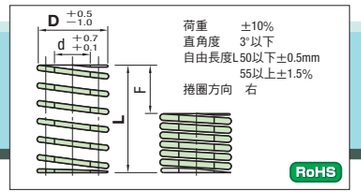
COIL SPRINGS –ULTRA HIGH DEFLECTION– SWY

彈簧

–超超級壓縮用　SWY–

CAD資料夾名稱：37_Springs



D	d	L	彈簧常數 N/mm{kgf/mm}	F=L×65% Fmm	荷重 N{kgf}	型式 Type D–L	NT$基準單價
11	7	20	2.26{0.23}	13.0	29.4 {3.0}	SWY 11– 20	
		25	1.81{0.18}	16.3		25	
		30	1.51{0.15}	19.5		30	
		35	1.29{0.13}	22.8		35	
		40	1.13{0.12}	26.0		40	
		45	1.01{0.10}	29.3		45	
		50	0.91{0.092}	32.5		50	
		55	0.82{0.084}	35.8		55	
		60	0.75{0.077}	39.0		60	
		65	0.70{0.071}	42.3		65	
		70	0.65{0.066}	45.5		70	
		75	0.60{0.061}	48.8		75	
		80	0.57{0.058}	52.0		80	
		90	0.50 {0.051}	58.5		90	
		100	0.45{0.046}	65.0		100	
12.5	8.5	20	3.09{0.32}	13.0	40.2 {4.1}	SWY 12.5– 20	
		25	2.47{0.25}	16.3		25	
		30	2.06{0.21}	19.5		30	
		35	1.77{0.18}	22.8		35	
		40	1.55{0.16}	26.0		40	
		45	1.37{0.14}	29.3		45	
		50	1.24{0.13}	32.5		50	
		55	1.12{0.11}	35.8		55	
		60	1.03{0.11}	39.0		60	
		65	0.95{0.10}	42.3		65	
		70	0.88{0.090}	45.5		70	
		75	0.82{0.084}	48.8		75	
		80	0.77{0.079}	52.0		80	
		90	0.69{0.070}	58.5		90	
		100	0.62{0.063}	65.0		100	
		110	0.56{0.057}	71.5		110	
		120	0.52{0.053}	78.0		120	
		125	0.49{0.050}	81.3		125	
16.5	10.5	20	7.02{0.72}	13.0	91.2 {9.3}	SWY 16.5– 20	
		25	5.61{0.57}	16.3		25	
		30	4.68{0.48}	19.5		30	
		35	4.01{0.41}	22.8		35	
		40	3.51{0.36}	26.0		40	
		45	3.12{0.32}	29.3		45	
		50	2.81{0.29}	32.5		50	
		55	2.55{0.26}	35.8		55	
		60	2.34{0.24}	39.0		60	
		65	2.16{0.22}	42.3		65	
		70	2.00{0.20}	45.5		70	
		75	1.87{0.19}	48.8		75	
		80	1.75{0.18}	52.0		80	
		90	1.56{0.16}	58.5		90	
		100	1.40{0.14}	65.0		100	
		110	1.28{0.13}	71.5		110	
		120	1.17{0.12}	78.0		120	
		125	1.12{0.11}	81.3		125	
		150	0.94{0.10}	97.5		150	

D	d	L	彈簧常數 N/mm{kgf/mm}	F=L×65% Fmm	荷重 N{kgf}	型式 Type D–L	NT$基準單價
20.5	13.5	30	5.58{0.57}	19.5	108.9 {11.1}	SWY20.5– 30	
		35	4.78{0.49}	22.8		35	
		40	4.19{0.43}	26.0		40	
		45	3.72{0.38}	29.3		45	
		50	3.35{0.34}	32.5		50	
		55	3.04{0.31}	35.8		55	
		60	2.79{0.28}	39.0		60	
		65	2.58{0.26}	42.3		65	
		70	2.39{0.24}	45.5		70	
		75	2.23{0.23}	48.8		75	
		80	2.09{0.21}	52.0		80	
		90	1.86{0.19}	58.5		90	
		100	1.67{0.17}	65.0		100	
		110	1.52{0.16}	71.5		110	
		120	1.40{0.14}	78.0		120	
		125	1.34{0.14}	81.3		125	
		130	1.29{0.13}	84.5		130	
		140	1.20{0.12}	91.0		140	
		150	1.12{0.11}	97.5		150	
24.5	16.5	30	6.99{0.71}	19.5	136.3 {13.9}	SWY24.5– 30	
		35	5.99{0.61}	22.8		35	
		40	5.24{0.53}	26.0		40	
		45	4.66{0.48}	29.3		45	
		50	4.19{0.43}	32.5		50	
		55	3.81{0.39}	35.8		55	
		60	3.50{0.36}	39.0		60	
		65	3.23{0.33}	42.3		65	
		70	3.00{0.31}	45.5		70	
		75	2.80{0.29}	48.8		75	
		80	2.62{0.27}	52.0		80	
		90	2.33{0.24}	58.5		90	
		100	2.10{0.21}	65.0		100	
		110	1.91{0.19}	71.5		110	
		120	1.75{0.18}	78.0		120	
		125	1.68{0.17}	81.3		125	
		130	1.61{0.16}	84.5		130	
		140	1.50{0.15}	91.0		140	
		150	1.40{0.14}	97.5		150	
		175	1.20{0.12}	113.8		175	
		200	1.05{0.11}	130.0		200	
30	21	35	8.79{0.90}	22.8	200.1 {20.4}	SWY 30– 35	
		40	7.69{0.78}	26.0		40	
		45	6.84{0.70}	29.3		45	
		50	6.16{0.63}	32.5		50	
		55	5.60{0.57}	35.8		55	
		60	5.13 {0.52}	39.0		60	
		65	4.74{0.48}	42.3		65	
		70	4.40{0.45}	45.5		70	
		75	4.10{0.42}	48.8		75	
		80	3.85{0.39}	52.0		80	
		90	3.42{0.35}	58.5		90	
		100	3.08{0.31}	65.0		100	
		110	2.80{0.29}	71.5		110	
		120	2.56{0.26}	78.0		120	
		125	2.46{0.25}	81.3		125	
		130	2.37{0.24}	84.5		130	
		140	2.20{0.22}	91.0		140	
		150	2.05{0.21}	97.5		150	
		160	1.92{0.20}	104.0		160	
		170	1.81{0.18}	110.5		170	
		175	1.76{0.18}	113.8		175	
		180	1.71{0.17}	117.0		180	
		190	1.62{0.17}	123.5		190	
		200	1.54{0.16}	130.0		200	
		250	1.23{0.13}	162.5		250	
		300	1.03{0.10}	195.0		300	

D	d	L	彈簧常數 N/mm{kgf/mm}	F=L×65% Fmm	荷重 N{kgf}	型式 Type D–L	NT$基準單價
37	26	40	11.32{1.15}	26.0	294.2 {30.0}	SWY 37– 40	
		45	10.06{1.03}	29.3		45	
		50	9.05{0.92}	32.5		50	
		55	8.23{0.84}	35.8		55	
		60	7.54{0.77}	39.0		60	
		65	6.96{0.71}	42.3		65	
		70	6.47{0.66}	45.5		70	
		75	6.03{0.62}	48.8		75	
		80	5.66{0.58}	52.0		80	
		90	5.03{0.51}	58.5		90	
		100	4.53{0.46}	65.0		100	
		110	4.11{0.42}	71.5		110	
		120	3.77{0.38}	78.0		120	
		130	3.48{0.36}	84.5		130	
		140	3.23{0.33}	91.0		140	
		150	3.02{0.31}	97.5		150	
		160	2.83{0.29}	104.0		160	
		170	2.66{0.27}	110.5		170	
		180	2.51{0.26}	117.0		180	
		190	2.38{0.24}	123.5		190	
		200	2.26{0.23}	130.0		200	
		225	2.01{0.21}	146.3		225	
		250	1.81{0.18}	162.5		250	
		275	1.65{0.17}	178.8		275	
		300	1.51{0.15}	195.0		300	
42	31	50	12.07{1.23}	32.5	392.3 {40.0}	SWY 42– 50	
		60	10.06{1.03}	39.0		60	
		70	8.62{0.88}	45.5		70	
		80	7.54{0.77}	52.0		80	
		90	6.71{0.68}	58.5		90	
		100	6.03{0.62}	65.0		100	
		110	5.49{0.56}	71.5		110	
		120	5.03{0.51}	78.0		120	
		130	4.64{0.47}	84.5		130	
		140	4.31{0.44}	91.0		140	
		150	4.02{0.41}	97.5		150	
		160	3.77{0.38}	104.0		160	
		170	3.55{0.36}	110.5		170	
		180	3.35{0.34}	117.0		180	
		190	3.18{0.32}	123.5		190	
		200	3.02{0.31}	130.0		200	
		225	2.68{0.27}	146.3		225	
		250	2.41{0.25}	162.5		250	
		275	2.19{0.22}	178.8		275	
		300	2.01{0.21}	195.0		300	

使用次數：100萬次(L×70%為30萬次)

彈簧的使用方法與注意事項 P.356

M材質　彈簧用油回火線

●荷重的計算方法：荷重=彈簧常數×壓縮量
(國際單位)　N=N/mm×Fmm
kgf=kgf/mm×Fmm
kgf=N×0.101972

Order 訂購範例　型式 SWY 12.5–40

Delivery 出貨日　WEB WOS

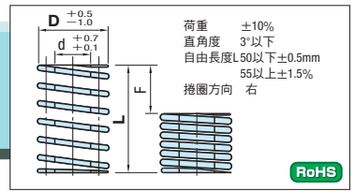
Price 價格　WEB WOS

COIL SPRINGS –SUPER HIGH DEFLECTION– SWU

彈簧

–超級壓縮用　SWU–

CAD資料夾名稱：37_Springs



D	d	L	彈簧常數 N/mm{kgf/mm}	F=L×60% Fmm	荷重 N{kgf}	型式 Type D–L	NT$基準單價
10.5	6.0	15	7.63{0.78}	9.0	68.6 {7.0}	SWU10.5–15	
		20	5.72{0.58}	12.0		20	
		25	4.58{0.47}	15.0		25	
		30	3.81{0.39}	18.0		30	
		35	3.27{0.33}	21.0		35	
		40	2.86{0.29}	24.0		40	
		45	2.54{0.26}	27.0		45	
		50	2.29{0.23}	30.0		50	
		55	2.08{0.21}	33.0		55	
		60	1.91{0.19}	36.0		60	
		65	1.76{0.18}	39.0		65	
		70	1.63{0.17}	42.0		70	
		75	1.53{0.16}	45.0		75	
		80	1.43{0.15}	48.0		80	
12.5	7.0	15	8.72{0.89}	9.0	78.5 {8.0}	SWU12.5–15	
		20	6.54{0.67}	12.0		20	
		25	5.23{0.53}	15.0		25	
		30	4.36{0.44}	18.0		30	
		35	3.74{0.38}	21.0		35	
		40	3.27{0.33}	24.0		40	
		45	2.91{0.30}	27.0		45	
		50	2.62{0.27}	30.0		50	
		55	2.38{0.24}	33.0		55	
		60	2.18{0.22}	36.0		60	
		65	2.01{0.21}	39.0		65	
		70	1.87{0.19}	42.0		70	
		75	1.74{0.18}	45.0		75	
		80	1.63{0.17}	48.0		80	
		90	1.45{0.15}	54.0		90	
		100	1.31{0.13}	60.0		100	
14.5	8.5	15	10.90 {1.11}	9.0	98.1 {10.0}	SWU14.5–15	
		20	8.17{0.83}	12.0		20	
		25	6.54{0.67}	15.0		25	
		30	5.45{0.56}	18.0		30	
		35	4.67{0.48}	21.0		35	
		40	4.09{0.42}	24.0		40	
		45	3.63{0.37}	27.0		45	
		50	3.27{0.33}	30.0		50	
		55	2.97{0.30}	33.0		55	
		60	2.72{0.28}	36.0		60	
		65	2.51{0.26}	39.0		65	
		70	2.33{0.24}	42.0		70	
		75	2.18{0.22}	45.0		75	
		80	2.04{0.21}	48.0		80	
		90	1.82{0.19}	54.0		90	
		100	1.63{0.17}	60.0		100	
		110	1.49{0.15}	66.0		110	
		120	1.36{0.14}	72.0		120	
		125	1.31{0.13}	75.0		125	
		150	1.09{0.11}	90.0		150	
17	10.5	20	12.26{1.25}	12.0	147.1 {15.0}	SWU 17 – 20	
		25	9.81{1.00}	15.0		25	
		30	8.17{0.83}	18.0		30	
		35	7.00{0.71}	21.0		35	
		40	6.13{0.63}	24.0		40	
		45	5.45{0.56}	27.0		45	
		50	4.90{0.50}	30.0		50	
		55	4.46{0.45}	33.0		55	
		60	4.09{0.42}	36.0		60	
		65	3.77{0.38}	39.0		65	
		70	3.50{0.36}	42.0		70	
		75	3.27{0.33}	45.0		75	
		80	3.06{0.31}	48.0		80	
		90	2.72{0.28}	54.0		90	
		100	2.45{0.25}	60.0		100	
		110	2.23{0.23}	66.0		110	
		120	2.04{0.21}	72.0		120	
		125	1.96{0.20}	75.0		125	
		150	1.63{0.17}	90.0		150	
		175	1.40{0.14}	105.0		175	

D	d	L	彈簧常數 N/mm{kgf/mm}	F=L×60% Fmm	荷重 N{kgf}	型式 Type D–L	NT$基準單價
21	13.5	25	15.04{1.53}	15.0	225.6 {23.0}	SWU 21– 25	
		30	12.53{1.28}	18.0		30	
		35	10.74{1.10}	21.0		35	
		40	9.40{0.96}	24.0		40	
		45	8.35{0.85}	27.0		45	
		50	7.52{0.77}	30.0		50	
		55	6.83{0.70}	33.0		55	
		60	6.27{0.64}	36.0		60	
		65	5.78{0.59}	39.0		65	
		70	5.37{0.55}	42.0		70	
		75	5.01{0.51}	45.0		75	
		80	4.70{0.48}	48.0		80	
		90	4.18{0.43}	54.0		90	
		100	3.76{0.38}	60.0		100	
		110	3.42{0.35}	66.0		110	
		120	3.13{0.32}	72.0		120	
		125	3.01{0.31}	75.0		125	
		130	2.89{0.29}	78.0		130	
		140	2.69{0.27}	84.0		140	
		150	2.51{0.26}	90.0		150	
		175	2.15{0.22}	105.0		175	
		200	1.88{0.19}	120.0		200	
26	16.5	30	16.34{1.67}	18.0	294.2 {30.0}	SWU 26– 30	
		35	14.01{1.43}	21.0		35	
		40	12.26{1.25}	24.0		40	
		45	10.90{1.11}	27.0		45	
		50	9.81{1.00}	30.0		50	
		55	8.92{0.91}	33.0		55	
		60	8.17{0.83}	36.0		60	
		65	7.54{0.77}	39.0		65	
		70	7.00{0.71}	42.0		70	
		75	6.54{0.67}	45.0		75	
		80	6.13{0.63}	48.0		80	
		90	5.45{0.56}	54.0		90	
		100	4.90{0.50}	60.0		100	
		110	4.46{0.45}	66.0		110	
		120	4.09{0.42}	72.0		120	
		125	3.92{0.40}	75.0		125	
		130	3.77{0.38}	78.0		130	
		140	3.50{0.36}	84.0		140	
		150	3.27{0.33}	90.0		150	
		175	2.80{0.29}	105.0		175	
		200	2.45{0.25}	120.0		200	
		225	2.18{0.22}	135.0		225	
		250	1.96{0.20}	150.0		250	
31	21	35	17.75{1.81}	21.0	372.7 {38.0}	SWU 31– 35	
		40	15.53{1.58}	24.0		40	
		45	13.80{1.41}	27.0		45	
		50	12.42{1.27}	30.0		50	
		55	11.29{1.15}	33.0		55	
		60	10.35{1.06}	36.0		60	
		65	9.56{0.97}	39.0		65	
		70	8.87{0.90}	42.0		70	
		75	8.28{0.84}	45.0		75	
		80	7.76{0.79}	48.0		80	
		90	6.90{0.70}	54.0		90	
		100	6.21{0.63}	60.0		100	
		110	5.65{0.58}	66.0		110	
		120	5.18{0.53}	72.0		120	
		125	4.97{0.51}	75.0		125	
		130	4.78{0.49}	78.0		130	
		140	4.44{0.45}	84.0		140	
		150	4.14{0.42}	90.0		150	
		160	3.88{0.40}	96.0		160	
		170	3.65{0.37}	102.0		170	
		175	3.55{0.36}	105.0		175	
		180	3.45{0.35}	108.0		180	
		190	3.27{0.33}	114.0		190	
		200	3.11{0.32}	120.0		200	
		250	2.48{0.25}	150.0		250	
		300	2.07{0.21}	180.0		300	

D	d	L	彈簧常數 N/mm{kgf/mm}	F=L×60% Fmm	荷重 N{kgf}	型式 Type D–L	NT$基準單價
37	26	40	19.20{1.96}	24.0	460.9 {47.0}	SWU 37– 40	
		45	17.07{1.74}	27.0		45	
		50	15.36{1.57}	30.0		50	
		55	13.97{1.42}	33.0		55	
		60	12.80{1.31}	36.0		60	
		65	11.82{1.21}	39.0		65	
		70	10.97{1.12}	42.0		70	
		75	10.24{1.04}	45.0		75	
		80	9.60{0.98}	48.0		80	
		90	8.54{0.87}	54.0		90	
		100	7.68{0.78}	60.0		100	
		110	6.98{0.71}	66.0		110	
		120	6.40{0.65}	72.0		120	
		130	5.91{0.60}	78.0		130	
		140	5.49{0.56}	84.0		140	
		150	5.12{0.52}	90.0		150	
		160	4.80{0.49}	96.0		160	
		170	4.52{0.46}	102.0		170	
		180	4.27{0.44}	108.0		180	
		190	4.04{0.41}	114.0		190	
		200	3.84{0.39}	120.0		200	
		225	3.41{0.35}	135.0		225	
		250	3.07{0.31}	150.0		250	
		275	2.79{0.28}	165.0		275	
		300	2.56{0.26}	180.0		300	
43	31	50	19.61{2.00}	30.0	588.4 {60.0}	SWU 43– 50	
		60	16.34{1.67}	36.0		60	
		70	14.01{1.43}	42.0		70	
		80	12.26{1.25}	48.0		80	
		90	10.90{1.11}	54.0		90	
		100	9.81{1.00}	60.0		100	
		110	8.92{0.91}	66.0		110	
		120	8.17{0.83}	72.0		120	
		130	7.54{0.77}	78.0		130	
		140	7.00{0.71}	84.0		140	
		150	6.54{0.67}	90.0		150	
		160	6.13{0.63}	96.0		160	
		170	5.77{0.59}	102.0		170	
		180	5.45{0.56}	108.0		180	
		190	5.16{0.53}	114.0		190	
		200	4.90{0.50}	120.0		200	
		225	4.36{0.44}	135.0		225	
		250	3.92{0.40}	150.0		250	
		275	3.57{0.36}	165.0		275	
		300	3.27{0.33}	180.0		300	

M材質　彈簧用油回火線

●荷重的計算方法：荷重=彈簧常數×壓縮量
(國際單位)　N=N/mm×Fmm
kgf=kgf/mm×Fmm
kgf=N×0.101972

使用次數：100萬次(L×65%為30萬次)

彈簧的使用方法與注意事項 P.356

Order 訂購範例　型式 SWU17–40

Delivery 出貨日　WEB WOS

Price 價格　WEB WOS