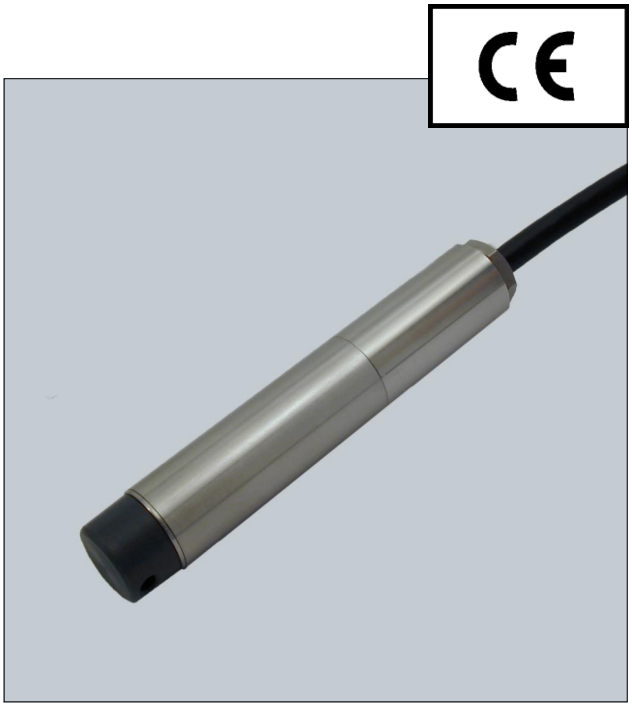
CTE9000 / CTU9000...CS Series

OEM stainless steel submersible pressure transducers



FEATURES

- **0...100 to 0...2000 mbar, 0...1.5 to 0...30 psi gage**
- **For corrosive media**
- **4...20 mA output**
- **Field interchangeable**

MEDIA COMPATIBILITY

Wetted materials:
stainless steel 1.4404 (316L), PUR, PE, ABS, Loctite 603

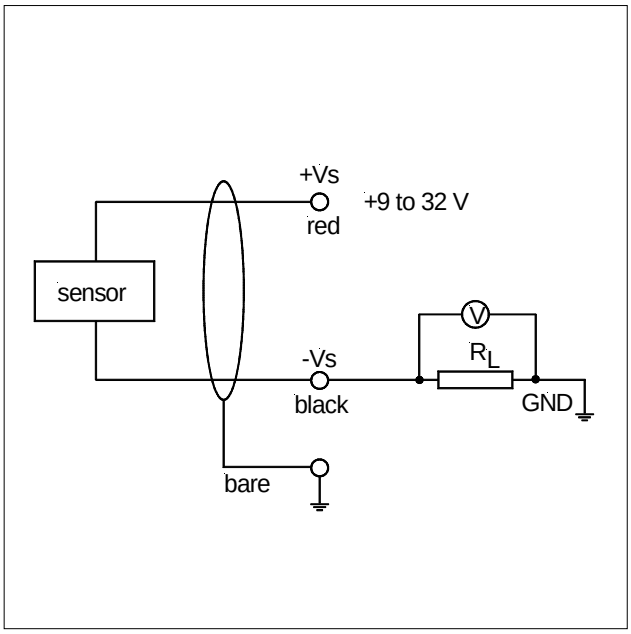
Housing:
protection class IP 68 (according to DIN EN 60529) respectively NEMA 6P[1]

SPECIFICATIONS[9,10]

Maximum ratings

Supply voltage (reverse polarity protection)[2]	9...32 V
Temperature limits	
Storage	-40 to 70°C
Operating	-25 to 70°C
Compensated	0 to 70°C
Vibration (5 to 500 Hz)	10 g_{RMS}
Mechanical shock	50 g
Proof pressure[3]	
CTEM9100..., CTEM9200...	600 mbar
CTU9001..., CTU9003...	9 psi
all others	2 x rated pressure

ELECTRICAL CONNECTION



SENSORTECHNICS

www.sensortechnics.com

INDIVIDUAL PERFORMANCE CHARACTERISTICS

(unless otherwise noted, V_S = 15 V, R_L = 100 Ω, t_{amb} = 25°C)

Characteristics			Min.	Typ.	Max.	Unit
Operating pressure		CTEM9100...	0		100	mbar
		CTEM9200...	0		200	
		CTEM9400...	0		400	
		CTEM9600...	0		600	
		CTEM91K0...	0		1000	
		CTEM91K6...	0		1600	
		CTEM92K0...	0		2000	
		CTU9001...	0		1.5	psi
		CTU9003...	0		3	
		CTU9005...	0		5	
		CTU9010...	0		10	
		CTU9015...	0		15	
		CTU9020...	0		20	
		CTU9030...	0		30	
Zero pressure offset			3.8	4.0	4.2	mA
Full scale span[7]			15.8	16.0	16.2	
Thermal effects (0 to 70°C)[4]	Offset	0.1 bar / 1.5 psi		0.04	0.08	%FSO/°C
		all others		0.02	0.05	
	Span			0.02	0.05	
Thermal effects (-25 to 0°C)	Offset			0.03		
	Span			0.03		
Non-linearity (BSL) and hysteresis[5]				±0.2	±0.5	%FSO
Repeatability				±0.1		
Output noise (0 < f < 1 kHz)				±0.04		
Long term stability[6]				±0.1		
Response time (10 to 90 %)				1		ms
Power supply rejection	Offset			0.05		%FSO/V
	Span			0.08		
Power consumption (I_L = 20 mA)				260		mW

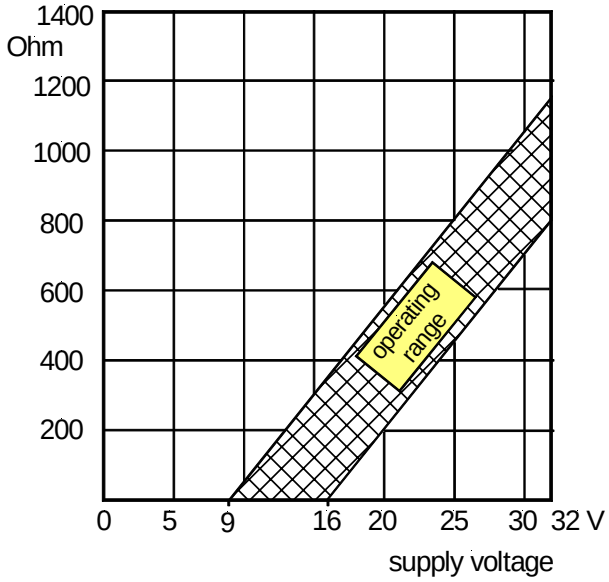
Specification notes (for all devices):

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. For more details see the load limitation diagrams.
3. Proof pressure is the maximum pressure which may be applied without causing damage to the sensing element.
4. Thermal effects tested and guaranteed from 0 to 70°C relative to 25°C. All specifications shown are relative to 25°C.
5. Non-linearity refers to the **B**est **S**traight **L**ine fit measured for offset, full scale span and 1/2 full scale span.
6. Long term stability is the change in output after one year or 1 million pressure cycles.
7. Span is the arithmetic difference in transmitter output signal measured at zero pressure and the maximum operating pressure.
8. Tests are in accordance with EN61000-6-2, April 1999.
9. CE-labelling is in accordance with 89/336/EEC.
10. The pressure transmitters must not be used as safety accessories according to article 1, 2.1.3 of the directive 97/23/EC.

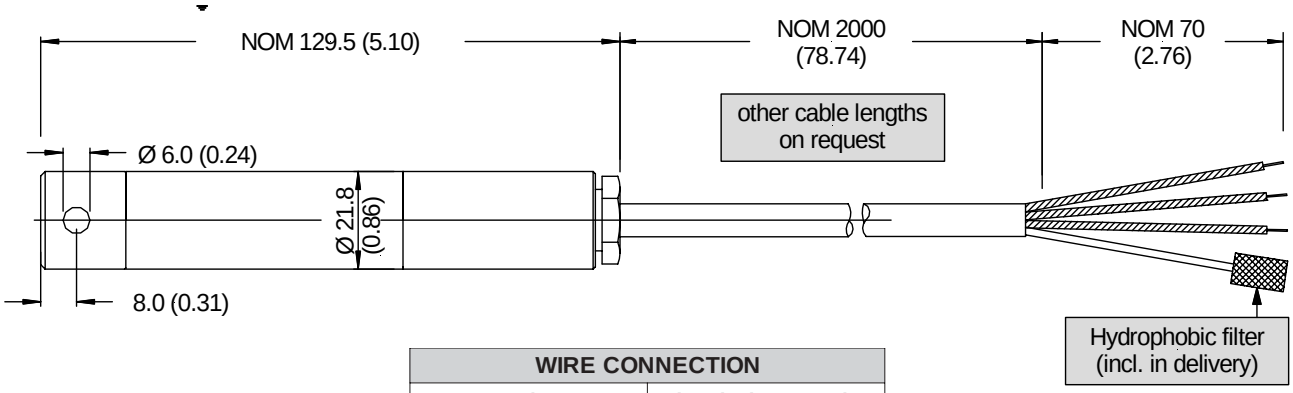
ELECTROMAGNETIC CAPABILITY[8]

	Test conditions	Criterion	Interference
Radiated, radio frequency electromagnetic field immunity (RFI)	EN61000-4-3: Grade 3 10 V/m, 80 MHz to 1000 MHz 80 % AMC (1 kHz)	A	<1 % FSO
Electrical fast transient / burst immunity (EFT)	EN61000-4-4: Grade 3 ±2 kV	B	<1 % FSO
Electrostatic discharge immunity test (ESD)	EN61000-4-2: Grade 4 ±8 kV, contact discharge	B	<1 % FSO
Immunity to conducted disturbances induced by radio-frequency fields	EN61000-4-6: Grade 3 0,15 to 80 MHz 10 V, 80 % AMC (1 kHz)	A	<1 % FSO

LOAD LIMITATION



OUTLINE DRAWING



WIRE CONNECTION	
Color	**Electrical connection**
red	+Vs
black	-Vs
transparent	vent tube[1]
bare	case/shield

mass: typ. 210 g (without cable)

dimensions in mm (inches)

ORDERING INFORMATION

CTx M 9xxx G 4 C x S

calibration
E: calibration in mbar
U: calibration in psi

mbar-ranges (only)

pressure range

100:	0 to 100 mbar	001:	0 to 1.5 psi
200:	0 to 200 mbar	003:	0 to 3 psi
400:	0 to 400 mbar	005:	0 to 5 psi
600:	0 to 600 mbar	010:	0 to 10 psi
1K0:	0 to 1000 mbar	015:	0 to 15 psi
1K6:	0 to 1600 mbar	020:	0 to 20 psi
2K0:	0 to 2000 mbar	030:	0 to 30 psi

submersible

cable length in m

cable version

output signal
4: 4...20 mA

pressure mode
G: gage pressure

Note: Other pressure ranges and options are widely available.
Please contact your nearest Sensortechnics sales representative.

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