

Pressure Sensor

FX1P201

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

Technical Data

Sensor-specific data

Measuring Range	-1...1 bar
Measurement Type	relative
Maximum overload pressure	5 bar
Bursting pressure	7,5 bar
Medium	Liquids, gases
Pressure response time (t ₉₀)	< 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
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	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

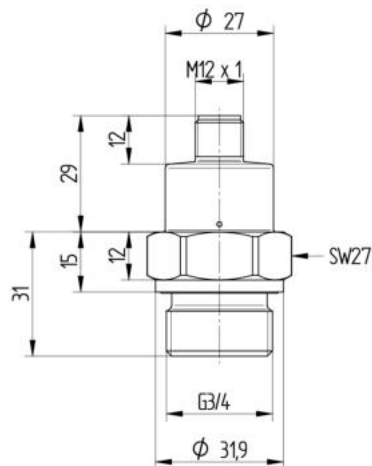
MTTFd (EN ISO 13849-1)	3283,16 a
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Analog Output	●
Connection Diagram No.	142
Suitable Connection Equipment No.	2
Suitable Mounting Technology No.	920

* Not UL certified

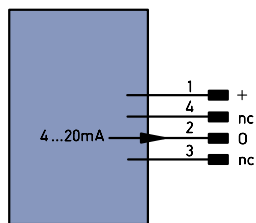
** Sensors up to 125 °C medium temperature suitable. During installation, please ensure that the sensor housing is sufficiently cooled by the surroundings.





All dimensions in mm (1 mm = 0.03937 Inch)

142



Legend

+	Supply Voltage +	PT	Platinum measuring resistor	ENAR5422	Encoder A/Ā (TTL)
-	Supply Voltage 0 V	nc	not connected	ENB5422	Encoder B/B̄ (TTL)
~	Supply Voltage (AC Voltage)	U	Test Input	ENa	Encoder A
A	Switching Output (NO)	Ū	Test Input inverted	ENb	Encoder B
Ā	Switching Output (NC)	W	Trigger Input	AMIN	Digital output MIN
V	Contamination/Error Output (NO)	W-	Ground for the Trigger Input	AMAX	Digital output MAX
Ū	Contamination/Error Output (NC)	O	Analog Output	AOK	Digital output OK
E	Input (analog or digital)	O-	Ground for the Analog Output	SY In	Synchronization In
T	Teach Input	BZ	Block Discharge	SY OUT	Synchronization OUT
Z	Time Delay (activation)	AWV	Valve Output	OLt	Brightness output
S	Shielding	a	Valve Control Output +	M	Maintenance
RxD	Interface Receive Path	b	Valve Control Output 0 V	rsv	reserved
TxD	Interface Send Path	SY	Synchronization	Wire Colors according to IEC 60757	
RDY	Ready	SY-	Ground for the Synchronization	BK	Black
GND	Ground	E+	Receiver-Line	BN	Brown
CL	Clock	S+	Emitter-Line	RD	Red
E/A	Output/Input programmable	±	Grounding	OG	Orange
IO-Link	IO-Link	SnR	Switching Distance Reduction	YE	Yellow
PoE	Power over Ethernet	Rx+/-	Ethernet Receive Path	GN	Green
IN	Safety Input	Tx+/-	Ethernet Send Path	BU	Blue
OSSD	Safety Output	Bus	Interfaces-Bus A(+)/B(-)	VT	Violet
Signal	Signal Output	La	Emitted Light disengageable	GY	Grey
BL-D+/-	Ethernet Gigabit bidirect. data line (A-D)	Mag	Magnet activation	WH	White
EN0.5422	Encoder 0-pulse 0-0 (TTL)	RES	Input confirmation	PK	Pink
		EDM	Contacting Monitoring	GNYE	Green/Yellow

