

### Maximum load calculate method:

Maximum load = compression × spring constant

$N = F_{mm} \times N/mm$  (kgf =  $N \times 0.101972$ )

Maximum load Deviation:  $\pm 10\%$

If  $D \leq 70$ , Tolerance  $D: \begin{smallmatrix} +0 \\ -1 \end{smallmatrix}$

If  $D \leq 50$ , Tolerance  $L \pm 0.5$

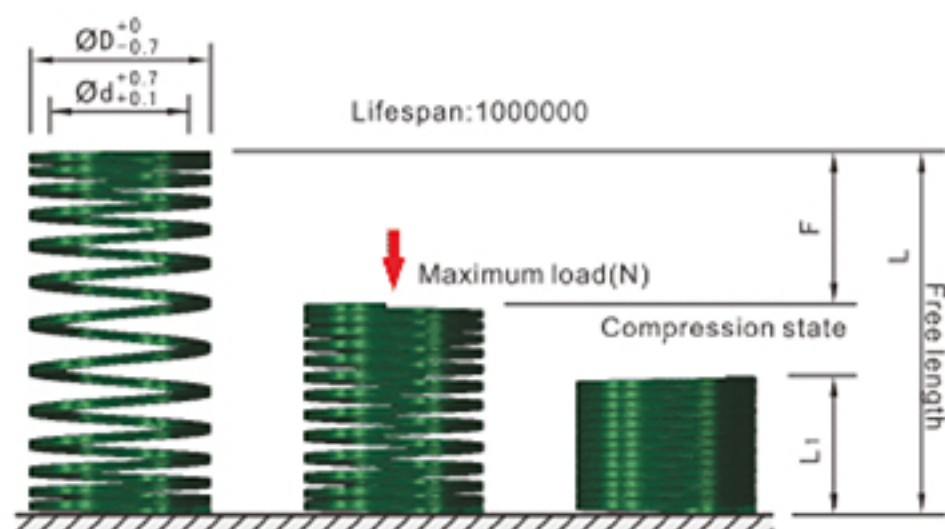
If  $D \geq 55$ , Tolerance  $L \pm 1\% \times L$

Order DSWH-D-L

D	L	d			F=L×19.2%		F=L×21.6%		F=L×24%		@ ¥/P
			N/mm	(mm)	Fmm	N	Fmm	N	Fmm	N	
10	10	5	122.6	7.4	1.9	235.4	2.2	264.8	2.4	294.2	
	15		81.4	11	2.9		3.2		3.6		
	20		61.8	14.4	3.8		4.3		4.8		
	25		49	18	4.8		5.4		6		
	30		41.2	21.6	5.8		6.5		7.2		
	35		35.3	25.2	6.7		7.5		8.4		
	40		30.4	28.8	7.7		8.6		9.6		
	45		27.5	32.4	8.6		9.7		10.8		
	50		24.5	36	9.6		10.8		12		
	55		22.6	39.6	10.6		11.8		13.2		
	60		20.6	43.2	11.5		13		14.4		
	65		18.6	46.8	12.5		14		15.6		
	70		17.7	50.4	13.4		15.1		16.8		
	75		16.7	54	14.4		16.2		18		
	80		15.7	57.6	15.4		17.3		19.2		
90	13.6	64.8	17.3	19.4	21.6						
12	15	6	117.1	11	2.9	333.4	3.2	372.7	3.6	421.7	
	20		88.3	14.4	3.8		4.3		4.8		
	25		70.6	18	4.8		5.4		6		
	30		58.8	21.6	5.8		6.5		7.2		
	35		50	25.2	6.7		7.5		8.4		
	40		44.1	28.8	7.7		8.6		9.6		
	45		39.2	32.4	8.6		9.7		10.8		
	50		35.3	36	9.6		10.8		12		
	55		32.4	39.6	10.6		11.8		13.2		
	60		29.4	43.2	11.5		13		14.4		
	65		26.5	46.8	12.5		14		15.6		
	70		24.5	50.4	13.4		15.1		16.8		
	75		23.5	54	14.4		16.2		18		
	80		21.6	57.6	15.4		17.3		19.2		
	90		19.5	64.8	17.3		19.4		21.6		
14	20	7	120.5	14.7	3.8	460.9	4.3	519.8	4.8	578.6	
	25		96.1	18	4.8		5.4		6		
	30		80.4	21.6	5.8		6.5		7.2		
	35		68.6	25.2	6.7		7.5		8.4		
	40		59.8	28.8	7.7		8.6		9.6		
	45		53.9	32.4	8.6		9.7		10.8		
	50		48.1	36	9.6		10.8		12		
	55		44.1	39.6	10.6		11.8		13.2		
	60		40.2	43.2	11.5		13		14.4		



DSWH

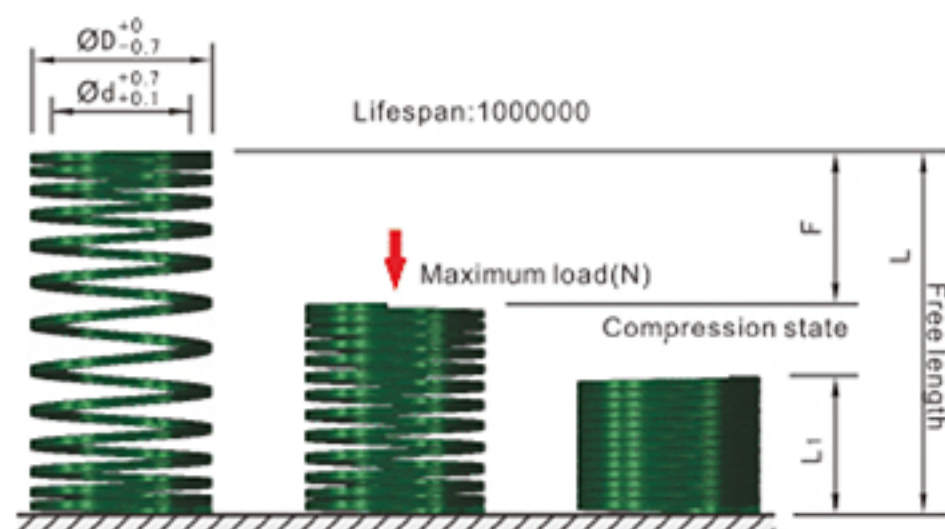


Order DSWH-D-L

D	L	d			F=L×19.2%		F=L×21.6%		F=L×24%		@ ¥/P
			N/mm	(mm)	Fmm	N	Fmm	N	Fmm	N	
14	65	7	37.3	46.8	12.5	460.9	14	519.8	15.6	578.6	
	70		34.3	50.4	13.4		15.1		16.8		
	75		32.4	54	14.4		16.2		18		
	80		30.4	57.6	15.4		17.3		19.2		
	90		26.5	64.8	17.3		19.4		21.6		
	100		24.1	72	19.2		21.6		24		
16	20	8	157.3	14.7	3.8	608	4.3	676.7	4.8	755.1	
	25		125.5	18	4.8		5.4		6		
	30		104.9	21.6	5.8		6.5		7.2		
	35		90.2	25.2	6.7		7.5		8.4		
	40		78.5	28.8	7.7		8.6		9.6		
	45		69.6	32.4	8.6		9.7		10.8		
	50		62.8	36	9.6		10.8		12		
	55		56.9	39.6	10.6		11.8		13.2		
	60		52	43.2	11.5		13		14.4		
	65		48.1	46.8	12.5		14		15.6		
	70		45.1	50.4	13.4		15.1		16.8		
	75		42.2	54	14.4		16.2		18		
18	80	9	39.2	57.6	15.4	764.9	17.3	853.2	19.2	951.2	
	90		35.3	64.8	17.3		19.4		21.6		
	100		31.4	72	19.2		21.6		24		
	20		198.2	14.7	3.8		4.3		4.8		
	25		158.9	18	4.8		5.4		6		
	30		132.4	21.6	5.8		6.5		7.2		
	35		112.8	25.2	6.7		7.5		8.4		
	40		99	28.8	7.7		8.6		9.6		
	45		88.3	32.4	8.6		9.7		10.8		
	50		79.4	36	9.6		10.8		12		
	55		71.6	39.6	10.6		11.8		13.2		
	60		65.7	43.2	11.5		13		14.4		
20	65	10	60.8	46.8	12.5	941.4	14	1059.1	15.6	1176.8	
	70		56.9	50.4	13.4		15.1		16.8		
	75		53	54	14.4		16.2		18		
	80		50	57.6	15.4		17.3		19.2		
	90		44.2	64.8	17.3		19.4		21.6		
	100		39.2	72	19.2		21.6		24		
	20		245.2	14.7	3.8		4.3		4.8		
	25		196.1	18	4.8		5.4		6		
	30		163.8	21.6	5.8		6.5		7.2		
	35		140.2	25.2	6.7		7.5		8.4		
	40		122.6	28.8	7.7		8.6		9.6		
	45		108.9	32.4	8.6		9.7		10.8		
	50		98.1	36	9.6		10.8		12		
	55		89.2	39.6	10.6		11.8		13.2		
	60		81.4	43.2	11.5		13		14.4		
22	65	11	75.5	46.8	12.5	1137.6	14	1274.9	15.6	1422	
	70		69.6	50.4	13.4		15.1		16.8		
	75		65.7	54	14.4		16.2		18		
	80		61.8	57.6	15.4		17.3		19.2		
	90		54.9	64.8	17.3		19.4		21.6		
	100		49	72	19.2		21.6		24		
	125		39.2	90	24		27		30		
	150		32.4	108	28.8		32.4		36		
	25		237.2	18	4.8		5.4		6		
	30		197.1	21.6	5.8		6.5		7.2		
	35		169.7	25.2	6.7		7.5		8.4		
	40		148	28.8	7.7		8.6		9.6		
	45		131.4	32.4	8.6		9.7		10.8		
	50		118.7	36	9.6		10.8		12		





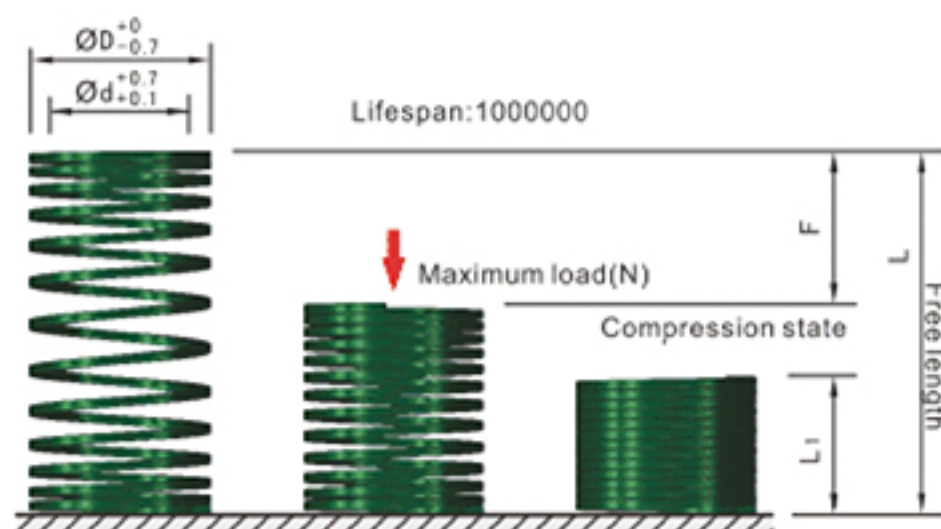


Order DSWH-D-L

D	L	d	F=L×19.2%		F=L×21.6%		F=L×24%		@ ¥/P
			N/mm	(mm)	Fmm	N	Fmm	N	
22	55	11	107.9	39.6	10.6	1137.6	11.9	13.2	1422
	60		99	43.2	11.5		13	14.4	
	65		91.2	46.8	12.5		14	15.6	
	70		84.3	50.4	13.4		15.1	16.8	
	75		79.4	54	14.4		16.2	18	
	80		74.5	57.6	15.4		17.3	19.2	
	90		65.7	64.8	17.3		19.4	21.6	
	100		58.9	72	19.2		21.6	24	
	125		47.1	90	24		27	30	
	150		39.2	108	28.8		32.4	36	
25	25	12.5	306	18	4.8	1471	5.4	6	1833.8
	30		255	21.6	5.8		6.5	7.2	
	35		218.7	25.2	6.7		7.5	8.4	
	40		191.2	28.8	7.7		8.6	9.6	
	45		169.7	32.4	8.6		9.7	10.8	
	50		153	36	9.6		10.8	12	
	55		139.3	39.6	10.6		11.9	13.2	
	60		127.5	43.2	11.5		13	14.4	
	65		117.7	46.8	12.5		14	15.6	
	70		108.9	50.4	13.4		15.1	16.8	
	75		102	54	14.4		16.2	18	
	80		95.1	57.6	15.4		17.3	19.2	
	90		85.3	64.8	17.3		19.4	21.6	
	100		76.5	72	19.2		21.6	24	
	125		60.8	90	24		27	30	
27	150		51	108	28.8		32.4	36	
	175		44.1	126	33.6		37.8	42	
	25	13.5	357.9	18	4.8	1716.2	5.4	6	2147.7
	30		298.1	21.6	5.8		6.5	7.2	
	35		255.9	25.2	6.7		7.5	8.4	
	40		223.6	28.8	7.7		8.6	9.6	
	45		199.1	32.4	8.6		9.7	10.8	
	50		179.5	36	9.6		10.8	12	
	55		162.8	39.6	10.6		11.9	13.2	
	60		149.1	43.2	11.5		13	14.4	
	65		137.3	46.8	12.5		14	15.6	
	70		127.5	50.4	13.4		15.1	16.8	
	75		119.6	54	14.4		16.2	18	
	80		111.8	57.6	15.4		17.3	19.2	
	90		99	64.8	17.3		19.4	21.6	
	100		89.2	72	19.2		21.6	24	
	125		71.6	90	24		27	30	
30	150		59.8	108	28.8		32.4	36	
	175		51	126	33.6		37.8	42	
	25	15	441.3	18	4.8	2118.2	5.4	6	2647.8
	30		367.7	21.6	5.8		6.5	7.2	
	35		314.8	25.2	6.7		7.5	8.4	
	40		257.6	28.8	7.7		8.6	9.6	
	45		245.2	32.4	8.6		9.7	10.8	
	50		220.6	36	9.6		10.8	12	
	55		201	39.6	10.6		11.9	13.2	
	60		184.4	43.2	11.5		13	14.4	
	65		169.7	46.8	12.5		14	15.6	
	70		157.9	50.4	13.4		15.1	16.8	
	75		147.1	54	14.4		16.2	18	
	80		138.3	57.6	15.4		17.3	19.2	
	90		122.6	64.8	17.3		19.4	21.6	
	100		110.8	72	19.2		21.6	24	
	125		88.3	90	24		27	30	



DSWH

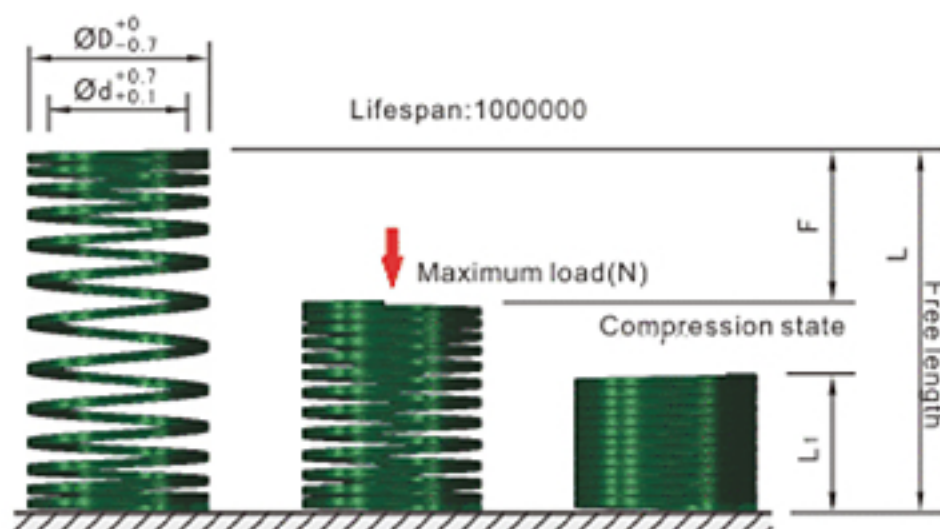


Order DSWH-D-L

D	L	d			F=L×19.2%		F=L×21.6%		F=L×24%		@ V/P
			N/mm	(mm)	Fmm	N	Fmm	N	Fmm	N	
30	150	15	73.5	108	28.8	2118.2	32.4	2383	36	2647.8	
	175		62.8	126	33.6		37.8		42		
	200		54.9	144	38.4		43.2		48		
35	40	17.5	374.6	28.8	7.7	2873.3	8.6	3236.2	9.6	3599	
	45		333.4	32.4	8.6		9.7		10.8		
	50		300.1	36	9.6		10.8		12		
	55		272.6	39.6	10.6		11.9		13.2		
	60		250.1	43.2	11.5		13		14.4		
	65		230.5	46.8	12.5		14		15.6		
	70		213.8	50.4	13.4		15.1		16.8		
	75		200.1	54	14.4		16.2		18		
	80		187.3	57.6	15.4		17.3		19.2		
	90		166.7	64.8	17.3		19.4		21.6		
	100		150	72	19.2		21.6		24		
	125		119.6	90	24		27		30		
40	150	20	100	108	28.8	3765.8	32.4	3765.8	36	4707.2	
	175		85.3	126	33.6		37.8		42		
	200		74.5	144	38.4		43.2		48		
	40		490.3	28.8	7.7		8.6		9.6		
	45		437.8	32.4	8.6		9.7		10.8		
	50		392.3	36	9.6		10.8		12		
	55		355.3	39.6	10.6		11.9		13.2		
	60		326.6	43.2	11.5		13		14.4		
	65		301.3	46.8	12.5		14		15.6		
	70		280.5	50.4	13.4		15.1		16.8		
	75		261.5	54	14.4		16.2		18		
	80		245.2	57.6	15.4		17.3		19.2		
50	90	25	217.7	64.8	17.3	5884	19.4	5884	21.6	7355	
	100		196.1	72	19.2		21.6		24		
	125		156.9	90	24		27		30		
	150		130.4	108	28.8		32.4		36		
	175		111.8	126	33.6		37.8		42		
	200		98.1	144	38.4		43.2		48		
	225		87.2	162	43.2		48.6		54		
	250		78.5	180	48		54		60		
	275		71.3	198	52.8		59.4		66		
	300		65.4	220.2	57.6		64.8		72		
	50	30	612.9	36	9.6	8472.9	10.8	9541.9	12	10591.2	
	55		557.2	39.6	10.6		11.9		13.2		
	60		510.9	43.2	11.5		13		14.4		
	65		471.5	46.8	12.5		14		15.6		
	70		437.4	50.4	13.4		15.1		16.8		
	75		408.6	54	14.4		16.2		18		
	80		383.4	57.6	15.4		17.3		19.2		
	90		340.3	64.8	17.3		19.4		21.6		
	100		306.9	72	19.2		21.6		24		
	125		245.2	90	24		27		30		
	150		204	108	28.8		32.4		36		
	175		175.5	126	33.6		37.8		42		
60	200	30	153	144	38.4		43.2		48		
	225		136.2	162	43.2		48.6		54		
	250		122.6	180	48		54		60		
	275		111.4	198	52.8		59.4		66		
	300		102	216	57.6		64.8		72		
	350		87.6	256.9	67.2		75.6		84		
	60		735.5	43.2	11.5		13		14.4		
	70		630.6	50.4	13.4		15.1		16.8		
	80		552.1	57.6	15.4		17.3		19.2		
	90		490.3	64.8	17.3		19.4		21.6		







Order DSWH-D-L

D	L	d			F=L×19.2%		F=L×21.6%		F=L×24%		@ ¥ /P
			N/mm	(mm)	Fmm	N	Fmm	N	Fmm	N	
60	100	30	441.3	72	19.2	8472.9	21.6	9541.9	24	10591.2	
	125		353	90	24		27		30		
	150		294.2	108	28.8		32.4		36		
	175		252	126	33.6		37.8		42		
	200		220.6	144	38.4		43.2		48		
	250		176.5	180	48		54		60		
	300		147.1	216	57.6		64.8		72		
	350		126.1	256.9	67.2		75.6		84		
70	70	38.5	747.2	51.4	13.4	10199	15.1	11473	16.8	12749	
	80		653.8	58.7	15.4		17.3		19.2		
	90		581.1	66.1	17.3		19.4		21.6		
	100		531.2	72	19.2		21.6		24		
	125		425	90	24		27		30		
	150		354.1	108	28.8		32.4		36		
	175		303.5	126	33.6		37.8		42		
	200		265.6	144	38.4		43.2		48		
	250		212.5	180	48		54		60		
	300		177.1	216	57.6		64.8		72		
	350		151.8	252	57.6		75.6		84		

