



MEGATRONE
INDUSTRIAL SOLUTIONS

Tie Rod Cylinder

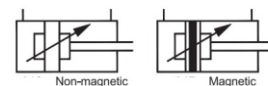
ISO 15552 Standard

Ø32 to 100 mm



www.megatrone.in

> **AIR CYLINDERS Double Acting - Ø32-100 mm**
As per ISO 15552 / VDMA 24562 standards



Features

- > Adjustable cushioning at both ends with elastomer pads
- > Wide varieties of mountings.
- > Magnetic and Non magnetic version
- > Optional - High temperature (FKM seals) 150°C max.**
- > Optional - Non corrosive Stainless steel piston rod and piston rod lock nut (SS 304) **



Technical Specifications

Cylinder bore Ø (mm)		32	40	50	63	80	100
Cushion stroke (mm)		21	23	23	23	28	28
Standard strokes* (mm)		25, 50, 80, 100, 125, 160, 200, 250, 300, 320, 400, 500					
Medium		Compressed air-filtered-lubricated					
Working pressure, bar		0.5 to 10 bar					
Ambient temperature		-10 to +60° C					
Medium temperature	Regular	+5° to +50° C					
	High temperature applications**	+5° to +150° C max.					
Materials of construction		Aluminium, Brass, Steel, Acetal, Polyurethane, Nitrile (Regular), FKM (High temperature)					
Mountings		Basic cylinder, Foot mounting, Front flange, Rear flange, Male clevis, Male clevis (with spherical bearing), Female clevis, Female clevis (King pin), Front trunnion, Rear trunnion, Centre trunnion					
Accessories		Clevis foot bracket, Wall mounting bracket, Trunnion bracket, Rod end fork, Rod end aligner, Rod end spherical eye					

* For Non standard or longer stroke cylinders, **contact us**

** Refer Special Ordering number

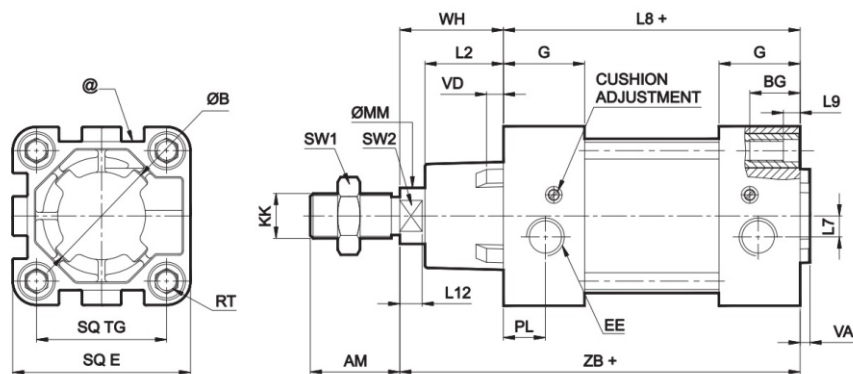
Applicable only for standard strokes (Upto 500mm)

Output force (force in N: 1N = 0.1 kgf)

Cylinder bore Ø (in mm)	Rod Ø (in mm)		Working pressure in bar								
			2	3	4	5	6	7	8	9	10
32	12	Extend	145	217	289	362	434	507	579	651	724
		Retract	124	187	249	311	373	435	498	559	621
40	16	Extend	226	339	452	565	678	792	905	1018	1130
		Retract	190	285	380	475	570	665	760	855	950
50	20	Extend	353	530	706	884	1060	1237	1414	1590	1767
		Retract	297	445	594	742	891	1039	1187	1336	1484
63	20	Extend	561	842	1122	1403	1683	1964	2244	2525	2805
		Retract	505	757	1009	1261	1514	1766	2018	2270	2523
80	25	Extend	905	1357	1809	2262	2714	3167	3619	4072	4524
		Retract	816	1225	1633	2041	2449	2857	3266	3674	4082
100	25	Extend	1414	2120	2828	3534	4241	4948	5655	6362	7069
		Retract	1325	1988	2650	3313	3976	4640	5300	5965	6625

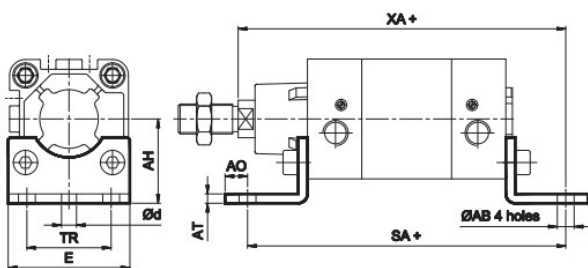
(Above values have been worked out taking frictional loss into consideration)

Basic cylinder



Cylinder bore	KK	AM	MM	Sw2	L12	Sw1	S ø11	VD	VA	L2	E max	G	TG	RT	Bø min	EE	PL	L7	WH	Tol	ZB	Tol	L8	Tol	L9	Stroke tol
32	M10x1.25	22	12	10	6	17	30	6	4	18.5	45	25.5	32.5	M6	16	G1/8	13	5	26	±1.3	120	±1	94	±0.6	5	+2 +0
40	M12x1.25	24	16	13	6.5	19	35	6.5	4	20.5	51	29	38	M6	16	G1/4	14.5	5	30		135		105		5	
50	M16x1.5	32	20	16	8	24	40	6.5	4	28	64	29	46.5	M8	16	G1/4	15	7.5	37		143		106		6	
63	M16x1.5	32	20	16	8	24	45	6.5	4	27.5	74	35	56.5	M8	16	G3/8	17	10	37	±1.5	158	±1.1	121	±0.8	6	+2.5 +0
80	M20x1.5	40	25	21	10	30	45	6.5	4	34	94	35	72	M10	16	G3/8	18	14	46		174		128		6	
100	M20x1.5	40	25	21	10	30	55	6.5	4	35	111	38.5	89	M10	16	G1/2	18	10	51		189		138		6	

Foot mounting

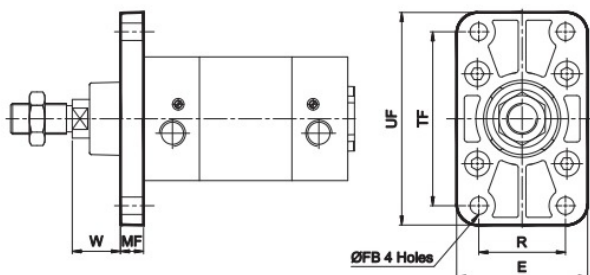


+ Add stroke

Cylinder bore	TR ±0.3	AB H14	AH J15	AO max	AT	E	d*	SA	Tol	XA	Tol	Recommended Bolt size
32	32	7	32	8	4	46	5.8	142	±1.25	144	±1.25	M6
40	36	10	36	10	4	52	7.8	161		163		M8
50	45	10	45	12	5	65	7.8	170		175		M8
63	50	10	50	12	5	75	7.8	185	±1.6	190	±1.5	M8
80	63	12	63	17	6	95	9.8	210		215		M10
100	75	14.5	71	19	6	115	11.8	220		230		M12

* Suitable for reaming

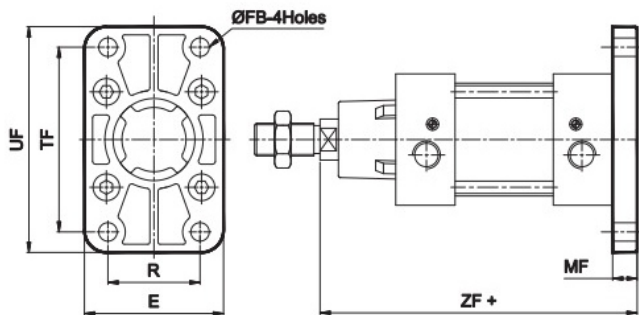
Front Flange



+ Add stroke

Cylinder bore	TF ±0.3	R ±0.3	FB H13	MF	UF	E	W	Tol	Recommended Bolt size
32	64	32	7	10	80	50	16	±1.5	M6
40	72	36	9	10	90	55	20		M8
50	90	45	9	12	110	68	25		M8
63	100	50	9	12	125	78	25	±1.8	M8
80	126	63	12	16	155	100	30		M10
100	150	71	14	16	185	120	35		M12

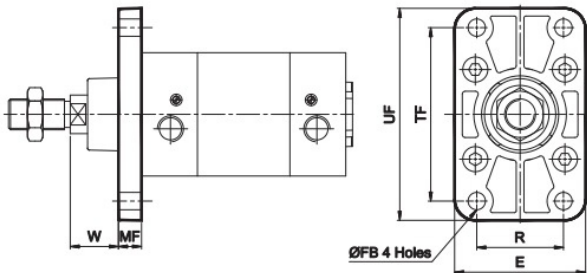
Rear Flange



+ Add stroke

Cylinder bore	TF ±0.3	R ±0.3	FB H13	MF	UF	E	ZF	Tol	Recommended Bolt size
32	64	32	7	10	80	50	130	±1.5	M6
40	72	36	9	10	90	55	145		M8
50	90	45	9	12	110	68	155		M8
63	100	50	9	12	125	78	170	±1.8	M8
80	126	63	12	16	155	100	190		M10
100	150	71	14	16	185	120	205		M12

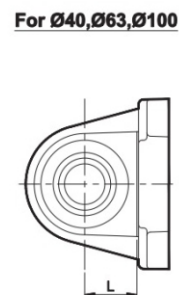
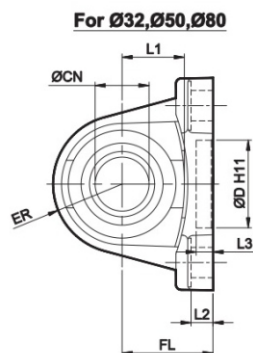
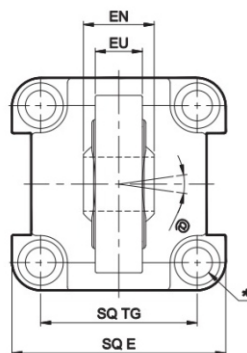
Male Clevis



+ Add stroke

Cylinder bore	TF ±0.3	R ±0.3	FB H13	MF	UF	E	W	Tol	Recommended Bolt size
32	64	32	7	10	80	50	16	±1.5	M6
40	72	36	9	10	90	55	20		M8
50	90	45	9	12	110	68	25		M8
63	100	50	9	12	125	78	25	±1.8	M8
80	126	63	12	16	155	100	30		M10
100	150	71	14	16	185	120	35		M12
125	180	90	16	20	211	141	45	±2	M12

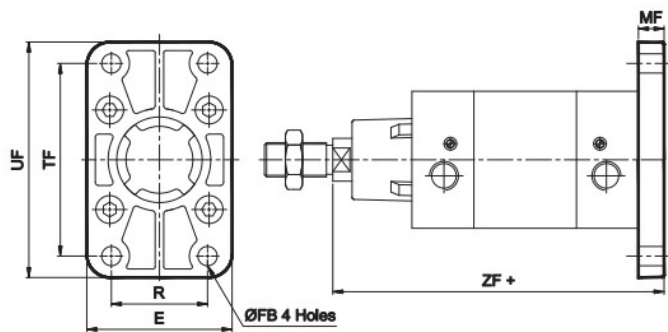
Male Clevis(with Spherical bearing)



+ Add stroke

Cylinder bore	CN H7	EN	EU	L	L1	ER max	SQ E	SQ TG	L2	FL	ØD H11	L3 min	@	Recommended Bolt size
32	10	14	10.5	-	13.5	15.5	45	32.5	5.5	22	30	4.5	±4°	M6x20
40	12	16	12	15.5	-	17.5	51	38	5.5	25	35			M6x20
50	16	21	15	-	19min	20.5	64	46.5	6.5	27	40			M8x20
63	16	21	15	19min	-	22.5	74	56.5	6.5	32	45			M8x20
80	20	25	18	-	24min	27.5	94	72	10	36	45			M10x25
100	20	25	18	24min	-	29.5	111	89	10	41	55			M10x25

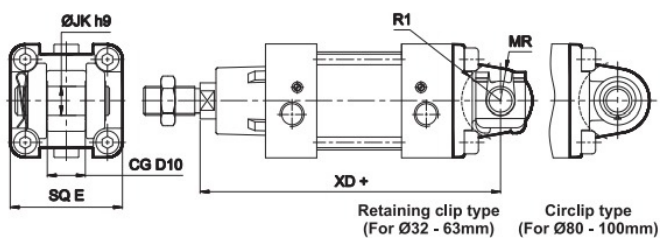
Female Clevis



+ Add stroke

Cylinder bore	EK e8	CS h14	L min	MR max	EB max	XD	Tol	
32	10	26	12	11	56	142	±1.25	
40	12	28	15	13	65	160		
50	12	32	15	13	73	170		
63	16	40	20	17	86	190	±1.6	
80	16	50	20	17	106	210		
100	20	60	25	21	129	230		

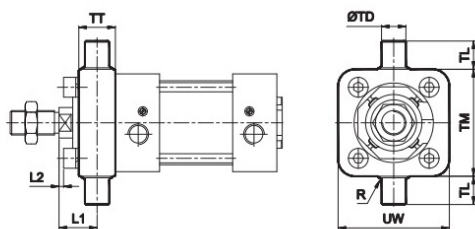
Female Clevis(King pin)



+ Add stroke

Cylinder bore	JK h9	CG D10	R1	MR max	SQ E	XD	Tol	
32	10	14	17	11	45	142	±1.25	
40	12	16	20	13	51	160		
50	12	21	22	18	64	170		
63	16	21	25	18	74	190	±1.6	
80	16	25	30	22	94	210		
100	20	25	32	22	111	230		

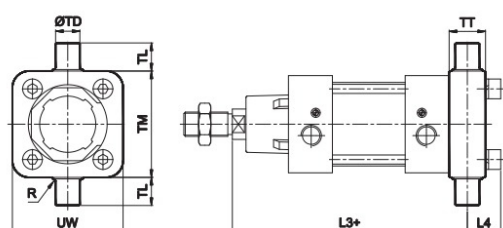
Front Trunnion



+ Add stroke

Cylinder bore	Td e8	TL h14	TM h14	UW	TT	R	L1	Tol	L2 approx	
32	12	12	50	48	16	1	18	±1.25	2	
40	16	16	63	55	22	1.6	19		0	
50	16	16	75	70	24	1.6	25		3	
63	20	20	90	86	28	1.6	23	±1.8	-1	
80	20	20	110	110	32	1.6	30		1.8	
100	25	25	132	135	40	2	31		-1.2	

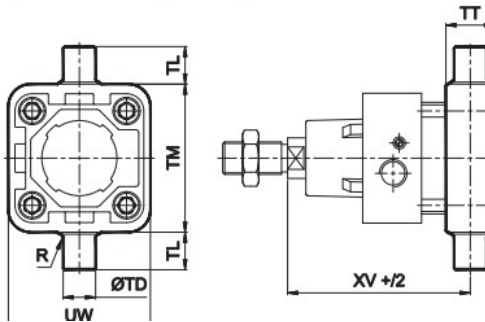
Rear Trunnion



+ Add stroke

Cylinder bore	Td e8	TL h14	TM h14	UW	TT	R	L3	Tol	L4 approx	
32	12	12	50	48	16	1	128	±1.25	16	
40	16	16	63	55	22	1.6	146		19	
50	16	16	75	70	24	1.6	155		22	
63	20	20	90	86	28	1.6	172	±1.8	24	
80	20	20	110	110	32	1.6	190		29	
100	25	25	132	135	40	2	209		33	

Centre Trunnion



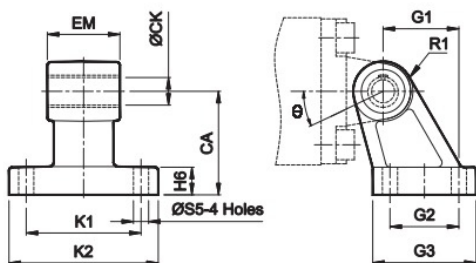
+ Add stroke

Cylinder bore	Td e9	TL h14	TM h14	UW	TT	R	XV #2
32	12	12	50	48	16	1	73
40	16	16	63	55	22	1.6	82.5
50	16	16	75	70	24	1.6	90
63	20	20	90	86	28	1.6	97.5
80	20	20	110	110	32	1.6	110
100	25	25	132	135	40	2	120

Note : Cylinder with Centre trunnion is factory fitted, please contact JANATICS - H.O

Accessories for Air Cylinder

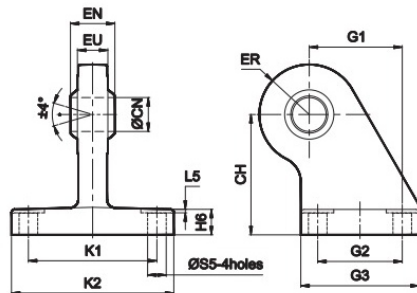
Clevis foot Bracket



Cylinder bore	K1 Js14	G2 Js14	S5 H13	CA Js15	CK H9	EM - 0.2 0.6	G1 Js14	H6	K2	G3	0°	Recommended Bolt size
32	38	18	6.6	32	10	26	21	8	51	31	10	M6
40	41	22	6.6	36	12	28	24	10	54	35	15	M6
50	50	30	9	45	12	32	33	12	65	45	15	M8
63	52	35	9	50	16	40	37	12	67	50	15	M8
80	66	40	11	63	16	50	47	14	86	60	15	M10
100	76	50	11	71	20	60	55	15	96	70	15	M10

@Adoptable to cylinder with female clevis

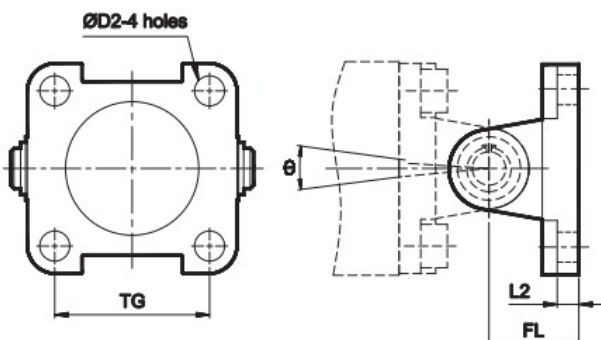
Clevis foot bracket (with spherical bearing)



Cylinder bore	K1 Js14	G2 Js14	S5 H13	CA Js15	CK H9	EU max	G1 Js14	H6	ER max	K2 max	G3	EN - 0.1	L5
32	38	18	6.6	32	10	10.5	21	10	51	51	31	14	1
40	41	22	6.6	36	12	12	24	10	18	54	35	16	1
50	50	30	9	45	12	15	33	12	21	65	45	21	1
63	52	35	9	50	16	15	37	12	23	67	50	21	1
80	66	40	11	63	16	18	47	14	28	86	60	25	2
100	76	50	11	71	20	18	55	15	30	96	70	25	2

@Adoptable to cylinder with female clevis

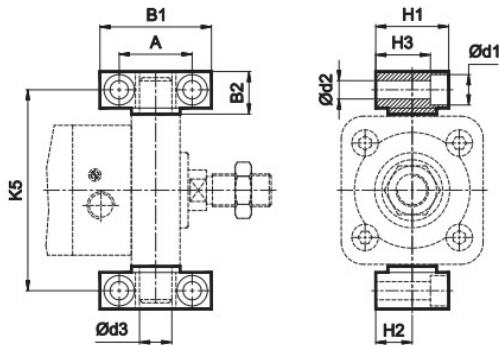
Wall Mounting Bracket



+ Add stroke

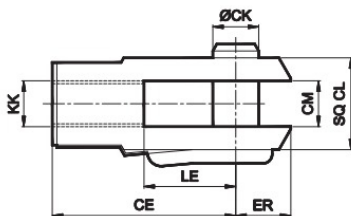
Cylinder bore	TG	D2	L2	FL	0°	Recommended Bolt size
32	32.5	6.6	5.5	22	90	M6
40	38	6.6	5.5	25	90	M6
50	46.5	9	6.5	27	90	M8
63	56.5	9	6.5	32	90	M8
80	72	11	10	36	60	M10
100	89	11	10	41	60	M10

Trunnion Bracket



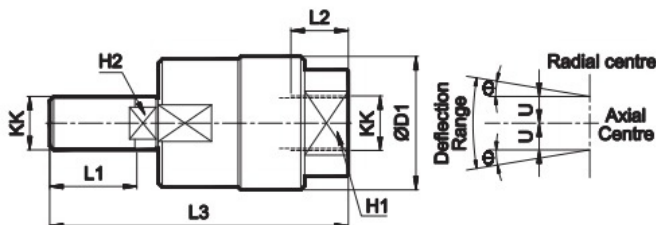
Cylinder bore	B1	B2	A	d1	d2 H13	d3 H9	H1	H2	H3	K5 Ja14
32	46	18	32 ±0.2	11	6.6	12	30	15 ±0.1	23	71
40	55	21	36 ±0.2	15	9	16	36	18 ±0.1	27	87
50	55	21	36 ±0.2	15	9	16	36	18 ±0.1	27	99
63	65	23	42 ±0.2	16.5	11	20	40	20 ±0.1	29	116
80	65	23	42 ±0.2	16.5	11	20	40	20 ±0.1	29	136
100	75	28.5	50 ±0.2	20	14	25	50	25 ±0.1	37	164

Rod & Fork(ISO 8140)



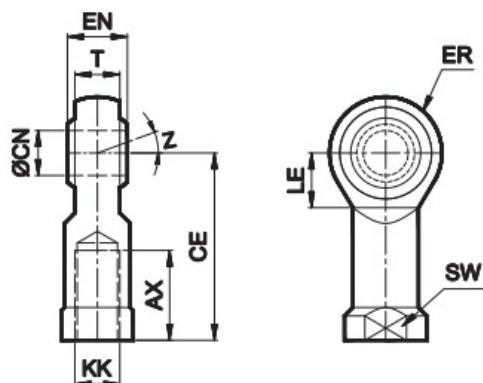
Cylinder bore	KK	CE	CK F8	CM B12	LE	ER max	CL
32	M10 x 1.25	40	10	10	20	16	20
40	M12 x 1.25	48	12	12	24	19	24
50/63	M16 x 1.5	64	16	16	32	25	32
80/100	M20 x 1.5	80	20	20	40	32	40

Rod & Aligner



Cylinder bore	KK	L1	L2	H1	H2	D1	U	α°
32	M10 x 1.25	20	14	17	8	28	0.75	5
40	M12 x 1.25	22	18	19	10	32	1	5
50/63	M16 x 1.5	25	22	27	13	41	1	5
80/100	M20 x 1.5	30	28	32	16	50	1.5	5







Rod & Spherical eye (ISO 8139)



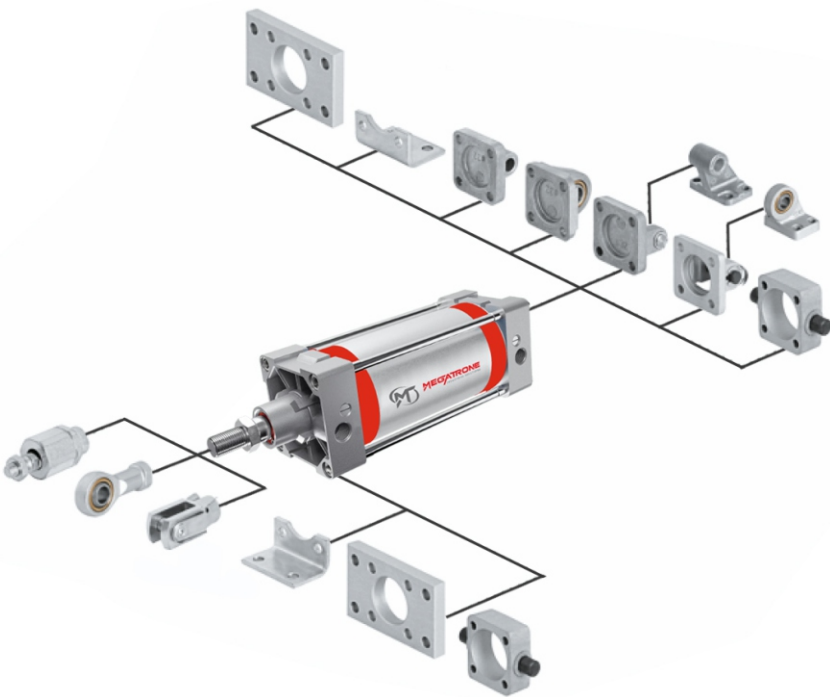
Cylinder bore	KK	CN H9	T	EN h12	CE	LE min	ER max	AX	SW	Z
32	M10 x 1.25	10	10.5	14	43	15	14	20	17	13°
40	M12 x 1.25	12	12	16	50	17	16	22	19	
50/63	M16 x 1.5	16	15	21	64	22	21	28	22	15°
80/100	M20 x 1.5	20	18	25	77	26	25	33	30/32	

How to Order

Model		Piston Ø (mm)		Stroke (mm)		Mountings	Special Cylinders
M	Magnetic cylinder	032	- Ø 32	025	- 25	O - Basic	H - High temp
S	Standard cylinder	040	- Ø 40	050	- 50	L - Foot Mounting	S - SS piston rod
		050	- Ø 50	080	- 80	F - Front Flange	
		063	- Ø 63	100	- 100	R - Rear Flange	
		080	- Ø 80	125	- 125	S - Male Clevis	
		100	- Ø 100	160	- 160	G - Male Clevis (with spherical bearing)	
				200	- 200	D - Female Clevis	
				250	- 250	K - Female Clevis (King pin)	
				300	- 300	M - Rear Trunnion	
				320	- 320	N - Front Trunnion	
				400	- 400	T - Centre Trunnion	
				500	- 500		

Cylinder bore Ø	Foot mounting *	Front / Rear flange *	Male clevis *	Female clevis *	Front / Rear trunnion *	Female clevis (King pin) *
						

Cylinders Mountings & Accessories





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