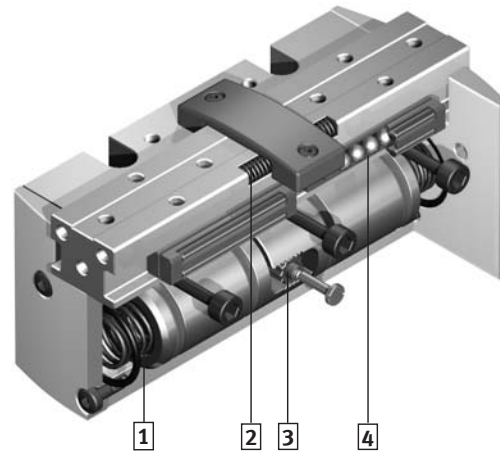
HGPP.PSI.US

Product Short Information

HGPP Precision Parallel Gripper

Features, Alternatives, and Options

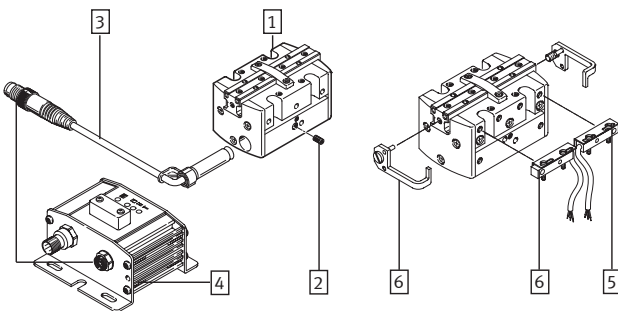
- Roller bearing guide ensures extremely precise gripper jaw guidance
- Precisely synchronized action of the two gripper jaws
- Maintenance-free operation and long service life – approx. 20 million cycles without relubrication
- Precise sensing via integrated Hall sensor
- Inexpensive alternative for sensing a maximum of two positions: adaptable inductive sensors with switch lugs
- Grippers can be mounted from above or below
- Minimal gripper weight: gripper housing and gripper jaws made of special aluminum alloy
- Compression springs for support or retaining gripper forces, or for use as a single-acting gripper using only one compressed air connection
- Gripper force retention, open
- Gripper force retention, closed
- Multiple compressed air connections
- Optional guide plate (ejector in the jaw area) to the gripper housing
- Optional gripper finger blanks



Technical Data

Precision gripper	Type HGPP					
Size	10	12	16	20	25	32
Operating pressure [bar]	2 ... 8					
Design	2-jaw precision parallel gripper					
Piston diameter [mm]	10	12	16	20	25	32
Opening stroke [mm]	4	5	10	15	20	25
Repetition accuracy [mm]	< 0.02	< 0.015		< 0.01	< 0.02	
Max. interchangeability [mm]	±0.1					
Centering precision [mm]	< Ø 0.05					
Gripping force at 6 bar [N]	94.2	135.2	241.2	377.0	589.0	965.0
Max. operating frequency [Hz]	4					

- 1 Compression spring closes gripper jaws
- 2 Compression spring opens gripper jaws
- 3 Synchronizing element
- 4 Backlash-free guide bearing

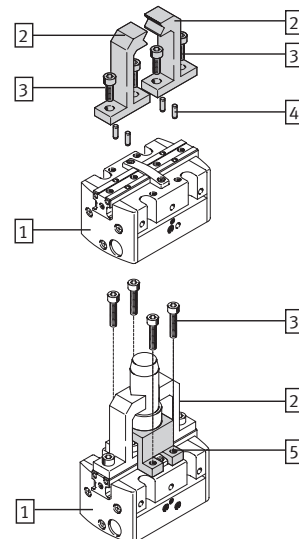


Integrated Hall sensor

- 1 HGPP Precision gripper
- 2 Set screw for securing the Hall sensor
- 3 Hall sensor
- 4 Electronic Hall unit for sensing 3 positions

Inductive sensor

- 5 Inductive sensor
- 6 Sensor retainer kit (consisting of 1 sensor retainer and 1 switch lug with mounting screws)



Mounting and application options

- 1 HGPP Precision parallel gripper
- 2 Gripper finger (user-specific in-house production)
- 3 Mounting screws
- 4 Locating pins
- 5 Guide plate (for absorbing process forces, pressing in a locating pin)



Maximum precision...



high load capacity...



with no relubrication!

Subject to change

For ordering and product assistance, or to find your nearest Festo Distributor in the USA,

Call: 1.800.99.FESTO
Fax: 1.800.96.FESTO
E-mail: customerservice@us.festo.com
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