Probe for Level Gauging

MicroBar® P34

By 4tech

Easy to install

Max liquid height ca. 20 metres
Several models available

MicroBar® P34

The optimal sensor for liquid storage tanks.

MicroBar® P34 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® P34 is built for harsh environments and can withstand 40x overpressure of full span. Both gauge and absolute pressure versions are available. Typical applications are gases, steam, vapor or liquid process media. The sensor is loop powered from the 4-20mA current loop, with a minimum voltage of12V DC.

Product Name:	**P34**
Specifications in brief:	
Power supply:	12-30 V
Output Signal:	4-20 mA
Applied Standards:	EN61326, EN61010-1 EN50014, EN50020 EN50284
European Directives:	89/336/EC 94/9/EC -ATEX
Ex Marking: (pending)	Ex II1/2G EEx ia IIC T6
ATEX:	TÜV02ATEX1817
Zero Accuracy:	± 0,2% fs
Span Accuracy:	± 0,2% fs
Conformity *:	± 0,2% fs
Aging accuracy:	± 0,1% per year
Standard operating Temp:	-20°C - +70°C
(ATEX zone 0 operating .)	-20°C - +55°C
Gauging principle:	Hydrostatic pressure

The typical way to install the MicroBar® P34 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. MicroBar® P34 can be ordered in different product designs, suitable for all tanks.

* Conformity=(sum of linearity error, hysteresis and repeatability)

We make it easy.

Tank2Eye

4tech AS, Solbraaveien 49, N-1383 Asker, Norway
Phone: +47 32 79 22 30 - Fax: +47 31 40 03 20
mail: sales@4tech.no - www.4tech.no

Data Sheet

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Product:	**P34**	**Intrinsically safe probe for liquids**
Communication standard:		4-20 mA current loop.
Environment:	(IP68)	-20 to +70 ºC. (ATEX zone 0; -20 to +55 ºC).
Installation:		With flange or hanging from cable.
Dimensions, probe only (Ø x L):		Approx: 40 x 12,5 mm .
CE norms:		EN50020, EN50014 EN 50284, EN61326, EN61010-1
Pressure ranges:		100mBar (1 metre) – 1000 mBar (10 metres) / (max 2500 mBar)
Measuring principle:		Hydrostatic pressure, gauge- with air vent.
Power supply:		12-30 VDC, 4-20mA, loop powered.
Type of sensors element used:		Ceramic pressure transducer UCS2,
Function:		Pressure 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 +70 ºC
Operating temperature in ATEX zone 1		-20 to +70 ºC
Operating temperature in ATEX zone 0		-20 to +55 ºC
ATEX notification body number:		0032
Explosion category:		EEx ia IIC T6 - 55ºC
Gas group:		Ex II 1 /2 G
EC type Examination certificate:		TÜV02ATEX1817
Safety limits (data for pressure circuit):		Ui=30VDC, Ii= 300 mA, Pi= 1,0W, Ci=3nF, Li= 0 mH
Safety limits for the sensor cable		Ci=160pF/m, Li= 1 µH/m.
Connection PE cable:		Cable with air vent. Pressure loop:=Red/black, Ground=White. (See separate connection data sheet for details)
O-Ring		FKM/Viton

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