

PSLC-M, PSLC-M-S PNEUMATIC SHAFT LOCKING CLAMPS



PSLC-M

(Standard, Single Acting)



PSLC-M-S

(Sensor Mountable, Single Acting)

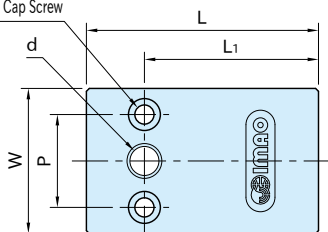
★Key Point

For automation of shaft locking.
Usable with sensors.

Body	Cover	Clamping Shaft
A5052 aluminum Anodized	A5056 aluminum Anodized	S45C steel Electroless nickel plated

For 2-M

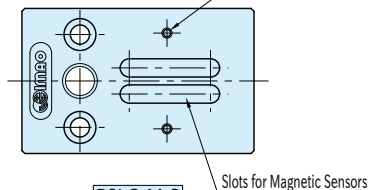
Hex-Socket Head Cap Screw



PSLC-M

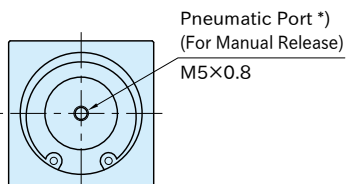
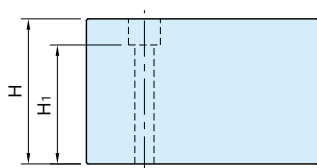
(Standard, Single Acting)

2-M3×0.5 Mounting Hole
for Sensor Brackets



PSLC-M-S

(Sensor Mountable, Single Acting)



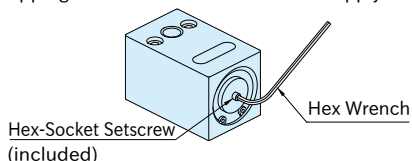
*) Delivered with the setscrew installed.
See the Feature section for details.

Part Number		d	L ₁	L	W	H	M	H ₁	P	Weight (g)	Suitable shaft dia. (h7,g6,f8) **)
Standard Type	Sensor Mountable Type										
PSLC10-3M	PSLC10-3M-S	10	60	80	50	50	M 6	41	32	530	φ 10
PSLC12-3M	PSLC12-3M-S	12								520	φ 12
PSLC16-3M	PSLC16-3M-S	16	70	95	63	63	M 8	53	42	1000	φ 16
PSLC20-3M	PSLC20-3M-S	20									φ 20
PSLC25-3M	PSLC25-3M-S	25	95	130	80	80	M10	65	56	2310	φ 25
PSLC30-3M	PSLC30-3M-S	30									φ 30

**) Recommended shaft: Heat treated (over HRC50) or hard chrome plated (over HV750, over 10 μm thickness)

Feature

- Spring clamping and pneumatic unclamping mechanism prevents the decrease of clamping force by air leakage.
- Available for remote and multiple operations.
- **PSLC-M-S** type can be used in combination with sensors to detect the clamping condition. The sensors must be supplied separately by customer.
- For details on applicable sensors and installation details, refer to **PSLC-M-SB**.
- Can be unclamped manually. The clamp can be released without air supply by fully tightening the setscrew into the manual unclamping hole.
- A setscrew is attached to the pneumatic port for shipping. Remove the setscrew for air supply.



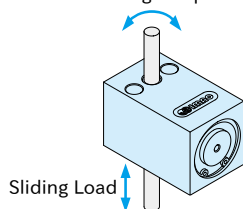
Note

- Clamping/unclamping operations must be performed with the shaft not in motion. Cannot be used as a brake of a moving shaft.
- Do not force the clamped shaft to move.
- Do not operate frequently without the shaft.
- Use clean air by removing moisture and debris with an air dryer and air filter.
- Impurities in the compressed air can cause malfunction.

Technical Information

Size	Operating Air Pressure (MPa)	Holding Torque (N·m)	Sliding Load (N)
PSLC-M PSLC-M-S	0.3~0.7	6	800
		9	
		21	1600
		23	
		35	2200
		40	

Holding Torque



Reference

PSLC-M-SB Sensor Brackets

Supplied With

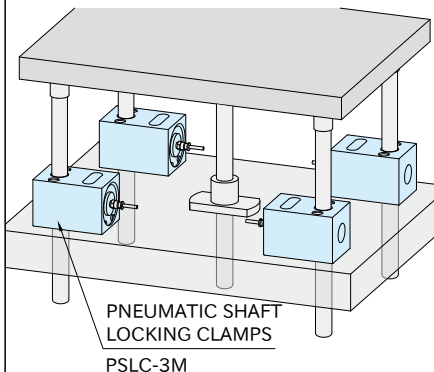
1 of hex. socket setscrew

Application Example

- Three-way valves are recommended.
- When air is supplied to compress the spring, the shaft is unclamped. When air is released, the shaft is clamped by the spring.
- Use bushings or bearings with the unit as needed.

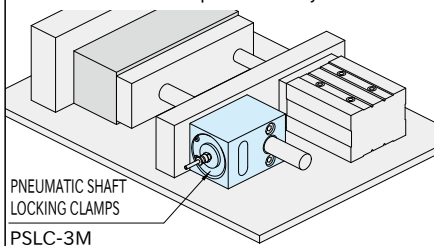
Sliding shaft locking

Vertical lock for elevator table



Sliding shaft locking

Horizontal lock with pneumatic cylinder



Spindle locking

Rotation lock for rotary stages

