

Resistant temperature detector with head

Model RTH

General purpose and Ex-proof

Features

- High stability sensor
- Mineral insulated for flexibility and durability
- General purpose with spring loaded sensor
- Available with weather proof and explosion proof head
- Custom designs for specific applications

Ranges

-200 up to 600 °C
-325 up to 1100 °F

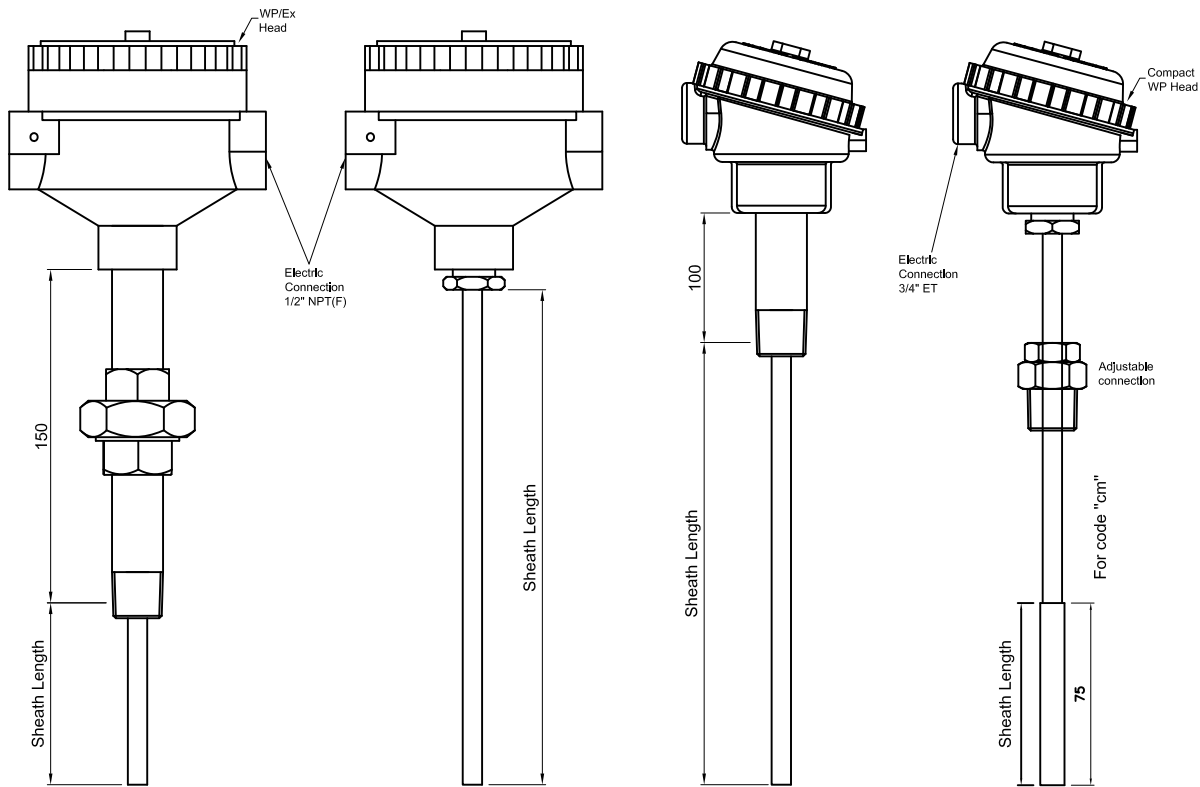
Applications

Chemical and petrochemical industry
Machine and apparatus construction
Pharmaceuticals, Dairy & Food process industry
Pulp and paper industry



Technical specification	RTH
Head types	Compact, Weatherproof and Ex-proof heads.
Element	Pt100, Pt500, Pt1000
Element type	Simplex or duplex
Measuring principle	
Range	From -200 to 600 °C
Sheath diameter	6mm, 8mm, others on request
Sheath length	Rigid up to 1000mm, flexible with MI cable 6X5 upto 20000mm
Process connection	1/4", 1/2", 3/4" NPT/BSP, adjustable, Nipple or Nipple union nipple connections
Material	
Process connection	Stainless steel 316, optional SS321
Sheath	Stainless steel 316, optional SS 321
Housing	Aluminum, epoxy coated
Electrical specification	
Wiring configuration	2 wire, 3 wire and 4 wire
Lead wire	26-gauge standard copper wire, silver plated
Terminal	Ceramic block with nickel plated brass terminal, optional spring loaded terminal
Ex-proof	Zone 1 & 2 IIA / IIB / IIC T6 Enclosure Ex-d IEC 60079-1:2007
Insulation	100 X 10 ⁶ ohms minimum insulation when measured at 500 VDC
Electrical connection	3/4" ET(F) for compact head, 1/2" NPT(F) for WP & EX, others on request.
General specification	
Accuracy	Class "A" and Class "B" as per DIN EN 60751, optional 1/3 rd & 1/10 th DIN
Stability	±0.04 maximum ice-point resistance shift following 1,000 hrs at maximum specified temperature
Protection IEC 60529	IP65, IP66 for Ex-Proof
Accessories, options	Thermowell, Head mounted transmitters, etc.

General dimensions in mm



Order information

Head Type	Element	Element type	Accuracy class	Sheath material	Sheath diameter	Sheath length	Process connection	Connection Type	Electrical connection	Options
(E) Compact weatherproof head	Pt100	(S2) Simplex 2 wire	(1) 1/10 th Din	(S) SS316	(D6) 6 mm	55 to 1000 mm	(=) None	(=) None	(=) Standard ³⁾	(NH) Tagging wired
(W) Weather proof	Pt500	(S3) Simplex 3 wire	(3) 1/3 rd Din	(SA) SS321	(D8) 8 mm		(02) 1/4" NPT(M)	(F) Fixed Hex nut	(JM) M20X1.5 mm female	(ST) Spring loaded terminal ⁴⁾
(B) Ex proof enclosure IIA/IIB certified	Pt1000	(S4) Simplex 4 wire	(A) Class 'A' -70/300C		(D10) 10 mm		(04) 1/2" NPT(M)	(NS) Nipple ²⁾	(B1) Ni plated brass double compression cable gland ⁷⁾	(HT) Head mounted transmitter
(C) Ex proof enclosure IIC certified		(D2) Duplex 2 wire	(B) Class 'B' -70/500C				(05) 3/4" NPT(M)	(US) Nipple union Nipple ²⁾	(C1) Ni plated brass Ex proof (IIA/IIB) cable gland ⁷⁾	(DE) Double entry for head ⁵⁾
		(D3) Duplex 3 wire	(EA) Extended temperature Class A -200/600C				(13) 1/4" BSP(M)	(D) adjustable connection sliding on stem	(D1) Ni plated brass Ex proof (IIC) cable gland ⁷⁾	(CM) MI cable extension ¹⁾
							(15) 1/2" BSP(M)		(F1) SS double compression cable gland ⁷⁾	(CA) Stainless steel armored PTFE insulated extension cable ¹⁾⁶⁾
							(17) 3/4" BSP(M)		(G1) SS Ex proof (IIA/IIB) cable gland ⁷⁾	(TTS) Teflon- Teflon, SS braided extension cable
							(16) M20x1.5(M)		(H1) SS Ex proof Ex proof (IIC) cable gland ⁷⁾	
									(I1) Plastic cable gland PG13.5 ⁷⁾	

1) Specify length in meter EG. CM1.5 = CM with 1.5m, Max length 20m, only for sheath diameter 6mm

2) Only with connection 1/2" NPT/BSP 3) 3/4" ET for head (E) & 1/2" NPT for others 4) only with weather proof head 5) not for Head type (E)

6) Max temperature limit for extension cable is 250°C 7) For two cable gland, specify the codes as B2, C2... applicable only for (DE)

How to order

Head Type	Model	Element	Element type	Accuracy Class	Sheath Material	Sheath Diameter	Sheath Length	Process Connection	Connection Type	Electrical Connection	Option
C	RTH	Pt100	S3	A	S	D6	100	04	D	=	ST