

## Models 301 & 304

### Spring-Loaded RTDs for Cast Iron Explosion-Proof Housings

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.

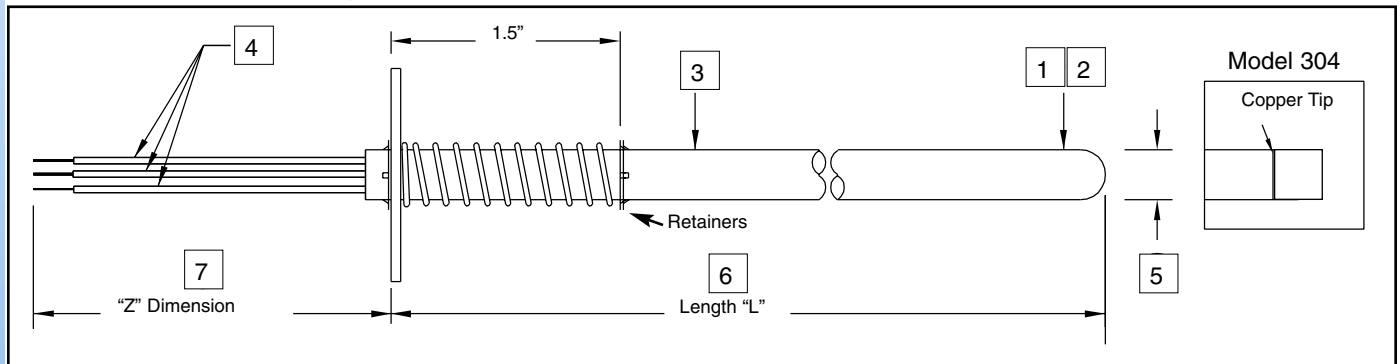


#### Model 301

- 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.



#### Specifications:

1. Base Model	Base Model/Series Number.								
2. A. Accuracy:	<i>Standard</i> Class B (no code) <i>High</i> Class A (code H) <i>Special</i> 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 <sub>0</sub> - 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 (.00385055) TCR, Teflon insulated lead wire. Code C - 316SS tube and wire construction, wire wound element, fiberglass insulated lead wire. Code B & D - Inconel sheathed MgO construction, wire wound element, fiberglass insulated lead wire.								
4. Lead Wires:	<table style="width: 100%; text-align: center;"> <tr> <td style="width: 25%;">3 - Wire</td> <td style="width: 25%;">4 - Wire</td> <td style="width: 25%;">6 - Wire (Dual 3 - Wire)</td> <td style="width: 25%;">8 - Wire (Dual 4 - Wire)</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </table>	3 - Wire	4 - Wire	6 - Wire (Dual 3 - Wire)	8 - Wire (Dual 4 - Wire)				
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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.								

Model	Description				
301	<b>Spring-Loaded RTD (for Connection Head Code 3)</b>				
304	<b>Spring-Loaded, Tip Sensitive RTD (for Connection Head Code 3)</b>				
<b>1</b>	<b>Code</b>	<b>R<sub>0</sub> &amp; Temperature Coefficient</b>			
	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.				
	<b>2</b>	<b>Code</b>	<b>Construction Temperature Limit</b>		
		A	500° F Maximum		
C		900° F Maximum (Platinum Only)			
D		1200° F Maximum (Platinum Only)			
<b>3</b>	<b>Code</b>	<b>Number of Lead Wires</b>	<b>For Models</b>		
	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		
<b>4</b>	<b>Code</b>	<b>Sheath Diameter</b>	<b>For Models</b>		
	C	.250" (1/4") Diameter	All		
	D	.215" (2 or 3 wire only)	All		
<b>5</b>	<b>Code</b>	<b>Sheath Length</b>			
	XXX.X	Specify length to nearest 0.1"			
<b>6</b>	<b>Code</b>	<b>Lead Wire Length</b>			
	Z006	6" - Standard with head			
	Z024	24" - Standard without head			
<b>7</b>	<b>Code</b>	<b>Option</b>			
	W	Water Resistant			
<b>8</b>					

301	-	01B	-	A	-	3	-	D	-	012.0	-	Z006	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-

Sample Model Number

Your Model Number

