

# PBLC

# PNEUMATIC BALL-LOCKING CLAMPS



Stainless Steel



**PBL1023S-SUS**

(Spring Clamping/Single Acting)

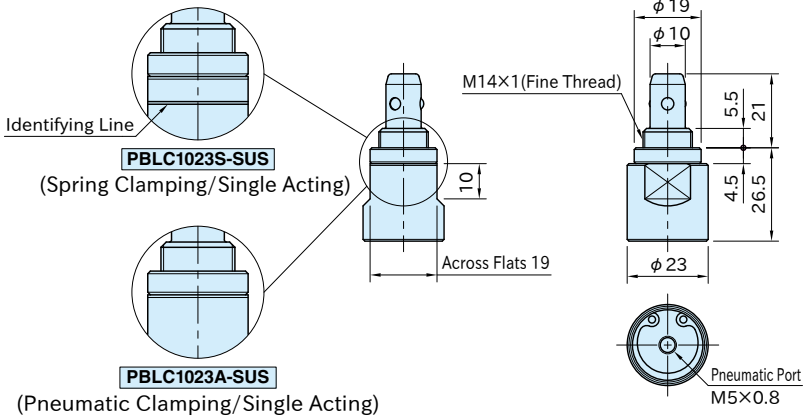


**PBL1023A-SUS**

(Pneumatic Clamping/Single Acting)

★ **Key Point**  
Two clamping types are available.

Body	Shaft	Ball	Spring	Retaining Ring	Seal
SUS303 stainless steel	SUS420J2 stainless steel Electroless nickel plated Quenched and tempered	SUS440C stainless steel Quenched and tempered	SUS304WPB stainless steel	SUS304 stainless steel	Nitrile rubber (NBR)



Part Number	Operating Air Pressure (MPa)	Clamping Force (N)	Weight (g)	Proper Receptacle
<b>PBL1023S-SUS</b>	0.3~0.7	50	71	PBLC-M16-SUS
<b>PBL1023A-SUS</b>		150 *)		

\*) The clamping force above is at 0.5 MPa.

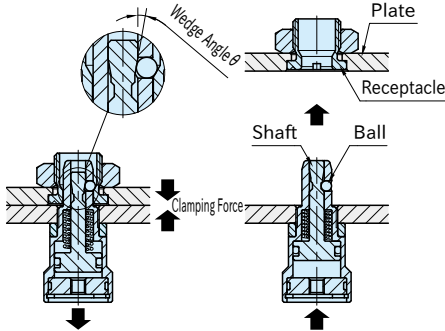


### Note

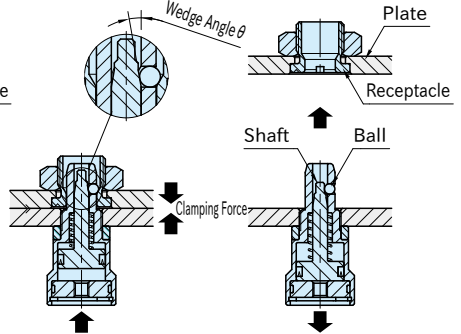
- **PBL1023S-SUS** has an identifying line and **PBL1023A-SUS** does not.
- Use clean air by removing moisture and debris with an air dryer and air filter.
- Impurities in the compressed air can cause malfunction.

## Feature

### PBLC1023S-SUS (Spring Clamping)



### PBLC1023A-SUS (Pneumatic Clamping)



Air Release (Clamping)

Air Supply (Unclamping)

Air Supply (Clamping)

Air Release (Unclamping)

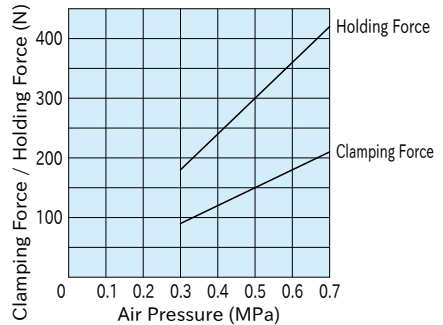
- The shaft pushes out the balls onto the tapered surface of the receptacle to pull down the plate.
- The wedge clamping prevents the plate from lifting up.
- Spring clamping type can keep clamping without air supply.

## Performance Curve

### PBLC1023S-SUS (Spring Clamping)

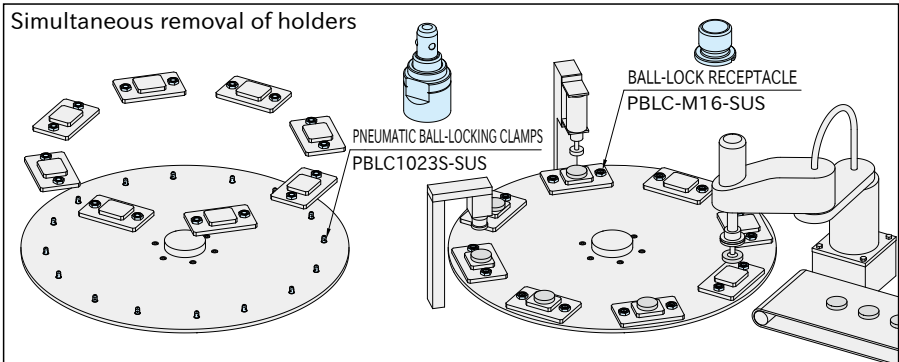
Clamping Force (N)	Holding Force (N)
50	150

### PBLC1023A-SUS (Pneumatic Clamping)



## Application Example

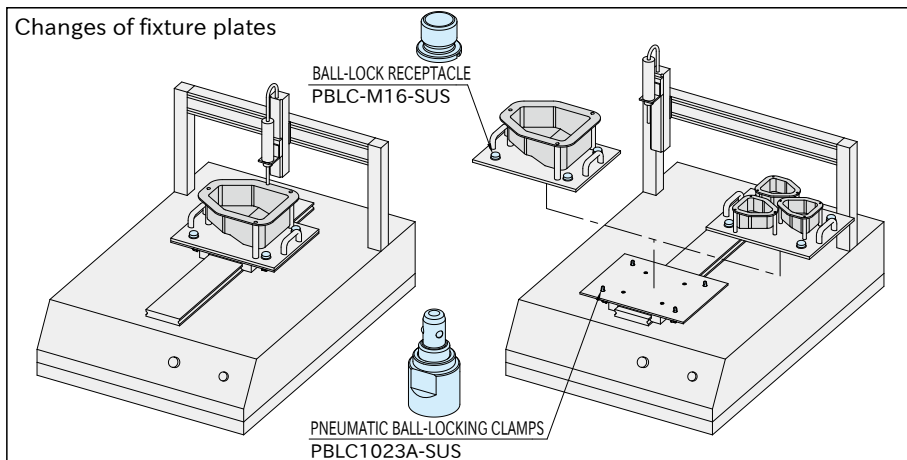
### Simultaneous removal of holders



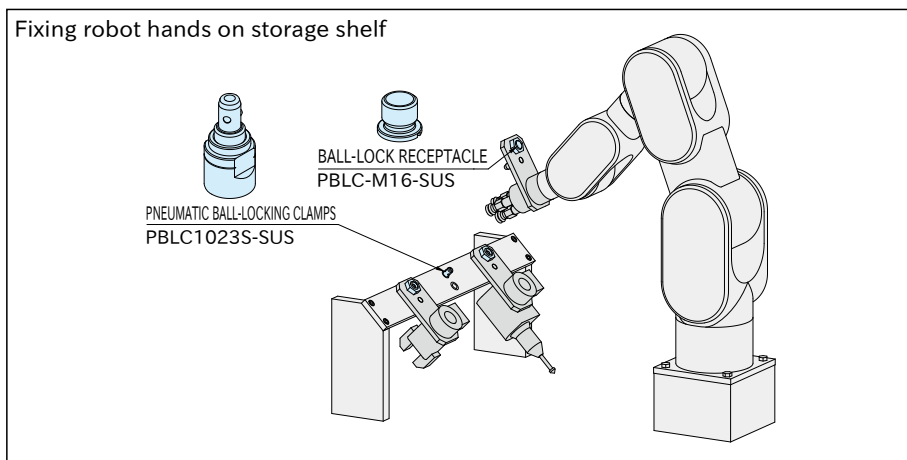
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## Application Example

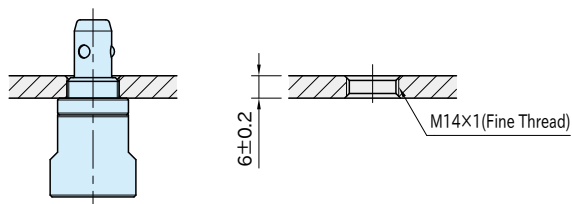
### Changes of fixture plates



### Fixing robot hands on storage shelf



### ■ Hole Preparation



### ■ Machining Accuracy

Spacing tolerance for multiple use should be  $\pm 0.1$ .

### ■ Repeatability

Repeatability is  $\pm 0.2$ .  
For higher accurate locating, use locating pins.