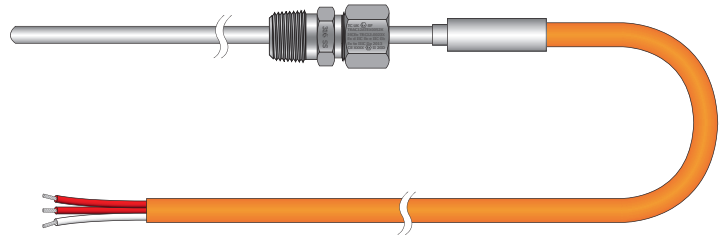


# ATEX / IECEx RTD Pt100 Sensors with Pot Seal

## RTD Pt100 Resistance Thermometers 3.0mm to 8.0mm dia.

Our ATEX / IECEx approved flexible mineral insulated platinum resistance thermometers utilise, as standard, detector elements with a resistance of 100 ohms @ 0°C and a fundamental interval of 38.5 ohms to IEC 60751. Single and duplex elements are available. An adjustable threaded compression fitting is required to achieve approval. Please see page 14 for our full range of fittings.

- Approved to II 2 GD Ex d IIC Gb (Gas) and Ex tb IIIC Db (Dust)
- Also suitable for use in intrinsically safe areas to Ex II 1 G Ex ia IIC Ga, see page 19 for details
- Temperature classification T6-T1, see page 20 for stand-off requirements
- Available in B, A, 1/3, 1/5 and 1/10 grade accuracies
- Sheath diameters from 3.0mm to 8.0mm
- PVC or PFA insulated extension cables
- Wide operating temperature range of -100°C to +600°C
- UKAS calibration available



The above sensor must be installed using the compression fitting supplied to maintain Ex d / Ex tb approval.  
For Ex ia applications a compression fitting is not required to maintain approval



SECTION 1	N° of Elements
1	Simplex
2	Duplex
3	Triplex

SECTION 2	Sheath Diameter (mm)	Sheath Diameter (inches)
Standard Sizes	3.0mm	0.118"
	4.5mm	0.177"
	6.0mm	0.236"
	8.0mm	0.315"

SECTION 3	N° of Wires	
2	2 wire	
3	3 wire	
4	4 wire	

SECTION 4	Sheath Length
	As Required

SECTION 5	Termination
CE4CL	<p>Other lengths of cable available</p>

SECTION 6	Tolerance of Element (IEC 60751)		
Grade	Accuracy @ 0°C	Accuracy @100°C	Order Code
B	±0.30°C	±0.80°C	R100 - B
A	±0.15°C	±0.35°C	R100 - A
1/3	±0.08°C	±0.19°C	R100 - 1/3
1/5	±0.05°C	±0.15°C	R100 - 1/5
1/10	±0.03°C	±0.12°C	R100 - 1/10

SECTION 7	Extension Cables (please specify length in metres)	
RP	PVC Insulation (105°C) (Termination: CE4CL seal, temperature rating 90°C)	RP37 (3-wire)
		RP47 (4-wire)
		RP67 (Duplex 3-wire)
RT	PFA Insulation (250°C) (Termination: CE4CLA seal, temperature rating 230°C)	RT37 (3-wire)
		RT47 (4-wire)
		RT67 (Duplex 3-wire)

SECTION 8	Stainless Steel Adjustable Compression Fittings		
Dia.	1/8" BSPT	1/4" BSPT	1/2" BSPT
3.0mm	SFS18T30EX	SFS14T30EX	SFS12T30EX
4.5mm	SFS18T45EX	SFS14T45EX	SFS12T45EX
6.0mm	SFS18T60EX	SFS14T60EX	SFS12T60EX
8.0mm	—	SFS14T80EX	SFS12T80EX

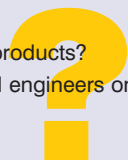
\* All cables have 7/0.2mm conductors. If no cable is required, leave this section of the order code blank and the sensor will be supplied with 100mm Kapton 'tails'.

Other thread sizes are available - please see page 14 for details.

Order Code - Example										
Type N°	I.S. Version (Optional, please see page 19 for details)	N° of Elements (See section 1)	Sheath Diameter (See section 2)	N° of Wires (See section 3)	Sheath Length (mm)	Termination (See section 5 and 7)	Resistance Value of Element	Grade of Element (See section 6)	Extension Cable (See section 7)	Compression Fitting (See section 8)
57	- IS	- 1	- 6.0	- 3	- 250	- CE4CL	- R100	- B	- 1m RP37	- SFS12T60EX

### Need advice

on using our **ATEX** approved products?  
 Contact one of our experienced engineers on  
**01895 252222**  
 International +44 1895 252222  
 or send an email to [atex@tc.co.uk](mailto:atex@tc.co.uk)

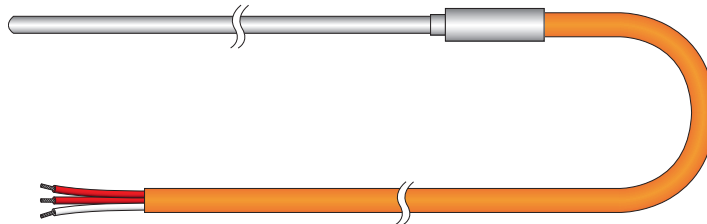


# ATEX / IECEx RTD Pt100 Sensors with Pot Seal

## RTD Pt100 Resistance Thermometers 3.0mm to 8.0mm dia.

Our ATEX / IECEx approved mineral insulated platinum resistance thermometers utilise, as standard, detector elements with a resistance of 100 ohms @ 0°C and a fundamental interval of 38.5 ohms to IEC 60751. Single and duplex elements are available.

- Approved to II 3 GD Ex nA IIC Gc (Gas) and Ex tc IIIC Dc (Dust)
- Pt100 element conforming to BS EN 60751 / IEC 60751
- Available in B, A, 1/3, 1/5 and 1/10 grade accuracies
- Sheath diameters from 3.0mm to 8.0mm
- 316 seamless stainless steel sheath (other grades/materials available)
- PVC or PFA insulated extension cables
- Simplex, duplex and triplex sensors available
- Wide operating temperature range of -100°C to +600°C
- UKAS calibration available



The above sensor must be terminated in a suitable ATEX / IECEx approved enclosure or box



SECTION 1	N° of Elements
1	Simplex
2	Duplex
3	Triplex

SECTION 2	Sheath Diameter (mm)	Sheath Diameter (inches)
Standard Sizes	3.0mm	0.118"
	4.5mm	0.177"
	6.0mm	0.236"
	8.0mm	0.315"

SECTION 3	N° of Wires		
2	2 wire		
3	3 wire		
4	4 wire		

SECTION 4	Sheath Length
	As Required

SECTION 5	Termination
CE4CL	<p>Other lengths of cable available</p>

SECTION 6	Tolerance of Element (IEC 60751)		
Grade	Accuracy @ 0°C	Accuracy @100°C	Order Code
B	±0.30°C	±0.80°C	R100 - B
A	±0.15°C	±0.35°C	R100 - A
1/3	±0.08°C	±0.19°C	R100 - 1/3
1/5	±0.05°C	±0.15°C	R100 - 1/5
1/10	±0.03°C	±0.12°C	R100 - 1/10

SECTION 7	Extension Cables (please specify length in metres)	
RP	PVC Insulation (105°C) (Termination: CE4CL seal, temperature rating 125°C)	RP37 (3-wire)
		RP47 (4-wire)
		RP67 (Duplex 3-wire)
RT	PFA Insulation (250°C) (Termination: CE4CLA seal, temperature rating 225°C)	RT37 (3-wire)
		RT47 (4-wire)
		RT67 (Duplex 3-wire)

\* All cables have 7/0.2mm conductors. If no cable is required, leave this section of the order code blank and the sensor will be supplied with 100mm Kapton 'tails'.

SECTION 8	Stainless Steel Adjustable Compression Fittings		
Dia.	1/8" BSPT	1/4" BSPT	1/2" BSPT
3.0mm	SFS18T30	SFS14T30	SFS12T30
4.5mm	SFS18T45	SFS14T45	SFS12T45
6.0mm	SFS18T60	SFS14T60	SFS12T60
8.0mm	—	SFS14T80	SFS12T80

Other thread sizes and materials available. Contact us for details.

## Order Code - Example

Type N°	N° of Elements (See section 1)	Sheath Dia. (See section 2)	N° of Wires (See section 3)	Sheath Length (mm)	Termination (See section 5)	Resistance Value of Element	Grade of Element (See section 6)	Extension Cable (See section 7)	Compression Fitting (Optional, see section 8)
37	- 1	- 6.0	- 3	- 250	- CE4CL	- R100	- B	- 1m RP37	- SFS14T60

## Need advice

on using our **ATEX** approved products?  
 Contact one of our experienced engineers on  
**01895 252222**  
 International +44 1895 252222  
 or send an email to [atex@tc.co.uk](mailto:atex@tc.co.uk)

