

DIAL THERMOMETERS

To Order

V 3 5 6 7 A
Model Number

5 0
Range
Code

1 4
Tube
System
Code

- 6 0
Capillary
Length in Inches
(omit if direct mount)

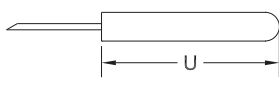
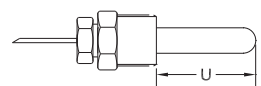
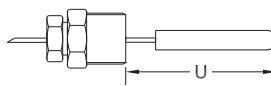
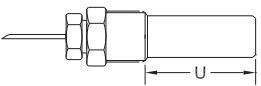
Specify Model Number from preceding pages, followed by Range and Tube System Codes from the tables below, followed by capillary length in inches.

Standard Ranges

Code	Range	°F		°C		Code	Range	°F		°C	
		Fig.	Div.	Fig.	Div.			Fig.	Div.	Fig.	Div.
22	-40 to 20°C	-	-	10	1	72	0 to 180°F	20	2	-	-
20	-40 to 65°F	-	-	10	2	73	0 to 180°F/C	20	2	20	2
21	-40 to 65°F/C	10	2	10	1	80	20 to 220°F	10	2	-	-
16	20 to 80°F	10	1	-	-	81	20 to 220°F/C	10	2	10	2
25	20 to 80°F/C	10	1	5	1	50	30 to 240°F	20	2	-	-
19	0 to 100°F	10	2	-	-	51	30 to 240°F/C	20	2	10	2
29	0 to 100°F/C	10	2	10	2	53	0 to 250°F	20	2	-	-
28	0 to 100°C	-	-	10	2	54	0 to 250°F/C	20	2	10	2
30	-40 to 110°F	20	2	-	-	56	50 to 250°F	20	2	-	-
31	-40 to 110°F/C	20	2	10	2	57	50 to 250°F/C	10	2	10	2
32	-20 to 120°F	20	2	-	-	60	30 to 300°F	10	1	-	-
33	-20 to 120°F/C	20	2	10	2	61	30 to 300°F/C	10	1	10	2
46	20 to 130°F	10	2	-	-	64	100 to 350°F	20	5	-	-
48	20 to 130°F/C	10	2	10	1	66	100 to 350°F/C	20	5	20	5
67	-40 to 150°F	10	2	-	-	70	200 to 450°F	20	2	-	-
49	0 to 150°F	20	2	-	-	71	200 to 450°F/C	20	2	20	2

Many ranges are NSF[®] listed for use in the food service industry. Special ranges, colors, logos and custom artwork is also available at nominal charge. Vapor thermometers have progressive graduations and are best read in the upper two-thirds of the scale. Care should be used to select a range that will locate the working temperature in this area. Other ranges are also available, consult factory.

Tube Systems

Type	Code	Capillary Tubing Material	Connection or Well Material	Sensing Bulb Material
 Plain Connection*	02	Tin Plated Copper	-	Nickel Plated Copper
	03	PVC Coated Copper	-	Nickel Plated Copper
	04	Bronze Braided Copper	-	Nickel Plated Copper
	05	Smooth 316SS	-	316SS
	08	Armored 316SS	-	316SS
 1/2" NPT Union Connection*	12	Tin Plated Copper	Brass	Nickel Plated Copper
	13	PVC Coated Copper	Brass	Nickel Plated Copper
	14	Bronze Braided Copper	Brass	Nickel Plated Copper
	15	Smooth 316SS	316SS	316SS
	18	Armored 316SS	316SS	316SS
 1/2" NPT Union Conn. with Extension*	32	Tin Plated Copper	Brass	Nickel Plated Copper
	33	PVC Coated Copper	Brass	Nickel Plated Copper
	34	Bronze Braided Copper	Brass	Nickel Plated Copper
	35	Smooth 316SS	316SS	316SS
	38	Armored 316SS	316SS	316SS
 1/2" NPT Thermowell*	22	Tin Plated Copper	Brass	Nickel Plated Copper
	23	PVC Coated Copper	Brass	Nickel Plated Copper
	24	Bronze Braided Copper	Brass	Nickel Plated Copper
	25	Smooth 316SS	316SS	316SS
	28	Armored 316SS	316SS	316SS

*See table on Page 63 for Sensing Bulb Dimensions.



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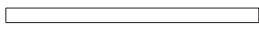
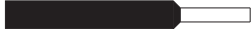

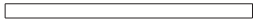

Bulbs, Tubing, and Optional Features

Sensing Bulb Dimensions

Range	Tube System Length	Bulb Diameter	Bulb Length	Notes
-40 to 65°F, -40 to 65°F/C	All	0.250"	2.0"	<i>For systems over 1200", consult factory. Bulb lengths of 4½" & 6" may be available on shorter systems, consult factory.</i>
All Others	Up to 120"	0.438"	2.5"	
	121" to 600"	0.438"	4.5"	
	601" to 1200"	0.438"	6.0"	

Capillary Tubing

The following connecting tubing types are used on vapor actuated dial thermometers in conjunction with the tube systems listed on the previous pages:

Type	Capillary Tubing Material
 Copper	Smooth Ø 0.062 tin plated copper capillary. This small diameter tubing can be easily formed without kinking or breaking. It is the material of choice in the food service industry and meets the requirements of NSF.
 PVC Covered	Smooth Ø 0.150 PVC covered Ø 0.062 copper capillary. This rugged, dielectric material is the ideal choice when the application requires bundling with other tubing, cable, or wiring. It meets the requirements of NSF and is the material of choice for commercial dishwashing and warewashing equipment.
 Bronze Braided	Bronze braided Ø 0.150 armor over Ø 0.062 copper capillary. This material is extremely durable, yet flexible, making it an excellent choice for applications where the capillary tubing will be exposed to extreme conditions. It can be ordered with nickel plating for use in food zones applications.
 316 Stainless Steel	Smooth Ø 0.062 type 316 stainless steel capillary. This small diameter tubing is flexible and provides chemical and corrosion resistance. It is an excellent choice for industrial processing or other applications where the capillary will be exposed to caustic or corrosive materials.
 316SS with 316SS Armor	Type 316 stainless steel Ø 0.250 interlocking armor over Ø 0.062 type 316 stainless steel capillary. This material is extremely rugged but has limited flexibility. It offers maximum protection against caustic or corrosive materials, and is ideal for applications where the tubing will be exposed to rough handling.

Optional Features

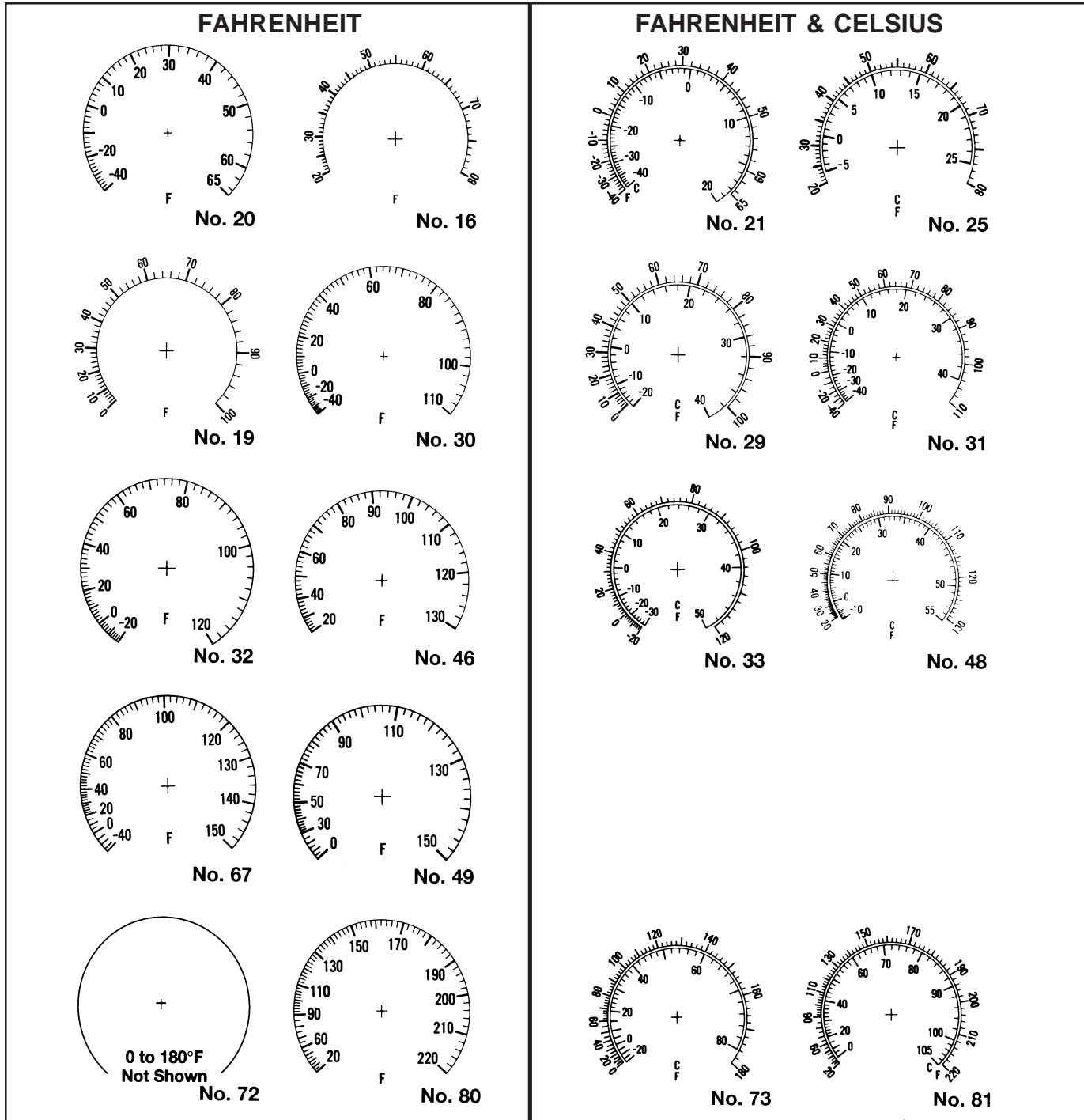
Code	Feature	Description
HS	Strain Relief at Case	Plastic boot installed at the case end of the capillary tubing to provide additional protection.
TS	Strain Relief at Bulb	Stainless steel round wire at the bulb end of the capillary tubing to provide additional protection.
SD	Silicone Dampening	Silicone grease applied to the movement mechanism to reduce wear in applications in which the instrument will be exposed to vibration.
WP	Lens O-Ring	O-ring seal installed on the lens (threaded type only) to help prevent moisture from entering the case from the front.
RTV	Case Sealant	RTV sealant applied around the rear connection opening to help prevent moisture from entering the rear of the case. Also prevents cold air from refrigeration equipment from entering the case and causing the lens to fog or frost.
WH	Weep Hole	Drain hole to allow drainage of the case in situations where moisture may collect in the bottom of the case. Useful in outdoor applications.
OR	Over Range Protection	The instrument should only be used within the range indicated on the dial. However, below-ambient ranges (e.g., -40 to 65°F) will be exposed to over ranging during shipment and storage. These instruments are furnished standard with over range protection. Additionally, many cross-ambient and above-ambient ranges can be provided with optional over range protection - consult factory when requesting this feature.

Specify the optional feature code when ordering.



DIAL THERMOMETERS

Standard Dial Faces



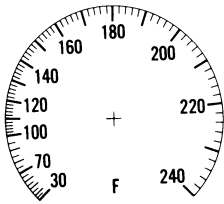
Standard ranges between -40°F and 450°F are offered in single and dual scales. Many are NSF® listed for use in food service applications. Vapor actuated thermometers have progressive graduations and are best read in the upper two-thirds of the measuring range, therefore, care should be exercised to select a range that will locate the working temperature in this area. Other ranges and special dials may be available - consult factory.



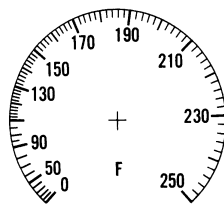
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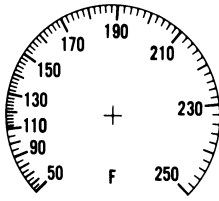
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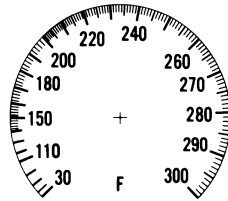
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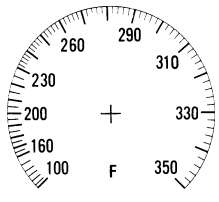
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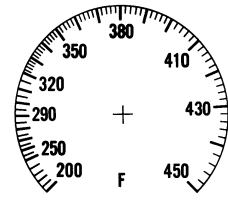
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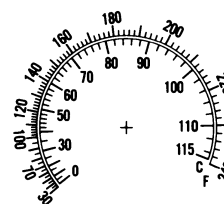


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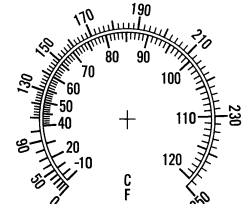


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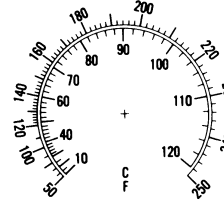
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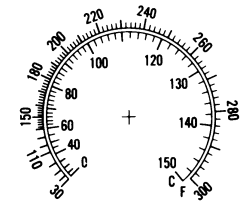
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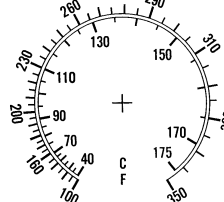
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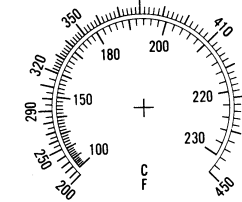
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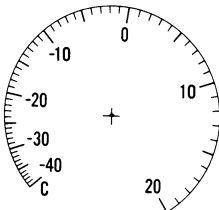


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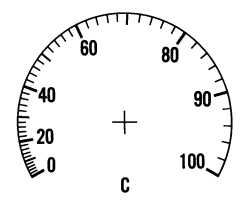


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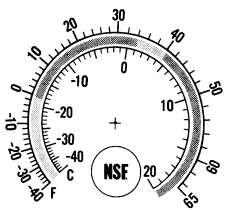
CELSIUS



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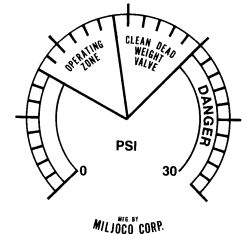


No. 28



SPECIAL DIALS ARE AVAILABLE

- Multi Color Printing
- Customer Name
- Service Markings
- Operating Colors Bands, Red for Hot, Blue for Cold, etc.



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