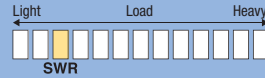
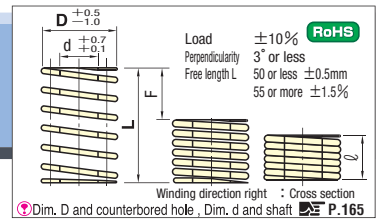


# COIL SPRINGS

## HIGH DEFLECTION SWR



Printed in Red



The volume discount rate is also applicable to alteration cost.  
All price & lead time are to be quoted.

D	d	L	Spring constant N/mm(kgf/mm)	Solid height mm	F=L×50% Fmm	Load N(kgf)	Catalog No. Type D - L	U/Price Qty: 1~19
10.5	6.0	15	10.46 [1.07]	6.0	7.5	78.5	SWR 10.5-15	8.0
		20	7.85 [0.80]	8.0	10.0	20		
		25	6.28 [0.64]	10.0	12.5	25		
		30	5.23 [0.53]	12.0	15.0	30		
		35	4.48 [0.46]	14.0	17.5	35		
		40	3.92 [0.40]	16.0	20.0	40		
		45	3.49 [0.36]	18.0	22.5	45		
		50	3.14 [0.32]	20.0	25.0	50		
		55	2.85 [0.29]	22.0	27.5	55		
		60	2.62 [0.27]	24.0	30.0	60		
		65	2.41 [0.25]	26.0	32.5	65		
		70	2.24 [0.23]	28.0	35.0	70		
12.5	7.0	15	11.77 [1.20]	6.0	7.5	88.3	SWR 12.5-15	9.0
		20	8.83 [0.90]	8.0	10.0	20		
		25	7.06 [0.72]	10.0	12.5	25		
		30	5.88 [0.60]	12.0	15.0	30		
		35	5.04 [0.51]	14.0	17.5	35		
		40	4.41 [0.45]	16.0	20.0	40		
		45	3.92 [0.40]	18.0	22.5	45		
		50	3.53 [0.36]	20.0	25.0	50		
		55	3.21 [0.33]	22.0	27.5	55		
		60	2.94 [0.30]	24.0	30.0	60		
		65	2.72 [0.28]	26.0	32.5	65		
		70	2.52 [0.26]	28.0	35.0	70		
14.5	8.5	15	17.00 [1.73]	6.0	7.5	127.5	SWR 14.5-15	13.0
		20	12.75 [1.30]	8.0	10.0	20		
		25	10.20 [1.04]	10.0	12.5	25		
		30	8.50 [0.87]	12.0	15.0	30		
		35	7.28 [0.74]	14.0	17.5	35		
		40	6.37 [0.65]	16.0	20.0	40		
		45	5.67 [0.58]	18.0	22.5	45		
		50	5.10 [0.52]	20.0	25.0	50		
		55	4.64 [0.47]	22.0	27.5	55		
		60	4.25 [0.43]	24.0	30.0	60		
		65	3.92 [0.40]	26.0	32.5	65		
		70	3.64 [0.37]	28.0	35.0	70		
17	10.5	20	19.61 [2.00]	8.0	10.0	196.1	SWR 17-20	20.0
		25	15.69 [1.60]	10.0	12.5	25		
		30	13.08 [1.33]	12.0	15.0	30		
		35	11.21 [1.14]	14.0	17.5	35		
		40	9.81 [1.00]	16.0	20.0	40		
		45	8.72 [0.89]	18.0	22.5	45		
		50	7.85 [0.80]	20.0	25.0	50		
		55	7.13 [0.73]	22.0	27.5	55		
		60	6.54 [0.67]	24.0	30.0	60		
		65	6.03 [0.62]	26.0	32.5	65		
		70	5.60 [0.57]	28.0	35.0	70		
		21	13.5	25	23.54 [2.40]	10.0		
30	19.61 [2.00]			12.0	15.0	30		
35	16.81 [1.71]			14.0	17.5	35		
40	14.71 [1.50]			16.0	20.0	40		
45	13.08 [1.33]			18.0	22.5	45		
50	11.77 [1.20]			20.0	25.0	50		
55	10.70 [1.09]			22.0	27.5	55		
60	9.81 [1.00]			24.0	30.0	60		
65	9.05 [0.92]			26.0	32.5	65		
70	8.41 [0.86]			28.0	35.0	70		
75	7.85 [0.80]			30.0	37.5	75		
26	16.5			80	7.35 [0.75]	32.0	40.0	392.3
		90	6.54 [0.67]	36.0	45.0	90		
		100	5.88 [0.60]	40.0	50.0	100		
		110	5.35 [0.55]	44.0	55.0	110		
		120	4.90 [0.50]	48.0	60.0	120		
		130	4.71 [0.48]	50.0	62.5	130		
		140	4.53 [0.46]	52.0	65.0	140		
		150	4.20 [0.43]	56.0	70.0	150		
		160	3.92 [0.40]	60.0	75.0	160		
		175	3.36 [0.34]	70.0	87.5	175		
		200	2.94 [0.30]	80.0	100.0	200		
		250	2.24 [0.23]	100.0	125.0	250		

Quotation

Quotation

D	d	L	Spring constant N/mm(kgf/mm)	Solid height mm	F=L×50% Fmm	Load N(kgf)	Catalog No. Type D - L	U/Price Qty: 1~19
31	21	35	28.02 [2.86]	14.0	17.5	490.3	SWR 31-35	50.0
		40	24.52 [2.50]	16.0	20.0	40		
		45	21.79 [2.22]	18.0	22.5	45		
		50	19.61 [2.00]	20.0	25.0	50		
		55	17.83 [1.82]	22.0	27.5	55		
		60	16.34 [1.67]	24.0	30.0	60		
		65	15.09 [1.54]	26.0	32.5	65		
		70	14.01 [1.43]	28.0	35.0	70		
		75	13.08 [1.33]	30.0	37.5	75		
		80	12.26 [1.25]	32.0	40.0	80		
		90	10.90 [1.11]	36.0	45.0	90		
		100	9.81 [1.00]	40.0	50.0	100		
37	26	110	8.92 [0.91]	44.0	55.0	588.4	SWR 37-35	60.0
		120	8.17 [0.83]	48.0	60.0	120		
		125	7.85 [0.80]	50.0	62.5	125		
		130	7.54 [0.77]	52.0	65.0	130		
		140	7.00 [0.71]	56.0	70.0	140		
		150	6.54 [0.67]	60.0	75.0	150		
		160	6.13 [0.63]	67.0	80.0	160		
		170	5.77 [0.59]	68.0	85.0	170		
		175	5.60 [0.57]	70.0	87.5	175		
		180	5.45 [0.56]	72.0	90.0	180		
		190	5.16 [0.53]	76.0	95.0	190		
		200	4.90 [0.50]	80.0	100.0	200		
43	31	250	3.92 [0.40]	100.0	125.0	833.6	SWR 43-50	85.0
		300	3.27 [0.33]	120.0	150.0	300		
		35	33.62 [3.43]	14.0	17.5	35		
		40	29.42 [3.00]	16.0	20.0	40		
		45	26.15 [2.67]	18.0	22.5	45		
		50	23.54 [2.40]	20.0	25.0	50		
		55	21.40 [2.18]	22.0	27.5	55		
		60	19.61 [2.00]	24.0	30.0	60		
		65	18.10 [1.85]	26.0	32.5	65		
		70	16.81 [1.71]	28.0	35.0	70		
		75	15.69 [1.60]	30.0	37.5	75		
		46	33	80	14.71 [1.50]	32.0		
90	13.08 [1.33]			36.0	45.0	90		
100	11.77 [1.20]			40.0	50.0	100		
110	10.70 [1.09]			44.0	55.0	110		
120	9.81 [1.00]			48.0	60.0	120		
125	9.41 [0.96]			50.0	62.5	125		
130	9.05 [0.92]			52.0	65.0	130		
140	8.41 [0.86]			56.0	70.0	140		
150	7.85 [0.80]			60.0	75.0	150		
160	7.35 [0.75]			64.0	80.0	160		
170	6.92 [0.71]			68.0	85.0	170		
175	6.72 [0.69]			70.0	87.5	175		
50	36	180	6.54 [0.67]	72.0	90.0	1324	SWR 50-50	135
		190	6.19 [0.63]	76.0	95.0	190		
		200	5.88 [0.60]	80.0	100.0	200		
		250	4.71 [0.48]	100.0	125.0	250		
		300	3.92 [0.40]	120.0	150.0	300		
		50	52.96 [5.40]	20.0	25.0	50		
		60	44.13 [4.50]	24.0	30.0	60		
		70	37.83 [3.86]	28.0	35.0	70		
		80	33.10 [3.38]	32.0	40.0	80		
		90	29.42 [3.00]	36.0	45.0	90		
		100	26.48 [2.70]	40.0	50.0	100		
		110	24.07 [2.45]	44.0	55.0	110		
55	36	120	22.06 [2.25]	48.0	60.0	1324	SWR 55-50	135
		130	20.37 [2.08]	52.0	65.0	130		
		140	18.91 [1.93]	56.0	70.0	140		
		150	17.65 [1.80]	60.0	75.0	150		
		175	15.13 [1.54]	70.0	87.5	175		
		200	13.24 [1.35]	80.0	100.0	200		
		225	11.77 [1.20]	90.0	112.5	225		
		250	10.59 [1.08]	100.0	125.0	250		
		275	9.63 [0.98]	110.0	137.5	275		
		300	8.83 [0.90]	120.0	150.0	300		
		350	7.57 [0.77]	140.0	175.0	350		
		400	6.62 [0.68]	160.0	200.0	400		

Quotation

Quotation

SWOSC -V  
 Load calculation method : N (load) = N/mm (spring constant) × F (deflection)  
 (International units) N = N/mm × Fmm  
 kgf = kgf/mm × Fmm  
 (kgf = N × 0.101972)  
 The solid height values are reference only. There may be some variations depending on lots.  
 Operation frequency : 1 million times. (L×55% is 300,000 times.)  
 Product Outline: P.163  
 Directions and precautions for coil springs: P.165

**Order** Catalog No. **SWR 37-40**

**Delivery** **Printed in Red** **Printed in Black**  
 SGP Stock **3** Days  
 For area out of Singapore please refer to P.i.

Quantity	1~19	20~49	50~199	200~500
Rate	-	5%	10%	15%

Alterations (NT) - Catalog No. NT - SWR 31-60  
 7 Days For area out of Singapore please refer to P.i.

Alteration	Code	Spec.	Price
No painting	NT	Paint peeling Peel the coating by shot peening. Since the springs which have undergone the painting peeling are easy to rust, be careful in handling. A rusty spring could cause early breakage. Compared to painted springs, there may be some variations, etc. depending on the lot.	Free of Change