



【Feature】

The coated thermocouple is a flexible thermocouple in which various materials are coated on the thermocouple strand, and the temperature can be easily measured by cutting it to the required length and electrically connecting one end.

In addition to general materials such as vinyl and glass as covering materials, we have silica glass and ceramics as heat-resistant materials, and Teflon (FEP) as a material with high chemical resistance.

【Ordering code】

TDW — — — — —

① ② ③ ④ ⑤

Contents	Code	Specifications
Model	TDW	Coated thermocouple wire
① Element type	T	Type T (copper / constantan)
	J	(iron / constantan)
	E	E (Chromel Constantan)
	K	K (Chromel / Alumel)
② Tolerance	1	Class 1
	2	Class 2
③ Type of coating	G	Heat resistant vinyl coating
	H	Glass braided coating
	S	Silica glass braided coating * Type K only
	C	Ceramic braided coating * Type K only
	T	Teflon (FEP) coating
④ Wire diameter	10	φ0.1mm
	20	φ0.2mm
	32	φ0.32mm
	65	φ0.65mm
⑤ Total length	100	100m
	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> (m)

* The material of the insulation coating is the same as the type of coating (3).

* The length is usually sold in units of 100m. However, as long as we have stock, we will sell it in 1m increments, so please contact our sales staff.

* The heat resistant temperature of the thermocouple wire and the coating material is as shown in the table below. Since it is used in combination, the lower temperature is the maximum operating temperature.

〈Operating temperature of each coating material〉

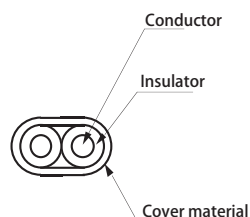
Wire diameter	Wire type	T	J	E	K
		Normal(°C)	Normal(°C)	Normal(°C)	Normal(°C)
0.1	Normal(°C)	100	100	100	200
	Overheat(°C)	150	150	150	250
0.2	Normal(°C)	100	200	200	300
	Overheat(°C)	150	300	300	400
0.32	Normal(°C)	200	200	200	400
	Overheat(°C)	250	300	300	500
0.65	Normal(°C)	200	400	450	650
	Overheat(°C)	250	500	500	850

Coating material	Max. temp. (°C)	Min. Temp. (°C)
Heat resistant vinyl	90	—20
Glass braided	250	0
Silica glass braided	600	0
Ceramic braided	1000	0
Teflon (FEP)	200	—250

〈Color of coating materials〉

Thermocouple type	Color of coating materials	Insulation color	
		+ side	—side
K	Blue	Red	White
E	Purple		
J	Yellow		
T	Brown		

【Dimensions】



〈Finished outer diameter〉

Element diameter	Finished outer diameter (mm)				
	Heatresistant vinyl	Glass braid	Sirika glass braid	Ceramic braid	Teflon
φ0.1	1.0×1.5	0.8×1.2	—	—	0.8×1.2
φ0.2	1.2×1.8	0.9×1.3	—	—	0.9×1.4
φ0.32	2.1×3.2	1.4×2.3	1.6×2.3	1.6×2.4	1.0×1.6
φ0.65	2.6×4.0	2.0×3.4	2.3×3.4	2.2×3.3	1.5×2.5