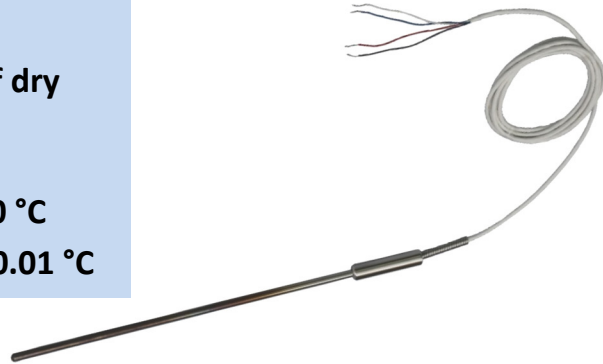


HIGHLIGHTS

- ✓ Vertical gradient measurement of dry block/dry Well
- ✓ 6 mm sensing element
- ✓ Temperature range: -200 °C to 670 °C
- ✓ Short term stability: ± 0.003 °C at 0.01 °C



OVERVIEW

AM1758 is specifically designed to measure vertical gradients of dry block or dry well. The length of the sensing element is only 6 mm, which allows AM1758 to measure detailed temperature changes inside the dry wells with pin point precision.

The short sensing element has adopted many of AccuMac's PRT technologies to offer a high level of stability across the temperature range from -200 °C to 670 °C. A uniquely designed support structure and filling material provides excellent balance between the hysteresis effect, mechanical shock and thermal shock performance.

It has long been a challenge for temperature calibration labs across the world to measure gradient of a dry block. With a 6 mm sensing element, AM1758 meets challenge and requirement such as one from The Euramet Calibration Guide CG-13 Version 3.0 "CALIBRATION OF TEMPERATURE BLOCK CALIBRATORS".



Finally a solution for accurate dry block gradient measurement!

SPECIFICATIONS

Temperature Range	From -200 °C to 670 °C
Resistance at 0 °C	Nominal 25 Ω
Temperature Coefficient	0.003925 Ω/ Ω/°C
Short Term Stability ⁽¹⁾	±0.003 °C at -196 °C; ±0.003 °C at 0.01 °C ±0.004 °C at 232 °C; ±0.005 °C at 420 °C; ±0.006 °C at 661 °C
Hysteresis	<=0.005 °C
Self-heating	0.0015 °C at 1 mA current
Response Time	9 seconds for 63% response to step change in water moving at 3 feet per second
Measurement Current	1 mA
Sensor Length	6 mm
Sensor Location	3 mm from tip
Insulation Resistance	>1000 MΩ at room temperature
Sheath Material	Inconel™
Dimension	0.25 inch X 12 inch (6.35 mm X 305 mm)
External Leads	Teflon™ – insulated copper wire, 4 leads, 2.5 meters
Handle Dimension	15 mm (OD) X 65 mm (L)
Handle Temperature Range ⁽²⁾	-50 °C to 180 °C
Optional Calibration	NIST traceable calibration and data available per request: Ordering # 5007

(1) Maximum variation from PRT during gradient measurements up to 4 hours in the same heat source

(2) Handle temperature outside this range will cause damage to the probe.

ACCESSORIES

Model	Description
9001	Wooden Carrying Case included

CONSTRUCTION DRAWING

