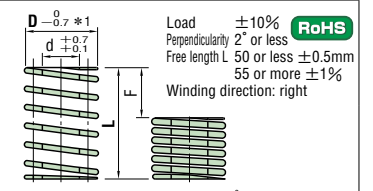
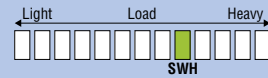


# COIL SPRINGS

—SWH—



\* 1 For D70, the D dimension tolerance is  $-0.10$ .

D	d	L	Spring constant			F=LX19.2%			F=LX21.6%			F=LX24%			Catalog No.	Base unit price
			N/mm (kgf/mm)	Fmm	Load N (kgf)	Fmm	Load N (kgf)	Fmm	Load N (kgf)	Fmm	Load N (kgf)	Fmm	Load N (kgf)	Fmm		
6	3	15	38.1	3.9	2.9		3.2		3.6	110	123	137	SWH6-15	1~19 pieces		
			20	28.5	2.9	3.8	4.3	4.8	20							
			25	22.8	2.3	4.8	5.4	6.0	25							
			30	19.0	1.9	5.8	6.5	7.2	30							
			35	16.3	1.7	6.7	7.6	8.4	35							
			40	14.3	1.5	7.7	8.6	9.6	40							
			45	12.7	1.3	8.6	9.7	10.8	45							
			50	11.4	1.2	9.6	10.8	12.0	50							
55	10.4	1.1	10.6	11.9	13.2	55										
60	9.5	1.0	11.5	13.0	14.4	60										
8	4	10	85.8	8.8	1.9	2.2	2.4	3.6	165	185	206	SWH8-10	1~19 pieces			
			15	57.2	5.8	2.9	3.2	4.3				15				
			20	42.9	4.4	3.8	4.3	4.8				20				
			25	34.3	3.5	4.8	5.4	6.0				25				
			30	28.6	2.9	5.8	6.5	7.2				30				
			35	24.5	2.5	6.7	7.5	8.4				35				
			40	21.5	2.2	7.7	8.6	9.6				40				
			45	19.1	1.9	8.6	9.7	10.8				45				
50	17.2	1.8	9.6	10.8	12.0	50										
55	15.6	1.6	10.6	11.8	13.2	55										
60	14.3	1.5	11.5	13.0	14.4	60										
65	13.2	1.3	12.5	14.0	15.6	65										
70	12.3	1.3	13.4	15.1	16.8	70										
75	11.4	1.2	14.4	16.2	18.0	75										
80	10.7	1.1	15.4	17.3	19.2	80										
10	5	10	123	12.5	1.9	2.2	2.4	3.6	235	265	294	SWH10-10	Quotation			
			15	81.7	8.3	2.9	3.2	4.3				15				
			20	61.3	6.3	3.8	4.3	4.8				20				
			25	49.0	5.0	4.8	5.4	6.0				25				
			30	40.8	4.2	5.8	6.5	7.2				30				
			35	35.0	3.6	6.7	7.5	8.4				35				
			40	30.6	3.1	7.7	8.6	9.6				40				
			45	27.2	2.8	8.6	9.7	10.8				45				
50	24.5	2.5	9.6	10.8	12.0	50										
55	22.3	2.3	10.6	11.8	13.2	55										
60	20.4	2.1	11.5	13.0	14.4	60										
65	18.8	1.9	12.5	14.0	15.6	65										
70	17.5	1.8	13.4	15.1	16.8	70										
75	16.3	1.7	14.4	16.2	18.0	75										
80	15.3	1.6	15.4	17.3	19.2	80										
90	13.6	1.4	17.3	19.4	21.6	90										
12	6	15	117	11.9	2.9	3.2	3.6	4.8	337	379	421	SWH12-15	1~19 pieces			
			20	87.7	8.9	3.8	4.3	4.8				20				
			25	70.2	7.2	4.8	5.4	6.0				25				
			30	58.5	6.0	5.8	6.5	7.2				30				
			35	50.1	5.1	6.7	7.5	8.4				35				
			40	43.9	4.5	7.7	8.6	9.6				40				
			45	39.0	4.0	8.6	9.7	10.8				45				
			50	35.1	3.6	9.6	10.8	12.0				50				
55	31.9	3.3	10.6	11.8	13.2	55										
60	29.2	3.0	11.5	13.0	14.4	60										
65	27.0	2.8	12.5	14.0	15.6	65										
70	25.1	2.6	13.4	15.1	16.8	70										
75	23.4	2.4	14.4	16.2	18.0	75										
80	21.9	2.2	15.4	17.3	19.2	80										
90	19.5	2.0	17.3	19.4	21.6	90										
14	7	20	120	12.3	3.8	4.3	4.8	6.0	462	520	578	SWH14-20	1~19 pieces			
			25	96.3	9.8	4.8	5.4	6.0				25				
			30	80.3	8.2	5.8	6.5	7.2				30				
			35	68.8	7.0	6.7	7.5	8.4				35				
			40	60.2	6.1	7.7	8.6	9.6				40				
			45	53.5	5.5	8.6	9.7	10.8				45				
			50	48.2	4.9	9.6	10.8	12.0				50				
			55	43.8	4.5	10.6	11.8	13.2				55				
60	40.1	4.1	11.5	13.0	14.4	60										
65	37.1	3.8	12.5	14.0	15.6	65										
70	34.4	3.5	13.4	15.1	16.8	70										
75	32.1	3.3	14.4	16.2	18.0	75										
80	30.1	3.1	15.4	17.3	19.2	80										
90	26.8	2.7	17.3	19.4	21.6	90										
100	24.1	2.5	19.2	21.6	24.0	100										

D	d	L	Spring constant			F=LX19.2%			F=LX21.6%			F=LX24%			Catalog No.	Base unit price
			N/mm (kgf/mm)	Fmm	Load N (kgf)	Fmm	Load N (kgf)	Fmm	Load N (kgf)	Fmm	Load N (kgf)	Fmm	Load N (kgf)	Fmm		
16	8	20	157	16.0	3.8	4.3	4.8	6.0	604	680	755	SWH16-20	1~19 pieces			
			25	126	12.8	4.8	5.4	6.0				25				
			30	105	10.7	5.8	6.5	7.2				30				
			35	89.9	9.2	6.7	7.5	8.4				35				
			40	78.6	8.0	7.7	8.6	9.6				40				
			45	69.9	7.1	8.6	9.7	10.8				45				
			50	62.9	6.4	9.6	10.8	12.0				50				
			55	57.2	5.8	10.6	11.8	13.2				55				
60	52.4	5.3	11.5	13.0	14.4	60										
65	48.4	4.9	12.5	14.0	15.6	65										
70	44.9	4.6	13.4	15.1	16.8	70										
75	41.9	4.3	14.4	16.2	18.0	75										
80	39.3	4.0	15.4	17.3	19.2	80										
90	35.0	3.6	17.3	19.4	21.6	90										
100	31.5	3.2	19.2	21.6	24.0	100										
18	9	20	198	20.2	3.8	4.3	4.8	6.0	761	856	951	SWH18-20	Quotation			
			25	159	16.2	4.8	5.4	6.0				25				
			30	132	13.5	5.8	6.5	7.2				30				
			35	113	11.5	6.7	7.5	8.4				35				
			40	99.1	10.1	7.7	8.6	9.6				40				
			45	88.1	9.0	8.6	9.7	10.8				45				
			50	79.3	8.1	9.6	10.8	12.0				50				
			55	72.0	7.3	10.6	11.8	13.2				55				
60	66.0	6.7	11.5	13.0	14.4	60										
65	61.0	6.2	12.5	14.0	15.6	65										
70	56.6	5.8	13.4	15.1	16.8	70										
75	52.8	5.4	14.4	16.2	18.0	75										
80	49.5	5.1	15.4	17.3	19.2	80										
90	44.0	4.5	17.3	19.4	21.6	90										
100	39.6	4.0	19.2	21.6	24.0	100										
20	10	20	245	25.0	3.8	4.3	4.8	6.0	941	1058	1176	SWH20-20	Quotation			
			25	196	20.0	4.8	5.4	6.0				25				
			30	163	16.7	5.8	6.5	7.2				30				
			35	140	14.3	6.7	7.5	8.4				35				
			40	123	12.5	7.7	8.6	9.6				40				
			45	109	11.1	8.6	9.7	10.8				45				
			50	98.0	10.0	9.6	10.8	12.0				50				
			55	89.1	9.1	10.6	11.8	13.2				55				
60	81.7	8.3	11.5	13.0	14.4	60										
65	75.4	7.7	12.5	14.0	15.6	65										
70	70.0	7.1	13.4	15.1	16.8	70										
75	65.3	6.7	14.4	16.2	18.0	75										
80	61.3	6.2	15.4	17.3	19.2	80										
90	54.4	5.6	17.3	19.4	21.6	90										
100	49.0	5.0	19.2	21.6	24.0	100										
125	39.2	4.0	24.0	27.0	30.0	125										
150	32.7	3.3	28.8	32.4	36.0	150										
22	11	20	237	24.2	4.8	5.4	6.0	7.2	1137	1279	1421	SWH22-20	1~19 pieces			
			30	197	20.1	5.8	6.5	7.2				30				
			35	169	17.3	6.7	7.6	8.4				35				
			40	148	15.1	7.7	8.6	9.6				40				
			45	132	13.4	8.6	9.7	10.8				45				
			50	118	12.1	9.6	10.8	12.0				50				
			55	108	11.0	10.6	11.9	13.2				55				
			60	98.7	10.1	11.5	13.0	14.4				60				
65	91.1	9.3	12.5	14.0	15.6	65										
70	84.6	8.6	13.4	15.1	16.8	70										
75	78.9	8.1	14.4	16.2	18.0	75										
80	74.0	7.5	15.4	17.3	19.2	80										
90	65.8	6.7	17.3	19.4	21.6	90										
100	59.2	6.0	19.2	21.6	24.0	100										
125	47.4	4.8	24.0	27.0	30.0	125										
150	39.5	4.0	28.8	32.4	36.0	150										

Order **Catalog No.** SWH 20-30

Days to Ship **Quotation**

Price **Quotation**

D	d	L	Spring constant			F=LX19.2%			F=LX21.6%			F=LX24%			Catalog No.	Base unit price
			N/mm (kgf/mm)	Fmm	Load N (kgf)	Fmm	Load N (kgf)	Fmm	Load N (kgf)	Fmm	Load N (kgf)	Fmm	Load N (kgf)	Fmm		
25	12.5	25	306	31.2	4.8	5.4	6.0	1466	1650	1833	SWH25-25	1~19 pieces				
			30	255	26.0	5.8	6.5				7.2		30			
			35	218	22.3	6.7	7.6				8.4		35			
			40	191	19.5	7.7	8.6				9.6		40			
			45	170	17.3	8.6	9.7				10.8		45			
			50	153	15.6	9.6	10.8				12.0		50			
			55	139	14.2	10.6	11.9				13.2		55			
			60	127	13.0	11.5	13.0				14.4		60			
65	118	12.0	12.5	14.0	15.6	65										
70	109	11.1	13.4	15.1	16.8	70										
75	102	10.4	14.4	16.2												