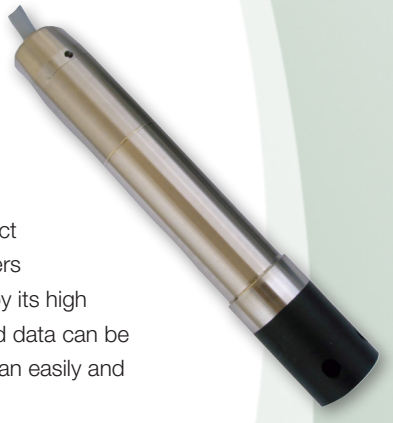
Level meter - EPT-LM

Variohm
Eurosensor

- Measuring range
  - 0...100 mbar up to 0...25 bar
- Robust construction
  - Stainless steel wetted parts
  - Stainless steel case (316L)
  - Protection category IP 68
- PUR cable (standard), FEP cable (optional)
- Resistant against ad blue with FEP cable
- 0utput signals - 4 ... 20 mA or 0 ... 10 V
- Measuring system
  - Sensor - stainless steel membrane
  - Piezo resistive silicon sensor
  - System filling - silicon oil
- Flush diaphragm with POM protection cover



The wide application field of level meter is guaranteed by the high accuracy and the rugged, compact design. The compensation and adjustment is carried out electronically. Thus the pressure transmitters have a very low total error and a very good long-term stability. The measuring cell is characterised by its high long-term resistance and long-term stability. With the precision of modern electronics, the measured data can be captured and read very accurately. By using permanent magnets the adjustment of the zero point can easily and securely be done at any time.

EPT-LM Specification

Standard pressure ranges (bar) *)	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
Over pressure (bar) *)	2 x - depending on pressure range
Burst pressure (bar) *)	3 x - depending on pressure range
Kind of pressure	Gauge pressure (air tube with Goretex filter)
Wetted parts	Stainless steel
Weight (g)	Depending on construction
Supply voltage	14..32 VDC
Output signals and max. load	4…20 mA, 2 wire $R_A \leq (U_B\text{-}12V) / 20mA$ 0…10V, 3 wire $R_A > 10\ k\Omega$
Adjustability of zero	Straightforward zero correction by using a magnet or via interface and PC programming kit
Accuracy **)	≤ +/-0.5% FS (Including non-linearity, zero point and full scale error, hysteresis, non-linearity and repeatability)
Non-linearity *)**	≤ 0.3% FS of nominal range EN 60770-1

Repeatability	≤ 0.1% FS
Long-term stability	≤ 0.1% FS 1-year stability at reference conditions
Permissible temperatures	
Media temperature	-10...+ 70°C
Ambient temperature	-10...+ 70°C
Storage temperature	-20...+ 100°C
CE-conformitiy	
Pressure equipment directive	97/23/EG
EMC directive	89/336/EEC emission (class B) immunity according to EN61326
Shock resistance	100 g to IEC 60068-2-27 mechanical
Vibration resistance	20 g to IEC 60068-2-6 resonance
Wiring protection	
Overvoltage	32 VDC
Short-circuit strength	Out+ / U_B- (for 1s)
Reverse polarity	For power supply

*) Others on request
**) Special custom design with optional better accuracy on request
***) Integral linearity error (FS = Full Scale, BFSL = Best Fit Straight Line)

Ordering Information

(Please use the characters in the chart below to construct your product code)

Sample Code: EPT-LM - 0.1bar - B - 2 - Pur5m

Series	Pressure Range	Output Signal	Cable type
EPT-LM	Please use code from table below	1 - 0-10 V DC 2 - 4-20 mA	**PurXXm** - XX m of PUR cable **FepXXm** - XX m of FEP cable

Pressure Range													
Bar	0.1	0.16	0.25	0.4	0.6	1.0	1.6	2.5	4.0	6.0	10.0	16.0	25.0
Order Code	0.1	0.16	0.25	0.4	0.6	1.0	1.6	2.5	4.0	6.0	10.0	16.0	25.0

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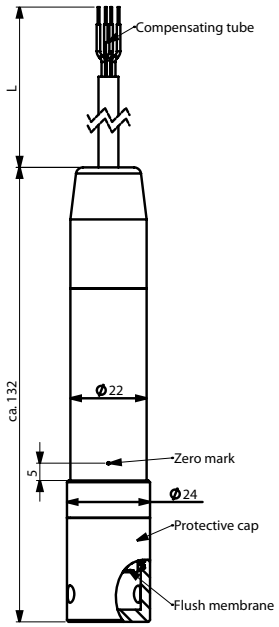
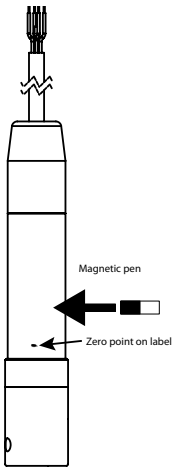
Dimensions and wiring



Connection

Output		Colour code
4...20 mA	2 wire	Brown = - White = +
0-10 V DC	3 wire	Brown = - White = + Yellow = signal

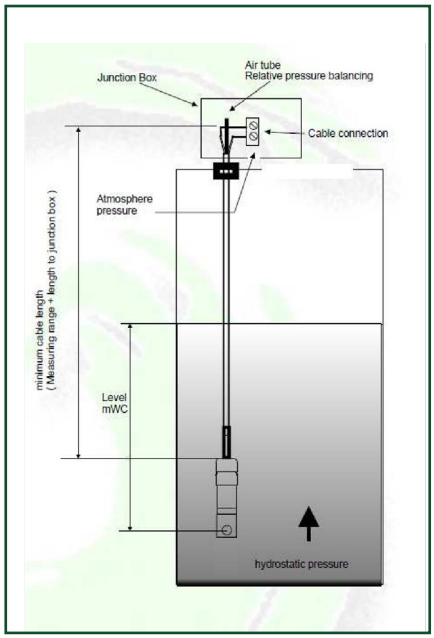


Zero correction

The zero can be set easily with a magnet within ± 10% of the nominal range.

To correct the zero point, hold a permanent magnet – a pin board magnet, for example – at the position marked on the pressure transmitter (i.e. a letter in a circle) for ½ to 2 ½ minutes after the power has been switched on. To correct the zero, atmospheric pressure is applied. Offsets for previously set values for initial and ultimate pressures will be corrected automatically by the device. A magnetic field applied outside of this time period has no effect on the setting. The power must be switched off and on before the zero point can be set again.

Application set-up



Safety information
During installation, putting into service and operation of these pressure sensors, it is necessary to observe the relevant safety regulations that are in force in the country of the user (as for example, DIN VDE 0100).

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