

DTM DIGITAL TEMPERATURE GAUGE



Flow
Pressure
Level
Temperature
measurement
monitoring
control



- Remote and Fixed Probe Versions
- Highly Visible Green LED Readout
- Standard & Custom Ranges Available
- Analog Output Standard
- Peak Hold/RS232 Options
- Up to four SPDT Switches
- 316 SS Construction

T2

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Model:
DTM



Features

- Highly Visible Green LED Readout
- Standard & Custom Ranges Available
- Analog Output Standard
- Up to Four SPDT Switches
- 316 SS Construction

With the DTM, KOBOLD addresses all the fundamental issues of industrial temperature sensing. A digital display, built-in transmission capability, and optional set-point switches, cover all aspects of indication and control. The DTM is designed as a direct replacement for gas or liquid bulb thermometers.

Constructed for industrial use, these meters feature 316-Ti SS wetted parts and 304 stainless steel enclosures. We offer a number of standardized temperature sensing ranges in units of Fahrenheit or Celsius. However, because of its electronic nature, any desired units or temperature ranges are possible (within the device's operating limits). If you don't see what you want, give us a call, and we'll customize the range for you.

The KOBOLD DTM comes standard with a local digital display and analog output . . . ideal for remote monitoring. Setpoint relays are available as options. These SPDT relays come in pairs of either two or four switches. Setpoints and hysteresis are fully adjustable via the front keypad making the DTM ideal for thermostatic temperature control of multiple processes.

If your application requires the installation of a thermowell see the TSH series thermowells.



KOBOLD DTM Digital Temperature Gauge

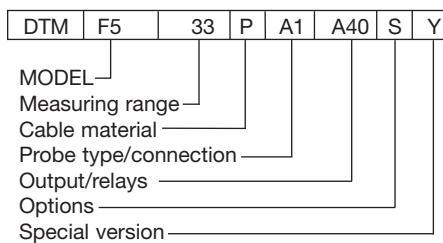
Specifications

- Ranges:** -30°F to 750°F (see table)
- Sensor Type:** Pt-100 RTD
- Accuracy:** ±0.5% FS ± 1 digit
- Linearity:** ±0.2% FS
- Repeatability:** ±0.1% FS ± 1 digit
- Response Time**
 - Display:** <100ms
 - Relays:** <30ms
- Operating Temperature**
 - Medium:** Per Range Code
 - Ambient:** -5°F to 140°F
 - Storage:** -40° to 160°F
- Displays**
 - Temperature:** 4 digit, 1/2" green LED
 - Switches:** 4 digit backlit LCD
- Materials of Construction**
 - Wetted Parts:** 316-Ti SS
 - Housing:** 304 SS, Nylon®

Electrical Information

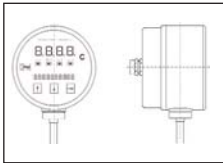
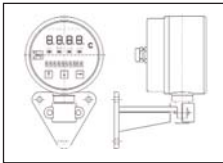
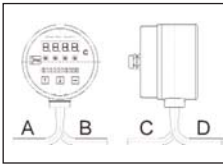
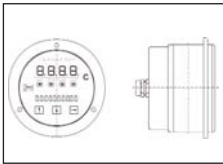
- Supply:** 15-30 VDC @ 200 mA
- Analog Output**
 - Current:** 0-20 mA, 4-20 mA, 3-wire into 500 Ω max.
 - Voltage:** 0-10 VDC, 3-wire into 500 Ω min.
- Zero Adjust:** ±25% of full scale
- Relays**
 - Type:** SPDT, Qty. 0, 2 or 4
 - Setpoints:** fully adjustable
 - Hysteresis:** fully adjustable
 - Max. Voltage:** 250 VAC, 220 VDC
 - Max. Current:** 3 A
 - Max. Power:** 50 VA, 60 W
- Connections:** via terminal strip
- Protection:** NEMA 4/IP65

DTM Order Key



Use Table 1 through 6 on the following pages to completely specify your model.

Table 1: Base Model

 <p>Straight probe DTM-S0...</p>	 <p>Remote probe wall mount DTM-F0...</p>
 <p>Bent probe DTM-SA... DTM-SB... DTM-SC... DYM-SD...</p>	 <p>Remote probe panel mount DTM-F5...</p>

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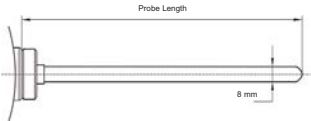
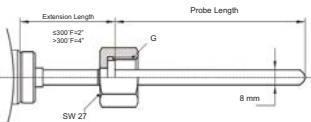
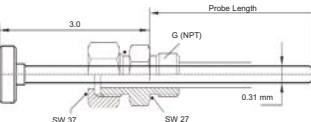
Table 2: Measuring Range

...34.. = -30 to +40°F	...31.. = -30 to +100°F	...32.. = -30 to +120°F	...36.. = -30 to +160°F
...37.. = 0 to 100°F	...14.. = 0 to 140°F	...22.. = 0 to 220°F	...33.. = 32 to 300°F
...39.. = 32 to 390°F	...57.. = 32 to 570°F	...75.. = 32 to 750°F	...24.. = -20 to +40°C
...26.. = -20 to +60°C	...44.. = -30 to +40°C	...35.. = -30 to +50°C	...46.. = -30 to +60°C
...60.. = 0 to 60°C	...80.. = 0 to 80°C	...10.. = 0 to 100°C	...12.. = 0 to 120°C
...16.. = 0 to 160°C	...20.. = 0 to 200°C	...30.. = 0 to 300°C	...40.. = 0 to 400°C
...YY.. = non standard range, specify desired scale and units when ordering			

Table 3: Options

...O.. =	no cable required
...P.. =	PVC cable, specify desired cable length when ordering
...S.. =	Silicone cable, specify desired cable length when ordering
*Note: Process temperature limits for cables with fitting style A0, PVC: 100°C(212°F), Silicone: 200°C(392°F)	

Table 4: Probe Type/connection (probe diameter 8 mm/0.31")

	Description	Fitting	Order Code
	Smooth Shank 8 mm Dia.	None	...A0..
	Union nut for insertion into TSH series Thermowells. Allows indicator to rotate	1/2" BSP	...B1..
	Union nut and shoulder nipple. Allows indicator to rotate when thermowell not used	1/2" NPT 3/4" NPT 1" NPT	...1A.. ...1B.. ...1C..

*Note: Specify desired probe length when ordering.

Table 5: Output Type/Contacts

Output Type	Relays		
	No relay	2 relays	4 relays
.4-20mA	..A40..	..A4G..	..A4M..
0-20 mA	..A00..	..A0G..	..A0M..
0-10 VDC	..AV0..	..AVG..	..AVM..

Table 6: Options

...S.. = Peak Hold
...R.. = RS232 Serial Interface
...K.. = Peak Hold & RS232

Dimensions (mm)

