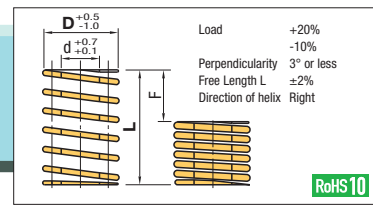


Coil Spring

For Medium Deflection SWS



D	d	L	N/mm (kgf/mm) (Spring Constant)	F=Lx40% Fmm N(kgf) Load	Part Number Type D-L	Unit Price
10.5	5.5	20	10.90(1.11)	8.0	SWS10.5- 20	
		25	8.72(0.89)	10.0	25	
		30	7.27(0.74)	12.0	30	
		35	6.23(0.64)	14.0	35	
		40	5.45(0.56)	16.0	40	
		45	4.84(0.49)	18.0	45	
		50	4.36(0.44)	20.0	50	
		55	3.96(0.40)	22.0	55	
		60	3.63(0.37)	24.0	60	
		65	3.35(0.34)	26.0	65	
12.5	6.5	20	15.25(1.56)	8.0	SWS12.5- 20	
		25	12.20(1.24)	10.0	25	
		30	10.17(1.04)	12.0	30	
		35	8.71(0.89)	14.0	35	
		40	7.63(0.78)	16.0	40	
		45	6.78(0.69)	18.0	45	
		50	6.10(0.62)	20.0	50	
		55	5.55(0.57)	22.0	55	
		60	5.08(0.52)	24.0	60	
		65	4.69(0.48)	26.0	65	
14.5	8.5	20	24.50(2.50)	8.0	SWS14.5- 20	
		25	19.61(2.00)	10.0	25	
		30	16.33(1.67)	12.0	30	
		35	14.00(1.43)	14.0	35	
		40	12.25(1.25)	16.0	40	
		45	10.89(1.11)	18.0	45	
		50	9.80(1.00)	20.0	50	
		55	8.91(0.91)	22.0	55	
		60	8.17(0.83)	24.0	60	
		65	7.54(0.77)	26.0	65	
17	10.5	20	49.00(5.00)	16.0	SWS 17- 25	
		25	29.42(3.00)	10.0	25	
		30	24.52(2.50)	12.0	30	
		35	21.01(2.14)	14.0	35	
		40	18.39(1.88)	16.0	40	
		45	16.34(1.67)	18.0	45	
		50	14.71(1.50)	20.0	50	
		55	13.37(1.36)	22.0	55	
		60	12.26(1.25)	24.0	60	
		65	11.32(1.15)	26.0	65	

D	d	L	N/mm (kgf/mm) (Spring Constant)	F=Lx40% Fmm N(kgf) Load	Part Number Type D-L	Unit Price
21	13.5	30	35.17(3.59)	12.0	SWS21- 30	
		35	30.14(3.07)	14.0	35	
		40	26.38(2.69)	16.0	40	
		45	23.44(2.39)	18.0	45	
		50	21.10(2.15)	20.0	50	
		55	19.18(1.96)	22.0	55	
		60	17.58(1.79)	24.0	60	
		65	16.23(1.66)	26.0	65	
		70	15.07(1.54)	28.0	70	
		75	14.07(1.43)	30.0	75	
26	16.5	30	47.42(4.84)	12.0	SWS26- 30	
		35	40.64(4.14)	14.0	35	
		40	35.56(3.63)	16.0	40	
		45	31.61(3.22)	18.0	45	
		50	28.45(2.90)	20.0	50	
		55	25.86(2.64)	22.0	55	
		60	23.71(2.42)	24.0	60	
		65	21.88(2.23)	26.0	65	
		70	20.32(2.07)	28.0	70	
		75	18.97(1.93)	30.0	75	
31	21	40	49.00(5.00)	16.0	SWS31- 40	
		45	43.56(4.44)	18.0	45	
		50	39.20(4.00)	20.0	50	
		55	35.65(3.64)	22.0	55	
		60	32.67(3.33)	24.0	60	
		65	30.15(3.07)	26.0	65	
		70	28.00(2.86)	28.0	70	
		75	26.13(2.66)	30.0	75	
		80	24.50(2.50)	32.0	80	
		85	23.17(2.32)	34.0	85	

D	d	L	N/mm (kgf/mm) (Spring Constant)	F=Lx40% Fmm N(kgf) Load	Part Number Type D-L	Unit Price
37	26	40	52.13(5.32)	16.0	SWS 37- 40	
		45	46.33(4.72)	18.0	45	
		50	41.70(4.25)	20.0	50	
		55	37.91(3.87)	22.0	55	
		60	34.75(3.54)	24.0	60	
		65	32.08(3.27)	26.0	65	
		70	29.79(3.04)	28.0	70	
		75	27.80(2.83)	30.0	75	
		80	26.06(2.66)	32.0	80	
		85	24.53(2.48)	34.0	85	
44.5	31	40	65.42(6.67)	12.0	SWS44.5- 40	
		45	57.07(5.81)	14.0	45	
		50	50.00(5.00)	16.0	50	
		55	44.00(4.40)	18.0	55	
		60	39.00(3.90)	20.0	60	
		65	34.80(3.53)	22.0	65	
		70	31.30(3.13)	24.0	70	
		75	28.30(2.83)	26.0	75	
		80	25.80(2.58)	28.0	80	
		85	23.70(2.37)	30.0	85	
52	37	40	80.00(8.00)	16.0	SWS52- 40	
		45	70.00(7.00)	18.0	45	
		50	62.50(6.25)	20.0	50	
		55	56.25(5.62)	22.0	55	
		60	51.00(5.10)	24.0	60	
		65	46.50(4.65)	26.0	65	
		70	42.75(4.27)	28.0	70	
		75	39.50(3.95)	30.0	75	
		80	36.75(3.67)	32.0	80	
		85	34.50(3.45)	34.0	85	

Ordering Example Part Number SWS21-100

Material: Oil tempered wires for springs

Load calculation method = Spring constant x Deflection (Int'l Unit) N=mmx Fmm

kgf=kgf/mmxFmm (kgf=Nx0.101972)

Usage count: 1 Million Times (Lx45% is 300,000 Times)

How to use coil springs, and precautions P.328

About D dimension and back facing hole, and D dimension and shaft, see P.188.1.