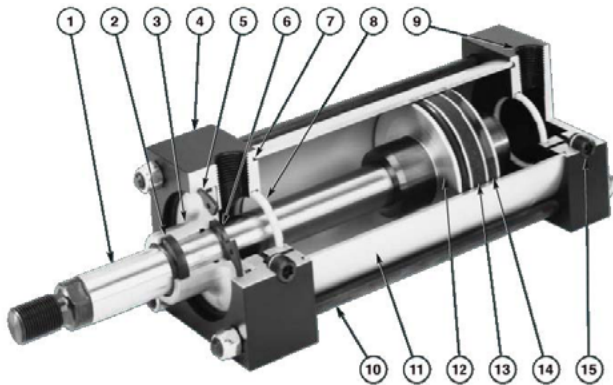


HEAVY DUTY NFPA CYLINDERS

FLAIRLINE

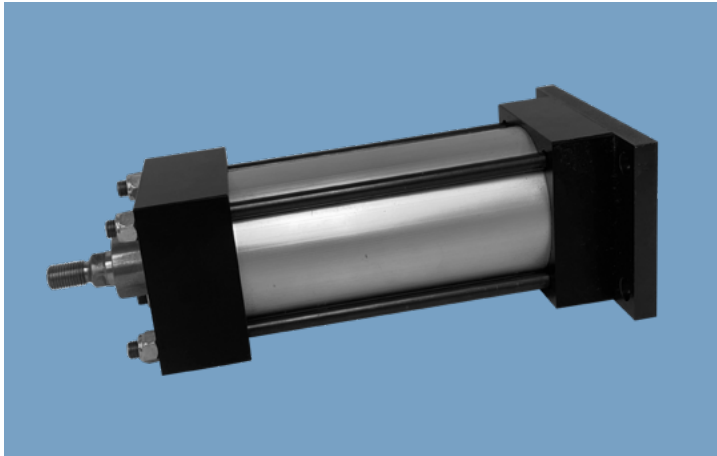


- 1 Chrome-plated, high-strength, steel **Piston Rods** are corrosion resistant, rugged and durable.
- 2 Urethane, double lip **Rod Wiper** aggressively wipes contaminants from rod protecting rod seal and cylinder.
- 3 660 bronze **Rod Bearing** provides maximum rod support and low friction for normal to high-load conditions. Lube reservoir allows longer bearing and seal life without maintenance.
- 4 **Head** and **Cap** are machined, aluminum precision blocks for accurate mounting surfaces. Black anodized for corrosion resistance.
- 5 Steel **Retaining Ring** for strength, coated for corrosion resistance, allows easy removal of rod bearing and seals without disassembly of cylinder.
- 6 Pressure-energized, wear compensating U-cup **Rod Seal** provides positive sealing.

- 7 **Barrel Seals** offer O-ring design for positive sealing.
- 8 Floating **Cushion Seal** “check valve” offers fast break-a-way, self-aligning, positive cushioning for faster cycle time and reduced cylinder wear.
- 9 N.P.T.F. **Ports** standard.
- 10 **Tie Rods** are pre-stressed, high strength steel for maximum fatigue capacity and have rolled threads for added strength. Black oxide finish provides corrosion resistance.
- 11 Precision-drawn, lightweight aluminum **Barrel** is hard anodized inside and out for corrosion and abrasion resistance. Fine I.D. micro-finish provides long life and positive sealing.
- 12 Aluminum **Piston** is threaded to rod, permanently locked with aerobic adhesive and secured with lock nut. Optional magnet is installed under wear ring.
- 13 Specially formulated acetal **Wear Ring** increases cylinder life by eliminating metal to metal contact.
- 14 Pressure-energized, wear compensating, U-cup **Piston Seals** provide positive sealing.
- 15 Adjustable **Cushion Needles** have fine thread metering, are captive and flush (cushions not available on head-end of 1 1/2 bore cylinders with oversize rods).

HEAVY DUTY NFPA CYLINDERS

FLAIRLINE



Information

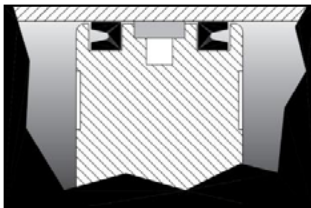
Flairline double-acting NFPA cylinders are built to NFPA standards and can be used for all types of applications where economical and durable actuators are required.

- Operating systems can be pneumatic or hydraulic
- Precision components and sealing elements permit continuous operation in any environment
- Models TS and TLS feature oversized rods with a unique seal configuration
- TL and TLS are low friction models for minimal break away force
- Models TM feature magnetic pistons cylinders

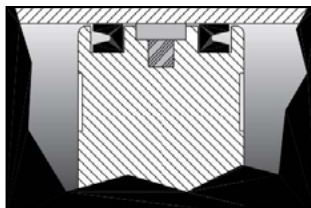
ALSO AVAILABLE IN DOUBLE ENDED

- Rod extensions allow for work to be done at both ends because the force and speed are equal in both directions
- TSDE cylinders feature oversized rods

AVAILABLE IN TWO PISTON TYPES



T TYPE



TM TYPE

FLAIRLINE WARRANTY

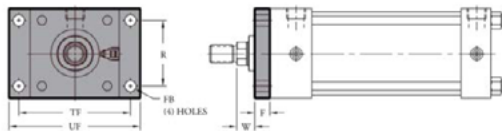
Flairline warrants each product against defects in material and workmanship for a period of one year from the date of manufacturing providing its use was in accordance with Flairline recommendations. If the product fails to perform as warranted, Flairline will, at its option, repair or replace the product free of charge. The company will not be liable for incidental or consequential damages. We make no other warranty, expressed or implied, including warranties of merchantability or fitness for a particular purpose.

HEAVY DUTY NFPA CYLINDERS



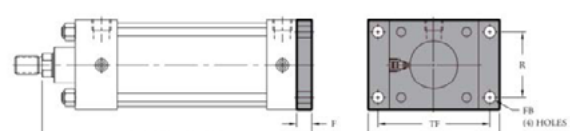
MOUNTING STYLES for HEAVY-DUTY NFPA CYLINDERS

Front Flange Mount (NFPA MF1)



NFPA MF1

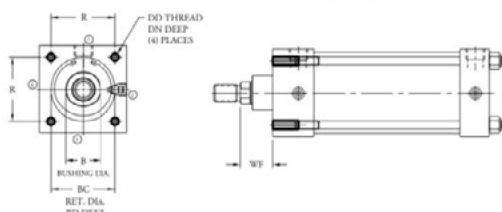
Rear Flange Mount (NFPA MF2)



NFPA MF2

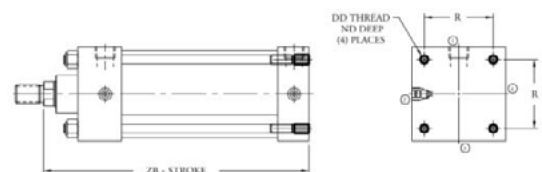
BORE SIZE	DIMENSIONS									BORE SIZE	DIMENSIONS												
	ROD DIA.	F	FB	R	TF	UF	W	ZF	ROD DIA.		F	FB	R	TF	UF	W	ZF						
1 1/2	5/8	1	3/8	5/16	1.43	2 3/4	3 3/8	5/8	1	5	5 3/8	1 1/2	5/8	1	3/8	5/16	1.43	2 3/4	3 3/8	5/8	1	5	5 3/8
2	5/8	1	3/8	3/8	1.84	3 3/8	4 1/8	5/8	1	5	5 1/2	2	5/8	1	3/8	3/8	1.84	3 3/8	4 1/8	5/8	1	5	5 1/2
2 1/2	5/8	1	3/8	3/8	2.19	3 7/8	4 5/8	5/8	1	5 1/8	5 1/2	2 1/2	5/8	1	3/8	3/8	2.19	3 7/8	4 5/8	5/8	1	5 1/8	5 1/2
3 1/4	1	1 3/8	5/8	7/16	2.76	4 11/16	5 1/2	3/4	1	6 1/4	6 1/2	3 1/4	1	1 3/8	5/8	7/16	2.76	4 11/16	5 1/2	3/4	1	6 1/4	6 1/2
4	1	1 3/8	5/8	7/16	3.32	5 7/16	6 1/4	3/4	1	6 1/4	6 1/2	4	1	1 3/8	5/8	7/16	3.32	5 7/16	6 1/4	3/4	1	6 1/4	6 1/2
5	1	1 3/8	5/8	9/16	4.10	6 5/8	7 5/8	3/4	1	6 1/2	6 3/4	5	1	1 3/8	5/8	9/16	4.10	6 5/8	7 5/8	3/4	1	6 1/2	6 3/4
6	1 3/8	1 3/4	3/4	9/16	4.88	7 5/8	8 5/8	7/8	1 1/8	7 3/8	7 5/8	6	1 3/8	1 3/4	3/4	9/16	4.88	7 5/8	8 5/8	7/8	1 1/8	7 3/8	7 5/8

Front Face Mount (NFPA FC1)



NFPA FC1

Rear Face Mount (NFPA FC2)



NFPA FC2

BORE SIZE	DIMENSIONS									BORE SIZE	DIMENSIONS										
	ROD DIA.	B	BC	BD	DD	DN	R	WF	ROD DIA.		DD	ND	R	ZB							
1 1/2	5/8	1	1.124	1.499	1 5/8	NA	1/16	1/4 - 28	3/4	1 1/8	1.43	1	1	1 1/2	5/8	1	1/4 - 28	1/2	1.43	4 5/8	5
2	5/8	1	1.124	1.499	2 1/8	3/32	5/16 - 24	3/4	1.84	1	3/8	2	5/8	1	5/16 - 24	1/2	1.84	4 5/8	5		
2 1/2	5/8	1	1.124	1.499	2 1/8	3/32	5/16 - 24	3/4	2.19	1	3/8	2 1/2	5/8	1	5/16 - 24	1/2	2.19	4 3/4	5 1/8		
3 1/4	1	1 3/8	1.499	1.999	2 3/4	5/32	3/8 - 24	7/8	2.76	1 3/8	1 5/8	3 1/4	1	1 3/8	3/8 - 24	5/8	2.76	5 5/8	5 7/8		
4	1	1 3/8	1.499	1.999	2 3/4	5/32	3/8 - 24	7/8	3.32	1 3/8	1 5/8	4	1	1 3/8	3/8 - 24	5/8	3.32	5 5/8	5 7/8		
5	1	1 3/8	1.499	1.999	2 3/4	5/32	1/2 - 20	7/8	4.10	1 3/8	1 5/8	5	1	1 3/8	1/2 - 20	5/8	4.10	5 7/8	6 1/8		
6	1 3/8	1 3/4	1.999	2.374	3 1/4	3/16	1/2 - 20	1	4.88	1 5/8	1 7/8	6	1 3/8	1 3/4	1/2 - 20	3/4	4.88	6 5/8	6 7/8		
8	1 3/8	1 3/4	1.999	2.374	3 1/4	3/16	5/8 - 18	1	6.44	1 5/8	1 7/8	8	1 3/8	1 3/4	5/8 - 18	3/4	6.44	6 3/4	7		

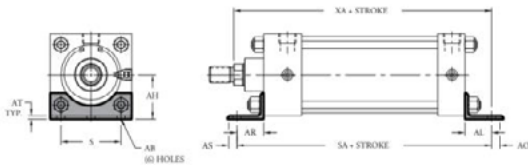
*Includes 3/8 unthread cover plate.

HEAVY DUTY NFPA CYLINDERS



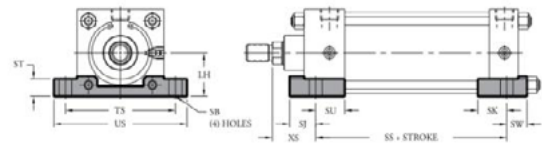
MOUNTING STYLES for HEAVY-DUTY NFPA CYLINDERS

Angle Mount (NFPA MS1)



NFPA MS1

Side Lug Mount (NFPA MS2)

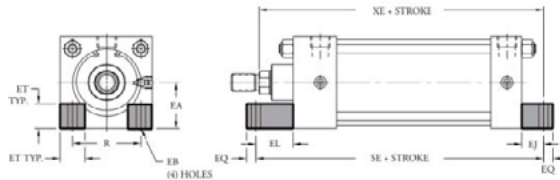


NFPA MS2

BORE SIZE	DIMENSIONS												
	ROD DIA.	AB	AH	AL	AO	AR	AS	AT	S	SA	XA		
1 1/2	5/8	1	7/16	1 3/16	1	3/8	1 3/8	3/8	1/8	1 1/4	6	5 5/8	6
2	5/8	1	7/16	1 7/16	1	3/8	1 3/8	3/8	1/8	1 3/4	6	5 5/8	6
2 1/2	5/8	1	7/16	1 5/8	1	3/8	1 3/8	3/8	1/8	2 1/4	6 1/8	5 3/4	6 1/8
3 1/4	1	1 3/8	9/16	1 15/16	1 1/4	1/2	1 7/8	5/8	3/16	2 3/4	7 3/8	6 7/8	7 1/8
4	1	1 3/8	9/16	2 1/4	1 1/4	1/2	1 7/8	5/8	3/16	3 1/2	7 3/8	6 7/8	7 1/8
5	1	1 3/8	11/16	2 3/4	1 3/8	5/8	2	1	3/16	4 1/4	7 7/8	7 1/4	7 1/2
6	1 3/8	1 3/4	13/16	3 1/4	1 3/8	5/8	2 1/8	7/8	3/16	5 1/4	8 1/2	8	8 1/4
8	1 3/8	1 3/4	13/16	4 1/4	1 13/16	1 1/16	1 13/16	1 1/16	1/4	7 1/8	8 3/4	8 9/16	8 13/16

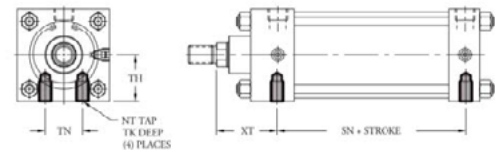
BORE SIZE	DIMENSIONS														
	ROD DIA.	LH	SB	SJ	SK	SS	ST	SU	SW	TS	US	XS			
1 1/2	5/8	1	1	7/16	3/4	1 1/8	5/8	2 7/8	1/2	15/16	9/16	2 3/4	3 1/2	1 3/8	1 3/4
2	5/8	1	1 1/4	7/16	7/8	15/16	2 7/8	1/2	15/16	3/4	3 1/4	4	1 3/8	1 3/4	
2 1/2	5/8	1	1 1/2	7/16	7/8	15/16	3	1/2	15/16	3/4	3 3/4	4 1/2	1 3/8	1 3/4	
3 1/4	1	1 3/8	1 7/8	9/16	1 1/8	1 1/4	3 1/4	3/4	1 1/4	3/4	4 3/4	5 3/4	1 7/8	2 1/8	
4	1	1 3/8	2 1/4	9/16	1 1/8	1 1/4	3 1/4	3/4	1 1/4	1	5 1/2	6 1/2	1 7/8	2 1/8	
5	1	1 3/8	2 3/4	13/16	1 7/16	1 9/16	3 3/8	1	1 9/16	1 7/16	6 7/8	8 1/4	2 1/16	2 5/16	
6	1 3/8	1 3/4	3 1/4	13/16	1 7/16	1 9/16	3 5/8	1	1 9/16	1 7/16	7 7/8	9 1/4	2 5/16	2 9/16	
8	1 3/8	1 3/4	4 1/4	13/16	1 11/16	1 9/16	3 3/4	1	1 9/16	1 11/16	9 7/8	11 1/4	2 5/16	2 9/16	

End Lug Mount (NFPA MS7)



NFPA MS7

Side Tapped Mounts (NFPA MS4)



NFPA MS4

BORE SIZE	DIMENSIONS													
	ROD DIA.	EA	EB	EJ	EL	EQ	ET	R	SE	XE				
1 1/2	5/8	1	1	5/16	3/4	3/4	1 1/8	3/4	1/4	9/16	1.43	5 1/2	5 3/8	5 3/4
2	5/8	1	1 1/4	3/8	15/16	1 5/16	5/16	1 1/16	1.84	5 7/8	5 9/16	5 15/16		
2 1/2	5/8	1	1 1/2	3/8	1 1/16	1 7/16	5/16	13/16	2.19	6 1/4	5 5/16	6 3/16		
3 1/4	1	1 3/8	1 7/8	7/16	7/8	1 1/2	3/8	1	2.76	6 5/8	6 1/2	6 3/4		
4	1	1 3/8	2 1/4	7/16	1	1 5/8	3/8	1 3/16	3.32	6 7/8	6 5/8	6 7/8		
5	1	1 3/8	2 3/4	9/16	1 1/16	1 11/16	1/2	1 3/8	4.10	7 1/4	6 15/16	7 3/16		
6	1 3/8	1 3/4	3 1/4	9/16	1	1 3/4	1/2	1 5/8	4.88	7 3/4	7 5/8	7 7/8		
8	1 3/8	1 3/4	4 1/4	1 1/16	1 1/8	1 1/8	5/8	2 1/16	6.44	7 3/8	7 7/8	8 3/8		

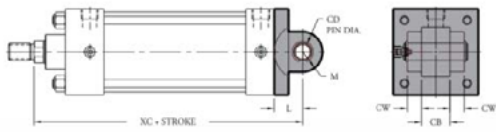
BORE SIZE	DIMENSIONS									
	ROD DIA.	NT	SN	TH	TK	TN	XT			
1 1/2	5/8	1	1/4-20	2 1/4	1	3/8	5/16	5/8	1 15/16	2 15/16
2	5/8	1	5/16-18	2 1/4	1 1/4	1/2	7/8	1 15/16	2 15/16	
2 1/2	5/8	1	3/8-16	2 3/8	1 1/2	5/8	1 1/4	1 15/16	2 15/16	
3 1/4	1	1 3/8	1/2-13	2 5/8	1 7/8	13/16	1 1/2	2 7/16	2 11/16	
4	1	1 3/8	1/2-13	2 5/8	2 1/4	13/16	2 1/16	2 7/16	2 11/16	
5	1	1 3/8	5/8-11	2 7/8	2 3/4	1	2 11/16	2 7/16	2 11/16	
6	1 3/8	1 3/4	3/4-10	3 1/8	3 1/4	1 3/16	3 1/4	2 13/16	3 1/16	
8	1 3/8	1 3/4	3/4-10	3 1/4	4 1/4	1 1/4	4 1/2	2 13/16	3 1/16	

HEAVY DUTY NFPA CYLINDERS



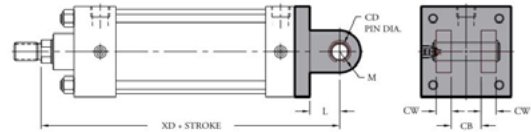
MOUNTING STYLES for HEAVY-DUTY NFPA CYLINDERS

Clevis Mount (NFPA MP1)



NFPA MP1

Clevis Mount (NFPA MP2)



NFPA MP2

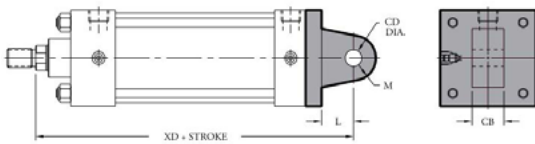
BORE SIZE	DIMENSIONS										
	ROD DIA.	CB	CD	CW	L	M	XC	XD			
1 1/2	5/8	1	3/4	1/2	1/2	3/4	5/8	5 3/8	5 3/4	5 3/4	6 1/8
2	5/8	1	3/4	1/2	1/2	3/4	5/8	5 3/8	5 3/4	5 3/4	6 1/8
2 1/2	5/8	1	3/4	1/2	1/2	3/4	5/8	5 1/2	5 7/8	5 7/8	6 1/4
3 1/4	1	1 3/8	1 1/4	3/4	5/8	1 1/4	7/8	6 7/8	7 1/8	7 1/2	7 3/4
4	1	1 3/8	1 1/4	3/4	5/8	1 1/4	7/8	6 7/8	7 1/8	7 1/2	7 3/4
5	1	1 3/8	1 1/4	3/4	5/8	1 1/4	7/8	7 1/8	7 3/8	7 3/4	8
6	1 3/8	1 3/4	1 1/2	1	3/4	1 1/2	1 1/4	8 1/8	8 3/8	8 7/8	9 1/8
8	1 3/8	1 3/4	1 1/2	1	3/4	1 1/2	1 1/4	8 1/4	8 1/2	NA	NA

Pivot pin is included on MP1 and MP2. Optional pivot pin for MP4.

BORE SIZE	DIMENSIONS										
	ROD DIA.	CB	CD	CW	L	M	XC	XD			
1 1/2	5/8	1	3/4	1/2	1/2	3/4	5/8	5 3/8	5 3/4	5 3/4	6 1/8
2	5/8	1	3/4	1/2	1/2	3/4	5/8	5 3/8	5 3/4	5 3/4	6 1/8
2 1/2	5/8	1	3/4	1/2	1/2	3/4	5/8	5 1/2	5 7/8	5 7/8	6 1/4
3 1/4	1	1 3/8	1 1/4	3/4	5/8	1 1/4	7/8	6 7/8	7 1/8	7 1/2	7 3/4
4	1	1 3/8	1 1/4	3/4	5/8	1 1/4	7/8	6 7/8	7 1/8	7 1/2	7 3/4
5	1	1 3/8	1 1/4	3/4	5/8	1 1/4	7/8	7 1/8	7 3/8	7 3/4	8
6	1 3/8	1 3/4	1 1/2	1	3/4	1 1/2	1 1/4	8 1/8	8 3/8	8 7/8	9 1/8
8	1 3/8	1 3/4	1 1/2	1	3/4	1 1/2	1 1/4	8 1/4	8 1/2	NA	NA

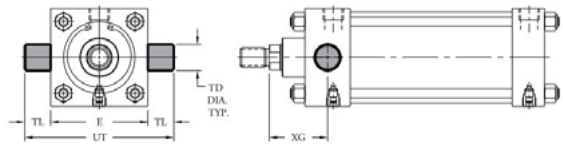
Pivot pin is included on MP1 and MP2. Optional pivot pin for MP4.

Pivot Mount (NFPA MP4)



NFPA MP4

Head Trunnion Mounts (NFPA MT1)



NFPA MT1

BORE SIZE	DIMENSIONS										
	ROD DIA.	CB	CD	CW	L	M	XC	XD			
1 1/2	5/8	1	3/4	1/2	1/2	3/4	5/8	5 3/8	5 3/4	5 3/4	6 1/8
2	5/8	1	3/4	1/2	1/2	3/4	5/8	5 3/8	5 3/4	5 3/4	6 1/8
2 1/2	5/8	1	3/4	1/2	1/2	3/4	5/8	5 1/2	5 7/8	5 7/8	6 1/4
3 1/4	1	1 3/8	1 1/4	3/4	5/8	1 1/4	7/8	6 7/8	7 1/8	7 1/2	7 3/4
4	1	1 3/8	1 1/4	3/4	5/8	1 1/4	7/8	6 7/8	7 1/8	7 1/2	7 3/4
5	1	1 3/8	1 1/4	3/4	5/8	1 1/4	7/8	7 1/8	7 3/8	7 3/4	8
6	1 3/8	1 3/4	1 1/2	1	3/4	1 1/2	1 1/4	8 1/8	8 3/8	8 7/8	9 1/8
8	1 3/8	1 3/4	1 1/2	1	3/4	1 1/2	1 1/4	8 1/4	8 1/2	NA	NA

Pivot pin is included on MP1 and MP2. Optional pivot pin for MP4.

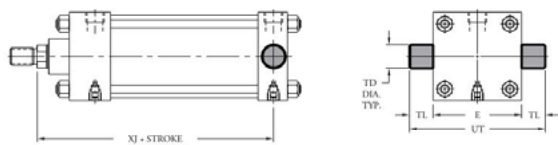
BORE SIZE	DIMENSIONS									
	ROD DIA.	E	TD	TL	UT	XG	XJ			
1 1/2	5/8	1	2	1	1	4	1 3/4	2 1/8	4 1/8	4 1/2
2	5/8	1	2 1/2	1	1	4 1/2	1 3/4	2 1/8	4 1/8	4 1/2
2 1/2	5/8	1	3	1	1	5	1 3/4	2 1/8	4 1/4	4 5/8
3 1/4	1	1 3/8	3 3/4	1	1	5 3/4	2 1/4	2 1/2	5	5 1/4
4	1	1 3/8	4 1/2	1	1	6 1/2	2 1/4	2 1/2	5	5 1/4
5	1	1 3/8	5 1/2	1	1	7 1/2	2 1/4	2 1/2	5 1/4	5 1/2
6	1 3/8	1 3/4	6 1/2	1 3/8	1 3/8	9 1/4	2 5/8	2 7/8	5 7/8	6 1/8
8	1 3/8	1 3/4	8 1/2	1 3/8	1 3/8	11 1/4	2 5/8	2 7/8	6	6 1/4

HEAVY DUTY NFPA CYLINDERS



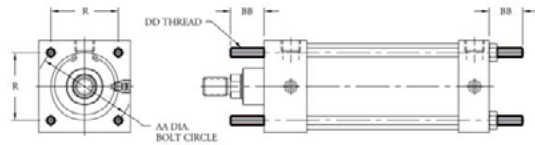
MOUNTING STYLES for HEAVY-DUTY NFPA CYLINDERS

Cap Trunnion Mounts (NFPA MT2)



NFPA MT2

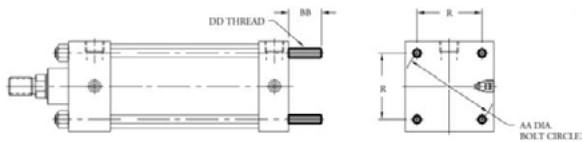
Extended Tie Rods - Front & Rear (NFPA MX1)



NFPA MX1

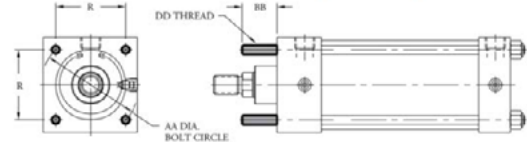
BORE SIZE	DIMENSIONS										BORE SIZE	DIMENSIONS			
	ROD DIA.	E	TD	TL	UT	XG	XJ	AA	BB	DD		R			
1 1/2	5/8	2	1	1	4	1 3/4	2 1/8	4 1/8	4 1/2	1 1/2	2.02	1	1/4-28	1.43	
2	5/8	1	2 1/2	1	1	4 1/2	1 3/4	2 1/8	4 1/8	4 1/2	2	2.6	1 1/8	5/16-24	1.84
2 1/2	5/8	1	3	1	1	5	1 3/4	2 1/8	4 1/4	4 5/8	2 1/2	3.1	1 1/8	5/16-24	2.19
3 1/4	1	1 3/8	3 3/4	1	1	5 3/4	2 1/4	2 1/2	5	5 1/4	3 1/4	3.9	1 3/8	3/8-24	2.76
4	1	1 3/8	4 1/2	1	1	6 1/2	2 1/4	2 1/2	5	5 1/4	4	4.7	1 3/8	3/8-24	3.32
5	1	1 3/8	5 1/2	1	1	7 1/2	2 1/4	2 1/2	5 1/4	5 1/2	5	5.8	1 13/16	1/2-20	4.10
6	1 3/8	1 3/4	6 1/2	1 3/8	1 3/8	9 1/4	2 5/8	2 7/8	5 7/8	6 1/8	6	6.9	1 13/16	1/2-20	4.88
8	1 3/8	1 3/4	8 1/2	1 3/8	1 3/8	11 1/4	2 5/8	2 7/8	6	6 1/4	8	9.1	2 5/16	5/8-18	6.44

Extended Tie Rods - Rear (NFPA MX2)



1
NFPA MX2

Extended Tie Rods - Front (NFPA MX3)



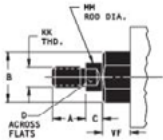
NFPA MX3

BORE SIZE	DIMENSIONS				BORE SIZE	DIMENSIONS			
	AA	BB	DD	R		AA	BB	DD	R
1 1/2	2.02	1	1/4-28	1.43	1 1/2	2.02	1	1/4-28	1.43
2	2.6	1 1/8	5/16-24	1.84	2	2.6	1 1/8	5/16-24	1.84
2 1/2	3.1	1 1/8	5/16-24	2.19	2 1/2	3.1	1 1/8	5/16-24	2.19
3 1/4	3.9	1 3/8	3/8-24	2.76	3 1/4	3.9	1 3/8	3/8-24	2.76
4	4.7	1 3/8	3/8-24	3.32	4	4.7	1 3/8	3/8-24	3.32
5	5.8	1 13/16	1/2-20	4.10	5	5.8	1 13/16	1/2-20	4.10
6	6.9	1 13/16	1/2-20	4.88	6	6.9	1 13/16	1/2-20	4.88
8	9.1	2 5/16	5/8-18	6.44	8	9.1	2 5/16	5/8-18	6.44

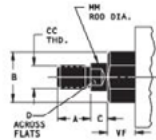
HEAVY DUTY NFPA CYLINDERS



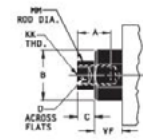
ROD END STYLES for HEAVY-DUTY NFPA CYLINDERS



SMALL MALE (NFPA SM)*



INTERMEDIATE MALE (NFPA IM)*



SHORT FEMALE (NFPA SF)*

BORE SIZE	DIMENSIONS						
	A	B	C	D	KK	MM	VF
1 1/2, 2, 2 1/2	3/4	1 1/8	3/8	1/2	7/16-20	5/8	5/8
3 1/4, 4	1 1/8	1 1/2	1/2	7/8	3/4-16	1	7/8

BORE SIZE	DIMENSIONS						
	A	B	C	CC	D	MM	VF
1 1/2, 2, 2 1/2	3/4	1 1/8	3/8	1/2-20	1/2	5/8	5/8
3 1/4, 4	1 1/8	1 1/2	1/2	7/8-14	7/8	1	7/8

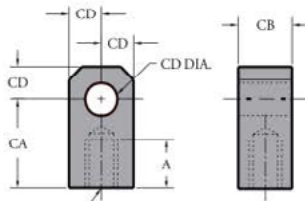
BORE SIZE	DIMENSIONS						
	A	B	C	D	KK	MM	VF
1 1/2, 2, 2 1/2	3/4	1 1/8	3/8	1/2	7/16-20	5/8	5/8
3 1/4, 4	1 1/8	1 1/2	1/2	7/8	3/4-16	1	7/8

*Standard on all Flairline NFPA interchangeable cylinders. When ordering, if no rod end style is specified, style SM will be supplied. Rod eye and rod clevis for style SM. Rod nut included.

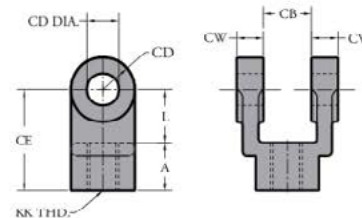
*Optional. Rod Nut Included

*Optional.

ACCESSORIES for HEAVY-DUTY NFPA CYLINDERS



ROD EYE



ROD CLEVIS

PART NO.	DIMENSIONS				
	A	CA	CB	CD	KK
4-36-3	3/4	1 1/2	3/4	1/2	7/16 - 20
4-36-3A	3/4	1 1/2	3/4	1/2	1/2 - 20
4-36-65	1 5/8	2 1/16	1 1/4	3/4	3/4 - 16
4-36-65A	1 5/8	2 1/16	1 1/4	3/4	7/8 - 14
4-36-12	1 5/8	2 13/16	1 1/2	1	1 - 14
4-36-12A	2	3 7/16	2	1 3/8	1 1/4 - 12
4-36-12B	2	3 7/16	2	1 3/8	1 1/2 - 12

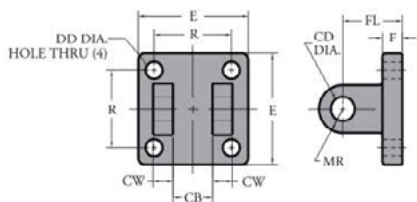
PART NO.	DIMENSIONS						
	A	CB	CD	CE	CW	L	KK
4-35-3	3/4	3/4	1/2	1 1/2	1/2	3/4	7/16 - 20
4-35-3A	3/4	3/4	1/2	1 1/2	1/2	3/4	1/2 - 20
4-35-65	1 1/8	1 1/4	3/4	2 3/8	5/8	1 1/4	3/4 - 16
4-35-65A	1 1/8	1 1/4	3/4	2 3/8	5/8	1 1/4	7/8 - 14
4-35-12	1 5/8	1 1/2	1	3 1/8	3/4	1 1/2	1 - 14
4-35-12A	2	2	1 3/8	4 1/8	1	2 1/8	1 1/4 - 12
4-35-12B	2	2	1 3/8	4 1/8	1	2 1/8	1 1/2 - 12

Pivot pin included.

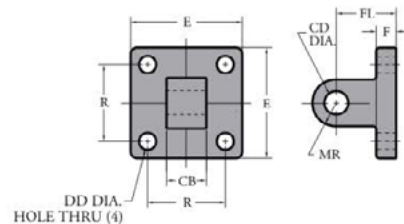
HEAVY DUTY NFPA CYLINDERS



ACCESSORIES for HEAVY-DUTY NFPA CYLINDERS



CLEVIS BRACKET

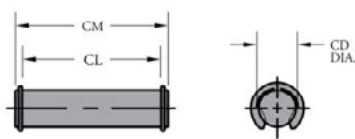


PIVOT BRACKET

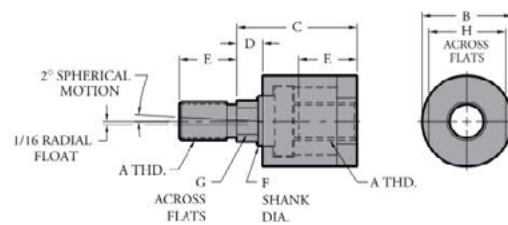
PART NO.	DIMENSIONS								
	CB	CD	CW	DD	E	F	FL	MR	R
5-34-3	3/4	1/2	1/2	13/32	2 1/2	3/8	1 1/2	1/2	1 5/8
5-34-65	1 1/4	3/4	5/8	17/32	3 1/2	5/8	1 7/8	3/4	2 9/16
5-34-12	1 1/2	1	3/4	21/32	4 1/2	3/4	2 1/4	1 1/8	3 1/4
5-34-12A	2	1 3/8	1	21/32	5	7/8	3	1 3/4	3 13/16
5-34-16	2 1/2	1 3/4	1 1/4	29/32	6 1/2	7/8	3 1/8	1 7/8	4 15/16

PART NO.	DIMENSIONS								
	CB	CD	DD	E	F	FL	MR	R	
5-37-3	3/4	1/2	13/32	2 1/2	3/8	1 1/8	1/2	1 5/8	
5-37-65	1 1/4	3/4	17/32	3 1/2	5/8	1 7/8	3/4	2 9/16	
5-37-12	1 1/2	1	21/32	4 1/2	7/8	2 3/8	1 1/4	3 1/4	
5-37-12A	2	1 3/8	21/32	5	7/8	3	1 5/8	3 13/16	
5-37-16	2 1/2	1 3/4	29/32	6 1/2	1 1/8	3 3/8	2 1/8	4 15/16	

See optional pivot pin below.



PIVOT PIN



ALIGNMENT COUPLER

PART NO.	DIMENSIONS		
	CD	CL	CM
BKT. PIN F 3 1/4, 4	1/2	1 7/8	2 1/16
PIVOT PIN FI 3 1/4, 4	3/4	2 5/8	2 29/32
5-40-12	1	3 1/8	3 7/16
5-40-12A	1 3/8	4 1/8	4 31/64
5-40-16	1 3/4	5 3/16	5 9/16

Snap Rings included.

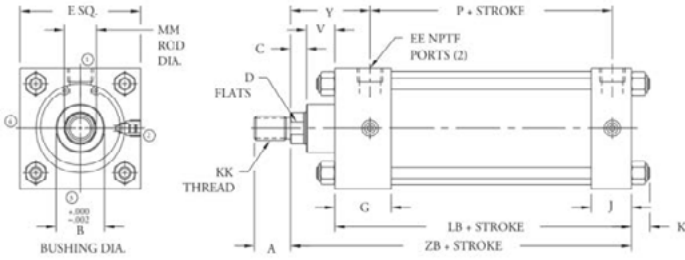
PART	DIMENSIONS									Max. Pull at Yield
	A	B	C	D	E	F	G	H		
4-39-3	7/16 -20	1 1/4	2	1/2	3/4	5/8	1/2	1	10,000	
4-39-3A	1/2 -20	1 1/4	2	1/2	3/4	5/8	1/2	1	14,000	
4-39-65	3/4 -16	1 3/4	2 5/16	1/2	1 1/8	31/32	3/16	1 1/2	34,000	
4-39-65A	7/8 -14	1 3/4	2 5/16	1/2	1 1/8	31/32	3/16	1 1/2	39,000	
4-39-12	1-14	2 1/2	2 15/16	1/2	1 5/8	1 3/8	1 5/32	2 1/4	64,000	
4-39-12A	1 1/4 -12	2 1/2	2 15/16	1/2	1 5/8	1 3/8	1 5/32	2 1/4	78,000	
4-39-16	1 1/2 -12	3 1/4	4 3/8	13/16	2 1/4	1 3/4	1 1/2	3	134,000	

Alignment couplers improve bearing and seal life by preventing excessive binding and friction caused by misalignment. Flairline alignment couplers also allow a greater assembly tolerances than would typically be required which help simplify cylinder installation. Alignment couplers work equally well in "push or "pull" applications and are available for all Flairline cylinders.

HEAVY DUTY NFPA CYLINDERS



Dimensions



Specifications

- Maximum Pressure:
Pneumatic: 250 psi
Hydraulic: 400 psi
(non-shock)
 - Operating Temperature:
0-200°F (Buna Seals)
-18-93°C (Buna Seals)
0-275°F (Viton Seals)
-18-135°C (Viton Seals)
- *Note: Viton seals for T and TS series only

Features

- Standard Bore Sizes:
1 1/2, 2, 2 1/2, 3 1/4, 4, 5, 6, 8
- Stroke Sizes: Any stroke up to 130"
- Cushions available: either/both ends
- Double-acting cylinders with pressure energized, wear compensating U-cup piston seals (Buna N standard; Viton available for Series T and TS)

DIM.	CYLINDER BORE																
	1 1/2	2	2 1/2	3 1/4	4	5	6	8									
A	3/4	1 1/8	3/4	1 1/8	3/4	1 1/8	1 1/8	1 5/8	2	1 5/8	2						
B	1.124	1.499	1.124	1.499	1.124	1.499	1.499	1.999	1.499	1.999	2.374	1.999	2.374				
C	3/8	1/2	3/8	1/2	3/8	1/2	1/2	5/8	1/2	5/8	1/2	5/8	3/4	5/8	3/4		
D	1/2	7/8	1/2	7/8	1/2	7/8	7/8	1 1/32	7/8	1 1/32	7/8	1 1/32	1 1/8	1 1/2	1 1/8	1 1/2	
E	2	2 1/2	3	3 3/4	4 1/2	5 1/2	6 1/2	8 1/2									
EE	1/4*	1/4*	1/4*	1/2	1/2	1/2	3/4	3/4									
G	1 1/2	1 1/2	1 1/2	1 3/4	1 3/4	1 3/4	2	2									
J	1	1	1	1 1/4	1 1/4	1 1/4	1 1/2	1 1/2									
K	7/16	15/32	15/32	9/16	9/16	3/4	3/4	7/8									
KK	7/16 -20	3/4 -16	7/16 -20	3/4 -16	7/16 -20	3/4 -16	1 -14	3/4 -14	1 -16	3/4 -14	1 -14	1 -14	1 1/4 -12	1 -14	1 1/4 -12		
LB	3 5/8	3 5/8	3 3/4	4 1/4	4 1/4	4 1/2	5	5 1/8									
LD	4 1/8	4 1/8	4 1/4	4 3/4	4 3/4	4 3/2	5 1/2	5 5/8									
MM (Rod Dia.)	5/8	1	5/8	1	5/8	1	1	1 3/8	1	1 3/8	1	1 3/8	1 3/8	1 3/4	1 3/8	1 3/4	
P	2 5/16	2 5/16	2 7/16	2 9/16	2 9/16	2 13/16	3 3/16	3 5/16									
V	5/8	7/8	5/8	7/8	5/8	7/8	7/8	1	7/8	1	7/8	1	1	1 1/8	1	1 1/8	
Y	1 29/32	2 9/32	1 29/32	2 9/32	1 29/32	2 9/32	2 15/32	2 23/32	2 15/32	2 23/32	2 15/32	2 23/32	2 23/32	3 1/32	2 25/32	3 1/32	
ZB	4 5/8	5	4 5/8	5	4 3/4	5 1/8	5 5/8	5 7/8	5 5/8	5 7/8	5 5/8	5 7/8	6 1/8	6 5/8	6 7/8	6 3/4	7
ZM	6 1/8	6 7/8	6 1/8	6 7/8	6 1/4	7	7 1/2	8	7 1/2	8	7 3/4	8 1/4	8 3/4	9 1/4	8 7/8	9 3/8	

*3/8 ports optional on 1 1/2, 2 and 2 1/2 bore cylinders.

HEAVY DUTY NFPA CYLINDERS



Ordering Information

T 2 x 6 MF1 T = 5 1/2 H NT

PISTON		MOUNTING STYLES		SPECIAL OPTIONS	
STANDARD	T	FRONT FLANGE MOUNT	MF1	CUSHIONS	
OVERSIZED ROD	TS	REAR FLANGE MOUNT	MF2	HEAD ONLY	H
LOW FRICTION	TL	FRONT FACE MOUNT	FC1	CAP ONLY	C
STANDARD		REAR FACE MOUNT	FC2	BOTH	HC
LOW FRICTION	TLS	ANGLE MOUNT	MS1	METAL ROD SCRAPER	MRS
OVERSIZED ROD		SIDE LUG MOUNT	MS2	3/8" INLET PORTS	Ports 3/8
		END LUG MOUNT	MS7	EXTRA INLET PORT(S)	Indicate location(s) (PP2, PP3, PP4) in cap or head end
		SIDE TAPPED MOUNT	MS4	NON-STANDARD INLET PORTS	Indicate location(s) (PP2, PP3, PP4) in cap or head end
		CLEVIS MOUNT	MP1	VITON PACKING	Viton
		CLEVIS MOUNT	MP2	STOP TUBES	Consult Factory
		PIVOT MOUNT	MP4	ROD END STYLES	Small Male Standard
		HEAD TRUNNION MOUNT	MT1	INTERMEDIATE MALE	IM
		CAP TRUNNION MOUNT	MT2	OR SHORT FEMALE	SF
		EXTENDED TIE RODS - FRONT & REAR	MX1	ROD EXTENSION "C"	C = Dimension
		EXTENDED TIE RODS - REAR	MX2	THREAD LENGTH "A"	A = Dimension
		EXTENDED TIE RODS - FRONT	MX3	MALE THREAD SIZE	XX = (size or plain rod end)
		BLANK	No Mount	FEMALE THREAD SIZE	XX = (size and depth - unless otherwise specified, all other dimensions will be Short Female)
				STAINLESS STEEL RODS	SS Rod

BORE SIZE	
1 1/2	
2	
2 1/2	
3 1/4	
4	
5	
6	
8	

STROKE LENGTH	
Any length in inch increments or fraction thereof up to and including 130"	

Note: All mounting options are on pages 51 - 54.

Replacement Parts

PK KIT T 2

PISTON		BORE SIZE	
STANDARD	T	1 1/2	
OVERSIZED ROD	TS	2	
LOW FRICTION	TL	2 1/2	
STANDARD		3 1/4	
LOW FRICTION	TLS	4	
OVERSIZED ROD		5	
		6	
		8	



**MF1, MF2, MP2, and MP4 are not available on 8" bore cylinders

Note: Longer lead times may be required for strokes longer than 18". Strokes over 40" may require oversized rods and/or stop tube. Cushions not available on head-end of 1 1/2 bore cylinders with oversized rods.

HEAVY DUTY NFPA MAGNETIC SWITCH CYLINDERS



Ordering Information

TM 2-CRT 2 x 6 MF1 T = 5 1/2 H NT

PISTON		BORE SIZE		MOUNTING STYLES		SPECIAL OPTIONS	
STANDARD TM		1 1/2		FRONT FLANGE MOUNT	MF1	CUSHIONS	
OVERSIZED TSM		2		REAR FLANGE MOUNT	MF2	HEAD ONLY	H
		2 1/2		FRONT FACE MOUNT	FC1	CAP ONLY	C
		3 1/4		REAR FACE MOUNT	FC2	BOTH	HC
		4		ANGLE MOUNT	MS1	METAL ROD SCRAPER	MRS
		5		SIDE LUG MOUNT	MS2	3/8" INLET PORTS	Ports 3/8
		6		END LUG MOUNT	MS7	EXTRA INLET PORT(S)	Indicate location(s) (PP2, PP3, PP4) in cap or head end
		8		SIDE TAPPED MOUNT	MS4	NON-STANDARD	
				CLEVIS MOUNT	MP1	INLET PORTS	Indicate location(s) (PP2, PP3, PP4) in cap or head end
				CLEVIS MOUNT	MP2		
				PIVOT MOUNT	MP4	VITON PACKING	Viton
				HEAD TRUNNION MOUNT	MT1	STOP TUBES	Consult Factory
				CAP TRUNNION MOUNT	MT2	ROD END STYLES	Small Male Standard
				EXTENDED TIE RODS - FRONT & REAR	MX1	OR SHORT FEMALE	IM
				EXTENDED TIE RODS - REAR	MX2	INTERMEDIATE MALE	SF
				EXTENDED TIE RODS - FRONT	MX3	ROD EXTENSION "C"	C = Dimension
				BLANK	No Mount	THREAD LENGTH "A"	A = Dimension
						MALE THREAD SIZE	XX = (size or plain rod end)
						FEMALE THREAD SIZE	XX = (size and depth - unless otherwise specified, all other dimensions will be Short Female
						STAINLESS STEEL RODS	SS Rod

Note: All mounting options are on pages 51 - 54.

STROKE LENGTH

Any length in inch increments or fraction thereof up to and including 130"

SWITCHES

TM:
 REED SWITCH Indicate Quantity-CRT
 HALL EFFECT SWITCH Indicate Quantity-HPT
 HALL EFFECT SWITCH Indicate Quantity-HNT
 TSM:
 REED SWITCH Indicate Quantity-CRR
 HALL EFFECT SWITCH Indicate Quantity-HPP
 HALL EFFECT SWITCH Indicate Quantity-HNN

Note: The switch options are on page 63.

Replacement Parts PK KIT TM 2

PISTON

TM
TSM

BORE SIZE

1 1/2
2
2 1/2
3 1/4
4
5
6
8

PROUD TO BE
MADE IN AMERICA

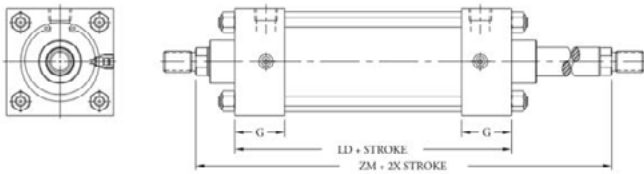
**MF1, MF2, MP2, and MP4 are not available on 8" bore cylinders

Note: Longer lead times may be required for strokes longer than 18". Strokes over 40" may require oversized rods and/or stop tube. Cushions not available on head-end of 1 1/2 bore cylinders with oversized rods.

HEAVY DUTY NFPA DOUBLE-ENDED CYLINDERS



Dimensions



Series TSDE features oversized rods

Specifications

- Maximum Pressure:
Pneumatic: 250 psi
Hydraulic: 400 psi
(non-shock)
 - Operating Temperature:
0-200°F (Buna Seals)
-18-93°C (Buna Seals)
0-275°F (Viton Seals)
-18-135°C (Viton Seals)
- *Note:** Viton seals for T and TS series only

Features

- Standard Bore Sizes:
1 1/2, 2, 2 1/2, 3 1/4, 4, 5, 6, 8
- Stroke Sizes: Any stroke up to 130"
- Cushions available: either/both ends
- Double-acting double-ended cylinders with pressure energized, wear compensating U-cup piston seals (Buna N standard; Viton available)

DIM.	CYLINDER BORE															
	1 1/2		2		2 1/2		3 1/4		4		5		6		8	
A	3/4	1 1/8	3/4	1 1/8	3/4	1 1/8	1 1/8	1 5/8	1 1/8	1 5/8	1 1/8	1 5/8	1 5/8	2	1 5/8	2
B	1.124	1.499	1.124	1.499	1.124	1.499	1.499	1.999	1.499	1.999	1.499	1.999	1.999	2.374	1.999	2.374
C	3/8	1/2	3/8	1/2	3/8	1/2	1/2	5/8	1/2	5/8	1/2	5/8	5/8	3/4	5/8	3/4
D	1/2	7/8	1/2	7/8	1/2	7/8	7/8	1 1/32	7/8	1 1/32	7/8	1 1/32	1 1/8	1 1/2	1 1/8	1 1/2
E	2	2 1/2	3	3 3/4	4 1/2	5 1/2	6 1/2	8 1/2								
EE	1/4*	1/4*	1/4*	1/2	1/2	1/2	3/4	3/4								
G	1 1/2	1 1/2	1 1/2	1 3/4	1 3/4	1 3/4	2	2								
J	1	1	1	1 1/4	1 1/4	1 1/4	1 1/2	1 1/2								
K	7/16	15/32	15/32	9/16	9/16	3/4	3/4	7/8								
KK	7/16-20	3/4-16	7/16-20	3/4-16	7/16-20	3/4-16	3/4-14	1-14	3/4-14	1-14	3/4-14	1-14	1-14	1 1/4-12	1-14	1 1/4-12
LB	3 5/8	3 5/8	3 3/4	4 1/4	4 1/4	4 1/2	5	5 1/8								
LD	4 1/8	4 1/8	4 1/4	4 3/4	4 3/4	4 3/2	5 1/2	5 5/8								
MM (Rod Dia.)	5/8	1	5/8	1	5/8	1	1	1 3/8	1	1 3/8	1	1 3/8	1 3/8	1 3/4	1 3/8	1 3/4
P	2 5/16	2 5/16	2 7/16	2 9/16	2 9/16	2 13/16	3 3/16	3 5/16								
V	5/8	7/8	5/8	7/8	5/8	7/8	7/8	1	7/8	1	7/8	1	1	1 1/8	1	1 1/8
Y	1 29/32	2 9/32	1 29/32	2 9/32	1 29/32	2 9/32	2 15/32	2 23/32	2 15/32	2 23/32	2 15/32	2 23/32	2 25/32	3 1/32	2 25/32	3 1/32
ZB	4 5/8	5	4 5/8	5	4 3/4	5 1/8	5 5/8	5 7/8	5 5/8	5 7/8	5 5/8	5 7/8	6 1/8	6 5/8	6 7/8	6 3/4
ZM	6 1/8	6 7/8	6 1/8	6 7/8	6 1/4	7	7 1/2	8	7 1/2	8	7 3/4	8 1/4	8 3/4	9 1/4	8 7/8	9 3/8

*3/8 ports optional on 1 1/2, 2 and 2 1/2 bore cylinders.

HEAVY DUTY NFPA DOUBLE-ENDED CYLINDERS



Ordering Information

TDE 2 x 6 MF1 T = 5 1/2 H NT

BORE SIZE	MOUNTING STYLES	SPECIAL OPTIONS																																																																						
<ul style="list-style-type: none"> 1 1/2 2 2 1/2 3 1/4 4 5 6 8 	<table border="0"> <tr><td>FRONT FLANGE MOUNT</td><td>MF1</td></tr> <tr><td>REAR FLANGE MOUNT</td><td>MF2</td></tr> <tr><td>FRONT FACE MOUNT</td><td>FC1</td></tr> <tr><td>REAR FACE MOUNT</td><td>FC2</td></tr> <tr><td>ANGLE MOUNT</td><td>MS1</td></tr> <tr><td>SIDE LUG MOUNT</td><td>MS2</td></tr> <tr><td>END LUG MOUNT</td><td>MS7</td></tr> <tr><td>SIDE TAPPED MOUNT</td><td>MS4</td></tr> <tr><td>CLEVIS MOUNT</td><td>MP1</td></tr> <tr><td>CLEVIS MOUNT</td><td>MP2</td></tr> <tr><td>PIVOT MOUNT</td><td>MP4</td></tr> <tr><td>HEAD TRUNNION MOUNT</td><td>MT1</td></tr> <tr><td>CAP TRUNNION MOUNT</td><td>MT2</td></tr> <tr><td>EXTENDED TIE RODS - FRONT & REAR</td><td>MX1</td></tr> <tr><td>EXTENDED TIE RODS - REAR</td><td>MX2</td></tr> <tr><td>EXTENDED TIE RODS - FRONT</td><td>MX3</td></tr> <tr><td>BLANK</td><td>No Mount</td></tr> </table> <p>Note: All mounting options are on pages 51 - 54.</p>	FRONT FLANGE MOUNT	MF1	REAR FLANGE MOUNT	MF2	FRONT FACE MOUNT	FC1	REAR FACE MOUNT	FC2	ANGLE MOUNT	MS1	SIDE LUG MOUNT	MS2	END LUG MOUNT	MS7	SIDE TAPPED MOUNT	MS4	CLEVIS MOUNT	MP1	CLEVIS MOUNT	MP2	PIVOT MOUNT	MP4	HEAD TRUNNION MOUNT	MT1	CAP TRUNNION MOUNT	MT2	EXTENDED TIE RODS - FRONT & REAR	MX1	EXTENDED TIE RODS - REAR	MX2	EXTENDED TIE RODS - FRONT	MX3	BLANK	No Mount	<table border="0"> <tr><td>CUSHIONS</td><td></td></tr> <tr><td>HEAD ONLY</td><td>H</td></tr> <tr><td>CAP ONLY</td><td>C</td></tr> <tr><td>BOTH</td><td>HC</td></tr> <tr><td>METAL ROD SCRAPER</td><td>MRS</td></tr> <tr><td>3/8" INLET PORTS</td><td>Ports 3/8</td></tr> <tr><td>EXTRA INLET PORT(S)</td><td>Indicate location(s) (PP2, PP3, PP4) in cap or head end</td></tr> <tr><td>NON-STANDARD INLET PORTS</td><td>Indicate location(s) (PP2, PP3, PP4) in cap or head end</td></tr> <tr><td>VITON PACKING</td><td>Viton Consult Factory Small Male Standard</td></tr> <tr><td>STOP TUBES</td><td>IM</td></tr> <tr><td>ROD END STYLES</td><td>SF</td></tr> <tr><td>INTERMEDIATE MALE</td><td>C = Dimension</td></tr> <tr><td>OR SHORT FEMALE</td><td>A = Dimension</td></tr> <tr><td>ROD EXTENSION "C"</td><td>XX = (size or plain rod end)</td></tr> <tr><td>THREAD LENGTH "A"</td><td>XX = (size and depth - unless otherwise specified, all other dimensions will be Short Female)</td></tr> <tr><td>MALE THREAD SIZE</td><td></td></tr> <tr><td>FEMALE THREAD SIZE</td><td>SS Rod</td></tr> <tr><td>STAINLESS STEEL RODS</td><td></td></tr> </table>	CUSHIONS		HEAD ONLY	H	CAP ONLY	C	BOTH	HC	METAL ROD SCRAPER	MRS	3/8" INLET PORTS	Ports 3/8	EXTRA INLET PORT(S)	Indicate location(s) (PP2, PP3, PP4) in cap or head end	NON-STANDARD INLET PORTS	Indicate location(s) (PP2, PP3, PP4) in cap or head end	VITON PACKING	Viton Consult Factory Small Male Standard	STOP TUBES	IM	ROD END STYLES	SF	INTERMEDIATE MALE	C = Dimension	OR SHORT FEMALE	A = Dimension	ROD EXTENSION "C"	XX = (size or plain rod end)	THREAD LENGTH "A"	XX = (size and depth - unless otherwise specified, all other dimensions will be Short Female)	MALE THREAD SIZE		FEMALE THREAD SIZE	SS Rod	STAINLESS STEEL RODS	
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<p>STROKE LENGTH</p> <p>Any length in inch increments or fraction thereof up to and including 130"</p>																																																																								

Replacement Parts

PK KIT TDE 2

PISTON	BORE SIZE
TDE TSDE	<ul style="list-style-type: none"> 1 1/2 2 2 1/2 3 1/4 4 5 6 8



**MF1, MF2, MP2, and MP4 are not available on 8" bore cylinders

Note: Longer lead times may be required for strokes longer than 18". Strokes over 40" may require oversized rods and/or stop tube. Cushions not available on head-end of 1 1/2 bore cylinders with oversized rods.

HEAVY DUTY NFPA MAGNETIC SWITCH DOUBLE-ENDED CYLINDERS



Ordering Information

TMDE 2-CRT 2 x 6 MF1 T = 5 1/2 H NT

PISTON		BORE SIZE	MOUNTING STYLES		SPECIAL OPTIONS	
STANDARD OVERSIZED ROD	TMDE TSMDE		1 1/2 2 2 1/2 3 1/4 4 5 6 8	FRONT FLANGE MOUNT REAR FLANGE MOUNT FRONT FACE MOUNT REAR FACE MOUNT ANGLE MOUNT SIDE LUG MOUNT END LUG MOUNT SIDE TAPPED MOUNT CLEVIS MOUNT CLEVIS MOUNT PIVOT MOUNT HEAD TRUNNION MOUNT CAP TRUNNION MOUNT EXTENDED TIE RODS - FRONT & REAR EXTENDED TIE RODS - REAR EXTENDED TIE RODS - FRONT BLANK	MF1 MF2 FC1 FC2 MS1 MS2 MS7 MS4 MP1 MP2 MP4 MT1 MT2 MX1 MX2 MX3 No Mount	CUSHIONS HEAD ONLY CAP ONLY BOTH METAL ROD SCRAPER 3/8" INLET PORTS EXTRA INLET PORT(S) NON-STANDARD INLET PORTS VITON PACKING STOP TUBES ROD END STYLES INTERMEDIATE MALE OR SHORT FEMALE ROD EXTENSION "C" THREAD LENGTH "A" MALE THREAD SIZE FEMALE THREAD SIZE STAINLESS STEEL RODS
SWITCHES						
TMDE: REED SWITCH Indicate Quantity-CRT HALL EFFECT SWITCH Indicate Quantity-HPT HALL EFFECT SWITCH Indicate Quantity-HNT TSMDE: REED SWITCH Indicate Quantity-CRR HALL EFFECT SWITCH Indicate Quantity-HPP HALL EFFECT SWITCH Indicate Quantity-HNN						
Note: The switch options are on page 63.						
STROKE LENGTH						
Any length in inch increments or fraction thereof up to and including 130"						
			Note: All mounting options are on pages 51 - 54.			

Replacement Parts

PK KIT TMDE 2

PISTON	BORE SIZE
TMDE TSMDE	1 1/2 2 2 1/2 3 1/4 4 5 6 8



PROUD TO BE
MADE IN AMERICA

**MF1, MF2, MP2, and MP4 are not available on 8" bore cylinders

Note: Longer lead times may be required for strokes longer than 18". Strokes over 40" may require oversized rods and/or stop tube. Cushions not available on head-end of 1 1/2 bore cylinders with oversized rods.

