

Type UPA2-LMP 307

Hydrostatic Level Measurement 1 mWC up to 160 mWC

The UPA2-LMP 307 level transmitter is suited for continuous fluid level measurement.

It can be used even in more viscous media as for example sludges - one simply has to remove the protective cap creating a flush diaphragm.

The design of the transmitter is marked by miniaturisation of mechanical parts and thus by small dimensions.

Features

- Measuring range 0...1 mWC up to 0...160 mWC
- Output Signals 4...20 mA / 2-wire or 0...10 V / 3-wire
- High accuracy acc. to IEC 60770 0,25% / 0,35% FSO
- High resistance against electrical faults caused by incorrect wiring, short-circuit, and overvoltage
- Cable with integrated air tube for atmospheric reference
- Flush diaphragm by simply removing the protective cap
- Option: II 1 G EEx ia IIC T4

Applications

- Environmental technology: sewage treatment, water supply
- Depth or level measurement in wells and open open waters
- Ground water level measurement
- Level monitoring in open tanks

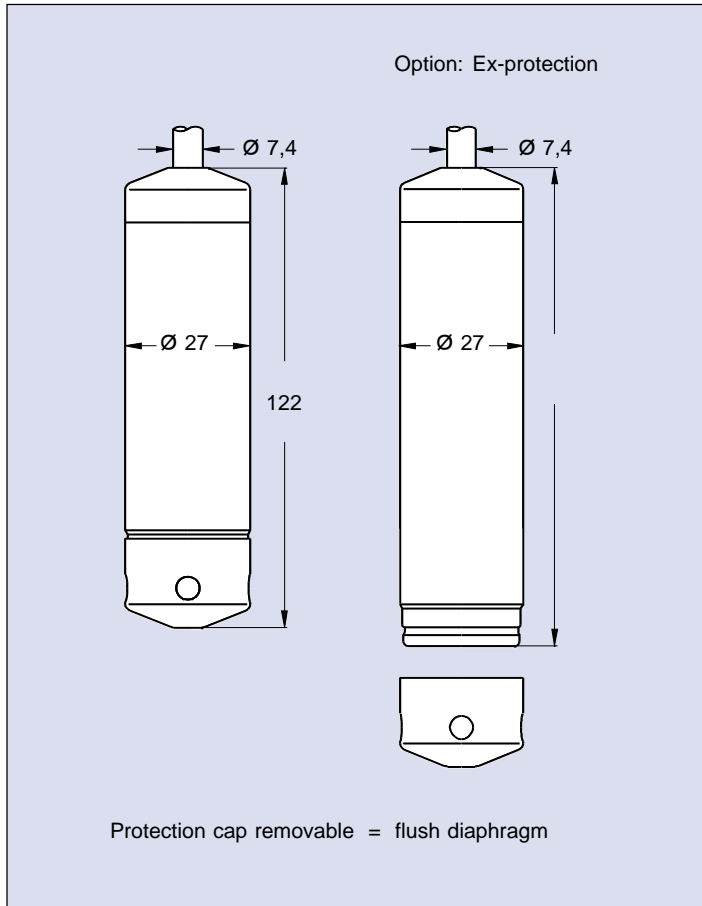


Technical Data

| | | | | | | | | | | | | | |
|--|---|---|--------|--------|-----|-----|--------|-----|----|----|-----|-----|--|
| Input Pressure Range | | 0.1 | 0.25 | 0.4 | 0.6 | 1.0 | 1.6 | 2.5 | 4 | 6 | 10 | 16 | |
| Press. Range P _N [bar] gauge | | 0.1 | 0.25 | 0.4 | 0.6 | 1.0 | 1.6 | 2.5 | 4 | 6 | 10 | 16 | |
| Filling Height [mWC] | | 1.0 | 2.5 | 4 | 6 | 10 | 16 | 25 | 40 | 60 | 100 | 160 | |
| Overpressure P _{max} [bar] | | 1 | 1 | 1 | 4 | 4 | 8 | 8 | 8 | 28 | 28 | 30 | |
| Supply | Voltage [VDC] | 12 ... 36, option Ex-protection: 12 ... 28 | | | | | | | | | | | |
| Output Signal | | 2-Wire-System, current: 4 ... 20 mA | | | | | | | | | | | |
| Performance | Accuracy according to IEC 60770 - Limit Point Adjustment (Nonlinearity, Hysteresis, Repeatability): Standard | ≤ ± 0.35% FSO (Nominal Press. 0.1 ... 0.4 bar ≤ ± 0.5% FSO), Optional (PN >0.4 bar): ≤ ± 0.25% FSO | | | | | | | | | | | |
| | Permissible Load [Ω] | Current 2-Wire: [UB (V) - 12V] / 0.02 A | | | | | | | | | | | |
| | Influence Effects | Supply : ≤ ± 0.05% FSO / 10 V, Load : ≤ ± 0.05% FSO / kΩ | | | | | | | | | | | |
| Option Ex-protection II 1 G EEx ia CII T4 | | Safety relevant data: U _i = 28 V; I _i = 93 mA; P _i = 660 mW | | | | | | | | | | | |
| Thermal Effects | Nominal Pressure P _N [bar] | 0.1 | 0.25 | 0.4 | 0.6 | 1.0 | 1.6 | 2.5 | 4 | 6 | 10 | 16 | |
| | Tolerance Band Offset + Span [± %FSO] | < 2.0 | < 1.5 | < 1.0 | | | < 0.75 | | | | | | |
| | Compensated Range [°C] | 0...70 | 0...70 | 0...70 | | | 0...70 | | | | | | |
| Electrical Connection | | Cable with integrated air tube for atmospheric reference, PVC-/PUR-/FEP-Sheath | | | | | | | | | | | |
| Temp. Ranges | Medium [°C] | -10 ... 70 | | | | | | | | | | | |
| | Storage [°C] | -25... 70 | | | | | | | | | | | |
| Materials | Housing | Stainless steel 1.4305 | | | | | | | | | | | |
| | Diaphragm | Stainless steel 1.4404 | | | | | | | | | | | |
| | Sealings | Viton (FKM) | | | | | | | | | | | |
| | Cable Sheath | PVC grey / PUR black / FEP | | | | | | | | | | | |
| Miscellaneous | Current Consumption | Current Output Signal < 30 mA | | | | | | | | | | | |
| | Ingress Protection | IP68 (DIN 40 050) | | | | | | | | | | | |
| | Weight | approx. 200 g (without cable) | | | | | | | | | | | |

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Dimensions (in mm)

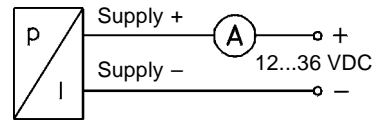


Connection chart

| Wiring | Electrical connections |
|---|---------------------------------|
| | Cable colours acc. to DIN 47100 |
| 2-wire system: Supply + Supply - Earth | white brown Cable shield |

Electrical connection

2-wire: 4...20 mA



02/02 PGS-ED 02/2

Barksdale Level Probes

Order number example

| Type | Series | Unit | Measuring range | Output signal | Accuracy | Electrical connection | Cable length |
|------|---------|------|-----------------|---------------|----------|-----------------------|--------------|
| UPA2 | LMP 307 | bar | 1000 | 1 | 5 | 1 | 005 |

Your order number

| | | | | | | | |
|------|---------|--|--|--|--|--|--|
| UPA2 | LMP 307 | | | | | | |
|------|---------|--|--|--|--|--|--|

Specifications are subject to changes without notice.

| Unit | Measuring range | | | Output signal | Accuracy | Electrical connection | Cable length [m] |
|------|-----------------|-------|------|---|---------------------------------------|---|-------------------------------|
| | [bar] | [mWC] | | | | | |
| bar | 0,1 | 1,0 | 1000 | (1) 4... 20 mA 2-wire (E) 4... 20 mA 2-wire Ex-protection II 1 G EExia IIC T4 | (3) 0,35% Standard | (1) PVC-cable | XXX (e. g.: 5 m = 005) |
| mWC | 0,25 | 2,5 | 2500 | | | (5) Option 0,5% (at PN \leq 0,4 bar) | |
| | 0,4 | 4,0 | 4000 | | (2) Option 0,25% (at PN > 0,4 bar) | (3) FEP-cable | |
| | 0,6 | 6,0 | 6000 | | | | |
| | 1,0 | 10 | 1001 | | | | |
| | 1,6 | 16 | 1601 | | | | |
| | 2,5 | 25 | 2501 | | | | |
| | 4,0 | 40 | 4001 | | | | |
| | 6,0 | 60 | 6001 | | | | |
| | 10 | 100 | 1002 | | | | |
| | 16 | 160 | 1602 | | | | |