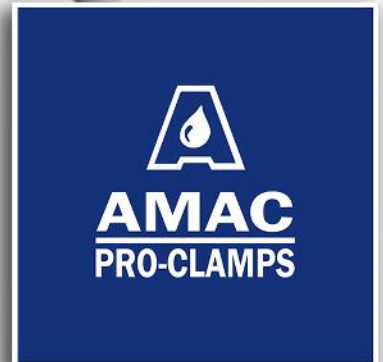
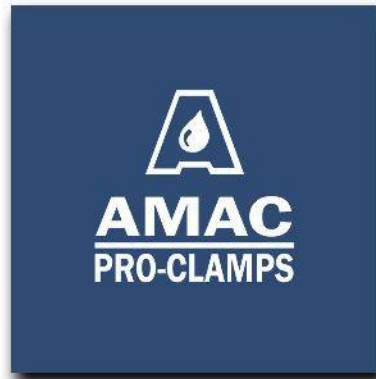




FULL CATALOG





AJC-SD SERIES

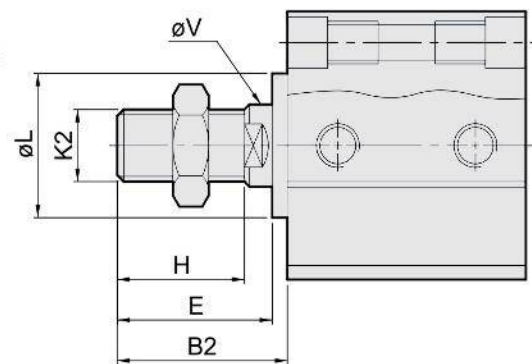
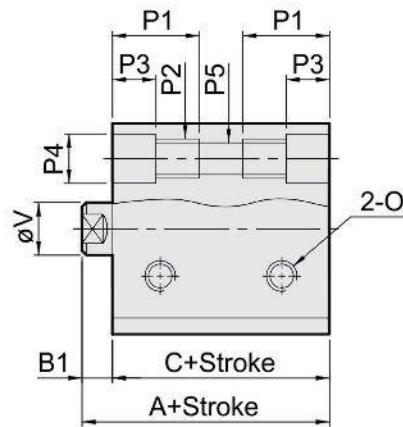
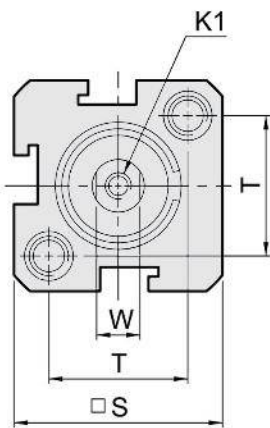
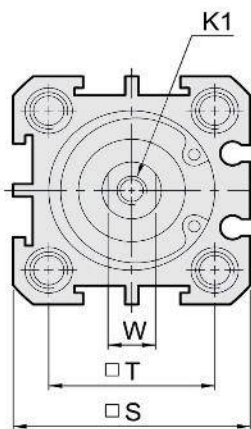
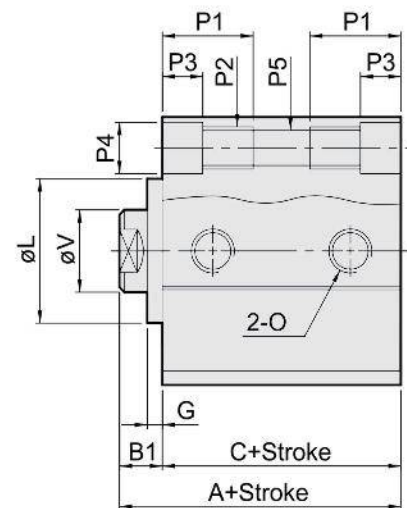
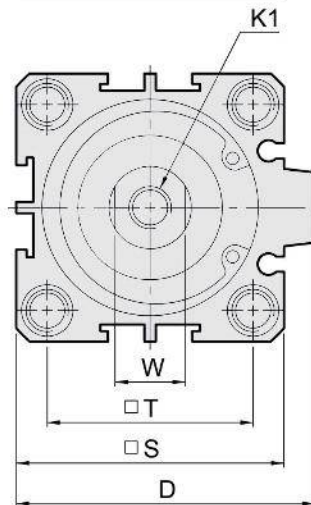
AJC-SD SERIES

Single-ended Pneumatic Clamping Cylinder



Characteristics & Dimensions

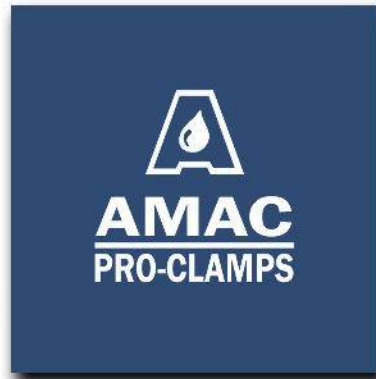
SERIES				AJC-SD						
Cylinder Bore	Ø12	Ø16	Ø20	Ø25	Ø32	Ø40	Ø50	Ø63	Ø80	Ø100
Standard Stroke	5.00 ~ 150.00									
Estándar Stroke With Magnetic Sensor	5.00 ~ 140.00									
Operating Temperature Range	-10.00° C ~ 60.00° C									
Theoretical Clamping Force	1.13 Kg/cm ² ~ 785.40 Kg/cm ²									
Fulid Type	Filtered Air									
Maximum Operating Pressure	70.00 Kg/cm ²					70.00 Kg/cm ²				
Operating Pressure Range	2.00 Kg/cm ² ~ 7.00 Kg/cm ²		1.50 Kg/cm ² ~ 7.00 Kg/cm ²			1.00 Kg/cm ² ~ 7.00 Kg/cm ²				
Cylinder Material	Aluminum Alloy									
**** All dimensions are given in millimeters.										

Bore $\varnothing 12$ - $\varnothing 16$

Bore $\varnothing 20$ - $\varnothing 25$

Bore $\varnothing 32$ - $\varnothing 100$


Characteristics & Dimensions

SERIES										
AJC-SD										
Ø	12	16	20	25	32	40	50	63	80	100
A	25	26	25	27	31.3	33.8	37.6	41.5	52.3	53.8
C	20.50	21.50	19.50	21.00	24.00	26.50	28.60	32.50	41.30	45.30
B1	4.50	4.50	5.50	6.00	7.30	7.30	9.00	9.00	11.00	8.50
B2	14.50	14.50	19.50	22.00	24.30	34.30	36.00	36.00	44.00	41.50
D	-	-	-	-	50.00	58.00	71.00	84.50	104.00	124.00
E	14.50	14.50	18.00	20.00	21.00	31.00	32.00	32.00	39.00	38.50
G	-	-	1.50	2.00	3.30	3.30	4.00	4.00	5.00	3.00
H	10.00	10.00	14.00	16.00	17.00	27.00	27.00	27.00	33.00	33.00
K1	M3 x 0.5 x 7D	M3 x 0.5 x 7D	M4 x 0.7 x 10D	M5 x 0.8 x 10D	M6 x 1.0 x 14D	M8 x 1.25 x 14D	M10 x 1.5 x 15D	M10 x 1.5 x 15D	M14 x 1.5 x 20D	M16 x 2.0 x 20D
K2	M5 x 0.8	M5 x 0.8	M6 x 1.0	M8 x 1.25	M10 x 1.25	M14 x 1.5	M18 x 1.5	M18 x 1.5	M22 x 1.5	M22 x 1.5
L	-	-	13.00	17.00	22.00	28.00	38.00	40.00	45.00	45.00
O	M5 x 0.8	M5 x 0.8	M5 x 0.8	M5 x 0.8	PT 1/8	PT 1/8	PT 1/4	PT 1/4	PT 3/8	PT 3/8
P1	10.50	10.50	11.00	14.00	14.00	18.00	18.50	18.50	22.50	28.00
P2	M5 x 0.8	M5 x 0.8	M5 x 0.8	M6 x 1.0	M6 x 1.0	M8 x 1.25	M8 x 1.25	M8 x 1.25	M12 x 1.75	M14 x 2.0
P3	4.50	4.50	5.00	6.00	6.00	8.00	8.50	8.50	10.50	13.00
P4	Ø6.50	Ø6.50	Ø6.50	Ø8.00	Ø8.00	Ø9.50	Ø11.00	Ø11.00	Ø14.00	Ø18.5
P5	Ø4.30	Ø4.30	Ø4.30	Ø5.10	Ø5.10	Ø6.80	Ø6.80	Ø6.80	Ø10.50	Ø12.30
S	25.00	29.00	34.00	40.00	44.00	52.00	62.00	75.00	94.00	114.00
T	15.70	19.80	24.00	28.00	34.00	40.00	48.00	60.00	74.00	90.00
V	6.00	6.00	8.00	10.00	12.00	16.00	20.00	20.00	25.00	25.00
W	5.00	5.00	6.00	8.00	10.00	14.00	17.00	17.00	22.00	22.00

*** All dimensions are given in millimeters.



AJC-SDM SERIES

AJC-SDM SERIES

Single-ended Pneumatic
Clamping Cylinder With
Magnet Sensor



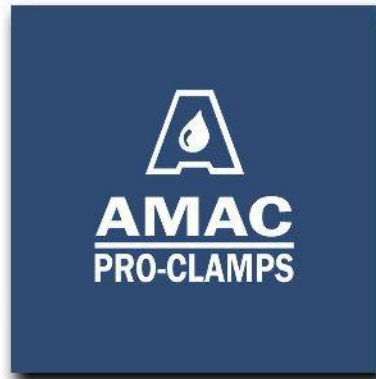
Characteristics & Dimensions

SERIES AJC-SDM										
Ø	12	16	20	25	32	40	50	63	80	100
A	35.00	36.00	35.00	37.00	41.30	43.80	47.60	51.50	62.30	63.80
C	30.50	31.50	29.50	31.00	34.00	36.50	38.60	42.50	51.30	55.30
B1	4.50	4.50	5.50	6.00	7.30	7.30	9.00	9.00	11.00	8.50
B2	14.50	14.50	19.50	22.00	24.30	34.30	36.00	36.00	44.00	41.50
D	-	-	-	-	50.00	58.00	71.00	84.50	104.00	124.00
E	14.50	14.50	18.00	20.00	21.00	31.00	32.00	32.00	39.00	38.50
G	-	-	1.50	2.00	3.30	3.30	4.00	4.00	5.00	3.00
H	10.00	10.00	14.00	16.00	17.00	27.00	27.00	27.00	33.00	33.00
K1	M3 x 0.5 x 7D	M3 x 0.5 x 7D	M4 x 0.7 x 10D	M5 x 0.8 x 10D	M6 x 1.0 x 14D	M8 x 1.25 x 14D	M10 x 1.5 x 15D	M10 x 1.5 x 15D	M14 x 1.5 x 20D	M16 x 2.0 x 20D
K2	M5 x 0.8	M5 x 0.8	M6 x 1.0	M8 x 1.25	M10 x 1.25	M14 x 1.5	M18 x 1.5	M18 x 1.5	M22 x 1.5	M22 x 1.5
L	-	-	13.00	17.00	22.00	28.00	38.00	40.00	45.00	45.00
O	M5 x 0.8	M5 x 0.8	M5 x 0.8	M5 x 0.8	PT 1/8	PT 1/8	PT 1/4	PT 1/4	PT 3/8	PT 3/8
P1	10.50	10.50	11.00	14.00	14.00	18.00	18.50	18.50	22.50	28.00
P2	M5 x 0.8	M5 x 0.8	M5 x 0.8	M6 x 1.0	M6 x 1.0	M8 x 1.25	M8 x 1.25	M8 x 1.25	M12 x 1.75	M14 x 2.0
P3	4.50	4.50	5.00	6.00	6.00	8.00	8.50	8.50	10.50	13.00
P4	Ø6.50	Ø6.50	Ø6.50	Ø8.00	Ø8.00	Ø9.50	Ø11.00	Ø11.00	Ø14.00	Ø18.5
P5	Ø4.30	Ø4.30	Ø4.30	Ø5.10	Ø5.10	Ø6.80	Ø6.80	Ø6.80	Ø10.50	Ø12.30
S	25.00	29.00	34.00	40.00	44.00	52.00	62.00	75.00	94.00	114.00
T	15.70	19.80	24.00	28.00	34.00	40.00	48.00	60.00	74.00	90.00
V	6.00	6.00	8.00	10.00	12.00	16.00	20.00	20.00	25.00	25.00
W	5.00	5.00	6.00	8.00	10.00	14.00	17.00	17.00	22.00	22.00

*** All dimensions are given in millimeters.

Characteristics & Dimensions

SERIES			AJC-SDM							
Cylinder Bore	Ø12	Ø16	Ø20	Ø25	Ø32	Ø40	Ø50	Ø63	Ø80	Ø100
Standard Stroke	5.00 ~ 150.00									
Estándar Stroke With Magnetic Sensor	5.00 ~ 140.00									
Operating Temperature Range	-10.00° C ~ 60.00° C									
Theoretical Clamping Force	1.13 Kg/cm ² ~ 785.40 Kg/cm ²									
Fulid Type	Filtered Air									
Maximum Operating Pressure	70.00 Kg/cm ²					70.00 Kg/cm ²				
Oparating Pressure Range	2.00 Kg/cm ² ~ 7.00 Kg/cm ²		1.50 Kg/cm ² ~ 7.00 Kg/cm ²			1.00 Kg/cm ² ~ 7.00 Kg/cm ²				
Cylinder Material	Aluminum Alloy									
*** All dimensions are given in millimeters.										



AJC-SW SERIES

AJC-SW SERIES

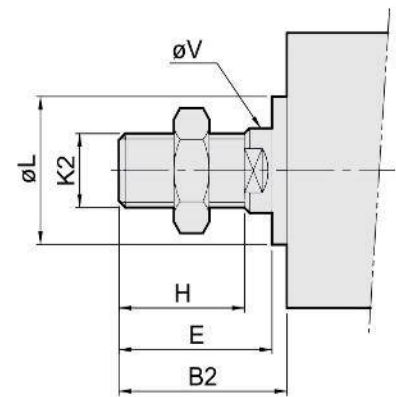
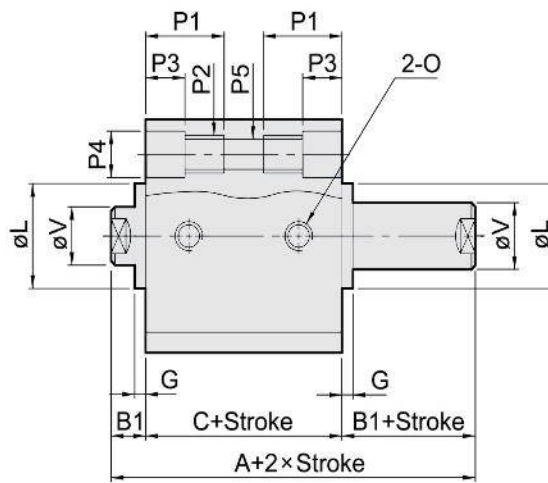
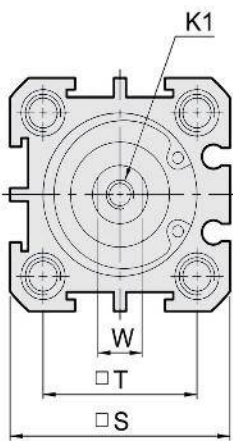
Double Ended Pneumatic Clamping Cylinder



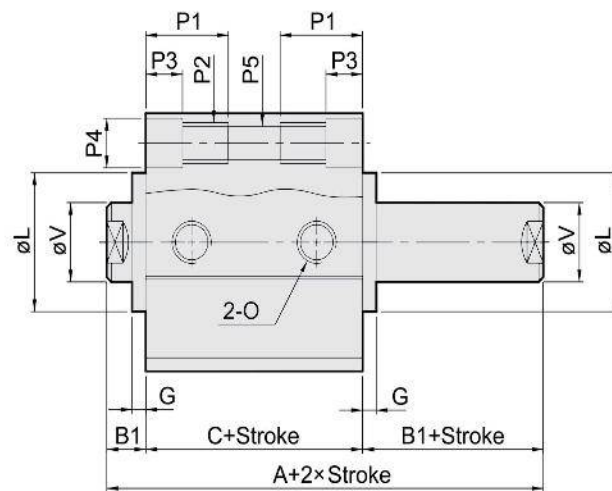
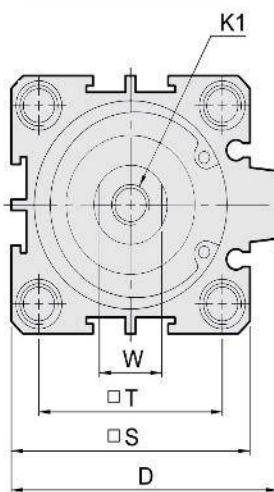
Characteristics & Dimensions

SERIES				AJC-SW						
Cylinder Bore	Ø12	Ø16	Ø20	Ø25	Ø32	Ø40	Ø50	Ø63	Ø80	Ø100
Standard Stroke	5.00 ~ 150.00									
Estándar Stroke With Magnetic Sensor	5.00 ~ 140.00									
Operating Temperature Range	-10.00° C ~ 60.00° C									
Theoretical Clamping Force	1.13 Kg/cm ² ~ 785.40 Kg/cm ²									
Fulid Type	Filtered Air									
Maximum Operating Pressure	70.00 Kg/cm ²					70.00 Kg/cm ²				
Operating Pressure Range	2.00 Kg/cm ² ~ 7.00 Kg/cm ²		1.50 Kg/cm ² ~ 7.00 Kg/cm ²			1.00 Kg/cm ² ~ 7.00 Kg/cm ²				
Cylinder Material	Aluminum Alloy									
**** All dimensions are given in millimeters.										

Bore $\varnothing 20, \varnothing 25$



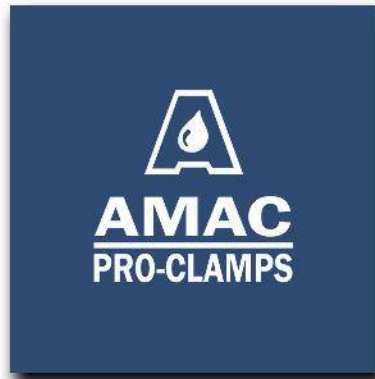
Bore $\varnothing 32 - \varnothing 100$



Characteristics & Dimensions

SERIES								
AJC-SW								
Ø	20	25	32	40	50	63	80	100
A	30.50	33.00	38.60	41.10	46.60	50.50	63.30	62.30
C	19.50	21.00	24.00	26.50	28.60	32.50	41.30	45.30
B1	5.50	6.00	7.30	7.30	9.00	9.00	11.00	8.50
B2	19.50	22.00	24.30	34.30	36.00	36.00	44.00	41.50
D	-	-	50.00	58.00	71.00	84.50	104.00	124.00
E	18.00	20.00	21.00	31.00	32.00	32.00	39.00	38.50
G	1.50	2.00	3.30	3.30	4.00	4.00	5.00	3.00
H	14.00	16.00	17.00	27.00	27.00	27.00	33.00	33.00
K1	M4 x 0.7 x 10D	M5 x 0.8 x 10D	M6 x 1.0 x 14D	M8 x 1.25 x 14D	M10 x 1.5 x 15D	M10 x 1.5 x 15D	M14 x 1.5 x 20D	M16 x 2.0 x 20D
K2	M6 x 1.0	M8 x 1.25	M10 x 1.25	M14 x 1.5	M18 x 1.5	M18 x 1.5	M22 x 1.5	M22 x 1.5
L	13.00	17.00	22.00	28.00	38.00	40.00	45.00	45.00
O	M5 x 0.8	M5 x 0.8	PT 1/8	PT 1/8	PT 1/4	PT 1/4	PT 3/8	PT 3/8
P1	11.00	14.00	14.00	18.00	18.50	18.50	22.50	28.00
P2	M5 x 0.8	M6 x 1.0	M6 x 1.0	M8 x 1.25	M8 x 1.25	M8 x 1.25	M12 x 1.75	M14 x 2.0
P3	5.00	6.00	6.00	8.00	8.50	8.50	10.50	13.00
P4	Ø6.50	Ø8.00	Ø8.00	Ø9.50	Ø11.00	Ø11.00	Ø14.00	Ø18.5
P5	Ø4.30	Ø5.10	Ø5.10	Ø6.80	Ø6.80	Ø6.80	Ø10.50	Ø12.30
S	34.00	40.00	44.00	52.00	62.00	75.00	94.00	114.00
T	24.00	28.00	34.00	40.00	48.00	60.00	74.00	90.00
V	8.00	10.00	12.00	16.00	20.00	20.00	25.00	25.00
W	6.00	8.00	10.00	14.00	17.00	17.00	22.00	22.00

**** All dimensions are given in millimeters.



AJC-SWM SERIES

AJC-SWM SERIES



AMAC
PRO-CLAMPS

Pneumatic Clamping Cylinder With Double Magnetic Sensor

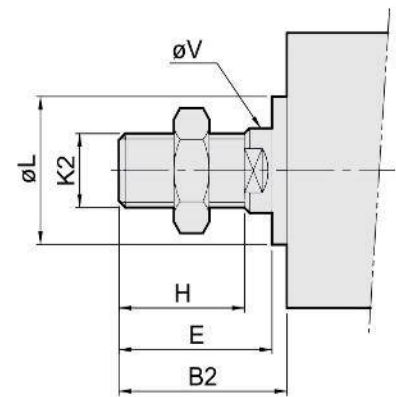
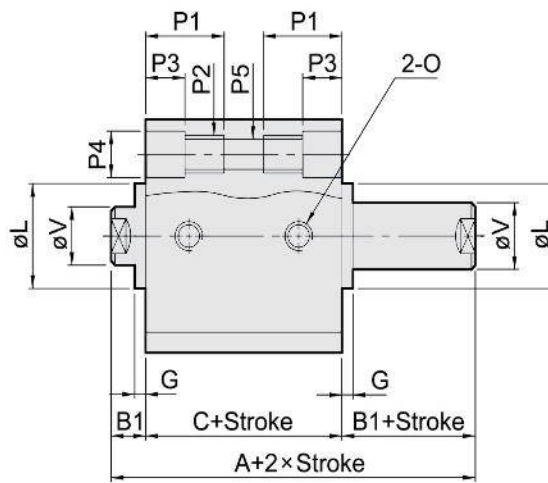
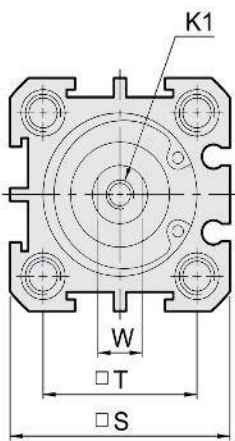


Characteristics & Dimensions

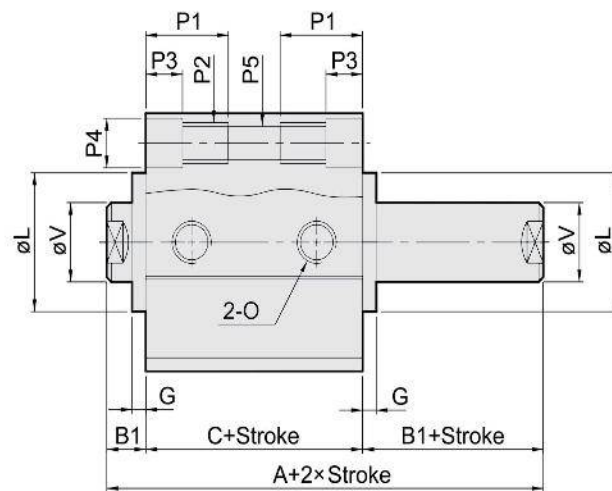
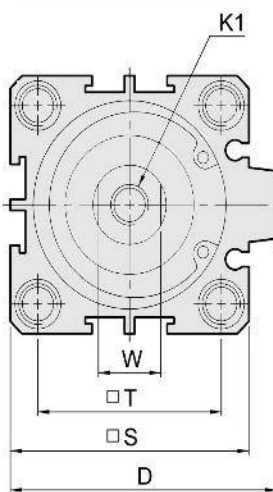
SERIES								
AJC-SWM								
Ø	20	25	32	40	50	63	80	100
A	40.50	43.00	48.60	51.10	56.60	60.50	73.30	72.30
C	29.50	31.00	34.00	36.50	38.60	42.50	51.30	55.30
B1	5.50	6.00	7.30	7.30	9.00	9.00	11.00	8.50
B2	19.50	22.00	24.30	34.30	36.00	36.00	44.00	41.50
D	-	-	50.00	58.00	71.00	84.50	104.00	124.00
E	18.00	20.00	21.00	31.00	32.00	32.00	39.00	38.50
G	1.50	2.00	3.30	3.30	4.00	4.00	5.00	3.00
H	14.00	16.00	17.00	27.00	27.00	27.00	33.00	33.00
K1	M4 x 0.7 x 10D	M5 x 0.8 x 10D	M6 x 1.0 x 14D	M8 x 1.25 x 14D	M10 x 1.5 x 15D	M10 x 1.5 x 15D	M14 x 1.5 x 20D	M16 x 2.0 x 20D
K2	M6 x 1.0	M8 x 1.25	M10 x 1.25	M14 x 1.5	M18 x 1.5	M18 x 1.5	M22 x 1.5	M22 x 1.5
L	13.00	17.00	22.00	28.00	38.00	40.00	45.00	45.00
O	M5 x 0.8	M5 x 0.8	PT 1/8	PT 1/8	PT 1/4	PT 1/4	PT 3/8	PT 3/8
P1	11.00	14.00	14.00	18.00	18.50	18.50	22.50	28.00
P2	M5 x 0.8	M6 x 1.0	M6 x 1.0	M8 x 1.25	M8 x 1.25	M8 x 1.25	M12 x 1.75	M14 x 2.0
P3	5.00	6.00	6.00	8.00	8.50	8.50	10.50	13.00
P4	Ø6.50	Ø8.00	Ø8.00	Ø9.50	Ø11.00	Ø11.00	Ø14.00	Ø18.5
P5	Ø4.30	Ø5.10	Ø5.10	Ø6.80	Ø6.80	Ø6.80	Ø10.50	Ø12.30
S	34.00	40.00	44.00	52.00	62.00	75.00	94.00	114.00
T	24.00	28.00	34.00	40.00	48.00	60.00	74.00	90.00
V	8.00	10.00	12.00	16.00	20.00	20.00	25.00	25.00
W	6.00	8.00	10.00	14.00	17.00	17.00	22.00	22.00

**** All dimensions are given in millimeters.

Bore $\varnothing 20, \varnothing 25$

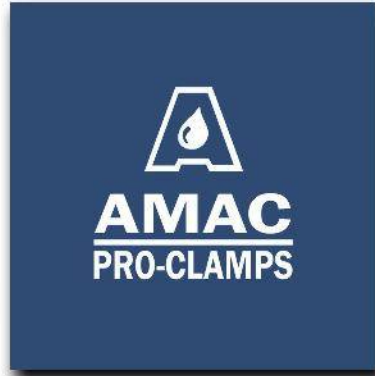


Bore $\varnothing 32 - \varnothing 100$



Characteristics & Dimensions

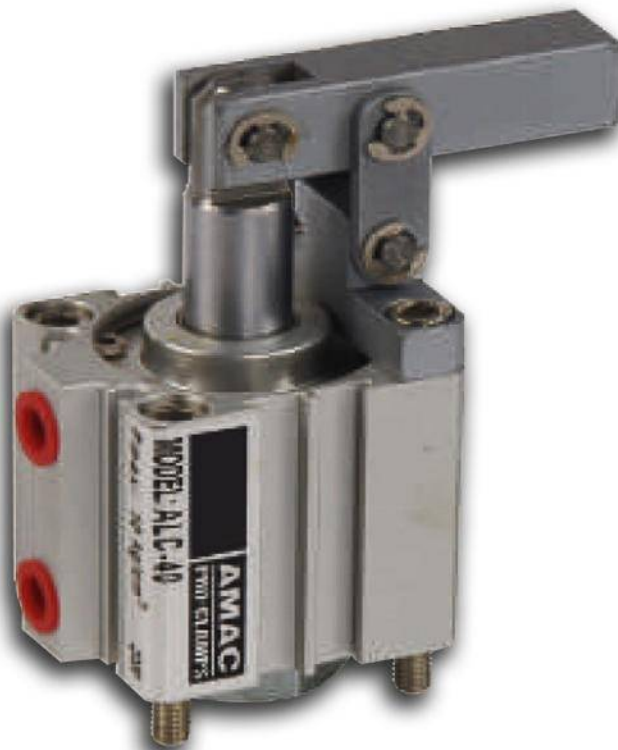
SERIES			AJC-SWM							
Cylinder Bore	Ø12	Ø16	Ø20	Ø25	Ø32	Ø40	Ø50	Ø63	Ø80	Ø100
Standard Stroke	5.00 ~ 150.00									
Estándar Stroke With Magnetic Sensor	5.00 ~ 140.00									
Operating Temperature Range	-10.00° C ~ 60.00° C									
Theoretical Clamping Force	1.13 Kg/cm ² ~ 785.40 Kg/cm ²									
Fulid Type	Filtered Air									
Maximum Operating Pressure	70.00 Kg/cm ²					70.00 Kg/cm ²				
Operating Pressure Range	2.00 Kg/cm ² ~ 7.00 Kg/cm ²		1.50 Kg/cm ² ~ 7.00 Kg/cm ²			1.00 Kg/cm ² ~ 7.00 Kg/cm ²				
Cylinder Material	Aluminum Alloy									
*** All dimensions are given in millimeters.										



ALC SERIES

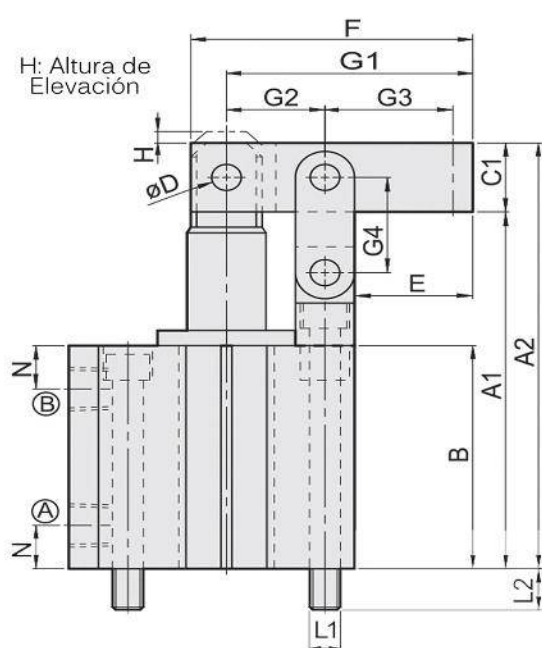
ALC-25

LEVER TYPE PNEUMATIC CLAMPS

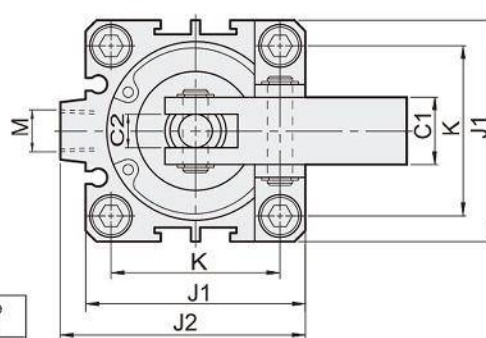


Characteristics & Dimensions

SERIES		ALC			
DEVICE TYPE					
Cylinder Bore	Ø25	Ø32	Ø40	Ø50	Ø63
Piston Rod Diameter	Ø10	Ø12	Ø16	Ø20	Ø20
Total Stroke	20.00	23.00	25.00	30.00	35.00
Piston Area (cm ²)	4.91	8.04	12.57	19.63	31.17
Theoretical Gripping Force (6Kg/cm ²)	15.00	25.00	44.00	71.00	136.00
Fluid Requirements	Filtered Air				
Maximum Operating Pressure	10.00 Kg/cm ²				
Operating Pressure Range	1.00 Kg/cm ² ~ 7.00 Kg/cm ²				
Action Type	Double Acting				
**** All dimensions are given in millimeters.					



Ⓐ	Puerto de Sujeción
Ⓑ	Puerto de Liberación



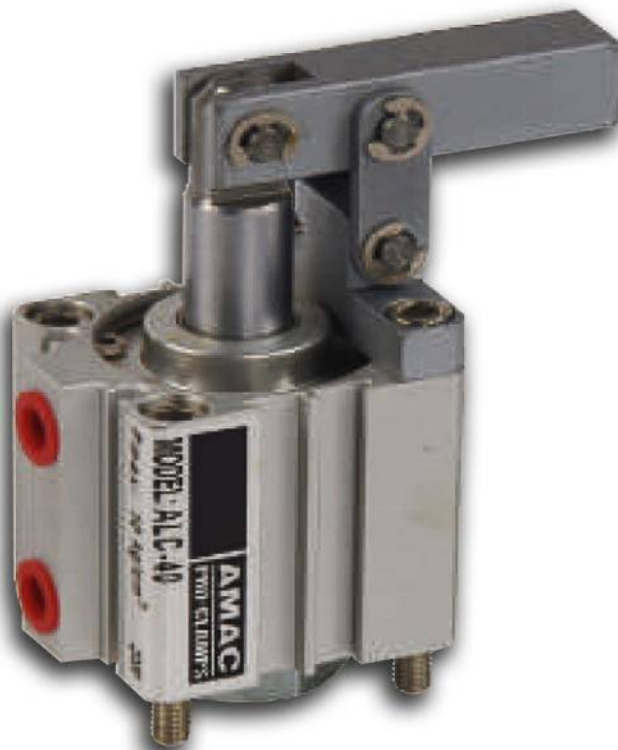
Characteristics & Dimensions

SERIES		ALC				
MODEL		ALC-25	ALC-32	ALC-40	ALC-50	ALC-63
STANDARD TYPE	A1	65.50	78.00	82.50	96.60	115.50
	A2	78.20	93.90	98.40	115.60	137.50
	B	41.00	49.00	54.50	58.60	72.50
MAGNETIC INDUCTION TYPE	A1	75.50	93.00	97.50	106.60	125.50
	A2	88.20	108.90	113.40	125.60	147.70
	B	51.00	64.00	66.50	68.60	82.50
C1		Ø12.70	Ø15.90	Ø15.90	Ø19.00	Ø22.20
C2		6.00	8.00	8.00	10.00	20.00
D		Ø5.00	Ø6.00	Ø6.00	Ø8.00	Ø8.00
E		25.00	31.00	32.00	35.00	38.50
FF		30.00	60.00	65.00	75.00	85.00
G1		45.00	54.00	58.00	66.00	76.00
G2		14.00	17.00	20.00	23.00	29.50
G3		27.50	33.00	34.00	38.00	40.50
G4		17.00	20.00	22.00	27.00	32.00
H		3.00	3.00	3.00	3.00	3.00
J1		40.00	44.00	52.00	62.00	75.00
J1		-	50.00	58.00	71.00	84.50
K		28.00	34.00	40.00	48.00	60.00
L1		M5 x 0.80	M5 x 0.80	M6 x 1.00	M6 x 1.00	M6 x 1.00
L2		10.50	11.00	9.50	11.00	11.00
M		M5 x 0.80	PT 1/8"	PT 1/8"	PT 1/4"	PT 1/4"
N		8.00	9.00	10.00	11.00	11.00

*** All dimensions are given in millimeters.

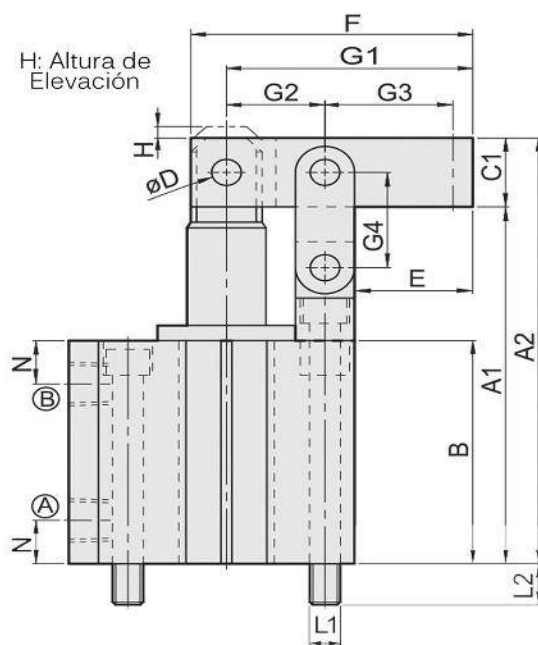
ALC-32

LEVER TYPE PNEUMATIC CLAMPS

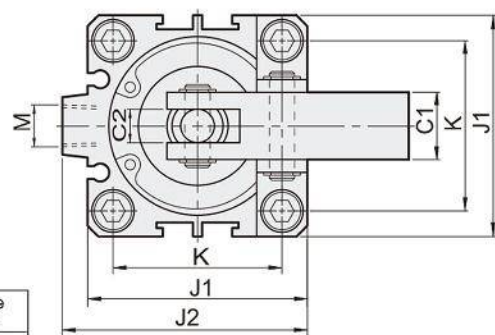


Characteristics & Dimensions

SERIES		ALC				
DEVICE TYPE						
Cylinder Bore		Ø25	Ø32	Ø40	Ø50	Ø63
Piston Rod Diameter		Ø10	Ø12	Ø16	Ø20	Ø20
Total Stroke		20.00	23.00	25.00	30.00	35.00
Piston Area	(cm ²)	4.91	8.04	12.57	19.63	31.17
Theoretical Gripping Force	(6Kg/cm ²)	15.00	25.00	44.00	71.00	136.00
Fluid Requirements		Filtered Air				
Maximum Operating Pressure		10.00 Kg/cm ²				
Operating Pressure Range		1.00 Kg/cm ² ~ 7.00 Kg/cm ²				
Action Type		Double Acting				
**** All dimensions are given in millimeters.						



$\textcircled{A}$	Puerto de Sujeción
$\textcircled{B}$	Puerto de Liberación



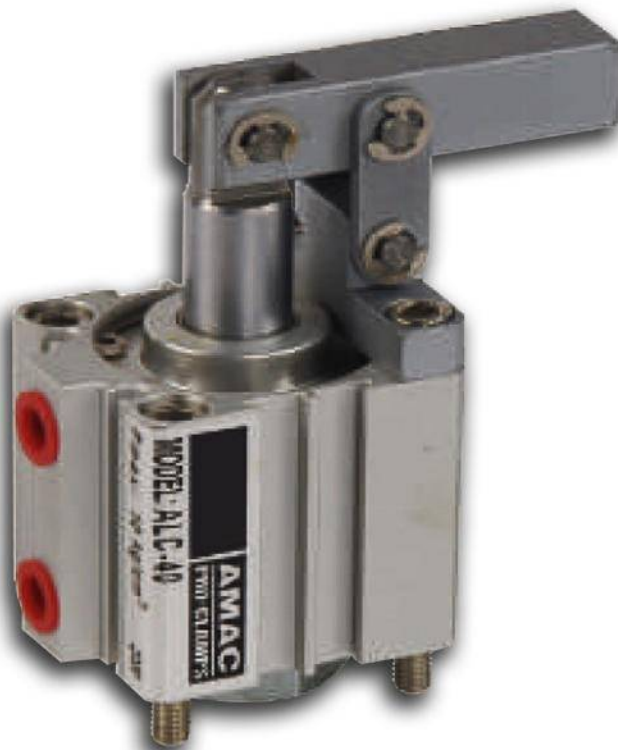
Characteristics & Dimensions

SERIES		ALC				
MODEL		ALC-25	ALC-32	ALC-40	ALC-50	ALC-63
STANDARD TYPE	A1	65.50	78.00	82.50	96.60	115.50
	A2	78.20	93.90	98.40	115.60	137.50
	B	41.00	49.00	54.50	58.60	72.50
MAGNETIC INDUCTION TYPE	A1	75.50	93.00	97.50	106.60	125.50
	A2	88.20	108.90	113.40	125.60	147.70
	B	51.00	64.00	66.50	68.60	82.50
C1		Ø12.70	Ø15.90	Ø15.90	Ø19.00	Ø22.20
C2		6.00	8.00	8.00	10.00	20.00
D		Ø5.00	Ø6.00	Ø6.00	Ø8.00	Ø8.00
E		25.00	31.00	32.00	35.00	38.50
FF		30.00	60.00	65.00	75.00	85.00
G1		45.00	54.00	58.00	66.00	76.00
G2		14.00	17.00	20.00	23.00	29.50
G3		27.50	33.00	34.00	38.00	40.50
G4		17.00	20.00	22.00	27.00	32.00
H		3.00	3.00	3.00	3.00	3.00
J1		40.00	44.00	52.00	62.00	75.00
J1		-	50.00	58.00	71.00	84.50
K		28.00	34.00	40.00	48.00	60.00
L1		M5 x 0.80	M5 x 0.80	M6 x 1.00	M6 x 1.00	M6 x 1.00
L2		10.50	11.00	9.50	11.00	11.00
M		M5 x 0.80	PT 1/8"	PT 1/8"	PT 1/4"	PT 1/4"
N		8.00	9.00	10.00	11.00	11.00

*** All dimensions are given in millimeters.

ALC-40

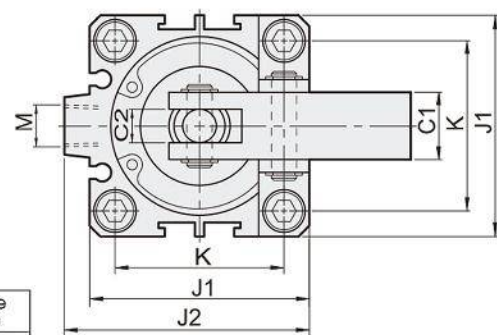
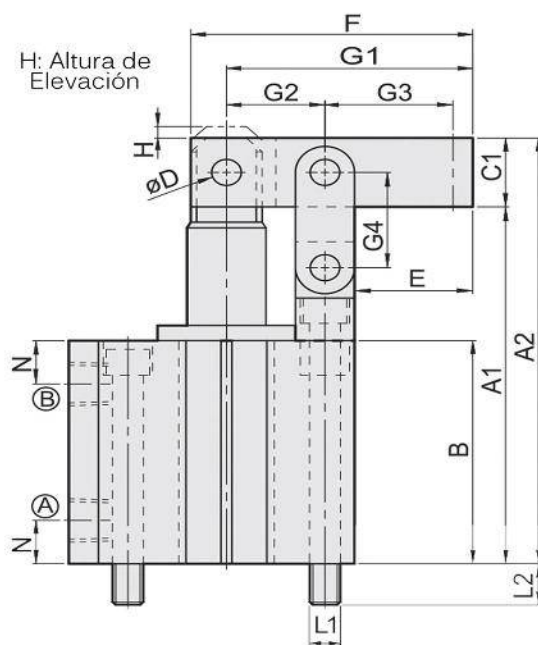
LEVER TYPE PNEUMATIC CLAMPS



Characteristics & Dimensions

SERIES		ALC				
MODEL		ALC-25	ALC-32	ALC-40	ALC-50	ALC-63
STANDARD TYPE	A1	65.50	78.00	82.50	96.60	115.50
	A2	78.20	93.90	98.40	115.60	137.50
	B	41.00	49.00	54.50	58.60	72.50
MAGNETIC INDUCTION TYPE	A1	75.50	93.00	97.50	106.60	125.50
	A2	88.20	108.90	113.40	125.60	147.70
	B	51.00	64.00	66.50	68.60	82.50
C1		Ø12.70	Ø15.90	Ø15.90	Ø19.00	Ø22.20
C2		6.00	8.00	8.00	10.00	20.00
D		Ø5.00	Ø6.00	Ø6.00	Ø8.00	Ø8.00
E		25.00	31.00	32.00	35.00	38.50
FF		30.00	60.00	65.00	75.00	85.00
G1		45.00	54.00	58.00	66.00	76.00
G2		14.00	17.00	20.00	23.00	29.50
G3		27.50	33.00	34.00	38.00	40.50
G4		17.00	20.00	22.00	27.00	32.00
H		3.00	3.00	3.00	3.00	3.00
J1		40.00	44.00	52.00	62.00	75.00
J1		-	50.00	58.00	71.00	84.50
K		28.00	34.00	40.00	48.00	60.00
L1		M5 x 0.80	M5 x 0.80	M6 x 1.00	M6 x 1.00	M6 x 1.00
L2		10.50	11.00	9.50	11.00	11.00
M		M5 x 0.80	PT 1/8"	PT 1/8"	PT 1/4"	PT 1/4"
N		8.00	9.00	10.00	11.00	11.00

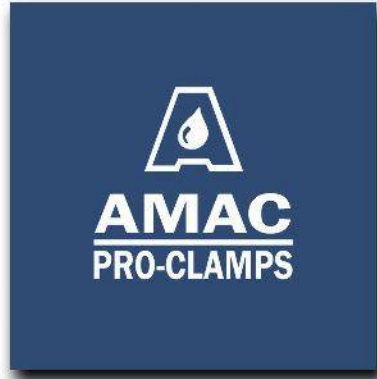
*** All dimensions are given in millimeters.



Ⓐ	Puerto de Sujeción
Ⓑ	Puerto de Liberación

Characteristics & Dimensions

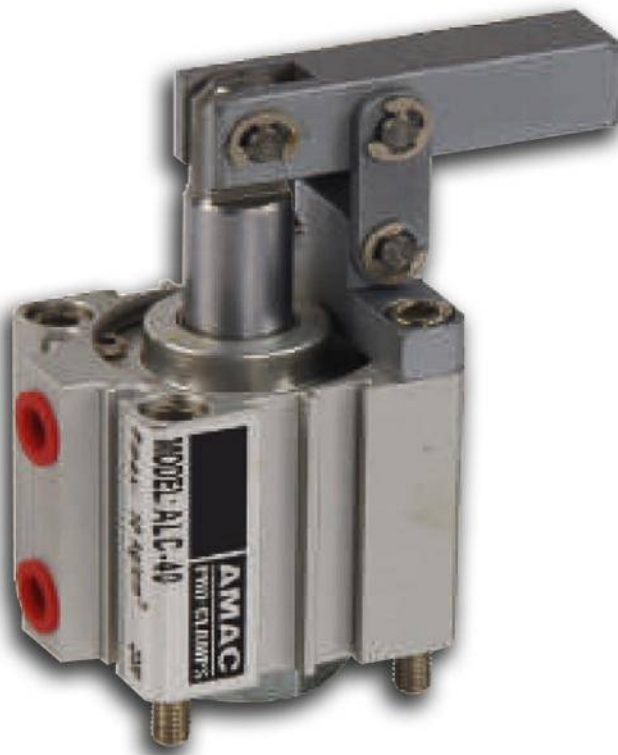
SERIES		ALC			
DEVICE TYPE					
Cylinder Bore	Ø25	Ø32	Ø40	Ø50	Ø63
Piston Rod Diameter	Ø10	Ø12	Ø16	Ø20	Ø20
Total Stroke	20.00	23.00	25.00	30.00	35.00
Piston Area (cm ²)	4.91	8.04	12.57	19.63	31.17
Theoretical Gripping Force (6Kg/cm ²)	15.00	25.00	44.00	71.00	136.00
Fluid Requirements	Filtered Air				
Maximum Operating Pressure	10.00 Kg/cm ²				
Operating Pressure Range	1.00 Kg/cm ² ~ 7.00 Kg/cm ²				
Action Type	Double Acting				
**** All dimensions are given in millimeters.					



ALC-MS SERIES

ALC-MS-25-S1

LEVER TYPE PNEUMATIC CLAMPS



Characteristics & Dimensions

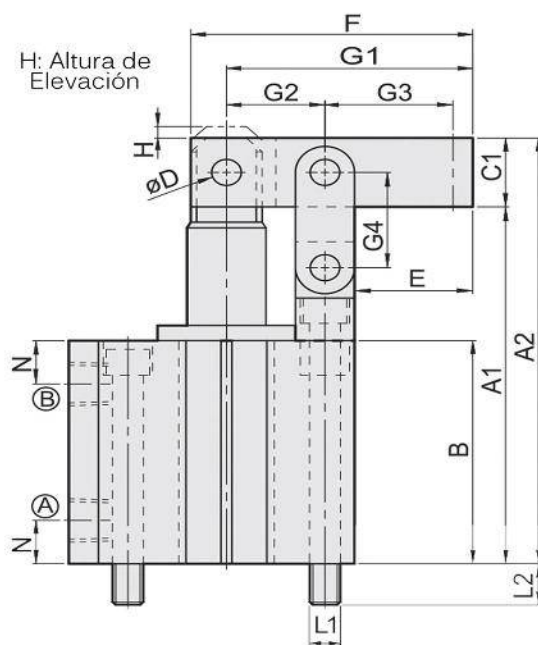
SERIES

ALC-MS

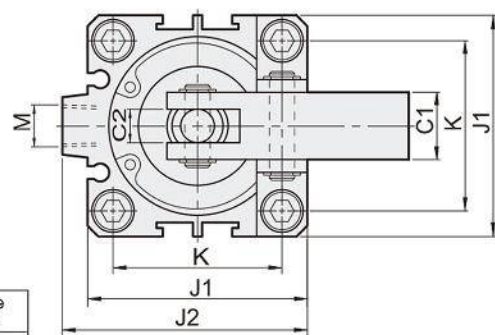
DEVICE TYPE

Cylinder Bore	Ø25	Ø32	Ø40	Ø50	Ø63
Piston Rod Diameter	Ø10	Ø12	Ø16	Ø20	Ø20
Total Stroke	20.00	23.00	25.00	30.00	35.00
Piston Area (cm ²)	4.91	8.04	12.57	19.63	31.17
Theoretical Gripping Force (6Kg/cm ²)	15.00	25.00	44.00	71.00	136.00
Fluid Requirements	Filtered Air				
Maximum Operating Pressure	10.00 Kg/cm ²				
Operating Pressure Range	1.00 Kg/cm ² ~ 7.00 Kg/cm ²				
Action Type	Double Action				

*** All dimensions are given in millimeters.



Ⓐ	Puerto de Sujeción
Ⓑ	Puerto de Liberación



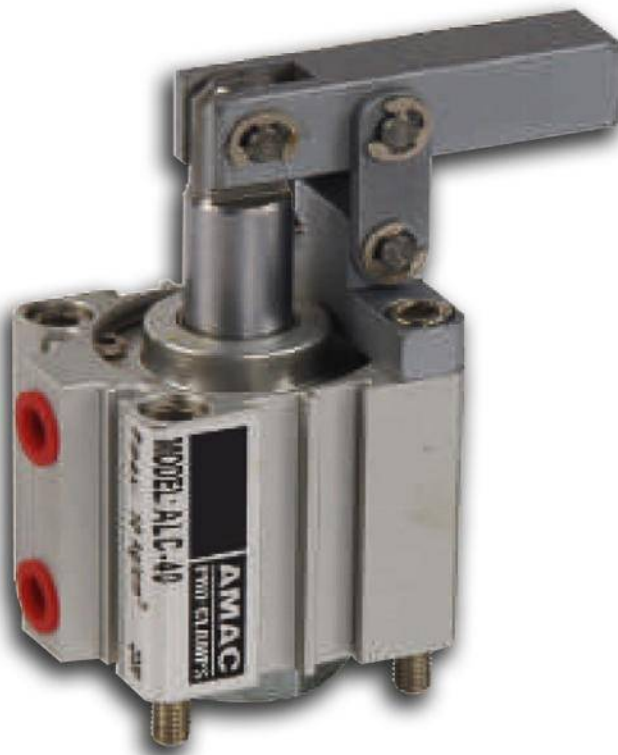
Characteristics & Dimensions

SERIES		ALC-MS				
MODEL		ALC-MS 25	ALC-MS 32	ALC-MS 40	ALC-MS 50	ALC-MS 63
STANDARD TYPE	A1	65.50	78.00	82.50	96.60	115.50
	A2	78.20	93.90	98.40	115.60	137.50
	B	41.00	49.00	54.50	58.60	72.50
MAGNETIC INDUCTION TYPE	A1	75.50	93.00	97.50	106.60	125.50
	A2	88.20	108.90	113.40	125.60	147.70
	B	51.00	64.00	66.50	68.60	82.50
C1		Ø12.70	Ø15.90	Ø15.90	Ø19.00	Ø22.20
C2		6.00	8.00	8.00	10.00	20.00
D		Ø5.00	Ø6.00	Ø6.00	Ø8.00	Ø8.00
E		25.00	31.00	32.00	35.00	38.50
FF		30.00	60.00	65.00	75.00	85.00
G1		45.00	54.00	58.00	66.00	76.00
G2		14.00	17.00	20.00	23.00	29.50
G3		27.50	33.00	34.00	38.00	40.50
G4		17.00	20.00	22.00	27.00	32.00
H		3.00	3.00	3.00	3.00	3.00
J1		40.00	44.00	52.00	62.00	75.00
J1		-	50.00	58.00	71.00	84.50
K		28.00	34.00	40.00	48.00	60.00
L1		M5 x 0.80	M5 x 0.80	M6 x 1.00	M6 x 1.00	M6 x 1.00
L2		10.50	11.00	9.50	11.00	11.00
M		M5 x 0.80	PT 1/8"	PT 1/8"	PT 1/4"	PT 1/4"
N		8.00	9.00	10.00	11.00	11.00

*** All dimensions are given in millimeters.

ALC-MS-25-S2

LEVER TYPE PNEUMATIC CLAMPS



Characteristics & Dimensions

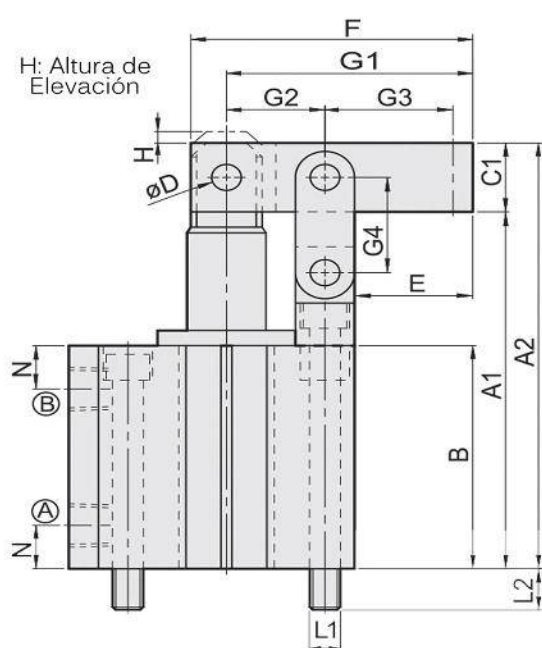
SERIES

ALC-MS

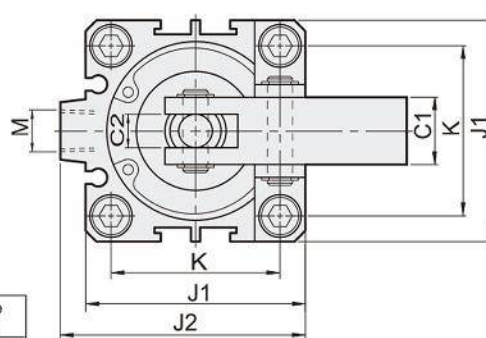
DEVICE TYPE

Cylinder Bore	Ø25	Ø32	Ø40	Ø50	Ø63
Piston Rod Diameter	Ø10	Ø12	Ø16	Ø20	Ø20
Total Stroke	20.00	23.00	25.00	30.00	35.00
Piston Area (cm ²)	4.91	8.04	12.57	19.63	31.17
Theoretical Gripping Force (6Kg/cm ²)	15.00	25.00	44.00	71.00	136.00
Fluid Requirements	Filtered Air				
Maximum Operating Pressure	10.00 Kg/cm ²				
Operating Pressure Range	1.00 Kg/cm ² ~ 7.00 Kg/cm ²				
Action Type	Double Action				

**** All dimensions are given in millimeters.



Ⓐ	Puerto de Sujeción
Ⓑ	Puerto de Liberación



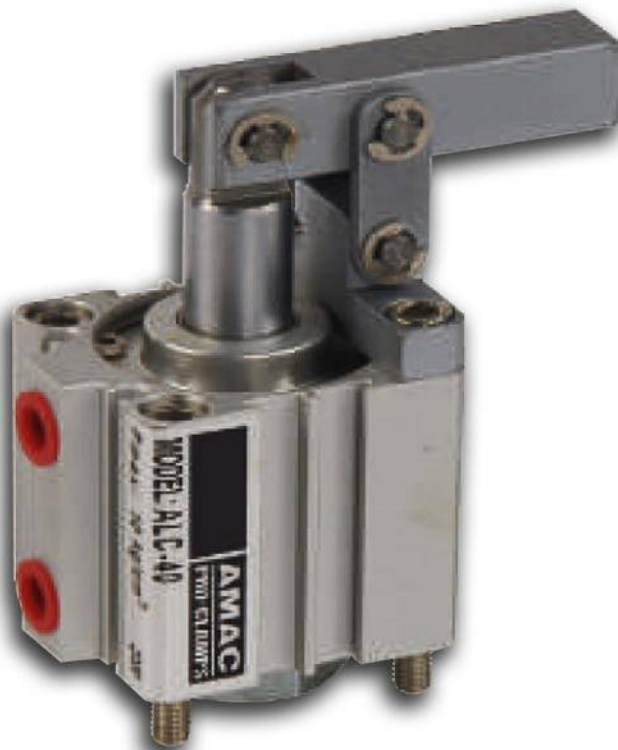
Characteristics & Dimensions

SERIES		ALC-MS				
MODEL		ALC-MS 25	ALC-MS 32	ALC-MS 40	ALC-MS 50	ALC-MS 63
STANDARD TYPE	A1	65.50	78.00	82.50	96.60	115.50
	A2	78.20	93.90	98.40	115.60	137.50
	B	41.00	49.00	54.50	58.60	72.50
MAGNETIC INDUCTION TYPE	A1	75.50	93.00	97.50	106.60	125.50
	A2	88.20	108.90	113.40	125.60	147.70
	B	51.00	64.00	66.50	68.60	82.50
C1		Ø12.70	Ø15.90	Ø15.90	Ø19.00	Ø22.20
C2		6.00	8.00	8.00	10.00	20.00
D		Ø5.00	Ø6.00	Ø6.00	Ø8.00	Ø8.00
E		25.00	31.00	32.00	35.00	38.50
FF		30.00	60.00	65.00	75.00	85.00
G1		45.00	54.00	58.00	66.00	76.00
G2		14.00	17.00	20.00	23.00	29.50
G3		27.50	33.00	34.00	38.00	40.50
G4		17.00	20.00	22.00	27.00	32.00
H		3.00	3.00	3.00	3.00	3.00
J1		40.00	44.00	52.00	62.00	75.00
J1		-	50.00	58.00	71.00	84.50
K		28.00	34.00	40.00	48.00	60.00
L1		M5 x 0.80	M5 x 0.80	M6 x 1.00	M6 x 1.00	M6 x 1.00
L2		10.50	11.00	9.50	11.00	11.00
M		M5 x 0.80	PT 1/8"	PT 1/8"	PT 1/4"	PT 1/4"
N		8.00	9.00	10.00	11.00	11.00

*** All dimensions are given in millimeters.

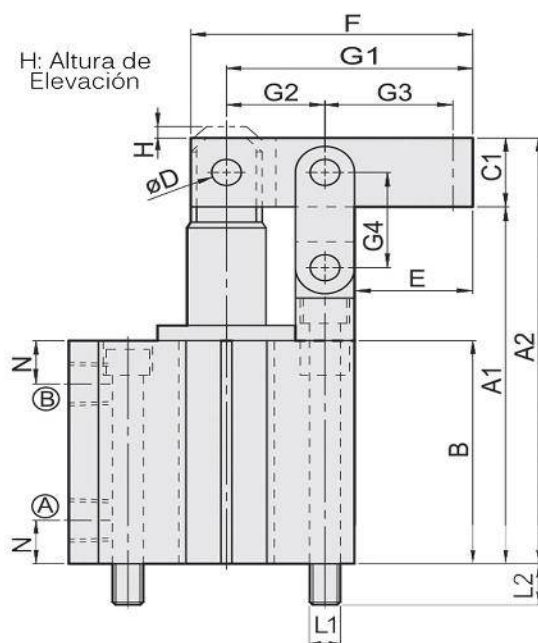
ALC-MS-32-S1

LEVER TYPE PNEUMATIC CLAMPS

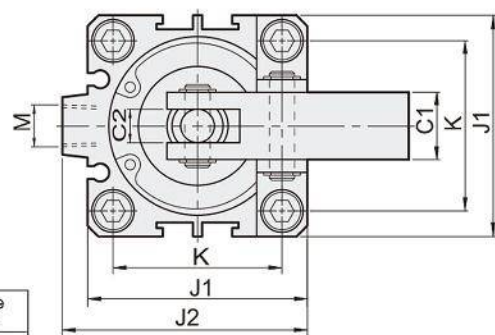


Characteristics & Dimensions

SERIES		ALC-MS				
DEVICE TYPE						
Cylinder Bore		Ø25	Ø32	Ø40	Ø50	Ø63
Piston Rod Diameter		Ø10	Ø12	Ø16	Ø20	Ø20
Total Stroke		20.00	23.00	25.00	30.00	35.00
Piston Area	(cm ²)	4.91	8.04	12.57	19.63	31.17
Theoretical Gripping Force	(6Kg/cm ²)	15.00	25.00	44.00	71.00	136.00
Fluid Requirements		Filtered Air				
Maximum Operating Pressure		10.00 Kg/cm ²				
Operating Pressure Range		1.00 Kg/cm ² ~ 7.00 Kg/cm ²				
Action Type		Double Action				
**** All dimensions are given in millimeters.						



$\textcircled{A}$	Puerto de Sujeción
$\textcircled{B}$	Puerto de Liberación



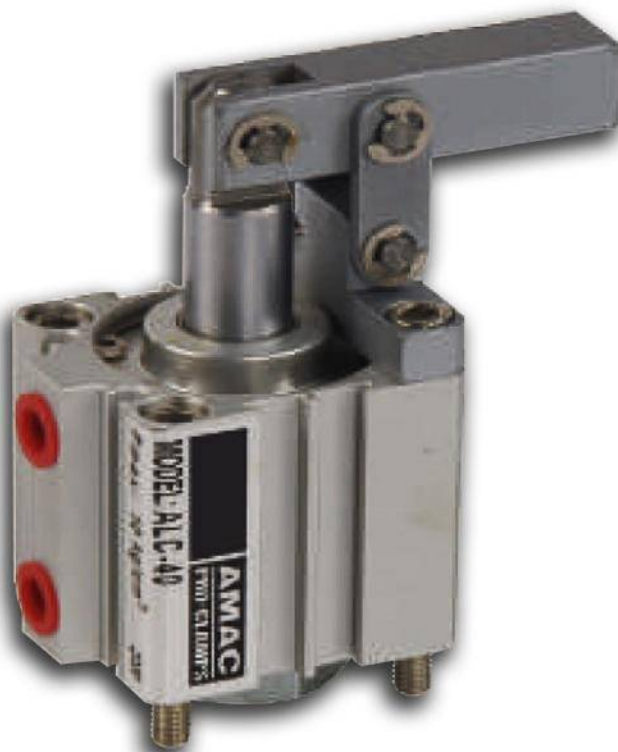
Characteristics & Dimensions

SERIES		ALC-MS				
MODEL		ALC-MS 25	ALC-MS 32	ALC-MS 40	ALC-MS 50	ALC-MS 63
STANDARD TYPE	A1	65.50	78.00	82.50	96.60	115.50
	A2	78.20	93.90	98.40	115.60	137.50
	B	41.00	49.00	54.50	58.60	72.50
MAGNETIC INDUCTION TYPE	A1	75.50	93.00	97.50	106.60	125.50
	A2	88.20	108.90	113.40	125.60	147.70
	B	51.00	64.00	66.50	68.60	82.50
C1		Ø12.70	Ø15.90	Ø15.90	Ø19.00	Ø22.20
C2		6.00	8.00	8.00	10.00	20.00
D		Ø5.00	Ø6.00	Ø6.00	Ø8.00	Ø8.00
E		25.00	31.00	32.00	35.00	38.50
FF		30.00	60.00	65.00	75.00	85.00
G1		45.00	54.00	58.00	66.00	76.00
G2		14.00	17.00	20.00	23.00	29.50
G3		27.50	33.00	34.00	38.00	40.50
G4		17.00	20.00	22.00	27.00	32.00
H		3.00	3.00	3.00	3.00	3.00
J1		40.00	44.00	52.00	62.00	75.00
J1		-	50.00	58.00	71.00	84.50
K		28.00	34.00	40.00	48.00	60.00
L1		M5 x 0.80	M5 x 0.80	M6 x 1.00	M6 x 1.00	M6 x 1.00
L2		10.50	11.00	9.50	11.00	11.00
M		M5 x 0.80	PT 1/8"	PT 1/8"	PT 1/4"	PT 1/4"
N		8.00	9.00	10.00	11.00	11.00

*** All dimensions are given in millimeters.

ALC-MS-32-S2

LEVER TYPE PNEUMATIC CLAMPS



Characteristics & Dimensions

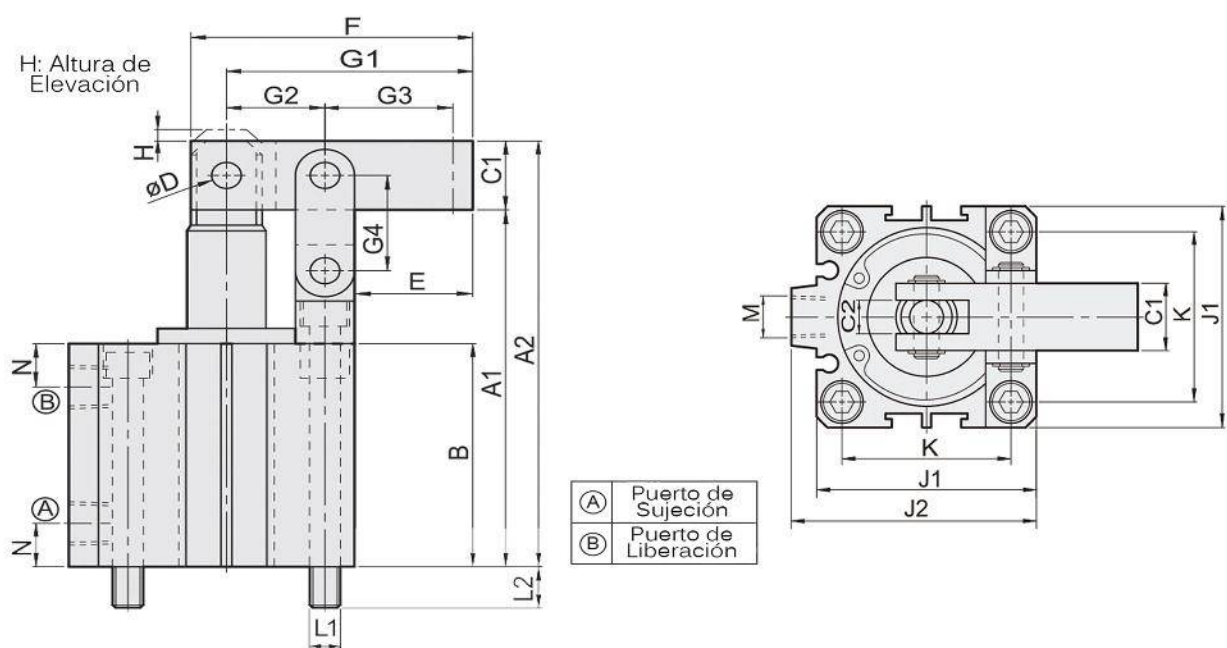
SERIES

ALC-MS

DEVICE TYPE

Cylinder Bore	Ø25	Ø32	Ø40	Ø50	Ø63
Piston Rod Diameter	Ø10	Ø12	Ø16	Ø20	Ø20
Total Stroke	20.00	23.00	25.00	30.00	35.00
Piston Area (cm ²)	4.91	8.04	12.57	19.63	31.17
Theoretical Gripping Force (6Kg/cm ²)	15.00	25.00	44.00	71.00	136.00
Fluid Requirements	Filtered Air				
Maximum Operating Pressure	10.00 Kg/cm ²				
Operating Pressure Range	1.00 Kg/cm ² ~ 7.00 Kg/cm ²				
Action Type	Double Action				

*** All dimensions are given in millimeters.



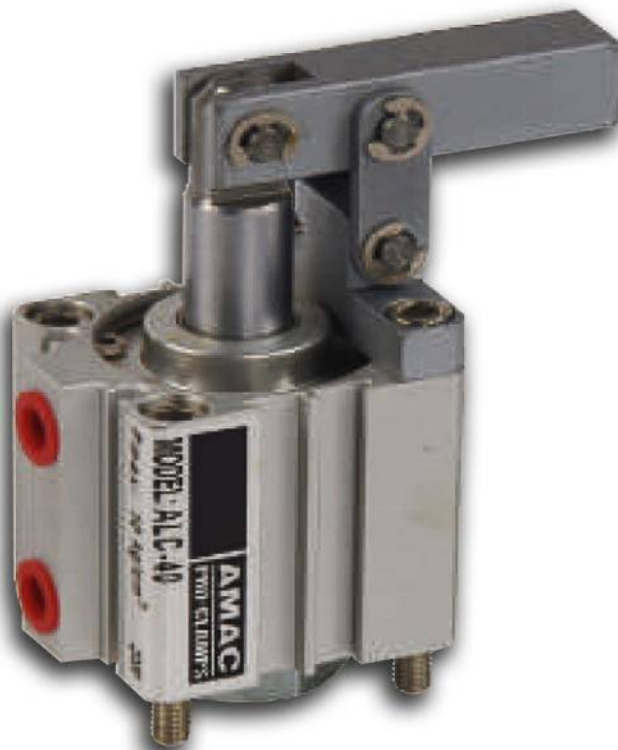
Characteristics & Dimensions

SERIES		ALC-MS				
MODEL		ALC-MS 25	ALC-MS 32	ALC-MS 40	ALC-MS 50	ALC-MS 63
STANDARD TYPE	A1	65.50	78.00	82.50	96.60	115.50
	A2	78.20	93.90	98.40	115.60	137.50
	B	41.00	49.00	54.50	58.60	72.50
MAGNETIC INDUCTION TYPE	A1	75.50	93.00	97.50	106.60	125.50
	A2	88.20	108.90	113.40	125.60	147.70
	B	51.00	64.00	66.50	68.60	82.50
C1		Ø12.70	Ø15.90	Ø15.90	Ø19.00	Ø22.20
C2		6.00	8.00	8.00	10.00	20.00
D		Ø5.00	Ø6.00	Ø6.00	Ø8.00	Ø8.00
E		25.00	31.00	32.00	35.00	38.50
FF		30.00	60.00	65.00	75.00	85.00
G1		45.00	54.00	58.00	66.00	76.00
G2		14.00	17.00	20.00	23.00	29.50
G3		27.50	33.00	34.00	38.00	40.50
G4		17.00	20.00	22.00	27.00	32.00
H		3.00	3.00	3.00	3.00	3.00
J1		40.00	44.00	52.00	62.00	75.00
J1		-	50.00	58.00	71.00	84.50
K		28.00	34.00	40.00	48.00	60.00
L1		M5 x 0.80	M5 x 0.80	M6 x 1.00	M6 x 1.00	M6 x 1.00
L2		10.50	11.00	9.50	11.00	11.00
M		M5 x 0.80	PT 1/8"	PT 1/8"	PT 1/4"	PT 1/4"
N		8.00	9.00	10.00	11.00	11.00

*** All dimensions are given in millimeters.

ALC-MS-40-S1

LEVER TYPE PNEUMATIC CLAMPS



Characteristics & Dimensions

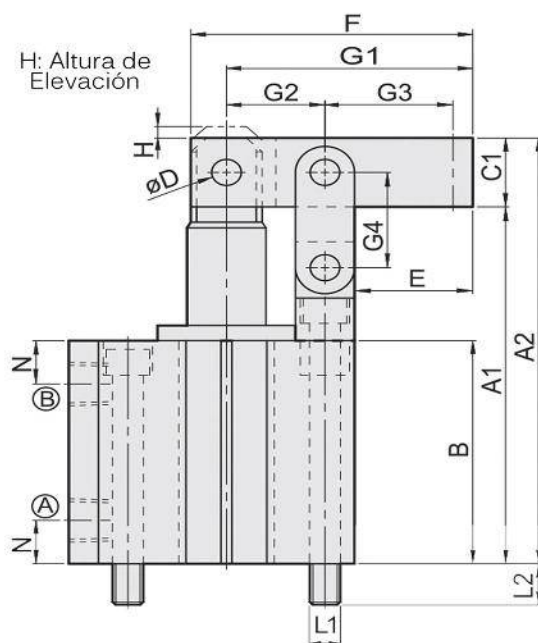
SERIES

ALC-MS

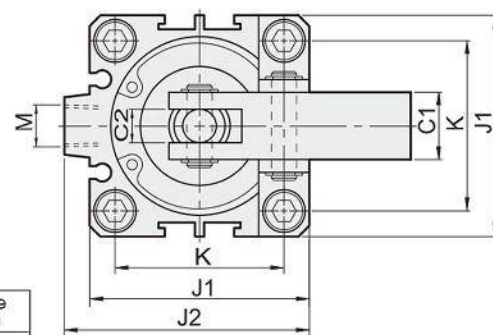
DEVICE TYPE

Cylinder Bore	Ø25	Ø32	Ø40	Ø50	Ø63
Piston Rod Diameter	Ø10	Ø12	Ø16	Ø20	Ø20
Total Stroke	20.00	23.00	25.00	30.00	35.00
Piston Area (cm^2)	4.91	8.04	12.57	19.63	31.17
Theoretical Gripping Force $(6Kg/cm^2)$	15.00	25.00	44.00	71.00	136.00
Fluid Requirements	Filtered Air				
Maximum Operating Pressure	10.00 Kg/cm²				
Operating Pressure Range	1.00 Kg/cm² ~ 7.00 Kg/cm²				
Action Type	Double Action				

*** All dimensions are given in millimeters.



Ⓐ	Puerto de Sujeción
Ⓑ	Puerto de Liberación



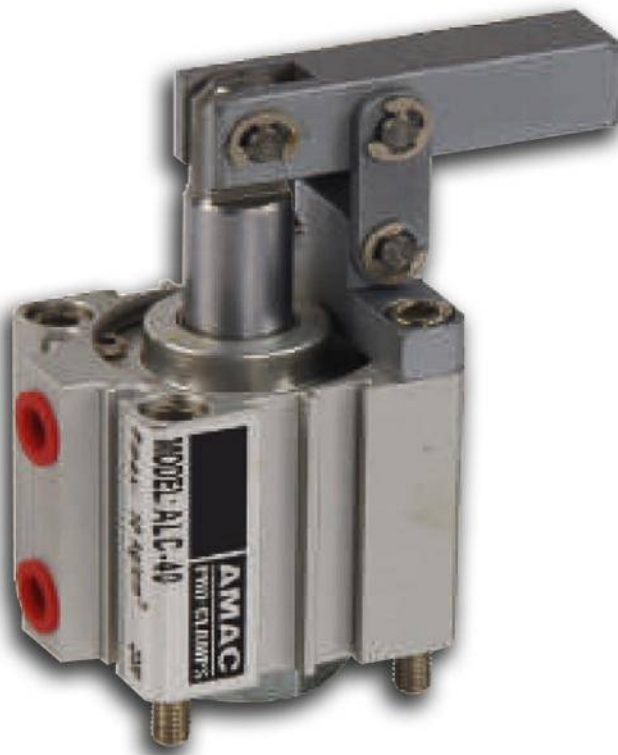
Characteristics & Dimensions

SERIES		ALC-MS				
MODEL		ALC-MS 25	ALC-MS 32	ALC-MS 40	ALC-MS 50	ALC-MS 63
STANDARD TYPE	A1	65.50	78.00	82.50	96.60	115.50
	A2	78.20	93.90	98.40	115.60	137.50
	B	41.00	49.00	54.50	58.60	72.50
MAGNETIC INDUCTION TYPE	A1	75.50	93.00	97.50	106.60	125.50
	A2	88.20	108.90	113.40	125.60	147.70
	B	51.00	64.00	66.50	68.60	82.50
C1		Ø12.70	Ø15.90	Ø15.90	Ø19.00	Ø22.20
C2		6.00	8.00	8.00	10.00	20.00
D		Ø5.00	Ø6.00	Ø6.00	Ø8.00	Ø8.00
E		25.00	31.00	32.00	35.00	38.50
FF		30.00	60.00	65.00	75.00	85.00
G1		45.00	54.00	58.00	66.00	76.00
G2		14.00	17.00	20.00	23.00	29.50
G3		27.50	33.00	34.00	38.00	40.50
G4		17.00	20.00	22.00	27.00	32.00
H		3.00	3.00	3.00	3.00	3.00
J1		40.00	44.00	52.00	62.00	75.00
J1		-	50.00	58.00	71.00	84.50
K		28.00	34.00	40.00	48.00	60.00
L1		M5 x 0.80	M5 x 0.80	M6 x 1.00	M6 x 1.00	M6 x 1.00
L2		10.50	11.00	9.50	11.00	11.00
M		M5 x 0.80	PT 1/8"	PT 1/8"	PT 1/4"	PT 1/4"
N		8.00	9.00	10.00	11.00	11.00

*** All dimensions are given in millimeters.

ALC-MS-40-S2

LEVER TYPE PNEUMATIC CLAMPS



Characteristics & Dimensions

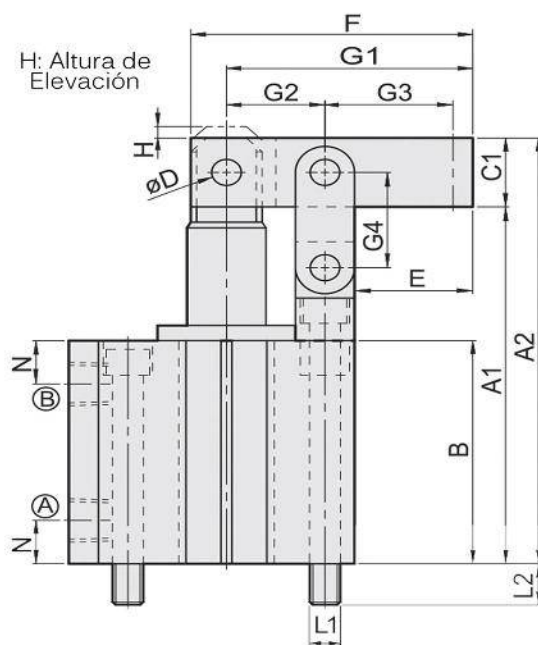
SERIES

ALC-MS

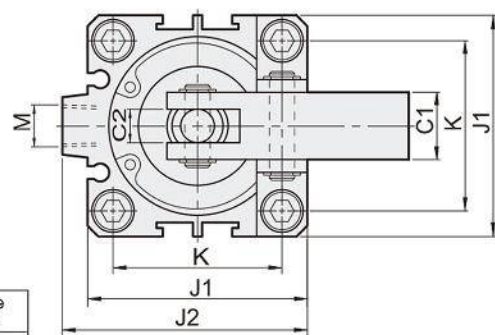
DEVICE TYPE

Cylinder Bore	Ø25	Ø32	Ø40	Ø50	Ø63
Piston Rod Diameter	Ø10	Ø12	Ø16	Ø20	Ø20
Total Stroke	20.00	23.00	25.00	30.00	35.00
Piston Area (cm^2)	4.91	8.04	12.57	19.63	31.17
Theoretical Gripping Force $(6Kg/cm^2)$	15.00	25.00	44.00	71.00	136.00
Fluid Requirements	Filtered Air				
Maximum Operating Pressure	10.00 Kg/cm²				
Operating Pressure Range	1.00 Kg/cm² ~ 7.00 Kg/cm²				
Action Type	Double Action				

*** All dimensions are given in millimeters.



Ⓐ	Puerto de Sujeción
Ⓑ	Puerto de Liberación



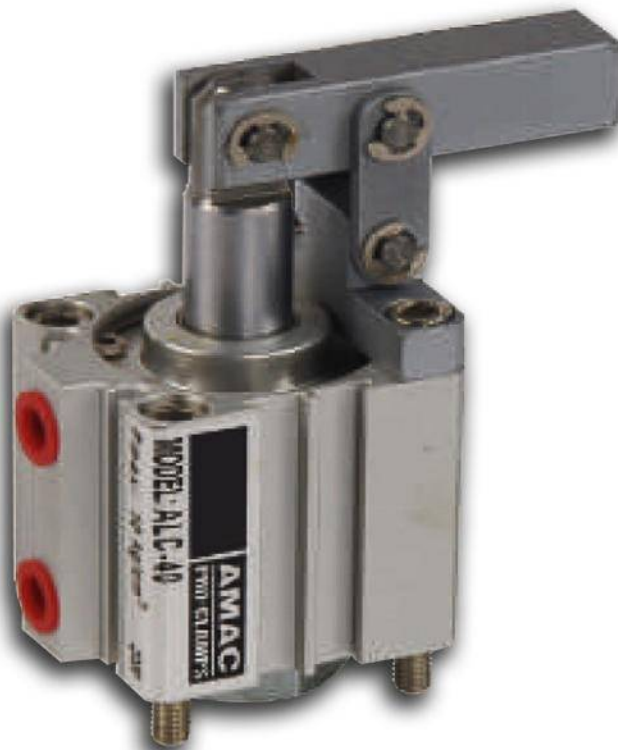
Characteristics & Dimensions

SERIES		ALC-MS				
MODEL		ALC-MS 25	ALC-MS 32	ALC-MS 40	ALC-MS 50	ALC-MS 63
STANDARD TYPE	A1	65.50	78.00	82.50	96.60	115.50
	A2	78.20	93.90	98.40	115.60	137.50
	B	41.00	49.00	54.50	58.60	72.50
MAGNETIC INDUCTION TYPE	A1	75.50	93.00	97.50	106.60	125.50
	A2	88.20	108.90	113.40	125.60	147.70
	B	51.00	64.00	66.50	68.60	82.50
C1		Ø12.70	Ø15.90	Ø15.90	Ø19.00	Ø22.20
C2		6.00	8.00	8.00	10.00	20.00
D		Ø5.00	Ø6.00	Ø6.00	Ø8.00	Ø8.00
E		25.00	31.00	32.00	35.00	38.50
FF		30.00	60.00	65.00	75.00	85.00
G1		45.00	54.00	58.00	66.00	76.00
G2		14.00	17.00	20.00	23.00	29.50
G3		27.50	33.00	34.00	38.00	40.50
G4		17.00	20.00	22.00	27.00	32.00
H		3.00	3.00	3.00	3.00	3.00
J1		40.00	44.00	52.00	62.00	75.00
J1		-	50.00	58.00	71.00	84.50
K		28.00	34.00	40.00	48.00	60.00
L1		M5 x 0.80	M5 x 0.80	M6 x 1.00	M6 x 1.00	M6 x 1.00
L2		10.50	11.00	9.50	11.00	11.00
M		M5 x 0.80	PT 1/8"	PT 1/8"	PT 1/4"	PT 1/4"
N		8.00	9.00	10.00	11.00	11.00

*** All dimensions are given in millimeters.

ALC-MS-50-S1

LEVER TYPE PNEUMATIC CLAMPS



Characteristics & Dimensions

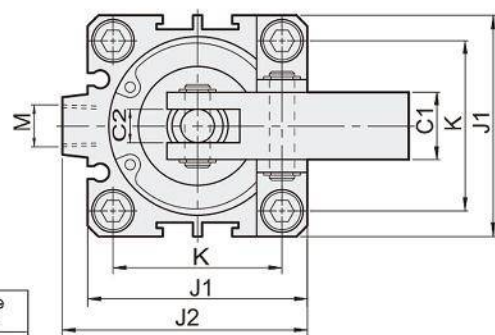
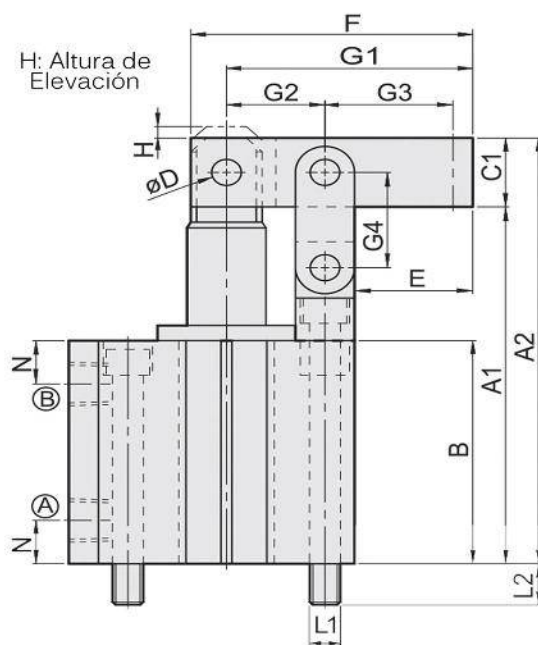
SERIES

ALC-MS

DEVICE TYPE

Cylinder Bore	Ø25	Ø32	Ø40	Ø50	Ø63
Piston Rod Diameter	Ø10	Ø12	Ø16	Ø20	Ø20
Total Stroke	20.00	23.00	25.00	30.00	35.00
Piston Area (cm ²)	4.91	8.04	12.57	19.63	31.17
Theoretical Gripping Force (6Kg/cm ²)	15.00	25.00	44.00	71.00	136.00
Fluid Requirements	Filtered Air				
Maximum Operating Pressure	10.00 Kg/cm ²				
Operating Pressure Range	1.00 Kg/cm ² ~ 7.00 Kg/cm ²				
Action Type	Double Action				

*** All dimensions are given in millimeters.



Ⓐ	Puerto de Sujeción
Ⓑ	Puerto de Liberación

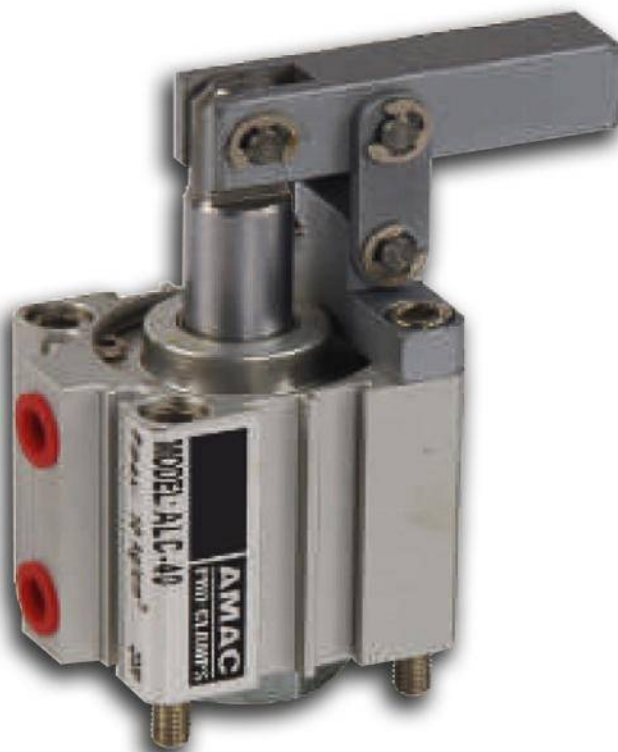
Characteristics & Dimensions

SERIES		ALC-MS				
MODEL		ALC-MS 25	ALC-MS 32	ALC-MS 40	ALC-MS 50	ALC-MS 63
STANDARD TYPE	A1	65.50	78.00	82.50	96.60	115.50
	A2	78.20	93.90	98.40	115.60	137.50
	B	41.00	49.00	54.50	58.60	72.50
MAGNETIC INDUCTION TYPE	A1	75.50	93.00	97.50	106.60	125.50
	A2	88.20	108.90	113.40	125.60	147.70
	B	51.00	64.00	66.50	68.60	82.50
C1		Ø12.70	Ø15.90	Ø15.90	Ø19.00	Ø22.20
C2		6.00	8.00	8.00	10.00	20.00
D		Ø5.00	Ø6.00	Ø6.00	Ø8.00	Ø8.00
E		25.00	31.00	32.00	35.00	38.50
FF		30.00	60.00	65.00	75.00	85.00
G1		45.00	54.00	58.00	66.00	76.00
G2		14.00	17.00	20.00	23.00	29.50
G3		27.50	33.00	34.00	38.00	40.50
G4		17.00	20.00	22.00	27.00	32.00
H		3.00	3.00	3.00	3.00	3.00
J1		40.00	44.00	52.00	62.00	75.00
J1		-	50.00	58.00	71.00	84.50
K		28.00	34.00	40.00	48.00	60.00
L1		M5 x 0.80	M5 x 0.80	M6 x 1.00	M6 x 1.00	M6 x 1.00
L2		10.50	11.00	9.50	11.00	11.00
M		M5 x 0.80	PT 1/8"	PT 1/8"	PT 1/4"	PT 1/4"
N		8.00	9.00	10.00	11.00	11.00

*** All dimensions are given in millimeters.

ALC-MS-50-S2

LEVER TYPE PNEUMATIC CLAMPS



Characteristics & Dimensions

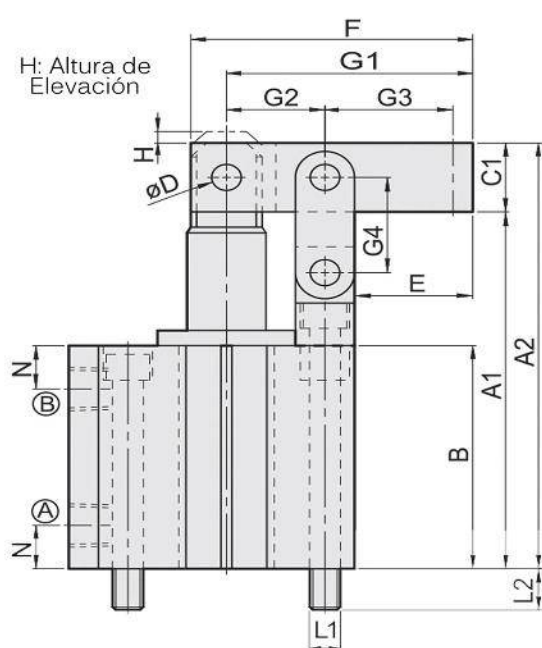
SERIES

ALC-MS

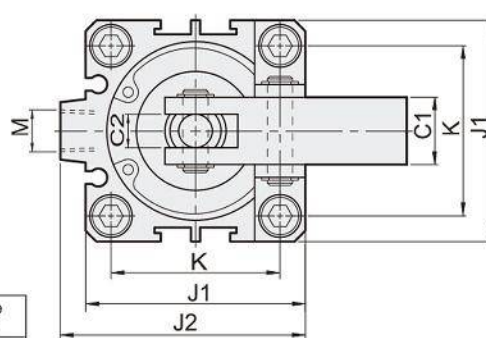
DEVICE TYPE

Cylinder Bore	Ø25	Ø32	Ø40	Ø50	Ø63
Piston Rod Diameter	Ø10	Ø12	Ø16	Ø20	Ø20
Total Stroke	20.00	23.00	25.00	30.00	35.00
Piston Area (cm ²)	4.91	8.04	12.57	19.63	31.17
Theoretical Gripping Force (6Kg/cm ²)	15.00	25.00	44.00	71.00	136.00
Fluid Requirements	Filtered Air				
Maximum Operating Pressure	10.00 Kg/cm ²				
Operating Pressure Range	1.00 Kg/cm ² ~ 7.00 Kg/cm ²				
Action Type	Double Action				

*** All dimensions are given in millimeters.



(A)	Puerto de Sujeción
(B)	Puerto de Liberación



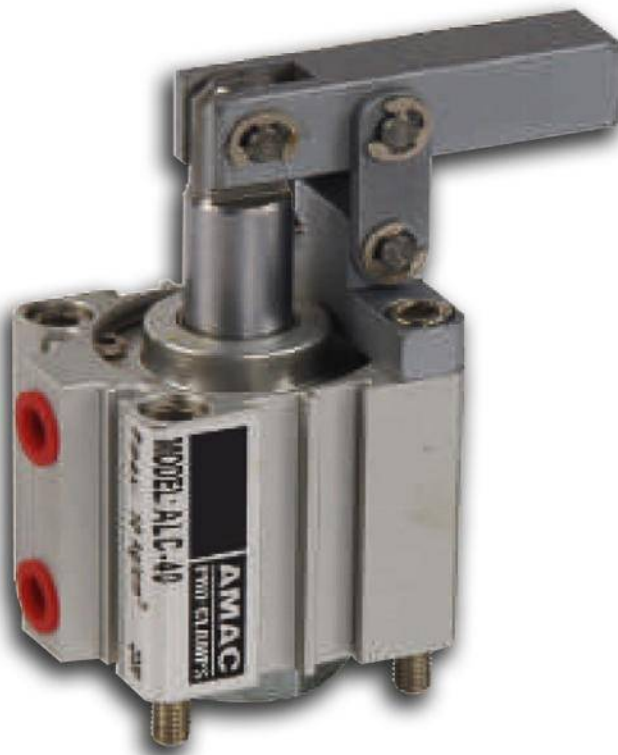
Characteristics & Dimensions

SERIES		ALC-MS				
MODEL		ALC-MS 25	ALC-MS 32	ALC-MS 40	ALC-MS 50	ALC-MS 63
STANDARD TYPE	A1	65.50	78.00	82.50	96.60	115.50
	A2	78.20	93.90	98.40	115.60	137.50
	B	41.00	49.00	54.50	58.60	72.50
MAGNETIC INDUCTION TYPE	A1	75.50	93.00	97.50	106.60	125.50
	A2	88.20	108.90	113.40	125.60	147.70
	B	51.00	64.00	66.50	68.60	82.50
C1		Ø12.70	Ø15.90	Ø15.90	Ø19.00	Ø22.20
C2		6.00	8.00	8.00	10.00	20.00
D		Ø5.00	Ø6.00	Ø6.00	Ø8.00	Ø8.00
E		25.00	31.00	32.00	35.00	38.50
FF		30.00	60.00	65.00	75.00	85.00
G1		45.00	54.00	58.00	66.00	76.00
G2		14.00	17.00	20.00	23.00	29.50
G3		27.50	33.00	34.00	38.00	40.50
G4		17.00	20.00	22.00	27.00	32.00
H		3.00	3.00	3.00	3.00	3.00
J1		40.00	44.00	52.00	62.00	75.00
J1		-	50.00	58.00	71.00	84.50
K		28.00	34.00	40.00	48.00	60.00
L1		M5 x 0.80	M5 x 0.80	M6 x 1.00	M6 x 1.00	M6 x 1.00
L2		10.50	11.00	9.50	11.00	11.00
M		M5 x 0.80	PT 1/8"	PT 1/8"	PT 1/4"	PT 1/4"
N		8.00	9.00	10.00	11.00	11.00

*** All dimensions are given in millimeters.

ALC-MS-63-S1

LEVER TYPE PNEUMATIC CLAMPS



Characteristics & Dimensions

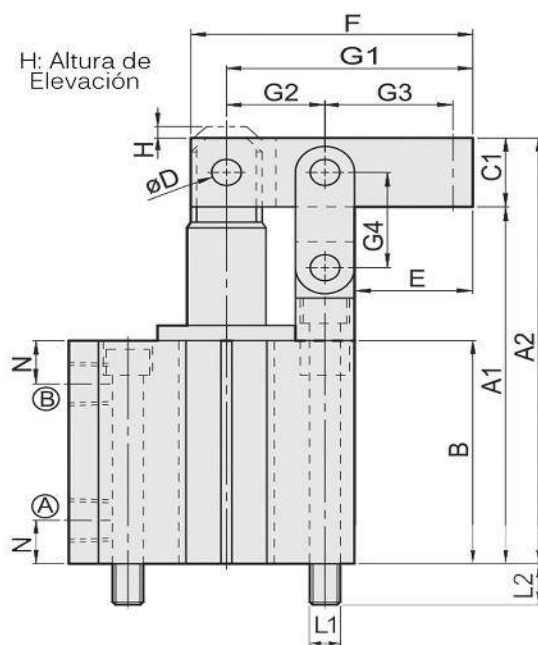
SERIES

ALC-MS

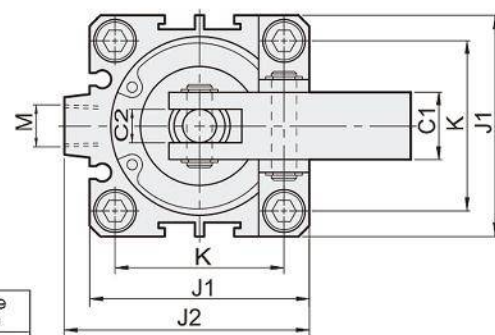
DEVICE TYPE

Cylinder Bore	Ø25	Ø32	Ø40	Ø50	Ø63
Piston Rod Diameter	Ø10	Ø12	Ø16	Ø20	Ø20
Total Stroke	20.00	23.00	25.00	30.00	35.00
Piston Area (cm ²)	4.91	8.04	12.57	19.63	31.17
Theoretical Gripping Force (6Kg/cm ²)	15.00	25.00	44.00	71.00	136.00
Fluid Requirements	Filtered Air				
Maximum Operating Pressure	10.00 Kg/cm ²				
Operating Pressure Range	1.00 Kg/cm ² ~ 7.00 Kg/cm ²				
Action Type	Double Action				

*** All dimensions are given in millimeters.



Ⓐ	Puerto de Sujeción
Ⓑ	Puerto de Liberación



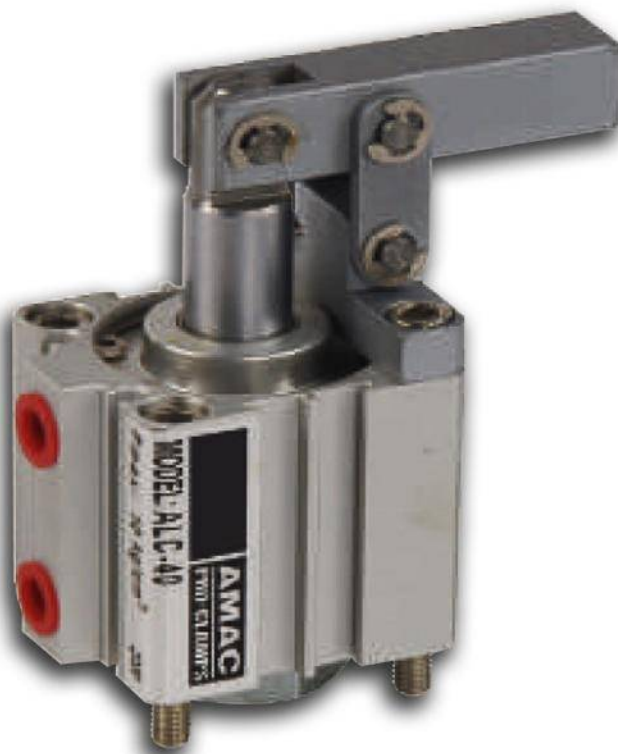
Characteristics & Dimensions

SERIES		ALC-MS				
MODEL		ALC-MS 25	ALC-MS 32	ALC-MS 40	ALC-MS 50	ALC-MS 63
STANDARD TYPE	A1	65.50	78.00	82.50	96.60	115.50
	A2	78.20	93.90	98.40	115.60	137.50
	B	41.00	49.00	54.50	58.60	72.50
MAGNETIC INDUCTION TYPE	A1	75.50	93.00	97.50	106.60	125.50
	A2	88.20	108.90	113.40	125.60	147.70
	B	51.00	64.00	66.50	68.60	82.50
C1		Ø12.70	Ø15.90	Ø15.90	Ø19.00	Ø22.20
C2		6.00	8.00	8.00	10.00	20.00
D		Ø5.00	Ø6.00	Ø6.00	Ø8.00	Ø8.00
E		25.00	31.00	32.00	35.00	38.50
FF		30.00	60.00	65.00	75.00	85.00
G1		45.00	54.00	58.00	66.00	76.00
G2		14.00	17.00	20.00	23.00	29.50
G3		27.50	33.00	34.00	38.00	40.50
G4		17.00	20.00	22.00	27.00	32.00
H		3.00	3.00	3.00	3.00	3.00
J1		40.00	44.00	52.00	62.00	75.00
J1		-	50.00	58.00	71.00	84.50
K		28.00	34.00	40.00	48.00	60.00
L1		M5 x 0.80	M5 x 0.80	M6 x 1.00	M6 x 1.00	M6 x 1.00
L2		10.50	11.00	9.50	11.00	11.00
M		M5 x 0.80	PT 1/8"	PT 1/8"	PT 1/4"	PT 1/4"
N		8.00	9.00	10.00	11.00	11.00

*** All dimensions are given in millimeters.

ALC-MS-63-S2

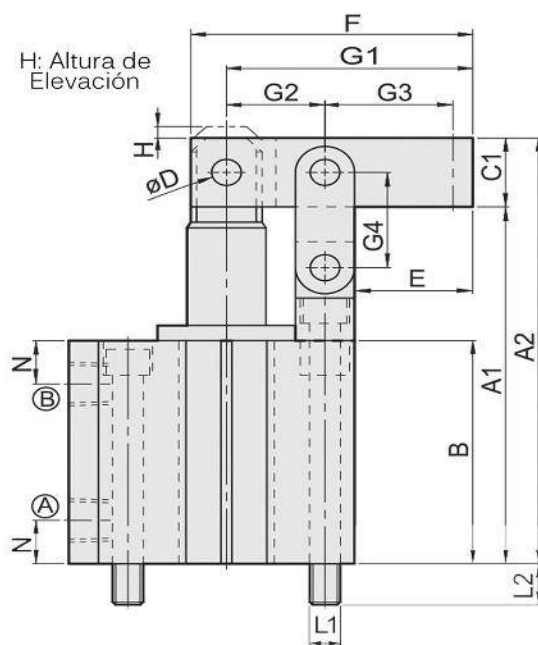
LEVER TYPE PNEUMATIC CLAMPS



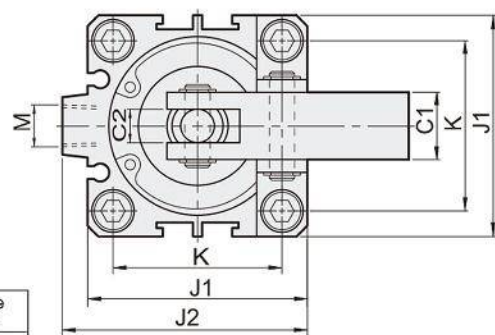
Characteristics & Dimensions

SERIES		ALC-MS				
DEVICE TYPE						
Cylinder Bore		Ø25	Ø32	Ø40	Ø50	Ø63
Piston Rod Diameter		Ø10	Ø12	Ø16	Ø20	Ø20
Total Stroke		20.00	23.00	25.00	30.00	35.00
Piston Area	(cm ²)	4.91	8.04	12.57	19.63	31.17
Theoretical Gripping Force	(6Kg/cm ²)	15.00	25.00	44.00	71.00	136.00
Fluid Requirements		Filtered Air				
Maximum Operating Pressure		10.00 Kg/cm ²				
Operating Pressure Range		1.00 Kg/cm ² ~ 7.00 Kg/cm ²				
Action Type		Double Action				

*** All dimensions are given in millimeters.



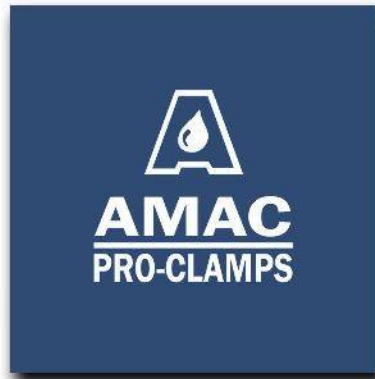
Ⓐ	Puerto de Sujeción
Ⓑ	Puerto de Liberación



Characteristics & Dimensions

SERIES		ALC-MS				
MODEL		ALC-MS 25	ALC-MS 32	ALC-MS 40	ALC-MS 50	ALC-MS 63
STANDARD TYPE	A1	65.50	78.00	82.50	96.60	115.50
	A2	78.20	93.90	98.40	115.60	137.50
	B	41.00	49.00	54.50	58.60	72.50
MAGNETIC INDUCTION TYPE	A1	75.50	93.00	97.50	106.60	125.50
	A2	88.20	108.90	113.40	125.60	147.70
	B	51.00	64.00	66.50	68.60	82.50
C1		Ø12.70	Ø15.90	Ø15.90	Ø19.00	Ø22.20
C2		6.00	8.00	8.00	10.00	20.00
D		Ø5.00	Ø6.00	Ø6.00	Ø8.00	Ø8.00
E		25.00	31.00	32.00	35.00	38.50
FF		30.00	60.00	65.00	75.00	85.00
G1		45.00	54.00	58.00	66.00	76.00
G2		14.00	17.00	20.00	23.00	29.50
G3		27.50	33.00	34.00	38.00	40.50
G4		17.00	20.00	22.00	27.00	32.00
H		3.00	3.00	3.00	3.00	3.00
J1		40.00	44.00	52.00	62.00	75.00
J1		-	50.00	58.00	71.00	84.50
K		28.00	34.00	40.00	48.00	60.00
L1		M5 x 0.80	M5 x 0.80	M6 x 1.00	M6 x 1.00	M6 x 1.00
L2		10.50	11.00	9.50	11.00	11.00
M		M5 x 0.80	PT 1/8"	PT 1/8"	PT 1/4"	PT 1/4"
N		8.00	9.00	10.00	11.00	11.00

*** All dimensions are given in millimeters.



**ASC
SERIES**

ASC SERIES

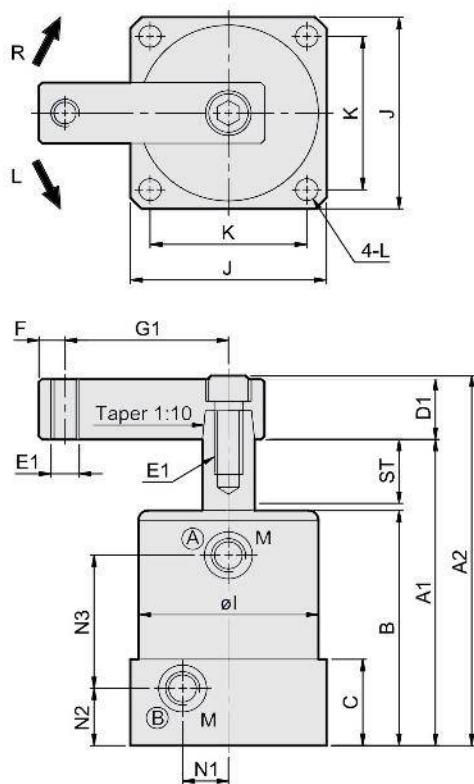
PNEUMATIC PISTON CLAMPING SYSTEMS



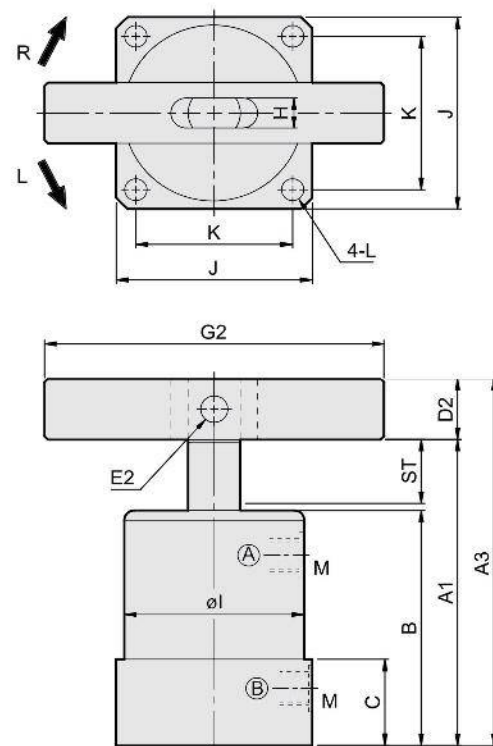
Características & Dimensiones

SERIES		ASC			
DEVICE TYPE		PNEUMATIC STANDARD DEVICES			
Cilinder Bore	Ø25	Ø32	Ø40	Ø50	Ø60
Piston Rod Diameter	Ø14.00	Ø16.00	Ø16.00	Ø20.00	Ø20.00
Turning Stroke	9.00	11.00	11.00	13.00	13.00
Gripping Stroke STD/INCR	13.00	15.00/30.00	15.00/30.00	17.00/34.00	17.00/34.00
Piston Area (Pull/Push) (cm ²)	3.37 / 4.90	6.03 / 8.04	10.56 / 12.57	16.49 / 19.63	28.03 / 31.17
Theoretical Clamping Force (6.00 Kg/cm ²)	20.00	36.00	63.00	99.00	168.00
Luid Tyoe	Filtered Air				
Maximum Operating Pressure	10.00 Kg/cm ²				
Operating Pressure Range	1.00 Kg/cm ² ~ 7.00 Kg/cm ²				
Rotating Direccion	R : Right Turn L : Left Turn N : Without Turn				
Rotating Angle	45° & 60°: Optional 90°: Standard				
Acuator Type	Double Accion				
**** Todas las dimensiones estaban dadas en milímetros.					

Single side swing clamp



Double side swing clamp

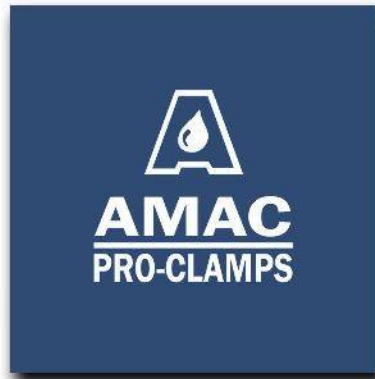


(A)	Puerto de Sujeción
(B)	Puerto de Liberación

Characteristics & Dimensions

SERIES	ASC								
MODEL	ASC-25	ASC-32		ASC-40		ASC-50		ASC-63	
ST: TURN/GRIP	22 : 9/13	26:11/15	41:11/30	26:11/15	41:11/30	30:30/17	47:13/34	30:30/17	47:13/34
A1	89.00	108.00	138.00	108.00	138.00	124.00	158.00	124.00	158.00
A2	-105.90	-128.00	-158.00	-128.00	-158.00	-150.40	-184.40	-150.40	-184.40
A3	104.90	127.00	157.00	127.00	157.00	146.20	180.20	146.20	180.20
B	65.00	78.00	93.00	78.00	93.00	90.00	107.00	90.00	107.00
C	23.00	28.00		28.00		31.00		31.00	
D1	■ 15.19	■ 19.00		■ 19.00		■ 25.40		■ 25.40	
D2	■ 15.19	■ 19.00		■ 19.00		■ 22.20		■ 22.20	
E1	M6 x 1.00	M8 x 1.25		M8 x 1.25		M10 x 1.50		M10 x 1.50	
E2	Ø6.00	Ø8.00		Ø8.00		Ø8.00		Ø8.00	
F	6.00	8.00		8.00		10.00		10.00	
G1	35.00	50.00		55.00		60.00		70.00	
G2	120.00	140.00		140.00		1260.00		160.00	
H	7.00	9.00		9.00		10.00		10.00	
ØI	Ø35.00	Ø46.00		Ø55.00		Ø65.00		Ø78.00	
J	38.00	50.00		60.00		70.00		83.00	
K	30.00	40.00		48.00		57.00		67.00	
L	Ø4.60	Ø5.60		Ø6.80		Ø6.80		Ø9.00	
M	M5 x 0.80	G1/8		G1/8		G1/8		G1/8	
N1	8.00	11.50		14.00		17.00		20.00	
N2	16.50	19.00		19.00		21.00		21.00	
N3	39.50	45.00	60.00	45.00	60.00	54.00	71.00	54.00	71.00

**** All dimensions are given in millimeters.



ASC-FA SERIES

ASC-FA SERIES

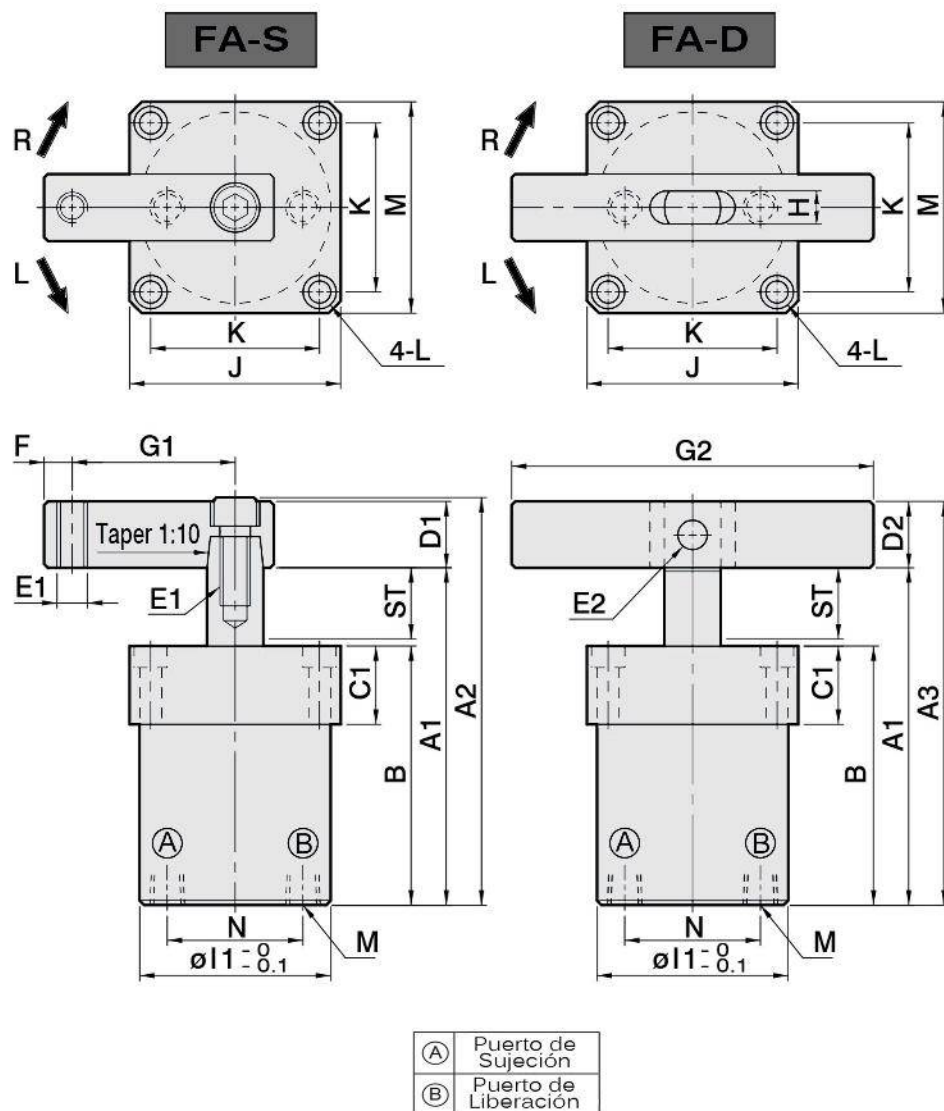


PNEUMATIC FLANGE TYPE CLAMPING SYSTEMS



Characteristics & Dimensions

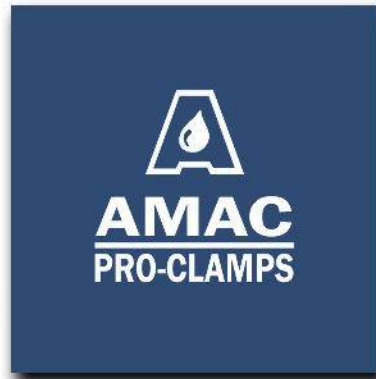
SERIES		ASC-FA			
DEVICE TYPE		PNEUMATIC FLANG TYPE SYSTEMS			
Cilinder Bore	Ø25	Ø32	Ø40	Ø50	Ø60
Piston Rod Diameter	Ø14.00	Ø16.00	Ø16.00	Ø20.00	Ø20.00
Turning Stroke	9.00	11.00	11.00	13.00	13.00
Gripping Stroke STD/INCR	13.00	15.00/30.00	15.00/30.00	17.00/34.00	17.00/34.00
Piston Area (Pull/Push) (cm ²)	3.37 / 4.90	6.03 / 8.04	10.56 / 12.57	16.49 / 19.63	28.03 / 31.17
Theoretical Clamping Force (6.00 Kg/cm ²)	20.00	36.00	63.00	99.00	168.00
Luid Tyoe	Filtered Air				
Maximum Operating Pressure	10.00 Kg/cm ²				
Operating Pressure Range	1.00 Kg/cm ² ~ 7.00 Kg/cm ²				
Rotating Direccion	R : Right Turn L : Left Turn N : Without Turn				
Rotating Angle	45° & 60°: Optional 90°: Standard				
Acuator Type	Double Action				
**** All dimensions are given in millimeters.					



Characteristics & Dimensions

SERIES	ASC-FA			
MODEL	ASC-FA 32	ASC-FA 40	ASC-FA 50	ASC-FA 63
ST: TURN/CLSMP	26:11/15	26:11/15	30:30/17	30:30/17
A1	108.00	108.00	124.00	124.00
A2	-128.00	-128.00	-150.40	-150.40
A3	127.00	127.00	146.20	146.20
B	78.00	78.00	90.00	90.00
C1	22.00	22.00	25.00	25.00
C2/C3	10.00/9.00	10.00/9.00	12.00/11.00	-
D1	■ 19.00	■ 19.00	■ 25.40	■ 25.40
D2	■ 19.00	■ 19.00	■ 22.20	■ 22.20
E1	M8 x 1.25	M8 x 1.25	M10 x 1.50	M10 x 1.50
E2	Ø8.00	Ø8.00	Ø8.00	Ø8.00
F	8.00	8.00	10.00	10.00
G1	50.00	55.00	60.00	70.00
G2	140.00	140.00	160.00	160.00
H	9.00	9.00	10.00	10.00
ØI1	Ø46.00	Ø55.00	Ø65.00	Ø78.00
I2/I3	M50 x 1.50/Ø48.00	M55 x 1.50/Ø53	M65 x 1.50/Ø63	-
J	50.00	60.00	70.00	83.00
K	40.00	48.00	57.00	67.00
L	Ø5.60~Ø9.00 x 5.50D	Ø6.80~Ø1.50 x 6.50D	Ø6.80~Ø10.50 x 6.50D	Ø9.00~Ø14.00 x 9.00D
M	PT 1/8	PT 1/8	PT 1/8	PT 1/8
N	32.00	40.00	50.00	63.00
T1 x 2PCS	11.00	11.00	12.00	-
T2	Ø70.00	Ø75.00	Ø85.00	-

*** All dimensions are given in millimeters.



ASC-MS SERIES

ASC-MS SERIES



PNEUMATIC PISTON CLAMP WITH MAGNETIC INDUCTION



Characteristics & Dimensions

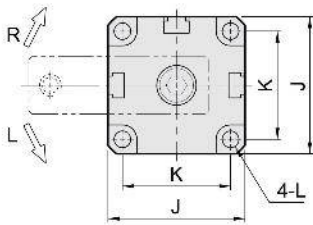
SERIE		ASC-MS			
DEVICE TYPE		PNEUMATIC DEVICE WITH MAGNETIC INDUCTOR			
Diámetro Del Cilindro	Ø25	Ø32	Ø40	Ø50	Ø60
Diámetro Del Vástago Del Pistón	Ø14.00	Ø16.00	Ø16.00	Ø20.00	Ø20.00
Carrera Giratoria	9.00	11.00	11.00	13.00	13.00
Carrera De Sujeción STD/INCR	13.00	15.00/30.00	15.00/30.00	17.00/34.00	17.00/34.00
Área De Presión (Jalar/Empujar) (cm ²)	3.37 / 4.90	6.03 / 8.04	10.56 / 12.57	16.49 / 19.63	28.03 / 31.17
Fuerza De Sujeción Teórica (6.00 Kg/cm ²)	20.00	36.00	63.00	99.00	168.00
Tipo De Fluido	Aire Filtrado				
Presión Máxima De Operación	10.00 Kg/cm ²				
Rango De Presión De Operación	1.00 Kg/cm ² ~ 7.00 Kg/cm ²				
Dirección De Rotación	R : Giro A La Derecha L : Giro A La Izquierda N : Sin Giro				
Angulo De Rotación	45° & 60°: Giros Opcionales 90°: Giro Estándar				
Tipo De Actuador	Doble Acción				
**** All dimensions are given in millimeters.					



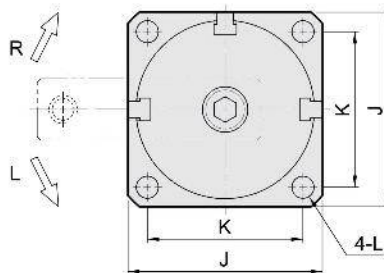
AMAC

PRO-CLAMPS

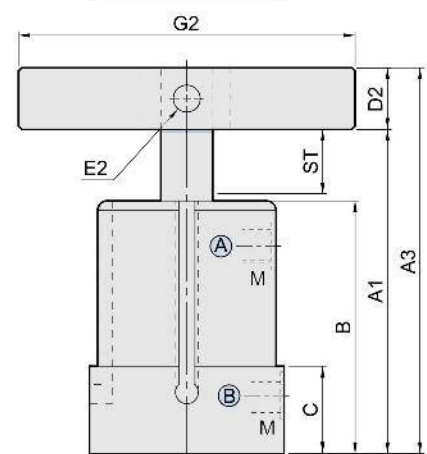
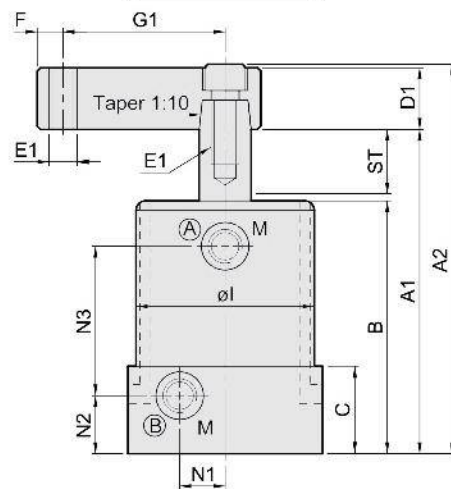
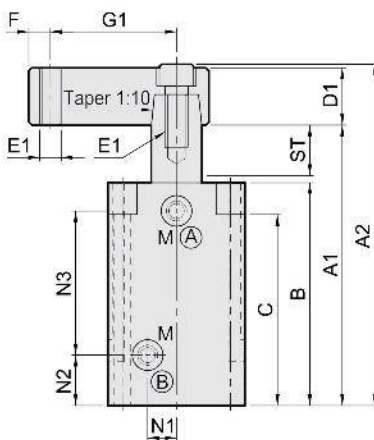
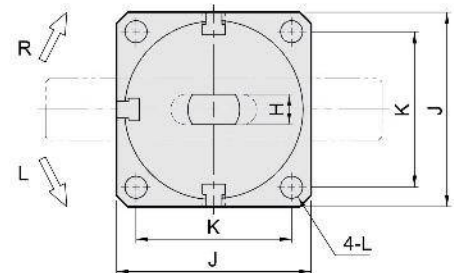
MS25S



MS32S-63S



MS32D-63D

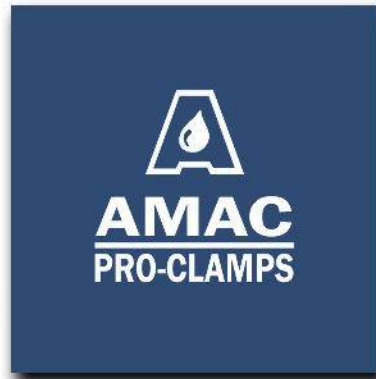


(A)	Puerto de Sujeción
(B)	Puerto de Liberación

Characteristics & Dimensions

SERIES	ASC-MS				
MODEL	ASC-MS 25	ASC-MS 32	ASC-MS 40	ASC-MS 50	ASC-MS 63
ST: TURN/CLAMP	22:9/13	26:11/15	30:30/17	30:30/17	30:30/17
A1	94.00	113.00	113.00	129.00	129.00
A2	-110.90	-133.00	-133.00	-155.40	-155.40
A3	-	132.00	132.00	151.20	151.20
B	70.00	83.00	83.00	95.00	95.00
C	60.00	28.00	28.00	31.00	31.00
D1	■ 15.90	■ 19.00	■ 25.40	■ 25.40	■ 25.40
D2	-	■ 19.00	■ 22.20	■ 22.20	■ 22.20
E1	M6 x 1.00	M8 x 1.25	M8 x 1.25	M10 x 1.50	M10 x 1.50
E2	-	Ø8.00	Ø8.00	Ø8.00	Ø8.00
F	6.00	8.00	8.00	10.00	10.00
G1	35.00	50.00	55.00	60.00	70.00
G2	-	140.00	140.00	160.00	160.00
H	-	9.00	9.00	10.00	10.00
ØI	Ø35.00	Ø46.00	Ø55.00	Ø65.00	Ø78.00
J	38.00	50.00	60.00	70.00	83.00
K	30.00	40.00	48.00	57.00	67.00
L	Ø4.60	Ø5.60	Ø6.80	Ø6.80	Ø9.00
M	M5 x 0.80	G 1/8	G 1/8	G 1/8	G 1/8
N1	8.00	11.50	14.00	17.00	20.00
N2	16.50	19.00	19.00	21.00	21.00
N3	44.50	20.00	50.00	59.00	59.00

**** All dimensions are given in millimeters.



ASC-TB SERIES

ASC-TB SERIES



PNEUMATIC PISTON CLAMP WITH THREADED BODY

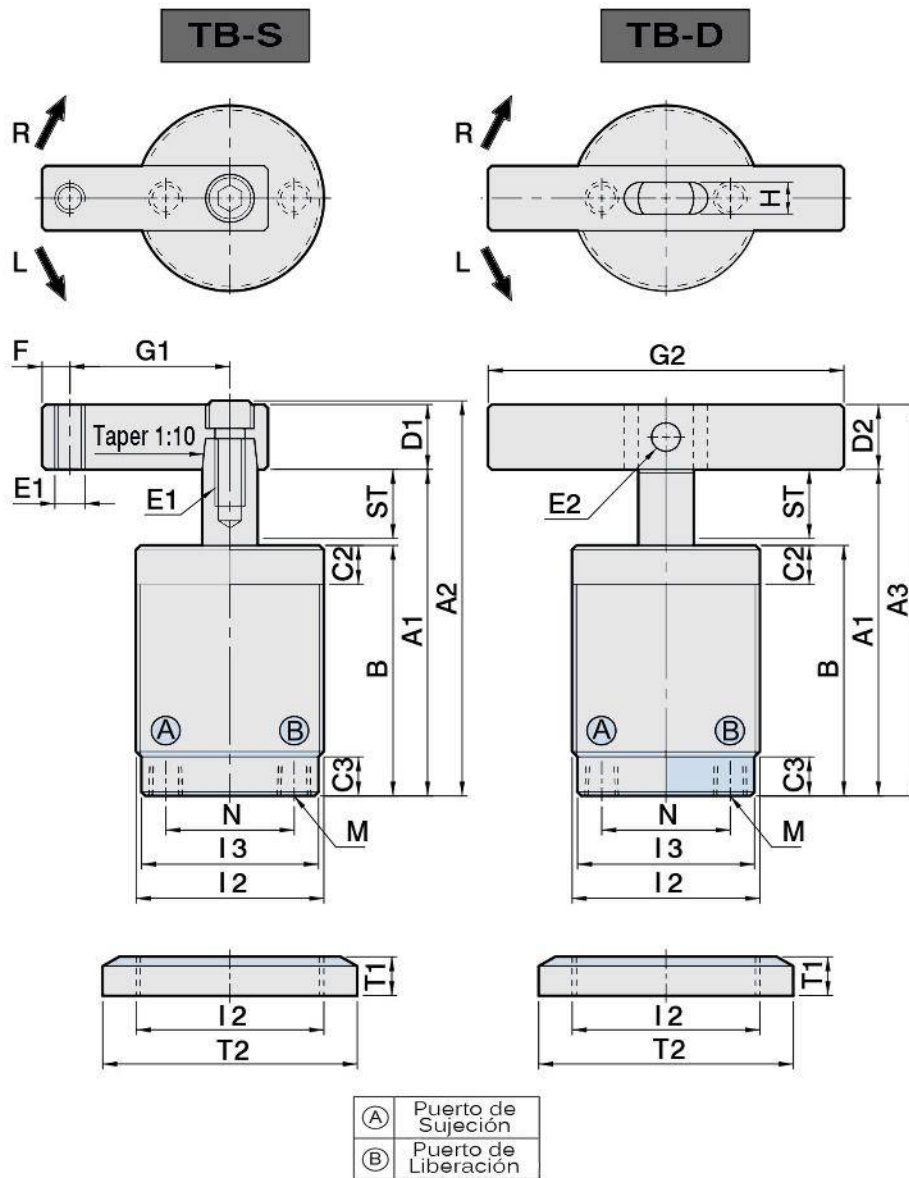


Characteristics & Dimensions

SERIES		ASC-TB			
DEVICE TYPE		PNEUMATIC DEVICE WITH THREADED BODY			
Cilinder Bore	Ø25	Ø32	Ø40	Ø50	Ø60
Piston Rod Diameter	Ø14.00	Ø16.00	Ø16.00	Ø20.00	Ø20.00
Turning Stroke	9.00	11.00	11.00	13.00	13.00
Gripping Stroke STD/INCR	13.00	15.00/30.00	15.00/30.00	17.00/34.00	17.00/34.00
Piston Area (Pull/Push) (cm ²)	3.37 / 4.90	6.03 / 8.04	10.56 / 12.57	16.49 / 19.63	28.03 / 31.17
Theoretical Clamping Force (6.00 Kg/cm ²)	20.00	36.00	63.00	99.00	168.00
Luid Tyoe	Filtered Air				
Maximum Operating Pressure	10.00 Kg/cm ²				
Operating Pressure Range	1.00 Kg/cm ² ~ 7.00 Kg/cm ²				
Rotating Direccion	R : Right Turn L : Left Turn N : Without Turn				
Rotating Angle	45° & 60°: Optional 90°: Standard				
Acuator Type	Double Action				
**** Todas las dimensiones estaban dadas en milímetros.					



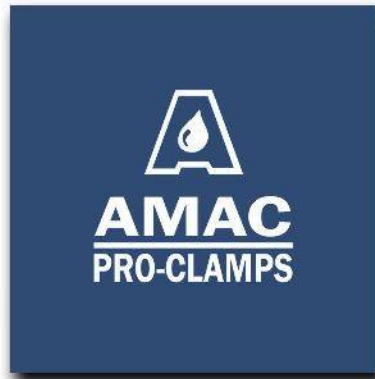
AMAC
PRO-CLAMPS



Characteristics & Dimensions

SERIES	ASC-TB		
MODEL	ASC-TB 32	ASC-TB 40	ASC-TB 50
ST: TURN/CLAMP	26:11/15	26:11/15	30:30/17
A1	108.00	108.00	124.00
A2	-128.00	-128.00	-150.40
A3	127.00	127.00	146.20
B	78.00	78.00	90.00
C1	22.00	22.00	25.00
C2/C3	10.00/9.00	10.00/9.00	12.00/11.00
D1	■ 19.00	■ 19.00	■ 25.40
D2	■ 19.00	■ 19.00	■ 22.20
E1	M8 x 1.25	M8 x 1.25	M10 x 1.50
E2	Ø8.00	Ø8.00	Ø8.00
F	8.00	8.00	10.00
G1	50.00	55.00	60.00
G2	140.00	140.00	160.00
H	9.00	9.00	10.00
ØI1	Ø46.00	Ø55.00	Ø65.00
I2/I3	M50 x 1.50/Ø48.00	M55 x 1.50/Ø53	M65 x 1.50/Ø63
J	50.00	60.00	70.00
K	40.00	48.00	57.00
L	Ø5.60~Ø9.00 x 5.50D	Ø6.80~Ø1.50 x 6.50D	Ø6.80~Ø10.50 x 6.50D
M	PT 1/8	PT 1/8	PT 1/8
N	32.00	40.00	50.00
T1 x 2PCS	11.00	11.00	12.00
T2	Ø70.00	Ø75.00	Ø85.00

**** All dimensions are given in millimeters.



FCV SERIES

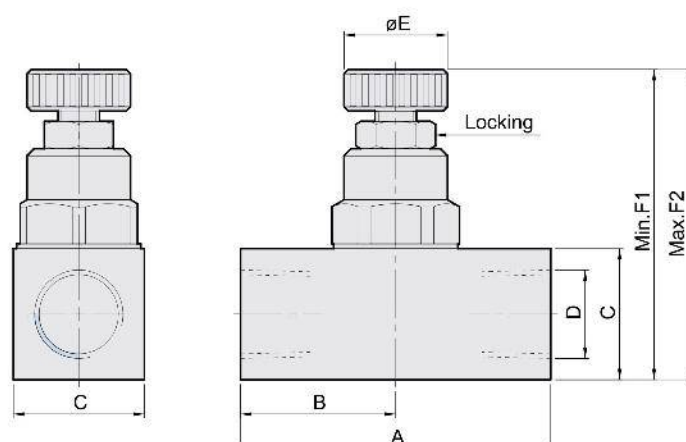
FCV

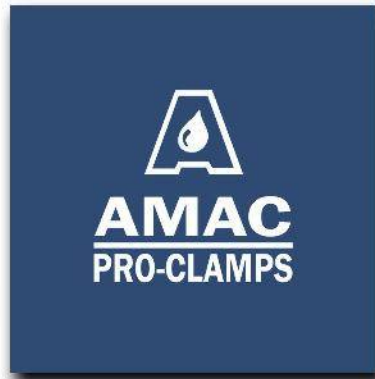
HYDRAULIC FLOW CONTROL VALVE



Characteristics & Dimensions

SERIES		FCV	
DEVICE TYPE		HYDRAULIC FLOW CONTROL VALVE	
MODEL	FCV-01	FCV-02	
A	35.00	45.00	
B	19.00	22.50	
C	■ 15.90	■ 19.00	
D	PT 1/8"	PT 1/4"	
ØE	Ø12.00	Ø15.00	
ØF1	41.00	45.00	
ØF2	44.50	48.50	
**** All dimensions are given in millimeters.			





HB SERIES

HB SERIES

HI PRESSURE AMPLIFIER



- **Pmax : 50 Kg/cm².**

- A hydraulic sequential valve is attached to the structure of this unit. When it is in operation, you can grease the cylinder and make it have dual pressure and let the sequential valve act, and then it will provide multiple boost pressure.

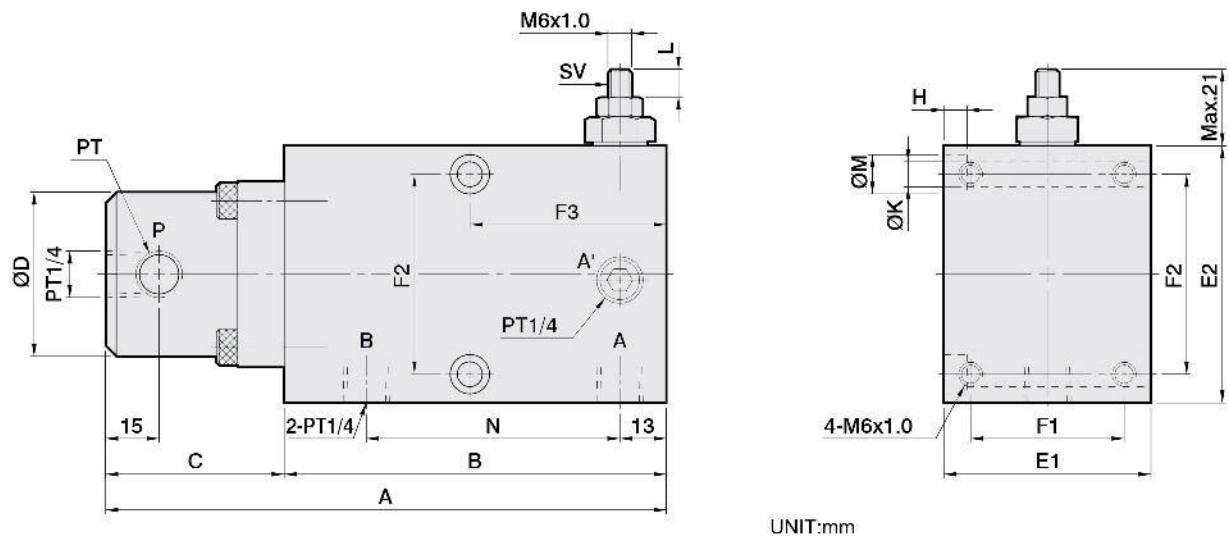
- It is suitable for special-use hydraulic machines and MC clamp in low-pressure circuit.

It needs a solenoid valve installed in the circuit and then it can operate the HB supercharger. The supercharger can be converted automatically.

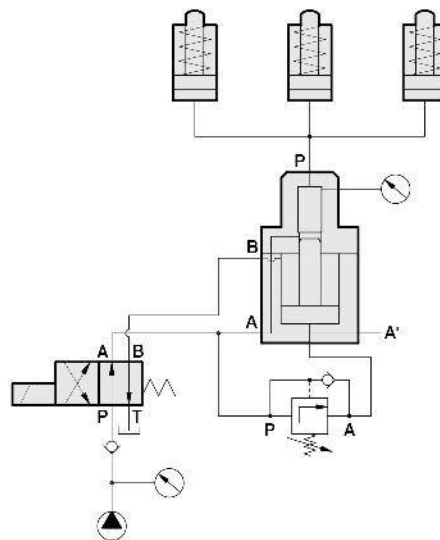


Characteristics & Dimensions

SERIES		HB		
DEVICE TYPE	HYDRAULIC AMPLIFIERS			
	MANIFOLD TYPE			
MODEL	HB - M 9 x 6	HB - M 5 x 10	HB - M 3.5 x 15	HB - M 3.2 x 25
MAXIMUM WORKING PRESSURE (Kg/cm ²)	10.00 Kg/cm ² ~ 50.00 Kg/cm ²			30.00 Kg/cm ² ~ 200.00 Kg/cm ²
OPERATING PRESSURE RANGE (Kg/cm ²)	35.00			
PRESSURE INCREMENT RANGE (Kg/cm ²)	9.00	5.00	3.50	3.20
HI PRESSURE OUTPUT (C.C.)	6.00	10.00	15.00	25.00
DEVICE PRESSURE TYPE	STANDARD	STANDARD	STANDARD	STANDARD
***** All dimensions are given in millimeters.				



Circuit diagram



Characteristics & Dimensions

SERIES		HB
DEVICE TYPE	HYDRAULIC AMPLIFIERS	
	HI PRESSURE TYPE	
MODEL	HB - 3.2 x 25	HB - M 3.5 x 15
MAXIMUM WORKING PRESSURE (Kg/cm ²)	50.00 Kg/cm ²	
OPERATING PRESSURE RANGE (Kg/cm ²)	30.00 Kg/cm ² ~ 20.00 Kg/cm ²	
PRESSURE INCREMENT RANGE (Kg/cm ²)	3.20	
HI PRESSURE OUTPUT (C.C.)	25.00	
DEVICE PRESSURE TYPE	HI PRESSURE STANDARD	HI PRESSURE MANIFOLD
••••• All dimensions are given in millimeters.		

Characteristics & Dimensions

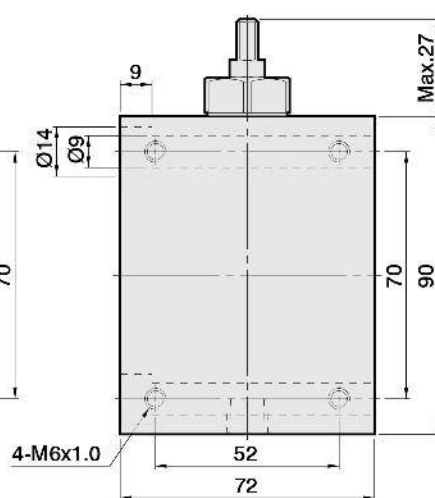
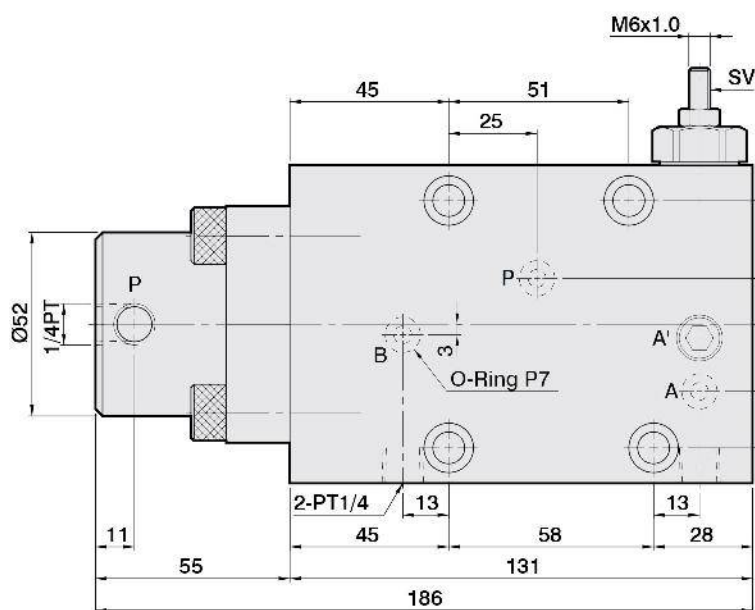
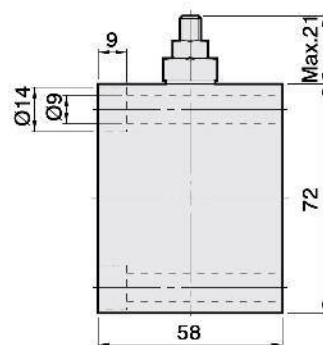
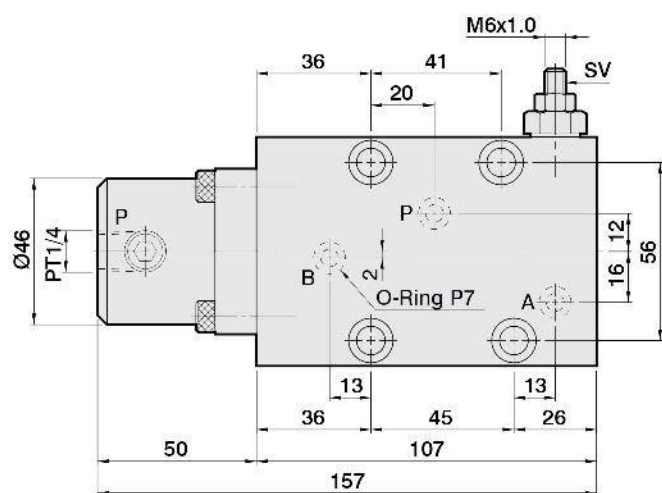
SERIES							HPS				
MODEL	HB-9x6	HB-5x10	HB-3.5x15	HB-8x22	HB-5x35	HB-3.8x45	HB-M9x6	HB-M5x10	HB-M3.5x15	HB-3.2x25	HB-M3.2x25
ST: TURN/ GRIP	HB-9x6	HB-5x10	HB-3.5x15	HB-8x22	HB-5x35	HB-3.8x45	HB-M9x6	HB-M5x10	HB-M3.5x15	HB-3.2x25	HB-M3.2x25
A2	157.00			210.00			157.00			186.00	
B	107.00			139.00			107.00			131.00	
C	50.00			71.00			50.00			55.00	
ØD	Ø46.00			Ø58.00			Ø46.00			52.00	
E1	58.00			82.00			58.00			72.00	
E2	72.00			95.00			72.00			90.00	
F1	43.00			62.00			-			52.00	
F2	56.00			80.00			-			70.00	
F3	55.00			70.00			-			-	
H	7.00			9.00			7.00			9.00	
ØK	Ø7.00			Ø9.00			Ø7.00			9.00	
ØM	Ø11.00			Ø14.00			Ø11.00			14.00	
N	71.00			96.00			-			-	
PT	PT 1/4"	PT 1/8"	PT 1/8"	PT 1/4"	PT 1/4"	PT 1/4"	PT 1/4"	PT 1/4"	PT 1/4"	PT 1/4"	PT 1/4"
INC ¹	9.00	5.00	3.50	8.00	5.00	3.80	9.00	5.00	3.50	3.20	3.20
OUT ²	6.00	10.00	15.00	22.00	35.00	45.00	6.00	10.00	15.00	25.00	25.00
TIPO ³	STD	STD	STD	STD	STD	STD	MNF	MNF	MNF	STD	MNF

** INC¹ : Pressure Increase Range. (Kg/cm²)

*** OUT² : Hi Pressure Output. (c.c.)

**** TIPO³ : STD: Standard Type, MNF:Manifold.

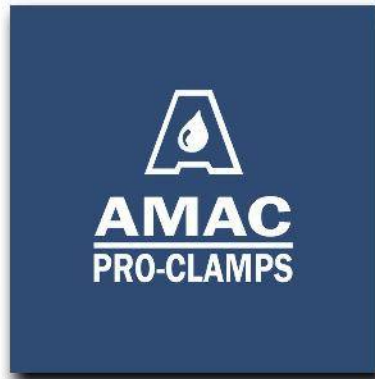
***** All dimensions are given in millimeters.



Characteristics & Dimensions

SERIES		HB					
DEVICE TYPE		HYDRAULIC AMPLIFIERS					
		STANDARD TYPE					
MODEL		HB - 9 x 6	HB - 5 x 10	HB - 3.5 x 15	HB - 8 x 22	HB - 5 x 35	HB - 3.8 x 45
MAXIMUM WORKING PRESSURE (Kg/cm ²)		10.00 Kg/cm ² ~ 50.00 Kg/cm ²					
OPERATING PRESSURE RANGE (Kg/cm ²)		35.00					
PRESSURE INCREMENT RANGE (Kg/cm ²)		9.00	5.00	3.50	8.00	5.00	3.80
HI PRESSURE OUTPUT	(C.C.)	6.00	10.00	15.00	22.00	35.00	45.00

**** All dimensions are given in millimeters.



**HBC
SERIES**

HBC SERIES

HYDRAULIC CYLINDER BLOCKS

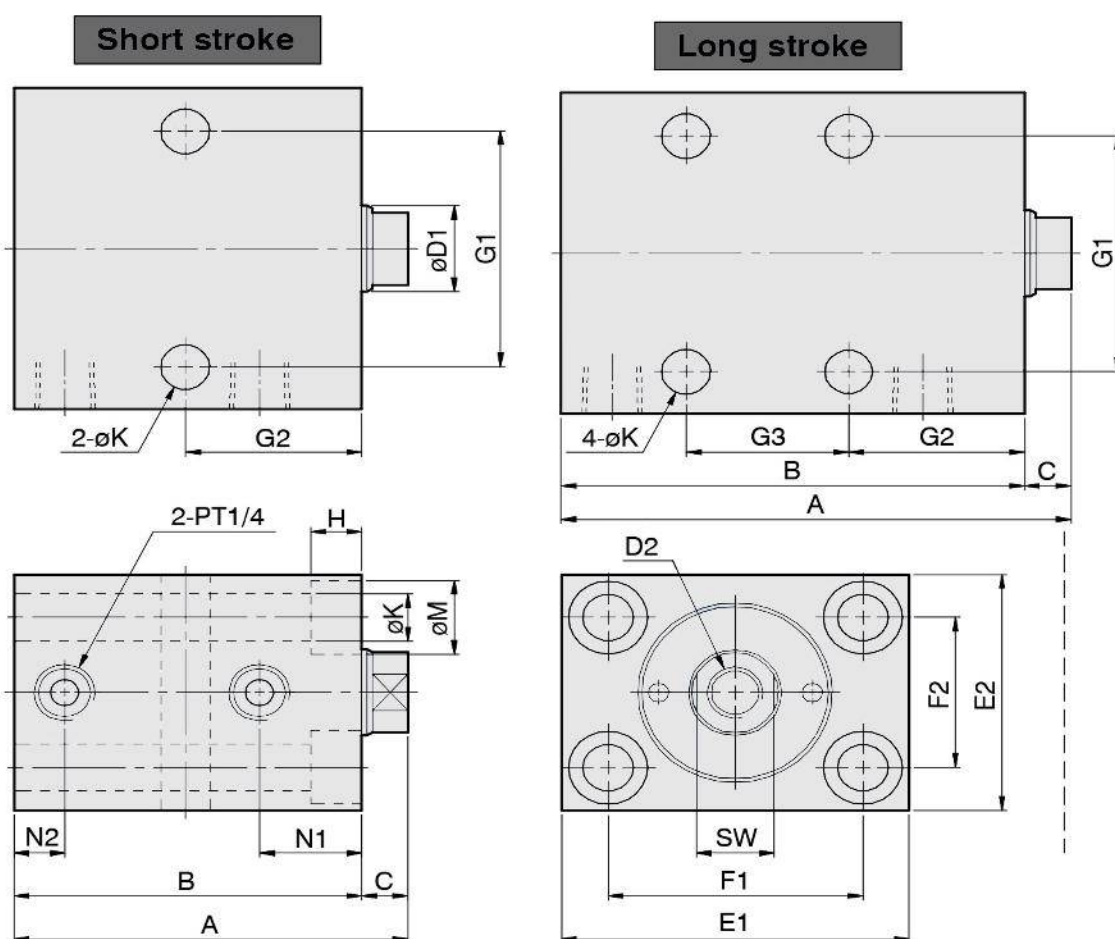
(HI PRESSURE)



Characteristics & Dimensions

SERIES		HBC			
DEVICE TYPE		HYDRAULIC CYLINDER BLOCK			
CYLINDER TYPE		Ø16	Ø25	Ø32	Ø40
PISTON ROD DIAMETER		Ø10	Ø16	Ø20	Ø25
PRESSURE AREA (cm ²)	F1 (PUSH)	2.01	4.91	8.04	12.57
	F2 (PULL)	1.22	2.90	4.90	7.66
PRESSURE AREA (Jalar/Empujar) (cm ²)	100 F1 (PUSH)	201.00	491.00	804.00	1,257.00
	100 F2 (PULL)	122.00	290.00	490.00	766.00
	500 F1 (PUSH)	1,005.00	2,455.00	4,020.00	6,285.00
	500 F2 (PULL)	610.00	1,450.00	2,450.00	3,830.00
PISTON STROKE		AS IN TABLE			
ACUATOR TYPE		SIMPLE & DOUBLE ACTION			

*** All dimensions are given in millimeters.



Characteristics & Dimensions

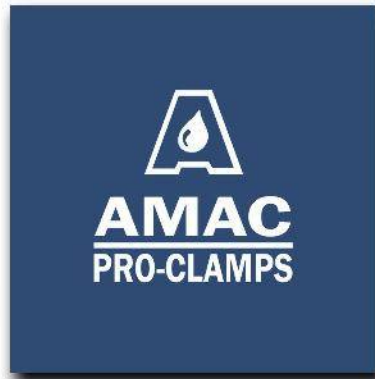
SERIES		HBC						
MODEL	HBC-16		HBC-25		HBC-32		HBC-40	
ACTION TYPE	SINGLE		SINGLE		SINGLE		SINGLE	
Carrera	8.00	20.00	8.00	20.00	10.00	20.00	10.00	20.00
A	62.00	97.00	71.00	101.00	85.00	110.00	89.00	114.00
B	56.00	91.00	64.00	94.00	75.00	100.00	79.00	104.00
C	6.00		7.00		10.00		10.00	
D1	10.00		16.00		20.00		25.00	
D2	M6 x 1.0	12	M10 x 1.5	15	M12 x 1.75	15	M16 x 2.0	25
SW	DEEP		DEEP		15 DEEP		25 DEEP	
E1	60.00		65.00		75.00		85.00	
E2	35.00		45.00		55.00		63.00	
F1	40.00		50.00		55.00		63.00	
F2	22.00		30.00		35.00		40.00	
G1	30.00		50.00		55.00		63.00	
G2	30.00		33.00		38.00		40.00	
G3	36.50		35.00		35.00		37.00	
H	6.50		9.00		11.00		11.00	
K	6.80		9.00		11.00		11.00	
M	11.00		14.00		18.00		18.00	
N1	16.50		18.00		22.00		24.00	
N2	11.00		11.00		11.00		11.00	

*** All dimensions are given in millimeters.

Characteristics & Dimensions

SERIES		HBC						
Modelo	HBC-16	HBC-25		HBC-32		HBC-40		
ACTION TYPE	DOUBLE		DOUBLE		DOUBLE		DOUBLE	
Carrera	16.00	50.00	20.00	50.00	25.00	50.00	25.00	50.00
A	62.00	97.00	71.00	101.00	85.00	110.00	89.00	114.00
B	56.00	91.00	64.00	94.00	75.00	100.00	79.00	104.00
C	6.00		7.00		10.00		10.00	
D1	10.00		16.00		20.00		25.00	
D2	M6 x 1.0	12	M10 x 1.5	15	M12 x 1.75		M16 x 2.0	
	DEEP		DEEP		15 DEEP		25 DEEP	
SW	8.00		13.00		17.00		21.00	
E1	60.00		65.00		75.00		85.00	
E2	35.00		45.00		55.00		63.00	
F1	40.00		50.00		55.00		63.00	
F2	22.00		30.00		35.00		40.00	
G1	30.00		50.00		55.00		63.00	
G2	30.00		33.00		38.00		40.00	
G3	36.50		35.00		35.00		37.00	
H	6.50		9.00		11.00		11.00	
K	6.80		9.00		11.00		11.00	
M	11.00		14.00		18.00		18.00	
N1	16.50		18.00		22.00		24.00	
N2	11.00		11.00		11.00		11.00	

*** All dimensions are given in millimeters.



HBC-LM SERIES

HBC-LM SERIES



LONG STROKE HYDRAULIC CYLINDER BLOCK WITH MANIFOLD

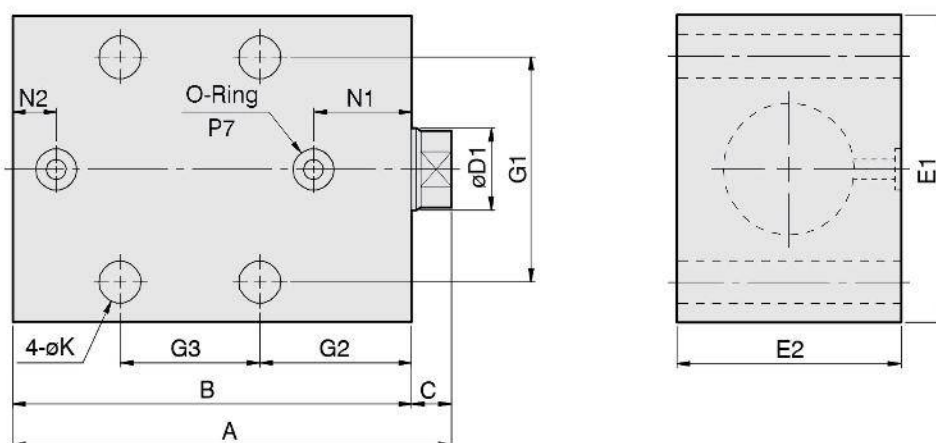
(HI PRESSURE)



Characteristics & Dimensions

SERIES			HBC-LM			
DEVICE TYPE			LONG STROKE HYDRAULIC CYLINDER BLOCK WITH MANIFOLD			
CYLINDER TYPE			Ø16	Ø25	Ø32	Ø40
PISTON ROD DIAMETER			Ø10	Ø16	Ø20	Ø25
PRESSURE AREA (cm ²)		F1 (PUSH)	2.01	4.91	8.04	12.57
		F2 (PULL)	1.22	2.90	4.90	7.66
PRESSURE AREA (PULL/PUSH) (cm ²)	100	F1 (PUSH)	201.00	491.00	804.00	1,257.00
		F2 (PULL)	122.00	290.00	490.00	766.00
	500	F1 (PUSH)	1,005.00	2,455.00	4,020.00	6,285.00
		F2 (PULL)	610.00	1,450.00	2,450.00	3,830.00
PISTON STROKE			Según Tabular			
ACUATOR TYPE			Acción Doble			
**** All dimensions are given in millimeters.						

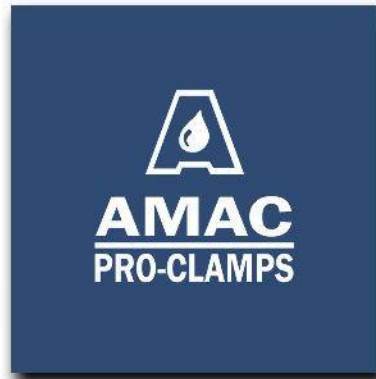
LM Long stroke manifold



Characteristics & Dimensions

SERIES		HBC-LM						
MODEL	HBC-LM 16		HBC-LM 25		HBC-LM 32		HBC-LM 40	
STROKE TYPE	SHORT	LONG	SHORT	LONG	SHORT	LONG	SHORT	LONG
Stroke	16.00	50.00	20.00	50.00	25.00	50.00	25.00	50.00
A	62.00	97.00	71.00	101.00	85.00	110.00	89.00	114.00
B	56.00	91.00	64.00	94.00	75.00	100.00	79.00	104.00
C	6.00		7.00		10.00		10.00	
D1	10.00		16.00		20.00		25.00	
D2	M6 x 1.0	12	M10 x 1.5	15	M12 x 1.75		M16 x 2.0	
	DEEP		DEEP		15 DEEP		25 DEEP	
SW	8.00		13.00		17.00		21.00	
E1	60.00		65.00		75.00		85.00	
E2	35.00		45.00		55.00		63.00	
F1	40.00		50.00		55.00		63.00	
F2	22.00		30.00		35.00		40.00	
G1	30.00		50.00		55.00		63.00	
G2	30.00		33.00		38.00		40.00	
G3	36.50		35.00		35.00		37.00	
H	6.50		9.00		11.00		11.00	
K	6.80		9.00		11.00		11.00	
M	11.00		14.00		18.00		18.00	
N1	19.50		21.00		24.50		27.00	
N2	11.00		11.00		11.00		11.00	

*** All dimensions are given in millimeters.



HBC-MA SERIES

HBC-MA SERIES



HYDRAULIC BLOCK CYLINDER WITH ROD MANIFOLD

(HI PRESSURE)

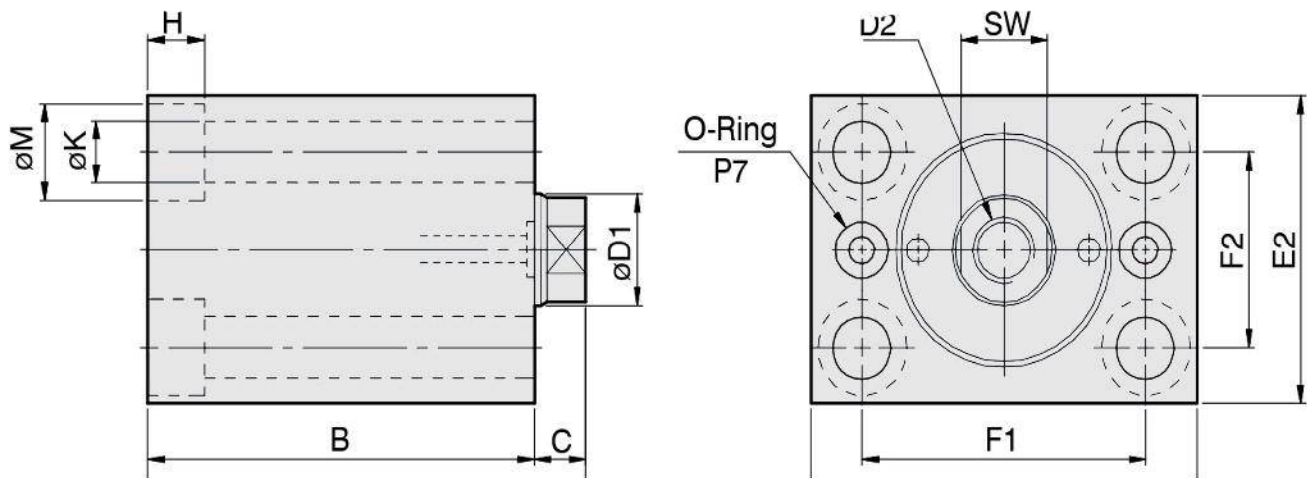


Characteristics & Dimensions

SERIES			HBC-MA			
DEVICE TYPE			HYDRAULIC BLOCK CYLINDER WITH ROD MANIFOLD			
CYLINDER TYPE			Ø16	Ø25	Ø32	Ø40
PISTON ROD DIAMETER			Ø10	Ø16	Ø20	Ø25
PRESSURE AREA (cm ²)	F1 (PUSH)		2.01	4.91	8.04	12.57
	F2 (PULL)		1.22	2.90	4.90	7.66
PRESSURE AREA (PULL/PUSH) (cm ²)	100	F1 (PUSH)	201.00	491.00	804.00	1,257.00
		F2 (PULL)	122.00	290.00	490.00	766.00
	500	F1 (PUSH)	1,005.00	2,455.00	4,020.00	6,285.00
		F2 (PULL)	610.00	1,450.00	2,450.00	3,830.00
PISTON STROKE			As In Table			
ACUATOR TYPE			Double Action			
**** All dimensions are given in millimeters.						



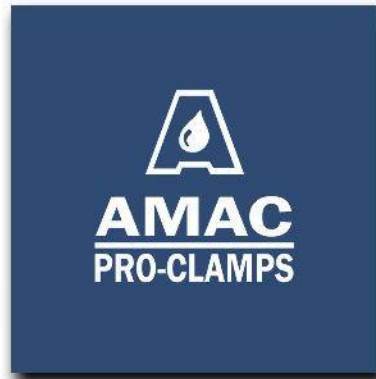
MA Rod side manifold



Characteristics & Dimensions

SERIE		HBC-MA						
MODEL	HBC-MA 16		HBC-MA 25		HBC-MA 32		HBC-MA 40	
STROKE TYPE	SHORT	LONG	SHORT	LONG	SHORT	LONG	SHORT	LONG
STROKE	16.00	50.00	20.00	50.00	25.00	50.00	25.00	50.00
A	62.00	97.00	71.00	101.00	85.00	110.00	89.00	114.00
B	56.00	91.00	64.00	94.00	75.00	100.00	79.00	104.00
C	6.00		7.00		10.00		10.00	
D1	10.00		16.00		20.00		25.00	
D2	M6 x 1.0	12	M10 x 1.5	15	M12 x 1.75		M16 x 2.0	
	DEEP		DEEP		15 DEEP		25 DEEP	
SW	8.00		13.00		17.00		21.00	
E1	60.00		65.00		75.00		85.00	
E2	35.00		45.00		55.00		63.00	
F1	40.00		50.00		55.00		63.00	
F2	22.00		30.00		35.00		40.00	
G1	30.00		50.00		55.00		63.00	
G2	30.00		33.00		38.00		40.00	
G3	36.50		35.00		35.00		37.00	
H	6.50		9.00		11.00		11.00	
K	6.80		9.00		11.00		11.00	
M	11.00		14.00		18.00		18.00	
N1	19.50		21.00		24.50		27.00	
N2	11.00		11.00		11.00		11.00	

*** All dimensions are given in millimeters.



HBC-MB SERIES

HBC-MB SERIES



BLOCK HYDRAULIC CYLINDER WITH LOWER MANIFOLD

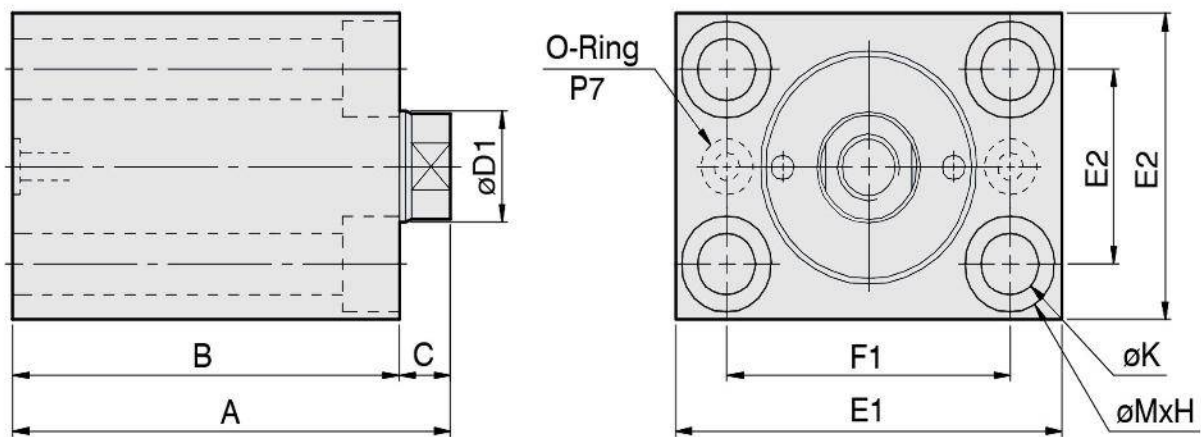
(HI PRESSURE)



Characteristics & Dimensions

SERIES		HBC-MB				
BLOCK HYDRAULIC CYLINDER WITH LOWER MANIFOLD						
CYLINDER TYPE		Ø16	Ø25	Ø32	Ø40	
PISTON ROD DIAMETER		Ø10	Ø16	Ø20	Ø25	
PRESSURE AREA (cm ²)	F1 (PUSH)	2.01	4.91	8.04	12.57	
	F2 (PULL)	1.22	2.90	4.90	7.66	
PRESSURE AREA (PULL/PUSH) (cm ²)	100	F1 (PUSH)	201.00	491.00	804.00	1,257.00
		F2 (PULL)	122.00	290.00	490.00	766.00
	500	F1 (PUSH)	1,005.00	2,455.00	4,020.00	6,285.00
		F2 (PULL)	610.00	1,450.00	2,450.00	3,830.00
PISTON STROKE		AS IN TABLE				
ACUATOR TYPE		DOUBLE ACTION				
**** All dimensions are given in millimeters.						

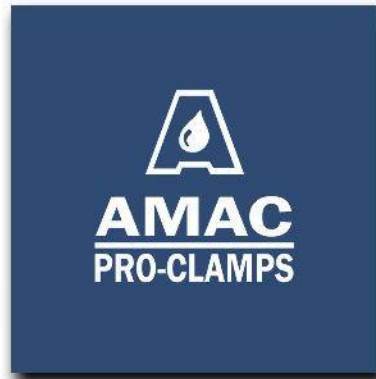
MB Bottom side manifold



Characteristics & Dimensions

SERIES		HBC-MB						
MODEL	HBC-MB 16		HBC-MB 25		HBC-MB 32		HBC-MB 40	
STROKE TYPE	SHORT	LONG	SHORT	LONG	SHORT	LONG	SHORT	LONG
Carrera	16.00	50.00	20.00	50.00	25.00	50.00	25.00	50.00
A	62.00	97.00	71.00	101.00	85.00	110.00	89.00	114.00
B	56.00	91.00	64.00	94.00	75.00	100.00	79.00	104.00
C	6.00		7.00		10.00		10.00	
D1	10.00		16.00		20.00		25.00	
D2	M6 x 1.0	12	M10 x 1.5	15	M12 x 1.75	M16 x 2.0		
	DEEP		DEEP		15 DEEP	25 DEEP		
SW	8.00		13.00		17.00		21.00	
E1	60.00		65.00		75.00		85.00	
E2	35.00		45.00		55.00		63.00	
F1	40.00		50.00		55.00		63.00	
F2	22.00		30.00		35.00		40.00	
G1	30.00		50.00		55.00		63.00	
G2	30.00		33.00		38.00		40.00	
G3	36.50		35.00		35.00		37.00	
H	6.50		9.00		11.00		11.00	
K	6.80		9.00		11.00		11.00	
M	11.00		14.00		18.00		18.00	
N1	19.50		21.00		24.50		27.00	
N2	11.00		11.00		11.00		11.00	

*** All dimensions are given in millimeters.



HBC-SM SERIES

HBC-SM SERIES



SHORT STROKE BLOCK HYDRAULIC CYLLINDER WITH MANIFOLD

(HIGH PRESSURE)

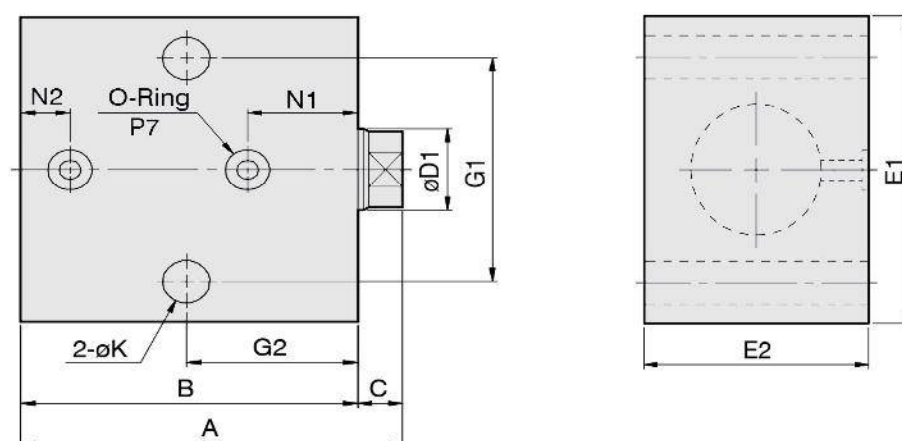


Characteristics & Dimensions

SERIES		HBC-SM						
MODEL	HBC-SM 16		HBC-SM 25		HBC-SM 32		HBC-SM 40	
STROKE TYPE	SHORT	LONG	SHORT	LONG	SHORT	LONG	SHORT	LONG
STROKE	16.00	50.00	20.00	50.00	25.00	50.00	25.00	50.00
A	62.00	97.00	71.00	101.00	85.00	110.00	89.00	114.00
B	56.00	91.00	64.00	94.00	75.00	100.00	79.00	104.00
C	6.00		7.00		10.00		10.00	
D1	10.00		16.00		20.00		25.00	
D2	M6 x 1.0	12	M10 x 1.5	15	M12 x 1.75	M16 x 2.0		
	DEEP		DEEP		15 DEEP	25 DEEP		
SW	8.00		13.00		17.00		21.00	
E1	60.00		65.00		75.00		85.00	
E2	35.00		45.00		55.00		63.00	
F1	40.00		50.00		55.00		63.00	
F2	22.00		30.00		35.00		40.00	
G1	30.00		50.00		55.00		63.00	
G2	30.00		33.00		38.00		40.00	
G3	36.50		35.00		35.00		37.00	
H	6.50		9.00		11.00		11.00	
K	6.80		9.00		11.00		11.00	
M	11.00		14.00		18.00		18.00	
N1	19.50		21.00		24.50		27.00	
N2	11.00		11.00		11.00		11.00	

*** All dimensions are given in millimeters.

SM Short stroke manifold



Characteristics & Dimensions

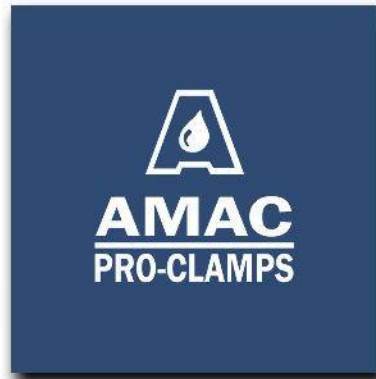
SERIE

HBC-SM

SHORT STROKE BLOCK HYDRAULIC CYLLINDER WITH MANIFOLD

CYLINDER TYPE		Ø16	Ø25	Ø32	Ø40	
PISTON ROD DIAMETER		Ø10	Ø16	Ø20	Ø25	
PRESSURE AREA (cm ²)	F1 (PUSH)	2.01	4.91	8.04	12.57	
	F2 (PULL)	1.22	2.90	4.90	7.66	
PRESSURE AREA (PULL/PUSH) (cm ²)	100	F1 (PUSH)	201.00	491.00	804.00	1,257.00
		F2 (PULL)	122.00	290.00	490.00	766.00
	500	F1 (PUSH)	1,005.00	2,455.00	4,020.00	6,285.00
		F2 (PULL)	610.00	1,450.00	2,450.00	3,830.00
PISTON STROKE		Según Tabular				
ACUATOR TYPE		Acción Doble				

**** Todas las dimensiones estaban dadas en milímetros.



HLB SERIES

HLB SERIES

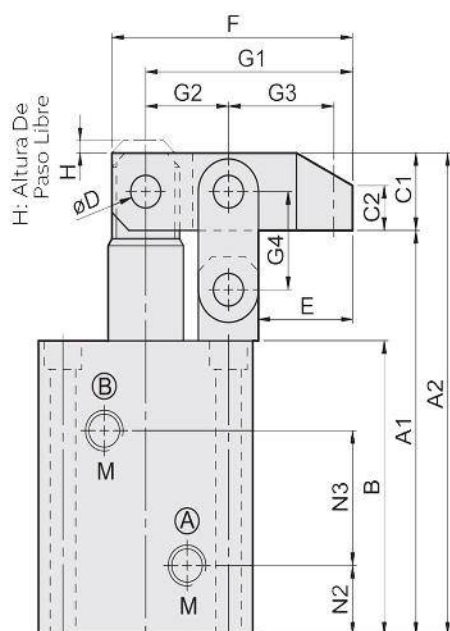
LEVER TYPE HYDRAULIC CYLINDER



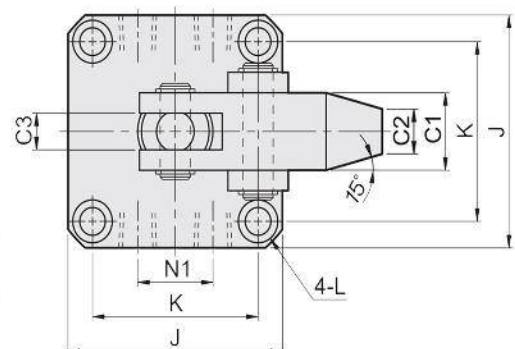
Characteristics & Dimensions

MODEL	HLB-25	HLB-32	HLB-40
A1	107.00	128.00	122.00
A2	126.00	150.20	144.20
B	80.00	96.00	90.00
C1	19.00	22.20	Ø22.20
C2	11.00	13.00	13.00
C3	9.00	10.00	10.00
D	Ø8	Ø10	Ø10
E	23.50	29.00	30.00
F	64.00	77.00	77.00
G1	55.00	66.00	66.00
G2	22.00	26.00	26.00
G3	28.00	34.00	34.00
G4	24.00	29.00	29.00
H	3.00	4.00	4.00
J	56.00	70.00	69.00
K	43.00	53.00	52.00
L	Ø6.80 ~ Ø10.50 x 6.50D	Ø9.00 ~ Ø14.00 x 9.00D	Ø9.00 ~ Ø14.00 x 9D
M	PT 1/8	PT 1/4"	PT 1/4
N1	18.00	26.00	26.00
N2	19.00	22.00	19.00
N3	34.00	42.00	40.00
N4	20.00	26.00	26.00
SEAL TYPE (O-Rings)	P7	P8	P8

*** All dimensions are given in millimeters.



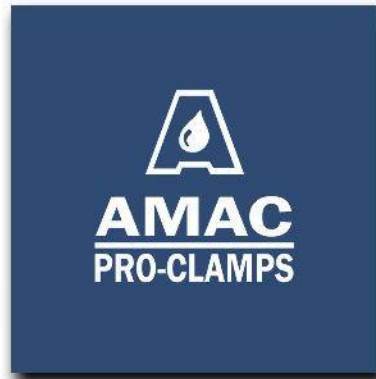
Ⓐ	Puerto De Sujeción
Ⓑ	Puerto De Liberación



Characteristics & Dimensions

MODEL	HLB-25	HLB-32	HLB-40
Cylinder Diameter	Ø25	Ø32	Ø40
Piston Rod Diameter	Ø18	Ø20	Ø25
Toral Stroke	25.00	25.00	30.00
Pressure Area (Pull/push) (cm ²)	2.37 / 4.91	4.90 / 8.04	7.66 / 12.57
Theoretical Gripping Force (100 Kg/cm ²)	388.00	635.00	955.00
Fluid Type	Hydraulic Filtered Oil		
Operating Pressure Range	5 ~ 140 Kg/cm ²		
Acuator Type	Double Action		

*** All dimensions are given in millimeters.



HLB-FA SERIES

HLB-FA SERIES

LEVER FLANGE TYPE HYDRAULIC CYLINDER

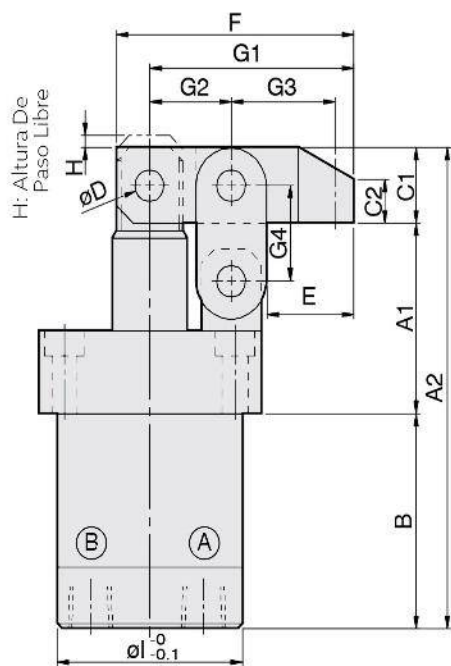




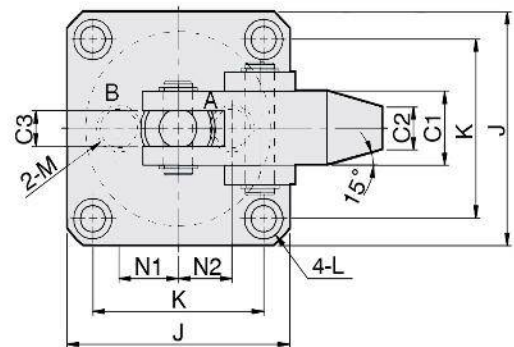
Characteristics & Dimensions

MODEL	HLB-FA 25	HLB-FA 32	HLB-FA 40
Cylinder Diameter	Ø25	Ø32	Ø40
Piston Rod Diameter	Ø18	Ø20	Ø25
Total Stroke	25.00	25.00	30.00
Pressure Area (Pull/push) (cm ²)	2.37 / 4.91	4.90 / 8.04	7.66 / 12.55
Theoretical Gripping Force (100 Kg/cm ²)	388.00	635.00	955.00
Fluid Type	Hydraulic Filtered Oil		
Operating Pressure Range	5 ~ 140 Kg/cm ²		
Acuator Type	Double Action		

*** All dimensions are given in millimeters.



(A)	Puerto De Sujeción
(B)	Puerto De Liberación

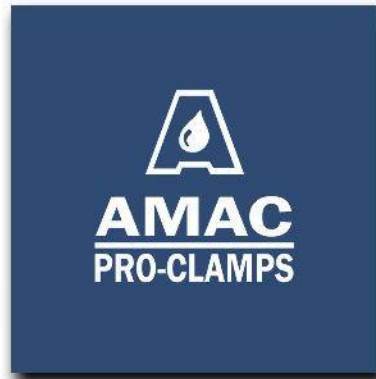




Characteristics & Dimensions

MODEL	HLB-FA 25	HLB-FA 32	HLB-FA 40
A1	49.00	52.00	57.00
A2	133.00	137.00	155.20
B	66.00	66.00	76.00
C1	19.00	19.00	22.20
C2	11.00	11.00	13.00
C3	9.00	9.00	10.00
D	Ø8	Ø8	Ø10
E	23.50	23.50	29.00
F	64.00	64.00	77.00
G1	55.00	55.00	66.00
G2	22.00	22.00	26.00
G3	28.00	28.00	34.00
G4	24.00	24.00	29.00
H	3.00	3.00	4.00
ØI	Ø45	Ø50	Ø58
J	56.00	60.00	70.00
K	43.00	46.00	53.00
L	Ø6.80 ~ Ø10.50 x 6.50D	Ø6.80 ~ Ø10.50 x 6.50D	Ø9.00 ~ Ø14.00 x 9.00D
M	PT 1/4"	PT 1/4"	PT 1/4"
N1	12.50	16.00	20.00
N2	12.50	14.50	17.50
N3	-	-	-
N4	-	-	-
SEAL TYPE (O-Rings)	-	-	-

*** All dimensions are given in millimeters.



HLB-FAM SERIES

HLB-FAM SERIES



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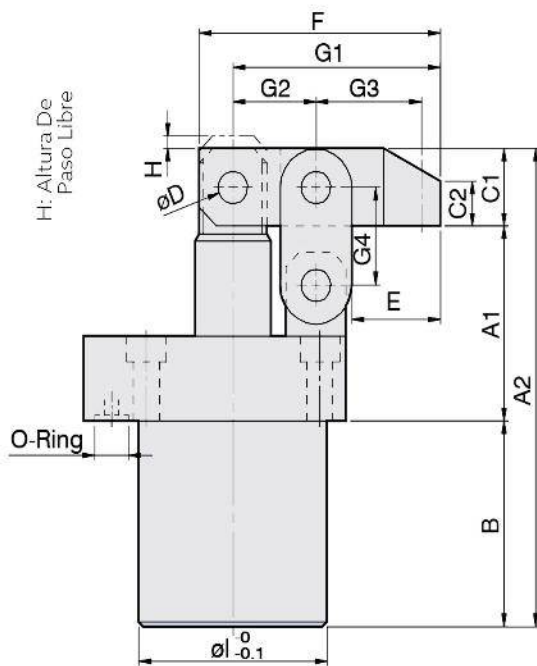
FLANGE LEVER TYPE HYDRAULIC CYLINDER WITH MANIFOLD



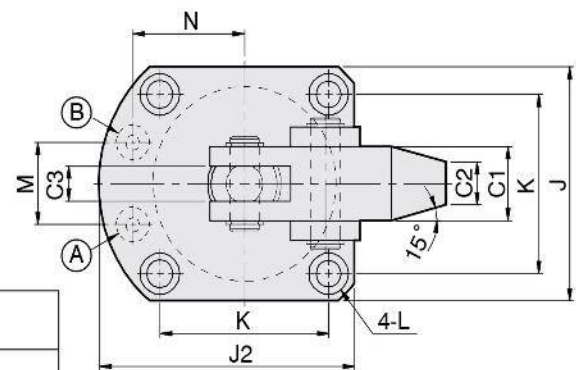


Characteristics & Dimensions

MODEL	HLB-FAM 25	HLB-FAM 32	HLB-FAM 40
Cylinder Diameter	Ø25	Ø32	Ø40
Piston Rod Diameter	Ø18	Ø20	Ø25
Toral Stroke	25.00	25.00	30.00
Pressure Area (Pull/push) (cm ²)	2.37 / 4.91	4.90 / 8.04	7.66 / 12.57
Theoretical Gripping Force (100 Kg/cm ²)	388.00	635.00	955.00
Fluid Type	HYDRAULIC FILTERED OIL		
Operating Pressure Range	5 ~ 140 Kg/cm ²		
Acuator Type	DOUBLE ACTION		
*** All dimensions are given in millimeters.			



(A)	Puerto De Sujeción
(B)	Puerto De Liberación

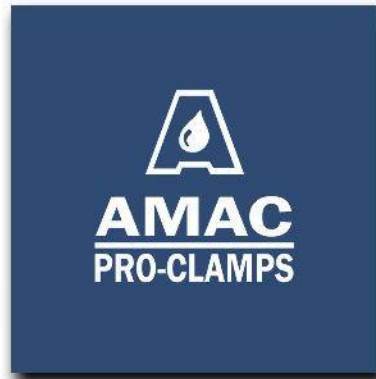




Characteristics & Dimensions

MODEL	HLB-FAM 25	HLB-FAM 32	HLB-FAM 40
A1	49.00	52.00	57.00
A2	126.00	131.00	150.20
B	58.00	60.00	70.00
C1	19.00	19.00	22.10
C2	11.00	11.00	13.00
C3	9.00	9.00	10.00
D	Ø8	Ø8	Ø10
E	23.50	23.50	29.00
F	64.00	64.00	77.00
G1	55.00	55.00	66.00
G2	22.00	22.00	26.00
G3	28.00	28.00	34.00
G4	24.00	24.00	29.00
H	3.00	3.00	4.00
ØI	Ø45	Ø50	Ø58
J1	56.00	60.00	70.00
J2	65.00	69.00	81.00
K	43.00	5.00	53.00
L	Ø6.80 ~ Ø10.50 x 6.50D	Ø6.80 ~ Ø10.50 x 6.50D	Ø9.00 ~ Ø14.00 x 9.00D
M	20.00	21.00	27.00
N1	28.00	30.50	35.00
N2	-	-	-
N3	-	-	-
N4	-	-	-
SEAL TYPE (O-Rings)	P6	P6	P9
P _{Min}	-	-	-
P _{Máx.}	-	-	-

*** All dimensions are given in millimeters.



HLB-FCM SERIES

HLB-FCM SERIES



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LEVER FLANGE TYPE HYDRAULIC CYLINDER WITH MANIFOLD AND FLOW CONTROL



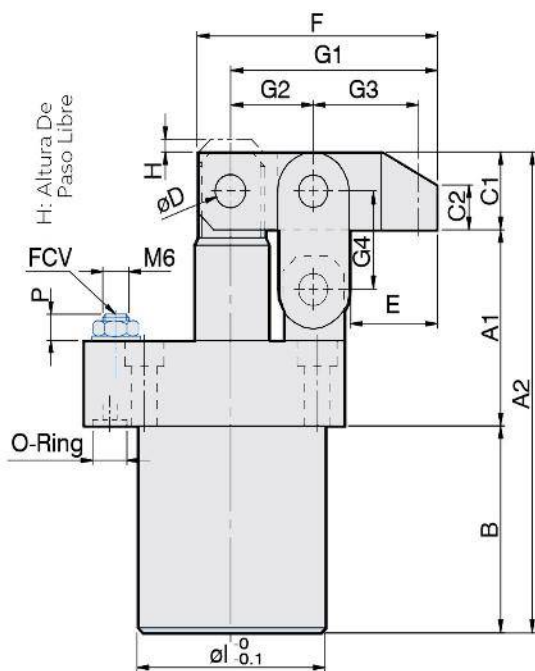


Characteristics & Dimensions

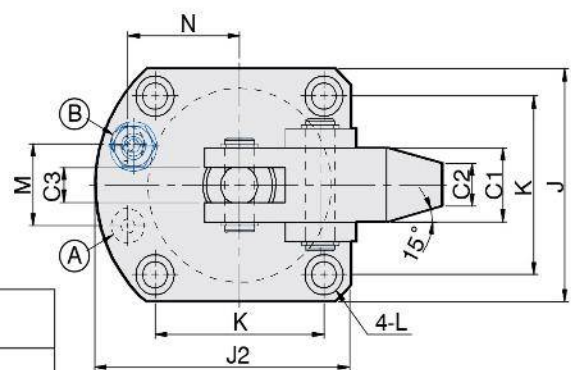
MODEL	HLB-FCM 25	HLB-FCM 32	HLB-FCM 40
Cylinder Diameter	Ø25	Ø32	Ø40
Piston Rod Diameter	Ø18	Ø20	Ø25
Toral Stroke	25.00	25.00	30.00
Pressure Area (Pull/push) (cm ²)	2.37 / 4.91	4.90 / 8.04	7.66 / 12.57
Theoretical Gripping Force (100 Kg/cm ²)	388.00	635.00	955.00
Fluid Type	Filtered Hydraulic Oil		
Operating Pressure Range	5 ~ 140 Kg/cm ²		
Acuator Type	Double Action		
*** All dimensions are given in millimeters.			



AMAC
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(A)	Puerto De Sujeción
(B)	Puerto De Liberación

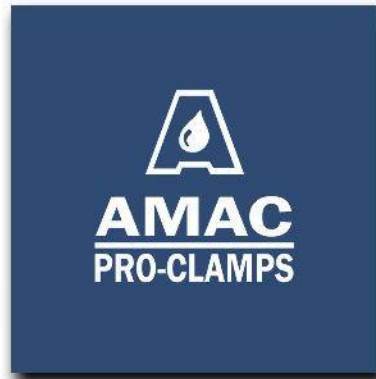




Characteristics & Dimensions

MODEL	HLB-FCM 25	HLB-FCM 32	HLB-FCM 40
A1	49.00	52.00	57.00
A2	126.00	131.00	150.20
B	58.00	60.00	71.00
C1	19.00	19.00	22.20
C2	11.00	11.00	13.00
C3	9.00	9.00	10.00
D	Ø8	Ø8	Ø10
E	23.50	23.50	29.00
F	64.00	64.00	77.00
G1	55.00	55.00	66.00
G2	22.00	22.00	26.00
G3	28.00	28.00	34.00
G4	24.00	24.00	29.00
H	3.00	3.00	4.00
ØI	Ø45	Ø50	Ø58
J1	56.00	60.00	70.00
J2	65.00	69.50	81.00
K	43.00	46.00	53.00
L	Ø6.80 ~ Ø10.50 x 6.50D	Ø6.80 ~ Ø10.50 x 6.50D	Ø9.00 ~ Ø14.00 x 9.00D
M	20.00	21.00	27.00
N1	28.00	30.50	35.00
N2	P6	-	-
N3	-	-	-
N4	-	-	-
SEAL TYPE (O-Rings)	P6	P6	P9
P _{Min}	7.10	4.10	4.10
P _{Máx.}	10.20	8.10	8.10

*** All dimensions are given in millimeters.



HLB-M SERIES

HLB-M SERIES



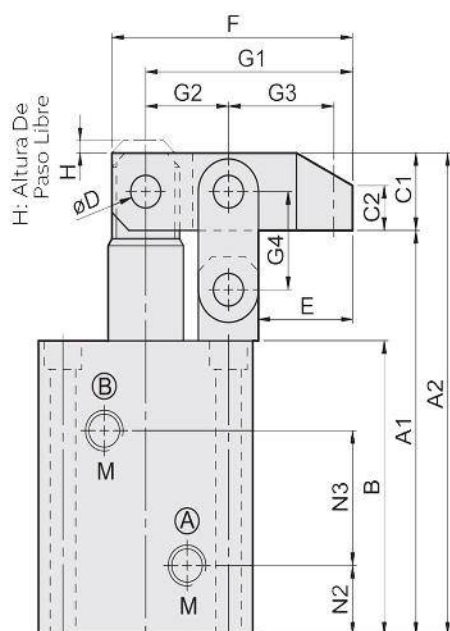
LEVER TYPE HYDRAULIC CYLINDER WITH MANIFOLD



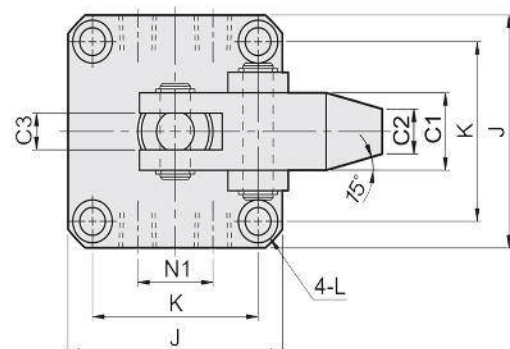
Characteristics & Dimensions

MODEL	HLB-M 25	HLB-M 32	HLB-M 40
Cylinder Diameter	Ø25	Ø32	Ø40
Piston Rod Diameter	Ø18	Ø20	Ø25
Total Stroke	25.00	25.00	30.00
Pressure Area (Pull/push) (cm ²)	2.37 / 4.91	4.90 / 8.04	7.66 / 12.57
Theoretical Gripping Force (100 Kg/cm ²)	388.00	635.00	955.00
Fluid Type	HYDRAULIC FILTERED OIL		
Operating Pressure Range	5 ~ 140 Kg/cm ²		
Acuator Type	DOUBLE ACTION		

*** All dimensions are given in millimeters.



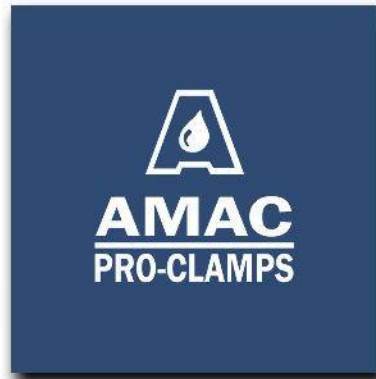
Ⓐ	Puerto De Sujeción
Ⓑ	Puerto De Liberación



Characteristics & Dimensions

MODEL	HLB-M 25	HLB-M 32	HLB-M 40
A1	107.00	112.00	128.00
A2	126.00	131.00	150.20
B	80.00	85.00	96.00
C1	19.00	19.00	22.20
C2	11.00	11.00	13.00
C3	9.00	9.00	10.00
D	Ø8	Ø8	Ø10
E	23.50	23.50	29.00
F	64.00	64.00	77.00
G1	55.00	55.00	66.00
G2	22.00	22.00	26.00
G3	28.00	28.00	34.00
G4	24.00	24.00	29.00
H	3.00	3.00	4.00
J	56.00	60.00	70.00
K	43.00	46.00	53.00
L	Ø6.80 ~ Ø10.50 x 6.50D	Ø6.80 ~ Ø10.50 x 6.50D	Ø9.00 ~ Ø14.00 x 9.00D
M	PT 1/8"	PT 1/8"	PT 1/4"
N1	18.00	22.00	26.00
N2	19.00	21.00	22.00
N3	34.00	35.00	42.00
N4	20.00	22.00	26.00
SEAL TYPE (O-Rings)	P7	P7	P8

*** All dimensions are given in millimeters.



HLB-MF SERIES

HLB-MF SERIES



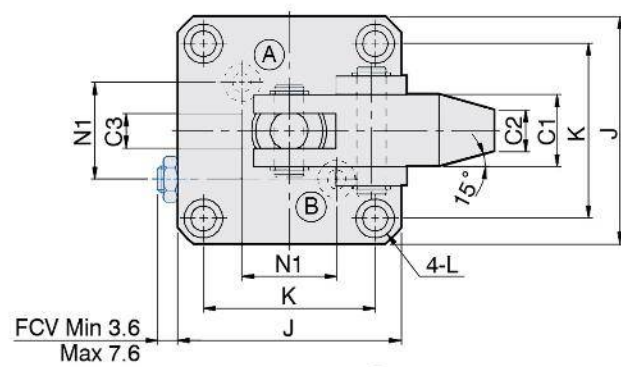
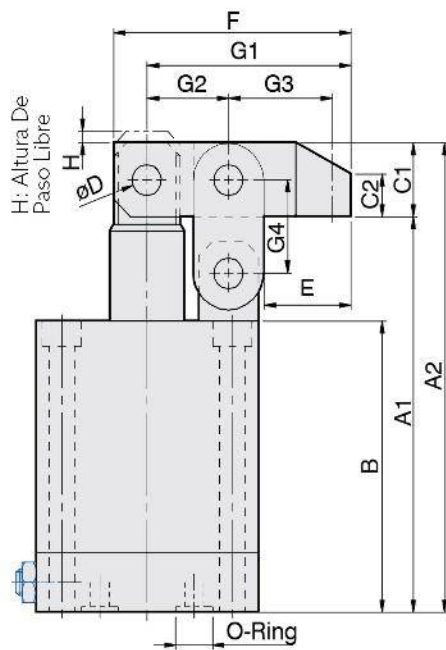
LEVER TYPE HYDRAULIC CYLINDER WITH MANIFOLD



Characteristics & Dimensions

MODEL	HLB-MF 25	HLB-MF 32	HLB-MF 40
Cylinder Diameter	Ø25	Ø32	Ø40
Piston Rod Diameter	Ø18	Ø20	Ø25
Total Stroke	25.00	25.00	30.00
Pressure Area (Pull/push) (cm ²)	2.37 / 4.91	4.90 / 8.04	7.66 / 12.57
Theoretical Gripping Force (100 Kg/cm ²)	388.00	635.00	955.00
Fluid Type	HYDRAULIC FILTERED OIL		
Operating Pressure Range	5 ~ 140 Kg/cm ²		
Acuator Type	DOUBLE ACTION		

*** All dimensions are given in millimeters.

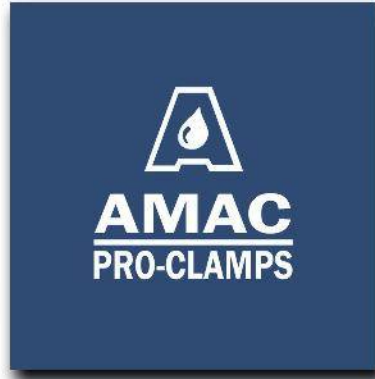


(A)	Puerto De Sujeción
(B)	Puerto De Liberación

Characteristics & Dimensions

MODEL	HLB-MF 25	HLB-MF 32	HLB-MF 40
A1	114.00	118.00	133.00
A2	133.00	137.00	155.20
B	87.00	91.00	101.00
C1	19.00	19.00	22.20
C2	11.00	11.00	13.00
C3	9.00	9.00	10.00
D	Ø8	Ø8	Ø10
E	23.50	23.50	29.00
F	64.00	64.00	77.00
G1	55.00	55.00	66.00
G2	22.00	22.00	26.00
G3	28.00	28.00	34.00
G4	24.00	24.00	29.00
H	3.00	3.00	4.00
J	56.00	60.00	70.00
K	43.00	46.00	53.00
L	Ø6.80 ~ Ø10.50 x 6.50D	Ø6.80 ~ Ø10.50 x 6.50D	Ø9.00 ~ Ø14.00 x 9.00D
M	-	-	-
N1	19.00	21.00	23.00
N2	-	-	-
N3	-	-	-
N4	-	-	-
SEAL TYPE (O-Rings)	P7	P7	P9

*** All dimensions are given in millimeters.



HLC SERIES

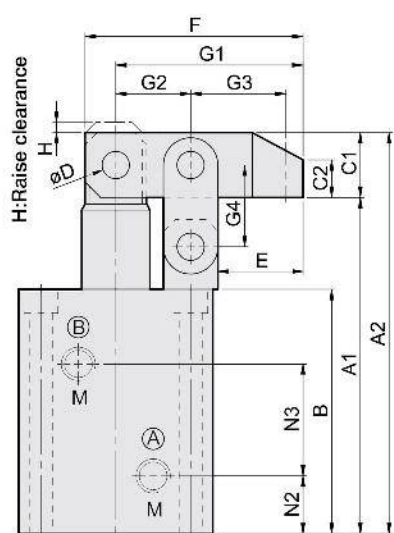
HLC SERIE

LEVER TYPE HYDRAULIC CYLINDER

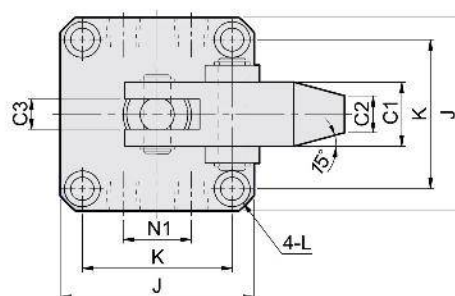


Characteristics & Dimensions

SERIES		HLC			
Cylinder Diameter	Ø25	Ø32	Ø40	Ø50	Ø60
Piston Rod Diameter	Ø18.00	Ø20.00	Ø22.40	Ø28.00	Ø35.00
Toral Stroke	25.00	25.00	30.00	34.00	40.00
Pressure Area (Pull/push) (cm ²)	2.37 / 4.91	4.90 / 8.04	8.63 / 12.57	13.47 / 19.63	21.55 / 31.17
Theoretical Gripping Force (100Kg/cm ²)	116.00	191.00	287.00	453.00	701.00
Fluid Type	FILTERED AIR				
Maximum Operating Pressure	70.00 Kg/cm ²				
Operating Pressure Range	5.00 Kg/cm ² ~ 50.00 Kg/cm ²				
Acuator Type	DOUBLE ACTION				
**** All dimensions are given in millimeters.					



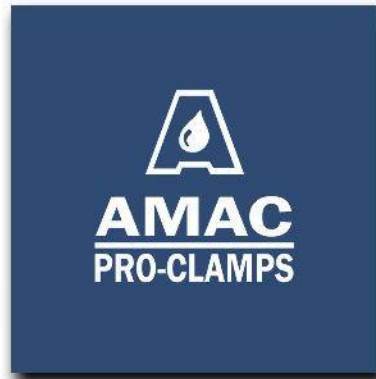
Ⓐ	Puerto de Sujeción
Ⓑ	Puerto de Liberación



Characteristics & Dimensions

SERIES		HLC			
Ø	HLC-25	HLC-32	HLC-40	HLC-50	HLC-63
A1	103.00	112.00	122.00	137.00	155.00
A2	122.00	131.00	144.20	162.40	186.80
B2	76.00	85.00	90.00	100.00	111.00
C1	■ 19.00	■ 19.00	■ 22.20	■ 25.4	24.30
C2	11.00	11.00	13.00	15.00	19.00
C3	8.00	9.00	10.00	11.00	15.00
ØD	Ø8.00	Ø8.00	Ø10.00	Ø12.11	Ø15.00
E	25.00	25.00	30.00	35.50	43.00
F	64.00	64.00	77.00	90.00	110.00
G1	55.00	55.00	66.00	77.00	94.00
G2	22.00	22.00	26.00	30.00	36.00
G3	28.00	28.00	34.00	39.00	48.00
G4	24.00	24.00	29.00	33.00	39.00
H	3.00	3.00	4.00	4.00	4.00
J	55.00	57.00	69.00	75.00	96.00
K	42.00	44.00	52.00	58.00	75.00
L	Ø6.80 x Ø10.50 x 6.50D	Ø6.80 x Ø10.50 x 6.50D	Ø9.00 x Ø14.00 x 9.00D	Ø9.00 x Ø14.00 x 9.00D	Ø11.00 x Ø18.00 x 11.00D
M	PT 1/8"	PT 1/4"	PT 1/4"	PT 1/4"	PT 1/4"
N1	18.00	22.00	26.00	32.00	38.00
N2	17.00	19.00	19.00	21.50	22.00
N3	33.00	38.00	40.00	45.00	52.00
N4	22.00	22.00	26.00	30.00	38.00
N5	P7	P7	P8	P8	P9

*** All dimensions are given in millimeters.



HLC-FA SERIES

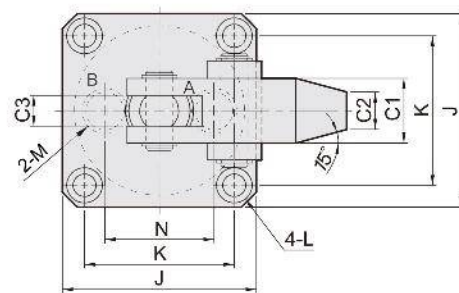
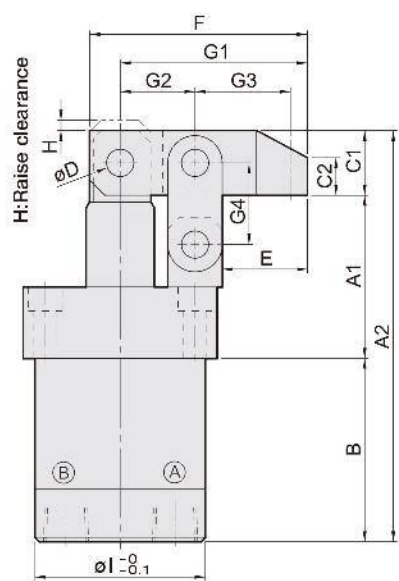
HLC-FA SERIES

LEVER FLANGE TYPE HYDRAULIC CYLINDER



Characteristics & Dimensions

SERIES		HLC-FA			
Cylinder Diameter	Ø25	Ø32	Ø40	Ø50	Ø60
Piston Rod Diameter	Ø18.00	Ø20.00	Ø22.40	Ø28.00	Ø35.00
Toral Stroke	25.00	25.00	30.00	34.00	40.00
Pressure Area (Pull/push) (cm ²)	2.37 / 4.91	4.90 / 8.04	8.63 / 12.57	13.47 / 19.63	21.55 / 31.17
Theoretical Gripping Force (100 Kg/cm ²)	116.00	191.00	287.00	453.00	701.00
Fluid Type	HYDRAULIC FILTERED OIL				
Maximum Operating Pressure	70.00 Kg/cm ²				
Operating Pressure Range	5.00 Kg/cm ² ~ 70.00 Kg/cm ²				
Acuator Type	DOUBLE ACTION				
**** All dimensions are given in millimeters.					

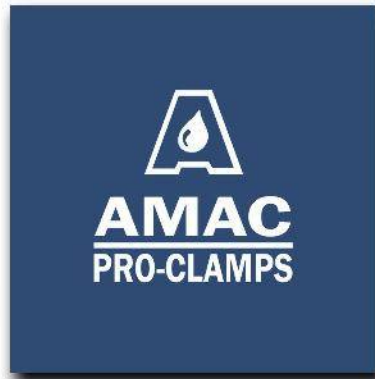


(A)	Puerto de Sujeción
(B)	Puerto de Liberación

Characteristics & Dimensions

SERIES	HLC-FA				
MODEL	HLC-FA 25	HLC-FA 32	HLC-FA 40	HLCF-FA 50	HLC-FA 63
A1	49.00	52.00	57.00	67.00	77.00
A2	131.00	134.00	152.20	170.40	194.80
B	63.00	63.00	73.00	78.00	86.00
C1	■ 19.00	■ 19.00	■ 22.20	■ 25.40	■ 31.80
C2	11.00	11.00	13.00	15.00	19.00
C3	9.00	9.00	10.00	11.00	15.00
ØD	Ø8.00	Ø8.00	Ø10.00	Ø12.00	Ø15.00
E	25.00	25.00	30.00	35.50	43.00
F	61.00	64.00	77.00	90.00	110.00
G1	55.00	55.00	66.00	77.00	94.00
G2	22.00	22.00	26.00	30.00	36.00
G3	28.00	28.00	34.00	39.00	48.00
G4	24.00	24.00	29.00	33.00	39.00
H	3.00	3.00	4.00	4.00	4.00
ØI	Ø45.00	Ø50.00	Ø58.00	Ø68.00	Ø87.00
J	55.00	57.00	69.00	75.00	96.00
K	42.00	44.00	52.00	58.00	75.00
L	Ø6.80 x Ø10.50 x 6.50D	Ø6.80 x 10.50 x 6.50D	Ø9.00 x 14.00 x 9.00D	Ø9.00 x 14.00 x 9.00D	Ø11.00 x 18.00 x 11.00D
M	PT 1/4"	PT 1/4"	PT 1/4"	PT 1/4"	PT 1/4"
N	25.00	32.00	40.00	50.00	63.00
O-RING SEAL	-	-	-	-	-

**** All dimensions are given in millimeters.



HLC-FAM SERIES

HLC-FAM SERIES



AMAC
PRO-CLAMPS

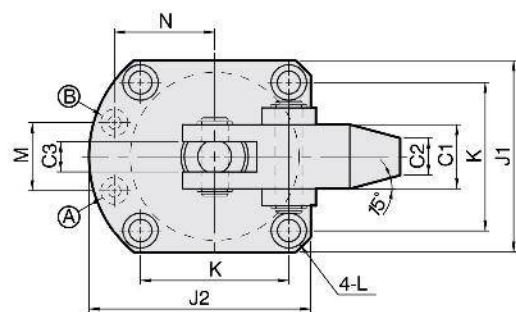
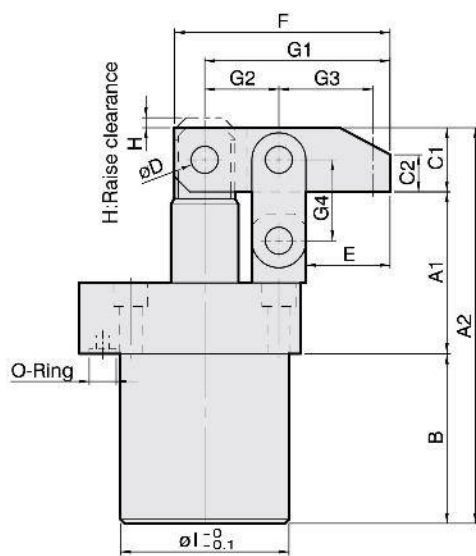
LEVER FLANGE TYPE HYDRAULIC CYLINDER WITH MANIFOLD



Characteristics & Dimensions

SERIES		HLC-FAM			
Cylinder Diameter	Ø25	Ø32	Ø40	Ø50	Ø60
Piston Rod Diameter	Ø18.00	Ø20.00	Ø22.40	Ø28.00	Ø35.00
Total Stroke	25.00	25.00	30.00	34.00	40.00
Pressure Area (Pull/push) (cm ²)	2.37 / 4.91	4.90 / 8.04	8.63 / 12.57	13.47 / 19.63	21.55 / 31.17
Theoretical Gripping Force (100 Kg/cm ²)	116.00	191.00	287.00	453.00	701.00
Fluid Type	HYDRAULIC FILTERED OIL				
Maximum Operating Pressure	70.00 Kg/cm ²				
Operating Pressure Range	5.00 Kg/cm ² ~ 70.00 Kg/cm ²				
Acuator Type	Doble Acción				

*** All dimensions are given in millimeters.

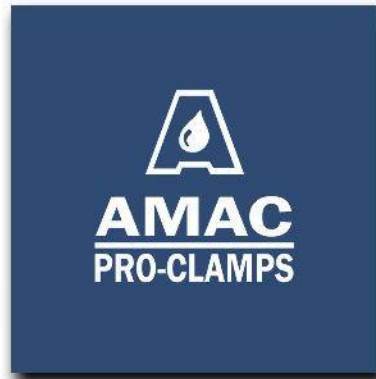


Ⓐ	Puerto de Sujeción
Ⓑ	Puerto de Liberación

Characteristics & Dimensions

SERIES	HLC-FAM				
MODEL	HLC-FAM 25	HLC-FAM 32	HLC-FAM 40	HLCF-FAM 50	HLC-FA 63
A1	49.00	52.00	57.00	67.00	77.00
A2	122.00	131.00	144.20	162.40	186.80
B	54.00	60.00	65.00	70.00	78.00
C1	■ 19.00	■ 19.00	■ 22.20	■ 25.40	■ 31.80
C2	11.00	11.00	13.00	15.00	19.00
C3	9.00	9.00	10.00	11.00	15.00
ØD	Ø8.00	Ø8.00	Ø10.00	Ø12.00	Ø15.00
E	25.00	25.00	30.00	35.50	43.00
F	64.00	64.00	77.00	90.00	110.00
G1	55.00	55.00	66.00	77.00	94.00
G2	22.00	22.00	26.00	30.00	36.00
G3	28.00	28.00	34.00	39.00	48.00
G4	24.00	24.00	29.00	33.00	39.00
H	3.00	3.00	4.00	4.00	4.00
ØI	Ø45.00	Ø50.00	Ø58.00	Ø68.00	Ø81.00
J1	55.00	57.00	69.00	75.00	96.00
J2	55.00	65.50	79.00	87.00	112.00
K	42.00	44.00	52.00	58.00	75.00
L	Ø6.80 x Ø10.50 x 6.50D	Ø6.80 x 10.50 x 6.50D	Ø9.00 x 14.00 x 9.00D	Ø9.00 x 14.00 x 9.00D	Ø11.00 x 18.00 x 11.00D
M	20.00	22.00	26.00	30.00	36.00
N	28.00	29.00	34.50	39.00	50.00
O'RING SEAL	P6	P6	P9	P9	P9

*** All dimensions are given in millimeters.



HLC-FCM SERIES

HLC-FCM SERIES



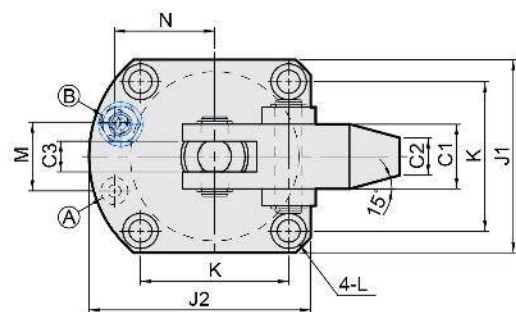
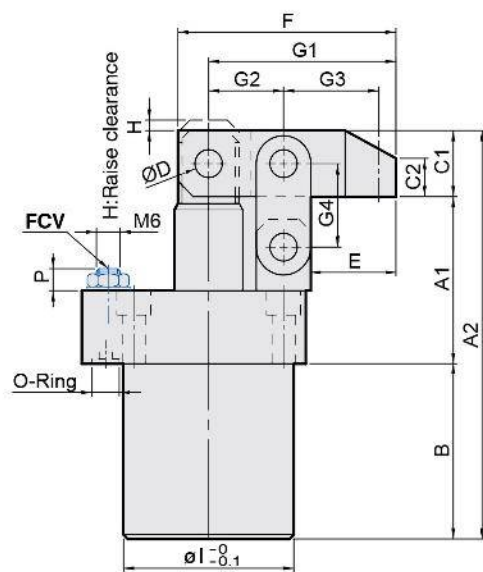
AMAC
PRO-CLAMPS

LEVER FLANGE TYPE HYDRAULIC CYLINDER WITH MANIFOLD AND FLOW CONTROL



Characteristics & Dimensions

SERIE		HLC-FCM			
Cylinder Diameter	Ø25	Ø32	Ø40	Ø50	Ø60
Piston Rod Diameter	Ø18.00	Ø20.00	Ø22.40	Ø28.00	Ø35.00
Toral Stroke	25.00	25.00	30.00	34.00	40.00
Pressure Area (Pull/push) (cm ²)	2.37 / 4.91	4.90 / 8.04	8.63 / 12.57	13.47 / 19.63	21.55 / 31.17
Theoretical Gripping Force (100 Kg/cm ²)	116.00	191.00	287.00	453.00	701.00
Fluid Type	HYDRAULIC FILTERED OIL				
Maximum Operating Pressure	70.00 Kg/cm ²				
Operating Pressure Range	5.00 Kg/cm ² ~ 70.00 Kg/cm ²				
Acuator Type	DOUBLE ACTION				
**** All dimensions are given in millimeters.					

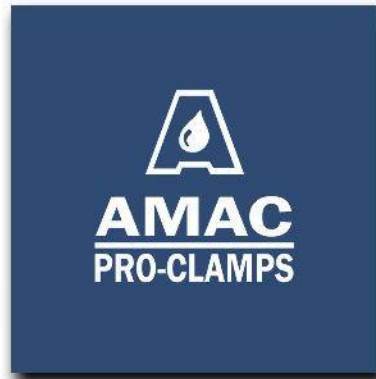


Ⓐ	Puerto de Sujeción
Ⓑ	Puerto de Liberación

Characteristics & Dimensions

SERIES	HLC-FCM				
MODEL	HLC-FCM 25	HLC-FCM 32	HLC-FCM 40	HLCF-FCM 50	HLC-FCM 63
A1	49.00	52.00	57.00	67.00	77.00
A2	122.00	131.00	144.20	162.40	186.80
B	54.00	60.00	65.00	70.00	78.00
C1	■ 19.00	■ 19.00	■ 22.20	■ 25.40	■ 31.80
C2	11.00	11.00	13.00	15.00	19.00
C3	9.00	9.00	10.00	11.00	15.00
ØD	Ø8.00	Ø8.00	Ø10.00	Ø12.00	Ø15.00
E	25.00	25.00	30.00	35.50	43.00
F	64.00	64.00	77.00	90.00	110.00
G1	55.00	55.00	66.00	77.00	94.00
G2	22.00	22.00	26.00	30.00	36.00
G3	28.00	28.00	34.00	39.00	48.00
G4	24.00	24.00	29.00	33.00	39.00
H	3.00	3.00	4.00	4.00	4.00
ØI	Ø45.00	Ø50.00	Ø58.00	Ø68.00	Ø81.00
J1	55.00	57.00	69.00	75.00	96.00
J2	55.00	65.50	79.00	87.00	112.00
K	42.00	44.00	52.00	58.00	75.00
L	Ø6.80 x Ø10.50 x 6.50D	Ø6.80 x 10.50 x 6.50D	Ø9.00 x 14.00 x 9.00D	Ø9.00 x 14.00 x 9.00D	Ø11.00 x 18.00 x 11.00D
M	20.00	22.00	26.00	30.00	36.00
N	28.00	29.00	34.50	39.00	50.00
O'RING SEAL	P6	P6	P9	P9	P9
P _{Min}	7.10	4.10	4.10	3.60	3.60
P _{Max}	10.20	8.10	8.10	7.60	7.60

**** All dimensions are given in millimeters.



HLC-M SERIES

HLC-M SERIES



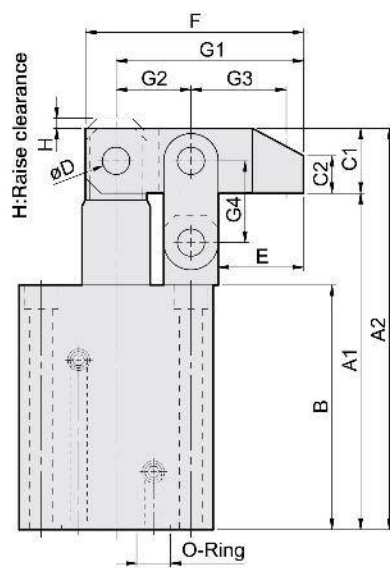
LEVER TYPE HYDRAULIC CYLINDER WITH MANIFOLD



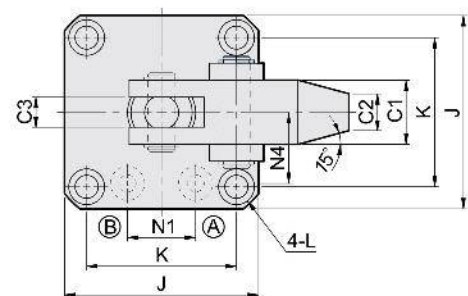
Characteristics & Dimensions

SERIE		HLC-M			
Cylinder Diameter	Ø25	Ø32	Ø40	Ø50	Ø60
Piston Rod Diameter	Ø18.00	Ø20.00	Ø22.40	Ø28.00	Ø35.00
Total Stroke	25.00	25.00	30.00	34.00	40.00
Pressure Area (Pull/push) (cm ²)	2.37 / 4.91	4.90 / 8.04	8.63 / 12.57	13.47 / 19.63	21.55 / 31.17
Theoretical Gripping Force (100 Kg/cm ²)	116.00	191.00	287.00	453.00	701.00
Fluid Type	HYDRAULIC FILTERED OIL				
Maximum Operating Pressure	70.00 Kg/cm ²				
Operating Pressure Range	5.00 Kg/cm ² ~ 70.00 Kg/cm ²				
Acuator Type	DOUBLE ACTION				

*** All dimensions are given in millimeters.



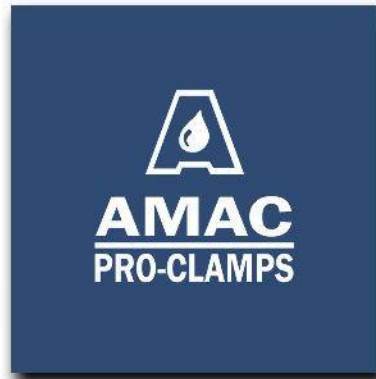
Ⓐ	Puerto de Sujeción
Ⓑ	Puerto de Liberación



Characteristics & Dimensions

SERIES	HLC-M				
MODEL	HLC-M 25	HLC-M 32	HLC-M 40	HLC-M 50	HLC-M 63
A1	103.00	112.00	122.00	137.00	155.00
A2	122.00	131.00	144.20	162.40	186.80
B	76.00	85.00	90.00	100.00	111.00
C1	■ 19.00	■ 19.00	■ 22.20	■ 25.40	■ 31.80
C2	11.00	11.00	13.00	15.00	19.00
C3	8.00	9.00	10.00	11.00	15.00
ØD	Ø8.00	Ø8.00	Ø10.00	Ø12.00	Ø15.00
E	25.00	25.00	30.00	35.50	43.00
F	64.00	64.00	77.00	90.00	110.00
G1	55.00	55.00	66.00	77.00	94.00
G2	22.00	22.00	26.00	30.00	36.00
G3	28.00	28.00	34.00	39.00	48.00
G4	24.00	24.00	29.00	33.00	39.00
H	3.00	3.00	4.00	4.00	4.00
J	55.00	57.00	69.00	75.00	96.00
K	42.00	44.00	52.00	58.00	75.00
L	Ø6.80 x Ø10.50 x 6.50D	Ø6.80 x 10.50 x 6.50D	Ø9.00 x 14.00 x 9.00D	Ø9.00 x 14.00 x 9.00D	Ø11.00 x 18.00 x 11.00D
M	PT 1/8"	PT 1/4"	PT 1/4"	PT 1/4"	PT 1/4"
N1	18.00	22.00	26.00	32.00	38.00
N2	17.00	19.00	19.00	21.50	22.00
N3	33.00	38.00	40.00	45.00	52.00
N4	20.00	22.00	26.00	30.00	38.00
O-RING SEAL	P7	P7	P8	P8	P9

**** All dimensions are given in millimeters.



HLC-MF SERIES

HLC-MF SERIES



LEVER TYPE HYDRAULIC CYLINDER WITH MANIFOLD AND FLOW CONTROL



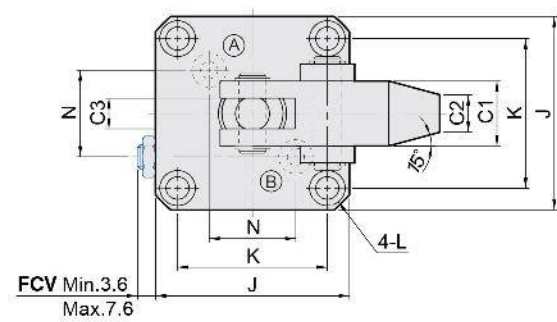
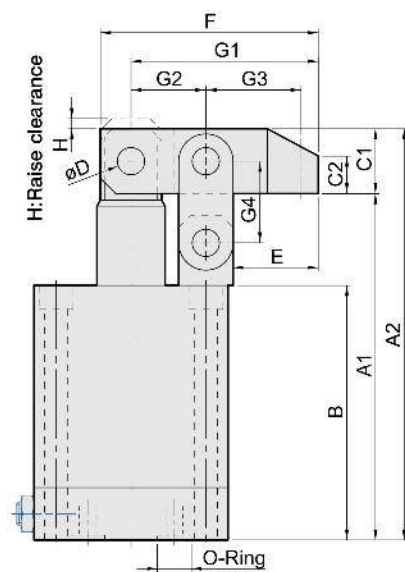
Characteristics & Dimensions

SERIES	HLC-MF				
MODEL	HLC-MF 25	HLC-MF 32	HLC-MF 40	HLCF-M 50	HLC-MF 63
A1	112.00	115.00	130.00	145.00	155.00
A2	131.00	134.00	152.20	170.40	186.80
B	85.00	88.00	98.00	108.00	111.00
C1	■ 19.00	■ 19.00	■ 22.20	■ 25.40	■ 31.80
C2	11.00	11.00	13.00	15.00	19.00
C3	9.00	9.00	10.00	11.00	15.00
ØD	Ø8.00	Ø8.00	Ø10.00	Ø12.00	Ø15.00
E	25.00	25.00	30.00	35.50	43.00
F	61.00	64.00	77.00	90.00	110.00
G1	55.00	55.00	66.00	77.00	94.00
G2	22.00	22.00	26.00	30.00	36.00
G3	28.00	28.00	34.00	39.00	48.00
G4	24.00	24.00	29.00	33.00	39.00
H	3.00	3.00	4.00	4.00	4.00
ØI	-	-	-	-	-
J	55.00	57.00	69.00	75.00	96.00
K	42.00	44.00	52.00	58.00	75.00
L	Ø6.80 x Ø10.50 x 6.50D	Ø6.80 x 10.50 x 6.50D	Ø9.00 x 14.00 x 9.00D	Ø9.00 x 14.00 x 9.00D	Ø11.00 x 18.00 x 11.00D
M	-	-	-	-	-
N	19.00	21.00	23.00	28.00	38.00
O-RING SEAL	P7	P7	P9	P9	P9

**** All dimensions are given in millimeters.



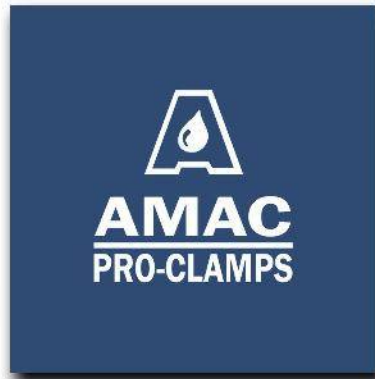
AMAC
PRO-CLAMPS



(A)	Puerto de Sujeción
(B)	Puerto de Liberación

Characteristics & Dimensions

SERIES		HLC-MF			
Cylinder Diameter	Ø25	Ø32	Ø40	Ø50	Ø60
Piston Rod Diameter	Ø18.00	Ø20.00	Ø22.40	Ø28.00	Ø35.00
Toral Stroke	25.00	25.00	30.00	34.00	40.00
Pressure Area (Pull/push) (cm ²)	2.37 / 4.91	4.90 / 8.04	8.63 / 12.57	13.47 / 19.63	21.55 / 31.17
Theoretical Gripping Force (100 Kg/cm ²)	116.00	191.00	287.00	453.00	701.00
Fluid Type	HYDRAULIC FILTERED OIL				
Maximum Operating Pressure	70.00 Kg/cm ²				
Operating Pressure Range	5.00 Kg/cm ² ~ 70.00 Kg/cm ²				
Acuator Type	DOUBLE ACTION				
**** All dimensions are given in millimeters.					



HPS SERIES

HPS

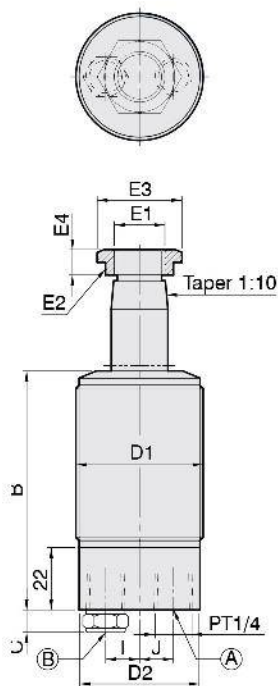
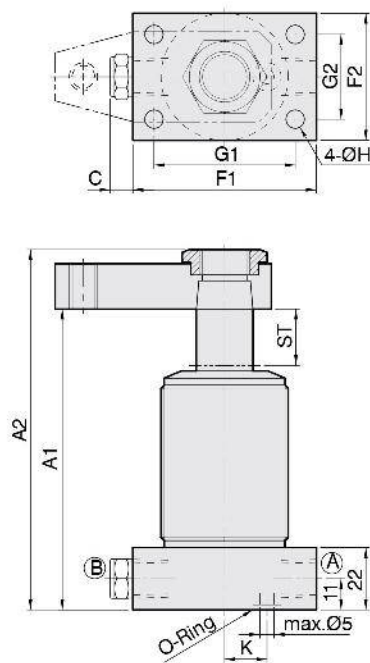


HIGH PRESSURE HYDRAULIC OSCILLATING CLAMPING CYLINDERS

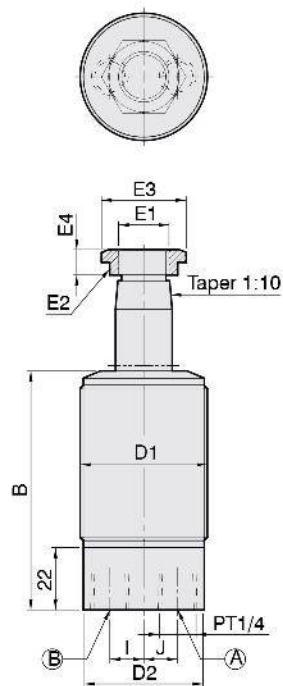
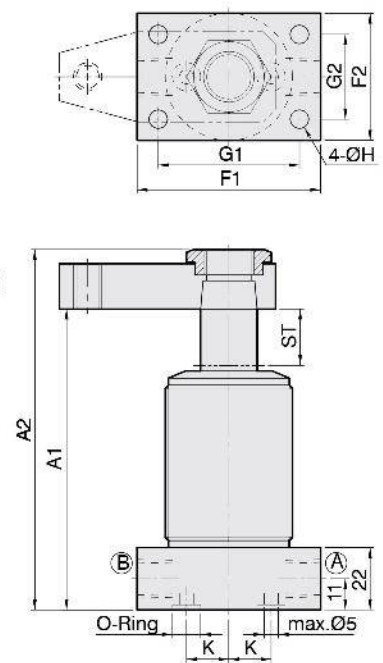


Characteristics & Dimensions

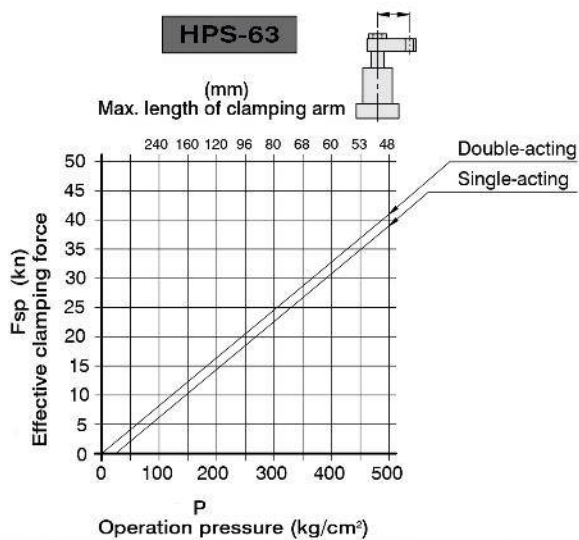
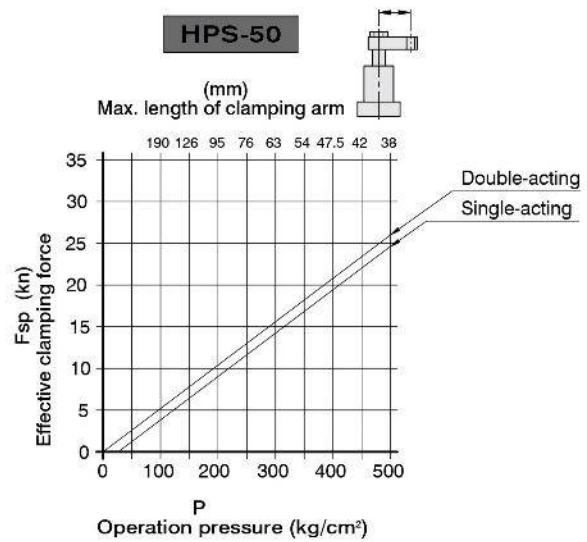
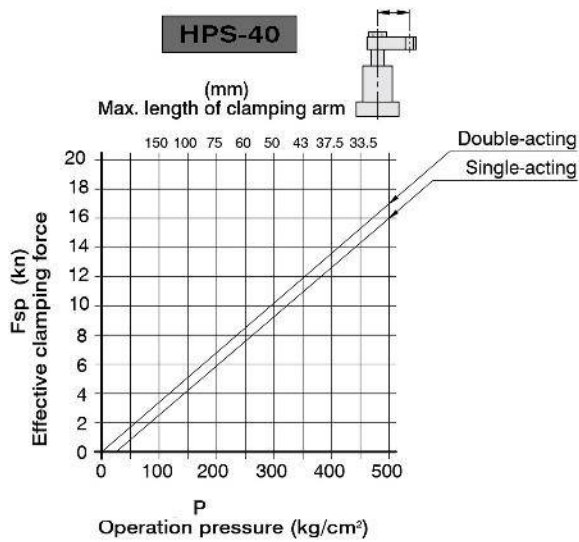
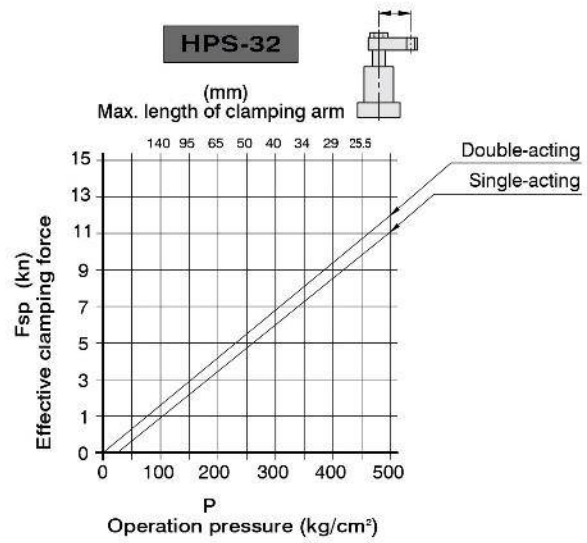
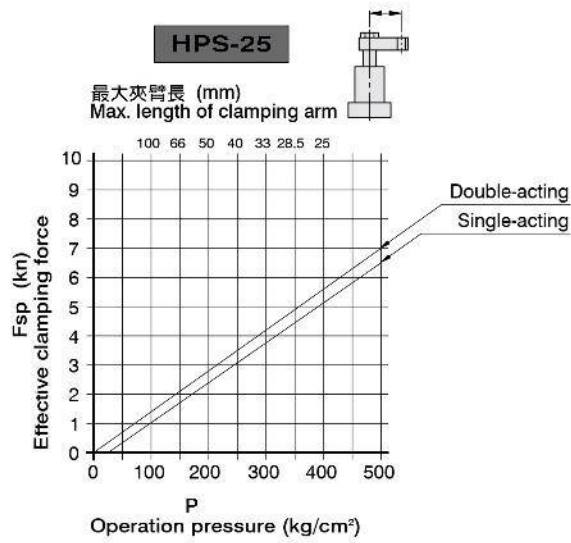
SERIES			HPS			
HIGH PRESSURE HYDRAULIC OSCILLATING CLAMPING CYLINDERS						
MODEL		Ø25	Ø32	Ø40	Ø50	Ø63
PISTON ROD DIAMETER		Ø20.00	Ø25.00	Ø32.00	Ø40.00	Ø50.00
TURNING STROKE	DOUBLE ACTING	8.00	9.00	9.00	12.00	12.00
	SINGLE ACTING	10.00	11.00	11.00	14.00	14.00
GRIPPING STROKE	DOUBLE ACTING	11.00	13.00	13.00	15.00	15.00
	SINGLE ACTING	9.00	11.00	11.00	13.00	13.00
MAXIMUM OIL FILLING SPEED		3.30	6.90	9.90	19.10	31.10
DEVICE PROTECTING OIL VOLUME		3.30	6.90	9.90	19.10	31.10
OIL RETURNING VOLUME REQUIRED		9.30	17.10	27.60	53.00	84.20
ROTATING DIRECTION		R : RIGHT TURNING L : LEFT TURNING N : WITHOUT TURNING				
ROTATING ANGLE		45° & 60°: OPTIONAL TURN 90°: STANDARD TURN				
MINIMUM OPERATING PRESSURE	DOUBLE ACTING	10.00 Kg/cm2				
	SINGLE ACTING	30.00 Kg/cm2				
MOUNTING TYPE	FLANGE TYPE	STANDARD				
		MANIFOLD				
		THREADED BODY				
ACTING TYPE		DOUBLE ACTION				
		SINGLE ACTION				
CYLINDER DIAMETER		Ø25, Ø32, Ø40, Ø50 & Ø63				
ROTATING ANGLE		45° & 60°: OPTIONAL TURN 90°: STANDARD TURN				
*** All dimensions are given in millimeters.						

Single-acting
Threaded Type

Flange Type


(A)	Clamping Port
(B)	Vent port

Double-acting
Threaded Type

Flange Type


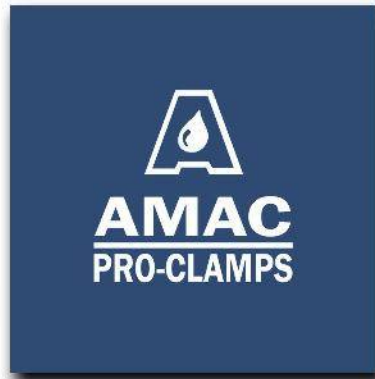
(A)	Clamping Port
(B)	Unclamping Port



Characteristics & Dimensions

SERIES		HPS			
MODEL	HPS-25	HPS-32	HPS-40	HPS-50	HPS-63
ST: TURN/GRIP	D:8/11 S:10/9	D:9/13 S:11/11	D:9/13 S:11/11	D:12/15 S:14/13	D:12/15 S:14/13
A1	107.50	120.50	124.00	142.00	148.00
A2	129.00	146.50	-150.40	177.00	190.00
B	87.00	97.00	146.20	113.50	119.50
C	8.00	8.00	90.00	8.00	8.00
D1	M45 x 1.50	M52 x 1.50	M60 x 1.50	M80 x 2.00	M90 x 2.00
D2	Ø43.00	Ø50.00	Ø58.00	Ø787.00	Ø88.00
E1	M18 x 1.50	M22 x 1.50	M28 x 1.50	M35 x 1.50	M45 x 1.50
E2	Ø23.50	Ø28.50	Ø35.50	Ø45.50	Ø54.50
E3	27.70	33.50	41.60	53.10	63.50
E4	9.00	10.00	10.00	12.00	14.00
F1	65.00	73.00	85.00	100.00	115.00
F2	45.00	53.00	63.00	80.00	90.00
G1	50.00	57.00	65.00	80.00	90.00
G2	30.00	37.00	44.00	60.00	68.00
H	Ø6.80	Ø9.00	Ø9.00	Ø13.00	Ø15.00
I	13.00	14.50	16.00	20.00	26.00
J	13.00	16.00	20.00	26.00	33.00
K	15.00	20.00	28.00	31.00	37.50
O'Ring TYPE	P7	P7	P7	P9	P9

*** All dimensions are given in millimeters.



**HSC
SERIES**

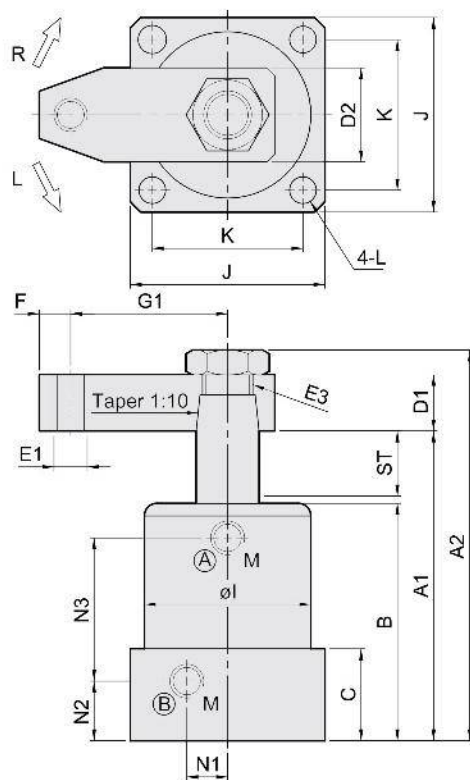
HSC SERIES

HYDRAULIC CYLINDER SWIVEL CLAMPS

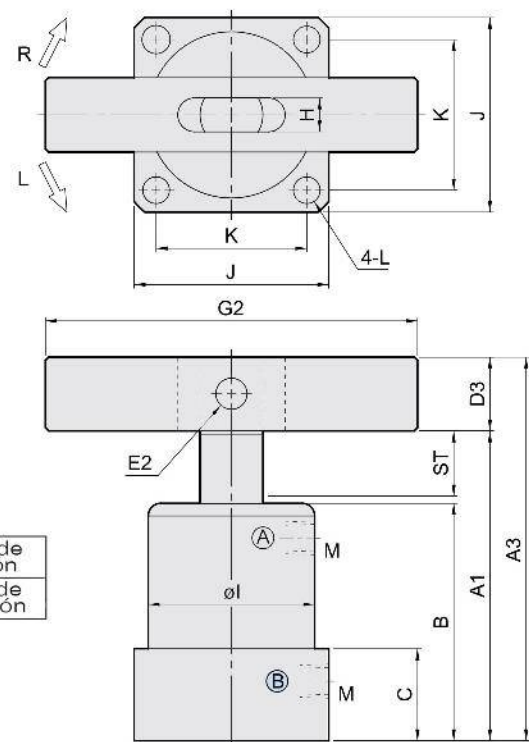


Characteristics & Dimensions

SERIES		HSC			
HYDRAULIC STANDARD DEVICE					
CYLINDER DIAMETER	Ø25	Ø32	Ø40	Ø50	Ø60
PISTON ROD DIAMETER	Ø18.00	Ø20.00	Ø22.40	Ø28.00	Ø35.00
TURNNING STROKE	9.00	11.00	11.00	13.00	13.00
GRIPPING STROKE STD/INCR	13.00	15.00/30.00	15.00/30.00	17.00/34.00	17.00/34.00
PRESSURE AREA (PULL/PUSH) (cm ²)	2.37 / 4.91	4.90 / 8.04	8.63 / 12.57	13.47 / 19.63	21.55 / 31.17
THEORETICAL GRIPPING FORCE (30.00 Kg/cm ²)	71.00	147.00	259.00	404.00	647.00
FLUID TYPE	FILTERED HYDRAULIC OIL				
MAXIMUM OPERATING PRESSURE	100.00 Kg/cm ²				
OPERATING PRESSURE RANGE	5.00 Kg/cm ² ~ 70.00 Kg/cm ²				
TURNNING DIRECTION	R : RIGHT TURN L : LEFT TURN N : WITHOUT TURN				
ROTATING ANGLE	45° & 60°: OPTIONAL TURNS 90°: STANDARD TURN				
ACUATOR TYPE	DOUBLE ACTION				
**** All dimensions are given in millimeters.					



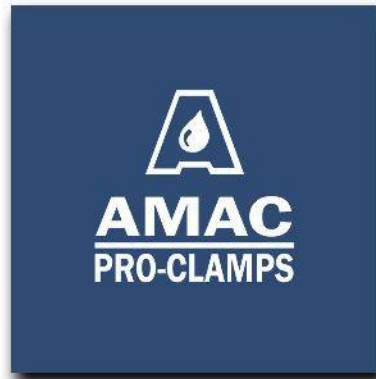
(A)	Puerto de Sujeción
(B)	Puerto de Liberación



Characteristics & Dimensions

SERIES		HSC							
MODEL	HSC-25	HSC-32		HSC-40		HSC-50		HSC-63	
A1	22:9/13	26:11/15	41:11/30	26:11/15	41:11/30	30:30/17	47:13/34	30:30/17	47:13/34
A2	101.00	115.00	145.00	120.00	150.00	134.00	168.00	139.00	173.00
A3	-124.00	-140.00	-170.00	-148.00	-178.00	-186.00	-200.00	-175.00	-209.00
B	120.00	85.00	100.00	90.00	105.00	100.00	117.00	105.00	122.00
C	76.00	30.00		30.00		34.00		34.00	
D1	27.00	17.00		18.00		20.00		23.00	
D2	15.00	31.00		31.00		37.00		48.00	
D3	■ 19.00	■ 22.20		■ 22.20		■ 25.40		■ 31.80	
E1	M10 x 1.50	M10 x 1.50		M10 x 1.50		M12 x 1.75		M16 x 2.00	
E2	Ø8.00	Ø8.00		Ø10.00		Ø12.00		Ø15.00	
E3	M14 x 1.50	M16 x 1.50		M18 x 1.50		M20 x 1.50		M26 x 1.50	
F	10.00	10.00		10.00		12.00		15.00	
G1	50.00	55.00		60.00		65.00		75.00	
G2	140.00	160.00		160.00		180.00		200.00	
H	9.00	10.00		10.00		12.00		15.00	
ØI	Ø46.00	Ø50.00		Ø54.00		Ø66.00		Ø80.00	
J	52.00	56.00		63.00		72.00		88.00	
K	40.00	44.00		48.00		57.00		70.00	
L	Ø6.80	Ø6.80		Ø9.00		Ø9.00		Ø11.00	
M	PT 1/8"	PT 1/8"		PT 1/8"		PT 1/4"		PT 1/4"	
N1	8.00	10.00		12.00		15.00		17.00	
N2	17.00	19.00		19.00		21.50		22.00	
N3	46.00	52.00	67.00	57.00	72.00	63.50	80.50	68.00	85.00

**** All dimensions are given in millimeters.



HSC-FA SERIES

HSC-FA SERIES



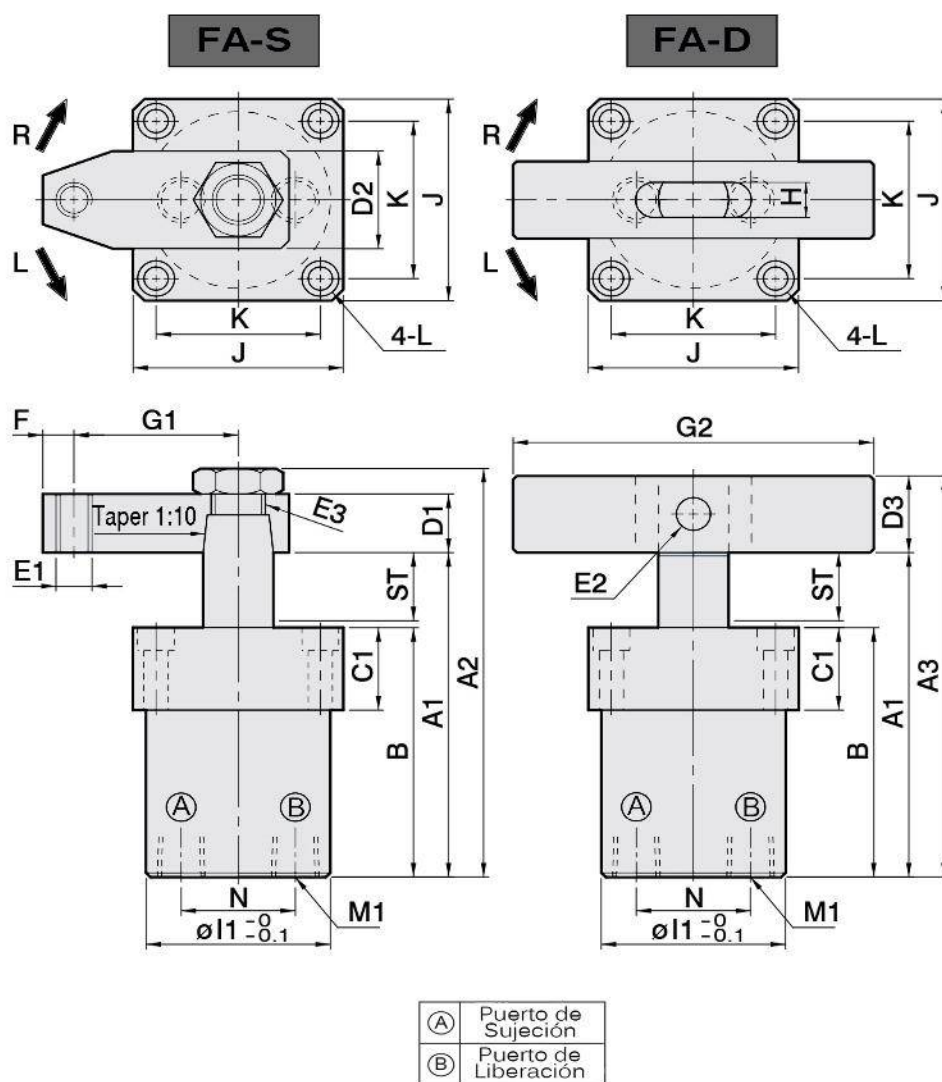
FLANGE TYPE HYDRAULIC CYLINDER SWIVEL CLAMPS



Characteristics & Dimensions

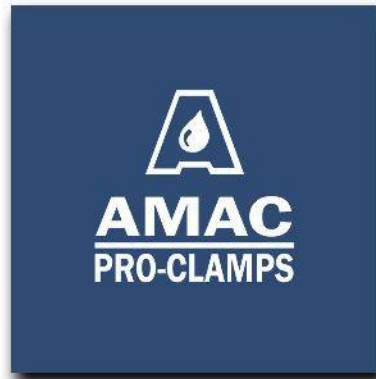
SERIE	HSC-FA				
Modelo	HSC-FA 25	HSC-FA 32	HSC-FA 40	HSC-FA 50	HSC-FA 63
TURN / GRIP	22:9/13	26:11/15	26:11/15	30:30/17	30:30/17
A1	101.00	115.00	120.00	134.00	139.00
A2	-124.00	-140.00	-148.00	-166.00	-175.00
A3	120.00	137.20	142.20	159.40	170.8
B	76.00	85.00	90.00	100.00	105.00
C	-	-	-	-	-
C1	22.00	25.00	25.00	30.00	30.00
C2/C3	10.00 / 8.00	10.00 / 9.00	12.00 / 9.00	12.00 / 11.00	-
D1	15.00	17.00	18.00	20.00	23.00
D2	27.00	31.00	31.00	37.00	48.00
D3	■ 19.00	■ 22.20	■ 22.20	■ 25.40	■ 31.80
E1	M10 x 1.50	M10 x 1.50	M10 x 1.50	M12 x 1.75	M16 x 2.00
E2	Ø8.00	Ø8.00	Ø10.00	Ø12.00	Ø15.00
E3	M14 x 1.50	M16 x 1.50	M18 x 1.50	M20 x 1.50	M26 x 1.50
F	10.00	10.00	10.00	12.00	15.00
G1	50.00	55.00	60.00	65.00	75.00
G2	140.00	160.00	160.00	180.00	200.00
H	9.00	10.00	10.00	12.00	15.00
ØI	-	-	-	-	-
ØI1	Ø45.00	Ø50.00	Ø58.00	Ø68.00	Ø80.00
I2/I3	M45 x 1.50 / Ø43	M50 x 1.50 / Ø48	M55 x 1.50 / Ø53	M65 x 1.50 / Ø63	-
J	53.00	57.00	69.00	56.00	88.00
K	40.00	44.00	52.00	44.00	70.00
L	Ø6.80 x Ø10.50 x Ø6.50D	Ø6.80 x Ø10.50 x Ø6.50D	Ø9.00 x Ø14.00 x Ø9.00D	Ø9.00 x Ø14.00 x Ø9.00D	Ø11.00 x Ø17.00 x Ø11.00D
M	-	-	-	-	-
M1	PT 1/4"	PT 1/4"	PT 1/4"	PT 1/4"	PT 1/4"
M2	PT 1/8"	PT 1/8"	PT 1/8"	PT 1/8"	-
N	28.00	32.00	40.00	50.00	63.00
N1	-	-	-	-	-
N2	-	-	-	-	-
N3	-	-	-	-	-
T1 x 2PCS	10.00	11.00	11.00	12.00	-
T2	Ø65.00	Ø70.00	Ø75.00	Ø85.00	-

**** All dimensions are given in millimeters.



Characteristics & Dimensions

SERIES		HSC-FA			
FLANGE TYPE HYDRAULIC DEVICE					
CYLINDER DIAMETER	Ø25	Ø32	Ø40	Ø50	Ø60
PISTON ROD DIAMETER	Ø18.00	Ø20.00	Ø22.40	Ø28.00	Ø35.00
TURNING STROKE	9.00	11.00	11.00	13.00	13.00
GRIPPING STROKE STD/INCR	13.00	15.00/30.00	15.00/30.00	17.00/34.00	17.00/34.00
PRESSURE AREA (PULL/PUSH) (cm ²)	2.37 / 4.91	4.90 / 8.04	8.63 / 12.57	13.47 / 19.63	21.55 / 31.17
THEORETICAL GRIPPING FORCE (30.00 Kg/cm ²)	71.00	147.00	259.00	404.00	647.00
FLUID TYPE	FILTERED HYDRAULIC OIL				
MAXIMUM OPERATING PRESSURE	100.00 Kg/cm ²				
OPERATING PRESSURE RANGE	5.00 Kg/cm ² ~ 70.00 Kg/cm ²				
TURNING DIRECTION	R : RIGHT TURN L : LEFT TURN N : WITHOUT TURN				
ROTATING ANGLE	45° & 60°: OPTIONAL TURNS 90°: STANDARD TURN				
ACUATOR TYPE	DOUBLE ACTION				
*** All dimensions are given in millimeters.					



HSC-FAM SERIES

HSC-FAM SERIES



FLANGE TYPE
HYDRAULIC CYLINDER
SWIVEL CLAMPS
WITH FLOW CONTROL



Characteristics & Dimensions

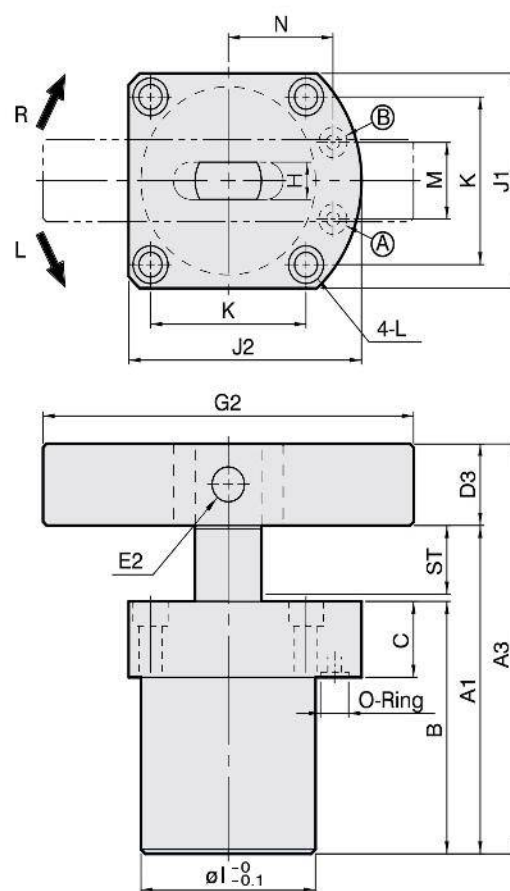
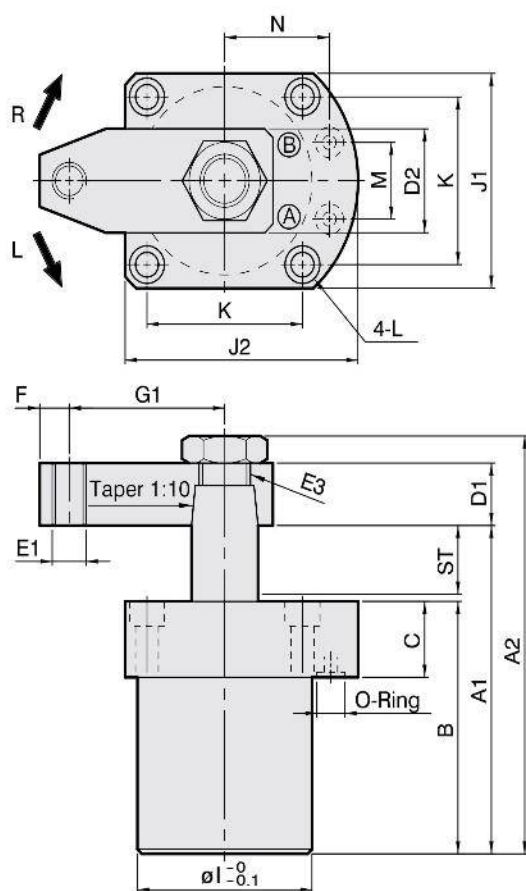
SERIE

HSC-FAM

FLANGE TYPE HYDRAULIC DEVICE WITH MANIFOLD

CYLINDER DIAMETER	Ø25	Ø32	Ø40	Ø50	Ø60
PISTON ROD DIAMETER	Ø18.00	Ø20.00	Ø22.40	Ø28.00	Ø35.00
TURNING STROKE	9.00	11.00	11.00	13.00	13.00
GRIPPING STROKE STD/INCR	13.00	15.00/30.00	15.00/30.00	17.00/34.00	17.00/34.00
PRESSURE AREA (PULL/PUSH) (cm ²)	2.37 / 4.91	4.90 / 8.04	8.63 / 12.57	13.47 / 19.63	21.55 / 31.17
THEORETICAL GRIPPING FORCE (30.00 Kg/cm ²)	71.00	147.00	259.00	404.00	647.00
FLUID TYPE	FILTERED HYDRAULIC OIL				
MAXIMUM OPERATING PRESSURE	100.00 Kg/cm ²				
OPERATING PRESSURE RANGE	5.00 Kg/cm ² ~ 70.00 Kg/cm ²				
TURNING DIRECTION	R : RIGHT TURN L : LEFT TURN N : WITHOUT TURN				
ROTATING ANGLE	45° & 60°: OPTIONAL TURNS 90°: STANDARD TURN				
ACTUATOR TYPE	DOUBLE ACTION				

**** All dimensions are given in millimeters.

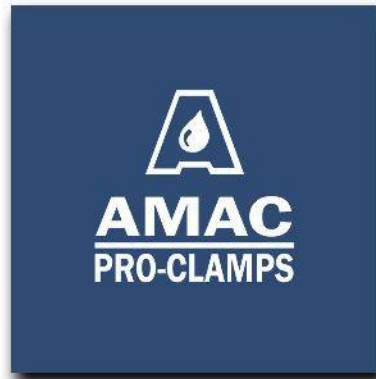


Ⓐ	PUERTO DE SUJECCIÓN
Ⓑ	PUERTO DE LIBERACIÓN

Characteristics & Dimensions

SERIES	HSC-FAM								
MODEL	HSC-FAM 25	HSC-FAM 32	HSC-FAM 40	HSC-FAM 50	HSC-FAM 63				
ST: TURN / GRIP	22:9/13	26:11/15	41:11/30	26:11/15	41:11/30	30:30/17	47:13/34	30:30/17	47:13/34
A1	101	115	145	120	150	134	168	139	173
A2	-124.00	-140.00	-170.00	-148.00	-178.00	-166.00	-200.00	-175.00	-209.00
A3	120.00	137.20	167.20	172.20	172.20	159.40	193.40	170.80	204.80
B	76.00	85.00	100.00	105.00	105.00	100.00	117.00	105.00	122.00
C	22.00	25.00	25.00	25.00	30.00	30.00	30.00	30.00	30.00
D1	15.00	17.00	18.00	18.00	20.00	20.00	23.00	23.00	23.00
D2	27.00	31.00	31.00	31.00	37.00	37.00	48.00	48.00	48.00
D3	■ 19.00	■ 22.20	■ 22.20	■ 22.20	■ 25.40	■ 25.40	■ 31.80	■ 31.80	■ 31.80
E1	M10 x 1.50	M10 x 1.50	M10 x 1.50	M10 x 1.50	M12 x 1.75	M12 x 1.75	M16 x 2.00	M16 x 2.00	M16 x 2.00
E2	Ø8.00	Ø8.00	Ø10.00	Ø10.00	Ø12.00	Ø12.00	Ø15.00	Ø15.00	Ø15.00
E3	M14 x 1.50	M16 x 1.50	M18 x 1.50	M18 x 1.50	M20 x 1.50	M20 x 1.50	M26 x 1.50	M26 x 1.50	M26 x 1.50
F	10.00	10.00	10.00	10.00	12.00	12.00	15.00	15.00	15.00
G1	50.00	55.00	60.00	60.00	65.00	65.00	75.00	75.00	75.00
G2	140.00	160.00	160.00	160.00	180.00	180.00	200.00	200.00	200.00
H	9.00	10.00	10.00	10.00	12.00	12.00	15.00	15.00	15.00
ØI	Ø45.00	Ø50.00	Ø58.00	Ø58.00	Ø68.00	Ø68.00	Ø81.00	Ø81.00	Ø81.00
J1	55.00	57.00	69.00	69.00	75.00	75.00	90.00	90.00	90.00
J2	64.00	65.50	79.00	79.00	87.00	87.00	104.00	104.00	104.00
K	42.00	44.00	52.00	52.00	58.00	58.00	70.00	70.00	70.00
L	Ø6.80 ~ Ø10.50 x 6.50D	Ø6.80 ~ Ø10.50 x 6.50D	Ø9.00 ~ Ø14.00 x 9.00D	Ø9.00 ~ Ø14.00 x 9.00D	Ø9.00 ~ Ø14.00 x 9.00D	Ø9.00 ~ Ø14.00 x 9.00D	Ø11.00 ~ Ø17.00 x 11.00D	Ø11.00 ~ Ø17.00 x 11.00D	Ø11.00 ~ Ø17.00 x 11.00D
M	20.00	22.00	26.00	26.00	30.00	30.00	34.00	34.00	34.00
N	28.00	29.00	34.50	34.50	39.00	39.00	47.00	47.00	47.00
O'RING TYPE	P6	P6	P9	P9	P9	P9	P9	P9	P9

**** All dimensions are given in millimeters.



HSC-FCM SERIES

HSC-FCM SERIES



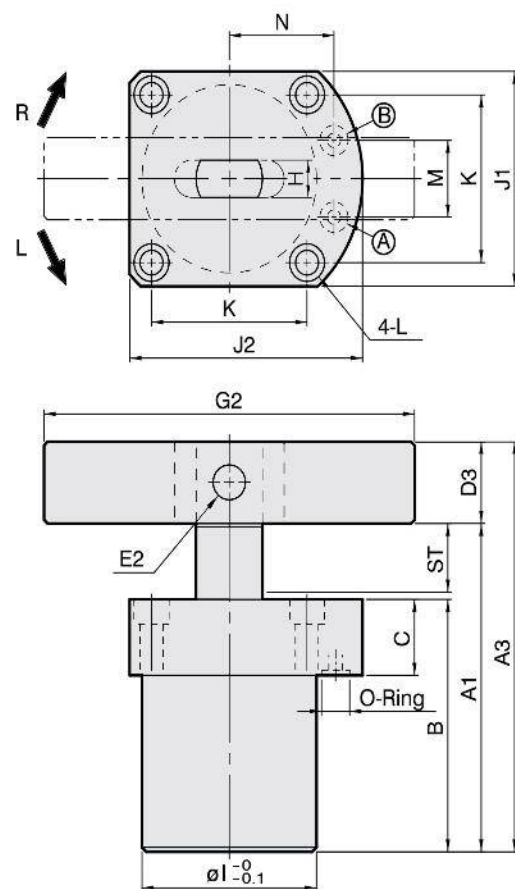
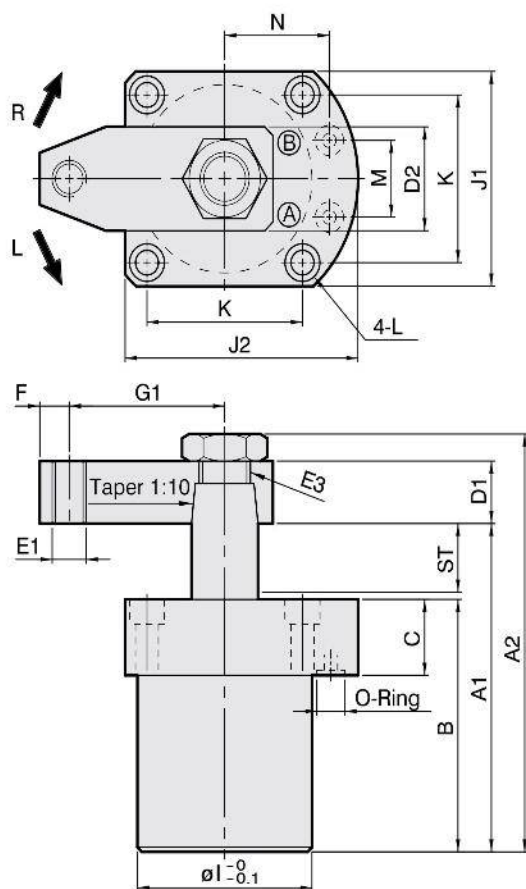
FLANGE TYPE HYDRAULIC CYLINDER SWIVEL CLAMPS WITH FLOW CONTROL



Characteristics & Dimensions

SERIES		HSC-FCM							
MODEL	HSC-FCM 25	HSC-FCM 32		HSC-FCM 40		HSC-FCM 50		HSC-FCM 63	
ST: TURN / GRIP	22:9/13	26:11/15	41:11/30	26:11/15	41:11/30	30:30/17	47:13/34	30:30/17	47:13/34
A1	101.00	115.00	145.00	120.00	150.00	134.00	168.00	139.00	173.00
A2	-124.00	-140.00	-170.00	-148.00	-178.00	-166.00	-200.00	-175.00	-209.00
A3	120.00	137.20	167.20	142.20	172.20	159.40	193.40	170.80	204.80
B	76.00	85.00	100.00	90.00	105.00	100.00	117.00	105.00	122.00
C	22.00	25.00		25.00		30.00		30.00	
D1	15.00	17.00		18.00		20.00		23.00	
D2	27.00	31.00		31.00		37.00		48.00	
D3	■ 19.00	■ 22.20		■ 22.20		■ 25.40		■ 31.80	
E1	M10 x 1.50	M10 x 1.50		M10 x 1.50		M12 x 1.75		M16 x 2.00	
E2	Ø8.00	Ø8.00		Ø10.00		Ø12.00		Ø15.00	
E3	M14 x 1.50	M16 x 1.50		M18 x 1.50		M20 x 1.50		M26 x 1.50	
F	10.00	10.00		10.00		12.00		15.00	
G1	50.00	55.00		60.00		65.00		75.00	
G2	140.00	160.00		160.00		180.00		200.00	
H	9.00	10.00		10.00		12.00		15.00	
ØI	Ø45.00	Ø50.00		Ø58.00		Ø68.00		Ø81.00	
J1	55.00	57.00		69.00		75.00		90.00	
J2	64.00	65.50		79.00		87.00		104.00	
K	42.00	44.00		52.00		58.00		70.00	
L	Ø6.80 ~ Ø10.50 x 6.50D	Ø6.80 ~ Ø10.50 x 6.50D		Ø9.00 ~ Ø14.00 x 9.00D		Ø9.00 ~ Ø14.00 x 9.00D		Ø11.00 ~ Ø17.00 x 11.00D	
M	20.00	22.00		26.00		30.00		34.00	
N	28.00	29.00		34.50		39.00		47.00	
O'RING TYPE	P6	P6		P9		P9		P9	
P _{MIN}	7.10	4.10		4.10		3.60		3.60	
P _{MAX}	10.20	8.10		8.10		7.60		7.60	

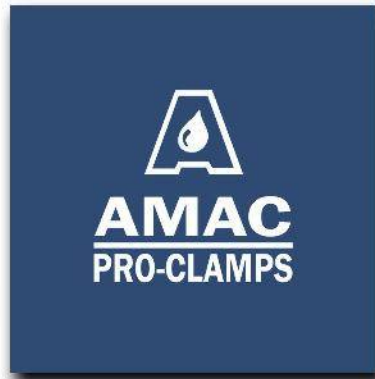
**** All dimensions are given in millimeters.



Ⓐ	PUERTO DE SUJECIÓN
Ⓑ	PUERTO DE LIBERACIÓN

Characteristics & Dimensions

SERIES		HSC-FCM			
FLANGE TYPE HYDRAULIC DEVICE WITH MANIFOLD AND FLOW CONTROL					
CYLINDER DIAMETER	Ø25	Ø32	Ø40	Ø50	Ø60
PISTON ROD DIAMETER	Ø18.00	Ø20.00	Ø22.40	Ø28.00	Ø35.00
TURNING STROKE	9.00	11.00	11.00	13.00	13.00
GRIPPING STROKE STD/INCR	13.00	15.00/30.00	15.00/30.00	17.00/34.00	17.00/34.00
PRESSURE AREA (PULL/PUSH) (cm ²)	2.37 / 4.91	4.90 / 8.04	8.63 / 12.57	13.47 / 19.63	21.55 / 31.17
THEORETICAL GRIPPING FORCE (30.00 Kg/cm ²)	71.00	147.00	259.00	404.00	647.00
FLUID TYPE	FILTERED HYDRAULIC OIL				
MAXIMUM OPERATING PRESSURE	100.00 Kg/cm ²				
OPERATING PRESSURE RANGE	5.00 Kg/cm ² ~ 70.00 Kg/cm ²				
TURNING DIRECTION	R : RIGHT TURN L : LEFT TURN N : WITHOUT TURN				
ROTATING ANGLE	45° & 60°: OPTIONAL TURNS 90°: STANDARD TURN				
ACUATOR TYPE	DOUBLE ACTION				
**** All dimensions are given in millimeters.					



HSC-M SERIES

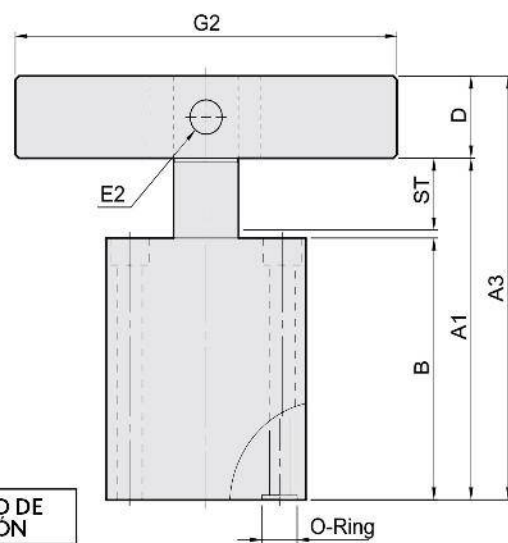
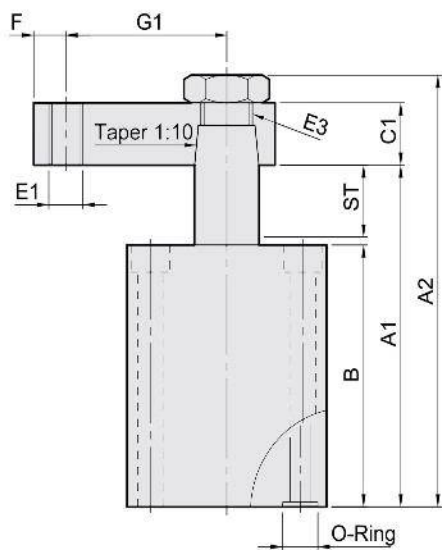
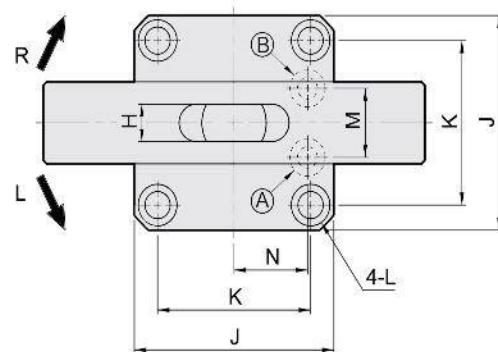
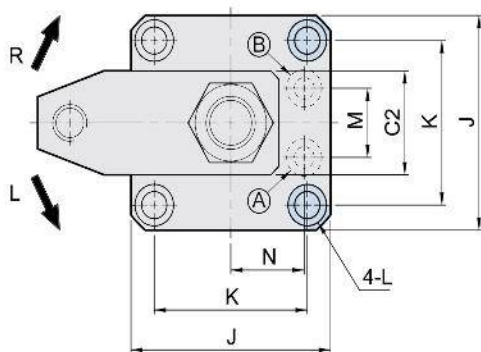
HSC-M SERIES

HYDRAULIC CYLINDER SWIVEL CLAMPS WITH FLOW CONTROL



Characteristics & Dimensions

SERIES		HSC-M			
HYDRAULIC DEVICE WITH MANIFOLD					
CYLINDER DIAMETER	Ø25	Ø32	Ø40	Ø50	Ø60
PISTON ROD DIAMETER	Ø18.00	Ø20.00	Ø22.40	Ø28.00	Ø35.00
TURNING STROKE	9.00	11.00	11.00	13.00	13.00
GRIPPING STROKE STD/INCR	13.00	15.00/30.00	15.00/30.00	17.00/34.00	17.00/34.00
PRESSURE AREA (PULL/PUSH) (cm ²)	2.37 / 4.91	4.90 / 8.04	8.63 / 12.57	13.47 / 19.63	21.55 / 31.17
THEORETICAL GRIPPING FORCE (30.00 Kg/cm ²)	71.00	147.00	259.00	404.00	647.00
FLUID TYPE	FILTERED HYDRAULIC OIL				
MAXIMUM OPERATING PRESSURE	100.00 Kg/cm ²				
OPERATING PRESSURE RANGE	5.00 Kg/cm ² ~ 70.00 Kg/cm ²				
TURNING DIRECTION	R : RIGHT TURN L : LEFT TURN N : WITHOUT TURN				
ROTATING ANGLE	45° & 60°: OPTIONAL TURNS 90°: STANDARD TURN				
ACUATOR TYPE	DOUBLE ACTION				
*** All dimensions are given in millimeters.					

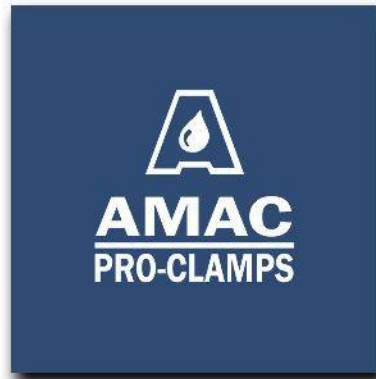


Ⓐ	PUERTO DE SUJECIÓN
Ⓑ	PUERTO DE LIBERACIÓN

Characteristics & Dimensions

SERIES		HSC-M							
MODEL	HSC-M 25	HSC-M 32		HSC-M 40		HSC-M 50		HSC-M 63	
ST: TURN / GRIP	22:9/13	26:11/15	41:11/30	26:11/15	41:11/30	30:30/17	47:13/34	30:30/17	47:13/34
A1	101.00	115.00	145.00	120.00	150.00	134.00	168.00	139.00	173.00
A2	-124.00	-140.00	-170.00	-148.00	-178.00	-166.00	-200.00	-175.00	-209.00
A3	120.00	137.20	167.20	142.20	172.20	159.40	193.40	170.80	204.80
B	76.00	85.00	100.00	90.00	105.00	100.00	117.00	105.00	122.00
C	22.00	25.00		25.00		30.00		30.00	
D1	15.00	17.00		18.00		20.00		23.00	
D2	27.00	31.00		31.00		37.00		48.00	
D3	■ 19.00	■ 22.20		■ 22.20		■ 25.40		■ 31.80	
E1	M10 x 1.50	M10 x 1.50		M10 x 1.50		M12 x 1.75		M16 x 2.00	
E2	Ø8.00	Ø8.00		Ø10.00		Ø12.00		Ø15.00	
E3	M14 x 1.50	M16 x 1.50		M18 x 1.50		M20 x 1.50		M26 x 1.50	
F	10.00	10.00		10.00		12.00		15.00	
G1	50.00	55.00		60.00		65.00		75.00	
G2	140.00	160.00		160.00		180.00		200.00	
H	9.00	10.00		10.00		12.00		15.00	
ØI	Ø45.00	Ø50.00		Ø58.00		Ø68.00		Ø81.00	
J1	55.00	57.00		69.00		75.00		90.00	
J2	64.00	65.50		79.00		87.00		104.00	
K	42.00	44.00		52.00		58.00		70.00	
L	Ø6.80 ~ Ø10.50 x 6.50D	Ø6.80 ~ Ø10.50 x 6.50D		Ø9.00 ~ Ø14.00 x 9.00D		Ø9.00 ~ Ø14.00 x 9.00D		Ø11.00 ~ Ø17.00 x 11.00D	
M	20.00	22.00		26.00		30.00		34.00	
N	28.00	29.00		34.50		39.00		47.00	
O'RING TYPE	P6	P6		P9		P9		P9	
P _{MIN}	7.10	4.10		4.10		3.60		3.60	
P _{MAX}	10.20	8.10		8.10		7.60		7.60	

**** All dimensions are given in millimeters.



HSC-MF SERIES

HSC-MF SERIES



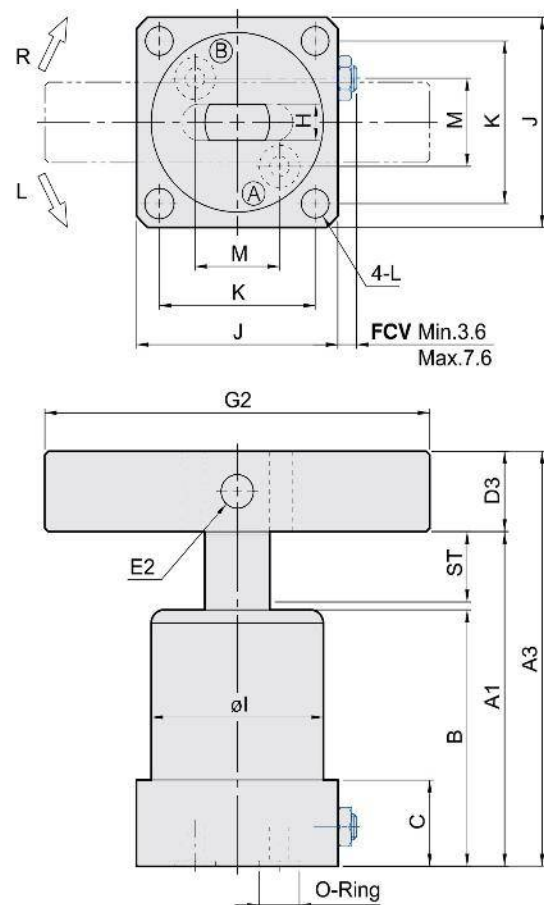
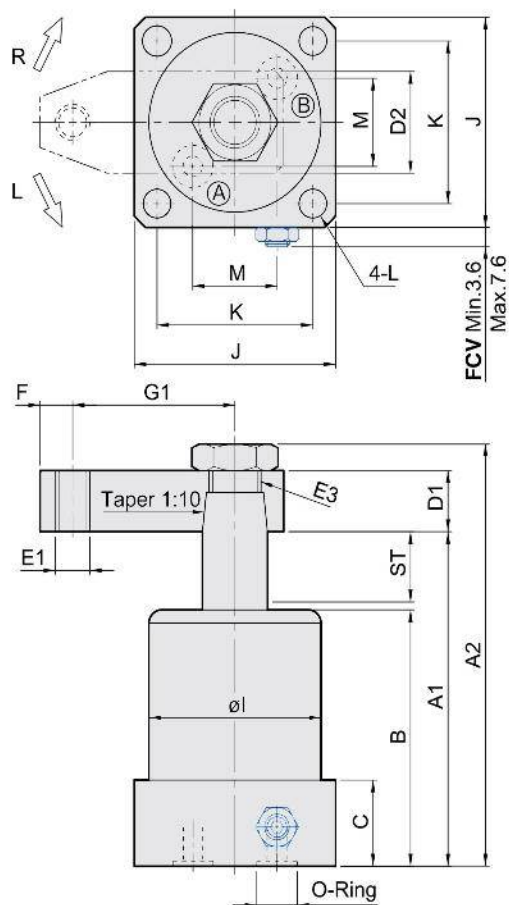
HYDRAULIC CYLINDER SWIVEL CLAMPS WITH MANIFOLD AND FLOW CONTROL



Characteristics & Dimensions

SERIES		HSC-MF							
MODEL	HSC-MF 25	HSC-MF 32		HSC-MF 40		HSC-MF 50		HSC-MF 63	
ST: TURN / GRIP	22:9/13	26:11/15	41:11/30	26:11/15	41:11/30	30:30/17	47:13/34	30:30/17	47:13/34
A1	101.00	115.00	145.00	120.00	150.00	134.00	168.00	139.00	173.00
A2	-124.00	-140.00	-170.00	-148.00	-178.00	-166.00	-200.00	-175.00	-209.00
A3	120.00	137.20	167.20	142.20	172.20	159.40	193.40	170.80	204.80
B	76.00	85.00	100.00	90.00	105.00	100.00	117.00	105.00	122.00
C	22.00	25.00		25.00		30.00		30.00	
D1	15.00	17.00		18.00		20.00		23.00	
D2	27.00	31.00		31.00		37.00		48.00	
D3	■ 19.00	■ 22.20		■ 22.20		■ 25.40		■ 31.80	
E1	M10 x 1.50	M10 x 1.50		M10 x 1.50		M12 x 1.75		M16 x 2.00	
E2	Ø8.00	Ø8.00		Ø10.00		Ø12.00		Ø15.00	
E3	M14 x 1.50	M16 x 1.50		M18 x 1.50		M20 x 1.50		M26 x 1.50	
F	10.00	10.00		10.00		12.00		15.00	
G1	50.00	55.00		60.00		65.00		75.00	
G2	140.00	160.00		160.00		180.00		200.00	
H	9.00	10.00		10.00		12.00		15.00	
ØI	Ø46.00	Ø50.00		Ø54.00		Ø68.00		Ø80.00	
J	55.00	57.00		63.00		72.00		88.00	
K	42.00	44.00		48.00		57.00		70.00	
L	Ø6.80	Ø6.80		Ø9.00		Ø9.00		Ø11.00	
M	19.00	21.00		23.00		28.00		32.00	
O'RING TYPE	P7	P7		P9		P9		P9	

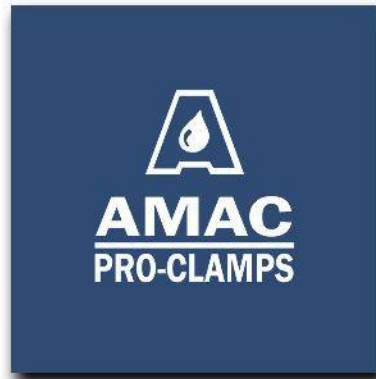
**** All dimensions are given in millimeters.



(A)	PUERTO DE SUJECCIÓN
(B)	PUERTO DE LIBERACIÓN

Characteristics & Dimensions

SERIES		HSC-MF			
HYDRAULIC DEVICE WITH MANIFOLD AND FLOW CONTROL					
CYLINDER DIAMETER	Ø25	Ø32	Ø40	Ø50	Ø60
PISTON ROD DIAMETER	Ø18.00	Ø20.00	Ø22.40	Ø28.00	Ø35.00
TURNING STROKE	9.00	11.00	11.00	13.00	13.00
GRIPPING STROKE STD/INCR	13.00	15.00/30.00	15.00/30.00	17.00/34.00	17.00/34.00
PRESSURE AREA (PULL/PUSH) (cm ²)	2.37 / 4.91	4.90 / 8.04	8.63 / 12.57	13.47 / 19.63	21.55 / 31.17
THEORETICAL GRIPPING FORCE (30.00 Kg/cm ²)	71.00	147.00	259.00	404.00	647.00
FLUID TYPE	FILTERED HYDRAULIC OIL				
MAXIMUM OPERATING PRESSURE	100.00 Kg/cm ²				
OPERATING PRESSURE RANGE	5.00 Kg/cm ² ~ 70.00 Kg/cm ²				
TURNING DIRECTION	R : RIGHT TURN L : LEFT TURN N : WITHOUT TURN				
ROTATING ANGLE	45° & 60°: OPTIONAL TURNS 90°: STANDARD TURN				
ACUATOR TYPE	DOUBLE ACTION				
**** All dimensions are given in millimeters.					



HSC-TB SERIES

HSC-TB SERIES



HYDRAULIC CYLINDER SWIVEL CLAMPS WITH THREADED BODY



Characteristics & Dimensions

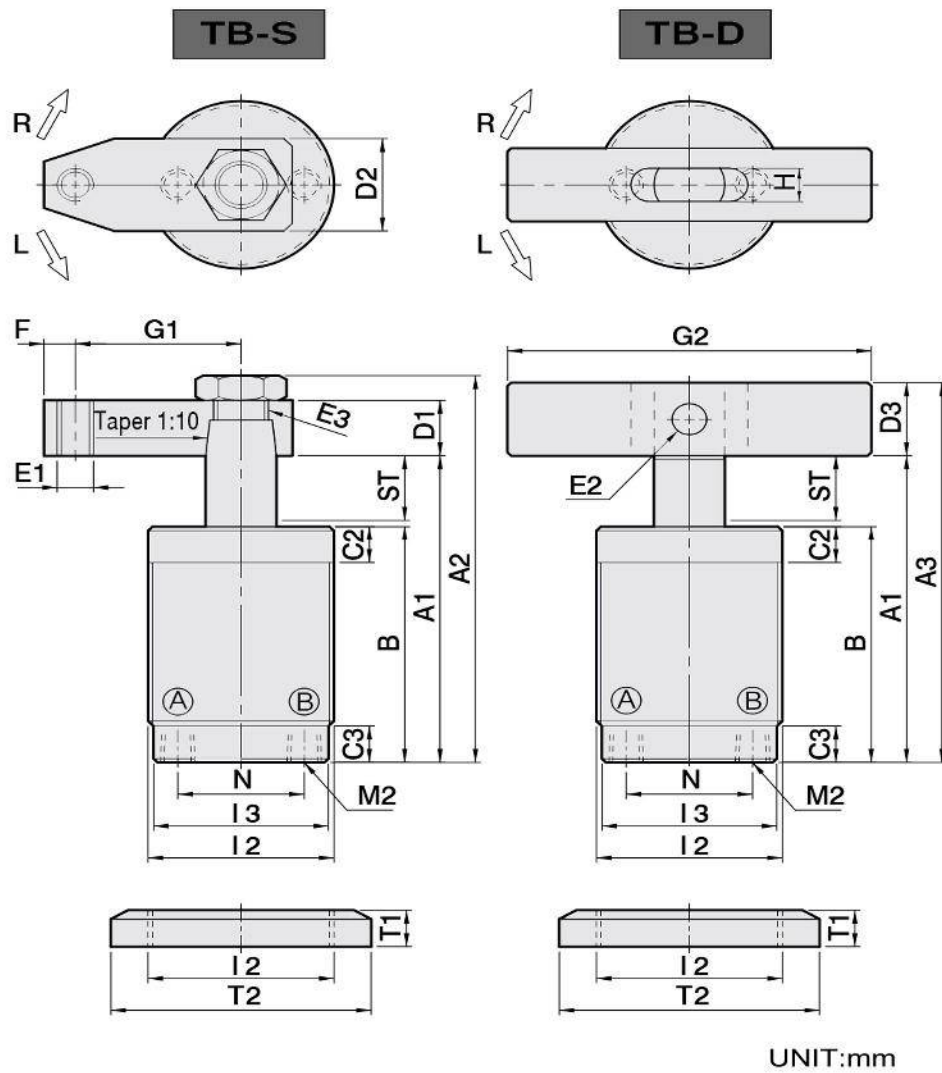
SERIES

HSC-TB

HYDRAULIC DEVICE WITH THREADED BODY

CYLINDER DIAMETER	Ø25	Ø32	Ø40	Ø50	Ø60
PISTON ROD DIAMETER	Ø18.00	Ø20.00	Ø22.40	Ø28.00	Ø35.00
TURNING STROKE	9.00	11.00	11.00	13.00	13.00
GRIPPING STROKE <i>STD/INCR</i>	13.00	15.00/30.00	15.00/30.00	17.00/34.00	17.00/34.00
PRESSURE AREA (PULL/PUSH) (cm ²)	2.37 / 4.91	4.90 / 8.04	8.63 / 12.57	13.47 / 19.63	21.55 / 31.17
THEORETICAL GRIPPING FORCE (30.00 Kg/cm ²)	71.00	147.00	259.00	404.00	647.00
FLUID TYPE	FILTERED HYDRAULIC OIL				
MAXIMUM OPERATING PRESSURE	100.00 Kg/cm²				
OPERATING PRESSURE RANGE	5.00 Kg/cm² ~ 70.00 Kg/cm²				
TURNING DIRECTION	R : RIGHT TURN L : LEFT TURN N : WITHOUT TURN				
ROTATING ANGLE	45° & 60°: OPTIONAL TURNS 90°: STANDARD TURN				
ACTUATOR TYPE	DOUBLE ACTION				

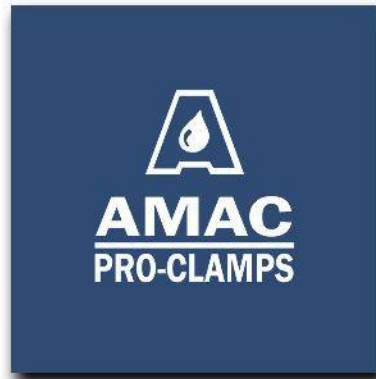
**** All dimensions are given in millimeters.



Characteristics & Dimensions

SERIES	HSC-TB				
MODEL	HSC-TB 25	HSC-TB 32	HSC-TB 40	HSC-TB 50	HSC-TB 63
ST: TURN / GRIP	22:9/13	26:11/15	26:11/15	30:30/17	30:30/17
A1	101.00	115.00	120.00	134.00	139.00
A2	-124.00	-140.00	-148.00	-166.00	-175.00
A3	120.00	137.20	142.20	159.40	170.8
B	76.00	85.00	90.00	100.00	105.00
C1	22.00	25.00	25.00	30.00	30.00
C2/C3	10.00 / 8.00	10.00 / 9.00	12.00 / 9.00	12.00 / 11.00	-
D1	15.00	17.00	18.00	20.00	23.00
D2	27.00	31.00	31.00	37.00	48.00
D3	■ 19.00	■ 22.20	■ 22.20	■ 25.40	■ 31.80
E1	M10 x 1.50	M10 x 1.50	M10 x 1.50	M12 x 1.75	M16 x 2.00
E2	Ø8.00	Ø8.00	Ø10.00	Ø12.00	Ø15.00
E3	M14 x 1.50	M16 x 1.50	M18 x 1.50	M20 x 1.50	M26 x 1.50
F	10.00	10.00	10.00	12.00	15.00
G1	50.00	55.00	60.00	65.00	75.00
G2	140.00	160.00	160.00	180.00	200.00
H	9.00	10.00	10.00	12.00	15.00
ØI1	Ø45.00	Ø50.00	Ø58.00	Ø68.00	Ø80.00
I2/I3	M45 x 1.50 / Ø43	M50 x 1.50 / Ø48	M55 x 1.50 / Ø53	M65 x 1.50 / Ø63	-
J	53.00	57.00	69.00	56.00	88.00
K	40.00	44.00	52.00	44.00	70.00
L	Ø6.80 x Ø10.50 x Ø6.50D	Ø6.80 x Ø10.50 x Ø6.50D	Ø9.00 x Ø14.00 x Ø9.00D	Ø9.00 x Ø14.00 x Ø9.00D	Ø11.00 x Ø17.00 x Ø11.00D
M1	PT 1/4"	PT 1/4"	PT 1/4"	PT 1/4"	PT 1/4"
M2	PT 1/8"	PT 1/8"	PT 1/8"	PT 1/8"	-
N	28.00	32.00	40.00	50.00	63.00
T1 x 2PCS	10.00	11.00	11.00	12.00	-
T2	Ø65.00	Ø70.00	Ø75.00	Ø85.00	-

**** All dimensions are given in millimeters.



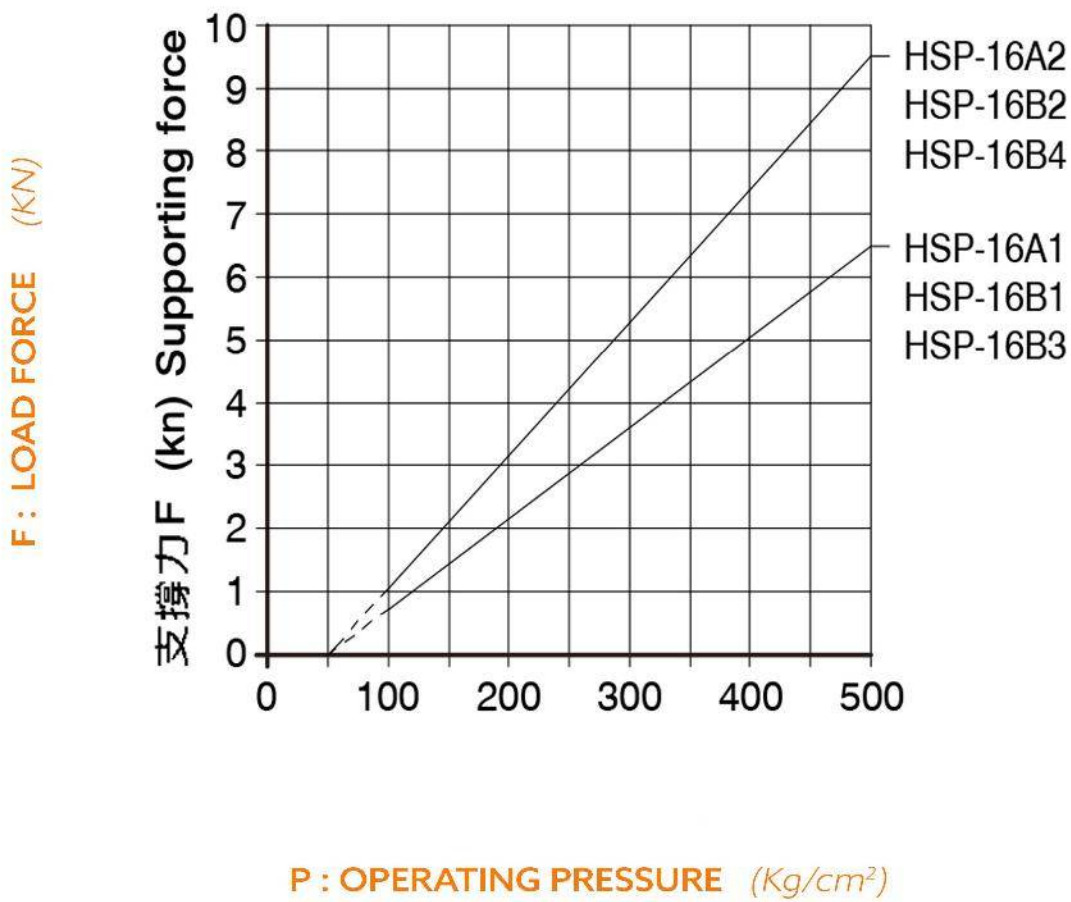
HSP-16 SERIES

HSP-16

HIGH PRESSURE LOAD CYLINDERS



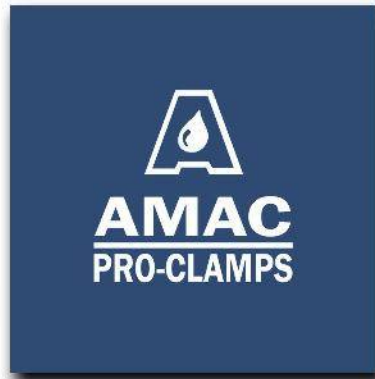
OUTPUT
TABLE



Characteristics & Dimensions

SERIES			HSP-16				
MODEL	HSP-16A1	HSP-16A2	HSP-16B1	HSP-16B2	HSP-16B3	HSP-16B4	
ROD DIAMETER	Ø16.00		Ø16.00		Ø16.00		
ROD STROKE	8.00		8.00		15.00		
MINIMUM WORKING PRESSURE	100.00 Kg/cm ²						
ROD FORCE TO POSITION WORKPIECE	650.00 Kg	950.00 Kg	650.00 Kg	950.00 Kg	650.00 Kg	950.00 Kg	
GRIPPING FORCE (500 Kg/cm ²)	Min = 0.80 Kg	Max = 1.30 Kg	Min = 0.80 Kg	Max = 1.30 Kg	Min = 0.80 Kg	Max = 1.30 Kg	
A	80.50	90.50	72.50	82.50	79.50	89.50	
B	79.00	89.00	71.00	81.00	70.00	88.00	
C	54.00	64.00	54.00	64.00	61.00	71.00	

**** All dimensions are given in millimeters.



HSP-25 SERIES

HSP-25

HIGH PRESSURE LOAD CYLINDERS



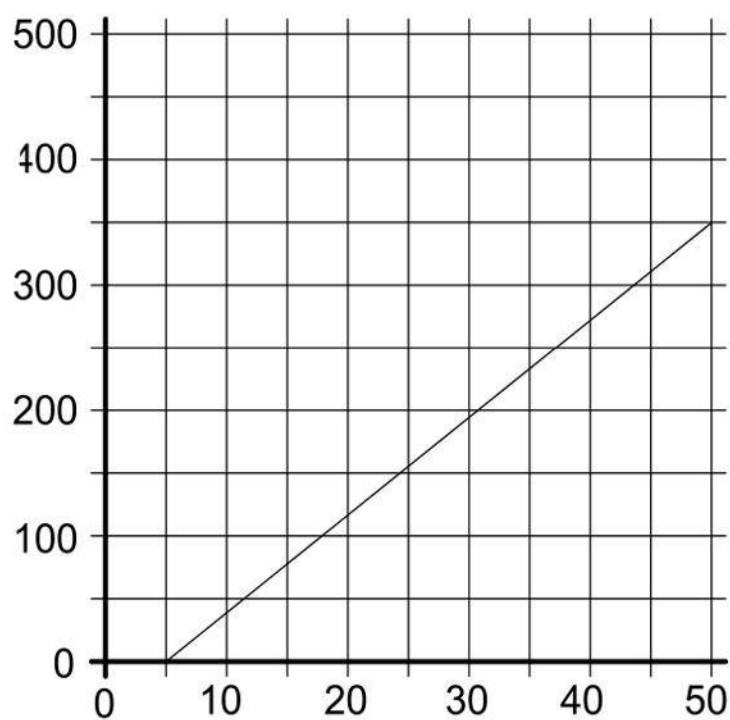
Characteristics & Dimensions

SERIES		HSP-25	
MODEL		HSP-25A	HSP-25B
ROD DIAMETER		Ø25.00	
ROD STROKE		12.00	
MINIMUM WORKING PRESSURE		100.00 Kg/cm ²	
ROD FORCE TO POSITION WORKPIECE		Min = 0.80 Kg Max = 1.30 Kg	
LOAD FORCE	(500 Kg/cm ²)	2,200.00 Kg	
*** All dimensions are given in millimeters.			



OUTPUT TABLE

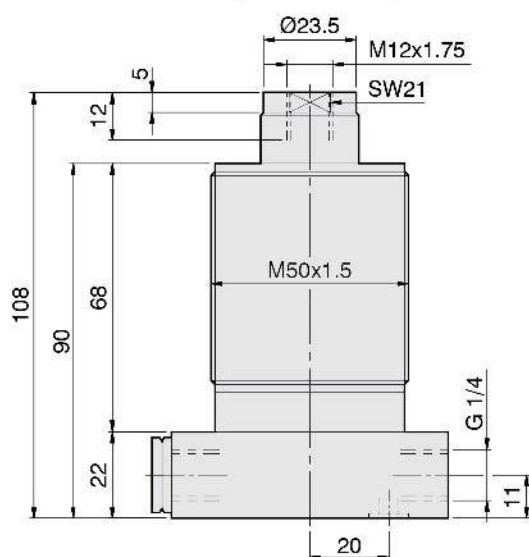
F : LOAD FORCE (KN)



P : OPERATING PRESSURE (Kg/cm²)

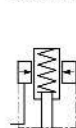


HSP-25A

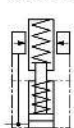


配管式 Line type	HSP-25A
油路板型 Manifold	HSP-M25A

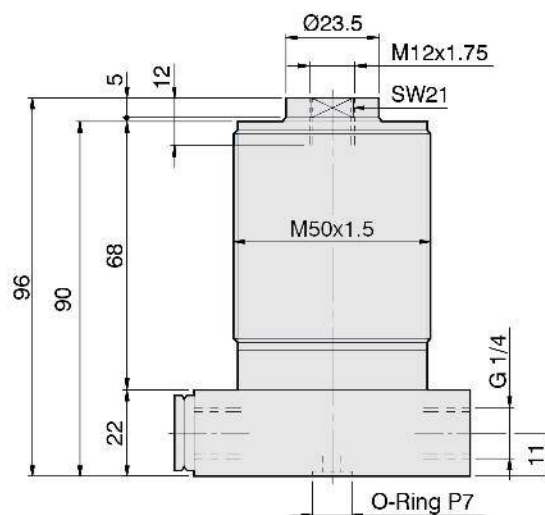
Type A



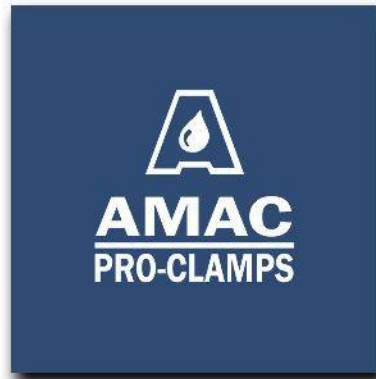
Type B



HSP-25B



配管式 Line type	HSP-25B
油路板型 Manifold	HSP-M25B



HSV SERIES

HYDRAULIC SECUENCIAL VALVE



- Pressure range: **10-300 kg/cm²**

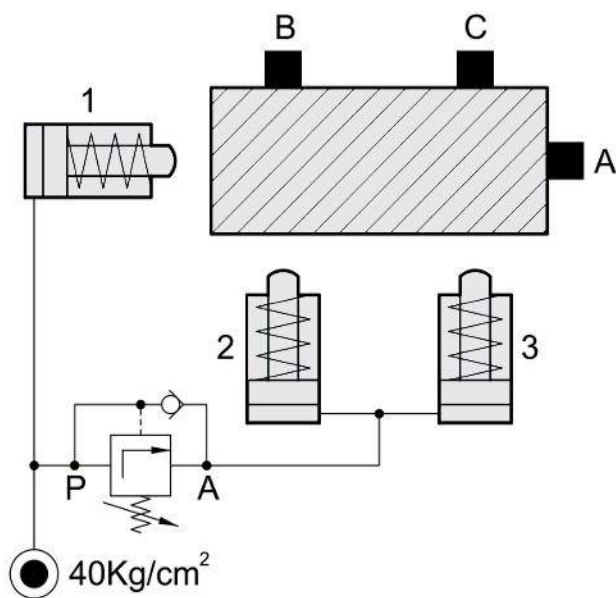
• The hydraulic sequence valve series is especially ideal for installation in the accessory circuit. The movement sequences of the hydraulic cylinder are decided by the pressure. The sequence valve features a compact construction and high pressure resistance. It requires no additional control when installed in the circuit and provides positive sequential movement control.

• The series offers two mounting types to choose from. **Type A** is a manifold mounting type and **Type B** is an in-line mounting type. You get a flexible choice of mounting types to suit your luminaire design.

Characteristics & Dimensions

SERIE	HSV
HYDRAULIC AMPLIFIERS	
MODEL	WORKING PRESSURE RANGE
HSV-A1	10.00 Kg/cm ² ~ 50.00 Kg/cm ²
HSV-A2	30.00 Kg/cm ² ~ 200.00 Kg/cm ²
HSV-A3	70.00 Kg/cm ² ~ 300.00 Kg/cm ²
HSV-B1	10.00 Kg/cm ² ~ 50.00 Kg/cm ²
HSV-B2	30.00 Kg/cm ² ~ 200.00 Kg/cm ²
HSV-B3	70.00 Kg/cm ² ~ 300.00 Kg/cm ²
**** All dimensions are given in millimeters.	

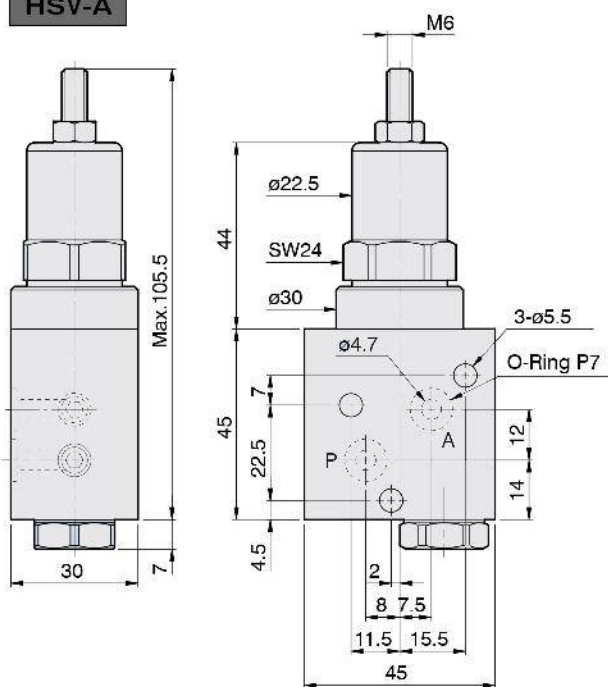
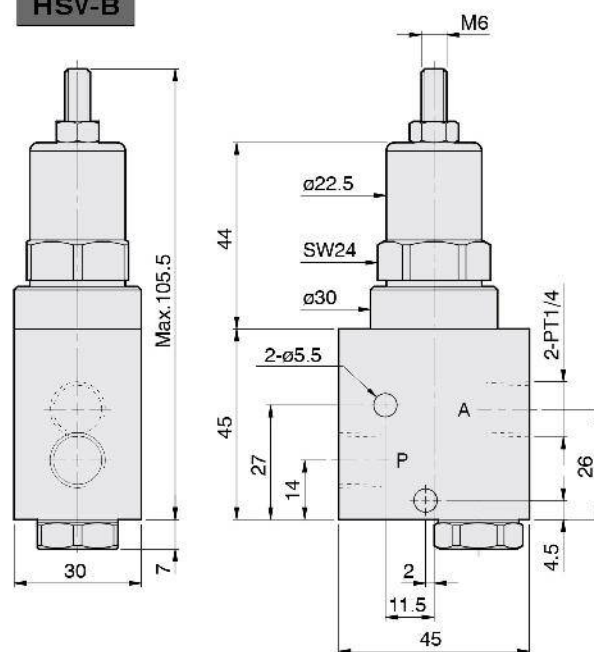
Circuit diagram

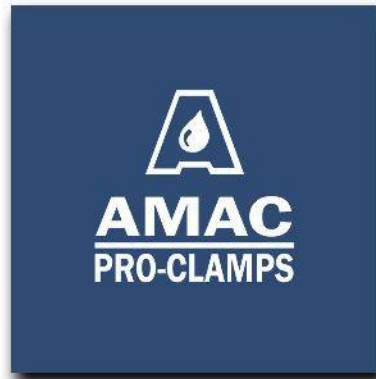


The hydraulic cylinder pushes the workpiece to A.

The pressure reaches the setting value of 40 kg/cm² in the HSV Series devices.

Hydraulic cylinders 2 and 3 push the workpiece to B and C to provide sequential motion clamping.

HSV-A

HSV-B




HTB HTM70-HTM140 SERIES

HTB HTM/HTM140 SERIES



THIN TYPE HYDRAULIC CYLINDERS



Characteristics & Dimensions

SERIES		HTB HTM-70			
CYLINDER DIAMETER	30	40	50	63	80
A	64.00	65.00	71.00	80.00	95.00
AL	89.00	95.00	106.00	120.00	140.00
B	54.00	55.00	60.00	67.00	78.00
C	10.00	10.00	11.00	13.00	17.00
CL	7.00	7.00	8.00	10.00	14.00
D	20.00	25.00	30.00	35.00	45.00
SW	17.00	22.00	27.00	32.00	41.00
E	62.00	70.00	80.00	94.00	114.00
F	47.00	52.00	58.00	69.00	86.00
H	6.50	9.00	11.00	13.00	15.00
K	6.80	9.00	11.00	13.00	15.00
M	11.00	14.00	18.00	20.00	22.00
N	M12x1.75x15D	M16x2.0x20D	M20x2.5x25D	M27x3.0x35D	M30x3.5x35D
W	M16 x 1.5	M22 x 1.5	M26 x 1.5	M30 x 35D	M39 x 1.5
WL	25.00	30.00	35.00	40.00	45.00
P1	28.00	28.00	29.50	31.00	33.00
P2	14.00	15.00	18.00	20.00	27.00
R	10.00	10.00	10.00	10.00	15.00
M	1/4"	1/4"	1/4"	3/8"	3/8"

*** All dimensions are given in millimeters.

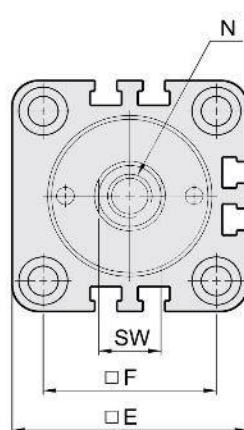
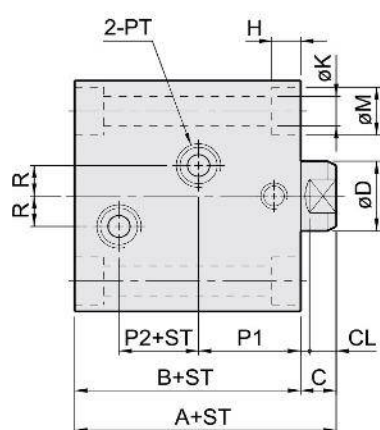
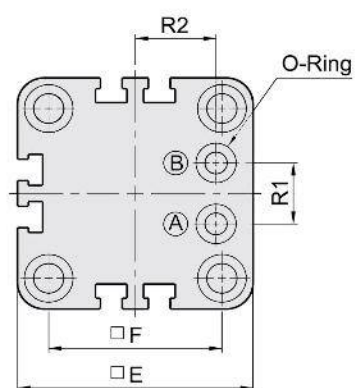
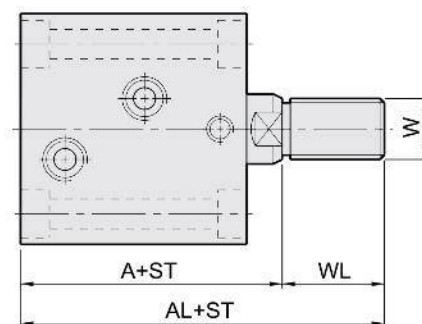
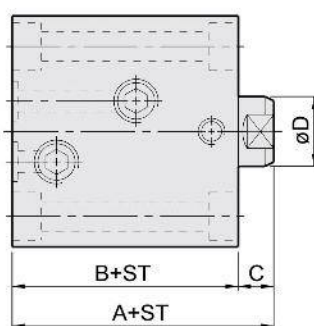
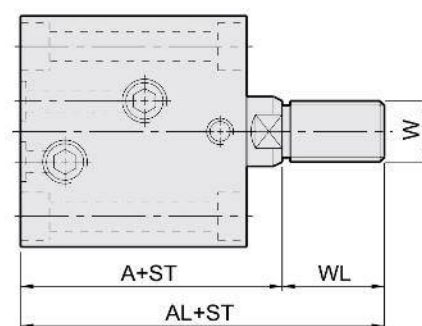
Characteristics & Dimensions

SERIES

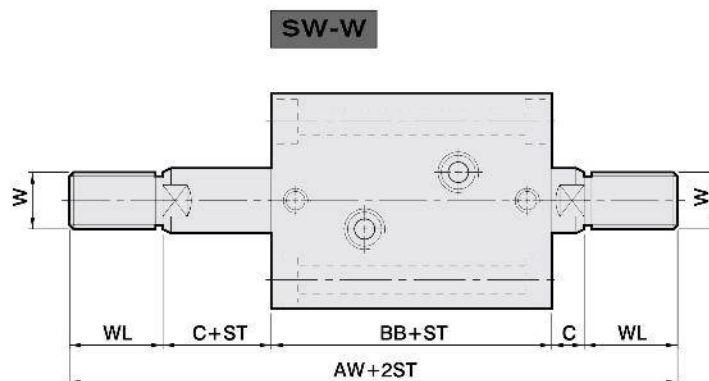
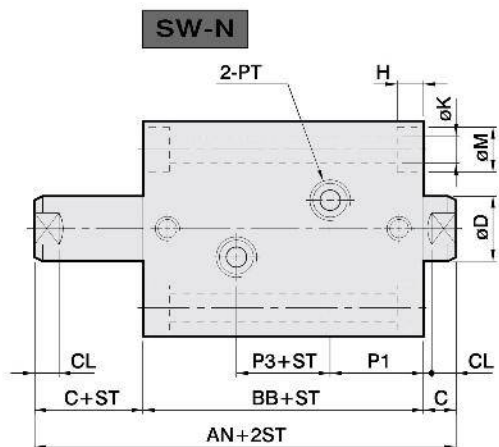
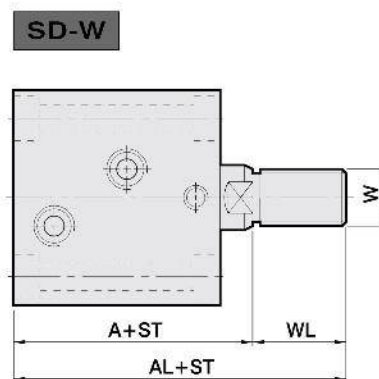
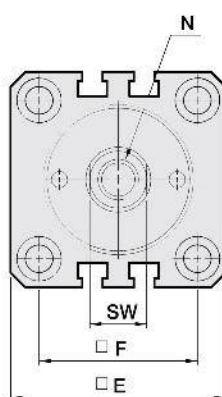
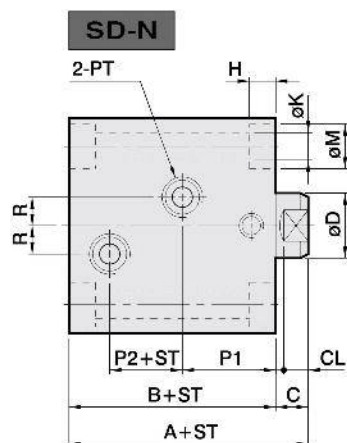
HTB HTM-140

CYLINDER DIAMETER	30	40	50	63	80
A	64.00	65.00	71.00	80.00	95.00
AL	89.00	95.00	106.00	120.00	140.00
B	54.00	55.00	60.00	67.00	78.00
C	10.00	10.00	11.00	13.00	17.00
CL	7.00	7.00	8.00	10.00	14.00
D	20.00	25.00	30.00	35.00	45.00
SW	17.00	22.00	27.00	32.00	41.00
E	62.00	70.00	80.00	94.00	114.00
F	47.00	52.00	58.00	69.00	86.00
H	6.50	9.00	11.00	13.00	15.00
K	6.80	9.00	11.00	13.00	15.00
M	11.00	14.00	18.00	20.00	22.00
N	M12x1.75x15D	M16x2.0x20D	M20x2.5x25D	M27x3.0x35D	M30x3.5x35D
W	M16 x 1.5	M22 x 1.5	M26 x 1.5	M30 x 35D	M39 x 1.5
WL	25.00	30.00	35.00	40.00	45.00
R1	20.00	20.00	20.00	26+	30.00
R2	20.00	24.00	29.00	35.00	44.00
O	P9	P9	P9	P11	P11

*** All dimensions are given in millimeters.

SD-N

SD-W

SDMB-N

SDMB-W


(A)	Puerto de Sujeción
(B)	Puerto de Liberación



(A)	Puerto de Sujeción
(B)	Puerto de Liberación

Characteristics & Dimensions

SERIES

HTB-HTM70

THIN TYPE HYDRAULIC CYLINDER

CYLINDER DIAMETER			Ø32	Ø40	Ø50	Ø63	Ø80	
PISTON ROD DIAMETER			Ø20	Ø25	Ø30	Ø35	Ø25	
OPERATING PRESSURE (Kg/cm ²)	10.00	▲	80.00	126.00	196.00	312.00	503.00	
		■	49.00	77.00	126.00	216.00	344.00	
	35.00	▲	281.00	440.00	687.00	1,091.00	1,759.00	
		■	172.00	268.00	440.00	754.00	1,203.00	
	70.00	▲	563.00	880.00	1,374.00	2,182.00	3,519.00	
		■	343.00	536.00	879.00	1,509.00	2,406.00	
	100.00	▲	804.00	1,257.00	1,963.00	3,117.00	5,027.00	
		■	490.00	766.00	1,256.00	2,155.00	3,437.00	
	140.00	▲	1,126.00	1,760.00	2,748.00	4,364.00	7,038.00	
		■	686.00	1,072.00	1,758.00	3,017.00	4,812.00	
PRESSURE AREA (cm ²)		▲	F1 (PUSH)	8.04	12.57	19.63	31.17	50.27
		■	F2 (PULL)	4.90	7.66	12.56	21.55	34.37
INSTALATION		SD: THIN TYPE HYDRAULIC CYLINDER						
		SDMB: THIN TYPE HYDRAULIC CYLINDER WITH BACK MANIFOLD						
		SD: THIN TYPE HYDRAULIC CYLINDER						
		SDMB: THIN TYPE HYDRAULIC CYLINDER WITH BACK MANIFOLD						
OPERATING PRESSURE RANGE		5.00 Kg/cm ² ~ 70.00 Kg/cm ²						
OPERATING SPEED RANGE		8.00 mm/seg ~ 100.00 mm/seg						
OPERATING TEMPERATURE RANGE		-10.00° C ~ 60.00° C						
OPERATING FLUID		HYDRAULIC FILTERED OIL						
ACTION TYPE		DOUBLE ACTION DEVICE						
PISTON BARREL CYLINDER MATERIAL		CARBON STEEL						
MAGNETIC SENSORS		S1:1 S2:2 (1 pc S1 / 2 pcs S2)						
THREAD TYPE		N: INTERNAL THREAD W: EXTERNAL THREAD						

** ▲ Empujar.

*** ■ Jalar.

**** Todas las dimensiones estaban dadas en milímetros.

Characteristics & Dimensions

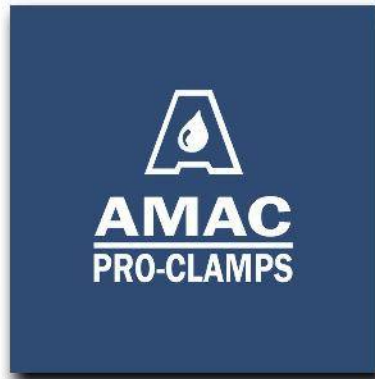
SERIES
HTB-HTM140
THIN TYPE HYDRAULIC CYLINDER

CYLINDER DIAMETER				Ø32	Ø40	Ø50	Ø63	Ø80
PISTON ROD DIAMETER				Ø20	Ø25	Ø30	Ø35	Ø25
OPERATING PRESSURE (Kg/cm ²)	10.00	▲		80.00	126.00	196.00	312.00	503.00
		■		49.00	77.00	126.00	216.00	344.00
	35.00	▲		281.00	440.00	687.00	1,091.00	1,759.00
		■		172.00	268.00	440.00	754.00	1,203.00
	70.00	▲		563.00	880.00	1,374.00	2,182.00	3,519.00
		■		343.00	536.00	879.00	1,509.00	2,406.00
	100.00	▲		804.00	1,257.00	1,963.00	3,117.00	5,027.00
		■		490.00	766.00	1,256.00	2,155.00	3,437.00
	140.00	▲		1,126.00	1,760.00	2,748.00	4,364.00	7,038.00
		■		686.00	1,072.00	1,758.00	3,017.00	4,812.00
PRESSURE AREA (cm ²)		▲	F1 (PUSH)	8.04	12.57	19.63	31.17	50.27
		■	F2 (PULL)	4.90	7.66	12.56	21.55	34.37
INSTALATION		AXIAL		SD: THIN TYPE HYDRAULIC CYLINDER				
				SDMB: THIN TYPE HYDRAULIC CYLINDER WITH BACK MANIFOLD				
OPERATING PRESSURE RANGE				5.00 Kg/cm ² ~ 70.00 Kg/cm ²				
OPERATING SPEED RANGE				8.00 mm/seg ~ 100.00 mm/seg				
OPERATING TEMPERATURE RANGE				-10.00° C ~ 60.00° C				
OPERATING FLUID				HYDRAULIC FILTERED OIL				
ACTION TYPE				DOUBLE ACTION DEVICE				
PISTON BARREL CYLINDER MATERIAL				CARBON STEEL				
MAGNETIC SENSORS				S1:1 S2:2 (1 pc S1 / 2 pcs S2)				
THREAD TYPE				N: INTERNAL THREAD W: EXTERNAL THREAD				

** ▲ PUSH.

*** ■ PULL.

**** All dimensions are given in millimeters.



HTB LA-LW SERIES

HTB LA/LW SERIES

THIN TYPE HYDRAULIC CYLINDERS



Characteristics & Dimensions

SERIES

HTB LAM / HTB LWM

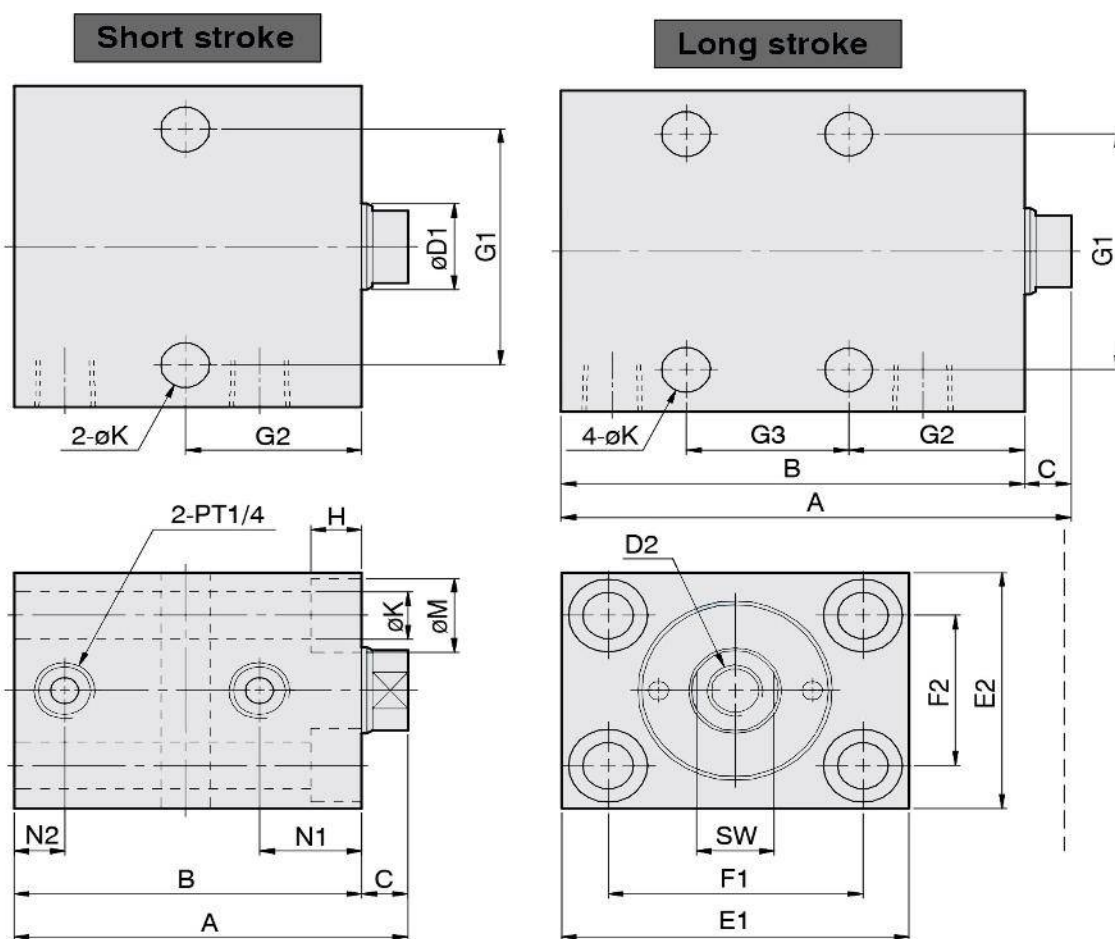
THIN TYPE HYDRAULIC CYLINDERS

CYLINDER DIAMETER		Ø20	Ø25	Ø32	Ø40	Ø50	Ø63	Ø80	
PISTON ROD DIAMETER		Ø12	Ø14	Ø20	Ø25	Ø30	Ø35	Ø25	
OPERATING PRESSURE (Kg/cm ²)	10.00	▲	31.00	49.00	80.00	126.00	196.00	312.00	503.00
		■	20.00	34.00	49.00	77.00	126.00	216.00	344.00
	35.00	▲	110.00	172.00	281.00	440.00	687.00	1,091.00	1,759.00
		■	71.00	118.00	172.00	268.00	440.00	754.00	1,203.00
	70.00	▲	220.00	344.00	563.00	880.00	1,374.00	2,182.00	3,519.00
		■	141.00	236.00	343.00	536.00	879.00	1,509.00	2,406.00
	100.00	▲	314.00	491.00	804.00	1,257.00	1,963.00	3,117.00	5,027.00
		■	201.00	337.00	490.00	766.00	1,256.00	2,155.00	3,437.00
	140.00	▲	440.00	687.00	1,126.00	1,760.00	2,748.00	4,364.00	7,038.00
		■	281.00	472.00	686.00	1,072.00	1,758.00	3,017.00	4,812.00
PRESSURE AREA (cm ²)	▲	3.14	4.91	8.04	12.57	19.63	31.17	50.27	
	■	2.01	3.37	4.90	7.66	12.56	21.55	34.37	
INSTALATION	Axial	SD : SINGLE END ROD							
		SW : DOUBLE END ROD							
OPERATING PRESSURE RANGE				5.00 Kg/cm ² ~ 140.00 Kg/cm ²					
OPERATING SPEED RANGE				8.00 mm/seg ~ 100.00 mm/seg					
OPERATING TEMPERATURE RANGE				-10.00° C ~ 60.00° C					
OPERATING FLUID				HIDRAULIC FILTERED OIL					
ACTION TYPE				DOUBLE ACTION DEVICE					
PISTON BARREL CYLINDER MATERIAL				CARBON STEEL					

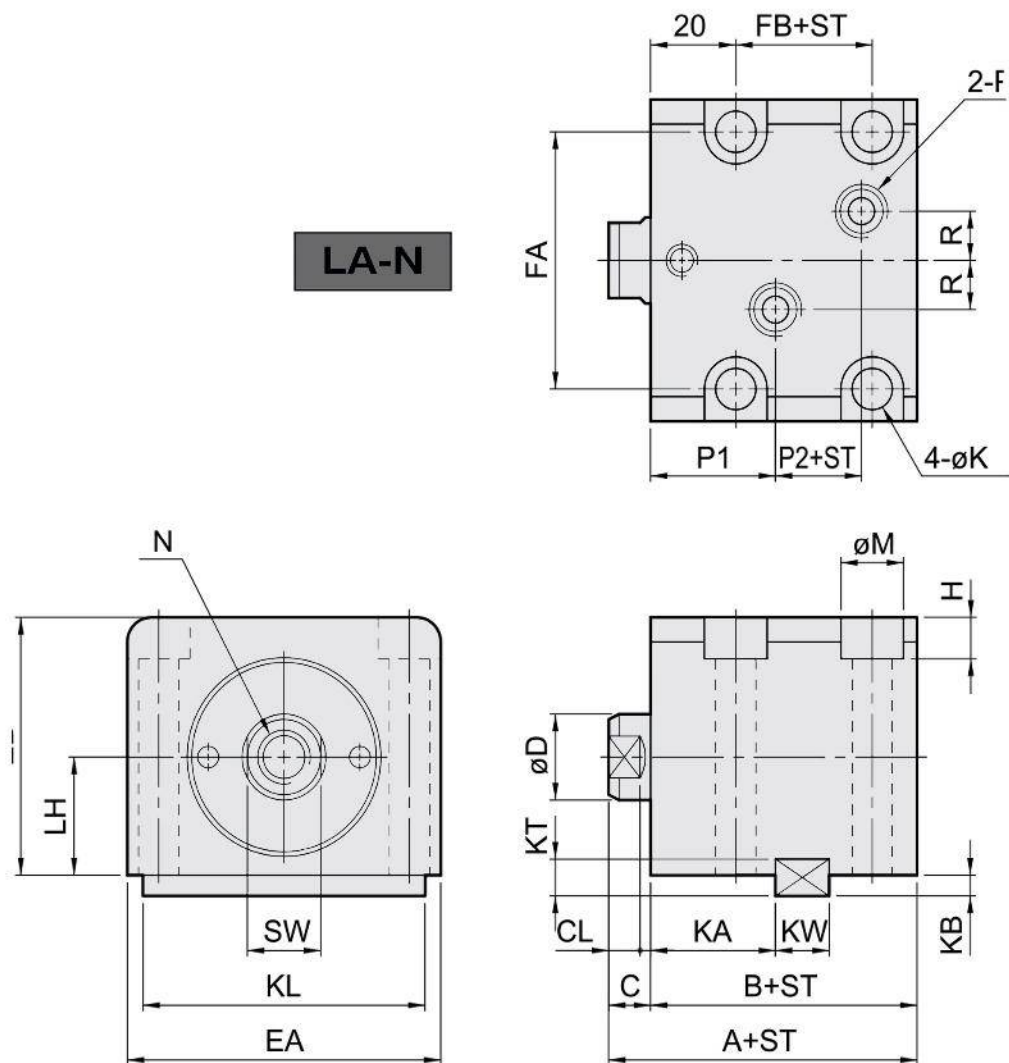
** ▲ Push.

*** ■ Pull.

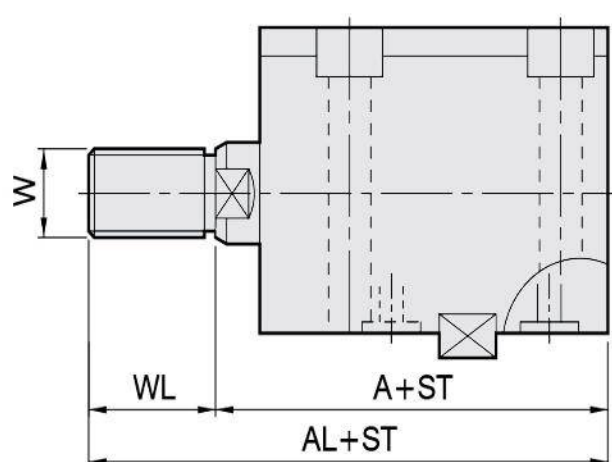
**** All dimensions are given in millimeters.

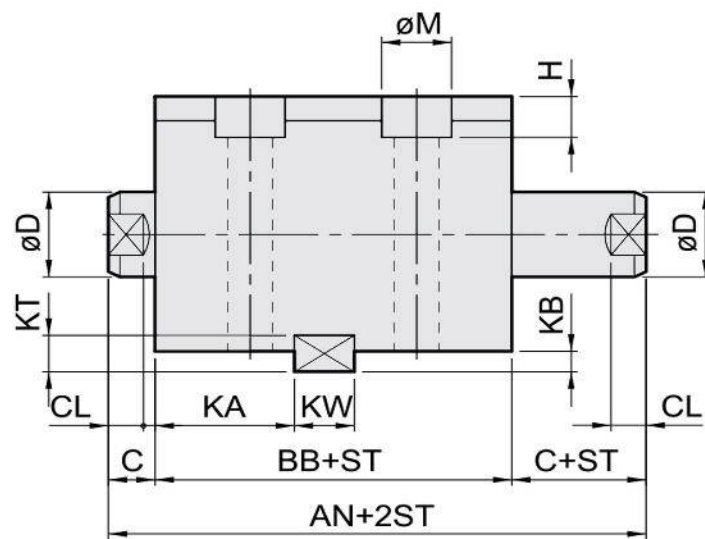
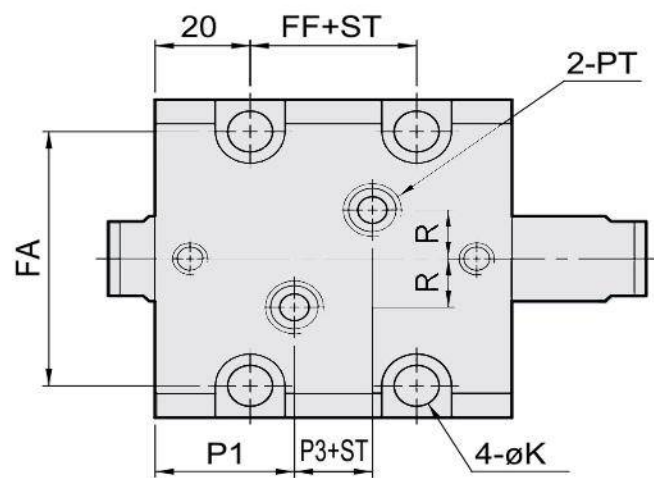


LA-N

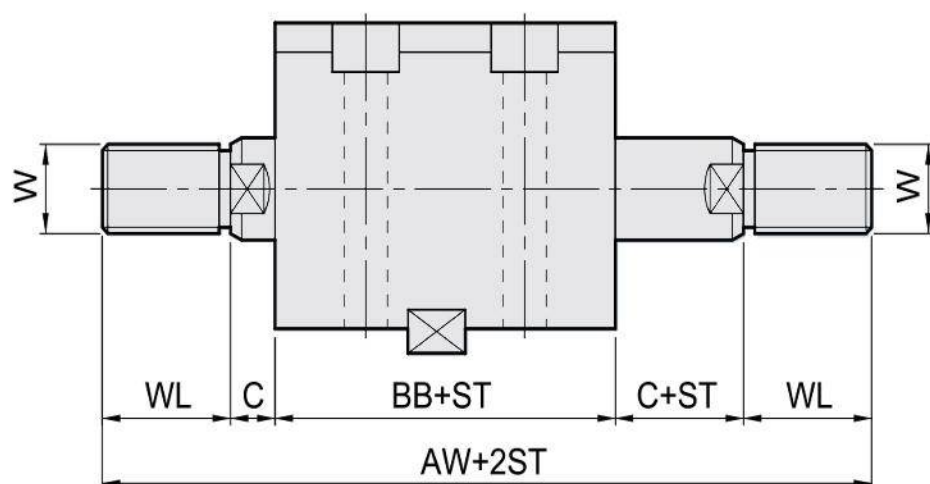


LA-W
LAM-W



LW-N


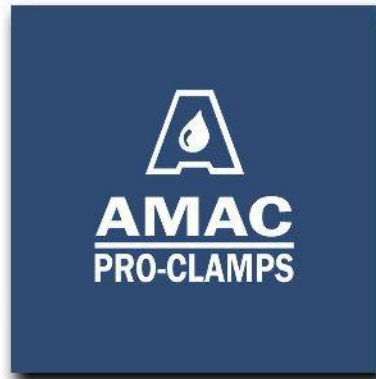
LW-W



Characteristics & Dimensions

SERIES	HTB LA/LW & LAM/LWM	
STROKE TYPE	20	25
A	51.00	53.00
AL	71.00	75.00
AN	72.00	74.00
AW	112.00	118.00
B	43.00	45.00
BB	56.00	58.00
C	8.00	8.00
CL	6.00	6.00
D	12.00	14.00
SW	10.00	12.00
EA	46.00	52.00
EB	37.00	44.00
LH	16.00	20.00
FA	35.00	41.00
FB	16.00	18.00
FF	20.00	22.00
H	6.50	6.50
K	6.80	6.80
M	11.00	11.00
N	M8 x 1.25 x 12D	M10 x 1.50 x 15D
W	M10 x 1.25	M12 x 1.25
WL	20.00	22.00
P1	22.50	23.00
P2	11.00	12.00
P3	11.00	12.00
R	5.00	7.00
O	P7	P7
KW	8.00	8.00
KT	7.00	7.00
KL	40.00	45.00
KA	29.00	30.00
KB	3.50	3.50

*** All dimensions are given in millimeters.



HTB LAM-LWM SERIES

HTB LAM/LWM SERIES



THIN TYPE HYDRULIC CYLINDERS



Characteristics & Dimensions

SERIES

HTB LAM / HTB LWM

THIN TYPE HYDRAULIC CYLINDERS

CYLINDER DIAMETER		Ø20	Ø25	Ø32	Ø40	Ø50	Ø63	Ø80	
PISTON ROD DIAMETER		Ø12	Ø14	Ø20	Ø25	Ø30	Ø35	Ø25	
OPERATING PRESSURE (Kg/cm ²)	10.00	▲	31.00	49.00	80.00	126.00	196.00	312.00	503.00
		■	20.00	34.00	49.00	77.00	126.00	216.00	344.00
	35.00	▲	110.00	172.00	281.00	440.00	687.00	1,091.00	1,759.00
		■	71.00	118.00	172.00	268.00	440.00	754.00	1,203.00
	70.00	▲	220.00	344.00	563.00	880.00	1,374.00	2,182.00	3,519.00
		■	141.00	236.00	343.00	536.00	879.00	1,509.00	2,406.00
	100.00	▲	314.00	491.00	804.00	1,257.00	1,963.00	3,117.00	5,027.00
		■	201.00	337.00	490.00	766.00	1,256.00	2,155.00	3,437.00
	140.00	▲	440.00	687.00	1,126.00	1,760.00	2,748.00	4,364.00	7,038.00
		■	281.00	472.00	686.00	1,072.00	1,758.00	3,017.00	4,812.00
PRESSURE AREA (cm ²)	▲	3.14	4.91	8.04	12.57	19.63	31.17	50.27	
	■	2.01	3.37	4.90	7.66	12.56	21.55	34.37	
INSTALATION	Axial	SD : SINGLE END ROD							
		SW : DOUBLE END ROD							
OPERATING PRESSURE RANGE				5.00 Kg/cm ² ~ 140.00 Kg/cm ²					
OPERATING SPEED RANGE				8.00 mm/seg ~ 100.00 mm/seg					
OPERATING TEMPERATURE RANGE				-10.00° C ~ 60.00° C					
OPERATING FLUID				HIDRAULIC FILTERED OIL					
ACTION TYPE				DOUBLE ACTION DEVICE					
PISTON BARREL CYLINDER MATERIAL				CARBON STEEL					

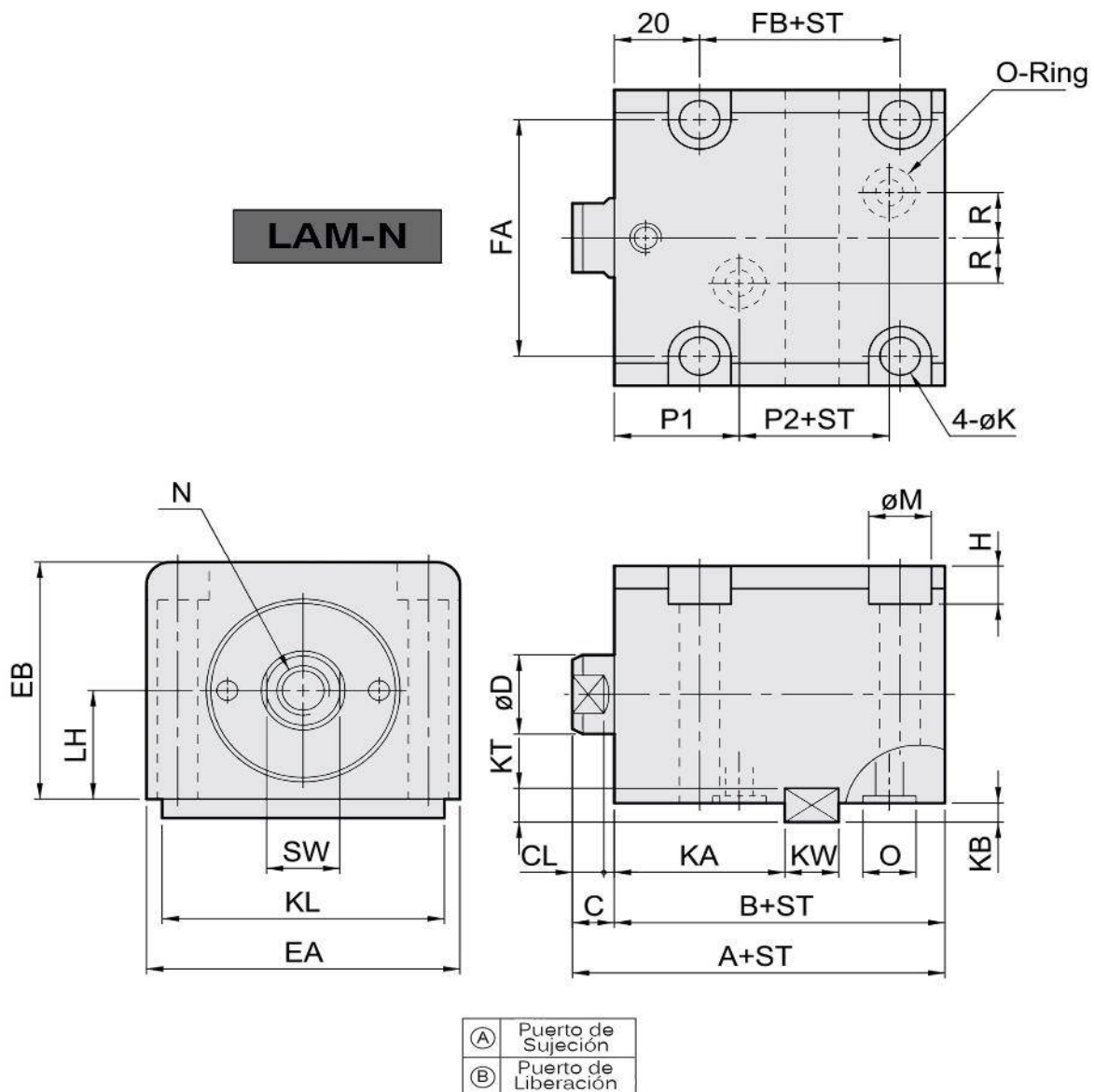
** ▲ Push.

*** ■ Pull.

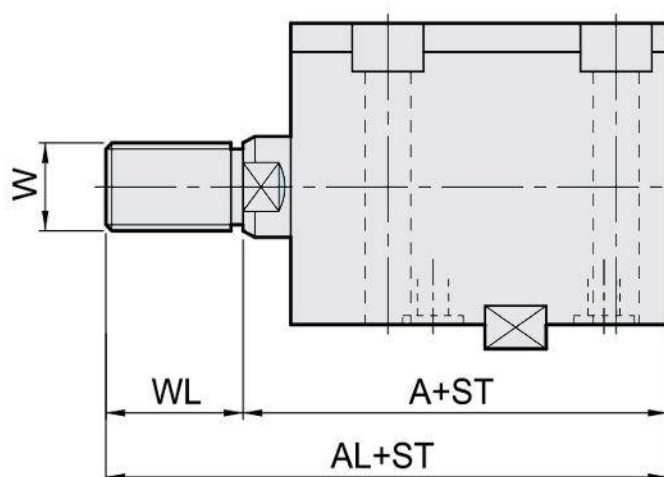
**** All dimensions are given in millimeters.



LAM-N



LAM-W

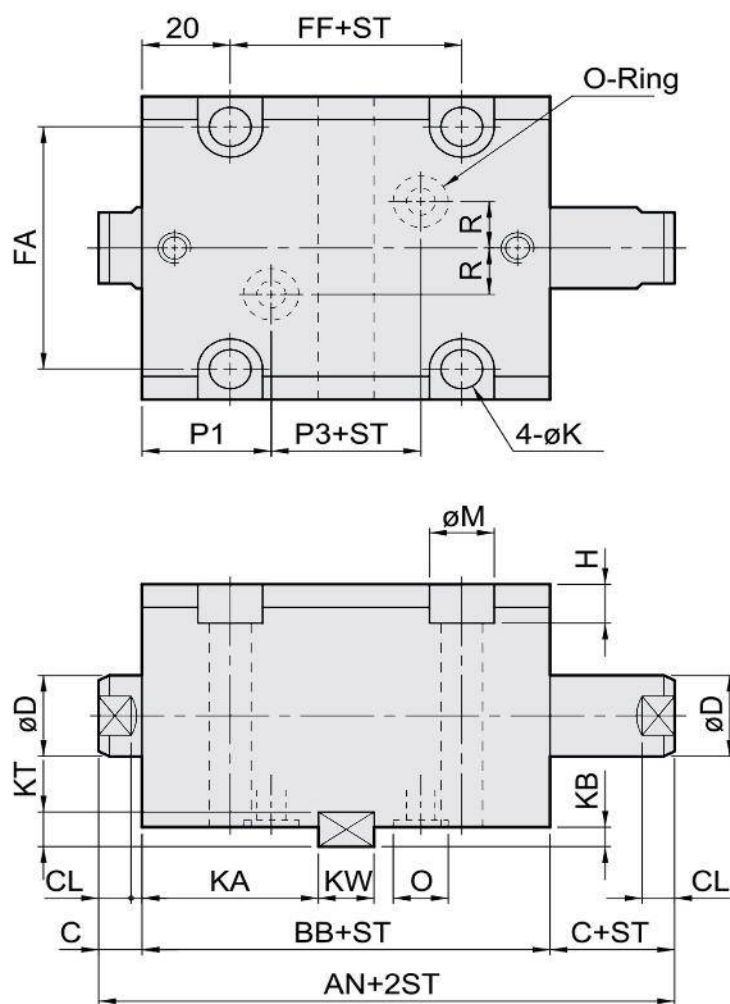


Ⓐ	Puerto de Sujeción
Ⓑ	Puerto de Liberación



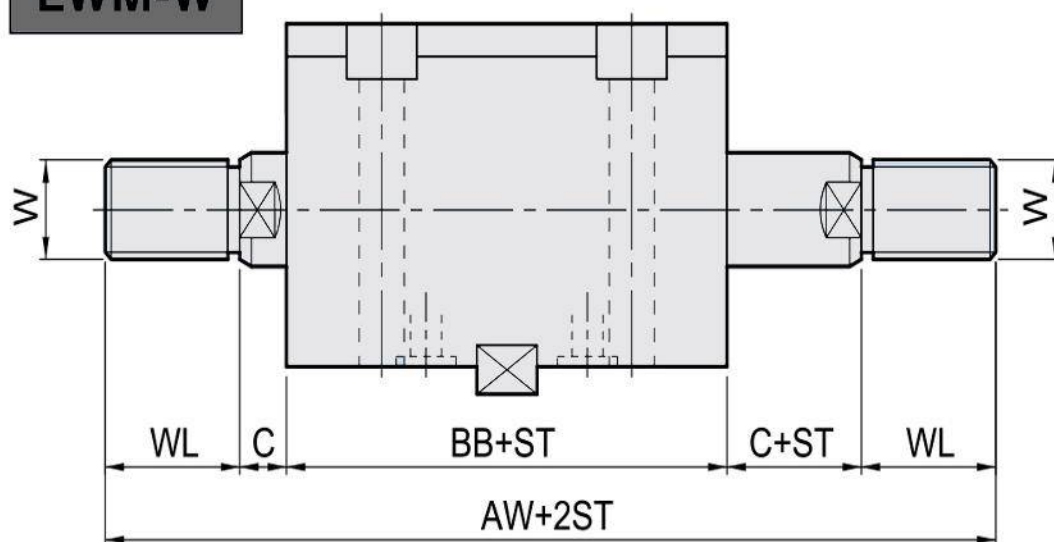
AMAC
PRO-CLAMPS

LWM-N



Ⓐ	Puerto de Sujeción
Ⓑ	Puerto de Liberación

LWM-W

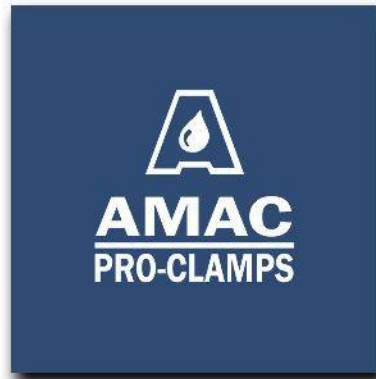


Ⓐ	Puerto de Sujeción
Ⓑ	Puerto de Liberación

Characteristics & Dimensions

SERIES		HTB LAM / HTB LWM					
CYLINDER DIAMETER	Ø20	Ø25	Ø32	Ø40	Ø50	Ø63	Ø80
A	51.00	53.00	64.00	65.00	71.00	80.00	95.00
AL	71.00	75.00	89.00	95.00	106.00	120.00	140.00
AN	72.00	74.00	89.00	90.00	97.00	108.00	127.00
AW	112.00	118.00	139.00	150.00	167.00	188.00	217.00
B	43.00	45.00	54.00	55.00	60.00	67.00	78.00
BB	56.00	58.00	69.00	70.00	75.00	82.00	93.00
C	8.00	8.00	10.00	10.00	11.00	13.00	17.00
CL	6.00	6.00	7.00	7.00	8.00	10.00	14.00
D	12.00	14.00	20.00	25.00	30.00	35.00	45.00
SW	10.00	12.00	17.00	22.00	27.00	32.00	41.00
E	42.00	48.00	62.00	70.00	80.00	94.00	114.00
F	30.00	36.00	47.00	52.00	58.00	69.00	86.00
H	5.50	5.50	6.50	9.00	11.00	13.00	15.00
K	5.60	5.60	6.80	9.00	11.00	13.00	15.00
M	9.00	9.00	11.00	14.00	18.00	20.00	22.00
N	M8x1.25x12D	M10x1.5x15D	M12x1.75x15D	M16x2.0x20D	M20x2.5x25D	M27x3.0x35D	M30x3.5x35D
W	M10 x 1.25	M12 x 1.25	M16 x 1.5	M22 x 1.5	M26 x 1.5	M30 x 35D	M39 x 1.5
WL	20.00	22.00	25.00	30.00	35.00	40.00	45.00
P1	22.50	23.00	28.00	28.00	28.50	31.00	33.00
P2	11.00	12.00	14.00	15.00	18.00	20.00	27.00
P3	11.00	12.00	13.00	14.00	16.00	20.00	27.00
R	5.00	7.00	10.00	10.00	60.00	10.00	15.00
PT	1/8"	1/8"	1/4"	1/4"	1/4"	1/4"	1/4"

*** All dimensions are given in millimeters.



HTB SD-SW SERIES

HTB SD/SW SERIES



SINGLE/DOUBLE ROD END HYDRAULIC CYLINDERS





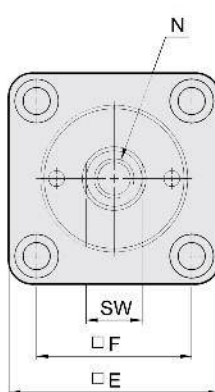
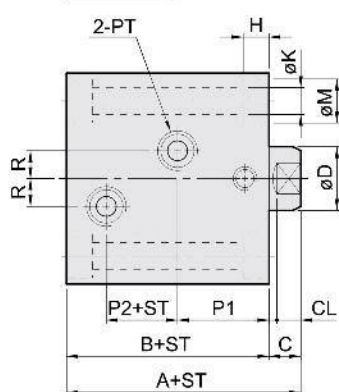
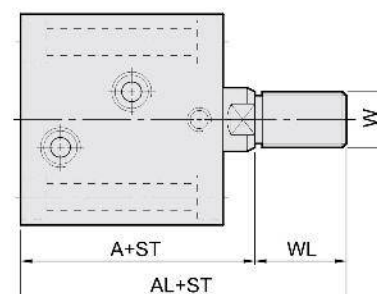
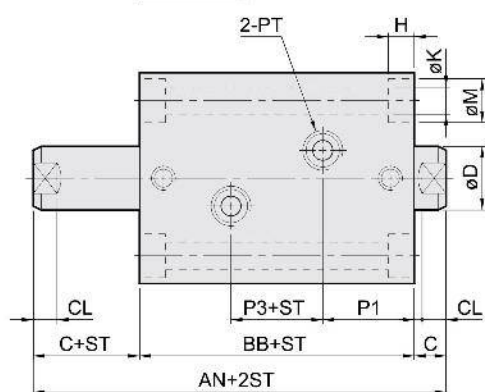
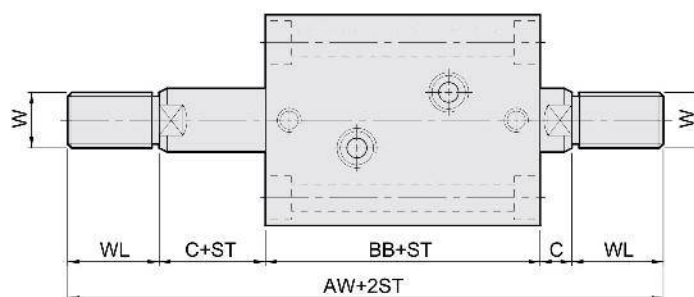
Characteristics & Dimensions

SERIES			HTB SD/SW						
THIN TYPE HYDRAULIC CYLINDERS									
CYLINDER DIAMETER			Ø20	Ø25	Ø32	Ø40	Ø50	Ø63	Ø80
PISTON ROD DIAMETER			Ø12	Ø14	Ø20	Ø25	Ø30	Ø35	Ø25
OPERATING PRESSURE (Kg/cm ²)	10.00	▲	31.00	49.00	80.00	126.00	196.00	312.00	503.00
		■	20.00	34.00	49.00	77.00	126.00	216.00	344.00
	35.00	▲	110.00	172.00	281.00	440.00	687.00	1,091.00	1,759.00
		■	71.00	118.00	172.00	268.00	440.00	754.00	1,203.00
	70.00	▲	220.00	344.00	563.00	880.00	1,374.00	2,182.00	3,519.00
		■	141.00	236.00	343.00	536.00	879.00	1,509.00	2,406.00
	100.00	▲	314.00	491.00	804.00	1,257.00	1,963.00	3,117.00	5,027.00
		■	201.00	337.00	490.00	766.00	1,256.00	2,155.00	3,437.00
	140.00	▲	440.00	687.00	1,126.00	1,760.00	2,748.00	4,364.00	7,038.00
		■	281.00	472.00	686.00	1,072.00	1,758.00	3,017.00	4,812.00
PRESSURE AREA (cm ²)	▲		3.14	4.91	8.04	12.57	19.63	31.17	50.27
	■		2.01	3.37	4.90	7.66	12.56	21.55	34.37
INSTALATION	AXIAL	SD : SINGLE ENDTERMINAL ROD							
		SW : SINGLE ENDTERMINAL ROD							
	LATERAL	LA : DOUBLE ENDTERMINAL ROD							
		LW : DOUBLE ENDTERMINAL ROD							
OPERATING PRESSURE RANGE					5.00 Kg/cm ² ~ 140.00 Kg/cm ²				
OPERATING SPEED RANGE					8.00 mm/seg ~ 100.00 mm/seg				
OPERATING TEMPERATURE RANGE					-10.00° C ~ 60.00° C				
OPERATING FLUID					HIDRAULIC FILTERED OIL				
ACTION TYPE					DOUBLE ACTION DEVICE				
PISTON BARREL CYLINDER MATERIAL					CARBON STEEL				

** ▲ Empujar.

*** ■ Jalar.

**** All dimensions are given in millimeters.

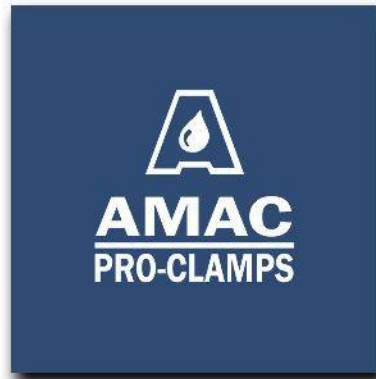
SD-N

SD-W

SW-N

SW-W


Ⓐ	Puerto de Sujeción
Ⓑ	Puerto de Liberación

Characteristics & Dimensions

SERIES		HTB SD / SW					
CYLINDER DIAMETER	Ø20	Ø25	Ø32	Ø40	Ø50	Ø63	Ø80
A	51.00	53.00	64.00	65.00	71.00	80.00	95.00
AL	71.00	75.00	89.00	95.00	106.00	120.00	140.00
AN	72.00	74.00	89.00	90.00	97.00	108.00	127.00
AW	112.00	118.00	139.00	150.00	167.00	188.00	217.00
B	43.00	45.00	54.00	55.00	60.00	67.00	78.00
BB	56.00	58.00	69.00	70.00	75.00	82.00	93.00
C	8.00	8.00	10.00	10.00	11.00	13.00	17.00
CL	6.00	6.00	7.00	7.00	8.00	10.00	14.00
D	12.00	14.00	20.00	25.00	30.00	35.00	45.00
SW	10.00	12.00	17.00	22.00	27.00	32.00	41.00
E	42.00	48.00	62.00	70.00	80.00	94.00	114.00
F	30.00	36.00	47.00	52.00	58.00	69.00	86.00
H	5.50	5.50	6.50	9.00	11.00	13.00	15.00
K	5.60	5.60	6.80	9.00	11.00	13.00	15.00
M	9.00	9.00	11.00	14.00	18.00	20.00	22.00
N	M8x1.25x12D	M10x1.5x15D	M12x1.75x15D	M16x2.0x20D	M20x2.5x25D	M27x3.0x35D	M30x3.5x35D
W	M10 x 1.25	M12 x 1.25	M16 x 1.5	M22 x 1.5	M26 x 1.5	M30 x 35D	M39 x 1.5
WL	20.00	22.00	25.00	30.00	35.00	40.00	45.00
P1	22.50	23.00	28.00	28.00	28.50	31.00	33.00
P2	11.00	12.00	14.00	15.00	18.00	20.00	27.00
P3	11.00	12.00	13.00	14.00	16.00	20.00	27.00
R	5.00	7.00	10.00	10.00	60.00	10.00	15.00
PT	1/8"	1/8"	1/4"	1/4"	1/4"	1/4"	1/4"

*** All dimensions are given in millimeters.



HTB SDMA-SDMB SERIES

HTB SDMA/ HTB SDMB SERIES



THIN TYPE HYDRAULIC CYLINDER WITH FRONT AND BACK MANIFOLD



Características & Dimensiones

SERIE

HTB-SDMA / HTB-SDMB

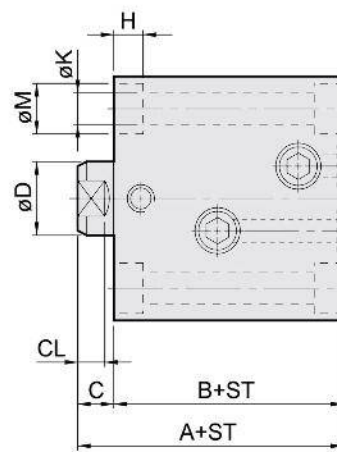
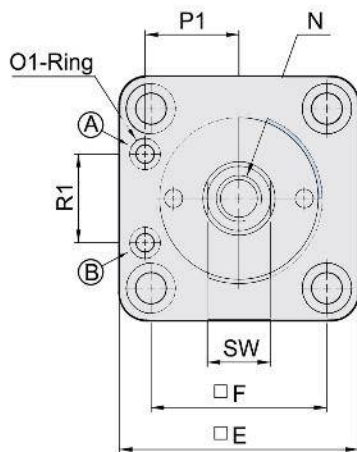
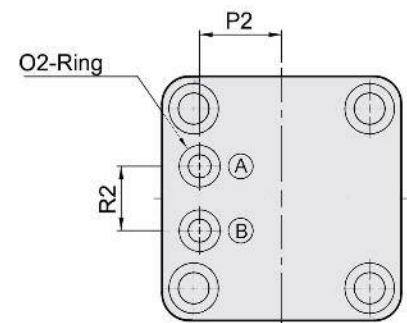
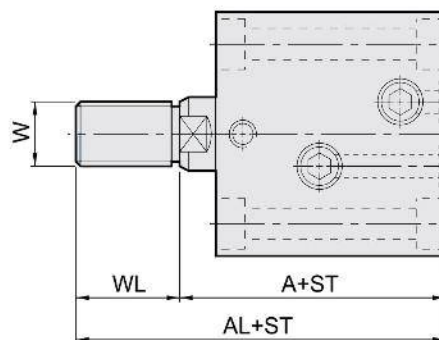
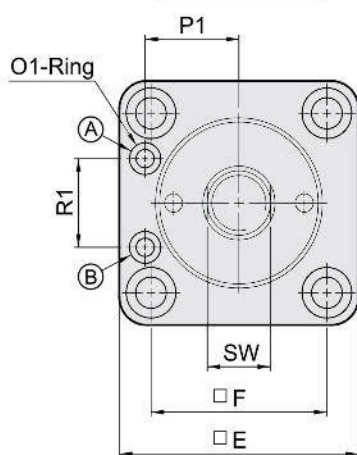
THIN TYPE HYDRAULIC CYLINDERS

CYLINDER DIAMETER		Ø20	Ø25	Ø32	Ø40	Ø50	Ø63	Ø80	
PISTON ROD DIAMETER		Ø12	Ø14	Ø20	Ø25	Ø30	Ø35	Ø25	
OPERATING PRESSURE (Kg/cm ²)	10.00	▲	31.00	49.00	80.00	126.00	196.00	312.00	503.00
		■	20.00	34.00	49.00	77.00	126.00	216.00	344.00
	35.00	▲	110.00	172.00	281.00	440.00	687.00	1,091.00	1,759.00
		■	71.00	118.00	172.00	268.00	440.00	754.00	1,203.00
	70.00	▲	220.00	344.00	563.00	880.00	1,374.00	2,182.00	3,519.00
		■	141.00	236.00	343.00	536.00	879.00	1,509.00	2,406.00
	100.00	▲	314.00	491.00	804.00	1,257.00	1,963.00	3,117.00	5,027.00
		■	201.00	337.00	490.00	766.00	1,256.00	2,155.00	3,437.00
	140.00	▲	440.00	687.00	1,126.00	1,760.00	2,748.00	4,364.00	7,038.00
		■	281.00	472.00	686.00	1,072.00	1,758.00	3,017.00	4,812.00
PRESSURE AREA (cm ²)	▲	3.14	4.91	8.04	12.57	19.63	31.17	50.27	
	■	2.01	3.37	4.90	7.66	12.56	21.55	34.37	
INSTALATION	Axial	SDMA : HYDRAULIC CYLINDER FRONT AXIAL MANIFOLD							
		SDMB : HYDRAULIC CYLINDER BACK AXIAL MANIFOLD							
OPERATING PRESSURE RANGE				5.00 Kg/cm ² ~ 140.00 Kg/cm ²					
OPERATING SPEED RANGE				8.00 mm/seg ~ 100.00 mm/seg					
OPERATING TEMPERATURE RANGE				-10.00° C ~ 60.00° C					
OPERATING FLUID				HIDRAULIC FILTERED OIL					
ACTION TYPE				DOUBLE ACTION DEVICE					
PISTON BARREL CYLINDER MATERIAL				CARBON STEEL					

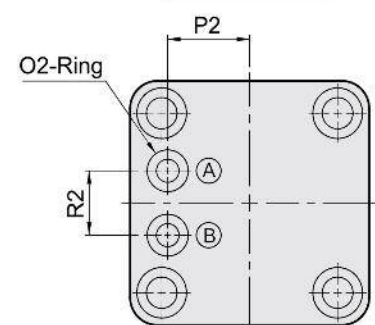
** ▲ Empujar.

*** ■ Jalar.

**** All dimensions are given in millimeters.

SDMA-N

SDMB-N

SDMA-W


(A)	Puerto de Sujeción
(B)	Puerto de Liberación

SDMB-W


(A)	推出油孔 Push out
(B)	拉入油孔 Pull in

Characteristics & Dimensions

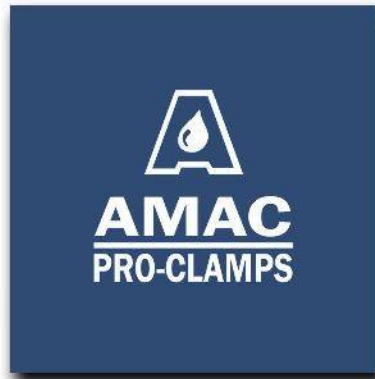
SERIES		HTB SDMA			
CYLINDER DIAMETER	30	40	50	63	80
A	64.00	65.00	71.00	80.00	95.00
AL	89.00	95.00	106.00	120.00	140.00
B	54.00	55.00	60.00	67.00	78.00
C	10.00	10.00	11.00	13.00	17.00
CL	7.00	7.00	8.00	10.00	14.00
D	20.00	25.00	30.00	35.00	45.00
SW	17.00	22.00	27.00	32.00	41.00
E	62.00	70.00	80.00	94.00	114.00
F	47.00	52.00	58.00	69.00	86.00
H	6.50	9.00	11.00	13.00	15.00
K	6.80	9.00	11.00	13.00	15.00
M	11.00	14.00	18.00	20.00	22.00
N	M12x1.75x15D	M16x2.0x20D	M20x2.5x25D	M27x3.0x35D	M30x3.5x35D
W	M16 x 1.5	M22 x 1.5	M26 x 1.5	M30 x 35D	M39 x 1.5
WL	25.00	30.00	35.00	40.00	45.00
P1	24.00	27.00	32.00	38.00	47.00
R1	24.00	26.00	27.00	35.00	45.00
O1	P6	P6	P8	P8	P11

*** All dimensions are given in millimeters.

Characteristics & Dimensions

SERIES		HTB SDBM			
CYLINDER DIAMETER	30	40	50	63	80
A	64.00	65.00	71.00	80.00	95.00
AL	89.00	95.00	106.00	120.00	140.00
B	54.00	55.00	60.00	67.00	78.00
C	10.00	10.00	11.00	13.00	17.00
CL	7.00	7.00	8.00	10.00	14.00
D	20.00	25.00	30.00	35.00	45.00
SW	17.00	22.00	27.00	32.00	41.00
E	62.00	70.00	80.00	94.00	114.00
F	47.00	52.00	58.00	69.00	86.00
H	6.50	9.00	11.00	13.00	15.00
K	6.80	9.00	11.00	13.00	15.00
M	11.00	14.00	18.00	20.00	22.00
N	M12x1.75x15D	M16x2.0x20D	M20x2.5x25D	M27x3.0x35D	M30x3.5x35D
W	M16 x 1.5	M22 x 1.5	M26 x 1.5	M30 x 35D	M39 x 1.5
WL	25.00	30.00	35.00	40.00	45.00
P2	20.00	24.00	29.00	35.00	44.00
R2	20.00	20.00	20.00	26.00	30.00
O2	P9	P9	P9	P11	P99

*** All dimensions are given in millimeters.



HTB-LA 20-25 SERIES

HTB-LA SERIES



THIN TYPE HYDRAULIC CYLINDERS

(DIAMETERS Ø20 & Ø25)



Characteristics & Dimensions

SERIES

HTB LA / HTB LW

THIN TYPE HYDRAULIC CYLINDERS

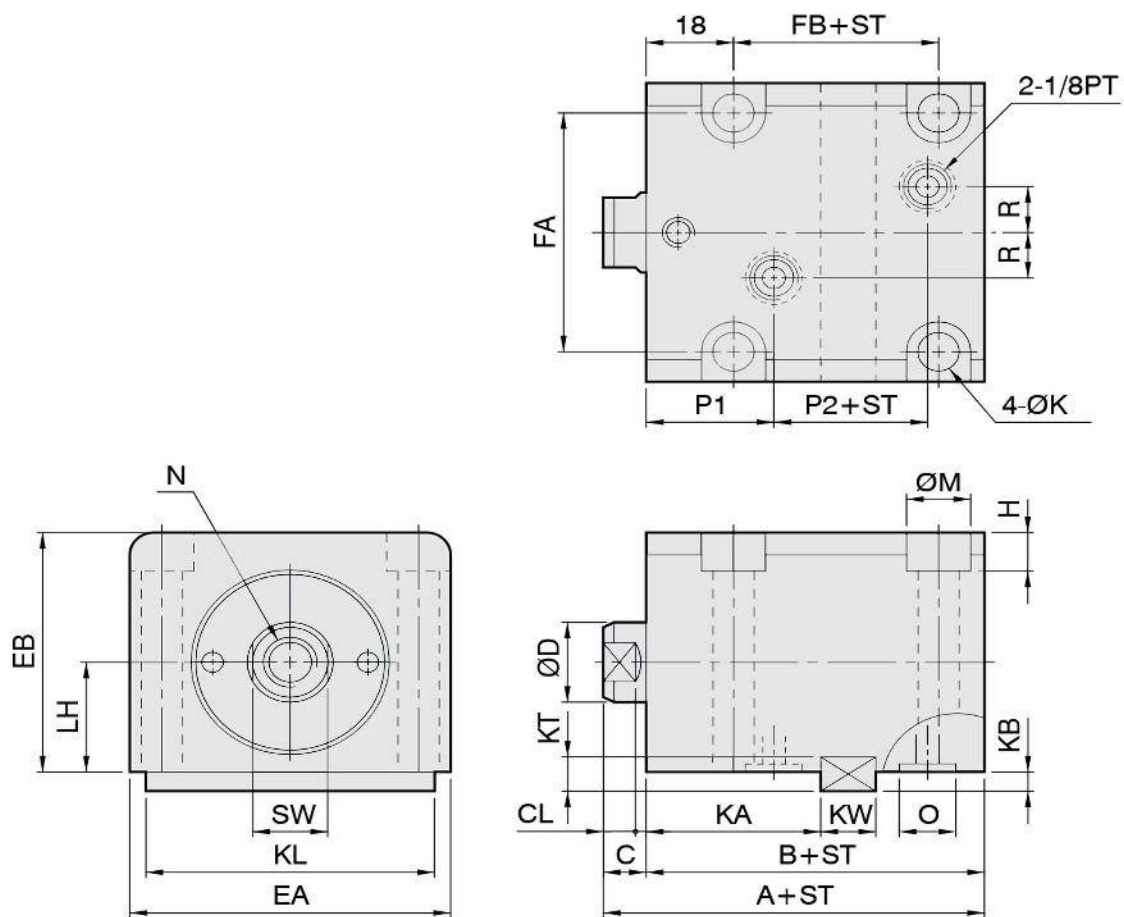
CYLINDER DIAMETER		Ø20	Ø25	Ø32	Ø40	Ø50	Ø63	Ø80	
PISTON ROD DIAMETER		Ø12	Ø14	Ø20	Ø25	Ø30	Ø35	Ø25	
OPERATING PRESSURE (Kg/cm ²)	10.00	▲	31.00	49.00	80.00	126.00	196.00	312.00	503.00
		■	20.00	34.00	49.00	77.00	126.00	216.00	344.00
	35.00	▲	110.00	172.00	281.00	440.00	687.00	1,091.00	1,759.00
		■	71.00	118.00	172.00	268.00	440.00	754.00	1,203.00
	70.00	▲	220.00	344.00	563.00	880.00	1,374.00	2,182.00	3,519.00
		■	141.00	236.00	343.00	536.00	879.00	1,509.00	2,406.00
	100.00	▲	314.00	491.00	804.00	1,257.00	1,963.00	3,117.00	5,027.00
		■	201.00	337.00	490.00	766.00	1,256.00	2,155.00	3,437.00
	140.00	▲	440.00	687.00	1,126.00	1,760.00	2,748.00	4,364.00	7,038.00
		■	281.00	472.00	686.00	1,072.00	1,758.00	3,017.00	4,812.00
PRESSURE AREA (cm ²)	▲	3.14	4.91	8.04	12.57	19.63	31.17	50.27	
	■	2.01	3.37	4.90	7.66	12.56	21.55	34.37	
INSTALATION	Axial	SD : SINGLE END ROD							
		SW : DOUBLE END ROD							
OPERATING PRESSURE RANGE				5.00 Kg/cm ² ~ 140.00 Kg/cm ²					
OPERATING SPEED RANGE				8.00 mm/seg ~ 100.00 mm/seg					
OPERATING TEMPERATURE RANGE				-10.00° C ~ 60.00° C					
OPERATING FLUID				HIDRAULIC FILTERED OIL					
ACTION TYPE				DOUBLE ACTION DEVICE					
PISTON BARREL CYLINDER MATERIAL				CARBON STEEL					

** ▲ Push.

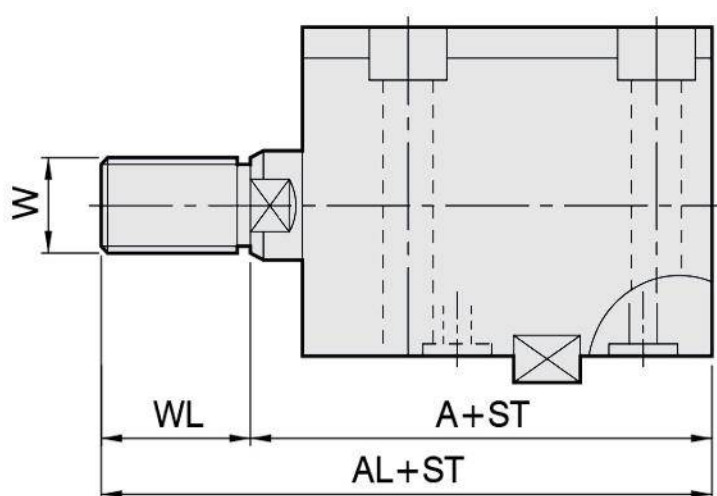
*** ■ Pull.

**** All dimensions are given in millimeters.

LA-N SERIES



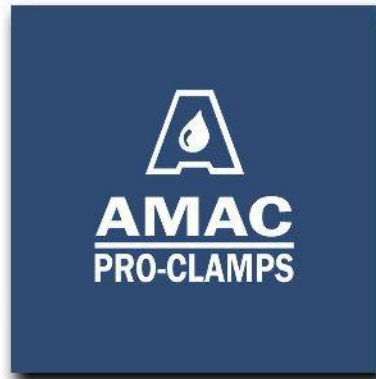
LA / LW SERIES



Characteristics & Dimensions

SERIES	HTB LA/LW & LAM/LWM	
STROKE TYPE	20	25
A	51.00	53.00
AL	71.00	75.00
AN	72.00	74.00
AW	112.00	118.00
B	43.00	45.00
BB	56.00	58.00
C	8.00	8.00
CL	6.00	6.00
D	12.00	14.00
SW	10.00	12.00
EA	46.00	52.00
EB	37.00	44.00
LH	16.00	20.00
FA	35.00	41.00
FB	16.00	18.00
FF	20.00	22.00
H	6.50	6.50
K	6.80	6.80
M	11.00	11.00
N	M8 x 1.25 x 12D	M10 x 1.50 x 15D
W	M10 x 1.25	M12 x 1.25
WL	20.00	22.00
P1	22.50	23.00
P2	11.00	12.00
P3	11.00	12.00
R	5.00	7.00
O	P7	P7
KW	8.00	8.00
KT	7.00	7.00
KL	40.00	45.00
KA	29.00	30.00
KB	3.50	3.50

**** All dimensions are given in millimeters.



HTB-LAM 20-25 SERIES

HTB-LAM SERIES



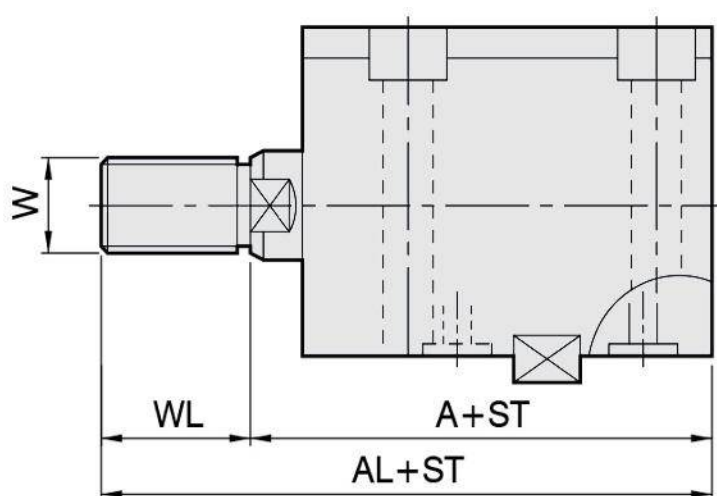
THIN TYPE HYDRAULIC CYLINDER

(DIAMETERS Ø20 & Ø25)





LAM-W SERIES



Characteristics & Dimensions

SERIES

HTB LAM / HTB LWM

THIN TYPE HYDRAULIC CYLINDERS

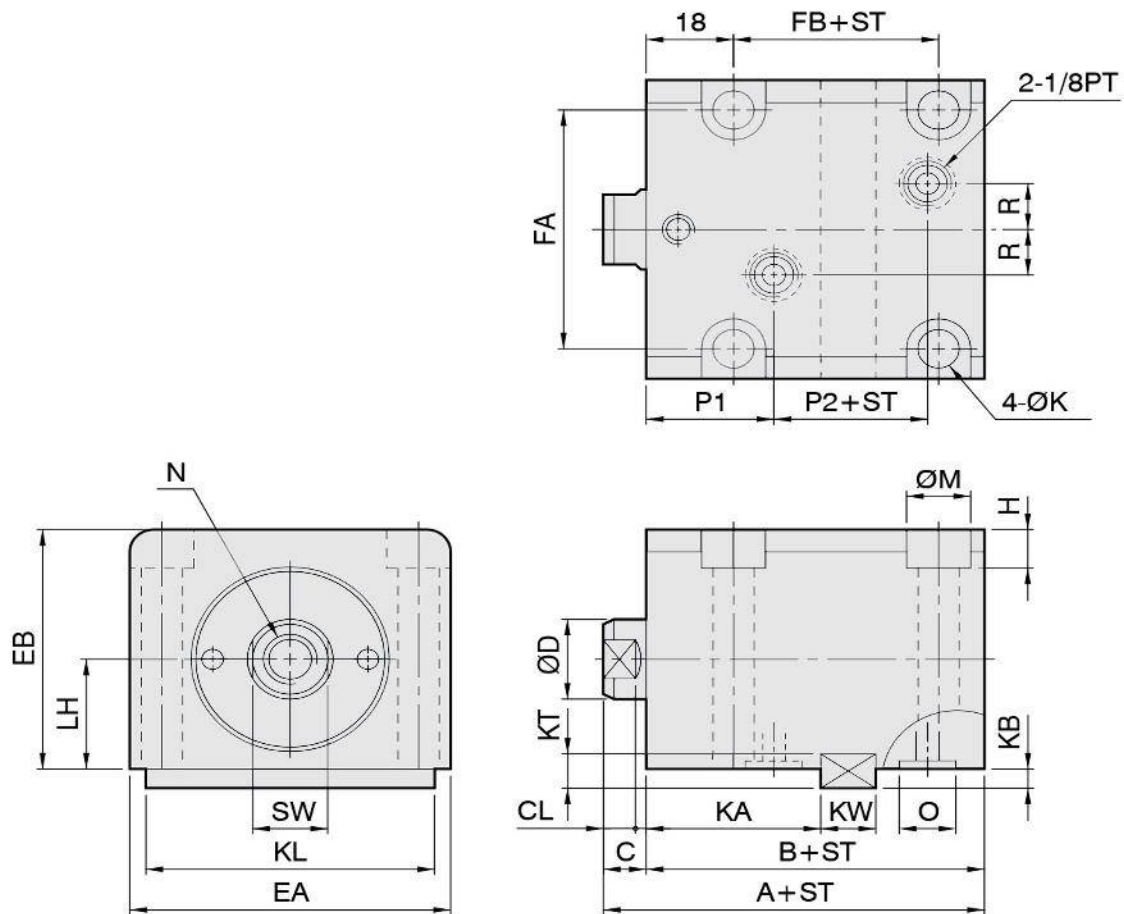
CYLINDER DIAMETER		Ø20	Ø25	Ø32	Ø40	Ø50	Ø63	Ø80	
PISTON ROD DIAMETER		Ø12	Ø14	Ø20	Ø25	Ø30	Ø35	Ø25	
OPERATING PRESSURE (Kg/cm ²)	10.00	▲	31.00	49.00	80.00	126.00	196.00	312.00	503.00
		■	20.00	34.00	49.00	77.00	126.00	216.00	344.00
	35.00	▲	110.00	172.00	281.00	440.00	687.00	1,091.00	1,759.00
		■	71.00	118.00	172.00	268.00	440.00	754.00	1,203.00
	70.00	▲	220.00	344.00	563.00	880.00	1,374.00	2,182.00	3,519.00
		■	141.00	236.00	343.00	536.00	879.00	1,509.00	2,406.00
	100.00	▲	314.00	491.00	804.00	1,257.00	1,963.00	3,117.00	5,027.00
		■	201.00	337.00	490.00	766.00	1,256.00	2,155.00	3,437.00
	140.00	▲	440.00	687.00	1,126.00	1,760.00	2,748.00	4,364.00	7,038.00
		■	281.00	472.00	686.00	1,072.00	1,758.00	3,017.00	4,812.00
PRESSURE AREA (cm ²)	▲	3.14	4.91	8.04	12.57	19.63	31.17	50.27	
	■	2.01	3.37	4.90	7.66	12.56	21.55	34.37	
INSTALATION	Axial	SD : SINGLE END ROD							
		SW : DOUBLE END ROD							
OPERATING PRESSURE RANGE				5.00 Kg/cm ² ~ 140.00 Kg/cm ²					
OPERATING SPEED RANGE				8.00 mm/seg ~ 100.00 mm/seg					
OPERATING TEMPERATURE RANGE				-10.00° C ~ 60.00° C					
OPERATING FLUID				HIDRAULIC FILTERED OIL					
ACTION TYPE				DOUBLE ACTION DEVICE					
PISTON BARREL CYLINDER MATERIAL				CARBON STEEL					

** ▲ Push.

*** ■ Pull.

**** All dimensions are given in millimeters.

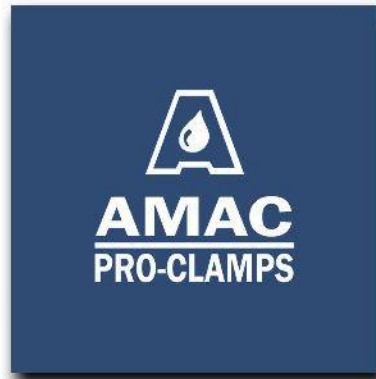
LAM-N SERIES



Characteristics & Dimensions

SERIES	HTB LA/LW & LAM/LWM	
STROKE TYPE	20	25
A	51.00	53.00
AL	71.00	75.00
AN	72.00	74.00
AW	112.00	118.00
B	43.00	45.00
BB	56.00	58.00
C	8.00	8.00
CL	6.00	6.00
D	12.00	14.00
SW	10.00	12.00
EA	46.00	52.00
EB	37.00	44.00
LH	16.00	20.00
FA	35.00	41.00
FB	16.00	18.00
FF	20.00	22.00
H	6.50	6.50
K	6.80	6.80
M	11.00	11.00
N	M8 x 1.25 x 12D	M10 x 1.50 x 15D
W	M10 x 1.25	M12 x 1.25
WL	20.00	22.00
P1	22.50	23.00
P2	11.00	12.00
P3	11.00	12.00
R	5.00	7.00
O	P7	P7
KW	8.00	8.00
KT	7.00	7.00
KL	40.00	45.00
KA	29.00	30.00
KB	3.50	3.50

**** All dimensions are given in millimeters.



HTB-LW 20-25 SERIES

HTB-LW SERIES



THIN TYPE HYDRAULIC CYLINDERS

(DIAMETERS Ø20 & Ø25)



Characteristics & Dimensions

SERIES

HTB LA / HTB LW

THIN TYPE HYDRAULIC CYLINDERS

CYLINDER DIAMETER		Ø20	Ø25	Ø32	Ø40	Ø50	Ø63	Ø80	
PISTON ROD DIAMETER		Ø12	Ø14	Ø20	Ø25	Ø30	Ø35	Ø25	
OPERATING PRESSURE (Kg/cm ²)	10.00	▲	31.00	49.00	80.00	126.00	196.00	312.00	503.00
		■	20.00	34.00	49.00	77.00	126.00	216.00	344.00
	35.00	▲	110.00	172.00	281.00	440.00	687.00	1,091.00	1,759.00
		■	71.00	118.00	172.00	268.00	440.00	754.00	1,203.00
	70.00	▲	220.00	344.00	563.00	880.00	1,374.00	2,182.00	3,519.00
		■	141.00	236.00	343.00	536.00	879.00	1,509.00	2,406.00
	100.00	▲	314.00	491.00	804.00	1,257.00	1,963.00	3,117.00	5,027.00
		■	201.00	337.00	490.00	766.00	1,256.00	2,155.00	3,437.00
	140.00	▲	440.00	687.00	1,126.00	1,760.00	2,748.00	4,364.00	7,038.00
		■	281.00	472.00	686.00	1,072.00	1,758.00	3,017.00	4,812.00
PRESSURE AREA (cm ²)	▲	3.14	4.91	8.04	12.57	19.63	31.17	50.27	
	■	2.01	3.37	4.90	7.66	12.56	21.55	34.37	
INSTALATION	Axial	SD : SINGLE END ROD							
		SW : DOUBLE END ROD							
OPERATING PRESSURE RANGE				5.00 Kg/cm ² ~ 140.00 Kg/cm ²					
OPERATING SPEED RANGE				8.00 mm/seg ~ 100.00 mm/seg					
OPERATING TEMPERATURE RANGE				-10.00° C ~ 60.00° C					
OPERATING FLUID				HIDRAULIC FILTERED OIL					
ACTION TYPE				DOUBLE ACTION DEVICE					
PISTON BARREL CYLINDER MATERIAL				CARBON STEEL					

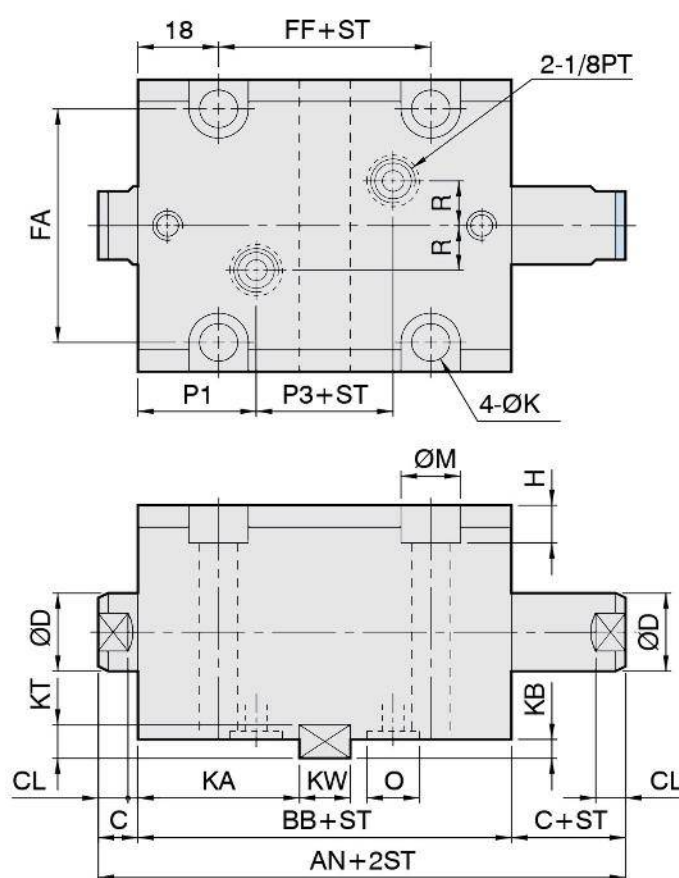
** ▲ Push.

*** ■ Pull.

**** All dimensions are given in millimeters.



LW-N SERIES

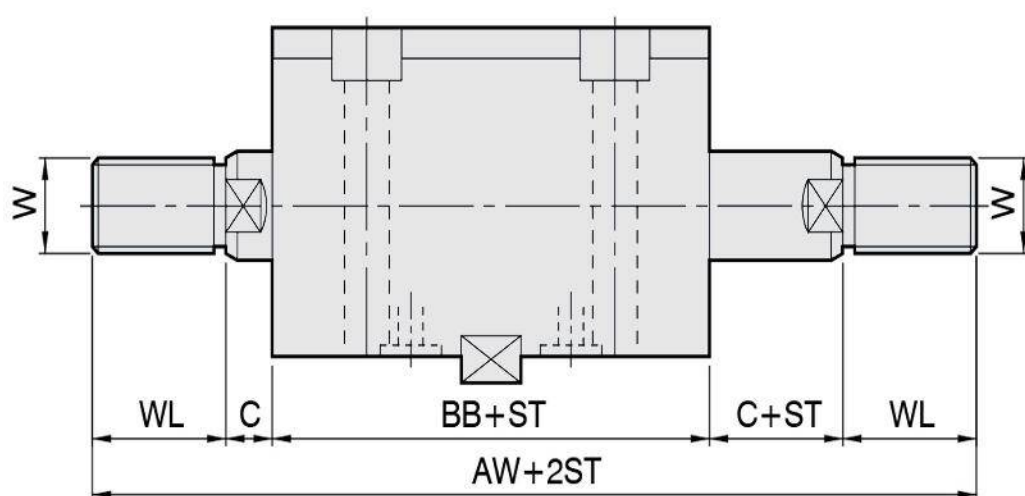


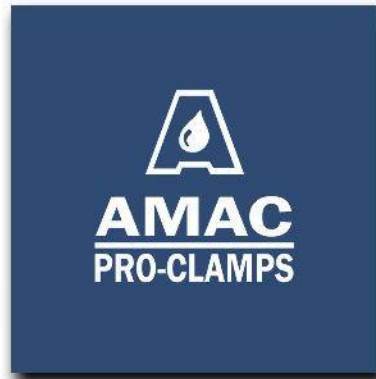
Characteristics & Dimensions

SERIES	HTB LA/LW & LAM/LWM	
STROKE TYPE	20	25
A	51.00	53.00
AL	71.00	75.00
AN	72.00	74.00
AW	112.00	118.00
B	43.00	45.00
BB	56.00	58.00
C	8.00	8.00
CL	6.00	6.00
D	12.00	14.00
SW	10.00	12.00
EA	46.00	52.00
EB	37.00	44.00
LH	16.00	20.00
FA	35.00	41.00
FB	16.00	18.00
FF	20.00	22.00
H	6.50	6.50
K	6.80	6.80
M	11.00	11.00
N	M8 x 1.25 x 12D	M10 x 1.50 x 15D
W	M10 x 1.25	M12 x 1.25
WL	20.00	22.00
P1	22.50	23.00
P2	11.00	12.00
P3	11.00	12.00
R	5.00	7.00
O	P7	P7
KW	8.00	8.00
KT	7.00	7.00
KL	40.00	45.00
KA	29.00	30.00
KB	3.50	3.50

**** All dimensions are given in millimeters.

LW-W SERIES





HTB-LWM 20-25 SERIES

HTB-LWM SERIES



DOUBLE END ROD THIN TYPE HYDRAULIC CYLINDERS WITH MANIFOLD

(DIAMETERS Ø20 & Ø25)



Characteristics & Dimensions

SERIES

HTB LAM / HTB LWM

THIN TYPE HYDRAULIC CYLINDERS

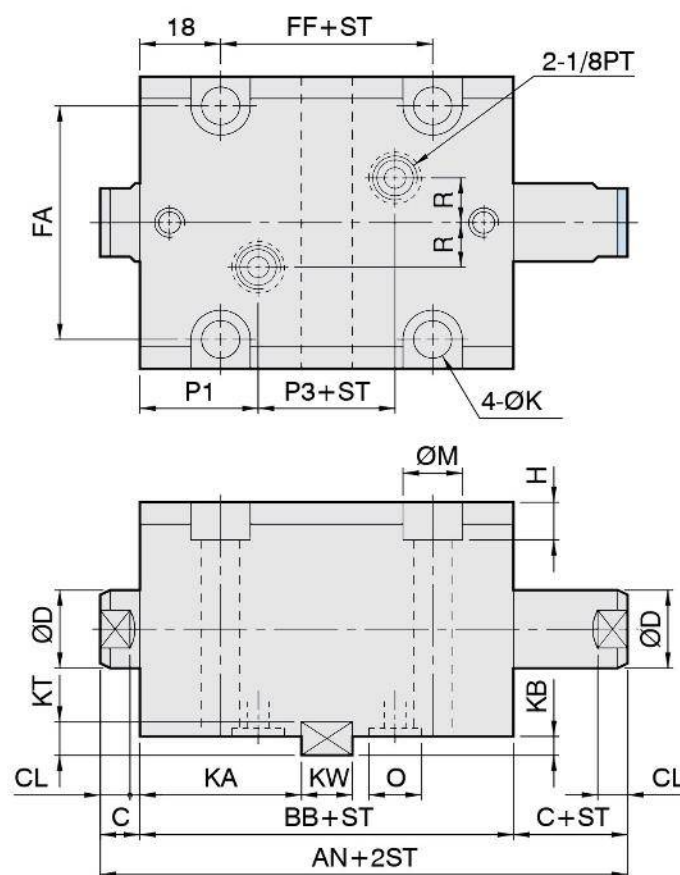
CYLINDER DIAMETER		Ø20	Ø25	Ø32	Ø40	Ø50	Ø63	Ø80	
PISTON ROD DIAMETER		Ø12	Ø14	Ø20	Ø25	Ø30	Ø35	Ø25	
OPERATING PRESSURE (Kg/cm ²)	10.00	▲	31.00	49.00	80.00	126.00	196.00	312.00	503.00
		■	20.00	34.00	49.00	77.00	126.00	216.00	344.00
	35.00	▲	110.00	172.00	281.00	440.00	687.00	1,091.00	1,759.00
		■	71.00	118.00	172.00	268.00	440.00	754.00	1,203.00
	70.00	▲	220.00	344.00	563.00	880.00	1,374.00	2,182.00	3,519.00
		■	141.00	236.00	343.00	536.00	879.00	1,509.00	2,406.00
	100.00	▲	314.00	491.00	804.00	1,257.00	1,963.00	3,117.00	5,027.00
		■	201.00	337.00	490.00	766.00	1,256.00	2,155.00	3,437.00
	140.00	▲	440.00	687.00	1,126.00	1,760.00	2,748.00	4,364.00	7,038.00
		■	281.00	472.00	686.00	1,072.00	1,758.00	3,017.00	4,812.00
PRESSURE AREA (cm ²)	▲	3.14	4.91	8.04	12.57	19.63	31.17	50.27	
	■	2.01	3.37	4.90	7.66	12.56	21.55	34.37	
INSTALATION	Axial	SD : SINGLE END ROD							
		SW : DOUBLE END ROD							
OPERATING PRESSURE RANGE				5.00 Kg/cm ² ~ 140.00 Kg/cm ²					
OPERATING SPEED RANGE				8.00 mm/seg ~ 100.00 mm/seg					
OPERATING TEMPERATURE RANGE				-10.00° C ~ 60.00° C					
OPERATING FLUID				HIDRAULIC FILTERED OIL					
ACTION TYPE				DOUBLE ACTION DEVICE					
PISTON BARREL CYLINDER MATERIAL				CARBON STEEL					

** ▲ Push.

*** ■ Pull.

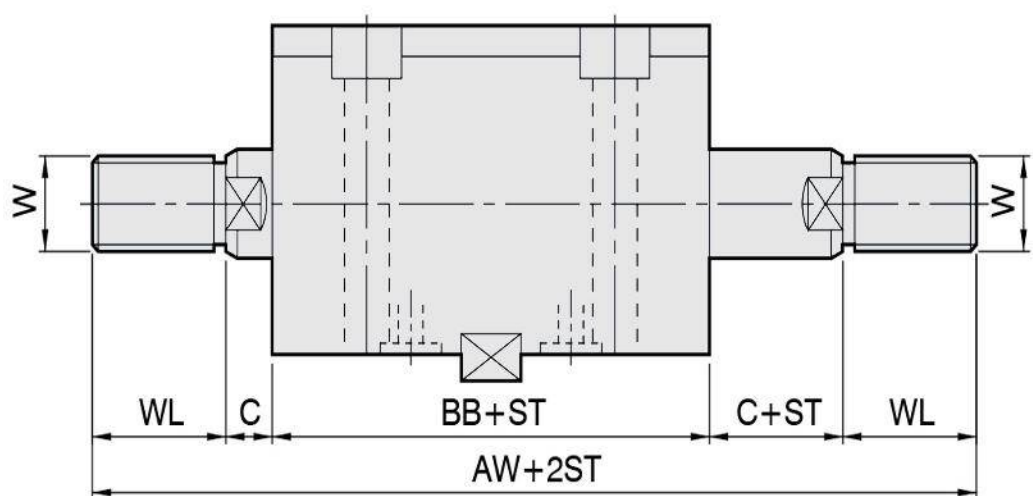
**** All dimensions are given in millimeters.

LWM-N SERIES





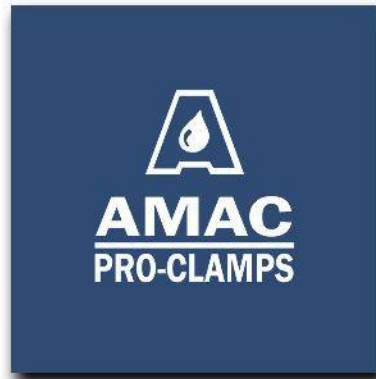
LWM-W SERIES



Characteristics & Dimensions

SERIES	HTB LA/LW & LAM/LWM	
STROKE TYPE	20	25
A	51.00	53.00
AL	71.00	75.00
AN	72.00	74.00
AW	112.00	118.00
B	43.00	45.00
BB	56.00	58.00
C	8.00	8.00
CL	6.00	6.00
D	12.00	14.00
SW	10.00	12.00
EA	46.00	52.00
EB	37.00	44.00
LH	16.00	20.00
FA	35.00	41.00
FB	16.00	18.00
FF	20.00	22.00
H	6.50	6.50
K	6.80	6.80
M	11.00	11.00
N	M8 x 1.25 x 12D	M10 x 1.50 x 15D
W	M10 x 1.25	M12 x 1.25
WL	20.00	22.00
P1	22.50	23.00
P2	11.00	12.00
P3	11.00	12.00
R	5.00	7.00
O	P7	P7
KW	8.00	8.00
KT	7.00	7.00
KL	40.00	45.00
KA	29.00	30.00
KB	3.50	3.50

**** All dimensions are given in millimeters.



LSP-16 SERIES

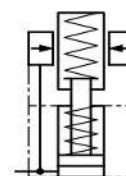
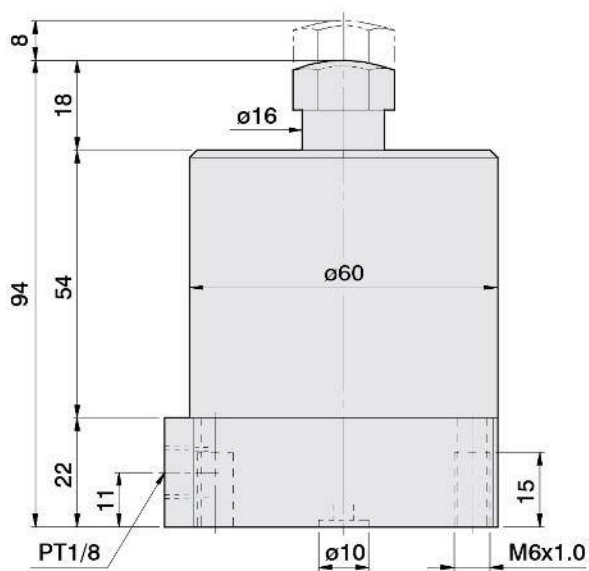
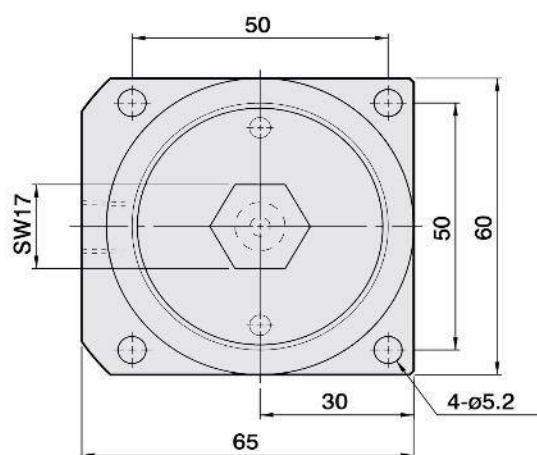
LSP-25

LOW PRESSURE LOAD CYLINDERS



Characteristics & Dimensions

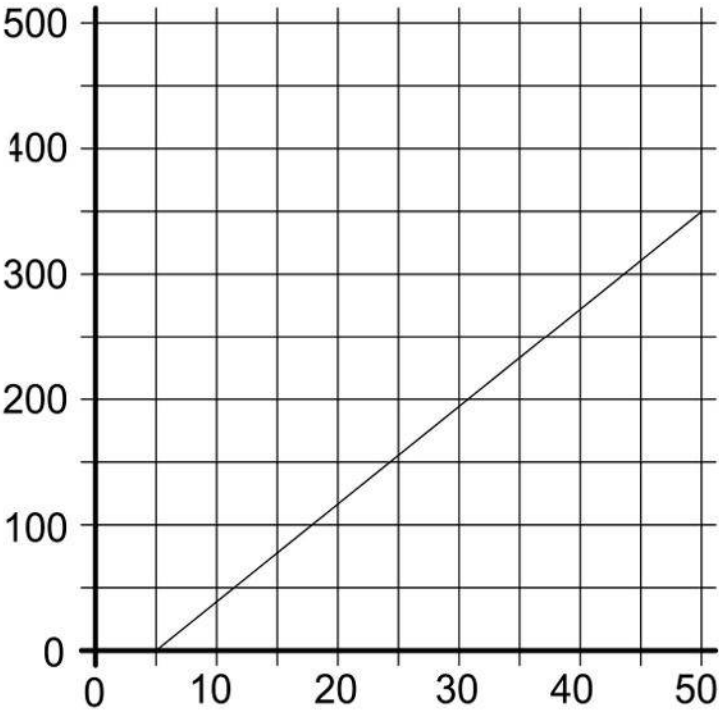
SERIES	LSP-16	
MODEL	LSP-16B	LSP-M16B
ROD DIAMETER	Ø16.00	Ø16.00
ROD STROKE	8.00	8.00
MAXIMUM WORKING PRESSURE	70.00 Kg/cm ²	
PISTON TYPE	NORMAL	WITH MANIFOLD
*** All dimensions are given in millimeters.		



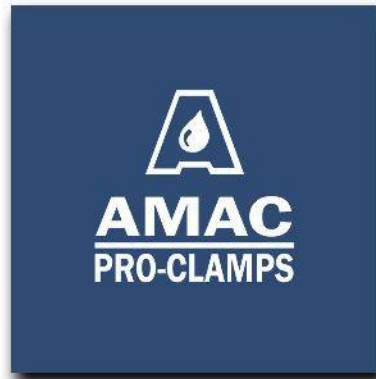
Line type	LSP-16B
Manifold	LSP-M16B

OUTPUT
TABLE

F : LOAD FORCE (KN)



P : OPERATING PRESSURE (Kg/cm²)

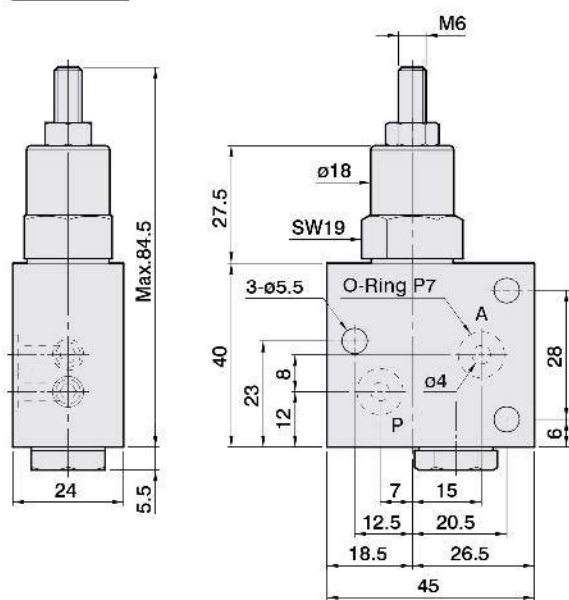
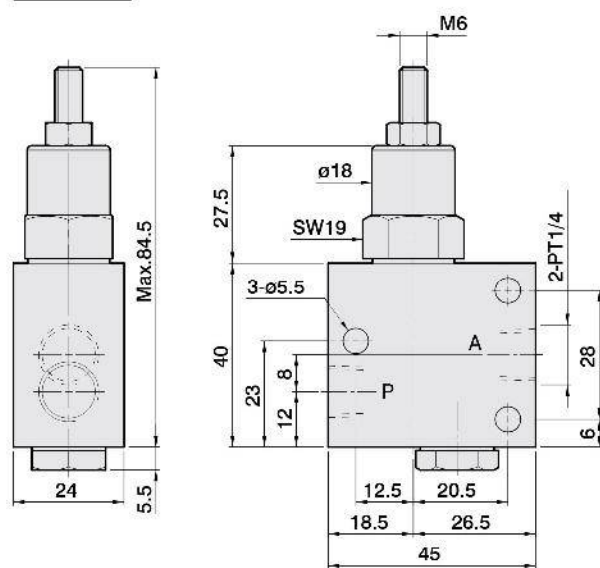


LSV SERIES

LSV SERIES

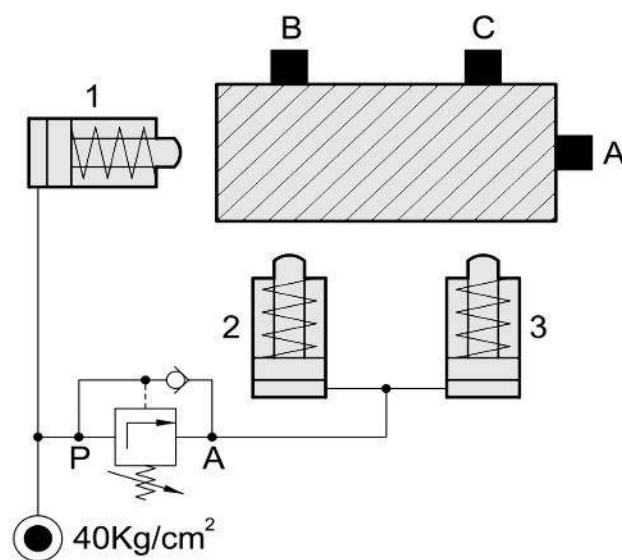
HYDRAULIC SEQUENTIAL VALVE



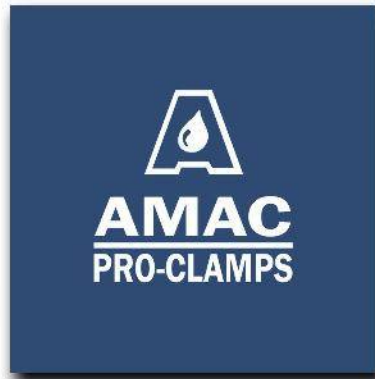
LSV-A

LSV-B




Circuit diagram



- Hydraulic cylinder 1 pushes the workpiece towards A.
- The pressure reaches the setting value of 40 kg/cm^2 in LSV.
- Hydraulic cylinders 2 and 3 push the workpiece towards B and C to provide a sequential clamping movement.



PRV SERIES

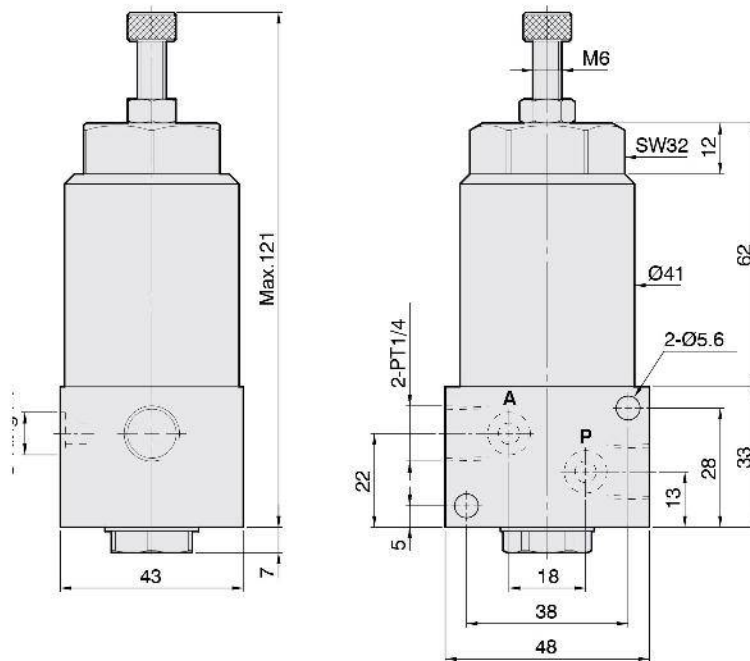
PRV

PRESSURE CONTROL HYDROLIC VALVE

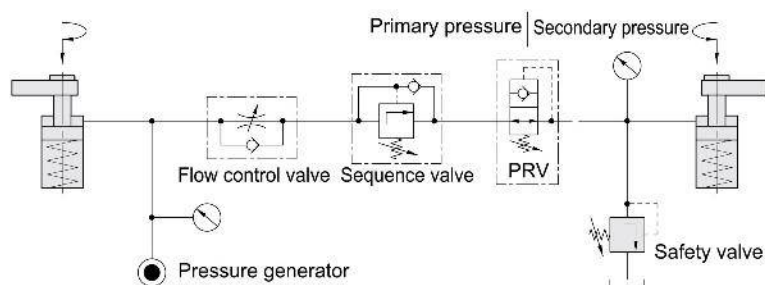


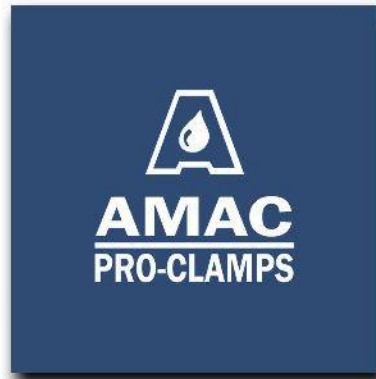
Characteristics & Dimensions

SERIES		PRV
PRESSURE CONTROL HYDRAULIC VALVE		
MODELO	02	
DEVICE TYPE	STANDARD	
	Manifold	
OPERATING PRESSURE	400.00 Kg/cm ²	
PRESSURE RANGE	5.00 Kg/cm ² ~ 380.00 Kg/cm ²	
WORKING PRESSURE	1	5.00 Kg/cm ² ~ 30.00 Kg/cm ²
	2	10.00 Kg/cm ² ~ 50.00 Kg/cm ²
	3	20.00 Kg/cm ² ~ 120.00 Kg/cm ²
	4	30.00 Kg/cm ² ~ 240.00 Kg/cm ²
	5	50.00 Kg/cm ² ~ 380.00 Kg/cm ²
*** All dimensions are given in millimeters.		



Circuit diagram





TC SERIES

SINGLE ACTION THREADED HYDRAULIC CYLINDER

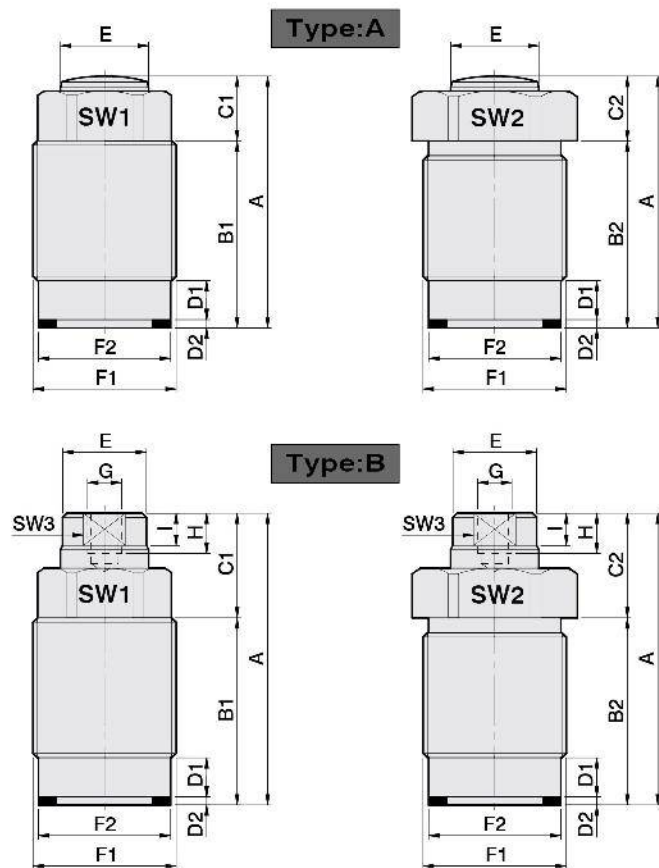


The single-acting hydraulic cylinder with threaded body employs imported seals and parts to ensure quality reliability, which minimizes oil leakage. There is no oil leakage during high-pressure clamping for a long time.

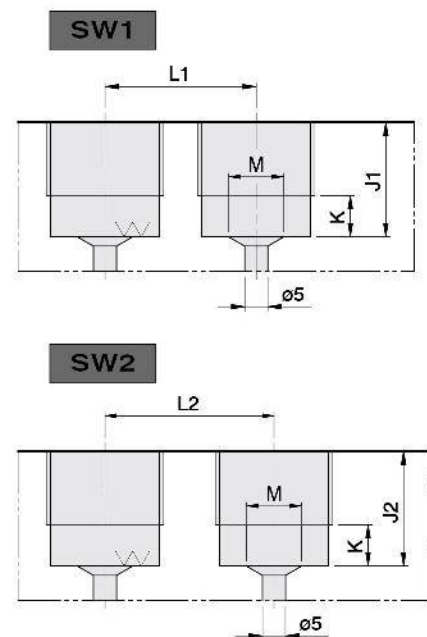
The compact construction allows multiple clamping units to be operated in a small space. This type of hydraulic cylinder is used for spring-return ejection, which cannot be used for pulling applications.

When installing, keep the contact angle between the rod and the workpiece less than 10° .

A leak-proof gasket is required to be placed under the bottom of the cylinder. The body of SW1 and SW2 is equipped with a dust-removing ring.



Mounting base diagram





Characteristics & Dimensions

SERIES		TC			
SINGLE ACTION THREADED HYDRAULIC CYLINDER					
CILINDER DIAMETER		Ø12	Ø16	Ø20	Ø25
PISTON ROD STROKE		10.00	12.00	15.00	16.00
GRIPPING	100.00 Kg/cm ²	110.00	200.00	310.00	490.00
FORCE	500.00 Kg/cm ²	570.00	1010.00	1570.00	2460.00
SPRING RESTORING FORCE (Min Kg)		2.80	5.00	7.80	12.30
MINIMUM PRESSURE (Kg/cm ²)		10.00	10.00	10.00	10.00
REQUIRED OIL (cm ³ /10.00 mm /pulse)		1.13	2.01	3.14	4.91
WORKING FLUID		FILTERED HYDRAULIC OIL			
ROD TERMINAL TYPE		A : CIRCULAR TYPE			
		B : INTERNAL THREAD TYPE			
BODY TYPE		SW1 : EXAGONAL SMALL BODY			
		SW2 : EXAGONAL LARGE BODY			
**** All dimensions are given in millimeters.					



Characteristics & Dimensions

SERIES					TC			
MODEL	TC-12A	TC-16A	TC-20A	TC-25A	TC-12B	TC-16B	TC-20B	TC-25B
A	38.50	47.00	56.50	60.00	45.50	53.00	66.00	69.00
B1	29.50	34.50	42.50	45.00	29.50	34.50	42.50	45.00
B2	26.50	34.50	42.50	45.00	26.50	34.50	42.50	45.00
C1	9.00	12.50	14.00	15.00	18.00	18.50	23.50	24.00
C2	12.00	12.50	14.00	15.00	19.00	18.50	23.50	24.00
D1	7.00	8.00	8.00	11.00	7.00	8.00	8.00	11.00
D2	1.50	1.50	1.50	2.00	1.50	1.50	1.50	2.00
E	Ø12.00	Ø16.00	Ø20.00	Ø25.00	Ø11.00	Ø15.00	Ø19.00	Ø23.00
F1	M22 x 1.50	M26 x 1.50	M30 x 1.50	M38 x 1.50	M22 x 1.50	M26 x 1.50	M30 x 1.50	M38 x 1.50
F2	-	-	-	-	M6 x 1.00	M6 x 1.00	M8 x 1.25	M8 x 1.25
G	-	-	-	-	7.00	7.00	9.00	9.00
I	-	-	-	-	5.50	5.50	6.00	7.00
J1 MIN/MAX	16.50/26.50	20.50/31.00	24.50/39.50	29.50/42.00	16.50/26.50	20.50/31.00	24.50/39.50	28.50/42.00
J2 MIN/MAX	16.50/25.00	20.50/33.00	24.50/42.00	28.50/44.50	16.50/25.00	20.50/33.00	24.50/42.00	28.50/44.50
K	8.00	9.00	9.00	11.00	8.00	9.00	9.00	11.00
L1	25.00	30.00	35.00	43.00	25.00	30.00	35.00	43.00
L2	31.00	34.00	40.00	52.00	31.00	34.00	40.00	52.00
M	Ø9/Ø12	Ø12/Ø16	Ø14/Ø20	Ø18/Ø25	Ø9/Ø12	Ø12/Ø16	Ø14/Ø20	Ø18/Ø25
SW1	18.00	22.00	26.00	33.00	18.00	22.00	26.00	33.00
SW2	24.00	27.00	32.00	41.00	24.00	27.00	32.00	41.00
SW3	-	-	-	-	10.00	13.00	17.00	19.00

*** All dimensions are given in millimeters.

4Man



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