Pressure Sensor

FX1P201

Part Number

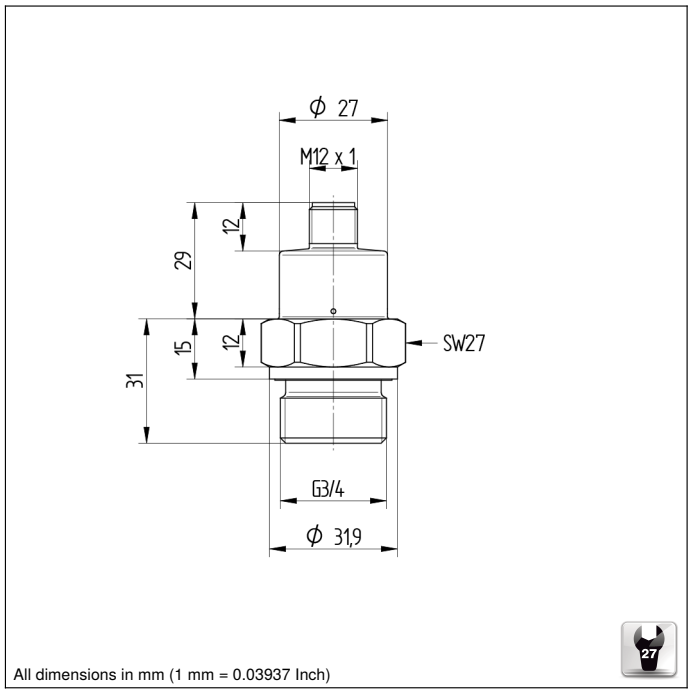
weFlux² InoxSens

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

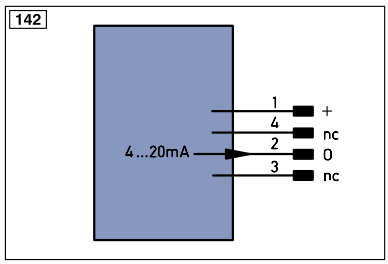
Technical Data

Sensor-specific data	
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	9...28 V DC
Current Consumption (Ub = 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
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)



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)	Ū	Test Input inverted
Ā	Switching Output (NC)	W	Trigger Input
V	Contamination/Error Output (NO)	W–	Ground for the Trigger Input
V̄	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)	AMV	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	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 RS422	Encoder 0-pulse 0-0̄ (TTL)	RES	Input confirmation
		EDM	Contactor Monitoring

ENARS422	Encoder A/Ā (TTL)
ENBRS422	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