

# 重荷重 TH HEAVY LOADS

## COIL SPRING

内径 (mm)	ばね定数		自由長×19.2% 100万回		自由長×21.6% 50万回		自由長×24% 30万回		Catalog No.	外径 D (mm)	自由長 L (mm)
	N/mm(kgf/mm)	たわみ (mm)	荷重 N(kgf)	たわみ (mm)	荷重 N(kgf)	たわみ (mm)	荷重 N(kgf)				
	86.25	{8.80}	1.9		2.2		2.4				10
	57.50	{5.86}	2.9		3.2		3.6				15
	43.13	{4.40}	3.8		4.3		4.8				20
	34.50	{3.52}	4.8		5.4		6.0				25
	28.75	{2.93}	5.8		6.5		7.2				30
	24.64	{2.51}	6.7		7.6		8.4				35
4	21.56	{2.20}	7.7		8.6		9.6				40
	19.17	{1.95}	8.6	167	9.7	186	10.8	206		8	45
	17.25	{1.76}	9.6	{17.0}	10.8	{19.0}	12.0	{21.0}			50
	15.68	{1.60}	10.6		11.9		13.2				55
	14.38	{1.47}	11.5		13.0		14.4				60
	13.27	{1.35}	12.5		14.0		15.6				65
	12.32	{1.26}	13.4		15.1		16.8				70
	11.50	{1.17}	14.4		16.2		18.0				75
	10.78	{1.10}	15.4		17.3		19.2				80
	61.34	{6.26}	3.8		4.3		4.8				20
	49.07	{5.00}	4.8		5.4		6.0				25
	40.90	{4.17}	5.8		6.5		7.2				30
35.05	{3.57}	6.7		7.6		8.4				35	
30.67	{3.13}	7.7		8.6		9.6				40	
27.26	{2.78}	8.6		9.7		10.8				45	
5	24.54	{2.50}	9.6	235	10.8	265	12.0	294	TH	10	50
	22.31	{2.27}	10.6	{24.0}	11.9	{27.0}	13.2	{30.0}			55
	20.45	{2.09}	11.5		13.0		14.4				60
	18.87	{1.92}	12.5		14.0		15.6				65
	17.53	{1.79}	13.4		15.1		16.8				70
	16.36	{1.67}	14.4		16.2		18.0				75
	15.34	{1.56}	15.4		17.3		19.2				80
	13.63	{1.39}	17.3		19.4		21.6				90
	86.34	{8.80}	3.8		4.3		4.8				20
	69.07	{7.04}	4.8		5.4		6.0				25
	57.56	{5.87}	5.8		6.5		7.2				30
	49.34	{5.03}	6.7		7.6		8.4				35
43.17	{4.40}	7.7		8.6		9.6				40	
38.37	{3.91}	8.6		9.7		10.8				45	
6	34.54	{3.52}	9.6	333	10.8	373	12.0	422		12	50
	31.40	{3.20}	10.6	{34.0}	11.9	{38.0}	13.2	{43.0}			55
	28.78	{2.93}	11.5		13.0		14.4				60
	26.57	{2.71}	12.5		14.0		15.6				65
	24.67	{2.52}	13.4		15.1		16.8				70
	23.02	{2.35}	14.4		16.2		18.0				75
	21.59	{2.20}	15.4		17.3		19.2				80
	19.19	{1.96}	17.3		19.4		21.6				90

自由長×24%を超えるたわみでは使用しないでください。 荷重(N) = ばね定数(N/mm) × たわみ(mm)

Order

内径 (mm)	ばね定数		自由長×19.2% 100万回		自由長×21.6% 50万回		自由長×24% 30万回		Catalog No.	外径 D (mm)	自由長 L (mm)
	N/mm(kgf/mm)	たわみ (mm)	荷重 N(kgf)	たわみ (mm)	荷重 N(kgf)	たわみ (mm)	荷重 N(kgf)				
	96.30	{9.82}	4.8		5.4		6.0				25
	80.25	{8.18}	5.8		6.5		7.2				30
	68.78	{7.01}	6.7		7.6		8.4				35
	60.19	{6.14}	7.7		8.6		9.6				40
	53.50	{5.46}	8.6		9.7		10.8				45
7	48.15	{4.91}	9.6		10.8		12.0				50
	43.77	{4.46}	10.6	461	11.9	520	13.2	579		14	55
	40.12	{4.09}	11.5	{47.0}	13.0	{53.0}	14.4	{59.0}			60
	37.04	{3.78}	12.5		14.0		15.6				65
	34.39	{3.51}	13.4		15.1		16.8				70
	32.10	{3.27}	14.4		16.2		18.0				75
	30.09	{3.07}	15.4		17.3		19.2				80
	26.75	{2.73}	17.3		19.4		21.6				90
	24.07	{2.45}	19.2		21.6		24.0				100
	125.37	{12.78}	4.8		5.4		6.0				25
	104.48	{10.65}	5.8		6.5		7.2				30
	89.55	{9.13}	6.7		7.6		8.4				35
78.36	{7.99}	7.7		8.6		9.6				40	
69.65	{7.10}	8.6		9.7		10.8				45	
62.69	{6.39}	9.6		10.8		12.0				50	
56.99	{5.81}	10.6		11.9		13.2				55	
8	52.24	{5.33}	11.5	608	13.0	677	14.4	755	TH	16	60
	48.22	{4.92}	12.5	{62.0}	14.0	{69.0}	15.6	{77.0}			65
	44.78	{4.57}	13.4		15.1		16.8				70
	41.79	{4.26}	14.4		16.2		18.0				75
	39.18	{4.00}	15.4		17.3		19.2				80
	34.83	{3.55}	17.3		19.4		21.6				90
	31.34	{3.20}	19.2		21.6		24.0				100
	25.07	{2.56}	24.0		27.0		30.0				125
	157.96	{16.11}	4.8		5.4		6.0				25
	131.64	{13.42}	5.8		6.5		7.2				30
	112.83	{11.51}	6.7		7.6		8.4				35
	98.73	{10.07}	7.7		8.6		9.6				40
87.76	{8.95}	8.6		9.7		10.8				45	
78.98	{8.05}	9.6		10.8		12.0				50	
9	71.80	{7.32}	10.6	765	11.9	853	13.2	951		18	55
	65.82	{6.71}	11.5	{78.0}	13.0	{87.0}	14.4	{97.0}			60
	60.75	{6.20}	12.5		14.0		15.6				65
	56.42	{5.75}	13.4		15.1		16.8				70
	52.65	{5.37}	14.4		16.2		18.0				75
	49.36	{5.03}	15.4		17.3		19.2				80
	43.88	{4.47}	17.3		19.4		21.6				90
	39.49	{4.03}	19.2		21.6		24.0				100
	31.59	{3.22}	24.0		27.0		30.0				125

自由長×24%を超えるたわみでは使用しないでください。 荷重(N) = ばね定数(N/mm) × たわみ(mm)

取組環境に注意

# 重荷重 TH HEAVY LOADS

## COIL SPRING

内径 (mm)	ばね定数 N/mm(kgf/mm)		自由長×19.2% 100万回		自由長×21.6% 50万回		自由長×24% 30万回		Catalog No.	外径 D (mm)	自由長 L (mm)
			たわみ (mm)	荷重 N(kgf)	たわみ (mm)	荷重 N(kgf)	たわみ (mm)	荷重 N(kgf)			
	196.11	{20.00}	4.8		5.4		6.0				25
	163.43	{16.66}	5.8		6.5		7.2				30
	140.08	{14.28}	6.7		7.6		8.4				35
	122.57	{12.50}	7.7		8.6		9.6				40
	108.95	{11.11}	8.6		9.7		10.8				45
	98.06	{10.00}	9.6		10.8		12.0				50
	89.14	{9.09}	10.6		11.9		13.2	1,177			55
10	81.71	{8.33}	11.5	{96.0}	13.0	{108.0}	14.4	{120.0}	20		60
	75.43	{7.69}	12.5		14.0		15.6				65
	70.04	{7.14}	13.4		15.1		16.8				70
	65.37	{6.67}	14.4		16.2		18.0				75
	61.28	{6.25}	15.4		17.3		19.2				80
	54.48	{5.55}	17.3		19.4		21.6				90
	49.03	{5.00}	19.2		21.6		24.0				100
	39.22	{4.00}	24.0		27.0		30.0				125
	32.69	{3.33}	28.8		32.4		36.0		TH		150
	236.11	{24.08}	4.8		5.4		6.0				25
	196.76	{20.06}	5.8		6.5		7.2				30
	168.65	{17.20}	6.7		7.6		8.4				35
	147.57	{15.05}	7.7		8.6		9.6				40
	131.17	{13.38}	8.6		9.7		10.8				45
	118.06	{12.04}	9.6		10.8		12.0	1,422			50
11	107.32	{10.94}	10.6	{116.0}	11.9	{130.0}	13.2	{145.0}	22		55
	98.38	{10.03}	11.5		13.0		14.4				60
	90.81	{9.26}	12.5		14.0		15.6				65
	84.33	{8.60}	13.4		15.1		16.8				70
	78.70	{8.03}	14.4		16.2		18.0				75
	73.78	{7.52}	15.4		17.3		19.2				80
	65.59	{6.69}	17.3		19.4		21.6				90
	59.03	{6.02}	19.2		21.6		24.0				100
	47.22	{4.82}	24.0		27.0		30.0				125
	39.35	{4.01}	28.8		32.4		36.0				150

自由長×24%を超えるたわみでは使用しないでください。 荷重(N) = ばね定数(N/mm) × たわみ(mm)

Order   -   
**TH 20 - 25**

内径 (mm)	ばね定数 N/mm(kgf/mm)		自由長×19.2% 100万回		自由長×21.6% 50万回		自由長×24% 30万回		Catalog No.	外径 D (mm)	自由長 L (mm)
			たわみ (mm)	荷重 N(kgf)	たわみ (mm)	荷重 N(kgf)	たわみ (mm)	荷重 N(kgf)			
	306.85	{31.29}	4.8		5.4		6.0				25
	255.71	{26.08}	5.8		6.5		7.2				30
	219.18	{22.35}	6.7		7.6		8.4				35
	191.78	{19.56}	7.7		8.6		9.6				40
	170.47	{17.38}	8.6		9.7		10.8				45
	153.43	{15.65}	9.6		10.8		12.0				50
	139.48	{14.22}	10.6		11.9		13.2				55
	127.85	{13.04}	11.5		13.0		14.4	1,834			60
12.5	118.02	{12.03}	12.5	{150.0}	14.0	{169.0}	15.6	{187.0}	25		65
	109.59	{11.18}	13.4		15.1		16.8				70
	102.28	{10.43}	14.4		16.2		18.0				75
	95.89	{9.78}	15.4		17.3		19.2				80
	85.24	{8.69}	17.3		19.4		21.6				90
	76.71	{7.82}	19.2		21.6		24.0				100
	61.37	{6.26}	24.0		27.0		30.0				125
	51.14	{5.22}	28.8		32.4		36.0				150
	43.84	{4.47}	33.6		37.8		42.0				175
	38.36	{3.91}	38.4		43.2		48.0		TH		200
	357.78	{36.48}	4.8		5.4		6.0				25
	298.15	{30.40}	5.8		6.5		7.2				30
	255.56	{26.06}	6.7		7.6		8.4				35
	223.61	{22.80}	7.7		8.6		9.6				40
	198.77	{20.27}	8.6		9.7		10.8				45
	178.89	{18.24}	9.6		10.8		12.0				50
	162.63	{16.58}	10.6		11.9		13.2				55
	149.07	{15.20}	11.5		13.0		14.4	2,150			60
13.5	137.61	{14.03}	12.5	{175.0}	14.0	{197.0}	15.6	{219.2}	27		65
	127.78	{13.03}	13.4		15.1		16.8				70
	119.26	{12.16}	14.4		16.2		18.0				75
	111.81	{11.40}	15.4		17.3		19.2				80
	99.38	{10.13}	17.3		19.4		21.6				90
	89.44	{9.12}	19.2		21.6		24.0				100
	71.56	{7.30}	24.0		27.0		30.0				125
	59.63	{6.08}	28.8		32.4		36.0				150
	51.11	{5.21}	33.6		37.8		42.0				175
	44.72	{4.56}	38.4		43.2		48.0				200

自由長×24%を超えるたわみでは使用しないでください。 荷重(N) = ばね定数(N/mm) × たわみ(mm)

圧縮ばね

# 重荷重 TH HEAVY LOADS

## COIL SPRING

内径 (mm)	ばね定数		自由長×19.2% 100万回		自由長×21.6% 50万回		自由長×24% 30万回		Catalog No.	外径 D (mm)	自由長 L (mm)
	N/mm(kgf/mm)	たわみ (mm)	荷重 N(kgf)	たわみ (mm)	荷重 N(kgf)	たわみ (mm)	荷重 N(kgf)				
	440.74	{44.94}	4.8		5.4		6.0				25
	367.28	{37.45}	5.8		6.5		7.2				30
	314.81	{32.10}	6.7		7.6		8.4				35
	275.46	{28.09}	7.7		8.6		9.6				40
	244.86	{24.97}	8.6		9.7		10.8				45
	220.37	{22.47}	9.6		10.8		12.0				50
	200.34	{20.43}	10.6		11.9		13.2				55
15	183.64	{18.73}	11.5	2,120 {216.2}	13.0	2,380 {242.7}	14.4	2,648 {270.0}			60
	169.52	{17.29}	12.5		14.0		15.6		16.8	30	65
	157.41	{16.05}	13.4		15.1		16.8				70
	146.91	{14.98}	14.4		16.2		18.0				75
	137.73	{14.04}	15.4		17.3		19.2				80
	122.43	{12.48}	17.3		19.4		21.6				90
	110.19	{11.24}	19.2		21.6		24.0				100
	88.15	{8.99}	24.0		27.0		30.0				125
	73.46	{7.49}	28.8		32.4		36.0				150
	62.96	{6.42}	33.6		37.8		42.0				175
	55.09	{5.62}	38.4	43.2	48.0			200			
	375.00	{38.24}	7.7		8.6		9.6			40	
	333.33	{33.99}	8.6		9.7		10.8			45	
	300.00	{30.59}	9.6		10.8		12.0			50	
	272.73	{27.81}	10.6		11.9		13.2			55	
	250.00	{25.49}	11.5		13.0		14.4			60	
	230.77	{23.53}	12.5		14.0		15.6			65	
17.5	214.29	{21.85}	13.4	2,870 {292.7}	15.1	3,240 {330.4}	16.8	3,600 {367.1}			70
	200.00	{20.39}	14.4		16.2		18.0		19.2	35	75
	187.50	{19.12}	15.4		17.3		19.2				80
	166.67	{17.00}	17.3		19.4		21.6				90
	150.00	{15.30}	19.2		21.6		24.0				100
	120.00	{12.24}	24.0		27.0		30.0				125
	100.00	{10.20}	28.8		32.4		36.0				150
	85.71	{8.74}	33.6		37.8		42.0				175
	75.00	{7.65}	38.4		43.2		48.0				200

▲ 自由長×24%を超えるたわみでは使用しないでください。 荷重(N) = ばね定数(N/mm) × たわみ(mm)

Order   -   
**TH 30 - 25**

内径 (mm)	ばね定数		自由長×19.2% 100万回		自由長×21.6% 50万回		自由長×24% 30万回		Catalog No.	外径 D (mm)	自由長 L (mm)
	N/mm(kgf/mm)	たわみ (mm)	荷重 N(kgf)	たわみ (mm)	荷重 N(kgf)	たわみ (mm)	荷重 N(kgf)				
	490.74	{50.04}	7.7		8.6		9.6				40
	436.21	{44.48}	8.6		9.7		10.8				45
	392.59	{40.03}	9.6		10.8		12.0				50
	356.90	{36.39}	10.6		11.9		13.2				55
	327.16	{33.36}	11.5		13.0		14.4				60
	301.99	{30.79}	12.5		14.0		15.6				65
	280.42	{28.60}	13.4		15.1		16.8				70
	261.73	{26.69}	14.4		16.2		18.0				75
20	245.37	{25.02}	15.4	3,770 {384.4}	17.3	4,240 {432.4}	19.2	4,710 {480.3}			80
	218.11	{22.24}	17.3		19.4		21.6		24.0	40	90
	196.30	{20.02}	19.2		21.6		24.0				100
	157.04	{16.01}	24.0		27.0		30.0				125
	130.86	{13.34}	28.8		32.4		36.0				150
	112.17	{11.44}	33.6		37.8		42.0				175
	98.15	{10.01}	38.4		43.2		48.0				200
	87.24	{8.90}	43.2		48.6		54.0				225
	78.52	{8.01}	48.0		54.0		60.0				250
	71.38	{7.28}	52.8		59.4		66.0				275
	65.43	{6.67}	57.6	64.8	72.0			300			
	612.96	{62.50}	9.6		10.8		12.0			50	
	557.24	{56.82}	10.6		11.9		13.2			55	
	510.80	{52.09}	11.5		13.0		14.4			60	
	471.51	{48.08}	12.5		14.0		15.6			65	
	437.83	{44.65}	13.4		15.1		16.8			70	
	408.64	{41.67}	14.4		16.2		18.0			75	
	383.10	{39.07}	15.4		17.3		19.2			80	
25	340.53	{34.72}	17.3	5,880 {599.6}	19.4	6,620 {675.1}	21.6	7,360 {750.5}			90
	306.48	{31.25}	19.2		21.6		24.0		27.0	50	100
	245.19	{25.00}	24.0		27.0		30.0				125
	204.32	{20.83}	28.8		32.4		36.0				150
	175.13	{17.86}	33.6		37.8		42.0				175
	153.24	{15.63}	38.4		43.2		48.0				200
	136.21	{13.89}	43.2		48.6		54.0				225
	122.59	{12.50}	48.0		54.0		60.0				250
	111.45	{11.36}	52.8		59.4		66.0				275
	102.16	{10.42}	57.6		64.8		72.0				300
87.57	{8.93}	67.2	75.6	84.0			350				

▲ 自由長×24%を超えるたわみでは使用しないでください。 荷重(N) = ばね定数(N/mm) × たわみ(mm)

圧入部は必ず保護してください

# 重荷重 TH HEAVY LOADS

## COIL SPRING

内径 (mm)	ばね定数		自由長×19.2% 100万回		自由長×21.6% 50万回		自由長×24% 30万回		Catalog No.	外径 D (mm)	自由長 L (mm)
	N/mm(kgf/mm)	たわみ (mm)	荷重 N(kgf)	たわみ (mm)	荷重 N(kgf)	たわみ (mm)	荷重 N(kgf)				
	736.11	{75.06}	11.5		13.0		14.4				60
	630.95	{64.34}	13.4		15.1		16.8				70
	552.08	{56.30}	15.4		17.3		19.2				80
	490.74	{50.04}	17.3		19.4		21.6				90
	441.67	{45.04}	19.2		21.6		24.0				100
30	353.33	{36.03}	24.0	8,470 {863.7}	27.0	9,540 {972.8}	30.0	10,590 {1080}		60	125
	294.44	{30.02}	28.8		32.4		36.0		150		
	252.38	{25.74}	33.6		37.8		42.0		175		
	220.83	{22.52}	38.4		43.2		48.0		200		
	196.30	{20.02}	43.2		48.6		54.0		225		
	176.67	{18.01}	48.0		54.0		60.0		250		
	160.61	{16.38}	52.8		59.4		66.0		275		
	147.22	{15.01}	57.6	64.8	72.0	300					
	126.19	{12.87}	67.2	75.6	84.0	350					
	773.81	{78.91}	13.4		15.1		16.8				70
	677.08	{69.04}	15.4		17.3		19.2				80
	601.85	{61.37}	17.3		19.4		21.6				90
	541.67	{55.23}	19.2		21.6		24.0				100
	433.33	{44.19}	24.0		27.0		30.0				125
38.5	361.11	{36.82}	28.8	10,400 {1061}	32.4	11,700 {1193}	36.0	13,000 {1326}		70	150
	309.52	{31.56}	33.6		37.8		42.0		175		
	270.83	{27.62}	38.4		43.2		48.0		200		
	240.74	{24.55}	43.2		48.6		54.0		225		
	216.67	{22.09}	48.0		54.0		60.0		250		
	196.97	{20.09}	52.8		59.4		66.0		275		
	180.56	{18.41}	57.6		64.8		72.0		300		
	154.76	{15.78}	67.2	75.6	84.0	350					

⚠ 自由長×24%を超えるたわみでは使用しないでください。 荷重(N) = ばね定数(N/mm) × たわみ(mm)



Order

Catalog No.    D    -    L  
**TH            60    -    60**