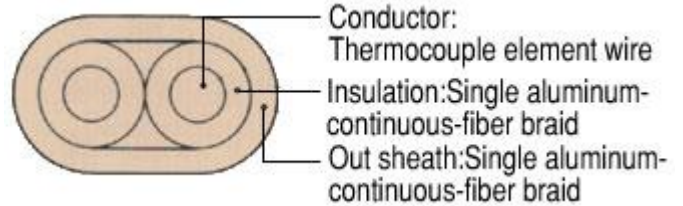


Ceramic duplex-insulated K type thermocouple wires (K-CERAC, K-CF)

Duplex-insulated thermocouple wires insulated and sheathed with super-heat resistant ceramic fiber. This series has excellent heat-resistance, electrical insulation resistance, and flexibility.

The strength of the wire does not weakened so much up to maximum operating temperature of thermocouple elemental wire (under normal condition). It is recommended to use K-CF, the type greige goods for ceramic fiber removed, under any environment where variance of insulation properties is critical. Color of ceramic fiber is natural-colored white. Identification is made by spiraled stripes on the surface appeared after yarning a colored thread, which is described in the Standards Table, together with braiding glass.



Parts No.	Conductor OD mm	Insulation OD mm	Finished OD mm	Conductor resistance Ω/m	Color		
					Insulation		Sheath
					+	-	
0.32 x1P K-CERAC	0.32	1.0	1.6x2.4	12.1	Natural + Red lines	Natural	Natural + Blue lines
0.65 x1P K-CERAC	0.65	1.5	2.2x3.3	2.95	Natural + Red lines	Natural	Natural + Blue lines
1.0 x1P K-CERAC	1.0	1.9	2.6x4.2	1.25	Natural + Red lines	Natural	Natural + Blue lines
0.32 x1P K-CF	0.32	1.0	1.6x2.4	12.1	Natural + Red lines	Natural	Natural + Blue lines
0.65 x1P K-CF	0.65	1.5	2.2x3.3	2.95	Natural + Red lines	Natural	Natural + Blue lines
1.0 x1P K-CF	1.0	1.9	2.6x4.2	1.25	Natural + Red lines	Natural	Natural + Blue lines

●Stainless-yarn braided type, K-SL GB-SOS is also well-received, because of its reinforced outer sheath and blockage of electrical interruption. Outer diameter of this type can be determined by adding 0.6 mm to outer diameter of ordinary types shown in above table.

■Operating temperature

Dia. of elemental wire (mm)	Maximum operation temperature for regular use (°C)	Maximum operation temperature under overheating condition (°C)
0.32	400	500
0.65	650	850
1.0	750	950

■ Characteristics

○ Retains its strength and flexibility after heating

Even after heated over 1000°C, it is as flexible as before heating. And under temperature at 1200°C, it keeps tensile strength 150 -200% greater than conventional silica-fibers.

○ No acid and chloride contained

Since it does not contain acid and chloride, it is chemically stable and does not corrode most kinds of metals. (Exceptionally, it reacts with dissolved copper and dissolved tin.)

○ Excellent in insulation resistance

It retains excellent insulation resistance under high temperature. More specifically, since greige goods is not used for K-CF, insulation resistance degrade due to pyrolysis of greige goods never occurs. Thus the product is able to retain excellent electrical insulation under high temperature.