

**Pt100 immersion probe for liquids and gases up to
+400 °C**

GTF 35

Introduction

Reliable temperature checks in liquids and gases depend on a slim probe that reacts quickly and withstands regular contact with the medium. This Pt100 immersion probe uses a rust-resistant Ø3 mm V4A tube and is designed without a handle for direct integration into measurement setups.

The probe covers -50 ... +400 °C for broad use in liquid and gas temperature measurement. Response behavior is clearly defined, with an approx. 10 s T90 response time in water at 0.4 m/s and approx. 40 s in air at 2 m/s. Users can select DIN Class B, AA, A or 1/10 DIN Class B accuracy, depending on the required measurement quality.

The family offers practical configuration options for different tasks. The standard version has a 150 mm probe length and 1 m PVC cable for -20 ... +70 °C. Other probe and cable lengths are available. A Teflon-covered V4A tube is available for acid and seawater applications up to 200 mm probe length, with a maximum measuring range of -50 ... +250 °C.



Slim immersion design

Ø3 mm V4A tube supports temperature checks in liquids and gases.



Selectable accuracy

Available in DIN Class B, AA, A or 1/10 DIN Class B accuracy.



Defined response

T90 is approx. 10 s in water at 0.4 m/s and approx. 40 s in air at 2 m/s.



Medium protection

Optional Teflon cover suits acid and seawater use up to 250 °C.

Technical Specifications

Measurement

Measuring principle	RTD
Temperature sensor	Pt100, Class DIN A / B / AA / 1/10B
Temperature range	-50...+400 °C (-50...+250 °C when Teflon-shrink-wrapped or rigid stem (1/10 DIN Class B))

Probe

Cable	PVC 4-wire, L = 1 m (Standard, other lengths upon request)
Connection	4-pole M12 / 4-pole Mini-DIN / loose ends with wire end ferrules
Probe Diameter	3 mm
Handle	No
Probe length	150 mm (Standard, other lengths upon request)
Material	AISI 316 stainless steel
Type	Immersion probe

Available product variants

Ordercode	Description	Article No.
GTF35-D-M12	GTF 35-D-M12 - Pt100 immersion probe for liquids and gases, measuring -50 ... +400 °C with Ø3 mm V4A tube, DIN Class B, AA, A or 1/10 DIN Class B accuracy, and Mini-DIN, M12 or ferruled loose-end connection.	488067
GTF35-B	GTF 35-B - Pt100 immersion probe for liquids and gases, measuring -50 ... +400 °C with Ø3 mm V4A tube, DIN Class B, AA, A or 1/10 DIN Class B accuracy, and Mini-DIN, M12 or ferruled loose-end connection.	600391
GTF35-D-MD	GTF 35-D-MD - Pt100 immersion probe for liquids and gases, measuring -50 ... +400 °C with Ø3 mm V4A tube, DIN Class B, AA, A or 1/10 DIN Class B accuracy, and Mini-DIN, M12 or ferruled loose-end connection.	601437
GTF35-B-M12	GTF 35-B-M12 - Pt100 immersion probe for liquids and gases, measuring -50 ... +400 °C with Ø3 mm V4A tube, DIN Class B, AA, A or 1/10 DIN Class B accuracy, and Mini-DIN, M12 or ferruled loose-end connection.	490335

Features

Pt100 sensor element

The probe uses a Pt100 sensor element for temperature measurement in liquid and gaseous media.

Probe construction

The immersion probe is built without a handle and uses a rust-resistant V4A tube with Ø3 mm diameter.

Probe length variants

The standard probe length is 150 mm. Other probe lengths are available for different installation depths.

Cable configuration

The standard version has a 1 m PVC cable with a specified cable temperature range of -20 ... +70 °C. Other cable lengths are available.

Connection variants

Versions are available with Mini-DIN plug in 4-wire configuration, 4-pin M12 plug or loose ends with ferrules.

Teflon-covered option

The V4A probe tube can be supplied with a Teflon cover for acid and seawater applications, limited to 200 mm length and -50 ... +250 °C.

Details

