



Typ SDT 09

basic @ pressure

Industrie Druckmessumformer

Wesentliche Merkmale

- ▶ Hohe Genauigkeit
- ▶ Tauchsonde komplett aus Edelstahl 1.4571
- ▶ Membranfläche aus Edelstahl 1.4435
- ▶ Dichtungen aus FKM
- ▶ Kunststoffabdeckung für Membranfläche



Technische Merkmale

- ▶ Geringer Temperaturfehler
- ▶ sehr gute Linearität
- ▶ sehr gute Langzeitstabilität
- ▶ Genauigkeit nach IEC 60770: 0,35% FSO
- ▶ Edelstahlsensor
- ▶ kleiner Durchmesser von 27 mm
- ▶ Nenndruckbereiche von 0...40 mbar bis 0...25bar

Anwendung

Die Tauchsonde SDT09 wurde für die kontinuierliche Füllstands- bzw. Pegelmessung in Wasser und sauberen als auch in verschmutzten Flüssigkeiten konzipiert.

Das Gehäuse besteht aus Edelstahl 1.4571, die Sensormembrane aus 1.4435.

Standardmäßig werden Dichtungen aus FKM verwendet; auf Anfrage stehen auch andere Dichtungswerkstoffe zur Verfügung.

Aufgrund der hochwertigen Edelstahl-Messzelle zeichnet sich die Tauchsonde SDT09 durch hervorragende messtechnische Eigenschaften aus.

Mit der SDT09 steht eine Tauchsonde für ein weites Spektrum von Einsatzgebieten zur Verfügung.

Zubehör



Abspannklemme ASK09



Klemmgehäuse SDAG-1

Bevorzugte Anwendungsgebiete sind:

- ▶ Füllstandsmessung in Wasser und sauberen bis verschmutzten Medien
- ▶ Umwelttechnik: Wasseraufbereitung, Klärwerke
- ▶ Tiefenmessung in Brunnen und offenen Gewässern
- ▶ Grundwasserpegelmessung
- ▶ Füllstandsüberwachung in offenen Behältern

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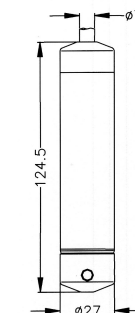
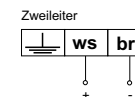


Technische Daten

| | | | | | | | | | | | | | | | |
|----------------------------|----------|----------|---------|----------|----------|---------|---------|-------|---------|---------|-------|-------|--------|--------|--------|
| Messbereiche in bar | 0...0,04 | 0...0,06 | 0...0,1 | 0...0,16 | 0...0,25 | 0...0,4 | 0...0,6 | 0...1 | 0...1,6 | 0...2,5 | 0...4 | 0...6 | 0...10 | 0...16 | 0...25 |
| Überdrucksicherheit in bar | 0,2 | 0,2 | 0,5 | 0,5 | 1 | 1 | 3 | 3 | 6 | 6 | 20 | 20 | 20 | 60 | 60 |

Anschlussbilder

| | |
|-----------------------------|--|
| Genauigkeit ¹ | Standard: $\leq \pm 0,35\%$ FSO Nenndruck $\leq 0,4$ bar: $\leq \pm 0,5\%$ FSO |
| Zul. Bürde | $R_{max} = [(U_s - U_{Bmin}) / 0,02] \text{ Ohm}$ |
| Einflusseffekte | Hilfsenergie: 0,05% FSO / 10V Bürde: 0,05% FSO / kOhm $\pm \pm 0,1\%$ FSO / Jahr |
| Langzeitstabilität | $-25^\circ\text{C} \dots +70^\circ\text{C}$ |
| Lagerungstemperaturbereich | $-10^\circ\text{C} \dots +70^\circ\text{C}$ |
| Messstoff-Temperaturbereich | max., mittl. TK [% FSO / 10 K] $\pm 0,3$ |
| Temperaturfehler | IP 68 |
| Schutzart | Werkstoff Trennmembran Chrom-Nickel-Stahl 1.4435 |
| Werkstoff Gehäuse | Chrom-Nickel-Stahl 1.4571 |
| Dichtungen | FKM |
| Masse | ca. 200 g (ohne Kabel) |



Elektrische Daten

| | |
|--------------------------|--|
| Betriebsspannung | 8...32 V DC |
| Ausgangssignal | 4...20 mA |
| Elektrische Anschlussart | Zweileiter |
| Elektrischer Anschluss | abgeschirmtes Kapillar-Kabel, Material: FEP |
| Verpolschutz | bei Verpolung keine Schädigung, allerdings auch keine Funktion |

Bestellcode

SDT09 - [] - [0] [8] [8] - [B] - [H] [9] - []

| Messbereiche | bar | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | 1 | 2 | 3 | 4 | 5 |
|--------------|-----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0...0,04 | | 0 | 1 | | | | | | | | | | | | | | |
| 0...0,06 | | 0 | 2 | | | | | | | | | | | | | | |
| 0...0,10 | | 0 | 3 | | | | | | | | | | | | | | |
| 0...0,16 | | 0 | 4 | | | | | | | | | | | | | | |
| 0...0,25 | | 0 | 5 | | | | | | | | | | | | | | |
| 0...0,40 | | 0 | 6 | | | | | | | | | | | | | | |
| 0...0,60 | | 0 | 7 | | | | | | | | | | | | | | |
| 0...1,00 | | 0 | 8 | | | | | | | | | | | | | | |
| 0...1,60 | | 0 | 9 | | | | | | | | | | | | | | |
| 0...2,50 | | 1 | 0 | | | | | | | | | | | | | | |
| 0...4,00 | | 1 | 1 | | | | | | | | | | | | | | |
| 0...6,00 | | 1 | 2 | | | | | | | | | | | | | | |
| 0...10,0 | | 1 | 3 | | | | | | | | | | | | | | |
| 0...16,0 | | 1 | 4 | | | | | | | | | | | | | | |
| 0...25,0 | | 1 | 5 | | | | | | | | | | | | | | |

Ausgangssignal

4...20 mA, Zweileitertechnik

Elektrischer Anschluss

Kabellänge in Metern

Bestellcode Zubehör

Abspannklemme Edelstahl **ASK09**

Klemmgehäuse **SDAG-1**

mit Goretex-Filter und 2 PG-Verschraubungen

¹ Kennlinienabweichung nach IEC 60770 - Grenzpunkteinrichtung (Nichtlinearität, Hysterese, Reproduzierbarkeit)

Stand 10/2006



Type SDT 09

basic @ pressure

industry pressure transmitter

Basic features

- ▶ High accuracy
- ▶ Dipping probe completely made of high-grade steel 1.4571
- ▶ Diaphragm surface made of high-grade steel 1.4435
- ▶ Seals made of FKM
- ▶ Plastic cover for diaphragm surface



Technical features

- ▶ less temperature error
- ▶ very good linearity
- ▶ long-time stability
- ▶ accuracy at IEC 60770: 0,35% FSO
- ▶ high-grade-steel sensor
- ▶ small diameter of 27 mm
- ▶ effective range from 0...40 mbar to 0...25bar

Design and mode of operation

The dipping probe SDT 09 was conceived for continuous measuring of liquid or level and clean or / and dirty liquids.

The housing consists of high-grade-steel 1.4571, the sensor-diaphragma of 1.4435.

Seals are standardly made of FKM; on inquires other seal materials are available..

Because of the high quality of the high-grade-steel sensor the measuring characteristic is very good.

The dipping probe can be used in many different operational areas.

Accessories



Anchor clamp
ASK09

Clamp housing
SDAG-1

Favoured fields of application are:

- ▶ environmental technology: water purification, sewage purification plant
- ▶ measuring of liquid level in water and clean or /and dirty media
- ▶ deep-measuringt in a spring and open waters
- ▶ ground water level measuring
- ▶ level monitoring in open container

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Technical facts

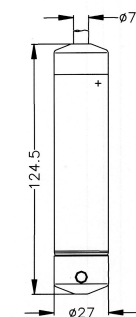
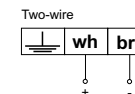
| | | | | | | | | | | | | | | | |
|-----------------------------------|----------|----------|---------|----------|----------|---------|---------|-------|---------|---------|-------|-------|--------|--------|--------|
| effective range in bar | 0...0,04 | 0...0,06 | 0...0,1 | 0...0,16 | 0...0,25 | 0...0,4 | 0...0,6 | 0...1 | 0...1,6 | 0...2,5 | 0...4 | 0...6 | 0...10 | 0...16 | 0...25 |
| confidence by overpressure in bar | 0,2 | 0,2 | 0,5 | 0,5 | 1 | 1 | 3 | 3 | 6 | 6 | 20 | 20 | 20 | 60 | 60 |

Wiring diagram

precision¹ _____ Standard: $\leq \pm 0,35\%$ FSO
nominal pressure $\leq 0,4$ bar: $\leq \pm 0,5\%$ FSO

perm. Burdens _____ $R_{max} = [(U_B - U_{Bmin}) / 0,02] \text{ Ohm}$
influence effects _____ auxiliary energy: 0,05% FSO / 10V
burdens: 0,05% FSO / kOhm

long time stability _____ $\leq \pm 0,1\%$ FSO / year
storage temperature range _____ -25 °C... + 70 °C
temperature range of measuring material _____ -10 °C... + 70 °C
temperatur error _____ max., Middle.TK [% FSO / 10 K] $\pm 0,3$
protective system _____ IP 68
material: parts with medium contact _____ Chrome-nickel-Steel 1.4435
material: housing _____ Chrome-nickel-Steel 1.4571
seals _____ FKM
weight _____ ca. 200 g (without cable)



Electrical facts

operating voltage _____ 8...32 V DC
output sign _____ 4...20 mA
connecting lead _____ two-wire
electrical union _____ shielded cable, material: FEP
pole protection _____ by changing the polarity it will not damage the transmitter, but it will not function

Order Code

SDT09 - [] - 088 - B - H9 - []

| Measuring range | bar | | | | |
|-----------------|-----|---|---|--|--|
| 0...0,04 | | 0 | 1 | | |
| 0...0,06 | | 0 | 2 | | |
| 0...0,10 | | 0 | 3 | | |
| 0...0,16 | | 0 | 4 | | |
| 0...0,25 | | 0 | 5 | | |
| 0...0,40 | | 0 | 6 | | |
| 0...0,60 | | 0 | 7 | | |
| 0...1,00 | | 0 | 8 | | |
| 0...1,60 | | 0 | 9 | | |
| 0...2,50 | | 1 | 0 | | |
| 0...4,00 | | 1 | 1 | | |
| 0...6,00 | | 1 | 2 | | |
| 0...10,0 | | 1 | 3 | | |
| 0...16,0 | | 1 | 4 | | |
| 0...25,0 | | 1 | 5 | | |

Output signal

4...20 mA, two-wire technology

Electrical connection

_____ cable length in metres

Order Code Accessories

Anchor Clamp

ASK09

High grade steel

Clamp housing

SDAG-1

mit Goretex-Filter und 2 PG-Verschraubungen

with goretex-filter and two PG-screw connection

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