

Industrial RTD, Probe Type

900 SERIES



- General purpose RTD probe with PVC or PTFE lead wires
- Adjustable and welded fittings available
- Ideal for OEM applications
- PVC or PTFE jacketed lead wires are available
- A variety of fitting sizes and probe diameters are available
- RTD PT100 Ω standard, others available
- 2, 3 or 4-wire circuit types
- Isolation to 500 Vdc
- Custom designs available

APPLICATIONS

- Chemical processing
- Textile production
- Automotive
- Plastics processing
- HVAC

SPECIFICATIONS

Temperature ranges	-50 °F to 400 °F (-50 °C to 200 °C) -50 °F to 750 °F (-50 °C to 400 °C) -330 °F to 1,100 °F (-200 °C to 600 °C)
Sheath material	316 stainless steel
Finish (standard)	32 micro-inches maximum
Pressure rating	500 psi (34.5 bar), tube only
RTD element	PT100 Ω @ 32 °F (0 °C), $\alpha=0.00385$ IEC 751
Lead wires	Stranded 22 AWG standard, PVC or PTFE insulation
Self-heating	50 mW / °C typical in moving water
Insulation resistance	Single element probes: 100 mega Ω /min. at 500 Vdc, leads to case Dual element probes: 100 mega Ω /min. at 100 Vdc, between element and leads to case
Transition	Sheath to wire transition max. temperature 266 °F (130 °C)

Thermowells are recommended for pressure, corrosive fluids and high velocity applications, see pages 34-35.

ORDERING INFORMATION			
SERIES	900		
TEMPERATURE RANGES	-50/400 -50 °F to 400 °F	-330/1100 -330 °F to 1,100 °F	
	-50/750 -50 °F to 750 °F		
ACCURACIES	1 $\pm 0.12\%$ (± 0.3 °C) at 0 °C, Class B	3 $\pm 0.04\%$ (± 0.1 °C) at 0 °C, Class AA	
	2 $\pm 0.06\%$ (± 0.15 °C) at 0 °C, Class A		
ELEMENT TYPES	C PT100 Ω at 0 °C	M PT1000 Ω at 0 °C	
CIRCUIT TYPES	1 Single, 2-wire	3 Single, 4-wire	5 Dual, 3-wire
	2 Single, 3-wire	4 Dual, 2-wire	6 Dual, 4-wire
PROCESS CONNECTIONS	0 None	8 1/2" NPT Male	
	1 1/8" NPT Male	48 1/2" NPT Male w/ adjustable compression fitting	
	2 1/4" NPT Male		
ELECTRICAL CONNECTIONS	6 1/2" NPT conduit with 36" cable	48 M12 x 1 (5-pin)*	
	36 Integral cable 36"	49 3-pin RTD plug	
	37 1/2" NPT conduit with 6" flying leads	50 M12 x 1 (8-pin)	
STEM LENGTHS	025 2.5"	090 9"	180 18"
	040 4"	120 12"	240 24"
	060 6"	150 15"	
STEM DIAMETERS	1 1/8"	3 3/8"	6 6 mm
	2 1/4"	4 1/2"	

Please consult your local NOSHOK Distributor or NOSHOK, Inc. for availability and delivery information.

* Single circuit types only

EXAMPLE

Series	900	900	-	-50/750	-	2	-	C	2	-	0	-	49	-	060	-	6
Temperature range	-50 °F to 750 °F																
Accuracy	$\pm 0.06\%$ (± 0.15 °C) at 0 °C, Class A																
Element type	PT100 Ω at 0 °C																
Circuit type	Single, 3-wire																
Process connection	None																
Electrical connection	3-pin RTD plug																
Stem length	6"																
Stem diameter	6 mm																

1/2" Conduit With Cable

M12 x 1 (5-pin)

Integral Cable 36"

1/2" NPT w/Flying Leads

RTD Plug

