

FracSENS LB 6770

DENSITY METER

Rugged meter for hydraulic fracturing
and cementing applications



 **BERTHOLD**

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The FracSENS LB 6770 nuclear density meter can connect directly to the control system. Without the transmitter unit, the outputted count rate can be used in the control system to calculate PPA, PPG, or SGU in both low and high pressure applications.

The new scintillation technology ensures high sensitivity and allows drastic reduction of source activity compared to conventional ion chamber detectors. A maximum of 20 mCi has proven sufficient for traditional fracturing applications.

With outer dimensions of 2.2 x 11.2 inches the FracSens LB 6770 is much smaller than any other fracturing density meter. Due to the compact design and its internal structure the density meter is extremely resistant to vibration and mechanical shock, which has been proven successfully in excessive tests (up to 500 g) and in real applications.

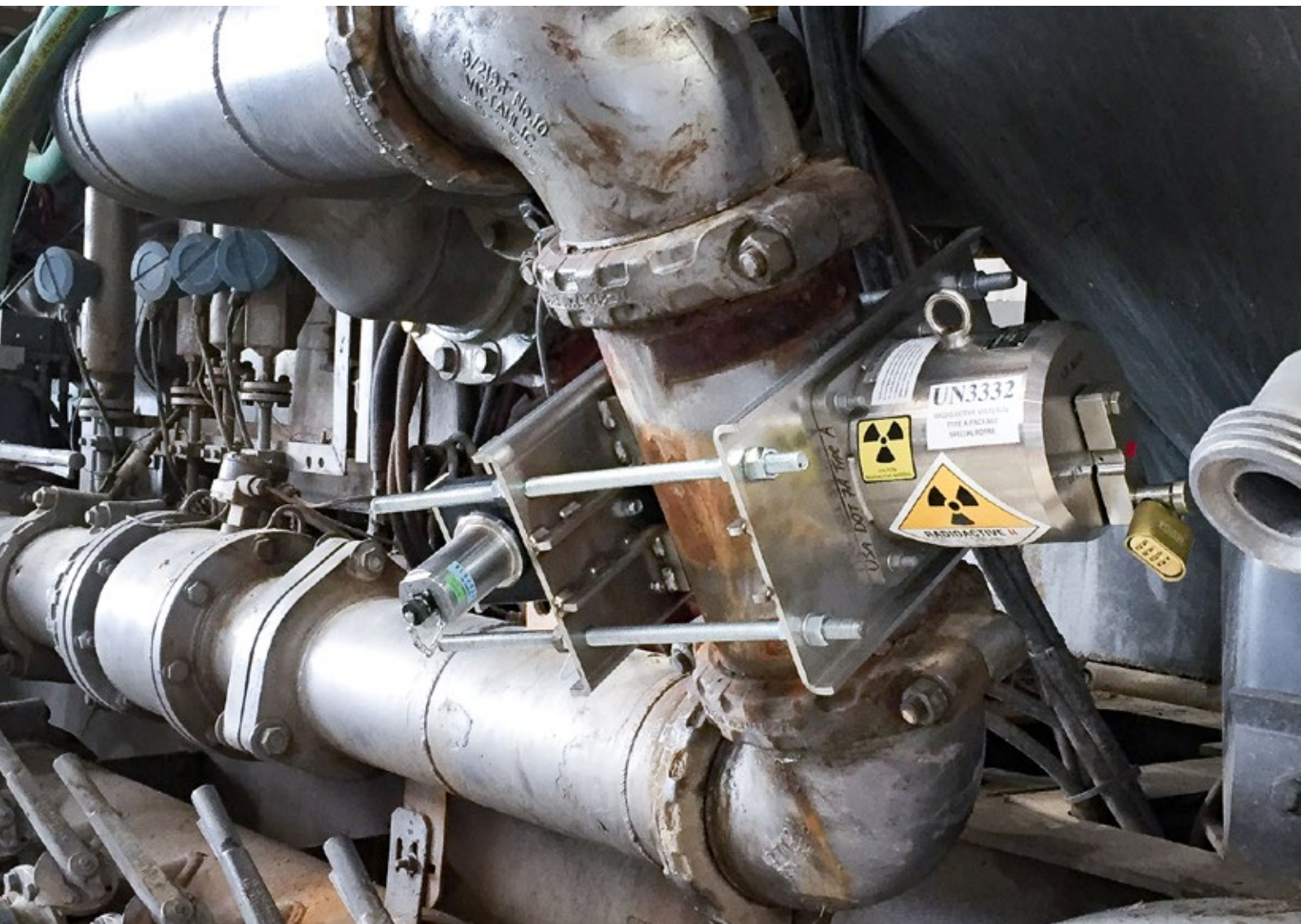
Ready to use in minimal time

Depending on customer preferences the FracSENS LB 6770 either connects to the control system directly or to the DuoXpert LB 475 Fracturing transmitter. In the first case customers will receive a signal proportional to count rate or density, which could either be a voltage output, a current output, or a pulse output – whatever fits customer control system. Even Modbus RTU communication is available. The FracSens LB 6770 is factory pre-configured according to customer needs and only a quick calibration with empty pipe and water or with water and a slurry of known density is needed to set the system up.

When the FracSens 6770 is connected to the DuoXpert LB 475 transmitter, several other output alternatives like PPA, PPG, percent, solids, specific gravity, or density become available with the transmitter performing all calculations, providing a 4-20 mA output signal.

Easily retrofit existing systems

Source replacement is costly, time consuming, and does not work towards a reduction in overall site source activity. Fortunately, the FracSENS LB 6770 can be used in combination with existing sources and clamps. We also offer adapters and clamps to adapt to customer's current system. Especially in low radiation conditions, our highly sensitive detectors improve the signal to noise ratio, providing superior measurement performance when compared to competing systems.



Features

- Condensed to lowest energy consumption
- Short response time
- Adjustable thresholds for individual selection of energy spectrum
- Configurable via the DuoXpert LB 475 transmitter or via the service modem

Technology

- State-of-the-art SiPM technology
- Best repeatability and temperature stability on the market $\leq 0.2\%$ over 100°C temperature range (tested according to subsea standard ISO 13628-6)
- Rugged design ensures long availability
- Highly sensitive scintillation technology
- Various output options available (0/4...20mA, 0...10V, pulses, Modbus)



Extended Warranty

We guarantee that this detector will survive in the most demanding of fracturing conditions and we give 18 months warranty from time of shipment as a standard for this product.



THE EXPERTS IN MEASUREMENT TECHNOLOGY

Berthold Technologies stands for excellent know-how, high quality and superior reliability. The customer is always the focus of our solution. We know our business!

Using our varied product portfolio, our enormous specialized knowledge and extensive experience, we develop suitable solutions together with our customers for new, individual measurement tasks in a wide variety of industries and applications. Berthold Technologies is specialized in radiometric process measurements for over 70 years. This is our core competence with state-of-the-art and innovative products and solutions covering a vast range of industries and applications.

We are here for you – worldwide!

The engineers and service technicians from Berthold Technologies are wherever you need them. Our global network assures you fast and above all competent and skilled assistance in case of help needed. No matter where you are, our highly qualified experts are willing and ready to assist you in a timely manner with the best possible solution for you, even in the most challenging applications.

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