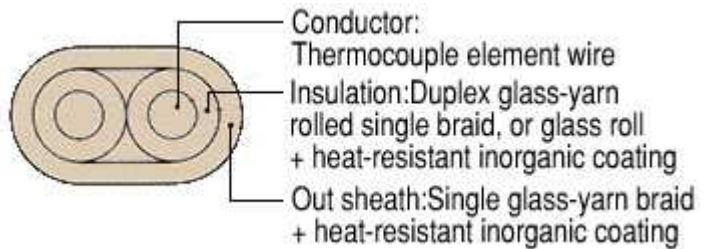


## ■ Glass duplex-insulated K type thermocouple wires with heat-resistant inorganic coating (K-Hh) ■

Duplex-insulated thermocouple wires insulated and sheathed with glass fiber, and coated with heat-resistant inorganic coating to improve heat-resistance and insulation properties. Maximum operating temperature under normal condition is 350°C, and short-time maximum operating temperature under overheating condition is 400°C.

K-Hh is improved version of K-H (glass coated thermocouple wire) with higher heat-resistance and insulation-resistance. Color of heat-resistant inorganic coating 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.



Standard type											
Parts No.	Conductor		Insulation		Parts OD	Sheath thickness	Finished OD	Conductor resistance	Color		
	OD	Thickness	OD	+					-	Sheath	
	mm	mm	mm								mm
0.32 x1P K-Hh	0.32	0.3	0.92	0.92x1.84	0.25	1.4x2.3	12.1	Natural + Red lines	Natural	Natural + Blue lines	
0.65 x1P K-Hh	0.65	0.4	1.45	1.45x2.9	0.25	2.0x3.4	2.95	Natural + Red lines	Natural	Natural + Blue lines	
1.0 x1P K-Hh	1.0	0.4	1.8	1.8x3.6	0.25	2.3x4.1	1.25	Natural + Red lines	Natural	Natural + Blue lines	

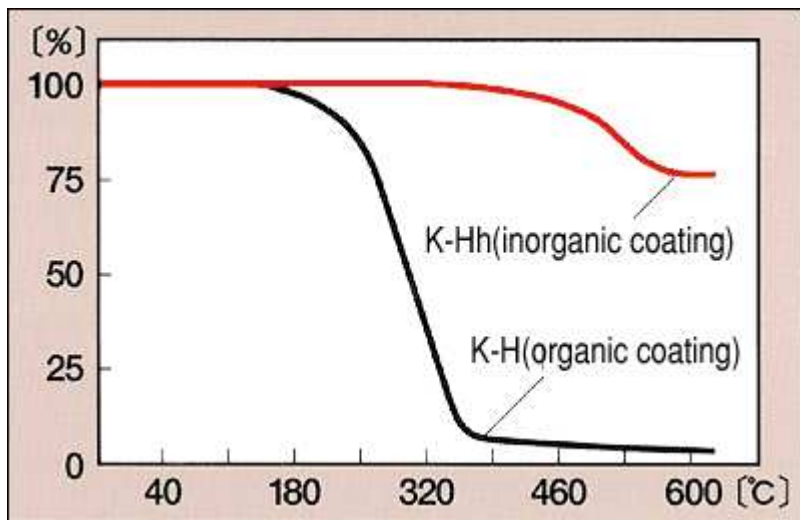
### Heat-Resistivity Data of K-Hh

#### ■ Heat-resistance property of coating materials

Graph 1: Temperature-Weight Change Rate

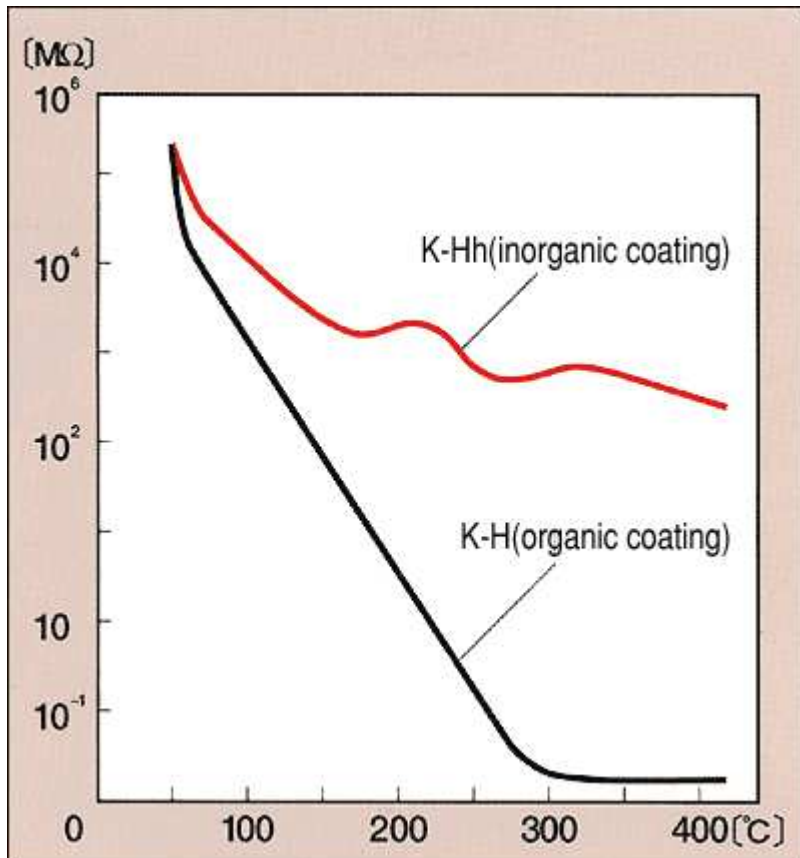
Graph 1 shows heat-resistivity of our new coating materials measured by thermogravimetric analysis and compared with a conventional coating material. Pyrolysis begins at 500°C for K-Hh and at 300°C for K-H. The data proves that heat-resistivity of these materials are far more excellent than that of conventional one.

● Pyrolysis starting points were determined by tangent method using TGA chart.



■ Heat-insulating property

Graph 2: Temperature-Insulation Resistance



Graph 2 shows changes in insulation resistance of our new coating materials under temperature changes compared with a conventional material. With the inorganic coating material, insulation resistance of K-Hh is high even under temperature at 400°C.

● This data is measured values for 450 mm. Source of the data is our in-house test result, but any value shown here is not guaranteed.