# TTR sheathed thermocouple



### Product overview

The TTR sheathed thermocouple is of short thermal response time, dynamic error reduced, large measurement scope, high mechanical strength and good pressure-resistant properties. It has many advantages (such as being bent, resistance to high pressure, quick thermal response time and being sturdy and durable). Like industrial fabricated thermocouple, it, as the sensor for temperature measurement, is usually used in conjunction with display instrument, recording instrument and electronic regulator and can be also used as temperature-sensing element of fabricated thermocouple. It can be used to directly measure the temperature of liquid, steam and gas medium and solid surface within the scope of 0°C~1300°C in all kinds of production processes.

### **Product features**



Temperature measurement scope and allowable error

	Tolerance level					
Graduation	1		11			
number	Allowable error value	Temperature measurement range °C	Allowable error value	Temperature measurement range °C		
K	±1.5°C	-415	±2.5°C	-40~+333		
, K	±0.004(t)	375~1000	±0.0075(t)	333~1200		
	±1.5°C	-40~+375	±2.5°C	-40~+333		
N	±0.0041(t)	375~1000	±0.0075(t)	333~1200		
Е	±1.5°C	-40~+375	±2.5°C	-40~+333		
E	±0.004(t)	375~800	±0.004(t)	333-900		
J	±1.5°C	-40~+375	±1.5°C	-40~+333		
,	±0.004(t)	375~750	±0.004(t)	333~750		
1	±1.5°C	-165	±1°C	-173		
1	±0.004(t)	125~350	±0.00751(t)	133~1000		
	±1°C	0~+1100	±2.5°C	0~600		
S	±11+0.003(t- 1100)	1100~1600	±0.0025(t)	600~1600		

#### • Thermocouple wire diameter and material

Thermocouple wire form		Single type	Double type	
Diameter of bushing		Ø2 Ø3 Ø4 Ø5 Ø6 Ø8	Ø3 Ø4 Ø5 Ø6 Ø8	
Bushing material	E, J and T	1Cr18Ni9T	1Cr18N/9Ti	
	K and N	1Cr18Ni9Ti GH3030	1Cr1BNi9Ti GH3030	
	S	GH3039	GH3039	

## **Product model selection**

TTR	sheathed thermocouple						
	Temperature-sensing element material M Nichrosi-nisiloy N Nickel-chromium-nisiloy E Nickel-chromium-copper nickel J iron-platinum-copper nicke T Copper-copper nickel Logarithm of thermocouple wire						
		2 5	ngle 2 Double nstallation type 2 Fixing thread 5 Fixing thread conical protection tube 8 Movable threaded pipe joint type  Junction box type		3 Fixed flange 6 Straight pipe joint type 0 No fixed device	4 Flexible pipe joint type 7 Fixing threaded pipe joint type	
			E Explosion-proof type  Diameter of the protective tube S Ø16mm D Special customization  Working end form				
TTR-					n e cross-section		