



Extra heavy load 极重负荷

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Model 型号	Outside Diameter 外径 (mm)	Inside Diameter 内径 (mm)	Free length 自由长 (mm)	Spring Constant 弹簧常数		Free length × 16.0% 1,000,000 cycles 自由长 × 16.0% 100万次		Free length × 18.0% 500,000 cycles 自由长 × 18.0% 50万次		Free length × 20.0% 300,000 cycles 自由长 × 20.0% 30万次	
				Deflection 压缩量 (mm)	Load 负荷 N [kgf]	Deflection 压缩量 (mm)	Load 负荷 N [kgf]	Deflection 压缩量 (mm)	Load 负荷 N [kgf]		
TB 8 × 10	8	4	10	166.11	{ 16.94 }	1.6	{ 255 }	1.8	{ 299 }	2.0	{ 343 }
15			15	110.74	{ 11.29 }	2.4		2.7		3.0	
20			20	83.06	{ 8.47 }	3.2		3.6		4.0	
25			25	66.44	{ 6.78 }	4.0		4.5		5.0	
30			30	55.37	{ 5.65 }	4.8		5.4		6.0	
35			35	47.46	{ 4.84 }	5.6		6.3		7.0	
40			40	41.53	{ 4.23 }	6.4		7.2		8.0	
45			45	36.91	{ 3.76 }	7.2		8.1		9.0	
50			50	33.22	{ 3.39 }	8.0		9.0		10.0	
55			55	30.20	{ 3.08 }	8.8		9.9		11.0	
60			60	27.69	{ 2.82 }	9.6		10.8		12.0	
65			65	25.56	{ 2.61 }	10.4		11.7		13.0	
70			70	23.73	{ 2.42 }	11.2		12.6		14.0	
75			75	22.15	{ 2.26 }	12.0		13.5		15.0	
80			80	20.76	{ 2.12 }	12.8		14.4		16.0	
TB 10 × 20	10	5	20	111.67	{ 11.39 }	3.2	{ 353 }	3.6	{ 402 }	4.0	{ 441 }
25			25	89.33	{ 9.11 }	4.0		4.5		5.0	
30			30	74.44	{ 7.59 }	4.8		5.4		6.0	
35			35	63.81	{ 6.51 }	5.6		6.3		7.0	
40			40	55.83	{ 5.69 }	6.4		7.2		8.0	
45			45	49.63	{ 5.06 }	7.2		8.1		9.0	
50			50	44.67	{ 4.55 }	8.0		9.0		10.0	
55			55	40.61	{ 4.14 }	8.8		9.9		11.0	
60			60	37.22	{ 3.80 }	9.6		10.8		12.0	
65			65	34.36	{ 3.50 }	10.4		11.7		13.0	
70			70	31.90	{ 3.25 }	11.2		12.6		14.0	
75			75	29.78	{ 3.04 }	12.0		13.5		15.0	
80			80	27.92	{ 2.85 }	12.8		14.4		16.0	
90			90	24.81	{ 2.53 }	14.4		16.2		18.0	
TB 12 × 20			12	6	20	141.67		{ 14.45 }		3.2	
25	25	113.33			{ 11.56 }	4.0	4.5	5.0			
30	30	94.44			{ 9.63 }	4.8	5.4	6.0			
35	35	80.95			{ 8.25 }	5.6	6.3	7.0			
40	40	70.83			{ 7.22 }	6.4	7.2	8.0			
45	45	62.96			{ 6.42 }	7.2	8.1	9.0			
50	50	56.67			{ 5.78 }	8.0	9.0	10.0			
55	55	51.52			{ 5.25 }	8.8	9.9	11.0			
60	60	47.22			{ 4.82 }	9.6	10.8	12.0			
65	65	43.59			{ 4.44 }	10.4	11.7	13.0			
70	70	40.48			{ 4.13 }	11.2	12.6	14.0			
75	75	37.78			{ 3.85 }	12.0	13.5	15.0			
80	80	35.42			{ 3.61 }	12.8	14.4	16.0			
90	90	31.48			{ 3.21 }	14.4	16.2	18.0			

Table of standards
规格表
极重负荷
TB

1N = 0.102 Kgf
1N (牛顿) = 0.102 Kgf (千克)

Load (N) = Spring Constant (N/mm) × Deflection (mm)
负荷 (N) = 弹簧常数 (N/mm) × 压缩量 (mm)



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Model 型号	Outside Diameter 外径 (mm)	Inside Diameter 内径 (mm)	Free length 自由长 (mm)	Spring Constant 弹簧常数		Free length × 16.0% 1,000,000 cycles 自由长 × 16.0% 100万次		Free length × 18.0% 500,000 cycles 自由长 × 18.0% 50万次		Free length × 20.0% 300,000 cycles 自由长 × 20.0% 30万次	
				(N/mm)	(kgf/mm)	Deflection 压缩量 (mm)	Load 负荷 N [kgf]	Deflection 压缩量 (mm)	Load 负荷 N [kgf]	Deflection 压缩量 (mm)	Load 负荷 N [kgf]
TB 14 × 25	14	7	25	148.22	{ 15.11 }	4.0	588 { 60.0 }	4.5	667 { 68.0 }	5.0	736 { 75.1 }
30			30	123.52	{ 12.60 }	4.8		5.4		6.0	
35			35	105.87	{ 10.80 }	5.6		6.3		7.0	
40			40	92.64	{ 9.45 }	6.4		7.2		8.0	
45			45	82.35	{ 8.40 }	7.2		8.1		9.0	
50			50	74.11	{ 7.56 }	8.0		9.0		10.0	
55			55	67.37	{ 6.87 }	8.8		9.9		11.0	
60			60	61.76	{ 6.30 }	9.6		10.8		12.0	
65			65	57.01	{ 5.81 }	10.4		11.7		13.0	
70			70	52.94	{ 5.40 }	11.2		12.6		14.0	
75			75	49.41	{ 5.04 }	12.0		13.5		15.0	
80			80	46.32	{ 4.72 }	12.8		14.4		16.0	
90			90	41.17	{ 4.20 }	14.4		16.2		18.0	
100	100	37.06	{ 3.78 }	16.0	18.0	20.0					
TB 16 × 25	16	8	25	196.22	{ 20.01 }	4.0	785 { 80.0 }	4.5	883 { 90.0 }	5.0	981 { 100.0 }
30			30	163.52	{ 16.67 }	4.8		5.4		6.0	
35			35	140.16	{ 14.29 }	5.6		6.3		7.0	
40			40	122.64	{ 12.51 }	6.4		7.2		8.0	
45			45	109.01	{ 11.12 }	7.2		8.1		9.0	
50			50	98.11	{ 10.00 }	8.0		9.0		10.0	
55			55	89.19	{ 9.10 }	8.8		9.9		11.0	
60			60	81.76	{ 8.34 }	9.6		10.8		12.0	
65			65	75.47	{ 7.70 }	10.4		11.7		13.0	
70			70	70.08	{ 7.15 }	11.2		12.6		14.0	
75			75	65.41	{ 6.67 }	12.0		13.5		15.0	
80			80	61.32	{ 6.25 }	12.8		14.4		16.0	
90			90	54.51	{ 5.56 }	14.4		16.2		18.0	
100	100	49.06	{ 5.00 }	16.0	18.0	20.0					
125	125	39.24	{ 4.00 }	20.0	22.5	25.0					
TB 18 × 25	18	9	25	246.22	{ 25.11 }	4.0	981 { 100.0 }	4.5	1,108 { 113.0 }	5.0	1,226 { 125.0 }
30			30	205.19	{ 20.92 }	4.8		5.4		6.0	
35			35	175.87	{ 17.93 }	5.6		6.3		7.0	
40			40	153.89	{ 15.69 }	6.4		7.2		8.0	
45			45	136.79	{ 13.95 }	7.2		8.1		9.0	
50			50	123.11	{ 12.55 }	8.0		9.0		10.0	
55			55	111.92	{ 11.41 }	8.8		9.9		11.0	
60			60	102.59	{ 10.46 }	9.6		10.8		12.0	
65			65	94.70	{ 9.66 }	10.4		11.7		13.0	
70			70	87.94	{ 8.97 }	11.2		12.6		14.0	
75			75	82.07	{ 8.37 }	12.0		13.5		15.0	
80			80	76.94	{ 7.85 }	12.8		14.4		16.0	
90			90	68.40	{ 6.97 }	14.4		16.2		18.0	
100	100	61.56	{ 6.28 }	16.0	18.0	20.0					
125	125	49.24	{ 5.02 }	20.0	22.5	25.0					

1N = 0.102 Kgf
1N (牛顿) = 0.102 Kg (千克)

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负荷 (N) = 弹簧常数 (N/mm) × 压缩量 (mm)

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TB

Model 型号	Outside Diameter 外径 (mm)	Inside Diameter 内径 (mm)	Free length 自由长 (mm)	Spring Constant 弹簧常数		Free length × 16.0% 1,000,000 cycles 自由长 × 16.0% 100万次		Free length × 18.0% 500,000 cycles 自由长 × 18.0% 50万次		Free length × 20.0% 300,000 cycles 自由长 × 20.0% 30万次	
				(N/mm)	(kgf/mm)	Deflection 压缩量 (mm)	Load 负荷 N [kgf]	Deflection 压缩量 (mm)	Load 负荷 N [kgf]	Deflection 压缩量 (mm)	Load 负荷 N [kgf]
TB 20 × 25	20	10	25	313.78	32.00	4.0	1,255 {128.0}	4.5	1,412 {144.0}	5.0	1,569 {160.0}
30			30	261.48	26.66	4.8		5.4		6.0	
35			35	224.13	22.85	5.6		6.3		7.0	
40			40	196.11	20.00	6.4		7.2		8.0	
45			45	174.32	17.78	7.2		8.1		9.0	
50			50	156.89	16.00	8.0		9.0		10.0	
55			55	142.63	14.54	8.8		9.9		11.0	
60			60	130.74	13.33	9.6		10.8		12.0	
65			65	120.68	12.31	10.4		11.7		13.0	
70			70	112.06	11.43	11.2		12.6		14.0	
75			75	104.59	10.67	12.0		13.5		15.0	
80			80	98.06	10.00	12.8		14.4		16.0	
90			90	87.16	8.89	14.4		16.2		18.0	
100			100	78.44	8.00	16.0		18.0		20.0	
125			125	62.76	6.40	20.0		22.5		25.0	
150	150	52.30	5.33	24.0	27.0	30.0					
TB 22 × 25	22	11	25	383.56	39.11	4.0	1,530 {156.0}	4.5	1,726 {176.0}	5.0	1,912 {195.0}
30			30	319.63	32.59	4.8		5.4		6.0	
35			35	273.97	27.94	5.6		6.3		7.0	
40			40	239.72	24.44	6.4		7.2		8.0	
45			45	213.09	21.73	7.2		8.1		9.0	
50			50	191.78	19.56	8.0		9.0		10.0	
55			55	174.34	17.78	8.8		9.9		11.0	
60			60	159.81	16.30	9.6		10.8		12.0	
65			65	147.52	15.04	10.4		11.7		13.0	
70			70	136.98	13.97	11.2		12.6		14.0	
75			75	127.85	13.04	12.0		13.5		15.0	
80			80	119.86	12.22	12.8		14.4		16.0	
90			90	106.54	10.86	14.4		16.2		18.0	
100			100	95.89	9.78	16.0		18.0		20.0	
125			125	76.71	7.82	20.0		22.5		25.0	
150	150	63.93	6.52	24.0	27.0	30.0					
TB 25 × 25	25	12.5	25	482.22	49.17	4.0	1,922 {196.0}	4.5	2,170 {221.3}	5.0	2,400 {244.7}
30			30	401.85	40.98	4.8		5.4		6.0	
35			35	344.44	35.12	5.6		6.3		7.0	
40			40	301.39	30.73	6.4		7.2		8.0	
45			45	267.90	27.32	7.2		8.1		9.0	
50			50	241.11	24.59	8.0		9.0		10.0	
55			55	219.19	22.35	8.8		9.9		11.0	
60			60	200.93	20.49	9.6		10.8		12.0	
65			65	185.47	18.91	10.4		11.7		13.0	
70			70	172.22	17.56	11.2		12.6		14.0	
75			75	160.74	16.39	12.0		13.5		15.0	
80			80	150.69	15.37	12.8		14.4		16.0	
90			90	133.95	13.66	14.4		16.2		18.0	
100			100	120.56	12.29	16.0		18.0		20.0	
125			125	96.44	9.83	20.0		22.5		25.0	
150	150	80.37	8.20	24.0	27.0	30.0					
175	175	68.89	7.02	28.0	31.5	35.0					
200	200	60.28	6.15	32.0	36.0	40.0					

1N = 0.102 Kgf
1N (牛顿) = 0.102 Kgf (千克)

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				(N/mm)	(kgf/mm)	Deflection 压缩量 (mm)	Load 负荷 N [kgf]	Deflection 压缩量 (mm)	Load 负荷 N [kgf]	Deflection 压缩量 (mm)	Load 负荷 N [kgf]					
TB 27 × 25	27	13.5	25	568.89	58.01	4.0	2,280 {232.5}	4.5	2,560 {261.1}	5.0	2,840 {289.6}					
30			30	474.07	48.34	4.8		5.4		6.0						
35			35	406.35	41.44	5.6		6.3		7.0						
40			40	355.56	36.26	6.4		7.2		8.0						
45			45	316.05	32.23	7.2		8.1		9.0						
50			50	284.44	29.01	8.0		9.0		10.0						
55			55	258.59	26.37	8.8		9.9		11.0						
60			60	237.04	24.17	9.6		10.8		12.0						
65			65	218.80	22.31	10.4		11.7		13.0						
70			70	203.17	20.72	11.2		12.6		14.0						
75			75	189.63	19.34	12.0		13.5		15.0						
80			80	177.78	18.13	12.8		14.4		16.0						
90			90	158.02	16.11	14.4		16.2		18.0						
100			100	142.22	14.50	16.0		18.0		20.0						
125			125	113.78	11.60	20.0		22.5		25.0						
150			150	94.81	9.67	24.0		27.0		30.0						
175			175	81.27	8.29	28.0		31.5		35.0						
200			200	71.11	7.25	32.0		36.0		40.0						
TB 30 × 25			30	15	25	706.67		72.06		4.0		2,820 {287.6}	4.5	3,180 {324.3}	5.0	3,530 {360.0}
30					30	588.89		60.05		4.8			5.4		6.0	
35	35	504.76			51.47	5.6	6.3	7.0								
40	40	441.67			45.04	6.4	7.2	8.0								
45	45	392.59			40.03	7.2	8.1	9.0								
50	50	353.33			36.03	8.0	9.0	10.0								
55	55	321.21			32.75	8.8	9.9	11.0								
60	60	294.44			30.02	9.6	10.8	12.0								
65	65	271.79			27.72	10.4	11.7	13.0								
70	70	252.38			25.74	11.2	12.6	14.0								
75	75	235.56			24.02	12.0	13.5	15.0								
80	80	220.83			22.52	12.8	14.4	16.0								
90	90	196.30			20.02	14.4	16.2	18.0								
100	100	176.67			18.01	16.0	18.0	20.0								
125	125	141.33			14.41	20.0	22.5	25.0								
150	150	117.78			12.01	24.0	27.0	30.0								
175	175	100.95			10.29	28.0	31.5	35.0								
200	200	88.33			9.01	32.0	36.0	40.0								
TB 35 × 40	35	17.5			40	600.00	61.18	6.4	3,840 {391.6}	7.2	4,320 {440.5}		8.0		4,810 {490.5}	
45					45	533.33	54.38	7.2		8.1			9.0			
50			50	480.00	48.95	8.0	9.0	10.0								
55			55	436.36	44.50	8.8	9.9	11.0								
60			60	400.00	40.79	9.6	10.8	12.0								
65			65	369.23	37.65	10.4	11.7	13.0								
70			70	342.86	34.96	11.2	12.6	14.0								
75			75	320.00	32.63	12.0	13.5	15.0								
80			80	300.00	30.59	12.8	14.4	16.0								
90			90	266.67	27.19	14.4	16.2	18.0								
100			100	240.00	24.47	16.0	18.0	20.0								
125			125	192.00	19.58	20.0	22.5	25.0								
150			150	160.00	16.32	24.0	27.0	30.0								
175			175	137.14	13.98	28.0	31.5	35.0								
200			200	120.00	12.24	32.0	36.0	40.0								

1N = 0.102 Kgf

1N (牛顿) = 0.102 Kgf (千克)

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负荷 (N) = 弹簧常数 (N/mm) × 压缩量 (mm)

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TB 40 × 40	40	20	40	784.72	{ 80.02 }	6.4	5,020 { 511.9 }	7.2	5,650 { 576.1 }	8.0	6,280 { 640.4 }
45			45	697.53	{ 71.13 }	7.2		8.1		9.0	
50			50	627.78	{ 64.02 }	8.0		9.0		10.0	
55			55	570.71	{ 58.20 }	8.8		9.9		11.0	
60			60	523.15	{ 53.35 }	9.6		10.8		12.0	
65			65	482.91	{ 49.24 }	10.4		11.7		13.0	
70			70	448.41	{ 45.73 }	11.2		12.6		14.0	
75			75	418.52	{ 42.68 }	12.0		13.5		15.0	
80			80	392.36	{ 40.01 }	12.8		14.4		16.0	
90			90	348.77	{ 35.56 }	14.4		16.2		18.0	
100			100	313.89	{ 32.01 }	16.0		18.0		20.0	
125			125	251.11	{ 25.61 }	20.0		22.5		25.0	
150			150	209.26	{ 21.34 }	24.0		27.0		30.0	
175			175	179.37	{ 18.29 }	28.0		31.5		35.0	
200			200	156.94	{ 16.00 }	32.0		36.0		40.0	
225			225	139.51	{ 14.23 }	36.0		40.5		45.0	
250			250	125.56	{ 12.80 }	40.0		45.0		50.0	
275	275	114.14	{ 11.64 }	44.0	49.5	55.0					
300	300	104.63	{ 10.67 }	48.0	54.0	60.0					
TB 50 × 50	50	25	50	981.11	{ 100.0 }	8.0	7,850 { 800.5 }	9.0	8,830 { 900.4 }	10.0	9,810 { 1000 }
55			55	891.92	{ 90.95 }	8.8		9.9		11.0	
60			60	817.59	{ 83.37 }	9.6		10.8		12.0	
65			65	754.70	{ 76.96 }	10.4		11.7		13.0	
70			70	700.79	{ 71.46 }	11.2		12.6		14.0	
75			75	654.07	{ 66.70 }	12.0		13.5		15.0	
80			80	613.19	{ 62.53 }	12.8		14.4		16.0	
90			90	545.06	{ 55.58 }	14.4		16.2		18.0	
100			100	490.56	{ 50.02 }	16.0		18.0		20.0	
125			125	392.44	{ 40.02 }	20.0		22.5		25.0	
150			150	327.04	{ 33.35 }	24.0		27.0		30.0	
175			175	280.32	{ 28.58 }	28.0		31.5		35.0	
200			200	245.28	{ 25.01 }	32.0		36.0		40.0	
225			225	218.02	{ 22.23 }	36.0		40.5		45.0	
250			250	196.22	{ 20.01 }	40.0		45.0		50.0	
275			275	178.38	{ 18.19 }	44.0		49.5		55.0	
300			300	163.52	{ 16.67 }	48.0		54.0		60.0	
350	350	140.16	{ 14.29 }	56.0	63.0	70.0					
TB 60 × 60	60	30	60	1176.85	{ 120.0 }	9.6	11,300 { 1152 }	10.8	12,710 { 1296 }	12.0	14,120 { 1440 }
70			70	1008.73	{ 102.9 }	11.2		12.6		14.0	
80			80	882.64	{ 90.00 }	12.8		14.4		16.0	
90			90	784.57	{ 80.00 }	14.4		16.2		18.0	
100			100	706.11	{ 72.00 }	16.0		18.0		20.0	
125			125	564.89	{ 57.60 }	20.0		22.5		25.0	
150			150	470.74	{ 48.00 }	24.0		27.0		30.0	
175			175	403.49	{ 41.14 }	28.0		31.5		35.0	
200			200	353.06	{ 36.00 }	32.0		36.0		40.0	
225			225	313.83	{ 32.00 }	36.0		40.5		45.0	
250			250	282.44	{ 28.80 }	40.0		45.0		50.0	
275			275	256.77	{ 26.18 }	44.0		49.5		55.0	
300			300	235.37	{ 24.00 }	48.0		54.0		60.0	
350	350	201.75	{ 20.57 }	56.0	63.0	70.0					

1N = 0.102 Kgf
1N (牛顿) = 0.102 Kgf (千克)

Load (N) = Spring Constant (N/mm) × Deflection (mm)
负荷 (N) = 弹簧常数 (N/mm) × 压缩量 (mm)

TB

NEW 新产品 TB70

Distributed in Germany, Italy, Portugal & Spain by

Extra heavy load 极重负荷

SPRINGMAKERS.NET

Model 型号	Outside Diameter 外径 (mm)	Inside Diameter 内径 (mm)	Free length 自由长 (mm)	Spring Constant 弹簧常数		Free length × 16.0% 1,000,000 cycles 自由长 × 16.0% 100万次		Free length × 18.0% 500,000 cycles 自由长 × 18.0% 50万次		Free length × 20.0% 300,000 cycles 自由长 × 20.0% 30万次	
				(N/mm)	(kgf/mm)	Deflection 压缩量 (mm)	Load 负荷 N [kgf]	Deflection 压缩量 (mm)	Load 负荷 N [kgf]	Deflection 压缩量 (mm)	Load 负荷 N [kgf]
TB 70 × 70	70	38.5	70	1285.71	{ 131.1 }	11.2	14,400 {1468}	12.6	16,200 {1652}	14.0	18,000 {1836}
80			80	1125.00	{ 114.7 }	12.8		14.4		16.0	
90			90	1000.00	{ 102.0 }	14.4		16.2		18.0	
100			100	900.00	{ 91.77 }	16.0		18.0		20.0	
125			125	720.00	{ 73.42 }	20.0		22.5		25.0	
150			150	600.00	{ 61.18 }	24.0		27.0		30.0	
175			175	514.29	{ 52.44 }	28.0		31.5		35.0	
200			200	450.00	{ 45.89 }	32.0		36.0		40.0	
225			225	400.00	{ 40.79 }	36.0		40.5		45.0	
250			250	360.00	{ 36.71 }	40.0		45.0		50.0	
275			275	327.27	{ 33.37 }	44.0		49.5		55.0	
300			300	300.00	{ 30.59 }	48.0		54.0		60.0	
350			350	257.14	{ 26.22 }	56.0		63.0		70.0	

1N = 0.102 Kgf

1N(牛顿) = 0.102 Kgf(千克)

Load (N) = Spring Constant (N/mm) × Deflection (mm)

负荷(N) = 弹簧常数(N/mm) × 压缩量(mm)

Table of standards
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TB