

Dual Mode Thermometer

REOTEMP
INSTRUMENTS

Measuring your world since 1965

REOTEMP's Dual Mode Thermometer (DMT) is a convenient, multi-purpose indicator for local and remote temperature monitoring. This rugged dual-sensor system puts TWO independent sensors in ONE THERMOWELL, and allows easy tie-in to process controls. Both sensors are NIST traceable. Special sensor encapsulation and optional liquid filling make the DMT the most rugged, durable instrument of its kind.

Bimetal Thermometer

- Local Easy-to-Read Temperature Indication
- Self-Actuating, Dampened Bimetal Helix Sensor
- Choice of 3", 4", or 5" Sizes, with Back or Adjustable Angles Connection
- Hermetically sealed per ASME B40.3 (3/8" stem only)
- NIST Traceable Calibration



Fillable



Hi-Vis
Dials



1%
Accuracy

FEATURES / BENEFITS

- Allows independent local and remote reading (Up to 1000°F) from one thermowell.
- Redundant sensors for simple, effective calibration or spot checking without removing instrument from thermowell.
- Easily installed in any standard thermowell.
- Interchangeable with existing thermometer, RTD, or Thermocouple.

SPECIFICATIONS

CASE & BEZEL: 304SS (std), 316SS (optional)

CASE STYLE: Back or Adjustable Angle Connection

DIAL SIZE: 3", 4", or 5"

PROCESS CONNECTION: 1/2" NPT (std), 1/2" NPT Union (optional)

EXTERNAL RESET: Slotted Hex Screw

CRYSTAL: Glass (std), Plastic or Tempered Glass (optional)

HERMETIC SEAL: Bimetal Thermometer per ASME B40.3 (3/8" stem only)

STEM MATERIAL: 304SS

STEM DIAMETER: 0.375" O.D. or 1/4" O.D.

STEM LENGTH: 2 1/2" to 36"

TC/RTD TEMPERATURE LIMITS:

-100°F to 1000°F (Thermocouple);

-100°F to 600°F (RTD - DM4 Model)

-100°F to 900°F (RTD - DMT Model)

RTD: 100 Ω Platinum; 0.00385 $\Omega/0^\circ\text{C}$, 3-wire (std.), others available - contact factory

RTD ACCURACY: 0.12% $^\circ\text{C}$ (std). Others available upon request.

THERMOCOUPLE: Type K Gounded Junction (std), Types T, E, J, and Ungrounded (optional)

THERMOCOUPLE ACCURACY: Type K $\pm 2.2^\circ\text{C}$ or 0.75% (-200 $^\circ\text{C}$ to 1260 $^\circ\text{C}$), whichever is greater. Others available upon request.

BIMETAL RANGES: Standard Ranges and Divisions up to 800°F (538 $^\circ\text{C}$). See inside of back page.

BIMETAL OVER RANGES: 50% over range to 550°F, 1000°F max.

BIMETAL ACCURACY: $\pm 1\%$ of Full Scale

THERMOWELL: Model DMT fits any standard 0.385" bore thermowell or Model DM4 fits 0.260" bore.

OPTIONS: Silicone case fill for vibration (3/8" stem only); 1 pt. or 3 pt. calibration, Hi-Vis Dial for bimet, sanitary tri-clamp fittings, SS tag



Thermocouple or RTD

- Remote and Local Indication
- Data Acquisition for Process Control
- Choice of Connection Styles (see drawings on following page)
- 4-20mA Transmitter Output Available

Standard Delivery 5-7 Days

Intended for use with Thermowell
(available through Reotemp)



Made in the USA

Dual Mode Thermometer

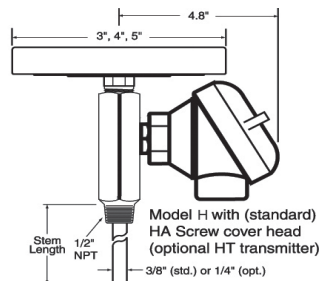
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HOW TO ORDER

DM	TA	040	F23	TK	A	A	—	HV	
Style & Stem Diameter: <u>3/8" Stem</u> TA = 3" Back Connect TC = 4" Back Connect TB = 5" Back Connect TL = 3" Adjustable-Angle TM = 4" Adjustable-Angle TJ = 5" Adjustable-Angle <u>1/4" Stem</u> 4A = 3" Back Connect 4C = 4" Back Connect 4B = 5" Back Connect 4L = 3" Adjustable-Angle 4M = 4" Adjustable-Angle 4J = 5" Adjustable-Angle	Stem Length: *025 = 2.5" 040 = 4" 060 = 6" 090 = 9" 120 = 12" 150 = 15" 180 = 18" 240 = 24" 300 = 30" 360 = 36" * Only available on 3/8" stem diameter	Temperature Range: Common Ranges: <u>Fahrenheit Ranges</u> F03 = -100°F to 100°F F23 = -40°F to 160°F *F55 = 25°F to 125°F F43 = 0°F to 200°F F47 = 0°F to 250°F F53 = 20°F to 240°F F63 = 50°F to 300°F F65 = 50°F to 400°F F69 = 50°F to 550°F F79 = 100°F to 800°F <u>Celsius Ranges</u> C03 = -70°C to 70°C C23 = -40°C to 70°C *C55 = 0°C to 50°C C43 = 0°C to 100°C C47 = -20°C to 120°C C53 = -10°C to 110°C C59 = 0°C to 150°C C65 = 0°C to 200°C C69 = 0°C to 300°C C81 = 50°C to 400°C <u>Dual °F/°C Ranges</u> D03 = -100°F to 100°F & -70°C to 40°C D23 = -40°F to 160°F & -40°C to 70°C *D55 = 25°F to 125°F & -5°C to 50°C D43 = 0°F to 200°F & -10°C to 90°C D47 = 0°F to 250°F & -20°C to 120°C D53 = 20°F to 240°F & -10°C to 115°C D63 = 50°F to 300°F & 10°C to 150°C D65 = 50°F to 400°F & 10°C to 200°C D69 = 50°F to 550°F & 10°C to 290°C D79 = 100°F to 800°F & 40°C to 400°C * Not available in 2.5" stem. See inside back cover for complete list of ranges.	Sensor: <u>Thermocouple (Single, Grounded)</u> TK = Type K TJ = Type J TE = Type E TT = Type T <u>Thermocouple (Single, Ungrounded)</u> UK = Type K UJ = Type J UE = Type E UT = Type T <u>Thermocouple (Dual, Grounded)</u> TKK = Type K TJJ = Type J TEE = Type E TTT = Type T <u>Thermocouple (Dual, Ungrounded)</u> UKK = Type K UJJ = Type J UEE = Type E UTT = Type T <u>RTD (Single)</u> RC = RTD, Pt. 100 ohm, 3-wire (max. 600°F - DM4) (max. 900°F - DMT)	Heads/Output Connections: A = Cast Iron Black C = Poly Plastic Black E = Explosion Proof Aluminum G = 316SS H = Cast Aluminum M = Aluminum Flip Top I = Blue Epoxy-Coated Aluminum J = Explosion Proof 316SS S = Poly Plastic White T = ATEX Explosion Proof Aluminum Z = Window Explosion Proof (Digital Display Required) EC = 1/2" NPT Male Electrical Connection w/ Lead Wire (See Drawing & Ignore Electrical Connection Section)	Electrical Connection: A = Terminal Block N = No Terminal Block, 6" Leads T = 4-20mA Xmtr D = 4-20mA Hart Xmtr *B = 4-20mA Xmtr w/ Display *H = 4-20mA Hart Xmtr w/ Display * Only available with Z Head	Accessories: HV = Hi-Vis Bimet Dial UF = Fixed Union US = Sliding Union SC = 1.5" or 1" Sanitary Tri-Clamp SL = 2" Sanitary Tri-Clamp SA = 2.5" Sanitary Tri-Clamp SP = 3" Sanitary Tri-Clamp PC = Acrylic Window TG = Tempered Glass Window SF = Silicone Fill (max. 500°F) TS = Stainless Steel Tag C1 = 1 pt. Calibration Certificate C3 = 3 pt. Calibration Certificate	Thermowell: For Thermowells, see pages 34-37.		



*dimensions in inches

