- **Stainless steel diaphragm**
- **Piezoresistive measuring cell**
- **2-wire technology (output 4-20 mA)**
- **Integrated overload protection**
- **High accuracy**
- **High electric operational reliability**
- **Ex approval for zone 0 (optional)**

UniBar E

Screw-in probe with integrated 4-20 mA transmitter for hydrostatic level measurement in clear fluids and gases. The probes are particularly sufficient for level investigation in tanks, containers and pipe lines.

The unit comes with a G1/2“ connection (DIN 3852) as standard process connection. The electric connection is made by screw terminals in stainless steel enclosure or plugs according to DIN ISO 4400. Various standard measurement ranges are available. The probes can be calibrated to the customer's individual requirements on request.
UniBar E probes are designed for rough industrial use. The UniBar E has proven even in aggressive media such as acids, lye and bleach.

The use under such extreme conditions is possible by using piezoresistive measurement cells made of stainless steel (1.4404).
The probe is also available with Ex-approval II 1G Ex ia IIC/IIB T4 and therefore can be installed in all explosive surroundings.
The UniBar E has a fixed measurement range. The probe utilises 2-wire technology.
Optionally available is a 4-character LED display integrated in the enclosure lid.

Specifications are subject to change.
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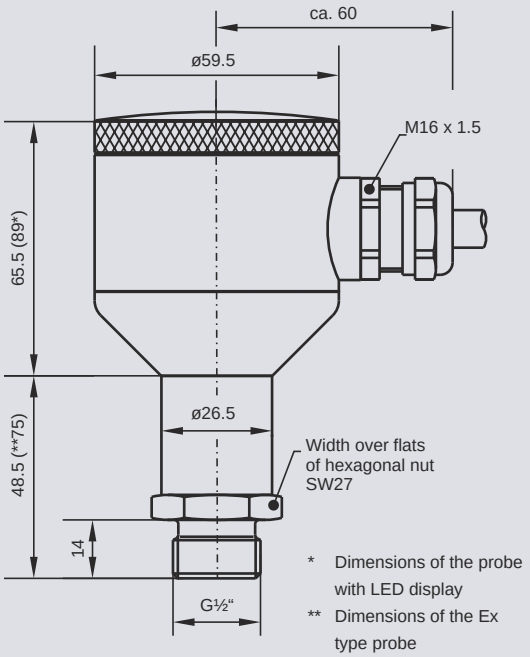
Specifications

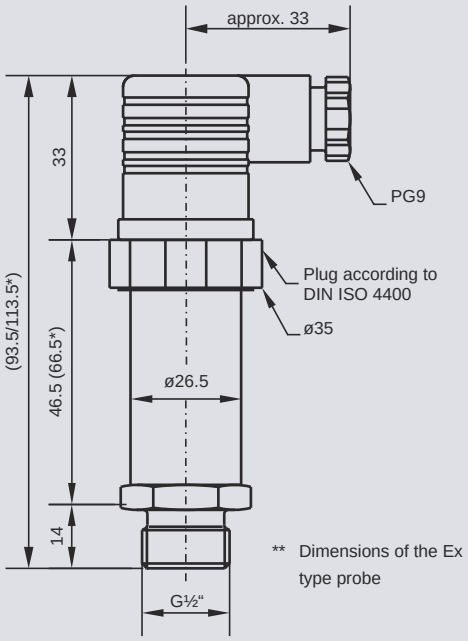
Dimensions



* Dimensions of the probe with LED display
** Dimensions of the Ex type probe

Dimensions in **mm**

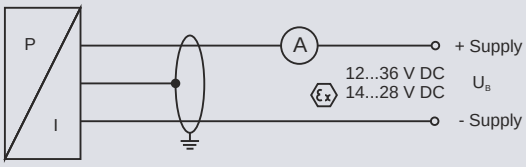
Dimensions



** Dimensions of the Ex type probe

Dimensions in **mm**

Connection



Connection

DIN 4400
PIN 1 = Supply +
PIN2 = Supply -
PIN3 = not connected

GND = PE

Screw-in probe

Measurement range/ overpressure	1 mWC / 1 bar I 2 mWC / 1 bar 4 mWC / 1 bar I 6 mWC / 3 bar 10 mWC / 3 bar I 20 mWC / 6 bar 1 bar / 3 bar I 2 bar / 6 bar 4 bar / 20 bar I 6 bar / 20 bar 10 bar / 20 bar I 20 bar / 90 bar Special measurement ranges on request.
Power supply	12 to 36 V DC, Ex: 14 to 28 V DC
Output signal	4-20 mA, 2-wire technology
Accuracy according to IEC 60770	0.25 % / 0.35 % FSO
Long-term stability	± 0.1 % FSO / year
Electric connection	field enclosure M16 x 1.5 / plug PG 9
Process connection	G½" DIN 3852 open connection with 12 mm diameter
Load	600 Ohm / 24 V or 1000 Ohm / 32 V
Integrated overvoltage protection	-120 to 150 V DC (1 sec at 25 °C)
Operating temperature	-25 °C to +85 °C (electronics)
Temperature of measured substance	-25 °C to +125 °C
Storing temperature	-40 °C to +100 °C
Material	• field enclosure stainless steel 1.4404 (inox 316L) with cable gland made of nickel-plated brass • plug "enclosure" stainless steel 1.4404 (inox 316L)
Medium-contacting	• diaphragm: stainless steel 1.4435 (inox 316Ti) • pressure conn. stainless steel 1.4571 • sealing: Viton®
Protection	field enclosure IP 67; plug IP 65
Measuring principle	piezoresistive
Ex-approval (optional)	II 1G Ex ia IIC T4; ATEX 2011X
Mechanical strength	• vibration: 10 g RMS (20...2000 Hz) • shock: 100 g/11 ms
Accessories	
Surge arrestor	type 9001/51-280-091-141 ATEX for connection to SPS in Zone 1
PA430 plug-on display	4-20 mA; LED; self-supplied via UniBar E plug connector
PA430-Ex	see above for Ex zone 1

Viton® is a registered trademark of DuPont Dow Elastomers

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