

Dual Mode Thermometers

REOTEMP DUAL MODE THERMOMETER (model DMT) is a convenient, multipurpose indicator for local and remote temperature monitoring. This rugged dual-sensor system puts TWO SENSORS in ONE THERMOWELL, and allows easy tie-in to process control. Both sensors are NIST traceable, and easily calibrated. 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
- Choice of three Dial Sizes, with Back, Bottom, or Adjustable Angle Connection
- Hermetically Sealed per ASME B40.3 (3/8" stem only)
- Thermometer is Easily Calibrated
- NIST Traceable Calibration

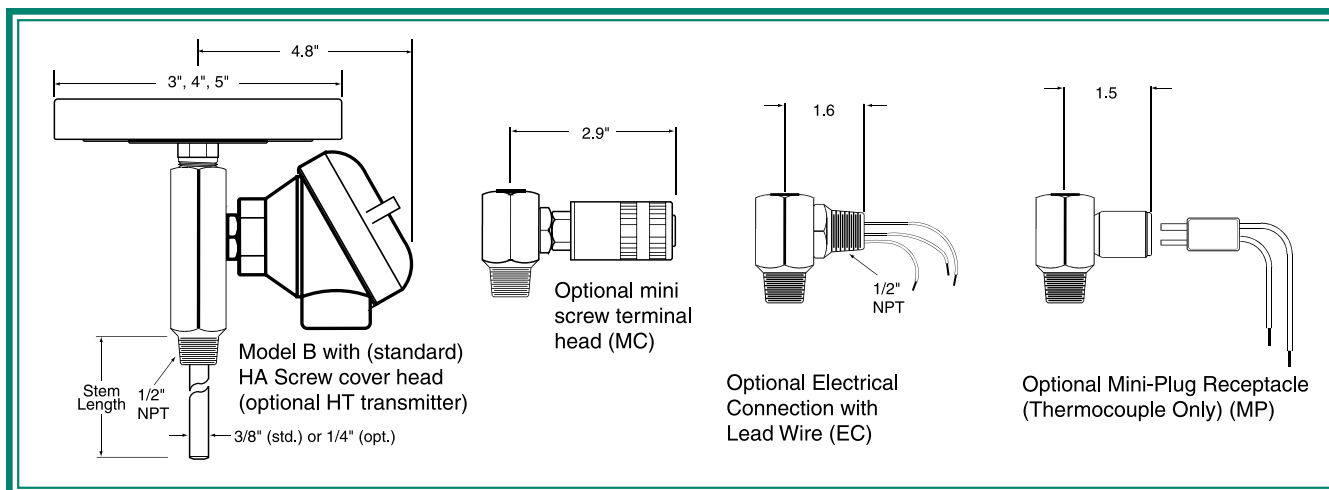
Thermocouple or RTD

- Remote and Local Indication
- Data Acquisition for Process Control
- Choice of Connection Styles (see drawing below)
- 4-20mA Transmitter Output Available

**Model DMT with
Screw Cover Terminal
Head, and Adjustable-
Angle Head**

DMT Advantages:

- Allows local and remote reading (Up to 1000°F) from one thermowell.
- Bimetal dependability with RTD (or thermocouple) accuracy.
- 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, Thermocouple.



Dual Mode Thermometers

How to Order

Model	Style/Stem (Table 1)	Stem Length (Table 2)	Temp Range (Table 3)	Sensor (Table 4)	Output Connection (Table 5)	Options (Table 6)	Thermowell (Table 7)
DM	TA	04	F23	TK	MC		ST4316B3

Table 1 - Style & Stem Dia.

Code		Description
3/8" Stem	1/4" Stem	
TA	4A	3" Back Connected
TC	4C	4" Back Connected
TB	4B	5" Back Connected
TL	4L	3" Adjustable-Angle
TM	4M	4" Adjustable-Angle
TJ	4J	5" Adjustable-Angle

Table 2 - Stem Length

Code	Length	Code	Length
020*	2.5"	150	15"
040	4"	180	18"
060	6"	240	24"
090	9"	300	30"
120	12"	360	36"

Table 3-Temperature Range

* available only with
3/8" dia. stem.

Code	Degrees F	Code	Degrees C	Code	Degrees F & C
F03	-100 TO 100°F	C03	-70 TO 70°C	D03	-100 TO 100°F & -70 TO 40°C
F23	-40 TO 160°F	C23	-40 TO 70°C	D23	-40 TO 160°F & -40 TO 70°C
F55*	25 TO 125°F	C55*	0 TO 50°C	D55*	25 TO 125°F & -5 TO 50°C
F43	0 TO 200°F	C43	0 TO 100°C	D43	0 TO 200°F & -10 TO 90°C
F47	0 TO 250°F	C47	-20 TO 120°C	D47	0 TO 250°F & -20 TO 120°C
F53	20 TO 240°F	C53	-10 TO 110°C	D53	20 TO 240°F & -10 TO 115°C
F63	50 TO 300°F	C59	0 TO 150°C	D63	50 TO 300°F & 10 TO 150°C
F65	50 TO 400°F	C65	0 TO 200°C	D65	50 TO 400°F & 10 TO 200°C
F69	50 TO 550°F	C69	0 TO 300°C	D69	50 TO 550°F & 10 TO 290°C
F79	100 TO 800°F	C73	0 TO 400°C	D79	100 TO 800°F & 40 TO 400°C

* min. stem 4" (3/8" dia.); 6" (1/4" dia.)

DMT Specifications

Case and Bezel:	304 SS (316 SS Available)
Case Style:	Back, Bottom or Adjustable Angle connection.
Dial Size:	3", 4" or 5"
Process	
Connection:	1/2" NPT Standard, (1/2" NPT Union available)
External Reset:	Slotted Hex Screw
Crystal:	Glass Standard, Plastic or Tempered Glass optional
Hermetic Seal:	Bi-Metal Thermometer per ASME B40.3 (3/8" stem only)
Stem:	304 SS, 0.375" O.D. 1/4" O.D. (DM4) Lengths, 2-1/2" to 36"
RTD:	100 Ω Platinum; 0.00385 Ω /°C, 3-wire std.
Thermocouple:	Type K grounded junction std. (Optional: types T, E, J, or ungrounded.)

Table 7 - Thermowell

See Thermowell Section

Table 6 - Options

U = Fixed Union
S = Sliding Union
C = 1.5" or 1" Sanitary Tri-Clamp
L = 2" Sanitary Tri-Clamp
A = 2.5" Sanitary Tri-Clamp
P = 3" Sanitary Tri-Clamp
M = .75" Sanitary Tri-Clamp

Table 5 - Output Connection

Code	Description
HA	Alum. Screw-Cover head with terminal block (Std.)
HD	Hart Transmitter
HT	Alum. Screw-Cover head with 4-20 mA transmitter
XT	Explosion-Proof head with 4-20 mA transmitter
XA	Aluminum Expl. Proof Head with terminal block
MP	Mini - Plug Receptacle (Thermocouple Only)
MC	Mini - Connection Head, w/screw terminals & protection head
EC	1/2" NPT Male Electrical Connection, w/Lead Wire

Table 4 - Sensor

Code		Description
Single	Dual	
TK	TKK	Thermocouple, Type K (grounded)
TJ	TJJ	Thermocouple, Type J (grounded)
TE	TEE	Thermocouple, Type E (grounded)
TT	TTT	Thermocouple, Type T (grounded)
UK	UKK	Thermocouple, Type K (ungrounded)
UJ	UJJ	Thermocouple, Type J (ungrounded)
UE	UEE	Thermocouple, Type E (ungrounded)
UT	UTT	Thermocouple, Type T (ungrounded)
RC	RCC	RTD, 100 ohm, 3-wire (max. 500°F)

Connection:	T/C plug, Mini connection head, or Standard screw-cover connection head are available. Special customer requirements accommodated.
Ranges:	Std. REOTEMP ranges and divisions to 800°F (400°C)
Over Ranges:	50% over range to 550°F, 1000°F max.
Accuracy:	(+/-) 1% of full scale
Thermowell:	Model DMT fits any standard 0.385" bore thermowell. (See table for Std. Models).
Options:	Silicone Case Fill for Vibration. (3/8" stem only)
NOTE: Model DMT is intended for use ONLY in a thermowell.	