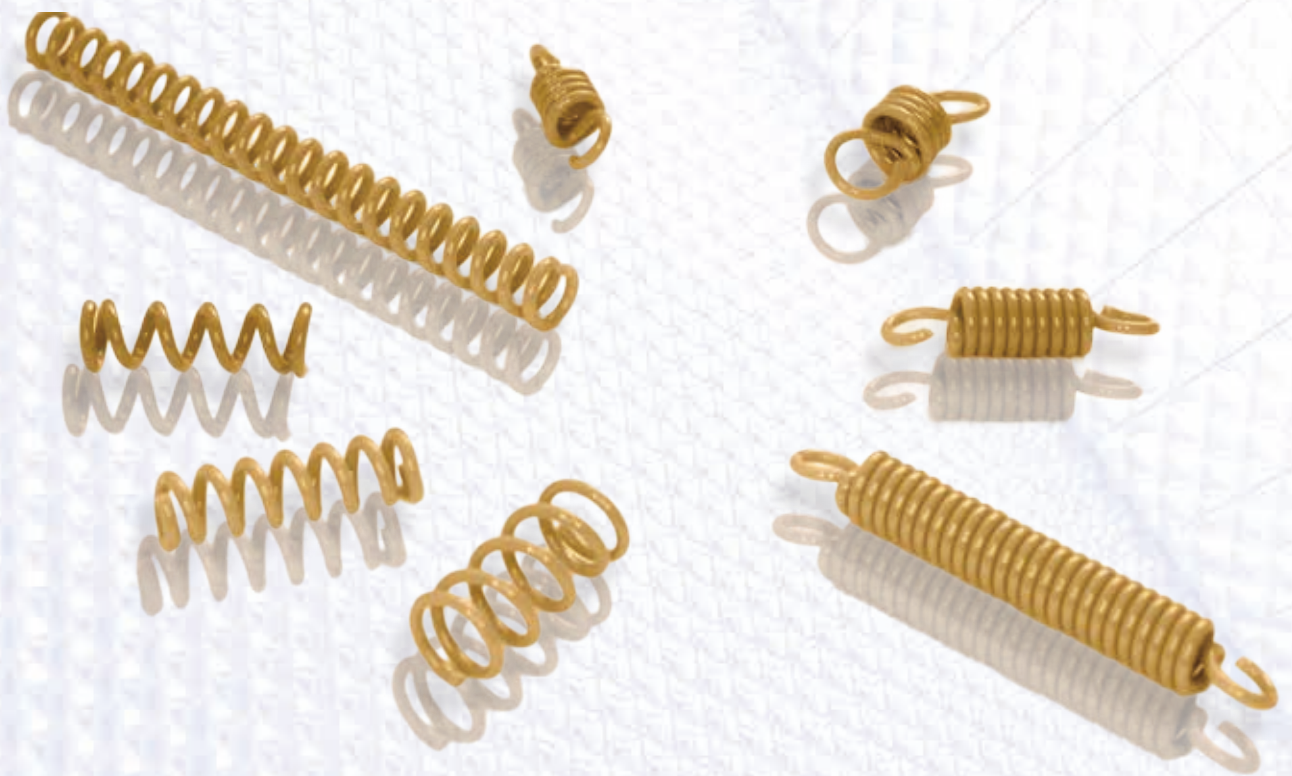





PEEK Springs



SANWA ENTERPRISE CO., LTD.

PEEK springs are made from natural PEEK thermoplastic which is superior in toughness, heat resistance, and chemical resistance. We at Sanwa Enterprise Company Ltd have delivered our industry's first spring made from a wire rod of PEEK resin. These springs are highly customizable and very cost effective.

Features:

- Made from PEEK  Superior spring characteristics
- Produced from wire rod  Highly customizable
- High volume production  More cost effective

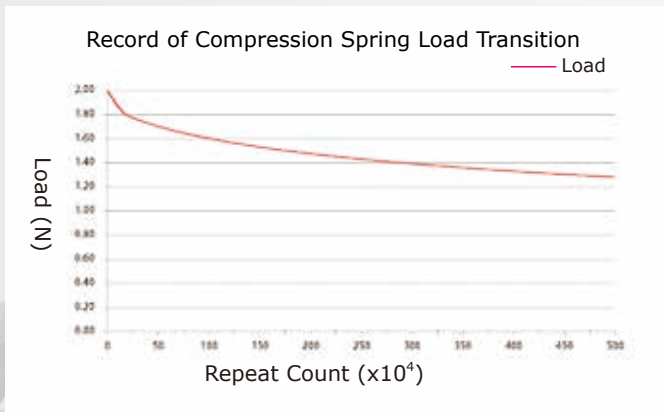


Load Transition of Compression Spring

Test Sample
 Free length: 17.65mm
 External diameter: 5.84mm
 Wire diameter: 1.0mm
 Number of coils: 5.5
 Load: 2.0N
 Presetting length: 13mm

Test Method:
 Using a repetitive compression testing device:

- 1)-measured data every 100,000 times to 1 million times.
- 2)-measured data every 1 million times from 1 million times to 5 million times.

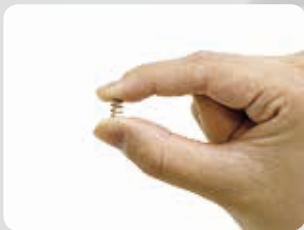
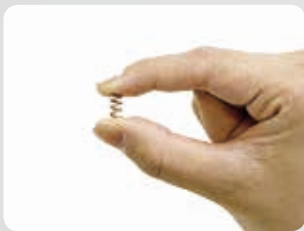
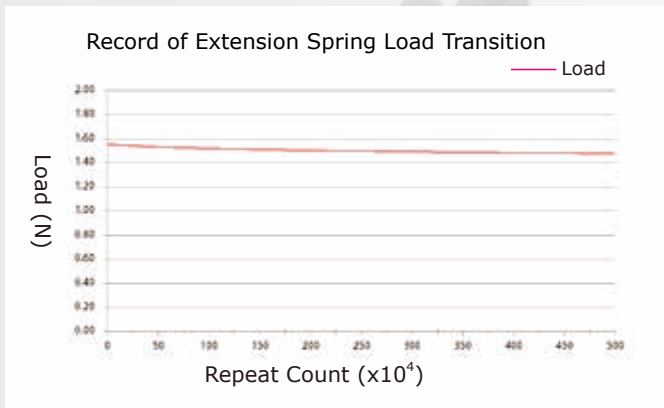


Load Transition of Extension Spring

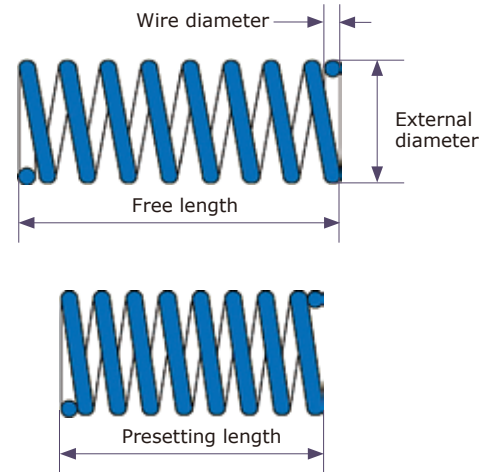
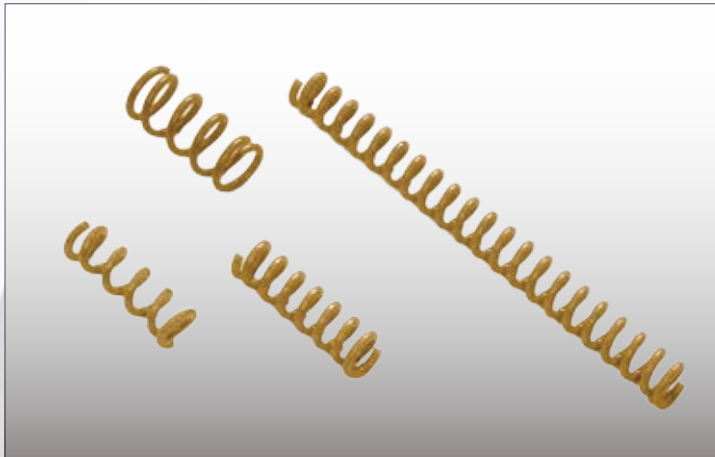
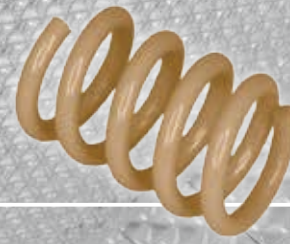
Test Sample
 Free length: 31.28mm
 External diameter: 5.53mm
 Wire diameter: 1.0mm
 Number of coils: 21
 Load: 1.56N
 Presetting length: 45.28mm

Test Method:
 Using a repetitive compression testing device:

- 1)-measured data every 100,000 times to 1 million times and investigated if there was any accidental data.
- 2)-measured data every 500,000 times from 1 million times to 5 million times.



Compression Spring



Sample data for 1.0 mm wire diameter

1.0mm	No.1	No.2	No.3	No.4	No.5	No.6	No.7	No.8
Wire diameter	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
External diameter	5.70	5.70	5.70	5.70	5.70	5.70	5.70	5.70
Central diameter	4.70	4.70	4.70	4.70	4.70	4.70	4.70	4.70
Internal diameter	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70
Free length	8.73	11.85	15.03	18.18	21.26	24.44	27.49	31.05
Total number of coils	3.50	4.50	5.50	6.50	7.50	8.50	9.50	10.50
Number of active coils	1.50	2.50	3.50	4.50	5.50	6.50	7.50	8.50
Spring pitch	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Presetting load(N)	2.54	2.32	2.26	2.17	2.15	2.17	2.08	2.26
Presetting length	6.00	8.50	11.00	13.00	15.00	17.50	20.00	22.00
Both ends grinding	No	No	No	No	No	No	No	No

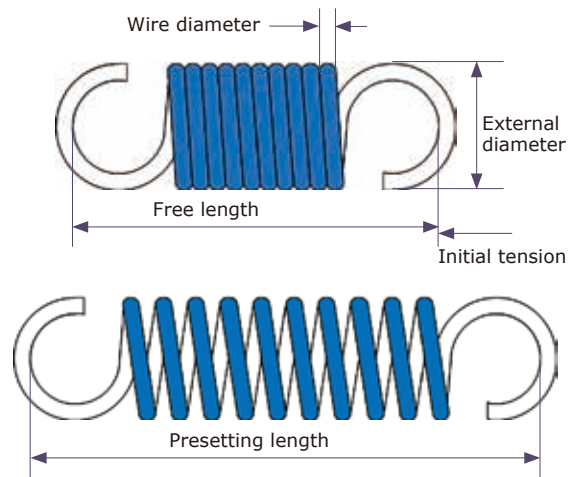
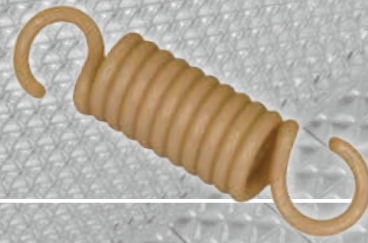
(mm)

Sample data for 0.5 mm wire diameter

0.5mm	No.1	No.2	No.3	No.4	No.5	No.6	No.7	No.8
Wire diameter	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
External diameter	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Central diameter	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50
Internal diameter	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Free length	4.10	5.60	7.10	8.50	9.90	11.60	13.20	14.80
Total number of coils	3.50	4.50	5.50	6.50	7.50	8.50	9.50	10.50
Number of active coils	1.50	2.50	3.50	4.50	5.50	6.50	7.50	8.50
Spring pitch	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Presetting load(N)	0.56	0.66	0.71	0.63	0.41	0.45	0.43	0.36
Presetting length	2.50	3.00	3.50	4.50	7.00	8.00	9.50	11.00
Both ends grinding	No	No	No	No	No	No	No	No

(mm)

Extension Spring



Sample data for 1.0 mm wire diameter

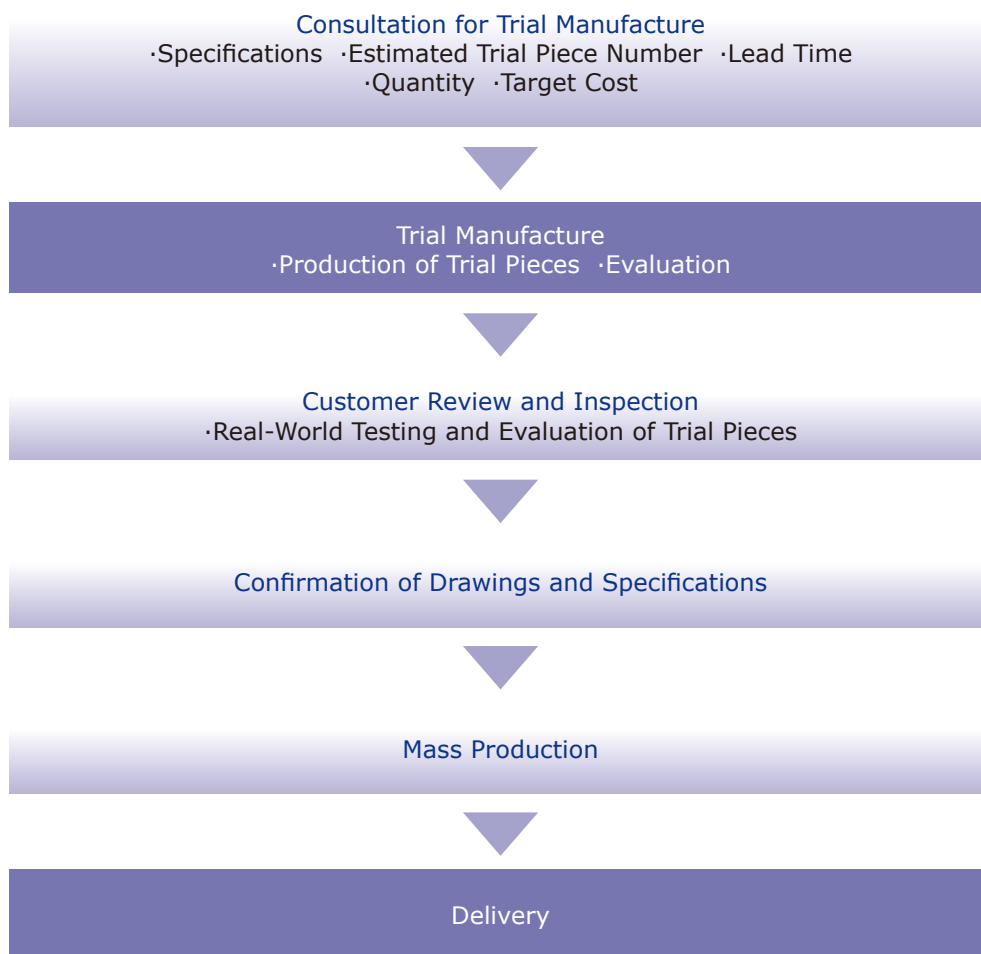
1.0mm	No.1	No.2	No.3	No.4	No.5	No.6	No.7	No.8	No.9	No.10
Wire diameter	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
External diameter	5.70	5.70	5.70	5.70	5.70	5.70	5.70	5.70	5.70	5.70
Central diameter	4.70	4.70	4.70	4.70	4.70	4.70	4.70	4.70	4.70	4.70
Internal diameter	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70
Free length	19.70	23.40	29.20	33.80	39.20	44.40	49.50	53.60	59.30	63.50
Number of active coils	9.00	13.00	18.00	22.00	27.00	32.00	36.00	41.50	45.50	50.00
Presetting load(N)	0.86	0.90	0.93	0.95	1.00	0.95	0.91	0.94	0.95	0.94
Presetting length	24.20	29.90	38.20	44.80	52.70	60.40	67.50	74.30	82.00	88.50

(mm)



Production Schedule from Trial Manufacture to Mass Production

Our fully custom PEEK springs can be made from scratch to fit your needs.



Required Specifications

External or internal diameter:	<input type="text"/>	mm			
Free length: (housing dimension)	<input type="text"/>	mm	Presetting length:	<input type="text"/>	mm
Presetting load:	<input type="text"/>	N			
Expecting mass production schedule:	<input type="text"/>				
Quantity:	<input type="text"/>				
Additional Comments:	<input type="text"/>				



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