

ORDERING INFORMATION

SYM	CHANGES	DATE	BY
-----	---------	------	----

SWP-0501 [] [] [] [] L [] N S

Pin Style

- D 3-Finger Contact Datum
- C 2-Finger Contact 2-way
- M 3-Finger Contact - Floating Pin

Part Hole Size

C&D=7.90-13.00 M=9.90-13.00
(9.00mm Dia Shown)

Actuator Option

- L Locking Option

Mounting Option

- 0 No Mounting option - (Pin Clamp Only)
- S Standard (Pilot mounted)
- I Inverted mount
- T Top mount

**INDIVIDUAL MOUNTING BRACKET
ORDER AS - SWPD05**

**5MM SHIM PACK
ORDER AS - SWPZ0501-S5**

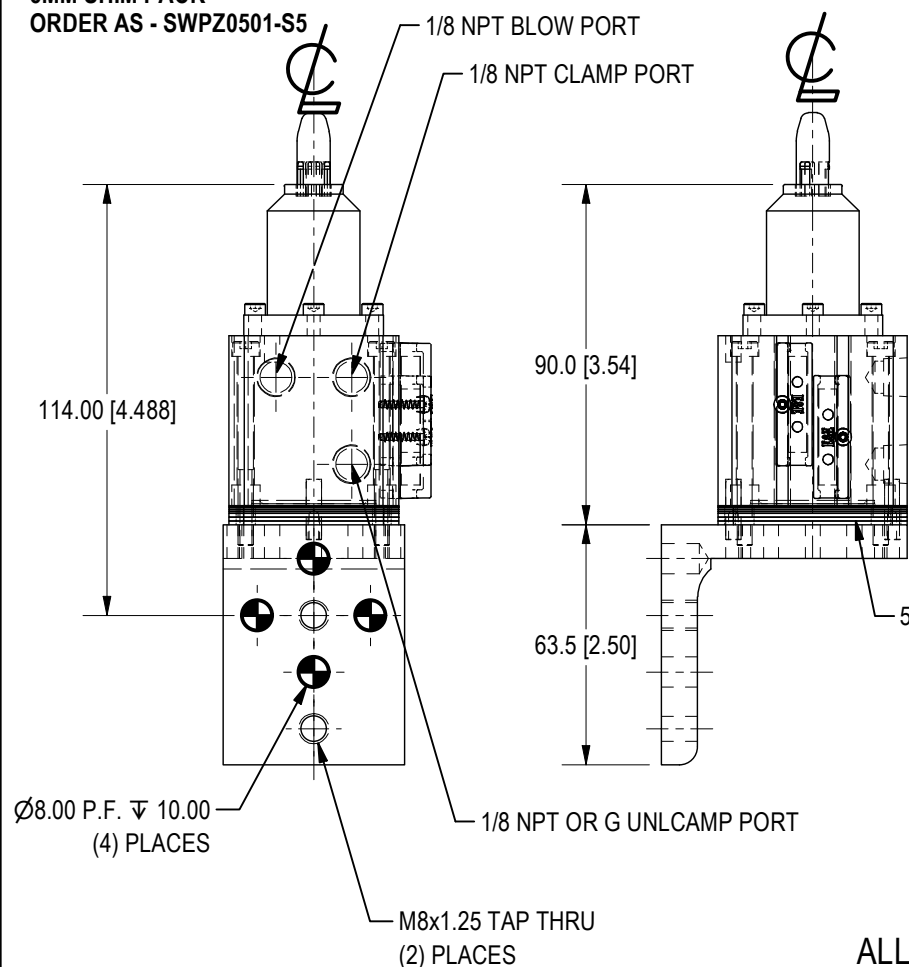
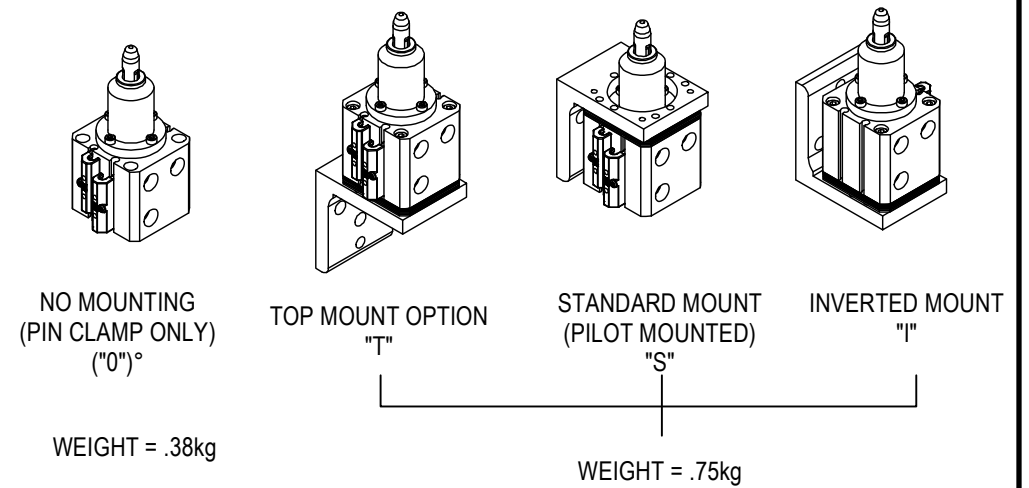
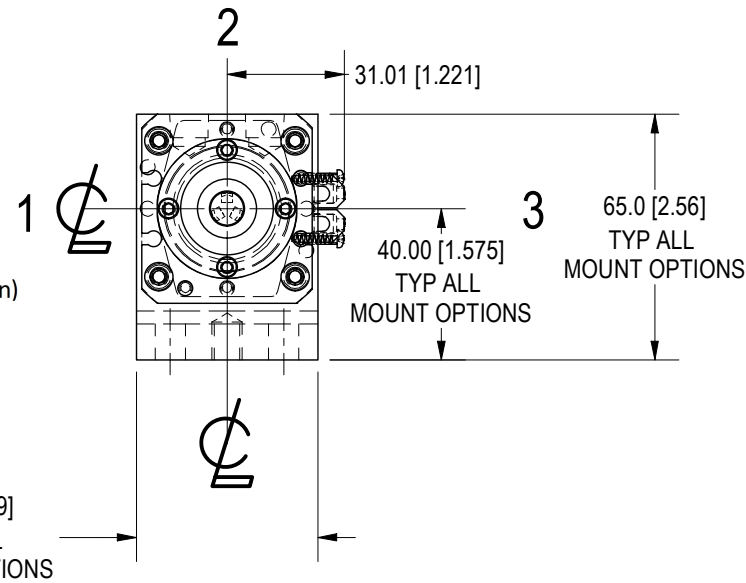
Switch

- S Sick (Standard) Weld Immune

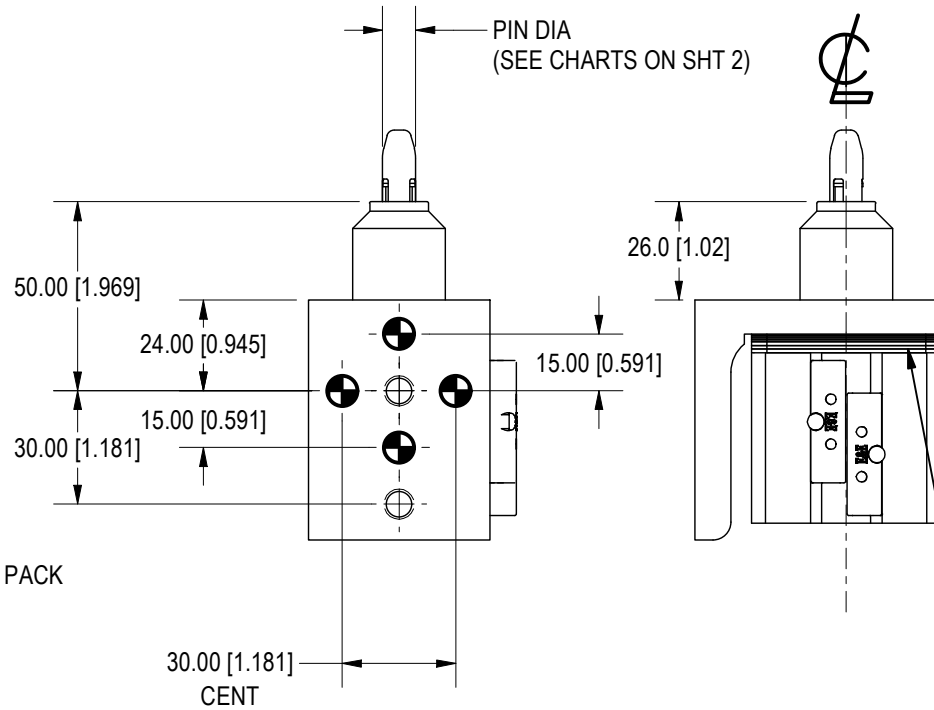
- Ports**
N NPT Ports

Port Position

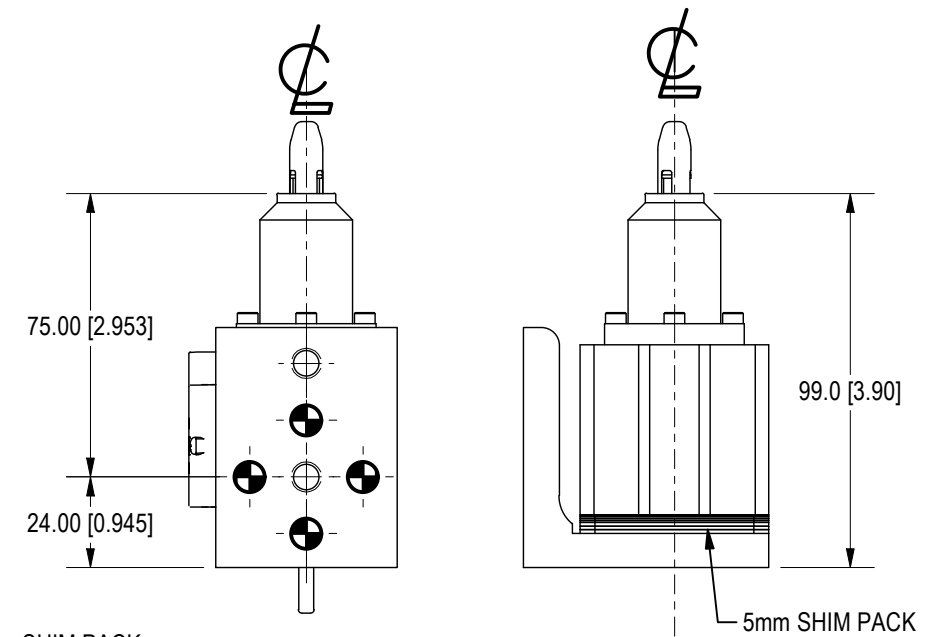
- 1 Port Position
- 2 Port Position (Shown)
- 3 Port Position



TOP MOUNT OPTION



STANDARD MOUNT OPTION
(PILOT MOUNTED)



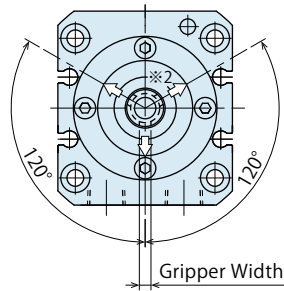
INVERTED MOUNT OPTION

ALL UNITS COME STANDARD WITH A 5mm SHIM PACK CONSISTING OF:
(2) 0.25mm (3) 0.50mm (3) 1.00mm

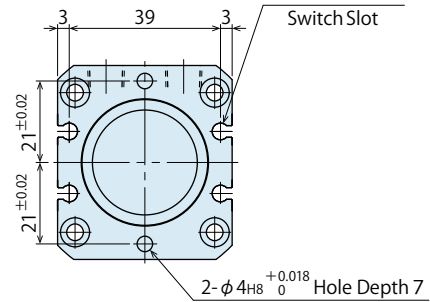
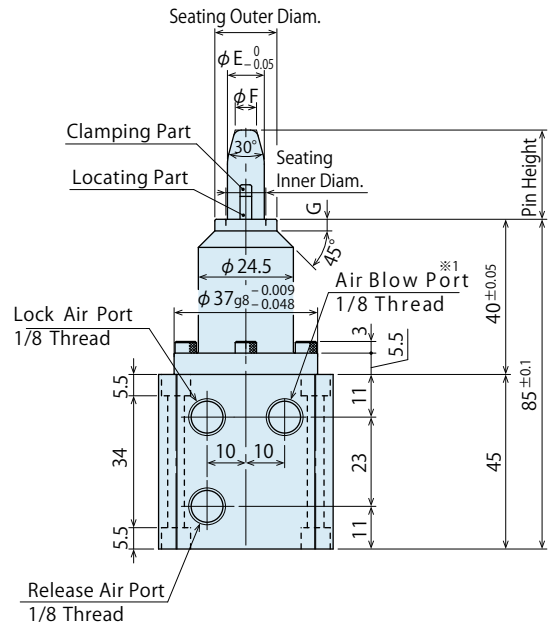
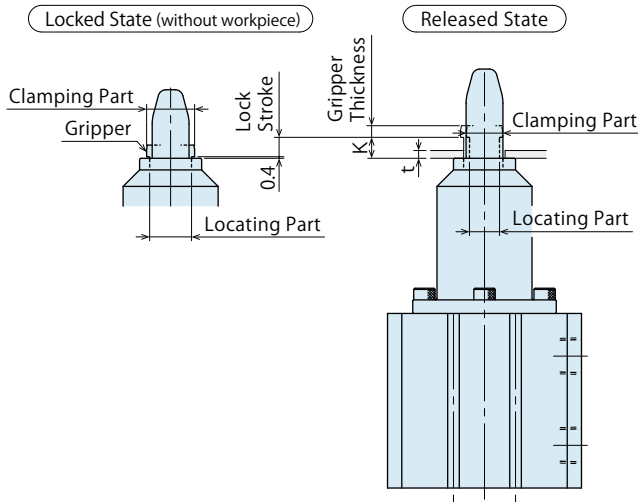
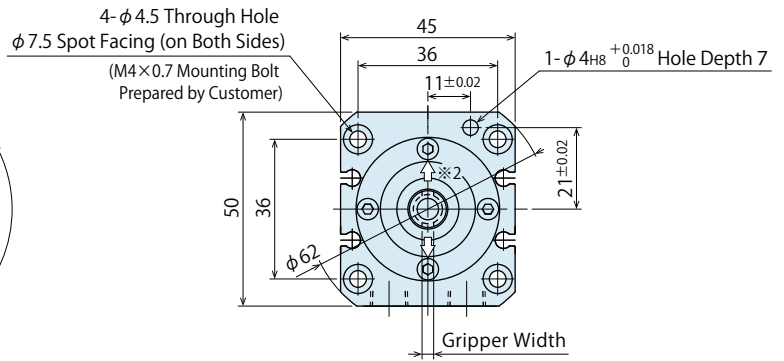
SEE FOLLOWING SHEETS FOR ADDITIONAL INFORMATION

<p>7200 MILLER DR. WARREN, MI 48092 EE-CP.COM</p>	NOTICE: THIS DRAWING IS PROPERTY OF E&E CUSTOM PRODUCTS INCLUDING THE PRINCIPLES OF THE DESIGN INVOLVED, AND IS SUBMITTED WITH AGREEMENT THAT IT IS NOT TO BE REPRODUCED, COPIED, OR LOANED, IN PART OR WHOLE, ACCEPTANCE OF THIS DRAWING WILL BE CONSTRUED AS AN AGREEMENT TO THE ABOVE		
	TITLE: 0501 SERIES PIN CLAMP PART NO.		
DRAWN BY: EE DATE: 6/9/2022 SCALE: 1/2 SHT 1 OF 1	CHK'D BY: EC DATE: 8/22/2024	APPR'D BY: MH DATE: 8/22/2024 DWG. NO. SWP0501-TEMPLATE FLEXCAN / P702	

Function D
3 FINGER CONTACT DATUM



Function C
2 FINGER CONTACT 2-WAY

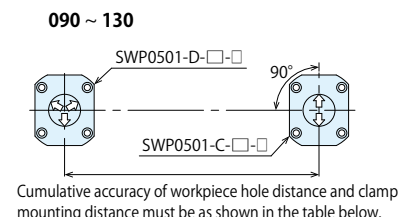
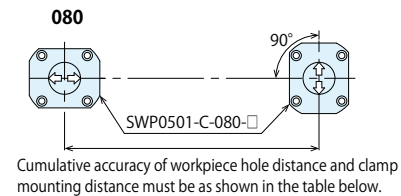


External Dimension List : SWP0501-D/C

Model No.	SWP0501						(mm)
	-C-080-□	-D/C-090-□	-D/C-100-□	-D/C-110-□	-D/C-120-□	-D/C-130-□	
Workpiece	Hole Diameter	8 ^{+0.2} / _{-0.1}	9 ^{+0.2} / _{-0.1}	10±0.2	11±0.2	12±0.2	13±0.2
	Thickness t	0.45					
Pin Height		2.3	3.6	5.5	6	6.5	7
Pin Outer Diam. E		2.3	3.6	5.5	6	6.5	7
Pin End Diam. F		2.3	3.6	5.5	6	6.5	7
Clamping Part	At Released	7.7	8.7	9.3	9.8	10.8	11.8
	At Locked <small>without workpiece</small>	9.8	10.8	11.8	12.8	13.8	14.8
Locating Part	At Released	6.1	7.1	7.7	8.2	9.2	10.2
	At Locked <small>without workpiece</small>	8.2	9.2	10.2	11.2	12.2	13.2
Gripper Width	Function D	-	3	3	3.5	3.5	3.5
	Function C	3	3	3.5	3.5	3.5	3.5
Gripper Thickness		2	2	3	3	3	3
Released Height K		2.7	4	5.9	6.4	6.9	7.4
Seating Inner Diam.		8.3	9.3	10.3	11.3	12.3	13.3
Seating Outer Diam.		15	15.5	16	17	18	19
Seating Part G		2.5	2.5	3	3	3	3
Lock Stroke		2.3	3.6	5.5	6	6.5	7

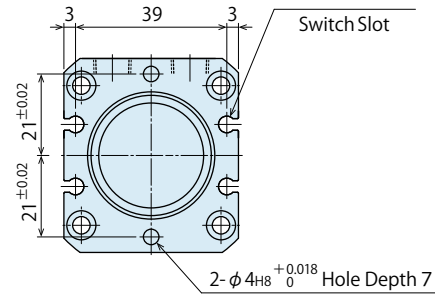
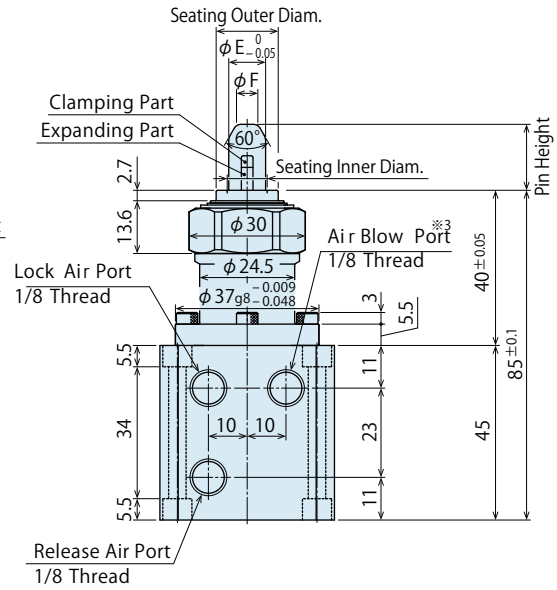
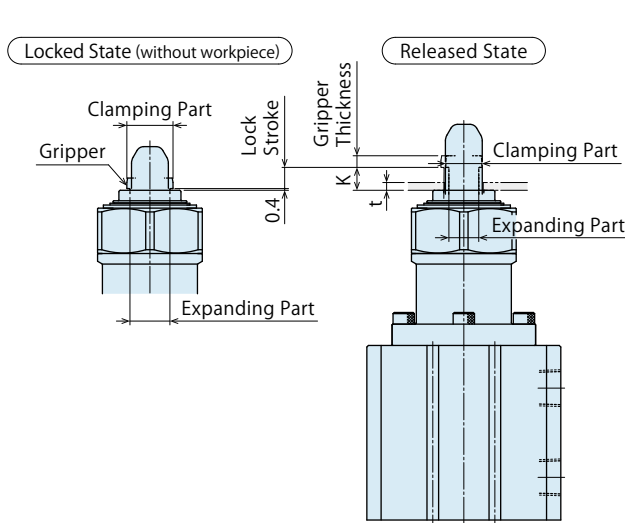
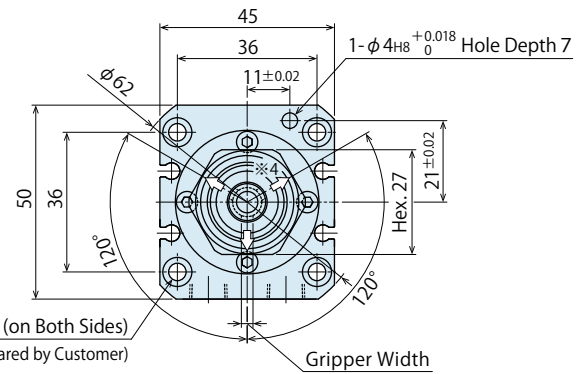
Notes :

- ※1. Continuously supply air pressure to the air blow port.
- ※2. The arrow ⇨ in the drawing shows expanding direction of grippers.
Since the clamping part is not a floating structure, when clamping a workpiece with two of these products, consider distance accuracy and use them with arrangement shown in the drawing on the right. With out-of specification distance accuracy, workpiece will interfere with the guide part causing damages.



Hole Diam.	Distance Accuracy
080~090	±0.05mm or better
100	±0.15mm or better
110~130	±0.40mm or better

Function M
3 FINGER CONTACT
FLOATING PIN



External Dimension List : SWP0501-M (mm)

Model No.		SWP0501 -M-100-□	SWP0501 -M-110-□	SWP0501 -M-120-□	SWP0501 -M-130-□	
Workpiece	Hole Diameter	10 ±0.2	11 ±0.2	12 ±0.2	13 ±0.2	
	Thickness	0.45				
	t	Min.	5.5	6	6.5	7
		Max.	5.5	6	6.5	7
Pin Height		17	19	19.5	20	
Pin Outer Diam. E		9.5	10	11	12	
Pin End Diam. F		5.5	6	7	8	
Clamping Part	At Released	9.3	9.8	10.8	11.8	
	At Locked <small>without workpiece</small>	11.8	12.8	13.8	14.8	
Locating Part	At Released	7.7	8.2	9.2	10.2	
	At Locked <small>without workpiece</small>	10.2	11.2	12.2	13.2	
Gripper Width		3	3.5	3.5	3.5	
Gripper Thickness		3	3	3	3	
Released Height K		5.9	6.4	6.9	7.4	
Seating Inner Diam.		10.3	11.3	12.3	13.3	
Seating Outer Diam.		16	17	18	19	
Lock Stroke		5.5	6	6.5	7	

Notes :

- ※3. Continuously supply air pressure to the air blow port.
- ※4. The arrow ⇨ in the drawing shows expanding direction of grippers.

Clamping Force • Expanding Force

(lbf)

Model No.	SWP0501		SWP1001	
	L: Locking	0: Non-Locking	L: Locking	0: Non-Locking
※2 ※3 Clamping Force	Air Pressure 75 psi	85	75	135
	Air Pressure 60 psi	70	60	115
	Air Pressure 45 psi	55	45	90
	Air Pressure 0 psi	10	-	20
※4 Expanding Force	Air Pressure 75 psi	230	200	365
	Air Pressure 60 psi	190	160	305
	Air Pressure 45 psi	150	120	245
	Air Pressure 0 psi	30	-	55

Notes :

※2. Clamping force shows the pressing force against the seating surface.

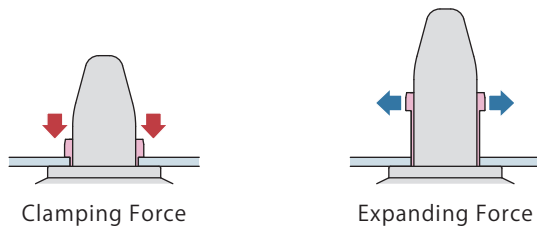
The values in the table shows the calculated value when the workpiece thickness t is 0.45mm.

※3. When supplying air pressure to the air blow port, a clamping force may decrease due to internal pressure.

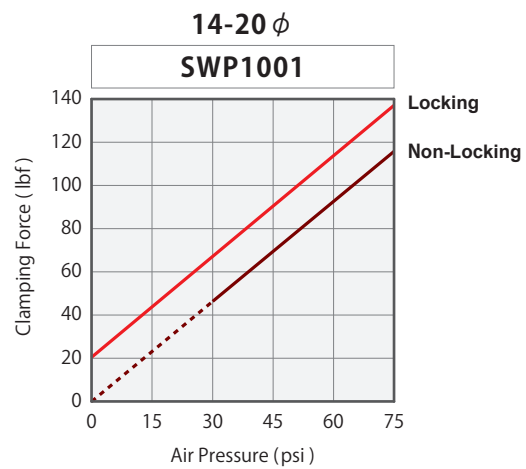
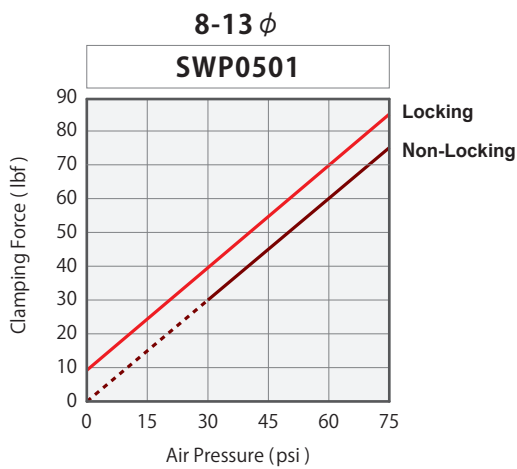
※4. Expanding force shows the force acting perpendicular to the pin's center axis.

Expanding force shows the calculated value when the friction coefficient is μ 0.15.

- Depending on the material, thickness and chamfer shape of a workpiece hole, it can be deformed by clamping action, and the specifications will not be satisfied. Make sure to test clamping beforehand and adjust pressure accordingly.



Clamping Force Curve



Expanding Force Curve

