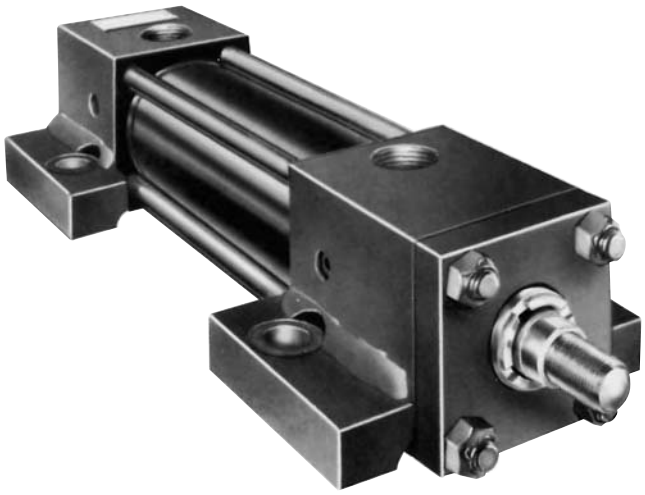
Series VH
Hydraulic Cylinders



Extra-long Tapered Cushions
Oversize Ports
Meets N.F.P.A. Specifications

Nominal Pressure - 3000 PSI
Standard Bore Sizes - 2 1/2" Through 8"
Piston Rod Diameters - 1" Through 5 1/2"
Fifteen Standard Mounting Styles

Series “VH” very heavy-duty hydraulic cylinders are premium quality cylinders–with operating capacities of 3,000 PSI. They fully meet NFPA standards. And to make sure every cylinder is premium-quality, Parker Hannifin subjects each and every one – not just batch samples – to tough inspection and performance tests.

OTHER SERIES “VH” FEATURES AND SPECIFICATIONS

Ports
Series “VH” ports are two sizes or larger than NFPA standards. Standard location is position 1 as shown in dimensional drawings. Where mountings do not interfere, ports may be located at positions 2, 3, or 4. Ports are not available at positions 2 or 4 on mounting style C, 2 1/2" thru 5" bore cylinders. SAE straight thread O-ring ports will be supplied unless otherwise specified.

Cushions
Cushions on Series “VH” cylinders are 3" long on all sizes except 3 1/4" and 4" bore sized equipped with 2" and 2 1/2" diameter piston rods which are supplied with cushions 2 13/16" long at head end. Self-centering floating cushion sleeve at head end and cushion spear at cap is tapered for 2/3 its length to give maximum cushioning effect for 1/3 its length.

Thrust Key
An extended retainer plate, to serve as a thrust key, can be supplied on mounting styles C and F. The thrust key would be the same as used on Parker Hannifin “2H” hydraulic cylinders.

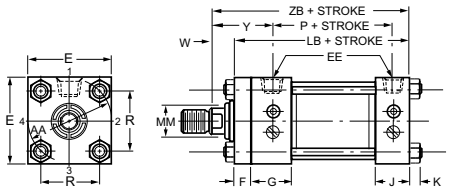
Air Bleeds
When specified, 1/8" NPTF bleed ports are available at either head or cap end. For design and location, ask for Drawing 81292.

Accessories
Mounting accessories for Series “VH” are the same as used on Parker Hannifin Series 2H hydraulic cylinders. For dimensional data for rod clevis, knuckle, clevis bracket, mounting plate and pivot pin, see the Parker Series 2H section of this catalog.

*See Section C for actual design factors.

For additional information – call your local Parker Cylinder Distributor.

Basic Cylinder Style T
(NFPA Style MX01)

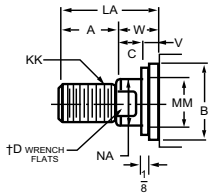


Rod end dimensions

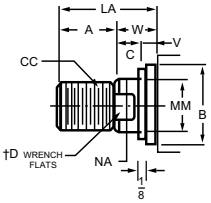
BORE	ROD NO.	ROD DIA.	THREAD		ROD EXTENSIONS AND PILOT DIMENSIONS									BASIC ENVELOPE AND MOUNTING DIMENSIONS							ADD STROKE		
						+.000 -.002									EE								
		MM	CC	KK	A	B	C	D	LA	NA	V	W	Y	E	NPTF◆	SAE°	F	G	J	K	LB	P	ZB
2 1/2	1(Std.)	1	7/8-14	3/4-16	1 1/8	1.499	1/2	7/8	1 7/8	15/16	1/4	3/4	4 1/8	3 1/2	1	16	5/8	3 3/4	3 1/2	7/16	9 3/8	3 1/2	10 9/16
	2	1 3/4	1 1/2-12	1 1/4-12	2	2.374	3/4	1 1/2	3 1/4	1 11/16	1/2	1 1/4	4 5/8										11 1/16
	3	1 3/8	1 1/4-12	1-14	1 5/8	1.999	5/8	1 1/8	2 5/8	1 5/16	3/8	1	4 3/8										10 13/16
3 1/4	1(Std.)	1 3/8	1 1/4-12	1-14	1 5/8	1.999	5/8	1 1/8	2 1/2	1 5/16	1/4	7/8	4 3/16	4 1/2	1 1/4	20	3/4	3 3/4	3 1/2	9/16	9 3/4	4 1/8	11 3/16
	2	2	1 3/4-12	1 1/2-12	2 1/4	2.624	7/8	1 11/16	3 1/2	1 15/16	3/8	1 1/4	4 9/16										11 9/16
	3	1 3/4	1 1/2-12	1 1/4-12	2	2.374	3/4	1 1/2	3 1/8	1 11/16	3/8	1 1/8	4 7/16										11 7/16
4	1(Std.)	1 3/4	1 1/2-12	1 1/4-12	2	2.374	3/4	1 1/2	3	1 11/16	1/4	1	4 7/16	5	1 1/4	20	7/8	3 3/4	3 1/2	9/16	10 1/8	4 3/8	11 11/16
	2	2 1/2	2 1/4-12	1 7/8-12	3	3.124	1	2 1/16	4 3/8	2 3/8	3/8	1 3/8	4 13/16										12 1/16
	3	2	1 3/4-12	1 1/2-12	2 1/4	2.624	7/8	1 11/16	3 3/8	1 15/16	1/4	1 1/8	4 9/16										11 13/16
5	1(Std.)	2	1 3/4-12	1 1/2-12	2 1/4	2.624	7/8	1 11/16	3 3/8	1 15/16	1/4	1 1/8	4 11/16	6 1/2	1 1/2	24	7/8	4	3 3/4	13/16	11 1/8	5 1/8	13 1/16
	2	3 1/2	3 1/4-12	2 1/2-12	3 1/2	4.249	1	3	4 7/8	3 3/8	3/8	1 3/8	4 15/16										13 5/16
	3	2 1/2	2 1/4-12	1 7/8-12	3	3.124	1	2 1/16	4 3/8	2 3/8	3/8	1 3/8	4 15/16										13 5/16
	4	3	2 3/4-12	2 1/4-12	3 1/2	3.749	1	2 5/8	4 7/8	2 7/8	3/8	1 3/8	4 15/16										13 5/16
6	1(Std.)	2 1/2	2 1/4-12	1 7/8-12	3	3.124	1	2 1/16	4 1/4	2 3/8	1/4	1 1/4	4 7/8	7 1/2	2	32	1	4 1/4	4 1/4	7/8	12 3/8	6 1/8	14 1/2
	2	4	3 3/4-12	3-12	4	4.749	1	3 3/8	5 1/4	3 7/8	1/4	1 1/4	4 7/8										14 1/2
	3	3	2 3/4-12	2 1/4-12	3 1/2	3.749	1	2 5/8	4 3/4	2 7/8	1/4	1 1/4	4 7/8										14 1/2
	4	3 1/2	3 1/4-12	2 1/2-12	3 1/2	4.249	1	3	4 3/4	3 3/8	1/4	1 1/4	4 7/8										14 1/2
7	1(Std.)	3	2 3/4-12	2 1/4-12	3 1/2	3.749	1	2 5/8	4 3/4	2 7/8	1/4	1 1/4	4 3/4	8 1/2	2	32	1	4 1/4	4 1/4	1 1/4	12 1/2	6 1/2	15
	2	5	4 3/4-12	3 1/2-12	5	5.749	1	4 1/4	6 1/4	4 7/8	1/4	1 1/4	4 3/4										15
	3	3 1/2	3 1/4-12	2 1/2-12	3 1/2	4.249	1	3	4 3/4	3 3/8	1/4	1 1/4	4 3/4										15
	4	4	3 3/4-12	3-12	4	4.749	1	3 3/8	5 1/4	3 7/8	1/4	1 1/4	4 3/4										15
	5	4 1/4	4 1/4-12	3 1/4-12	4 1/2	5.249	1	3 7/8	5 3/4	4 3/8	1/4	1 1/4	4 3/4										15
8	1(Std.)	3 1/2	3 1/4-12	2 1/2-12	3 1/2	4.249	1	3	4 3/4	3 3/8	1/4	1 1/4	4 3/4	9 1/2	2 1/2	32	1	4 1/2	4 1/2	1 1/2	13 1/2	7 1/2	16 1/4
	2	5 1/2	5 1/4-12	4-12	5 1/2	6.249	1	4 5/8	6 3/4	5 3/8	1/4	1 1/4	4 3/4										16 1/4
	3	4	3 3/4-12	3-12	4	4.749	1	3 3/8	5 1/4	3 7/8	1/4	1 1/4	4 3/4										16 1/4
	4	4 1/2	4 1/4-12	3 1/4-12	4 1/2	5.249	1	3 7/8	5 3/4	4 3/8	1/4	1 1/4	4 3/4										16 1/4
	5	5	4 3/4-12	3 1/2-12	5	5.749	1	4 1/4	6 1/4	4 7/8	1/4	1 1/4	4 3/4										16 1/4

◆ SAE straight thread ports are standard and are indicated by port number. For dimensional information see Section C.
° NPTF ports are available at no extra charge.

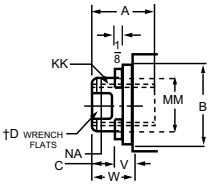
PISTON ROD END THREADS



PARKER THREAD STYLE 4
(NFPA SM)



PARKER THREAD STYLE 8
(NFPA IM)



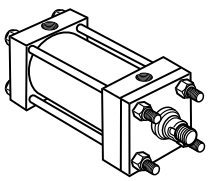
PARKER THREAD STYLE 9
(NFPA SF)

Style 4 Rod Ends recommended for applications where workpiece is secured against rod shoulder. When workpiece is not shouldered, Style 4 Rod Ends are recommended through 2" rod diameter, Style 8 on larger diameters. If rod end is not specified, Style 4 will be furnished.

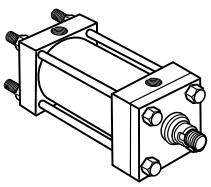
NOTE: Special piston rod end threads, two times length are available on 2 1/2" diameter piston rods and smaller. To order, specify thread Style 42 which has KK thread dia. or Style 82 which has CC thread dia. Other piston rod threads are available. To order, specify Style 3 and give desired dimensions for CC or KK, A and LA. For other specials, send dimensions or sketch.

† On 4 1/2" diameter rods and larger, 4 each .515 diameter spanner wrench holes will be provided.

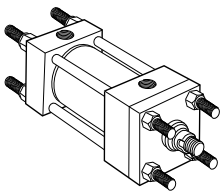
Tie Rod Mounted Styles TB, TC, TD (NFPA Styles MX3, MX2, MX1)



Style TB
(MX3)

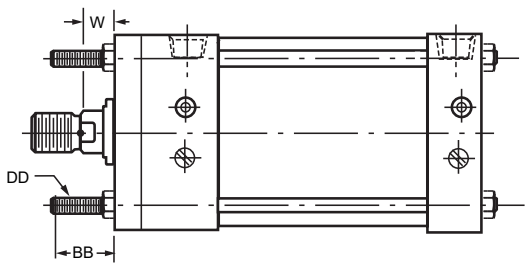


Style TC
(MX2)



Style TD
(MX1)

Style TB, Tie Rods Extended, is illustrated at right. Style TC, Cap Tie Rods Extended, and Style TD, Both Ends Tie Rods Extended, can be dimensioned from Style TB drawing.

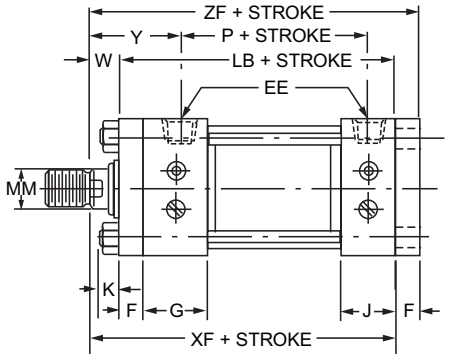


For Cylinder Division Plant Locations – See Page II.

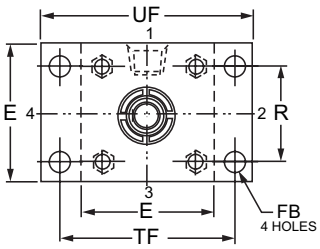
B

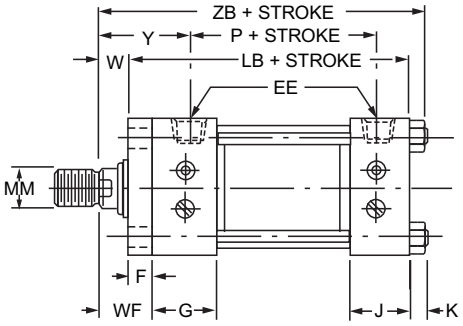
Flange Mountings

Style H, J, HB, JB



STYLE H (NFPA MF2)





STYLE J (NFPA MF1)

For Style "H" Mount

Bore Size	Max. PSI - Pull* Rod Code 1	2	3	4	5
2 1/2	3000	3000	3000	–	–
3 1/4	3000	3000	3000	–	–
4	3000	3000	3000	–	–
5	2000	3000	2000	2500	–
6	1800	2500	2000	2000	–
7	2000	3000	2000	2500	2800
8	1700	2500	1700	1800	2200

* Maximum pressure rating - pull application

For Style "J" Mount

Bore Size	Max. PSI - Push* Rod Code 1	2	3	4	5
2 1/2	2000	1100	1500	–	–
3 1/4	1800	1300	1400	–	–
4	1800	1300	1700	–	–
5	1300	800	1200	1000	–
6	1200	800	1000	900	–
7	1400	800	1200	1100	1000
8	1100	800	1000	1000	800

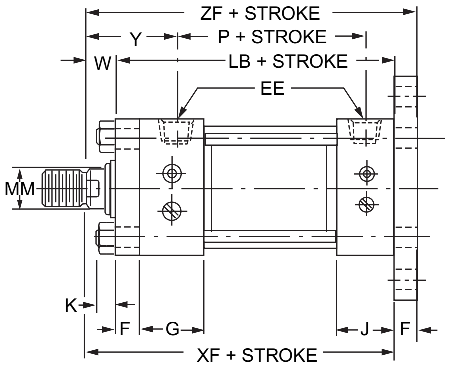
* Maximum pressure rating - push application

Specific Dimensions for Series VH Mounting Styles (in inches)

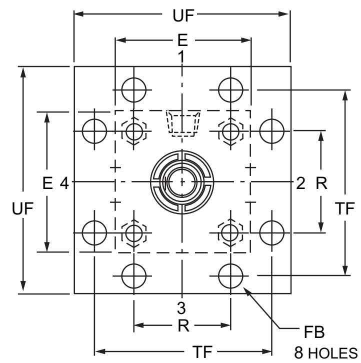
BORE	ROD NO.	ROD DIA.	AA	BB	BD	CB	+.000 CD◆ -.002	CW	DD	+.000 FA -.003	FB	L	+.000 LH -.002	LR	M	MR	ND	NT	PA	PC	PD	PF	R	SB•	ST
2 1/2	1 2 3	1 1 3/4 1 3/8	3.6	1 13/16	1 1/2	1 1/4	.751	5/8	1/2-20	.562	9/16	1 1/4	1.744	15/16	3/4	15/16	9/16 1/2 9/16	5/8-11	5/16	2 3/4	2 1/16	3 1/16	2.55	13/16	1
3 1/4	1 2 3	1 3/8 2 1 3/4	4.6	2 5/16	2	1 1/2	1.001	3/4	5/8-18	.687	11/16	1 1/2	2.244	1 1/4	1	1 3/16	7/8 11/16 7/8	3/4-10	3/8	2 1/2	2 5/8	2 15/16	3.25	13/16	1
4	1 2 3	1 3/4 2 1/2 2	5.4	2 5/16	2	2	1.376	1	5/8-18	.812	11/16	2 1/8	2.494	1 3/4	1 3/8	1 5/8	1 11/16 1	1-8	7/16	2 11/16	2 15/16	2 15/16	3.82	1 1/16	1 1/4
5	1 2 3 4	2 3 1/2 2 1/2 3	7.0	3 3/16	2	2 1/2	1.751	1 1/4	7/8-14	.812	15/16	2 1/4	3.244	2 1/16	1 3/4	2 1/8	1 1/8 1 1 1/8 1 1/8	1-8	7/16	2 15/16	3 11/16	3 3/16	4.95	1 1/16	1 1/4
6	1 2 3 4	2 1/2 4 3 3 1/2	8.1	3 5/8	3	2 1/2	2.001	1 1/4	1-14	.937	1 1/16	2 1/2	3.744	2 5/16	2	2 3/8	1 3/4 1 1/4 1 3/4 1 1/2	1 1/4-7	1/2	3 3/16	4 1/4	3 5/16	5.73	1 5/16	1 1/2
7	1 2 3 4 5	3 5 3 1/2 4 4 1/2	9.3	4 1/8	3	3	2.501	1 1/2	1 1/8-12	.937	1 3/16	3	4.244	2 3/4	2 1/2	2 7/8	1 1/8 1 1/8 1 1/8 1 1/8 1 1/8	1 1/2-6	1/2	2 15/16	4 3/4	3 1/8	6.58	1 9/16	1 3/4
8	1 2 3 4 5	3 1/2 5 1/2 4 4 1/2 5	10.6	4 1/2	3 1/2	3	3.001	1 1/2	1 1/4-12	.937	1 5/16	3 1/4	4.744	3 1/4	2 3/4	3 1/8	1 1/2 1 1/2 1 1/2 1 1/2 1 1/2	1 1/2-6	1/2	2 15/16	5 1/4	3 1/4	7.50	1 9/16	1 3/4

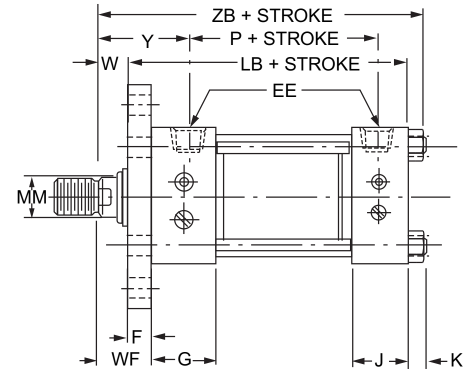
◆ Dimension CD is pin diameter. • Upper surface spotfaced for socket head screws. ◆◆ Dimension to be specified by customer.

For additional information – call your local Parker Cylinder Distributor.

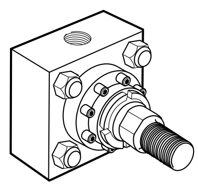


STYLE HB (NFPA MF6)





STYLE JB (NFPA MF5)



For 7" & 8" bores, this style retainer configuration applies to all but J and JB mounts.

For Style "JB" Mount

Bore Size	Max. PSI - Push* Rod Code 1	2	3	4	5
2 1/2	3000	3000	3000	–	–
3 1/4	3000	3000	3000	–	–
4	3000	3000	3000	–	–
5	3000	3000	3000	3000	–
6	3000	2700	3000	2700	–
7	3000	2700	3000	3000	3000
8	3000	2300	2500	2500	2500

* Maximum pressure rating - push application

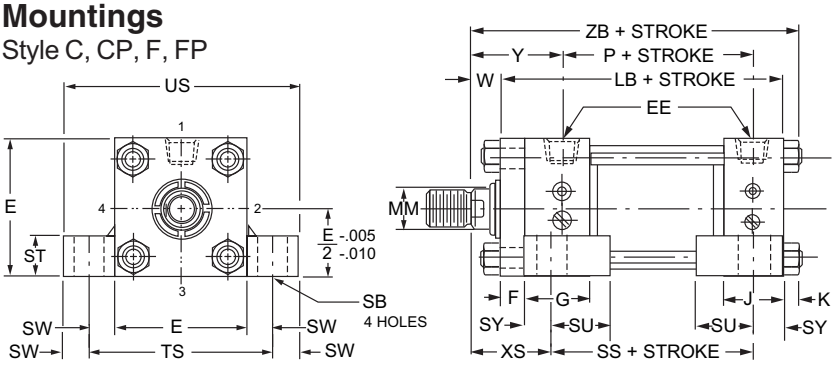
B

SU	SW	SY	TD +.000 -.001	TF	TL	TM	TN	TS	TY	UF	UM	UT	US	UW	XG	MIN. XI ◆◆	DD MTG. MIN. STK.	XS	XT	add stroke						
																				SN	SS	XC	XF	XJ	ZC	ZF
1 9/16	11/16	2 11/16	1.375	4 5/8	1 3/8	4	1 5/16	4 7/8	3 3/4	5 3/8	6 3/4	6 1/4	6 1/4	4 5/8	4 1/4 4 3/4 4 1/2	5 15/16 6 7/16 6 3/16	1/8	4 1/16 4 9/16 4 5/16	4 3/8 4 7/8 4 5/8	3	3 3/8	11 3/8 11 7/8 11 5/8	10 1/8 10 5/8 10 3/8	7 3/8 7 7/8 7 5/8	12 1/8 12 5/8 12 3/8	10 3/4 11 1/4 11
1 9/16	11/16	2 7/16	1.750	5 7/8	1 3/4	5	1 1/2	5 7/8	4 3/4	7 1/8	8 1/2	8	7 1/4	5 13/16	4 3/8 4 3/4 4 5/8	6 7/16 6 13/16 6 11/16	3/8	4 1/16 4 7/16 4 5/16	4 1/2 4 7/8 4 3/4	3 1/2	4 1/8	12 1/8 12 1/2 12 3/8	10 5/8 11 10 7/8	8 8 3/8 8 1/4	13 1/8 13 1/2 13 3/8	11 3/8 11 3/4 11 5/8
2	7/8	2 5/8	1.750	6 3/8	1 3/4	5 1/2	2 1/16	6 3/4	5 1/4	7 5/8	9	8 1/2	8 1/2	6 3/8	4 5/8 5 4 3/4	6 11/16 7 1/16 6 13/16	1/8	4 1/2 4 7/8 4 5/8	4 3/4 5 1/8 4 7/8	3 3/4	4	13 1/4 13 5/8 13 3/8	11 1/8 11 1/2 11 1/4	8 1/2 8 7/8 8 5/8	14 5/8 15 14 3/4	12 12 3/8 12 1/8
2	7/8	2 7/8	1.750	8 3/16	1 3/4	7	2 15/16	8 1/4	6 3/4	9 3/4	10 1/2	10	10	7 3/4	5 5 1/4 5 1/4 5 1/4	7 1/16 7 5/16 7 5/16 7 5/16	0	4 7/8 5 1/8 5 1/8 5 1/8	5 1/8 5 3/8 5 3/8 5 3/8	4 1/4	4 1/2	14 1/2 14 3/4 14 3/4 14 3/4	12 1/4 12 1/2 12 1/2 12 1/2	9 3/8 9 5/8 9 5/8 9 5/8	16 1/4 16 1/2 16 1/2 16 1/2	13 1/8 13 3/8 13 3/8 13 3/8
2 1/2	1 1/8	3 1/8	2.000	9 7/16	2	8 1/2	3 5/16	9 3/4	7 3/4	11 1/4	12 1/2	11 1/2	12	10 3/4	5 3/8 5 3/8 5 3/8 5 3/8	8 1/16 8 1/16 8 1/16 8 1/16	1/4	5 3/8 5 3/8 5 3/8 5 3/8	5 1/2 5 1/2 5 1/2 5 1/2	5 1/8	5 1/8	16 1/8 16 1/8 16 1/8 16 1/8	13 5/8 13 5/8 13 5/8 13 5/8	10 3/8 10 3/8 10 3/8 10 3/8	18 1/8 18 1/8 18 1/8 18 1/8	14 5/8 14 5/8 14 5/8 14 5/8
2 7/8	1 3/8	2 7/8	2.500	10 5/8	2 1/2	9 3/4	3 3/4	11 1/4	8 3/4	12 5/8	14 3/4	13 1/2	14	11 1/2	5 1/8 5 1/8 5 1/8 5 1/8 5 1/8	8 1/16 8 1/16 8 1/16 8 1/16 8 1/16	1/8	5 1/8 5 1/8 5 1/8 5 1/8 5 1/8	5 5/16 5 5/16 5 5/16 5 5/16 5 5/16	5 7/8	5 3/4	16 3/4 16 3/4 16 3/4 16 3/4 16 3/4	13 3/4 13 3/4 13 3/4 13 3/4 13 3/4	10 7/8 10 7/8 10 7/8 10 7/8 10 7/8	19 1/4 19 1/4 19 1/4 19 1/4 19 1/4	14 3/4 14 3/4 14 3/4 14 3/4 14 3/4
2 7/8	1 3/8	2 7/8	3.000	11 13/16	3	11	4 1/4	12 1/4	9 3/4	14	17	15 1/2	15	13 3/8	5 1/4 5 1/4 5 1/4 5 1/4 5 1/4	8 9/16 8 9/16 8 9/16 8 9/16 8 9/16	1/8	5 1/8 5 1/8 5 1/8 5 1/8 5 1/8	5 7/16 5 7/16 5 7/16 5 7/16 5 7/16	6 5/8	6 3/4	18 18 18 18 18	14 3/4 14 3/4 14 3/4 14 3/4 14 3/4	11 3/4 11 3/4 11 3/4 11 3/4 11 3/4	20 3/4 20 3/4 20 3/4 20 3/4 20 3/4	15 3/4 15 3/4 15 3/4 15 3/4 15 3/4

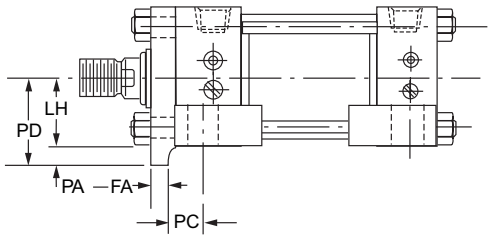
For Cylinder Division Plant Locations – See Page II.

Side Mountings

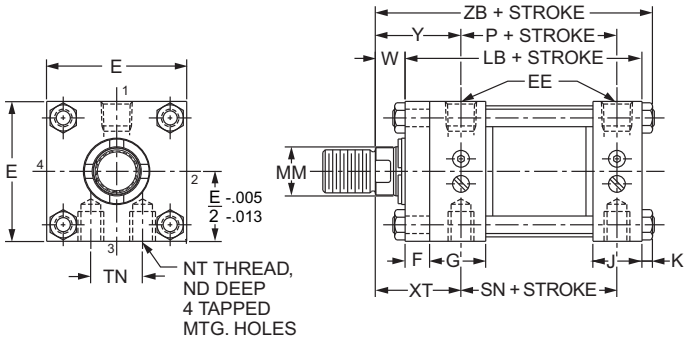
Style C, CP, F, FP



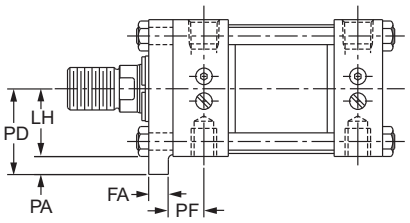
STYLE C (NFPA MS2)



STYLE CP Side Lugs with Thrust Key Modification



STYLE F (NFPA MS4)



STYLE FP Side Tapped with Thrust Key Modification

Specific Dimensions for Series VH Mounting Styles (in inches)

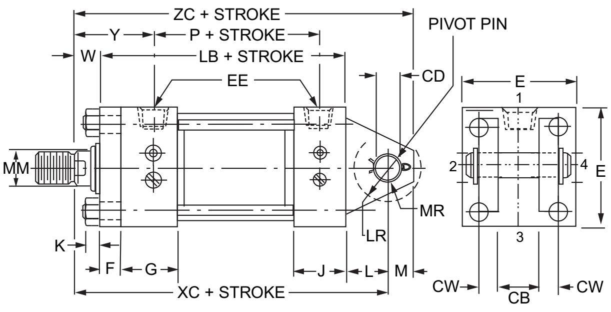
BORE	ROD NO.	ROD DIA.	AA	BB	BD	CB	+.000 CD◆ -.002	CW	DD	+.000 FA -.003	FB	L	+.000 LH -.002	LR	M	MR	ND	NT	PA	PC	PD	PF	R	SB•	ST
2 1/2	1 2 3	1 1 3/4 1 3/8	3.6	1 13/16	1 1/2	1 1/4	.751	5/8	1/2-20	.562	9/16	1 1/4	1.744	15/16	3/4	15/16	9/16 1/2 9/16	5/8-11	5/16	2 3/4	2 1/16	3 1/16	2.55	13/16	1
3 1/4	1 2 3	1 3/8 2 1 3/4	4.6	2 5/16	2	1 1/2	1.001	3/4	5/8-18	.687	11/16	1 1/2	2.244	1 1/4	1	1 3/16	7/8 11/16 7/8	3/4-10	3/8	2 1/2	2 5/8	2 15/16	3.25	13/16	1
4	1 2 3	1 3/4 2 1/2 2	5.4	2 5/16	2	2	1.376	1	5/8-18	.812	11/16	2 1/8	2.494	1 3/4	1 3/8	1 5/8	1 11/16 1	1-8	7/16	2 11/16	2 15/16	2 15/16	3.82	1 1/16	1 1/4
5	1 2 3 4	2 3 1/2 2 1/2 3	7.0	3 3/16	2	2 1/2	1.751	1 1/4	7/8-14	.812	15/16	2 1/4	3.244	2 1/16	1 3/4	2 1/8	1 1/8 1 1 1/8 1 1/8	1-8	7/16	2 15/16	3 11/16	3 3/16	4.95	1 1/16	1 1/4
6	1 2 3 4	2 1/2 4 3 3 1/2	8.1	3 5/8	3	2 1/2	2.001	1 1/4	1-14	.937	1 1/16	2 1/2	3.744	2 5/16	2	2 3/8	1 3/4 1 1/4 1 3/4 1 1/2	1 1/4-7	1/2	3 3/16	4 1/4	3 5/16	5.73	1 5/16	1 1/2
7	1 2 3 4 5	3 5 3 1/2 4 4 1/2	9.3	4 1/8	3	3	2.501	1 1/2	1 1/8-12	.937	1 3/16	3	4.244	2 3/4	2 1/2	2 7/8	1 1/8 1 1/8 1 1/8 1 1/8 1 1/8	1 1/2-6	1/2	2 15/16	4 3/4	3 1/8	6.58	1 9/16	1 3/4
8	1 2 3 4 5	3 1/2 5 1/2 4 4 1/2 5	10.6	4 1/2	3 1/2	3	3.001	1 1/2	1 1/4-12	.937	1 5/16	3 1/4	4.744	3 1/4	2 3/4	3 1/8	1 1/2 1 1/2 1 1/2 1 1/2 1 1/2	1 1/2-6	1/2	2 15/16	5 1/4	3 1/4	7.50	1 9/16	1 3/4

◆ Dimension CD is pin diameter. • Upper surface spotfaced for socket head screws. ◆◆ Dimension to be specified by customer.

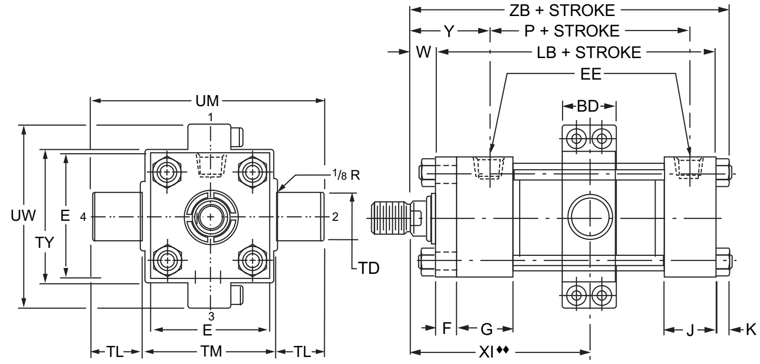
For additional information – call your local Parker Cylinder Distributor.

Pivot Mountings

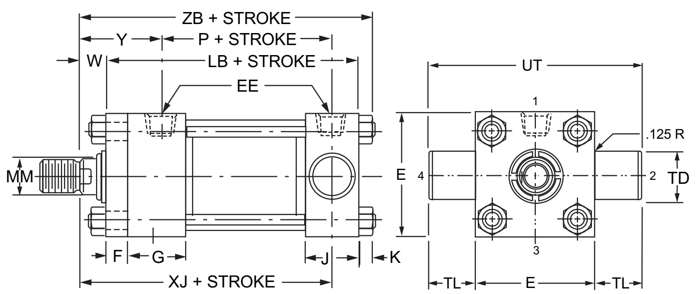
Styles BB, DB, D, DD



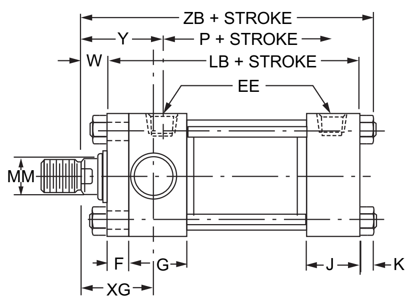
STYLE BB (NFPA MP1)



STYLE DD (NFPA MT4)



STYLE DB (NFPA MT2)

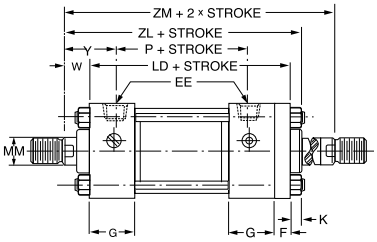


STYLE D (NFPA MT1)

SU	SW	SY	TD +.000 -.001	TF	TL	TM	TN	TS	TY	UF	UM	UT	US	UW	XG	MIN. XI ◆◆	DD MTG. MIN. STK.	XS	XT	ADD STROKE SN	SS	XC	XF	XJ	ZC	ZF
1 9/16	11/16	2 11/16	1.375	4 5/8	1 3/8	4	1 5/16	4 7/8	3 3/4	5 3/8	6 3/4	6 1/4	6 1/4	4 5/8	4 1/4 4 3/4 4 1/2	5 15/16 6 7/16 6 3/16	1/8	4 1/16 4 9/16 4 5/16	4 3/8 4 7/8 4 5/8	3	3 3/8	11 3/8 11 7/8 11 5/8	10 1/8 10 5/8 10 3/8	7 3/8 7 7/8 7 5/8	12 1/8 12 5/8 12 3/8	10 3/4 11 1/4 11
1 9/16	11/16	2 7/16	1.750	5 7/8	1 3/4	5	1 1/2	5 7/8	4 3/4	7 1/8	8 1/2	8	7 1/4	5 13/16	4 3/8 4 3/4 4 5/8	6 7/16 6 13/16 6 11/16	3/8	4 1/16 4 7/16 4 5/16	4 1/2 4 7/8 4 3/4	3 1/2	4 1/8	12 1/8 12 1/2 12 3/8	10 5/8 11 10 7/8	8 8 3/8 8 1/4	13 1/8 13 1/2 13 3/8	11 3/8 11 3/4 11 5/8
2	7/8	2 5/8	1.750	6 3/8	1 3/4	5 1/2	2 1/16	6 3/4	5 1/4	7 5/8	9	8 1/2	8 1/2	6 3/8	4 5/8 5 4 3/4	6 11/16 7 1/16 6 13/16	1/8	4 1/2 4 7/8 4 5/8	4 3/4 5 1/8 4 7/8	3 3/4	4	13 1/4 13 5/8 13 3/8	11 1/8 11 1/2 11 1/4	8 1/2 8 7/8 8 5/8	14 5/8 15 14 3/4	12 12 3/8 12 1/8
2	7/8	2 7/8	1.750	8 3/16	1 3/4	7	2 15/16	8 1/4	6 3/4	9 3/4	10 1/2	10	10	7 3/4	5 5 1/4 5 1/4 5 1/4	7 1/16 7 5/16 7 5/16 7 5/16	0	4 7/8 5 1/8 5 1/8 5 1/8	5 1/8 5 3/8 5 3/8 5 3/8	4 1/4	4 1/2	14 1/2 14 3/4 14 3/4 14 3/4	12 1/4 12 1/2 12 1/2 12 1/2	9 3/8 9 5/8 9 5/8 9 5/8	16 1/4 16 1/2 16 1/2 16 1/2	13 1/8 13 3/8 13 3/8 13 3/8
2 1/2	1 1/8	3 1/8	2.000	9 7/16	2	8 1/2	3 5/16	9 3/4	7 3/4	11 1/4	12 1/2	11 1/2	12	10 3/4	5 3/8 5 3/8 5 3/8 5 3/8	8 1/16 8 1/16 8 1/16 8 1/16	1/4	5 3/8 5 3/8 5 3/8 5 3/8	5 1/2 5 1/2 5 1/2 5 1/2	5 1/8	5 1/8	16 1/8 16 1/8 16 1/8 16 1/8	13 5/8 13 5/8 13 5/8 13 5/8	10 3/8 10 3/8 10 3/8 10 3/8	18 1/8 18 1/8 18 1/8 18 1/8	14 5/8 14 5/8 14 5/8 14 5/8
2 7/8	1 3/8	2 7/8	2.500	10 5/8	2 1/2	9 3/4	3 3/4	11 1/4	8 3/4	12 5/8	14 3/4	13 1/2	14	11 1/2	5 1/8 5 1/8 5 1/8 5 1/8 5 1/8	8 1/16 8 1/16 8 1/16 8 1/16 8 1/16	1/8	5 1/8 5 1/8 5 1/8 5 1/8 5 1/8	5 5/16 5 5/16 5 5/16 5 5/16 5 5/16	5 7/8	5 3/4	16 3/4 16 3/4 16 3/4 16 3/4 16 3/4	13 3/4 13 3/4 13 3/4 13 3/4 13 3/4	10 7/8 10 7/8 10 7/8 10 7/8 10 7/8	19 1/4 19 1/4 19 1/4 19 1/4 19 1/4	14 3/4 14 3/4 14 3/4 14 3/4 14 3/4
2 7/8	1 3/8	2 7/8	3.000	11 13/16	3	11	4 1/4	12 1/4	9 3/4	14	17	15 1/2	15	13 3/8	5 1/4 5 1/4 5 1/4 5 1/4 5 1/4	8 9/16 8 9/16 8 9/16 8 9/16 8 9/16	1/8	5 1/8 5 1/8 5 1/8 5 1/8 5 1/8	5 7/16 5 7/16 5 7/16 5 7/16 5 7/16	6 5/8	6 3/4	18 18 18 18 18	14 3/4 14 3/4 14 3/4 14 3/4 14 3/4	11 3/4 11 3/4 11 3/4 11 3/4 11 3/4	20 3/4 20 3/4 20 3/4 20 3/4 20 3/4	15 3/4 15 3/4 15 3/4 15 3/4 15 3/4

B

DIMENSIONS
DOUBLE ROD CYLINDERS



To obtain dimensioning information on a double rod cylinder, first select the desired mounting style and refer to the corresponding single rod cylinder model shown on the preceding pages. After you have determined all necessary dimensions from that drawing, turn back to this page and supplement those dimensions with additional ones from this drawing and the table at right. These added dimensions provide the additional information needed to completely dimension a double rod cylinder model.

On a double rod cylinder where the two rod ends will be different, be sure to state which rod end is to go at which end of the cylinder.

BORE SIZE	ROD NO.	ROD DIA.	ADD STROKE LD	ADD STROKE ZL	ADD STROKE SN_K	ADD STROKE SS_K	ADD 2X STROKE ZM
2 1/2	1	1	10 1/4	11 7/16	3	3 5/8	11 3/4
	2	1 3/4		11 15/16			12 3/4
	3	1 3/8		11 11/16			12 1/4
3 1/4	1	1 3/8	10 3/4	12 3/16	3 1/2	4 3/8	12 1/2
	2	2		12 9/16			13 1/4
	3	1		12 7/16			13
4	1	1 3/4	11 1/4	12 13/16	3 3/4	4 1/4	13 1/4
	2	2 1/2		13 3/16			14
	3	2		12 15/16			13 1/2
5	1	2	12 1/4	14 3/16	4 1/4	4 3/4	14 1/2
	2	3 1/2		14 7/16			15
	3	2 1/2		14 7/16			15
	4	3		14 7/16			15
6	1	2 1/2	13 3/8	15 1/2	4 7/8	5 1/8	15 7/8
	2	4					
	3	3					
	4	3 1/2					
7	1	3	13 1/2	15 3/4	5 3/8	5 3/4	16
	2	5					
	3	3 1/2					
	4	4					
	5	4 1/2					
8	1	3 1/2	14 1/2	16 13/16	6 1/8	6 3/4	17
	2	5 1/2					
	3	4					
	4	4 1/2					
	5	5					
REPLACES			LB	ZB	SN	SS	—
ON SINGLE ROD MOUNTING STYLE			ALL MTG. STYLES		F	C	ALL MTG.

HOW TO ORDER SERIES VH CYLINDERS

Note: Parker Series VH Cylinders can be completely & accurately described by a model number consisting of coded symbols. To develop a model number select only those symbols that represent the cylinder required and place them in the sequence shown in the chart below.

SERIES VH MODEL NUMBERS—HOW TO DEVELOP THEM—HOW TO DECODE THEM.

	BORE SIZE	CUSHION HEAD END	DOUBLE ROD	MOUNTING STYLE	MOUNTING MOD.	COMBINATION MOUNTING STYLE	SERIES	PISTON	PORTS	COMMON MODIFICATION	SPECIAL MODIFICATIONS	PISTON ROD NO.	ROD END THREAD STYLE NO.	ALTERNATE STANDARD ROD END THD. LENGTH	THREAD TYPE	CUSHION CAP END	STROKE
EXAMPLE	6	C	K	C	P	TB	VH		T	V	S	1	4	2	A	C	X50
	Specify 2 1/2" thru 8"	Specify only if Cushion Head End is required	Use only if Double Rod Cyl. is required	Specify mounting style T, TB, TC, TD, F, H, J, BB, C, D, DB, DD, HB, JB.	Specify P-for Thrust Key Mtg. M-for Manifold Ports	Specify any practical mtg. style available	Specify Series VH	For ring type piston no letter req'd. Use K for Hi-load Piston	Specify Port Type req'd. U=NPTF T=S.A.E. P=S.A.E. Flange Ports R=BSP B=BSPT G=Metric Y=metric ISO 6149	If required specify V=Fluoro-carbon Seals F=Nut Retained Piston X=E.P.R. Seals W=Water Service J=High Water Content Fluid See Section C	Specify only if special modifications are required. Do not use symbol "S" for rod end modifications.	Specify rod code no. See chart in Section C for min. Piston rod diameter	Specify Style 4 Small Male Style 8 Intermediate Male Style 9 Short Female Style 3 Special. Specify KK, A, LA or W dim. req'd	Specify only if 2 times Standard Catalog "A" dim. is required	Specify A=UNF W=BSF M=Metric	Specify only if Cushion Cap End is required	Specify in inches. Show symbol "X" just ahead of stk. length.

Class 1 SEALS
Class 1 seals are the seals provided as standard in a cylinder assembly unless otherwise specified. For further information on fluid compatibility on operating limitations of all compounds, see Section C.
For the VH series cylinders the following make-up Class 1 Seals:

Primary Piston Rod Seal—Enhanced Polyurethane
Piston Rod Wiper—Nitrile
Piston Seals—Cast Iron Rings
Option—Nitrile lipseals with polymyte back-up washers
Option—Hi-Load, Filled P.T.F.E. seals with a nitrite expander
O-rings—Nitrile (nitrrile back-up washer when used)

For additional information – call your local Parker Cylinder Distributor.