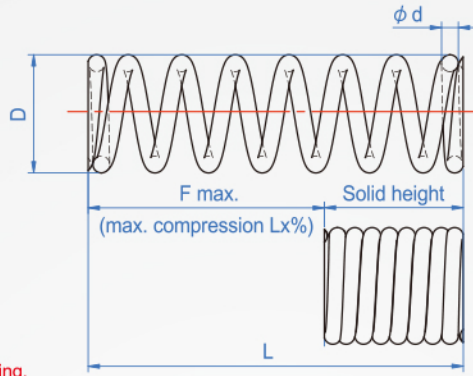


25% Compression  
**CB139**  
9/9 (heavy)



Material	Heat resistance	Curl direction
SWP Piano wire JIS G 3522	80°	Right



How to order

1 2 3  
 CB139 - 5 - 25 - 0.90  
 TYPE    D    L    d

- ◆ D Tolerance : Below φ 16 <sup>+0</sup> -0.5mm
- ◆ L : 50以下 ± 1.5mm
- ◆ End grinding : Wire diameter below φ 0.75 No grinding.  
Wire diameter above φ 0.8 is grinding.
- ◆ Frequency of use : About 100 million times.

			單位 : mm					
D	L	d	Solid height	max. compression L x %	F max.	Load N/max	Modulus ±10%	
3	5	0.40	3.2	25%	1.3	4.9	3.9 N/mm	
	10	0.50	7.0	25%	2.5	9.8		
	15	0.55	11.0	25%	3.8	14.7		
	20	0.55	12.7	25%	5.0	19.6		
	25	0.60	17.4	25%	6.3	24.5		
	30	0.60	21.0	25%	7.5	29.4		
	35	0.65	25.1	25%	8.8	34.3		
	40	0.65	27.3	25%	10.0	39.2		
4	5	0.50	3.0	25%	1.3	5.9	4.9 N/mm	
	10	0.60	6.0	25%	2.5	12.3		
	15	0.65	9.8	25%	3.8	18.1		
	20	0.70	12.6	25%	5.0	24.5		
	25	0.76	16.5	25%	6.3	30.4		
	30	0.75	20.3	25%	7.5	36.8		
	35	0.80	23.6	25%	8.8	43.1		
	40	0.80	23.6	25%	10.0	49.0		
5	5	0.65	3.3	25%	1.3	12.7	9.8 N/mm	
	10	0.80	7.0	25%	2.5	24.5		
	15	0.80	7.0	25%	3.8	37.3		
	20	0.90	13.0	25%	5.0	49.0		
	25	0.90	13.0	25%	6.3	61.8		
	30	1.00	21.0	25%	7.5	73.5		
	35	1.00	25.0	25%	8.8	86.3		
	40	1.00	25.0	25%	10.0	98.1		
6	5	1.10	31.0	25%	11.3	110.8	9.8 N/mm	
	10	1.10	34.0	25%	12.5	122.6		
	15	1.10	39.0	25%	13.8	135.3		
	20	1.10	43.0	25%	15.0	147.1		
	5	0.70	3.5	25%	1.3	12.7		9.8 N/mm
	10	0.80	7.0	25%	2.5	24.5		
	15	0.90	7.5	25%	3.8	37.3		
	20	1.00	11.5	25%	5.0	49.0		
25	1.10	17.5	25%	6.3	61.8			
30	1.10	19.5	25%	7.5	73.5			
35	1.10	20.0	25%	8.8	86.3			
40	1.20	28.0	25%	10.0	98.1			
8	45	1.20	30.0	25%	11.3	110.8	9.8 N/mm	
	50	1.20	32.0	25%	12.5	122.6		
	55	1.20	32.0	25%	13.8	135.3		
	60	1.30	43.0	25%	15.0	147.1		
	10	1.00	6.0	25%	2.5	24.5		9.8 N/mm
	15	1.20	10.8	25%	3.8	37.3		
	20	1.20	11.5	25%	5.0	49.0		
	25	1.30	17.0	25%	6.3	61.8		
30	1.30	17.0	25%	7.5	73.5			
35	1.40	24.5	25%	8.8	86.3			
40	1.40	25.2	25%	10.0	98.1			
45	1.50	32.0	25%	11.3	110.8			
10	50	1.50	33.0	25%	12.5	122.6	9.8 N/mm	
	55	1.50	36.5	25%	13.8	135.3		
	60	1.50	33.0	25%	15.0	147.1		
	10	1.20	6.0	25%	2.5	24.5		9.8 N/mm
	15	1.30	8.5	25%	3.8	37.3		
	20	1.40	12.0	25%	5.0	49.0		
	25	1.50	16.5	25%	6.3	61.8		
	30	1.50	17.0	25%	7.5	73.5		
35	1.60	23.0	25%	8.8	86.3			
40	1.60	24.0	25%	10.0	98.1			
45	1.70	30.0	25%	11.3	110.8			
50	1.70	31.5	25%	12.5	122.6			
55	1.80	40.0	25%	13.8	135.3			

			單位 : mm					
D	L	d	Solid height	max. compression L x %	F max.	Load N/max	Modulus ±10%	
10	60	1.80	40.0	25%	15.0	147.1	9.8 N/mm	
	65	1.80	43.0	25%	16.3	159.8		
	70	1.80	43.0	25%	17.5	171.6		
	80	1.80	43.0	25%	20.0	196.1		
	10	1.40	6.5	25%	2.5	24.5		9.8 N/mm
15	1.40	7.7	25%	3.8	36.3			
20	1.60	17.5	25%	5.0	49.0			
25	1.60	13.6	25%	6.3	60.8			
30	1.70	18.0	25%	7.5	73.5			
35	1.80	22.5	25%	8.8	85.3			
40	1.80	24.0	25%	10.0	98.1			
45	1.80	24.0	25%	11.3	109.8			
12	50	2.00	34.0	25%	12.5	122.6	9.8 N/mm	
	55	2.00	38.0	25%	13.8	134.4		
	60	2.00	40.0	25%	15.0	147.1		
	65	2.00	42.0	25%	16.3	158.9		
	70	2.10	48.5	25%	17.5	171.6		
	80	2.10	52.5	25%	20.0	196.1		
	10	1.60	6.4	25%	2.5	49.0		20.0 N/mm
	15	1.80	11.0	25%	3.8	74.5		
20	1.80	11.0	25%	5.0	98.1			
25	2.00	17.0	25%	6.3	123.6			
30	2.00	18.0	25%	7.5	147.1			
35	2.10	22.0	25%	8.8	172.6			
40	2.10	22.0	25%	10.0	196.1			
45	2.30	32.0	25%	11.3	221.6			
13	50	2.30	32.0	25%	12.5	245.2	20.0 N/mm	
	55	2.40	40.0	25%	13.8	270.7		
	60	2.40	42.0	25%	15.0	294.2		
	65	2.40	42.0	25%	16.3	319.7		
	70	2.50	50.0	25%	17.5	343.2		
	80	2.50	50.0	25%	20.0	392.3		
	15	1.80	9.0	25%	3.8	72.6		19.6 N/mm
	20	2.00	13.0	25%	5.0	98.1		
25	2.00	14.0	25%	6.3	121.6			
30	2.10	18.0	25%	7.5	147.1			
35	2.10	18.0	25%	8.8	170.6			
40	2.30	26.3	25%	10.0	196.1			
45	2.30	27.6	25%	11.3	219.7			
50	2.40	31.0	25%	12.5	245.2			
14	55	2.50	37.5	25%	13.8	268.7	19.6 N/mm	
	60	2.50	41.0	25%	15.0	294.2		
	65	2.50	43.5	25%	16.3	317.7		
	70	2.60	48.0	25%	17.5	343.2		
	80	2.60	52.0	25%	20.0	392.3		
	15	2.00	10.0	25%	3.8	74.5		19.6 N/mm
	20	2.10	12.5	25%	5.0	98.1		
	25	2.30	17.0	25%	6.3	123.6		
30	2.30	18.5	25%	7.5	147.1			
35	2.40	21.5	25%	8.8	172.6			
40	2.40	21.5	25%	10.0	196.1			
45	2.50	27.5	25%	11.3	221.6			
50	2.50	27.5	25%	12.5	245.2			
16	55	2.60	32.0	25%	13.8	270.7	19.6 N/mm	
	60	2.60	32.0	25%	15.0	294.2		
	65	2.80	46.0	25%	16.3	319.7		
	70	2.80	46.0	25%	17.5	343.2		
	80	2.90	55.0	25%	20.0	392.3		

Example : CB139-5-30-1

Length 30 (ex. Tensile 5mm) to load 25

Load=Modulus x Extension

49N=9.8N/mm x 5mm

※Load calculation formula : Load(N) = Modulus x Compression

※Conversion : kgf=N x 0.102

※Solid height is the reference value, there will be little difference in the production.