



Multiple mounting options

# MiniBar® P130

## Cost effective sensor family

The customer specific, submersible pressure transducers UC2 are available for gauge pressure ranges from 0... 100 mbar to 0... 20 bar. Other measuring ranges are available on request. The most common applications are in the areas of medical devices and for hydrostatic level measurement. Due to the small build (Ø22mm) the transducers could be used in a large variety of applications. 4tech has the know-how to provide solutions for the most diverse applications, adapting both the electrical and the structural aspects of the pressure transducer to your specific application.

Typical users are heating oil, lubricant and diesel customers.

The central core of the transducer is the capacitive ceramic pressure sensing element, Ceracore M. Its special features include high overload protection (up to 40 times the nominal pressure span), corrosion resistance and long term stability.

We make it easy.

<b>Product ID:</b>	<b>MiniBar® P130</b>
<b>Specifications in brief</b>	
<b>Housing:</b>	Titanium 3.7035
<b>Power supply:</b>	12-30 V
<b>Output Signal:</b>	4-20 mA
<b>Applied Standards:</b>	EN50014 EN50020
<b>European Directives:</b>	89/336/EC 94/9/EC
<b>Ex Marking:</b>	Ⓔ II 1/2 GD EEx ia IIC T6
<b>ATEX:</b>	ISSeP07ATEX003X/1
<b>Accuracy:</b>	± 0,3% fs
<b>Aging accuracy:</b>	± 0,15% per year
<b>Operating Temperature:</b>	-20°C - +70°C
<b>(ATEX Operating Temp.)</b>	-20°C - +65°C
<b>Temperature sensor:</b>	n/a
<b>(measuring scale</b>	
<b>Gauging principle:</b>	Hydrostatic pressure



<b>Product:</b>	<b>MiniBar P130 Intrinsically safe probe for liquids</b>
<b>Communication standard:</b>	4-20 mA current loop.
<b>Environment: (except cable)</b>	-20 to +80 °C. ATEX use -20 to +65 °C. (IP68)
<b>Environment (including cable):</b>	-20 to +70 °C. ATEX use -20 to +65 °C. (IP68)
<b>Installation:</b>	Hanging from cable or using threads. (Options: Fixed mounting , inner or outer threads)
<b>Dimensions, probe only (Ø x L):</b>	Approx: 2,2 x 12,7 cm (+ cable)
<b>CE norms:</b>	EN 50014, EN50020, EN 50284, EN61326-A/B, EN6000-6-2
<b>Pressure ranges:</b>	100mBar (1 meter) – 1000 mBar (10 meter) / (max 2000mBar)
<b>Measuring principle:</b>	Hydrostatic pressure, gauge- with air vent.
<b>Power supply:</b>	12V-30 DC, 4-20mA, loop powered.
<b>Type of sensors element used:</b>	Ceramic pressure transducer UC2.
<b>Number of signal outputs:</b>	One, loop powered. Pressure only.
<b>Function:</b>	Pressure 4-20mA
<b>Resolution in signal processor-ASIC:</b>	13 bit
<b>Span accuracy:</b>	+/- 0,3%
<b>Zero Accuracy:</b>	+/- 0,3%
<b>Conformity (linearity/hysteresis/repeatability):</b>	+/- 0,25%
<b>Long-term stability:</b>	+/- 0,15% per year
<b>Temperature effect on Measuring range:</b>	Thermal change within max temp range, max +/- 1,0%
<b>ATEX notification body number:</b>	0492 ISSeP (Institut Scientifique de Service Public)
<b>Explosion category:</b>	EEx ia IIC T6 T90°C
<b>Gas group:</b>	 II 1/2 GD
<b>EC type Examination certificate:</b>	ISSeP07ATEX003X/1
<b>Safety limits:</b>	$U_i \leq 30V$ , $I_i \leq 250 \text{ mA}$ , $P_i \leq 0,75W$ , $C_i = 3,5nF$ , $L_i = 3 \mu H$ (without cable)
<b>Connection (PE cable):</b>	Cable with air vent. V+ =White / V- =brown (See separate data sheet for details)
<b>O-Ring</b>	HNBR

