



Safe and reliable temperature measurement.

The VITO MPT Multi spot Pt100 Temperature probe for temperature measurement together with Honeywell Enraf automatic tank gauging equipment is the answer for accurate inventory management.

The VITO MPT is a robust and reliable device, fully complying with all relevant industrial standards. The VITO MPT provides average product temperature, vapor temperature and temperature profiles, utilizing high accuracy Pt100 temperature sensors. Its accuracy complies

with the requirements for legal metrology and is according to API MPMS Chapter 7 section 3.

The solution meets international safety requirements for use in explosion hazardous areas.

Global Experience. Locally Applied.

Technical Specification

Principle	
Measuring principle	4-14 Pt100 temperature elements equidistant spaced between top and bottom element
Measuring Specifications	
Product temperature range	
Standard	-50 °C to +120 °C (-58 °F to +248 °F)
Low	-200 °C to +50 °C (-328 °F to +122 °F)
High	-50 °C to +200 °C (-58 °F to +392 °F)
Very high	-20 °C to +250 °C (-4 °F to +482 °F)
Storage temperature	-50 °C to +120 °C (-58 °F to +248 °F)
Measuring length	Depending on identification code (see drawing)
Element accuracy	According EN-IEC 60751: <ul style="list-style-type: none"> • 1/6 DIN Class B = $\pm 1/6 \cdot (0.30 + 0.005 \cdot t)$ °C • 1/10 DIN Class B = $\pm 1/10 \cdot (0.30 + 0.005 \cdot t)$ °C
Probe accuracy	<ul style="list-style-type: none"> • 1/6 DIN Class B = $\pm (0.15 + 0.002 \cdot t)$ °C • 1/10 DIN Class B = $\pm (0.12 + 0.0015 \cdot t)$ °C
Measuring resolution	0.01 °C (0.01 °F)
Mechanical	
Process material	AISI 316
Adjusting pipe	ISO 228/1-G1/2B (1/2 BSP), adjustable length 255 mm (10"), see drawing
Maximum outside diameter	28.6 mm (1.2")
Mounting flange	Optional (1/2 BSP threaded mounting hole required)
Anchor weight	Max. 9 kg (20 lb)
Environmental	
Storage temperature	-50 °C to +120 °C (-58 °F to +248 °F)
Operating pressure	6 bar / 600 kPa (90 psi) hydrostatic pressure
Safety	The VITO MPT probe is a passive component and can be considered as simple apparatus when used in Intrinsically Safe circuits in accordance with the following: <ul style="list-style-type: none"> • EN IEC 60079-11, clause 5.7 • NEC (National Electrical Code) Article 504 (Intrinsically Safe Systems) 504.2 (Definitions) Simple Apparatus
Electrical	
Flying leads	Color coded stranded wires, PTFE isolated, length: <ul style="list-style-type: none"> • 35 cm (14") • 250 cm (98") • 600 cm (236")Op

Identification Code

Pos 1 Application

U General purpose

Pos 2 Product Temperature Probe

- S Standard: -50 °C to +120 °C (-58 °F to +248 °F)
- L Low: -200 °C to +50 °C (-328 °F to +122 °F)
- H High: -50 °C to +200 °C (-58 °F to +392 °F)
- V Very High: -20 °C to +250 °C (-4 °F to +482 °F)

Pos 3 Position Not Used

- Not used

Pos 4 Flying Leads Length

- N 35 cm (14")
- B 250 cm (98")
- E 600 cm (236")

Pos 5, 6, 7 Instrument Designation

3 6 1 VITO MPT Temperature probe

Pos 8 Accuracy Class Pt100 Elements

- A 1/6 DIN Class B = $\pm 1/6 \cdot (0.30 + 0.005 \cdot |t|)$ °C
- B 1/10 DIN Class B = $\pm 1/10 \cdot (0.30 + 0.005 \cdot |t|)$ °C

Pos 9, 10 Number of Pt100 Elements

* * 04 to 14 (max. 06 elements if directly connected to SmartRadar FlexLine)

Pos 11 Electrical Hazardous Classification

- C 1 m (39") from bottom of probe
- D 15 cm (6") from bottom of probe

Pos 12, 13, 14, 15 Overall Length in Steps of 10 cm

* * * 0 Range 0370 to 4000 cm

Pos 16, 17, 18, 19 Position of Highest Temperature Element in Steps of 10 cm

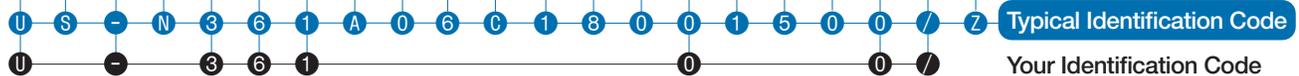
* * * 0 0300 to 3930 cm (\leq overall length - 70 cm)

Pos 20 Separator

/

Pos 21 Tag Plate

- Z None
- T Included (AISI 304)

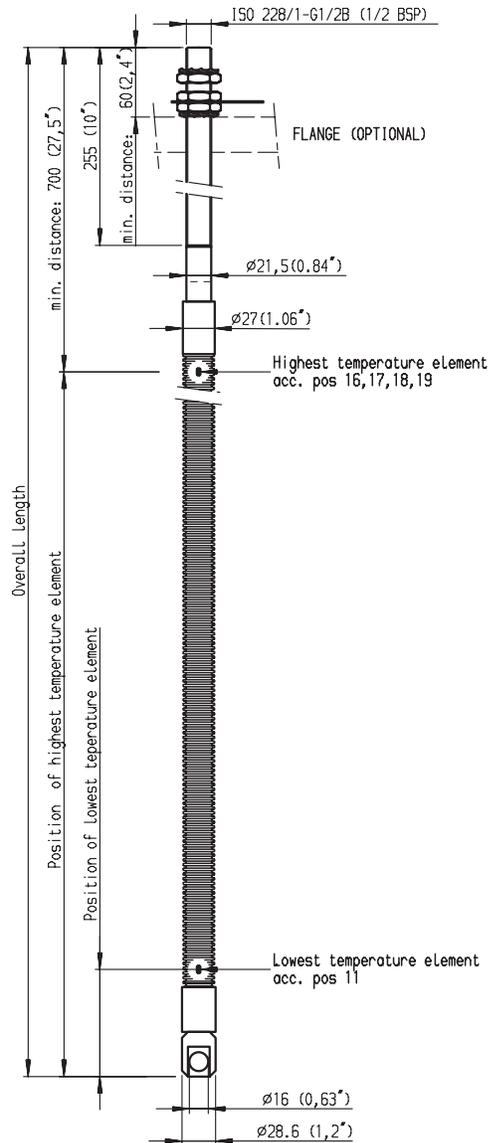


Typical Identification Code

Your Identification Code

Dimensional Drawing

361 VITO MPT Temperature probe



For More Information

To learn more about Honeywell Enraf's VITO Probes, visit www.honeywellenraf.com or contact your Honeywell Enraf account manager.

Americas

Honeywell Enraf Americas, Inc.
2000 Northfield Ct.
Roswell, GA 30076
USA
Phone: +1 770 475 1900
Email: enraf-us@honeywell.com

Asia Pacific

Honeywell Pte Ltd.
17 Changi Business Park Central 1
Singapore 486073
Phone: +65 6355 2828
Email: enraf-sg@honeywell.com

Europe, Middle East and Africa

Honeywell Enraf
Delftechpark 39
2628 XJ Delft
The Netherlands
Phone: +31 (0)15 2701 100
Email: enraf-nl@honeywell.com

EN-13-02-US
August 2013
© 2013 Honeywell International Inc.

Honeywell Enraf

Your Terminal Operations Partner