

Pneumatic Swing Clamps



APPLICATION

When machining a workpiece by means of a machine tools, a pneumatic swing clamping cylinder will be your best choice if the placing and taking-off of the workpiece are not allowed to be interfered by the clamp.

FUNCTION

This swing clamp belongs to a pull cylinder of which the total stroke is equal to the sum of a swing stroke and a clamping stroke, and is usually used within the clamping stroke.

TYPE

This swing clamp belongs to a double-acting type which is operated mainly in a downward pressing manner, including clockwise swing and counter-clockwise swing; standard angle is 90°, and optional angles include 0°, 45°, 60°; clamping ways include single arm or double arms; the mounting manner includes threaded type and lower flange type for manifold mounting with O-ring seal.

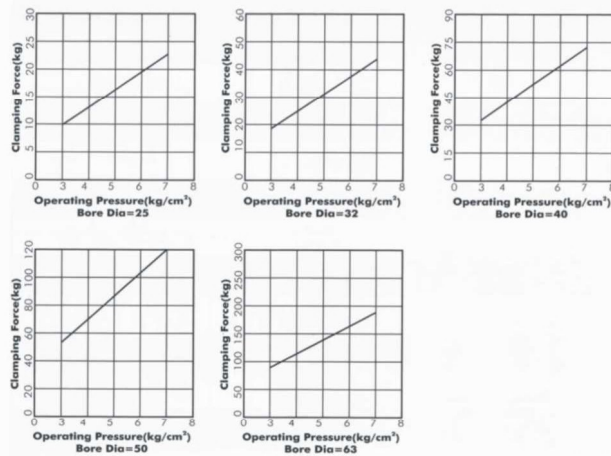
MATERIAL

The material of the main body is of aluminum alloy.

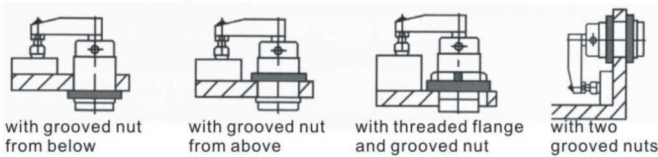
NOTE

It is necessary to use a device having F.R.L. function for these pneumatic swing clamps in order to effectively remove moisture, lubricate and extend the working life of the swing clamps.

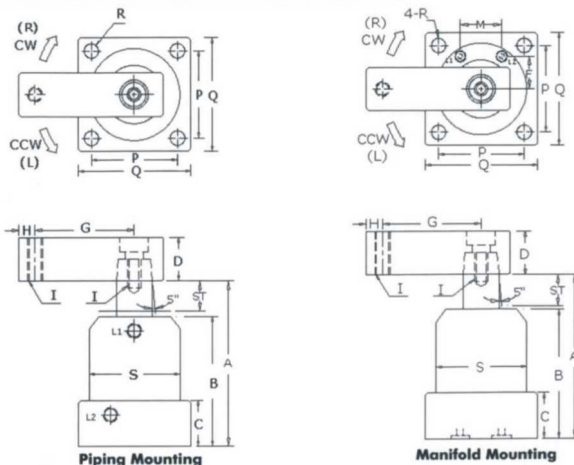
■ Schematic view showing a theoretical clamping force under different pneumatic pressure:



■ Threaded Mounting Types



■ DIMENSIONS of Single-sided Swing Clamps



■ SPECIFICATION

unit:mm

Sizes	Model	PSF-25	PSF-32	PSF-40	PSF-50	PSF-63
Mounting Type	Bottom Flange					
Arm Type	Single Arm					
Max. Pressure	7 kg/cm ²					
Normal Pressure	4~6 kg/cm ²					
Acting Type	Double Acting					
Swivel Angle	90° (0°, 45°, 60°, 180°) ± 2°					
Swivel Stroke (mm)	12	12	12	14	14	
Clamping Stroke (mm)	14	14	15	15	15	
Bore Diameter (mm)	25	32	40	50	63	
Piston Rod φ (mm)	14	16	16	20	20	
Clamping Force (5kg/cm ²)	16(kg)	30(kg)	50(kg)	85(kg)	140(kg)	
A (Unclamp)	95.5	102.5	106	113	119	
B	65.5	71	75	80	86	
C	23	23	26	26	30	
D	□ 16	□ 19	□ 19	□ 25.4	□ 25.4	
G	30	50	50	70	70	
H	8	9	9	10	10	
L1 (clamp)/ L2 (unclamp)	M5X0.8	PF1/8	PF1/8	PF1/8	PF1/8	
I	M6X1	M8X1.25	M8X1.25	M10X1.5	M10X1.5	
P	30	44	48	55	64	
Q	40	54	58	68	80	
R	∅4.5	∅6.5	∅6.5	∅8.5	∅8.5	
S	∅35	∅50	∅55	∅65	∅75	
M	18	22	26	30	40	
F	12.5	17	19.5	24	29	
Weight (kg)	0.4	0.7	0.85	1.3	1.8	