## **Completion Barrier Valve (CBV)**

Protect the formation and reduce OPEX with remote opening



The Caledyne Completion Barrier Valve (CBV) delivers reliable isolation between the upper and lower completion and enables interventionless hydraulic opening to save downhole trips and reduce OPEX.

Using a patented remote-opening module, the CBV can be hydraulically opened by simply applying tubing pressure cycles. The module offers an adjustable number of open/close cycles (up to 20) to suit a variety of applications, and it can be independently tested prior to valve assembly if desired. A full backup module is also incorporated into the valve to provide 100% redundancy.

Once open, the CBV can be mechanically closed using a shifting tool which can also reopen the valve, enabling an unlimited number of mechanical cycles. An interlock mechanism and auto-release shifting profiles ensure the ball valve is always in the fully open or fully closed position before the shifting tool disengages, eliminating the risk of the tool becoming hung up inside the valve or for pressure or flow accidentally closing the valve.

The CBV's ball valve features a fully spherical design to improve strength, and because the ball is always in contact with the upper and lower ball seats, the risk of debris settling inside the rotating mechanism is eliminated, helping operators to avoid costly remedial operations.

To help ensure long-term, sand-free production, the CBV can be combined

## Applications

- Formation isolation during upper completion installations
- Packer setting

## **Features and benefits**

- Adjustable, remote-opening module
  - Enables valve actuation using only tubing pressure cycles
  - Provides up to
    20 open/close cycles
  - Withstands differential pressures across the ball to maintain reliable open/close performance
  - Reduces the risk of formation damage by using well pressure rather than applied pressure
  - Offers option for mechanical actuation
- Fully spherical ball valve geometry
  - Delivers improved strength
  - Prevents debris from settling inside the rotating mechanism
- Internal equalizing mechanism
  - Reduces opening load requirements under high differential pressures
  - Allows the valve to be run above a packer
- Smooth internal bore
  - Minimizes debris accumulation risks



with field-proven sand control systems from Baker Hughes, a GE company (BHGE).

Contact your local BHGE representative today to learn more about how the CBV can reduce your OPEX while delivering reliable formation isolation.



CBV Specifications		
Parameter	4½ in. x 7 in.	5½ in. x 9⁵/ଃ in.
Maximum OD	5.866 in. (149.0 mm)	8.043 in. (204.28 mm)
Minimum ID	3.314 in. (84.18 mm)	4.561 in. (115.85 mm)
Pressure rating across ball	5,000 psi (34.5 MPa)	5,000 psi with 7,500 psi optional (34.5 MPa with 51.7 MPa optional)
Pressure rating across housing	7,500 psi (51.7 MPa)	10,000 psi (68.9 MPa)

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