Easy to install
Easy to transport

Several models available
Max liquid height app. 20 meter

MicroBar® P44

The optimal sensor for liquid storage tanks.

MicroBar® P44 is a sensor especially designed for continuous operation in rough and hazardous liquid environments. A very responsive ceramic sensor element is built into a stainless steel enclosure to provide reliable, high resolution level measurement. The MicroBar® P44 is built for harsh environments and can withstand 40x overpressure of full span.

The slim (Ø40mm) sensor construction opens up for combinations i.e. with dipstick, overfill sensor, etc.. Two separate signal loops provide liquid pressure and temperature detection.

Product ID:	P44
Specifications in brief	
Housing:	Stainless steel 1.4404
Power supply:	12-30 V
Output Signal:	4-20 mA
Applied Standards:	EN60079-0, EN60079-11 EN60079-26
European Directives:	89/336/EC 94/9/EC -ATEX
Ex Marking: (pending)	⟨Ex⟩ II1G Ex ia IIC T4
ATEX:	Nemko 99ATEX219
Accuracy:	± 0,2% fs
Aging accuracy:	± 0,1% per year
Operating Temperature:	-20°C - +80°C
(ATEX operating temp.)	-20°C - +60°C
Temperature sensor T2:	-20°C - +80°C /
(measuring scale) T3:	-25°C - +125°C
Gauging principle:	Hydrostatic pressure

The typical way to install the MicroBar® P44 is by hanging the sensor by the cable inside the tank or to mount it from the outside at the bottom of an above ground tank through a flange. As an option it can be assembled with airtrap with an integrated PTC element as a dedicated sensor for an overfill prevention system and even in combination with aluminum or SS316L pipes. The unique pipe construction allows the sensor to be packed and transported in a small size cardboard box. MicroBar® P44 can be ordered in different product designs, suitable for all tanks.

We make it easy.

Product:	**P44**	**Intrinsically safe probe for liquids**
Communication standard:		4-20 mA current loop.
Environment:		-20 to +80 ºC. (ATEX use -20 to +60 ºC). (IP68)
Installation:		With Airtrap® or hanging from cable.
Dimensions, probe only (Ø x L):		Approx: 4,0 x 25 cm (Airtrap® and rods custom made to size).
CE norms:		EN60079-0, EN60079-11, EN60079-26, EN 50284, EN61326, EN61010-1
Pressure ranges:		100mBar (1 meter) – 1000 mBar (10 meter) / (max 2500 mBar)
Measuring principle:		Hydrostatic pressure, gauge- with air vent. / Airtrap®
Power supply:		12V-30 DC, 4-20mA, loop powered.
Type of sensors element used:		Ceramic pressure transducer UCS2,
Number of signal outputs:		Two, loop powered. Pressure / temperature.
Function:		Pressure loop 4-20mA, temp. loop 4-20mA
Span accuracy:		+/- 0,2%
Zero Accuracy:		+/- 0,2%
Conformity (linearity/hysteresis/rep.ability):		+/- 0,2%
Long-term stability:		+/- 0,1% per year
Temperature effect on Measuring range:		Thermal change within max temp .range, +/-1,0%
Operating temperature in non-ATEX application:		-20 to +80 ºC
Operating temperature in ATEX zone 0		-20 to +60 ºC
Temperature loop, measuring range T2:		scale -20 to +80 ºC
Temperature loop, measuring range T3:		scale -25 to +125 ºC
ATEX notification body number:		0470
Explosion category:		Ex ia IIC T4 - 60ºC
Gas group:		⟨Ex⟩ II 1G
EC type Examination certificate:		Nemko 99ATEX219
Safety limits (data for pressure circuit):		U_i=29V, I_i= 93 mA, P_i= 0,68W, C_i=3nF, L_i= 0 mH
Safety limits (data for temperature circuit):		U_i=29V, I_i= 93 mA, P_i= 0,68W, C_i=22nF, L_i= 0 mH
Connection (Fluorthermoplastic) cable:		Cable with air vent. Pressure=Red/green, Temp.= white/yellow (See separate connection data sheet for details)
Connection with Airtrap®		8-pin M12plug. IP68. Same colour code as above.
O-Ring		FKM/Viton

Tank2Eye

4tech®