



TR Series Air Cylinders NFPA Interchange



American Cylinder Co., Inc.

TR Series - NFPA Interchange

1-1/2" through 8" Bore

American's TR Series Cylinders NFPA cylinder interchanges with NFPA mounting styles. The TR Series Cylinders are available in 1-1/2", 2", 2-1/2", 3-1/4", 4", 5", 6" and 8" bore sizes. Stroke lengths are by 1/8" increments, with standard strokes of 1", 2", 3", 4", 5", 6", 8", 10" & 12". For special requirements, consult the factory or your nearest local American Cylinder Distributor.

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LUBRICATION

American cylinders are prelubricated at the factory prior to shipment to provide millions of trouble-free cycles. Most applications do not require additional lubrication. Magnalube-G is used to lubricate the cylinders from the factory. Consult your American Cylinder distributor or the factory for special lubrication requirements.

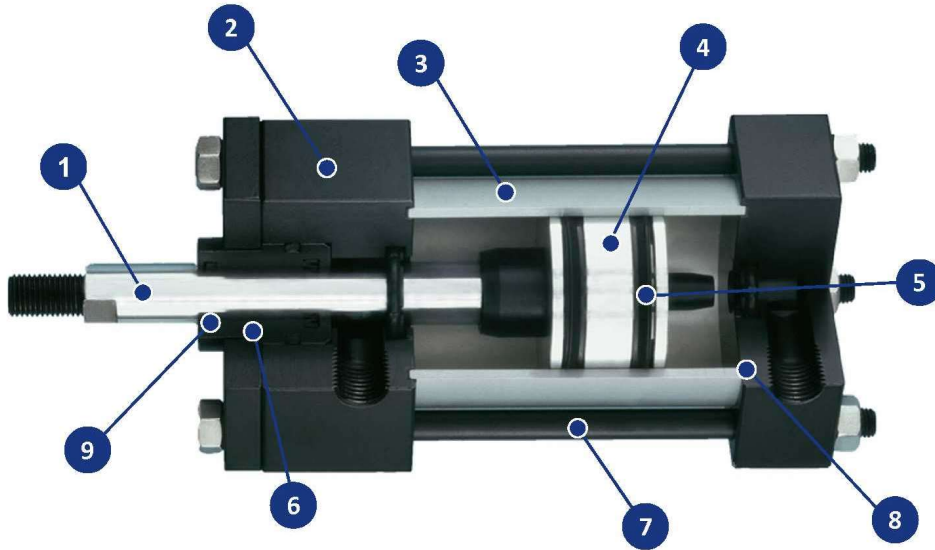
TEMPERATURE RATINGS

Buna-N seals are supplied as standard in all American Cylinder models and are recommended for operating temperatures in the -20°F (-25°C) to 200°F (95°C) range. Fluoroelastomer (FKM) seals are recommended for high temperature cylinder applications having operating temperatures up to 400°F (204°C).

Product enhancements resulting from our quality improvement program may necessitate changes in specifications without notice.

American Cylinder Distributors are located in every major industrial market.

STANDARD FEATURES & BENEFITS: NFPA Series



RATED 200 PSI AIR

NFPA MOUNTING STYLES

1-½ Inch Through 8 Inch Bore

1) Hard Chrome-Plated & Polished Piston Rod:

Minimum yield of 100,000 PSI. High tensile strength steel provides for reliable performance and longer rod seal life.

2) Solid Anodized Aluminum Alloy Heads: Designed for corrosion resistance and extra strength.

3) Aluminum Alloy Tube 6063-T832: PSI of 35,000. Hard coated I.D. resists scoring and wear.

4) Aluminum Alloy Piston: Provides excellent characteristics against the hard coated I.D. cylinder body.

5) Seals: Piston and rod seals are of a U-Cup design for low friction with standard and magnetic field piston options. Air/Oil piston option adds a Quad-ring seal to piston. Buna-N (B) material is standard, FKM (V) material should be used when high temp (over 200°F) or chemical resistance is required.

6) Cast Iron Rod Bushing: Compatible with the hard chrome plated rod. Close grain cast iron bearing provides maximum wear resistance for long life.

7) Tie Rods: High strength steel to maintain compression on tube end seals.

8) Tube End Seals: Fiber and nitrile base elastomer acting as a binder for positive sealing.

9) Quad Ring Wiper: Wipes the rod clean and keeps out contamination.

10) Factory Lubricated: Cylinder bodies are lubricated with Teflon-based compound.

11) Pretested: The quality of each cylinder is assured by testing each unit for leakage prior to shipment. Quality control provides added value to American Cylinders.

Product enhancements resulting from our quality improvement program may necessitate changes in specifications without notice

BORE SIZE SELECTION:

APPROXIMATE PUSH FORCES (lbs) (non-rod side)

Bore	Piston Area (in. ²)	40 PSI	50 PSI	60 PSI	80 PSI	100 PSI	125 PSI	150 PSI	Cubic FT. Displacement Per in. Of Push Stroke
		APPROXIMATE PUSH FORCES (lbs)							
1.5"	1.77	71	88	106	142	177	221	266	.00102
2"	3.14	126	157	189	251	314	392	471	.00182
2.5"	4.91	196	246	295	393	491	614	737	.00284
3.25"	8.30	332	415	498	664	830	1037	1245	.00480
4"	12.57	503	629	754	1005	1257	1571	1886	.00727
5"	19.64	785	982	1178	1571	1964	2455	2946	.01137
6"	28.27	1130	1414	1696	2262	2827	3534	4240	.01637
8"	50.26	2010	2513	3015	4020	5026	6280	7539	.02227

APPROXIMATE PULL FORCES (lbs) (rod side)

Bore	Rod Diameter	Effective Piston Area (in. ²)	40 PSI	50 PSI	60 PSI	80 PSI	100 PSI	125 PSI	150 PSI	Cubic FT. Displacement Per in. Of Pull Stroke
			APPROXIMATE PULL FORCES (lbs)							
1.5"	.62	1.46	59	73	88	117	146	183	220	0.00084
	1.00	0.98	40	49	59	79	98	123	148	0.00057
2.00"	.62	2.84	114	142	170	227	284	355	426	0.00164
	1.00	2.36	94	118	141	188	236	294	353	0.00137
2.50"	.62	4.60	184	230	276	368	460	576	691	0.00266
	1.00	4.12	165	206	247	330	412	515	618	0.00239
3.25"	1.00	7.51	300	375	450	601	751	938	1126	0.00435
	1.37	6.82	273	341	409	545	682	852	1023	0.00394
4.00"	1.00	11.78	471	589	707	942	1178	1472	1766	0.00682
	1.37	11.09	443	554	665	887	1109	1386	1663	0.00641
5.00"	1.00	18.84	754	942	1130	1507	1884	2355	2826	0.01092
	1.37	18.15	726	908	1089	1452	1815	2269	2723	0.01051
6.00"	1.37	26.79	1071	1339	1607	2143	2679	3348	4018	0.01551
	1.75	25.86	1034	1293	1551	2068	2586	3232	3878	0.01498
8.00"	1.37	48.77	1951	2438	2926	3901	4877	6096	7315	0.02141
	1.75	47.84	1913	2392	2870	3827	4784	5979	7175	0.02088

For Un-tabulated Air Pressures:

Push Force (LBS) = Pressure (PSI) x Piston Area (in²)

Pull Force (LBS) = Pressure (PSI) x Effective Piston Area (in²)

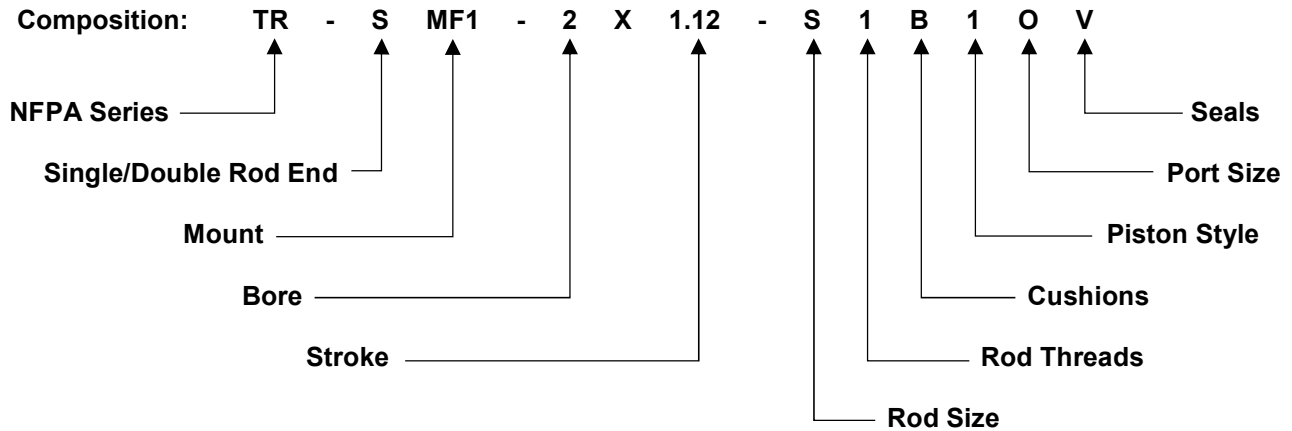
HOW TO ORDER:

Example: NFPA, Single Rod End, Front Flange Mount, 2" Bore, 1-1/8" Stroke, Standard Rod Size, Small Male Thread, Cushions Both Ends, Standard Piston, Oversized Ports, and Fluoroelastomer Seals

Model No.: TR-SMF1-2X1.12-S1B1O V

Model No.

Composition:

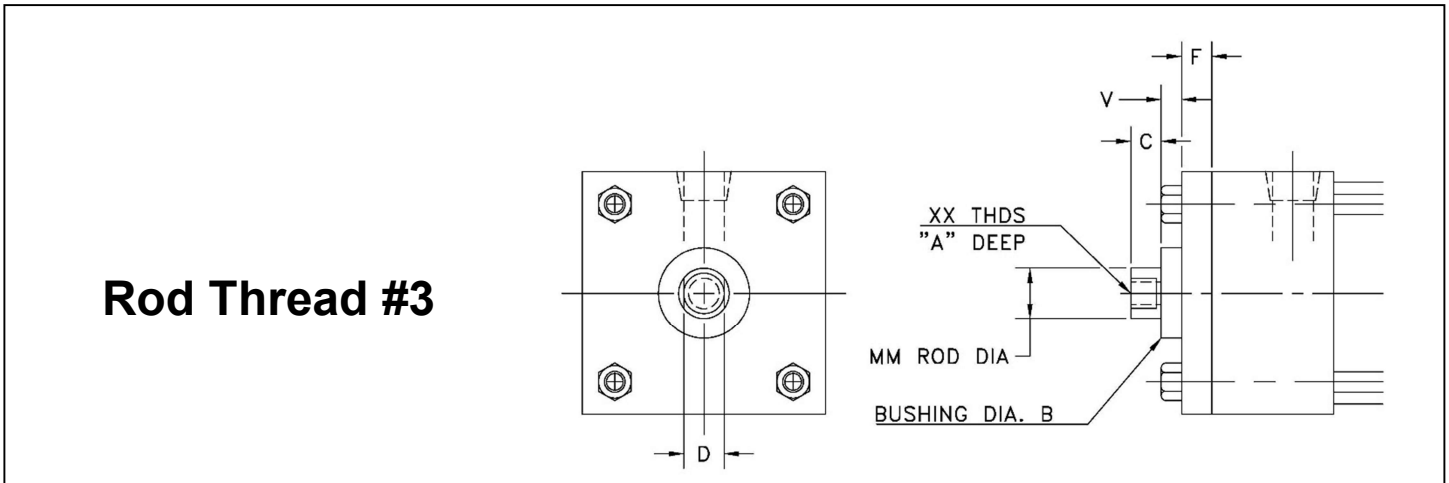
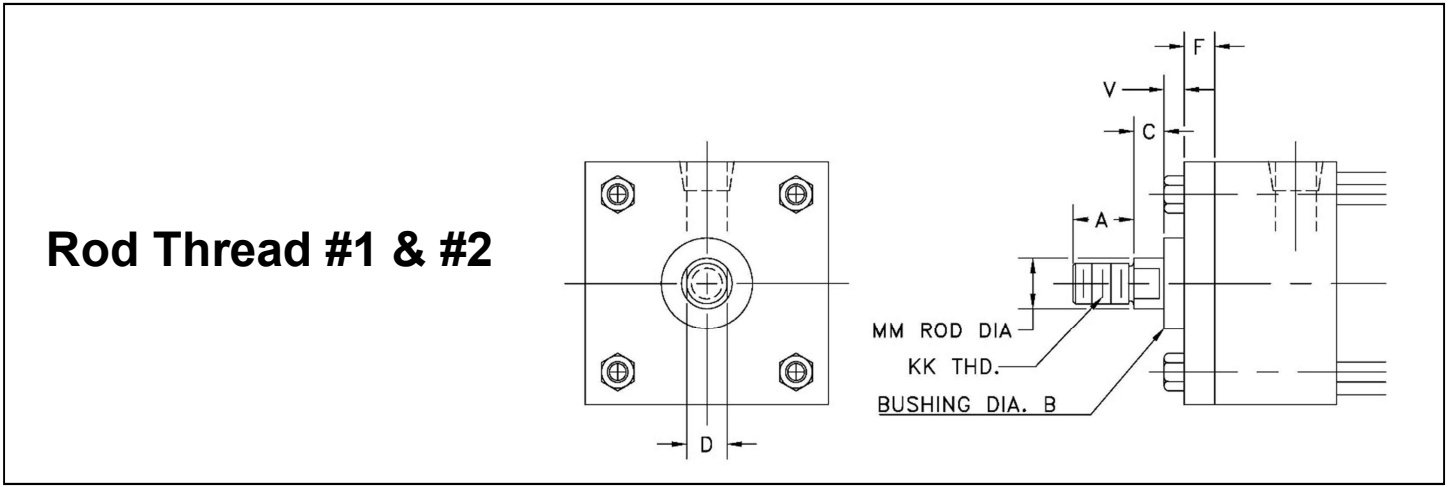


Rod Style	Mount	Bore Size (in.)	Rod Size	Rod Thread	Cushions	Piston Style	Port Size	Seals
S - Single	MXO – Basic (No Mount)	1.5	S - Standard	1 – Small Male	N – None	1 - Standard	S – Standard	B – Buna
D - Double	MF1 – Front Flange	2	L - Oversized	2 – Intermediate Male	H – Head	2 - Magnetic	O - Oversized	V – FKM
	MF2 – Rear Flange	2.5		3 – Small Female	C – Cap	3 – Air/oil		
	MS4 – Bottom Tap	3.25			B – Both Ends			
	MP1 – Fixed Clevis	4						
	MP2 – Detachable Clevis	5						
	MP4 – Detachable Eye	6						
	MT1 – Head End Trunnion	8						
	MT2 – Cap End Trunnion							
	MX1 – Extended Tie Rod Both Ends							
	MX2 – Extended Tie Rod Cap End							
	MX3 – Extended Tie Rod Head End							
	BB – Base Bar							
	ME3 – Square Flange Head End							
ME4 – Square Flange Cap End								

Standard Stroke Lengths = 1", 2", 3", 4", 5", 6", 8", 10" & 12"

NOTES
 Strokes available in 1/8" increments. Non-Standard strokes and strokes over 30" are subject to additional charges. Strokes are truncated in call outs Ex: 1.125" stroke = 1.12
 Please see mount specific pages for more information on any incompatible options and bore sizes.

ROD THREAD OPTIONS:

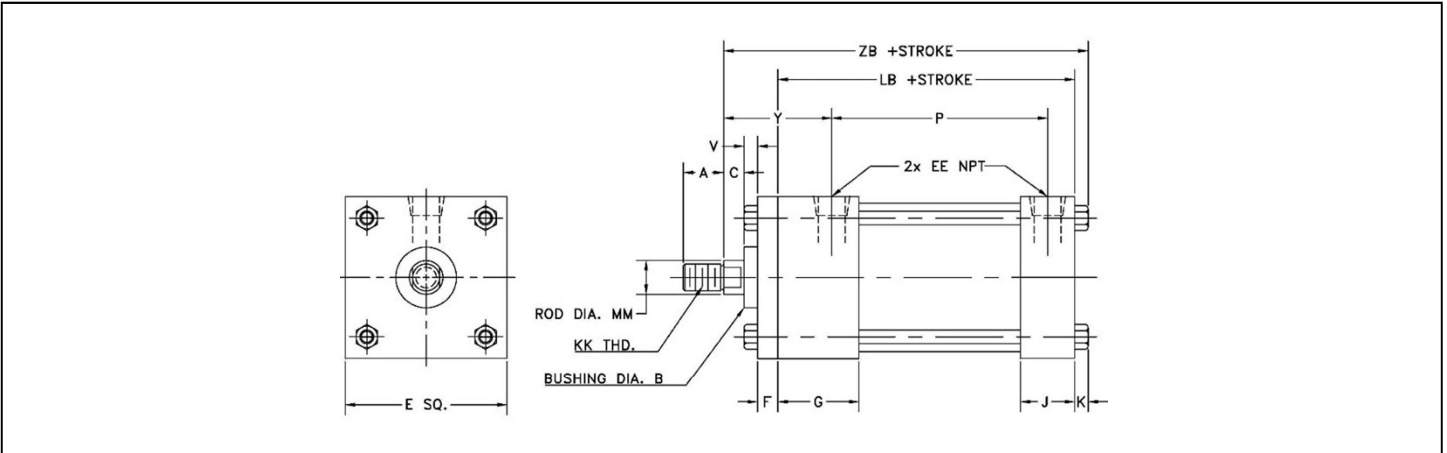


DIMENSIONS FOR ROD THREADS

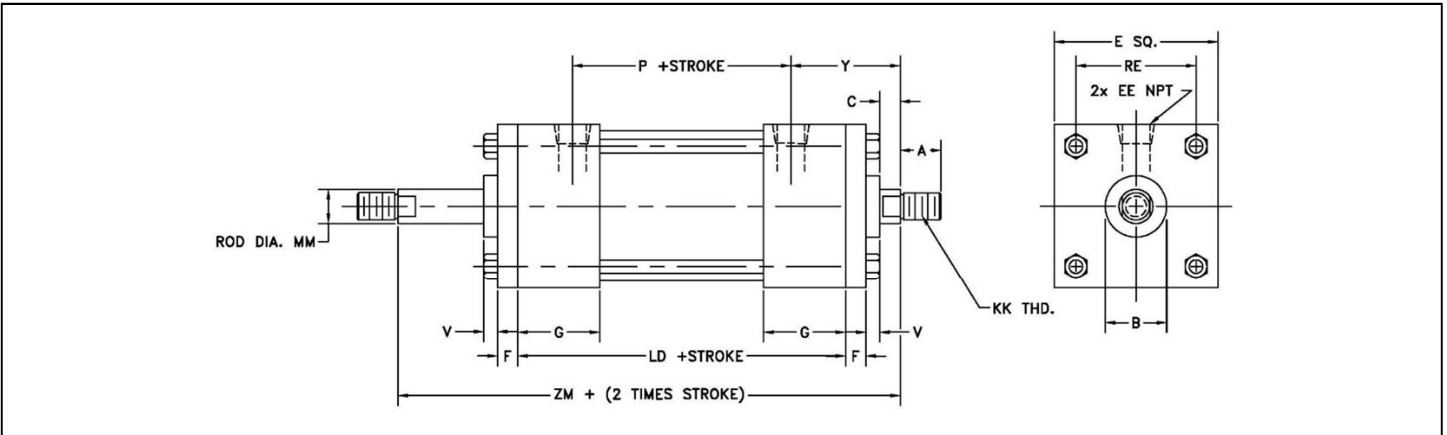
Bore	MM	#1	#2	#3	A	B	C	D	F	V
1.5"	Std. 0.625"	7/16 - 20	1/2 - 20	7/16 - 20	.75	1.12	.37	.50	.37	.25
	Oversized 1"	3/4 - 16	7/8 - 14	3/4 - 16	1.12	1.50	.50	.81	.37	.50
2", 2.5"	Std. 0.625"	7/16 - 20	1/2 - 20	7/16 - 20	.75	1.12	.37	.50	.37	.25
	Oversized 1"	3/4 - 16	7/8 - 14	3/4 - 16	1.12	1.50	.50	.81	.37	.50
3.25", 4", 5"	Std. 1"	3/4 - 16	7/8 - 14	3/4 - 16	1.12	1.50	.50	.81	.62	.25
	Oversized 1.375"	1 - 14	1-1/4 - 12	1 - 14	1.62	2.00	.62	1.12	.62	.37
6" & 8"	Std. 1.375"	1 - 14	1-1/4 - 12	1 - 14	1.62	2.00	.62	1.12	.62	.25
	Oversized 1.75"	1-1/4 - 12	1-1/2 - 12	1-1/4 - 12	2.00	2.37	.75	1.50	.75	.37

Note that throughout catalog the #1 thread option is default for all above lettered dimensions

MXO: Basic Mount



MXO: Basic Mount Double Rod

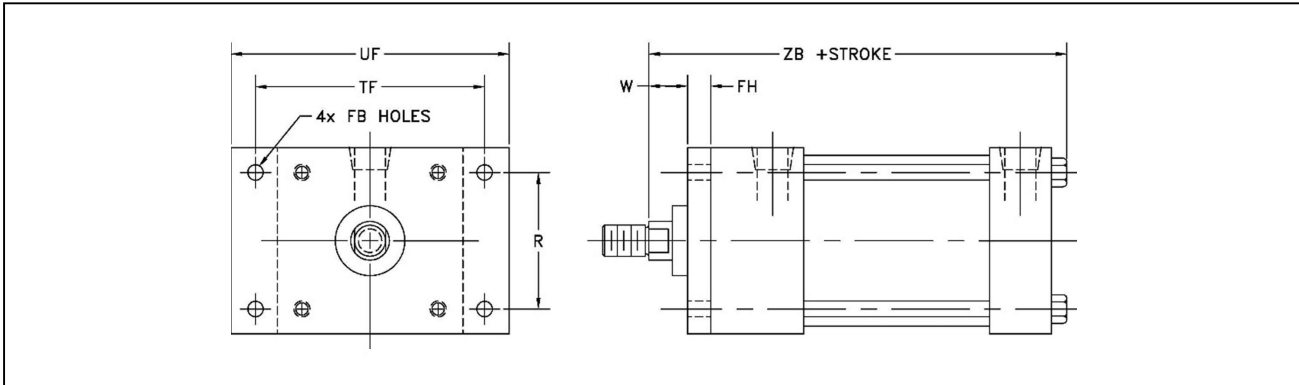


DIMENSIONS FOR MXO MOUNTS

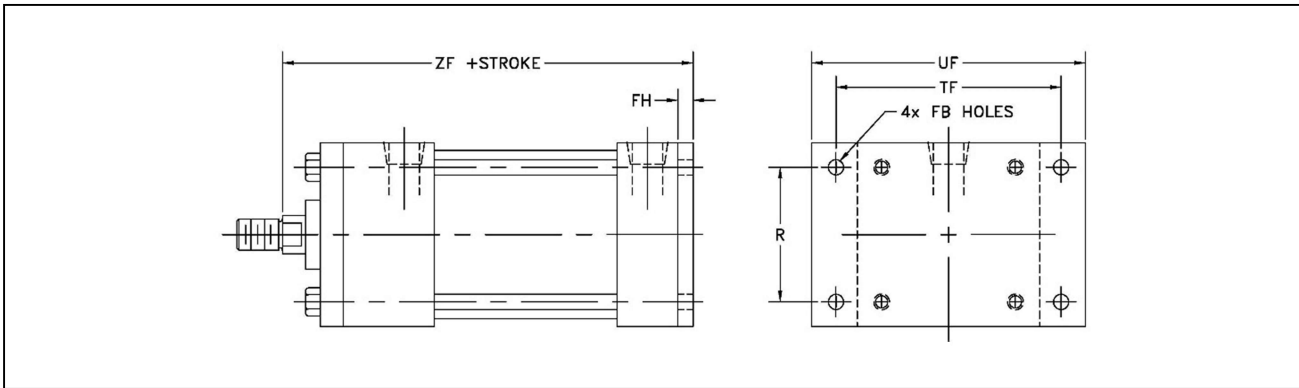
Bore	Rod	A	B	C	E	EE	EE*	F	G	J	K	KK	LB	LD	P	RE	V	Y	ZB	ZM
1.5"	.62	.75	1.12	.37	2.00	1/4	3/8	.37	1.50	1.00	.25	7/16-20	3.62	4.12	2.18	1.43	.25	1.96	4.87	6.12
	.50			3/4-16								.50								
2"	.62	.75	1.12	.37	2.50	1/4	3/8	.37	1.50	1.00	.31	7/16-20	3.62	4.12	2.18	1.84	.25	1.96	4.93	6.12
	.50			3/4-16								.50								
2.5"	.62	.75	1.12	.37	3.00	1/4	3/8	.37	1.50	1.00	.31	7/16-20	3.75	4.25	2.31	2.19	.25	1.96	5.06	6.25
	.50			3/4-16								.50								
3.25"	1.00	1.12	1.50	.50	3.75	3/8	1/2	.62	1.75	1.25	.43	3/4-16	4.25	4.75	2.62	2.94	.25	2.43	6.06	7.50
	1.37			.62								.37								
4"	1.00	1.12	1.50	.50	4.50	3/8	1/2	.62	1.75	1.25	.43	3/4-16	4.25	4.75	2.62	3.56	.25	2.43	6.06	7.50
	1.37			.62								.37								
5"	1.00	1.12	1.50	.50	5.50	3/8	1/2	.62	1.75	1.25	.50	3/4-16	4.50	5.00	2.87	4.10	.25	2.43	6.37	7.75
	1.37			.62								.37								
6"	1.37	1.62	2.00	.62	6.50	1/2	3/4	.75	2.00	1.50	.50	1 - 14	5.00	5.50	3.12	4.88	.25	2.81	7.12	8.75
	1.75			.75								.37								
8"	1.37	1.62	2.00	.62	8.50	1/2	3/4	.75	2.00	1.50	.62	1 - 14	5.12	5.62	3.25	6.44	.25	2.81	7.37	8.87
	1.75			.75								.37								

* When equipped with oversized port option

MF1: Front Flange Mount



MF2: Rear Flange Mount

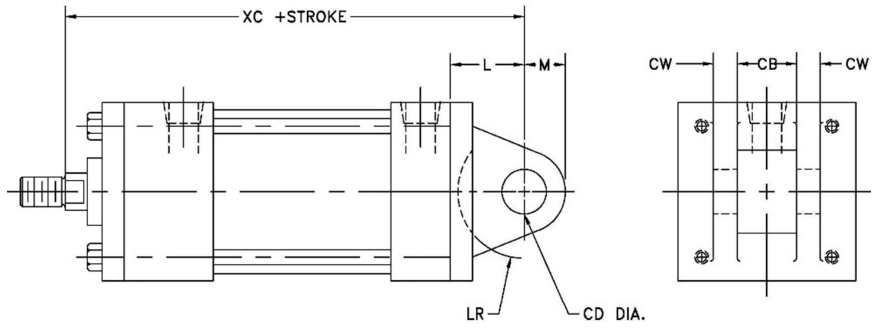


DIMENSIONS FOR FLANGE MOUNTS MF1 & MF2

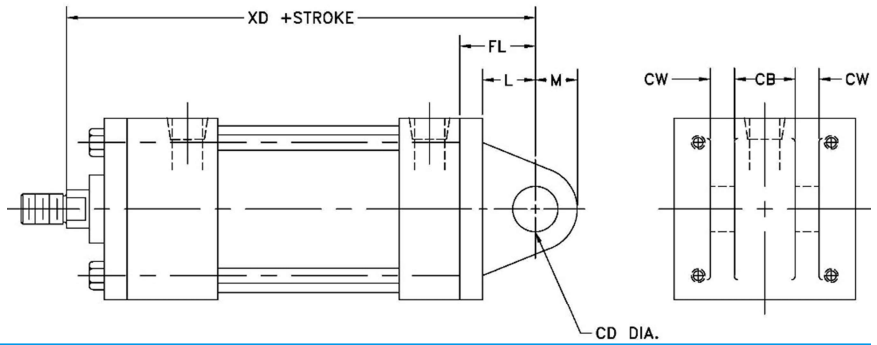
Bore	Rod	A	B	C	D	F	KK	V	FB	FH	R	TF	UF	W	ZB	ZF
1.5"	.62	.75	1.12	.37	.50	.37	7/16-20	.25	.31	.37	1.43	2.75	3.37	.62	4.87	5.00
	1.00	1.12	1.50	.50	.81	.37	3/4-16	.50						1.00	5.25	5.37
2"	.62	.75	1.12	.37	.50	.37	7/16-20	.25	.37	.37	1.84	3.37	4.12	.62	4.93	5.00
	1.00	1.12	1.50	.50	.81	.37	3/4-16	.50						1.00	5.31	5.37
2.5"	.62	.75	1.12	.37	.50	.37	7/16-20	.25	.37	.37	2.18	3.87	4.62	.62	5.06	5.12
	1.00	1.12	1.50	.50	.81	.37	3/4-16	.50						1.00	5.43	5.50
3.25"	1.00	1.12	1.50	.50	.81	.62	3/4-16	.25	.43	.62	2.76	4.68	5.50	.75	6.06	6.25
	1.37	1.62	2.00	.62	1.12	.62	1 - 14	.37						1.00	6.31	6.50
4"	1.00	1.12	1.50	.50	.81	.62	3/4-16	.25	.43	.62	3.32	5.43	6.25	.75	6.06	6.25
	1.37	1.62	2.00	.62	1.12	.62	1 - 14	.37						1.00	6.31	6.50
5"	1.00	1.12	1.50	.50	.81	.62	3/4-16	.25	.56	.62	4.10	6.62	7.62	.75	6.37	6.50
	1.37	1.62	2.00	.62	1.12	.62	1 - 14	.37						1.00	6.62	6.75
6"	1.37	1.62	2.00	.62	1.12	.75	1 - 14	.25	.56	.75	4.88	7.62	8.62	.87	7.12	7.37
	1.75	2.00	2.37	.75	1.50		1-1/4 - 12	.37						1.12	7.37	7.62
8"	MF1 & MF2 mounts are not available in 8" bore. Please see ME3 & ME4 mounts for flange style mounting															

Pivot Mounts:

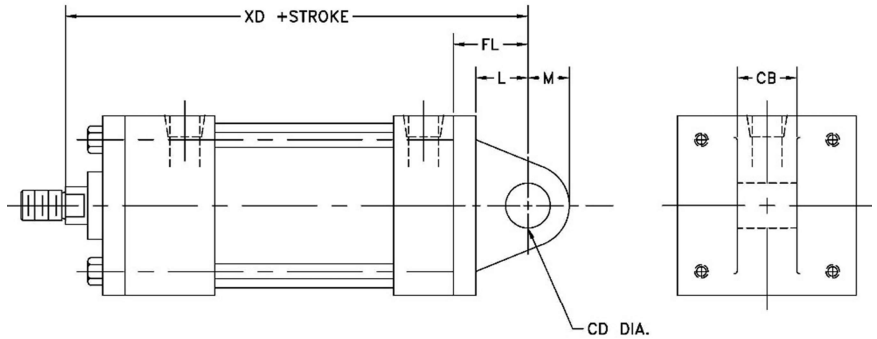
MP1 Mount
Fixed clevis
Available on 1.5" – 8" bores



MP2 Mount
Detachable clevis
Available on 1.5" – 5" bores



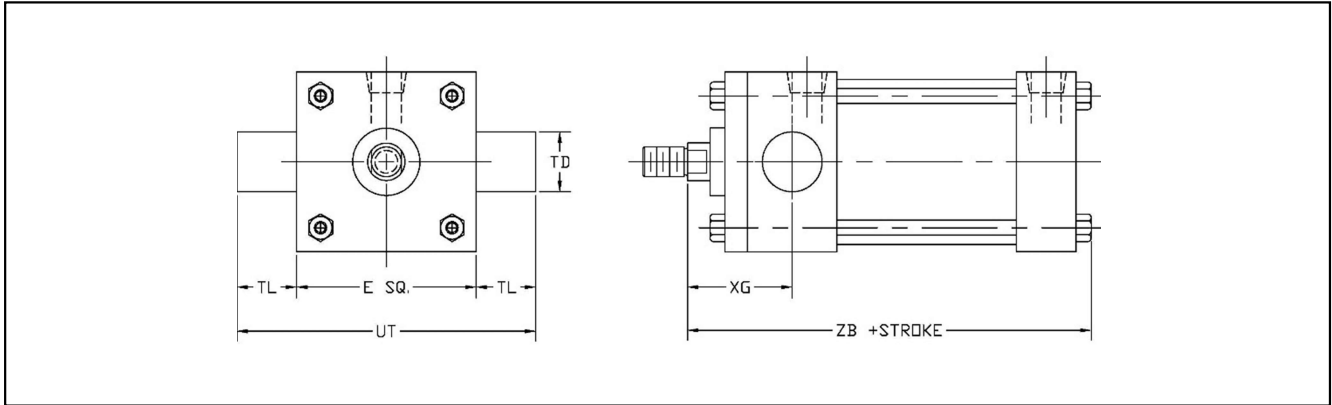
MP4 Mount
Detachable eye
Available on 1.5" – 4" bores



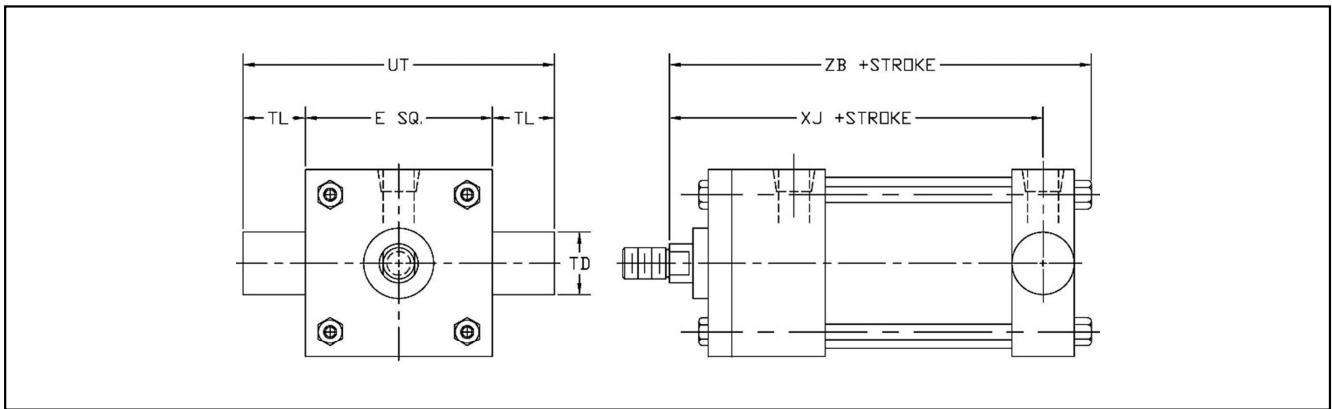
DIMENSIONS FOR PIVOT MOUNTS MP1, MP2, & MP4

Bore	Rod	A	B	C	D	F	KK	V	CB	CD	CW	FL	L	LR	M	XC	XD
1.5"	.62	.75	1.12	.37	.50	.37	7/16-20	.25	.75	.50	.50	1.12	.75	.75	.62	5.37	5.75
	1.00	1.12	1.50	.50	.81	.37	3/4-16	.50								5.75	6.12
2"	.62	.75	1.12	.37	.50	.37	7/16-20	.25	.75	.50	.50	1.12	.75	.75	.62	5.37	5.75
	1.00	1.12	1.50	.50	.81	.37	3/4-16	.50								5.75	6.12
2.5"	.62	.75	1.12	.37	.50	.37	7/16-20	.25	.75	.50	.50	1.12	.75	.75	.62	5.50	5.87
	1.00	1.12	1.50	.50	.81	.37	3/4-16	.50								5.87	6.25
3.25"	1.00	1.12	1.50	.50	.81	.62	3/4-16	.25	1.25	.75	.62	1.75	1.25	1	.87	6.87	7.37
	1.37	1.62	2.00	.62	1.12	.62	1 - 14	.37								7.12	7.62
4"	1.00	1.12	1.50	.50	.81	.62	3/4-16	.25	1.25	.75	.62	1.75	1.25	1	.87	6.87	7.37
	1.37	1.62	2.00	.62	1.12	.62	1 - 14	.37								7.12	7.62
5"	1.00	1.12	1.50	.50	.81	.62	3/4-16	.25	1.25	.75	.62	1.75	1.25	--	.75	7.12	7.62
	1.37	1.62	2.00	.62	1.12	.62	1 - 14	.37								7.37	7.87
6"	1.37	1.62	2.00	.62	1.12	.75	1 - 14	.25	1.50	1.00	.75	--	1.50	--	1.00	8.12	N/A
	1.75	2.00	2.37	.75	1.50		1-1/4 - 12	.37								8.37	N/A
8"	1.37	1.62	2.00	.62	1.12	.75	1 - 14	.25	1.50	1.00	.75	--	1.50	--	1.00	8.25	N/A
	1.75	2.00	2.37	.75	1.50		1-1/4 - 12	.37								8.50	N/A

MT1: Head End Trunnion Mount



MT2: Cap End Trunnion Mount



DIMENSIONS FOR TRUNNION MOUNTS MT1 & MT2

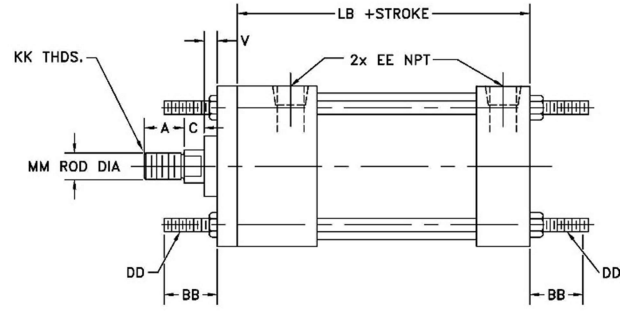
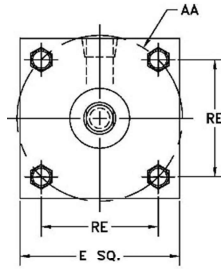
Bore	Rod	A	B	C	D	E	F	KK	V	E	LB	TD	TL	UT	XG	XJ	ZB
1.5"	.62	.75	1.12	.37	.50	2.00	.37	7/16-20	.25	2.00	3.62	1.00	1.00	4.00	N/A*	4.12	4.87
	1.00	1.12	1.50	.50	.81		.37	3/4-16	.50						N/A*	4.50	5.25
2"	.62	.75	1.12	.37	.50	2.50	.37	7/16-20	.25	2.50	3.62	1.00	1.00	4.50	1.75	4.12	4.93
	1.00	1.12	1.50	.50	.81		.37	3/4-16	.50						N/A*	4.50	5.31
2.5"	.62	.75	1.12	.37	.50	3.00	.37	7/16-20	.25	3.00	3.75	1.00	1.00	5.00	1.75	4.25	5.06
	1.00	1.12	1.50	.50	.81		.37	3/4-16	.50						2.12	4.62	5.43
3.25"	1.00	1.12	1.50	.50	.81	3.75	.62	3/4-16	.25	3.75	4.25	1.00	1.00	5.75	2.25	5.00	6.06
	1.37	1.62	2.00	.62	1.12		.62	1 - 14	.37						N/A*	5.25	6.31
4"	1.00	1.12	1.50	.50	.81	4.50	.62	3/4-16	.25	4.50	4.25	1.00	1.00	6.50	2.25	5.00	6.06
	1.37	1.62	2.00	.62	1.12		.62	1 - 14	.37						2.50	5.25	6.31
5"	1.00	1.12	1.50	.50	.81	5.50	.62	3/4-16	.25	5.50	4.50	1.00	1.00	7.50	2.25	5.25	6.37
	1.37	1.62	2.00	.62	1.12		.62	1 - 14	.37						2.50	5.50	6.62
6"	1.37	1.62	2.00	.62	1.12	6.50	.75	1 - 14	.25	6.50	5.00	1.37	1.37	9.25	2.62	5.87	7.12
	1.75	2.00	2.37	.75	1.50		.75	1-1/4 - 12	.37						2.87	6.12	7.37
8"	1.37	1.62	2.00	.62	1.12	8.50	.75	1 - 14	.25	8.50	5.12	1.37	1.37	11.25	2.62	6.00	7.37
	1.75	2.00	2.37	.75	1.50		.75	1-1/4 - 12	.37						2.87	6.25	7.62

* Not available in MT1 mount

Extended Tie Rod Mounts:

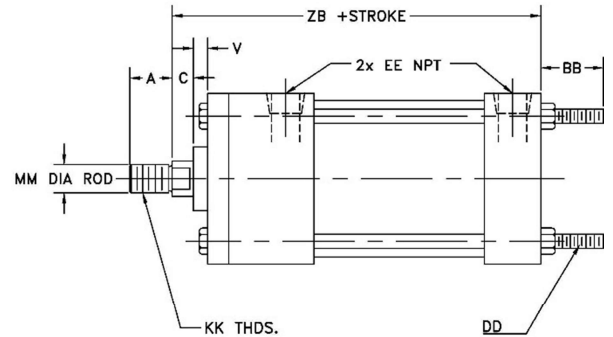
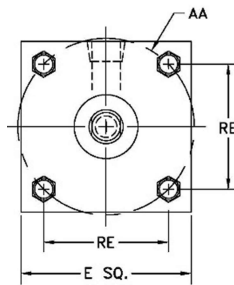
MX1 Mount

Extended tie rods both ends
Available on 1.5" – 8" bores



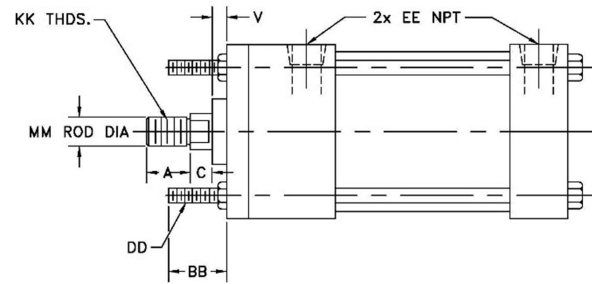
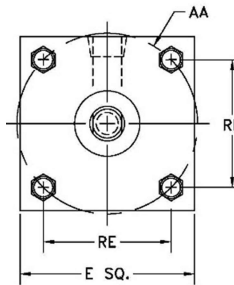
MX2 Mount

Extended tie rods cap end
Available on 1.5" – 8" bores



MX3 Mount

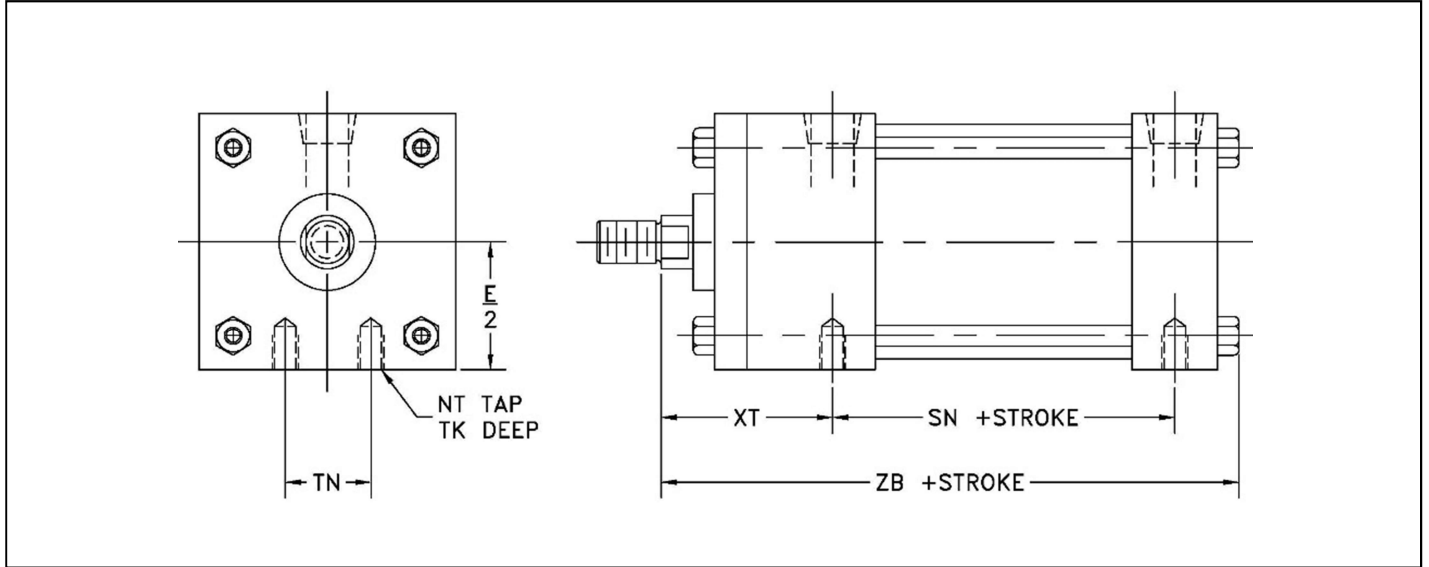
Extended tie rods head end
Available on 1.5" – 8" bores



DIMENSIONS FOR EXTENDED TIE ROD MOUNTS MX1, MX2, & MX3

Bore	Rod	A	B	C	D	E	F	KK	V	AA	BB	DD	LB	RE	ZB
1.5"	.62	.75	1.12	.37	.50	2.00	.37	7/16-20	.25	2.02	1.00	1/4-28	3.62	1.43	4.87
	1.00	1.12	1.50	.50	.81		.37	3/4-16	.50						5.25
2"	.62	.75	1.12	.37	.50	2.50	.37	7/16-20	.25	2.60	1.12	5/16-24	3.62	1.84	4.93
	1.00	1.12	1.50	.50	.81		.37	3/4-16	.50						5.31
2.5"	.62	.75	1.12	.37	.50	3.00	.37	7/16-20	.25	3.10	1.12	5/16-24	3.75	2.18	5.06
	1.00	1.12	1.50	.50	.81		.37	3/4-16	.50						5.43
3.25"	1.00	1.12	1.50	.50	.81	3.75	.62	3/4-16	.25	3.90	1.37	3/8-24	4.25	2.76	6.06
	1.37	1.62	2.00	.62	1.12		.62	1 - 14	.37						6.31
4"	1.00	1.12	1.50	.50	.81	4.50	.62	3/4-16	.25	4.68	1.37	3/8-24	4.25	3.32	6.06
	1.37	1.62	2.00	.62	1.12		.62	1 - 14	.37						6.31
5"	1.00	1.12	1.50	.50	.81	5.50	.62	3/4-16	.25	5.80	1.81	1/2-20	4.50	4.10	6.37
	1.37	1.62	2.00	.62	1.12		.62	1 - 14	.37						6.62
6"	1.37	1.62	2.00	.62	1.12	6.50	.75	1 - 14	.25	6.90	1.81	1/2-20	5.00	4.87	7.12
	1.75	2.00	2.37	.75	1.50		1-1/4 - 12	.37	7.37						
8"	1.37	1.62	2.00	.62	1.12	8.50	.75	1 - 14	.25	9.10	2.31	5/8-18	5.12	6.43	7.37
	1.75	2.00	2.37	.75	1.50		1-1/4 - 12	.37	7.62						

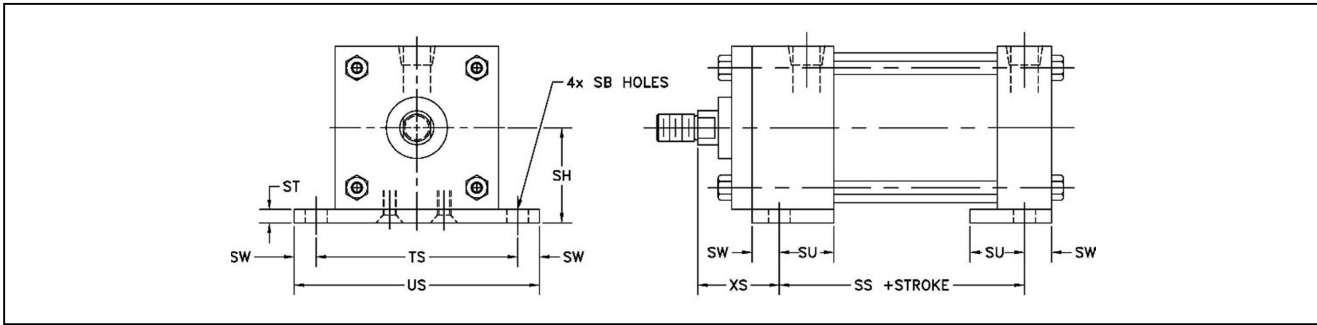
MS4: Bottom Tap



DIMENSIONS FOR BOTTOM TAPPED MOUNT MS4

Bore	Rod	A	B	C	D	E	F	KK	V	NT	TK	TN	SN	XT	ZB
1.5"	.62	.75	1.12	.37	.50	2.00	.37	7/16-20	.25	1/4-20	.37	.62	2.25	1.93	4.87
	1.00	1.12	1.50	.50	.81		.37	3/4-16	.50					2.31	5.25
2"	.62	.75	1.12	.37	.50	2.50	.37	7/16-20	.25	5/16-18	.50	.87	2.25	1.93	4.93
	1.00	1.12	1.50	.50	.81		.37	3/4-16	.50					2.31	5.31
2.5"	.62	.75	1.12	.37	.50	3.00	.37	7/16-20	.25	3/8-16	.62	1.25	2.37	1.93	5.06
	1.00	1.12	1.50	.50	.81		.37	3/4-16	.50					2.31	5.43
3.25"	1.00	1.12	1.50	.50	.81	3.75	.62	3/4-16	.25	1/2-13	.75	1.50	2.62	2.43	6.06
	1.37	1.62	2.00	.62	1.12		.62	1 - 14	.37					2.68	6.31
4"	1.00	1.12	1.50	.50	.81	4.50	.62	3/4-16	.25	1/2-13	.75	2.06	2.62	2.43	6.06
	1.37	1.62	2.00	.62	1.12		.62	1 - 14	.37					2.68	6.31
5"	1.00	1.12	1.50	.50	.81	5.50	.62	3/4-16	.25	5/8-11	1.00	2.68	2.87	2.43	6.37
	1.37	1.62	2.00	.62	1.12		.62	1 - 14	.37					2.68	6.62
6"	1.37	1.62	2.00	.62	1.12	6.50	.75	1 - 14	.25	3/4-10	1.12	3.25	3.12	2.81	7.12
	1.75	2.00	2.37	.75	1.50			1-1/4 - 12	.37					3.06	7.37
8"	1.37	1.62	2.00	.62	1.12	8.50	.75	1 - 14	.25	3/4-10	1.12	4.50	3.25	2.81	7.37
	1.75	2.00	2.37	.75	1.50			1-1/4 - 12	.37					3.06	7.62

BB: Base Bar

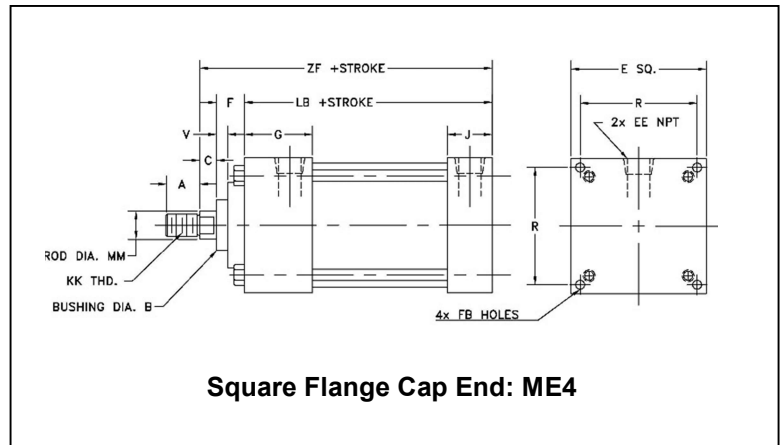
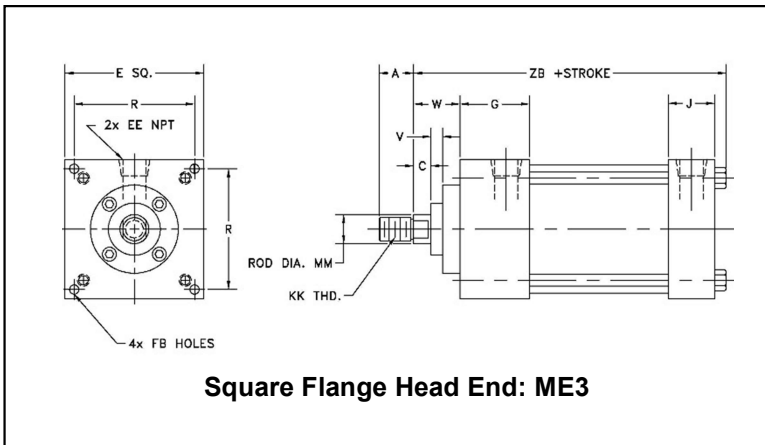


DIMENSIONS FOR BASE BAR MOUNT BB

Bore	Rod	A	B	C	D	F	KK	V	SB	SH	SS	ST	SU	SW	TS	US	XS
1.5"	.62	.75	1.12	.37	.50	.37	7/16-20	.25	.43	1.25	2.87	.25	1.12	.37	2.75	3.50	1.37
	1.00	1.12	1.50	.50	.81	.37	3/4-16	.50									1.75
2"	.62	.75	1.12	.37	.50	.37	7/16-20	.25	.43	1.50	2.87	.25	1.12	.37	3.25	4.00	1.37
	1.00	1.12	1.50	.50	.81	.37	3/4-16	.50									1.75
2.5"	.62	.75	1.12	.37	.50	.37	7/16-20	.25	.43	1.87	3.00	.37	1.12	.37	3.75	4.50	1.37
	1.00	1.12	1.50	.50	.81	.37	3/4-16	.50									1.75
3.25"	1.00	1.12	1.50	.50	.81	.62	3/4-16	.25	.56	2.37	3.25	.50	1.25	.50	4.75	5.75	1.87
	1.37	1.62	2.00	.62	1.12	.62	1 - 14	.37									2.12
4"	1.00	1.12	1.50	.50	.81	.62	3/4-16	.25	.56	2.75	3.25	.50	1.25	.50	5.50	6.50	1.87
	1.37	1.62	2.00	.62	1.12	.62	1 - 14	.37									2.12
5"	1.00	1.12	1.50	.50	.81	.62	3/4-16	.25	.68	3.25	3.12	.50	1.06	.68	6.87	8.25	2.06
	1.37	1.62	2.00	.62	1.12	.62	1 - 14	.37									2.31

Note: base bar mount not available in 6" or 8" bores

Square Flange Mounts:



DIMENSIONS FOR SQUARE FLANGE MOUNTS ME3 & ME4

Bore	Rod	A	B	C	D	E	G	J	KK	R	V	W	EE	FB	ZB	ZF
8"	1.37	1.62	2.00	.62	1.12	8.50	2.00	1.50	1 - 14	7.57	.37	1.62	.50	.68	7.37	6.75
	1.75	2.00	2.37	.75	1.50	8.50	2.00	1.50	1-1/4 - 12	7.57	.37	1.87	.50	.68	7.62	7.00

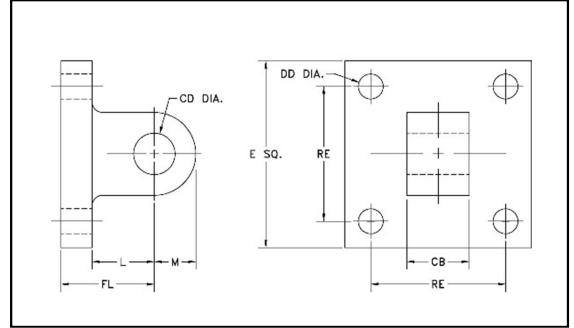
Accessories

ACCESSORIES ARE ASSEMBLED ON CYLINDER PRIOR TO SHIPPING UNLESS OTHERWISE SPECIFIED

EYE MOUNTING BRACKET

Use with MP1 or MP2 Mounts. Also compatible with Rod Clevis Accessory									
Use With Bore	Part No.	Dimension							
		CB	CD	DD	E	FL	L	M	RE
1.5", 2", 2.5"	EB-4	.75	.50	.40	2.50	1.12	.75	.56	1.63
3.25", 4", 5"	EB-5	1.25	.75	.46	3.50	1.87	1.25	.87	2.56
6", 8"	EB-3	1.50	1.00	.65	4.50	2.25	1.50	1.00	3.25

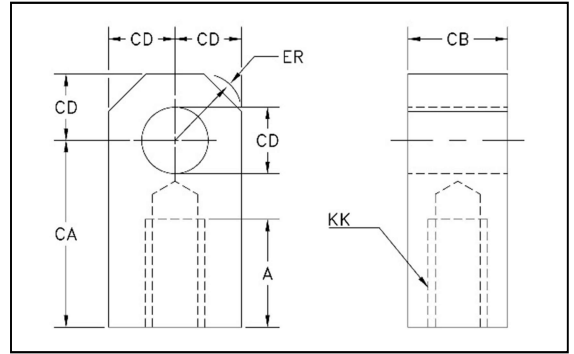
MATERIAL: PAINTED CAST IRON



FEMALE ROD EYE

Part No.	Dimension					
	A	CA	CB	CD	ER	KK
FRE-1	.75	1.50	.75	.50	.56	7/16-20
FRE-2	1.12	2.06	1.25	.75	.93	3/4-16
FRE-3	1.62	2.81	1.50	1.00	1.12	1 - 14

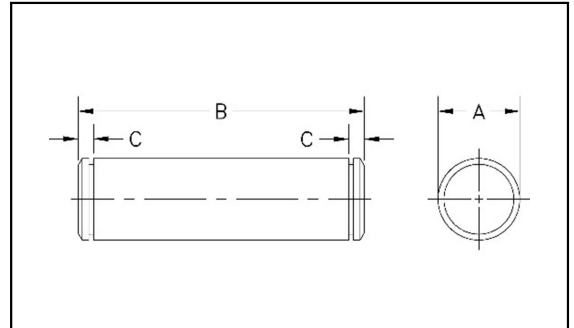
MATERIAL: BLACK OXIDE COATED STEEL



CLEVIS PIN

Use With Bore	Part No.	Dimension		
		A	B	C
1.5", 2", 2.5"	CP-1	.50	2.25	.18
3.25", 4", 5"	CP-2	.75	3.00	.18
6", 8"	CP-3	1.00	3.50	.18

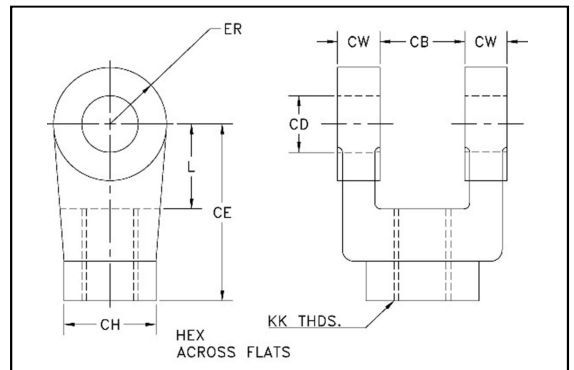
MATERIAL: CHROME PLATED STEEL



ROD CLEVIS

Use With Bore	Part No.	Dimension							
		CB	CD	CE	CH	CW	ER	KK	L
1.5", 2", 2.5"	RC-1	.75	.50	1.50	.75	.50	.50	7/16-20	.75
3.25", 4", 5"	RC-2	1.25	.75	2.37	1.25	.62	.75	3/4-16	1.25
6", 8"	RC-3	1.50	1.00	3.12	1.62	.75	1.00	1 - 14	1.50

MATERIAL: BLACK OXIDE COATED FORGED STEEL

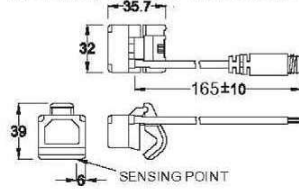


Switches:

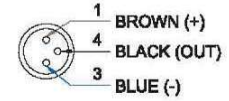


DIMENSION

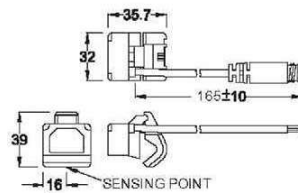
SS-6200N, SS-6200P / SS-6200N-QD, SS-6200P-QD



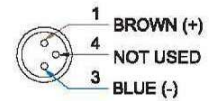
Solid State QD Pinout



RS-6200 / RS-6200-QD



Reed QD Pinout



Unit:mm

SPECIFICATION

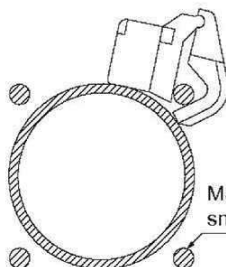
TYPE	RS-6200	SS-6200N	SS-6200P
CONNECT DIAGRAM			
CHARACTERISTICS			
WIRING METHOD	2-Wire Type	3-Wire Type	
SWITCHING LOGIC	SPST, Normally Open	Solid State Output, Normally Open	
SENSOR TYPE	Reed Switch	NPN Current Sinking	PNP Current Sourcing
OPERATING VOLTAGE	5-240V DC/AC	5-30V DC	
SWITCHING CURRENT		1 Amp. max.	
CONTACT RATING (NOTE 1)		30 W max.	
CURRENT CONSUMPTION	--	42 mA @ 24V DC max.	30 mA @ 24V DC max.
VOLTAGE DROP	3.5 V max.	1.5 V @ 0.5A max.	
LEAKAGE CURRENT	--	0.01 mA max.	
INDICATOR	Red LED	Power : Green LED , Output : Red LED	
CABLE	ø4.5, 2C, PVC	ø4.5, 3C, PVC	
OPERATING FREQUENCY	200 Hz	1000 Hz	
MAGNET REQUIREMENT (NOTE 2)	80 Gauss	40 Gauss	
TEMPERATURE RANGE		-10~70°C (+14~158°F)	
SHOCK (NOTE 3)	30 G	9 G	50 G
VIBRATION (NOTE 4)		9 G	
ENCLOSURE CLASSIFICATION		IEC 60529 IP67 (NEMA 6)	
PROTECTION CIRCUIT (NOTE 5)	4		3,4

NOTE:

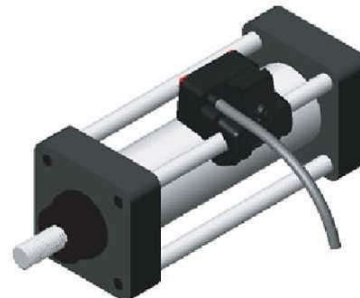
1. WARNING: Never exceed rating (Watt=Voltage x Amperage). Permanent damage to sensor will occur.
2. Measuring standard target: ø15.5xø9x5t (Anisotropy rubber magnet)
3. Sin wave / X, Y, Z 3 directions / 3 times each direction / 11 ms each time.
4. Double amplitude 1.5 mm / 10Hz-55Hz-10Hz (Sweep 1 min) / X, Y, Z 3 directions / 1 hour each time.
5. 1=None / 2=Short-circuit / 3=Power Source Reverse polarity / 4=Surge Suppression



SELF MOUNTING CLAMPS



Max. tie-rod diameter ø 17.5
small tie-rod diameter ø 6



Unit:mm

clamps are included with switches



American Cylinder Co., Inc.

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Peotone, Illinois 60468-9116

P: 708/258-3935

F: 708/258-3980

ON THE INTERNET<http://www.americancylinder.com>E-MAIL: amcyl@americancylinder.com

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