

Pneumatic Angular Grippers

OLE 2-Finger

OLE is an angular gripper for universal use in clean or dirty environments. Suitable for space sensitive applications

Advantages

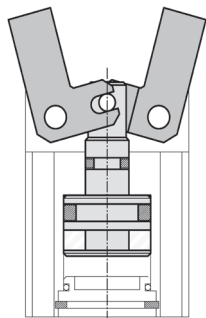
- Slim design allows multiple grippers to be arranged in a row.
- Available in a range of piston plate diameters from 12 to 16mm (see OF for bigger sizes).
- Light, compact design for space-saving handling without interference.
- Integrated permanent magnets for direct monitoring of piston movement.
- Slots for mounting and positioning of magnetic-field sensors.



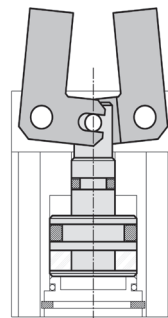
EFFECTO

GROUP

Open/Close Diagram

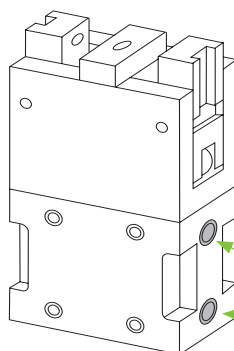


OPEN



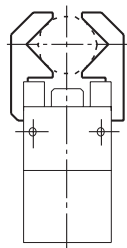
CLOSED

Pneumatic Feed

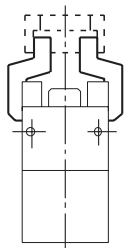


Standard
Pneumatic Connections

Gripping Diagram



External Clamping



Internal Clamping

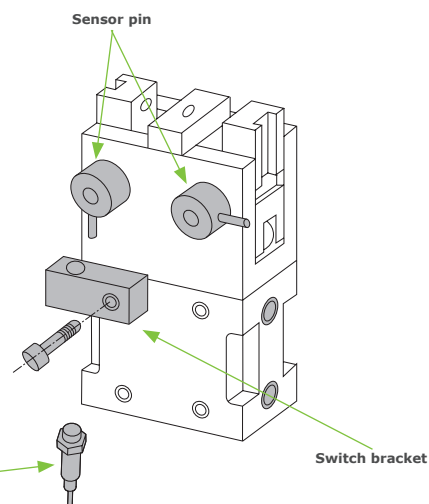
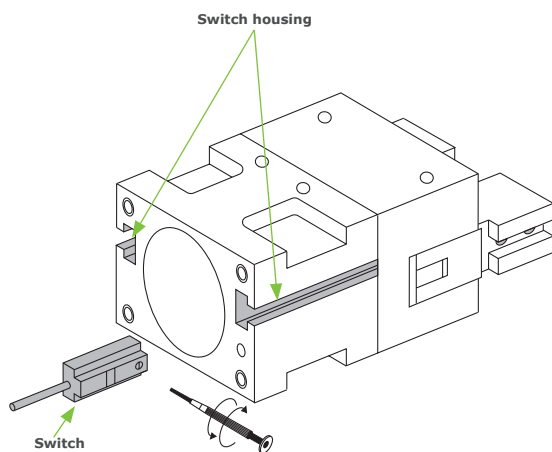
Guidelines for the selection of a gripper model

Selection of the correct gripper model depends on the workpiece's weight, the friction coefficient between the fingers and the workpiece and the required motion of the application.

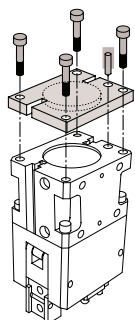
Due to inertial forces associated with motion, we recommend that the holding force of the gripper model should be from 10 to 20 times the workpiece's weight.

If the application presents high acceleration/deceleration or impacts during the motion, then a further safety margin should be considered.

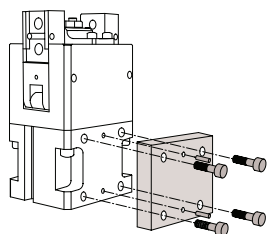
Control Diagram



Mounting

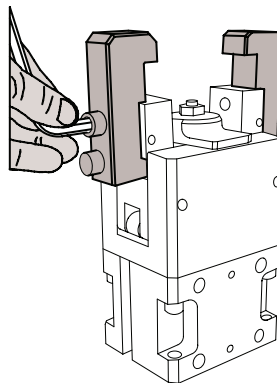


**Axial Mounting
Bottom fixing**

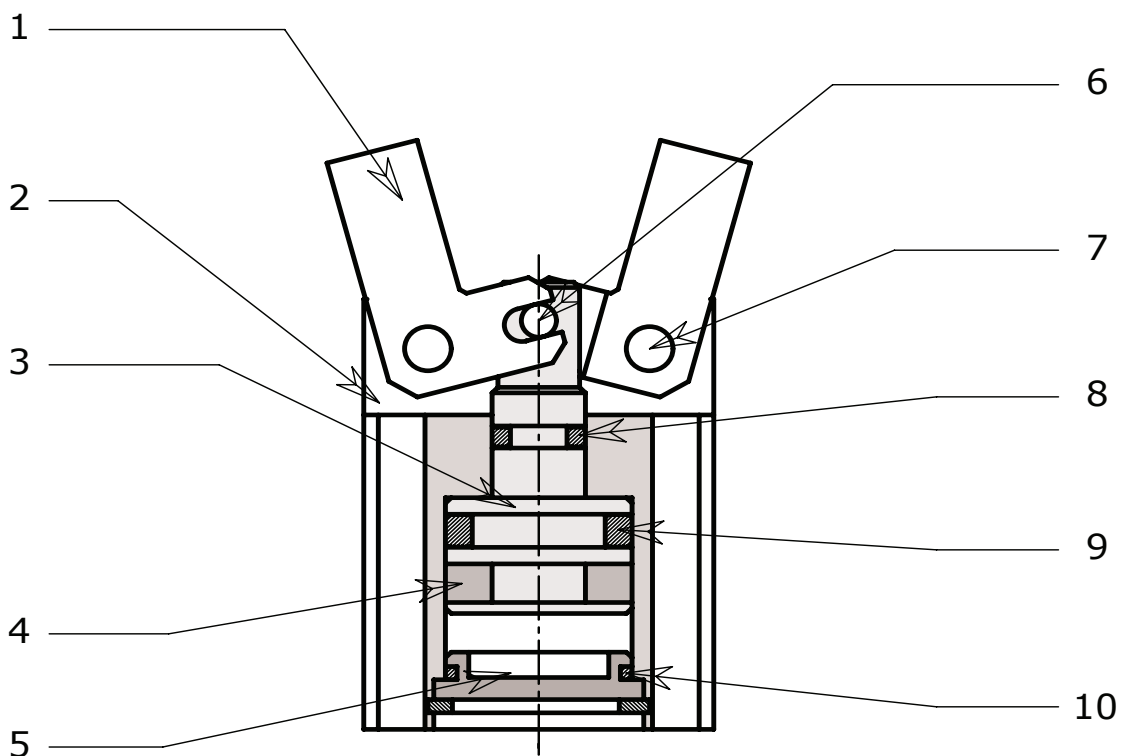
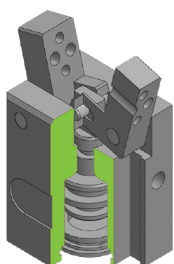


Side Mounting

Fingers Mounting



Construction Diagram

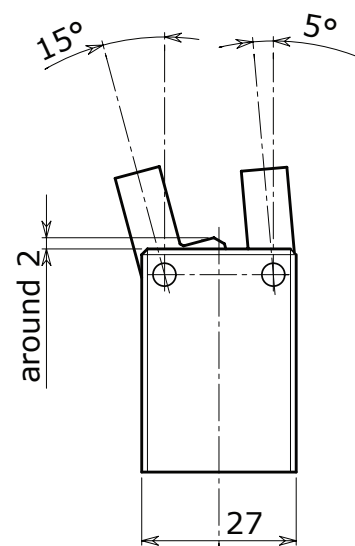
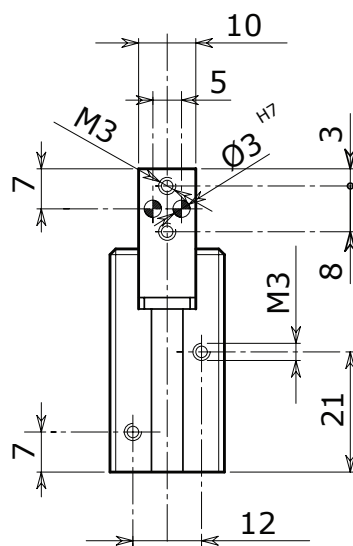
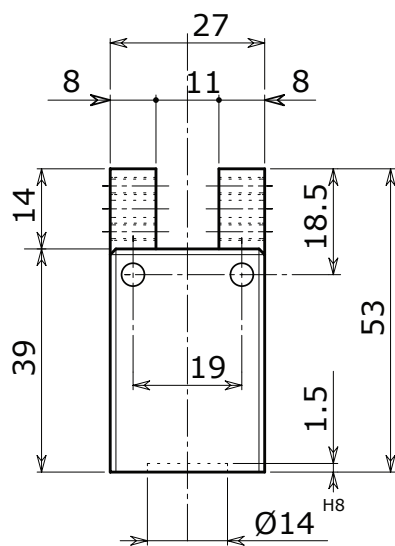
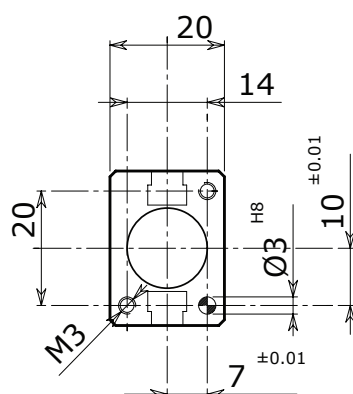


Nr.	Description	Material
01	LEVER	Chrome Molybdenum Steel
02	BODY	Aluminum Alloy
03	PISTON	Aluminum Alloy
04	MAGNET	Rubber magnet
05	CAP	Brass
06	PIN	Chrome Molybdenum Steel
07	KNUCKLE PIN	Chrome Molybdenum Steel
08	SHAFT SEAL	NBR
09	PISTON SEAL	NBR
10	CAP SEAL	NBR

Dimensional Drawing



OLE 12



TECHNICAL DATA

OLE 12

Stroke per jaw	°	20
Fluid consumption double stroke	cm ³ in ³	0.62 0.04
Closing force per jaw @ 6 bar	N lb	13 3
Opening force per jaw @ 6 bar	N lb	23 5
Total closing force @ 6 bar	N lb	26 6
Total opening force @ 6 bar	N lb	46 10
Recommended workpiece weight	kg lb	0.13 0.30
Weight	kg lb	0.10 0.22
Repeat accuracy	mm in	± 0.05 ± 0.0020

* Recommended workpiece weight is calculated for force-fit gripping with a coefficient of static friction of 0.15 and a safety factor of 3 against workpiece slippage.

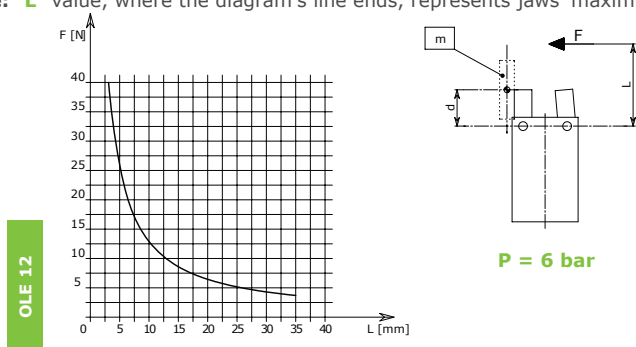
Opening Pressure **2 - 8 bar (29 - 116 psi)**

Working Temperature **5 - 60 °C (41 - 140 °F)**

Noise Emission (Sound Pressure) **≤ 70 db(A) in any direction**

Clamping Force Diagram

Note: "L" value, where the diagram's line ends, represents jaws' maximum length.

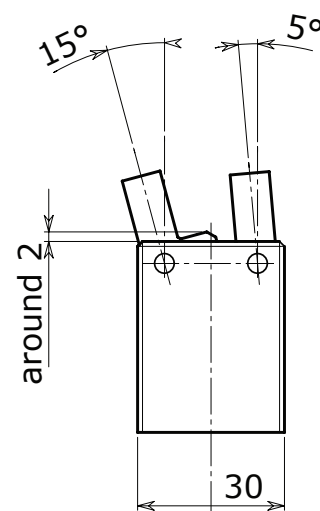
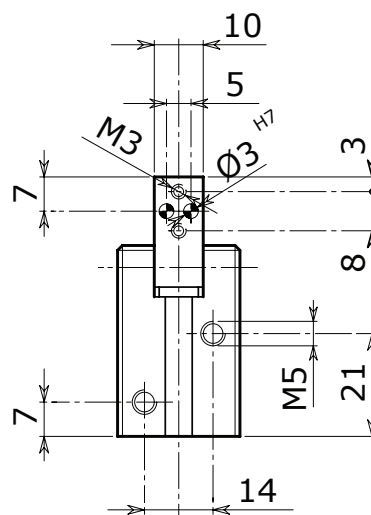
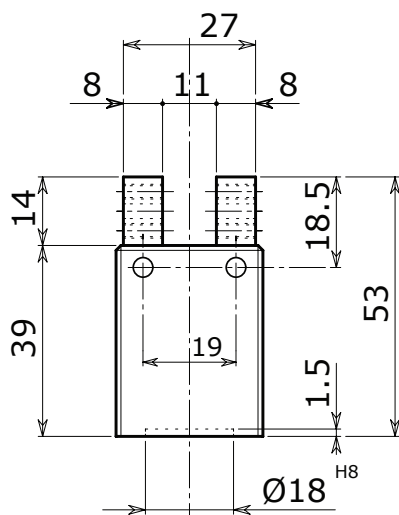
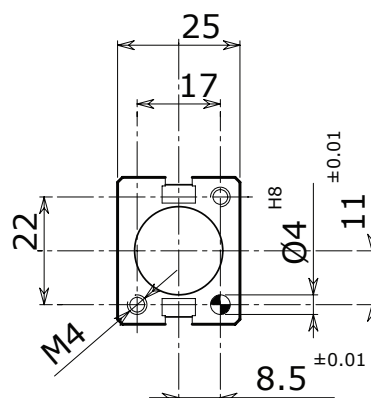


F = True clamping force per jaw - **L** = Reading distance - **d** = Distance from finger center of gravity to lever rotation fulcrum - **m** = Finger mass
Values read at a distance **L=10 mm**

Dimensional Drawing



OLE 16



TECHNICAL DATA

OLE 16		
Stroke per jaw	°	20
Fluid consumption double stroke	cm ³ in ³	1.3 0.08
Closing force per jaw @ 6 bar	N lb	30 7
Opening force per jaw @ 6 bar	N lb	41 9
Total closing force @ 6 bar	N lb	60 14
Total opening force @ 6 bar	N lb	81 18
Recommended workpiece weight	kg lb	0.30 0.70
Weight	kg lb	0.15 0.33
Repeat accuracy	mm in	± 0.05 ± 0.0020

* Recommended workpiece weight is calculated for force-fit gripping with a coefficient of static friction of 0.15 and a safety factor of 3 against workpiece slippage.

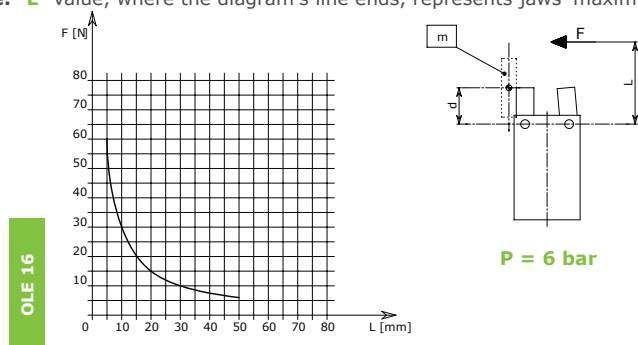
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