



# DTS12 Series Temperature Probes



DTS12A Air Temperature Probe for meteorological temperature measurement.

## Features

- Platinum resistance element
- Accuracy: 1/4 DIN 43760 B
- Weather-resistant design
- EMI shielding

DTS12 Series Temperature Probes are specially designed for outdoor use, for example with weather stations. The watertight, weather-resistant design ensures reliable temperature measurements in extreme conditions.

DTS12 probes can be used with equipment operating either with the resistor bridge principle (3-wire connection) or constant current principle (4-wire connection).

The housing of the platinum resistance (Pt100 sensor) sensing element is made of stainless steel, and it is located in the tip part of the assembly. The cable screen attached to the sensor housing provides a good shield against electromagnetic interference (EMI).

### DTS12A Air Temperature Probe

DTS12A Air Temperature Probe is meant to be used in meteorological temperature measurement. Vaisala recommends using a radiation shield to ensure correct results.

### DTS12G Ground/Soil Temperature Probe

DTS12G Ground/Soil Temperature Probe is specially designed for automatic weather stations. It can be used to measure the temperature at different levels beneath the surface. In road weather stations it uses road depth temperature information to produce a 24-hour road surface temperature forecast.



### DTS12W Water Temperature Probe

DTS12W Water Temperature Probe is a dedicated sensor for measuring water temperature in tanks. Therefore it is equipped with the standard M20 thread for fastening.



# Technical Data

## DTS12A Specifications

Sensing element	Platinum resistance element (Pt100)
Accuracy	1/4 DIN 43760 B ±0.08 °C at 0 °C (±32.14 °F at 32 °F)
Sensitivity	0.385 Ω/°C
Measurement range	-60 ... +80 °C (-76 ... +176 °F)
Housing material	Stainless steel AISI 316, PVC
Probe	Max. diameter: 8 mm (0.31 in) Length: 173 mm (6.81 in)
Cable	Screened multicore 4 × 0.22 mm and shield Length: 3.5 m (11 ft 6 in) Diameter: 5 mm (0.20 in)

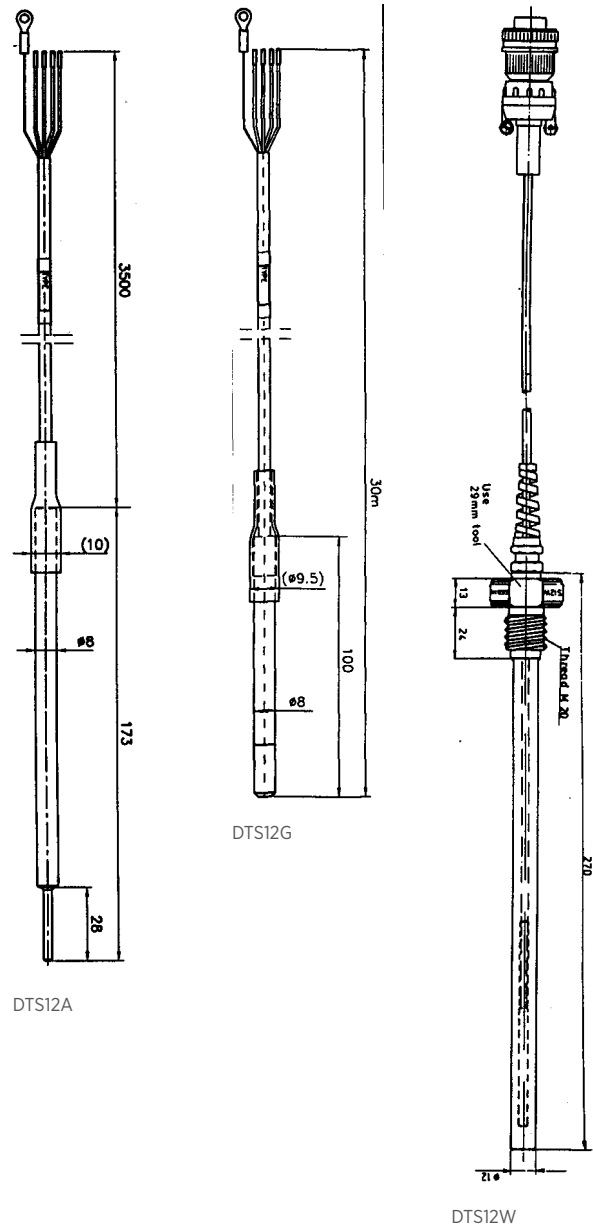
## DTS12G Specifications

Sensing element	Platinum resistance element (Pt100)
Accuracy	1/4 DIN 43760 B
Sensitivity	0.385 Ω/°C
Measurement range	-80 ... +80 °C (-112 ... +176 °F)
Housing material	Stainless steel AISI 316
Probe	Max. diameter: 9.5 mm (0.4 in) Length: 100 mm (3.9 in)
Cable	Screened multicore 4 × 0.22 mm (24 AWG) and shield Diameter: 5 mm (0.20 in)

## DTS12W Specifications

Sensing element	Platinum resistance element (Pt100)
Accuracy	1/4 DIN 43760 B ±0.08 °C at 0 °C (±32.14 °F at 32 °F)
Sensitivity	0.385 Ω/°C
Measurement range	-80 ... +80 °C (-112 ... +176 °F)
Housing material	Stainless steel AISI 316
Probe	Length: 270 mm (10.63 in) Max. diameter: 33 mm (1.30 in) Tube: 8 mm (0.31 in) Thread: M20
Cable	Screened multicore 4 × 0.22 mm and shield Length: 5 m (16 ft 5 in) Diameter: 5 mm (0.20 in)

## Dimensions in mm



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