

Pressure Sensor

FFAP099

Part Number

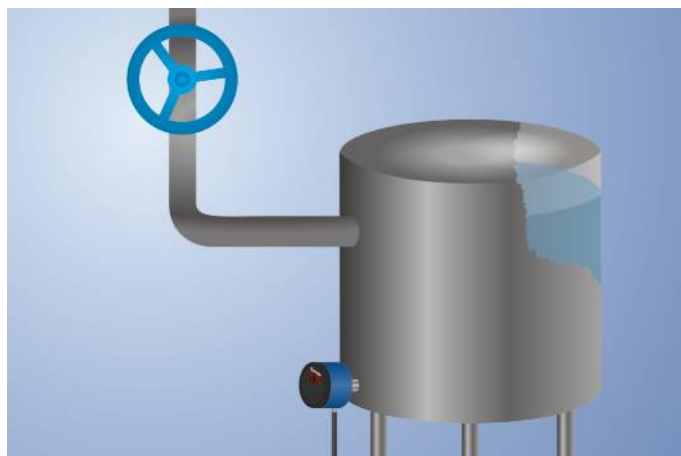
UniBar



- **Highly visible output indicator**
- **Piggable with flush mounting**
- **Simple operation via the display**
- **Space-saving process connection thanks to small pressure membrane**

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

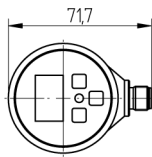
UniBar pressure sensors are very easy to use thanks to the integrated display. The highly visible switching status display enables the rapid localization of affected sensors for maintenance processes.



Technical Data

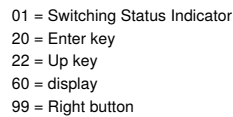
Sensor-specific data	
Measuring Range	0...250 bar
Measurement Type	relative
Maximum overload pressure	500 bar
Bursting pressure	1000 bar
Setting Range	4...100 %
Medium	Liquids, gases
Switching Hysteresis	2 %
Measuring error	< ± 0,5 %
Temperature Drift	0,025 %/K
Environmental conditions	
Temperature of 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
Number of Switching Outputs	1
Response Time	30 ms
Switching Output/Switching Current	< 250 mA
Switching Output Voltage Drop	< 2 V
Analog Output	0...10 V
Signal source	Pressure
Resolution	10 bit
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	IP67 *
Connection	M12 × 1; 4-pin
Process Connection	G 1/2"
Safety-relevant Data	
MTTFd (EN ISO 13849-1)	1201,51 a
Analog Output	●
PNP NO	●
Connection Diagram No.	534
Control Panel No.	A05
Suitable Connection Equipment No.	2
Suitable Mounting Technology No.	904

* Certified by wenglor



27

A05



Legend					
+	Supply Voltage +	nc	Not connected	EN _{RS422}	Encoder B/B' (TTL)
-	Supply Voltage 0 V	U	Test Input	EN _A	Encoder A
~	Supply Voltage (AC Voltage)	$\bar{U}$	Test Input inverted	EN _B	Encoder B
A	Switching Output (NO)	W	Trigger Input	AM _{IN}	Digital output MIN
$\bar{A}$	Switching Output (NC)	W-	Ground for the Trigger Input	AM _{AX}	Digital output MAX
V	Contamination/Error Output (NO)	O	Analog Output	AOK	Digital output OK
$\bar{V}$	Contamination/Error Output (NC)	O-	Ground for the Analog Output	SY In	Synchronization In
E	Input (analog or digital)	BZ	Block Discharge	SY OUT	Synchronization OUT
T	Teach Input	AM _V	Valve Output	ÖLT	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		
RDY	Ready	E+	Receiver-Line	BK	Black
GND	Ground	S+	Emitter-Line	BN	Brown
CL	Clock	$\pm$	Grounding	RD	Red
E/A	Output/Input programmable	SnR	Switching Distance Reduction	OG	Orange
	IO-Link	Rx+/-	Ethernet Receive Path	YE	Yellow
PoE	Power over Ethernet	Tx+/-	Ethernet Send Path	GN	Green
IN	Safety Input	Bus	Interfaces-Bus A(+)/B(-)	BU	Blue
QSSD	Safety Output	La	Emitted Light disengageable	VT	Violet
Signal	Signal Output	Mag	Magnet activation	GY	Grey
BI_D+/-	Ethernet Gigabit bidirect. data line (A-D)	RES	Input confirmation	WH	White
EN _{RS422}	Encoder 0-pulse 0/0' (TTL)	EDM	Contact or Monitoring	PK	Pink
PT	Platinum measuring resistor	EN _{RS422}	Encoder A/Ä (TTL)	GNYE	Green/Yellow