



Model	Outer Dia D (mm)	Inner Dia d (mm)	Free Length L (mm)	Spring Const (kgf/mm)	0.3 million	
					Deflection F (mm)	Load kgf(N)
TY 11 × 20	11	7	20	0.23	13.0	3
			25	0.18	16.3	
			30	0.15	19.5	
			35	0.13	22.8	
			40	0.12	26.0	
			45	0.10	29.3	
			50	0.09	32.5	
			55	0.08	35.8	
			60	0.08	39.0	
			65	0.07	42.3	
			70	0.07	45.5	
			75	0.06	48.8	
			80	0.06	52.0	
			90	0.05	58.5	
			100	0.05	65.0	
TY 12.5 × 20	12.5	8.5	20	0.32	13.0	4.1
			25	0.25	16.3	
			30	0.21	19.5	
			35	0.18	22.8	
			40	0.16	26.0	
			45	0.14	29.3	
			50	0.13	32.5	
			55	0.11	35.8	
			60	0.11	39.0	
			65	0.10	42.3	
			70	0.09	45.5	
			75	0.08	48.8	
			80	0.08	52.0	
			90	0.07	58.5	
			100	0.06	65.0	
110	0.06	71.5				

Model	Outer Dia D (mm)	Inner Dia d (mm)	Free Length L (mm)	Spring Const (kgf/mm)	0.3 million	
					Deflection F (mm)	Load kgf(N)
TY 12.5 × 120	12.5	8.5	120	0.05	78.0	4.1
			125	0.05	81.3	
TY 16.5 × 20	16.5	10.5	20	0.72	13.0	9.3
			25	0.57	16.3	
			30	0.48	19.5	
			35	0.41	22.8	
			40	0.36	26.0	
			45	0.32	29.3	
			50	0.29	32.5	
			55	0.26	35.8	
			60	0.24	39.0	
			65	0.22	42.3	
			70	0.20	45.5	
			75	0.19	48.8	
			80	0.18	52.0	
			90	0.16	58.5	
			100	0.14	65.0	
110	0.13	71.5				
120	0.12	78.0				
125	0.11	81.3				
150	0.10	97.5				
TY 20.5 × 30	20.5	13.5	30	0.57	19.5	11.1
			35	0.49	22.8	
			40	0.43	26.0	
			45	0.38	29.3	
			50	0.34	32.5	
			55	0.31	35.8	
			60	0.28	39.0	
			65	0.26	42.3	
			70	0.24	45.5	
			75	0.23	48.8	
			80	0.21	52.0	
			90	0.19	58.5	
			100	0.17	65.0	
			110	0.16	71.5	
			120	0.14	78.0	
125	0.14	81.3				
130	0.13	84.5				
140	0.12	91.0				
150	0.11	97.5				
TY 24.5 × 30	24.5	16.5	30	0.71	19.5	13.9
			35	0.61	22.8	
			40	0.53	26.0	

MIDDLE DEFLECTION SPRING

HUAN SIN COMPANY LIMITED

Model	Outer Dia D (mm)	Inner Dia d (mm)	Free Length L (mm)	Spring Const (kgf/mm)	0.3 million	
					Deflection F (mm)	Load kgf(N)
TY 24.5 × 45	24.5	16.5	45	0.48	29.3	13.9
50			0.43	32.5		
55			0.39	35.8		
60			0.36	39.0		
65			0.33	42.3		
70			0.31	45.5		
75			0.29	48.8		
80			0.27	52.0		
90			0.24	58.5		
100			0.21	65.0		
110			0.19	71.5		
120			0.18	78.0		
125			0.17	81.3		
130			0.16	84.5		
140			0.15	91.0		
150			0.14	97.5		
175			0.12	113.8		
200	0.11	130.0				
TY 30 × 35	30	21	35	0.09	22.8	20.4
40			0.78	26.0		
45			0.70	29.3		
50			0.63	32.5		
55			0.57	35.8		
60			0.52	39.0		
65			0.48	42.3		
70			0.45	45.5		
75			0.42	48.8		
80			0.39	52.0		
90			0.35	58.5		
100			0.31	65.0		
110			0.29	71.5		
120			0.26	78.0		
125			0.25	81.3		
130			0.24	84.0		
140			0.22	91.0		
150			0.21	97.5		
160			0.20	104.0		
170	0.18	110.5				
175	0.18	113.8				
180	0.17	117.0				
190	0.17	123.5				
200	0.16	130.0				
250	0.13	162.5				
300	0.10	195.0				

Model	Outer Dia D (mm)	Inner Dia d (mm)	Free Length L (mm)	Spring Const (kgf/mm)	0.3 million	
					Deflection F (mm)	Load kgf(N)
TY 37 × 40	37	26	40	1.15	26.0	30
45			45	1.03	29.3	
50			50	0.92	32.5	
55			55	0.84	35.8	
60			60	0.77	39.0	
65			65	0.71	42.3	
70			70	0.66	45.5	
75			75	0.62	48.8	
80			80	0.58	52.0	
90			90	0.51	58.5	
100			100	0.46	65.0	
110			110	0.42	71.5	
120			120	0.38	78.0	
130			130	0.36	84.5	
140			140	0.33	91.0	
150			150	0.31	97.5	
160			160	0.29	104.0	
170			170	0.27	110.5	
180			180	0.26	117.0	
190			190	0.24	123.5	
200	200	0.23	130.0			
225	225	0.21	146.3			
250	250	0.18	162.5			
275	275	0.17	178.8			
300	300	0.15	195.0			
TY 42 × 50	42	31	50	1.23	32.5	40
60			60	1.03	39.0	
70			70	0.88	45.5	
80			80	0.77	52.0	
90			90	0.68	58.5	
100			100	0.62	65.0	
110			110	0.56	71.5	
120			120	0.51	78.0	
130			130	0.47	84.5	
140			140	0.44	91.0	
150			150	0.41	97.5	
160			160	0.38	104.0	
170			170	0.36	110.5	
180			180	0.34	117.0	
190			190	0.32	123.5	
200	200	0.31	130.0			
225	225	0.27	146.3			

Model	Free Length L (mm)	Spring Const (kgf/mm)	0.3 million	
			Deflection F (mm)	Load kgf(N)
TY 42 × 250	250	0.25	162.5	40
275	275	0.22	178.8	
300	300	0.21	195.0	



Order Example

TYPE	D	L
TY	D37	L150