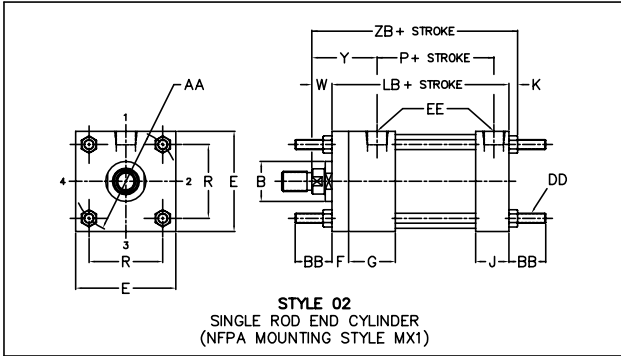




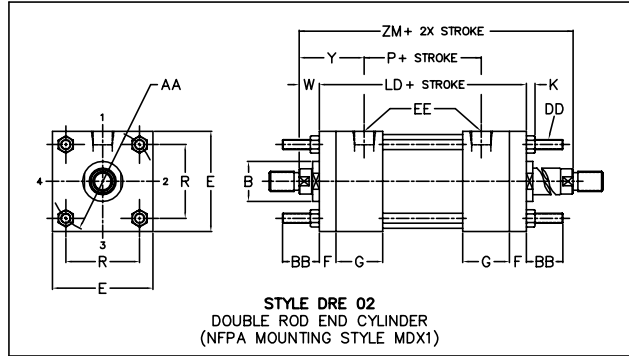
TIE ROD AND NOSE MOUNTED CYLINDERS

1 1/2" TO 6" BORE SERIES JHD AND LSSL AIR CYLINDERS

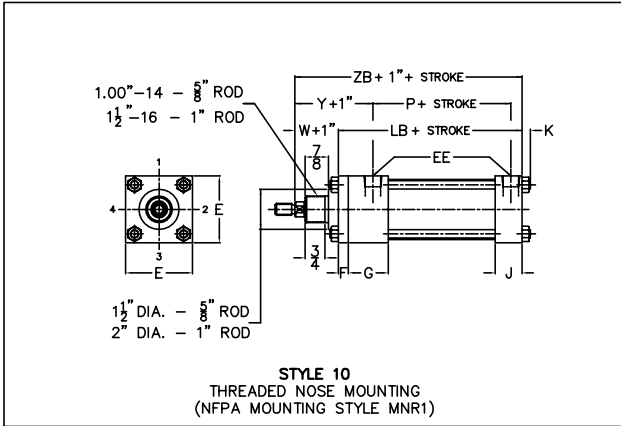
STANDARD IN BRASS TUBE DESIGN AND ALL STAINLESS STEEL DESIGN!



Standard Port location in Position 1.
Standard Cushion location Position 2.



Standard Port location in Position 1.
Standard Cushion location Position 2.



Standard Port location in Position 1.
Standard Cushion location Position 2.

NOTE: For 1-1/2", 2", 2-1/2"
cylinder only with 5/8"
and 1" rod sizes only

TIE ROD MOUNTING DESCRIPTION

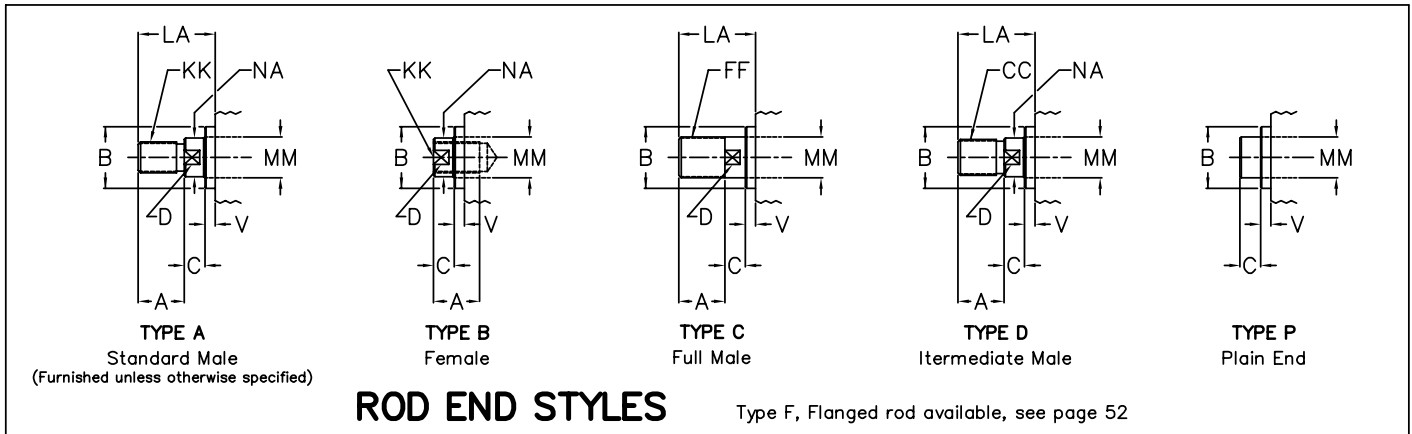
MOUNTING STYLE	NFFA MOUNTING STYLE	DESCRIPTION
01	MX0	NO TIE ROD EXTENSIONS
02	MX1	TIE RODS EXTENDED BOTH ENDS
03	MX2	TIE RODS EXTENDED CAP END
04	MX3	TIE RODS EXTENDED ROD END
DRE 01	MDX0	NO TIE ROD EXTENSIONS
DRE 02	MDX1	TIE RODS EXTENDED BOTH ENDS
DRE 03	MDX3	TIE RODS EXTENDED ONE END

ENVELOPE AND MOUNTING DIMENSIONS NOT AFFECTED BY ROD DIAMETER

BORE	AA	BB	DD	E	EE *		F	G	J	K	R	LB	LD	P
					NPTF	SAE								
1 1/2	2.02	1	1/4-28	2	3/8	6	3/8	1 1/2	1	1/4	1.43	4	4 7/8	2 1/4
2	2.60	1 1/8	5/16-24	2 1/2	3/8	6	3/8	1 1/2	1	5/16	1.84	4	4 7/8	2 1/4
2 1/2	3.10	1 1/8	5/16-24	3	3/8	6	3/8	1 1/2	1	5/16	2.19	4 1/8	5	2 3/8
3 1/4	3.90	1 3/8	3/8-24	3 3/4	1/2	10	5/8	1 3/4	1 1/4	3/8	2.76	4 7/8	6	2 5/8
4	4.70	1 3/8	3/8-24	4 1/2	1/2	10	5/8	1 3/4	1 1/4	3/8	3.32	4 7/8	6	2 5/8
5	5.80	1 13/16	1/2-20	5 1/2	1/2	10	5/8	1 3/4	1 1/4	7/16	4.10	5 1/8	6 1/4	2 7/8
6	6.90	1 13/16	1/2-20	6 1/2	3/4	12	3/4	2	1 1/2	7/16	4.88	5 3/4	7	3 1/8

* NPTF PORTS FURNISHED UNLESS OTHERWISE SPECIFIED

TIE ROD AND NOSE MOUNTED CYLINDERS (Cont.)



DIMENSIONS AFFECTED BY ROD DIAMETER

BORE	ROD DIA. MM	THREAD SIZE			ROD AND PILOT DIMENSIONS							ENVELOPE DIMENSIONS			
		KK STD	CC	FF	A	B +.000 -.002	C	D	LA	NA	V	W	Y	ZB ADD STROKE	ZM ADD 2X STROKE
1 1/2	5/8	7/16-20	1/2-20	5/8-18	3/4	1.124	3/8	1/2	1 3/8	9/16	1/4	5/8	1 15/16	4 7/8	6 1/8
	1 *	3/4-16	7/8-14	1-14	1 1/8	1.499	1/2	7/8	2 1/8	15/16	1/2	1	2 5/16	5 1/4	6 7/8
2	5/8	7/16-20	1/2-20	5/8-18	3/4	1.124	3/8	1/2	1 3/8	9/16	1/4	5/8	1 15/16	4 15/16	6 1/8
	1	3/4-16	7/8-14	1-14	1 1/8	1.499	1/2	7/8	2 1/8	15/16	1/2	1	2 5/16	5 5/16	6 7/8
	1 3/8 *	1-14	1 1/4-12	1 3/8-12	1 5/8	1.999	5/8	1 1/8	2 7/8	1 5/16	5/8	1 1/4	2 9/16	5 9/16	7 3/8
2 1/2	5/8	7/16-20	1/2-20	5/8-18	3/4	1.124	3/8	1/2	1 3/8	9/16	1/4	5/8	1 15/16	5 1/16	6 1/4
	1	3/4-16	7/8-14	1-14	1 1/8	1.499	1/2	7/8	2 1/8	15/16	1/2	1	2 5/16	5 7/16	7
	1 3/8	1-14	1 1/4-12	1 3/8-12	1 5/8	1.999	5/8	1 1/8	2 7/8	1 5/16	5/8	1 1/4	2 9/16	5 11/16	7 1/2
	1 3/4 *	1 1/4-12	1 1/2-12	1 3/4-12	2	2.374	3/4	1 1/2	3 1/2	1 11/16	3/4	1 1/2	2 13/16	5 15/16	8
3 1/4	1	3/4-16	7/8-14	1-14	1 1/8	1.499	1/2	7/8	1 7/8	15/16	1/4	3/4	2 7/16	6	7 1/2
	1 3/8	1-14	1 1/4-12	1 3/8-12	1 5/8	1.999	5/8	1 1/8	2 5/8	1 5/16	3/8	1	2 11/16	6 1/4	8
	1 3/4	1 1/4-12	1 1/2-12	1 3/4-12	2	2.374	3/4	1 1/2	3 1/4	1 11/16	1/2	1 1/4	2 15/16	6 1/2	8 1/2
	2 *	1 1/2-12	1 3/4-12	2-12	2 1/4	2.624	7/8	1 11/16	3 5/8	1 15/16	1/2	1 3/8	3 1/16	6 5/8	8 3/4
4	1	3/4-16	7/8-14	1-14	1 1/8	1.499	1/2	7/8	1 7/8	15/16	1/4	3/4	2 7/16	6	7 1/2
	1 3/8	1-14	1 1/4-12	1 3/8-12	1 5/8	1.999	5/8	1 1/8	2 5/8	1 5/16	3/8	1	2 11/16	6 1/4	8
	1 3/4	1 1/4-12	1 1/2-12	1 3/4-12	2	2.374	3/4	1 1/2	3 1/4	1 11/16	1/2	1 1/4	2 15/16	6 1/2	8 1/2
	2	1 1/2-12	1 3/4-12	2-12	2 1/4	2.624	7/8	1 11/16	3 5/8	1 15/16	1/2	1 3/8	3 1/16	6 5/8	8 3/4
5	1	3/4-16	7/8-14	1-14	1 1/8	1.499	1/2	7/8	1 7/8	15/16	1/4	3/4	2 7/16	6 5/16	7 3/4
	1 3/8	1-14	1 1/4-12	1 3/8-12	1 5/8	1.999	5/8	1 1/8	2 5/8	1 5/16	3/8	1	2 11/16	6 9/16	8 1/4
	1 3/4	1 1/4-12	1 1/2-12	1 3/4-12	2	2.374	3/4	1 1/2	3 1/4	1 11/16	1/2	1 1/4	2 15/16	6 13/16	8 3/4
	2	1 1/2-12	1 3/4-12	2-12	2 1/4	2.624	7/8	1 11/16	3 5/8	1 15/16	1/2	1 3/8	3 1/16	6 15/16	9
6	1 3/8	1-14	1 1/4-12	1 3/8-12	1 5/8	1.999	5/8	1 1/8	2 1/2	1 5/16	1/4	7/8	2 13/16	7 1/16	8 3/4
	1 3/4	1 1/4-12	1 1/2-12	1 3/4-12	2	2.374	3/4	1 1/2	3 1/8	1 11/16	3/8	1 1/8	3 1/16	7 5/16	9 1/4
	2	1 1/2-12	1 3/4-12	2-12	2 1/4	2.624	7/8	1 11/16	3 1/2	1 15/16	3/8	1 1/4	3 3/16	7 7/16	9 1/2
	2 1/2	1 7/8-12	2 1/4-12	2 1/2-12	3	3.124	1	2 1/16	4 1/2	2 3/8	1/2	1 1/2	3 7/16	7 11/16	10

FIRST ROD SIZE SHOWN FOR EACH BORE SIZE IS STANDARD ROD

* ROD END CUSHIONS AVAILABLE ONLY AS NON-ADJUSTABLE TYPE - CONSULT LEHIGH