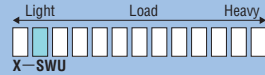
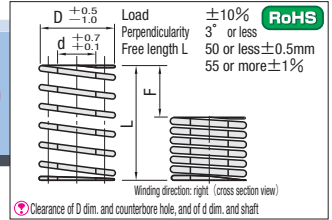


COIL SPRINGS

—X-SWU—



PRINTED IN RED



D	d	L	Spring constant		F=L×55%		Catalogue No.
			N/mm (kgf/mm)	Fmm	Load N (kgf)	Type D-L	
Operation count 1,000,000							
10.5	6	15	7.65	[0.78]	8.3	62.76 (6.4)	X-SWU 10.5 — 15
		20	5.69	[0.58]	11.0		20
		25	4.61	[0.47]	13.8		25
		30	3.82	[0.39]	16.5		30
		35	3.24	[0.33]	19.3		35
		40	2.84	[0.29]	22.0		40
		45	2.55	[0.26]	24.8		45
		50	2.26	[0.23]	27.5		50
		55	2.06	[0.21]	30.3		55
		60	1.86	[0.19]	33.0		60
		65	1.77	[0.18]	35.8		65
		70	1.67	[0.17]	38.5		70
		75	1.57	[0.16]	41.3		75
		80	1.47	[0.15]	44.0		80
		12.5	7	15	8.73		[0.89]
20	6.57			[0.67]	11.0	20	
25	5.20			[0.53]	13.8	25	
30	4.31			[0.44]	16.5	30	
35	3.73			[0.38]	19.3	35	
40	3.24			[0.33]	22.0	40	
45	2.94			[0.30]	24.8	45	
50	2.65			[0.27]	27.5	50	
55	2.35			[0.24]	30.3	55	
60	2.16			[0.22]	33.0	60	
65	1.96			[0.20]	35.8	65	
70	1.86			[0.19]	38.5	70	
75	1.77			[0.18]	41.3	75	
80	1.67			[0.17]	44.0	80	
90	1.47			[0.15]	49.5	90	
100	1.27	[0.13]	55.0	100			
14.5	8.5	15	10.89	[1.11]	8.3	90.2 (9.2)	X-SWU 14.5 — 15
		20	8.14	[0.83]	11.0		20
		25	6.57	[0.67]	13.8		25
		30	5.49	[0.56]	16.5		30
		35	4.71	[0.48]	19.3		35
		40	4.12	[0.42]	22.0		40
		45	3.63	[0.37]	24.8		45
		50	3.24	[0.33]	27.5		50
		55	2.94	[0.30]	30.3		55
		60	2.75	[0.28]	33.0		60
		65	2.55	[0.26]	35.8		65
		70	2.35	[0.24]	38.5		70
		75	2.16	[0.22]	41.3		75
		80	2.06	[0.21]	44.0		80
		90	1.86	[0.19]	49.5		90
100	1.67	[0.17]	55.0	100			
110	1.47	[0.15]	60.5	110			
120	1.37	[0.14]	66.0	120			
125	1.27	[0.13]	68.8	125			
150	1.08	[0.11]	82.5	150			
17	10.5	20	12.26	[1.25]	11.0	134.4 (13.7)	X-SWU 17 — 20
		25	9.81	[1.00]	13.8		25
		30	8.14	[0.83]	16.5		30
		35	6.96	[0.71]	19.3		35
		40	6.18	[0.63]	22.0		40
		45	5.49	[0.56]	24.8		45
		50	4.90	[0.50]	27.5		50
		55	4.41	[0.45]	30.3		55
		60	4.12	[0.42]	33.0		60
		65	3.73	[0.38]	35.8		65
		70	3.53	[0.36]	38.5		70
		75	3.24	[0.33]	41.3		75
		80	3.04	[0.31]	44.0		80
		90	2.75	[0.28]	49.5		90
		100	2.45	[0.25]	55.0		100
110	2.26	[0.23]	60.5	110			
120	2.06	[0.21]	66.0	120			
125	1.96	[0.20]	68.8	125			
150	1.67	[0.17]	82.5	150			
175	1.37	[0.14]	96.3	175			

D	d	L	Spring constant		F=L×55%		Catalogue No.
			N/mm (kgf/mm)	Fmm	Load N (kgf)	Type D-L	
Operation count 1,000,000							
21	13.5	25	15.00	[1.53]	13.8	205.9 (21)	X-SWU 21 — 25
		30	12.55	[1.28]	16.5		30
		35	10.79	[1.10]	19.3		35
		40	9.41	[0.96]	22.0		40
		45	8.34	[0.85]	24.8		45
		50	7.65	[0.78]	27.5		50
		55	6.86	[0.70]	30.3		55
		60	6.28	[0.64]	33.0		60
		65	5.79	[0.59]	35.8		65
		70	5.39	[0.55]	38.5		70
		75	5.00	[0.51]	41.3		75
		80	4.71	[0.48]	44.0		80
		90	4.22	[0.43]	49.5		90
		100	3.73	[0.38]	55.0		100
		110	3.33	[0.34]	60.5		110
120	3.14	[0.32]	66.0	120			
125	3.04	[0.31]	68.8	125			
130	2.84	[0.29]	71.5	130			
140	2.65	[0.27]	77.0	140			
150	2.55	[0.26]	82.5	150			
175	2.16	[0.22]	96.3	175			
200	1.86	[0.19]	110.0	200			
26	16.5	30	16.38	[1.67]	16.5	250.6 (27.5)	X-SWU 26 — 30
		35	14.02	[1.43]	19.3		35
		40	12.26	[1.25]	22.0		40
		45	10.89	[1.11]	24.8		45
		50	9.81	[1.00]	27.5		50
		55	8.92	[0.91]	30.3		55
		60	8.14	[0.83]	33.0		60
		65	7.55	[0.77]	35.8		65
		70	6.96	[0.71]	38.5		70
		75	6.57	[0.67]	41.3		75
		80	6.18	[0.63]	44.0		80
		90	5.49	[0.56]	49.5		90
		100	4.90	[0.50]	55.0		100
		110	4.41	[0.45]	60.5		110
		120	4.12	[0.42]	66.0		120
125	3.92	[0.40]	68.8	125			
130	3.73	[0.38]	71.5	130			
140	3.53	[0.36]	77.0	140			
150	3.24	[0.33]	82.5	150			
175	2.84	[0.29]	96.3	175			
200	2.45	[0.25]	110.0	200			
225	2.16	[0.22]	123.8	225			
250	1.96	[0.20]	137.5	250			
31	21	35	17.75	[1.81]	19.3	343.2 (35)	X-SWU 31 — 35
		40	15.49	[1.58]	22.0		40
		45	13.83	[1.41]	24.8		45
		50	12.45	[1.27]	27.5		50
		55	11.28	[1.15]	30.3		55
		60	10.40	[1.06]	33.0		60
		65	9.51	[0.97]	35.8		65
		70	8.83	[0.90]	38.5		70
		75	8.24	[0.84]	41.3		75
		80	7.75	[0.79]	44.0		80
		90	6.86	[0.70]	49.5		90
		100	6.18	[0.63]	55.0		100
		110	5.69	[0.58]	60.5		110
		120	5.20	[0.53]	66.0		120
		125	5.00	[0.51]	68.8		125
130	4.81	[0.49]	71.5	130			
140	4.41	[0.45]	77.0	140			
150	4.12	[0.42]	82.5	150			
160	3.92	[0.40]	88.0	160			
170	3.63	[0.37]	93.5	170			
175	3.53	[0.36]	96.3	175			
180	3.43	[0.35]	99.0	180			
190	3.24	[0.33]	104.5	190			
200	3.14	[0.32]	110.0	200			
250	2.45	[0.25]	137.5	250			
300	2.06	[0.21]	165.0	300			

D	d	L	Spring constant		F=L×55%		Catalogue No.
			N/mm (kgf/mm)	Fmm	Load N (kgf)	Type D-L	
Operation count 1,000,000							
37	26	40	19.22	[1.96]	22.0	392.8 (43.1)	X-SWU 37 — 40
		45	17.06	[1.74]	24.8		45
		50	15.40	[1.57]	27.5		50
		55	13.93	[1.42]	30.3		55
		60	12.85	[1.31]	33.0		60
		65	11.87	[1.21]	35.8		65
		70	10.98	[1.12]	38.5		70
		75	10.20	[1.04]	41.3		75
		80	9.61	[0.98]	44.0		80
		90	8.53	[0.87]	49.5		90
		100	7.65	[0.78]	55.0		100
		110	6.96	[0.71]	60.5		110
		120	6.37	[0.65]	66.0		120
		130	5.88	[0.60]	71.5		130
		140	5.49	[0.56]	77.0		140
150	5.10	[0.52]	82.5	150			
160	4.81	[0.49]	88.0	160			
170	4.51	[0.46]	93.5	170			
180	4.31	[0.44]	99.0	180			
190	4.02	[0.41]	104.5	190			
200	3.82	[0.39]	110.0	200			
225	3.43	[0.35]	123.8	225			
250	3.04	[0.31]	137.5	250			
275	2.75	[0.28]	151.3	275			
300	2.55	[0.26]	165.0	300			
43	31	50	19.61	[2.00]	27.5	539.4 (55)	X-SWU 43 — 50
		60	16.38	[1.67]	33.0		60
		70	14.02	[1.43]	38.5		70
		80	12.26	[1.25]	44.0		80
		90	10.89	[1.11]	49.5		90
		100	9.81	[1.00]	55.0		100
		110	8.92	[0.91]	60.5		110
		120	8.14	[0.83]	66.0		120
		130	7.55	[0.77]	71.5		130
		140	6.96	[0.71]	77.0		140
		150	6.57	[0.67]	82.5		150
		160	6.18	[0.63]	88.0		160
		170	5.79	[0.59]	93.5		170
		180	5.49	[0.56]	99.0		180
		190	5.20	[0.53]	104.5		190
200	4.90	[0.50]	110.0	200			
225	4.31	[0.44]	123.8	225			
250	3.92	[0.40]	137.5	250			
275	3.53	[0.36]	151.3	275			
300	3.24	[0.33]	165.0	300			

- Product Line-up
- Instructions and precautions for the use of coil springs

Order Example **Catalogue No.**
X-SWU 22-100

Delivery **SGP Stock**

Stock availability
Red : SGP stock
Grey : Not available

• 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

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