SI Series ISO6431 Standard Cylinder

Ordering code

SI – 50 X 50 – S – LB

Series
SI:ISO6431 standard double acting

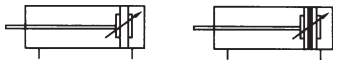
Bore

Stroke

Magnet
Blank:Without magnet
S:With magnet

Mounting

Symbol



SI SI-S

Theoretical force

Unit:N

Bore szie (mm)	Rod diameter (mm)	Operating direction		Piston area(mm^2)	Operating pressure (MPa)								
					0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
32	12	Double acting	Out	804	80.4	160.8	241.2	321.6	402.0	482.4	562.8	643.2	723.6
			In	690	69.0	138.0	207.0	276.0	345.0	414.0	483.0	552.0	621.0
40	16	Double acting	Out	1256	125.6	251.2	376.8	502.4	628.0	753.6	879.2	1002.4	1130.4
			In	1055	105.5	211.0	316.5	422.0	527.5	633.0	738.5	844.0	949.5
50	20	Double acting	Out	1963	196.3	392.6	588.9	785.2	981.5	1177.8	1374.1	1570.4	1766.7
			In	1649	164.9	329.8	494.7	659.6	824.5	989.4	1154.3	1399.2	1484.1
63	20	Double acting	Out	3117	311.7	623.4	935.1	1246.8	1558.5	1870.2	2181.9	2493.6	2805.3
			In	2803	280.3	560.6	840.9	1121.2	1401.5	1681.8	1962.1	2242.4	2522.7
80	25	Double acting	Out	5026	502.6	1005.2	1507.8	2010.4	2513.0	3015.6	3518.2	4020.8	4523.4
			In	4536	453.6	907.2	1360.8	1814.4	2268.0	2721.6	3175.2	3628.8	4082.4
100	25	Double acting	Out	7853	785.3	1570.6	2355.9	3141.2	3926.5	4711.8	4288.2	6282.4	7067.7
			In	7147	714.7	1429.4	2144.1	2858.8	3573.5	4288.2	5002.9	5717.6	6432.3
125	32	Double acting	Out	12272	1227.2	2454.4	3681.6	4908.8	6136.0	7363.2	8590.4	9817.6	11044.8
			In	11468	1146.8	2293.6	3440.4	4587.2	5734.0	6880.8	8027.6	9174.4	10321.2
160	40	Double acting	Out	20106	2010.6	4021.2	6031.8	8042.4	10053.0	12063.6	14074.2	16084.8	18095.4
			In	18849	1884.9	3769.8	5654.7	7539.6	9424.5	11309.4	13194.3	15079.2	16964.1
200	40	Double acting	Out	31416	3141.6	6283.2	9424.8	12566.4	15708.0	18849.6	21991.2	25132.8	28274.4
			In	30157	3015.7	6031.4	9047.1	12062.8	15078.5	18094.2	21109.9	24125.6	27141.3
250	50	Double acting	Out	49087	4908.7	9817.4	14726.1	19634.8	24043.5	29452.2	34360.9	39269.6	44178.3
			In	47124	4712.4	8377.6	12566.4	18849.6	23562.0	28274.4	32986.8	37699.2	42411.6

SI Series ISO6431 Standard Cylinder

Specifications

Bore (mm)	32	40	50	63	80	100	125	160	200
Operation	Double acting								
Fluid	Air								
Mounting	Basic, FA, FB, CA, CB, LB								
Operating pressure	0.1~0.9MPa								
Proof pressure	1.35MPa								
Operating temperature	0~70℃								
Operating piston speed	50~800 mm/s								
Cushioning	Adjustable cushioning								
Cushioning stroke	24						32		
Port size	G1/8 "	G1/4 "		G3/8 "		G1/2 "		G3/4 "	

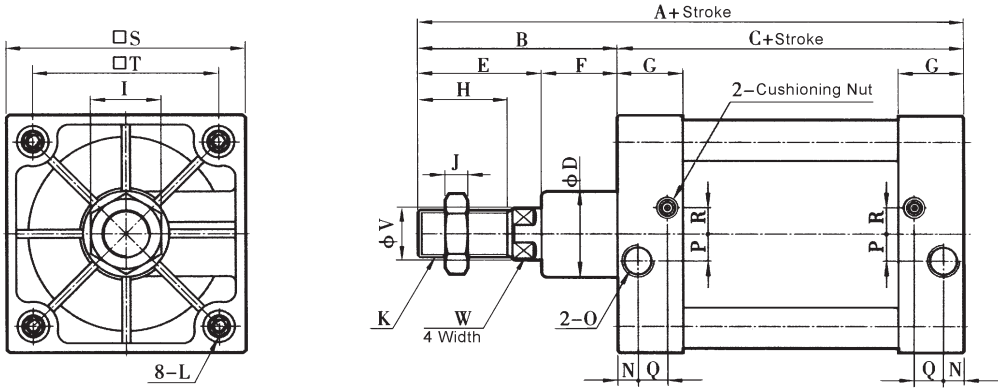
Stroke

Bore (mm)	Standard stroke	Max. stroke	Allowable stroke
32	25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500	1000	2000
40	25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500 600 700 800	1200	2000
50	25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1200	2000
63	25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000
80	25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000
100	25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000
125	25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000
160	25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000
200	25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000

Intermediate strokes are available.

SI Series ISO6431 Standard Cylinder

φ32~ φ200

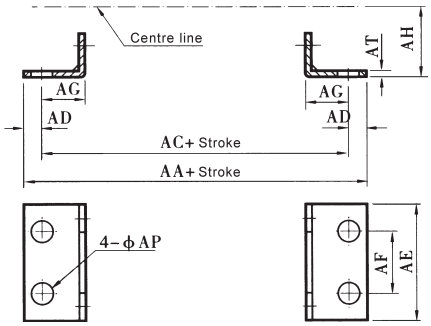


Bore/Symbol	A	B	C	D	E	F	G	H	I	J	K	L
32	142	48	94	30	32	16	28	22	17	6	M10×1.25	M6
40	159	54	105	35	36	18	29	24	19	7	M12×1.25	M6
50	175	69	106	40	44	25	31	32	24	8	M16×1.5	M8
63	190	69	121	45	44	25	32	32	24	8	M16×1.5	M8
80	214	86	128	45	56	30	35	40	30	10	M20×1.5	M10
100	229	91	138	55	59	32	36	40	30	10	M20×1.5	M10
125	279	119	160	60	74	45	46	54	41	13.5	M27×2	M12
160	332	152	180	65	94	58	50	72	55	18	M36×2	M16
200	347	167	180	75	107	60	50	72	55	18	M36×2	M16

Bore/Symbol	N	O	P	Q	R	S	T	V	W
32	13.5	1/8	4	7.5	7	47	32.5	12	10
40	16	1/4	6	9.5	9	53	38	16	13
50	18.5	1/4	8.5	6.7	9	65	46.5	20	17
63	19	3/8	6	7.7	9	75	56.5	20	17
80	19	3/8	10	5	13.5	95	72	25	22
100	18	1/2	12.5	10	14.5	115	89	25	22
125	23	1/2	14	12	14	140	110	32	27
160	25	3/4	15	12	20	180	140	40	36
200	25	3/4	15	12	20	220	175	40	36

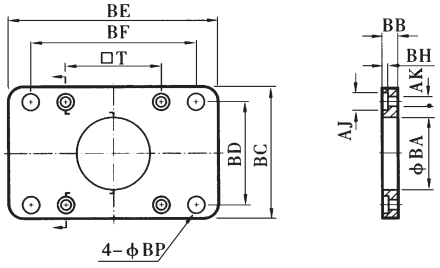
ISO 6431 Standard Cylinder Mounting Bracket

LB



Symbol / Bore	32	40	50	63	80	100	125	160	200
AA	158	179	190	209	248	258	290	340	380
AC	142	161	170	185	210	220	250	300	320
AD	8	9	10	12	19	19	20	20	30
AE	48	53	63	73	98	115	140	180	220
AF	32	36	45	50	63	75	90	115	135
AG	24	28	32	32	41	41	45	60	70
AH	32	36	45	50	63	71	90	115	135
AP	7	9	9	9	12	14	16	18	22
AT	4	4	4	4	5	5	8	8	9

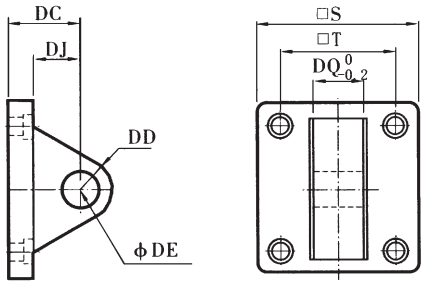
FA



Symbol / Bore	32	40	50	63	80	100	125	160	200
AJ	10.5	10.5	14	14	17	17	19	25	25
AK	7	7	9	9	11	11	13	17	17
BA	30.3	35.3	40.3	45.3	45.3	55.3	60.3	65.3	75.3
BB	10	10	12	12	16	16	20	20	25
BC	50	55	65	75	100	120	140	180	220
BD	32	36	45	50	63	75	90	115	135
BE	80	90	110	125	154	186	224	280	320
BF	64	72	90	100	126	150	180	230	270
BH	6.5	6.5	6.5	8.5	10.5	10.5	8	8	12
BP	7	9	9	9	12	14	16	18	22
T	32.5	38	46.5	56.5	72	89	110	140	175

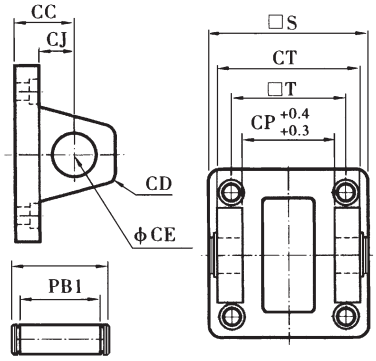
ISO 6431 Standard Cylinder Mounting Bracket

CA



Symbol / Bore	32	40	50	63	80	100	125	160	200
S	47	53	65	75	95	115	140	180	220
T	32.5	38	46.5	56.5	72	89	110	140	175
DC	22	25	27	32	36	41	50	55	60
DD	9	12	12	15	15	20	25	30	30
DE	10	12	12	16	16	20	25	30	30
DJ	13	16	17	22	22	27	33	35.5	37
DQ	25.8	27.8	31.7	39.7	49.7	59.7	69.7	89.7	89.7

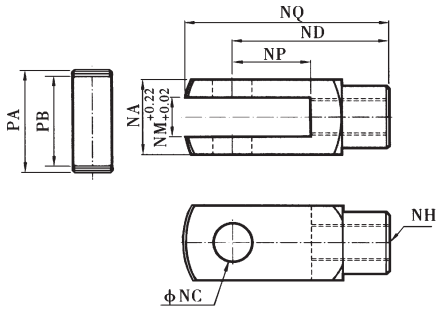
CB



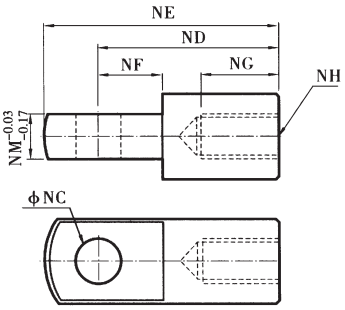
Symbol / Bore	32	40	50	63	80	100	125	160	200
CC	22	25	27	32	36	41	50	55	60
CD	5	5	3	3	8	8	8	9	9
CE	10	12	12	16	16	20	25	30	30
CJ	13	16	17	22	22	27	31	35.5	36
CP	26	28	32	40	50	60	70	90	90
CT	45	52	60	70	90	110	130	170	170
PAI	52	60	68	79	99	119	139	181	181
PBI	46.5	53.5	61.5	71.5	91.5	111.5	131.5	171.5	171.5
S	47	53	65	75	95	115	140	180	220
T	32.5	38	46.5	56.5	72	89	110	140	175

ISO6431 Standard Cylinder Joint Accessory

Y joint

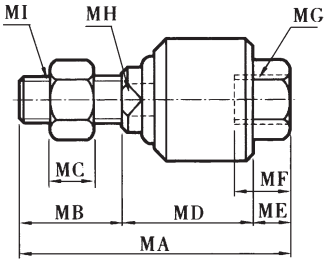


I joint



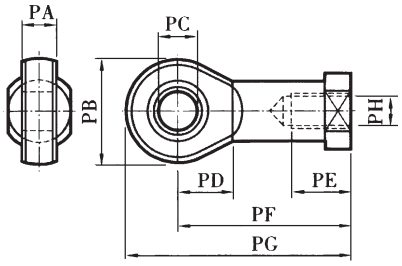
Bore / Symbol	NA	NC	ND	NE	NG	NH	NM	NP	NQ	PA	PB
32	19	10	40	52	20	M10×1.25	10	20	52	26.2	20
40	25.4	12	48	67	20	M12×1.25	12	24	62	32.8	26.5
50	32	16	64	89	23	M16×1.5	16	32	83	39.3	33
63	32	16	64	89	23	M16×1.5	16	32	83	39.3	33
80	44.4	20	80	112	30	M20×1.5	20	40	105	53.3	45
100	44.4	20	80	112	30	M20×1.5	20	40	105	53.3	45
125	55	30	110	155	56	M27×2.0	30	54	148	64	55.6
160	70	35	144	201	72	M36×2.0	35	72	191	80	70.6
200	70	35	144	201	72	M36×2.0	3	72	191	80	70.6

Float joint



Bore / Symbol	MA	MB	MC	MD	ME	MF	MG	MH	MI
32	73	20	6	45	8	26	M10×1.25	12	M10×1.25
40	77	24	7	46	7	26	M12×1.25	12	M12×1.25
50	106	32	8	62	12	34	M16×1.5	19	M16×1.5
63	106	32	8	62	12	34	M16×1.5	19	M16×1.5
80	122	40	10	68	14	42	M20×1.5	19	M20×1.5
100	122	40	10	68	14	42	M20×1.5	19	M20×1.5
125	147	54	13.5	77	16	40	M27×2.0	24	M27×2.0
160	251	72	18	161	18	78	M36×2.0	36	M36×2.0
200	251	72	18	161	18	78	M36×2.0	36	M36×2.0

Fisheye joint



Bore / Symbol	PA	PB	PC	PD	PE	PF	PG	PH
32	14	28	10	15	20	43	57	M10×1.25
40	16	32	12	17	22	50	66	M12×1.25
50	21	42	16	22	28	64	85	M16×1.5
63	21	42	16	22	28	64	85	M16×1.5
80	25	50	20	26	33	77	102	M20×1.5
100	25	50	20	26	33	77	102	M20×1.5
125	37	70	30	36	51	110	145	M27×2.0
160	21	80	35	41	56	125	165	M36×2.0
200	21	50	35	41	56	125	165	M36×2.0