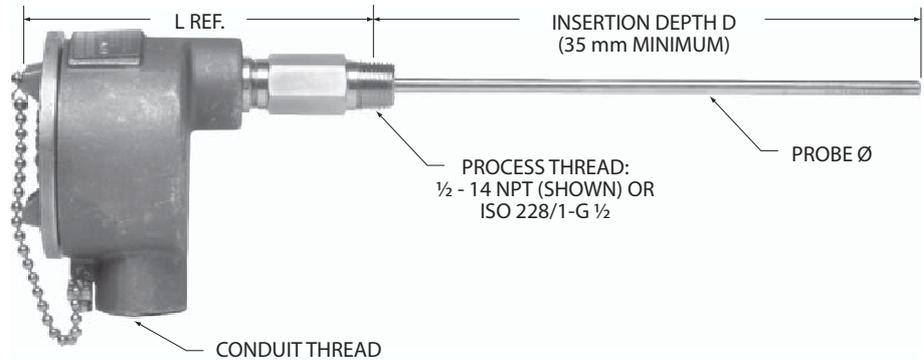


Flameproof RTD Sensors – Metric Dimensioned



ATEX



Overview

Flameproof sensors are designed to contain an explosion as well as prevent the transmission of an explosion to the surrounding atmosphere. These sensors are suitable for use in Zone 1 or Zone 2.

- Approved for use in hazardous locations defined by IEC/EN 60079-0 and IEC/EN 60079-1, ATEX directive 94/9/EC (KEMA 03 ATEX 2389 X), and II 2 G Ex d IIC T6
- Features tip-sensitive, all stainless or MgO filled RTD probe for fast response
- Spring-loaded holder ensures good probe contact
- U.S. or metric threads

Specifications

Temperature range: -50 to 260°C (-58 to 500°F).

Material:

Tip-sensitive probe: Stainless steel with copper alloy tip.

All stainless RTD: Stainless steel.

MgO filled RTD: Inconel.

Fittings: Stainless steel.

Connection head:

CH356: 316L stainless steel IP66, Type 3, 4, and 4X.

CH357: Aluminum alloy IP65, Type 3 and 4.

CH358: Epoxy coated aluminum alloy IP66, Type 3, 4, and 4X.

Pressure rating:

Spring-loaded holder: 50 psi (3.4 bar).

Fluid seal fitting: 100 psi (6.9 bar).

Insulation resistance: 100 megohms min. at 100 VDC, leads to probe case.

Connection: Terminal block for wires up to AWG 14.

Time constant: Typical value in moving water.

Tip sensitive:

Single element 1.5 seconds.

Dual element 7 seconds.

All stainless and MgO filled: 10 seconds.

Hazardous area requirements

Refer to Minco's Application Aid #19 entitled "Specifying Temperature Sensors for Hazardous Areas" for more information on how to classify a hazardous area, methods of protection, and the various standards and agencies (including FM, CSA, CENELEC and ATEX). Application Aid #19 is available at www.minco.com/sensoraid/.

Specify and order products at:
www.minco.com/sensors_config

Specifications subject to change

Fitting options

Fitting	Process Thread	L REF.		Code
		CH356	CH357/CH358	
Fluid Seal	1/2 - 14 NPT	4.3" (108mm)	4.6" (116 mm)	0*
Fluid Seal	G 1/2	4.1" (103 mm)	4.4" (111 mm)	1*
Set screw spring-loaded	1/2 - 14 NPT	5.3" (135 mm)	5.6" (143 mm)	2
Set screw spring-loaded	G 1/2	5.0" (128mm)	5.4" (136 mm)	3
Fixed spring-loaded	1/2 - 14 NPT	4.5" (115 mm)	N/A	4
Welded	1/2 - 14 NPT	4.2"(107 mm)	4.5" (115 mm)	6**
Welded	G 1/2	4.0" (101 mm)	4.3" (109 mm)	7**
Release knob spring-loaded	1/2 - 14 NPT	5.4" (137 mm)	5.7" (145 mm)	8
Release knob spring-loaded	G 1/2	5.2" (132 mm)	5.5" (140 mm)	9

* Not available with CH356 stainless steel connection head.

** 0.250" (6.4mm) for all stainless and MgO only (not available in tip-sensitive or 0.236" diameter models).

RTD Assembly Numbers

Connection Head	CH356 Stainless				CH357 Aluminum				CH358 Epoxy Coated			
	0.236" (6.0mm)		0.250" (6.4mm)		0.236" (6.0mm)		0.250" (6.4mm)		0.236" (6.0mm)		0.250" (6.4mm)	
Probe Diameters	Single	Dual	Single	Dual	Single	Dual	Single	Dual	Single	Dual	Single	Dual
Number of elements	AS800	AS801	AS810	AS811	AS830	AS831	AS840	AS841	AS860	AS861	AS870	AS871
Tip Sensitive	AS802	AS803	AS812	AS813	AS832	AS833	AS842	AS843	AS862	AS863	AS872	AS873
All Stainless	AS804		AS814	AS815	AS834		AS844	AS845	AS864		AS874	AS875
MgO Platinum												

Notes:

CH356: 316L stainless steel IP66, Type 3, 4, and 4X.

CH357: Aluminum alloy IP65, Type 3 and 4.

CH358: Epoxy coated aluminum alloy IP66, Type 3, 4, and 4X.

Get more information on connection heads on pages 4-2 to 4-3.

Sensing elements

Element	Code	Code	
		Single	Dual
Platinum (0.00392 TCR) 100 Ω ±0.5% at 0°C	PA	PAPA	
Platinum (0.00385 TCR) 100 Ω ±0.1% at 0°C (Meets EN60751, Class B)	PD	PDPD	
Platinum (0.00385 TCR) 100 Ω ±0.06% at 0°C (Meets EN60751, Class A)	PM	PMPM	
Platinum (0.00385 TCR) 100 Ω ±0.5% at 0°C	PE	PEPE	
Platinum (0.00375 TCR) 1000 Ω ±0.12% at 0°C	PW	PWPW	
Copper (0.00427 TCR) 10 Ω ±0.2% at 25°C	CA		
(dual) 10 Ω ±0.5% at 25°C		CCCC	
Nickel (0.00672 TCR) 120 Ω ±0.5% at 0°C	NA	NANA	
Nickel (0.00618 TCR) 100 Ω ±0.22% at 0°C	NB	NBNB	

Specification and order options

AS800	Assembly number from table
4	Fitting from table
PD	Sensing element from table
100	Insertion depth D (in mm): (35-3000 mm)
X	Leads per sensing element: Y = 2 leads (n/a for copper) Z = 3 leads X = 4 leads (n/a for dual models)
3	Conduit thread: 3 = 1/2 - 14 NPT 4 = 3/4 - 14 NPT 5 = M20 x 1.5
AS8004PD100X3 = Sample part number	

Specifications subject to change

