

## **Description & Features:**

- A general purpose, versatile 1" (25mm) to 6" (150mm) dial, 304 stainless steel thermometer
- Bi-metallic sensing element for reliable readings
- Back, bottom or adjustable angle connection
- Welded stem length from 2.5" (63mm) and up
- ±1% accuracy
- Anti-parallax dial that reduces operator reading errors (3" (75mm)-6" (150mm))
- Recalibrator screw is standard on all dial sizes
- ASME B40.200 compliant
- 5 year warranty

## **Applications:**

Industrial process, heating and air conditioning, ventilation and wastewater

	Specifications			
1" (25mm), 2" (50mm): Aluminum with black markings, flat dial 3" (75mm), 4" (100mm), 5" (127mm), 6" (150mm): Aluminum with black markings anti-parallax dial				
Case	AISI 304 SS			
Stem	AISI 304 SS welded to socket, centre back, bottom or adjustable angle configurations (316 SS optional*) 1" (25mm), 2" (50mm) dial: Centre back connection only			
Recalibrator Screw	Standard			
Lens	1" (25mm): Polycarbonate Others: Glass standard, hermetically sealed			
Ring	AISI 304 SS			
Connection	1" (25mm): None 2" (50mm): 1/4" NPT standard 3" (75mm), 4" (100mm), 5" (127mm), 6" (150mm): 1/2" NPT standard			
Sensing Element	Bi-metallic coil			
Pointer	Aluminum, painted black			
Maximum Operating Pressure	125 psi (861 kPa)			
Operating Temperature	75% of full scale value (recommended maximum)			
Ambient Temperature	-58°F to 248°F (-50°C to 120°C)			
Accuracy	±1% of full scale			
Enclosure Rating	2" (50mm) to 6" (150mm): IP68			

<sup>\*</sup>Contact Winters for 316 SS requirements

Note: The use of a thermowell is recommended to protect the thermometer in corrosive or pressure applications, as well as to maintain a closed system during its removal from the process

Order Codes: To order, specify the code for each dial/stem length and the range: i.e. TBM20025 - B26

Dial Size	Stem Length	Fixed Centre Back	Bottom	Adjustable Angle
1" (25mm) pocket thermometer	5" (127mm)	TBM10050	-	
2" (50mm) lab thermometer	8" (200mm)	TBM20080	-	-
	2.5" (63mm)	TBM20025	-	-
	4" (100mm)	TBM20040	-	-
2" (FOmm) NDT Connection	6" (150mm)	TBM20060	-	-
2" (50mm) NPT Connection	9" (230mm)	TBM20090	-	-
	12" (300mm)	TBM20120	-	-
	15" (370mm)	TBM20150	-	-
	2.5" (63mm)	TBM30025	TBM31025	TBM32025
	4" (100mm)	TBM30040	TBM31040	TBM32040
2" (7Emm) NDT Connection	6" (150mm)	TBM30060	TBM31060	TBM32060
3" (75mm) NPT Connection	9" (230mm)	TBM30090	TBM31090	TBM32090
	12" (300mm)	TBM30120	TBM31120	TBM32120
	15" (370mm)	TBM30150	TBM31150	TBM32150
	2.5" (63mm)	TBM40025	TBM41025	TBM42025
	4" (100mm)	TBM40040	TBM41040	TBM42040
A" (100mm) NDT Connection	6" (150mm)	TBM40060	TBM41060	TBM42060
4" (100mm) NPT Connection	9" (230mm)	TBM40090	TBM41090	TBM42090
	12" (300mm)	TBM40120	TBM41120	TBM42120
	15" (370mm)	TBM40150	TBM41150	TBM42150
	2.5" (63mm)	TBM50025	TBM51025	TBM52025
	4" (100mm)	TBM50040	TBM51040	TBM52040
F" (127mm) NDT Connection	6" (150mm)	TBM50060	TBM51060	TBM52060
5" (127mm) NPT Connection	9" (230mm)	TBM50090	TBM51090	TBM52090
	12" (300mm)	TBM50120	TBM51120	TBM52120
	15" (370mm)	TBM50150	TBM51150	TBM52150
	2.5" (63mm)	TBM60025	TBM61025	TBM62025
	4" (100mm)	TBM60040	TBM61040	TBM62040
6" (150mm) NDT Connection	6" (150mm)	TBM60060	TBM61060	TBM62060
6" (150mm) NPT Connection	9" (230mm)	TBM60090	TBM61090	TBM62090
	12" (300mm)	TBM60120	TBM61120	TBM62120
	15" (370mm)	TBM60150	TBM61150	TBM62150

Dial Size	Stem Length	Fixed Centre Back	Bottom	Adjustable Angle
	2.5" (63mm)	TBM30025T1	TBM31025T1	TBM32025T1
	4" (100mm)	TBM30040T1	TBM31040T1	TBM32040T1
0" (7F ) DCD(0) 0 "	6" (150mm)	TBM30060T1	TBM31060T1	TBM32060T1
3" (75mm) BSP(G) Connection	9" (230mm)	TBM30090T1	TBM31090T1	TBM32090T1
	12" (300mm)	TBM30120T1	TBM31120T1	TBM32120T1
	15" (370mm)	TBM30150T1	TBM31150T1	TBM32150T1
	2.5" (63mm)	TBM40025T1	TBM41025T1	TBM42025T1
	4" (100mm)	TBM40040T1	TBM41040T1	TBM42040T1
A" (100mm) DCD(C) Compostion	6" (150mm)	TBM40060T1	TBM41060T1	TBM42060T1
4" (100mm) BSP(G) Connection	9" (230mm)	TBM40090T1	TBM41090T1	TBM42090T1
	12" (300mm)	TBM40120T1	TBM41120T1	TBM42120T1
	15" (370mm)	TBM40150T1	TBM41150T1	TBM42150T1
	2.5" (63mm)	TBM50025T1	TBM51025T1	TBM52025T1
	4" (100mm)	TBM50040T1	TBM51040T1	TBM52040T1
F" (127mm) DCD(C) Compostion	6" (150mm)	TBM50060T1	TBM51060T1	TBM52060T1
5" (127mm) BSP(G) Connection	9" (230mm)	TBM50090T1	TBM51090T1	TBM52090T1
	12" (300mm)	TBM50120T1	TBM51120T1	TBM52120T1
	15" (370mm)	TBM50150T1	TBM51150T1	TBM52150T1
	2.5" (63mm)	TBM60025T1	TBM61025T1	TBM62025T1
	4" (100mm)	TBM60040T1	TBM61040T1	TBM62040T1
4" (1E0mm) DCD(C) Connection	6" (150mm)	TBM60060T1	TBM61060T1	TBM62060T1
6" (150mm) BSP(G) Connection	9" (230mm)	TBM60090T1	TBM61090T1	TBM62090T1
	12" (300mm)	TBM60120T1	TBM61120T1	TBM62120T1
	15" (370mm)	TBM60150T1	TBM61150T1	TBM62150T1

## **Temperature Codes**

°F & °C (Dual)	Code	°F only	Code	°C only	Code	°C & °F (Dual)	Code
-100°F to 150°F & -70°C to 70°C	B1	-40°F to 120°F	B14	-80°C to 50°C	B26	-30°C to 70°C & -20°F to 150°F	B75
-40°F to 120°F & -40°C to 50°C	B2	-40°F to 160°F	B15	-50°C to 50°C	B27	0°C to 120°C & 30°F to 250°F	B76
0°F to 140°F & -20°C to 60°C	В3	0°F to 140°F	B16	0°C to 50°C	B28	0°C to 300°C & 30°F to 570°F	B77
-40°F to 160°F & -40°C to 70°C	B4	0°F to 200°F	B17	-50°C to 100°C	B29	0°C to 200°C & 30°F to 400°F	B79
25°F to 125°F & - 5°C to 50°C	B5	20°F to 240°F	B18	0°C to 100°C	B30	0°C to 250°C & 30°F to 480°F	B80
0°F to 200°F & -20°C to 90°C	B6	0°F to 250°F	B19	-20°C to 120°C	B31	0°C to 50°C & 30°F to 120°F	B81
20°F to 240°F & - 5°C to 115°C	B7	50°F to 300°F	B20	0°C to 150°C	B32	-20°C to 60°C & -4°F to 140°F	B85
0°F to 250°F & -20°C to 120°C	B8	50°F to 400°F	B21	0°C to 200°C	B33	-	-
50°F to 300°F & 10°C to 150°C	В9	50°F to 550°F	B22	0°C to 300°C	B34	-	-
50°F to 400°F & 10°C to 200°C	B10	150°F to 750°F	B23	0°C to 450°C	B35	-	-
50°F to 500°F & 10°C to 260°C	B11	0°F to 800°F	B24	100°C to 550°C	B36	-	-
150°F to 750°F & 70°C to 400°C	B12	200°F to 1,000°F	B25	0°C to 500°C	B39	-	-
200°F to 1,000°F & 100°C to 550°C	B13	14°F to 140°F	B38	-10°C to 60°C	B40	-	-
14°F to 140°F & -10°C to 60°C	B37	-	-	100°C to 400°C	B41	-	-
32°F to 212°F & 0°C to 100°C	B52	-	-	100°C to 540°C	B42	-	-
32°F to 140°F & 0°C to 60°C	B84	-	-	-30°C to 70°C	B45	-	-
-60°F to 300°F & -50°C to 150°C	B86	-	-	20°C to 120°C	B46	-	-
-	-	-	-	-30°C to 170°C	B47	-	-
-	-	-	-	0°C to 120°C	B48	-	-
-	-	-	-	0°C to 400°C	B49	-	-
-	-	-	-	0°C to 250°C	B50	-	-
-	-	-	-	20°C to 60°C	B51	-	-
-	-	-	-	0°C to 60°C	B82	-	-

Other ranges, stem lengths, connection sizes and thread types available upon request. For glycerin fill, maximum temperature limit is 300°F (150°C). Silicone fill available.

Option suffix for above order code only:

AP3 = 3" (75mm) acrylic lens	BG5 = 5" (127mm) glycerin filling	SCK = Socket conversion kit
AP4 = 4" (100mm) acrylic lens	BG6 = 6" (150mm) glycerin filling	SPG3 = 3" (75mm) Shatterproof glass lens
AP5 = 5" (127mm) acrylic lens	DUCT = Aluminum duct flange	SPG5 = 5" (127mm) Shatterproof glass lens
AP6 = 6" (150mm) acrylic lens	RSP4 = 4" (100mm) Red set pointer	SPG6= 6" (150mm) Shatterproof glass lens
BG3 = 3" (75mm) glycerin filling	RSP5 = 5" (127mm) Red set pointer	, , , , ,
BG4 = 4" (100mm) glycerin filling	RSP6 = 6" (150mm) Red set pointer	

Note: The use of a thermowell is recommended to protect the thermometer from corrosive or damaging environments, as well as to maintain a closed system during its removal from the process