Pressure Sensor

FX1P201

Part Number

weFlux² InoxSens



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



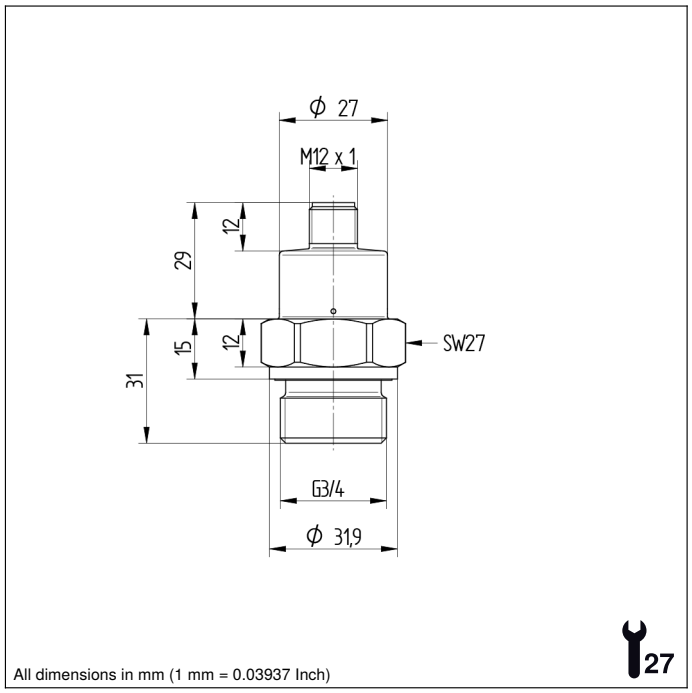
Technical Data

Sensor-specific data	
Sensor element	Ceramic membrane
Measuring Range	-1...1 bar
Measurement Type	relative
Maximum overload pressure	5 bar
Bursting pressure	7,5 bar
Medium	Liquids, gases
Pressure response time (t90)	< 1 ms
Measuring error (total)	≤ ± 0,5 %
Hysteresis	< ± 0,1 %
Linearity Deviation	< ± 0,5 %
Zero-point error	< ± 0,1 %
Repeat Accuracy	< ± 0,1 %
Temperature coefficient zero-point	<± 0,05% /10K
Temperature coefficient range	<± 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	12...32 V DC
Current Consumption (Ub = 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	
Housing Material	Stainless steel, V4A (1.4404/316L)
Material in contact with media	Ceramic
Material in contact with media	Rubber, FKM
Material in contact with media	Stainless steel, V4A (1.4404/316L)
Degree of Protection	IP65 *
Connection Type	Plug variant
Connection	M12 × 1; 4-pin
Process Connection	G3/4"; front
Thread	External thread
Seal material	Fluororubber, FKM
Safety-relevant Data	
MTTFd (EN ISO 13849-1)	3283,16 a
Scope of delivery	1 × initial start-up instructions
	1 × sensor
Analog Output	●
Connection Diagram No.	142
Suitable Connection Equipment No.	2
Suitable Mounting Technology No.	920

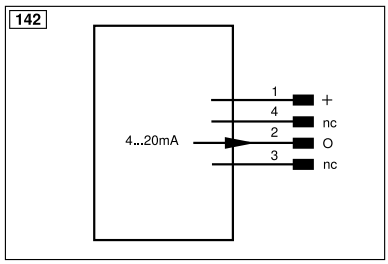
* Not UL certified
** Sensors up to 125 °C medium temperature suitable. During installation, please ensure that the sensor housing is sufficiently cooled by the surroundings.

Complementary Products

IO-Link converter



All dimensions in mm (1 mm = 0.03937 Inch)



Legend					
+	Supply Voltage +	PT	Platinum measuring resistor	ENARS422	Encoder A/Ā (TTL)
–	Supply Voltage 0 V	nc	Not connected	ENBRS422	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
V̄	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
R	Reset 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	ower 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
EN0 RS422	Encoder 0-pulse 0/0̄ (TTL)	EDM	Contactor Monitoring	GNYE	Green/Yellow

Specifications are subject to change without notice V0-26.10.2026