



Easy to install
Easy to transport

Several models available
Max liquid height app. 20 meter

FuelBar® 410

The optimal sensor for liquid storage tanks.

FuelBar® 410 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 FuelBar® 410 is built for harsh environments and can withstand 40x overpressure of full span.

The sensor construction includes several patented features. Two separate signal loops provide liquid pressure, temperature and water detection. The slim (Ø41mm) construction opens up for combinations i.e. with dipstick, overflow sensor, etc.

FuelBar® 410 can as well be equipped with an integrated PTC element as a dedicated sensor for an overflow prevention system. A manual dipstick can also be fitted into the same 2 inch socket. The unique pipe construction allows the sensor to be packed and transported in a small size cardboard box. FuelBar® 410 can be ordered in different product designs, suitable for all tanks.

We make it easy.



Product ID:

FuelBar® 410

Specifications in brief

Housing:	Stainless steel 1.4404
Power supply:	12-30 V
Output Signal:	4-20 mA
Applied Standards:	EN50014 EN50020
European Directives:	89/336/EC 94/9/EC (ATEX)
Ex Marking:	Ex I G EExia IIC T4
ATEX:	NEMKO 99 ATEX 219
Accuracy:	± 0,2% fs
Aging accuracy:	± 0,1% per year
Operating Temperature:	-20°C - +80°C
(ATEX Operating Temp.)	-10°C - +70°C
Temperature sensor:	-50°C - +50°C
(Measuring scale)	
Gauging principle:	Hydrostatic pressure





Product:	FuelBar® 410 Intrinsically safe probe for liquids
Communication standard:	4-20 mA current loop.
Environment:	-20 to +80 °C. ATEX use -10 to +70 °C. (IP68)
Installation:	With Airtrap® or hanging from cable.
Dimensions, probe only (Ø x L):	Approx: 4,1 x 25 cm (Airtrap® and rods custom made to size).
CE norms:	EN 50014, EN50020, 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. inside 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 4-20mA, temp. 4-20mA (scale -50 to +50 °C)
Water level switch:	Water float switch with reed magnet.
Resolution in signal processor compensation:	13 bit
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, max +/- 1,0%
ATEX notification body number:	0470 Nemko
Explosion category:	EEx ia IIC T4 (Ta= -20 - +70°C)
Gas group:	Ex II 1 G
EC type Examination certificate:	Nemko 99ATEX219
Safety limits (data for pressure circuit):	Ui=29V, li= 93 mA, Pi= 0,68W, Ci=3nF, Li= 0 mH
Safety limits (data for temperature circuit):	Ui=29V, li= 93 mA, Pi= 0,68W, Ci=22nF, Li= 0 mH
Water level switch signal:	Temp. override signal. Temp.loop current li>20mA
Connection (Fluorthermoplast) cable):	Cable with air vent. Pressure=Red/green, Temp.= white/yellow (See separate data sheet for details)
Connection with Airtrap®	8-pin M12plug. IP68. Same colour code as above.
O-Ring	FKM/Viton

