

MAS*/MATS* series

Pneumatic Swing Clamping Cylinder



Order example:

MAS	L	—	40	×	90
MODEL	SWIVEL DIRECTION		PISTON ϕ		ANGLE
MAS	R: CW		25		0°
MASD	L: CCW		32		45°
MATS	P: Nonswing		40		60°
MATSD			50		90°
			63		180°

Note: MATS and MATSD produced by order

Note:

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

*F: Filters R: Regulators L: Lubricators

Application:

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

Function:

This cylinder 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.

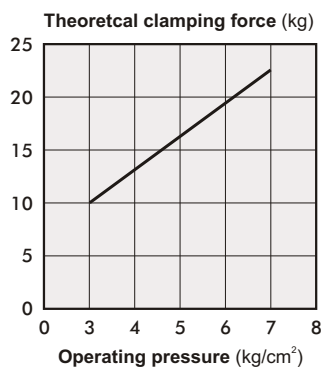
Type:

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

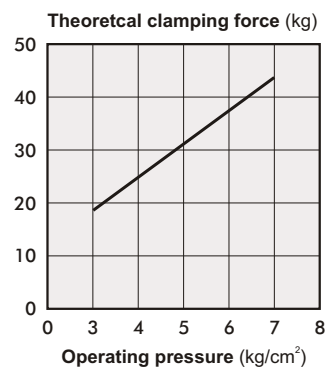
Material:

This material of the main body is aluminum alloy.

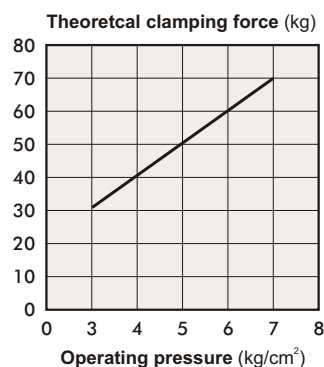
Schematic view showing a theoretical clamping force under different pneumatic pressure:



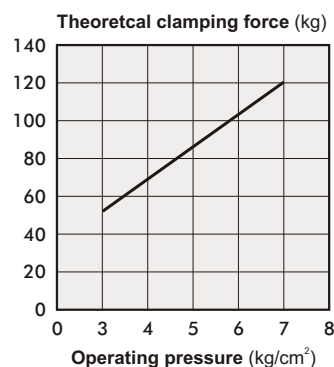
MAS-25



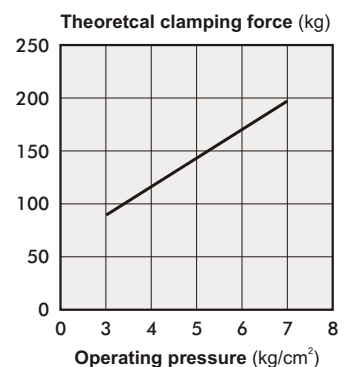
MAS-32



MAS-40



MAS-50



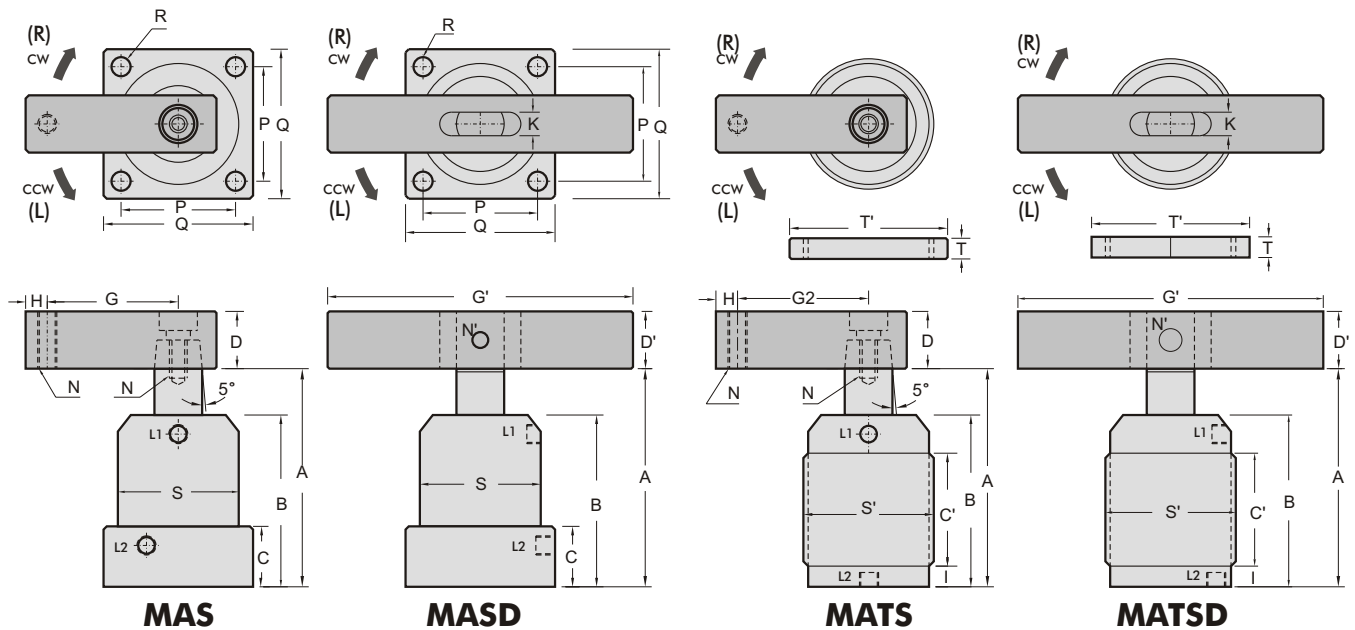
MAS-63

MAS*/MATS* Max. operating pressure 7kg/cm²



Pneumatic Swing Clamping Cylinder Double-acting, operating pressure 4-6 kg/cm²

mindman



Flange type	MAS-25	MAS-32 MASD-32	MAS-40 MASD-40	MAS-50 MASD-50	MAS-63 MASD-63
Threaded type (produced by order)	MATS-25	MATS-32 MATSD-32	MATS-40 MATSD-40	MATS-50 MATSD-50	MATS-63 MATSD-63
Max. operating pressure	7kg/cm ²				
Normal operating pressure	4-6kg/cm ²				
Cylinder operating	Double-acting				
Swivel angle	90° (0° 45° 60° 180°)±2°				
Swivel stroke (mm)	12/*21	12/*21	12/*21	14/*21	14/*21
Clamping stroke (mm)	14/*5	14/*5	15/*6	15/*8	15/*8
Piston-φ (mm)	25	32	40	50	63
Piston rod-φ (mm)	14	16	16	20	20
Theoretical force (5kg/cm ²)	16kg	30kg	50kg	85kg	140kg
A (unclamp) (mm)	95.5	102.5	106	113	119
B (mm)	66.5	71	75	80	86
C (mm)	23	23	26	26	30
C' (mm)	35	40	45	50	56
D (mm)	□16	□19	□19	□25.4	□25.4
D' (mm)		□19	□19	□22	□22
G (mm)	30	50	50	70	70
G' (mm)		100	100	120	120
G2 (mm)	50	60	70	80	90
H (mm)	8	9	9	10	10
I (mm)	10	13	13	13	13
K (mm)		9	9	10	10
L1 (clamp) L2 (unclamp)	M5×0.8	PT 1/8	PT 1/8	PT 1/8	PT 1/8
N (mm)	M6×1	M8×1.25	M8×1.25	M10×1.5	M10×1.5
N' (mm)		φ8	φ8	φ8	φ8
P (mm)	30	44	48	55	64
Q (mm)	40	54	58	68	80
R (mm)	φ4.5	φ6.5	φ6.5	φ8.5	φ8.5
S (mm)	φ35	φ50	φ55	φ65	φ75
S' (mm)	M40×1.5	M50×1.5	M55×1.5	M65×1.5	M80×1.5
T (×2 pcs) (mm)	9	11	11	12	15
T' (mm)	φ58	φ70	φ75	φ85	φ105

Note: Dimension for 180° .