

# Conventional Production-Pressure-Operated Valves

Gas lift valves for continuous or intermittent tubing flow production

## APPLICATIONS

- Gas lift service
- Continuous or intermittent tubing flow

## ADVANTAGES

- Capable of operating with production or injection pressure
- Integral reverse-flow check valves or floating valve seat design

Part of Camco\* gas lift and subsurface safety systems, conventional production-pressure-operated gas lift valves are normally used for production-pressure-operated gas lift production in either continuous or intermittent tubing flow applications. A nitrogen-charged, multi-ply MONEL® bellows provides the force necessary to maintain the valves in a normally closed position.

This line of valves includes 5/8-in [15.9-mm] OD JR-50, 1-in [25.4-mm] OD JR-40, and 1½-in [38.1-mm] OD JR-20 valves. The JR-50, JR-40, and JR-20 valves have crossover seats that allow production pressure to act on the bellows. JR-50 valves have an integral reverse-flow check valve. When used with the appropriate conventional mandrel and reverse-flow check valve, JR-40 and JR-20 valves can be operated by either production or injection pressure and used for either tubing or annular flow.

## Port sizes

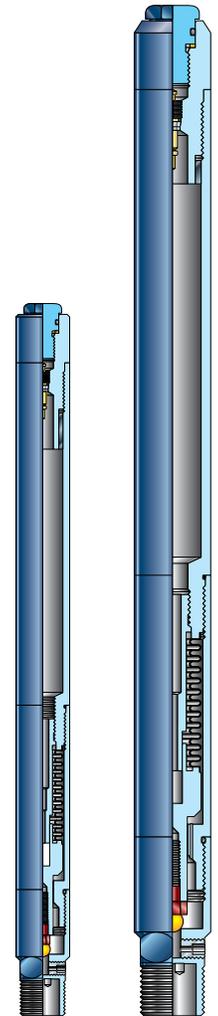
The port size available for the 5/8-in OD JR-50 valves is 3/32 in [2.3 mm].

The port sizes available for the 1-in JR-40 OD valves are 1/8 and 3/16 in [3.2 and 4.8 mm].

The port sizes available for the 1½-in OD JR-20 valves are 1/8, 3/16, and 1/4 in [3.2, 4.8, and 6.4 mm].

## Operation

In production-pressure-operated gas lift applications, production fluid enters the valve and acts on the effective bellows area. The production pressure necessary to compress the bellows of JR-50, JR-40, and JR-20 valves is controlled by precharged nitrogen pressure. As production pressure overcomes the precharged nitrogen pressure in the bellows or the preset spring force, the bellows is compressed and lifts the stem tip off the seat. Injection gas then flows through the seat, past the reverse-flow check valve, and into the production conduit.



JR-40 (left) and JR-20 (right) valves.

## Engineering Data for Conventional Production-Pressure-Operated Valves

Type	OD, in [mm]	Connecting Thread, in [mm]	Reverse-Flow Check Valve	Mandrel
JR-50	0.625 [15.9]	0.250 - 18 NPT	Integral	†
JR-40	1.000 [25.4]	0.500 - 14 NPT	BF, B-1	B, B deflector lug, BR deflector lug
JR-20	1.500 [38.1]	0.500 - 14 NPT	CF, J-20	C Series

†Contact your Schlumberger representative.