HALLIBURTON

COMPLETION SOLUTIONS | ISOLATION BARRIER VALVES

FS2 fluid loss isolation barrier valve

Reliable, economical fluid control and barrier technology

FEATURES AND BENEFITS

- Provides barrier for safe interventionless upper completion installation and testing
- Prevents fluid loss to the reservoir
- Reduces costs on subsea or deep wells
- Provides barrier in a well suspension system
- No well- or depth-specific setup required
- Debris-tolerant, non-translating ball system
- Design provides unlimited mechanical opening/ closing of valve
- Remote actuation cycling mechanism isolated from wellbore fluid and debris
- Actuation system unaffected by changes in hydrostatic pressure, thus enhancing long-term suspension capability

Overview

When the success of your completion project relies on effective flow control and wellbore barriers, the Halliburton FS2 isolation barrier valve provides a reliable, interventionless solution.

The FS2 valve isolates the formation below the uppermost gravel-pack packer, holding pressure from above and below, to help ensure complete formation isolation. The FS2 being used in sand control frac-pack, gravel-pack, and standalone screen applications as well as intelligent and standard completions.

The FS2 valve provides a reliable means of:

- Preventing fluid loss to formations after completing initial gravel pack operations
- Isolating the reservoir during upper completion installation
- Isolating formations during up-hole operations throughout the life of the well

The closure device is a proven, high-performance ball mechanism that provides a positive bi-directional seal in brine and oil-based mud environments. The debris- tolerant, non-translating ball design eliminates unnecessary movement within the mechanism during opening and closing operations allowing operation in debris-laden environments.

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How it works

Optimum placement of the FS2 valve is normally below the gravel pack or liner hanger assembly. Washpipe, located on the bottom of the service tool, is extended through the valve. A collet shifting tool is attached to the end of the washpipe, which on retrieval closes the valve, immediately isolating the formation and allowing inflow or positive pressure-testing above the ball. Remote actuation in the form of hydraulic pressure cycles is then used to open the valve after upper completion installation.

Options

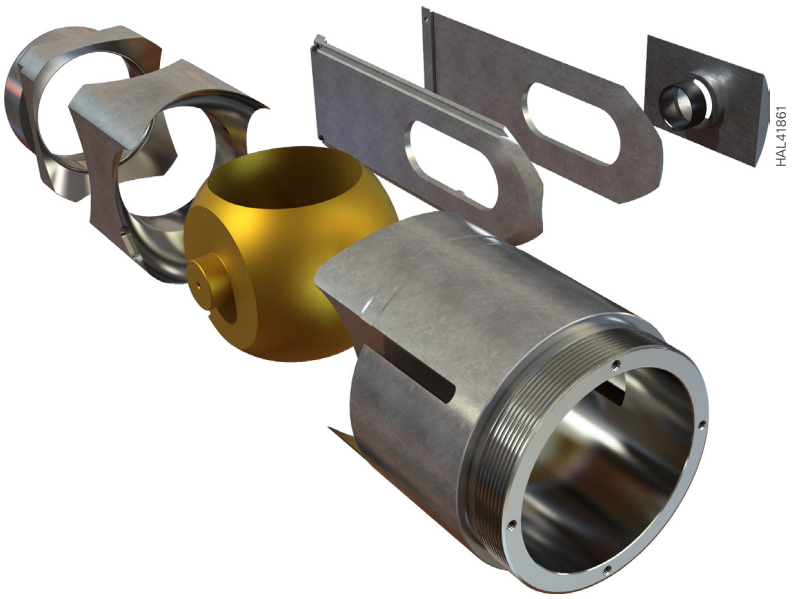
- Available to suit 7-in., 7 5/8-in., 9 5/8-in./9 7/8-in. and 10 3/4-in. casing
- Ball differential rating up to 10,000 psi (689.5 bar)
- Collapse rating up to 15,000 psi (1034.2 bar)
- Burst rating up to 12,000 psi (827.4 bar)
- Temperature rating to 375°F (190.5°C)
- Increased differential opening capability

Qualification testing

Each FS2 valve is subjected to extensive qualification testing during prototyping. In addition to rigorous discrete component level testing, a full valve test program designed to help ensure reliable performance in well conditions is carried out.

Testing includes:

- Remote opening at maximum rated temperature
- Differential opening capability test
- Collapse testing at maximum rated temperature
- Multiple remote open tests in debris
- Qualified in accordance with ISO 28781/API 19V requirements. API 19V monogram available



MatchSet® liner swivel sub

For more information, contact your local Halliburton representative or visit us on the web at www.halliburton.com