

PALMER

Designed and Built in Asheville,
North Carolina

Model 950 Direct Drive Rigid Stem 5" Dial Thermometers with 1/2" NPT SS Adjustable Union and 3/8" Diameter Stem

Palmer's experience in the thermometer field enables us to offer a line of filled system Dial Thermometers with uncompromising accuracy. Used in many different applications, including power plants, chemical processing plants, breweries, canneries and HVAC equipment, our Dial Thermometers are engineered to provide long service life with an extremely dependable thermal system.

Direct-Drive Double-Wound Bourdon Coil: With this construction, the pointer shaft operates directly from the center coil. This eliminates the conventional sector and pinion type movement and its multiplying mechanism which are subject to wear and tear and subsequent inaccuracies. This unique feature results in a temperature indicator that is extremely responsive to temperature changes and will maintain its accuracy for many years.

Stainless Steel Bezel Ring and Glass Cover: provides a weather-tight seal.

Easy to Read Dial: Every thermometer dial is constructed of heavy gauge aluminum with a low glare finish. High contrast black numerals, graduations, and pointer all contribute to minimize reading errors.

Liquid Actuated Systems: (Standard) These temperature systems are filled with a non-toxic, odorless, organic, and non-flammable liquid up to 500°F. It is non-hazardous, environmentally friendly with no hydrogens, and proven to be an excellent substitute for Mercury. (Mercury Actuated Systems available).

Calibration: Tapered-tip Pointer can be adjusted for calibration.

Interchangeability: 1/2" NPT SS Adjustable Union: Designed to adjust for installation in multiple thermowell stem lengths.

Fully Adjustable All Angle Case: Model 950 Series Dial Thermometers may be adjusted during installation and locked to provide the best reading angle.



950 Direct Drive Rigid
Dial Thermometer

Model 950 Series Specifications

Form:	Adjustable All Angle Case
Case:	Polished 316 Stainless Steel Case. 5" Dial (127 mm)
Fill:	Liquid Actuated: < 500°F Mercury Actuated: > 500°F
Dial Face:	Black Graduations and Numerals on White Background. Linear Scale with High-Visibility Tapered-Tip Black Pointer.
Bezel/Lens:	Stainless Steel Bezel Ring and Glass Cover, Gasket Sealed Plexiglas - Optional
Fitting:	1/2" NPT SS Adjustable Union, 304 Stainless Steel. Optional 3/4" SS Adjustable Union, 304 Stainless Steel available.
Stem:	3/8" (9.52mm) Diameter Stem, 304 Stainless Steel
Stem Lengths:	Standard Lengths from 6" (152 mm) to 24" (610 mm). Measure stem length from 1/2" up on threads to tip with adjustable fitting pushed up to highest point on stem.
Bulb:	3/8" (9.52mm) Diameter, 304 Stainless Steel
System:	Case Compensated System with Double Wound Direct Drive Bourdon Coil.
Accuracy:	± One Scale Division.

Applications

Chemical and Petrochemical Pneumatics
Hazardous Environments Compressor Controls
Process Engineering Pump Protection
Pulp and Paper Industry Shipping
Water Treatment Systems



Specifications subject to change without notice.

January
2022

Palmer Wahl Instruments, Inc. • Toll Free: 800-421-2853 • Phone: 828-658-3131 • www.palmerwahl.com

Palmer Wahl
BEYOND THE SCALE

Dial Model 950 Series Ordering Guide

MODEL 950 SERIES - DIRECT DRIVE RIGID STEM DIAL

Step 1 - Select: Dial Size

Code	Dial Size
950	5" Direct Drive Rigid Dial, All Angle Case

Step 2 - Select: Stem Length

Code	Stem Length (Includes Bulb)
6	6 inches (152 mm)
9	9 inches (229 mm)
12	12 inches (305 mm)
15	15 inches (381 mm)
18	18 inches (457 mm)
24	24 inches (610 mm)

If Stem lengths over 24" are required please call Customer Service.

Step 3 - Select: Temperature Range

Code	°F Range	° Div	Code	°C Range	° Div		Fill
-100/100F	-100° to 100°	2°	-60/40C	-60° to 40°	1°	Low Range	Liquid Actuated
-30/130F	-30° to 130°	1°	-30/60C	-30° to 60°	1°		
30/180F	30° to 180°	1°	NA	NA			
0/150F	0° to 150°	1°	-10/80C	-10° to 80°	1°		
0/240F	0° to 240°	2°	-10/120C	-10° to 120°	1°		
0/300F	0° to 300°	2°	-10/150C	-10° to 150°	1°	High Range	Mercury Actuated
0/400F	0° to 400°	5°	0/220C	0° to 220°	2°		
0/500F	0° to 500°	5°	0/280C	0° to 280°	2°		
0/600F	0° to 600°	5°	0/320C	0° to 320°	2°		
0/750F	0° to 750°	5°	0/400C	0° to 400°	2°		
200/750F	200° to 750°	5°	100/400C	100° to 400°	2°		
200/950F	200° to 950°	5°	100/500C	100° to 500°	5°		
200/1200F	200° to 1200°	10°	NA	NA		Ultra High Range	

*Range not available on the Model 950
Mercury Bulbs are available below 500°F if products containing mercury can be shipped to your state. Contact us for details.

Dual Scale Ranges: specify F&C
Fahrenheit and Réaumur: 0° to 240°F&R; 0° to 150°F&R

Step 4 - Select: Options

Code	Options
F&C	Dual Range Scale
(PC)	Plexiglas Cover
(T)	3/4" NPT SS Adjustable Union

Dial	Stem Length	Temperature Range	Options
950			

Insert Codes in boxes above to build part number

Model Number Example:

95018-10/120C(PC): 5 inch Dial, 18 inch Stem Length, -10° to 120°C Liquid Actuated Temperature Range, Plexiglas Cover.



**We build to order:
if your process requires
an option not shown here
please call
Customer Service.**

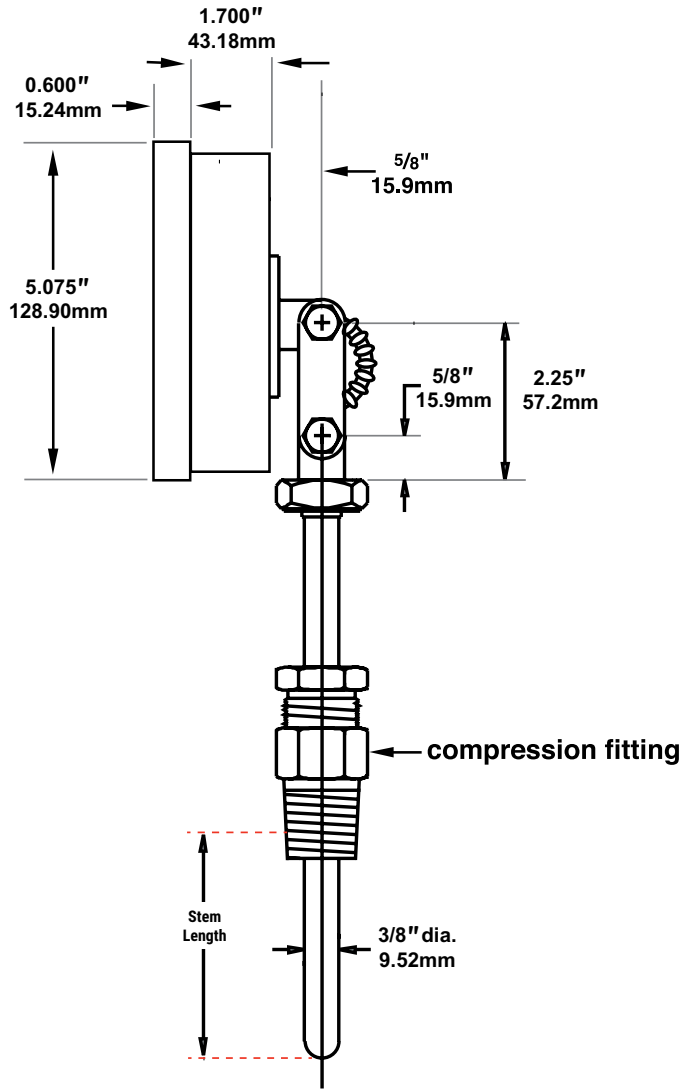
Specifications subject to change without notice.

Dial Model 950 Series Dimensional Drawings

Adjustable All Angle Case Rigid Dial Thermometer 1/2" NPT SS

Adjustable Union and 3/8" Diameter Stem

5" Dial - Model 950



**We build to order:
if your process requires
an option not shown here
please call
Customer Service.**

To measure stem length measure from 1/2" up on threads of fitting to tip of stem.
Adjustable union fitting should be slid to top of stem and tightened before measuring.



Specifications subject to change without notice.

January 2022

Palmer Wahl Instruments, Inc. • Toll Free: 800-421-2853 • Phone: 828-658-3131 • www.palmerwahl.com

Palmer Wahl
BEYOND THE SCALE

Connections and Thermowells for Rigid Dial Thermometer Bulbs

		RIGID STEM DIAL THERMOMETERS				
		Models 50A/50AL	Model 1050		Model 950	
	Stem Diameter	5/8"	3/16"	3/16"	3/8"	3/8"
	Bulb Diameter	7/16"	1/4"	1/4"	3/8"	3/8"
	Probe Connection	1-1/4"-18 UNEF Swivel Nut	1/2" NPT Fixed Fitting	7/8"-22 Swivel Nut Fitting	1/2" NPT Adjustable Union	3/4" NPT Adjustable Union
Open End	Standard Union Connection 3/4" NPT	1140-7	1120-7	1150-7	1120-7	NA
	Standard Union Connection 1" NPT	1140-8	1120-8	1150-8	1120-8	NA
	Extension Neck Lagging Union Connection 3/4" NPT	1141-7	1121-7	NA	1121-7	NA
	Extension Neck Lagging Union Connection 1" NPT	1141-8	1121-8	NA	1121-8	NA
	Surface Mount Flanged Union Connection	1140-9	1120-9	1150-9	1120-9	NA
Closed Receptacle	Standard Thermowell	1140 Series Thermowell	NA	CP-990-1 (3.5" Probe Length Only)	1130 Series Thermowell	NA
	Extension Neck Lagging Thermowell	1141 Series Thermowell	NA	NA	1131 Series Thermowell	NA
	Built-up Heavy Wall Thermowell	1144 Series Thermowell	NA	NA	NA	NA
	Built-up Extension Neck Lagging Heavy Wall Thermowell	1145 Series Thermowell	NA	NA	NA	NA
	Weld-in Thermowell	1146 Series Thermowell	NA	NA	1136 Series Thermowell	NA
	Flanged Thermowell	1147 Series Thermowell	NA	NA	1137 Series Thermowell	NA

