

## Models 302 & 303 (Legacy)

### Spring-Loaded RTDs for General Purpose housings

Designed for applications where a Weed Instrument General Purpose 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.

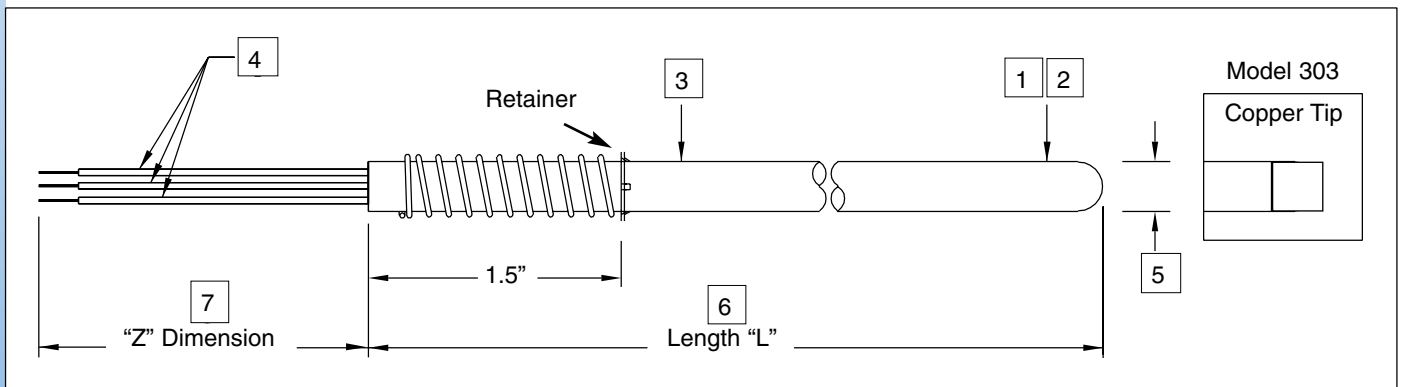


**Model 302** is a Spring-Loaded temperature sensor intended to be used in a thermowell.

- Refer to Model 301 for explosion proof connection head applications.
- Refer to Model 305 if spring-loaded hex fitting is required.

**Model 303** is a Spring-Loaded, Tip Sensitive temperature sensor. The tip sensitive design is ideal for bearing temperature applications.

- Refer to Model 304 for cast iron explosion-proof connection head applications.
- Refer to Model 102 if spring-loading is not required.



#### 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)	
B. TCR:	* Industry Standard is DIN Curve (code 01B), Platinum, 100@ 0°C. Conforms to IEC 751. 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 diameter - faster response. See RTD General Specs.		
E. Tip Sensitivity:	Model 303 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.		
4. Lead Wires:	3 - Wire 	4 - Wire 	6 - Wire (Dual 3 - Wire) 
	8 - Wire (Dual 4 - Wire) 		
5. Sheath Diameter:	.250" (1/4") is the industry standard.		
6. Sheath Length:	Entire stem length. See sizing chart in RTD General Specifications.		
7. Lead Wire Length:	Length of wires beyond sheath.		
8. Water resistant:	Increases moisture protection for humid environments.		

Model	Description	
302	Spring-Loaded RTD (Legacy Type 1 & 2 Connection Head)	
303	Spring-Loaded, Tip Sensitive RTD (Legacy Type 1 & 2 Connection Head)	
1	Code	R <sub>0</sub> & 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 For Models
	A	500° F Maximum All
	C	900° F Maximum (Platinum Only) 302
	D	1200° F Maximum (Platinum Only) 302
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) 302
	8	Dual 4-Wire (With dual element) 302
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
	ZXXX	Other - Consult factory
7	Code	Option
	W	Water Resistant
8		

303	-	01B	-	A	-	2	-	C	-	012.0	-	Z006	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-

Sample Model Number

Your Model Number

