

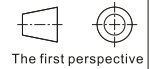
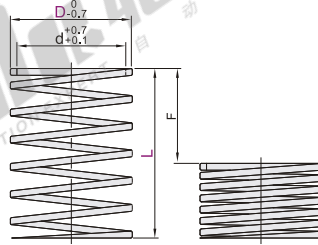
Coil Springs ◀ Extra-Light Load Spring (Purple)

Code	Type	Material	Maximum Allowable Deflection
YSWC	Extra-Light Load	Oil-Cooled Tempered Spring Steel	L×60%

□ L Dimensional Tolerance

L	Tol.
50 or Less	±0.5
50 or More	±1.0%

- ① Load(±10%).
- ② Perpendicularity (2° or Less).
- ③ Load (N): Spring constant (N/mm) × Deflection(Fmm)
- ④ Heat resistant temperature is 150 °C.
- ⑤ 1kgf=9.81N.
- ⑥ The solid height values are for reference only. There may be some variation between lots.
- ⑦ The maximum deflection for springs shown as "Out of range" is 55%. Do not use such a spring at a deflection exceeding 55%.
- ⑧ The spring color and number of turns may vary depending on the production batch. But the performance of the product meets the standard and does not affect the use.



□ Deflection: 40%~50%

Part Number Code	D	L	Inner Dia. d	Spring Constant N/mm	a Solid Height	Usage Method						
						0.3 million times F=L×50%		0.5 million times F=L×45%		1 million times F=L×40%		
						Fmm	Load N	Fmm	Load N	Fmm	Load N	
20				18.52	8	10	9	8				
25				14.82	10	12.5	11.3	10				
30				12.35	12	15	13.5	12				
35				10.58	14	17.5	15.8	14				
40				9.26	16	20	18	16				
45				8.23	18	22.5	20.3	18				
50				7.41	20	25	22.5	20				
14.5	9			6.74	22	27.5	186.3	24.8	166.7	22	147.1	
60				6.17	24	30	27	24				
65				5.70	26	32.5	29.3	26				
70				5.29	28	35	31.5	28				
75				4.94	30	37.5	33.8	30				
80				4.63	32	40	36	32				
90				4.12	36	45	40.5	36				
100				3.70	40	50	45	40				
25				21.80	10	12.5	11.3	10				
30				18.16	12	15	13.5	12				
35				15.57	14	17.5	15.8	14				
40				13.62	16	20	18	16				
45				12.11	18	22.5	20.3	18				
50				10.90	20	25	22.5	20				
17	11			9.91	22	27.5	274.6	24.8	245.2	22	215.7	
60				9.08	24	30	27	24				
65				8.38	26	32.5	29.3	26				
70				7.78	28	35	31.5	28				
75				7.27	30	37.5	33.8	30				
80				6.81	32	40	36	32				
90				6.05	36	45	40.5	36				
100				5.45	40	50	45	40				
30				23.24	12	15	13.5	12				
35				19.92	14	17.5	15.8	14				
40				17.43	16	20	18	16				
45				15.50	18	22.5	20.3	18				
50				13.95	20	25	22.5	20				
55				12.68	22	27.5	24.8	22				
21	13			11.62	24	30	353.0	27	313.8	24	284.4	
65				10.73	26	32.5	29.3	26				
70				9.96	28	35	31.5	28				
75				9.30	30	37.5	33.8	30				
80				8.72	32	40	36	32				
90				7.75	36	45	40.5	36				
100				6.97	40	50	45	40				
30				34.87	12	15	13.5	12				
35				29.89	14	17.5	15.8	14				
40				26.15	16	20	18	16				
45				23.24	18	22.5	20.3	18				
50				20.92	20	25	22.5	20				
55				19.02	22	27.5	24.8	22				
26	16.5			17.43	24	30	519.8	27	470.7	24	411.9	
65				16.09	26	32.5	29.3	26				
70				14.94	28	35	31.5	28				
75				13.95	30	37.5	33.8	30				
80				13.08	32	40	36	32				
90				11.62	36	45	40.5	36				
100				10.46	40	50	45	40				
40				34.87	16	20	18	16				
45				30.99	18	22	20.3	18				
50				27.89	20	25	22.5	20				
60				23.24	24	30	27	24				
70				19.92	28	35	31.5	28				
80				17.43	32	40	36	32				
90				15.50	36	45	40.5	36				
100				13.95	40	50	45	40				

□ Deflection: 50%~60%

Part Number Code	D	L	Inner Dia. d	Spring Constant N/mm	a Solid Height	Usage Method						
						0.3 million times F=L×60%		0.5 million times F=L×55%		1 million times F=L×50%		
						Fmm	Load N	Fmm	Load N	Fmm	Load N	
15				3.9	5	9	8.3	7.5				
20				2.9	6.6	12	11	10				
25				2.3	8	15	13.8	12.5				
30				1.9	9.3	18	16.5	15				
35				1.6	10.5	21	19.3	17.5				
40				1.4	11.8	24	22	20				
45				1.3	13.1	27	24.8	22.5				
8	4.6			1.2	14.4	30	27.5	25	34	31	29	
50				1.0	15.7	33	30.3	27.5				
60				0.9	16.7	36	33	30				
65				0.8	18.3	39	35.8	32.5				
70				0.8	19.5	42	38.5	35				
75				0.7	21	45	41.3	37.5				
80				0.7	22.2	48	44	40				
15				6.1	6	9	8.3	7.5				
20				4.6	7.5	12	11	10				
25				3.7	9	15	13.8	12.5				
30				3.0	10.5	18	16.5	15				
35				2.6	12	21	19.3	17.5				
40				2.3	13.4	24	22	20				
45				2.0	14.8	27	24.8	22.5				
10	5.8			1.8	16.2	30	27.5	25	54	50	46	
55				1.7	17.7	33	30.3	27.5				
60				1.5	19.1	36	33	30				
65				1.4	20.6	39	35.8	32.5				
70				1.3	22	42	38.5	35				
75				1.2	23.4	45	41.3	37.5				
80				1.1	24.9	48	44	40				
90				1.0	27.8	54	49.5	45				
20				5.4	7	12	11	10				
25				4.3	8	15	13.8	12.5				
30				3.6	10	18	16.5	15				
35				3.1	12	21	19.3	17.5				
40				2.7	14	24	22	20				
45				2.4	15	27	24.8	22.5				
50				2.2	16	30	27.5	25				
12	7.4			2.0	17	33	30.3	27.5	64	59	54	
55				1.8	18	36	33	30				
60				1.7	20	39	35.8	32.5				
65				1.5	21	42	38.5	35				
70				1.4	22	45	41.3	37.5				
75				1.3	24	48	44	40				
80				1.2	27	54	49.5	45				
25				8.17	10.5	15	13.8	12.5				
30				6.81	11	18	16.5	15				
35				5.84	13	21	19.3	17.5				
40				5.11	15	24	22	20				
45				4.54	16.7	27	24.8	22.5				
50				4.09	18	30	27.5	25				
55				3.71	20	33	30.3	27.5				
14	8.5			3.41	21.5	36	33	30	122	113	103	
60				3.14	23	39	35.8	32.5				
65				2.92	24.6	42	38.5	35				
70				2.72	26.2	45	41.3	37.5				
75				2.55	28	48	44	40				
80				2.27	31	54	49.5	45.5				
90				2.04	34	60	55	50				

Extra-Light Load Spring (Purple) ▶

Coil Springs

Deflection : 50%~60%

Part Number			Inner Dia. d	Spring Constant N/mm	a	Usage Method							
Code	D	L				0.3 million times F=L×60%		0.5 million times F=L×55%		1 million times F=L×50%			
					Solid Height	Fmm	Load N	Fmm	Load N	Fmm	Load N		
YSWC	18	25	11	10.60	9	15		13.8		12.5			
		30		8.80	10.3	18		16.5		15			
		35		7.50	11.5	21		19.3		17.5			
		40		6.60	12.7	24		22		20			
		45		5.90	14	27		24.8		22.5			
		50		5.30	15.5	30		27.5		25			
		55		4.80	16.5	33		30.3	157	33	144	30	132
		60		4.40	18	36		33		35.8		32.5	
		65		4.10	19	39		35.8		38.5		35	
		70		3.80	20.5	42		38.5		41.3		37.5	
	75	3.50	22	45		41.3		44		40			
	80	3.30	23	48		44		49.5		45			
	90	2.90	25.5	54		49.5		55		50			
	100	2.60	29	60		55		13.8		12.5			
	25	14.10	9	15		13.8		15		15			
	30	11.70	11	18		16.5		19.3		17.5			
	35	10.10	12.5	21		19.3		22		20			
	40	8.80	14	24		22		24.8		22.5			
	45	7.80	15	27		24.8		27.5		25			
	50	7.00	16.5	30		27.5		30.3	216	33	196		
	55	6.40	18	33		30.3		33		30			
	60	5.90	19.2	36		33		35.8		32.5			
	65	5.40	20.5	39		35.8		38.5		35			
	70	5.14	21.7	42		38.5		41.3		37.5			
	75	4.79	23	45		41.3		44		40			
	80	4.49	24.2	48		44		49.5		45.5			
	90	4.00	27	54		49.5		55		50			
	100	3.60	30	60		55		Out of range		13.8			
	25	24.19	9			Out of range		16.5		15			
	30	20.16	10.5	18		18		19.3		17.5			
35	17.28	12.7	21		21		22		20				
40	15.12	14.6	24		24		24.8		22.5				
45	13.44	16.6	27		27		27.5		25				
50	12.09	18	30		30		30.3	363	33	333			
55	11.00	20	33		33		33		30				
60	10.08	21.3	36		36		35.8		32.5				
65	9.30	22.5	39		39		38.5		35				
70	8.64	24	42		42		41.3		37.5				
75	8.06	25.3	45		45		44		40				
80	7.56	26.7	48		48		49.5		45				
90	6.72	29.5	54		54		55		50				
100	6.05	32.2	60		60		Out of range		13.8				
25	31.38	9.5			9.5		16.5		15				
30	26.15	11	18		18		19.3		17.5				
35	22.42	13	21		21		22		20				
40	19.61	14.5	24		24		24.8		22.5				
45	17.43	16.5	27		27		27.5		25				
50	15.69	18	30		30		30.3	471	33	431			
55	14.26	19.5	33		33		33		30				
60	13.08	20.8	36		36		35.8		32.5				
65	12.07	22	39		39		38.5		35				
70	11.21	23.3	42		42		41.3		37.5				
75	10.46	24.5	45		45		44		40				
80	9.81	25.8	48		48		49.5		45				
90	8.72	28.3	54		54		55		50				
100	7.85	30.8	60		60		Out of range		13.8				



Part Number			d
Code	D	L	
YSWC	30	45	20

YSWC—D30—L40



Discount price

Per	1~19	20~
Price	100%	Additional quotation

Delivery

4

