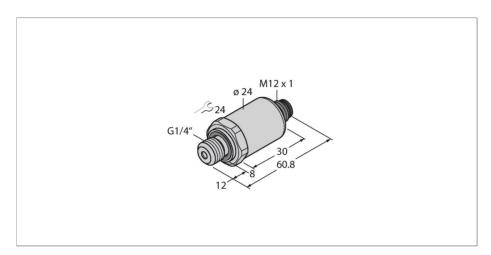
PT350R-2004-I2-H1143/X Pressure Transmitter – With Current Output (2-Wire)



Technical data

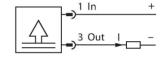
Accuracy LHR

Туре	PT350R-2004-I2-H1143/X
ID no.	100003041
Medium temperature	-40+135 °C
Pressure range	
Relative pressure bar	0350 bar rel.
	05076.33 psi
	035 MPa
Admissible overpressure	≤ 1200 bar
Burst pressure	≥ 2400 bar
Response time	< 2 ms, typ. 1 ms
Long-term stability	± 0.25 % FS, according to IEC EN 60770-1
Power supply	
Operating voltage	733 VDC
Current consumption	≤ 23 mA
Short-circuit/reverse polarity protection	yes / yes
Insulation class	III
Output 1	Analog output
Output function	Analog output current
Analog output	
Current output	420 mA
Load	≤ (Supply voltage -7)/20 kΩ
Resolution	<± 0.1 % FS

Features

- Fully welded metal measuring cell
- Pressure range 0...350 bar rel.
- Pressure peak orifice
- ■7...33 VDC
- ■Analog output 4...20 mA
- Process connection G1/4" male thread (DIN 3852-E)
- Connector device, M12 × 1

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.

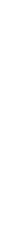
A wide range of process connections and electrical connections offer a high degree of flexibility in a wide range of applications.

± 0.3 % FS BSL



Technical data

Housing material	Stainless-steel/Plastic, 1.4404 (AISI 316L)/polyacrylamide 50 % GF UL 94 V-0
Process connection	G 1/4" male thread DIN 3852-E (rear sealing)
Pressure connection material	Stainless steel 1.4404 (AISI 316L)
Pressure transducer material	Stainless steel 1.4435 (AISI 316L)
Wrench size pressure connection / coupling nut	24
Max. tightening torque of housing nut	20 Nm
Electrical connection	Connector, M12 × 1
Protection class	IP67
Ambient temperature	-30+85 °C
Storage temperature	-50+100 °C
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
Vibration resistance	20 g, 152000 Hz, 1525 Hz with amplitude +/- 15 mm, 1 octave/minute all 3 directions, 50 continuous loads
Approvals	UL
Reference conditions acc. to IEC 61298-1	
Temperature	15+25 °C
Atmospheric pressure	8601060 hPa abs.
Humidity	4575 % rel.
Auxiliary power	24 VDC
Temperature behaviour	
MTTF	1189 years acc. to SN 29500 (Ed. 99) 40 °C
Included in delivery	FKM special profile seal (1x)
Technical data	
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Туре	PT350R-2004-I2-H1143/X
	PT350R-2004-I2-H1143/X 100003041
Туре	
Type ID no.	
Type ID no. Pressure range	100003041
Type ID no. Pressure range	100003041 0350 bar rel.
Type ID no. Pressure range	100003041 0350 bar rel. 05076.33 psi
Type ID no. Pressure range Relative pressure bar	100003041 0350 bar rel. 05076.33 psi 035 MPa
Type ID no. Pressure range Relative pressure bar Admissible overpressure	100003041 0350 bar rel. 05076.33 psi 035 MPa ≤ 1200 bar



PT350R-2004-12-H1143/X| 05/04/2021 16-21 | technical changes reserved

Technical data

Operating voltage 733 VDC Current consumption ≤ 23 mA Short-circuit/reverse polarity protection yes / yes Protection type and class IP67 / III Insulation voltage 750 VDC Outputs Output Output 1 Analog output Current output 420 mA Load ≤ (Supply voltage -7)/20 kΩ Resolution <± 0.1 % FS Accuracy LHR ± 0.3 % FS BSL Temperature behaviour Medium temperature Medium temperature -40+135 °C Temperature coefficient ± 0.2 % of full scale/10 K Ambient temperature -30+85 °C Storage temperature -50+100 °C Vibration resistance 20 g, 152000 Hz, 1525 Hz with amplitude +/- 15 mm, 1 octave/minute all addirections, 50 continuous loads, acc. to IEC 68-2-26 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 Housing Stainless-steel/Plastic, 1.4404 (AISI 316L) Polyacrylamide 50 % GF UL 94 V-0 Pressure connection material Stainless steel 1.4404 (AISI 316L) Process connection G 1/4" male thread DIN 3852-E (rear sealing)	Power supply	
Short-circuit/reverse polarity protection Protection type and class IP67 / III Insulation voltage 750 VDC Outputs Output 1 Analog output Output function Analog output current Analog output Current output 420 mA Load ≤ (Supply voltage -7)/20 kΩ Resolution <± 0.1 % FS Accuracy LHR ± 0.3 % FS BSL Temperature behaviour Medium temperature -40+135 °C Temperature coefficient ± 0.2 % of full scale/10 K Ambient conditions Ambient temperature -50+85 °C Storage temperature -50+100 °C Vibration resistance 20 g, 152000 Hz, 1525 Hz with amplitude +/-15 mm, 1 octave/minute all 3 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 concrete (6x) , acc. to IEC 68-2-27 Housing Housing material Stainless-steel/Plastic, 1.4404 (AISI 316L)/polyacrylamide 50 % GF UL 94 V-0 Pressure connection material Stainless steel 1.4404 (AISI 316L) Process connection	Operating voltage	733 VDC
Protection type and class IP67 / III Insulation voltage 750 VDC Outputs Output 1	Current consumption	≤ 23 mA
Insulation voltage 750 VDC Outputs Output 1 Analog output Output function Analog output current Analog output Current output 420 mA Load ≤ (Supply voltage -7)/20 kΩ Resolution <± 0.1 % FS Accuracy LHR ± 0.3 % FS BSL Temperature behaviour Medium temperature -40+135 °C Temperature coefficient ± 0.2 % of full scale/10 K Ambient conditions Ambient temperature -50+85 °C Storage temperature -50+100 °C Vibration resistance 20 g, 15200 Hz, 1525 Hz with amplitude +/- 15 mm, 1 octave/minute all 3 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 concrete (6x) , acc. to IEC 68-2-27 Housing Housing material Stainless-steel/Plastic, 1.4404 (AISI 316L)/polyacrylamide 50 % GF UL 94 V-0 Pressure transducer material Stainless steel 1.4435 (AISI 316L) Process connection G 1/4" male thread DIN 3852-E (rear sealing) Wrench size pressure connection / coupling nut Electrical connection Connector, M12 × 1 Max. tightening torque of housing nut Reference conditions acc. to IEC 61298-1	Short-circuit/reverse polarity protection	yes / yes
Outputs Analog output Output function Analog output current Analog output 420 mA Load ≤ (Supply voltage -7)/20 kΩ Resolution <± 0.1 % FS	Protection type and class	IP67 / III
Output 1 Analog output Output function Analog output current Analog output 420 mA Load ≤ (Supply voltage -7)/20 kΩ Resolution <± 0.1 % FS	Insulation voltage	750 VDC
Output function Analog output Current output 420 mA Load ≤ (Supply voltage -7)/20 kΩ Resolution <± 0.1 % FS	Outputs	
Analog output 420 mA Load ≤ (Supply voltage -7)/20 kΩ Resolution <± 0.1 % FS	Output 1	Analog output
Current output 420 mA Load ≤ (Supply voltage -7)/20 kΩ Resolution <± 0.1 % FS	Output function	Analog output current
Load ≤ (Supply voltage -7)/20 kΩ Resolution <± 0.1 % FS Accuracy LHR ± 0.3 % FS BSL Temperature behaviour Medium temperature -40+135 °C Temperature coefficient ± 0.2 % of full scale/10 K Ambient conditions Ambient temperature -30+85 °C Storage temperature -50+100 °C Vibration resistance 20 g, 152000 Hz, 1525 Hz with amplitude +/- 15 mm, 1 octave/minute all 3 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 concrete (6x) , acc. to IEC 68-2-27 Housing Housing material Stainless-steel/Plastic, 1.4404 (AISI 316L)/polyacrylamide 50 % GF UL 94 V-0 Pressure connection material Stainless steel 1.4404 (AISI 316L) Process connection G 1/4" male thread DIN 3852-E (rear sealing) Wrench size pressure connection / coupling nut Electrical connection Connector, M12 × 1 Max. tightening torque of housing nut Reference conditions acc. to IEC 61298-1	Analog output	
Resolution	Current output	420 mA
Accuracy LHR ± 0.3 % FS BSL Temperature behaviour Medium temperature -40+135 °C Temperature coefficient ± 0.2 % of full scale/10 K Ambient conditions Ambient temperature -30+85 °C Storage temperature -50+100 °C Vibration resistance 20 g, 152000 Hz, 1525 Hz with amplitude +/- 15 mm, 1 octave/minute all 3 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 concrete (6x) , acc. to IEC 68-2-27 Housing Housing material Stainless-steel/Plastic, 1.4404 (AISI 316L)/polyacrylamide 50 % GF UL 94 V-0 Pressure connection material Stainless steel 1.4404 (AISI 316L) Process connection G 1/4" male thread DIN 3852-E (rear sealing) Wrench size pressure connection / coupling nut Electrical connection Connector, M12 × 1 Max. tightening torque of housing nut Reference conditions acc. to IEC 61298-1	Load	≤ (Supply voltage -7)/20 kΩ
Temperature behaviour Medium temperature -40+135 °C Temperature coefficient ± 0.2 % of full scale/10 K Ambient conditions Ambient temperature -30+85 °C Storage temperature -50+100 °C Vibration resistance 20 g, 152000 Hz, 1525 Hz with amplitude +/- 15 mm, 1 octave/minute all 3 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 concrete (6x) , acc. to IEC 68-2-27 Housing Housing material Stainless-steel/Plastic, 1.4404 (AISI 316L)/polyacrylamide 50 % GF UL 94 V-0 Pressure connection material Stainless steel 1.4404 (AISI 316L) Process connection G 1/4" male thread DIN 3852-E (rear sealing) Wrench size pressure connection / coupling nut Electrical connection Connector, M12 × 1 Max. tightening torque of housing nut Reference conditions acc. to IEC 61298-1	Resolution	<± 0.1 % FS
Medium temperature -40+135 °C Temperature coefficient ± 0.2 % of full scale/10 K Ambient conditions Ambient temperature -30+85 °C Storage temperature -50+100 °C Vibration resistance 20 g, 152000 Hz, 1525 Hz with amplitude +/- 15 mm, 1 octave/minute all 3 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 concrete (6x) , acc. to IEC 68-2-27 Housing Housing material Stainless-steel/Plastic, 1.4404 (AISI 316L)/polyacrylamide 50 % GF UL 94 V-0 Pressure connection material Stainless steel 1.4404 (AISI 316L) Process connection G 1/4" male thread DIN 3852-E (rear sealing) Wrench size pressure connection / coupling nut Electrical connection Connector, M12 × 1 Max. tightening torque of housing nut Reference conditions acc. to IEC 61298-1	Accuracy LHR	± 0.3 % FS BSL
Temperature coefficient ± 0.2 % of full scale/10 K Ambient conditions Ambient temperature -30+85 °C Storage temperature -50+100 °C Vibration resistance 20 g, 152000 Hz, 1525 Hz with amplitude +/- 15 mm, 1 octave/minute all 3 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 concrete (6x) , acc. to IEC 68-2-27 Housing Housing material Stainless-steel/Plastic, 1.4404 (AISI 316L)/polyacrylamide 50 % GF UL 94 V-0 Pressure connection material Stainless steel 1.4404 (AISI 316L) Process connection G 1/4" male thread DIN 3852-E (rear sealing) Wrench size pressure connection / coupling nut Electrical connection Connector, M12 × 1 Max. tightening torque of housing nut Reference conditions acc. to IEC 61298-1	Temperature behaviour	
Ambient conditions Ambient temperature -30+85 °C Storage temperature -50+100 °C Vibration resistance 20 g, 152000 Hz, 1525 Hz with amplitude +/- 15 mm, 1 octave/minute all 3 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 concrete (6x), acc. to IEC 68-2-27 Housing Housing material Stainless-steel/Plastic, 1.4404 (AISI 316L)/polyacrylamide 50 % GF UL 94 V-0 Pressure connection material Stainless steel 1.4404 (AISI 316L) Process connection G 1/4" male thread DIN 3852-E (rear sealing) Wrench size pressure connection / coupling nut Electrical connection Connector, M12 × 1 Max. tightening torque of housing nut Reference conditions acc. to IEC 61298-1	Medium temperature	-40+135 °C
Ambient temperature Storage temperature -30+85 °C Vibration resistance 20 g, 152000 Hz, 1525 Hz with amplitude +/- 15 mm, 1 octave/minute all 3 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 concrete (6x) , acc. to IEC 68-2-27 Housing Housing material Stainless-steel/Plastic, 1.4404 (AISI 316L)/polyacrylamide 50 % GF UL 94 V-0 Pressure connection material Stainless steel 1.4404 (AISI 316L) Process connection G 1/4" male thread DIN 3852-E (rear sealing) Wrench size pressure connection / coupling nut Electrical connection Connector, M12 × 1 Max. tightening torque of housing nut Reference conditions acc. to IEC 61298-1	Temperature coefficient	± 0.2 % of full scale/10 K
Storage temperature -50+100 °C Vibration resistance 20 g, 152000 Hz, 1525 Hz with amplitude +/- 15 mm, 1 octave/minute all 3 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 concrete (6x) , acc. to IEC 68-2-27 Housing Housing material Stainless-steel/Plastic, 1.4404 (AISI 316L)/polyacrylamide 50 % GF UL 94 V-0 Pressure connection material Stainless steel 1.4404 (AISI 316L) Pressure transducer material Stainless steel 1.4435 (AISI 316L) Process connection G 1/4" male thread DIN 3852-E (rear sealing) Wrench size pressure connection / coupling nut Electrical connection Connector, M12 × 1 Max. tightening torque of housing nut Reference conditions acc. to IEC 61298-1	Ambient conditions	
Vibration resistance 20 g, 152000 Hz, 1525 Hz with amplitude +/- 15 mm, 1 octave/minute all 3 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 concrete (6x), acc. to IEC 68-2-27 Housing Housing material Stainless-steel/Plastic, 1.4404 (AISI 316L)/polyacrylamide 50 % GF UL 94 V-0 Pressure connection material Stainless steel 1.4404 (AISI 316L) Process connection G 1/4" male thread DIN 3852-E (rear sealing) Wrench size pressure connection / coupling nut Electrical connection Connector, M12 × 1 Max. tightening torque of housing nut Reference conditions acc. to IEC 61298-1	Ambient temperature	-30+85 °C
amplitude +/- 15 mm, 1 octave/minute all 3 directions, 50 continuous loads, acc. to IEC 68-2-6 Shock resistance	Storage temperature	-50+100 °C
all 6 directions, free fall from 1 m onto concrete (6x), acc. to IEC 68-2-27 Housing Housing material Stainless-steel/Plastic, 1.4404 (AISI 316L)/polyacrylamide 50 % GF UL 94 V-0 Pressure connection material Stainless steel 1.4404 (AISI 316L) Pressure transducer material Stainless steel 1.4435 (AISI 316L) Process connection G 1/4" male thread DIN 3852-E (rear sealing) Wrench size pressure connection / coupling nut Electrical connection Connector, M12 × 1 Max. tightening torque of housing nut Reference conditions acc. to IEC 61298-1	Vibration resistance	amplitude +/- 15 mm, 1 octave/minute all 3 directions, 50 continuous loads, acc. to
Housing material Stainless-steel/Plastic, 1.4404 (AISI 316L)/polyacrylamide 50 % GF UL 94 V-0 Pressure connection material Stainless steel 1.4404 (AISI 316L) Pressure transducer material Stainless steel 1.4435 (AISI 316L) Process connection G 1/4" male thread DIN 3852-E (rear sealing) Wrench size pressure connection / coupling nut Electrical connection Connector, M12 × 1 Max. tightening torque of housing nut Reference conditions acc. to IEC 61298-1	Shock resistance	all 6 directions, free fall from 1 m onto
Pressure connection material Stainless steel 1.4404 (AISI 316L) Pressure transducer material Stainless steel 1.4435 (AISI 316L) Process connection G 1/4" male thread DIN 3852-E (rear sealing) Wrench size pressure connection / coupling nut Electrical connection Connector, M12 × 1 Max. tightening torque of housing nut Reference conditions acc. to IEC 61298-1	Housing	
Pressure transducer material Stainless steel 1.4435 (AISI 316L) Process connection G 1/4" male thread DIN 3852-E (rear sealing) Wrench size pressure connection / coupling nut Electrical connection Connector, M12 × 1 Max. tightening torque of housing nut Reference conditions acc. to IEC 61298-1	Housing material	
Process connection G 1/4" male thread DIN 3852-E (rear sealing) Wrench size pressure connection / coupling nut Electrical connection Connector, M12 × 1 Max. tightening torque of housing nut Reference conditions acc. to IEC 61298-1	Pressure connection material	Stainless steel 1.4404 (AISI 316L)
Sealing) Wrench size pressure connection / coupling nut Electrical connection Connector, M12 × 1 Max. tightening torque of housing nut 20 Nm Reference conditions acc. to IEC 61298-1	Pressure transducer material	Stainless steel 1.4435 (AISI 316L)
coupling nut Electrical connection Connector, M12 × 1 Max. tightening torque of housing nut 20 Nm Reference conditions acc. to IEC 61298-1	Process connection	•
Max. tightening torque of housing nut 20 Nm Reference conditions acc. to IEC 61298-1		24
Reference conditions acc. to IEC 61298-1	Electrical connection	Connector, M12 × 1
61298-1	Max. tightening torque of housing nut	20 Nm
Temperature 15+25 °C		
	Temperature	15+25 °C



Technical data

Atmospheric pressure	8601060 hPa abs.
Humidity	4575 % rel.
Auxiliary power	24 VDC
Approvals	UL
MTTF	1189 years acc. to SN 29500 (Ed. 99) 40 °C
Included in delivery	FKM special profile seal (1x)