

Pressure Sensor

FX5P201

Part Number

weFlux² 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**

weFlux² 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	-1...10 bar
Measurement Type	relative
Maximum overload pressure	20 bar
Bursting pressure	30 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	$\leq \pm 0,05\% / 10K$
Temperature coefficient range	$\leq \pm 0,05\% / 10K$

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 _b = 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 $\times$ 1; 4-pin
Process Connection	G3/4"; front
Seal material	FKM

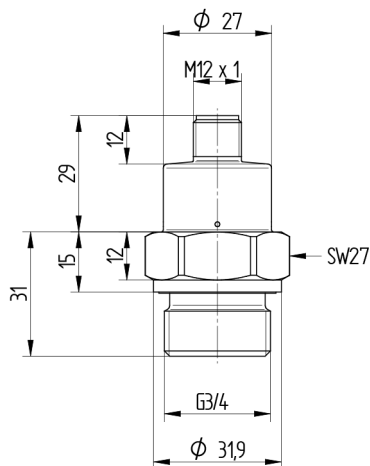
Safety-relevant Data

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

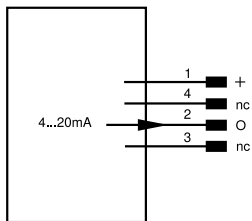
** Sensors up to 125 °C medium temperature suitable. During installation, please ensure that the sensor housing is sufficiently cooled by the surroundings.



All dimensions in mm (1 mm = 0.03937 Inch)



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Legend					
+	Supply Voltage +	nc	Not connected	ENBRS422	Encoder B/B (TTL)
-	Supply Voltage 0 V	U	Test Input	ENA	Encoder A
~	Supply Voltage (AC Voltage)	Ü	Test Input inverted	ENb	Encoder B
A	Switching Output (NO)	W	Trigger Input	AMIN	Digital output MIN
Ä	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	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
BL_D+/-	Ethernet Gigabit bidirect. data line (A-D)	RES	Input confirmation	PK	Pink
ENo RS422	Encoder 0-pulse 0/Ü (TTL)	EDM	Contact Monitoring	GNYE	Green/Yellow
PT	Platinum measuring resistor	ENARIS422	Encoder A/A (TTL)		