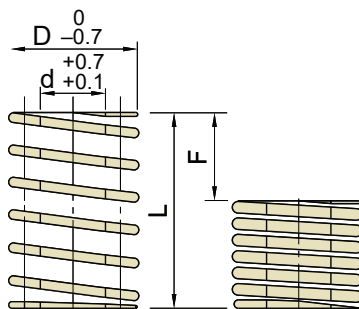




Load : $\pm 10\%$
 Perpendicularity : 2° or less
 Free length L : 50 or less $\pm 0.5\text{mm}$
 : 55 or more $\pm 1\%$
 Winding direction : right

Model	Outer Dia D (mm)	Inner Dia d (mm)	Free Length L (mm)	Spring Const (kgf/mm)	0.3 million		0.5 million		1 million	
					Deflection F (mm)	Load kgf(N)	Deflection F (mm)	Load kgf(N)	Deflection F (mm)	Load kgf(N)
SB 8 × 10	8	4	10	16.94	2.0	35	1.8	31	1.6	26
15			15	11.30	3.0		2.7		2.4	
20			20	8.47	4.0		3.6		3.2	
25			25	6.78	5.0		4.5		4.0	
30			30	5.65	6.0		5.4		4.8	
35			35	4.84	7.0		6.3		5.6	
40			40	4.24	8.0		7.2		6.4	
45			45	3.77	9.0		8.1		7.2	
50			50	3.39	10.0		9.0		8.0	
55			55	3.08	11.0		9.9		8.8	
60			60	2.82	12.0		10.8		9.6	
65			65	2.61	13.0		11.7		10.4	
70			70	2.42	14.0		12.6		11.2	
75			75	2.26	15.0		13.5		12.0	
80			80	2.12	16.0		14.4		12.8	
90			90	1.88	18.0		16.2		14.4	
SB 10 × 10	10	5	10	22.78	2.0	45	1.8	41	1.6	36
15			15	15.19	3.0		2.7		2.4	
20			20	11.25	4.0		3.6		3.2	
25			25	9.00	5.0		4.5		4.0	
30			30	7.50	6.0		5.4		4.8	
35			35	6.43	7.0		6.3		5.6	
40			40	5.63	8.0		7.2		6.4	
45			45	5.00	9.0		8.1		7.2	
50			50	4.50	10.0		9.0		8.0	
55			55	4.09	11.0		9.9		8.8	
60			60	3.75	12.0		10.8		9.6	
65			65	3.47	13.0		11.7		10.4	
70			70	3.21	14.0		12.6		11.2	
75			75	3.00	15.0		13.5		12.0	
80			80	2.82	16.0		14.4		12.8	
90			90	2.50	18.0		16.2		14.4	
100			100	2.25	20.0		18.0		16.0	

Model	Outer Dia D (mm)	Inner Dia d (mm)	Free Length L (mm)	Spring Const (kgf/mm)	0.3 million		0.5 million		1 million	
					Deflection F (mm)	Load kgf(N)	Deflection F (mm)	Load kgf(N)	Deflection F (mm)	Load kgf(N)
SB 12 × 20	12	6	20	14.50	4.0	58	3.6	52	3.2	46
25			25	11.60	5.0		4.5		4.0	
30			30	9.67	6.0		5.4		4.8	
35			35	8.29	7.0		6.3		5.6	
40			40	7.25	8.0		7.2		6.4	
45			45	6.44	9.0		8.1		7.2	
50			50	5.80	10.0		9.0		8.0	
55			55	5.27	11.0		9.9		8.8	
60			60	4.83	12.0		10.8		9.6	
65			65	4.44	13.0		11.7		10.4	
70			70	4.13	14.0		12.6		11.2	
75			75	3.85	15.0		13.5		12.0	
80			80	3.61	16.0		14.4		12.8	
90			90	3.22	18.0		16.2		14.4	
100			100	2.90	20.0		18.0		16.0	
SB 14 × 20	14	7	20	18.89	4.0	75	3.6	68	3.2	60
25			25	15.00	5.0		4.5		4.0	
30			30	12.50	6.0		5.4		4.8	
35			35	10.27	7.0		6.3		5.6	
40			40	9.38	8.0		7.2		6.4	
45			45	8.34	9.0		8.1		7.2	
50			50	7.50	10.0		9.0		8.0	
55			55	6.82	11.0		9.9		8.8	
60			60	6.25	12.0		10.8		9.6	
65			65	5.77	13.0		11.7		10.4	
70			70	5.36	14.0		12.6		11.2	
75			75	5.00	15.0		13.5		12.0	
80			80	4.69	16.0		14.4		12.8	
90			90	4.17	18.0		16.2		14.4	
100			100	3.75	20.0		18.0		16.0	
125			125	3.00	25.0		22.5		20.0	
SB 16 × 20	16	8	20	25.00	4.0	100	3.6	90	3.2	80
25			25	20.00	5.0		4.5		4.0	
30			30	16.67	6.0		5.4		4.8	
35			35	14.29	7.0		6.3		5.6	
40			40	12.50	8.0		7.2		6.4	
45			45	11.11	9.0		8.1		7.2	
50			50	10.00	10.0		9.0		8.0	
55			55	9.09	11.0		9.9		8.8	
60			60	8.34	12.0		10.8		9.6	
65			65	7.69	13.0		11.7		10.4	
70			70	7.14	14.0		12.6		11.2	
75			75	6.67	15.0		13.5		12.0	
80			80	6.25	16.0		14.4		12.8	
90			90	5.56	18.0		16.2		14.4	
100			100	5.00	20.0		18.0		16.0	
125			125	4.00	25.0		22.5		20.0	

Model	Outer Dia D (mm)	Inner Dia d (mm)	Free Length L (mm)	Spring Const (kgf/mm)	0.3 million		0.5 million		1 million	
					Deflection F (mm)	Load kgf(N)	Deflection F (mm)	Load kgf(N)	Deflection F (mm)	Load kgf(N)
SB 18 × 20	18	9	20	31.39	4.0	125	3.6	113	3.2	100
25			25	25.00	5.0		4.5		4.0	
30			30	20.84	6.0		5.4		4.8	
35			35	17.86	7.0		6.3		5.6	
40			40	15.63	8.0		7.2		6.4	
45			45	13.89	9.0		8.1		7.2	
50			50	12.50	10.0		9.0		8.0	
55			55	11.37	11.0		9.9		8.8	
60			60	10.42	12.0		10.8		9.6	
65			65	9.62	13.0		11.7		10.4	
70			70	8.93	14.0		12.6		11.2	
75			75	8.34	15.0		13.5		12.0	
80			80	7.82	16.0		14.4		12.8	
90			90	6.95	18.0		16.2		14.4	
100			100	6.26	20.0		18.0		16.0	
125			125	5.00	25.0		22.5		20.0	
SB 20 × 20	20	10	20	40.00	4.0	160	3.6	144	3.2	128
25			25	32.00	5.0		4.5		4.0	
30			30	26.67	6.0		5.4		4.8	
35			35	22.86	7.0		6.3		5.6	
40			40	20.00	8.0		7.2		6.4	
45			45	17.78	9.0		8.1		7.2	
50			50	16.00	10.0		9.0		8.0	
55			55	14.55	11.0		9.9		8.8	
60			60	13.33	12.0		10.8		9.6	
65			65	12.31	13.0		11.7		10.4	
70			70	11.43	14.0		12.6		11.2	
75			75	10.67	15.0		13.5		12.0	
80			80	10.00	16.0		14.4		12.8	
90			90	8.89	18.0		16.2		14.4	
100			100	8.00	20.0		18.0		16.0	
125			125	6.40	25.0		22.5		20.0	
150			150	5.33	30.0		27.0		24.0	
175			175	4.57	35.0		31.5		28.0	
SB 22 × 25	22	11	25	39.00	5.0	195	4.5	176	4.0	156
30			30	32.50	6.0		5.4		4.8	
35			35	27.86	7.0		6.3		5.6	
40			40	24.38	8.0		7.2		6.4	
45			45	21.67	9.0		8.1		7.2	
50			50	19.50	10.0		9.0		8.0	
55			55	17.73	11.0		9.9		8.8	
60			60	16.25	12.0		10.8		9.6	
65			65	15.00	13.0		11.7		10.4	
70			70	13.93	14.0		12.6		11.2	
75			75	13.00	15.0		13.5		12.0	
80			80	12.19	16.0		14.4		12.8	
90			90	10.83	18.0		16.2		14.4	
100			100	9.75	20.0		18.0		16.0	
125			125	7.80	25.0		22.5		20.0	
150			150	6.50	30.0		27.0		24.0	
175			175	5.57	35.0		31.5		28.0	

Model	Outer Dia D (mm)	Inner Dia d (mm)	Free Length L (mm)	Spring Const (kgf/mm)	0.3 million		0.5 million		1 million	
					Deflection F (mm)	Load kgf(N)	Deflection F (mm)	Load kgf(N)	Deflection F (mm)	Load kgf(N)
SB 25 × 25	25	12.5	25	49.00	5.0	245	4.5	221	4.0	196
30			30	40.80	6.0		5.4		4.8	
35			35	35.00	7.0		6.3		5.6	
40			40	30.60	8.0		7.2		6.4	
45			45	27.20	9.0		8.1		7.2	
50			50	24.50	10.0		9.0		8.0	
55			55	22.30	11.0		9.9		8.8	
60			60	20.40	12.0		10.8		9.6	
65			65	18.80	13.0		11.7		10.4	
70			70	17.50	14.0		12.6		11.2	
75			75	16.30	15.0		13.5		12.0	
80			80	15.30	16.0		14.4		12.8	
90			90	13.60	18.0		16.2		14.4	
100			100	12.30	20.0		18.0		16.0	
125			125	9.80	25.0		22.5		20.0	
150			150	8.17	30.0		27.0		24.0	
175			175	7.00	35.0		31.5		28.0	
200			200	6.13	40.0		36.0		32.0	
SB 27 × 25	27	13.5	25	58.00	5.0	290	4.5	261	4.0	232
30			30	48.33	6.0		5.4		4.8	
35			35	41.43	7.0		6.3		5.6	
40			40	36.25	8.0		7.2		6.4	
45			45	32.22	9.0		8.1		7.2	
50			50	29.00	10.0		9.0		8.0	
55			55	26.36	11.0		9.9		8.8	
60			60	24.17	12.0		10.8		9.6	
65			65	22.31	13.0		11.7		10.4	
70			70	20.71	14.0		12.6		11.2	
75			75	19.33	15.0		13.5		12.0	
80			80	18.13	16.0		14.4		12.8	
90			90	16.11	18.0		16.2		14.4	
100			100	14.50	20.0		18.0		16.0	
125			125	11.60	25.0		22.5		20.0	
150			150	9.67	30.0		27.0		24.0	
175			175	8.28	35.0		31.5		28.0	
200			200	7.25	40.0		36.0		32.0	
SB 30 × 25	30	15	25	72.00	5.0	360	4.5	324	4.0	288
30			30	60.00	6.0		5.4		4.8	
35			35	51.43	7.0		6.3		5.6	
40			40	45.00	8.0		7.2		6.4	
45			45	40.00	9.0		8.1		7.2	
50			50	36.00	10.0		9.0		8.0	
55			55	32.72	11.0		9.9		8.8	
60			60	30.00	12.0		10.8		9.6	
65			65	27.69	13.0		11.7		10.4	
70			70	25.71	14.0		12.6		11.2	
75			75	24.00	15.0		13.5		12.0	
80			80	22.50	16.0		14.4		12.8	
90			90	20.00	18.0		16.2		14.4	
100			100	18.00	20.0		18.0		16.0	

Model	Outer Dia D (mm)	Inner Dia d (mm)	Free Length L (mm)	Spring Const (kgf/mm)	0.3 million		0.5 million		1 million	
					Deflection F (mm)	Load kgf(N)	Deflection F (mm)	Load kgf(N)	Deflection F (mm)	Load kgf(N)
SB 30 × 125	30	15	125	14.40	25.0	360	22.5	324	20.0	288
150			150	12.00	30.0		27.0		24.0	
175			175	10.28	35.0		31.5		28.0	
200			200	9.00	40.0		36.0		32.0	
SB 35 × 35	35	17.5	35	69.94	7.0	490	6.3	441	5.6	392
40			40	61.25	8.0		7.2		6.4	
45			45	54.44	9.0		8.1		7.2	
50			50	49.00	10.0		9.0		8.0	
55			55	44.54	11.0		9.9		8.8	
60			60	40.83	12.0		10.8		9.6	
65			65	37.69	13.0		11.7		10.4	
70			70	35.00	14.0		12.6		11.2	
75			75	32.67	15.0		13.5		12.0	
80			80	30.62	16.0		14.4		12.8	
90			90	27.22	18.0		16.2		14.4	
100			100	24.50	20.0		18.0		16.0	
125			125	19.60	25.0		22.5		20.0	
150			150	16.33	30.0		27.0		24.0	
175			175	14.00	35.0		31.5		28.0	
200			200	12.25	40.0		36.0		32.0	
SB 40 × 40	40	20	40	80.00	8.0	640	7.2	576	6.4	512
45			45	71.11	9.0		8.1		7.2	
50			50	64.00	10.0		9.0		8.0	
55			55	58.18	11.0		9.9		8.8	
60			60	53.33	12.0		10.8		9.6	
65			65	49.23	13.0		11.7		10.4	
70			70	45.71	14.0		12.6		11.2	
75			75	42.67	15.0		13.5		12.0	
80			80	40.00	16.0		14.4		12.8	
90			90	35.55	18.0		16.2		14.4	
100			100	32.00	20.0		18.0		16.0	
125			125	25.60	25.0		22.5		20.0	
150			150	21.33	30.0		27.0		24.0	
175			175	18.28	35.0		31.5		28.0	
200			200	16.00	40.0		36.0		32.0	
225			225	14.22	45.0		40.5		36.0	
250			250	12.80	50.0		45.0		40.0	
275			275	11.64	55.0		49.5		44.0	
300			300	10.67	60.0		54.0		48.0	
SB 50 × 50	50	25	50	100.00	10.0	1000	9.0	900	8.0	800
55			55	90.91	11.0		9.9		8.8	
60			60	83.33	12.0		10.8		9.6	
65			65	76.92	13.0		11.7		10.4	
70			70	71.42	14.0		12.6		11.2	
75			75	66.67	15.0		13.5		12.0	
80			80	62.50	16.0		14.4		12.8	
90			90	55.55	18.0		16.2		14.4	
100			100	50.00	20.0		18.0		16.0	
125			125	40.00	25.0		22.5		20.0	

Model	Outer Dia D (mm)	Inner Dia d (mm)	Free Length L (mm)	Spring Const (kgf/mm)	0.3 million		0.5 million		1 million	
					Deflection F (mm)	Load kgf(N)	Deflection F (mm)	Load kgf(N)	Deflection F (mm)	Load kgf(N)
SB 50 × 150	50	25	150	33.33	30.0	1000	27.0	900	24.0	800
175			175	28.57	35.0		31.5		28.0	
200			200	25.00	40.0		36.0		32.0	
225			225	22.22	45.0		40.5		36.0	
250			250	20.00	50.0		45.0		40.0	
275			275	18.18	55.0		49.5		44.0	
300			300	16.66	60.0		54.0		48.0	
350			350	14.29	70.0		63.0		56.0	
SB 60 × 60	60	30	60	120.00	12.0	1440	10.8	1296	9.6	1152
70			70	102.86	14.0		12.6		11.2	
80			80	90.00	16.0		14.4		12.8	
90			90	80.00	18.0		16.2		14.4	
100			100	72.00	20.0		18.0		16.0	
125			125	57.60	25.0		22.5		20.0	
150			150	48.00	30.0		27.0		24.0	
175			175	41.14	35.0		31.5		28.0	
200			200	36.00	40.0		36.0		32.0	
225			225	32.00	45.0		40.5		36.0	
250			250	28.80	50.0		45.0		40.0	
275			275	26.18	55.0		49.5		44.0	
300			300	24.00	60.0		54.0		48.0	
350			350	20.57	70.0		63.0		56.0	



Order Example

TYPE	D	L
SB	- D30	- L200