

Gas Vent Valve

Enables gas to vent through the packer to prevent ESP gas lock



Rated up to 5,000 psi
[35 MPa]



Rated up to 163 degC
[325 degF]

APPLICATIONS

- Wells with electrical submersible pumps (ESPs)
- Low-volume gas lift installations
- Sweet to moderately corrosive environments

BENEFITS

- Improves well production by reducing ESP interruptions due to gas locking
- Maintains well safety with automatic closing

FEATURES

- Rod piston actuation system
- Sleeve-valve closure system
- Reduced hydraulic chamber area

The gas vent valve improves well production by preventing gas locking in ESP wells with BluePack ESP* retrievable hydraulic-set ESP production packers.

Normally closed, the gas vent valve is installed in the auxiliary bore of the packer to isolate the annuli above and below the packer. When too much gas accumulates below the packer, the valve can be opened by pressuring up on a hydraulic line. The open flow path allows the gas to vent to the upper annulus, preventing the ESP from becoming gas locked.

Operation

To actuate the valve, pressure is applied from the surface. A rod piston pushes the isolation sleeve down until the ports are aligned, allowing gas flow. When the pressure is bled off, a power spring pushes the piston and sleeve upward, closing the system.

Gas Vent Valve Specifications

Max. working pressure, psi [MPa]	5,000 [34]
Working temperature range, degF [degC]	40–325 [4–163]
Flow area, in ² [mm ²]	0.785 [506]
Lower connection size and type	1.9-in NUE Pin
Hydraulic line nominal size and type	¼-in NPT
Full close pressure, psi [MPa]	1,325 [9]
Full open pressure, psi [MPa]	2,140 [15]



Gas vent valve.