





M0102/0902

INTRODUCTION

The Model J Dialtemp™ is a non electronic thermometer that features a 360 degree swivel neck with a 90 degree tilt range of it's large easy-to-read 5 inch dial face. The heliarc stainless steel welded construction provides a moisture-proof bond, while preventing the possibility of rust and corrosion. The temperature sensing device consists of sensitive bi-metal coils. They are wound to pre-determined standards and are individually trimmed and tested for full-scale accuracy, contributing minimum pointer vibration and maximum heat transfer. One external reset screw enables fast and simple recalibration. This superior DialTemp instrumentation design combines high precision with durability and dependability, making the Model J Thermometer ideal for a wide variety of applications.

UNPACKING INSTRUCTIONS

Remove the packing list and verify that all equipment has been received. If there are any questions about the shipment, please call the OMEGA Customer Service Department at 1-800-622-2378 or (203) 359-1660.

Upon receipt of shipment, inspect the container and equipment for signs of damage. Take particular note of any evidence of rough handling in transit. Immediately report any damage to the shipping agent.



The carrier will not honor any claims unless all shipping material is saved for their examination. After examining and removing contents, save packing material in event reshipment is necessary.

HEAD ADJUSTMENT INSTRUCTIONS

Adjust the angle of the head before installing the Model J Thermometer. Refer to Figure 1 to locate the adjustment screws.



Install the thermometer so that the maximum ambient head temperature remains below 300°F (149°C) at all times.

1. Adjust the rotational position of the head by loosening the two bracket bolts and rotating the bracket until the head is in the desired position.

- NOTE: Observe that the head and stem must be in the full upright position in order to rotate the head. Tighten the bracket bolts securely.
- 2. Adjust the tilt angle of the head by loosening the two hinge screws and tilting the head to the desired position. Tighten the hinge screws securely.

TO RESET THE DIAL

- 1. Determine the room temperature by using a reference thermometer of known accuracy.
- 2. Locate the reset screw on the back of the head (see Figure 1).
- 3. The numbered dial face inside the head will rotate as the screw is turned. Use a slotted screwdriver or a ¼" hex wrench to adjust the setting.
- 4. Align the pointer with the correct temperature on the numbered dial face. The thermometer is now ready for installation.

INSTALLATION INSTRUCTIONS

The Model J DialTemp Thermometer is supplied with a ½" -14 NPT pipe thread for mounting purposes. Carefully screw the thermometer into the fitting by hand until slightly tight. Complete tightening by using a ½" wrench on the wrench flats. When using a thermowell, tighten only FINGER TIGHT.



NEVER TIGHTEN BY TWISTING THE HEAD! AVOID HANDLING THE THERMOMETER BY THE STEM OR BENDING THE STEM.

To obtain a positive seal, coat the threads with pipe joint compound or wrap with Teflon tape.

When inserting the DialTemp into a semi-solid material, hold the stem firmly and insert slowly and carefully to avoid bending. When inserting the thermometer into a material, always hold it by the stem, not by the head.

OPERATING INSTRUCTIONS

For correct temperature measurement, the stem of the DialTemp must be immersed at least 2" in fluids and 4" in gases.

RANGES AND DIVISIONS:

| Fahrenheit | | Celsius | |
|------------|----|-----------|---|
| -40-160°F | 2 | 0-100°C | 1 |
| *0-200°F | 2 | -10-110°C | 1 |
| *0-250°F | 2 | 0-150°C | 1 |
| 50-300°F | 2 | 0-300°C | 5 |
| *50-500°F | 5 | | |
| 150-750°F | 5 | | |
| 100-800°F | 5 | | |
| 200-1000°F | 10 | | |

^{*} Off-the-shelf ranges/divisions for the 2½" and 6" stem lengths. Not recommended for continuous use above 800°F.

SPECIFICATIONS

ACCURACY: ±1% of full scale

RESPONSE TIME: Readings are stabilized within 40 seconds

RECALIBRATION: External ¼" nut reset screw

OVERRANGE PROTECTION: 50% up to 500°F

MATERIALS:

CONSTRUCTION: Stainless steel welded construction (rust and

corrosion-proof, leakproof, hermetically sealed)

PRESSURE RATING: Rated to 1,000 PSI. Use of thermowell is

recommended for higher pressures or for

very heavy-duty applications.

HEAD & BEZEL: Polished Type 302 stainless steel

MOUNTING: ½"-14 NPT, Type 303 stainless steel, ¾" wrench flats. DIAL FACE: Anodized aluminum. Black marks and numbers

with stain matte finish background. Easy to read.

Minimum parallax.

STEM: Type 304 stainless steel (highly resistant to

corrosion)

CRYSTAL: Optically clear strong glass.

OPTIONAL: Unbreakable clear plastic (not recommended for

ranges over 300°F)

DIMENSIONS:

HEAD DIAMETER: 5" dia. STEM DIAMETER: 4" dia.

STEM LENGTH: standard is 2½" or 6". Also available: 4", 9", 12",

15", 18", 24", 30", 36". 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 -excellent for probing

asphalt, compost, soil, frozen foods, and other

semi-solid materials.

RESET SCREW: ¼" hex nut with slot for screwdriver.

OPTIONAL FEATURES: ½", ¾" NPT Adaptor Bushing (other threads

available on special order)

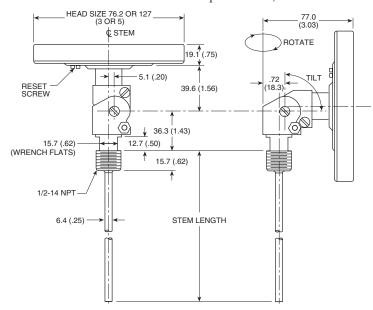


Figure 1. Dimensions Model J



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specifications without notice WARNING: These products are not designed for use in, and should not be used for, patient-connected applications



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Canada:

Mexico:

ISO 9001 Certified

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.

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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.
- FOR NON-WARRANTY REPAIRS, consult OMEGA for current repair charges. Have the following information available BEFORE contacting OMEGA:
- 1. Purchase Order number to cover the COST of the repair,
- 2. Model and serial number of the product, 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.

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