

Pressure Sensor

FFAP012

Part Number

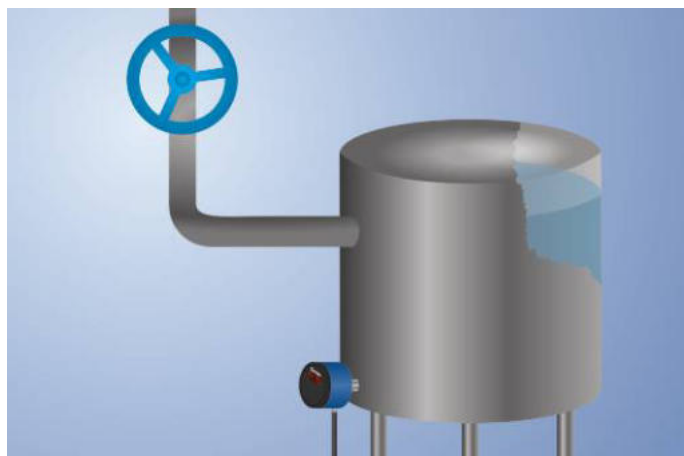
UniBar



- Highly visible output indicator
- Simple operation via the display

UniBar pressure sensors measure the relative pressure in closed systems of any medium in the range -1...600 bar.

UniBar pressure sensors are very easy to use thanks to the integrated display. The highly visible switching status display enables the rapid localization of affected sensors for maintenance processes.



Technical Data

Sensor-specific data

Measuring Range	0...0,1 bar
Maximum overload pressure	1 bar
Bursting pressure	1,5 bar
Adjustable Range	4...100 %
Medium	Liquids, gases
Switching Hysteresis	2 %
Measuring error	< ± 0,5 %
Temperature Drift	0,025 %/K

Environmental conditions

Temperature of medium	-25...80 °C
Ambient temperature	-25...80 °C
EMC	DIN EN 61326-2-3
Shock resistance per DIN IEC 68-2-27	30 g / 11 ms
Vibration resistance per DIN IEC 60068-2-6	20 g (10...2000 Hz)

Electrical Data

Supply Voltage	16...32 V DC
Current Consumption (U _b = 24 V)	< 60 mA
Switching Outputs	1
Response Time	30 ms
Switching Output/Switching Current	< 250 mA
Switching Output Voltage Drop	< 2 V
Analog Output	4...20 mA Press
Resolution	10 bit
Current Output Load Resistance	< 500 Ohm
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Protection Class	III

Mechanical Data

Setting Method	Menu
Housing Material	PBT; PC; FKM
Material Control Panel	Polyester
Material in contact with media	1.4435; 1.4404
Degree of Protection	IP65 *
Connection	M12 × 1; 4-pin
Process Connection	G 1/2"

Safety-relevant Data

MTTFd (EN ISO 13849-1)	1201,51 a
Analog Output	●
Final value, analog output: scalable 2:1	●
PNP NO/NC switchable	●

Connection Diagram No.	533
Control Panel No.	A05
Suitable Connection Technology No.	21

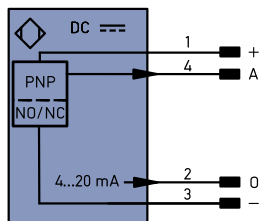
* Tested by wenglor

Complementary Products

Seal G1/2" ZH5G002



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The diagram shows the Wenglor A05 sensor unit, which is a circular device. It features a large rectangular sensor window in the center. Above the window is the Wenglor logo and the model number 'A05'. To the right of the window is a small circular indicator labeled '60' and the word 'BAR'. Below the window are four buttons: a left arrow labeled '99', a central push button labeled '01', a right arrow labeled '22', and a square button labeled '20'.

01 = Switching Status Indicator
20 = Enter Button
22 = UP Button
60 = Display
99 = Right button

+	Supply Voltage +
−	Supply Voltage 0 V
~	Supply Voltage (AC Voltage)
A	Switching Output (NO)
Ȧ	Switching Output (NC)
V	Contamination/Error Output (NO)
Ț	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
OSSD	Safety Output
Signal	Signal Output
Bi-D+/-	Ethernet Gigabit bidirect. data line (A-D)
EN0 RS422	Encoder 0-pulse 0-0 (TTL)
PI	Platinum measuring resistor
nc	not connected
U	Test Input
Ū	Test Input inverted
W	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
E+	Receiver-Line
S+	Emitter-Line
±	Grounding
SnR	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	Contactur Monitoring
ENAR5422	Encoder A/A (TTL)
ENBR5422	Encoder B/B (TTL)

Wire Colors according to
DIN IEC 757

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