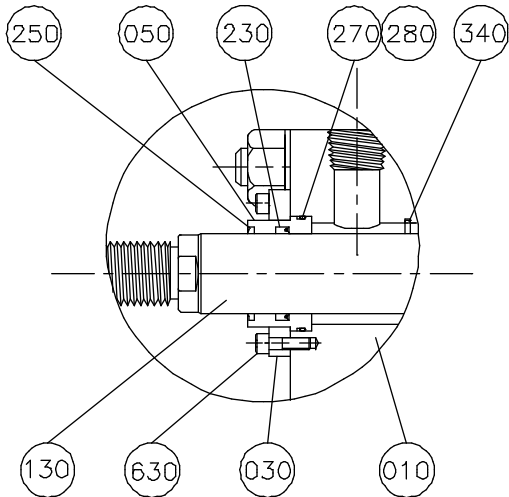
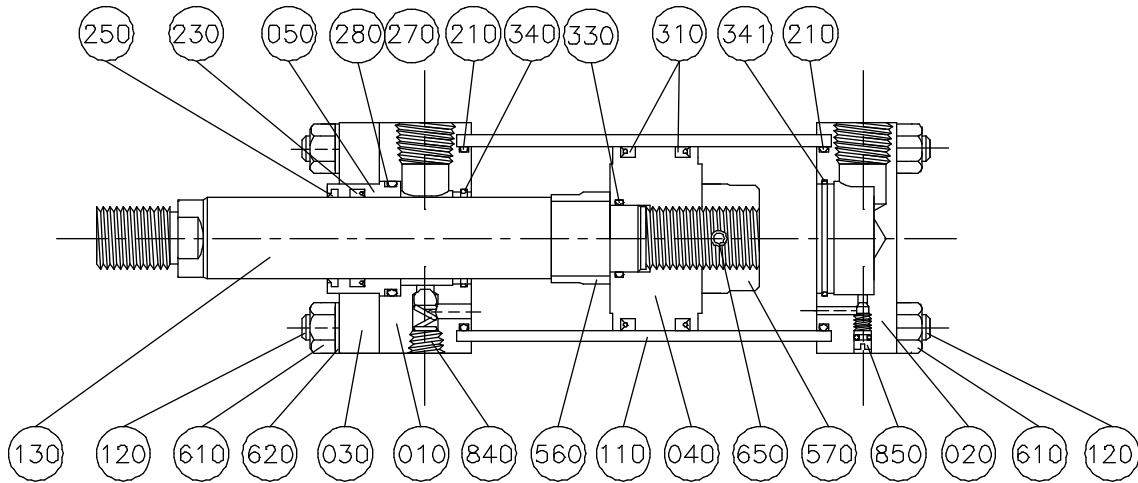


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WARRANTY: Our products are warranted for one year to be free from defects in workmanship and material. We will replace or repair at our election, including lowest transportation costs, any product that our inspection shows to be defective. Any claim under this warranty must be made within ten days after Buyer's receipt of the product shipped or, in the event the defect is incapable of discovery until in use or in processing in the manufacture of other products, within ten days after buyer learns of the alleged defect giving rise to the claim. In any event, any such claim must be made within the one year period covered by this warranty. We assume no liability for consequential damages of any kind, or for damages arising from a claim of negligence. Our liability is limited to the replacement or repair of the defective part.

PURAKAL SERIES 100 PARTS LIST



**REPAIR KIT CONTENTS:
ITEMS 050 210 230 250 270 280 310 330**

**SEAL KIT CONTENTS:
ITEMS 210 230 250 270 280 310 330**

To insure the proper components and to speed your order please specify:

1. Serial number of cylinder.
2. Part number or drawing number of cylinder (if applicable).
3. Model (series and mounting style).
4. Bore of cylinder.
5. Stroke of cylinder.
6. Piston rod diameter.
7. Operating medium.

010 Rod Head
020 Blind Head
030 Retainer Plate (through 6" bore)
Retainer Cap (8" and above)
040 Piston
050 Rod Bearing
110 Barrel
120 Tie Rod
130 Piston Rod
210 Barrel Seal ('O' Ring)
230 Rod Seal (Deep Cup)
250 Rod Wiper
270 Bearing O.D. Seal ('O' Ring)
280 Bearing O.D. Seal (Backup)

310 Piston O.D. Seal (Cup)
330 Piston I.D. Seal ('O' Ring)
340 Rod End Positive Cushion Seal
341 Blind End Positive Cushion Seal
560 Rod End Cushion Sleeve
570 Blind End Cushion Sleeve
610 Tie Rod Nut
620 Hardened Washer
630 Retainer Cap Screw (8" and above)
640 Piston Nut
650 Piston Lock
840 Ball Check Assembly
850 Cushion Adjusting Valve Assembly
860 Seal Kit
870 Repair Kit

PURAKAL SERIES 100 CYLINDER FEATURES

**ADJUSTABLE CUSHION
VALVE:**

This infinite adjustment feature can be obtained at an additional cost for all bores and rod sizes that are not fixed cushioned. Standard position is #2.

BALL CHECK ASSEMBLY:

Ball check assemblies are supplied as standard for most cushioned cylinders. Standard position is #4.

BARREL:

Standard material is honed steel tubing with chromed I.D. for extended cylinder life.

CUSHIONS:

All cylinders are supplied as non-cushioned unless otherwise requested. Certain 1 1/2" and 2" bore cylinders are limited to fixed, non adjustable cushions. For longer cushions, check with the factory.

LUBRICATION:

Series 100 cylinders are designed for air operation. Cylinders must be well lubricated with mineral based lubricant. Specify any special fluids or lubricants if required.

MOUNTINGS:

All cylinder mountings are interchangeable with standard NFPA envelope mounting dimensions. Special mountings can be obtained if needed.

PISTON:

The one piece design gives our pistons longer life. For strength, the piston is threaded to the rod and is mechanically locked to the rod through the piston nut or cushion sleeve.

PISTON ROD:

Standard supplied rods are hard chrome plated with a 90,000 PSI or better yield strength. Special material or strength requirements can be obtained upon request.

PORTING:

Standard cylinders will be supplied with NPT ports. SAE 'O' ring ports of appropriate size are an option at no extra cost. The standard location for ports is position #1. Specify any position (1, 2, 3, or 4) for either head end.

PRESSURES:

Series 100 pneumatic cylinders are rated at 250 PSI air service and for hydraulic service see the table on page 4.

RETAINERS:

A retainer plate is used for all cylinders through 6" bore. Retainer caps are used for cylinders 8" and above.

ROD BEARINGS:

Longer length and 660 bronze material give our bearings extended life.

ROD WIPER:

Wipers are made of urethane. Brass wipers are available at extra cost.

SEALS:

"K" seal cups are used for the piston O.D. seals on air application, polyurethane cups are used on hydraulic application. Polyurethane deep cups are used for the rod seal. 'O' rings are used for the static seals.

TEMPERATURES:

Series 100 cylinders operate continuously at -30 degrees F to 200 degrees F. For special temperature or medium, contact our engineering department.

TOLERANCES:

All dimensions are in inches with tolerances of $\pm 1/32"$. There will be an additional cost for closer tolerances.

PURAKAL SERIES 100 CYLINDER SELECTION

SELECT THE BORE SIZE

Use the table below to select the cylinder bore size that provides the required force at the desired working pressure. Keep in mind that a pneumatic cylinder must be overpowered to move a load. For example, a cylinder which develops 1000 pounds of force can balance a 1000 pound load but cannot MOVE it. Select a cylinder with at least 25% extra force for

moving the load at an average speed, or 100% for fast movement.

After selecting the proper size cylinder for the job use the envelope and mounting dimension charts to determine cylinder dimensions.

PRESSURE TABLE

CYL. BORE DIA.	PISTON ROD DIA.	PRESS. RATING		CYL. WORK ACTION	WORK AREA SQ. IN.	WORKING PRESSURE P.S.I.												FLUID REQUIRED PER INCH OF STROKE	
		MAX. AIR	HYD. 4:1 SAFETY FACTOR			60	80	90	100	150	200	250	350	400	500	600	750	GAL.	CU. FT.
1 1/2	5/8 1	250	2250	PUSH	1.767	106	141	159	177	265	353	442	618	707	884	1060	1325	.00765	.00102
				PULL	1.460	88	117	131	146	219	292	365	511	584	730	876	1095	.00632	.00084
				PULL	.785	47	63	71	79	118	157	196	275	314	393	471	589	.00340	.00045
2	5/8 1 1 3/8	250	1200	PUSH	3.142	189	251	283	314	471	628	786	1099	1257	1571	1885	2357	.01360	.00182
				PULL	2.835	170	227	255	284	425	567	709	992	1134	1418	1701	2126	.01227	.00164
				PULL	2.356	141	188	212	236	353	471	589	825	942	1178	1414	1767	.01020	.00136
				PULL	1.657	99	133	149	166	249	331	414	580	663	829	994	1243	.00717	.00096
2 1/2	5/8 1 1 3/8	250	700	PUSH	4.909	295	393	442	491	736	982	1227	1718	1964	2455	2945	3682	.02125	.00284
				PULL	4.602	276	368	414	460	690	920	1151	1611	1841	2301	2761	3452	.01992	.00266
				PULL	4.123	247	330	371	412	618	825	1031	1443	1649	2062	2474	3092	.01785	.00239
				PULL	3.424	205	274	308	342	514	685	856	1198	1370	1712	2054	2568	.01482	.00198
3 1/4	1 1 3/8 1 3/4	250	1100	PUSH	8.296	498	664	747	830	1244	1659	2074	2904	3318	4148	4978	6222	.03591	.00480
				PULL	7.510	451	601	676	751	1127	1502	1878	2629	3004	3755	4506	5633	.03251	.00430
				PULL	6.811	409	545	613	681	1022	1362	1703	2384	2724	3406	4087	5108	.02948	.00394
				PULL	5.891	353	471	530	589	884	1178	1473	2062	2356	2946	3535	4418	.02550	.00341
4	1 1 3/8 1 3/4	250	700	PUSH	12.566	754	1005	1131	1257	1885	2513	3142	4398	5026	6283	7540	9425	.05440	.00727
				PULL	11.781	707	942	1060	1178	1767	2356	2945	4123	4712	5891	7069	8836	.05100	.00682
				PULL	11.082	665	887	997	1108	1662	2216	2771	3879	4433	5541	6649	8312	.04797	.00641
				PULL	10.161	610	813	914	1016	1524	2032	2540	3556	4064	5081	6097	7621	.04399	.00588
5	1 1 3/8 1 3/4	250	500	PUSH	19.635	1178	1571	1767	1964	2945	3927	4909	6872	7854	9818	11781	14726	.08500	.01136
				PULL	18.850	1131	1508	1697	1885	2828	3770	4713	6598	7540	9425	11310	14138	.08160	.01091
				PULL	18.150	1089	1452	1634	1815	2723	3630	4538	6353	7260	9075	10890	13613	.07857	.01050
				PULL	17.230	1034	1378	1551	1723	2585	3446	4308	6031	6892	8615	10338	12923	.07459	.00997
6	1 3/8 1 3/4 2	250	500	PUSH	28.274	1696	2262	2545	2827	4241	5655	7069	9896	11310	14137	16964	21206	.12240	.01636
				PULL	26.790	1607	2143	2411	2679	4019	5358	6698	9377	10716	13395	16074	20093	.11597	.01551
				PULL	25.869	1552	2070	2328	2587	3880	5174	6467	9054	10348	12935	15521	19402	.11199	.01497
				PULL	25.133	1508	2011	2262	2513	3770	5027	6283	8797	10053	12567	15080	18850	.10880	.01455
8	1 3/8 1 3/4 2	250	350	PUSH	50.265	3016	4021	4524	5027	7540	10053	12566	17593	20106	25133	30159	37699	.21760	.02909
				PULL	48.781	2927	3902	4390	4878	7317	9756	12195	17073	19512	24391	29269	36586	.21117	.02823
				PULL	47.860	2872	3829	4307	4786	7179	9572	11965	16751	19144	23930	28716	35895	.20719	.02770
				PULL	47.124	2827	3770	4241	4712	7069	9425	11781	16493	18850	23562	28274	35343	.20400	.02727
10	1 3/4 2 2 1/2	250	350	PUSH	78.540	4712	6283	7069	7854	11781	15708	19635	27489	31416	39270	47124	58905	.34000	.04546
				PULL	76.135	4568	6091	6852	7614	11420	15227	19034	26647	30454	38068	45681	57101	.32959	.04407
				PULL	75.398	4524	6032	6786	7540	11310	15080	18850	26389	30159	37699	45239	56549	.32640	.04364
				PULL	73.631	4418	5890	6627	7363	11045	14726	18408	25771	29452	36816	44179	55223	.31875	.04262
12	2 2 1/2 3	250	350	PUSH	113.10	6786	9048	10179	11310	16965	22620	28275	39585	45240	56550	67860	84825	.48961	.06546
				PULL	109.96	6598	8797	9896	10996	16494	21992	27490	38486	43984	54980	65976	82470	.47602	.06364
				PULL	108.19	6491	8655	9737	10819	16229	21638	27048	37867	43276	54095	64914	81143	.46835	.06262
				PULL	106.03	6362	8482	9543	10603	15905	21206	26508	37111	42412	53015	63618	79523	.45900	.06137

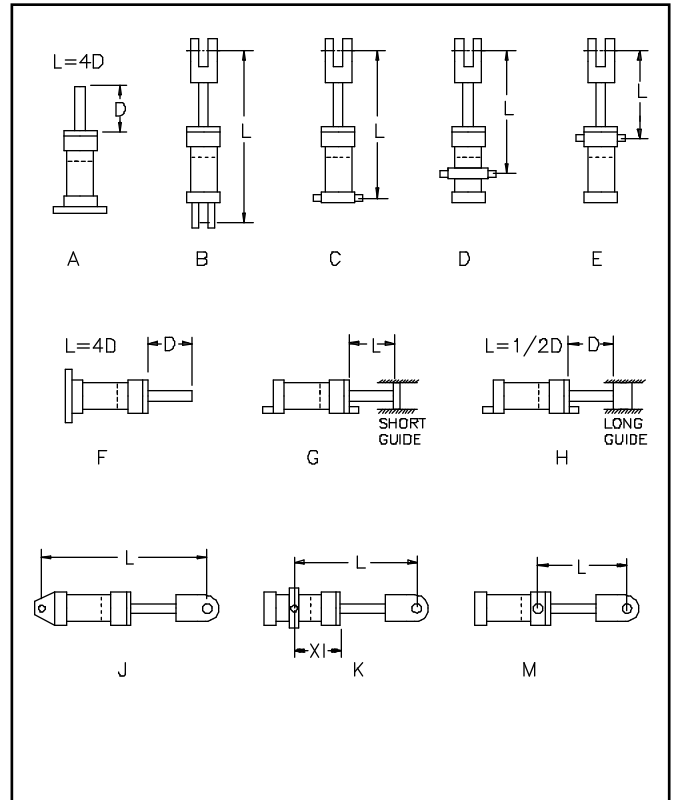
PURAKAL SERIES 100 PISTON ROD SIZES

THRUST (LBS)	PISTON ROD DIAMETER								
	5/8	1	1 3/8	1 3/4	2	2 1/2	3	3 1/2	4
50	62								
100	55	112							
200	47	99							
300	44	88	142						
500	38	75	130	180					
750	28	70	122	170	198	272			
1000	25	60	103	156	191	258	332		
1250	21	52	94	140	183	251	316	400	
1500	19	50	92	136	168	240	300	390	
2000	15	43	81	113	150	229	291	360	430
4000	12	31	62	96	120	170	252	309	380
6000		25	52	80	100	160	197	262	346
8000		22	45	75	99	134	189	230	310
10000		21	40	67	89	121	173	210	268
20000			27	48	63	104	142	171	216
30000				40	51	81	115	155	204
40000				30	45	70	99	135	176
50000					35	62	90	121	162
60000						56	82	110	144
70000						48	74	103	133
80000						43	70	96	125
90000						37	66	90	119
100000							60	84	112

SELECT THE ROD SIZE

For most tension applications, the smallest standard rod diameter is adequate. For a push application, determine the proper rod size using the following procedure.

1. Determine the maximum load that will be imposed on the rod.
2. Identify the mounting style and the corresponding "L" dimension from the illustration above.
3. Determine the stop tube length, if required, from the discussion at right. For mounting styles B, C, D, and J, add the stop tube length to the "L" dimension to obtain the basic column length.
4. Refer to the table and select the line with a thrust load greater than or equal to your requirement.
5. Scan to the right until a length greater than or equal to your basic column length is encountered.
6. Read the required piston rod diameter at the top of the column.



STOP TUBE LENGTH

Stop tubes are spacers which increase the distance between the piston and rod head, maintaining alignment of the piston rod and cylinder bore. This reduces the eccentricity in the column, resulting in lower bending stress in the rod. At the same time, the increased span reduces the bearing stress on piston and rod bearings.

Stop tubes are advisable for long stroke push cylinders mounted as styles A, B, C, D, J, and K. When the value of "L" exceeds 50 inches, use one whole inch of stop tube for each 10 inches of length in excess of 50 inches.

For a horizontal rigidly mounted cylinder with piston rod unsupported and no weight added to the rod (style F), use one whole inch of stop tube for every 10 inches of length in excess of 50 inches.

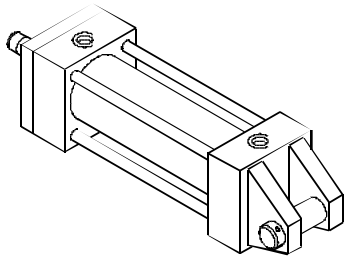
For horizontally mounted styles J and K, it is advisable to calculate the bearing loads with the rod fully extended. The bearing loads should be limited to 200 psi for smooth operation and long life and not more than 350 psi under any condition.

For style K (center trunnion cylinder), the most favorable rod bearing load is obtained with the XI dimension equal to about 1/3 the total collapsed cylinder length.

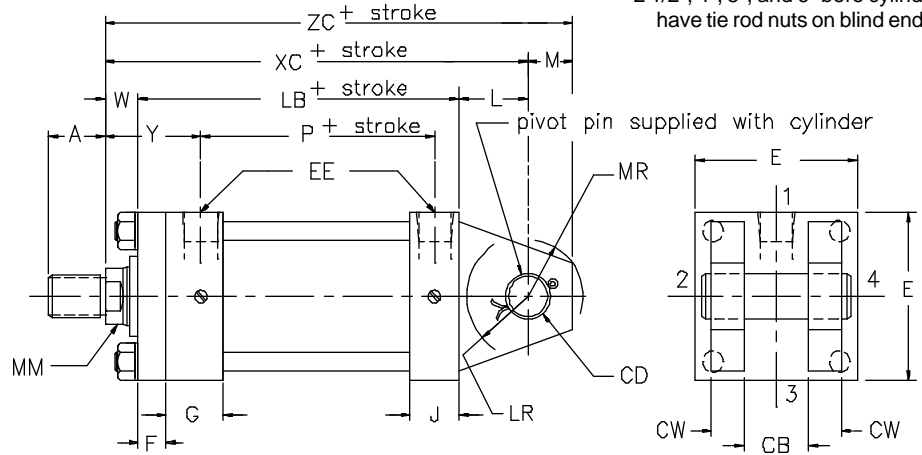
MP-1
MPU-3
MP-3

PURAKAL SERIES 100 CLEVIS, SPHERICAL AND PIVOT EYE MOUNTINGS 1 1/2" - 6" BORE

BASE CLEVIS MOUNTING

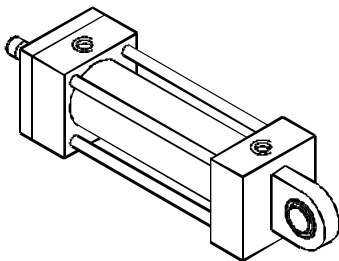


MP-1

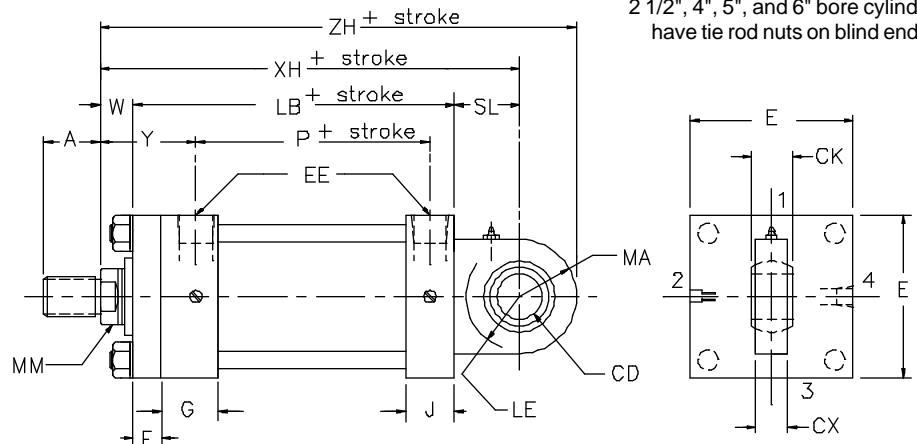


For mounting accessories see pages 24 through 31.

SPHERICAL TANG MOUNTING

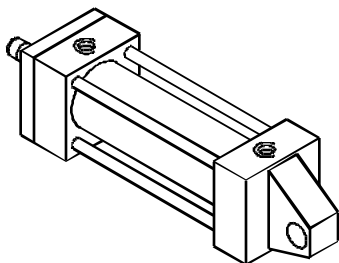


MPU-3

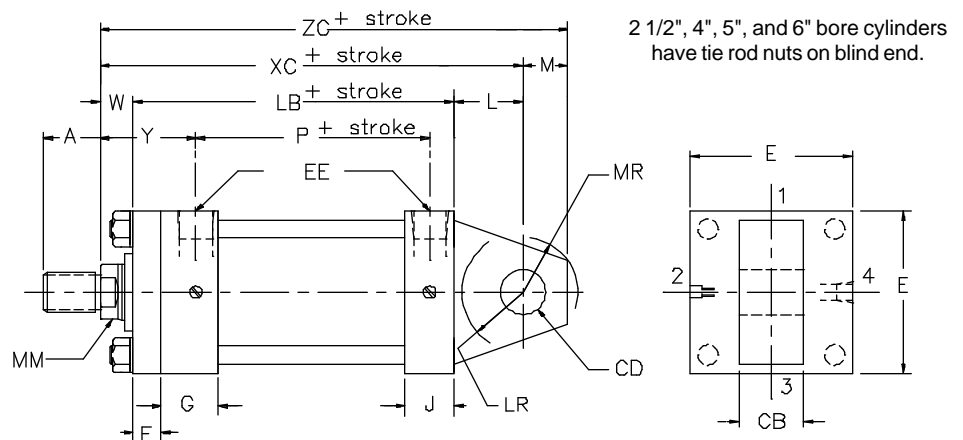


For mounting accessories see pages 24 through 31.

BASE PIVOT EYE MOUNTING



MP-3



For mounting accessories see pages 24 through 31.

PURAKAL SERIES 100 CLEVIS, SPHERICAL AND PIVOT EYE MOUNTINGS 1 1/2" - 6" BORE

MP-1
MPU-3
MP-3

ENVELOPE AND MOUNTING DIMENSIONS AFFECTED BY ROD SIZE

CYL BORE	ROD DIA									ADD STROKE	ADD STROKE		ADD STROKE	ADD STROKE
	MM	A	B	C	CC	D	KK	V	W	XC	XH	Y	ZC	ZH
1 1/2	5/8	3/4	1.124	3/8	1/2-20	1/2	7/16-20	1/4	5/8	5 3/8	5 7/16	1 15/16	5 7/8	6 3/16
	1*	1 1/8	1.499	1/2	7/8-14	7/8	3/4-16	1/2	1	5 3/4	5 13/16	2 5/16	6 1/4	6 9/16
2	5/8	3/4	1.124	3/8	1/2-20	1/2	7/16-20	1/4	5/8	5 3/8	5 7/16	1 15/16	5 7/8	6 3/16
	1	1 1/8	1.499	1/2	7/8-14	7/8	3/4-16	1/2	1	5 3/4	5 13/16	2 5/16	6 1/4	6 9/16
2 1/2	5/8	3/4	1.124	3/8	1/2-20	1/2	7/16-20	1/4	5/8	5 1/2	5 9/16	1 15/16	6	6 5/16
	1	1 1/8	1.499	1/2	7/8-14	7/8	3/4-16	1/2	1	5 7/8	5 15/16	2 5/16	6 3/8	6 11/16
3 1/4	1	1 1/8	1.499	1/2	7/8-14	7/8	3/4-16	1/4	3/4	6 7/8	6 13/16	2 3/8	7 5/8	8 1/16
	1 3/8	1 5/8	1.999	5/8	1 1/4-12	1 1/8	1-14	3/8	1	7 1/8	7 1/16	2 5/8	7 7/8	8 5/16
4	1	1 1/8	1.499	1/2	7/8-14	7/8	3/4-16	1/4	3/4	6 7/8	6 13/16	2 3/8	7 5/8	8 1/16
	1 3/8	1 5/8	1.999	5/8	1 1/4-12	1 1/8	1-14	3/8	1	7 1/8	7 1/16	2 5/8	7 7/8	8 5/16
5	1	1 1/8	1.499	1/2	7/8-14	7/8	3/4-16	1/4	3/4	7 1/8	7 1/16	2 3/8	7 7/8	8 5/16
	1 3/8	1 5/8	1.999	5/8	1 1/4-12	1 1/8	1-14	3/8	1	7 3/8	7 5/16	2 5/8	8 1/8	8 9/16
6	1 3/8	1 5/8	1.999	5/8	1 1/4-12	1 1/8	1-14	3/8	1 1/4	7 5/8	7 9/16	2 7/8	8 3/8	8 13/16
	2	2 1/4	2.624	7/8	1 3/4-12	1 11/16	1 1/2-12	3/8	1 1/4	8 1/2	8 9/16	3 1/8	9 1/2	10 1/16

*Rod end cushion is non-adjustable.

ENVELOPE AND MOUNTING DIMENSIONS

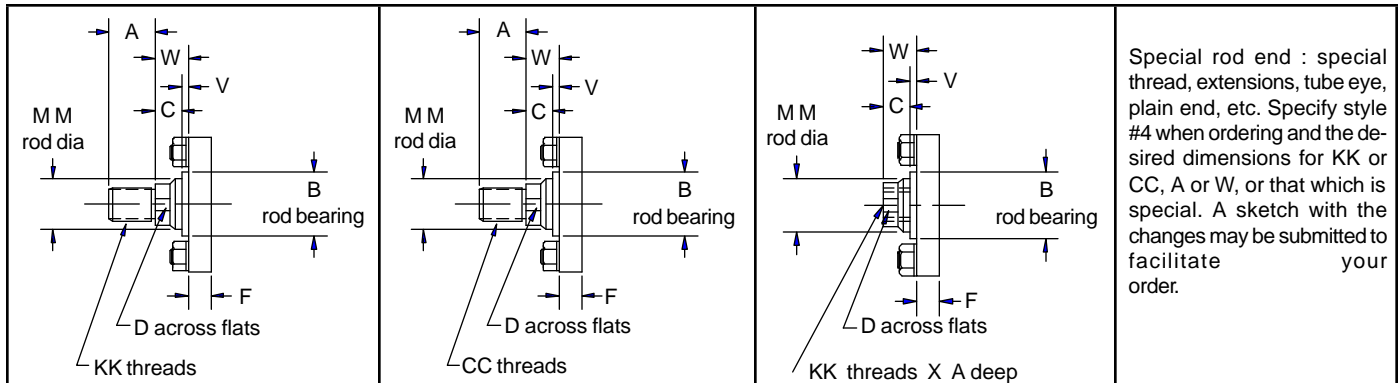
CYL. BORE							NPT	SAE					ADD STROKE						ADD STROKE	
	CB	CD	CK	CW	CX	E	EE	EE	F	G	J	L	LB	LE	LR	M	MA	MR	P	SL
1 1/2	3/4	.500	7/16	1/2	3/8	2	3/8	#6	3/8	1 1/2	1	3/4	4	9/16	9/16	1/2	3/4	5/8	2 1/4	13/16
2	3/4	.500	7/16	1/2	3/8	2 1/2	3/8	#6	3/8	1 1/2	1	3/4	4	9/16	9/16	1/2	3/4	5/8	2 1/4	13/16
2 1/2	3/4	.500	7/16	1/2	3/8	3	3/8	#6	3/8	1 1/2	1	3/4	4 1/8	9/16	9/16	1/2	3/4	5/8	2 3/8	13/16
3 1/4	1 1/4	.750	21/32	5/8	5/8	3 3/4	1/2	#8	5/8	1 3/4	1 1/4	1 1/4	4 7/8	13/16	1	3/4	1 3/16	15/16	2 11/16	1 3/16
4	1 1/4	.750	21/32	5/8	5/8	4 1/2	1/2	#8	5/8	1 3/4	1 1/4	1 1/4	4 7/8	13/16	1	3/4	1 3/16	15/16	2 11/16	1 3/16
5	1 1/4	.750	21/32	5/8	5/8	5 1/2	1/2	#8	5/8	1 3/4	1 1/4	1 1/4	5 1/8	13/16	1	3/4	1 3/16	15/16	2 15/16	1 3/16
6	1 1/2	1.000	7/8	3/4	3/4	6 1/2	3/4	#12	3/4	2	1 1/2	1 1/2	5 3/4	1 1/16	1 1/4	1	1 3/8	1 3/16	3 3/16	1 9/16

STYLE 1 ROD END

STYLE 2 ROD END

STYLE 3 ROD END

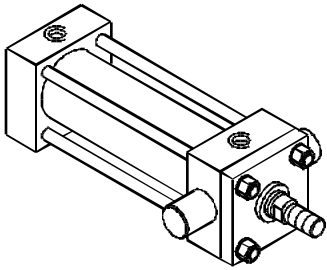
STYLE 4 ROD END



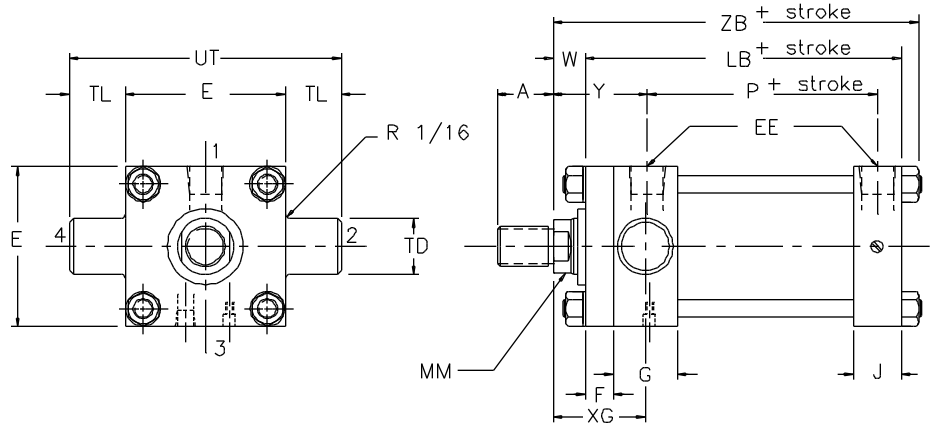
MT-1
 MT-2
 MT-4

**PURAKAL SERIES 100
 TRUNNION MOUNTINGS
 1 1/2" - 6" BORE**

ROD END TRUNNION MOUNTING

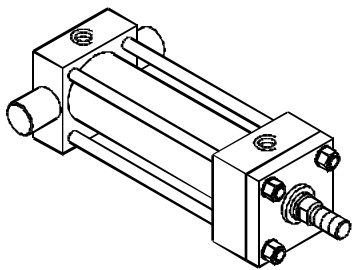


MT-1

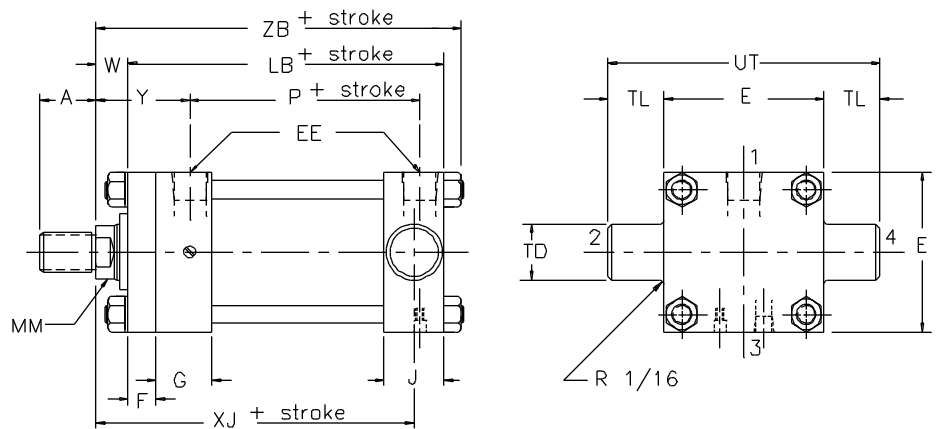


For mounting accessories see pages 24 through 31.

BLIND END TRUNNION MOUNTING

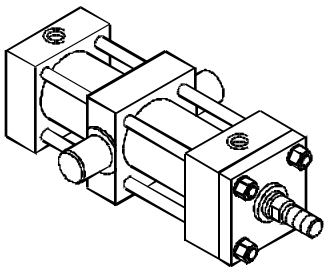


MT-2

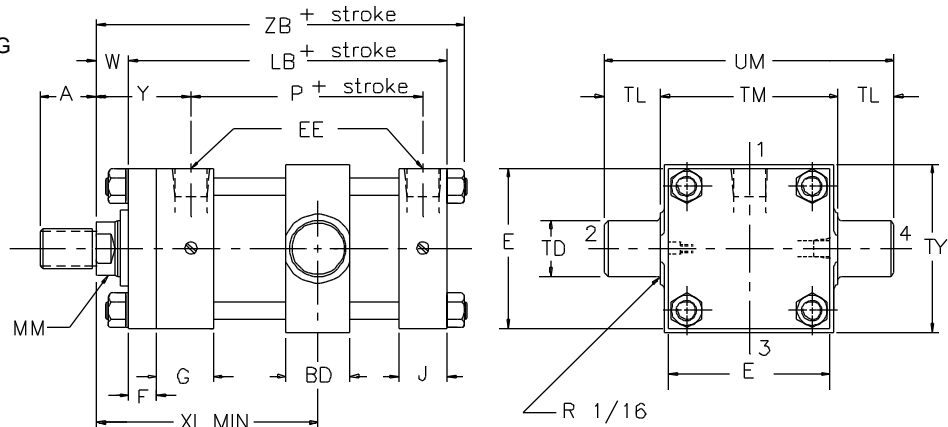


For mounting accessories see pages 24 through 31.

INTERMEDIATE TRUNNION MOUNTING



MT-4



For mounting accessories see pages 24 through 31.

**PURAKAL SERIES 100
TRUNNION MOUNTINGS
1 1/2" - 6" BORE**

MT-1
MT-2
MT-4

ENVELOPE AND MOUNTING DIMENSIONS AFFECTED BY ROD SIZE

CYL. BORE	ROD DIA											ADD STROKE		ADD STROKE
	MM	A	B	C	CC	D	KK	V	W	XG	XI MIN	XJ	Y	ZB
1 1/2	5/8	3/4	1.124	3/8	1/2-20	1/2	7/16-20	1/4	5/8	1 3/4	3 1/8	4 1/8	1 15/16	4 27/32
	1*	1 1/8	1.499	1/2	7/8-14	7/8	3/4-16	1/2	1	2 1/8	3 1/2	4 1/2	2 5/16	5 7/32
2	5/8	3/4	1.124	3/8	1/2-20	1/2	7/16-20	1/4	5/8	1 3/4	3 1/4	4 1/8	1 15/16	4 7/8
	1	1 1/8	1.499	1/2	7/8-14	7/8	3/4-16	1/2	1	2 1/8	3 5/8	4 1/2	2 5/16	5 1/4
2 1/2	5/8	3/4	1.124	3/8	1/2-20	1/2	7/16-20	1/4	5/8	1 3/4	3 1/4	4 1/4	1 15/16	5
	1	1 1/8	1.499	1/2	7/8-14	7/8	3/4-16	1/2	1	2 1/8	3 5/8	4 5/8	2 5/16	5 3/8
3 1/4	1 3/8*	1 5/8	1.999	5/8	1 1/4-12	1 1/8	1-14	5/8	1 1/4	2 3/8	3 7/8	4 3/4	2 9/16	5 1/2
	1	1 1/8	1.499	1/2	7/8-14	7/8	3/4-16	1/4	3/4	2 1/4	4 1/8	5	2 3/8	5 15/16
4	1 3/8	1 5/8	1.999	5/8	1 1/4-12	1 1/8	1-14	3/8	1	2 1/2	4 3/8	5 1/4	2 5/8	6 3/16
	1 3/4	2	2.374	3/4	1 1/2-12	1 1/2	1 1/4-12	1/2	1 1/4	2 3/4	4 5/8	5 1/2	2 7/8	6 7/16
5	1 3/8	1 5/8	1.999	5/8	1 1/4-12	1 1/8	1-14	3/8	1	2 1/2	4 3/8	5 1/2	2 5/8	6 9/16
	1 3/4	2	2.374	3/4	1 1/2-12	1 1/2	1 1/4-12	1/2	1 1/4	2 3/4	4 5/8	5 3/4	2 7/8	6 13/16
6	1 3/8	1 5/8	1.999	5/8	1 1/4-12	1 1/8	1-14	1/4	7/8	2 5/8	4 7/8	5 7/8	2 3/4	7 1/16
	1 3/4	2	2.374	3/4	1 1/2-12	1 1/2	1 1/4-12	3/8	1 1/8	2 7/8	5 1/8	6 1/8	3	7 5/16
	2	2 1/4	2.624	7/8	1 3/4-12	1 11/16	1 1/2-12	3/8	1 1/4	3	5 1/4	6 1/4	3 1/8	7 7/16

* Rod end cushion is non-adjustable.

ENVELOPE AND MOUNTING DIMENSIONS

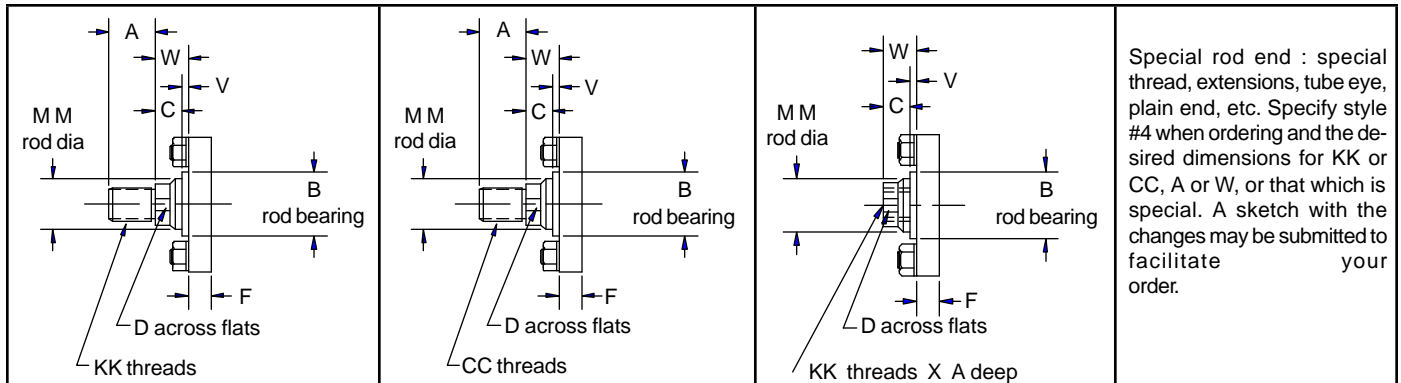
CYL. BORE			NPT	SAE				ADD STROKE	ADD STROKE						
	BD	E	EE	EE	F	G	J	LB	P	TD	TL	TM	TY	UM	UT
1 1/2	1 1/4	2	3/8	#6	3/8	1 1/2	1	4	2 1/4	1.000	1	2 1/2	2 1/2	4 1/2	4
2	1 1/2	2 1/2	3/8	#6	3/8	1 1/2	1	4	2 1/4	1.000	1	3	3	5	4 1/2
2 1/2	1 1/2	3	3/8	#6	3/8	1 1/2	1	4 1/8	2 3/8	1.000	1	3 1/2	3 1/2	5 1/2	5
3 1/4	2	3 3/4	1/2	#8	5/8	1 3/4	1 1/4	4 7/8	2 11/16	1.000	1	4 1/2	4 1/4	6 1/2	5 3/4
4	2	4 1/2	1/2	#8	5/8	1 3/4	1 1/4	4 7/8	2 11/16	1.000	1	5 1/4	5	7 1/4	6 1/2
5	2	5 1/2	1/2	#8	5/8	1 3/4	1 1/4	5 1/8	2 15/16	1.000	1	6 1/4	6	8 1/4	7 1/2
6	2 1/2	6 1/2	3/4	#12	3/4	2	1 1/2	5 3/4	3 3/16	1.375	1 3/8	7 5/8	7	10 3/8	9 1/4

STYLE 1 ROD END

STYLE 2 ROD END

STYLE 3 ROD END

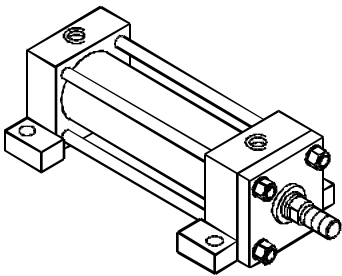
STYLE 4 ROD END



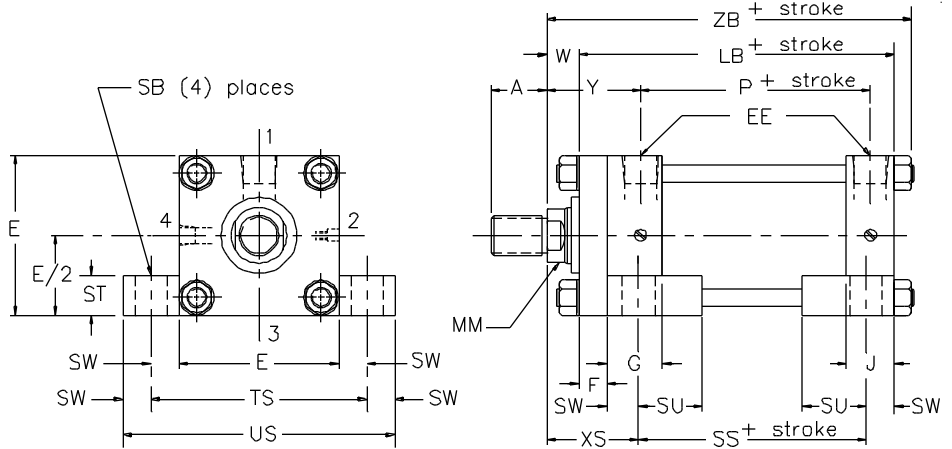
MS-2
MD
MS-4

PURAKAL SERIES 100
SIDE LUG, DOUBLE ROD, SIDE TAPPED MOUNTINGS
1 1/2" - 6" BORE

SIDE LUG MOUNTING

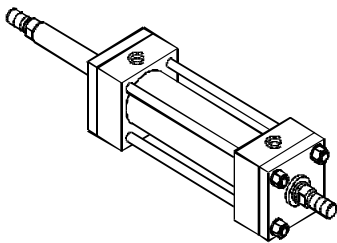


MS-2



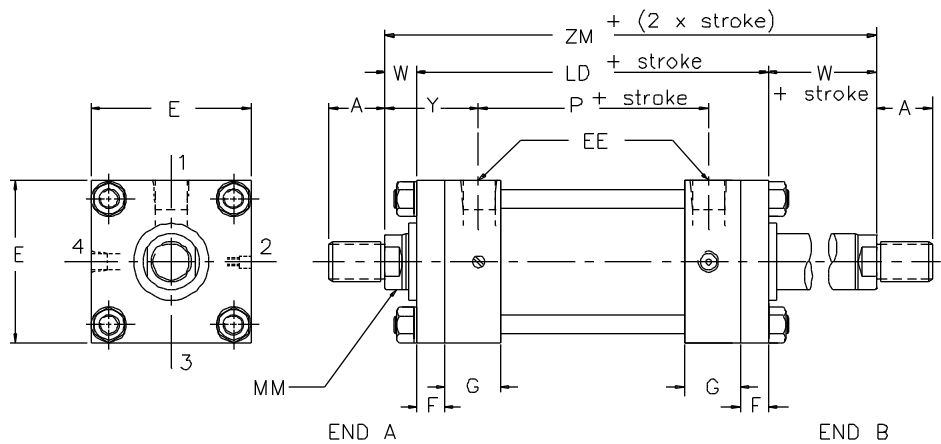
For mounting accessories see pages 24 through 31.

DOUBLE ROD MOUNTING



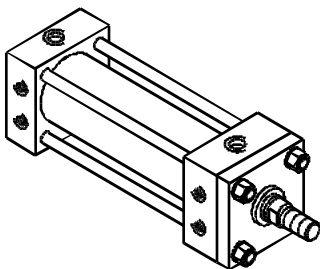
Most mounting styles available.
Consult factory for details.

MD



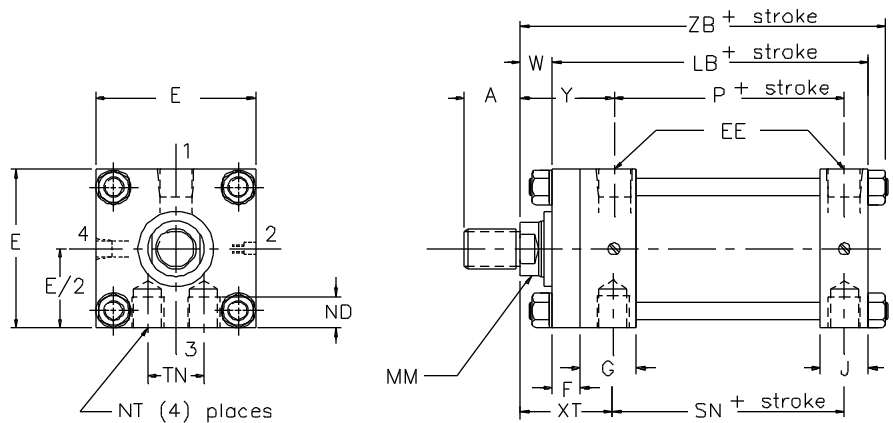
For mounting accessories see pages 24 through 31.

SIDE TAPPED MOUNTING



Tapped holes are rotated to show in this view.
Standard location is Position #3.

MS-4



For mounting accessories see pages 24 through 31.

PURAKAL SERIES 100
SIDE LUG, DOUBLE ROD AND SIDE TAPPED MOUNTINGS
1 1/2" - 6" BORE

MS-2
 MD
 MS-4

ENVELOPE AND MOUNTING DIMENSIONS AFFECTED BY ROD SIZE

CYL. BORE	ROD DIA													ADD STROKE	ADD 2 X STROKE
	MM	A	B	C	CC	D	KK	ND	V	W	XS	XT	Y	ZB	ZM
1 1/2	5/8	3/4	1.124	3/8	1/2-20	1/2	7/16-20	3/8	1/4	5/8	1 3/8	1 15/16	1 15/16	4 27/32	6 1/8
	1*	1 1/8	1.499	1/2	7/8-14	7/8	3/4-16	1/4	1/2	1	1 3/4	2 5/16	2 5/16	5 7/32	6 7/8
2	5/8	3/4	1.124	3/8	1/2-20	1/2	7/16-20	3/8	1/4	5/8	1 3/8	1 15/16	1 15/16	4 7/8	6 1/8
	1	1 1/8	1.499	1/2	7/8-14	7/8	3/4-16	3/8	1/2	1	1 3/4	2 5/16	2 5/16	5 1/4	6 7/8
	1 3/8*	1 5/8	1.999	5/8	1 1/4-12	1 1/8	1-14	5/16	5/8	1 1/4	2	2 9/16	2 9/16	5 1/2	7 3/8
2 1/2	5/8	3/4	1.124	3/8	1/2-20	1/2	7/16-20	1/2	1/4	5/8	1 3/8	1 15/16	1 15/16	5	6 1/4
	1	1 1/8	1.499	1/2	7/8-14	7/8	3/4-16	1/2	1/2	1	1 3/4	2 5/16	2 5/16	5 3/8	7
	1 3/8	1 5/8	1.999	5/8	1 1/4-12	1 1/8	1-14	1/2	5/8	1 1/4	2	2 9/16	2 9/16	5 5/8	7 1/2
3 1/4	1	1 1/8	1.499	1/2	7/8-14	7/8	3/4-16	3/4	1/4	3/4	1 7/8	2 7/16	2 3/8	5 15/16	7 1/2
	1 3/8	1 5/8	1.999	5/8	1 1/4-12	1 1/8	1-14	3/4	3/8	1	2 1/8	2 11/16	2 5/8	6 3/16	8
	1 3/4	2	2.374	3/4	1 1/2-12	1 1/2	1 1/4-12	3/4	1/2	1 1/4	2 3/8	2 15/16	2 7/8	6 7/16	8 1/2
4	1	1 1/8	1.499	1/2	7/8-14	7/8	3/4-16	3/4	1/4	3/4	1 7/8	2 7/16	2 3/8	5 15/16	7 1/2
	1 3/8	1 5/8	1.999	5/8	1 1/4-12	1 1/8	1-14	3/4	3/8	1	2 1/8	2 11/16	2 5/8	6 3/16	8
	1 3/4	2	2.374	3/4	1 1/2-12	1 1/2	1 1/4-12	3/4	1/2	1 1/4	2 3/8	2 15/16	2 7/8	6 7/16	8 1/2
5	1	1 1/8	1.499	1/2	7/8-14	7/8	3/4-16	15/16	1/4	3/4	2 1/16	2 7/16	2 3/8	6 5/16	7 3/4
	1 3/8	1 5/8	1.999	5/8	1 1/4-12	1 1/8	1-14	15/16	3/8	1	2 5/16	2 11/16	2 5/8	6 9/16	8 1/4
	1 3/4	2	2.374	3/4	1 1/2-12	1 1/2	1 1/4-12	15/16	1/2	1 1/4	2 9/16	2 15/16	2 7/8	6 13/16	8 3/4
6	1 3/8	1 5/8	1.999	5/8	1 1/4-12	1 1/8	1-14	1 1/8	1/4	7/8	2 5/16	2 13/16	2 3/4	7 1/16	8 3/4
	1 3/4	2	2.374	3/4	1 1/2-12	1 1/2	1 1/4-12	1 1/8	3/8	1 1/8	2 9/16	3 1/16	3	7 5/16	9 1/4
	2	2 1/4	2.624	7/8	1 3/4-12	1 11/16	1 1/2-12	1 1/8	3/8	1 1/4	2 11/16	3 3/16	3 1/8	7 7/16	9 1/2

* Rod end cushion is non-adjustable.

ENVELOPE AND MOUNTING DIMENSIONS

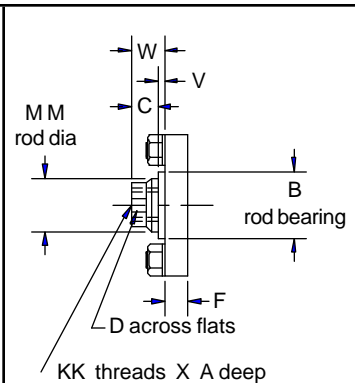
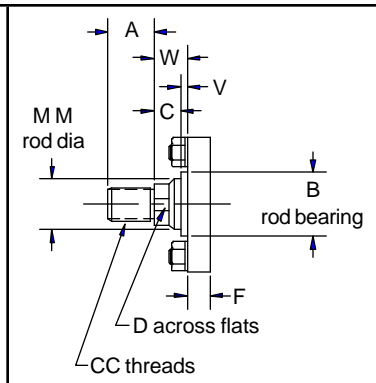
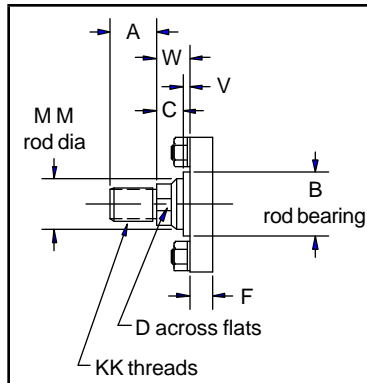
CYL. BORE	NPT		SAE				ADD STROKE	ADD STROKE	ADD STROKE		ADD STROKE	ADD STROKE							
	E	EE	EE	F	G	J	LB	LD	NT	P	SB	SN	SS	ST	SU	SW	TN	TS	US
1 1/2	2	3/8	#6	3/8	1 1/2	1	4	4 7/8	1/4-20	2 1/4	7/16	2 1/4	2 7/8	1/2	15/16	3/8	5/8	2 3/4	3 1/2
2	2 1/2	3/8	#6	3/8	1 1/2	1	4	4 7/8	5/16-18	2 1/4	7/16	2 1/4	2 7/8	1/2	15/16	3/8	7/8	3 1/4	4
2 1/2	3	3/8	#6	3/8	1 1/2	1	4 1/8	5	3/8-16	2 3/8	7/16	2 3/8	3	1/2	15/16	3/8	1 1/4	3 3/4	4 1/2
3 1/4	3 3/4	1/2	#8	5/8	1 3/4	1 1/4	4 7/8	6	1/2-13	2 11/16	9/16	2 5/8	3 1/4	3/4	1 1/4	1/2	1 1/2	4 3/4	5 3/4
4	4 1/2	1/2	#8	5/8	1 3/4	1 1/4	4 7/8	6	1/2-13	2 11/16	9/16	2 5/8	3 1/4	3/4	1 1/4	1/2	2 1/16	5 1/2	6 1/2
5	5 1/2	1/2	#8	5/8	1 3/4	1 1/4	5 1/8	6 1/4	5/8-11	2 15/16	13/16	2 7/8	3 1/8	1	1 9/16	11/16	2 11/16	6 7/8	8 1/4
6	6 1/2	3/4	#12	3/4	2	1 1/2	5 3/4	7	3/4-10	3 3/16	13/16	3 1/8	3 5/8	1	1 9/16	11/16	3 1/4	7 7/8	9 1/4

STYLE 1 ROD END

STYLE 2 ROD END

STYLE 3 ROD END

STYLE 4 ROD END



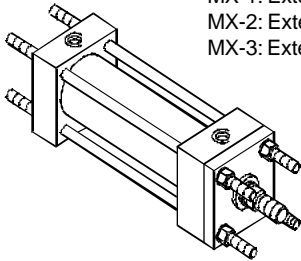
Special rod end : special thread, extensions, tube eye, plain end, etc. Specify style #4 when ordering and the desired dimensions for KK or CC, A or W, or that which is special. A sketch with the changes may be submitted to facilitate your order.

MX
MF-1
MF-2

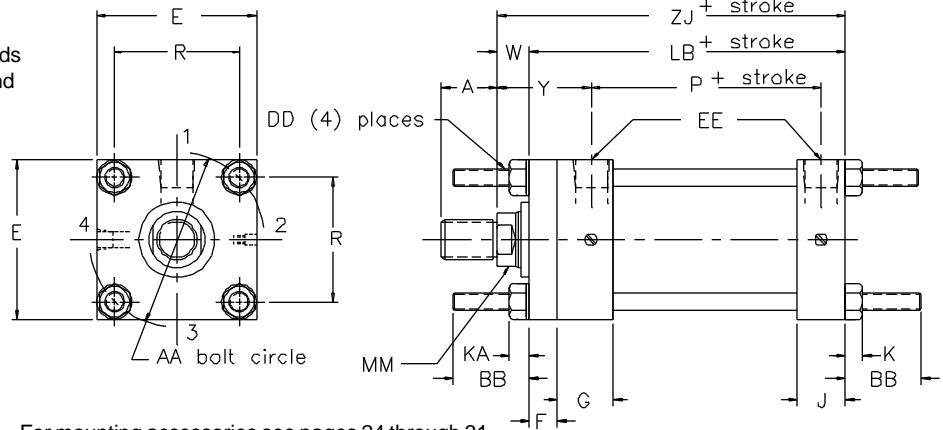
PURAKAL SERIES 100 TIE ROD AND RECTANGULAR FLANGE MOUNTINGS 1 1/2" - 6" BORE

TIE ROD EXTENDED MOUNTING

- MX-0: Not extended
- MX-1: Extended on both ends
- MX-2: Extended on blind end
- MX-3: Extended on rod end

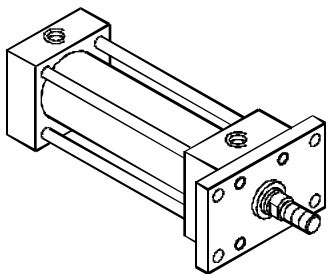


MX

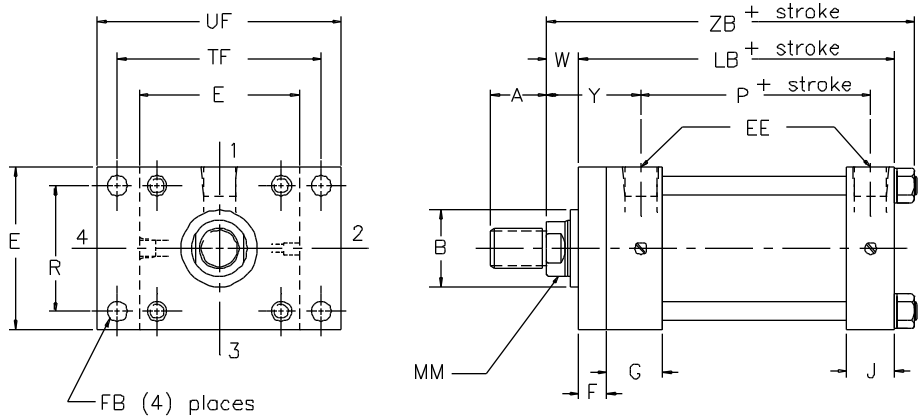


For mounting accessories see pages 24 through 31.

ROD END RECTANGULAR FLANGE MOUNTING

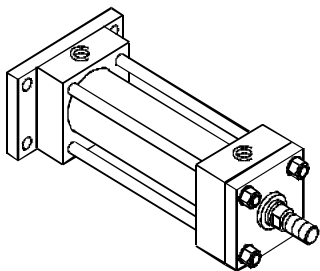


MF-1

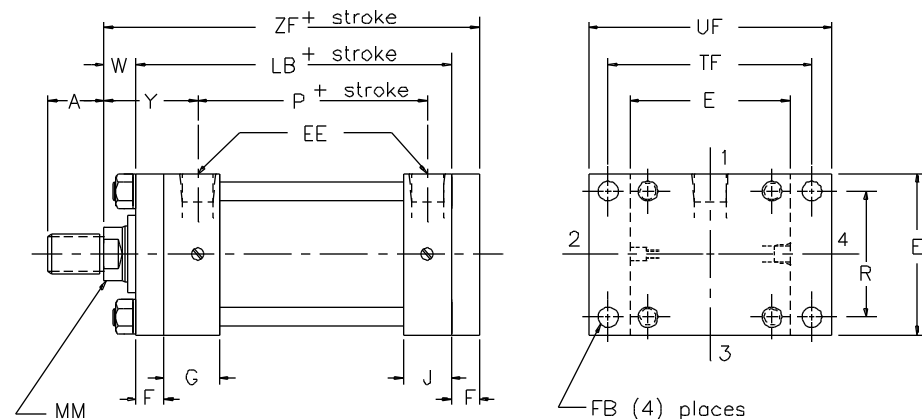


For mounting accessories see pages 24 through 31.

BLIND END RECTANGULAR FLANGE MOUNTING



MF-2



For mounting accessories see pages 24 through 31.

PURAKAL SERIES 100 TIE ROD AND RECTANGULAR FLANGE MOUNTINGS 1 1/2" - 6" BORE

MX
MF-1
MF-2

ENVELOPE AND MOUNTING DIMENSIONS AFFECTED BY ROD SIZE

CYL. BORE	ROD DIA										ADD STROKE	ADD STROKE	ADD STROKE
	MM	A	B	C	CC	D	KK	V	W	Y	ZB	ZF	ZJ
1 1/2	5/8	3/4	1.124	3/8	1/2-20	1/2	7/16-20	1/4	5/8	1 15/16	4 27/32	5	4 5/8
	1*	1 1/8	1.499	1/2	7/8-14	7/8	3/4-16	1/2	1	2 5/16	5 7/32	5 3/8	5
2	5/8	3/4	1.124	3/8	1/2-20	1/2	7/16-20	1/4	5/8	1 15/16	4 7/8	5	4 5/8
	1	1 1/8	1.499	1/2	7/8-14	7/8	3/4-16	1/2	1	2 5/16	5 1/4	5 3/8	5
	1 3/8*	1 5/8	1.999	5/8	1 1/4-12	1 1/8	1-14	5/8	1 1/4	2 9/16	5 1/2	5 5/8	5
2 1/2	5/8	3/4	1.124	3/8	1/2-20	1/2	7/16-20	1/4	5/8	1 15/16	5	5 1/8	4 3/4
	1	1 1/8	1.499	1/2	7/8-14	7/8	3/4-16	1/2	1	2 5/16	5 3/8	5 1/2	5 1/8
	1 3/8	1 5/8	1.999	5/8	1 1/4-12	1 1/8	1-14	5/8	1 1/4	2 9/16	5 5/8	5 3/4	5 3/8
3 1/4	1	1 1/8	1.499	1/2	7/8-14	7/8	3/4-16	1/4	3/4	2 3/8	5 15/16	6 1/4	5 5/8
	1 3/8	1 5/8	1.999	5/8	1 1/4-12	1 1/8	1-14	3/8	1	2 5/8	6 3/16	6 1/2	5 7/8
	1 3/4	2	2.374	3/4	1 1/2-12	1 1/2	1 1/4-12	1/2	1 1/4	2 7/8	6 7/16	6 3/4	6 1/8
4	1	1 1/8	1.499	1/2	7/8-14	7/8	3/4-16	1/4	3/4	2 3/8	5 15/16	6 1/4	5 5/8
	1 3/8	1 5/8	1.999	5/8	1 1/4-12	1 1/8	1-14	3/8	1	2 5/8	6 3/16	6 1/2	5 7/8
	1 3/4	2	2.374	3/4	1 1/2-12	1 1/2	1 1/4-12	1/2	1 1/4	2 7/8	6 7/16	6 3/4	6 1/8
5	1	1 1/8	1.499	1/2	7/8-14	7/8	3/4-16	1/4	3/4	2 3/8	6 5/16	6 1/2	5 7/8
	1 3/8	1 5/8	1.999	5/8	1 1/4-12	1 1/8	1-14	3/8	1	2 5/8	6 9/16	6 3/4	6 1/8
	1 3/4	2	2.374	3/4	1 1/2-12	1 1/2	1 1/4-12	1/2	1 1/4	2 7/8	6 13/16	7	6 3/8
6	1 3/8	1 5/8	1.999	5/8	1 1/4-12	1 1/8	1-14	1/4	7/8	2 3/4	7 1/16	7 3/8	6 5/8
	1 3/4	2	2.374	3/4	1 1/2-12	1 1/2	1 1/4-12	3/8	1 1/8	3	7 5/16	7 5/8	6 7/8
	2	2 1/4	2.624	7/8	1 3/4-12	1 11/16	1 1/2-12	3/8	1 1/4	3 1/8	7 7/16	7 3/4	7

* Rod end cushion is non-adjustable.

ENVELOPE AND MOUNTING DIMENSIONS

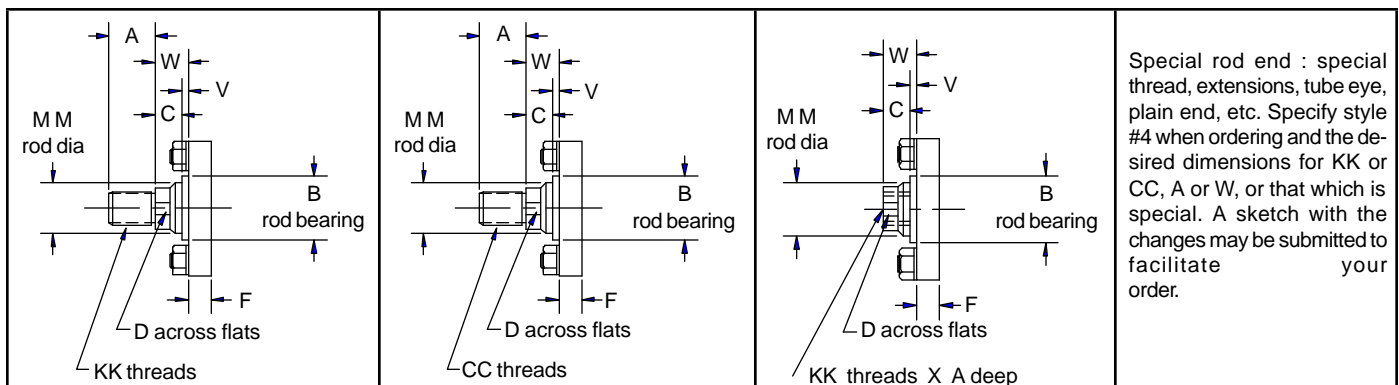
CYL. BORE					NPT	SAE							ADD STROKE	ADD STROKE			
	AA	BB	DD	E	EE	EE	F	FB	G	J	K	KA	LB	P	R	TF	UF
1 1/2	2.02	1	1/4-28	2	3/8	#6	3/8	5/16	1 1/2	1	7/32	9/32	4	2 1/4	1.43	2 3/4	3 3/8
2	2.60	1 1/8	5/16-24	2 1/2	3/8	#6	3/8	3/8	1 1/2	1	1/4	5/16	4	2 1/4	1.84	3 3/8	4 1/8
2 1/2	3.10	1 1/8	5/16-24	3	3/8	#6	3/8	3/8	1 1/2	1	1/4	5/16	4 1/8	2 3/8	2.19	3 7/8	4 5/8
3 1/4	3.90	1 3/8	3/8-24	3 3/4	1/2	#8	5/8	7/16	1 3/4	1 1/4	5/16	3/8	4 7/8	2 11/16	2.76	4 11/16	5 1/2
4	4.70	1 3/8	3/8-24	4 1/2	1/2	#8	5/8	7/16	1 3/4	1 1/4	5/16	3/8	4 7/8	2 11/16	3.32	5 7/16	6 1/4
5	5.80	1 13/16	1/2-20	5 1/2	1/2	#8	5/8	9/16	1 3/4	1 1/4	7/16	1/2	5 1/8	2 15/16	4.10	6 5/8	7 5/8
6	6.90	1 13/16	1/2-20	6 1/2	3/4	#12	3/4	9/16	2	1 1/2	7/16	1/2	5 3/4	3 3/16	4.88	7 5/8	8 5/8

STYLE 1 ROD END

STYLE 2 ROD END

STYLE 3 ROD END

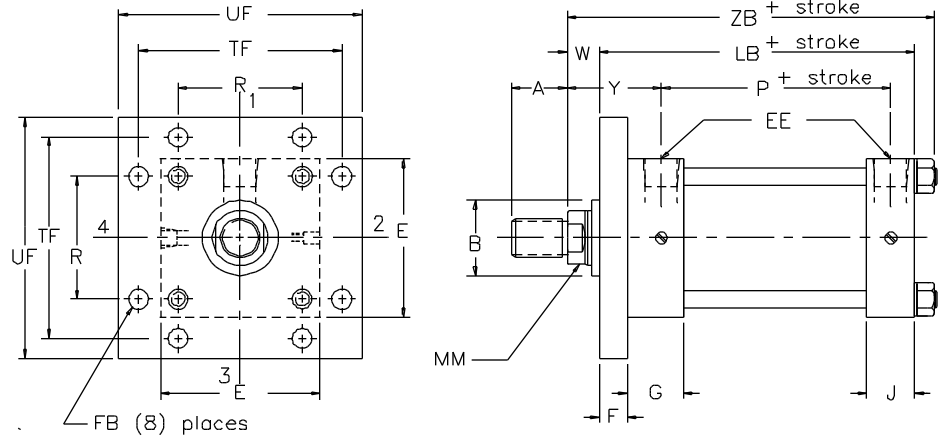
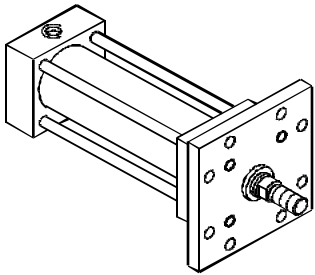
STYLE 4 ROD END



MF-5
MF-6

**PURAKAL SERIES 100
SQUARE FLANGE MOUNTINGS
1 1/2" - 6" BORE**

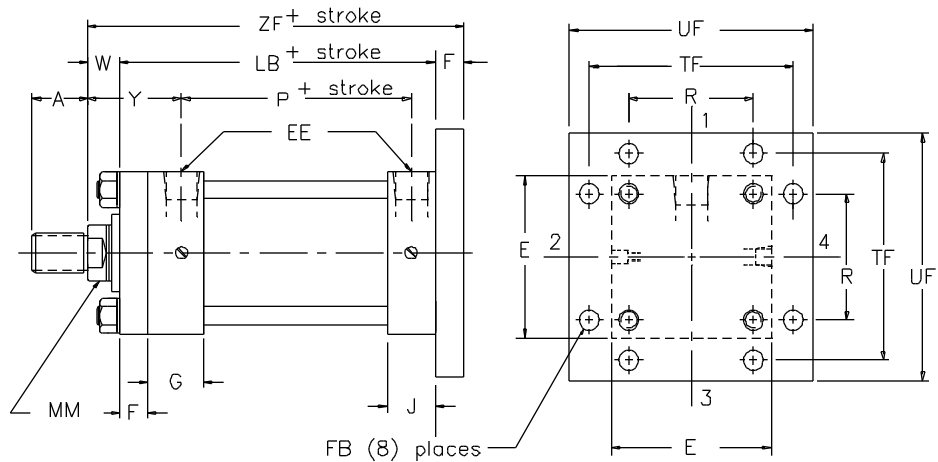
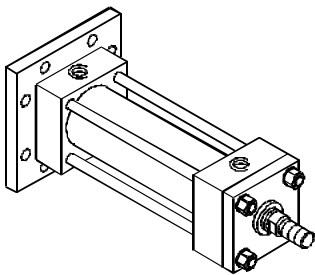
ROD END
SQUARE FLANGE MOUNTING



MF-5

For mounting accessories see pages 24 through 31.

BLIND END
SQUARE FLANGE MOUNTING



MF-6

For mounting accessories see pages 24 through 31.

PURAKAL SERIES 100 SQUARE FLANGE MOUNTINGS 1 1/2" - 6" BORE

MF-5
MF-6

ENVELOPE AND MOUNTING DIMENSIONS AFFECTED BY ROD SIZE

CYL. BORE	ROD DIA										ADD STROKE	ADD STROKE
	MM	A	B	C	CC	D	KK	V	W	Y	ZB	ZF
1 1/2	5/8	3/4	1.124	3/8	1/2-20	1/2	7/16-20	1/4	5/8	1 15/16	4 27/32	5
	1*	1 1/8	1.499	1/2	7/8-14	7/8	3/4-16	1/2	1	2 5/16	5 7/32	5 3/8
2	5/8	3/4	1.124	3/8	1/2-20	1/2	7/16-20	1/4	5/8	1 15/16	4 7/8	5
	1 1 3/8*	1 1/8 1 5/8	1.499 1.999	1/2 5/8	7/8-14 1 1/4-12	7/8 1 1/8	3/4-16 1-14	1/2 5/8	1 1 1/4	2 5/16 2 9/16	5 1/4 5 1/2	5 3/8 5 5/8
2 1/2	5/8	3/4	1.124	3/8	1/2-20	1/2	7/16-20	1/4	5/8	1 15/16	5	5 1/8
	1 1 3/8	1 1/8 1 5/8	1.499 1.999	1/2 5/8	7/8-14 1 1/4-12	7/8 1 1/8	3/4-16 1-14	1/2 5/8	1 1 1/4	2 5/16 2 9/16	5 3/8 5 5/8	5 1/2 5 3/4
3 1/4	1	1 1/8	1.499	1/2	7/8-14	7/8	3/4-16	1/4	3/4	2 3/8	5 15/16	6 1/4
	1 3/8 1 3/4	1 5/8 2	1.999 2.374	5/8 3/4	1 1/4-12 1 1/2-12	1 1/8 1 1/2	1-14 1 1/4-12	3/8 1/2	1 1 1/4	2 5/8 2 7/8	6 3/16 6 7/16	6 1/2 6 3/4
4	1	1 1/8	1.499	1/2	7/8-14	7/8	3/4-16	1/4	3/4	2 3/8	5 15/16	6 1/4
	1 3/8 1 3/4	1 5/8 2	1.999 2.374	5/8 3/4	1 1/4-12 1 1/2-12	1 1/8 1 1/2	1-14 1 1/4-12	3/8 1/2	1 1 1/4	2 5/8 2 7/8	6 3/16 6 7/16	6 1/2 6 3/4
5	1	1 1/8	1.499	1/2	7/8-14	7/8	3/4-16	1/4	3/4	2 3/8	6 5/16	6 1/2
	1 3/8 1 3/4	1 5/8 2	1.999 2.374	5/8 3/4	1 1/4-12 1 1/2-12	1 1/8 1 1/2	1-14 1 1/4-12	3/8 1/2	1 1 1/4	2 5/8 2 7/8	6 9/16 6 13/16	6 3/4 7
6	1 3/8	1 5/8	1.999	5/8	1 1/4-12	1 1/8	1-14	1/4	7/8	2 3/4	7 1/16	7 3/8
	1 3/4 2	2 2 1/4	2.374 2.624	3/4 7/8	1 1/2-12 1 3/4-12	1 1/2 1 11/16	1 1/4-12 1 1/2-12	3/8 3/8	1 1/8 1 1/4	3 3 1/8	7 5/16 7 7/16	7 5/8 7 3/4

* Rod end cushion is non-adjustable.

ENVELOPE AND MOUNTING DIMENSIONS

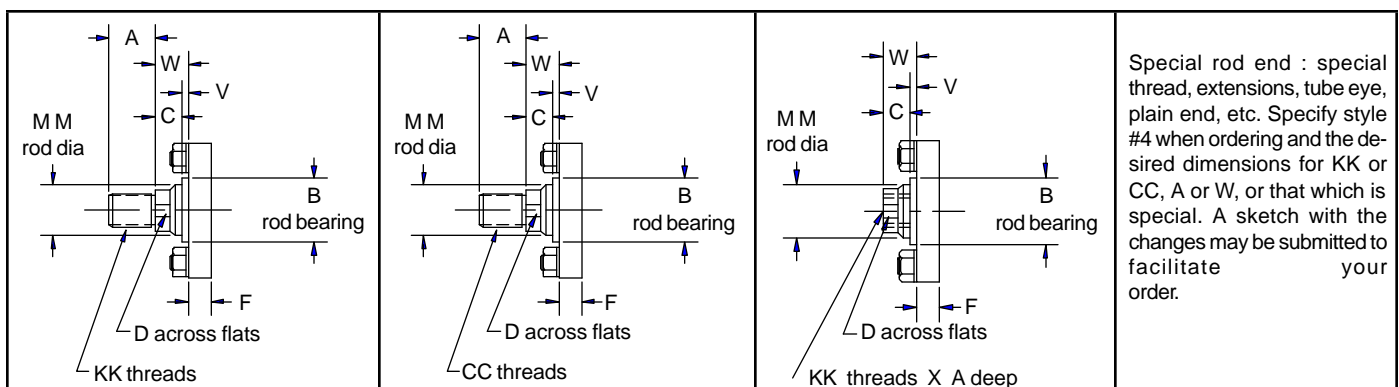
CYL. BORE		NPT	SAE					ADD STROKE	ADD STROKE			
	E	EE	EE	F	FB	G	J	LB	P	R	TF	UF
1 1/2	2	3/8	#6	3/8	5/16	1 1/2	1	4	2 1/4	1.43	2 3/4	3 3/8
2	2 1/2	3/8	#6	3/8	3/8	1 1/2	1	4	2 1/4	1.84	3 3/8	4 1/8
2 1/2	3	3/8	#6	3/8	3/8	1 1/2	1	4 1/8	2 3/8	2.19	3 7/8	4 5/8
3 1/4	3 3/4	1/2	#8	5/8	7/16	1 3/4	1 1/4	4 7/8	2 11/16	2.76	4 11/16	5 1/2
4	4 1/2	1/2	#8	5/8	7/16	1 3/4	1 1/4	4 7/8	2 11/16	3.32	5 7/16	6 1/4
5	5 1/2	1/2	#8	5/8	9/16	1 3/4	1 1/4	5 1/8	2 15/16	4.10	6 5/8	7 5/8
6	6 1/2	3/4	#12	3/4	9/16	2	1 1/2	5 3/4	3 3/16	4.88	7 5/8	8 5/8

STYLE 1 ROD END

STYLE 2 ROD END

STYLE 3 ROD END

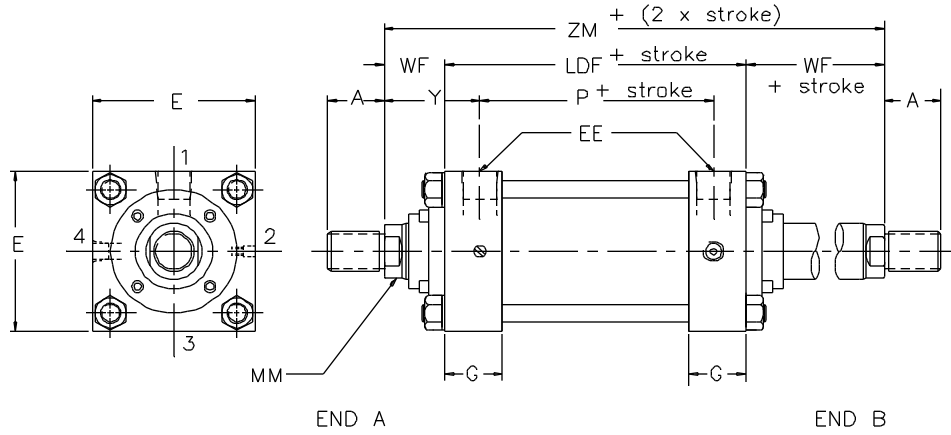
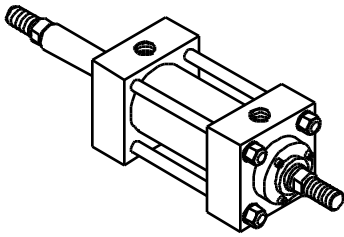
STYLE 4 ROD END



MD
MP-1

PURAKAL SERIES 100 DOUBLE ROD AND CLEVIS MOUNTINGS 8" - 12" BORE

DOUBLE ROD MOUNTING

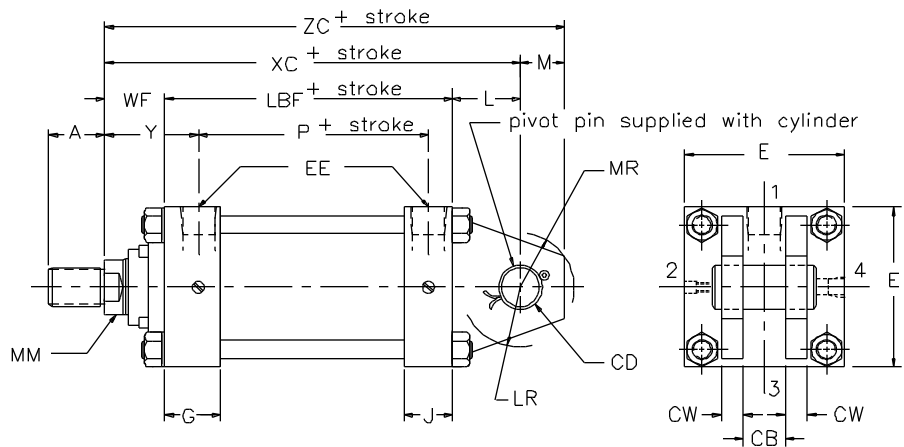
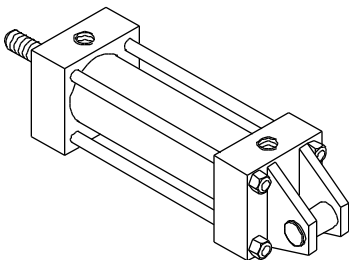


Most mounting styles available.
Consult factory for details.

MD

For mounting accessories see pages 24 through 31.

BASE CLEVIS MOUNTING



MP-1

For mounting accessories see pages 24 through 31.

PURAKAL SERIES 100
DOUBLE ROD AND CLEVIS MOUNTINGS
8" - 12" BORE

MD
MP-1

ENVELOPE AND MOUNTING DIMENSIONS AFFECTED BY ROD SIZE

CYL. BORE	ROD DIA												ADD STROKE		ADD STROKE	ADD 2 X STROKE
	MM	A	B	BF	C	CC	D	HS	KK	VA	VF	WF	XC	Y	ZC	ZM
8	1 3/8	1 5/8	1.999	2 31/32	5/8	1 1/4-12	1 1/8	1/4	1-14	7/16	9/16	1 5/8	8 1/4	2 13/16	9 1/4	8 7/8
	1 3/4	2	2.374	3 23/32	3/4	1 1/2-12	1 1/2	3/8	1 1/4-12	7/16	11/16	1 7/8	8 1/2	3 1/16	9 1/2	9 3/8
	2	2 1/4	2.624	3 31/32	7/8	1 3/4-12	1 11/16	3/8	1 1/2-12	9/16	9/16	2	8 5/8	3 3/16	9 5/8	9 5/8
10	1 3/4	2	2.374	3 23/32	3/4	1 1/2-12	1 1/2	3/8	1 1/4-12	7/16	11/16	1 7/8	10 3/8	3 1/8	11 3/4	10 3/8
	2	2 1/4	2.624	3 31/32	7/8	1 3/4-12	1 11/16	3/8	1 1/2-12	9/16	9/16	2	10 1/2	3 1/4	11 7/8	10 5/8
	2 1/2	3	3.124	4 15/32	1	2 1/4-12	2 1/16	3/8	1 7/8-12	9/16	11/16	2 1/4	10 3/4	3 1/2	12 1/8	11 1/8
12	2	2 1/4	2.624	3 31/32	7/8	1 3/4-12	1 11/16	3/8	1 1/2-12	9/16	9/16	2	11 1/8	3 1/4	12 7/8	11 1/8
	2 1/2	3	3.124	4 15/32	1	2 1/4-12	2 1/16	3/8	1 7/8-12	9/16	11/16	2 1/4	11 3/8	3 1/2	13 1/8	11 5/8
	3	3 1/2	3.749	5 15/32	1	2 3/4-12	2 5/8	3/8	2 1/4-12	9/16	11/16	2 1/4	11 3/8	3 1/2	13 1/8	11 5/8

ENVELOPE AND MOUNTING DIMENSIONS

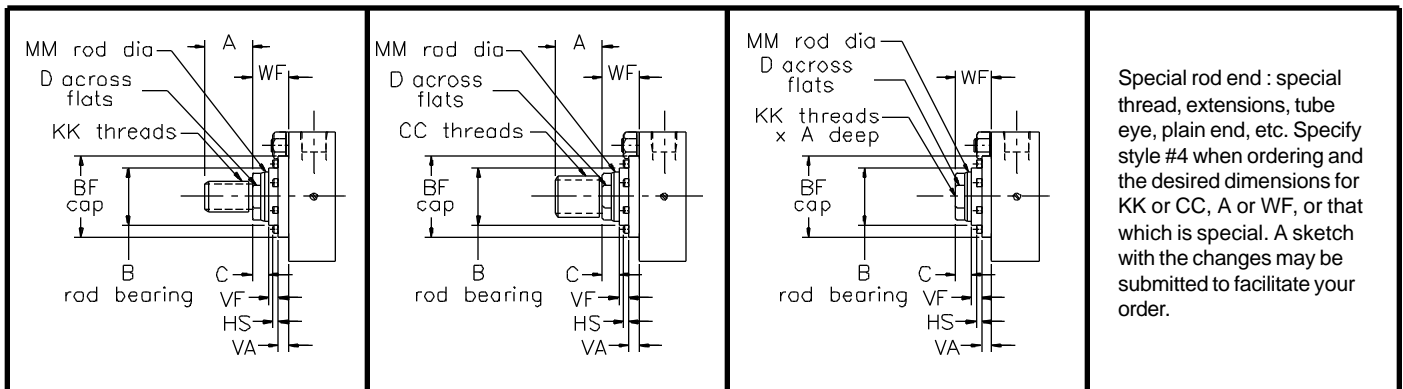
CYL. BORE					NPT	SAE					ADD STROKE	ADD STROKE				ADD STROKE
	CB	CD	CW	E	EE	EE	G	J	L	LBF	LDF	LR	M	MR	P	
8	1 1/2	1.000	3/4	8 1/2	3/4	#12	2	1 1/2	1 1/2	5 1/8	5 5/8	1 1/4	1	1 3/16	3 1/4	
10	2	1.375	1	10 5/8	1	#16	2 1/4	2	2 1/8	6 3/8	6 5/8	1 7/8	1 3/8	1 5/8	4 1/8	
12	2 1/2	1.750	1 1/4	12 3/4	1	#16	2 1/4	2	2 1/4	6 7/8	7 1/8	2	1 3/4	2 1/8	4 5/8	

STYLE 1 ROD END

STYLE 2 ROD END

STYLE 3 ROD END

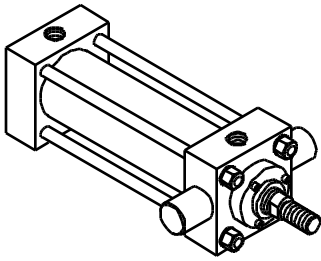
STYLE 4 ROD END



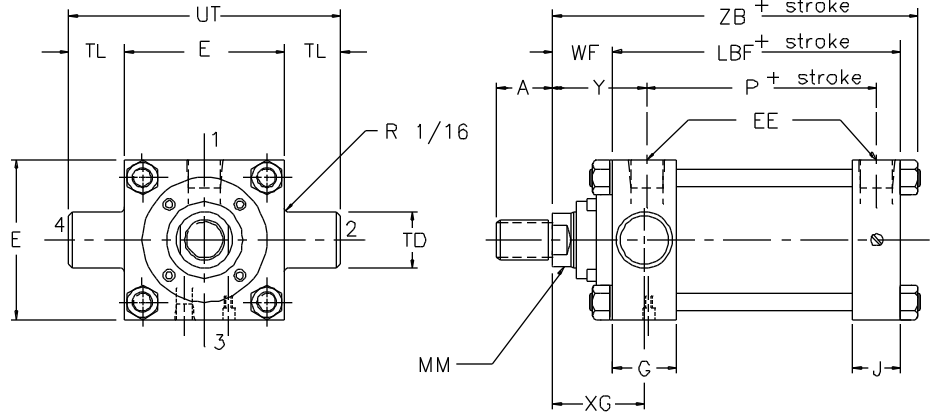
MT-1
 MT-2
 MT-4

PURAKAL SERIES 100 TRUNNION MOUNTINGS 8" - 12" BORE

HEAD TRUNNION MOUNTING

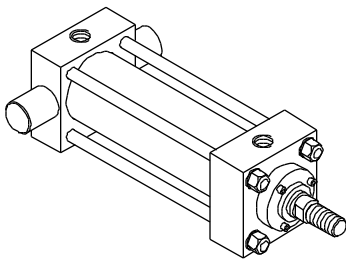


MT-1

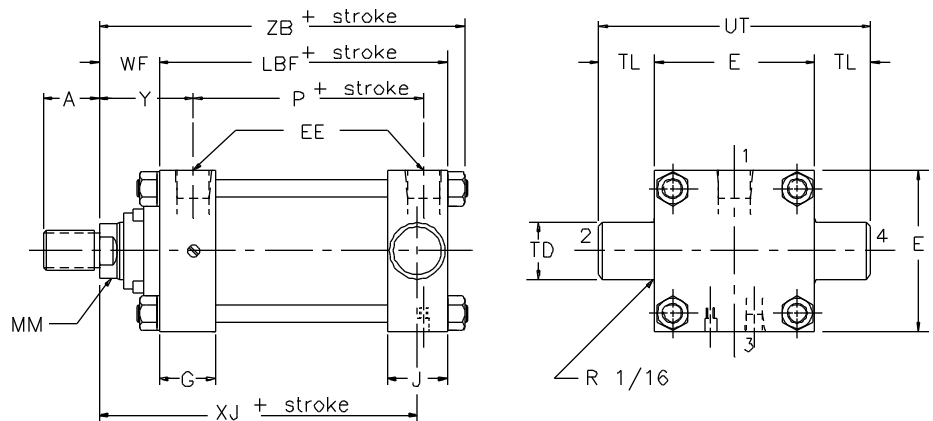


For mounting accessories see pages 24 through 31.

BASE TRUNNION MOUNTING

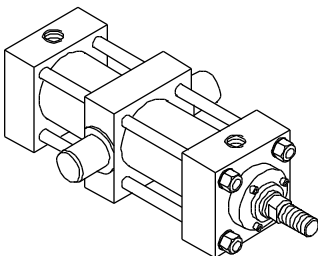


MT-2

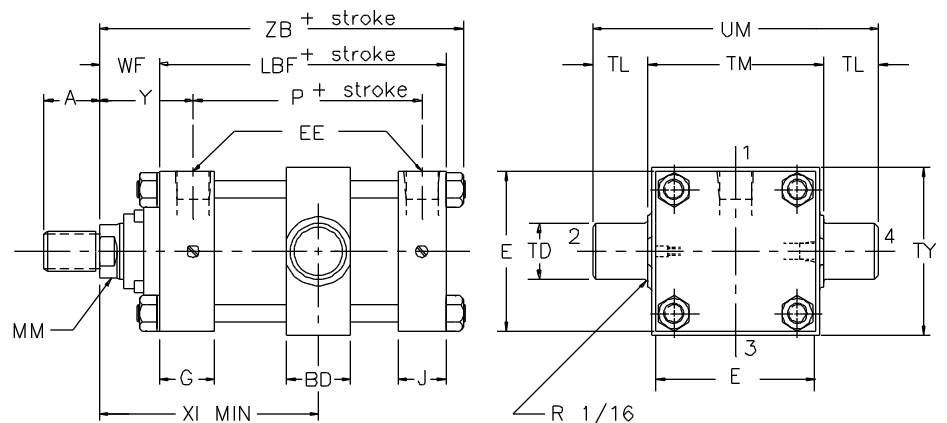


For mounting accessories see pages 24 through 31.

INTERMEDIATE TRUNNION MOUNTING



MT-4



For mounting accessories see pages 24 through 31.

**PURAKAL SERIES 100
TRUNNION MOUNTINGS
8" - 12" BORE**

MT-1
MT-2
MT-4

ENVELOPE AND MOUNTING DIMENSIONS AFFECTED BY ROD SIZE

CYL. BORE	ROD DIA														ADD STROKE		ADD STROKE
	MM	A	B	BF	C	CC	D	HS	KK	VA	VF	WF	XG	XI MIN	XJ	Y	ZB
8	1 3/8	1 5/8	1.999	2 31/32	5/8	1 1/4-12	1 1/8	1/4	1-14	7/16	9/16	1 5/8	2 5/8	4 7/8	6	2 13/16	7 5/16
	1 3/4	2	2.374	3 23/32	3/4	1 1/2-12	1 1/2	3/8	1 1/4-12	7/16	11/16	1 7/8	2 7/8	5 1/8	6 1/4	3 1/16	7 9/16
	2	2 1/4	2.624	3 31/32	7/8	1 3/4-12	1 11/16	3/8	1 1/2-12	9/16	9/16	2	3	5 1/4	6 3/8	3 3/16	7 11/16
10	1 3/4	2	2.374	3 23/32	3/4	1 1/2-12	1 1/2	3/8	1 1/4-12	7/16	11/16	1 7/8	3	5 5/8	7 1/4	3 1/8	8 15/16
	2	2 1/4	2.624	3 31/32	7/8	1 3/4-12	1 11/16	3/8	1 1/2-12	9/16	9/16	2	3 1/8	5 3/4	7 3/8	3 1/4	9 1/16
	2 1/2	3	3.124	4 15/32	1	2 1/4-12	2 1/16	3/8	1 7/8-12	9/16	11/16	2 1/4	3 3/8	6	7 5/8	3 1/2	9 5/16
12	2	2 1/4	2.624	3 31/32	7/8	1 3/4-12	1 11/16	3/8	1 1/2-12	9/16	9/16	2	3 1/8	5 3/4	7 7/8	3 1/4	9 9/16
	2 1/2	3	3.124	4 15/32	1	2 1/4-12	2 1/16	3/8	1 7/8-12	9/16	11/16	2 1/4	3 3/8	6	8 1/8	3 1/2	9 13/16
	3	3 1/2	3.749	5 15/32	1	2 3/4-12	2 5/8	3/8	2 1/4-12	9/16	11/16	2 1/4	3 3/8	6	8 1/8	3 1/2	9 13/16

ENVELOPE AND MOUNTING DIMENSIONS

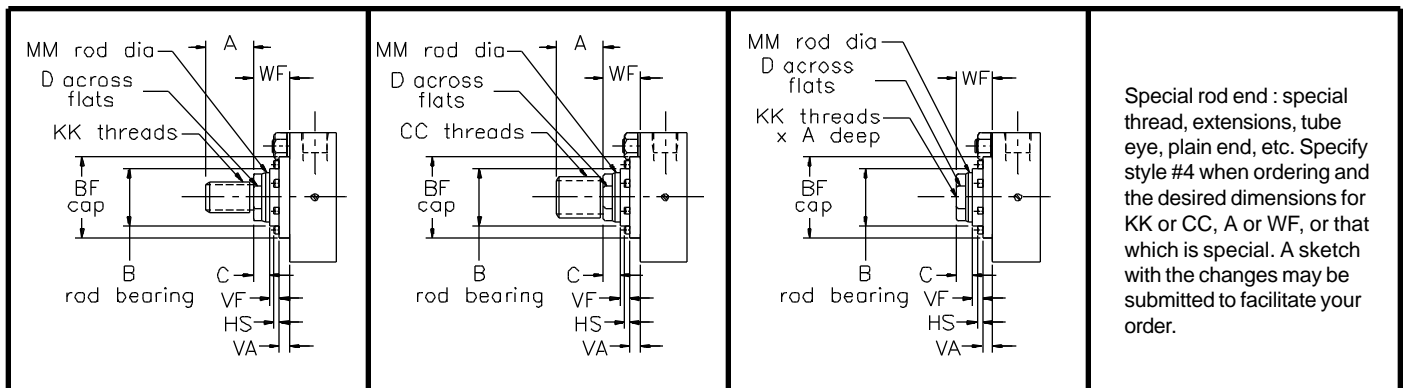
CYL. BORE			NPT	SAE			ADD STROKE	ADD STROKE						
	BD	E	EE	EE	G	J	LBF	P	TD	TL	TM	TY	UM	UT
8	2 1/2	8 1/2	3/4	#12	2	1 1/2	5 1/8	3 1/4	1.375	1 3/8	9 3/4	9 1/2	12 1/2	11 1/4
10	3	10 5/8	1	#16	2 1/4	2	6 3/8	4 1/8	1.750	1 3/4	12	11 3/4	15 1/2	14 1/8
12	3	12 3/4	1	#16	2 1/4	2	6 7/8	4 5/8	1.750	1 3/4	14	13 3/4	17 1/2	16 1/4

STYLE 1 ROD END

STYLE 2 ROD END

STYLE 3 ROD END

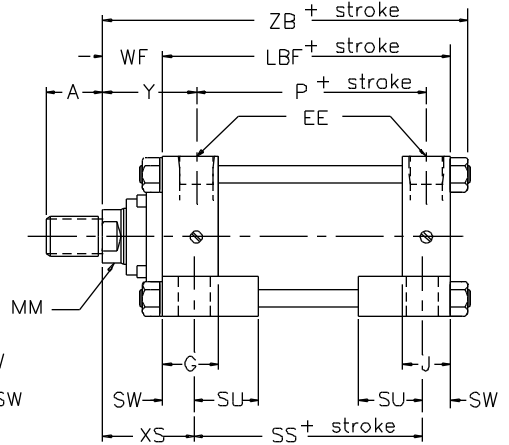
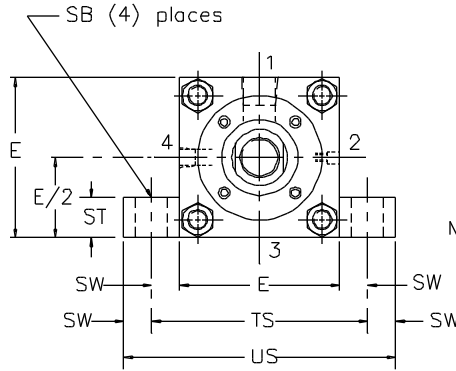
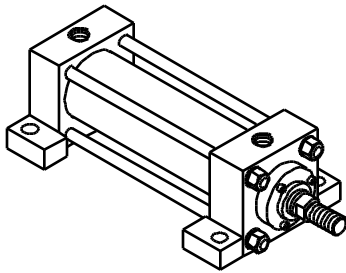
STYLE 4 ROD END



MS-2
MS-4

PURAKAL SERIES 100
SIDE LUG AND SIDE TAPPED MOUNTINGS
8" - 12" BORE

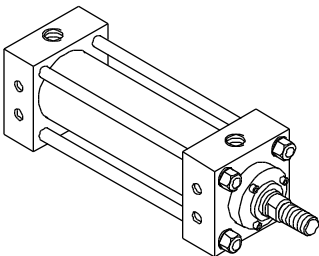
SIDE LUG MOUNTING



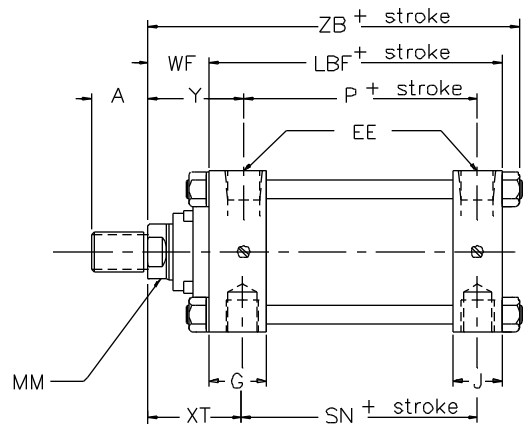
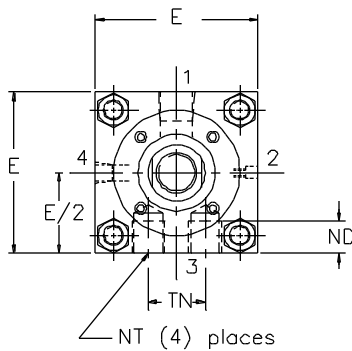
MS-2

For mounting accessories see pages 24 through 31.

SIDE TAPPED MOUNTING



Tapped holes are rotated to show in this view.
Standard location is Position #3.



MS-4

For mounting accessories see pages 24 through 31.

PURAKAL SERIES 100
SIDE LUG AND SIDE TAPPED MOUNTINGS
8" - 12" BORE

MS-2
MS-4

ENVELOPE AND MOUNTING DIMENSIONS AFFECTED BY ROD SIZE

CYL. BORE	ROD DIA															ADD STROKE
	MM	A	B	BF	C	CC	D	HS	KK	VA	VF	WF	XS	XT	Y	ZB
8	1 3/8	1 5/8	1.999	2 31/32	5/8	1 1/4-12	1 1/8	1/4	1-14	7/16	9/16	1 5/8	2 5/16	2 13/16	2 13/16	7 5/16
	1 3/4	2	2.374	3 23/32	3/4	1 1/2-12	1 1/2	3/8	1 1/4-12	7/16	11/16	1 7/8	2 9/16	3 1/16	3 1/16	7 9/16
	2	2 1/4	2.624	3 31/32	7/8	1 3/4-12	1 11/16	3/8	1 1/2-12	9/16	9/16	2	2 11/16	3 3/16	3 3/16	7 11/16
10	1 3/4	2	2.374	3 23/32	3/4	1 1/2-12	1 1/2	3/8	1 1/4-12	7/16	11/16	1 7/8	2 3/4	3 1/8	3 1/8	8 15/16
	2	2 1/4	2.624	3 31/32	7/8	1 3/4-12	1 11/16	3/8	1 1/2-12	9/16	9/16	2	2 7/8	3 1/4	3 1/4	9 1/16
	2 1/2	3	3.124	4 15/32	1	2 1/4-12	2 1/16	3/8	1 7/8-12	9/16	11/16	2 1/4	3 1/8	3 1/2	3 1/2	9 5/16
12	2	2 1/4	2.624	3 31/32	7/8	1 3/4-12	1 11/16	3/8	1 1/2-12	9/16	9/16	2	2 7/8	3 1/4	3 1/4	9 9/16
	2 1/2	3	3.124	4 15/32	1	2 1/4-12	2 1/16	3/8	1 7/8-12	9/16	11/16	2 1/4	3 1/8	3 1/2	3 1/2	9 13/16
	3	3 1/2	3.749	5 15/32	1	2 3/4-12	2 5/8	3/8	2 1/4-12	9/16	11/16	2 1/4	3 1/8	3 1/2	3 1/2	9 13/16

ENVELOPE AND MOUNTING DIMENSIONS

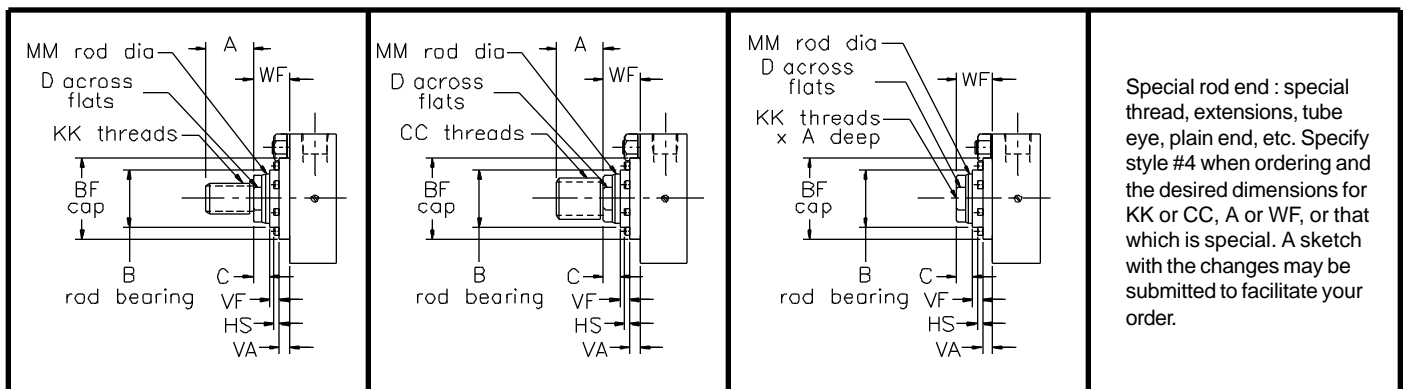
CYL. BORE	NPT		SAE		ADD STROKE			ADD STROKE			ADD STROKE		ADD STROKE					
	E	EE	EE	G	J	LBF	ND	NT	P	SB	SN	SS	ST	SU	SW	TN	TS	US
8	8 1/2	3/4	#12	2	1 1/2	5 1/8	1 1/8	3/4-10	3 1/4	13/16	3 1/4	3 3/4	1	1 9/16	11/16	4 1/2	9 7/8	11 1/4
10	10 5/8	1	#16	2 1/4	2	6 3/8	1 1/2	1-8	4 1/8	1 1/16	4 1/8	4 5/8	1 1/4	2	7/8	5 1/2	12 3/8	14 1/8
12	12 3/4	1	#16	2 1/4	2	6 7/8	1 1/2	1-8	4 5/8	1 1/16	4 5/8	5 1/8	1 1/4	2	7/8	7 1/4	14 1/2	16 1/4

STYLE 1 ROD END

STYLE 2 ROD END

STYLE 3 ROD END

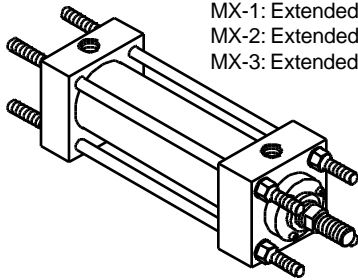
STYLE 4 ROD END



MX
ME-3
ME-4

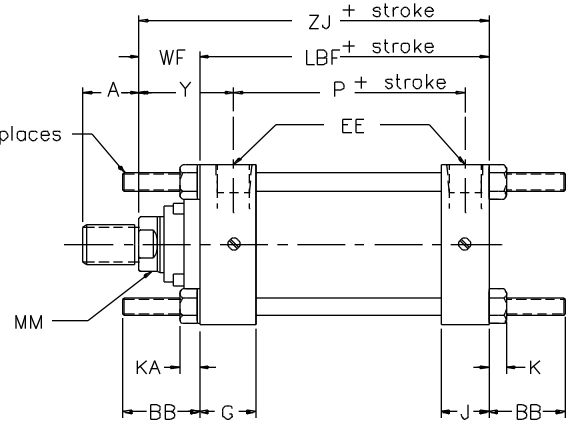
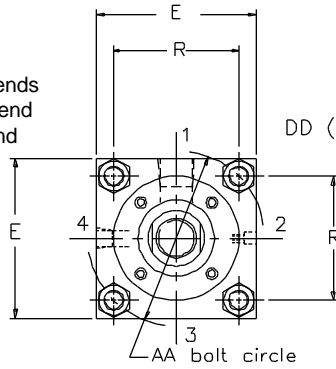
PURAKAL SERIES 100 TIE ROD AND SQUARE HEAD MOUNTINGS 8" - 12" BORE

TIE ROD EXTENDED MOUNTING



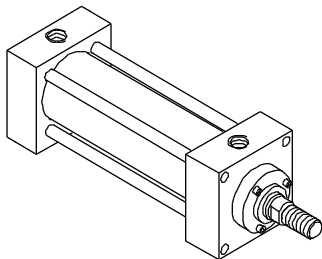
MX-0: Not extended
MX-1: Extended on both ends
MX-2: Extended on blind end
MX-3: Extended on rod end

MX

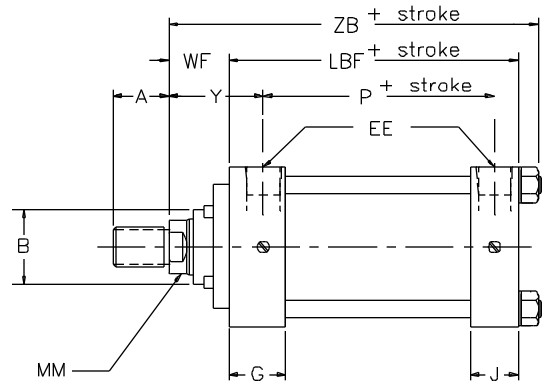
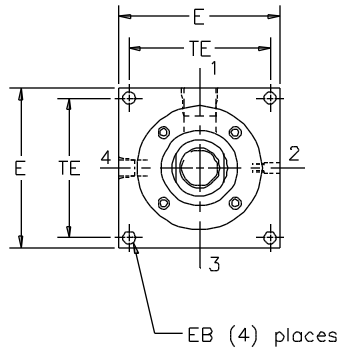


For mounting accessories see pages 24 through 31.

ROD HEAD SQUARE MOUNTING

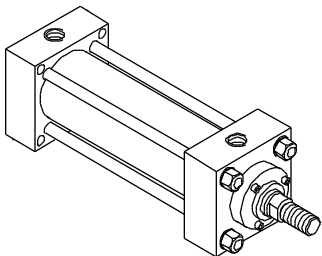


ME-3

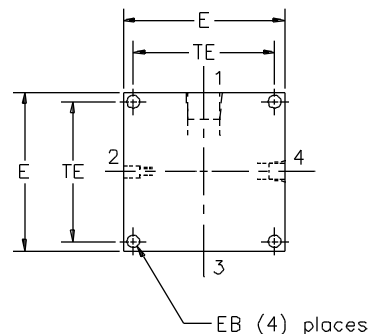
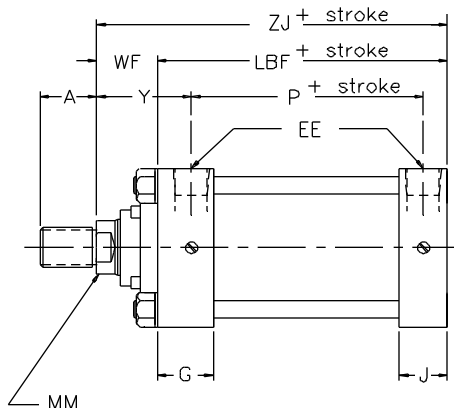


For mounting accessories see pages 24 through 31.

BLIND HEAD SQUARE MOUNTING



ME-4



For mounting accessories see pages 24 through 31.

PURAKAL SERIES 100
TIE ROD AND SQUARE HEAD MOUNTINGS
8" - 12" BORE

MX-3
 ME-3
 ME-4

ENVELOPE AND MOUNTING DIMENSIONS AFFECTED BY ROD SIZE

CYL. BORE	ROD DIA													ADD STROKE	ADD STROKE
	MM	A	B	BF	C	CC	D	HS	KK	VA	VF	WF	Y	ZB	ZJ
8	1 3/8	1 5/8	1.999	2 31/32	5/8	1 1/4-12	1 1/8	1/4	1-14	7/16	9/16	1 5/8	2 13/16	7 5/16	6 3/4
	1 3/4	2	2.374	3 23/32	3/4	1 1/2-12	1 1/2	3/8	1 1/4-12	7/16	11/16	1 7/8	3 1/16	7 9/16	7
	2	2 1/4	2.624	3 31/32	7/8	1 3/4-12	1 11/16	3/8	1 1/2-12	9/16	9/16	2	3 3/16	7 11/16	7 1/8
10	1 3/4	2	2.374	3 23/32	3/4	1 1/2-12	1 1/2	3/8	1 1/4-12	7/16	11/16	1 7/8	3 1/8	8 15/16	8 1/4
	2	2 1/4	2.624	3 31/32	7/8	1 3/4-12	1 11/16	3/8	1 1/2-12	9/16	9/16	2	3 1/4	9 1/16	8 3/8
	2 1/2	3	3.124	4 15/32	1	2 1/4-12	2 1/16	3/8	1 7/8-12	9/16	11/16	2 1/4	3 1/2	9 5/16	8 5/8
12	2	2 1/4	2.624	3 31/32	7/8	1 3/4-12	1 11/16	3/8	1 1/2-12	9/16	9/16	2	3 1/4	9 9/16	8 7/8
	2 1/2	3	3.124	4 15/32	1	2 1/4-12	2 1/16	3/8	1 7/8-12	9/16	11/16	2 1/4	3 1/2	9 13/16	9 1/8
	3	3 1/2	3.749	5 15/32	1	2 3/4-12	2 5/8	3/8	2 1/4-12	9/16	11/16	2 1/4	3 1/2	9 13/16	9 1/8

ENVELOPE AND MOUNTING DIMENSIONS

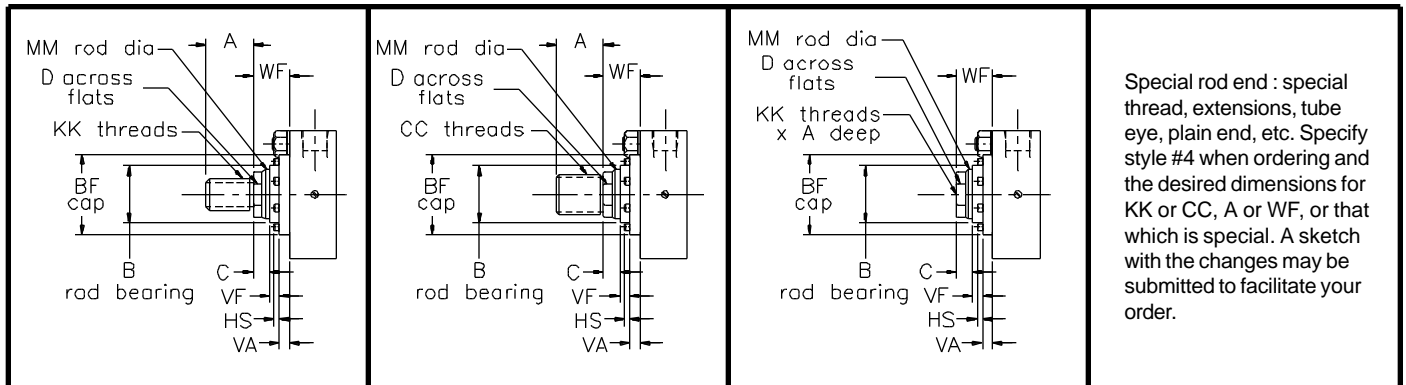
CYL. BORE						NPT	SAE					ADD STROKE	ADD STROKE		
	AA	BB	DD	E	EB	EE	EE	G	J	K	KA	LBF	P	R	TE
8	9.10	2 5/16	5/8-18	8 1/2	11/16	3/4	#12	2	1 1/2	9/16	5/8	5 1/8	3 1/4	6.44	7.57
10	11.20	2 11/16	3/4-16	10 5/8	13/16	1	#16	2 1/4	2	5/8	11/16	6 3/8	4 1/8	7.92	9.40
12	13.30	2 11/16	3/4-16	12 3/4	13/16	1	#16	2 1/4	2	5/8	11/16	6 7/8	4 5/8	9.40	11.10

STYLE 1 ROD END

STYLE 2 ROD END

STYLE 3 ROD END

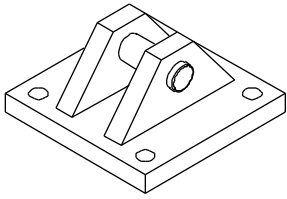
STYLE 4 ROD END



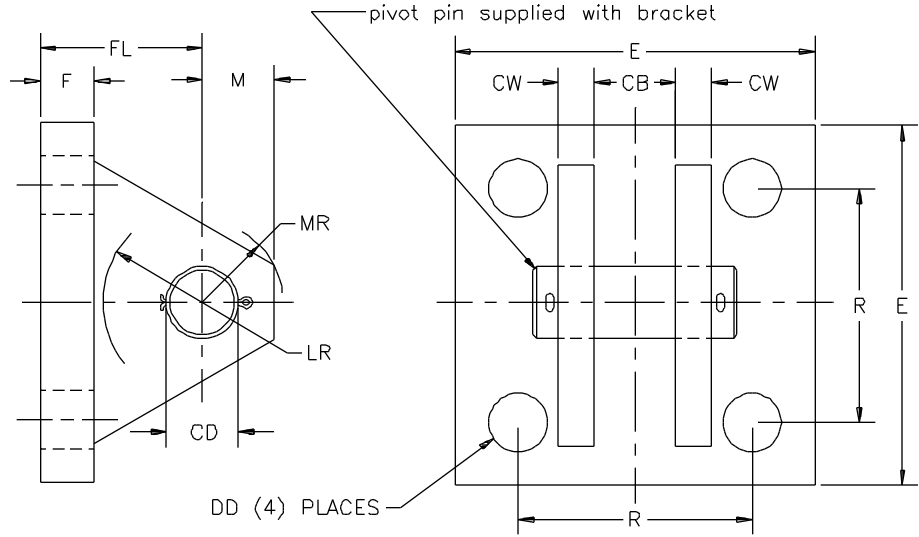
PCB
PME
PSE

PURAKAL SERIES 100 MOUNTING ACCESSORIES

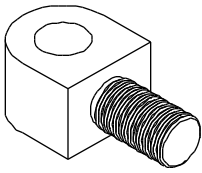
CLEVIS BRACKET



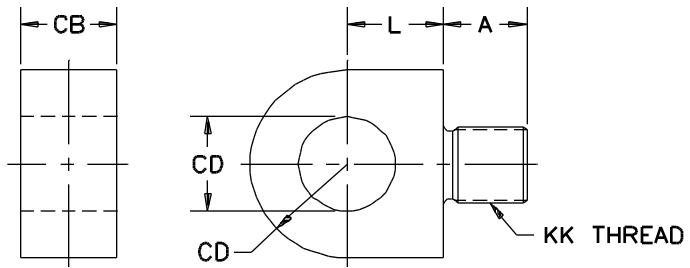
PCB



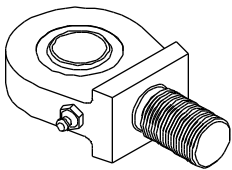
MALE ROD EYE



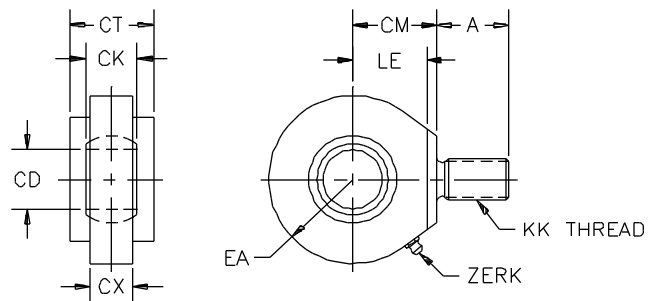
PME



SELF ALIGNING ROD EYE



PSE



PURAKAL SERIES 100 MOUNTING ACCESSORIES

PCB
PME
PSE

CLEVIS BRACKET

	PART NUMBER											
	PCB-05	PCB-07	PCB-10	PCB-13	PCB-17	PCB-20	PCB-25	PCB-30	PCB-30-35	PCB-35	PCB-40	PCB-40-50
CB	3/4	1 1/4	1 1/2	2	2 1/2	2 1/2	3	3	3 1/2	4	4 1/2	5
CD	1/2	3/4	1	1 3/8	1 3/4	2	2 1/2	3	3	3 1/2	4	4
CW	1/2	5/8	3/4	1	1 1/4	1 1/2	1 1/2	1 1/2	1 1/2	2	2	2
DD	13/32	17/32	21/32	21/32	29/32	1 1/16	1 3/16	1 5/16	1 5/16	1 13/16	2 1/16	2 1/16
E	3 1/2	5	6 1/2	7 1/2	9 1/2	12 3/4	12 3/4	12 3/4	12 3/4	15 1/2	17 1/2	17 1/2
F	1/2	5/8	3/4	7/8	7/8	1	1	1	1	1 11/16	1 15/16	1 15/16
FL	1 1/2	1 7/8	2 1/4	3	3 5/8	4 1/4	4 1/2	6	6	6 11/16	7 11/16	7 11/16
LR	3/4	1 3/16	1 1/2	2	2 3/4	3 3/16	3 1/2	4 1/4	4 1/4	5	5 3/4	5 3/4
M	1/2	3/4	1	1 3/8	1 3/4	2	2 1/2	3	3	3 1/2	4	4
MR	5/8	1 1/16	1 1/4	1 3/4	2 7/32	2 3/4	3 1/8	3 5/8	3 5/8	4 1/8	4 7/8	4 7/8
R	2.55	3.82	4.95	5.73	7.50	9.40	9.40	9.40	9.40	12.00	13.75	13.75

MALE ROD EYE

	PART NUMBER															
	PME-05	PME-05-05	PME-07	PME-10-08	PME-10	PME-13	PME-17	PME-20	PME-20-18	PME-25	PME-30	PME-30-27	PME-35	PME-35-35	PME-40	PME-40-45
A	3/4	3/4	1 1/8	1 1/8	1 5/8	2	2 1/4	2 1/4	3	3 1/2	3 1/2	3 1/2	4	5	5 1/2	5 1/2
CB	3/4	3/4	1 1/4	1 1/2	1 1/2	2	2 1/2	2 1/2	2 1/2	3	3	3 1/2	4	4	4 1/2	5
CD	1/2	1/2	3/4	1	1	1 3/8	1 3/4	2	2	2 1/2	3	3	3 1/2	3 1/2	4	4
L	5/8	5/8	7/8	7/8	1 1/8	1 5/8	2	2	2 1/4	2 3/4	4 1/4	4 1/4	5	5	5 3/4	5 3/4
KK	7/16-20	1/2-20	3/4-16	7/8-14	1-14	1 1/4-12	1 1/2-12	1 3/4-12	1 7/8-12	2 1/4-12	2 1/2-12	2 3/4-12	3 1/4-12	3 1/2-12	4-12	4 1/2-12

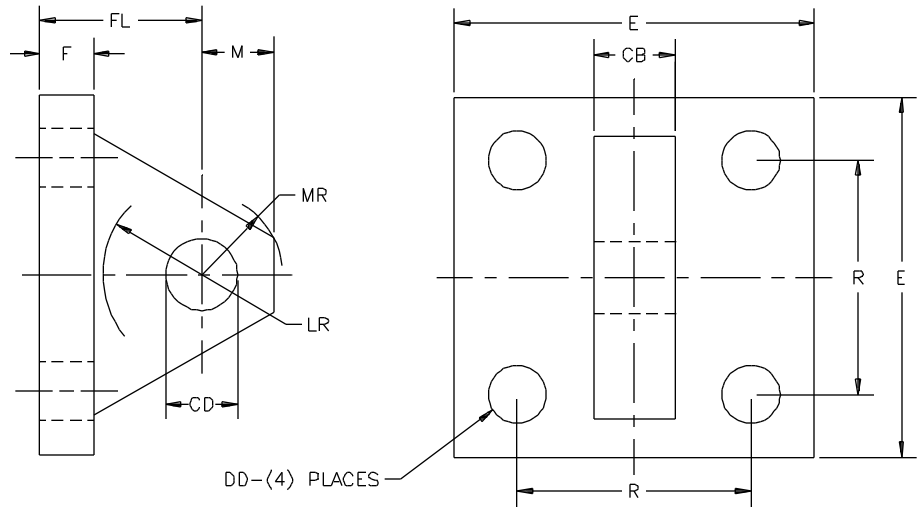
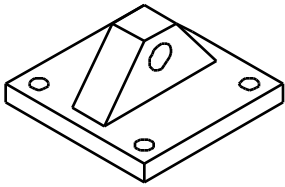
SELF ALIGNING ROD EYE

	PART NUMBER					
	PSE-05	PSE-07	PSE-10	PSE-13	PSE-17	PSE-20
A	3/4	1 1/8	1 5/8	2	2 1/4	3
CD	1/2	3/4	1	1 3/8	1 3/4	2
CK	7/16	21/32	7/8	1 3/16	1 17/32	1 3/4
CM	7/8	1 1/4	1 7/8	2 1/8	2 1/2	2 3/4
CT	1/2	7/8	1 1/8	1 1/2	1 3/4	2
CX	3/8	9/16	3/4	1 1/32	1 5/16	1 1/2
EA	7/8	1 1/4	1 3/8	1 13/16	2 3/16	2 1/2
LE	3/4	1 1/16	1 7/16	1 7/8	2 1/4	2 1/2
KK	7/16-20	3/4-16	1-14	1 1/4-12	1 1/2-12	1 7/8-12

PEB
PC
PE

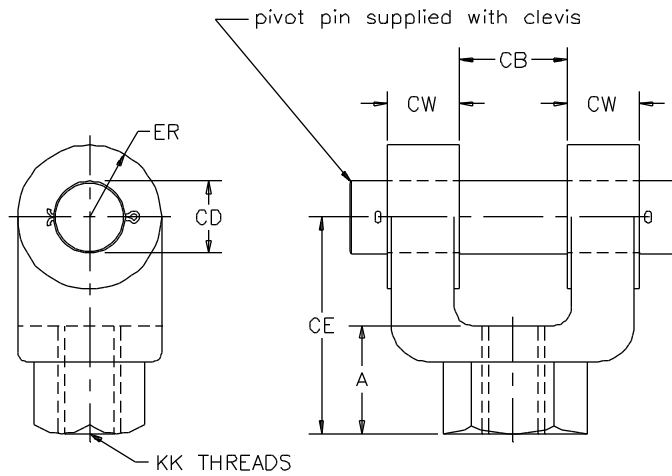
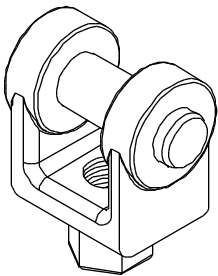
PURAKAL SERIES 100 MOUNTING ACCESSORIES

EYE BRACKET



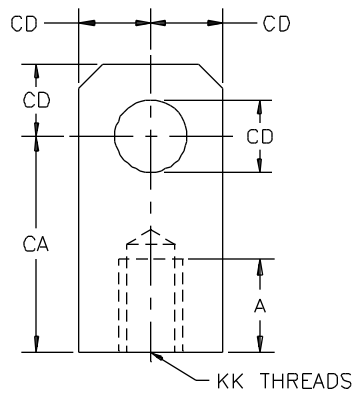
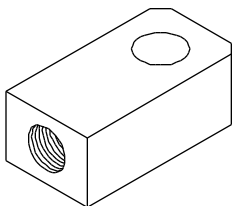
PEB

FEMALE ROD CLEVIS



PC

FEMALE ROD EYE



PE

**PURAKAL SERIES 100
MOUNTING ACCESSORIES**

PEB
PC
PE

EYE BRACKET

	PART NUMBER									
	PEB-05	PEB-07	PEB-10	PEB-13	PEB-17	PEB-20	PEB-25	PEB-30	PEB-35	PEB-40
CB	3/4	1 1/4	1 1/2	2	2 1/2	2 1/2	3	3	4	4 1/2
CD	1/2	3/4	1	1 3/8	1 3/4	2	2 1/2	3	3 1/2	4
DD	13/32	17/32	21/32	21/32	29/32	1 1/16	1 3/16	1 5/16	1 13/16	2 1/16
E	2 1/2	3 1/2	4 1/2	5	6 1/2	7 1/2	8 1/2	9 1/2	12 5/8	14 7/8
F	3/8	5/8	3/4	7/8	7/8	1	1	1	1 11/16	1 15/16
FL	1 1/8	1 7/8	2 1/4	3	3 1/8	3 1/2	4	4 1/4	5 11/16	6 7/16
LR	3/4	1 1/4	1 1/2	2 1/8	2 1/4	2 1/2	3	3 1/4	4	4 1/2
M	1/2	3/4	1	1 3/8	1 3/4	2	2 1/2	2 3/4	3 1/2	4
MR	9/16	7/8	1 1/4	1 5/8	2 1/8	2 7/16	3	3 1/4	4 1/8	5 1/4
R	1.63	2.55	3.25	3.82	4.95	5.73	6.58	7.50	9.62	11.45

FEMALE ROD CLEVIS

	PART NUMBER														
	PC -05	PC -05-05	PC -07	PC -10-08	PC -10	PC -13	PC -17	PC -20	PC -20-18	PC -25	PC -30	PC -30-27	PC -35	PC -40-35	PC -40
A	3/4	3/4	1 1/8	1 5/8	1 5/8	2	2 1/4	3	3	3 1/2	3 1/2	3 1/2	4 1/2	5	5 1/2
CB	3/4	3/4	1 1/4	1 1/2	1 1/2	2	2 1/2	2 1/2	2 1/2	3	3	3	4	4 1/2	4 1/2
CD	1/2	1/2	3/4	1	1	1 3/8	1 3/4	2	2	2 1/2	3	3	3 1/2	4	4
CE	1 1/2	1 1/2	2 3/8	3 1/8	3 1/8	4 1/8	4 1/2	5 1/2	5 1/2	6 1/2	6 3/4	6 3/4	8 1/2	9 13/16	10
CW	1/2	1/2	5/8	3/4	3/4	1	1 1/4	1 1/4	1 1/4	1 1/2	1 1/2	1 1/2	2	2 1/4	2 1/4
ER	1/2	1/2	3/4	1	1	1 3/8	1 3/4	2	2	2 1/2	2 3/4	2 3/4	3 1/2	4	4
KK	7/16-20	1/2-20	3/4-16	7/8-14	1-14	1 1/4-12	1 1/2-12	1 3/4-12	1 7/8-12	2 1/4-12	2 1/2-12	2 3/4-12	3 1/4-12	3 1/2-12	4-12

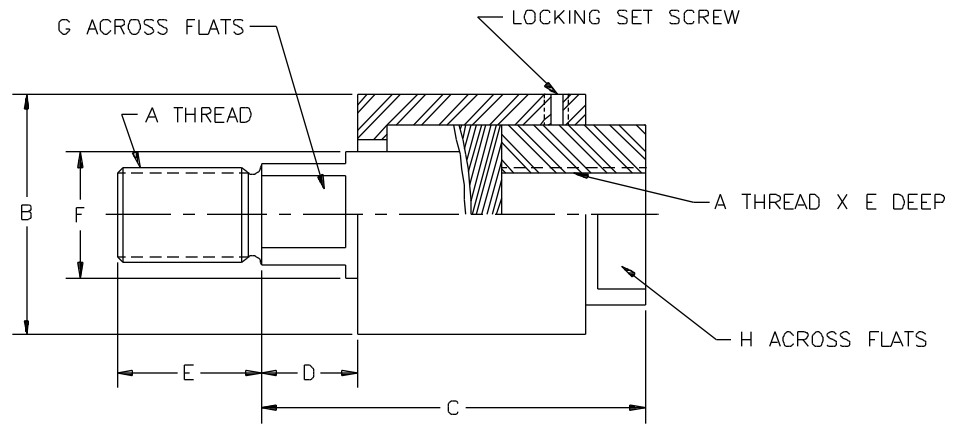
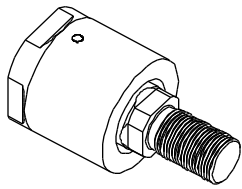
FEMALE ROD EYE

	PART NUMBER															
	PE -05	PE -05-05	PE -07	PE -10-08	PE -10	PE -13	PE -17	PE -20	PE -20-18	PE -25	PE -30	PE -30-27	PE -35	PE -35-35	PE -40	PE -40-45
A	3/4	3/4	1 1/8	1 1/8	1 5/8	2	2 1/4	2 1/4	3	3 1/2	3 1/2	3 5/8	4 1/2	5	5 1/2	5 1/2
CA	1 1/2	1 1/2	2 1/16	2 3/8	2 13/16	3 7/16	4	4 3/8	5	5 13/16	6 1/8	6 1/2	7 5/8	7 5/8	9 1/8	9 1/8
CB	3/4	3/4	1 1/4	1 1/2	1 1/2	2	2 1/2	2 1/2	2 1/2	3	3	3 1/2	4	4	4 1/2	5
CD	1/2	1/2	3/4	1	1	1 3/8	1 3/4	2	2	2 1/2	3	3	3 1/2	3 1/2	4	4
KK	7/16-20	1/2-20	3/4-16	7/8-14	1-14	1 1/4-12	1 1/2-12	1 3/4-12	1 7/8-12	2 1/4-12	2 1/2-12	2 3/4-12	3 1/4-12	3 1/2-12	4-12	4 1/2-12

PAC
PP

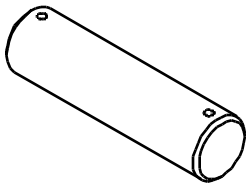
PURAKAL SERIES 100 MOUNTING ACCESSORIES

ALIGNMENT COUPLER

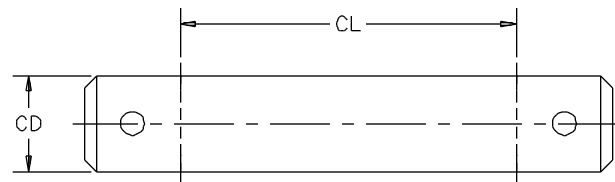


PAC

PIVOT PIN



PP



**PURAKAL SERIES 100
MOUNTING ACCESSORIES**

PAC
PP

ALIGNMENT COUPLER

	PART NUMBER									
	PAC-04	PAC-05	PAC-07	PAC-08	PAC-10	PAC-12	PAC-15	PAC-17	PAC-18	PAC-20
A	7/16-20	1/2-20	3/4-16	7/8-14	1-14	1 1/4-12	1 1/2-12	1 3/4-12	1 7/8-12	2-12
B	1 1/4	1 1/4	1 3/4	1 3/4	2 1/2	2 1/2	3 1/4	3 1/4	3 3/4	3 3/4
C	2	2	2 5/16	2 5/16	2 15/16	2 15/16	4 3/8	4 3/8	5 7/16	5 7/16
D	1/2	1/2	1/2	1/2	1/2	1/2	13/16	13/16	7/8	7/8
E	3/4	3/4	1 1/8	1 1/8	1 5/8	1 5/8	2 1/4	2 1/4	3	3
F	5/8	5/8	31/32	31/32	1 3/8	1 3/8	1 3/4	1 3/4	2	2
G	1/2	1/2	13/16	13/16	1 5/32	1 5/32	1 1/2	1 1/2	1 7/8	1 7/8
H	1	1	1 1/2	1 1/2	2 1/4	2 1/4	3	3	3 1/2	3 1/2
MAX PULL	10,000	14,000	34,000	39,000	64,000	78,000	134,000	134,000	240,000	240,000

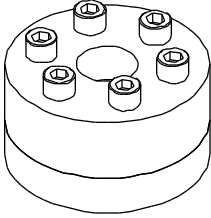
PIVOT PIN

	PART NUMBER												
	PP-05	PP-07	PP-10	PP-13	PP-17	PP-20	PP-20-55	PP-25	PP-30	PP-30-65	PP-35	PP-40-85	PP-40
CD	1/2	3/4	1	1 3/8	1 3/4	2	2	2 1/2	3	3	3 1/2	4	4
CL	1 3/4	2 1/2	3	4	5	5	5 1/2	6	6	6 1/2	8	8 1/2	9

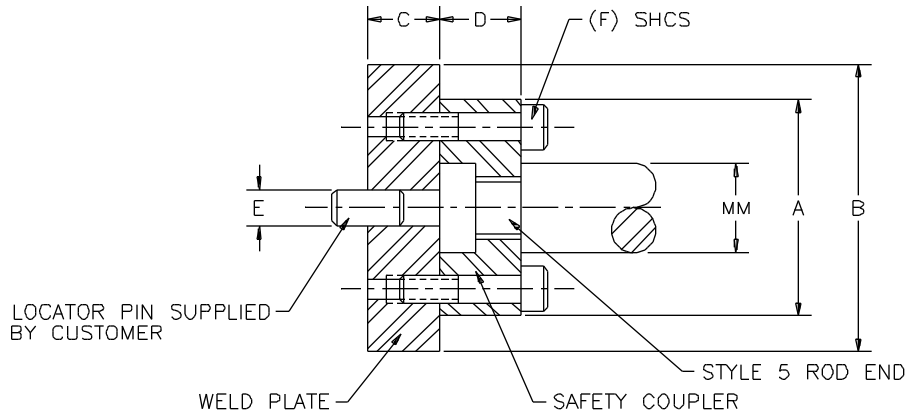
PSC

PURAKAL SERIES 100 MOUNTING ACCESSORIES

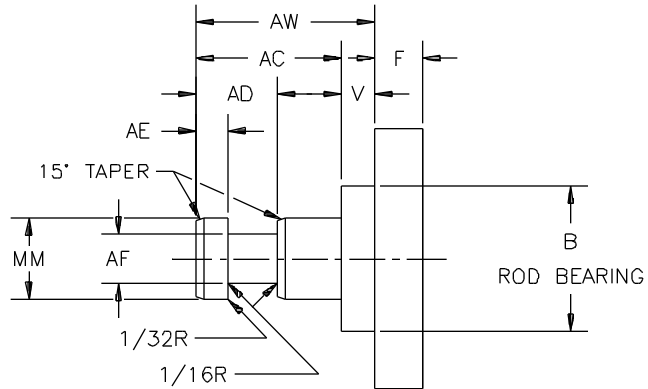
SAFETY COUPLER



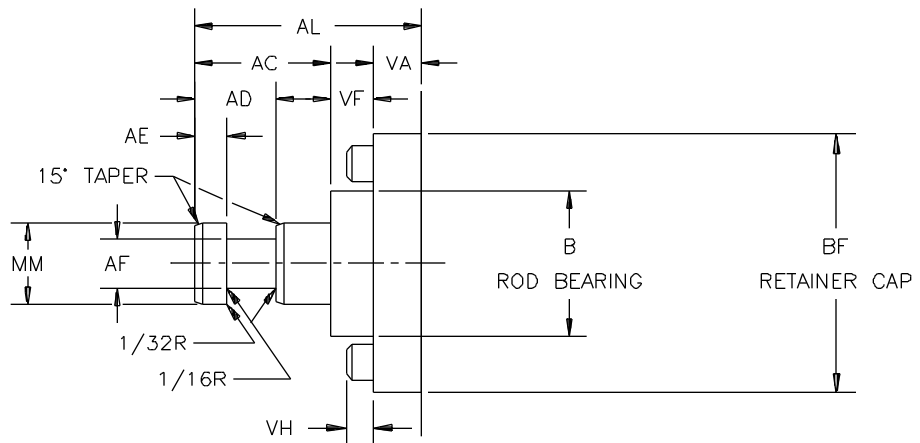
PSC



SAFETY COUPLER
ROD END
1 1/2" TO 6" BORE



SAFETY COUPLER
ROD END
8" TO 12" BORE



PURAKAL SERIES 100 MOUNTING ACCESSORIES

PSC

SAFETY COUPLER

	PART NUMBER								
	PSC-06	PSC-10	PSC-13	PSC-17	PSC-20	PSC-25	PSC-30	PSC-35	PSC-40
MM	5/8	1	1 3/8	1 3/4	2	2 1/2	3	3 1/2	4
A	1.50	2.00	2.50	3.00	3.50	4.00	5.00	5.88	6.38
B	2.00	2.50	3.00	4.00	4.00	4.50	5.50	7.00	7.00
C	.50	.50	.62	.62	.75	.75	1.00	1.00	1.00
D	.56	.88	1.00	1.25	1.62	1.88	2.38	2.62	2.62
E	.250	.250	.250	.250	.375	.375	.375	.375	.375
F	4	6	6	8	12	12	12	12	12
SHCS	#10-24X .94	1/4-20X1.25	5/16-18X1.50	5/16-18X1.75	3/8-16X2.25	3/8-16X2.50	1/2-13X3.25	5/8-11X3.50	5/8-11X3.50

SAFETY COUPLER ROD END 1 1/2" to 6" BORE

CYL BORE	ROD DIA MM	AC	AD	AE	AF	AW	B	F	V
1 1/2	5/8	1 1/8	5/8	1/4	3/8	1 3/8	1.124	3/8	1/4
	1	1 1/2	15/16	3/8	11/16	2	1.499	3/8	1/2
2	5/8	1 1/8	5/8	1/4	3/8	1 3/8	1.124	3/8	1/4
	1	1 1/2	15/16	3/8	11/16	2	1.499	3/8	1/2
	1 3/8	1 3/4	1 1/16	3/8	7/8	2 3/8	1.999	3/8	5/8
2 1/2	5/8	1 1/8	5/8	1/4	3/8	1 3/8	1.124	3/8	1/4
	1	1 1/2	15/16	3/8	11/16	2	1.499	3/8	1/2
	1 3/8	1 3/4	1 1/16	3/8	7/8	2 3/8	1.999	3/8	5/8
3 1/4	1	1 1/2	15/16	3/8	11/16	1 3/4	1.499	5.8	1/4
	1 3/8	1 3/4	1 1/16	3/8	7/8	2 1/8	1.999	5/8	3/8
	1 3/4	2	1 5/16	1/2	1 1/8	2 1/2	2.374	5/8	1/2
4	1	1 1/2	15/16	3/8	11/16	1 3/4	1.499	5/8	1/4
	1 3/8	1 3/4	1 1/16	3/8	7/8	2 1/8	1.999	5/8	3/8
	1 3/4	2	1 5/16	1/2	1 1/8	2 1/2	2.374	5/8	1/2
5	1	1 1/2	15/16	3/8	11/16	1 3/4	1.499	5/8	1/4
	1 3/8	1 3/4	1 1/16	3/8	7/8	2 1/8	1.999	5/8	3/8
	1 3/4	2	1 5/16	1/2	1 1/8	2 1/2	2.374	5/8	1/2
6	1 3/8	1 3/4	1 1/16	3/8	7/8	2	1.999	3/4	1/4
	1 3/4	2	1 5/16	1/2	1 1/8	2 3/8	2.374	3/4	3/8
	2	2 5/8	1 11/16	5/8	1 3/8	3	2.624	3/4	3/8

SAFETY COUPLER ROD END 8" to 12" BORE

CYL BORE	ROD DIA MM	AC	AD	AE	AF	AL	B	BF	VA	VF	VH
8	1 3/8	1 3/4	1 1/16	3/8	7/8	2 3/4	1.999	2 31/32	7/16	9/16	5/16
	1 3/4	2	1 5/16	1/2	1 1/8	3 1/8	2.374	3 23/32	7/16	11/16	5/16
	2	2 5/8	1 11/16	5/8	1 3/8	3 3/4	2.624	3 31/32	9/16	9/16	3/8
10	1 3/4	2	1 5/16	1/2	1 1/8	3 1/8	2.374	3 23/32	7/16	11/16	5/16
	2	2 5/8	1 11/16	5/8	1 3/8	3 3/4	2.624	3 31/32	9/16	9/16	3/8
	2 1/2	3 1/4	1 15/16	3/4	1 3/4	4 1/2	3.124	4 15/32	9/16	11/16	3/8
12	2	2 5/8	1 11/16	5/8	1 3/8	3 3/4	2.624	3 31/32	9/16	9/16	3/8
	2 1/2	3 1/4	1 15/16	3/4	1 3/4	4 1/2	3.124	4 15/32	9/16	11/16	3.8
	3	3 5/8	2 7/16	7/8	2 1/4	4 7/8	3.749	5 15/32	9/16	11/16	1/2

PURAKAL SERIES 100 ACCESSORY COMPARISON

ROD DIA		THREAD	PIN	CLEVIS	ROD EYE	MALE ROD END	SELF ALIGNING ROD EYE	PIN	EYE BRACKET	CLEVIS BRACKET	SERIES 100	SERIES 2500	SERIES 3000
KK	CC												
5/8		7/16-20	PP-05	PC-05	PE-05	PME-05	PSE-05	PP-05	PEB-05	PCB-05	1 1/2, 2, 2 1/2	1 1/2	1 1/2
	5/8	1/2-20	PP-05	PC-05-05	PE-05-05			PP-05	PEB-05	PCB-05	1 1/2, 2, 2 1/2	1 1/2	1 1/2
1		3/4-16	PP-07	PC-07	PE-07	PME-07	PSE-07	PP-07	PEB-07	PCB-07	3 1/4, 4, 5	2, 2 1/2	2, 2 1/2
	1	7/8-14	PP-10	PC-10-08	PE-10-08	PME-10-08		PP-10	PEB-10	PCB-10	6, 8	3 1/4	3 1/4
1 3/8		1-14	PP-10	PC-10	PE-10	PME-10	PSE-10	PP-10	PEB-10	PCB-10	6, 8	3 1/4	3 1/4
1 3/4	1 3/8	1 1/4-12	PP-13	PC-13	PE-13	PME-13	PSE-13	PP-13	PEB-13	PCB-13	10	4	4
2	1 3/4	1 1/2-12	PP-17	PC-17	PE-17	PME-17	PSE-17	PP-17	PEB-17	PCB-17	12	5	5
	2	1 3/4-12	PP-20	PC-20	PE-20	PME-20		PP-20	PEB-20	PCB-20		6	6
2 1/2		1 7/8-12	PP-20	PC-20-18	PE-20-18	PME-20-18	PSE-20	PP-25	PEB-25	PCB-25		7	7
3	2 1/2	2 1/4-12	PP-25	PC-25	PE-25	PME-25		PP-30	PEB-30	PCB-30		8	8
3 1/2		2 1/2-12	PP-30	PC-30	PE-30	PME-30		PP-30	PEB-30	PCB-30		8	8
	3	2 3/4-12	PP-30	PC-30-27	PE-30-27	PME-30-27							
4		3-12						PP-35	PEB-35	PCB-35		10	10
4 1/2	3 1/2	3 1/4-12	PP-35	PC-35	PE-35	PME-35		PP-35	PEB-35	PCB-35		10	10
5		3 1/2-12	PP-35		PE-35-35	PME-35-35		PP-40	PEB-40	PCB-40		12	12
5		3 1/2-12	PP-40	PC-40-35									
	4	3 3/4-12						PP-40	PEB-40	PCB-40		12	12
5 1/2, 7		4-12	PP-40	PC-40	PE-40	PME-40							
	4 1/2	4 1/4-12						PP-40	PEB-40	PCB-40		12	12
8, 8 1/2		4 1/2-12	PP-40		PE-40-45	PME-40-45							
	5	4 3/4-12											
	5 1/2	5 1/4-12											
	7	5 1/2-12											
	8 1/2	6-12											

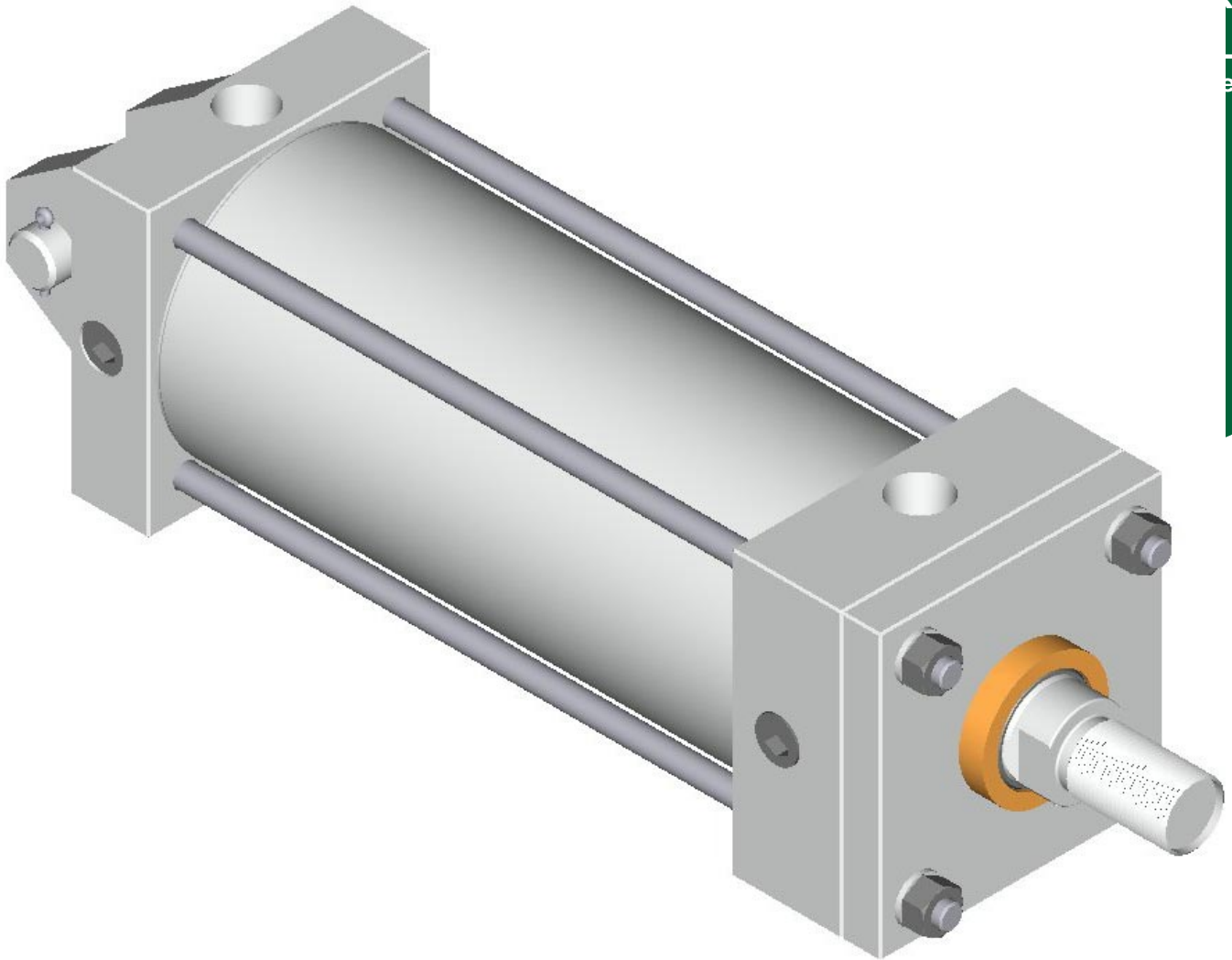
APPROXIMATE NET WEIGHTS OF 100 SERIES CYLINDERS BASED ON STANDARD ROD DIAMETERS

BORE	MODEL NUMBER										ADD PER INCH OF STROKE
	MS-2	ME-3 MF-1 MS-4	MF-5	MP-1 MP-3	MF-2 ME-4	MF-6	MT-4	MT-1 MT-2	MX-2 MX-3 (ROD OR BASE END)	MX-1 (BOTH ENDS)	
1 1/2	4.6	4.3	4.8	4.4	4.8	5.2	6.0	4.5	4.1	4.2	0.33
2	6.9	6.8	7.5	6.7	7.4	8.1	8.8	6.8	6.5	6.6	0.41
2 1/2	10.0	10.0	10.7	9.8	10.9	11.7	12.4	9.9	9.6	9.7	0.47
3 1/4	19.5	19.2	20.9	19.6	21.7	23.4	21.8	18.5	18.2	18.4	0.71
4	27.3	27.2	29.1	27.4	30.8	32.7	29.8	26.3	26.0	26.2	0.79
5	43.7	42.3	45.2	41.8	47.6	50.5	46.2	40.7	40.6	40.8	1.00
6	63.3	62.8	66.6	63.3	71.7	75.6	70.6	61.00	60.2	60.6	1.67
8	106.0	102.0		106.0	102.0		120.0	103.0	103.0	104.0	2.33
10	191.0	184.0		193.0	184.0		213.0	187.0	186.0	188.0	3.66
12	288.0	281.0		297.0	281.0		321.0	284.0	283.0	285.0	4.32

PURAKAL

CYLINDERS, INC

**SERIES
100**



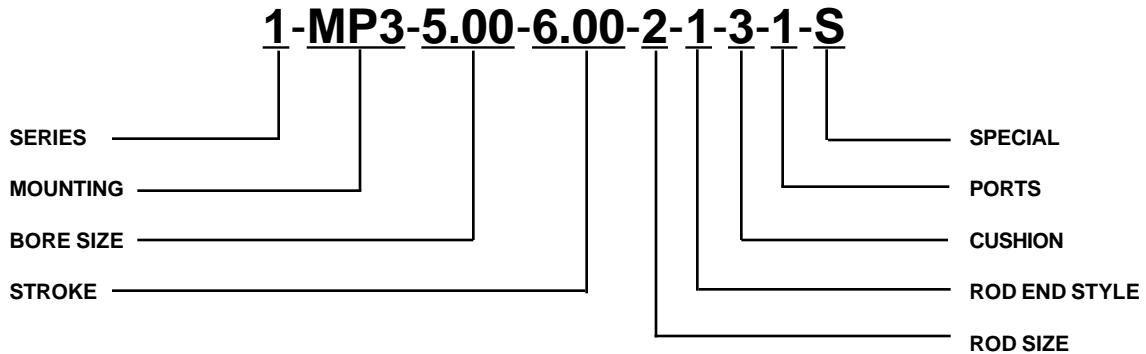
PURAKAL CYLINDERS, INC

P.O. Box 22038
Eugene, OR 97402-0414
Phone (541) 345-4199
FAX (541) 345-6522

Catalog 10096.1

ORDER INFORMATION

The example that follows illustrates the basic order code system. Use this code system for accurate and efficient processing of your cylinder order.



SERIES

- 1 = 100 (Air and low pressure hydraulic)
- 2 = 2500 (Welded hydraulic)
- 3 = 3000 (Hydraulic)
- 4 = 3059 (Transducer positioning)
- 5 = 3500 (Extra heavy duty hydraulic)

MOUNTING

MX0	ME3
MX1	ME4
MX2	MT1
MX3	MT2
MD	MT4
MF1	MS2
MF2	MS4
MF5	MP1
MF6	MP3
	MPU

BORE SIZE (INCHES)

1.50	5.00
2.00	6.00
2.50	8.00
3.25	10.00
4.00	12.00

(7, 14, and other special sizes available on request)

STROKE (INCHES)

XXX.XX

SPECIAL

Specify any special features. A sketch may be submitted to facilitate your order.

PORTS

- 1 = NPT
- 2 = SAE

CUSHIONING

- 0 = Non cushioned
- 1 = Cushioned on rod end only
- 2 = Cushioned on blind end only
- 3 = Cushioned on both ends

ROD END STYLE

- 1 = Standard male thread (KK)
- 2 = Oversized male thread (CC)
- 3 = Female thread (KK)
- 4 = Special thread size
- 5 = Safety coupler

ROD SIZE

- 1 = Standard #1 (smallest standard)
- 2 = Standard #2
- 3 = Oversized

PURAKAL SERIES 100 CYLINDER INSTALLATION

All cylinders are individually tested before shipment to assure proper operation. It is recommended that the shipping plugs in the cylinder ports not be removed during installation until actual piping connections are to be made.

Align the cylinder carefully, keeping mounting surfaces square, parallel, concentric and true.

Trunnion and pivot mounted cylinders swivel in one direction only with trunnion pins and pivot pins designed to carry shear loads only. Trunnion and pivot bearings must fit closely for the entire length of the pin with trunnion bearings held rigidly and in accurate alignment.

Flush mounting cylinders (styles MS-2 and MS-4) should be pinned or keyed to prevent shifting from load application. Keys should be bolted or welded against cylinder heads in maximum pressure or shock applications. Pins or keys must be large enough to withstand the full force developed by the cylinder.

In making the piston rod connection, always use wrench flats on rod and never apply a wrench to a smooth section of rod (score marks or nicks on piston rod will cause premature rod seal failure).

Operate the cylinder several times to make sure it is functioning properly. Check piping for leakage. A clean air supply and a line lubricator are required for air operation.

RECOMMENDED TIE ROD TORQUE VALUES FOR 100 SERIES CYLINDERS

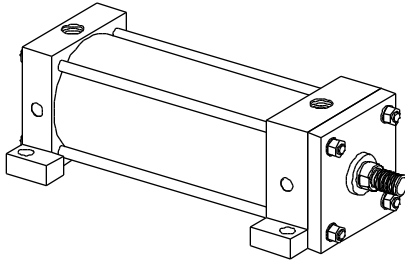
BORE	1 1/2	2	2 1/2	3 1/4	4	5	6	8	10	12
TIE ROD THREAD	1/4-28	5/16-24	5/16-24	3/8-24	3/8-24	1/2-20	1/2-20	5/8-18	3/4-16	3/4-16
TORQUE FT-LB	10	20	20	28	28	60	60	120	140	140

RECOMMENDED RETAINER SCREW TORQUE VALUES FOR 100 SERIES CYLINDERS

SCREW SIZE	1/4-28 UNF	3/8-24 UNF
TORQUE (FT-LB)	15	60

PURAKAL

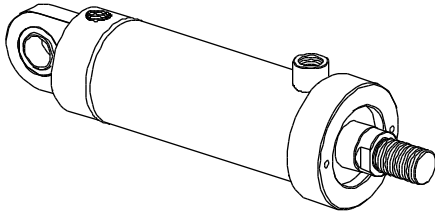
CYLINDERS, INC.



100 SERIES PNEUMATIC CYLINDER

250 PSI air/750 PSI hydraulic operating pressure
1 1/2" to 12" Bore

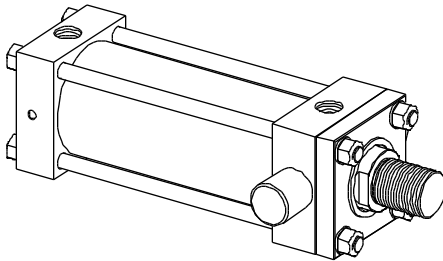
TIE ROD cylinder * GROUND AND POLISHED HARD CHROME PLATED piston rod * HONED AND CHROME PLATED barrel I.D. * POLYURETHANE seals * all NFPA MOUNTINGS available



2500 SERIES HEAVY DUTY HYDRAULIC CYLINDER

3000 PSI operating pressure
1 1/2" to 6" Bore

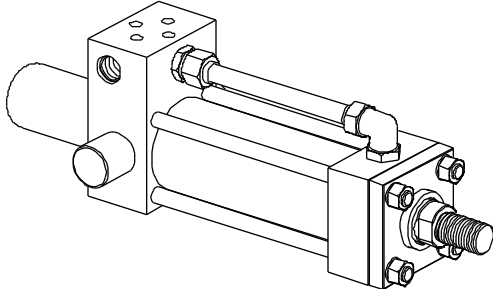
WELDED construction * GROUND AND POLISHED HARD CHROME PLATED piston rod * HEAVY WALL HONED barrel I.D. * POLYURETHANE SEALS * CLEVIS, PIN EYE, SINGLE LUG, AND BLIND END PLATE mounts * NFPA INTERCHANGEABLE mounting dimensions



3000 SERIES HYDRAULIC CYLINDER

3000 PSI operating pressure
1 1/2" to 12" Bore

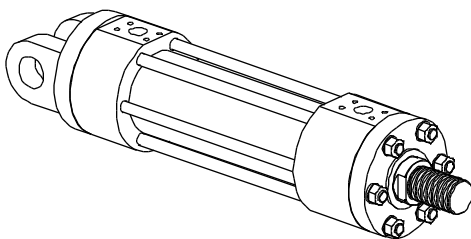
TIE ROD cylinder * GROUND AND POLISHED HARD CHROME PLATED piston rod * HEAVY WALL HONED barrel I.D. * POLYURETHANE seals * all NFPA MOUNTINGS available



3050 SERIES LINEAR POSITIONING HYDRAULIC CYLINDER

3000 PSI operating pressure
2" to 5" Bore

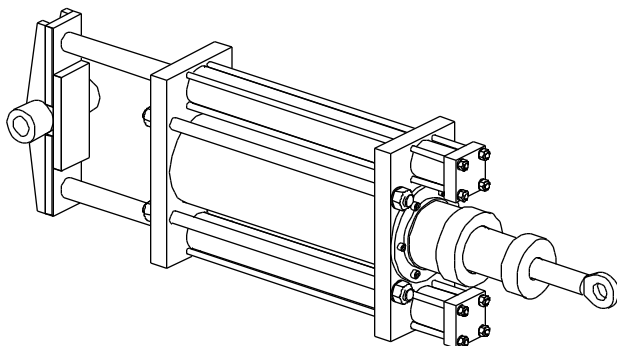
TIE ROD cylinder * GROUND AND POLISHED HARD CHROME PLATED piston rod * HEAVY WALL HONED barrel I.D. * LOW FRICTION seals * NFPA MOUNTINGS available * DIRECT SERVO MOUNTING * TRANSDUCER position sensing * LARGE BORE models available on request



3500 SERIES SUPER HEAVY DUTY HYDRAULIC CYLINDER

3500 PSI operating pressure
2 1/2" to 6" Bore

TIE ROD cylinder for EXTREME SERVICE requirements * GROUND AND POLISHED, HEAVY CHROME PLATED piston rod * 4-BOLT FLANGE ports * POLYURETHANE seals * TIE ROD, CLEVIS, SINGLE LUG, TRUNNION mounts * HEAVY DUTY CUSHIONS for high inertial loads



SPECIAL DESIGNS

1 1/2" to 36" Bore Pneumatic, 1 1/2" to 24" Bore Hydraulic
Up to 240" Stroke

INTENSIFIER CYLINDERS * ACCUMULATORS * MULTIPORT SWIVELS * SPRING LOADED CYLINDERS * COMPUTER AIDED DESIGN AND ANALYSIS by an experienced engineering staff

Consult the PURAKAL distributor in your area or call our factory direct to discuss your unique applications.