

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.

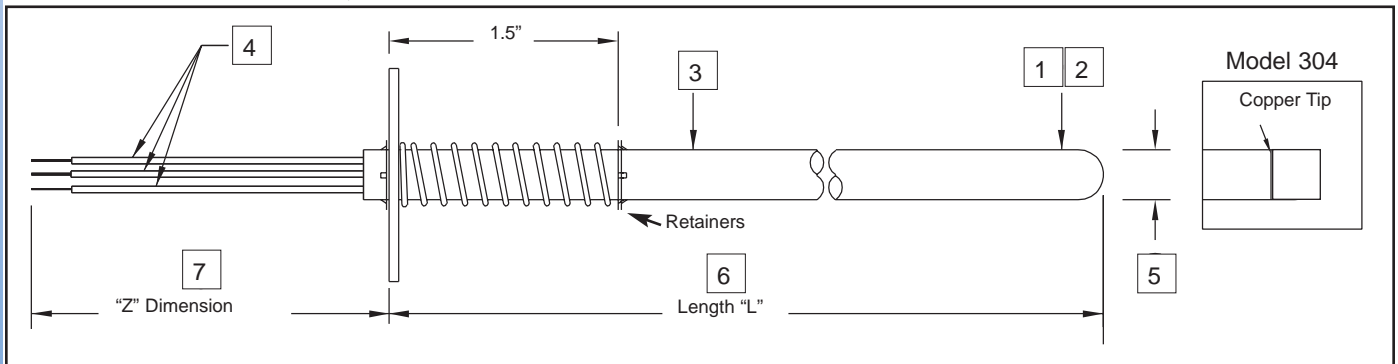


Model 301

- 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 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 (.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:	<div style="display: flex; justify-content: space-around; align-items: flex-end;"> <div style="text-align: center;"> <p>3 - Wire</p> </div> <div style="text-align: center;"> <p>4 - Wire</p> </div> <div style="text-align: center;"> <p>6 - Wire (Dual 3 - Wire)</p> </div> <div style="text-align: center;"> <p>8 - Wire (Dual 4 - Wire)</p> </div> </div>
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	Spring-Loaded RTD (for Connection Head Code 3)			
304	Spring-Loaded, Tip Sensitive RTD (for Connection Head Code 3)			
1	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.			
2	Code	Construction Temperature Limit		
	A	500° F Maximum		
	C	900° F Maximum (Platinum Only)		
	D	1200° F Maximum (Platinum Only)		
3	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	
4	Code	Sheath Diameter	For Models	
	C	.250" (1/4") Diameter	All	
	D	.215" (2 or 3 wire only)	All	
5	Code	Sheath Length		
	XXX.X	Specify length to nearest 0.1"		
6	Code	Lead Wire Length		
	Z006	6" - Standard with head		
	Z024	24" - Standard without head		
7	Code	Option		
	W	Water Resistant		
8	Code	Option		

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

Sample Model Number

Your Model Number

