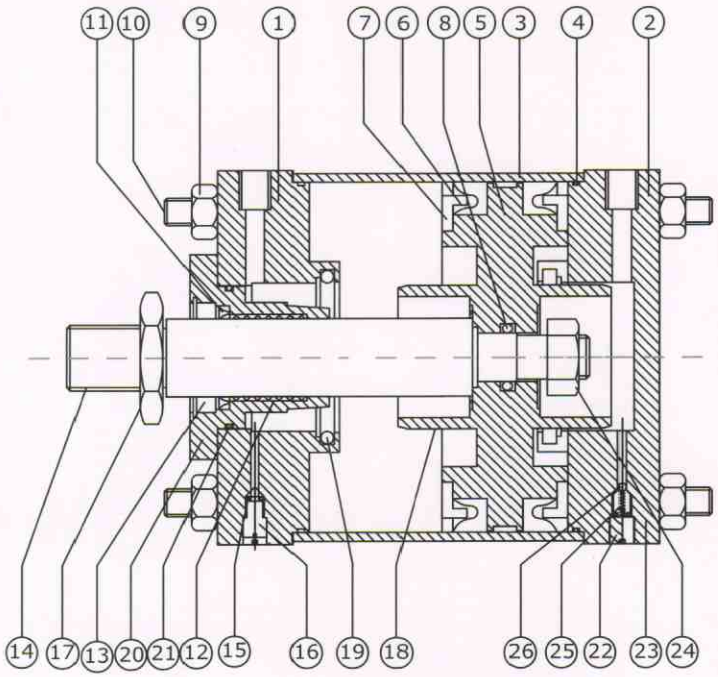
Ø5" - Ø14" ~~Medium~~ Large Bore Air Cylinders

- Sizes available 5",6", 8",10", 12" and 14" bore diameter.
- Suitable for a wide range of applications.
- Available in all types of mountings and attachments.
- Single acting, Double, Magnetic, Double Ended, Tandem, Telescopic.
- Max stroke lengths upto 2000 mm.

Part List		
No.	Description	Qty.
01	Front cover	1
02	Rear Cover	1
03	Tube	1
04	'O' ring for cover	2
05	Wear ring	1
06	'U' cup seal for piston	2
07	Piston	2
08	'O' ring for piston	1
09	Tie rod nut	8
10	Tie rod	4
11	'U' cup for piston rod seal	1
12	Bush bearing	1
13	Wiper Seal	1
14	Piston rod	1
15	'O' ring for bleed screw	2
16	Bleed Screw	2
17	Lock nut	2
18	Cushioning boss	2
19	Cushioning Seal	2
20	bush	2
21	'O' ring bush	2
22	Check Screw	2
23	'O' ring for check screw	2
24	Piston rod nut	1
25	Spring	2
26	Ball	2

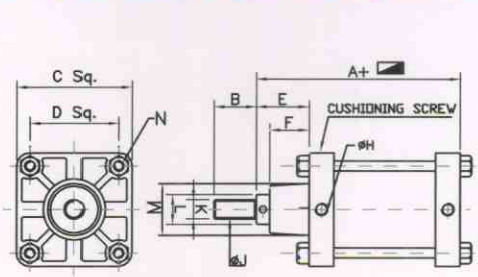


Seal kit cosists of items 4,6,8,11,13,15, 19, 21 & 23

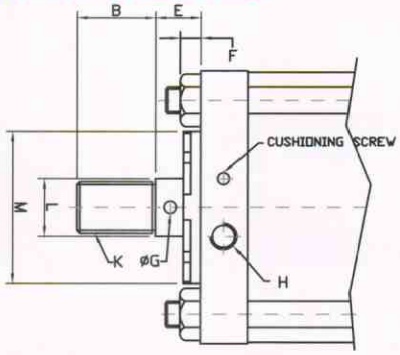
Technical Characteristics :

- Media : Air
- Mountings & Accessories
- Seals : Nitrile, Viton on request
- Temperature : 0°c to 80°c (for Nitrile Seals)
- Piston : Up to 4" Aluminium & from 5" to 14" cast iron.
- Pressure : 0.5 to 10.2 kgf/cm^2, high pressure on request.
- Piston rod : En-8 (ground & Hard Chrome Plated), SS304 on request
- End Covers : Up to 4" Aluminium die Casted & powder coated.
  From 5" to 14" close grain cast iron & powder coated.
- Cylinder Barrel : Up to 4" Dia. Brass, Aluminium, MS (Honed & Hard Chrome Plated) From 5" dia. To 14" dia.
  MS (Honed & Hard Chrome Plated) Powder Coated on request.

Double Acting Large Bore Cylinder Tie Rod Construction



ø5" ø6"& ø8" Cylinder std design



ø10", 12" & 14" Cylinder heavy design

*Dimensional Details

Bore Size	A mm	B mm	C mm	D mm	E mm	F mm	ØG MM	H BSP	K-BSF	*K-Metric Alternate	ØL MM	ØM MM	N-BSF
127 (5")	179	45	140	108	70	45	8	G3/8	1"-10	M27 x 2	35	65	1/2" - 16
152 (6")	194	45	170	130	70	45	8	G1/2	1"-10	M27 x 2	35	70	5/8" - 14
203 (8") (light)	245	50	220	168	65	35	8	G1/2	1-1/ 2"-8	M36 x 2	38.1	65	5/8 - 14
203 (8") (heavy)	205	57	216	168	29	16	8	G3/4	1-1 / 2"-8	M36 x 2	45	121	3/4"-12
254 (10")	240	76	267	210	43	17	9	G3/4	2" - 7	M48 x 2	57	150	1"-10
304 (12")	286	76	321	246	60	28	9	G1	2"-7	M48 x 2	57	177	1"-10
354 (14")	286	76	375	292	60	28	9	G1	2"-7	M48 x 2	57	177	1-1/4"-9

- We Offer BSF threading on piston rod as a standard but metric threads can be provided with prior information on parchase order.
- Heavy duty cylinders in ø354 mm (14") with 57 mm piston rod are also offered.

Piston Thrust Chart

Bore Size		Air Pressure (BAR) 1	2	3	4	5	6	7	8	9	10	Free Air Consumption Litters / 25 mm stroke
		Thrust Available (KGF)										
127 (5")	Push	102	282	304	406	506	608	710	811	912	1014	2.53
	Pull	94	187	281	375	468	562	655	750	843	937	2.34
152 (6")	Push	149	298	447	596	745	894	1043	1192	1342	1497	3.73
	Pull	142	282	424	566	706	848	990	1131	1272	1414	3.53
203 (8")	Push	262	523	785	1046	1307	1569	1830	2092	2354	2615	6.54
	Pull	249	498	746	995	1244	1493	1742	1990	2239	2468	6.22
254 (10")	Push	406	811	1216	1622	2027	2433	2838	3243	3649	4045	10.14
	Pull	385	770	1155	1540	1925	2310	2695	3090	3465	3850	9.63
304 (12")	Push	581	1162	1742	2323	2904	3485	4065	4646	5226	5807	14.52
	Pull	560	1121	1681	2241	2801	3362	3922	4482	5043	5603	14.01
354(14")	Push	792	1568	2376	3168	3960	4752	5543	6335	7127	7919	19.80
	Pull	771	1544	2314	3068	3858	4629	5401	6172	6952	7715	19.29

Note :

To decide cylinder bore size :

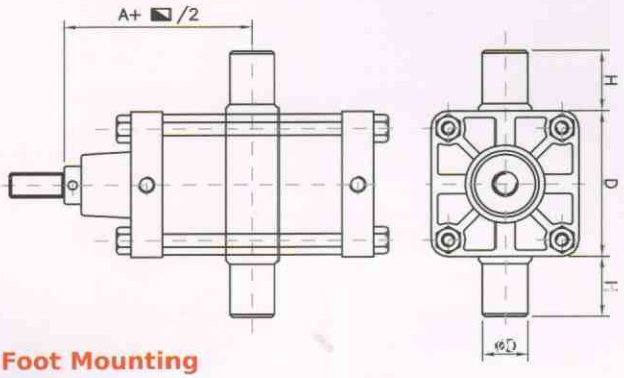
- Establish force required and working pressure available.
- Select working pressure on top of the chart.
- Select force required by reading down from selected working pressure.
- Read Out Cylinder bore size on left of the chart.

Example :

If it is astablished that the force required is 150kg and working pressure available is 7 bar, above chart will load you be select 2¼" bore cylinder.

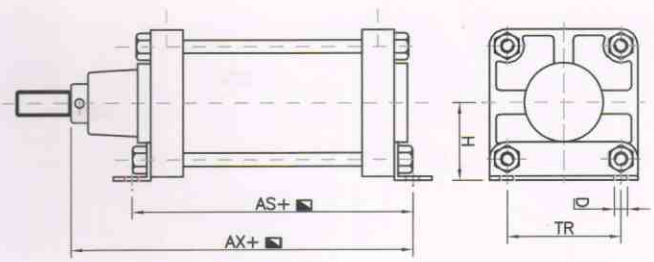
Note : Due to continuous developments dimensions are subject to change without notice.

Centre Trunnion Mounting



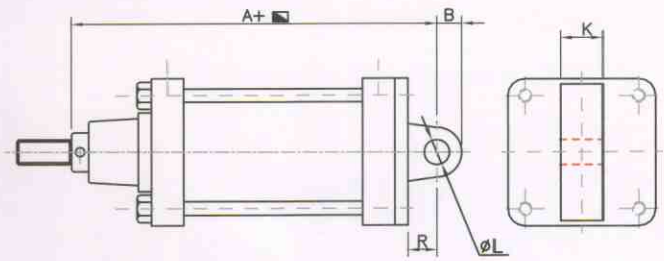
Bore Size	MTG. Part No.	A mm	ØD(Nom) mm	H mm	D mm
127 (5")	50 CT	124	38.1	51	159
152 (6")	60 CT	132	38.1	50.8	184
203 (8") (L)	80 CT	155	44.4	54	248
203 (8") (H)	80 CT	117	44.4	54	248
254 (10")	100 CT	141	50.8	64	305
304 (12")	120 CT	173	76.2	76	381
355 (14")	140 CT	173	88.9	102	457

Foot Mounting



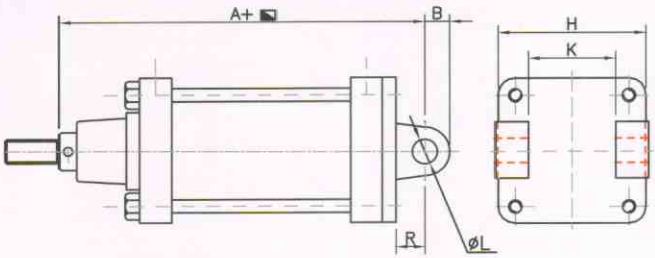
Bore Size	MTG. Part No.	AX mm	AS mm	TR mm	D mm	H mm
127 (5")	50 FM	202	172	108.0	13	89
152 (6")	60 FM	232	200	131	17	89
203 (8") (L)	80 FM	281	252	88.9	19	122
203 (8") (H)	80 FM	244	252	88.9	19	122
254 (10")	100FM	285	286	114.3	26	149
304 (12")	120 FM	337	328	139.7	27	178
355 (14")	140 FM	352	359	158.8	33	213

Single Pivot Mounting



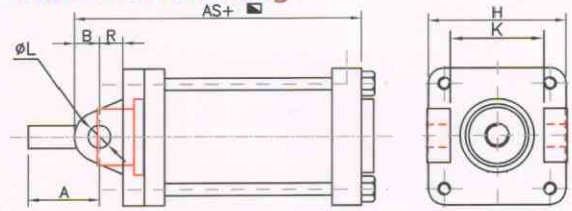
Bore Size	MTG. Part No.	A mm	R mm	K mm	DL (NOM) mm	B mm
127 (5")	50 SP	238	44	56	25.4	25
152 (6")	60 SP	264	45	57	25.4	32
203 (8") (L)	80 SP	315	48	67	38.1	41
203 (8") (H)	80 SP	280	48	67	38.1	41
254 (10")	100 SP	319	49	70	38.1	38
304 (12")	120 SP	382	57	102	38.1	41
355 (14")	140 SP	407	96	127	57.15	54

Rear Pivot Mounting



Bore Size	MTG. Part	A MM	H MM	K MM	ØL (Nom) MM	B MM	R
127 (5")	50 RP	211	139.7	88.9	25.4	25	25
152 (6")	60 RP	246	172	108.0	25.4	22.6	27
203 (8") (L)	80 RP	296	222.3	146.0	38.1	41	29
203 (8") (H)	80 RP	263	222.3	146.0	38.1	41	29
254 (10")	100 RP	304	269.9	165.1	38.1	44	32
304 (12")	Not Offered as Std. Feature						
355 (14")							

Front Pivot Mounting



L = Light duty cylinder
H = Heavy duty cylinder

Bore Size	MTG. Part No.	A mm	H mm	K mm	ØL (Nom) mm	B mm	R mm	AS mm
127 (5")	50 FP	71	139.7	88.9	25.4	25	25	147
152 (6")	60 FP	70	172	108.0	25.4	22.6	27	172
203 (8") (L)	80 FP	61	222.3	146.0	38.1	41	29	233
203 (8") (H)	80 FP	32	222.3	146.0	38.1	41	29	233
254 (10")	100 FP	56	269.9	165.1	38.1	44	32	260
304 (12")	Not Offered as Std. Feature							
355 (14")								

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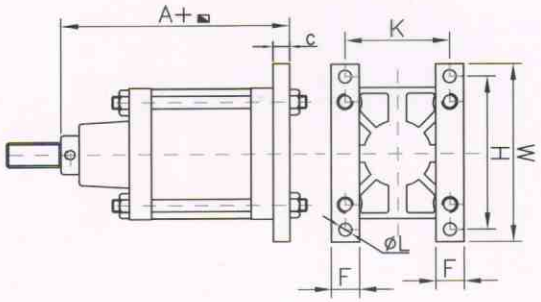
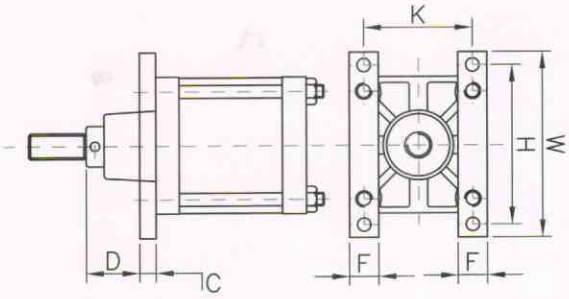
Rear Flange Mounting



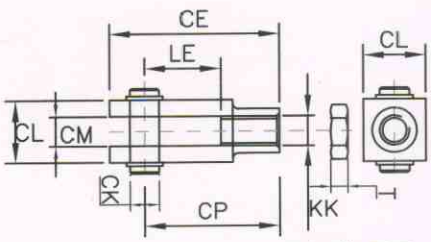
Bore Size	MTG. Part No.	A mm	C mm	F mm	W mm	H mm	K mm	ØL mm
127 (5")	50 RF	198	19	38.1	203	171.5	108	13.5
152 (6")	60 RF	213	19	38.1	242	203.2	130	16.5
203 (8") (L)	80 RF	247	25.4	51	318	266.7	168	20
203 (8") (H)	80 RF	283	25.4	51	318	266.7	168	20
254 (10")	100 RF	246	32	57	362	311.2	210	26
304 (12")	120 RF	286	32	63.5	448	384.2	246	27
354 (14")	140 RF	292	38	76.2	533	457.2	292	33.4

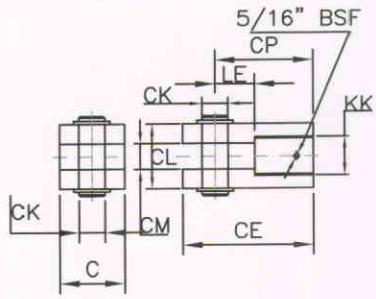
Front Flange Mounting



Bore Size	MTG. Part No.	C mm	D mm	F mm	W mm	H mm	K mm	ØL mm
127 (5")	50 FF	19	46	38.1	203	171.5	108	13.5
152 (6")	60 FF	19	46	38.1	242	203.2	130.2	16.5
203 (8")(L)	80 FF	25.4	40	51	318	266.7	168.3	20
203 (8") (H)	80 FF	25.4	40	51	318	266.7	168.3	20
254 (10")	100 FF	32	11	57	362	311.2	209.5	26
304 (12")	120 FF	32	28	63.5	448	384.2	246	27
355 (14")	140 FF	38	22	76.2	533	457.2	292	33.4

Fork





Bore Size	MTG. Part No.	KK BSF	ØCK mm	CP mm	CL mm	CM mm	LE mm	T mm	CE mm
127 (5")	50 F	1"-10	25.4	89.0	50.8	25.4	50.8	15	114
152 (6")	60 F	1"-10	25.4	89.0	50.8	25.4	50.8	15	114
203 (8")	80 F	11/2"-80	25.4	95.3	63.5	25.4	38.1	15	127
254 (10")	100 F	2"-7	31.75	120.6	76.2	31.75	44.5	18	158
304 (12")	120 F	2"-7	31.75	120.6	76.2	31.75	44.5	18	158
355 (14")	140 F	2"-7	31.75	120.6	76.2	31.75	44.5	18	158

Standard Cylinders Mode Selection Chart

*** Bore		** Mounting	**** Stroke	**** Extra Mounting
1½''	(15)	Rear Pivot (RP)	50	Single
2"	(20)	Front Pivot (FP)	:	Pivot (SP)
2¼"	(22)	Front Flange (FF)	100	Rod End (RE)
2½"	(25)	Rear Flange (RF)	:	Fork (F)
3"	(30)	Foot MTG (FM)	200	Double
4"	(40)	NECK MTG (NM)	:	Ended (DE)
5"	(50)	Centre Truion (CT)	1000	
6"	(60)	Basic (B)	:	
8"	(80)			
10"	(100)			
12"	(120)			
14"	(140)			

e.g. 1½" Bore x 400 mm Stroke Rear Pivot with Fork is represented as (15 RP 400 F)

Note : Due to continuous developments dimensions are subject to change without notice.