

Main features

- Measuring ranges from 1 mWC to 250 mWC
- Standard signals 4...20 mA, 0...10 V, and others
- Media temperature range -40°C to 85°C
- No internal transmitting media
- Max. tensile force 4 kp
- Highly reliable
- Degree of protection IP68
- Precision Class 0.5 %

Applications

- Filling level measurement in tanks, vessels, water systems
- Point level measurement in rivers, rivulets, lakes or weirs

Description

Thanks to its stainless steel membrane and semiconductor thin-film technology, the filling level or point level sensor has excellent properties, is hermetically tight and very robust in its stainless steel housing. The reasonably priced probe is of long-term stability and simple to operate.

Options

- Cap configuration, as a weight of steel or plastic
- For more aggressive media with special coating



Specification

| PRESSURE RANGE | | | | | | |
|--|-------------------|--|------------------------------------|--|-------------------|--|
| Measuring range* silicon technology | p [bar]** | 0,10 | 0,25 | 0,50 | | |
| Overload pressure | p [bar]** | 0,3 | 0,5 | 1,0 | | |
| Burst pressure | p [bar]** | 0,6 | 1,0 | 1,5 | | |
| Measuring range* stainless steel diaphragm | p [bar]** | 1 | 1,6 | 2,0 | 2,5 | 4,0 6,0 |
| Overload pressure | p [bar]** | 6 | 6 | 6 | 6 | 10 20 |
| Burst pressure | p [bar]** | 9 | 9 | 9 | 9 | 15 30 |
| Measuring range* stainless steel diaphragm | p [bar]** | 10 | 16 | 20 | 25 | |
| Overload pressure | p [bar]** | 20 | 40 | 40 | 100 | |
| Burst pressure | p [bar]** | 30 | 60 | 60 | 150 | ** 1 bar is equivalent to ~ 10 mWC |
| ELECTRICAL PARAMETER | | | | | | |
| | signal | | | $U_s [V_{DC}]$ | $R_L [k\Omega]$ | $RA [\Omega]$ |
| Output signal * and | R_A in Ohm | 4...20 mA | (2-wire, 3-wire) | 9...32 | | acc. to $R_A = < (U_s - 10V) / 0,02 A$ |
| maximum acceptable burden R_A | | 0...10 V_{DC} | (3-wire) | 12...32 | > 5,0 | |
| | | 1...5 V_{DC} | | 8...32 | > 1,0 | |
| Response time * (10-90%) | t [ms] | < 1 | | | | |
| Withstand voltage | U [V_{DC}] | 350 | option 710 | | | |
| ACCURACY | | | | | | |
| | | for pressure range of 1 bar to 25 bar | | for pressure range of 0,1 bar to 0,5 bar | | |
| Accuracy @RT | % of the range | $\leq 0,50$ | option $\leq 0,25$ | $\leq 1,00$ | option $\leq 0,5$ | |
| | BFSL | $\leq 0,125$ | | $\leq 0,25$ | | |
| Non-linearity | % of the range | $\leq 0,15$ | | $\leq 0,15$ | | |
| Repeatability | % of the range | $\leq 0,10$ | | $\leq 0,10$ | | |
| Stability/year | % of the range | $\leq 0,10$ | | $\leq 0,10$ | | |
| ACCEPTABLE TEMPERATURE RANGES | | | | | | |
| Measuring medium | T [$^{\circ}C$] | -40...85 | | | | |
| Ambience | T [$^{\circ}C$] | -40...85 | | | | |
| Storage | T [$^{\circ}C$] | -40...85 | | | | |
| Compensated range* | T [$^{\circ}C$] | -20...85 | | | | |
| Temperature coefficient within the compensated range | | | | | | |
| Mean TC offset | % of the range | $\leq 0,15 / 10K$ | | | | |
| Mean TC range | % of the range | $\leq 0,15 / 10K$ | | | | |
| Total error | % of the range | -40 $^{\circ}C$ | 2,00% | | | |
| | % of the range | 85 $^{\circ}C$ | 2,00% | | | |
| MECHANICAL PARAMETER | | | | | | |
| Parts in contact with the measuring medium | stainless steel | for pressure range of 1 bar to 25 bar | | | | |
| Parts in contact with the measuring medium | silicon | for pressure range of 0,1 bar to 0,5 bar | | | | |
| Housing | | stainless steel | | | | |
| Casing | | plastic / stainless steel | | | | |
| Cable | | depending on medium | | | | |
| Shock resistance | g | 1000 | acc. to IEC 68-2-32 | | | |
| Vibration resistance | g | 20 | acc. to IEC 68-2-6 and IEC 68-2-36 | | | |
| Mass with plastic casing | m [g] | 100 plus cable | | | | |
| Mass with steel casing | m [g] | 190 plus cable | | | | |
| Mass cable | m [g] | 40 per m | | | | |
| CE - conformity | | EC Directive 89/336/EWG | | | | |

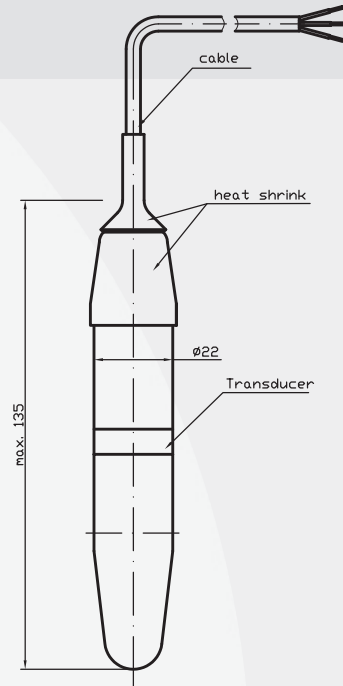
* others upon request

Configurations -examples-

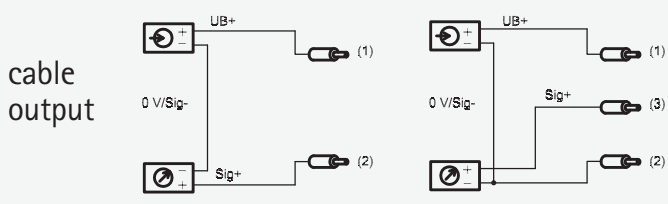


with plastic casing

with steel casing



Electrical Connections* (left: 2-wire, right: 3-wire)



| | | |
|----------------|------------|----------|
| Legend | | (1) red |
| = power supply | (2) black | |
| = consumer | (3) white | |

| | |
|--|---|
| | GUEMISA (Electrónica Guerra y Miró Guemisa S.L.) |
| | Sta. Virgilia, 29 - local - 28033 Madrid (Spain) |
| | Tlfno.: (034) 91 764 21 00 Fax.: (034) 91 764 21 32 |
| | Email.: ventas@guemisa.com Web.: www.guemisa.com |

* Custom-made adjustments acc. to pressure connections and connecting options are possible.