

SG



種類	使用回数			外径	内径	自由長	荷重	直角度
	100万回	50万回	30万回					
SG	自由長×16%	自由長×18%	自由長×20%	+0 -0.7	+0.1 +0.7	自由長50mm以下±0.5mm 自由長55mm以上±1%	±10%	2度以下

密着長は参考値です、ロットによって多少のバラツキがあります。
 「許容範囲外」の表記があるサイズの最大たわみは18%です
 最大たわみを超えてのご使用はおやめ下さい

品番 Catalog No. 编号	外径 Outer-Dia 外径 (mm)	内径 Inner-Dia 内径 (mm)	自由長 Free Length 自由長 (mm)	ばね定数 Spring Constant 弾簧定数 (N/mm) (kgf/mm)		密着長 Min.Length 貼緊長 (mm)	100万回		50万回		30万回	
				たわみ Deflection 弯曲 (mm)	荷重 Load 負荷 (kgf)[N]		たわみ Deflection 弯曲 (mm)	荷重 Load 負荷 (kgf)[N]	たわみ Deflection 弯曲 (mm)	荷重 Load 負荷 (kgf)[N]		
SG10-15	10	5	15	163.0	16.7	11.4	2.4	40 {392.0}	45 {441.0}	50 {490.0}	許容範囲外	
20			123.0	12.5	15.0	3.2	2.7				4.0	
25			98.1	10.0	19.0	4.0	3.6				5.0	
30			81.7	8.3	22.8	4.8	4.5				6.0	
35			70.0	7.1	26.6	5.6	5.4				7.0	
40			61.3	6.3	30.4	6.4	6.3				8.0	
45			54.5	5.6	34.2	7.2	7.2				9.0	
50			49.0	5.0	38.0	8.0	8.1				10.0	
55			44.6	4.5	41.8	8.8	9.0				11.0	
60			40.9	4.2	45.6	9.6	9.9				12.0	
65			37.7	3.8	49.4	10.4	10.8				13.0	
70			35.0	3.6	53.2	11.2	11.7				14.0	
75			32.7	3.3	57.0	12.0	12.6				15.0	
80			30.6	3.1	60.8	12.8	13.5				16.0	
90	27.2	2.8	68.4	14.4	14.4	18.0						
100	24.5	2.5	76.0	16.0	16.2	20.0						
SG12-15	12	6	15	245.0	25.0	11.4	2.4	60 {588.0}	68 {662.0}	75 {735.0}	許容範囲外	
20			184.0	18.8	15.0	3.2	2.7				4.0	
25			147.0	15.0	19.0	4.0	3.6				5.0	
30			123.0	12.5	22.8	4.8	4.5				6.0	
35			105.0	10.7	26.6	5.6	5.4				7.0	
40			91.9	9.4	30.4	6.4	6.3				8.0	
45			81.7	8.3	34.2	7.2	7.2				9.0	
50			73.5	7.5	38.0	8.0	8.1				10.0	
55			66.9	6.8	41.8	8.8	9.0				11.0	
60			61.3	6.3	45.6	9.6	9.9				12.0	
65			56.6	5.8	49.4	10.4	10.8				13.0	
70			52.5	5.4	53.2	11.2	11.7				14.0	
75			49.0	5.0	57.0	12.0	12.6				15.0	
80			46.0	4.7	60.8	12.8	13.5				16.0	
90	40.9	4.2	68.4	14.4	14.4	18.0						
100	36.8	3.8	76.0	16.0	16.2	20.0						
SG14-20	14	7	20	238.0	24.3	15.2	3.2	78 {761.0}	87 {856.0}	97 {951.0}	許容範囲外	
25			190.0	19.4	19.0	4.0	3.6				5.0	
30			159.0	16.2	22.8	4.8	4.5				6.0	
35			136.0	13.9	26.6	5.6	5.4				7.0	
40			119.0	12.1	30.4	6.4	6.3				8.0	
45			106.0	10.8	34.2	7.2	7.2				9.0	
50			95.1	9.7	38.0	8.0	8.1				10.0	
55			86.5	8.8	41.8	8.8	9.0				11.0	
60			79.3	8.1	45.6	9.6	9.9				12.0	
65			73.2	7.5	49.4	10.4	10.8				13.0	
70			67.9	6.9	53.2	11.2	11.7				14.0	
75			63.4	6.5	57.0	12.0	12.6				15.0	
80			59.5	6.1	60.8	12.8	13.5				16.0	
90			52.8	5.4	68.4	14.4	14.4				18.0	
100	47.6	4.9	76.0	16.0	16.2	20.0						
SG16-20	16	8	20	319.0	32.5	15.2	3.2	104 {1020.0}	117 {1147.0}	130 {1275.0}	許容範囲外	
25			255.0	26.0	19.0	4.0	3.6				5.0	
30			212.0	21.7	22.8	4.8	4.5				6.0	
35			182.0	18.6	26.6	5.6	5.4				7.0	
40			159.0	16.3	30.4	6.4	6.3				8.0	

品番 Catalog No. 编号	外径 Outer-Dia 外径 (mm)	内径 Inner-Dia 内径 (mm)	自由長 Free Length 自由長 (mm)	ばね定数 Spring Constant 弹簧定数 (N/mm) (kgf/mm)		密着長 Min.Length 貼緊長 (mm)	100万回		50万回		30万回	
				たわみ Deflection 弯曲 (mm)	荷重 Load 负荷 (kgf)[N]		たわみ Deflection 弯曲 (mm)	荷重 Load 负荷 (kgf)[N]	たわみ Deflection 弯曲 (mm)	荷重 Load 负荷 (kgf)[N]		
SG16-45	16	8	45	142.0	14.4	34.2	7.2	104 {1020.0}	117 {1147.0}	130 {1275.0}	8.1	9.0
50			127.0	13.0	38.0	8.0	9.0				10.0	
55			116.0	11.8	41.8	8.8	9.9				11.0	
60			106.0	10.8	45.6	9.6	10.8				12.0	
65			98.1	10.0	49.4	10.4	11.7				13.0	
70			91.1	9.3	53.2	11.2	12.6				14.0	
75			85.0	8.7	57.0	12.0	13.5				15.0	
80			79.7	8.1	60.8	12.8	14.4				16.0	
90			70.8	7.2	68.4	14.4	16.2				18.0	
100			63.7	6.5	76.0	16.0	18.0				20.0	
SG18-20			18	9	20	392.0	40.0				15.2	3.2
25	314.0	32.0			19.0	4.0	4.5	5.0				
30	262.0	26.7			22.8	4.8	5.4	6.0				
35	224.0	22.9			26.6	5.6	6.3	7.0				
40	196.0	20.0			30.4	6.4	7.2	8.0				
45	174.0	17.8			34.2	7.2	8.1	9.0				
50	157.0	16.0			38.0	8.0	9.0	10.0				
55	143.0	14.5			41.8	8.8	9.9	11.0				
60	131.0	13.3			45.6	9.6	10.8	12.0				
65	121.0	12.3			49.4	10.4	11.7	13.0				
70	112.0	11.4			53.2	11.2	12.6	14.0				
75	105.0	10.7			57.0	12.0	13.5	15.0				
80	98.1	10.0			60.8	12.8	14.4	16.0				
90	87.2	8.9			68.4	14.4	16.2	18.0				
100	78.5	8.0	76.0	16.0	18.0	20.0						
SG20-20	20	10	20	515.0	52.5	15.2	3.2	168 {1648.0}	189 {1853.0}	210 {2059.0}	3.6	許容範囲外
25			412.0	42.0	19.0	4.0	4.5				5.0	
30			343.0	35.0	22.8	4.8	5.4				6.0	
35			294.0	30.0	26.6	5.6	6.3				7.0	
40			257.0	26.3	30.4	6.4	7.2				8.0	
45			229.0	23.3	34.2	7.2	8.1				9.0	
50			206.0	21.0	38.0	8.0	9.0				10.0	
55			187.0	19.1	41.8	8.8	9.9				11.0	
60			172.0	17.5	45.6	9.6	10.8				12.0	
65			158.0	16.2	49.4	10.4	11.7				13.0	
70			147.0	15.0	53.2	11.2	12.6				14.0	
75			137.0	14.0	57.0	12.0	13.5				15.0	
80			129.0	13.1	60.8	12.8	14.4				16.0	
90			114.0	11.7	68.4	14.4	16.2				18.0	
100			103.0	10.5	76.0	16.0	18.0				20.0	
125	82.4	8.4	95.0	20.0	22.5	25.0						
SG22-20	22	11	20	588.0	60.0	15.2	3.2	192 {1883}	216 {2118}	240 {2354}	3.6	許容範囲外
25			471.0	48.0	19.0	4.0	4.5				5.0	
30			392.0	40.0	22.8	4.8	5.4				6.0	
35			336.0	34.3	26.6	5.6	6.3				7.0	
40			294.0	30.0	30.4	6.4	7.2				8.0	
45			262.0	26.7	34.2	7.2	8.1				9.0	
50			235.0	24.0	38.0	8.0	9.0				10.0	
55			214.0	21.8	41.8	8.8	9.9				11.0	
60			196.0	20.0	45.6	9.6	10.8				12.0	
65			181.0	18.5	49.4	10.4	11.7				13.0	
70			168.0	17.1	53.2	11.2	12.6				14.0	
75			157.0	16.0	57.0	12.0	13.5				15.0	
80			147.0	15.0	60.8	12.8	14.4				16.0	
90			131.0	13.3	68.4	14.4	16.2				18.0	
100			118.0	12.0	76.0	16.0	18.0				20.0	
125	94.1	9.6	95.0	20.0	22.5	25.0						
SG25-20	25	12.5	20	760.0	77.5	15.2	3.2	248 {2432}	279 {2736}	310 {3040}	3.6	許容範囲外
25			608.0	62.0	19.0	4.0	4.5				5.0	
30			507.0	51.7	22.8	4.8	5.4				6.0	
35			434.0	44.3	26.6	5.6	6.3				7.0	
40			380.0	38.8	30.4	6.4	7.2				8.0	
45			338.0	34.4	34.2	7.2	8.1				9.0	
50			304.0	31.0	38.0	8.0	9.0				10.0	
55			276.0	28.2	41.8	8.8	9.9				11.0	
60			253.0	25.8	45.6	9.6	10.8				12.0	
65			234.0	23.8	49.4	10.4	11.7				13.0	
70			217.0	22.1	53.2	11.2	12.6				14.0	
75	203.0	20.7	57.0	12.0	13.5	15.0						

品番 Catalog No. 编号	外径 Outer-Dia 外径 (mm)	内径 Inner-Dia 内径 (mm)	自由長 Free Length 自由長 (mm)	ばね定数 Spring Constant 弹簧定数 (N/mm) (kgf/mm)		密着長 Min.Length 貼緊長 (mm)	100万回		50万回		30万回	
							たわみ Deflection 弯曲 (mm)	荷重 Load 负荷 (kgf){N}	たわみ Deflection 弯曲 (mm)	荷重 Load 负荷 (kgf){N}	たわみ Deflection 弯曲 (mm)	荷重 Load 负荷 (kgf){N}
SG25-80	25	12.5	80	190.0	19.4	60.8	12.8	248 {2432}	14.4	279 {2736}	16.0	310 {3040}
90			169.0	17.2	68.4	14.4	16.2		18.0			
100			152.0	15.5	76.0	16.0	18.0		20.0			
125			121.6	12.4	95.0	20.0	22.5		25.0			
150			90.7.0	9.2.5	15.2	3.2	3.6		許容範囲外			
SG27-20	27	13.5	20	726.0	74.0	19.0	4.0	296 {2903}	4.5	333 {3266}	5.0	370 {3628}
25			605.0	61.7	22.8	4.8	5.4		6.0			
30			518.0	52.9	26.6	5.6	6.3		7.0			
35			454.0	46.3	30.4	6.4	7.2		8.0			
40			403.0	41.1	34.2	7.2	8.1		9.0			
45			363.0	37.0	38.0	8.0	9.0		10.0			
50			330.0	33.6	41.8	8.8	9.9		11.0			
55			302.0	30.8	45.6	9.6	10.8		12.0			
60			279.0	28.5	49.4	10.4	11.7		13.0			
65			259.0	26.4	53.2	11.2	12.6		14.0			
70			242.0	24.7	57.0	12.0	13.5		15.0			
75			227.0	23.1	60.8	12.8	14.4		16.0			
80			202.0	20.6	68.4	14.4	16.2		18.0			
90			181.0	18.5	76.0	16.0	18.0		20.0			
100			145.0	14.8	95.0	20.0	22.5		25.0			
125	121.0	12.3	114.0	24.0	27.0	30.0						
SG30-20	30	15	20	1177.0	120.0	15.2	3.2	384 {3766}	3.6	432 {4236}	許容範囲外	480 {4707}
25			941.0	96.0	19.0	4.0	4.5		5.0			
30			785.0	80.0	22.8	4.8	5.4		6.0			
35			672.0	68.6	26.6	5.6	6.3		7.0			
40			588.0	60.0	30.4	6.4	7.2		8.0			
45			523.0	53.3	34.2	7.2	8.1		9.0			
50			471.0	48.0	38.0	8.0	9.0		10.0			
55			428.0	43.6	41.8	8.8	9.9		11.0			
60			392.0	40.0	45.6	9.6	10.8		12.0			
65			362.0	36.9	49.4	10.4	11.7		13.0			
70			336.0	34.3	53.2	11.2	12.6		14.0			
75			314.0	32.0	57.0	12.0	13.5		15.0			
80			294.0	30.0	60.8	12.8	14.4		16.0			
90			262.0	26.7	68.4	14.4	16.2		18.0			
100			235.0	24.0	76.0	16.0	18.0		20.0			
125	188.0	19.2	95.0	20.0	22.5	25.0						
150	157.0	16.0	114.0	24.0	27.0	30.0						
175	134.0	13.7	133.0	28.0	31.5	35.0						
200	118.0	12.0	152.0	32.0	36.0	40.0						
SG35-30	35	17.5	30	1030.0	105.0	22.8	4.8	504 {4943}	5.4	567 {5560}	6.0	630 {6178}
35			883.0	90.0	26.6	5.6	6.3		7.0			
40			772.0	78.8	30.4	6.4	7.2		8.0			
45			686.0	70.0	34.2	7.2	8.1		9.0			
50			618.0	63.0	38.0	8.0	9.0		10.0			
55			562.0	57.3	41.8	8.8	9.9		11.0			
60			515.0	52.5	45.6	9.6	10.8		12.0			
65			475.0	48.5	49.4	10.4	11.7		13.0			
70			441.0	45.0	53.2	11.2	12.6		14.0			
75			412.0	42.0	57.0	12.0	13.5		15.0			
80			386.0	39.4	60.8	12.8	14.4		16.0			
90			343.0	35.0	68.4	14.4	16.2		18.0			
100			309.0	31.5	76.0	16.0	18.0		20.0			
125			247.0	25.2	95.0	20.0	22.5		25.0			
150			206.0	21.0	114.0	24.0	27.0		30.0			
175	177.0	18.0	133.0	28.0	31.5	35.0						
200	154.0	15.8	152.0	32.0	36.0	40.0						
SG40-35	40	20	35	1149.0	117.1	26.6	5.6	656 {6433}	6.3	738 {7237}	7.0	820 {8041}
40			1005.0	102.5	30.4	6.4	7.2		8.0			
45			893.0	91.1	34.2	7.2	8.1		9.0			
50			804.0	82.0	38.0	8.0	9.0		10.0			
55			731.0	74.5	41.8	8.8	9.9		11.0			
60			670.0	68.3	45.6	9.6	10.8		12.0			
65			619.0	63.1	49.4	10.4	11.7		13.0			
70			574.0	58.6	53.2	11.2	12.6		14.0			
75			536.0	54.7	57.0	12.0	13.5		15.0			
80			503.0	51.3	60.8	12.8	14.4		16.0			
90			447.0	45.6	68.4	14.4	16.2		18.0			
100			402.0	41.0	76.0	16.0	18.0		20.0			

品番 Catalog No. 编号	外径 Outer-Dia 外径 (mm)	内径 Inner-Dia 内径 (mm)	自由長 Free Length 自由长 (mm)	ばね定数 Spring Constant 弹簧定数 (N/mm) (kgf/mm)		密着長 Min.Length 贴紧长 (mm)	100万回		50万回		30万回	
							たわみ Deflection 弯曲 (mm)	荷重 Load 负荷 (kgf){N}	たわみ Deflection 弯曲 (mm)	荷重 Load 负荷 (kgf){N}	たわみ Deflection 弯曲 (mm)	荷重 Load 负荷 (kgf){N}
SG40-125	40	20	125	322.0	32.8	95.0	20.0	656 {6433}	22.5	738 {7237}	25.0	820 {8041}
150			268.0	27.3	114.0	24.0	27.0		30.0			
175			230.0	23.4	133.0	28.0	31.5		35.0			
200			201.0	20.5	152.0	32.0	36.0		40.0			
SG50-50			50	1226.0	125.0	39.0	8.0		9.0		10.0	
55	55	1114.0	113.6	43.0	8.8	9.9	11.0					
60	60	1022.0	104.2	47.0	9.6	10.8	12.0					
65	65	943.0	96.2	51.0	10.4	11.7	13.0					
70	70	876.0	89.3	54.0	11.2	12.6	14.0					
75	75	817.0	83.3	58.0	12.0	13.5	15.0					
80	80	766.0	78.1	61.0	12.8	14.4	16.0					
90	90	681.0	69.4	68.4	14.4	16.2	18.0					
100	100	613.0	62.5	76.0	16.0	18.0	20.0					
125	125	490.0	50.0	95.0	20.0	22.5	25.0					
150	150	409.0	41.7	114.0	24.0	27.0	30.0					
175	175	350.0	35.7	133.0	28.0	31.5	35.0					
200	200	306.0	31.3	152.0	32.0	36.0	40.0					