INSTALLING THE THERMOMETER

Model A and B Dial Thermometers are supplied standard with a ⅜" NPT hex mounting nut. Carefully screw the thermometer into the fitting by hand until slightly tight. Complete tightening using a ⅜" wrench on the hex nut. (See Figure 1). When using a thermowell, tighten only FINGER TIGHT. CAUTION: NEVER TIGHTEN BY TWISTING THE HEAD! To obtain a positive seal, coat threads with pipe joint compound, or use Teflon® tape.

When inserting Dialtemp™ Dial Thermometers into semi-solid materials, hold stem firmly and insert slowly and carefully to avoid bending. Do not hold thermometer by the head when inserting into a material, always hold by the stem.

A ⅜" NPT mounting nut, ⅝" NPT Adapter bushing and plain hex bushing (with no threads) are also available as mounting options for the Model A and B Dial Thermometers. It is not always desirable to permanently mount Dialtemp™ Thermometers. Clip Hangers (Model C-10) and Spring Handles (T-27) are available as a mounting option. They are used for mounting thermometers on the rim of tanks, kettles, urns, solder pots, beakers and other containers. Simply slide the metal clip onto the ¼" stem of the thermometer and lower it into the liquid.

CAUTION: Avoid handling the thermometer by the stem or bending the stem when carrying it around.

SILICONE-FILLED THERMOMETERS

OMEGA provides the same features in its special order silicone-filled thermometers as the standard 3" and 5" styles. They are offered for severe industrial applications where vibration is a problem. Silicone is a non-toxic viscous fluid. Its dampering characteristics prevent wear and tear on internal parts and improve readability by reducing flutter. To specify, add “-SF” to the end of the part number.

THERMOWELLS

Thermowells should be used whenever the stem would be exposed to pressure, corrosion, or shear forces. They also make it possible to remove the thermometer without losing pressure or contents.

OPERATING INSTRUCTIONS

For the correct temperature, the stem of the Dial Thermometer must be immersed at least 2" in fluids and 4" in gases. An exception to this rule are thermometers with the ranges of 0-100°F, 24-125°F, and 0-50°C. These require at least 3½" in liquid and 5" in gas.

TO RESET THE DIAL

1. Determine the room temperature using a reference thermometer of known accuracy.
2. Firmly hold the hex mounting nut in the hand or with a ⅜" wrench.
3. While firmly holding the thermometer, slowly turn the RESET SCREW with a screwdriver (or ¼" wrench). The dial face INSIDE the head will rotate as the screw is turned. Slowly turn the reset screw until the proper temperature on the dial face is aligned with the pointer.

SPECIFICATIONS:

- **ACCURACY:** ±1% of full scale
- **RESPONSE TIME:** Readings are stabilized within 40 seconds.
- **RECALIBRATION:** External with ¼" nut reset screw.
- **MATERIALS & CONSTRUCTION:** Stainless steel welded construction (rust and corrosion-proof, leak-proof, hermetically sealed)
- **HEAD & BEZEL:** Polished Type 302 stainless steel.
- **MOUNTING NUT:** Type 303 stainless steel, ⅜" Hex, ⅜" HPT
- **DIAL FACE:** Anodized aluminum with raised black marks and numbers with satin matte finish background. Easy to read. Minimum parallax.
- **STEM:** ⅛" Dia. 304 Stainless Steel (highly resistant to corrosion)
- **CRYSTAL:** Optically clear strong glass. Unbreakable clear polycarbonate plastic crystals are on all silicone-filled models which are not recommended for ranges over 300°F.

DIMENSIONS

- **HEAD DIAMETER:** Model A: 3" dia. Model B: 5" dia.
- **STEM DIAMETER:** ¼" dia.
- **STEM LENGTH:** Standard is 9". Also available: 2⅛", 4", 6", 12", 15", 18", 24", 30", 36" (Stems over 36" are also available, consult Sales Department for pricing). Intermediate lengths available on special order (allow 5 weeks). NOTE: A 4" stem is the shortest length for ranges 0-100°F, 25-125°F, and 0-50°C.
- **POINTED STEMS:** Optional on all models. They are excellent for probing asphalt, compost, soil, frozen foods and other semi-solid materials.
- **RESET SCREWS:** ¼" Hex Nut with slot for

---

Teflon® is a registered trademark of DuPont.
Servicing North America:

USA: One Omega Drive, Box 4047 Stamford CT 06907-0047 Tel: (203) 359-1660 FAX: (203) 359-7700 e-mail: info@omega.com

Canada: 976 Bergar Laval (Quebec) H7L 5A1 Tel: (514) 856-6928 FAX: (514) 856-6886 e-mail: info@omega.ca

For immediate technical or application assistance:


Mexico: En Español: (01) 203-359-7803 e-mail: espanol@omega.com FAX: (001) 203-359-7807 info@omega.com.mx

It is the policy of OMEGA to comply with all worldwide safety and EMC/EMI regulations that apply. OMEGA is constantly pursuing certification of its products to the European New Approach Directives. OMEGA will add the CE mark to every appropriate device upon certification.

The information contained in this document is believed to be correct, but OMEGA Engineering, Inc. accepts no liability for any errors it contains, and reserves the right to alter specifications without notice.

WARNING: These products are not designed for use in, and should not be used for, patient-connected applications.

WARRANTY/DISCLAIMER

OMEGA ENGINEERING, INC. warrants this unit to be free of defects in materials and workmanship for a period of 13 months from date of purchase. OMEGA’s WARRANTY adds an additional one (1) month grace period to the normal one (1) year product warranty to cover handling and shipping time. This ensures that OMEGA’s customers receive maximum coverage on each product.

If the unit malfunctions, it must be returned to the factory for evaluation. OMEGA’s Customer Service Department will issue an Authorized Return (AR) number immediately upon phone or written request. Upon examination by OMEGA, if the unit is found to be defective, it will be repaired or replaced at no charge. OMEGA’s WARRANTY does not apply to defects resulting from any action of the purchaser, including but not limited to mishandling, improper interfacing, operation outside of design limits, improper repair, or unauthorized modification. This WARRANTY is VOID if the unit shows evidence of having been tampered with or shows evidence of having been damaged as a result of excessive corrosion; or current, heat, moisture or vibration; improper specification; misapplication; misuse or other operating conditions outside of OMEGA’s control. Components which wear are not warranted, including but not limited to contact points, fuses, and triacs.

OMEGA is pleased to offer suggestions on the use of its various products. However, OMEGA neither assumes responsibility for any omissions or errors nor assumes liability for any damages that result from the use of its products in accordance with information provided by OMEGA, either verbal or written. OMEGA warrants only that the parts manufactured by it will be as specified and free of defects. OMEGA MAKES NO OTHER WARRANTIES OR REPRESENTATIONS OF ANY KIND WHATSOEVER, EXPRESS OR IMPLIED, EXCEPT THAT OF TITLE, AND ALL IMPLIED WARRANTIES INCLUDING ANY WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED. LIMITATION OF LIABILITY: The remedies of purchaser set forth herein are exclusive, and in no event shall OMEGA be liable for consequential, incidental or special damages.

CONDITIONS: Equipment sold by OMEGA is not intended to be used, nor shall it be used: (1) as a “Basic Component” under any 10 CFR 21 (NRC), used in or with any nuclear installation or activity; or (2) in medical applications or used on humans. Should any Product(s) be used in or with any nuclear installation or activity, medical application, used on humans, or misused in any way, OMEGA assumes no responsibility as set forth in our basic WARRANTY/DISCLAIMER language, and, additionally, purchaser will indemnify OMEGA and hold OMEGA harmless from any liability or damage whatsoever arising out of the use of the Product(s) in such a manner.

RETURN REQUESTS / INQUIRIES

Direct all warranty and repair requests/inquiries to the OMEGA Customer Service Department. BEFORE RETURNING ANY PRODUCT(S) TO OMEGA, PURCHASER MUST OBTAIN AN AUTHORIZED RETURN (AR) NUMBER FROM OMEGA’S CUSTOMER SERVICE DEPARTMENT (IN ORDER TO AVOID PROCESSING DELAYS). The assigned AR number should then be marked on the outside of the return package and on any correspondence.

The purchaser is responsible for shipping charges, freight, insurance and proper packaging to prevent breakage in transit.

FOR WARRANTY RETURNS, please have the following information available BEFORE contacting OMEGA:
1. Purchase Order number under which the product was PURCHASED.
2. Model and serial number of the product under warranty, and
3. Repair instructions and/or specific problems relative to the product.

OMEGA’s policy is to make running changes, not model changes, whenever an improvement is possible. This affords our customers the latest in technology and engineering.

OMEGA is a registered trademark of OMEGA ENGINEERING, INC.

© Copyright 2002 OMEGA ENGINEERING, INC. All rights reserved. This document may not be copied, photocopied, reproduced, translated, or reduced to any electronic medium or machine-readable form, in whole or in part, without the prior written consent of OMEGA ENGINEERING, INC.