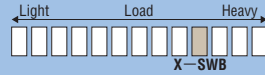
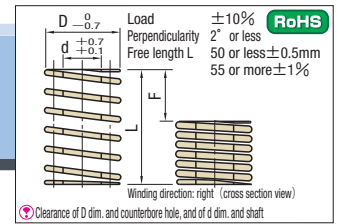


# COIL SPRINGS

— EXTRA HEAVY LOAD X-SWB —



PRINTED IN RED



D	d	L	Spring constant		F=L×16%		F=L×18%		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	162.0 (16.5)	1.6	1.8	258 (26)	291 (30)	X-SWB 8 — 10	
		15	108.0 (11.0)	2.4	2.7			15	
		20	80.8 (8.2)	3.2	3.6			20	
		25	64.6 (6.6)	4.0	4.5			25	
		30	53.8 (5.5)	4.8	5.4			30	
		35	46.1 (4.7)	5.6	6.3			35	
		40	40.4 (4.1)	6.4	7.2			40	
		45	35.9 (3.7)	7.2	8.1			45	
		50	32.3 (3.3)	8.0	9.0			50	
		55	29.4 (3.0)	8.8	9.9			55	
		60	26.9 (2.7)	9.6	10.8			60	
		65	24.8 (2.5)	10.4	11.7			65	
		70	23.1 (2.4)	11.2	12.6			70	
		75	21.5 (2.2)	12.0	13.5			75	
		80	20.2 (2.1)	12.8	14.4			80	

D	d	L	Spring constant		F=L×16%		F=L×18%		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	245.0 (25.0)	3.2	3.6	784 (80)	882 (90)	X-SWB16 — 20	
		25	196.0 (20.0)	4.0	4.5			25	
		30	163.0 (16.7)	4.8	5.4			30	
		35	140.0 (14.3)	5.6	6.3			35	
		40	123.0 (12.5)	6.4	7.2			40	
		45	109.0 (11.1)	7.2	8.1			45	
		50	98.0 (10.0)	8.0	9.0			50	
		55	89.1 (9.1)	8.8	9.9			55	
		60	81.7 (8.3)	9.6	10.8			60	
		65	75.4 (7.7)	10.4	11.7			65	
		70	70.0 (7.1)	11.2	12.6			70	
		75	65.3 (6.7)	12.0	13.5			75	
		80	61.3 (6.3)	12.8	14.4			80	
		90	54.4 (5.6)	14.4	16.2			90	
		100	49.0 (5.0)	16.0	18.0			100	

D	d	L	Spring constant		F=L×16%		F=L×18%		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	12.5	25	481.0 (49.0)	4.0	4.5	1922 (196)	2162 (220)	X-SWB25 — 25	
		30	400.0 (40.8)	4.8	5.4			30	
		35	343.0 (35.0)	5.6	6.3			35	
		40	300.0 (30.6)	6.4	7.2			40	
		45	267.0 (27.2)	7.2	8.1			45	
		50	240.0 (24.5)	8.0	9.0			50	
		55	218.0 (22.3)	8.8	9.9			55	
		60	200.0 (20.4)	9.6	10.8			60	
		65	185.0 (18.8)	10.4	11.7			65	
		70	172.0 (17.5)	11.2	12.6			70	
		75	160.0 (16.3)	12.0	13.5			75	
		80	150.0 (15.3)	12.8	14.4			80	
		90	133.0 (13.6)	14.4	16.2			90	
		100	120.0 (12.2)	16.0	18.0			100	
		125	96.1 (9.8)	20.0	22.5			125	

D	d	L	Spring constant		F=L×16%		F=L×18%		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	20	40	784.0 (79.9)	6.4	7.2	5018 (512)	5645 (576)	X-SWB40 — 40	
		45	697.0 (71.1)	7.2	8.1			45	
		50	627.0 (64.0)	8.0	9.0			50	
		55	570.0 (58.1)	8.8	9.9			55	
		60	523.0 (53.3)	9.6	10.8			60	
		65	482.0 (49.2)	10.4	11.7			65	
		70	448.0 (45.7)	11.2	12.6			70	
		75	418.0 (42.6)	12.0	13.5			75	
		80	392.0 (40.0)	12.8	14.4			80	
		90	348.0 (35.5)	14.4	16.2			90	
		100	314.0 (32.0)	16.0	18.0			100	
		125	251.0 (25.6)	20.0	22.5			125	
		150	209.0 (21.3)	24.0	27.0			150	
		175	179.0 (18.3)	28.0	31.5			175	
		200	157.0 (16.0)	32.0	36.0			200	

● 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-SWB 20-80

Stock availability  
 Red : SGP stock  
 Grey : Not available

Delivery **SGP Stock**

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](mailto:misumi_pm@misumi.com.sg)