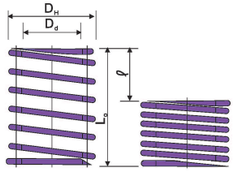

注文方法:SY •10.5×15=100
代号 外径D_H 自由长L_o 数量

公制(日本)标准模具弹簧

Metric(japanese)standards molding springs

SY 中变形(紫色) SY Middle Deflection (Purple)

荷重计算方式

弹簧刚度kgf/mm×ℓ（压缩量）=kgf（荷重）例:代号SY10.5×15(30万回时)

刚度kgf/mm×ℓ（压缩量）=kgf（荷重）
1.33×7.5=10

SY弹簧使用回数与压缩比的关系

种类\使用回数	100万回	50万回	30万回	最大压缩量
SY	自由长L_o的40%	自由长L_o的45%	自由长L_o的50%	自由长L_o的60%

弹簧尺寸价格表　　单位：元/条

规格(modle) 外径×内径×长度 D_H×D_d×L_o	价 格	刚 度	压缩量 deflection 40% 1.000.000		压缩量 deflection 45% 500.000		压缩量 deflection 50% 300.000	
mm	RMB	kfg/mm	ℓ/mm	Kgf{N}	ℓ/mm	Kgf{N}	ℓ/mm	Kgf{N}
SY10.5x6x15	10.0	1.33	6.0		6.8		7.5	
20	10.6	1.00	8.0		9.0		10.0	
25	11.2	0.80	10.0		11.3		12.5	
30	11.8	0.67	12.0		13.5		15.0	
35	12.4	0.57	14.0		15.8		17.5	
40	13.0	0.50	16.0		18.0		20.0	
45	13.6	0.44	18.0	8	20.3	9	22.5	10
50	14.2	0.40	20.0	{78.4}	22.5	{88.2}	25.0	{98}
55	14.8	0.36	22.0		24.8		27.5	
60	15.4	0.33	24.0		27.0		30.0	
65	16.0	0.31	26.0		29.3		32.5	
70	16.6	0.29	28.0		31.5		35.0	
75	17.2	0.27	30.0		33.8		37.5	
80	17.8	0.25	32.0		36.0		40.0	
SY12.5x7x15	9.8	2.00	6.0		6.8		7.5	
20	10.6	1.50	8.0		9.0		10.0	
25	11.4	1.26	10.0		11.3		12.5	
30	12.2	1.00	12.0		13.5		15.0	
35	13.0	0.65	14.0		15.8		17.5	
40	13.8	0.75	16.0		18.0		20.0	
45	14.6	0.67	18.0		20.3		22.5	
50	15.4	0.60	20.0	12	22.5	13.5	25.0	15
55	16.2	0.55	22.0	{117.6}	24.8	{132.3}	27.5	{147}
60	17.0	0.50	24.0		27.0		30.0	
65	17.8	0.46	26.0		29.3		32.5	
70	18.6	0.43	28.0		31.5		35.0	
75	19.4	0.40	30.0		33.8		37.5	
80	20.2	0.38	32.0		36.0		40.0	
90	21.8	0.33	36.0		40.5		45.0	
100	23.4	0.30	40.0		45.0		50.0	
SY14.5x9x20	12.5	2.10	8.0		9.0		10.0	
25	13.6	1.68	10.0		11.3		12.5	
30	14.7	1.40	12.0		13.5		15.0	
35	15.8	1.20	14.0		15.8		17.5	
40	16.9	1.05	16.0		18.0		20.0	
45	18.0	0.93	18.0		20.3		22.5	
50	19.1	0.84	20.0	17	22.5	19	25.0	21
55	20.2	0.76	22.0	{166.6}	24.8	{186.2}	27.5	{205.8}
60	21.3	0.70	24.0		27.0		30.0	
65	22.4	0.65	26.0		29.3		32.5	
70	23.5	0.60	28.0		31.5		35.0	
75	24.6	0.55	30.0		33.8		37.5	
80	25.7	0.53	32.0		36.0		40.0	
90	27.0	0.47	36.0		40.5		45.0	

1N=0.102kgf

HI-WILCO®
弹 簧 专 家

弹簧尺寸价格表　　单位：元/条

规格(modle) 外径×内径×长度 D_H×D_d×L_o	价 格	刚 度	压缩量 deflection 40% 1.000.000		压缩量 deflection 45% 500.000		压缩量 deflection 50% 300.000	
mm	RMB	kfg/mm	ℓ/mm	Kgf{N}	ℓ/mm	Kgf{N}	ℓ/mm	Kgf{N}
SY14.5x9x100	29.0	0.42	40.0	17	45.0	19	50.0	21
125	31.0	0.34	50.0	{166.6}	56.3	{186.2}	62.5	{205.8}
SY17x11x25	14.5	2.46	10.0		11.3		12.5	
30	15.8	2.05	12.0		13.5		15.0	
35	17.1	1.76	14.0		15.8		17.5	
40	18.4	1.54	16.0		18.0		20.0	
45	19.7	1.37	18.0		20.3		22.5	
50	21.0	1.23	20.0		22.5		25.0	
55	22.3	1.12	22.0		24.8		27.5	
60	23.6	1.03	24.0	25	27.0	28	30.0	31
65	24.9	0.95	26.0	{245}	29.3	{274.4}	32.5	{303.8}
70	26.2	0.88	28.0		31.5		35.0	
75	27.5	0.82	30.0		33.8		37.5	
80	28.8	0.77	32.0		36.0		40.0	
90	30.1	0.68	35.0		40.5		45.0	
100	33.0	0.62	40.0		45.0		50.0	
125	36.0	0.49	50.0		56.3		62.5	
150	39.0	0.41	60.0		67.5		75.0	
SY21x13x25	17.0	3.19	10.0		11.3		12.5	
30	16.5	2.67	12.0		13.5		15.0	
35	17.9	2.29	14.0		15.8		17.5	
40	19.3	2.00	16.0		18.0		20.0	
45	20.7	1.78	18.0		20.3		22.5	
50	22.1	1.60	20.0		22.5		25.0	
55	23.5	1.45	22.0		24.8		27.5	
60	24.9	1.33	24.0	32	27.0	36	30.0	40
65	26.3	1.23	26.0	{313.6}	29.3	{352.8}	32.5	{392}
70	27.7	1.14	28.0		31.5		35.0	
75	29.1	1.07	30.0		33.8		37.5	
80	30.5	1.00	32.0		36.0		40.0	
90	33.0	0.89	36.0		40.5		45.0	
100	35.5	0.80	40.0		45.0		50.0	
125	38.0	0.64	50.0		56.3		62.5	
150	41.0	0.53	60.0		67.5		75.0	
175	43.0	0.46	70.0		78.8		87.5	
SY26x16.5x30	20.0	3.87	12.0		13.5		15.0	
35	21.5	3.31	14.0		15.8		17.5	
40	23.0	2.90	16.0		18.0		20.0	
45	24.5	2.68	18.0		26.3		22.5	
50	26.0	2.32	20.0		22.5		25.0	
55	27.5	2.11	22.0		24.8		27.5	
60	29.0	1.93	24.0		27.0		30.0	
65	30.5	1.78	26.0		29.3		32.5	
70	32.0	1.66	28.0	46	31.5	52	35.0	58
75	33.5	1.55	30.0	{450.8}	33.8	{509.6}	37.5	{568.4}
80	35.0	1.45	32.0		36.0		40.0	
90	38.5	1.29	36.0		40.5		45.0	
100	42.0	1.16	40.0		45.0		50.0	
110	45.5	1.05	44.0		49.5		55.0	
125	45.5	0.93	50.0		56.3		62.5	
150	49.0	0.77	60.0		67.5		75.0	
175	52.0	0.66	70.0		78.8		87.5	
200	55.0	0.58	80.0		90.0		100.0	
SY31x21x40	24.0	3.90	16.0		18.0		20.0	
45	26.5	3.47	18.0		20.3		22.5	
50	29.0	3.12	29.0		22.5		25.0	
55	31.5	2.84	22.0	62	24.8	70	27.5	78
60	34.0	2.60	24.0	{607.6}	27.0	{686}	30.0	{764.4}
65	36.5	2.40	26.0		29.3		32.5	
70	39.0	2.23	28.0		31.5		35.0	

1N=0.102kgf

弹簧尺寸价格表

单位：元/条

规格(modle) 外径×内径×长度 $D_o \times D_i \times L_o$	价 格	刚 度	压缩量 deflection 40% 1.000.000		压缩量 deflection 45% 500.000		压缩量 deflection 50% 300.000	
mm	RMB	kfg/mm	//mm	Kgf{N}	//mm	Kgf{N}	//mm	Kgf{N}
SY31X21X75	41.5	2.08	30.0		33.8		37.5	
80	44.0	1.95	32.0		36.0		40.0	
90	48.5	1.73	36.0		40.5		45.0	
100	53.0	1.56	40.0		45.0		50.0	
110	59.0	1.42	44.0		49.5		55.0	
125	59.0	1.25	50.0	62 {607.6}	56.3	62 {607.6}	62.5	62 {607.6}
150	65.0	1.04	60.0		67.5		75.0	
175	71.0	0.89	70.0		78.8		87.5	
200	77.0	0.78	80.0		90.0		100.0	
250	89.0	0.62	100.0		112.5		125.0	
300	96.0	0.52	120.0		135.0		150.0	
SY39x26x40	26.0	5.10	16.0		18.0		20.0	
45	29.5	4.53	18.0		20.3		22.5	
50	33.0	4.08	29.0		22.5		25.0	
55	36.5	0.71	22.0		24.8		27.5	
60	40.0	3.40	24.0		27.0		30.0	
65	43.5	3.14	26.0		29.3		32.5	
70	47.0	2.91	28.0		31.5		35.0	
75	50.5	2.72	30.0		33.8		37.5	
80	54.0	2.56	32.0	82 {803.6}	35.0	92 {901.6}	40.0	102 {999.6}
90	59.0	2.27	36.0		40.5		45.0	
100	64.0	2.04	40.0		45.0		50.0	
110	76.0	1.65	44.0		49.5		55.0	
125	76.0	1.63	50.0		68.3		62.5	
150	88.0	1.36	60.0		67.5		75.0	
175	100.0	1.17	70.0		78.8		87.5	
200	112.0	1.02	80.0		90.0		100.0	
250	136.0	0.82	100.0		112.5		125.0	
300	160.0	0.68	120.0		135.0		150.0	
SY48x32x50	35.0	5.44	20.0		22.5		25.0	
55	39.0	4.95	22.0		24.8		27.5	
60	43.0	4.53	24.0		27.0		30.0	
65	47.0	4.18	26.0		29.3		32.5	
70	51.0	3.89	28.0		31.5		35.0	
75	55.0	3.63	30.0		33.8		37.5	
80	59.0	3.40	32.0		35.0		40.0	
90	65.0	3.02	36.0	109 {1068.2}	40.5	122 {1195.6}	45.0	136 {1332.8}
100	71.0	2.72	40.0		45.0		50.0	
110	86.0	2.47	44.0		49.5		55.0	
125	86.0	2.18	50.0		68.3		62.5	
150	101.0	1.81	60.0		67.5		75.0	
175	116.0	1.55	70.0		78.8		87.5	
200	131.0	1.36	80.0		90.0		100.0	
250	161.0	1.09	100.0		112.5		125.0	
300	190.0	0.91	120.0		135.0		150.0	
SY52x37x60	56.0	5.33	24.0		27.0		30.0	
70	66.5	4.57	28.0		31.5		35.0	
80	76.5	4.00	32.0		35.0		40.0	
90	84.5	3.56	35.0		40.5		45.0	
100	92.5	3.20	40.0		45.0		50.0	
110	112.0	2.91	44.0		49.5		55.0	
125	112.0	2.56	50.0		56.3		62.0	
150	131.5	2.13	60.0	128 {1254.4}	67.5	144 {1411.2}	75.0	160 {1568}
175	151.0	1.83	70.0		78.8		87.5	
200	170.5	1.60	80.0		90.0		100.0	
225	190.0	1.42	90.0		101.3		112.5	
250	209.5	1.28	100.0		112.5		125.0	
275	229.0	1.16	110.0		123.8		137.5	
300	247.0	1.07	120.0		135.0		150.0	
350	302.0	0.91	140.0		157.5		175.0	

1N=0.102kgf