

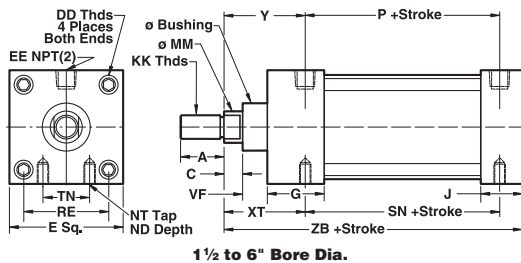
1-800-GRAINGER (472-4643)



NFPA Square-Head Tie Rod Aluminum Cylinders

- Max. operating pressure: 250 psi (1 1/2" to 6" bores)
- Temp. range: -20° to 200°F
- Include magnetic piston

Switch-ready magnetic piston cylinders have a replaceable rod gland and fully adjustable cushion to allow a full range of NFPA MS4 interchangeable mounting configurations. 4 internal-threaded sleeve nuts recessed in the head and 4 internal-threaded sleeve nuts recessed in the head and 4 tapped holes in the cap permit direct mounting. Additional NFPA cylinders available on Grainger.com.



1 1/2 to 6" Bore Dia.



Dimension (in.)

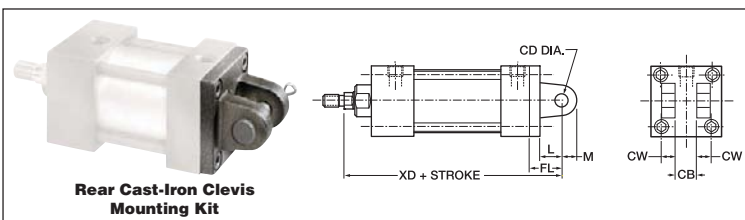
Bore Dia.	A	C	E	J	G	P	DD	EE	KK	MM	NT	RE	SN	TN	VF	XT	ZB
1 1/2 to 6" Bore Diameter																	
1 1/2	0.75	0.375	2	1	1.5	2.34	1/4 - 28	1/4 NPT	1/2 - 20	0.625	1/4 - 20	1.428	2.25	0.625	0.625	1.938	4.625
2	0.75	0.375	2.5	1	1.5	2.34	3/16 - 24	1/4 NPT	1/2 - 20	0.625	3/16 - 18	1.838	2.25	0.875	0.625	1.938	4.625
2 1/2	0.75	0.375	3	1	1.5	2.47	3/16 - 24	1/4 NPT	1/2 - 20	0.625	3/16 - 16	2.192	2.375	1.25	0.625	1.938	4.75
3 1/4	1.125	0.5	3.75	1.25	1.75	2.69	1/8 - 20	3/4 NPT	3/4 - 16	1	1/2 - 13	2.937	2.625	1.5	0.875	2.438	5.625
4	1.125	0.5	4.5	1.25	1.75	2.69	1/8 - 20	3/4 NPT	3/4 - 16	1	1/2 - 13	3.562	2.625	2.063	0.875	2.438	5.625
6	1.625	0.625	6.5	1.5	2	3.125	1/2 - 20	1 1/4 NPT	1 - 14	1.375	3/4 - 10	4.879	3.125	3.25	1	2.813	6.625

Bore Dia.	Stroke	Item No.
Non-Cushioned, Magnetic Piston		
1 1/2 in	1/2", 1 1/2", 1", 2 1/2", 2", 3 1/2", 3", 4 1/2", 4", 5 1/2", 5"	D8124
2 in	1/2", 1 1/2", 1", 2 1/2", 2", 3 1/2", 3", 4 1/2", 4", 5 1/2", 5"	D8132
2 1/2 in	1/2", 1 1/2", 1", 2 1/2", 2", 3 1/2", 3", 4 1/2", 4", 5 1/2", 5"	D8139
3 1/4 in	1/2", 1", 1 1/2", 2 1/2", 2", 3", 3 1/2", 4 1/2", 4", 5", 5 1/2"	D8147
4 in	1/2", 1", 1 1/2", 2 1/2", 2", 3", 3 1/2", 4 1/2", 4", 5", 5 1/2"	D8155
6 in	1/2", 1", 1 1/2", 2", 2 1/2", 3", 3 1/2", 4", 4 1/2", 5", 6"	D8162
Adjustable Cushion, Magnetic Piston		
1 1/2 in	6", 6 1/2", 7", 7 1/2", 8 1/2", 8", 9", 9 1/2"	D8125
	10 1/2", 10", 11", 11 1/2", 12", 12 1/2", 13", 13 1/2", 14", 14 1/2"	D8126
	15", 15 1/2", 16", 16 1/2", 17", 17 1/2", 18", 18 1/2", 19", 19 1/2"	D8127
2 in	20", 20 1/2", 21", 21 1/2", 22", 22 1/2", 23", 23 1/2", 24", 24 1/2", 25", 25 1/2"	D8130
	26", 26 1/2", 27", 27 1/2", 28", 28 1/2", 29", 29 1/2", 30", 30 1/2"	D8129
	31", 31 1/2", 32", 32 1/2", 33", 33 1/2", 34", 34 1/2", 35", 35 1/2", 36"	D8131
	6", 6 1/2", 7", 7 1/2", 8 1/2", 8", 9", 9 1/2"	D8133
2 in	10 1/2", 10", 11", 11 1/2", 12", 12 1/2", 13", 13 1/2", 14", 14 1/2"	D8134
	15", 15 1/2", 16", 16 1/2", 17", 17 1/2", 18", 18 1/2", 19", 19 1/2"	D8135
	20", 20 1/2", 21", 21 1/2", 22", 22 1/2", 23", 23 1/2", 24", 24 1/2", 25", 25 1/2"	D8136
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	6", 6 1/2", 7", 7 1/2", 8 1/2", 8", 9", 9 1/2"	D8141
2 1/2 in	10 1/2", 10", 11", 11 1/2", 12", 12 1/2", 13", 13 1/2", 14", 14 1/2"	D8142
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	6", 6 1/2", 7", 7 1/2", 8 1/2", 8", 9", 9 1/2"	D8148
3 1/4 in	10 1/2", 10", 11", 11 1/2", 12", 12 1/2", 13", 13 1/2", 14", 14 1/2"	D8149
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	6", 6 1/2", 7", 7 1/2", 8 1/2", 8", 9", 9 1/2"	D8156
4 in	10 1/2", 10", 11", 11 1/2", 12", 12 1/2", 13", 13 1/2", 14", 14 1/2"	G8249
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	6", 6 1/2", 7", 7 1/2", 8", 8 1/2", 9", 9 1/2"	D8163
6 in	10", 10 1/2", 11", 11 1/2", 12", 12 1/2", 13", 13 1/2", 14", 14 1/2"	D8164
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	20", 20 1/2", 21", 21 1/2", 22", 22 1/2", 23", 23 1/2", 24", 24 1/2", 25", 25 1/2"	D8166
	26", 26 1/2", 27", 27 1/2", 28", 28 1/2", 29", 29 1/2", 30", 30 1/2"	D8167
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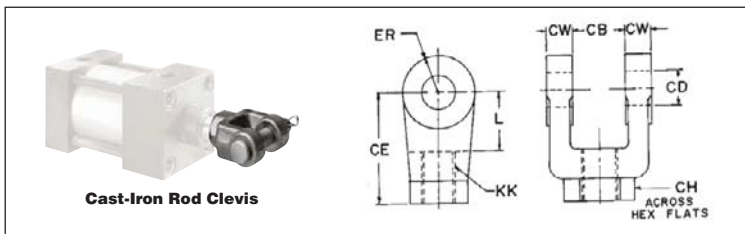
Mounting Hardware for NFPA Square-Head Tie-Rod Aluminum Cylinders

Bore Dia. (in.)	CB	CD	Dimensions (in.)		L	M	Item No.
			CW	FL			
Cast-Iron Clevis Mounting Kits							
1 1/2 in	0.75 in	0.5 in	1/2 in	1.125 in	0.75 in	0.625 in	6X471
2 in	0.75 in	0.5 in	1/2 in	1.125 in	0.75 in	0.625 in	6X473
2 1/2 in	0.75 in	0.5 in	1/2 in	1.125 in	0.75 in	0.625 in	6X475
3 1/4 in	1.25 in	0.75 in	3/8 in	1.875 in	1.25 in	0.875 in	6X479
4 in	1.25 in	0.75 in	3/8 in	1.875 in	1.25 in	0.875 in	6X481
6 in	1.5 in	1 in	3/4 in	2.25 in	1.5 in	1.125 in	1A017



Rear Cast-Iron Clevis Mounting Kit

Bore Dia. (in.)	CB	CD	Dimensions (in.)		L	Item No.			
			CE	CH	CW	ER	KK		
Cast-Iron Rod Clevis									
1 1/2 to 2 1/2	0.75 in	0.5 in	1 1/2 in	1 in	1/2 in	1/2 in	1/2 - 20	0.75 in	6X476
3 1/4 to 4	1.25 in	0.75 in	2 3/8 in	1 1/4 in	3/8 in	3/4 in	3/4 - 16	1.25 in	6X482
6 in	1.5 in	1 in	3 1/2 in	1 1/2 in	3/4 in	1 in	1 - 14	1.5 in	1A018



Cast-Iron Rod Clevis

Thread Size (in.)	Overall Length (in.)	Overall Dia. (in.)	Max. Operating Force (lb.)	Item No.
Self-Aligning Couplers				
1/2 - 20	2.75 in	1 1/4 in	14,000 lb	1A313
3/4 - 16	3.4375 in	1 3/4 in	34,000 lb	1A314
1 - 14	4.5625 in	2 1/2 in	37,000 lb	1A315



Self-Aligning Coupler