

# Pressure Sensor

## FX2P201

Part Number

weFlux<sup>2</sup> InoxSens



- **Analog output: 4...20 mA**
- **Compact, laser-welded stainless steel 316L housing**
- **Precise measuring accuracy:  $\pm 0.5\%$**
- **Very fast response time of  $< 1$  s**

weFlux<sup>2</sup> two-wire pressure sensors with analog output are distinguished by their space-saving design and a short response time of less than one millisecond, making them ideally suited for quick pressure measurement applications – for example when monitoring pressure curves in hydraulic systems. Thanks to the temperature element integrated in the measuring cell, the sensors with a G3/4" flush-mounted process connection are equipped with accurate temperature compensation.



### Technical Data

#### Sensor-specific data

Measuring Range	0...0,25 bar
Measurement Type	relative
Maximum overload pressure	1 bar
Bursting pressure	1,5 bar
Medium	Liquids, gases
Pressure response time (t90)	< 1 ms
Measuring error (total)	$\leq \pm 0,5\%$
Hysteresis	$< \pm 0,1\%$
Linearity Deviation	$< \pm 0,5\%$
Zero-point error	$< \pm 0,1\%$
Repeat Accuracy	$< \pm 0,1\%$
Temperature coefficient zero-point	$< \pm 0,05\% / 10K$
Temperature coefficient range	$< \pm 0,05\% / 10K$

#### Environmental conditions

Temperature of medium	-25...125 °C**
Ambient temperature	-25...80 °C
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 <sub>b</sub> = 24 V)	< 21 mA
Number of analog outputs	1
Analog Output	4...20 mA
Signal source	Pressure
Current Output Load Resistance	< 500 Ohm
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Protection Class	III

#### Mechanical Data

Sensor element	Ceramic membrane
Housing Material	1.4404
Material in contact with media	1.4404; FKM; ceramic
Degree of Protection	IP65 *
Connection	M12 × 1; 4-pin
Process Connection	G3/4"; front
Seal material	FKM

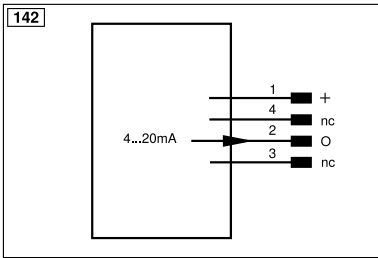
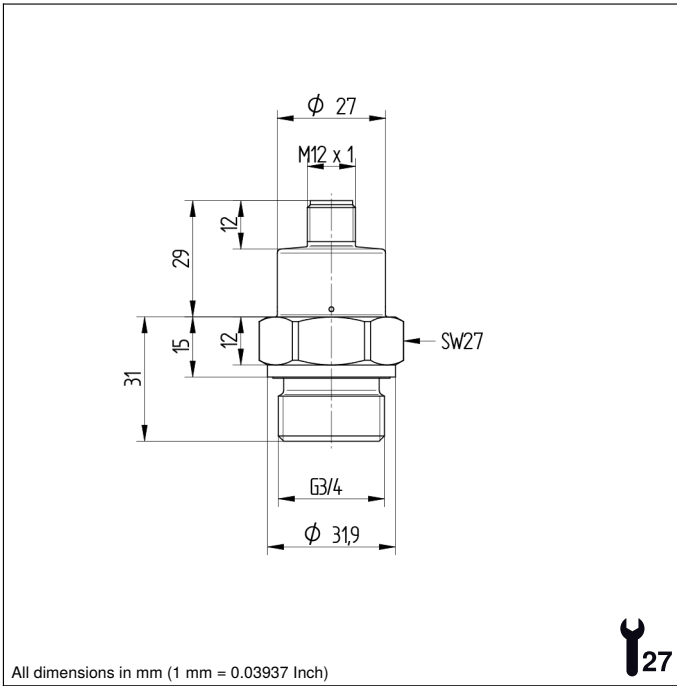
#### Safety-relevant Data

MTTFd (EN ISO 13849-1)	3283,16 a
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Analog Output	●
Connection Diagram No.	142
Suitable Connection Equipment No.	2
Suitable Mounting Technology No.	920

\* Not UL certified

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



Legend					
+	Supply Voltage +	nc	Not connected	EN <sub>BRS422</sub>	Encoder B/B̄ (TTL)
-	Supply Voltage 0 V	U	Test Input	ENA	Encoder A
~	Supply Voltage (AC Voltage)	Ū	Test Input inverted	EN <sub>B</sub>	Encoder B
A	Switching Output (NO)	W	Trigger Input	AMIN	Digital output MIN
Ā	Switching Output (NC)	W-	Ground for the Trigger Input	AMAX	Digital output MAX
V	Contamination/Error Output (NO)	O	Analog Output	AOK	Digital output OK
ȳ	Contamination/Error Output (NC)	O-	Ground for the Analog Output	SY In	Synchronization In
E	Input (analog or digital)	BZ	Block Discharge	SY OUT	Synchronization OUT
T	Teach Input	Amv	Valve Output	OLT	Brightness output
Z	Time Delay (activation)	a	Valve Control Output +	M	Maintenance
S	Shielding	b	Valve Control Output 0 V	rsv	Reserved
RxD	Interface Receive Path	SY	Synchronization	Wire Colors according to DIN IEC 60757	
TxD	Interface Send Path	SY-	Ground for the Synchronization	BK	Black
RDY	Ready	E+	Receiver-Line	BN	Brown
GND	Ground	S+	Emitter-Line	RD	Red
CL	Clock	±	Grounding	OG	Orange
E/A	Output/Input programmable	SnR	Switching Distance Reduction	YE	Yellow
⚡	IO-Link	Rx+/-	Ethernet Receive Path	GN	Green
PoE	Power over Ethernet	Tx+/-	Ethernet Send Path	BU	Blue
IN	Safety Input	Bus	Interfaces-Bus A(+)/B(-)	VT	Violet
OSSD	Safety Output	La	Emitted Light disengageable	GY	Grey
Signal	Signal Output	Mag	Magnet activation	WH	White
BI_D+/-	Ethernet Gigabit bidirect. data line (A-D)	RES	Input confirmation	PK	Pink
EN <sub>o</sub> RS422	Encoder 0-pulse 0/0̄ (TTL)	EDM	Contact Monitoring	GNYE	Green/Yellow
PT	Platinum measuring resistor	EN <sub>A</sub> RS422	Encoder A/Ā (TTL)		