Conductive rod probe: SAT

Electrode probe for conductive limit level detection in electrically conductive filling materials with up to 7 electrode rods – plastic screwing thread; up to 6 measuring points; temperature: -40°C...+150°C; pressure: 10 bar

Description

The SAT rod probes are used in conjunction with the evaluation units (eg, SRA-100-U0) is used for level detection and level control in conductive liquids.
Depending on the number of bars and evaluation devices used, different measurement tasks such as Overflow, dry run, two-step control, moisture detection, etc. are realized.
Depending on model selected can include the container wall as a mass, to be implemented to 7 switch points.
The ground connection erflogt either directly to the container or conducting a probe rod.
In the probe head, an additional module (diode module LBM) for permanent circuit monitoring to be installed.
In the case of a line break between the electrode probe and an appropriate evaluation, the evaluation issue an alert.

Application

- Level detection in conductive liquids
- Up to seven limit levels simultaneously detectable
- As leakage or overflow protection in containers
- For minimum / maximum / resp. multi-point-detection in containers
- As pump protection, resp. dry run protection in pipelines
- For two-point control of pumps
- For conductivities from 1 µS/ cm
- For process temperatures from -15 ° C up to +150 ° C
- For process pressures from -1 bar up to +10 bar
- Material also for corrosive and aggressive products
- ATEX II 1G Ex ia IIB / IIC T6 ... T1 Ga
- Approved for use in hazardous areas
- Integrated line break monitoring

Specials

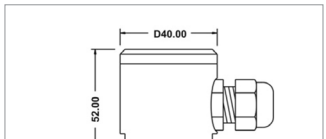
Your benefits

- Suitable for *aggressive media* due to the use of special material such as. Hastelloy; PTFE; ETFE resp. E-CTFE etc.
- High-quality, coated probe insulation
- *No infiltration by liquids possible*
- Simple switching point adjustment by probe rods that can be shortened

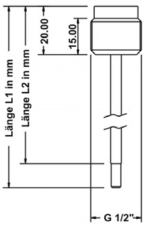
Technical data

Technische Daten	
Process pressure:	-1...10 bar
Process temperature:	-40°C...+150°C, observe limitations (see operating instructions)
Protection classification:	IP65 EN/IEC 60529
Material Process connection:	POM / PP / PTFE
Material Electrode rod:	Stahl 1.4404 (AISI316L) bzw. 1.4571 (AISI316Ti) / Hastelloy C22
Isolation Electrode rod isolation:	PA / ETFE resp. E-CTFE
Gaskets (medium contact)	Electrode isolation PA: NBR / Electrode isolation ETFE resp. E-CTFE: FPM

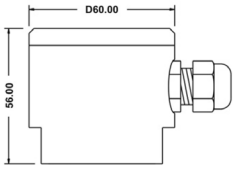
Bestellschlüssel



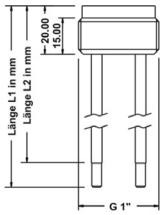
Anschlussgehäuse
∅ 40mm



Prozessanschluss
G12 – G ½"



Anschlussgehäuse
∅ 60mm (nur Werkstoff POM)



Prozessanschluss
G10 – G 1"

Model
- 0 Standard
- Ex ATEX II 1 G Ex ia IIB/IIC T6...T1 Ga

Electrode rods
- 1 1 electrode rod
- 2 2 electrode rods
- 3 3 electrode rods
- 4 4 electrode rods
- 5 5 electrode rods
- 7 7 electrode rods

Process connection
- G12 Thread ISO 228-1 – G½" only with one electrode rod possible
- G10 Thread ISO 228-1 – G1" up to three electrode rods possible
- G15 Thread ISO 228-1 – G1½" up to five electrode rods possible
- G20 Thread ISO 228-1 – G2"" up to seven electrode rods possible

Material probe rod
(price per 100mm)
- A4 CrNi-steel, rod diameter 4mm
- A8 CrNi-steel, rod diameter 8mm
- D Hastelloy® C22, rod diameter 4mm
- Y Others

Material Connection housing
- D POM – polyoxymethylenee Delrin®, Ø 40 mm for G½" / G1" resp. Ø 80 mm for G1½" / G2"
- E POM – polyoxymethylenee Delrin®, Ø 60 mm for G½" / G1"
- P PP – polypropylenee, Ø 40 mm for G½" / G1"
- M PP – polypropylenee, Ø 80 mm for G1½" / G2"
- T PTFE – Polytetrafluoroethylene Teflon®, Ø 40 mm for G½" / G1"
- L PTFE – Polytetrafluoroethylene Teflon®, Ø 80 mm for G1½" / G2"

Material probe insulation
(price per 100mm)
- R PA – Polyamid (standard), *not for material process connection T / L – PFTE*
- H4 E-CTFE – Ethylene-chlorotrifluoroethylene (Halar®) 4mm
- H8 E-CTFE – Ethylene-chlorotrifluoroethylene (Halar®) 8mm

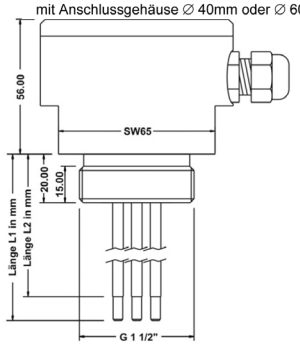
Circuit monitoring
- A Without circuit monitoring
- B Diode module LBM only for terminal enclosure Ø 60mm (only at head Ø ≥ 60 mm, resp. thread ≥ 1½")

Diameter probe rod
- 0 4 mm (L1 max. 2000mm)
- W 8 mm 8 mm (L1 max. 3000mm)

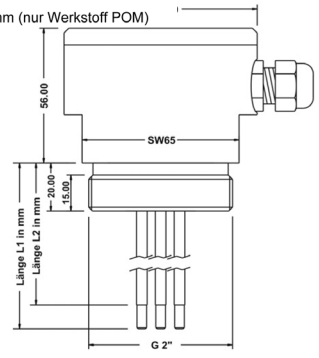
Length L1 probe rod in mm - up to max. 2500 mm

Length L2 insulation mm

mit Anschlussgehäuse ∅ 40mm oder ∅ 60mm (nur Werkstoff POM)



Prozessanschluss
G15 – G 1 ½"



Prozessanschluss
G20 – G 2"

Order code

SAT		mm	mm

SAT probes are only available in 500 mm increments!
Probe rods should be shortened by oneself!

Equipment

Order information	*Model*
AH-2	Spacers for 2-rod probes
AH-3	Spacers for 3-rod probes
AH-4	Spacers for 4-rod probes
AH-5	Spacers for 5-rod probes

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