CTE8000 / CTU8000 Series

OEM pressure transmitters for industrial media

FEATURES

- **250 mbar to 100 bar, 5 to 1500 psi gage[1] or absolute[10] pressure**
- **0...10 V, 0.5...4.5 V, 0...5 V, 1...6 V or 4...20 mA output**
- **Field interchangeable**
- **For many industrial gases and liquids**
- **EMC according to EN 61326-1[8]**

MEDIA COMPATIBILITY

Wetted materials:
Stainless steel 1.4404 (316L)[9], ceramic AL_2O_3, NBR (FKM)

Housing:
Stainless steel 1.4404 (316L), protection class IP 67 (according to DIN EN 60529) respectively NEMA 6[1]

SPECIFICATIONS[11,12]

Maximum ratings

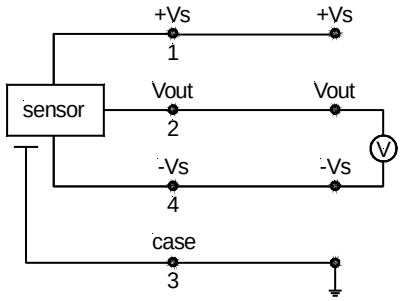
Supply voltage (reverse polarity protection)	
CTE(M)/CTU8...0	12...32 V
CTE(M)/CTU8...1	9...32 V
CTE(M)/CTU8...6, ...7	8...32 V
CTE(M)/CTU8...4[2]	7...32 V
Maximum load current (source)	
CTE(M)/CTU8...0, ...1, ...6, ...7	1 mA
Proof pressure[3]	2 x rated pressure

Environmental

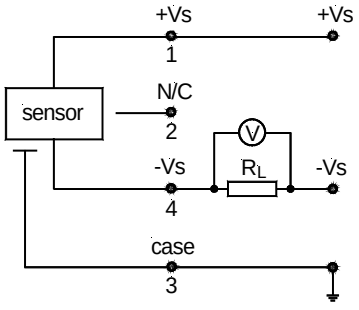
Temperature limits	
Storage	-40...85 °C
Operating (media)	-25...85 °C
Electronic (ambient)	-25...85 °C
Compensated	0...70 °C
Vibration (5 to 500 Hz)	10 g_{RMS}
Mechanical shock	50 g

ELECTRICAL CONNECTION

Voltage output device



Current output device



COMMON PERFORMANCE CHARACTERISTICS

(V_S=15 V ±0.1 V, T_A=25 °C, RH=50 %)

Characteristics			Min.	Typ.	Max.	Unit
Thermal effects (0...70 °C)[4]	Offset	devices up to 1 bar/15 psi		±0.03	±0.06	%FSO/°C
		all others		±0.02	±0.04	
	Span			±0.02	±0.04	
Thermal effects (-25...0 °C, 70...85 °C)[4]	Offset			±0.03		
	Span			±0.03		
Non-linearity (BSL), hysteresis and repeatability[5]		CT...8N...		±0.2	±0.5	%FSO
		all others		±0.1	±0.3	
Long term stability[6]				±0.1	±0.3	
Output noise (0< f <1 kHz)				±0.1		
Response time (10 to 90 %)		devices up to 350 mbar/5 psi		35		ms
		all others		5		
D/A resolution					11	bit
Power supply rejection	Offset			±0.01		%FSO/V
	Span			±0.02		

INDIVIDUAL PERFORMANCE CHARACTERISTICS

(V_S=15 V ±0.1 V, T_A=25 °C, RH=50 %)

0...10 V output (R_L > 100 kΩ)

Characteristics		Min.	Typ.	Max.	Unit
Zero pressure offset	CT...8N...		5		V
	all others		0	0.1	
Full scale span[7]		9.9	10	10.1	
Output impedance				25	Ω
Current consumption (no load)			4		mA

0.5...4.5 V output (R_L > 100 kΩ)

Characteristics		Min.	Typ.	Max.	Unit
Zero pressure offset	CT...8N...		2.5		V
	all others	0.45	0.5	0.55	
Full scale span[7]		3.95	4	4.05	
Output impedance				25	Ω
Current consumption (no load)			4		mA