

KEYDRILL BOTTOM MOUNT PULSER GEN3 (BMP-G3)

Overview:

KeyDrill Bottom Mount Pulser Gen3 (BMP-G3) encodes MWD telemetry into a sequence of pressure surges (positive pulse) in the mud column by restricting mud flow through a reciprocating poppet. The tool is fully retrievable and replaceable. The BMP-G3 is a drop in replacement, bottom mount, servo pulser module that is fully compatible with the QDT-compatible MWD system. It incorporates cutting-edge technologies to achieve significant improvements in performance. Available in Max Operating Temperatures of 175°C, 185°C and 200°C.

The BMP-G3 is available with Piston or Bladder style oil compensation based on the customer's preference. Combined with servo motor technology, the KeyDrill BMP-G3 has excellent power efficiency and offers more accurate control than the legacy QDT solenoid pulser.

Key Features:

- High power efficiency and accurate motor control.
- Strong push and pull for high LCM environments.
- High-speed pulsing (up to 0.125s PW)
- Continue operating without using Hall sensors -no recycle or trip necessary.
- Configurable clearing pulses including option to indicate sensor less mode while downhole.
- High Vibration/Shock resistance
- Low noise when running with short hops like Babelfish/SLB RSS
- KPD Test Utility software provides an intuitive user interface & high-speed memory download.
- Energy consumption for each pulse
- Real-time plotting of 3 axis vibration, temperature, voltage, current, pulse width, flow status, & hall sensor state.
- Life Remaining Analyzer, total pulse count, & servo poppet/orifice wear counter.

Specifications:

Min Flow Rate: 35 gpm (8 L/sec) in water
Max Flow Rate: 1,100 gpm (67 L/sec) in water
Max Operating Temperature 175°C, 185°C and 200°C available
Max Hydrostatic Pressure: 20,000 PSI (137.9 MPa)
Operating Voltage: 20-38V
Nominal Current: 12mA
Shock: 1,000G / 0.5 millisecond
Vibration: 20g RMS 30-500 Hz Random
Mud Sand Content: <1% recommended
Poppet Push/Pull Force: >100 lbs
Output Flow Switch: 0-5VDC
Power Consumption: 400 hours per 29V Lithium Battery
Length (End to End) & Weight:
Standard: 51.5" (1,308mm) / 25 lbs (11.3 kg)
With Gamma: ... 66.2" (1,681.48mm) / 33 lbs (14.9 kg)
Housing Diameter: 1.875" OD