

Pressure Sensor

FFAP097

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.

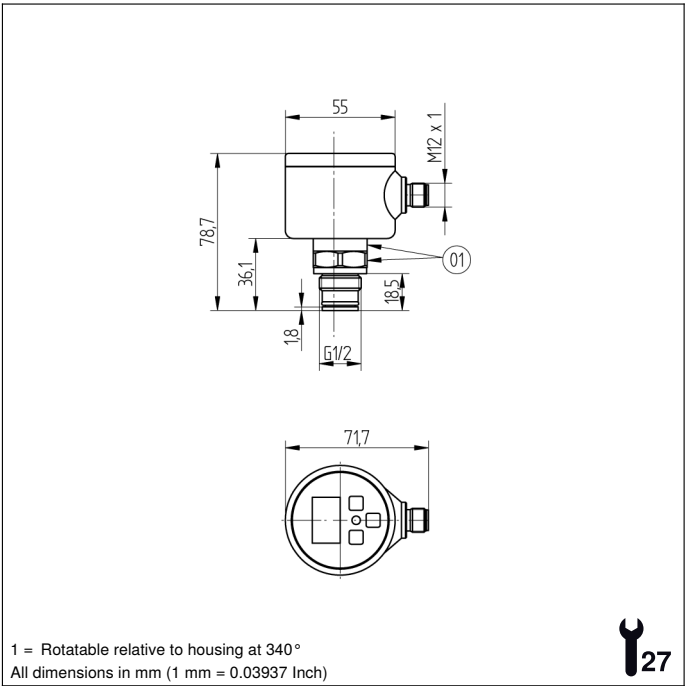
UniBar pressure sensors are very easy to use thanks to the integrated display. The highly visible switching status display enables the rapid localization of affected sensors for maintenance processes.



Technical Data

Sensor-specific data	
Measuring Range	0...160 bar
Measurement Type	relative
Maximum overload pressure	320 bar
Bursting pressure	640 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



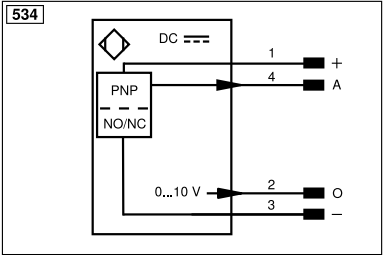
Ctrl. Panel

A05



- 01 = Switching Status Indicator
20 = Enter key
22 = Up key
60 = display
99 = Right button

1 = Rotatable relative to housing at 340°
All dimensions in mm (1 mm = 0.03937 Inch)



Legend			
+	Supply Voltage +	nc	Not connected
-	Supply Voltage 0 V	U	Test Input
~	Supply Voltage (AC Voltage)	Ů	Test Input inverted
A	Switching Output (NO)	W	Trigger Input
Ā	Switching Output (NC)	W-	Ground for the Trigger Input
V	Contamination/Error Output (NO)	O	Analog Output
Ȳ	Contamination/Error Output (NC)	O-	Ground for the Analog Output
E	Input (analog or digital)	BZ	Block Discharge
T	Teach Input	Amv	Valve Output
Z	Time Delay (activation)	a	Valve Control Output +
S	Shielding	b	Valve Control Output 0 V
RxD	Interface Receive Path	SY	Synchronization
TxD	Interface Send Path	SY-	Ground for the Synchronization
RDY	Ready	E+	Receiver-Line
GND	Ground	S+	Emitter-Line
CL	Clock	±	Grounding
E/A	Output/Input programmable	SnR	Switching Distance Reduction
IO-Link	IO-Link	Rx+/-	Ethernet Receive Path
PoE	Power over Ethernet	Tx+/-	Ethernet Send Path
IN	Safety Input	Bus	Interfaces-Bus A(+)/B(-)
OSSD	Safety Output	La	Emitted Light disengageable
Signal	Signal Output	Mag	Magnet activation
BL_D+/-	Ethernet Gigabit bidirect. data line (A-D)	RES	Input confirmation
ENo RS422	Encoder 0-pulse 0/0 (TTL)	EDM	Contact Monitoring
PT	Platinum measuring resistor	ENARIS422	Encoder A/A (TTL)
ENBIS422	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 DIN IEC 60757			
BK	Black	GN	Green
BN	Brown	BU	Blue
RD	Red	VT	Violet
OG	Orange	GY	Grey
YE	Yellow	WH	White
PK	Pink	PK	Pink
GNYE	Green/Yellow		