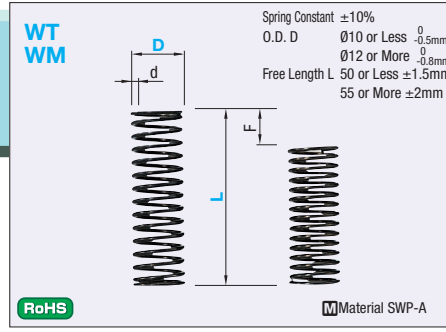


Round Coil Springs

WT, WM: O.D. Referenced



Spring Constant		D12 and 14 for WY Type and D12,14 and 20 for WT Type are not available.					
Type	WY	WR	WF	WT	WM	WH	WB
2				0.5(0.05)			
3				1.5	2.0	2.9(0.3)	3.9(0.4)
4	N/mm 0.1 (kgf/mm) (0.01)			{0.15}	{0.2}		4.9(0.5)
5							
6							
8		N/mm 0.3 (kgf/mm) (0.03)	N/mm 0.5 (kgf/mm) (0.05)			N/mm 5.9 (kgf/mm) (0.6)	N/mm 9.8 (kgf/mm) (1.0)
10				N/mm 1.0 (kgf/mm) (0.1)	N/mm 2.0 (kgf/mm) (0.2)		
12	N/mm 0.2 (kgf/mm) (0.02)						
13						N/mm 9.8 (kgf/mm) (1.0)	N/mm 19.6 (kgf/mm) (2.0)
14							
16							
18							
20		N/mm 0.5 (kgf/mm) (0.05)	N/mm 1.0 (kgf/mm) (0.1)	N/mm 2.9 (kgf/mm) (0.3)	N/mm 3.9 (kgf/mm) (0.4)	N/mm 14.7 (kgf/mm) (1.5)	29.4(3.0)
22							
27							N/mm 29.4(kgf/mm) (3.0)
Fmax.	F=Lx75%	F=Lx60%	F=Lx45%	F=Lx40%	F=Lx40%	F=Lx35%	F=Lx30%

WT: Fmax. (Allowable Deflection) =Lx40% (Lx35%)

d	Solid Length	F max.	Load N(kgf) max.	Part Number	Unit Price
				Type D-L	10 - 19 pcs.
0.3	1.73	2	2.9(0.3)	WT3-5*	
0.4	5	4	5.9(0.6)	10*	
0.45	8.78	6	8.8(0.9)	15*	
0.45	8.78	8	11.8(1.2)	20*	
0.5	14.5	10	14.7(1.5)	25*	
0.4	2.7	2	2.9(0.3)	WT4-5*	
0.4	2.7	4	5.9(0.6)	10*	
0.5	6.5	6	8.8(0.9)	15*	
0.55	9.63	8	11.8(1.2)	20	
0.55	9.63	10	14.7(1.5)	25	
0.6	15	12	17.7(1.8)	30	
0.6	15	14	20.6(2.1)	35	
0.65	22.1	16	23.5(2.4)	40	
0.45	2.36	2	3.9(0.4)	WT5-5*	
0.5	3.25	4	7.8(0.8)	10*	
0.6	6.3	6	11.8(1.2)	15	
0.6	6.3	8	15.7(1.6)	20	
0.7	12.6	10	19.6(2.0)	25	
0.7	12.6	12	23.5(2.4)	30	
0.75	17.3	14	27.5(2.8)	35	
0.75	17.3	16	31.4(3.2)	40	
0.8	24	15.8	30.9(3.2)	(45)	
0.8	24	17.5	34.3(3.5)	(50)	
0.85	32.3	19.3	37.8(3.9)	(55)	
0.85	32.3	21	41.2(4.2)	(60)	
0.85	34	22.7	44.5(4.5)	(65)	
0.9	44.6	24.5	48.1(4.9)	(70)	
0.5	2.38	2	3.9(0.4)	WT6-5*	
0.6	4.35	4	7.8(0.8)	10	
0.6	4.35	6	11.8(1.2)	15	
0.7	7.7	8	15.7(1.6)	20	
0.7	7.7	10	19.6(2.0)	25	
0.8	14	12	23.5(2.4)	30	
0.8	14	14	27.5(2.8)	35	
0.85	18.7	16	31.4(3.2)	40	
0.85	18.7	18	35.3(3.6)	45	
0.9	24.8	20	39.2(4.0)	50	
0.9	24.8	19	37.8(3.9)	(55)	
0.9	24.8	21	41.2(4.2)	(60)	
0.9	26.1	22.7	44.5(4.5)	(65)	
1	43	24.5	48.1(4.9)	(70)	
1	43	28	54.9(5.6)	(80)	
0.7	4.38	4	7.8(0.8)	WT8-10	
0.8	6.8	6	11.8(1.2)	15	
0.8	6.8	8	15.7(1.6)	20	
0.8	6.8	10	19.6(2.0)	25	
0.9	10.8	12	23.5(2.4)	30	
0.9	10.8	14	27.5(2.8)	35	
1	17.5	16	31.4(3.2)	40	
1	17.5	18	35.3(3.6)	45	
1	17.5	20	39.2(4.0)	50	
1.1	27.5	22	43.1(4.4)	55	
1.1	27.5	24	47.1(4.8)	60	
1.1	27.5	26	51.0(5.2)	65	
1.1	27.5	28	54.9(5.6)	70	
1.2	42	32	62.8(6.4)	80	
0.85	5.53	4	7.8(0.8)	WT10-10	
0.9	6.75	6	11.8(1.2)	15	
0.9	6.75	8	15.7(1.6)	20	
1	10	10	19.6(2.0)	25	
1	10	12	23.5(2.4)	30	
1	10	14	27.5(2.8)	35	
1	10	16	31.4(3.2)	40	
1.1	14.3	18	35.3(3.6)	45	
1.1	14.3	20	39.2(4.0)	50	
1.2	21.6	22	43.1(4.4)	55	
1.2	21.6	24	47.1(4.8)	60	
1.2	21.6	26	51.0(5.2)	65	
1.3	32.5	28	54.9(5.6)	70	
1.3	32.5	32	62.8(6.4)	80	
1	6	6	11.8(1.2)	WT13-15	
1.1	8.25	8	15.7(1.6)	20	
1.1	8.25	10	19.6(2.0)	25	
1.2	11.1	12	23.5(2.4)	30	
1.2	11.1	14	27.5(2.8)	35	
1.2	11.1	16	31.4(3.2)	40	
1.2	11.1	18	35.3(3.6)	45	
1.3	15.6	20	39.2(4.0)	50	
1.3	15.6	22	43.1(4.4)	55	
1.3	15.6	24	47.1(4.8)	60	
1.4	21	26	51.0(5.2)	65	
1.4	21	28	54.9(5.6)	70	
1.4	21	32	62.8(6.4)	80	
1.2	7.5	6	11.8(1.2)	WT16-15	
1.3	9.43	8	15.7(1.6)	20	
1.4	12.6	10	19.6(2.0)	25	
1.4	12.6	12	23.5(2.4)	30	
1.4	12.6	14	27.5(2.8)	35	
1.4	12.6	16	31.4(3.2)	40	
1.6	22.4	18	35.3(3.6)	45	
1.6	22.4	20	39.2(4.0)	50	
1.6	22.4	22	43.1(4.4)	55	
1.7	28.9	24	47.1(4.8)	60	
1.7	28.9	26	51.0(5.2)	65	
1.7	28.9	28	54.9(5.6)	70	
1.7	28.9	32	62.8(6.4)	80	

• Load calculation method = Spring constant x Deflection (Int'l Unit) N=N/mmxFmm kgf=kgf/mmxFmm (kgf=Nx0.101972)

• Allowable Deflection of (L) Size

- WT5-40Fmax=Lx35%
- WT5-45Fmax=Lx35%
- WT5-50Fmax=Lx35%
- WT5-55Fmax=Lx35%
- WT5-60Fmax=Lx35%
- WT5-65Fmax=Lx35%
- WT5-70Fmax=Lx35%
- WT6-55Fmax=Lx35%
- WT6-60Fmax=Lx35%
- WT6-65Fmax=Lx35%
- WT6-70Fmax=Lx35%
- WT6-80Fmax=Lx35%

• The values of solid length are for reference only. There may be some variations depending on the lot.

• Usage Count: 1 Million Times

• Product Outline P327

• How to use coil springs, and precautions P328

• Both ends of * marked WT Type springs are not ground.

WM: Fmax. (Allowable Deflection) =Lx35%

d	Solid Length	F max.	Load N(kgf) max.	Part Number	Unit Price
				Type D-L	10 - 19 pcs.
0.35	2.5	1.8	3.4(0.4)	WM 3-5*	
0.38	3.3	3.5	6.9(0.7)	10*	
0.45	7	5.3	10.3(1.1)	15*	
0.5	11.5	7	13.7(1.4)	20*	
0.5	11.5	7.5	14.7(1.5)	(25)	
0.55	20.4	9	17.7(1.8)	(30)	
0.4	2.3	1.7	3.9(0.4)	WM 4-5*	
0.45	3.4	3.5	6.9(0.7)	10*	
0.5	5.1	5.2	10.8(1.1)	15*	
0.55	7.7	7	13.7(1.4)	20	
0.6	11.7	8.7	17.7(1.8)	25	
0.6	11.7	10.5	20.6(2.1)	30	
0.65	17.6	12.2	24.0(2.5)	35	
0.65	17.6	12	23.5(2.4)	(40)	
0.5	2.8	1.7	4.9(0.5)	WM 5-5*	
0.6	4.2	3.5	9.8(1.0)	10	
0.65	6.5	5.2	14.7(1.5)	15	
0.65	6.5	7	20.6(2.1)	20	
0.7	9.1	8.7	25.5(2.6)	25	
0.75	12.7	10.5	30.4(3.1)	30	
0.8	17.4	12.2	35.3(3.6)	35	
0.85	23.8	14	41.2(4.2)	40	
0.85	23.8	15.8	46.1(4.7)	45	
0.9	23.8	15	43.5(4.5)	(50)	
0.9	30	16.5	49.0(5.0)	(55)	
0.9	30	18	53.0(5.4)	(60)	
0.9	30	17.6	52.0(5.3)	(65)	
0.9	30	19.6	58.8(6.0)	(70)	
0.55	2.8	1.7	4.9(0.5)	WM 6-5*	
0.65	4.7	3.5	9.8(1.0)	10	
0.75	8	5.2	14.7(1.5)	15	
0.75	8	7	20.6(2.1)	20	
0.85	13.6	8.7	25.5(2.6)	25	
0.85	13.6	10.5	30.4(3.1)	30	
0.9	18	12.2	35.3(3.6)	35	
0.9	18	14	41.2(4.2)	40	
0.9	18	15.8	46.1(4.7)	45	
0.85	18	17.5	51.0(5.2)	50	
1.0	31	19.2	55.9(5.7)	55	
1.0	31	18	53.0(5.4)	(60)	
1.0	31	18.8	54.9(5.6)	(65)	
1.1	47.3	20	58.8(6.0)	(70)	
1.1	48.4	22.4	65.9(6.7)	(80)	
0.75	4.2	3.5	9.8(1.0)	WM 8-10	
0.9	8.5	5.2	14.7(1.5)	15	
0.9	8.5	7	20.6(2.1)	20	
0.9	8.5	8.7	25.5(2.6)	25	
0.9	8.5	10.5	30.4(3.1)	30	
1.0	13	12.2	35.3(3.6)	35	
1.0	13	14	41.2(4.2)	40	
1.1	19.8	15.8	46.1(4.7)	45	
1.1	19.8	17.5	51.0(5.2)	50	
1.2	31.2	19.2	55.9(5.7)	55	
1.2	31.2	21	61.8(6.3)	60	
1.2	31.2	22.7	64.7(6.6)	65	
1.2	31.2	24.5	71.6(7.3)	70	
1.3	44.2	28	82.4(8.4)	80	
0.9	5.2	3.5	9.8(1.0)	WM 10-10	
1.0	7.7	5.2	14.7(1.5)	15	
1.0	7.7	7	20.6(2.1)	20	
1.1	11	8.7	25.5(2.6)	25	
1.1	11	10.5	30.4(3.1)	30	
1.2	16.2	12.2	35.3(3.6)	35	