

KTE2000...CS Series

OEM submersible level sensors

FEATURES

- 0...50 to 0...200 mbar
(approx. 0...1.67 to 0...6.70 ft H₂O)
- Capacitive ceramic pressure cells
- For corrosive media
- 4...20 mA output
- High overpressure resistance

MEDIA COMPATIBILITY

Wetted materials:

Ceramic Al₂O₃, stainless steel 1Cr18Ni9Ti,
NBR, Viton, PE (PUR)

Housing:

protection class IP 68 (according to DIN EN 60529)
respectively NEMA 6P¹

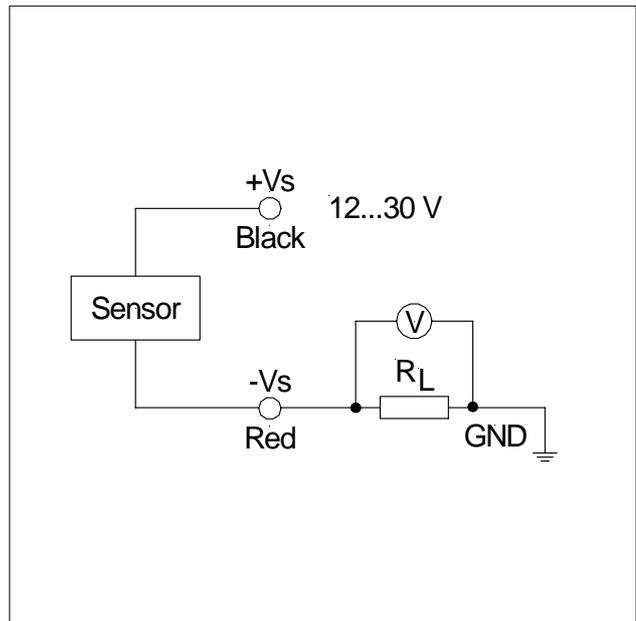


SPECIFICATIONS⁶

Maximum ratings

| | |
|-----------------------------|---------------------|
| Supply voltage ² | 12...30 V |
| Temperature limits | |
| Storage | -30...85 °C |
| Operating | -30...80 °C |
| Compensated | -30...70 °C |
| Proof pressure ³ | 10 x rated pressure |

ELECTRICAL CONNECTION



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INDIVIDUAL PERFORMANCE CHARACTERISTICS

| Characteristics | | Min. | Typ. | Max. | Unit |
|------------------------------|--------------|------|--------|-------|-----------|
| Operating pressure | KTEM2050... | 0 | | 50 | mbar |
| | KTEM2100... | 0 | | 100 | |
| | KTEM2200... | 0 | | 200 | |
| Zero pressure offset | | | 4.0 | | mA |
| Full scale span | | | 16.0 | | |
| Thermal effects ⁴ | -20...70 °C | | ±0.015 | | %FSO/°C |
| | -20...-30 °C | | ±0.02 | | |
| Accuracy ⁵ | | | | ±0.75 | %FSO |
| Long term stability | | | ±0.1 | | %FSO/year |
| Vibration (200 Hz/g) | | | ±0.01 | | %FSO |

LOAD LIMITATION²

$$R_{\max} = \frac{V_s - 12\text{ V}}{0.02\text{ A}}$$

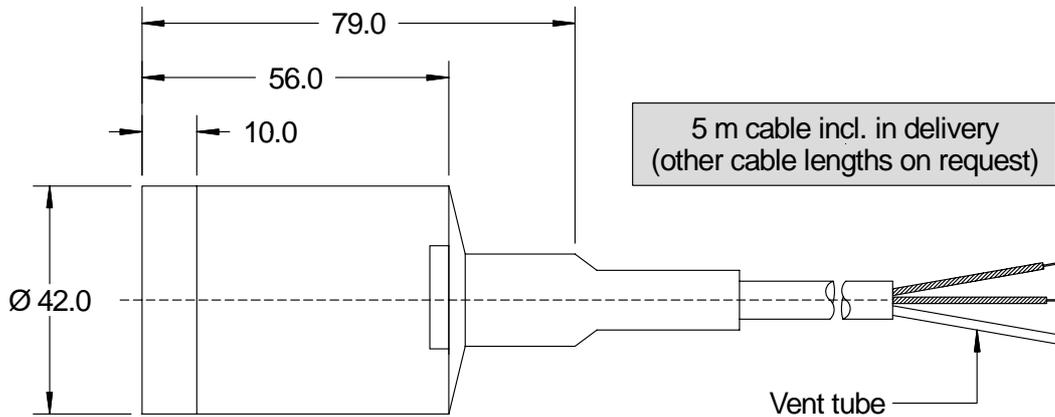
Specification notes:

1. The package is an all-sealed housing. For proper function the gage port is vented to the atmosphere through the connecting cable. Thus the vent tube of the cable end must have access to the ambient pressure.
2. The minimum supply voltage is directly proportional to the load resistance seen by the transmitter.
3. Proof pressure is the maximum pressure which may be applied without causing damage to the sensing element.
4. All specifications shown are relative to 25°C.
5. Accuracy is the combined error from offset and span calibration, linearity, hysteresis and repeatability. Linearity is the measured deviation based on a straight line. Hysteresis is the maximum output difference at any point within the operating pressure range for increasing and decreasing pressure. Calibration errors include the deviation of offset and full scale from nominal values.
6. The pressure transmitters must not be used as safety accessories according to article 1, 2.1.3 of the directive 97/23/EC.

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OUTLINE DRAWING



dimensions in mm

ORDERING INFORMATION

| | | | | |
|--|------------|----------|----------|---|
| KTEM2 | xxx | G | 4 | C5S |
| Pressure range | | | | Cable submersible |
| 050: 0...50 mbar (approx. 1.67 ft H ₂ O) | | | | 5: 5 m cable length (other cable lengths on request) |
| 100: 0...100 mbar (approx. 3.35 ft H ₂ O) | | | | |
| 200: 0...200 mbar (approx. 6.70 ft H ₂ O) | | | | output signal |
| Pressure mode | | | | 4: 4...20 mA |
| G: gage pressure | | | | |

Note: Other pressure ranges and calibrations (e.g. psi, inch H₂O, cm H₂O) are available on request. Please contact your nearest Sensortech sales representative.

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