Pressure Sensor
with IO-Link

FX2Q101
Part Number

weFlux² **Inox**Sens

- **2 analog outputs: 4 ... 20 mA**
- **Compact, laser-welded V4A stainless steel housing**
- **Pressure and temperature measurement with a single sensor**

weFlux2 pressure sensors measure the relative pressure of any desired media in closed systems. Pressure acting upon the sensor is converted to an electronic signal. The analog outputs read out the measured pressure and temperature values as 4 to 20 mA signals.

Technical Data

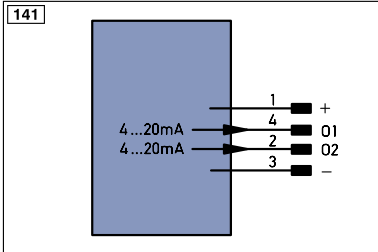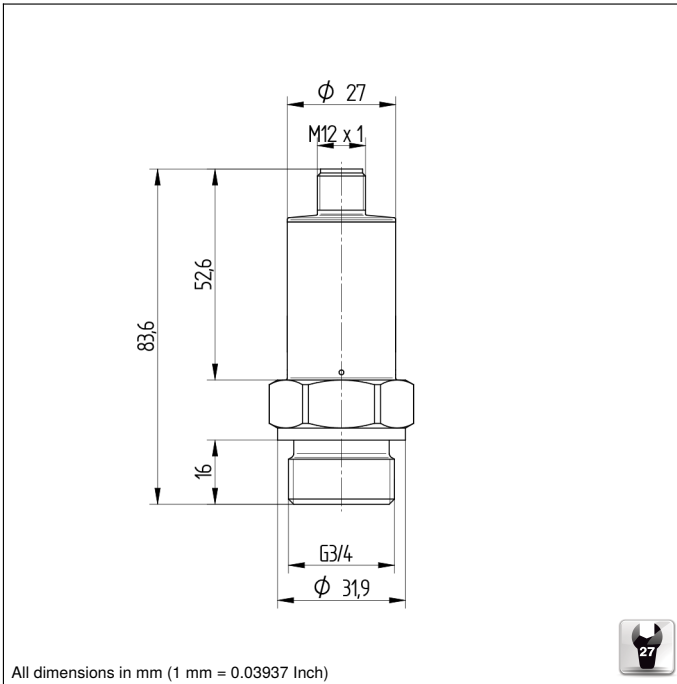| Sensor-specific data	
Measuring Range	0...0,25 bar
Measurement Type	relative
Maximum overload pressure	1 bar
Bursting pressure	1,5 bar
Medium	Liquids, gases
Temperature Measurement Range	-40...125 °C
Response time (t90) Temp	< 1 s
Pressure Response Time (t90)	< 10 ms
Temperature Measurement Accuracy	< ± 1 °C
Measuring error (total)	0,5 %
Hysteresis	< ± 0,1 %
Linearity Deviation	< ± 0,2 %
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)	< 15 mA
Analog Outputs	2
Analog Output	4...20 mA Press / Temp
Resolution	> 11 bit
Current Output Load Resistance	< 500 Ohm
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Protection Class	III
Mechanical Data	
Sensor element	Ceramic diaphragm
Housing Material	1.4404
Material in contact with media	1.4404; FKM; Ceramic
Degree of Protection	IP65 *
Connection	M12 × 1; 4-pin
Process Connection	G 3/4"; front
Safety-relevant Data	
MTTFd (EN ISO 13849-1)	1157,11 a
Analog Output	●

Connection Diagram No.	**141**
Suitable Connection Equipment No.	**2**
Suitable Mounting Technology No.	**920**

* Tested by wenglor
** Sensors suitable up to 125 °C media temperature. During installation, please ensure that the sensor housing is adequately cooled by the surroundings.

All dimensions in mm (1 mm = 0.03937 Inch)

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4...20mA	1	+
4...20mA	4	O1
	2	O2
	3	−

Legend

+	Supply Voltage +	PT	Platinum measuring resistor	EN_{ARS422}	Encoder A/Ā (TTL)
−	Supply Voltage 0 V	nc	not connected	EN_{BRS422}	Encoder B/B̄ (TTL)
~	Supply Voltage (AC Voltage)	U	Test Input	EN_A	Encoder A
A	Switching Output (NO)	Ū	Test Input inverted	EN_B	Encoder B
Ā	Switching Output (NC)	W	Trigger Input	A_{MIN}	Digital output MIN
V	Contamination/Error Output (NO)	W−	Ground for the Trigger Input	A_{MAX}	Digital output MAX
V̄	Contamination/Error Output (NC)	O	Analog Output	A_{OK}	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)	A_{MW}	Valve Output	O_{LT}	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		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
BI_D+/−	Ethernet Gigabit bidirect. data line (A-D)	Mag	Magnet activation	WH	White
EN_{0RS422}	Encoder 0-pulse 0-0̄ (TTL)	RES	Input confirmation	PK	Pink
		EDM	Contactor Monitoring	GNYE	Green/Yellow