

Black Lightning Bonded Piston



Black Lightning™ Single Durometer bonded piston

The National Oilwell Varco Black Lightning Bonded is a single durometer, solid bonded piston, designed for a wide range of harsh drilling fluid environments.

The Black Lightning Bonded is designed to offer the following:

- Higher temperature resistance up to 300° Fahrenheit
- Superior resistance to tear and extrusion
- Increased run times at pressures above 5000 PSI

The Black Lightning Bonded is manufactured from a highly engineered single durometer elastomeric compound. This highly cross-linked polymer matrix is specially formulated for increased toughness in moderate to high fluid temperatures. The Black Lightning exhibits superior chemical and abrasion resistance, while maintaining the highest mechanical properties. For additional information see your National Oilwell Varco representative.

Engineered Elastomeric Compound Designed For

Increased resistance to water, oil, and synthetic-based drilling fluids

Increased temperature resistance

Increased resistance to tear, extrusion, and particle embedment

High-strength alloy piston hub

Bonded Black Lightning pistons boast a time-proven, heat-treated alloy steel hub

Piston hub resists deformation, even at the highest of working pressures

Piston body design

Reduced mass for lower weight

Reverse compatibility to existing piston rods

Bonded design prevents fluid migration and erosion between body and elastomer