

Pressure Sensor

FX5P201

Part Number



- **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.



weFlux² InoxSens

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 (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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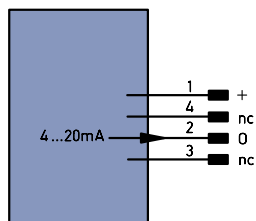
Analog Output	●
Connection Diagram No.	142
Suitable Connection Equipment No.	2
Suitable Mounting Technology No.	920

* 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.



142



+	Supply Voltage +
-	Supply Voltage 0 V
~	Supply Voltage (AC Voltage)
A	Switching Output (NO)
$\bar{A}$	Switching Output (NC)
V	Contamination/Error Output (NO)
$\bar{V}$	Contamination/Error Output (NC)
E	Input (analog or digital)
T	Teach Input
Z	Time Delay (activation)
S	Shielding
RxD	Interface Receive Path
TxD	Interface Send Path
RDY	Ready
GND	Ground
CL	Clock
E/A	Output/Input programmable
	IO-Link
PoE	Power over Ethernet
IN	Safety Input
QSSD	Safety Output
Signal	Signal Output
BL-D/-	Ethernet Gigabit bidirect. data line (A-D)
EN0	Encoder 0-pulse 0-0 (TTL)

PT	Platinum measuring resistor
nc	not connected
U	Test Input
$\bar{U}$	Test Input inverted
W	Trigger Input
W –	Ground for the Trigger Input
O	Analog Output
O –	Ground for the Analog Output
BZ	Block Discharge
AWV	Valve Output
a	Valve Control Output +
b	Valve Control Output 0 V
SY	Synchronization
SY –	Ground for the Synchronization
E+	Receiver-Line
S+	Emitter-Line
$\pm$	Grounding
S_NR	Switching Distance Reduction
Rx+/-	Ethernet Receive Path
Tx+/-	Ethernet Send Path
Bus	Interfaces-Bus A(+)/B(-)
La	Emitted Light disengageable
Mag	Magnet activation
RES	Input confirmation
EDM	Contactator Monitoring

ENAR542Z	Encoder A/ $\bar{A}$ (TTL)
ENBR542Z	Encoder B/B (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