

# ISO 15552 CYLINDERS

## Installation & Application Data

- 1 Cylinder should be sized according to work load.
- 2 Cylinders should be protected from dirty environments.
- 3 Dirty substances in the pipe must be cleared away before cylinder is connected with pipeline to prevent the entrance of sundries into the cylinder.
- 4 Use only clean filtered air to 40  $\mu\text{m}$  (lubricated if necessary).
- 5 Anti-freezing measures shall be adopted under low temperature environments to prevent moisture freezing.
- 6 Prior to first run, test cylinder under no load. Turn buffer adjustment to minimum and gradually increase to avoid damage.
- 7 In order for the cylinder to achieve long service life, do not side load cylinder.
- 8 When the cylinder with magnet is selected and used, it is suggested to use KELM sensor to avoid detecting failure.



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# GEN 1 & 2 ISO15552 CYLINDERS

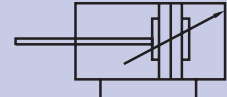


## Specification

<b>Bore Size mm</b>	32	40	50	63	80	100	125
<b>Acting Type</b>	Double Acting, Magnetic, Buffer Cushioning						
<b>Fluid</b>	Air (to be filtered by 40um filter element)						
<b>Mounting Styles</b>	FA FB CA CB CR LB TC FTC TF TM						
<b>Operating Pressure</b>	0.1Mpa – 1.0 Mpa (15 – 145psi)						
<b>Proof Pressure</b>	1.5MPa (215psi)						
<b>Temperature</b>	-20°C to +80°C						
<b>Speed Range mm/s</b>	30-800						30-500
<b>Stroke Tolerance</b>	0-250 +1.0	0	251-1000 +1.4	0	1001-1500+1.8	0	
<b>Cushion Type</b>	Variable						
<b>Adjustable Cushion Stroke mm</b>	27		30		36		40
<b>Port</b>	G1/8"	G1/4"		G3/8"		G1/2"	

## Symbol

Double Acting, Magnetic  
& Adjustable Cushioning



## Thrust Data

Bore mm	Rod mm	Type	Pressure area mm <sup>2</sup>	Unit: Newton (N)									
				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	Push Side	804	80.4	160.8	241.2	321.6	402.0	482.4	562.8	643.2	723.6
			Pull Side	690	69.0	138.0	207.0	276.0	345.0	414.0	483.0	552.0	621.0
40	16	Double Acting	Push Side	1256	125.6	251.2	376.8	502.4	628.0	753.6	879.2	1002.4	1130.4
			Pull Side	1055	105.5	211.0	316.5	422.0	527.5	633.0	738.5	844.0	949.5
50	20	Double Acting	Push Side	1963	196.3	392.6	588.9	785.2	981.5	1177.8	1374.1	1570.4	1766.7
			Pull Side	1649	164.9	329.8	494.7	659.6	824.5	989.4	1154.3	1399.2	1484.1
63	20	Double Acting	Push Side	3117	311.7	623.4	935.1	1246.8	1558.5	1870.2	2181.9	2493.6	2805.3
			Pull Side	2803	280.3	560.6	840.9	1121.2	1401.5	1681.8	1962.1	2242.4	2522.7
80	25	Double Acting	Push Side	5026	502.6	1005.2	1507.8	2010.4	2513.0	3015.6	3518.2	4020.8	4523.4
			Pull Side	4536	453.6	907.2	1360.8	1814.4	2268.0	2721.6	3175.2	3628.8	4082.4
100	25	Double Acting	Push Side	4853	785.3	1570.6	2355.9	3141.2	3926.5	4711.8	4288.2	6282.4	7067.7
			Pull Side	7362	736.2	1472.4	2208.6	2948.6	3681.0	4417.2	5153.4	5889.6	6625.8
125	32	Double Acting	Push Side	12272	1227.2	2454.4	3681.6	4908.8	6136.0	7363.2	8590.4	9817.6	11044.8
			Pull Side	11468	1146.8	2293.6	3440.4	4587.2	5734.0	6880.8	8027.6	9174.4	10321.2

## Ordering Code

K I	—	8 0	—	B	—	X	—	5 0	—	S	—	P
Model		Bore Size		Rod Material		Stroke		Magnetic		Thread		
KI : Double Acting		32 : 32mm		Blank : Medium Carbon Steel		25 : 25mm	250 : 250mm	S : Magnetic		P : PT		
KJ : Double Rod		40 : 40mm		A : SUS420J2		50 : 50mm	300 : 300mm	Blank : None magnetic		T : NPT		
KK : Adjustable Stroke		50 : 50mm		B : SUS304		75 : 75mm	350 : 350mm			G : BSPP		
		63 : 63mm		C : SUS316		80 : 80mm	450 : 450mm					
		80 : 80mm				100 : 100mm	500 : 500mm					
		100 : 100mm				125 : 125mm	600 : 600mm					
		125 : 125mm				150 : 150mm	700 : 700mm					
						160 : 160mm	800 : 800mm					
						175 : 175mm	900 : 900mm					
						200 : 200mm	1000 : 1000mm					

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## Product Features

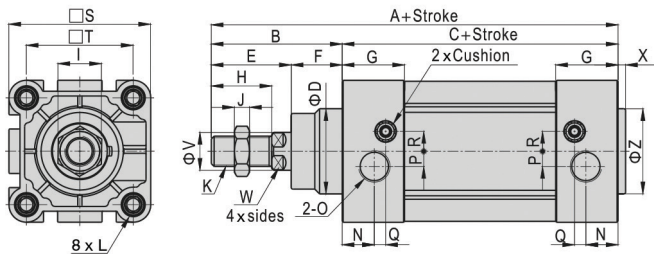
- 1 ISO 15552 (original ISO6431) standard cylinder.
- 2 The piston seal is composed of two 'Y' shaped one-way seal structure, which has compensation function, long service life and low start-up pressure.
- 3 The square aluminium profile without tie rods has a good corrosion resistance.
- 4 The cushion adjustments are smooth and steady. There are cylinders and accessories with several specifications for installation of your choice.

## Available Strokes

Bore size mm	Standard stroke mm	Max stroke mm	Available stroke mm
32	25 50 75 80 100 125 150 160 175 200 250 300 350 450 500	1000	1800
40	25 50 75 80 100 125 150 160 175 200 250 300 350 450 500 600 700 800	1200	1800
50	25 50 75 80 100 125 150 160 175 200 250 300 350 450 500 600 700 800 900 1000	1200	1800
63	25 50 75 80 100 125 150 160 175 200 250 300 350 450 500 600 700 800 900 1000	1500	1800
80	25 50 75 80 100 125 150 160 175 200 250 300 350 450 500 600 700 800 900 1000	1500	1800
100	25 50 75 80 100 125 150 160 175 200 250 300 350 450 500 600 700 800 900 1000	1500	1800
125	25 50 75 80 100 125 150 160 175 200 250 300 350 450 500 600 700 800 900 1000	1500	1800

## Dimensions

Item Bore	A	B	C	D	E	F	G	H	I	J	K	L	N	O	P	Q	R	S	T	V	W	X	Z
32	142	48	94	30	29	19	27.5	22	17	6	M10 x 1.25	M6	13.5	1/8"	5.8	6	6.3	46.5	32.5	12	10	3	30
40	159	54	105	35	33	21	32	24	17	7	M12 x 1.25	M6	17.5	1/4"	6	5.5	9	54	38	16	13	3.5	35
50	175	69	106	40	42	27	31	32	23	8	M16 x 1.5	M8	14	1/4"	8	5	10.5	64	46.5	20	17	3.5	40
63	190	69	121	45	42	27	33	32	23	8	M16 x 1.5	M8	17	3/8"	8	6	10.5	75	56.5	20	17	4	45
80	214	86	128	45	53	33	33	40	26	10	M20 x 1.5	M10	16.5	3/8"	8	6.5	12.5	93	72	25	22	4	45
100	229	91	138	55	55	36	37	40	26	10	M20 x 1.5	M10	19.5	1/2"	10	7	12	110	89	25	22	4	55
125	279	119	160	60	74	45	46	54	41	13.5	M27 x 2	M12	23	1/2"	11	12	11	134	110	32	27	4	60



Item Bore	A	A1	B	C	E	Z	J	K
32	190	188	48	94	29	27	6	M10 x 1.25
40	213	208	54	105	33	28	7	M12 x 1.25
50	244	231	69	106	42	29	8	M16 x 1.5
63	259	246	69	121	42	29	8	M16 x 1.5
80	300	282.5	86	128	53	35.5	10	M20 x 1.5
100	320	300.5	91	138	55	35.5	10	M20 x 1.5
125	398	366.5	119	160	74	42.5	13.5	M27 x 2

## Inner Structure

No.	Item	Material
1	Rod nut	Stainless steel
2	Piston rod	Blank : Medium Carbon Steel B : 304 Stainless Steel
3	Front cover packing	TPU
4	Front cover	Aluminium alloy
5	Bushing	Wear resistant material
6	Cushioning o-ring	TPU
7	Barrel	Aluminium alloy
8	O-ring	NBR
9	Piston	Aluminium alloy
10	Piston seal	TPU
11	Wear ring	Wear resistant material
12	Magnet	Plastic / rubber (ø125)
13	Bolt	Carbon steel
14	Buffer gasket	TPU
15	Back cover	Aluminium alloy
16	Screw	Carbon steel / stainless steel

