

Resistance Temperature Detectors (RTDs)

Resistance Temperature Detectors (RTD's). These detectors are frequently used in the plastics industries and many others. Care must be taken to eliminate moisture and vibration effects can be troublesome as well. Thermo Sensors provides the utmost in current state of the art in materials, techniques and research.

Thermo Sensors offers the Reliatemp RTD. This RTD features lifetime moisture free use as well as excellent vibration resistance.

Please refer to our order guide to assist in determining your needs. We can also provide technical design assistance and application suggestions. Give us a call.



Direct Immersion/Replacement RTD Assemblies

Table A (cont.)

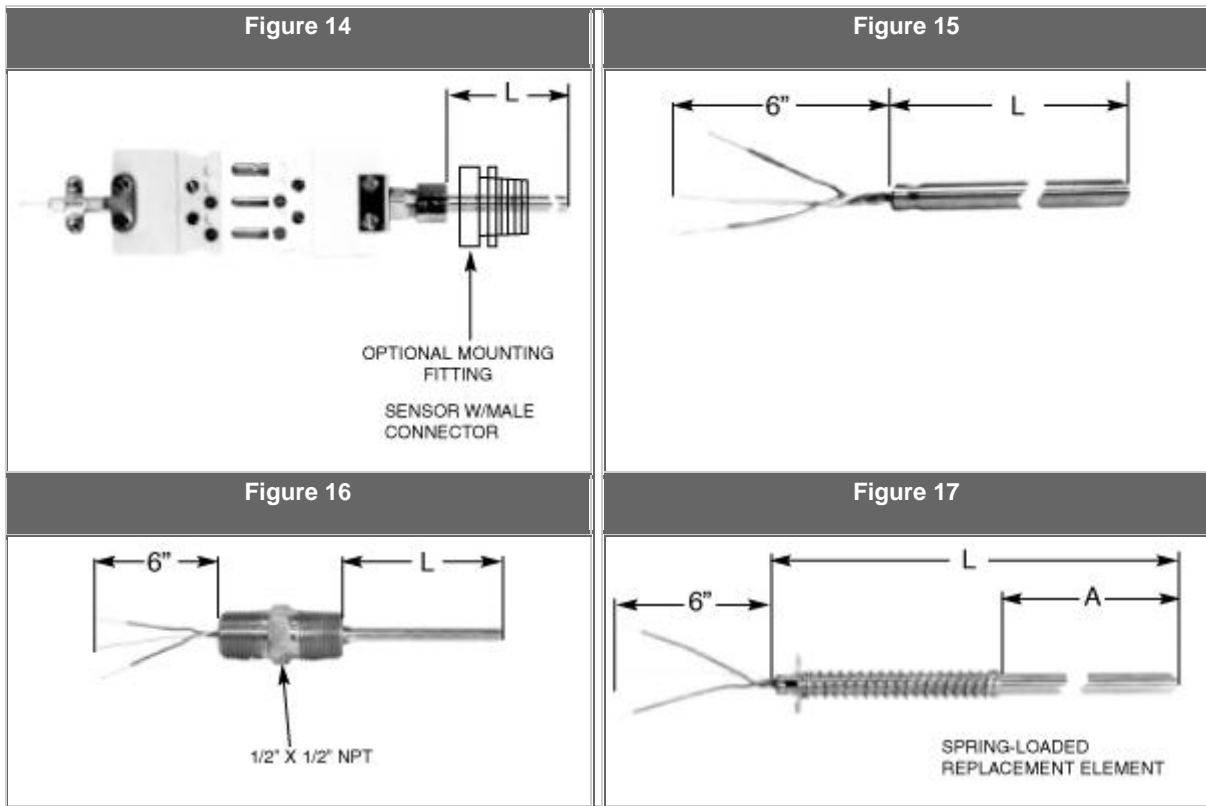


Figure 18		Basic Order Code				
		Fig. 14	Fig. 15	Fig. 16	Fig. 17	Fig. 18
		M w/o mating female MF w/ mating female	B	SB	BS(A)	SBS

How to Order:

Pgs. 6-8	Page 9						Page 10	
Basic Order Code	Sensor Diameter	Element	Tolerance	Temp. Range	Sheath Material	Lead Conn.	"L" Length	Options
SB	4	A	1	A	1	B	6	L
Table A	Table B	Table C	Table D	Table E	Table F	Table G	Table H	Table I

RTD Assembly Specifications

Table B (sensor diameter)

Sensor Diameter	Order Code
1/8" (.125")	2
3/16" (.188")	3
1/4" (.250")STD	4
5/16" (.312")	5
3/8" (.375")	6

Table C (element)

Resistance 0°C	Material	Temperature Coefficient/Alpha (a)	Order Code	
			Single Element	Dual Element
100Ω	Platinum	.00385Ω/Ω°C	A	2A
100Ω	Platinum	.003916Ω/Ω°C	B	2B
100Ω	Platinum	.003902Ω/Ω°C	C	2C
98.129Ω (100Ωnom-)	Platinum Sama Standard RC21-4-1966	.00392Ω/Ω°C	D	2D
120Ω	Nickel	.00672Ω/Ω°C	E	2E
9.035Ω	Copper	.00427Ω/Ω°C	F	2F

Table D (tolerance)

Accuracy at 0°C	Order Code
± .12% Class B	1
± .06% Class A	2
± .03% Lab Grade	3
± .02% Lab Grade	4
± .01% Lab Grade	5

Table E (temperature range)

Temperature Range	Order Code
-50 to +250 Deg. C -58 to +482 Deg. F	A
-50 to +400 Deg. C -58 to +752 Deg. F	B
-50 to +660 Deg. C -58 to +1220 Deg. F	C

Table F (sheath material)

Sheath Material	Order Code
316 SS	1
Alloy 600	2
Alloy C-276	3

Table G (lead connection)

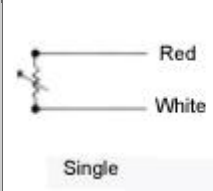
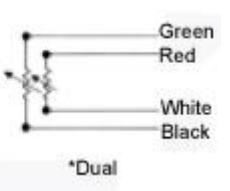
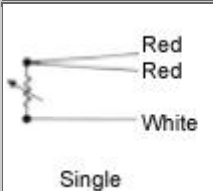
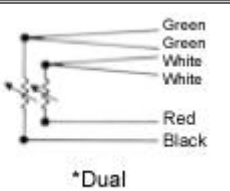
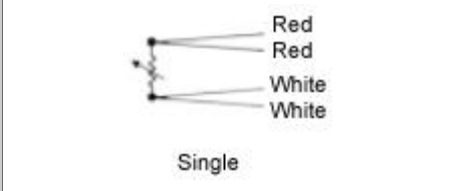
2-Wire	Order Code A
 <p>Single</p>	 <p>*Dual</p>
3-Wire	Order Code B
 <p>Single</p>	 <p>*Dual</p>
4-Wire	Order Code C
 <p>Single</p>	






Table H (length)

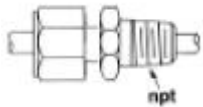
Specify "L" in Inches
 Length Not required when Thermowell is used.




Optional Connections

(For extended lead types)

Table I (options)

	Description	Order Code	
	Spade Lugs for #8 Screw	L	
	Male Plug	M	
	Two - 2 Pin connectors mounted in tandem will be furnished for both styles of 4-wire single element assemblies.		
	Dual element assemblies will have the same connector arrangements except Doubled.		
	Female Jack	F	
	Watertight connector	1/2" NPT	W1
		3/4" NPT	W3
	Watertight connector with lugs for #8 screws	1/2" NPT	WL1
		3/4" NPT	WL3

Optional Mounting Fittings		
Description	NPT	Order Code
	1/8"	1AS
	1/4"	2AS
	3/8"	3AS
	1/2"	4AS
	3/4"	6AS
For Teflon readjustable insert, replace "A" with "R" Example: 4RS		

Optional Spring-Loaded Devices	
Description	Order Code
 Adjustable Spring	FP 275
 1/2" NPT Double threaded adjustable hex bushing	FP 240
 1/2" NPT single threaded adjustable hex bushing	SSL