FORTRESS SPV

SIDE POCKET GAS LIFT VALVE

TIER 1

The Fortress SPV from Tier 1 is an injection pressure operated (IPO) valve and designed to be installed in a Fortress Side Pocket Mandrel (SPM).

Pressurized gas is injected down the annulus between the tubing and the casing. The Fortress SPV diverts this gas into the tubing string to provide lifting assistance. These valves do not require a workover rig to retrieve and install, saving time and money on wells that have significant variations in production parameters.

As the gas enters the tubing string it mixes with the liquid level above the Fortress SPV and subsequently reduces the overall density of this fluid. With a reduction in hydrostatic head the bottom hole, pressure can once again drive production from the formation to surface. Multiple valves are often installed along the tubing string to minimize the injected gas pressure requirements and maximize longevity of the gas lift system through the production cycle of the well.

CURRENT SIZES

- 25.4mm (1”)
- 38.1mm (1.5”)

STANDARD OFFERING

- Viton packing
- Monel or Tungsten seats
- 68.9 MPa (10,000 psi) rating
- Orifice sizes: 4.76mm (0.1875”), 6.35mm (0.25”), or 7.94mm (0.3125”)
- Check valves

OPTIONS

- Sour service
- Various elastomer materials
- 25.4mm (1”) Valves - Bk-2 Latch or BEK-2
- 38.1mm (1.5”) Valves - RK or RA Latch
- Available for reverse flow valve
- API certified

FEATURES & BENEFITS

- Wireline-retrievable system eliminates the need to pull the tubing to repair or replace the valve
- Three-ply Monel bellows with viscous fluid protection providing functional longevity
- Mechanical stop limiting over-stroke of bellows which prevents damage from high pressure
- Integral check valve reducing the risk of debris contamination within the valve
- Standard retrieving profiles to ensure compatibility with common wireline equipment
- Two sets of packing to straddle and isolate mandrel ports ensuring longevity of pressure isolation

APPLICATIONS

- Artificially lifted production wells
- Liquid loaded wells
- High liquid production
- Liquid rich gas production
- Oil wells
- Continuous or intermittent flow regimes
- Vertical / Deviated / Horizontal