

Climax[®] Pneumatics



ISO 6431

Single & Through Rod Cylinders

TECHNICAL PRODUCT CATALOG

ISO 6431 Tie Rod Cylinders



End Caps	<i>ø32-160mm Pressure Diecast Aluminum ø200-320mm Gravity Cast Aluminum</i>
Tube	<i>Anodized Aluminum</i>
Tie Rods	<i>High Strength Steel</i>
Piston Seals	<i>ø32-100mm Polyurethane ø125-320mm Nitrile Rubber</i>
Piston Rod	<i>Chromium Coated Stainless Steel</i>

Working Pressure	<i>ø32-200mm 1 to 16 bar ø250 & 320mm 1 to 10 bar</i>
Temperature	<i>-20°C to 80°C max</i>
Working Fluid	<i>Filtered compressed air, lubricated or not</i>

Available Versions

Double Acting, Magnetic, Cushioned
Double Acting, Magnetic, Cushioned, Through Piston Rod

Standard Strokes

Ø mm	25	40	50	80	100	125	160	200	250	300	320	400	500
32	.	.	.	.	.	.	.	.	.	.	.	.	.
40	.	.	.	.	.	.	.	.	.	.	.	.	.
50	.	.	.	.	.	.	.	.	.	.	.	.	.
63	.	.	.	.	.	.	.	.	.	.	.	.	.
80	.	.	.	.	.	.	.	.	.	.	.	.	.
100	.	.	.	.	.	.	.	.	.	.	.	.	.
125	.	.	.	.	.	.	.	.	.	.	.	.	.
160	.	.	.	.	.	.	.	.	.	.	.	.	.
200	.	.	.	.	.	.	.	.	.	.	.	.	.
250	.	.	.	.	.	.	.	.	.	.	.	.	.
320	.	.	.	.	.	.	.	.	.	.	.	.	.

Non-Standard Strokes are readily available

ISO 6431 Tie Rod Cylinders

How to Order Base Models

CX 032 A 0 2 M 100 B A C TM400 1 2

Series _____
CX – ISO 6431 Tie Rod Cylinder

Bore _____
032 – 32 mm 125 – 125 mm
040 – 40 mm **160** – 160 mm
050 – 50 mm 200 – 200 mm
063 – 63 mm 250 – 250 mm
080 – 80 mm 320 – 320 mm
100 – 100 mm

Cushioning _____
A – Adjustable Cushioning Standard

Range _____
0 – Single Rod
2 – Through Rod

Magnet _____
2 – Magnetic Piston Standard

Piston Rod Ends _____
M – Male

Stroke _____
025 – 25 mm 200 – 200 mm
040 – 40 mm 250 – 250 mm
050 – 50 mm 300 – 300 mm
080 – 80 mm 320 – 320 mm
100 – 100 mm 400 – 400 mm
125 – 125 mm 500 – 500 mm
160 – 160 mm

Piston Rod Material _____
B – Chromium Coated Stainless Steel

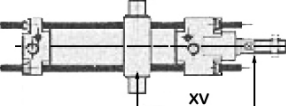
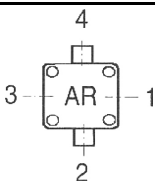
Tie Rod Material _____
A – High Strength Steel

Body Material _____
C – Anodized Aluminum

Side Trunnion _____
Blank – No Trunnion
TM*** – *** = "XV" Dimension (please specify)

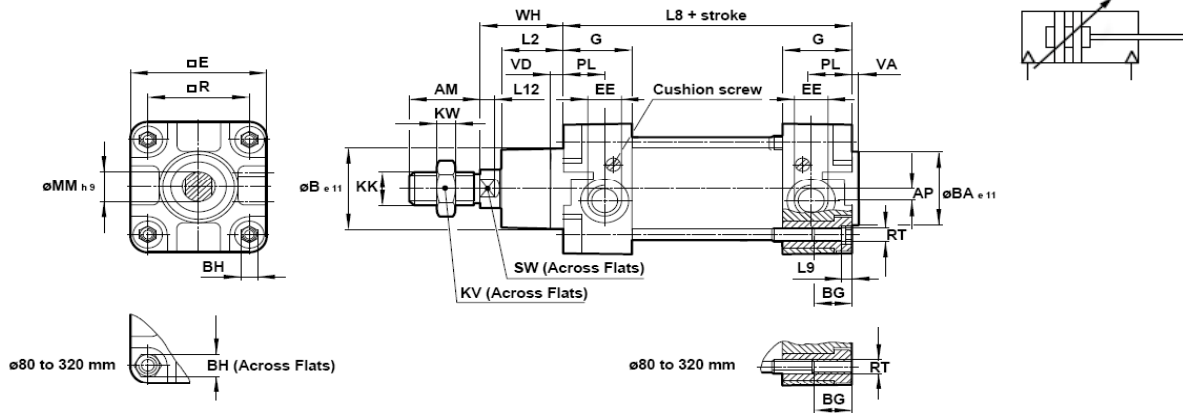
Port Position - Head _____
1 – Position 1
2 – Position 2
3 – Position 3
4 – Position 4

Port Position - Cap _____
1 – Position 1
2 – Position 2
3 – Position 3
4 – Position 4

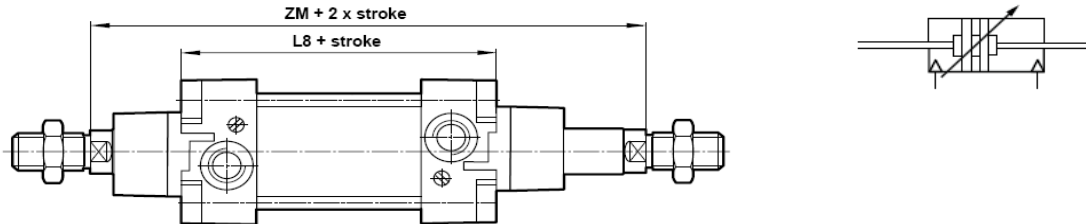



ISO 6431 Tie Rod Cylinders

Double Acting Single Rod



Double Acting Through Rod



ømm	AM	AP	øB _{ø11}	øBA _{ø11}	BG	BH	□E	EE	G	KK	KV	KW
32	0.87 (22)	0.14 (3.5)	1.18 (30)	1.18 (30)	0.71 (18)	0.24 (6)	1.85 (47)	G 1/8 (1/8" NPT)	1.08 (27.5)	M10x1.25	0.67 (17)	0.20 (5)
40	0.94 (24)	0.18 (4.5)	1.38 (35)	1.38 (35)	0.71 (18)	0.24 (6)	2.09 (53)	G 1/4 (1/4" NPT)	1.26 (32)	M12x1.25	0.75 (19)	0.24 (6)
50	1.26 (32)	0.24 (6)	1.57 (40)	1.57 (40)	0.71 (18)	0.31 (8)	2.56 (65)	G 1/4 (1/4" NPT)	1.22 (31)	M16x1.5	0.94 (24)	0.31 (8)
63	1.26 (32)	0.39 (10)	1.77 (45)	1.77 (45)	0.69 (17.5)	0.31 (8)	2.95 (75)	G 3/8 (3/8" NPT)	1.30 (33)	M16x1.5	0.94 (24)	0.31 (8)
80	1.57 (40)	0.33 (8.5)	1.77 (45)	1.77 (45)	0.85 (21.5)	0.75 (19)	3.74 (95)	G 3/8 (3/8" NPT)	1.30 (33)	M20x1.5	1.18 (30)	0.39 (10)
100	1.57 (40)	0.35 (9)	2.17 (55)	2.17 (55)	0.85 (21.5)	0.75 (19)	4.53 (115)	G 1/2 (1/2" NPT)	1.46 (37)	M20x1.5	1.18 (30)	0.39 (10)
125	2.13 (54)	0.39 (10)	2.36 (60)	2.36 (60)	1.26 (32)	0.94 (24)	5.51 (140)	G 1/2 (1/2" NPT)	1.81 (46)	M27x2	1.61 (41)	0.53 (13.5)
160	2.83 (72)	0.71 (18)	2.56 (65)	2.56 (65)	1.12 (28.5)	1.26 (32)	7.22 (183.5)	G 3/4 (3/4" NPT)	1.97 (50)	M36x2	2.17 (55)	0.71 (18)
200	2.83 (72)	0.71 (18)	2.95 (75)	2.95 (75)	1.12 (28.5)	1.26 (32)	8.82 (224)	G 3/4 (3/4" NPT)	1.97 (50)	M36x2	2.17 (55)	0.71 (18)
250	3.31 (84)	0.89 (22.5)	3.54 (90)	3.54 (90)	1.38 (35)	1.42 (36)	11.02 (280)	G 1 (1" NPT)	2.28 (58)	M42x2	2.56 (65)	0.83 (21)
320	3.78 (96)	0.89 (22.5)	4.33 (110)	4.33 (110)	1.18 (30)	1.81 (46)	13.78 (350)	G 1 (1" NPT)	2.36 (60)	M48x2	2.95 (75)	0.94 (24)

ømm	L2	L8	L9	L12	øMMh9	PL	□R	RT	SW	VA	VD	WH	ZM
32	0.79 (20)	3.70 (94)	0.16 (4)	0.24 (6)	0.47 (12)	0.51 (13)	1.26 (32.5)	M 6	0.39 (10)	0.12 (3)	0.24 (6)	1.02 (26)	5.75 (146)
40	0.87 (22)	4.13 (105)	0.16 (4)	0.26 (6.5)	0.63 (16)	0.59 (15)	1.50 (38)	M 6	0.51 (13)	0.14 (3.5)	0.24 (6)	1.18 (30)	6.50 (165)
50	1.06 (27)	4.17 (106)	0.20 (5)	0.31 (8)	0.79 (20)	0.73 (18.5)	1.83 (46.5)	M 8	0.67 (17)	0.14 (3.5)	0.24 (6)	1.46 (37)	7.09 (180)
63	1.14 (29)	4.76 (121)	0.20 (5)	0.31 (8)	0.79 (20)	0.75 (19)	2.22 (56.5)	M 8	0.67 (17)	0.16 (4)	0.24 (6)	1.46 (37)	7.68 (195)
80	1.30 (33)	5.04 (128)	-	0.39 (10)	0.98 (25)	0.75 (19)	2.83 (72)	M 10	0.87 (22)	0.16 (4)	0.24 (6)	1.81 (46)	8.66 (220)
100	1.42 (36)	5.43 (138)	-	0.39 (10)	0.98 (25)	0.71 (18)	3.50 (89)	M 10	0.87 (22)	0.16 (4)	0.24 (6)	2.01 (51)	9.45 (240)
125	1.77 (45)	6.30 (160)	-	0.51 (13)	1.26 (32)	0.79 (20)	4.33 (110)	M 12	1.06 (27)	0.24 (6)	0.61 (15.5)	2.56 (65)	11.42 (290)
160	2.28 (58)	7.09 (180)	-	0.63 (16)	1.57 (40)	0.83 (21)	5.51 (140)	M 16	1.42 (36)	0.16 (4)	0.59 (15)	3.15 (80)	13.39 (340)
200	2.64 (67)	7.09 (180)	-	0.63 (16)	1.57 (40)	0.83 (21)	6.89 (175)	M 16	1.42 (36)	0.20 (5)	0.59 (15)	3.74 (95)	14.57 (370)
250	3.15 (80)	7.87 (200)	-	0.79 (20)	1.97 (50)	1.14 (29)	8.66 (220)	M 20	1.61 (41)	0.28 (7)	0.51 (13)	4.13 (105)	-
320	3.54 (90)	8.66 (220)	-	0.94 (24)	2.48 (63)	1.18 (30)	10.63 (270)	M 24	2.17 (55)	0.28 (7)	0.51 (13)	4.72 (120)	-