

# 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.be.endress.com/FTI77](http://www.be.endress.com/FTI77)

## Specs at a glance

- **Process temperature** -50°C ... 400°C (-58°F ... 752°F)
- **Process pressure absolute / 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.

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## Features and specifications

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### Point Level / Solids

**Measuring principle**

Capacitive Solid

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**Characteristic / Application**

Partly isolated sword probe / rope probe for very high temperatures

High mech. lateral load

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**Specialities**

Inactive length

Active build-up compensation

High lateral loading

Extremely robust probe

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**Supply / Communication**

19 ... 253V AC

10 ... 55V DC-PNP

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

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

PFM

3-wire

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**Ambient temperature**

-50°C ... 70°C

(-58°F ... 158°F)

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**Process temperature**

-50°C ... 400°C

(-58°F ... 752°F)

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**Process pressure absolute / max. overpressure limit**

Vacuum ... 10 bar

(Vacuum ... 145 psi)

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**Main wetted parts**

Ceramic, 316L, Steel

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

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**Process connection**

Thread R1 1/2, NPT1 1/2

Flanges DN/ASME/JIS

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**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)

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**Communication**

2- wire 19-253 VAC

DC PNP

Relais DPDT

PFM

3-wire

8/16 mA

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**Certificates / Approvals**ATEX, FM, CSA, IEC Ex, EAC

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**Safety approvals**SIL

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**Design approvals**EN 10204-3.1

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**Components**

PFM: FTC325, FTC625, FTC470Z, FTC471Z

3-wire: FTC325

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**Application limits**DK min. 2.5

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