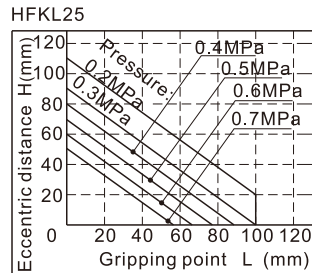
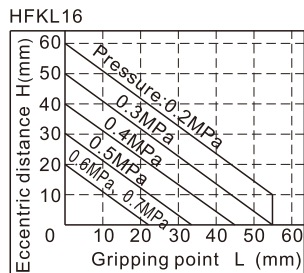
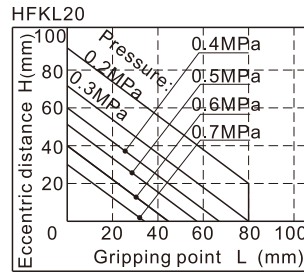
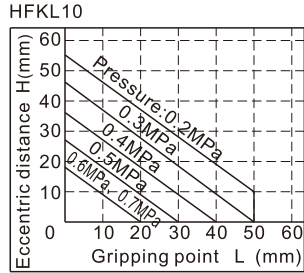
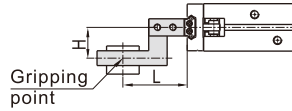
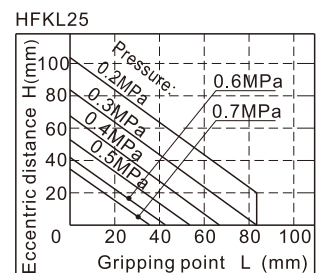
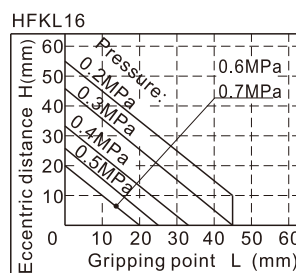
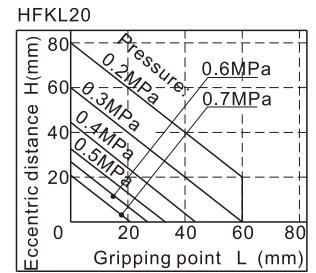
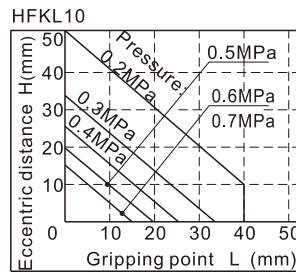
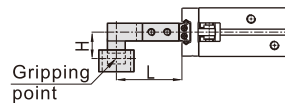


## HFKL Series

The range of the closed gripping points



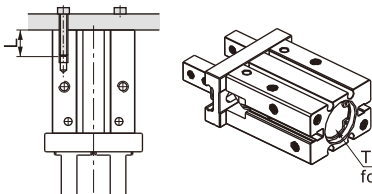
The range of the opened clamping point



## Installation and application

1. Due to the abrupt changes, the circuit pressure is low, which will lead to the decrease of the gripping force and falling of the work-pieces. In order to avoid the harm to the human body and damage to the equipment, anti-dropping device must be equipped.
2. Don't use the air gripper under strong external force and impact force.
3. Please contact with us when the single acting type clamps only with the spring force.
4. When install and fix the air gripper, avoid falling down, collision and damage.
5. When fixing the gripping jaw parts, don't twist the gripping jaw.
6. There are several kinds of installation method, and the locking torque of fastening screw must be within the prescribed torque range shown in the below chart. If the locking torque is too large, it will cause the dysfunctional. If the locking torque is too small, it will cause the position deviation and fall.

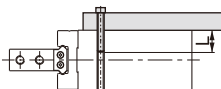
### Tail installation type



The bore of the tail is used for mounting and positioning

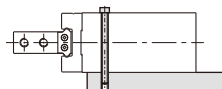
Bore size	The bolts type	Max. locking moment	Max. screwed depth	The aperture of the positioning bore	The depth of the positioning bore
10	M3×0.5	0.88N.m	6mm	Φ11mm <sup>+0.05</sup>	1.5mm
16	M4×0.7	2.1N.m	8mm	Φ17mm <sup>+0.05</sup>	1.5mm
20	M5×0.8	4.3N.m	10mm	Φ21mm <sup>+0.05</sup>	2mm
25	M6×1.0	7.3N.m	12mm	Φ26mm <sup>+0.05</sup>	2mm

### The installation of the front threaded hole

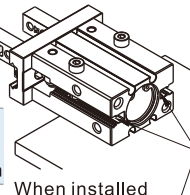


Bore size	The bolts type	Max. locking moment(Nm)	Max. screwed depth(mm)
10	M3×0.5	0.69	5
16	M4×0.7	2.1	7
20	M5×0.8	4.3	8
25	M6×1.0	7.3	10

### The installation of the front through hole

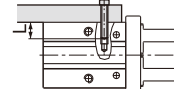


Bore size	The bolts type	Max. locking moment(Nm)	Max. screwed depth(mm)
10	M2.5×0.45	0.49	5
16	M3×0.5	0.88	8
20	M4×0.7	2.1	10
25	M5×0.8	4.3	12



When installed from front through holes, sensors can not be installed in the sensor grooves that are interfered by screws.

### Surface installation type

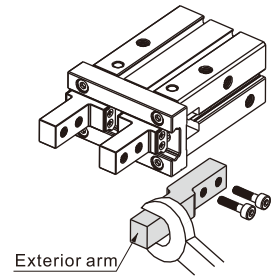


Bore size	The bolts type	Max. locking moment(Nm)	Max. screwed depth(mm)
10	M3×0.5	0.9	6
16	M4×0.7	1.6	4.5
20	M5×0.8	3.3	8
25	M6×1.0	5.9	10

## HFKL Series

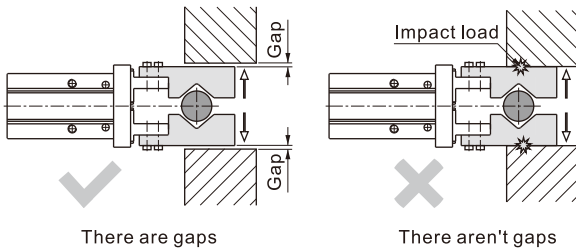
7. The installation method of the gripping jaw fittings  
When install the gripping jaw fittings, you have to pay particular attention that you can only hold the gripping jaw by using spanner, and then lock the screws with allen wrench. Never clamp the body directly and then lock the screws, otherwise the parts will be easily damaged.

Bore size	The bolts type	Max. locking moment(Nm)
10	M2.5×0.45	0.31
16	M3×0.5	0.59
20	M4×0.7	1.4
25	M5×0.8	2.8

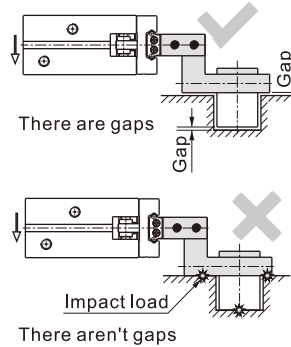


8. Confirm that there is no external forces exerted on the gripping jaw.  
Transverse load acts on the gripping jaw, which will cause impact load and leads to the shaking and damage of gripping jaw. Equip with gaps so that the air gripper will not crash into work-pieces and accessories at the end of its trip.

8.1) The end of stroke under the open state of air gripper

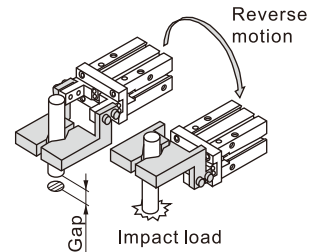


8.2) The end of stroke under the move state of air gripper

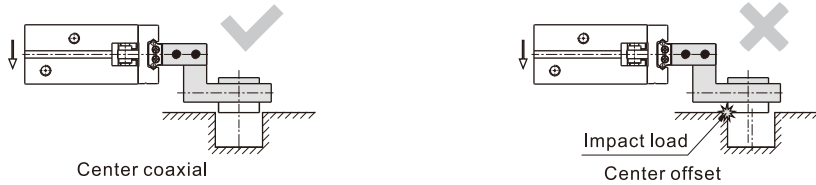


8.3) Reverse motion state

When reverse motion state, the gripping point must be precision, otherwise in the reverse motion state the air gripper maybe impact with ambience and will cause impact load .



9. When the work-pieces are inserted, the center line should be coaxial, no offset, in case there are external force generated on gripping jaw. When testing, it is specially required that the manual operation should be reduced, the pressure should be used to run it at a low speed, and guarantee the safety and no impact.



10. Please use the flow control valve to adjust the opening and closing speed of gripping jaw if too fast.

11. People can not enter the movement path of air gripper and articles can not be placed on the path too.

12. Before removing the air gripper, please confirm that it is out of working state, and then discharge of compressed air.