

General Purpose Sensor Assembly (TE.11 Series)

Primarily intend for immersion application with low-cost and can accommodate with the wide range of sensing elements. Design may vary based on application and your need.

Basically, sensor has been housed inside sealess tube or mineral insulated cable and extension cable will help reach the transmitter which locate far from the process. Other designs and calibration service are available upon request.



RTD Specifications

Resistance at 0°C	100/1000 Ω
Standard	IEC 60751
Tolerance	Class A , B

Note: Other sensor type and tolerance will be available upon request.

Thermocouple Specifications

Sensor type	K (NiCr-Ni) J (Fe-CuNi) T (Cu/Cu-Ni) E (NiCr-CuNi)
Standard	IEC 60584
Tolerance	Class 1

Note: Other sensor type will be available upon request.

General Specifications

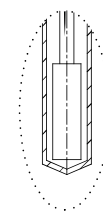
Wire end	Bare end, Connector, Spade lug
Sensor element	RTD and thermocouple
Sensor sheath diameter	ø1.6 to 12.7 mm
Sensor sheath material	SS 316/L

Extension Wire

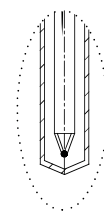
FEP insulated	400°F (204°C)
PFA insulated	500°F (260°C)
TFE insulated	500°F (260°C)
Fiberglass insulated	900°F (482°C)
PVC insulated	221°F (105°C)
Standard wire size	AWG 24, AWG 26

Note: Other wire types such as stainless braided (SSOB) on wire insulation and sizes are available upon request.

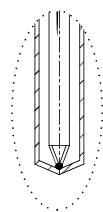
Types of Hot Junctions



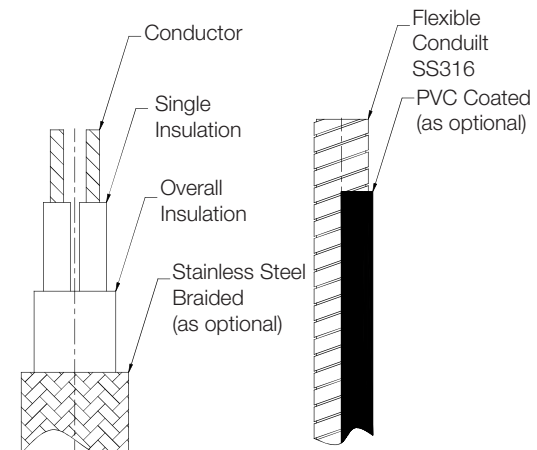
RTD



Thermocouple ungrounded junction



Thermocouple grounded junction

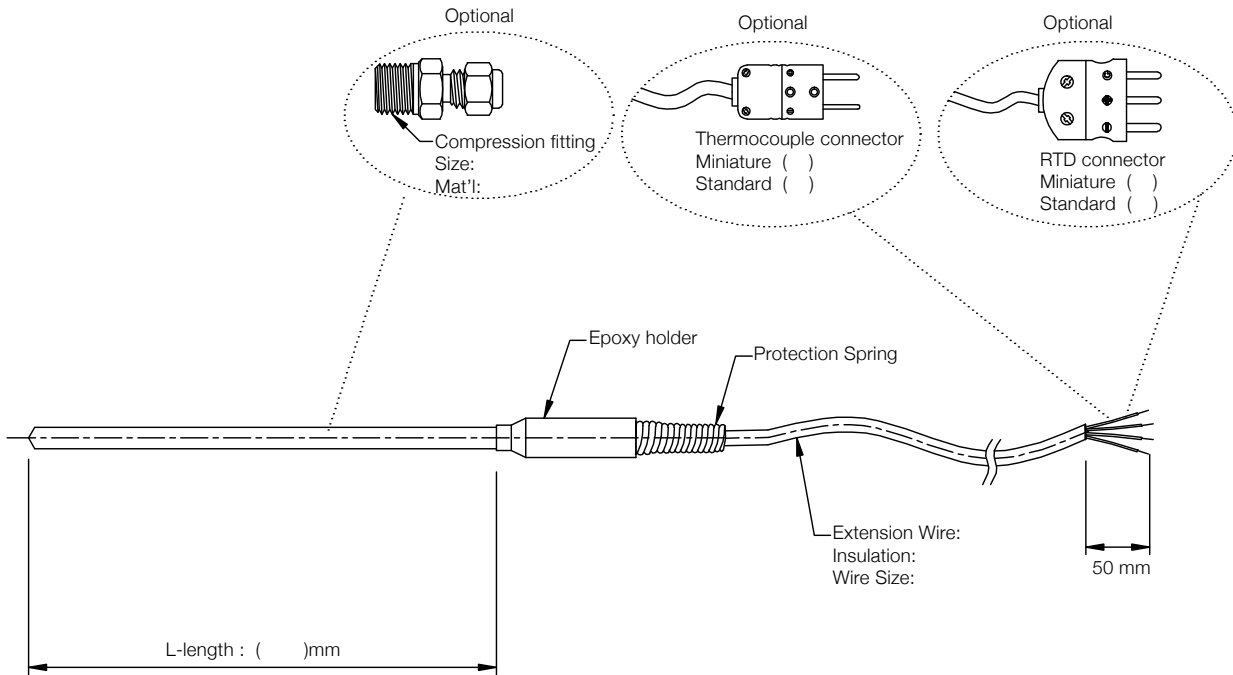


Typical Wire Construction

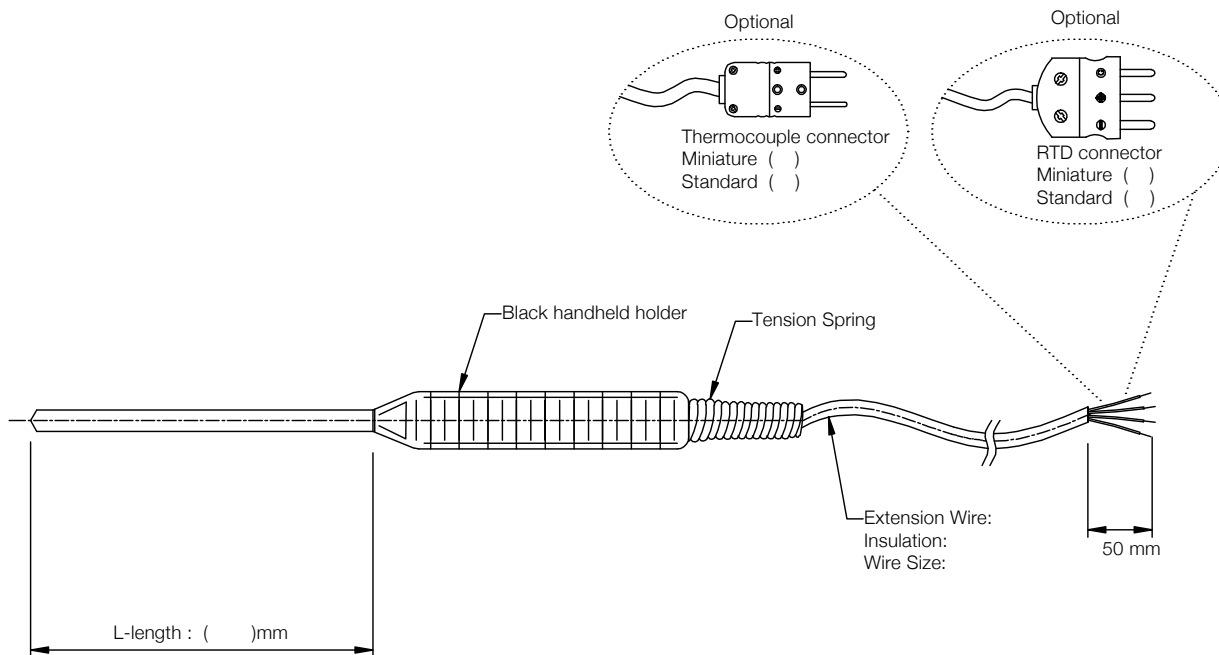
Also in Flexible type for better protection

General Assembly Drawings

Sensor Assembly with epoxy holder

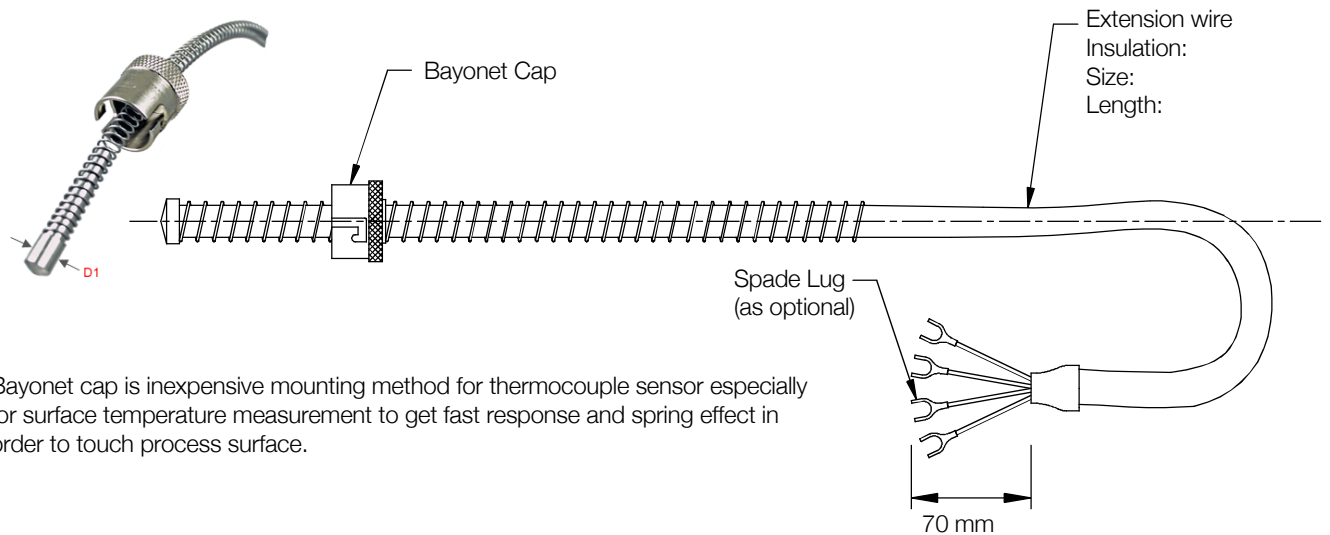


Sensor Assembly with PVC handheld



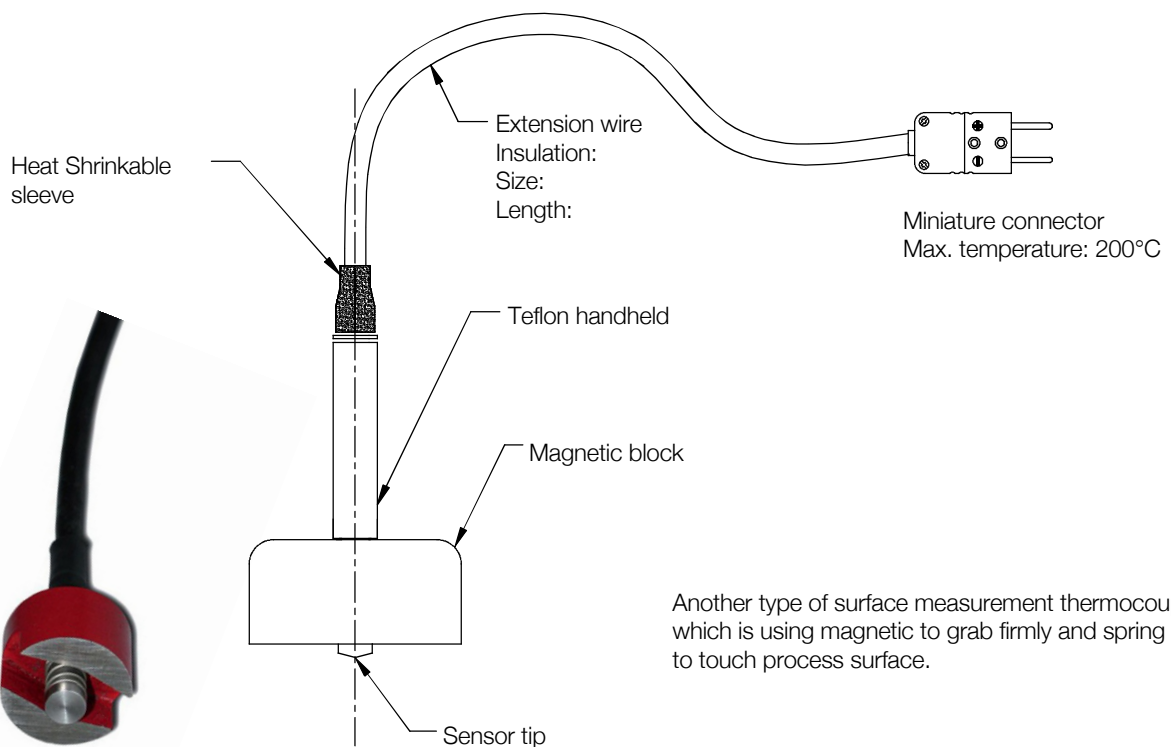
Type of connection will also lead variety of construction for sensors which is used for different application.

Sensor Assembly with Bayonet Cap



Bayonet cap is inexpensive mounting method for thermocouple sensor especially for surface temperature measurement to get fast response and spring effect in order to touch process surface.

Sensor Assembly with Magnetic Block



Another type of surface measurement thermocouple sensor which is using magnetic to grab firmly and spring will allow it to touch process surface.

General Purpose Temperature Sensor Assembly (TE.11 Series ,Ordering Guideline)

Please refer to below data sheet for choosing right model number of your sensor and do let us know about your need.

Sensor type									
K	Type K Thermocouple								
J	Type J Thermocouple								
T	Type T Thermocouple								
E	Type E Thermocouple								
R	RTD (Resistance Temperature Detector)								
Y1	Special version , to be specified								
Tolerance type									
A	Class A , IEC 751 , Thin Film (RTD) (Note : the data for reference only , it may varies based on sensor type)								
Sensor sheath									
M1	MI-RTDØ 6 mm-Single-3 Wires-SS 316 (Note : the data for reference only , it may varies based on sensor type)								
Wire junction									
U	Ungrounded (Std for RTD)								
G	Grounded								
E	Exposed								
Sheath length									
XXXX	To be specified (e.g 0125 for 125 mm long)								
Sensor connection style									
Z	None				8	RTD, Std male connector/plug			
1	Epoxy holder & protection spring*				9	RTD,Std female connector/plug			
2	Epoxy holder only*				10	RTD, Miniature male connector/plug			
3	Plastic handheld holder, protection spring				11	RTD, Miniature female connector/plug			
4	Thermocouple, Std male connector/plug				12	Base plate			
5	Thermocouple, Std female connector/plug				13	Base plate with terminal block			
6	Thermocouple, Miniature male connector/plug				14	Bare end*			
7	Thermocouple, Miniature female connector/plug				Y2	Special version, to be specified			
Wire Insulation, AWG 24									
L	Thermocouple - TE/TE				Y3	Special version, to be specified			
M	Thermocouple - TE/TE/SSOB				L	RTD - TE/TE			
N	Thermocouple - FG/FG				M	RTD - TE/TE/SSOB			
O	Thermocouple - PVC/PVC				N	RTD - FG/FG			
P	Thermocouple - SiR/SiR				O	RTD - PVC/PVC			
C	Thermocouple -PVC Coiled cable				P	RTD - SiR/SiR			
Z	None								
Extension wire length									
XXXX	To be specified (e.g 0125 for 125 mm long)								
Wire termination style									
Z	None				8	RTD, Miniature female connector/plug			
1	Thermocouple , Std male connector/plug				9	Bare end*			
2	Thermocouple ,Std female connector/plug				Y5	Special version, to be specified			
3	Thermocouple , Miniature male connector/plug								
4	Thermocouple , Miniature female connector/plug								
5	RTD, Std male connector/plug								
6	RTD,Std female connector/plug								
7	RTD, Miniature male connector/plug								
Additional options									
Z	None								
X1	Bayonet cap								
X2	Compression fitting								
X3	Flexible Armour Cable								
Y6	Special version, to be specified								
U	More than one option								
Documents (optional)									
	In-house Calibration Certificate [RTD,PT100 (@ Class A , Class B) ,Thermocouple]								
3	Three Point (-25 to 500)								
5	Five Points (-25 to 500)								
Z	None								
	(Note : Non-Singlas / Singlas Calibration report is available upon request)								
TE.11									
	1	2	3	4	5	6	7	8	9 10
									← Order Code