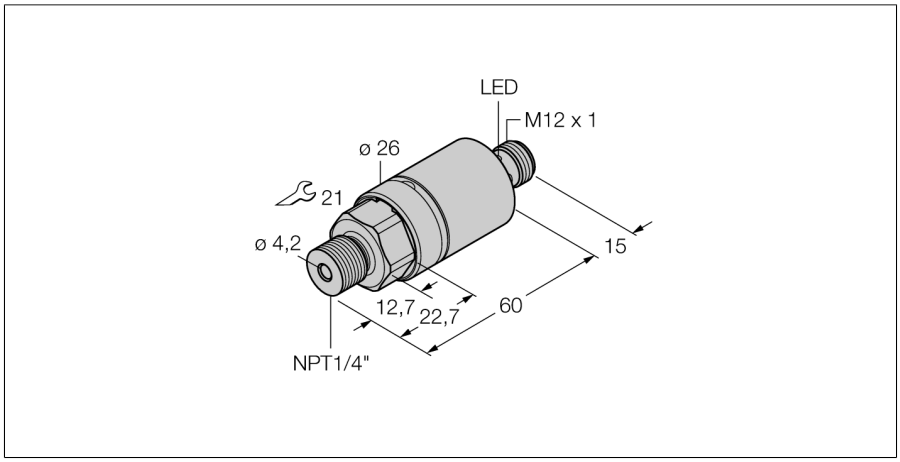
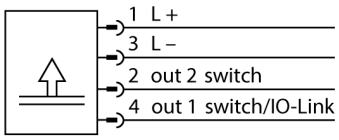
Pressure Sensor
2 PNP/NPN Transistor Switching Outputs
PC400R-203-2UPN8X-H1141



- Cylindrical version without display
- 2 PNP/NPN switching outputs
- Communication via IO-Link
- Display of communication via LED at M12 connector
- Pressure range 0…400 bar rel.

Wiring Diagram



Type	PC400R-203-2UPN8X-H1141
ID	6833747
Pressure type	Relative pressure
Pressure range	0…400 bar
	0…5801.51 psi
	0…40 MPa
Admissible overpressure	≤ 700 bar
Burst pressure	≥ 700 bar
Response time	< 3 ms
Power supply	
Operating voltage U_B	15…30 VDC
Current consumption	≤ 12 mA
Voltage drop at I_e	≤ 2 V
Protective measure	SELV; PELV according to EN 50178
Short-circuit/reverse polarity protection	yes / yes
Protection class	IP67
Insulation class	III
Outputs	
Output 1	Switching output or IO-Link mode
Output 2	Switching output
Switching output	
Communication protocol	IO-Link
Output function	NO/NC, PNP/NPN
Accuracy	± 0.5 % FS BSL
Rated operational current	0.15 A
Switching frequency	≤ 180 Hz
Switching point distance	≥ 0.5 %
Switch point:	(Min. + 0.005 × range)…100 % of full scale
Release point(s)	min up to (SP - 0.005 x range)
Switching cycles	≥ 100 mil.
Switch point SP1	configurable
Release point rP1	customized

Functional principle

The IO-Link pressure transmitters of the PC 200 series operate with piezoresistive ceramic measuring cells. The ceramic diaphragm is unbalanced in proportion to the pressure applied. The digitally processed signal is made available via IO-Link or as switching output. Highest flexibility and 0.5 % f.s.accuracy guarantee secure connection to your processes.

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IO-Link	
IO-Link specification	V 1.0
Programming	FDT / DTM
Transmission physics	corresponds to 3-wire physics (PHY2)
Transmission rate	COM 2 / 38.4 kbps
Process data width	16 bit
Measured value information	14 bit
Switchpoint information	2 bit
Frame type	2.2
Accuracy	± 0.5 % FS BSL
Included in the SIDI GSDML	Yes

Temperature behaviour	
Medium temperature	-40…+85 °C
Temperature coefficient zero point TK_0	± 0.15 % of full scale/10 K
Temperature coefficient range TK_s	± 0.15 % of full scale/10 K

Environmental conditions	
Ambient temperature	-40…+80 °C
Storage temperature	-40…+80 °C
Vibration resistance	20 g (9…2000 Hz), according to IEC 68-2-6
Shock resistance	50 acc. to IEC 68-2-27

Mechanical data	
Housing material	Stainless steel, 1.4305 (AISI 303)/PBT-GF15
Pressure connection material	Stainless steel 1.4305 (AISI 303)
Material pressure transducer	Ceramic Al□O□
Sealing material	FPM
Process connection	1/4″ NPT-18 male thread
Wrench size pressure connection / coupling nut	21
Electrical connection	Connector, M12 × 1

Reference conditions acc. to IEC 61298-1	
Temperature	15…+25 °C
Atmospheric pressure	860…1060 hPa abs.
Humidity	45…75 % rel.
Auxiliary power	24 VDC

Programming options	switch/release point, PNP/NPN, NO/NC, hysteresis/window mode, muting, pressure unit, peak pressure memory

Tests/approvals

MTTF	2079 years acc. to SN 29500 (Ed. 99) 40 °C

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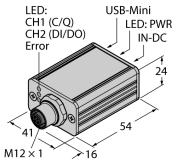
Function accessories

Type code	Ident-No.		Dimension drawing
USB-2-IOL-0002	6825482	IO-Link Master with integrated USB port	

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