QCPSS — HEAVY DUTY ONE TOUCH PUSH LOCK CLAMPS

IMAO

RoHS

Wedge ▼

Clamping Position

2-M4 For Socket-Head Cap Screws

Unclamping Position

41
35
32
60
120°

52
4
10
5.7

Recommended Clamping Range 5.9-6.3
(Clamping Stroke 5.8-6.5)

Protrusion at Unclamping Position

φ22
φ26
45

(φ9.5)

Diameter of Countersink

QCPSS-F
Flat Gripper

QCPSS-D
Diamond Gripper
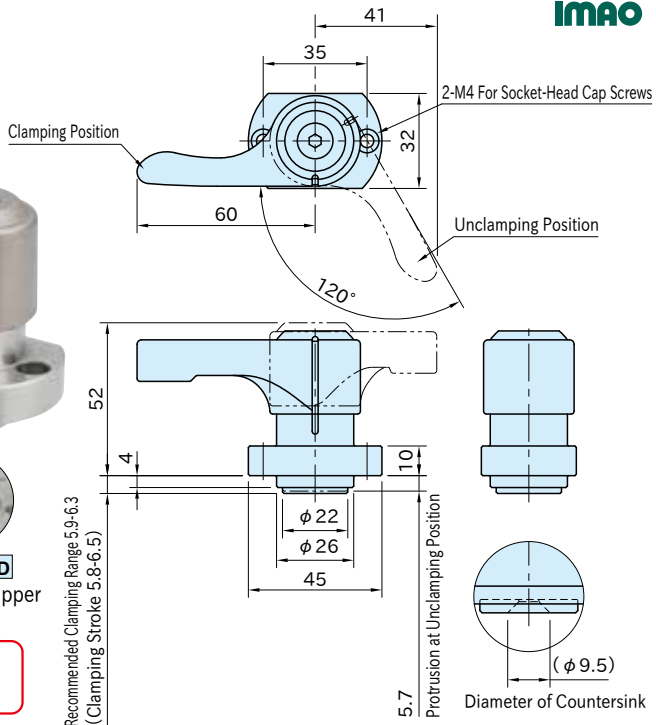
★ Key Point

Quick & easy lock with high clamping force

Part Number	Body	Piston	Spring	Handle	Gripper
QCPSS2245-6-S-F	SUS303 stainless steel	SCM435 steel Electroless Nickel Plated	Equivalent to SWOSC-V	SCS13 stainless steel (Equivalent to SUS304)	SUS303 stainless steel
QCPSS2245-6-S-D					SUS630 stainless steel Diamond electroplated

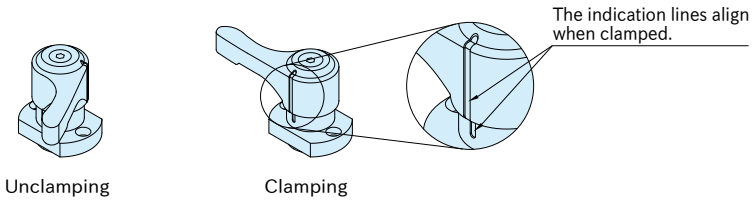| Part Number	Gripper	Clamping Force (N)	Weight (g)	Shaft Collars
QCPSS2245-6-S-F	Flat	1100	320	QCPSC2245-20
QCPSS2245-6-S-D	Diamond			QCPSC2245-25

QCPSC	SHAFT COLLARS

Feature

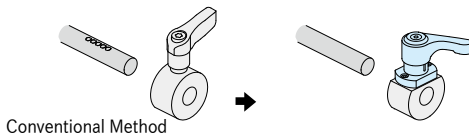・By turning the handle, the piston is pushed out and locked with the balls and tapered surface to clamp the object such as flat bar or shaft.
・The internal spring and wedge mechanism provides constant and strong clamping force.
・Frictional force generated at the contact surface prevents the object from moving.
・The flat gripper which hardly damages an object, and the diamond gripper which provides high holding force, are available. Choose a suitable type for your application.
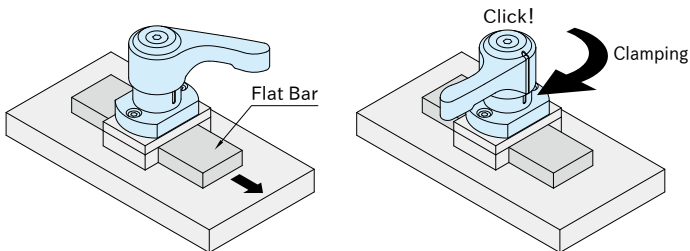
Piston Spring Wedge Angle θ Tapered Surface

Flat Bar Base Gripper Friction Surface

Unclamping Clamping
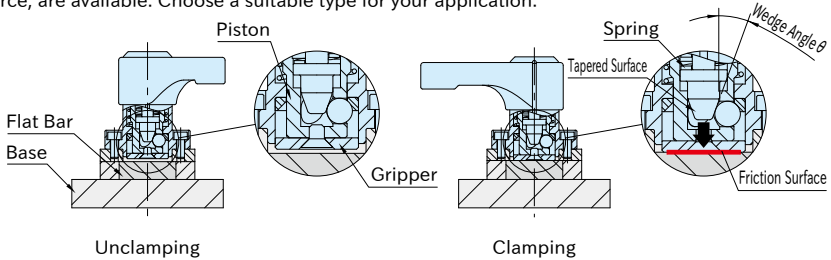
・The indication line clearly shows clamp/unclamp position.

The indication lines align when clamped.

Unclamping Clamping

・Shafts are less likely to be damaged compared to fixing by screws.

Conventional Method

How To Use

Click! Clamping

Flat Bar

Slide the flat bar at the unclamping position.

Turn the handle 120° to clamp.

Lock for slide position adjustment

HEAVY DUTY ONE TOUCH PUSH LOCK CLAMPS
QCPSS2245-6-S
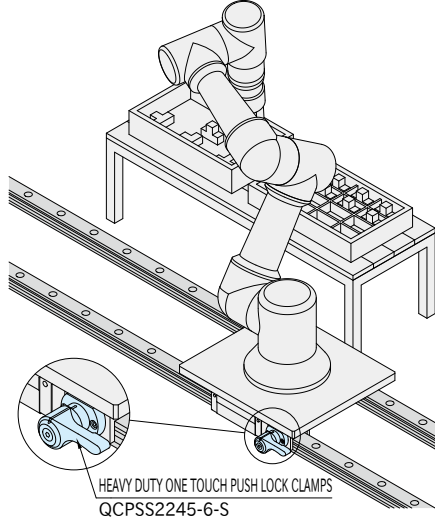
Lock for elevating equipment

HEAVY DUTY ONE TOUCH
PUSH LOCK CLAMPS
QCPSS2245-6-S
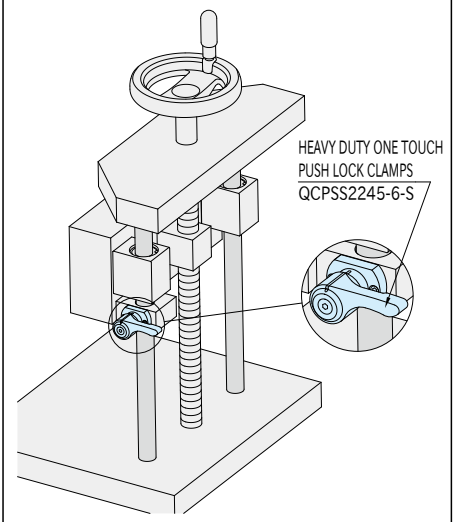
Technical Information

Part Number	Sliding Load (N)	Holding Torque (N·m)
QCPSS2245-6-S-F	450	12
QCPSS2245-6-S-D	900	23

Flat Bar

Base

Sliding Load

■ Actual Clamping Position vs. Sliding Load and Holding Torque

Performance (Reference Value)

Allowable Sliding Load (N)

1400
1200
1000
800
600
400
200
0

QCPSS2245-6-S-D

QCPSS2245-6-S-F

5.8 5.9 6.0 6.1 6.2 6.3 6.4 6.5

Actual Clamping Position (mm)

Holding Torque (N·m)

35.0
30.0
25.0
20.0
15.0
10.0
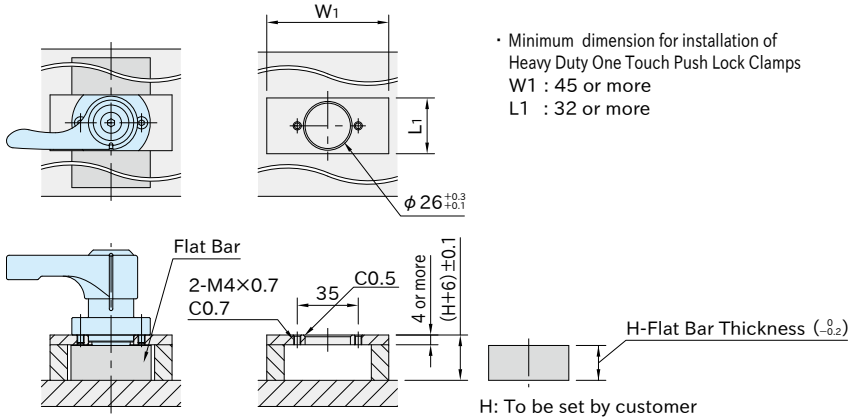5.0
0.0

Shaft

Holding Torque

Base

Sliding Load
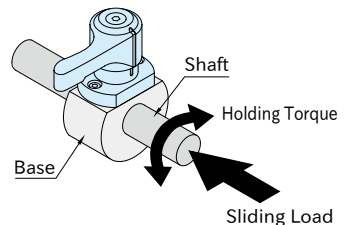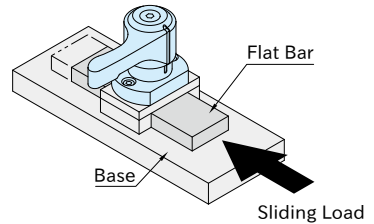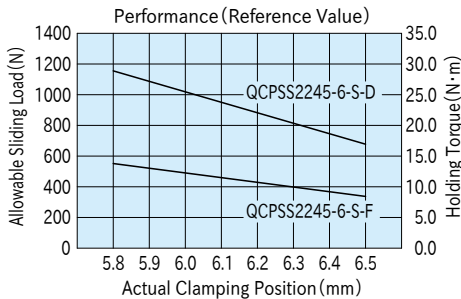
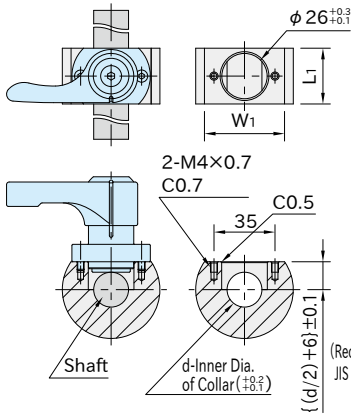These numerical values are for reference only, under the following conditions.
・The material of the object (flat bar, shaft) and the base is SUS303 stainless steel.
・The gripper, object (flat bar, shaft), and base are fully degreased.
・The object is clamped within the recommended clamping range.
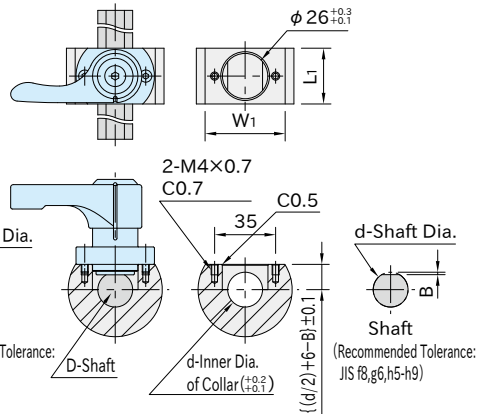・The values of Holding Torque are for φ25 shafts.

■For Flat Bar

- Minimum dimension for installation of Heavy Duty One Touch Push Lock Clamps
  W1 : 45 or more
  L1 : 32 or more

$\phi 26^{+0.3}_{+0.1}$

2-M4×0.7
C0.7

35   C0.5

4 or more

$(H+6)\pm0.1$

Flat Bar

H-Flat Bar Thickness $\left(^{0}_{-0.2}\right)$

H: To be set by customer

■For Shaft

$\phi 26^{+0.3}_{+0.1}$

L1

W1

2-M4×0.7
C0.7

35   C0.5

d-Shaft Dia.

Shaft
(Recommended Tolerance:
JIS f8,g6,h5-h9)

Shaft   d-Inner Dia. of Collar $\left(^{+0.2}_{+0.1}\right)$

$\{(d/2)+6\}\pm0.1$

- d:To be set by customer
- The approximate outer diameter of the collar can be calculated according to the following formula.

Outer diameter of collar $\geqq 2\times\sqrt{\left(\dfrac{W_1}{2}\right)^2+\left(\dfrac{d}{2}+6\right)^2}$

■For D-Shaft

$\phi 26^{+0.3}_{+0.1}$

L1

W1

2-M4×0.7
C0.7

35   C0.5

d-Shaft Dia.

B

Shaft
(Recommended Tolerance:
JIS f8,g6,h5-h9)

D-Shaft   d-Inner Dia. of Collar $\left(^{+0.2}_{+0.1}\right)$

$\{(d/2)+6-B\}\pm0.1$

- d·B:To be set by customer
- The approximate outer diameter of the collar can be calculated according to the following formula.

Outer diameter of collar $\geqq 2\times\sqrt{\left(\dfrac{W_1}{2}\right)^2+\left(\dfrac{d}{2}+6-B\right)^2}$

Note

- Degrease all contact surfaces thoroughly.
- Do not try to move the clamped object.
- When using the clamps by methods other than "How to Install" above, please install them so that the object is clamped within the recommended clamping range.