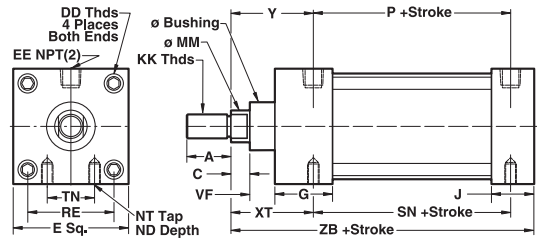




## NFPA Square-Head Tie Rod Steel Cylinders

- Max. operating pressure: 250 psi
- Temp. range: -20° to 200°F

These cylinders offer full range of NFPA interchangeable mounting configurations. Cushioned cylinders have a fully adjustable cushion.



Bore Dia.	A	C	E	G	J	P	Y	DD	EE	KK	MM	NT	RE	SN	TN	VF	XT	ZB
1 1/2"	0.750	0.375	2.000	1.500	1.000	2.340	1.875	1/4-28	1/4 NPT	1/2-20	0.625	1/4-20	1.428	2.250	0.625	0.625	1.938	4.625
2"	0.750	0.375	2.500	1.500	1.000	2.340	1.875	3/8-24	1/4 NPT	1/2-20	0.625	3/8-18	1.838	2.250	0.625	0.625	1.938	4.625
2 1/2"	0.750	0.375	3.000	1.500	1.000	2.470	1.875	3/8-24	1/4 NPT	1/2-20	0.625	3/8-16	2.192	2.375	1.250	0.625	1.938	4.750
3 1/4"	1.125	0.500	3.750	1.750	1.250	2.690	2.438	1/2-20	3/8 NPT	3/4-16	1.000	1/2-13	2.937*	2.625	1.500	0.875	2.438	5.625
4"	1.125	0.500	4.500	1.750	1.250	2.690	2.438	1/2-20	3/8 NPT	3/4-16	1.000	1/2-13	3.562*	2.625	2.063	0.875	2.438	5.625
6"	1.625	0.625	6.500	2.000	1.500	3.125	2.813	1/2-20	1/2 NPT	1-14	1.375	3/4-10	4.879	3.125	3.250	1.000	2.813	6.625

\* Does not meet NFPA mounting dimensions.

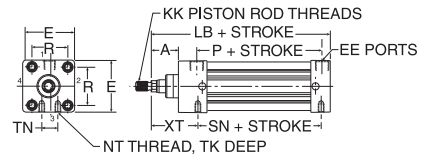
Bore Dia.	Stroke	Item No.	Bore Dia.	Stroke	Item No.
1 1/2"	1 in, 2 in, 3 in, 4 in, 5 in, 6 in, 7 in, 8 in, 9 in, 10 in, 11 in, 12 in, 13 in, 14 in, 15 in, 16 in, 17 in, 18 in, 19 in, 20 in, 21 in, 22 in, 23 in, 24 in, 25 in, 26 in, 27 in, 28 in, 29 in, 30 in, 31 in, 32 in, 33 in, 34 in, 35 in, 36 in	D8169	3 1/4"	8 in, 6 in, 6 1/2 in, 7 in, 7 1/2 in, 8 in, 8 1/2 in, 9 in, 9 1/2 in, 10 in, 10 1/2 in, 11 in, 11 1/2 in, 12 in, 12 1/2 in, 13 in, 13 1/2 in, 14 in, 14 1/2 in, 15 in, 15 1/2 in, 16 in, 16 1/2 in, 17 in, 17 1/2 in, 18 in, 18 1/2 in, 19 in, 19 1/2 in, 20 in, 20 1/2 in, 21 in, 21 1/2 in, 22 in, 22 1/2 in, 23 in, 23 1/2 in, 24 in, 24 1/2 in, 25 in, 25 1/2 in	D8194
	2 in, 2 1/2 in, 3 in, 4 in, 5 in, 6 in, 7 in, 8 in, 9 in, 10 in, 11 in, 12 in, 13 in, 14 in, 15 in, 16 in, 17 in, 18 in, 19 in, 20 in, 21 in, 22 in, 23 in, 24 in, 25 in, 26 in, 27 in, 28 in, 29 in, 30 in, 31 in, 32 in, 33 in, 34 in, 35 in, 36 in	D8177		10 in, 10 1/2 in, 11 in, 11 1/2 in, 12 in, 12 1/2 in, 13 in, 13 1/2 in, 14 in, 14 1/2 in, 15 in, 15 1/2 in, 16 in, 16 1/2 in, 17 in, 17 1/2 in, 18 in, 18 1/2 in, 19 in, 19 1/2 in, 20 in, 20 1/2 in, 21 in, 21 1/2 in, 22 in, 22 1/2 in, 23 in, 23 1/2 in, 24 in, 24 1/2 in, 25 in, 25 1/2 in	D8195
	2 1/2 in, 3 in, 3 1/2 in, 4 in, 4 1/2 in, 5 in, 5 1/2 in, 6 in, 6 1/2 in, 7 in, 7 1/2 in, 8 in, 8 1/2 in, 9 in, 9 1/2 in, 10 in, 10 1/2 in, 11 in, 11 1/2 in, 12 in, 12 1/2 in, 13 in, 13 1/2 in, 14 in, 14 1/2 in, 15 in, 15 1/2 in, 16 in, 16 1/2 in, 17 in, 17 1/2 in, 18 in, 18 1/2 in, 19 in, 19 1/2 in, 20 in, 20 1/2 in, 21 in, 21 1/2 in, 22 in, 22 1/2 in, 23 in, 23 1/2 in, 24 in, 24 1/2 in, 25 in, 25 1/2 in	D8185		15 in, 15 1/2 in, 16 in, 16 1/2 in, 17 in, 17 1/2 in, 18 in, 18 1/2 in, 19 in, 19 1/2 in, 20 in, 20 1/2 in, 21 in, 21 1/2 in, 22 in, 22 1/2 in, 23 in, 23 1/2 in, 24 in, 24 1/2 in, 25 in, 25 1/2 in	D8196
1 1/2"	2 in, 2 1/2 in, 3 in, 3 1/2 in, 4 in, 4 1/2 in, 5 in, 5 1/2 in, 6 in, 6 1/2 in, 7 in, 7 1/2 in, 8 in, 8 1/2 in, 9 in, 9 1/2 in, 10 in, 10 1/2 in, 11 in, 11 1/2 in, 12 in, 12 1/2 in, 13 in, 13 1/2 in, 14 in, 14 1/2 in, 15 in, 15 1/2 in, 16 in, 16 1/2 in, 17 in, 17 1/2 in, 18 in, 18 1/2 in, 19 in, 19 1/2 in, 20 in, 20 1/2 in, 21 in, 21 1/2 in, 22 in, 22 1/2 in, 23 in, 23 1/2 in, 24 in, 24 1/2 in, 25 in, 25 1/2 in	D8201	4"	26 in, 26 1/2 in, 27 in, 27 1/2 in, 28 in, 28 1/2 in, 29 in, 29 1/2 in, 30 in, 30 1/2 in, 31 in, 31 1/2 in, 32 in, 32 1/2 in, 33 in, 33 1/2 in, 34 in, 34 1/2 in, 35 in, 35 1/2 in, 36 in	D8197
	2 1/2 in, 3 in, 3 1/2 in, 4 in, 4 1/2 in, 5 in, 5 1/2 in, 6 in, 6 1/2 in, 7 in, 7 1/2 in, 8 in, 8 1/2 in, 9 in, 9 1/2 in, 10 in, 10 1/2 in, 11 in, 11 1/2 in, 12 in, 12 1/2 in, 13 in, 13 1/2 in, 14 in, 14 1/2 in, 15 in, 15 1/2 in, 16 in, 16 1/2 in, 17 in, 17 1/2 in, 18 in, 18 1/2 in, 19 in, 19 1/2 in, 20 in, 20 1/2 in, 21 in, 21 1/2 in, 22 in, 22 1/2 in, 23 in, 23 1/2 in, 24 in, 24 1/2 in, 25 in, 25 1/2 in	D8174		8 in, 6 in, 6 1/2 in, 7 in, 7 1/2 in, 8 in, 8 1/2 in, 9 in, 9 1/2 in, 10 in, 10 1/2 in, 11 in, 11 1/2 in, 12 in, 12 1/2 in, 13 in, 13 1/2 in, 14 in, 14 1/2 in, 15 in, 15 1/2 in, 16 in, 16 1/2 in, 17 in, 17 1/2 in, 18 in, 18 1/2 in, 19 in, 19 1/2 in, 20 in, 20 1/2 in, 21 in, 21 1/2 in, 22 in, 22 1/2 in, 23 in, 23 1/2 in, 24 in, 24 1/2 in, 25 in, 25 1/2 in	D8198
	2 1/2 in, 3 in, 3 1/2 in, 4 in, 4 1/2 in, 5 in, 5 1/2 in, 6 in, 6 1/2 in, 7 in, 7 1/2 in, 8 in, 8 1/2 in, 9 in, 9 1/2 in, 10 in, 10 1/2 in, 11 in, 11 1/2 in, 12 in, 12 1/2 in, 13 in, 13 1/2 in, 14 in, 14 1/2 in, 15 in, 15 1/2 in, 16 in, 16 1/2 in, 17 in, 17 1/2 in, 18 in, 18 1/2 in, 19 in, 19 1/2 in, 20 in, 20 1/2 in, 21 in, 21 1/2 in, 22 in, 22 1/2 in, 23 in, 23 1/2 in, 24 in, 24 1/2 in, 25 in, 25 1/2 in	D8175		26 in, 26 1/2 in, 27 in, 27 1/2 in, 28 in, 28 1/2 in, 29 in, 29 1/2 in, 30 in, 30 1/2 in, 31 in, 31 1/2 in, 32 in, 32 1/2 in, 33 in, 33 1/2 in, 34 in, 34 1/2 in, 35 in, 35 1/2 in, 36 in	D8199
2"	2 in, 2 1/2 in, 3 in, 3 1/2 in, 4 in, 4 1/2 in, 5 in, 5 1/2 in, 6 in, 6 1/2 in, 7 in, 7 1/2 in, 8 in, 8 1/2 in, 9 in, 9 1/2 in, 10 in, 10 1/2 in, 11 in, 11 1/2 in, 12 in, 12 1/2 in, 13 in, 13 1/2 in, 14 in, 14 1/2 in, 15 in, 15 1/2 in, 16 in, 16 1/2 in, 17 in, 17 1/2 in, 18 in, 18 1/2 in, 19 in, 19 1/2 in, 20 in, 20 1/2 in, 21 in, 21 1/2 in, 22 in, 22 1/2 in, 23 in, 23 1/2 in, 24 in, 24 1/2 in, 25 in, 25 1/2 in	D8182	6"	8 in, 6 in, 6 1/2 in, 7 in, 7 1/2 in, 8 in, 8 1/2 in, 9 in, 9 1/2 in, 10 in, 10 1/2 in, 11 in, 11 1/2 in, 12 in, 12 1/2 in, 13 in, 13 1/2 in, 14 in, 14 1/2 in, 15 in, 15 1/2 in, 16 in, 16 1/2 in, 17 in, 17 1/2 in, 18 in, 18 1/2 in, 19 in, 19 1/2 in, 20 in, 20 1/2 in, 21 in, 21 1/2 in, 22 in, 22 1/2 in, 23 in, 23 1/2 in, 24 in, 24 1/2 in, 25 in, 25 1/2 in	D8202
	2 1/2 in, 3 in, 3 1/2 in, 4 in, 4 1/2 in, 5 in, 5 1/2 in, 6 in, 6 1/2 in, 7 in, 7 1/2 in, 8 in, 8 1/2 in, 9 in, 9 1/2 in, 10 in, 10 1/2 in, 11 in, 11 1/2 in, 12 in, 12 1/2 in, 13 in, 13 1/2 in, 14 in, 14 1/2 in, 15 in, 15 1/2 in, 16 in, 16 1/2 in, 17 in, 17 1/2 in, 18 in, 18 1/2 in, 19 in, 19 1/2 in, 20 in, 20 1/2 in, 21 in, 21 1/2 in, 22 in, 22 1/2 in, 23 in, 23 1/2 in, 24 in, 24 1/2 in, 25 in, 25 1/2 in	D8183		26 in, 26 1/2 in, 27 in, 27 1/2 in, 28 in, 28 1/2 in, 29 in, 29 1/2 in, 30 in, 30 1/2 in, 31 in, 31 1/2 in, 32 in, 32 1/2 in, 33 in, 33 1/2 in, 34 in, 34 1/2 in, 35 in, 35 1/2 in, 36 in	D8203
	2 1/2 in, 3 in, 3 1/2 in, 4 in, 4 1/2 in, 5 in, 5 1/2 in, 6 in, 6 1/2 in, 7 in, 7 1/2 in, 8 in, 8 1/2 in, 9 in, 9 1/2 in, 10 in, 10 1/2 in, 11 in, 11 1/2 in, 12 in, 12 1/2 in, 13 in, 13 1/2 in, 14 in, 14 1/2 in, 15 in, 15 1/2 in, 16 in, 16 1/2 in, 17 in, 17 1/2 in, 18 in, 18 1/2 in, 19 in, 19 1/2 in, 20 in, 20 1/2 in, 21 in, 21 1/2 in, 22 in, 22 1/2 in, 23 in, 23 1/2 in, 24 in, 24 1/2 in, 25 in, 25 1/2 in	D8184		8 in, 6 in, 6 1/2 in, 7 in, 7 1/2 in, 8 in, 8 1/2 in, 9 in, 9 1/2 in, 10 in, 10 1/2 in, 11 in, 11 1/2 in, 12 in, 12 1/2 in, 13 in, 13 1/2 in, 14 in, 14 1/2 in, 15 in, 15 1/2 in, 16 in, 16 1/2 in, 17 in, 17 1/2 in, 18 in, 18 1/2 in, 19 in, 19 1/2 in, 20 in, 20 1/2 in, 21 in, 21 1/2 in, 22 in, 22 1/2 in, 23 in, 23 1/2 in, 24 in, 24 1/2 in, 25 in, 25 1/2 in	D8204
2 1/2"	2 in, 2 1/2 in, 3 in, 3 1/2 in, 4 in, 4 1/2 in, 5 in, 5 1/2 in, 6 in, 6 1/2 in, 7 in, 7 1/2 in, 8 in, 8 1/2 in, 9 in, 9 1/2 in, 10 in, 10 1/2 in, 11 in, 11 1/2 in, 12 in, 12 1/2 in, 13 in, 13 1/2 in, 14 in, 14 1/2 in, 15 in, 15 1/2 in, 16 in, 16 1/2 in, 17 in, 17 1/2 in, 18 in, 18 1/2 in, 19 in, 19 1/2 in, 20 in, 20 1/2 in, 21 in, 21 1/2 in, 22 in, 22 1/2 in, 23 in, 23 1/2 in, 24 in, 24 1/2 in, 25 in, 25 1/2 in	D8189	6"	26 in, 26 1/2 in, 27 in, 27 1/2 in, 28 in, 28 1/2 in, 29 in, 29 1/2 in, 30 in, 30 1/2 in, 31 in, 31 1/2 in, 32 in, 32 1/2 in, 33 in, 33 1/2 in, 34 in, 34 1/2 in, 35 in, 35 1/2 in, 36 in	D8205
	2 1/2 in, 3 in, 3 1/2 in, 4 in, 4 1/2 in, 5 in, 5 1/2 in, 6 in, 6 1/2 in, 7 in, 7 1/2 in, 8 in, 8 1/2 in, 9 in, 9 1/2 in, 10 in, 10 1/2 in, 11 in, 11 1/2 in, 12 in, 12 1/2 in, 13 in, 13 1/2 in, 14 in, 14 1/2 in, 15 in, 15 1/2 in, 16 in, 16 1/2 in, 17 in, 17 1/2 in, 18 in, 18 1/2 in, 19 in, 19 1/2 in, 20 in, 20 1/2 in, 21 in, 21 1/2 in, 22 in, 22 1/2 in, 23 in, 23 1/2 in, 24 in, 24 1/2 in, 25 in, 25 1/2 in	D8191		8 in, 6 in, 6 1/2 in, 7 in, 7 1/2 in, 8 in, 8 1/2 in, 9 in, 9 1/2 in, 10 in, 10 1/2 in, 11 in, 11 1/2 in, 12 in, 12 1/2 in, 13 in, 13 1/2 in, 14 in, 14 1/2 in, 15 in, 15 1/2 in, 16 in, 16 1/2 in, 17 in, 17 1/2 in, 18 in, 18 1/2 in, 19 in, 19 1/2 in, 20 in, 20 1/2 in, 21 in, 21 1/2 in, 22 in, 22 1/2 in, 23 in, 23 1/2 in, 24 in, 24 1/2 in, 25 in, 25 1/2 in	D8206
	2 1/2 in, 3 in, 3 1/2 in, 4 in, 4 1/2 in, 5 in, 5 1/2 in, 6 in, 6 1/2 in, 7 in, 7 1/2 in, 8 in, 8 1/2 in, 9 in, 9 1/2 in, 10 in, 10 1/2 in, 11 in, 11 1/2 in, 12 in, 12 1/2 in, 13 in, 13 1/2 in, 14 in, 14 1/2 in, 15 in, 15 1/2 in, 16 in, 16 1/2 in, 17 in, 17 1/2 in, 18 in, 18 1/2 in, 19 in, 19 1/2 in, 20 in, 20 1/2 in, 21 in, 21 1/2 in, 22 in, 22 1/2 in, 23 in, 23 1/2 in, 24 in, 24 1/2 in, 25 in, 25 1/2 in	D8192		26 in, 26 1/2 in, 27 in, 27 1/2 in, 28 in, 28 1/2 in, 29 in, 29 1/2 in, 30 in, 30 1/2 in, 31 in, 31 1/2 in, 32 in, 32 1/2 in, 33 in, 33 1/2 in, 34 in, 34 1/2 in, 35 in, 35 1/2 in, 36 in	D8207



## NFPA Extruded Aluminum Air Cylinders

- Max. operating pressure: 250 psi
- Operating temp. range: -10° to 165°F
- Switch ready
- Cushions: standard and adjustable at both ends on 7" and larger stroke lengths

Feature industry-standard footprint, which allows interchangeability with other NFPA-style cylinders of either tie-rod or extruded construction. Advantages include clean appearance and fewer spaces for dirt and debris to collect.



Bore Dia.	A	E	P	R	EE	KK	LB	NT	TK	TN	SN	XT
1 1/2"	1.000	2.000	2.313	1.430	3/8	1/2-20	4.625	1/4-20	0.375	0.625	2.250	1.938
2"	1.000	2.500	2.313	1.840	3/8	1/2-20	4.625	3/8-18	0.438	0.875	2.250	1.938
2 1/2"	1.000	3.000	2.375	2.190	3/8	1/2-20	4.750	1/2-16	0.625	1.250	2.375	1.938
3 1/4"	1.375	3.750	2.625	2.760	1/2	3/4-16	5.625	1/2-13	0.750	1.500	2.625	2.438
4"	1.375	4.500	2.625	3.320	1/2	3/4-16	5.625	1/2-13	0.750	2.063	2.625	2.438
5"	1.375	5.500	2.875	4.100	1/2	3/4-16	5.875	1/2-11	0.938	2.688	2.875	2.438

Bore Dia.	Stroke	Item No.	Bore Dia.	Stroke	Item No.
1 1/2 in	1 in, 1 1/2 in, 2 in, 2 1/2 in, 3 in, 3 1/2 in, 4 in, 4 1/2 in	D8529	5 in	2 in, 2 1/2 in, 3 in, 3 1/2 in, 4 in, 4 1/2 in	D8553
	5 in, 5 1/2 in, 6 in, 6 1/2 in, 7 in, 7 1/2 in, 8 in, 8 1/2 in	D8531		5 in, 5 1/2 in, 6 in, 6 1/2 in, 7 in, 7 1/2 in, 8 in, 8 1/2 in	D8554
	9 in, 9 1/2 in, 10 in, 10 1/2 in, 11 in, 11 1/2 in, 12 in, 12 1/2 in	D8532		9 in, 9 1/2 in, 10 in, 10 1/2 in, 11 in, 11 1/2 in, 12 in, 12 1/2 in	D8555
2 in	1 in, 1 1/2 in, 2 in, 2 1/2 in, 3 in, 3 1/2 in, 4 in, 4 1/2 in	D8533	5 in	13 in, 13 1/2 in, 14 in, 14 1/2 in, 15 in, 15 1/2 in, 16 in, 16 1/2 in, 17 in, 17 1/2 in, 18 in, 18 1/2 in	D8556
	5 in, 5 1/2 in, 6 in, 6 1/2 in, 7 in, 7 1/2 in, 8 in, 8 1/2 in	D8534		19 in, 19 1/2 in, 20 in, 20 1/2 in, 21 in, 21 1/2 in	D8557
	9 in, 9 1/2 in, 10 in, 10 1/2 in, 11 in, 11 1/2 in, 12 in, 12 1/2 in	D8535		22 in, 22 1/2 in, 23 in, 23 1/2 in, 24 in, 30 in, 36 in	D8558
2 1/2 in	1 in, 1 1/2 in, 2 in, 2 1/2 in, 3 in, 3 1/2 in, 4 in, 4 1/2 in	D8536	5 in		D8559
	5 in, 5 1/2 in, 6 in, 6 1/2 in, 7 in, 7 1/2 in, 8 in, 8 1/2 in	D8537			
	9 in, 9 1/2 in, 10 in, 10 1/2 in, 11 in, 11 1/2 in, 12 in, 12 1/2 in	D8538			
3 1/4 in	2 in, 2 1/2 in, 3 in, 3 1/2 in, 4 in, 4 1/2 in	D8539			
	5 in, 5 1/2 in, 6 in, 6 1/2 in, 7 in, 7 1/2 in, 8 in, 8 1/2 in	D8541			
	9 in, 9 1/2 in, 10 in, 10 1/2 in, 11 in, 11 1/2 in, 12 in, 12 1/2 in	D8542			
4 in	13 in, 13 1/2 in, 14 in, 14 1/2 in, 15 in, 15 1/2 in, 16 in, 16 1/2 in, 17 in, 17 1/2 in, 18 in, 18 1/2 in	D8543			
	19 in, 19 1/2 in, 20 in, 20 1/2 in, 21 in, 21 1/2 in, 22 in, 22 1/2 in, 23 in, 23 1/2 in, 24 in, 30 in, 36 in	D8544			
	2 in, 2 1/2 in, 3 in, 3 1/2 in, 4 in, 4 1/2 in	D8546			
4 in	5 in, 5 1/2 in, 6 in, 6 1/2 in, 7 in, 7 1/2 in, 8 in, 8 1/2 in	D8547			
	9 in, 9 1/2 in, 10 in, 10 1/2 in, 11 in, 11 1/2 in, 12 in, 12 1/2 in	D8548			
	13 in, 13 1/2 in, 14 in, 14 1/2 in, 15 in, 15 1/2 in, 16 in, 16 1/2 in, 17 in, 17 1/2 in, 18 in, 18 1/2 in	D8549			
19 in, 19 1/2 in, 20 in, 20 1/2 in, 21 in, 21 1/2 in, 22 in, 22 1/2 in, 23 in, 23 1/2 in, 24 in, 30 in, 36 in	D8551				