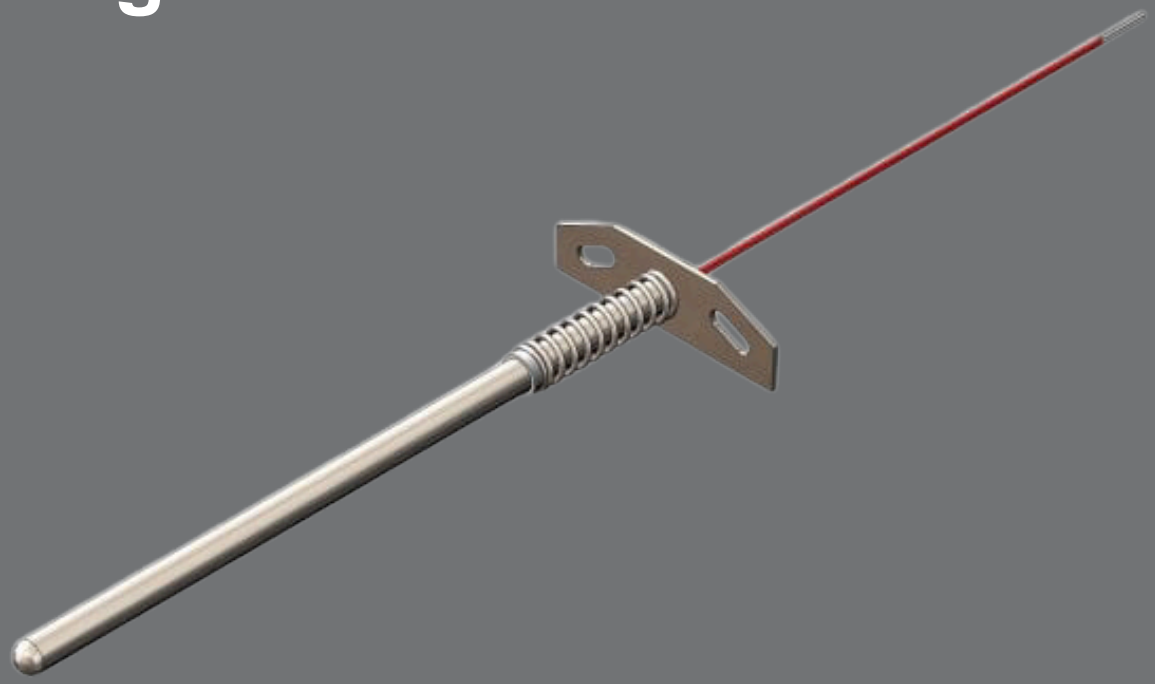
Model 301 and 304 spring loaded RTDs for cast iron explosion-proof housing

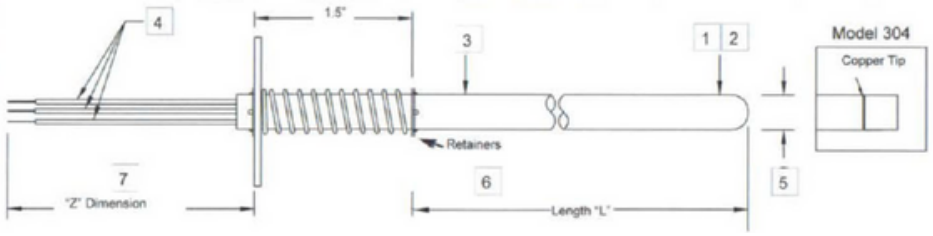


Overview

Designed for applications where a cast iron explosion-proof connection head and a thermowell are required. The spring-loaded action of this RTD ensures proper contact with the tip of the thermowell for maximum heat transfer.

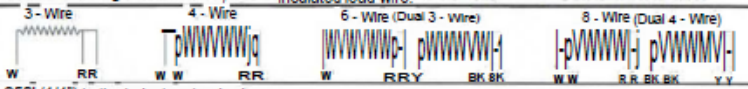
Key features

- Model 301: Refer to Model 302 for general purpose connection head applications. Refer to Model 305 if spring-loaded hex fitting is needed.
- Model 304: Tip Sensitive temperature sensor. The tip sensitive design is ideal for bearing temperature applications. Refer to Model 303 for general purpose connection head applications.



Technical specification

Feature	Description
Element type	Standard platinum, 100 ohms @ 0C (32F), .00385 TCR, with optional Pt Ro and TCRs available
Accuracy	Standard DIN-B, with optional DIN-A and others available upon request
Construction	Standard 500°F service temperature, with optional high temperature and rugged constructions available
Lead wire configuration	Standard 3 Wire, with optional: 2, 4, 6 or 8 wire
Sensor sheath diameter	Standard 1/4" diameter, with optional 1/8", 3/16" and others available
Lead wire length	Standard 6", with custom length available
Connections	Options of standard and miniature sizes, as well as standard and high temperature ratings
Fittings	Optional compression and spring loaded fittings with various NPT connections
Insulation resistance	Greater than 100 Megohms @ 100VDC @ 21C (70F)

1. Base Model	Base Model/Series Number.
2. A. Accuracy:	*Standard* Class B (no code) *High* Class A (code H) *Special* Customer Specified (code S) * Industry Standard is DIN Curve (code 01B), Platinum, 100 @ 0°C. Conforms to IEC 751.
B. TCR:	Temperature Coefficient of Resistance is the temperature vs. resistance characteristics of a given metal (Pt, Cu & Ni) used in manufacturing the RTD. Determines the curve of the RTD.
C. Ice Point Resistance:	R_0 - Resistance at 0°C (32°F)
D. Response Time:	Dependent on sheath diameter, the smaller the diameter - the faster the response. See RTD General Specs.
E. Tip Sensitivity:	Model 304 Copper Tip, element is encapsulated in copper to increase sensitivity at tip of probe
3. Construction:	Code A - 316SS tube and wire construction, thin film element, Teflon insulated lead wire. Code C - 316SS tube and wire construction, fiberglass insulated lead wire. Code B & D - MgO construction, Teflon insulated lead wire.
4. Lead Wires:	
5. Sheath Diameter:	.250" (1/4") is the industry standard.
6. Sheath Length :	Entire sheath length. See sizing chart in RTD General Specifications.
7. Lead Wire Length:	Length of wires beyond the sheath.
8. Water resistant:	Increases moisture protection for humid environments.

Technical specification

Model	Description
301	Spring-Loaded RTD (for Connection Head Code 3)
304	Spring-Loaded, Tip Sensitive RTD (for Connection Head Code 3)

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Code	R_0 & Temperature Coefficient			
01B	**100 ohm Platinum**	**.00385055**	**TCR**	**100 ohms @ 0°C - Industry Standard**
01A	100 ohm Platinum	.003902	TCR	100 ohms @ 0°C
10A	1000 ohm Platinum	.003902	TCR	1000 ohms @ 0°C
10B	1000 ohm Platinum	.00385055	TCR	1000 ohms @ 0°C
12N	120 ohm Nickel	.00672	TCR	120 ohms @ 0°C
09C	10 ohm Copper (9.035)	.004274	TCR	10 ohms @ 25°C

Add Code "H" for higher accuracy
Add Code "S" for special accuracy
Add Code "M_", ME for matched to element, MT for matched to transmitter, MP for two matched probes.

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Code	Construction Temperature Limit
A	500° F Maximum
C	900° F Maximum (Platinum Only)
D	1200° F Maximum (Platinum Only)
B	1700° F Maximum (Platinum Only)

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Code	Number of Lead Wires	For Models
2	2-Wire (No lead Compensation)	All
3	3-Wire (Lead Compensation)	All
4	4-Wire (Complete Compensation)	All
6	Dual 3-Wire (With dual element)	301
8	Dual 4-Wire (With dual element)	301

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Code	Sheath Diameter	For Models
C	.250" (1/4") Diameter	All
D	.215" (2 or 3 wire only)	All
Other	Consult factory	

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Code	Sheath Length
XXX.X	Specify length to nearest 0.1"

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Code	Lead Wire Length
Z006	6" - Standard with head
Z024	24" - Standard without head
ZXXX	Other - Consult Factory

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Code	Option
W	Water Resistant

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301	-	01B	-	A	-	3	-	D	-	012.0	-	Z006	-	Sample Model Number
	-		-		-		-		-		-		-	Your Model Number

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