

Capacitance Point level detection Solicap FTI77

Point level detection for bulk solids, especially for high temperatures and strong mechanical loads



Benefits:

- Highest safety and reliability due to extremely robust design for harsh process conditions
- Cost savings thanks to easy and fast commissioning as calibration is performed at the press of a button
- Cost-effective, reliable and universal application thanks to wide range of certificates and approvals
- Two-stage overvoltage protection against static discharges from the silo
- Active build-up compensation for bulk solids with caking tendency
- Use in safety systems requiring functional safety to SIL2/SIL3
- Reduction in storage costs thanks to easy-to-shorten sword model and rope model

More information and current pricing:

www.ca.endress.com/FTI77

Specs at a glance

- **Process temperature** -50°C ... 400°C (-58°F ... 752°F)
- **Process pressure / max. overpressure limit** Vacuum ... 10 bar (Vacuum ... 145 psi)

Field of application: Solicap FTI77 is a partly insulated sword/rope probe for point level detection of fine-grained to coarse-grained bulk solids. It offers maximum reliability due to its active build-up compensation and is suited for a wide range of applications thanks to numerous certificates and approvals. Due to its robust construction, it can also be used in applications with very high lateral loads (up to 800Nm, sword version), high temperatures and abrasive media.

Features and specifications

Point Level / Solids

Measuring principle

Capacitive Solid

Characteristic / Application

Partly isolated sword probe / rope probe for very high temperatures

High mech. lateral load

Specialities

Inactive length

Active build-up compensation

High lateral loading

Extremely robust probe

Supply / Communication

19 ... 253V AC

10 ... 55V DC-PNP

19...253V AC bzw 10...55V DC

8/16mA, 11 ... 36V DC

PFM

3-wire

Ambient temperature

-50°C ... 70°C

(-58°F ... 158°F)

Process temperature

-50°C ... 400°C

(-58°F ... 752°F)

Process pressure / max. overpressure limit

Vacuum ... 10 bar

(Vacuum ... 145 psi)

Main wetted parts

Ceramic, 316L, Steel

Point Level / Solids**Max. tensile strength**Rope: 20 kN

Process connection

Thread R1 1/2, NPT1 1/2

Flanges DN/ASME/JIS

Sensor length

Rope: 0.5 ... 20m

(1.6 ... 65ft)

Sword: 0.2m ... 1m

(0.6 ... 3.3ft)

Inactive length: 0.1m ... 1m

(0.3 ... 3.3ft)

Communication

2- wire 19-253 VAC

DC PNP

Relais DPDT

PFM

3-wire

8/16 mA

Certificates / ApprovalsATEX, FM, CSA, IEC Ex, EAC

Safety approvalsSIL

Design approvalsEN 10204-3.1

Components

PFM: FTC325, FTC625, FTC470Z, FTC471Z

3-wire: FTC325

Application limitsDK min. 2.5

More information www.ca.endress.com/FTI77