

R-20 Series Gas Vent Valves

Slickline-retrievable, flapper-type valves for annular gas vent installations to 5,000 psi [34,475 kPa]

APPLICATIONS

- Electrical submersible pump installations
- Low-volume gas lift installations
- Working pressures to 5,000 psi [34,475 kPa]
- Medium setting depths
- Sweet to moderately corrosive environments

BENEFITS

- Predictable operation
- Decreased friction
- Reduced hydraulic chamber area
- Deeper setting depths than valves with concentric pistons

FEATURES

- Camco* flapper-closure system
- Patented rod-piston actuation system

The Camco R-20 gas vent valve controls the flow of annular vent gas by isolating the annular flow from the tubing flow at the valve. Designed for electrical submersible pump installations and rated to 5,000-psi [34,475-kPa] working pressure, this valve is suitable for medium setting depths in sweet to moderately corrosive environments.

The R-20 valve is installed in an MMGE-SV side pocket mandrel with a separate hydraulic control line for positive control of annular flow. MMGE-SV mandrels are designed for use with API standard-weight production tubing and feature an external control line connection to the side pocket.

The R-20 safety valves feature the innovative and proven Camco flapper-closure system. Designed for strength, the flapper mechanism has a single, large hinge with a hinge pin made from a high-strength alloy.

The patented rod-piston actuation system provides predictable operation, decreased friction, a reduced hydraulic chamber area, and deeper setting depths than valves with concentric pistons.

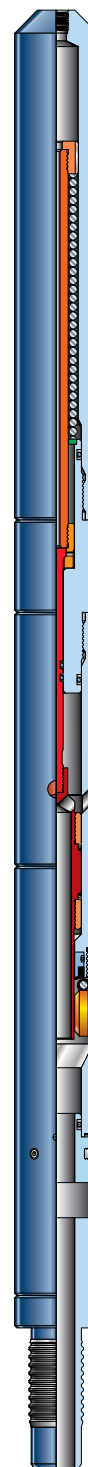
OPERATION

Open

When the valve is open, annular gas flows through the packer, the annular vent line, and the valve. The gas exits into the annulus above the packer and through the ports in the valve body and mandrel.

Close

If hydraulic control line pressure is released, a spring-loaded flow tube moves upward, allowing the flapper to close and shut in the annulus.



R-20 series gas vent valve.

Engineering Data for R-20 Gas Vent Safety Valves

Latch	Max. OD with Latch (in [mm])	Max. OD without Latch (in [mm])	Flow Area (in ² [mm ²])	Working Pressure (psi [kPa])
RK-SV	1.786 [45.4]	1.546 [39.3]	0.307 [197.9]	5,000 [34,475]