

Pressure Sensor

FX7P203

Part Number



- Analog output: 4 ... 20 mA
- Compact, laser-welded V4A stainless steel housing
- Outstanding measuring accuracy: $\pm 0.5\%$
- Very short response time: < 1 ms

weFlux² InoxSens

Technical Data

Sensor-specific data

Measuring Range	0...40 bar
Measurement Type	relative
Maximum overload pressure	80 bar
Bursting pressure	120 bar
Medium	Liquids, gases
Pressure Response Time (t ₉₀)	< 1 ms
Measuring error (total)	< 1 %
Temperature Coefficient Zero-Point	< $\pm 0,15\%$ /10K
Temperature Coefficient Range	< $\pm 0,2\%$ /10K

Environmental conditions

Temperature of medium	-25...125 °C**
Ambient temperature	-25...80 °C
Atmospheric humidity	100 % r.H.
Storage temperature	-25...80 °C
EMC	DIN EN 61326-2-3
Shock resistance per DIN IEC 68-2-27	50 g / 11 ms
Vibration resistance per DIN IEC 60068-2-6	10 g (10...2000 Hz)

Electrical Data

Supply Voltage	9...28 V DC
Current Consumption (U _b = 24 V)	< 21 mA
Analog Outputs	1
Analog Output	4...20 mA Press
Current Output Load Resistance	< 500 Ohm
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Protection Class	III

Mechanical Data

Sensor element	Stainless steel diaphragm
Housing Material	1.4404
Material in contact with media	1.4404; 1.4548; FKM
Degree of Protection	IP68/IP69K *
Connection	M12 × 1; 4-pin
Process Connection	G 1/4"
{Dichtungsmaterial}	FKM

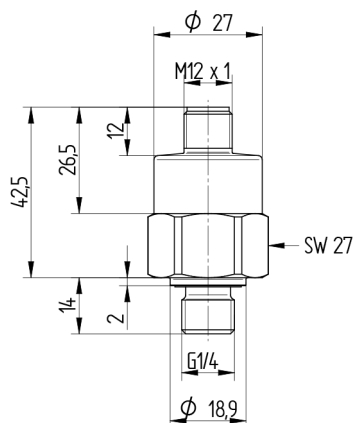
Safety-relevant Data

MTTFd (EN ISO 13849-1)	3283,16 a
Analog Output	●
Connection Diagram No.	142
Suitable Connection Equipment No.	2
Suitable Mounting Technology No.	919

* Not UL certified

** Sensors suitable up to 125 °C media temperature. During installation, please ensure that the sensor housing is adequately cooled by the surroundings.

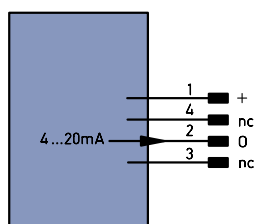




All dimensions in mm (1 mm = 0.03937 Inch)



142



Legend

+	Supply Voltage +	PT	Platinum measuring resistor
-	Supply Voltage 0 V	nc	not connected
~	Supply Voltage (AC Voltage)	U	Test Input
A	Switching Output (NO)	U	Test Input inverted
Ā	Switching Output (NC)	W	Trigger Input
V	Contamination/Error Output (NO)	W-	Ground for the Trigger Input
Ṽ	Contamination/Error Output (NC)	O	Analog Output
E	Input (analog or digital)	O-	Ground for the Analog Output
T	Teach Input	BZ	Block Discharge
Z	Time Delay (activation)	AWV	Valve Output
S	Shielding	a	Valve Control Output +
RxD	Interface Receive Path	b	Valve Control Output 0 V
TxD	Interface Send Path	SY	Synchronization
RDY	Ready	SY-	Ground for the Synchronization
GND	Ground	E+	Receiver-Line
CL	Clock	S+	Emitter-Line
E/A	Output/Input programmable	±	Grounding
IO-Link	IO-Link	SnR	Switching Distance Reduction
PoE	Power over Ethernet	Rx+/-	Ethernet Receive Path
IN	Safety Input	Tx+/-	Ethernet Send Path
OSSD	Safety Output	Bus	Interfaces-Bus A(+)/B(-)
Signal	Signal Output	La	Emitted Light disengageable
BI-D+/-	Ethernet Gigabit bidirect. data line (A-D)	Mag	Magnet activation
EN0-PS42	Encoder 0-pulse 0-0 (TTL)	RES	Input confirmation
		EDM	Contacting Monitoring

EN0-PS42	Encoder A/Ā (TTL)
EN0-PS42	Encoder B/B̄ (TTL)
ENa	Encoder A
ENb	Encoder B
AMIN	Digital output MIN
AMAX	Digital output MAX
AOK	Digital output OK
SY in	Synchronization In
SY OUT	Synchronization OUT
OLt	Brightness output
M	Maintenance
rsv	reserved

Wire Colors according to IEC 60757

BK	Black
BN	Brown
RD	Red
OG	Orange
YE	Yellow
GN	Green
BU	Blue
VT	Violet
GY	Grey
WH	White
PK	Pink
GNYE	Green/Yellow

