

Insertion temperature probe for soft media, -70 ... +250 °C

GES 175

Introduction

For checks in soft and semi-solid media, you need a probe that enters cleanly and reacts quickly. This insertion probe measures temperatures from -70 ... +250 °C and uses a Pt1000 sensor element, giving technicians a dependable tool for process checks, field measurements and laboratory tasks where the medium can be pierced directly.

The family adapts to different instruments and working methods. Connection options include BNC plug, loose ends with ferrules, gold-plated 3.5 mm jack plug or 4-wire Mini-DIN plug. The standard probe length is 100 mm, with many other lengths available for deeper or more compact measuring points.

A V4A (1.4404) probe tube supports use in demanding media contact, while the selectable probe diameters and tip designs help match the probe to the material. Response is fast in moving water at $T_{90} < 2$ s and about 40 s in air at 2 m/s.

Features

Connection versions

The family supports BNC plug, loose ends with ferrules, gold-plated 3.5 mm jack plug and 4-wire Mini-DIN plug versions.

Probe geometry

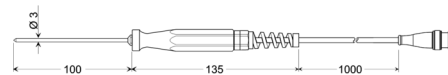
Standard probe length is 100 mm. Other lengths are available, with diameters from Ø1.5 mm to Ø6 mm and several tip shapes.

Cable variants

The standard version uses 1 m highly flexible silicone cable rated -50 ... +200 °C. Teflon (-200 ... +250 °C), PVC (-20 ... +105 °C) and spiral cable versions are also available.

Handle versions

The standard configuration uses a plastic handle with anti-kink screw connection. Options include waterproof potting (max. 100 °C, only with PVC cable) or a Teflon handle.



Quick readings

Reacts with $T_{90} < 2$ s in water at 0.4 m/s for faster temperature checks.



Wide temperature use

Covers -70 ... +250 °C with Pt1000 sensing for varied media conditions.



Selectable accuracy

Choose DIN Class B or DIN Class AA to match the required measurement task.



Media-ready tube

V4A (1.4404) probe tube supports direct insertion into soft media.

Technical Specifications

Measurement

Measuring principle	RTD
Temperature sensor	Pt1000, Class B (Standard) / Class AA
Temperature range	-70...+250 °C

Probe

Cable	Silicone (-50 ... +200 °C) / PTFE (-200 ... +250 °C) / PVC (-20 ... +105 °C) / Coiled
Connection	BNC / loose ends with wire end ferrules / gold plated 3.5 mm jack plug / 4-wire Mini-DIN
Probe Diameter	1.5 mm / 2.2 mm / 3 mm (Standard) / 4 mm / 5 mm / 6 mm
Probe length	Standard: 100 mm (other lengths available upon request)
Material	Stainless steel 1.4404 (V4A)
Type	Insertion probe

Available product variants

Ordercode	Description	Article No.
GES175-KS	GES 175-KS - Insertion temperature probe for soft media measures -70 ... +250 °C with a Pt1000 element, V4A probe tube and 3.5 mm jack connection.	600431
GES175-BNC	GES 175-BNC - Insertion temperature probe for soft media measures -70 ... +250 °C with a Pt1000 element, V4A probe tube and BNC connection.	611324