Technical Information TI 227F/00/en

Operating Instructions 017195-1000

Capacitance Level Measurement Rope Probe 21 262, 21 262 A

Partially insulated rope probe





















Applications

- Limit detection in bulk solids.
- Level measurement in dry, conductive bulk solids.

Mounting the Probe

The probe is designed for vertical installation only.

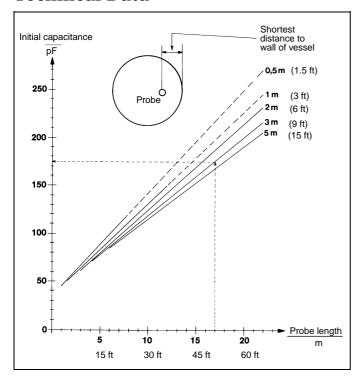
Please contact your local Service Centre when using the probe for minimum detection with strongly abrasive materials or those that cause build-up. The last two meters of the cable must be straightened before feeding the probe into the vessel.

Technical Data

- Operating pressure pe: 0 bar (0 psi)
- Operating temperature:
- -30 °C...+120 °C (−20 °F...+250 °F)
- Maximum probe length L: 22000 mm
- Minimum probe length L: 500 mm
- Max. permissible load: 40000 N
- Max. screening length L₂: 2000 mm, steel
- Process connections for 21 262
 - $-G_{1}^{1}/_{2}A$
- $-1^{1}/_{2}-11^{1}/_{2}$ NPT
- DIN flanges DN 50, DN 80, DN 100 / PN 16
- ANSI flanges 2", 4" / 150 psi
- Materials for process connections
 - steel
- 1.4571 (SS 316 Ti)
- Process connection for 21 262 A
- G 1¹/₂ A, steel
- Materials for housing
- Aluminium, painted
- Aluminium, plastic-coated
- PBTP
- Cable entries:
 Pg 16, NPT ¹/₂", G ¹/₂, M 20x1,5,
 HNA 24x1,5



Technical Data



Initial capacitance of the probe 21 262 as a function of the probe length and the distance from the wall of the vessel

Determining the initial capacitance

The values are used for probes parallel to the vessel wall; error limits ±15 %. Feedthrough capacitance and stray capacitances are included.

Example

Given:

Probe length 17 m, shortest distance to wall of vessel 3 m.

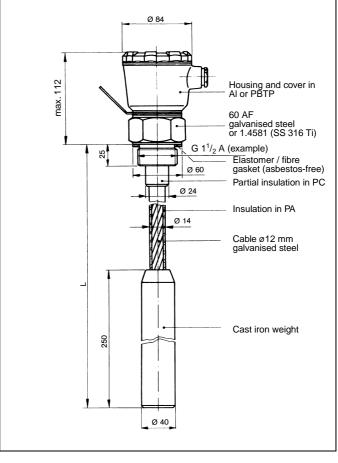
Resulting in:

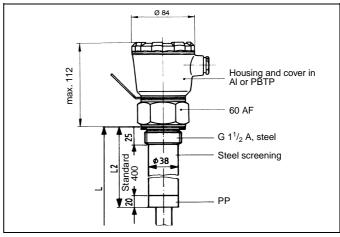
Initial capacitance in air (empty vessel) 175 pF, ±15%.

Dimensions of probe 21 262

Dimensions in mm 100 mm = 3.94 in 1 in = 25.4 mm

Dimensions of probe 21 262 A





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