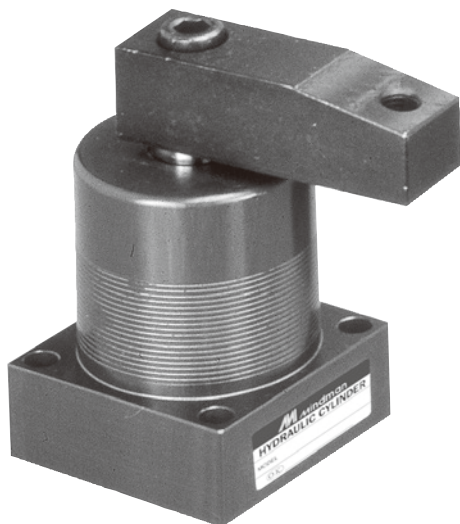


MAS* / MATS* series

PNEUMATIC - SWING CLAMP CYLINDER



Features

- Double clamp retracting, the piston rod rotates, causing the clamping arm to swing in either a clockwise or counterclockwise direction. Clamping then takes place as the rod continues to retract in a straight line, pulling the arm against the workpieces.
- Pull cylinder type, Available models offer angles of rotation of 0°, 45°, 60° or 90°.
- The cylinder body is made of aluminum alloy and the surface is hard membrane treated.
- Mounting methods: Square base type, threaded type, upper flange type.

Note

- When it is necessary to change the length of the clamping arm, it should be noted that do not exceed 1.5 times of the original G value in order to avoid the serious slanting of the piston rod.
- Suggested to add a flow control valve to the hydraulic inlet to control the motion of the swing angle in order to prevent the inertial impact.
- A workpiece should not be clamped within a swing stroke, and it should be clamped within the vertical downward clamping stroke.
- Whenever placing and taking off a workpiece, it is necessary to use an air gun to clean the piston and the seal for removing the iron slag or foreigner objects attached thereon in order to prevent the foreigner objects from entering the seal to cause oil leakage.

Order example

MAS L — 40 F — 90

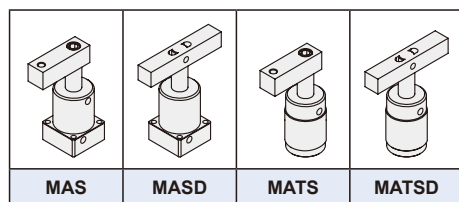
SWIVEL
DIRECTION
R: CW
L: CCW
P: Nonswing

PISTON Ø
25, 32, 40,
50, 63

Blank: Line type
F: Manifold

ANGLE
0°
45°
60°
90°

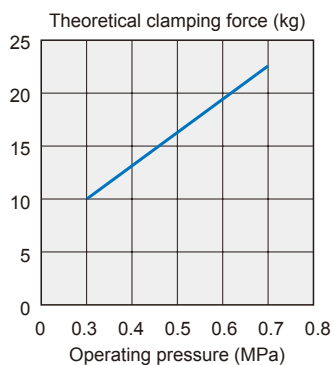
MODEL



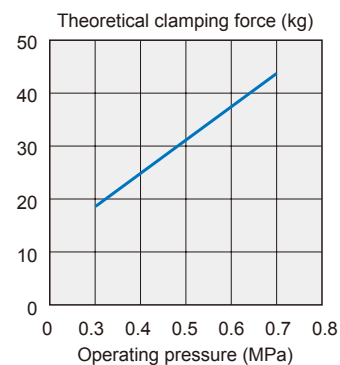
* MATS and MATSD produced by order.

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

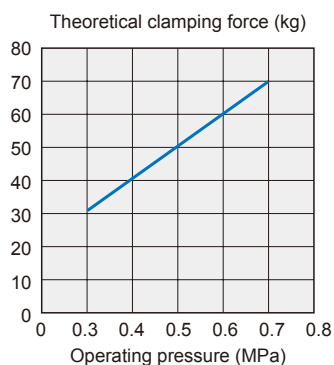
MAS-25



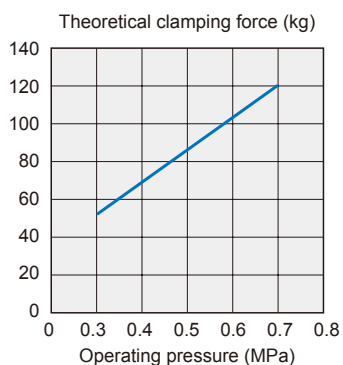
MAS-32



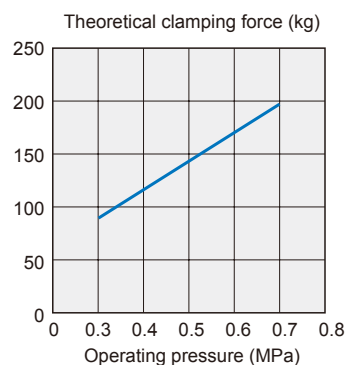
MAS-40



MAS-50

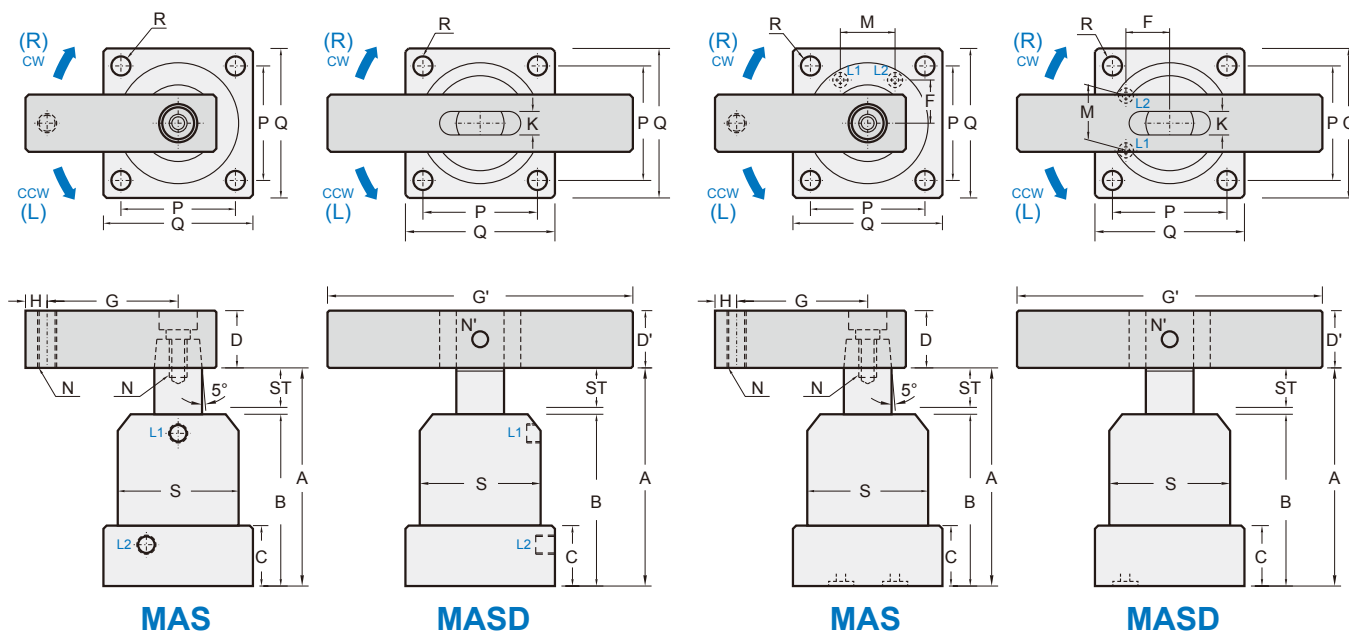


MAS-63



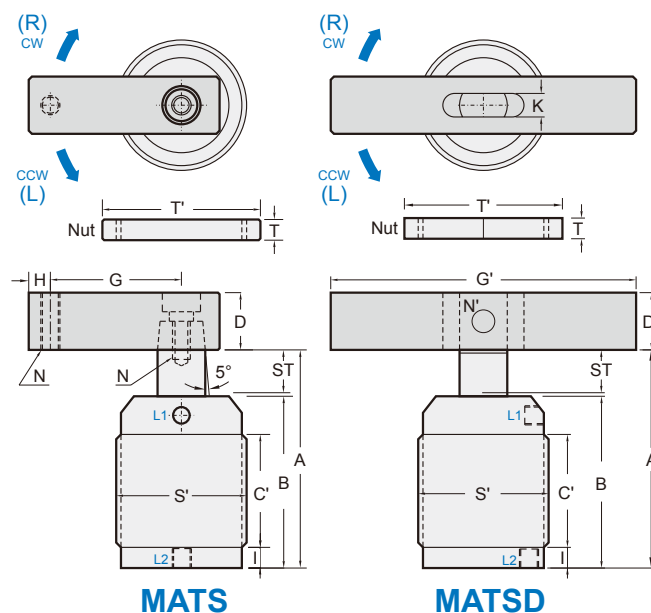
MAS*

MAS*-F



Flange type	MAS-25	MAS-32 MASD-32	MAS-40 MASD-40	MAS-50 MASD-50	MAS-63 MASD-63
Max. operating pressure	1 MPa				
Normal operating pressure	0.4~0.6 MPa				
Cylinder operating	Double acting				
Swivel angle	$90^\circ(60^\circ, 45^\circ, 0^\circ) \pm 2^\circ$				
Swivel stroke (mm)	12	12	12	14	14
Clamping stroke (mm)	14	14	15	15	15
Piston $\varnothing$ (mm)	25	32	40	50	63
Piston rod $\varnothing$ (mm)	14	16	16	20	20
Theoretical force (0.5 MPa)	16kg	30kg	50kg	85kg	140kg
A (unclamp) (mm)	95.5	102.5	106	113	119
B (mm)	65.5	71	75	80	86
C (mm)	23	23	26	26	30
D (mm)	$\square 16$	$\square 19$	$\square 19$	$\square 25.4$	$\square 25.4$
D' (mm)	—	$\square 19$	$\square 19$	$\square 22$	$\square 22$
G (mm)	30	50	50	70	70
G' (mm)	—	100	100	120	120
H (mm)	8	9	9	10	10
K (mm)	—	9	9	10	10
L1 (clamp) L2 (unclamp)	M5×0.8	Rc1/8	Rc1/8	Rc1/8	Rc1/8
O-ring manifold	S3	S4	S4	S4	S4
N (mm)	M6×1	M8×1.25	M8×1.25	M10×1.5	M10×1.5
N' (mm)	—	$\varnothing 8$	$\varnothing 8$	$\varnothing 8$	$\varnothing 8$
P (mm)	30	44	48	55	64
Q (mm)	40	54	58	68	80
R (mm)	$\varnothing 4.5$	$\varnothing 6.5$	$\varnothing 6.5$	$\varnothing 8.5$	$\varnothing 8.5$
S (mm)	$\varnothing 35$	$\varnothing 50$	$\varnothing 55$	$\varnothing 65$	$\varnothing 75$
M (mm)	18	22	26	30	40
F (mm)	12.5	17	19.5	24	29
Weight (kg)	0.4	0.7	0.85	1.3	1.8

MATS*



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	1 MPa				
Normal operating pressure	0.4~0.6 MPa				
Cylinder operating	Double acting				
Swivel angle	90°(60°,45°,0°)±2°				
Swivel stroke (mm)	12	12	12	14	14
Clamping stroke (mm)	14	14	15	15	15
Piston $\varnothing$ (mm)	25	32	40	50	63
Piston rod $\varnothing$ (mm)	14	16	16	20	20
Theoretical force (0.5 MPa)	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)	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
H (mm)	8	9	9	10	10
I (mm)	7	9	9	9	10
K (mm)	—	9	9	10	10
L1 (clamp) L2 (unclamp)	M5×0.8	Rc1/8	Rc1/8	Rc1/8	Rc1/8
N (mm)	M6×1	M8×1.25	M8×1.25	M10×1.5	M10×1.5
N' (mm)	—	∅8	∅8	∅8	∅8
S' (mm)	M40×1.5	M50×1.5	M55×1.5	M65×1.5	M80×1.5
T (×2 pcs nut) (mm)	9	11	11	12	12
T' (mm)	∅58	∅70	∅75	∅85	∅100
Weight (kg)	0.8	1.1	1.25	1.7	2