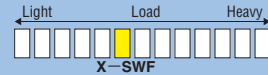
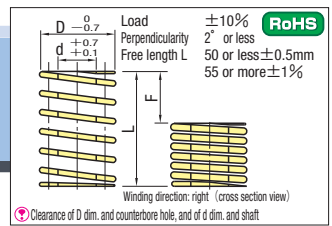


COIL SPRINGS

— MINIMAL LOAD X-SWF —



PRINTED IN RED



D	d	L	Spring constant		F=LX40%		F=LX45%		Catalogue No.
			N/mm (kgf/mm)	Fmm	Load N (kgf)	Fmm	Load N (kgf)		
Operation count			1,000,000		500,000		Type D-L		
8	4	10	15.7 (1.60)	4.0	6.8	4.5	63 (6.4)	71 (7.2)	X—SWF 8 — 10
		15	10.5 (1.07)	6.0	6.8	6.8		15	
		20	7.8 (0.80)	8.0	9.0	9.0		20	
		25	6.3 (0.64)	10.0	11.2	11.2		25	
		30	5.2 (0.53)	12.0	13.5	13.5		30	
		35	4.5 (0.46)	14.0	15.7	15.7		35	
		40	3.9 (0.40)	16.0	18.0	18.0		40	
		45	3.5 (0.36)	18.0	20.2	20.2		45	
		50	3.1 (0.32)	20.0	22.5	22.5		50	
		55	2.9 (0.29)	22.0	24.7	24.7		55	
		60	2.6 (0.27)	24.0	27.0	27.0		60	
		65	2.4 (0.25)	26.0	29.3	29.3		65	
		70	2.2 (0.23)	28.0	31.5	31.5		70	
		75	2.1 (0.21)	30.0	33.8	33.8		75	
80	2.0 (0.20)	32.0	36.0	36.0	80				

D	d	L	Spring constant		F=LX40%		F=LX45%		Catalogue No.
			N/mm (kgf/mm)	Fmm	Load N (kgf)	Fmm	Load N (kgf)		
Operation count			1,000,000		500,000		Type D-L		
16	8	20	20.6 (2.10)	8.0	9.0	9.0	165 (17)	185 (19)	X—SWF16 — 20
		25	16.5 (1.68)	10.0	11.2	11.2		25	
		30	13.7 (1.40)	12.0	13.5	13.5		30	
		35	11.8 (1.20)	14.0	15.7	15.7		35	
		40	10.3 (1.05)	16.0	18.0	18.0		40	
		45	9.2 (0.93)	18.0	20.2	20.2		45	
		50	8.2 (0.84)	20.0	22.5	22.5		50	
		55	7.5 (0.76)	22.0	24.7	24.7		55	
		60	6.9 (0.70)	24.0	27.0	27.0		60	
		65	6.3 (0.65)	26.0	29.2	29.2		65	
		70	5.9 (0.60)	28.0	31.5	31.5		70	
		75	5.5 (0.56)	30.0	33.7	33.7		75	
		80	5.1 (0.53)	32.0	36.0	36.0		80	
		90	4.6 (0.47)	36.0	40.5	40.5		90	
100	4.1 (0.42)	40.0	45.0	45.0	100				
125	3.3 (0.34)	50.0	56.3	56.3	125				

D	d	L	Spring constant		F=LX40%		F=LX45%		Catalogue No.
			N/mm (kgf/mm)	Fmm	Load N (kgf)	Fmm	Load N (kgf)		
Operation count			1,000,000		500,000		Type D-L		
25	13.5	25	39.2 (4.00)	10.0	11.2	11.2	392 (40)	441 (45)	X—SWF25 — 25
		30	32.7 (3.33)	12.0	13.5	13.5		30	
		35	28.0 (2.86)	14.0	15.7	15.7		35	
		40	24.5 (2.50)	16.0	18.0	18.0		40	
		45	21.8 (2.22)	18.0	20.2	20.2		45	
		50	19.6 (2.00)	20.0	22.5	22.5		50	
		55	17.8 (1.82)	22.0	24.7	24.7		55	
		60	16.3 (1.67)	24.0	27.0	27.0		60	
		65	15.1 (1.54)	26.0	29.2	29.2		65	
		70	14.0 (1.43)	28.0	31.5	31.5		70	
		75	13.1 (1.33)	30.0	33.7	33.7		75	
		80	12.3 (1.25)	32.0	36.0	36.0		80	
		90	10.9 (1.11)	36.0	40.5	40.5		90	
		100	9.8 (1.00)	40.0	45.0	45.0		100	
125	7.8 (0.80)	50.0	56.2	56.2	125				
150	6.5 (0.67)	60.0	67.5	67.5	150				
175	5.6 (0.57)	70.0	78.7	78.7	175				
200	4.9 (0.50)	80.0	90.0	90.0	200				

D	d	L	Spring constant		F=LX40%		F=LX45%		Catalogue No.
			N/mm (kgf/mm)	Fmm	Load N (kgf)	Fmm	Load N (kgf)		
Operation count			1,000,000		500,000		Type D-L		
40	22	40	62.7 (6.39)	16.0	18.0	18.0	1003 (102)	1129 (115)	X—SWF40 — 40
		45	55.7 (5.68)	18.0	20.3	20.3		45	
		50	50.2 (5.11)	20.0	22.5	22.5		50	
		55	45.6 (4.65)	22.0	24.8	24.8		55	
		60	41.8 (4.26)	24.0	27.0	27.0		60	
		65	38.6 (3.93)	26.0	29.3	29.3		65	
		70	35.8 (3.65)	28.0	31.5	31.5		70	
		75	33.4 (3.41)	30.0	33.8	33.8		75	
		80	31.4 (3.20)	32.0	36.0	36.0		80	
		90	27.9 (2.84)	36.0	40.5	40.5		90	
		100	25.1 (2.56)	40.0	45.0	45.0		100	
		125	20.1 (2.05)	50.0	56.2	56.2		125	
		150	16.7 (1.70)	60.0	67.5	67.5		150	
		175	14.3 (1.46)	70.0	78.7	78.7		175	
200	12.5 (1.28)	80.0	90.0	90.0	200				
225	11.1 (1.14)	90.0	101.3	101.3	225				
250	10.0 (1.02)	100.0	112.5	112.5	250				
275	9.1 (0.93)	110.0	123.8	123.8	275				
300	8.4 (0.85)	120.0	135.0	135.0	300				

● Load calculation method: Load=Spring constant×Deflection
 (SI unit) N=N/mm×Fmm
 kgf=kgf/mm×Fmm
 (kgf=N×0.101972)

Order Example **Catalogue No.** X—SWF 10—30

Stock availability
 Red : SGP stock
 Grey : Not available

Delivery **SGP Stock**

● Printed in Red

☎ For area out of Singapore, please refer to P.I.

The sizes in grey are not available. If you would like MISUMI to stock any particular size please contact us misumi_pm@misumi.com.sg