

STANDPIPE (PUMP) PRESSURE



Frequency
Converter



Barrier
Amplifier



Encoder
Interface



Pressure Transmitter for Monitoring Pump Pressure

- High stability
- High accuracy
- High shock and vibration capacity
- Individual types and pressure ranges

Parameter Specifications

- Operating pressure ranges from 0 to 700 bar
- System accuracy $\leq 1\%$ of full scale
- System resolution 1 bar

Principle of Operation

A diaphragm separates a micro-machined silicon sensor with temperature compensation from the pressure medium. Silicon oil serves as pressure transmitter. An integrated amplifier converts the output test current, which is proportional to the pressure density, into a corresponding DC signal (4 – 20mA).

Maintenance

Once the system is set up and calibrated, generally no maintenance will be required.

Visual routine checks (daily) shall include the observation of possible leaks in the sensor hydraulic system.

Data Processing

The powerful DMS software records, visualizes and displays data on different locations on the well site.

The DMS supports the setting of individual alarms for “High” and “Low” limits.

Technical Specifications

SENSOR		
▪ Type or model	Pressure transmitter	
▪ Certified for hazardous area	Intrinsically safe to EEx ia IIC T4	
▪ Certificate of conformity	BASEEFA No. Ex-89.C.2251	
▪ Operating temperature range	-20 °C ... +80 °C	
▪ Supply voltage	24 V DC	
▪ Installation point	Connected to the load cell of the standpipe pressure indicator (coupling connection e.g. 1/4" NPT HANSEN)	
Evaluation Unit		
	Transmitter / Repeater Unit	Ex-Barrier Amplifier with BUS System
▪ Type or model	Isolating amplifier – inputs EEx ia IIC	Barrier Amplifier - EEx ia IIC
▪ Certificate of conformity	BASEEFA No. Ex-90.C.2358X	TÜV 99 ATEX 1499 X
▪ Signal output	4 – 20 mA	4 – 20 mA
▪ Supply voltage	24 V DC	24 V DC
▪ Bus System	Not applicable	Field bus independent connectors
▪ Installation point	Logging unit; plugged into 19-inch frame (DMS rack)	