Schlumberger

XLI-B Barrier Series Gas Lift Valves

Injection-pressure-operated for high-pressure wells

APPLICATIONS

- Subsea gas lift installations
- High-pressure, high-injection-rate gas lift installations
- High-pressure, high-injection-rate deepwater gas lift installations
- High-performance gas lift installations

BENEFITS

- Enhanced safety as wellbore integrity is ensured during shut-in periods
- Reduced downtime with reliable performance in deepwater, high-pressure environments
- Increased operating pressure envelope for deeper gas injection
- Reduced costs with no modifications required for existing completion practices or surface facilities

FEATURES

- Reliable, retrievable gas lift valve design using field-proven technology
- Subsurface-actuated assembly with no physical link to the surface
- Barrier-qualified, reverse-flow check valve system that provides positive seal between tubing and casing annulus
- Familiar injection-pressure-operated techniques with simplified hardware

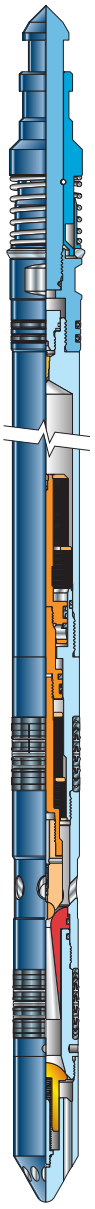
Schlumberger XLI-B Barrier Series injection-pressure-operated gas lift valves extend the capability of traditional gas lift systems by increasing the range of operating pressures from 2,000 to 5,000 psi. Based on field-proven Camco* gas lift technology, this system enables operators to complete high-pressure gas lift wells and operate with higher injection pressures and deeper injection points to enhance well performance. With higher operating pressures, wells can be completed with fewer mandrels and valves.

To accommodate higher operating pressures, this 1¾-in valve incorporates an innovative edge-welded bellows system. Manufactured using state-of-the-art technology and corrosion-resistant materials, the bellows reduces the internal gas charge while increasing the operating injection pressure. During offshore operations, this configuration allows the operator to inject high-pressure gas and improves the depth of injection required to maximize drawdown and increase production.

High-pressure performance

XLI-B Barrier Series valves are part of the XLift* family of high-pressure gas lift valves that operate with higher injection pressures and deeper injection points. The XLift system uses a positive-sealing check system instead of the velocity check valve systems used in traditional gas lift valves.

The XLI-B injection-pressure-operated valve is subsurface controlled with no physical link to the surface. It features a venturi flow configuration for more efficient and stable gas flow throughout and a positive check valve that eliminates potential leak paths to the casing or tubing annulus. The large 1¾-in OD enhances performance.



XLI-B injection-pressure-operated gas lift valve.

XLI-B Barrier Series Gas Lift Valves

XLI-B Valve Specifications	
OD (not including latch), in	1.500
Length with latch, in [mm]	34.063 [865]
Check valve test pressure (max. differential), psi [kPa]	10,000 [45,965]
Operating pressure (max. injection gas pressure on surface), psi [kPa]†	5,000 [34,474]
Max. temperature, degF [degC]	350 [177]
Min. temperature, degF [degC]	50 [10]
Venturi orifice size range, in	8/64 to 32/64
Materials	
Body parts	Inconel® 925, Monel® 400 and K-500
O-rings and seals	Viton®
Bellows	NA
Seat/venturi	Tungsten carbide
Packing	Modified Campac carbon and moly-filled Teflon® with PTFE/carbon fiber/graphite-filled PEEK™ backup and Monel® K-500 retainer ring
Secondary accessories	
Running tool	XI 1.75
Pulling tool	2-in JDS type
Mandrel series	XLG

www.slb.com/gaslift

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