# **OEM** submersible level sensors

# **FEATURES**

- 0...50 to 0...200 mbar
   (approx. 0...1.67 to 0...6.70 ft H<sub>2</sub>O)
- · Capacitive ceramic pressure cells
- · For corrosive media
- 4...20 mA output
- · High overpressure resistance

# **MEDIA COMPATIBILITY**

Wetted materials:

Ceramic Al<sub>2</sub>O<sub>3</sub>, stainless steel 1Cr18Ni9Ti, NBR, Viton, PE (PUR)

Protection class:

IP 68 (according to DIN EN 60529, NEMA 6P)1



#### SPECIFICATIONS<sup>6</sup>

# **Maximum ratings**

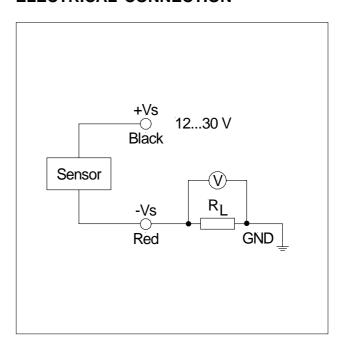
Supply voltage<sup>2</sup> 12...30 V

Temperature limits

Storage -30...85 °C
Operating -30...80 °C
Compensated -30...70 °C

Proof pressure<sup>3</sup> 10 x rated pressure

# **ELECTRICAL CONNECTION**





#### INDIVIDUAL PERFORMANCE CHARACTERISTICS

Characteristics		Min.	Тур.	Max.	Unit	
Operating pressure	KTEM2050	0		50		
	KTEM2100	0		100	mbar	
	KTEM2200	0		200		
Zero pressure offset			4.0		mA	
Full scale span			16.0		IIIA	
Thermal effects <sup>4</sup>	-2070 °C		±0.015		%FSO/°C	
	-2030 °C		±0.02			
Accuracy <sup>5</sup>				±0.75	%FSO	
Long term stability			±0.1		%FSO/year	
Vibration (200 Hz/g)			±0.01		%FSO	

#### LOAD LIMITATION<sup>2</sup>

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

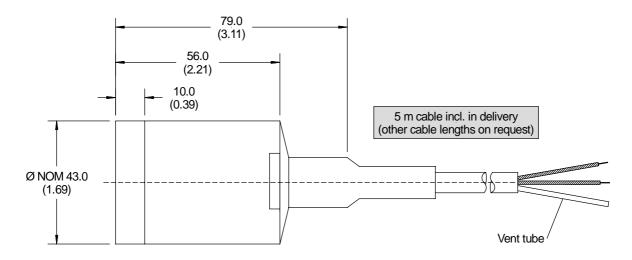
# **Specification notes:**

- 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.



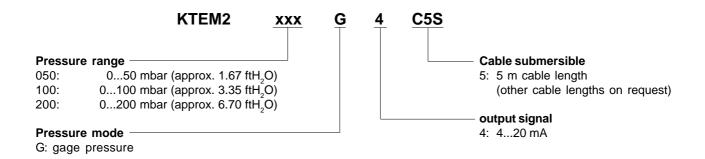
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# **OUTLINE DRAWING**



mass: approx. 280 g (without cable) dimensions in mm (inches)

#### ORDERING INFORMATION



**Note:** Other pressure ranges and calibrations (e.g. psi, inH<sub>2</sub>O, cmH<sub>2</sub>O) are available on request. Please contact First Sensor for further information.

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