

FLOW-SURE BV

THE WIRELESS BALL VALVE FROM METROI

The Metrol FLOW-SURE BV is a wirelessly controlled, hydrostatic pressure operated ball valve and can be used as:

- a tester valve during DST's
- a lateral isolation valve for long term production control
- a formation saver valve
- enclosed well test isolation valve

DESCRIPTION

The FLOW-SURE BV is a wirelessly controlled, hydrostatic pressure operated ball or isolation valve and can be part of the primary suspension barrier envelope.

The combination of Metrol's wireless communications with a non-elastomeric high pressure sealing system for the first time enables a well to be controlled from the surface without pressure pulsing or control lines, and allows the ball to be positioned above or below a packer without any requirement for packer feedthroughs.

It can also be used as an alternate flow path enabling well kill, or act as a formation saver valve located in a tail pipe. A FLOW-SURE BV installed below a permanent packer can isolate the well enabling the DST string to be removed for extended build-ups or long-term reservoir observation.

Metrol's PARAGON wireless gauges can be used in conjunction with the FLOW-SURE valves to provide 'real-time' tubing and annulus pressure monitoring both above and below the packer or packers.

The valves include industry tested dual redundant control systems capable of independently cycling the tool for robust and reliable performance.

FEATURES & BENEFITS

FEATURES

- > Multiple tools can be run at the same time, for fully selectable zonal testing
- > Integrated with proven Metrol PARAGON Telemetry system
- > Dual redundant control system
- > Metal to metal primary seals
- Built-in control system diagnostic pressure monitoring

BENEFITS

- > Surface wireless control
- No control lines
- No packer feedthroughs
- > No nitrogen
- Ball position sensor in-built. Activation and ball position confirmation provided at surface
- > H,S, CO, and acid compatible

APPLICATIONS & OPTIONS

APPLICATIONS

- Multi-zone testing
- > Extended build-up
- > Lateral isolation valve
- Well test valveFormation Saver Valve
- Alternate flow path

OPTIONS

> Long-term battery packs

Material Standard:

- > Back-up mechanical shifting
- Internal or external rupture open/close overide
- > Zero hydrostatic (nitrogen driven)

SPECIFICATIONS

Max. OD: 5.5"[139.7mm] Tool ID: 2.25"[57mm] ID Flow Area: 3.976sq.in[2565mm2] **Ball Differential Static:** 10,000psi[69MPa] Max. Annular Pressure: 17.500psi[120MPa] Max. Tubing Pressure: 17.500psi[120MPa] **Ball Opening Differential:** 5,000psi[35MPa] Min hydrostatic: 1,200psi[8.3MPa]

 Max. functions:
 45 cycles

 Temperature rating:
 350°F[175°C]

 Length:
 24.6ft[7.5m]

 Weight:
 1125lbs[510kg]

 Tensile Strength:
 315,000lbf[1401kN]

 Min. battery life:
 >90days at 175°C

 >5years at 90°C

 Connection:
 3 ½" 15.8# PH6

NACE MR 0175/ISO 15156

