



Model	Outer Dia D (mm)	Inner Dia d (mm)	Free Length L (mm)	Solid Length (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)
SY 10.5 × 15	10.5	6	15	6	1.33	7.5	10	6.8	9	6.0	8
20			20	8	1.00	10.0		9.0		8.0	
25			25	10	0.80	12.5		11.3		10.0	
30			30	12	0.67	15.0		13.5		12.0	
35			35	14	0.57	17.5		15.8		14.0	
40			40	16	0.50	20.0		18.0		16.0	
45			45	18	0.44	22.5		20.3		18.0	
50			50	20	0.40	25.0		22.5		20.0	
55			55	22	0.36	27.5		24.8		22.0	
60			60	24	0.33	30.0		27.0		24.0	
65			65	26	0.31	32.5		29.3		26.0	
70			70	28	0.29	35.0		31.5		28.0	
75			75	30	0.27	37.5		33.8		30.0	
80			80	32	0.25	40.0		36.0		32.0	
SY 12.5 × 15	12.5	7	15	6	2.00	7.5	15	6.8	13.5	6.0	12.0
20			20	8	1.50	10.0		9.0		8.0	
25			25	10	1.20	12.5		11.3		10.0	
30			30	12	1.00	15.0		13.5		12.0	
35			35	14	0.86	17.5		15.8		14.0	
40			40	16	0.75	20.0		18.0		16.0	
45			45	18	0.67	22.5		20.3		18.0	
50			50	20	0.60	25.0		22.5		20.0	
55			55	22	0.55	27.5		24.8		22.0	
60			60	24	0.50	30.0		27.0		24.0	
65			65	26	0.46	32.5		29.3		26.0	
70			70	28	0.43	35.0		31.5		28.0	
75			75	30	0.40	37.5		33.8		30.0	
80			80	32	0.38	40.0		36.0		32.0	
90	90	36	0.33	45.0	40.5	36.0					
100	100	40	0.30	50.0	45.0	40.0					

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						Deflection F (mm)	Load kgf(N)	Deflection F (mm)	Load kgf(N)	Deflection F (mm)	Load kgf(N)
SY 14.5 × 20	14.5	9	20	8	2.10	10.0	21	9.0	19	8.0	17
25			25	10	1.68	12.5		11.3			
30			30	12	1.40	15.0		13.5			
35			35	14	1.20	17.5		15.8			
40			40	16	1.05	20.0		18.0			
45			45	18	0.93	22.5		20.3			
50			50	20	0.84	25.0		22.5			
55			55	22	0.76	27.5		24.8			
60			60	24	0.70	30.0		27.0			
65			65	26	0.65	32.5		29.3			
70			70	28	0.60	35.0		31.5			
75			75	30	0.56	37.5		33.8			
80			80	32	0.53	40.0		36.0			
90			90	36	0.47	45.0		40.5			
100			100	40	0.42	50.0		45.0			
125	125	50	0.34	62.5	56.3						
SY 17 × 25	17	11	25	10	2.46	12.5	31	11.3	28	10.0	25
30			30	12	2.05	15.0		13.5			
35			35	14	1.76	17.5		15.8			
40			40	16	1.54	20.0		18.0			
45			45	18	1.37	22.5		20.3			
50			50	20	1.23	25.0		22.5			
55			55	22	1.12	27.5		24.8			
60			60	24	1.03	30.0		27.0			
65			65	26	0.95	32.5		29.3			
70			70	28	0.88	35.0		31.5			
75			75	30	0.82	37.5		33.8			
80			80	32	0.77	40.0		36.0			
90			90	36	0.68	45.0		40.5			
100			100	40	0.62	50.0		45.0			
125			125	50	0.49	62.5		56.3			
150	150	60	0.41	75.0	67.5						
SY 21 × 25	21	13	25	10	3.19	12.5	40	11.3	36	10.0	32
30			30	12	2.67	15.0		13.5			
35			35	14	2.29	17.5		15.8			
40			40	16	2.00	20.0		18.0			
45			45	18	1.78	22.5		20.3			
50			50	20	1.60	25.0		22.5			
55			55	22	1.45	27.5		24.8			
60			60	24	1.33	30.0		27.0			
65			65	26	1.23	32.5		29.3			
70			70	28	1.14	35.0		31.5			

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						Deflection F (mm)	Load kgf(N)	Deflection F (mm)	Load kgf(N)	Deflection F (mm)	Load kgf(N)
SY 21 × 75	21	13	75	30	1.07	37.5	40	33.8	36	30.0	32
			80	32	1.00	40.0		36.0		32.0	
			90	36	0.89	45.0		40.5		36.0	
			100	40	0.80	50.0		45.0		40.0	
			125	50	0.64	62.5		56.3		50.0	
			150	60	0.53	75.0		67.5		60.0	
			175	70	0.46	87.5		78.8		70.0	
SY 26 × 30	26	16.5	30	12	3.87	15.0	58	13.5	52	12.0	46
			35	14	3.31	17.5		15.8		14.0	
			40	16	2.90	20.0		18.0		16.0	
			45	18	2.58	22.5		20.3		18.0	
			50	20	2.32	25.0		22.5		20.0	
			55	22	2.11	27.5		24.8		22.0	
			60	24	1.93	30.0		27.0		24.0	
			65	26	1.78	32.5		29.3		26.0	
			70	28	1.66	35.0		31.5		28.0	
			75	30	1.55	37.5		33.8		30.0	
			80	32	1.45	40.0		36.0		32.0	
			90	36	1.29	45.0		40.5		36.0	
			100	40	1.16	50.0		45.0		40.0	
			110	44	1.05	55.0		49.5		44.0	
			125	50	0.93	62.5		56.3		50.0	
			150	60	0.77	75.0		67.5		60.0	
			175	70	0.66	87.5		78.8		70.0	
200	80	0.58	100.0	90.0	80.0						
SY 32 × 40	32	21	40	16	3.90	20.0	78	18.0	70	16.0	62
			45	18	3.47	22.5		20.3		18.0	
			50	20	3.12	25.0		22.5		20.0	
			55	22	2.84	27.5		24.8		22.0	
			60	24	2.60	30.0		27.0		24.0	
			65	26	2.40	32.5		29.3		26.0	
			70	28	2.23	35.0		31.5		28.0	
			75	30	2.08	37.5		33.8		30.0	
			80	32	1.95	40.0		36.0		32.0	
			90	36	1.73	45.0		40.5		36.0	
			100	40	1.56	50.0		45.0		40.0	
			110	44	1.42	55.0		49.5		44.0	
			125	50	1.25	62.5		56.3		50.0	
			150	60	1.04	75.0		67.5		60.0	
			175	70	0.89	87.5		78.8		70.0	
200	80	0.78	100.0	90.0	80.0						

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						Deflection F (mm)	Load kgf(N)	Deflection F (mm)	Load kgf(N)	Deflection F (mm)	Load kgf(N)
SY 32 × 250	32	21	250	100	0.62	125.0	78	112.5	70	100.0	62
			300	120	0.52	150.0		135.0		120.0	
SY 39 × 40	39	26	40	16	5.10	20.0	102	18.0	92	16.0	82
45			18	4.53	22.5	20.3		18.0			
50			20	4.08	25.0	22.5		20.0			
55			22	3.71	27.5	24.8		22.0			
60			24	3.40	30.0	27.0		24.0			
65			26	3.14	32.5	29.3		26.0			
70			28	2.91	35.0	31.5		28.0			
75			30	2.72	37.5	33.8		30.0			
80			32	2.55	40.0	36.0		32.0			
90			36	2.27	45.0	40.5		36.0			
100			40	2.04	50.0	45.0		40.0			
110			44	1.85	55.0	49.5		44.0			
125			50	1.63	62.5	56.3		50.0			
150			60	1.36	75.0	67.5		60.0			
175			70	1.17	87.5	78.8		70.0			
200			80	1.02	100.0	90.0		80.0			
250			100	0.82	125.0	112.5		100.0			
300			120	0.68	150.0	135.0		120.0			
SY 46 × 50			46	32	50	20		5.44		25.0	
55	22	4.95			27.5	24.8	22.0				
60	24	4.53			30.0	27.0	24.0				
65	26	4.18			32.5	29.3	26.0				
70	28	3.89			35.0	31.5	28.0				
75	30	3.63			37.5	33.8	30.0				
80	32	3.40			40.0	36.0	32.0				
90	36	3.02			45.0	40.5	36.0				
100	40	2.72			50.0	45.0	40.0				
110	44	2.47			55.0	49.5	44.0				
125	50	2.18			62.5	56.3	50.0				
150	60	1.81			75.0	67.5	60.0				
175	70	1.55			87.5	78.8	70.0				
200	80	1.36			100.0	90.0	80.0				
250	100	1.09	125.0	112.5	100.0						
300	120	0.91	150.0	135.0	120.0						



Order Example

TYPE	D	L
SY	D26	L100