

Industrial RTD, Probe Type with Connection Head



910/915 SERIES



Select Connection Heads
Available with CSA/FM Approvals

APPLICATIONS

- Industrial boilers
- Petrochemical
- Exhaust gas monitoring
- Food processing

- Standard head-type RTD assembly
- A variety of head types are available
- Factory Mutual and Canadian Standards approved explosion proof models available
- Transmitter available, fits standard heads
- Probe welded to fitting or spring loaded
- If used in conjunction with a thermowell, probe can be replaced in some models without possibility for leakage
- Process fitting 1/2" NPT standard, others available
- RTD PT100 Ω standard, others available
- 2, 3 or 4-wire circuit types
- Isolation to 500 Vdc

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
Environmental protection	A1/A2: NEMA 4 P1 & S1/S2: NEMA 4X
Transition	Sheath to wire transition max. temperature 266 °F (130 °C)

Thermowells are recommended for pressure, corrosive fluids and high velocity applications, see pages 48-50.



WARNING: This product can expose you to chemicals including Lead and Nickel, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

ORDERING INFORMATION			
SERIES	910 Fixed RTD	915 Spring-loaded RTD	
TEMPERATURE RANGES	-50/400 -50 °F to 400 °F -50/750 -50 °F to 750 °F	-330/1100 -330 °F to 1,100 °F	
ACCURACIES	1 ±0.12% (±0.3 °C) at 0 °C, Class B 2 ±0.06% (±0.15 °C) at 0 °C, Class A	3 ±0.04% (±0.1 °C) at 0 °C, Class AA	
ELEMENT TYPES	C PT100 Ω at 0 °C	M PT1000 Ω at 0 °C	
CIRCUIT TYPES	1 Single, 2-wire 2 Single, 3-wire	3 Single, 4-wire 4 Dual, 2-wire	5 Dual, 3-wire 6 Dual, 4-wire
OPTIONAL TRANSMITTER/ OUTPUT	1U 4 mA to 20 mA, 2-wire, upscale burnout 1D 4 mA to 20 mA, 2-wire, downscale burnout 2 0 Vdc to 5 Vdc, 3-wire	3 1 Vdc to 5 Vdc, 3-wire 5 0 Vdc to 10 Vdc, 3-wire	
PROCESS CONNECTIONS	0 None 1 1/8" NPT Male 2 1/4" NPT Male	8 1/2" NPT Male 48 1/2" NPT Male w/sliding compression fitting **	
ELECTRICAL CONNECTIONS	23 Connection head w/ 1/2" NPT conduit	45 Connection head with 3/4" NPT conduit	
ELECTRICAL CONNECTION MATERIALS	A1 Aluminum cast A2 Aluminum cast, explosion proof*	P1 PP, white S1 Stainless Steel cast	S2 Stainless Steel cast, explosion proof*
STEM LENGTHS	025 2.5" 040 4" 060 6"	090 9" 120 12" 150 15"	180 18" 240 24"
STEM DIAMETERS	1 1/8" 2 1/4"	3 3/8" 4 1/2"	6 6 mm

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

* Factory Mutual and Canadian Standards approved explosion proof Class I, Division I, Groups B, C and D; Class II, Division I, Groups E, F and G

** Add 2" to stem length for this option. If installing with thermowells, Process Connection option 48 must be selected.

EXAMPLE

Series 910
Temperature range -330 °F to 1,100 °F
Accuracy ±0.12% (±0.3 °C) at 0 °C, Class B
Element type PT1000 Ω at 0 °C
Circuit type Dual, 2-wire
Process connection 1/2" NPT Male
Electrical connection Connection head w/1/2" NPT conduit
Electrical connection material Stainless Steel cast
Stem length 12"
Stem diameter 3/8"

910 - -330/1100 - 1 - M 4 - 8 - 23 S1 - 120 - 3

Aluminum Cast (A1/A2)

Polypropylene (P1)

Stainless Steel Cast (S1/S2)

NEMA 4

NEMA 4X

NEMA 4X

