

Model : FMK Series : K-05

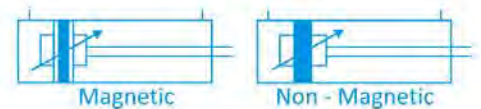
Features

- ▶ Large range of bore size
- ▶ Stroke available up to 1000 mm
- ▶ Available on request upto 3000 mm stroke cylinder
- ▶ Long established tie rod design, proven ruggedness & reliability
- ▶ Adjustable cushioning at both end
- ▶ Aluminum barrel / Hard anodized aluminum barrel for 1000 mm + Above Stroke
- ▶ Available in both magnetic & Non - Magnetic version



Technical Specification

Bore Dia	25	40	50	65	75	100	125	150	200	250
Stroke	Standard in Multiplication of 25 mm									
Cushion	Available at both ends									
Barrel	Aluminium, Hard Anodized									
Piston Rod	EN 8 with hard chrome plated									
Piston Rod Dia	10	16	20	25	32	40	50			
End Cover	Aluminium Pressure Die Cast									
Sales	Polyurethane, Nitrile <i>(Viton seal available on request for high temperature)</i>									
Surface Treatment	Auto finish enameling end cover & cylinder barrel									
Mounting	Std. Mounting available (for more details see dimension)									



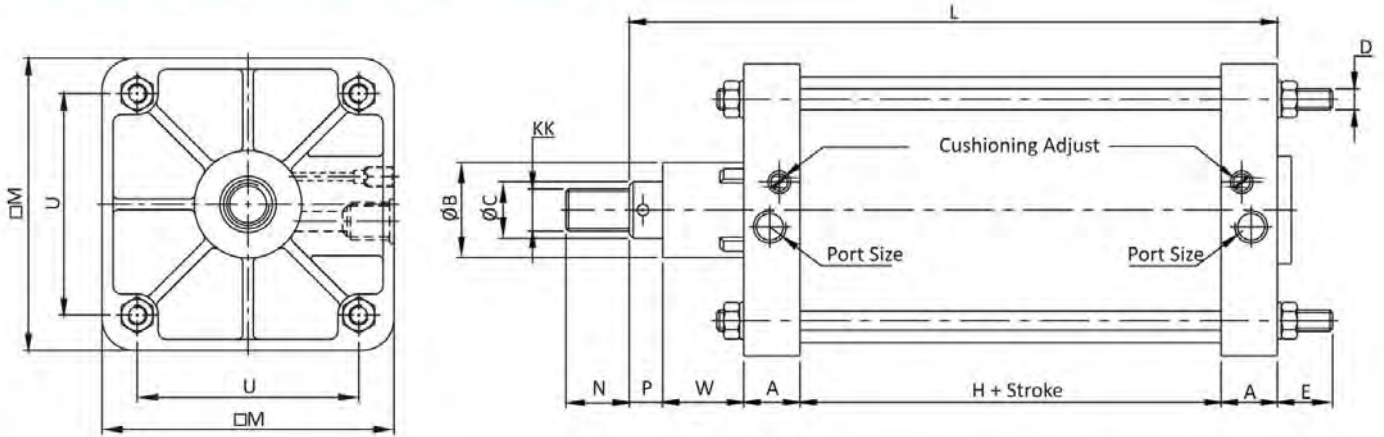
Output Force

(force in N : 1N = 0.1 kgf)

Bore dia in mm	Rod dia in mm	Action	Working Pressure in Bar									
			2	3	4	5	6	7	8	9	10	
25	10	Extend	90	135	175	220	273	308	352	394	442	
		Retract	79	117	148	189	234	264	302	335	380	
40	16	Extend	226	339	452	565	678	792	905	1018	1130	
		Retract	190	285	380	475	570	665	760	855	950	
50	16	Extend	393	589	785	982	1178	1374	1571	1767	1963	
		Retract	352	529	705	881	1057	1234	1410	1586	1762	
65	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	
125	32	Extend	2209	3313	4417	5522	6626	7731	8835	9940	11044	
		Retract	2064	3096	4128	5160	6192	7224	8256	9288	10320	
150	32	Extend	3534	5301	7069	8836	10603	12370	14137	15904	17671	
		Retract	3373	5060	6747	8434	10120	11807	13494	15180	16867	
200	40	Extend	5654	8482	11309	14137	16964	19792	22619	25446	28274	
		Retract	5428	8143	10857	13571	16286	19000	21714	24429	27143	
250	50	Extend	9817	14726	19635	24544	29452	34361	39270	44179	49087	
		Retract	9425	14137	18850	23562	28274	32987	37699	42412	47124	

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

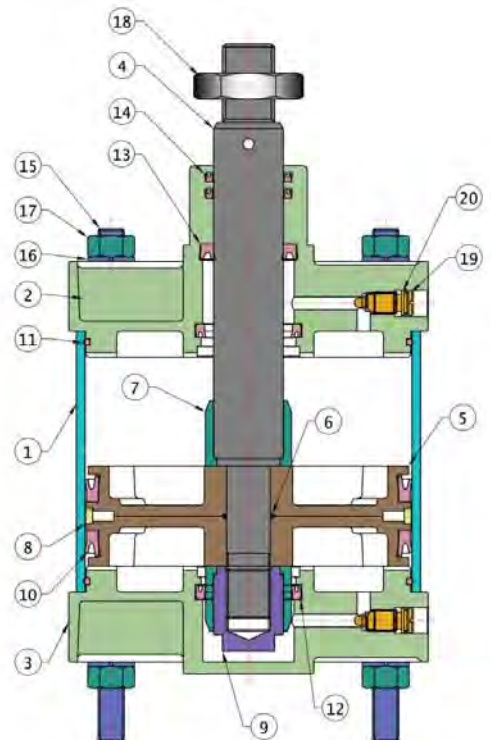
Basic Cylinder Dimensions For FMK Model



Bore dia	KK	H	A	W	P	N	E	U	$\square M$	ØB	ØC	L	D	K*	Port Size
25	M8X1.25P.	28	18	20	9	15	16	25	41	25	10	91	M5	24	G1/8"
40	M12X1.75P.	43	21	19	11	20	19	36.5	57	35	16	115	M6	63	G1/4"
50	M12X1.75P.	43	21	19	11	20	19	47.5	67	35	16	115	M6	98	G1/4"
65	M16X1.50P.	51	25	23	17	24	24	60	82	45	20	141	M8	165	G1/4"
75	M20X2.50P.	47	32	35	16	30	29	70	94	45	25	162	M10	220	G1/2"
100	M20X2.50P.	47	32	35	16	30	29	88	116	45	25	162	M10	360	G1/2"
125	M24X3P.	64	32	44	19	36	35	112	138	60	32	191	M12	613	G1/2"
150	M24X3P.	71	32	44	19	36	35	126	165	60	32	198	M12	880	G1/2"
200	M30X3.5P.	87	46	55	20	50	45	175	220	70	40	254	M16	1570	G3/4"
250	M42X4.5P.	85	56	75	26	57	55	210	272	90	50	298	M20	2450	G1"

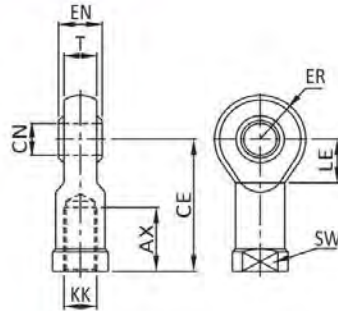
*K = Push Force at 5 Kg/cm²

No.	Item Name	Material
1	Round Pipe	Aluminium Alloy HE9WP (6063-T6) (IS : 733)
2	Top Cover	Aluminium Alloy ALsi 132 (BS 1490)
3	Bottom Cover	Aluminium Alloy ALsi 132 (BS 1490)
4	Piston Rod	BS-970-90, EN-8, (080M40)
5	Piston	Aluminium Alloy ALsi 132 (BS 1490)
6	O-Ring For Piston	Nitrile Buna - N Gr. 80
7	Delrin Collar	Delrin Copolymer
8	Delrin Ring	Delrin Copolymer
9	Piston Lock Nut	BS-970-90, EN-8, (080M40)
10	V-Seal For Piston	Hi - Nitrile
11	Diameter Ring	Nitrile Buna - N Gr.80
12	Cushion Seal	Nitrile Buna - N Gr.80
13	Shaft V - Seal	Nitrile Buna - N Gr.80
14	Duster V - Seal	Nitrile Buna - N Gr.80
15	Stud	BS - 970 - 90, EN - 8, (080M40)
16	Washer	M.S.
17	Nut For Stud	M.S.
18	Nut For Shaft	M.S.
19	Cushion Pin	Brass
20	O-Ring For Cushion Pin	Nitrile Buna - N Gr. 80



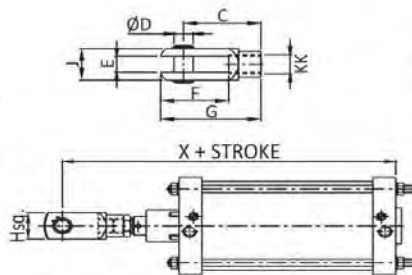
Model : FMK
Series : K-05

Rod End Spherical Eye Mounting (AR) - G



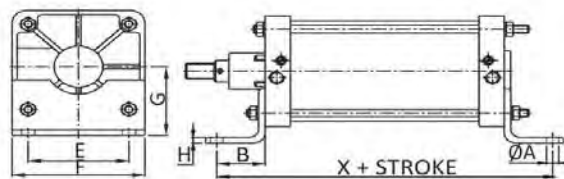
Bore die	KK	EN h12	T	CN H9	AX	CE	ER max.	LE min.	SW
25	M8X1.25P	12	9	8	23.5	37	11	13.5	14
40	M12X1.75P	16	12	12	25	50	15.75	16	19
50	M12X1.75P	16	12	12	25	50	15.75	16	19
65	M16X1.5P	21	15	16	25	65.5	20	20	24
75	M20X2.5P	25	18	20	35	77.5	23	22	30
100	M20X2.5P	25	18	20	35	77.5	23	22	30
125	M24X3P	30	23	25	40	101	30	33.5	36
150	M24X3P	30	23	25	40	101	30	33.5	36
200	M30X3.5P	44	30	35	50	133.5	45.5	45.5	60
250	M42X4.5P	43	31	35	60	144	45.5	45.5	55

Rod End Fork Mounting (ARC) - A



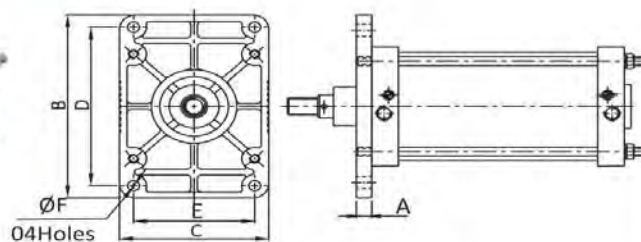
Bore die	KK	C	ØD	E	F	G	J	X	Hsq.
25	M8X1.25P	39.5	10	10	30	51	19	132	19
40	M12X1.75P	52.5	12	12.5	47	64	25	173	25
50	M12X1.75P	52.5	12	12.5	47	64	25	173	25
65	M16X1.5P	64	16	17	61.5	80	32	213	32
75	M20X2.5P	80	20	21	76	99	38	253	38
100	M20X2.5P	80	20	21	76	99	38	253	38
125	M24X3P	100	25	25	93	124	50	301	50
150	M24X3P	100	25	25	93	124	50	308	50
200	M30X3.5P	111	30	32	100	142	63	377	63
250	M42X4.5P	128	35	33	108	167	70	443	70

Foot Mounting (AFB) - L



Bore die	ØA	B	E	F	G	H	X
25	5.5	14.5	25	38	25	3	91
40	6.5	23	38	55	35.5	4	131
50	6.5	27	46	66	38	5	139
65	9	26	60	80	55	5	153
75	10.5	30	70	98.5	57	6	171
100	10.5	30	88	122	70	6	171
125	12.5	33	112	140	78	6	194
150	12.5	33	126	156	88	6	201
200	16.5	44	175	225	120	8	267
250	21	50	210	275	150	8	297

Front Flange Mounting (FM) - F

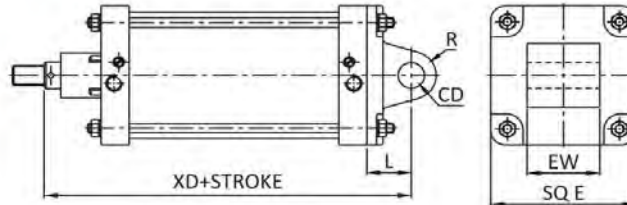


Bore die	A	B	C	D	E	ØF
25	6	72.6	40	56	25	6.5
40	10	97	60	77	36.5	8.5
50	10	108	75	82	47.5	8.5
65	10	138	85	105	60	10.5
75	16	153	102	125	70	13
100	16	175	120	145	88	13
125	19	202	141	170	112	12.5
150	23	218	166	190	126	12.5
200	25	320	225	259	175	22
250	25	395	275	325	210	25.5

Note : Since, constant worldwide advancement in technology, We keep our rights reserved to make changes time to time in Technical Specification and Dimensions without prior notice.

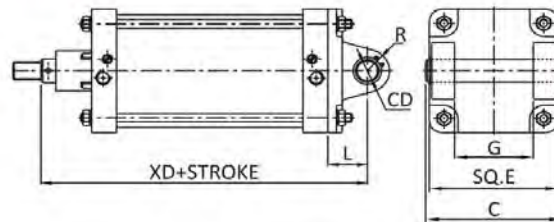


Male Clevis Mounting (ACL) - S



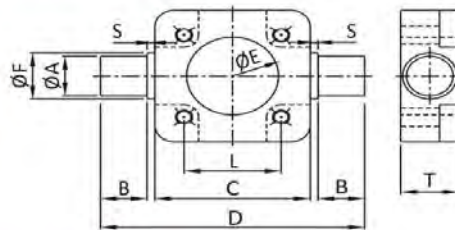
Bore die	CD	EW -0.5 -1.2	L	R	E max.	XD
25	8	14.5	22	---	41	113
40	12	27	25	10	57	140
50	12	31	25	12	67	140
65	16	39.5	30	16	82	171
75	16	49.5	32	17	94	194
100	20	58	38	17	116	200
125	25	70	45	25	138	236
150	25	90	45	25	165	243
200	30	90	65	30	220	319
250	40	110	70	41	272	368

Female Clevis Mounting (ACL) - D



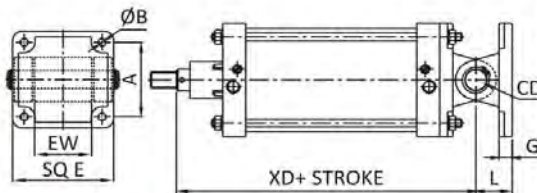
Bore die	CD H9	G	C	L	R	E max.	XD
25	8	15	46	13	---	41	104
40	12	28.5	66	25	10	57	140
50	12	32.5	72	25	12	67	140
65	16	40.5	86	30	16	82	171
75	16	50	105	32	17	94	194
100	20	60.5	129	38	17	116	200
125	25	72	130	45	25	138	236
150	25	92	150	45	25	165	243
200	30	92	177	65	30	220	319
250	40	110	221	70	41	272	368

Front & Rear Trunnion Mounting (FM) - M



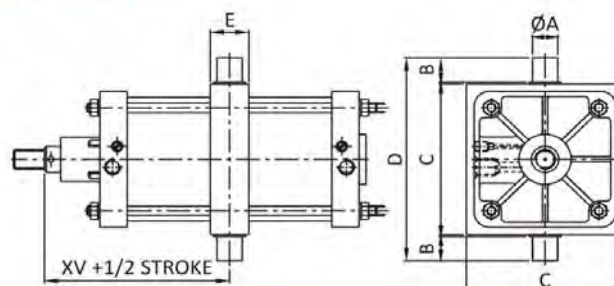
Bore die	ØA	B	ØE	C	D	T	L	S	ØF
25	12	12	26	40	68	15	25	2	14
40	18	18	36	55	95	20	36.5	2	20
50	18	18	36	67	107	20	47.5	2	20
65	20	25	46	80	134	24	60	2	24
75	35	29	70	93	156	40	70	2.5	40
100	35	29	75	115	178	40	88	2.5	40
125	25	25	64	132	210	50	112	---	---
150	32	32	64	163	264	50	126	1.8	45
200	45	36	75	230	302	45	175	2.5	---
250	50	60	90	277	397	50	210	2.5	---

Pivot Bracket & Pin Mounting (PB-P) - DS



Bore die	CD	EW -0.5 -1.2	L	G	ØB	A	E max.	XD
25	8	22	13	9	5.5	25	41	104
40	12	25	25	9	6.5	36.5	57	140
50	12	25	25	11	6.5	47.5	67	140
65	16	39.5	30	11	8.5	60	82	171
75	16	32	32	14	10.5	70	94	194
100	20	58	38	15	10.5	88	116	200
125	25	45	45	25	12.5	112	138	236
150	25	45	45	25	12.5	126	165	243
200	30	65	65	30	17	175	220	319
250	40	70	70	25	22	210	272	368

Center Trunnion Mounting (NCTM) - T



Bore die	ØA	B	C	D	E	XV ±2.5
25	12	12	57	85	24	60
40	18	20	78	112	35	72.5
50	18	20	84	128	35	72.5
65	28	28	115	175	45	90.5
75	35	29	130	193	45	106.5
100	35	29	158	221	45	106.5
125	40	33.5	180	252	50	127
150	40	33.5	207	279	50	130.5
200	48	36	266	343	80	164.5
250	60	60	335	461	95	199.5