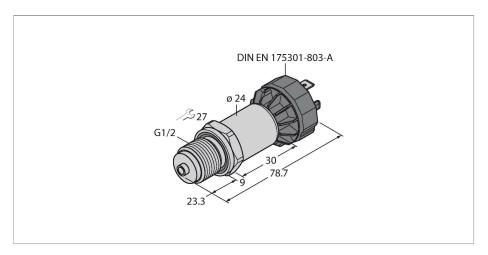


PT10R-2008-U1-DA91/X Pressure Transmitter – With Voltage Output (3-Wire)



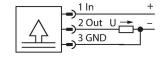
Technical data

Туре	PT10R-2008-U1-DA91/X
ID	6836293
Pressure type	Relative pressure
Pressure range	010 bar
	0145.04 psi
	01 MPa
Admissible overpressure	≤ 30 bar
Burst pressure	≥ 60 bar
Response time	< 2 ms, typ. 1 ms
Long-term stability	0.25 % FS, according to IEC EN 60770-1
Power supply	
Operating voltage U _B	1233 VDC
Current consumption	≤ 7 mA
Short-circuit/reverse polarity protection	yes / yes
Protection class	IP65
Insulation class	III
Insulation voltage	750 VDC
Outputs	
Output 1	Analog output
Output function	Analog output voltage
Analog output	
Voltage output	010 V
Load	≤ 100 nF/> 10 kΩ
Resolution	<± 0.1 % FS
Accuracy LHR	±0.3 % FS (typical; max. ±0.5 % FS)

Features

- Fully welded metal measuring cell
- Pressure range 0...10 bar rel.
- ■Pressure peak orifice
- ■12...33 VDC
- ■Analog output 0...10 V
- Process connection G1/2" male thread, back sealing and manometer (combi)
- Connector device, DIN EN 175301-803-A

Wiring diagram





Functional principle

The pressure sensors in the PT...-2000 product series operate with a fully welded metal measuring cell in various pressure ranges of up to -1...1000 bar in 2-, 3- or even 4-wire technology. Depending on the sensor variant, the processed signal is available as an analog output signal (4...20 mA, 0... 10 V, 0...5 V, 1...6 V, ratiometric) or as a digital IO-Link process parameter. The IO-Link sensor variants also have two independently configurable switching outputs. In addition to the standard variants, there are special sensors for uses such as ATEX areas or for oxygen applications.

A wide range of process connections and electrical connections offer a high degree of flexibility in a wide range of applications.



Technical data

plitude ± 15 mm, 1 octave/minute in al directions, 50 continuous loads, acc. to IEC 68-2-6 Shock resistance 100 g, 11 ms, half sinusoidal curve, al 6 directions, free fall from 1 m onto co crete (6x) acc. to IEC 68-2-27 Mechanical data Housing material Stainless-steel/Plastic, 1.4404 (AISI 316L)/polyarylamide 50 % GF UL 94 \(\) Pressure connection material Stainless steel 1.4404 (AISI 316L) Material pressure transducer Stainless steel 1.4016 (AISI 430) Process connection G 1/2" male thread, rear sealing and manometer (combi) Wrench size pressure connection / coupling nut	Temperature behaviour	
Environmental conditions Ambient temperature -30+85 °C Storage temperature -50+100 °C Vibration resistance 20 g, 152000 Hz, 1525 Hz with ar plitude ± 15 mm, 1 octave/minute in al directions, 50 continuous loads, acc. to IEC 68-2-6 Shock resistance 100 g, 11 ms, half sinusoidal curve, al 6 directions, free fall from 1 m onto co crete (6x) acc. to IEC 68-2-27 Mechanical data Housing material Stainless-steel/Plastic, 1.4404 (AISI 316L)/polyarylamide 50 % GF UL 94 V Pressure connection material Stainless steel 1.4404 (AISI 316L) Material pressure transducer Stainless steel 1.4016 (AISI 430) Process connection G 1/2" male thread, rear sealing and manometer (combi) Wrench size pressure connection / coupling nut Electrical connection Connector, DIN EN 175301-803 Form Max. tightening torque of housing nut Reference conditions acc. to IEC 61298-1 Temperature 15+25 °C Atmospheric pressure 8601060 hPa abs. Humidity 4575 % rel.	Medium temperature	-40+135 °C
Ambient temperature Storage temperature -50+100 °C Vibration resistance 20 g, 152000 Hz, 1525 Hz with an plitude ± 15 mm, 1 octave/minute in all directions, 50 continuous loads, acc. to IEC 68-2-6 Shock resistance 100 g, 11 ms, half sinusoidal curve, all 6 directions, free fall from 1 m onto co crete (6x) acc. to IEC 68-2-27 Mechanical data Housing material Stainless-steel/Plastic, 1.4404 (AISI 316L)/polyarylamide 50 % GF UL 94 North and the stainless steel 1.4404 (AISI 316L) Material pressure transducer Stainless steel 1.4016 (AISI 430) Process connection G 1/2" male thread, rear sealing and manometer (combi) Wrench size pressure connection / coupling nut Electrical connection Connector, DIN EN 175301-803 Form 30 Nm Reference conditions acc. to IEC 61298-1 Temperature 15+25 °C Atmospheric pressure 8601060 hPa abs. Humidity 4575 % rel.	Temperature coefficient	± 0.2 % of full scale/10 K
Storage temperature -50+100 °C Vibration resistance 20 g, 152000 Hz, 1525 Hz with ar plitude ± 15 mm, 1 octave/minute in al directions, 50 continuous loads, acc. to IEC 68-2-6 Shock resistance 100 g, 11 ms, half sinusoidal curve, al 6 directions, free fall from 1 m onto co crete (6x) acc. to IEC 68-2-27 Mechanical data Housing material Stainless-steel/Plastic, 1.4404 (AISI 316L)/polyarylamide 50 % GF UL 94 V 316L)/polyarylamide 50 % GF UL 94 V 316L)/polyarylamide 50 % GF UL 94 V 316L) Material pressure transducer Stainless steel 1.4016 (AISI 430) Process connection G 1/2" male thread, rear sealing and manometer (combi) Wrench size pressure connection / coupling nut Electrical connection Connector, DIN EN 175301-803 Form 30 Nm Reference conditions acc. to IEC 61298-1 Temperature 15+25 °C Atmospheric pressure 8601060 hPa abs. Humidity 4575 % rel.	Environmental conditions	
Vibration resistance 20 g, 152000 Hz, 1525 Hz with an plitude ± 15 mm, 1 octave/minute in al directions, 50 continuous loads, acc. to IEC 68-2-6 Shock resistance 100 g, 11 ms, half sinusoidal curve, al 6 directions, free fall from 1 m onto co crete (6x) acc. to IEC 68-2-27 Mechanical data Housing material Stainless-steel/Plastic, 1.4404 (AISI 316L)/polyarylamide 50 % GF UL 94 V Pressure connection material Stainless steel 1.4404 (AISI 316L) Material pressure transducer Stainless steel 1.4016 (AISI 430) Process connection G 1/2" male thread, rear sealing and manometer (combi) Wrench size pressure connection / coupling nut Electrical connection Connector, DIN EN 175301-803 Form Max. tightening torque of housing nut Reference conditions acc. to IEC 61298-1 Temperature 15+25 °C Atmospheric pressure 8601060 hPa abs. Humidity 4575 % rel.	Ambient temperature	-30+85 °C
plitude ± 15 mm, 1 octave/minute in al directions, 50 continuous loads, acc. to IEC 68-2-6 Shock resistance 100 g, 11 ms, half sinusoidal curve, al 6 directions, free fall from 1 m onto co crete (6x) acc. to IEC 68-2-27 Mechanical data Housing material Stainless-steel/Plastic, 1.4404 (AISI 316L)/polyarylamide 50 % GF UL 94 V Pressure connection material Stainless steel 1.4404 (AISI 316L) Material pressure transducer Stainless steel 1.4016 (AISI 430) Process connection G 1/2" male thread, rear sealing and manometer (combi) Wrench size pressure connection / coupling nut Electrical connection Connector, DIN EN 175301-803 Form Max. tightening torque of housing nut Reference conditions acc. to IEC 61298-1 Temperature 15+25 °C Atmospheric pressure 8601060 hPa abs. Humidity 4575 % rel.	Storage temperature	-50+100 °C
Mechanical data Housing material Stainless-steel/Plastic, 1.4404 (AISI 316L)/polyarylamide 50 % GF UL 94 \ Pressure connection material Material pressure transducer Process connection G 1/2" male thread, rear sealing and manometer (combi) Wrench size pressure connection / coupling nut Electrical connection Connector, DIN EN 175301-803 Form Max. tightening torque of housing nut Reference conditions acc. to IEC 61298-1 Temperature 15+25 °C Atmospheric pressure 8601060 hPa abs. Humidity	Vibration resistance	20 g, 152000 Hz, 1525 Hz with amplitude ± 15 mm, 1 octave/minute in all 3 directions, 50 continuous loads, acc. to IEC 68-2-6
Housing material Stainless-steel/Plastic, 1.4404 (AISI 316L)/polyarylamide 50 % GF UL 94 \ Pressure connection material Stainless steel 1.4404 (AISI 316L) Material pressure transducer Stainless steel 1.4016 (AISI 430) Process connection G 1/2" male thread, rear sealing and manometer (combi) Wrench size pressure connection / coupling nut Electrical connection Connector, DIN EN 175301-803 Form Max. tightening torque of housing nut Reference conditions acc. to IEC 61298-1 Temperature 15+25 °C Atmospheric pressure 8601060 hPa abs. Humidity 4575 % rel.	Shock resistance	100 g, 11 ms, half sinusoidal curve, all 6 directions, free fall from 1 m onto concrete (6x) acc. to IEC 68-2-27
Pressure connection material Stainless steel 1.4404 (AISI 316L) Material pressure transducer Stainless steel 1.4016 (AISI 430) Process connection G 1/2" male thread, rear sealing and manometer (combi) Wrench size pressure connection / coupling nut Electrical connection Connector, DIN EN 175301-803 Form Max. tightening torque of housing nut Reference conditions acc. to IEC 61298-1 Temperature 15+25 °C Atmospheric pressure 8601060 hPa abs. Humidity 4575 % rel.	Mechanical data	
Material pressure transducer Stainless steel 1.4016 (AISI 430) Process connection G 1/2" male thread, rear sealing and manometer (combi) Wrench size pressure connection / coupling nut Electrical connection Connector, DIN EN 175301-803 Form Max. tightening torque of housing nut Reference conditions acc. to IEC 61298-1 Temperature 15+25 °C Atmospheric pressure 8601060 hPa abs. Humidity 4575 % rel.	Housing material	Stainless-steel/Plastic, 1.4404 (AISI 316L)/polyarylamide 50 % GF UL 94 V-0
Process connection G 1/2" male thread, rear sealing and manometer (combi) Wrench size pressure connection / coupling nut Electrical connection Connector, DIN EN 175301-803 Form Max. tightening torque of housing nut Reference conditions acc. to IEC 61298-1 Temperature 15+25 °C Atmospheric pressure 8601060 hPa abs. Humidity 4575 % rel.	Pressure connection material	Stainless steel 1.4404 (AISI 316L)
Wrench size pressure connection / coupling nut Electrical connection Max. tightening torque of housing nut Reference conditions acc. to IEC 61298-1 Temperature 15+25 °C Atmospheric pressure 8601060 hPa abs. Humidity 27 Connector, DIN EN 175301-803 Form 30 Nm Reference conditions acc. to IEC 61298-1 Temperature 4575 % rel.	Material pressure transducer	Stainless steel 1.4016 (AISI 430)
Electrical connection Connector, DIN EN 175301-803 Form Max. tightening torque of housing nut Reference conditions acc. to IEC 61298-1 Temperature 15+25 °C Atmospheric pressure 8601060 hPa abs. Humidity 4575 % rel.	Process connection	
Max. tightening torque of housing nut 30 Nm Reference conditions acc. to IEC 61298-1 Temperature 15+25 °C Atmospheric pressure 8601060 hPa abs. Humidity 4575 % rel.		27
Reference conditions acc. to IEC 61298-1 Temperature 15+25 °C Atmospheric pressure 8601060 hPa abs. Humidity 4575 % rel.	Electrical connection	Connector, DIN EN 175301-803 Form A
61298-1 Temperature 15+25 °C Atmospheric pressure 8601060 hPa abs. Humidity 4575 % rel.	Max. tightening torque of housing nut	30 Nm
Atmospheric pressure 8601060 hPa abs. Humidity 4575 % rel.		
Humidity 4575 % rel.	Temperature	15+25 °C
	Atmospheric pressure	8601060 hPa abs.
Auxiliary power 24 VDC	Humidity	4575 % rel.
	Auxiliary power	24 VDC
Tests/approvals	Tests/approvals	
Approvals cULus	Approvals	cULus
UL registration number E302799	UL registration number	E302799
MTTF 1238 years acc. to SN 29500 (Ed. 99) °C	MTTF	1238 years acc. to SN 29500 (Ed. 99) 40 °C
Included in delivery FKM special profile seal (1x)	Included in delivery	FKM special profile seal (1x)



Accessories

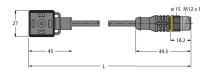
Dimension drawing

Type

VAS04-K81E-0.6-RSC5T/TXL

6606726

Extension cable, valve connector, A



Extension cable, valve connector, A type to M12 male connector, straight, 5-pin; cable length: 0.6 m, jacket material: PUR, black