

# Piano Wire

## Meets various needs as high-strength piano wire for springs

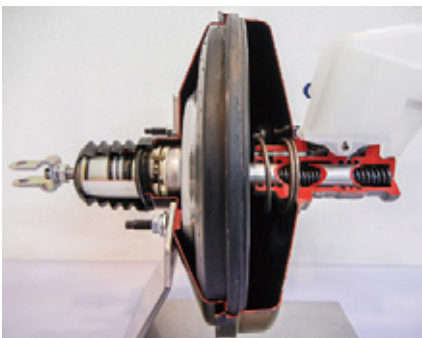
Our steel wires are produced with state-of-the-art drawing machines from piano wire rods made by JFE Steel Corporation and deliver excellent performance as steel wires for springs in applications requiring high-stress durability.

SWPC, which is produced from JIS G 3502 SWRS87A piano wire rod, is superior to SWP-B in tensile strength.

SWPC has been adopted for springs used in essential safety components of automobiles, for example, and is highly regarded.

### ■ Applications

Various types of springs for automobiles, mechanical devices, home appliances, etc.



Spring for automotive brakes



Return spring for drum brakes

- JIS G 3522 piano wire
- Product type : SWP-A, SWP-B, and SWPC
- JIS authentication number : QA0307067 (SWP-A, SWP-B)

## Specifications

### Wire diameter tolerance and mechanical properties

Wire diameter (mm)	Wire diameter tolerance (mm)		Tensile strength (N/mm <sup>2</sup> )		Number of twists	Tensile strength (N/mm <sup>2</sup> )	Number of twists
	General wire	Wire made to order	SWP-A	SWP-B		SWPC	
0.40~0.70	Piano wires with wire diameters in this range are described in the pamphlet "Piano Wire & Hard Drawn Steel Wire for the Small Diameter Spring."					—	—
0.80	±0.010	+0 -0.010	2,110 ~ 2,350	2,350 ~ 2,600	≥25	—	—
0.90	∕	∕	2,110 ~ 2,300	2,300 ~ 2,500	∕	—	—
1.00	∕	∕	2,060 ~ 2,260	2,260 ~ 2,450	∕	—	—
1.20	±0.015	+0 -0.015	2,010 ~ 2,210	2,210 ~ 2,400	∕	—	—
1.30	∕	∕	1,960 ~ 2,160	2,160 ~ 2,350	∕	2,350 ~ 2,540	≥20
1.40	∕	∕	1,960 ~ 2,160	2,160 ~ 2,330	∕	2,350 ~ 2,540	∕
1.60	∕	∕	1,910 ~ 2,110	2,110 ~ 2,300	∕	2,300 ~ 2,490	∕
1.80	∕	∕	1,860 ~ 2,060	2,060 ~ 2,260	∕	2,260 ~ 2,460	∕
2.00	∕	∕	1,810 ~ 2,010	2,010 ~ 2,210	∕	2,210 ~ 2,410	∕
2.30	±0.020	+0 -0.020	1,770 ~ 1,960	1,960 ~ 2,160	≥20	2,160 ~ 2,360	∕
2.60	∕	∕	1,770 ~ 1,960	1,960 ~ 2,160	∕	2,160 ~ 2,360	∕
2.90	∕	∕	1,720 ~ 1,910	1,910 ~ 2,110	∕	2,110 ~ 2,310	∕
3.20	∕	∕	1,670 ~ 1,860	1,860 ~ 2,060	∕	2,060 ~ 2,260	∕
3.50	±0.030	+0 -0.030	1,670 ~ 1,810	1,810 ~ 1,960	∕	1,960 ~ 2,110	∕
4.00	∕	∕	1,670 ~ 1,810	1,810 ~ 1,960	≥15	1,960 ~ 2,110	≥15
4.50	∕	∕	1,620 ~ 1,770	1,770 ~ 1,910	∕	1,910 ~ 2,050	∕
5.00	∕	∕	1,620 ~ 1,770	1,770 ~ 1,910	∕	1,910 ~ 2,050	∕
5.50	∕	∕	1,570 ~ 1,710	1,710 ~ 1,860	∕	1,860 ~ 2,010*	∕
6.00	±0.040	+0 -0.040	1,520 ~ 1,670	1,670 ~ 1,810	∕	1,810 ~ 1,950*	∕
6.50	∕	∕	1,520 ~ 1,670	1,670 ~ 1,810	—	1,810 ~ 1,950*	—
7.00	∕	∕	1,470 ~ 1,620	1,620 ~ 1,770	—	1,770 ~ 1,920*	—
8.00	∕	∕	1,470 ~ 1,620	1,620 ~ 1,770	—	—	—
9.00	±0.050	+0 -0.050	1,420 ~ 1,570	—	—	—	—

\* For requests for specifications or other matters, please contact us.

### Standard mass and style of product

Wire diameter range (mm)	Coiling capstan diameter			Standard mass Coil (kg)
	400mm 16 in.	610mm 24 in.	760mm 30 in.	
0.80 ~ 1.60	○			50~80
1.60 ~ 1.80	○	○		50~150
1.80 ~ 2.60		○	○	100~200
2.60 ~ 9.00			○	100~200



JFE Techno-wire Corporation

<http://www.jfe-techno-wire.co.jp/>

### Steel Wire Sales Department

JFE Kuramae Building, 2-17-4 Kuramae, Taito-ku, Tokyo-to, Japan, 111-0051  
Tel: +81-(0)3-3865-9246 Fax: +81-(0)3-3865-7960