

The SWITCH™ - Patents: GB2421525 & US 7,650,942,B2

The Switch is a new and innovative downhole product, designed to allow the operation of two ESPs from a single power cable, expanding the options for multiple ESP configuration. Workovers become less of a risk with minimum impact on downtime - in essence, The SWITCH opens up new opportunities to the operator which were previously unachievable.



Product Applications

- Dual, Triple and Quad ESP Configurations
- Retrofit Single ESP Well to Dual ESP
- Dual ESP + Induction Heater
- Intelligent Well Completions (SmartWells)
- Cable Redundancy for Single ESP

Product Specification

- Design Life (Below packer): 10 years
- Rated Pressure: 5,000Psi
- Working Temperature: 0°C to 121°C
- No. of Switching Cycles: 100
- Qualified Voltage (U): 5kVAC
- Qualified Current: 140A
- Production Tubing: up to 3.5" - 4.5" subject to casing size (secures to production tubing)

Key Features

- For running dual ESP systems with a single power cable to surface
- Switch between two 3-phase ESP units
- Low profile: (suitable for an 8.25" drift diameter with a production tubing up to 4.5")
- Pressure compensated for long term seal performance
- Dielectric oil filled
- Downhole resistant materials to NACE and NORSOK standards
- Resistant to gas decompression
- Maintains standard packer, clamps and wellhead
- Single ESP feed through to surface
- Up to 5" adjustability on the MLE terminations
- Commercial benefits to customer
- Cable terminations based on field proven penetrator technology

Qualification Testing

- Hydrostatic Pressure Test and Temperature Cycling
- Gas Test and Rapid Gas Decompression Test
- Vibration and Shock Test
- High Current Temperature Rise
- Downhole Simulation
- Power Frequency

