

NAVY TYPE DUAL MODE THERMOMETER

Reotemp's Navy Type Dual Mode Thermometer combines a bimetal thermometer and RTD sensor into the same stem. This provides local indication and remote reading from a single instrument. The unit has a heavy duty, all-welded construction built to withstand tough shock and high vibration environments. The DMS option meets the requirements for MIL-S-901D and MIL-STD-167-1A for navy mil-spec shock and vibration.



Made in the USA

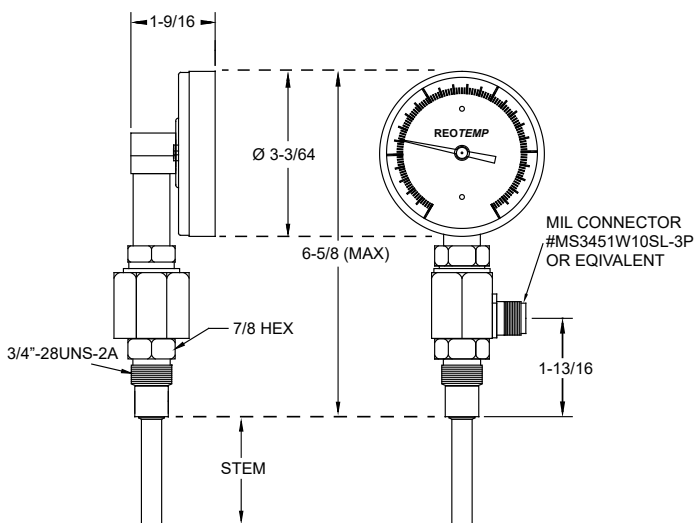


FEATURES / BENEFITS

- An Improved Dual Element Alternative to Standard MIL-I-17244E Bimetal Thermometer
- Reinforced Construction Designed for Use on Navy Ships and Other Demanding Applications
- Independent Local and Remote Reading (Up to 1000°F) from One Thermowell
- Redundant Sensors for Simple, Effective Calibration or Spot Checking Without Removing the Instrument from the Thermowell
- Interchangeable with Existing Thermometer, RTD, or Thermocouple
- DMS Model is Navy Mil-Spec Approved (MIL-S-901D & MIL-STD-167-1A)

SPECIFICATIONS

Approvals (Optional)	MIL-S 901D (Shock) and MIL-STD-167 (Vibration)
Sensor	100Ω Platinum 3 Wire RTD
RTD Temperature Range	-40°F to 1000°F
Accuracy	RTD: Class B Bimetal: ± 1% of Scale
Electrical Connection	Mil Connector MS3451W10SL-3P 3 Pin Electrical Cable Connection
Dial Range	All Standard Bimetal Ranges. See page 221 for a Complete Range Code Guide
Dial Size	3" or 5"
Process Connections	3/4"-28 Thread, 1/2" NPT, or 7/8" 14 with Fixed Swivel Union and Navy Collar
Stem Diameter	3/8" DMN & DMS Models, 1/4" for DMC
Lens	Polycarbonate
Stem Material	304SS
External Dial Reset	Slotted Hex Screw



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HOW TO ORDER: Choose options to build a part number. For example: **DMNA04F53RA3**

DM	N	A	04	F53	R	A3
STYLE	BIMETAL CONNECTION	STEM LENGTH	TEMPERATURE RANGE	SENSOR TYPE	ELECTRICAL CONNECTION	PROCESS CONNECTION
N = Navy Type 3/8" Stem; Fixed Swivel Union C = Navy Type 1/4" Stem; Fixed Swivel Union	A = 3" Back X = 3" Bottom Reset L = 3" Adjustable J = 5" Adjustable	02 = 2" 04 = 4" 06 = 6" 09 = 9" Note: Intermediate lengths available.	F53 = 20°F to 240°F F69 = 50°F to 550°F F85 = 200°F 1,000°F Other Ranges Available, See page 221 for a Complete Range Code Guide	R = RTD, Pt 100/385 High Vibration	A3 = Mil Spec 3 Pin Connector	No Code = 3/4"-28 Fixed Swivel Union with Navy Collar (Standard) P = 1/2" NPT Fixed Swivel Union w/ Navy Collar I = 7/8"-14 Fixed Swivel Union w/ Navy Collar

MIL-SPEC DUAL MODE THERMOMETER

The MIL-SPEC Dual Mode Thermometer has passed rigorous impact testing to achieve MIL-S-910D (Shock) and MIL-STD-167-1A(Vibration).

HOW TO ORDER: Choose options to build a part number. For example: **DMSA04F53RA3**

DM	S	A	04	F53	R	A3
STYLE	BIMETAL CONNECTION	STEM LENGTH	TEMPERATURE RANGE	SENSOR TYPE	ELECTRICAL CONNECTION	
S = Mil-Spec Approved, 3/8" Stem, 3/4"-28 Standard Thread, Fixed Swivel Union with Navy Collar	A = 3" Back X = 3" Bottom Reset	02 = 2" 04 = 4" 06 = 6" 10 = 10" Note: Intermediate lengths available. Max stem length is 10".	F53 = 20°F to 240°F F69 = 50°F to 550°F F43 = 0°F to 200°F Other Ranges Available, See page 221 for a Complete Range Code Guide	R = RTD, Pt 100/385 High Vibration	A3 = Mil Spec 3 Pin Connector	

BIMETAL OPTION CODES

Part #	Description	Industrial AA, RR, CC, CN, BB, SS, XR, XX, YY, YN, VR, VV, LL, MM, JJ	Small Dial OEM QQ, GG, HH	Digital DT, DTR, BT	Dual Mode Thermometer DMT
CASE FILL OPTIONS					
-SF	Silicone Filled Case	✓	N/A	N/A	✓
LENS OPTIONS					
-PC	Acrylic Window	✓	✓	N/A	✓
-PY	Polycarbonate Window	✓	✓	STD	✓
-TG	Tempered Safety Glass Lens	✓	N/A	N/A	✓
-SG	Laminated Safety Glass Lens	✓	N/A	N/A	✓
-GL	Plain Glass	STD	STD	✓	STD
STEM OPTIONS					
-PS	Pointed Tip	✓	✓	✓	N/A
-SS	316 Stainless Steel Stem	✓	✓	✓	✓
-F5	5/16" Diameter Stem (Not Available with 316SS Stem)	✓	✓	✓	N/A
-S3	3/8" Diameter Stem	✓	✓	✓	✓
-TF	Teflon Coating (Stem Only)	✓	✓	✓	✓
DIAL OPTIONS					
-CL	Custom Logo Dial	✓	✓	✓	✓
-HV	Hi-Vis Dial	✓	MQ	N/A	✓
-CB	Color Band	✓	MQ	N/A	✓
-PI	Color Pie	✓	MQ	N/A	✓
-WD	White Dial (Standard Ranges Only)	✓	✓	✓	✓
-MM	Min/Max Pointer	✓	N/A	N/A	✓
NL	No Logo	✓	✓	✓	✓
TAG OPTION					
-TS	Stainless Steel Tag (1-10 Characters)	✓	✓	✓	✓
-TP	Paper Tag	✓	✓	✓	✓
CERTIFICATION OPTIONS					
-R1	1pt. Calibration Certification (Reotemp Chooses the Point)	✓	✓	✓	✓
-R3	3 pt. Calibration Certification (Reotemp Chooses the Points)	✓	✓	✓	✓
-C1	1 pt. Calibration Certification (Customer Chooses the Point)	✓	✓	✓	✓
-C3	3 pt. Calibration Certification (Customer Chooses the Points)	✓	✓	✓	✓
-CS	NIST Calibration Sticker (No Logged Points)	✓	✓	✓	✓
-CC	Certificate of Conformance	✓	✓	✓	✓
OTHER					
-3H	316 Stainless Steel Head & Bezel	✓	N/A	STD	✓
-HT	Heat Transfer Compound	✓	✓	✓	✓
-CH	Spring Handle (T-27)	✓	✓	✓	N/A
-AS	Allows Bimet to Fit 1-1/4-18 xxowell	✓	✓	✓	✓

✓	Indicates that the option is available with the model.
STD	Indicates standard options with no additional cost.

N/A	Indicates the option is not available with this model.
MQ	Minimum order quantity applies.

BIMETAL RANGE CODES

FAHRENHEIT RANGES		
Code	°F Range	Div.
F03	-100/100	2
F05	-100/200	2
F07	-80/120	2
F11	-70/150	2
F19	-50/300	5
F21 [†]	-40/120	2
F23	-40/160	2
F25	-40/180	2
F26	-40/200	2
F27 [‡]	-40/70	1
F31 [†]	-20/120	2
F33	-20/425	5
F35 [‡]	0/100	1
F37 [†]	0/140	2
F39 [†]	0/150	1
F43	0/200	2
F45	0/220	2
F47	0/250	2
F49	0/300	2
F50	0/500	5
F51	0/600	10
F53	20/240	2
F55 [‡]	25/125	1
F57 [‡]	30/130	1
F63	50/300	2
F65	50/400	5
F67	50/500	5
F69	50/550	5
F71	50/650	10
F73	50/750	10
F78	100/600	5
F79	100/800	10
F81	150/750	10
F82	200/700	20
F83	200/300	2
F84	100/900	5
F85	200/1000	10
F89	250/600	5
F91	300/400	2

CELSIUS RANGES		
Code	°C Range	Div.
C01	-80/220	2
C03	-70/70	2
C06	-70/30	1
C07	-50/50	1
C08	-60/120	2
C09 [‡]	-50/0	1
C15	-50/100	2
C17	-50/200	2
C19	-40/160	2
C20	-60/300	5
C23	-40/70	1
C24	-40/350	5
C27 [‡]	-30/30	1
C31 [†]	-20/40	1
C32	-20/60	
C33	-20/220	2
C34	-20/320	5
C35 [‡]	0/30	.5
C37 [‡]	0/60	1
C38 [†]	0/80	
C43	0/100	1
C47	-20/120	2
C53	-10/110	1
C55 [‡]	0/50	.5
C56	0/120	1
C59	0/150	1
C60	50/150	
C61	0/160	2
C63	10/150	2
C65	0/200	2
C67	0/250	2
C69	0/300	2
C71	0/300	5
C73	0/400	5
C74	0/450	5
C75	0/500	5
C79	50/450	5
C81	50/400	5
C85	100/500	5
C87	100/550	5

DUAL RANGES	
Code	°F & °C Range
D01	-150/400 & 100/200
D03	-100/100 & -70/40
D07	-80/120 & -60/50
D15	-50/210 & -50/100
D19	-50/300 & -40/160
D23	-40/160 & -40/70
D37 [†]	0/140 & -15/60
D39 [†]	0/150 & -20/65
D41 [†]	0/160 & -15/70
D43	0/200 & -10/90
D45	0/220 & -10/100
D47	0/250 & -20/120
D49	0/300 & -10/150
D53	20/240 & -10/115
D55 [‡]	25/125 & -5/50
D63	50/300 & 10/150
D65	50/400 & 10/200
D67	50/500 & 10/260
D69	50/550 & 10/290
D77	100/450 & 40/230
D79	100/800 & 40/400
D81	150/750 & 70/400
D85	200/1000 & 100/500
D87	200/1000 & 100/550

‡ Minimum stem length is 4".

† For 2.5" stem, all bottom connect and all-angle models require adapter P/N AD22S.