



MEGATRONE
INDUSTRIAL SOLUTIONS

Tie Rod Cylinder

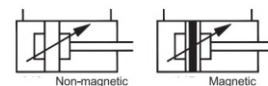
ISO 15552 Standard

Ø125 to 250 mm



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- > AIR CYLINDERS Double Acting (Ø125, 160, 200, 250 mm)
As per ISO 15552 / VDMA 24562 standards



Features

- > Adjustable cushioning at both ends
- > Wide varieties of mountings
- > Low friction
- > Long life
- > 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)		125	160	200	250
Cushion stroke (mm)		40	40	40	40
Standard strokes* (mm)		50 80 100 125 160 200 250 300 320 400 500			
Medium		Compressed air-filtered-lubricated			
Working pressure		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, Iron, Polyurethane, Nitrile (Regular), Viton (High temperature)			
Mountings		Basic cylinder, Foot mounting, Front flange, Rear flange, Male clevis, Female clevis, Female clevis King pin), Centre trunnion, Front trunnion, Rear 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**

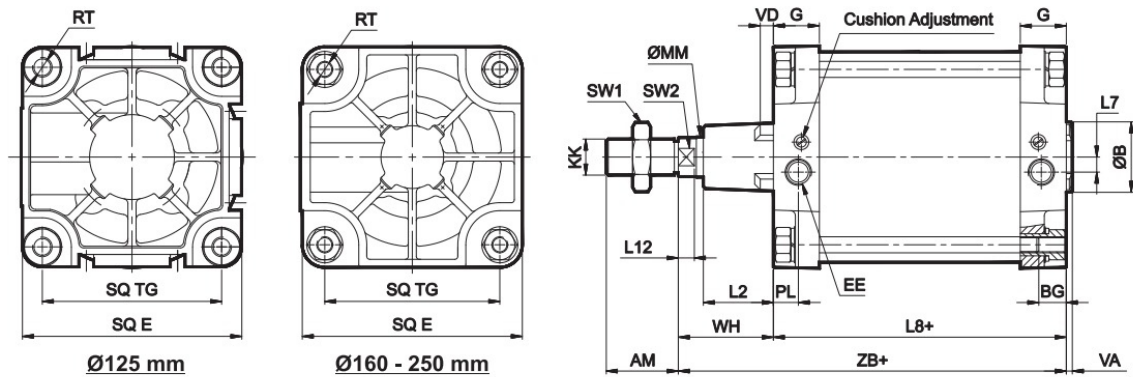
** Refer Special Ordering number

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
Ø125	32	Extend	2209	3313	4417	5522	6626	7731	8835	9940	11044
		Retract	2064	3096	4128	5160	6192	7224	8256	9288	10320
Ø160	40	Extend	3619	5428	7238	9047	10857	12666	14476	16286	18095
		Retract	3392	5089	6785	8482	10178	11875	13571	15268	16964
Ø200	40	Extend	5654	8482	11309	14137	16964	19792	22619	25446	28274
		Retract	5428	8143	10857	13571	16286	19000	21714	24429	27143
Ø250	50	Extend	8836	13253	17671	22089	26507	30925	35343	39760	44178
		Retract	8482	12723	16964	21205	25446	29688	33929	38170	42411

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

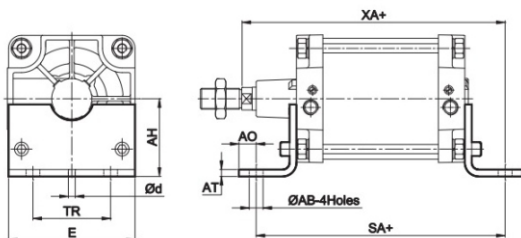
Basic cylinder



Cylinder bore	KK	AM	MM	Sw2	L12	Sw1	Bell	VD	VA	L2	E max	G	TG	RT	BG min	EE	PL	L7	WH ±2.2	ZB	L8	Stroke tol
125	M27 x 2	54	32	27	13	41	60	10	6	48.5	136	44	110	M12	20	G1/2	20	12	65	225 ± 1.2	160 ± 1.0	+4 0
160	M36 x 2	72	40	36	16	55	65	8	6	60	183	51	140	M16	24	G3/4	26	15	80	260 ± 1.5	180 ± 1.1	
200	M36 x 2	72	40	36	16	55	75	8	6	70	222	46	175	M16	24	G3/4	25	15	95	275 ± 1.5	180 ± 1.6	
250	M42 x 2	84	50	46	20	65	90	12	10	75	272	56	175	M20	25	G1	31	25	105	305 ± 2	200 ± 1.6	+5 0

MOUNTINGS FOR AIR CYLINDER

Foot mounting

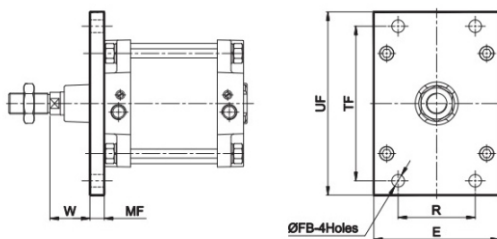


+ Add stroke

Cylinder bore Ø	TR ±0.3	AB H14	AH Js16	AO max	AT	E	SA ±2	d*	XA ±2
125	90	16.5	90	17	8	140	250	11.8	270
160	115	18.5	115	17	10	180	300	11.8	320
200	135	24	135	30	12	222	320	11.8	345
250	165	28	165	35	20	265	350	11.8	380

* Suitable for reaming

Front Flange

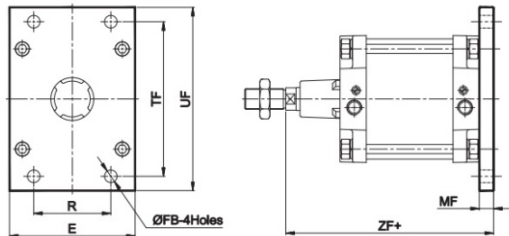


+ Add stroke

Cylinder bore Ø	TF	R	FB H13	MF	UF	E	W ±2.5
125	180 ± 0.3	90 ± 0.3	16	20	211	142	45
160	230 ± 0.3	115 ± 0.3	18	20	276	180	60
200	270 ± 0.3	135 ± 0.3	22	25	320	222	70
250	330 ± 0.7	165 ± 0.5	26	25	390	265	80

MOUNTINGS FOR AIR CYLINDER

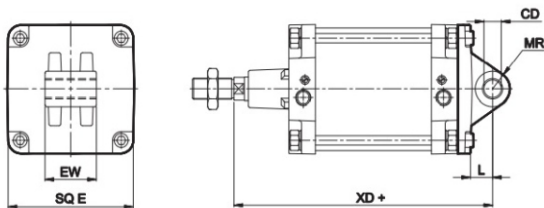
Rear Flange



+ Add stroke

Cylinder bore Ø	TF	R	FB H13	MF	UF	E	ZF+ ±2.5
125	180 ±0.3	90 ±0.3	16	20	211	142	45
160	230 ±0.3	115 ±0.3	18	20	276	180	60
200	270 ±0.3	135 ±0.3	22	25	320	222	70
250	330 ±0.7	165 ±0.5	26	25	390	265	80

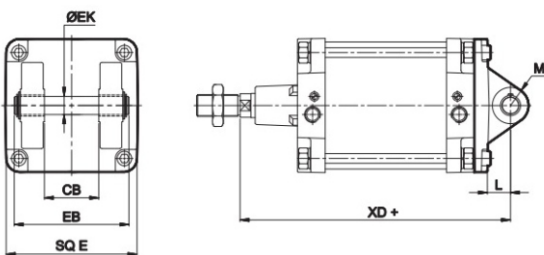
Male Clevis



+ Add stroke

Cylinder bore Ø	CD H9	EW	Tol	L min	MR max	E max	XD ±2
125	25	70	- 0.5 - 1.2	30	26	142	275
160	30	90		35	31	180	315
200	30	90		35	31	222	335
250	40	110		45	41	270	375

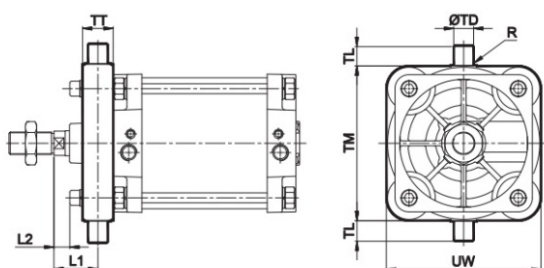
Female Clevis



+ Add stroke

Cylinder bore Ø	EK e8	L min	MR max	EB max	CB H14	E max	XD ±2.5
125	25	30	26	148	70	142	275
160	30	35	31	191	90	180	315
200	30	35	31	191	90	222	335
250	40	45	41	220	110	270	375

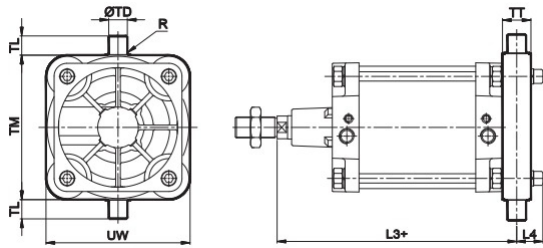
Front Trunnion



+ Add stroke

Cylinder bore Ø	TD e9	TL h14	TM h14	UW	TT	R	L1 ±2.5	L2 Approx.
125	25	25	160	155	44	2	43	6.5
160	32	32	200	195	49	2.5	55.5	11.5
200	32	32	250	248	49	2.5	70.5	26.5
250	40	40	320	318	60	3.2	75	21

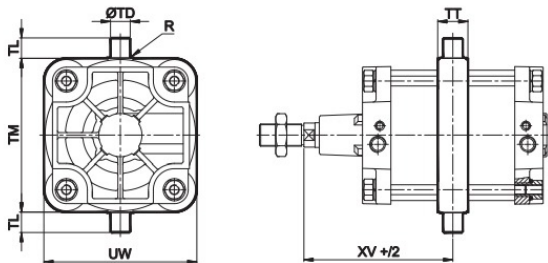
Rear Trunnion



+ Add stroke

Cylinder bore Ø	TD e9	TL h14	TM h14	UW	TT	R	L1 ±1.8	L4
125	25	25	160	155	44	2	247	36.5
160	32	32	200	195	49	2.5	284.5	44
200	32	32	250	248	49	2.5	299.5	44
250	40	40	320	318	60	3.2	335	54

Male Clevis



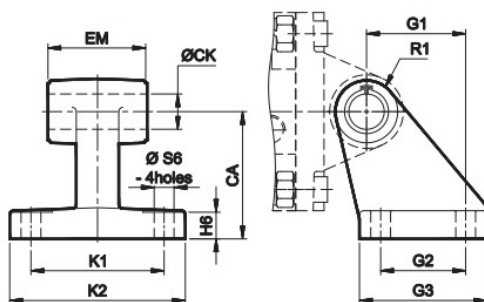
+ Add stroke

Cylinder bore Ø	TD e9	TL h14	TM h14	UW	TT	R	XV ±2.5
125	25	25	160	155	44	2	145
160	32	32	200	195	49	2.5	170
200	32	32	250	248	49	2.5	185
250	40	40	320	318	60	3.2	205

Note: Cylinder with Centre trunnion is factory fitted, please contact

Accessories for Air Cylinder

Clevis Foot Bracket

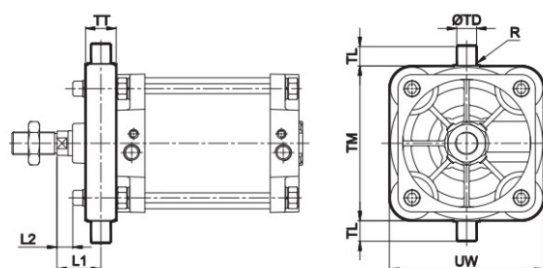


+ Add stroke

Cylinder bore Ø	K1 Js14	G2 Js14	S6 H13	CA Js15	CK H9	EM	Tol	G1	Tol	H6	R1 max	K2	G3
125	94	60	14	90	25	70	- 0.5 - 1.5	70	±0.2	20	23.5	124	90
160	118	88	14	115	30	90		97		25	31.5	156	126
200	122	90	18	135	30	90		105		30	31.5	162	130
250	150	110	22	165	40	110		128		32	45	200	160

@ Adoptable to Cylinder with female clevis

Front Trunnion



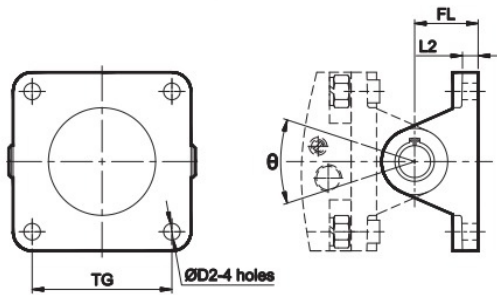
+ Add stroke

Cylinder bore Ø	K1 Js14	G2 Js14	S5 H13	CH Js15	CN H7	EU max	G1 Js14	H6	ER max	K2	G3	EN -0.1	L5	H1 max
125	94	60	14	90	30	25	70	20	40	124	90	37	2	50

@Adoptable to cylinder with female clevis (King pin)

Wall Mounting Bracket

+ Add stroke

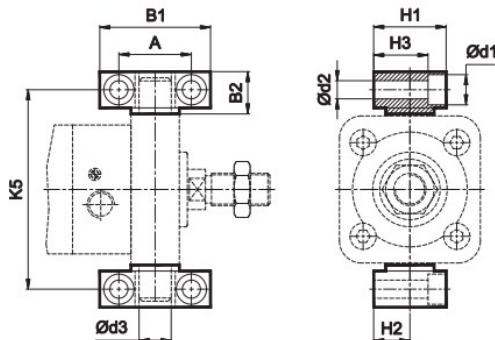


Cylinder bore Ø	TG	D2	L2	FL ±0.2	0°
125	110	13	10	50	80
160	140	17	10	55	80
200	175	17	11	60	90
250	220	22	11	70	80

Note: Cylinder with Centre trunnion is factory fitted, please contact

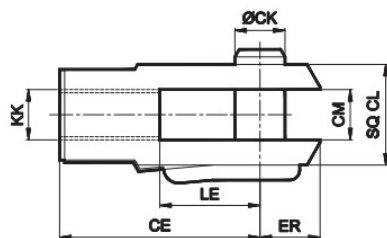
Trunnion Bracket

+ Add stroke



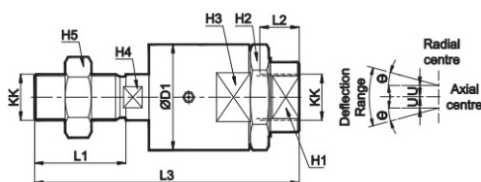
Cylinder bore Ø	B1	B2	A	d1	d2 H13	d3 H9	H1	H2	H3	K5 Js14
125	75	28.5	50 ±0.2	20	14	25	50	25 ±0.1	37	192
160	92	40	60 ±0.3	25	18	32	60	30 ±0.2	43	245
200	92	40	60 ±0.3	25	18	32	60	30 ±0.2	43	295
250	140	50	90 ±0.3	32	22	40	70	35 ±0.2	48	375

Rod End Fork(ISO 8140)



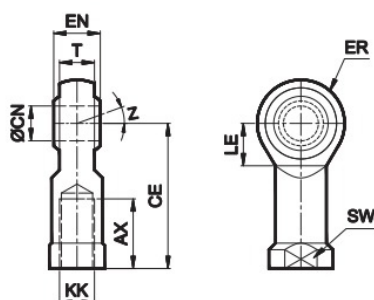
Cylinder bore Ø	KK	CE	CK f8	CM B12	LE	ER max	CL
125	M27 x 2	110	30	30	55	45	55
160 & 200	M36 x 2	144	35	35	72	53	70
250	M42 x 2	168	40	40	86	77	85

Rod End Aligner



Cylinder bore Ø	KK	L1	L2	L3	H1	H2	H3	H4	H5	ØD1	U	0°
125	M27 x 2	54	42	157	41	55	55	24	41	62	1.5	5
160 & 200	M36 x 2	72	55	251	60	75	75	32	55	80	1.5	5

Rod End Spherical eye(ISO 8139)



Cylinder bore Ø	KK	CN H9	T	EN h12	CE	LE min	ER max	AX	SW	Z
125	M27 x 2	30	25	37	110	36	35	51	41	15°
160 & 200	M36 x 2	35	28	43	125	41	40	56	50	
250	M42 x 2	40	33	49	142	46	45	60	55	

AIR CYLINDERS Double Acting (Ø125, 160, 200, 250 mm)

As per ISO 15552 / VDMA 24562 standards

Model	
S	Standard cylinder
M	Magnetic cylinder

Piston Ø (mm)	
125	- Ø 125
160	- Ø 160
200	- Ø 200
250	- Ø 250

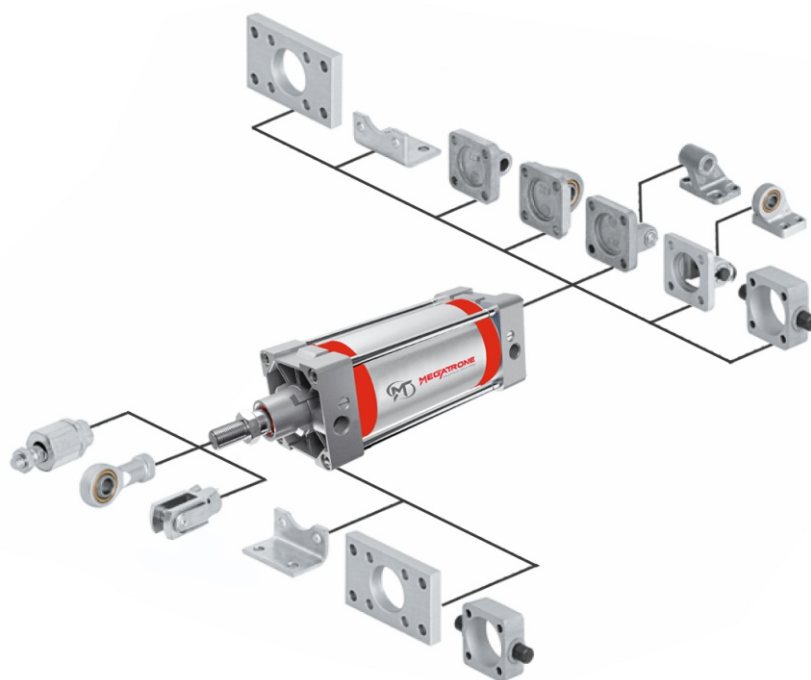
Stroke (mm)	
050	- 50
080	- 80
100	- 100
125	- 125
160	- 160
200	- 200
250	- 250
300	- 300
320	- 320
400	- 400
500	- 500

Mountings	
O	- Basic
L	- Foot Mounting
F	- Front Flange
R	- Rear Flange
S	- Male Clevis
D	- Female Clevis
K	- Female Clevis (King pin)
N	- Front Trunnion
M	- Rear Trunnion
T	- Centre Trunnion

Special Cylinders	
H	- High temp
S	- SS piston rod

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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