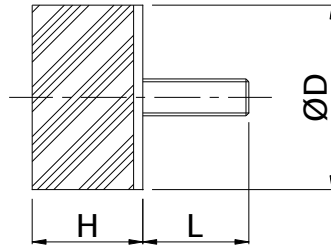


## Buffer Type D



Compounds Produced:  
 (Natural Rubber) 43° Shore A (soft)  
 57° Shore A (medium)  
 68° Shore A (hard)

### Available Sizes

• = STANDARD STOCK

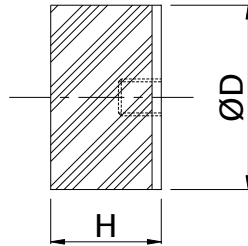
Dimensions Dia/Ht (mm)	Screw Thread Size x L (mm)	Special Screw Thread Size (mm)
6/6	M3 x 6	
6/7	M3 x 6	
7/6	M3 x 6	
8/8	M3 x 6	
• 10/10	<b>M4 x 10</b>	M3 x 5, M5 x 5
10/15	M4 x 10	M5 x 10
12/8	M4 x 12	
12/13	M4 x 12	
12/13.5	M4 x 12	
13/26	M4 x 10	
15/6	M4 x 13	
15/8	M4 x 13	
15/13	M4 x 13	M4 x 8, M4 x 10
15/15	M4 x 13	M4 x 15, M5 x 15
15/18	M4 x 13	
15/28	M4 x 13	
• 18/7.5	<b>M6 x 16</b>	M6 x 10
20/5	M6 x 15	
20/12	M6 x 15	
20/13.5	M6 x 15	
• 20/15 *	<b>M6 x 15</b>	M6 x 8, M6 x 10
20/20	M6 x 15	M6 x 12, M6 x 18
20/23	M6 x 15	M6 x 20
20/25	M6 x 15	
25/5	M6 x 18	
25/6	M6 x 18	
25/8	M6 x 18	
25/13	M6 x 18	
25/15	M6 x 18	M6 x 6, M6 x 8
• 25/17	<b>M6 x 18</b>	M6 x 10, M6 x 12
25/20	M6 x 18	M6 x 15, M6 x 20
25/25	M6 x 18	
25/28	M6 x 18	
30/5.5	M8 x 20	
30/10	M8 x 20	
30/15	M8 x 20	
• 30/17 *	<b>M8 x 20</b>	M8 x 8, M8 x 10
• 30/20	<b>M8 x 20</b>	M8 x 13, M8 x 16
30/25	M8 x 20	M8 x 18, M8 x 23
30/28	M8 x 20	M8 x 27
30/30	M8 x 20	
30/40	M8 x 20	
30/55	M8 x 20	

Dimensions Dia/Ht (mm)	Screw Thread Size x L (mm)	Special Screw Thread Size (mm)
40/5	M8 x 23	
40/6	M8 x 23	
40/10	M8 x 23	
40/15	M8 x 23	
40/18	M8 x 23	M8 x 12, M8 x 13
40/20	M8 x 23	M8 x 16, M8 x 28
• 40/28	<b>M8 x 23</b>	M10 x 20
40/38	M8 x 23	
40/40	M8 x 23	
40/50	M8 x 23	
50/17	M10 x 28	
• 50/21	<b>M10 x 28</b>	M8 x 23, M10 x 15
50/27	M10 x 28	M10 x 20, M10 x 33
50/36	M10 x 28	M12 x 27
50/42	M10 x 28	
50/45	M10 x 28	
70/42	M10 x 30	
70/45	M10 x 30	M10 x 25
75/15	M12 x 37	
• 75/25	<b>M12 x 37</b>	M12 x 27, M12 x 32
75/36	M12 x 37	
75/51	M12 x 37	
80/40	M12 x 37	M12 x 27
100/35	M16 x 45	
100/40	M16 x 45	
100/50	M16 x 45	M12 x 37, M16 x 37
100/100	M16 x 45	
125/38	M16 x 45	
125/60	M16 x 45	
150/40	M16 x 45	
150/45	M16 x 45	M20 x 45
150/75	M16 x 45	
160/30	M16 x 45	
160/47	M16 x 45	M20 x 45
200/100	M20 x 45	
250/48	M20 x 45	

\* These parts are only standard in natural rubber of hardness 57° Shore A

Note: Buffers can be manufactured in non-standard sizes, rubber hardness and various compounds, minimum order quantities may apply.

## Buffer Type E



Compounds Produced: 43° Shore A (soft)  
 (Natural Rubber) 57° Shore A (medium)  
 68° Shore A (hard)

### Available Sizes

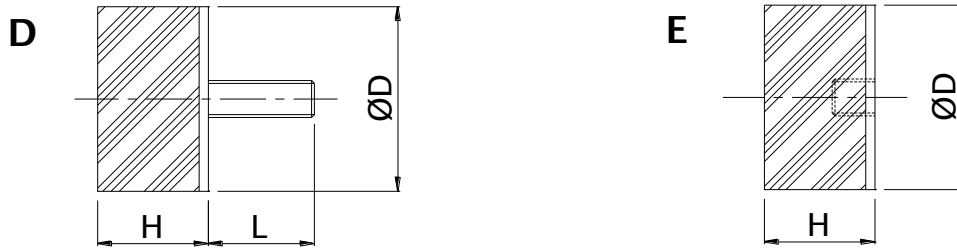
• = STANDARD STOCK

Dimensions Dia/Ht (mm)	Screw Thread Size x L (mm)	Special Screw Thread Size (mm)
6/6	M3	
6/7	M3	
7/6	M3	
8/8	M3	
10/10	M4	M3, M5
10/15	M4	
12/13	M4	
12/13.5	M4	
13/26	M4	
15/13	M4	M5
15/15	M4	
15/18	M4	
15/28	M4	
20/12	M6	M5
20/13.5	M6	
20/15	M6	
20/20	M6	
20/23	M6	
20/25	M6	
25/13	M6	
25/15	M6	
25/17	M6	
25/20	M6	
25/25	M6	
25/28	M6	
• 30/15	M8	
• 30/17	M8	
• 30/20	M8	
30/25	M8	
30/28	M8	
30/30	M8	
30/40	M8	
30/55	M8	
40/15	M8	M10
40/18	M8	
40/20	M8	
• 40/28	M8	
40/38	M8	
40/40	M8	
40/50	M8	

Dimensions Dia/Ht (mm)	Screw Thread Size x L (mm)	Special Screw Thread Size (mm)
50/17	M10	
• 50/21	M10	
50/27	M10	M8, M12
50/36	M10	
50/42	M10	
50/45	M10	
70/42	M10	M12, M16
70/45	M10	
75/25	M12	M16
75/36	M12	
75/51	M12	
80/40	M12	
100/35	M16	M12
100/40	M16	
100/50	M16	
100/100	M16	
125/38	M16	M20
125/60	M16	
150/40	M16	M20
150/45	M16	
150/75	M16	
160/30	M16	M20
160/47	M16	
200/100	M20	
250/48	M20	

Note: Buffers can be manufactured in non-standard sizes, rubber hardness and various compounds, minimum order quantities may apply.

## Spring Characteristics For Types:



**IMPORTANT NOTE:** All values of load in the table shown apply to type D and E buffers. Reference should be made to the beginning of this chapter for load calculations and to Section 1—Technical Information for selection examples.

Dia/Ht (mm)	Compression Characteristics				Dia/Ht (mm)	Compression Characteristics				Dia/Ht (mm)	Compression Characteristics			
	Def (mm)	Load (N)				Def (mm)	Load (N)				Def (mm)	Load (N)		
		43°	57°	68°			43°	57°	68°			43°	57°	68°
10/10	0.4	8.3	15.9	22.1	25/20	0.9	83.0	115	167	50/27	1.3	308	553	805
	0.9	18.7	35.7	49.7		1.8	166	231	333		2.5	592	1064	1548
	1.3	27.0	51.6	71.8		2.7	249	346	500		3.8	900	1617	2352
	(MAX)					(MAX)					(MAX)			
15/13	0.6	23.7	43.7	64.0	25/28	1.3	56.5	104	194	50/42	2.0	243	443	641
	1.2	47.5	87.5	128		2.6	113	209	299		4.0	487	887	1282
	1.7	67.3	124	181		3.9	170	313	448		6.0	730	1330	1922
	(MAX)					(MAX)					(MAX)			
15/28	1.3	19.1	34.5	51	30/15	0.7	127	230	336	70/42	2.0	540	1014	1393
	2.7	39.7	71.8	106		1.3	237	426	624		3.9	1054	1977	2717
	4.0	58.8	106	157		2.0	364	656	960		5.9	1594	2991	4110
	(MAX)					(MAX)					(MAX)			
18/7.5	0.3	56.7	100	148	30/17	0.8	114	207	301	75/25	1.1	1228	2193	3143
	0.6	113.4	200	295		1.5	213	388	564		2.2	2456	4387	6286
	0.9	170.1	300	443		2.3	327	596	864		3.3	3683	6580	9429
	(MAX)					(MAX)					(MAX)			
20/12	0.5	47.3	87.8	125	30/20	0.9	99.5	180	261	75/36	1.7	789	1403	2034
	1.0	94.6	176	250		1.8	199	359	522		3.3	1531	2724	3948
	1.5	142.0	263	375		2.7	298	539	783		5.0	2319	4127	5982
	(MAX)					(MAX)					(MAX)			
20/13.5	0.6	46.2	84.1	127	30/28	1.3	83.3	157	248	75/51	2.4	610	1100	1592
	1.2	92.3	168	254		2.6	167	314	496		4.8	1221	2200	3185
	1.7	130.8	238	360		3.9	250	471	744		7.2	1831	3300	4777
	(MAX)					(MAX)					(MAX)			
20/23	1.1	37.9	70.1	103	40/28	1.3	171	309	451	100/35	1.6	1827	3321	4813
	2.1	72.4	134	196		2.6	342	617	902		3.1	3539	6434	9324
	3.2	110.3	204	298		3.9	512	926	1353		4.7	5366	9754	14137
	(MAX)					(MAX)					(MAX)			
20/25	1.2	38.1	68.3	98.9	40/38	1.8	152	273	400	100/40	1.8	1577	2851	4070
	2.3	73.1	131	190		3.6	303	546	801		3.6	3154	5702	8140
	3.5	111.2	199	289		5.4	454	818	1201		5.4	4730	8552	12210
	(MAX)					(MAX)					(MAX)			
25/13	0.6	85.7	156	227	50/17	0.8	484	877	1289	100/50	2.3	1240	2203	3277
	1.1	157	286	415		1.5	907	1645	2417		4.6	2480	4406	6555
	1.7	243	442	642		2.3	1391	2522	3705		6.9	3720	6609	9832
	(MAX)					(MAX)					(MAX)			
25/17	0.8	73.7	133	195	50/21	1.0	374	678	980	100/100	4.8	943	1699	2456
	1.5	138.3	249	366		1.9	711	1289	1861		9.6	1886	3397	4913
	2.3	212.0	383	561		2.9	1086	1967	2841		14.4	2829	5096	7369
	(MAX)					(MAX)					(MAX)			

Note: There is a possible deviation of ±20% in the above values due to production and hardness tolerances