

## Applications:

- Sweet to moderately corrosive environments
- Low volume gas lift installations
- Wide range of setting depths
- Electrical submersible pump installations

## Benefits:

- Adapts to multi-bore packers
- Predictable operation
- Decreased friction
- Reduced hydraulic chamber area
- Deeper setting depths

## Features:

- Unique sleeve-closure system
- Proven rod-piston actuation system

## Description:

The Camco\* PGV-S sleeve-closure type Packer Gas Vent valve controls the flow of annular vent gas in electrical submersible pump installations and injection gas in low volume gas lift installations. Commonly attached to the top of a multi-bore packer, the valve vents gas from below the packer to the annulus above when actuated from surface. The PGV-S is normally installed with a dedicated hydraulic control line for positive surface control. The PGV-S is rated to 5,000 psi [34,474 kPa] working pressure.

The PGV-S valve design features an innovative sleeve-closure system. The proven rod-piston hydraulic actuation system provides predictable operation, decreased friction, a reduced hydraulic chamber area, and deeper setting depths than valves with concentric operating pistons.

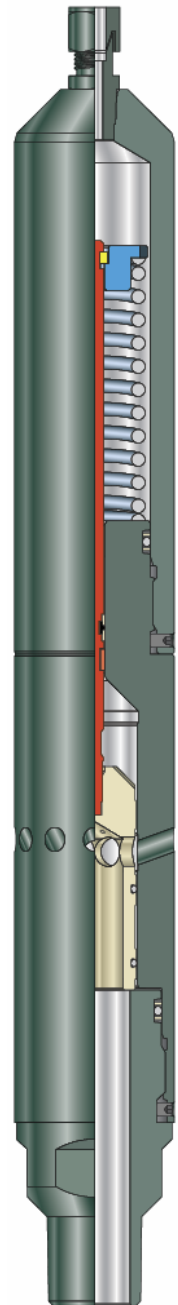
## Operation:

### Open

When the valve is open, annular gas flows through the packer and valve. It exits into the casing annulus above the packer through the ports in the valve's closure sleeve and body.

### Close

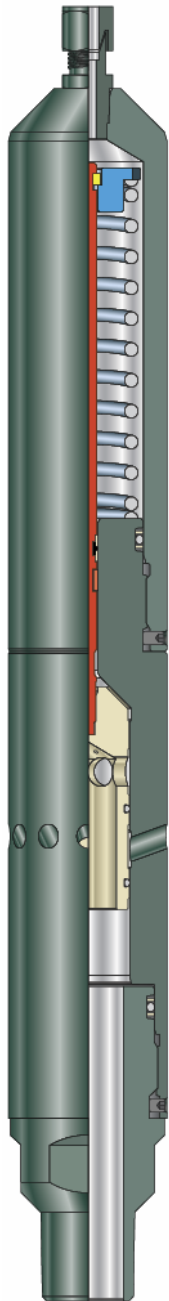
If hydraulic control line pressure is lost for any reason, the spring-loaded closure sleeve moves upward allowing the valve to close and shut in the annulus below the packer.



PGV-S  
Open Position



Q1-0099



PGV-S  
Closed Position

## Annular Lock-Out:

An optional annular lock-out feature is an assembly that can be installed in the factory when specified or added as a subassembly at a later date in the field. If equipped with the Annular lock-out feature the PGV-S-ALO can be permanently locked in the open position to by-pass the closure mechanism. Applied annular pressure above a predetermined value will activate the lock-out.

## Engineering Data<sup>†</sup>:

Flow Area (Bore) In <sup>2</sup> [mm <sup>2</sup> ]	Flow Area (Ports) In <sup>2</sup> [mm <sup>2</sup> ]	Flowtube Travel in. [mm]	Hydraulic Chamber Area in. [mm]	Over All Length in [mm]	Max OD in [mm]	Min ID in [mm]
0.484 [312.3]	0.484 [312.3]	0.960 [24.4]	0.039 [251.6]	16.540 [420.1]	1.785 [43.6]	0.785 [19.9]

Lower Connection NPT in [mm]	Hydraulic Connection NPT in [mm]	Working Pressure psi [kPa]	External Parts	O-ring/ Back-ups	Tee Seal/ Back-ups
0.500 [12.7], 0.750 [20], 1.250 [31.75]	0.250 [8]	5,000 [34,474]	410/13Cr	Viton®/ PEEK®	Viton®/Teflon®

Max Differential Pressure psi [kPa]	Max Differential Operating Pressure psi [kPa]	C/L Pressure to Open Against Max Setting Depth Spring psi [kPa]
5,000 [34,474]	4,500 [31,026]	8,000 [55,158]

Test Pressure (Hydraulic Chamber) psi [kPa]	Full Open Pressure psi [kPa]	Full Closed Pressure psi [kPa]
7.500 [51,710]	3.000 [20,684] †	1,500 [10,342] †

\* Camco™ licensed by Schlumberger. Camco is a mark of Schlumberger.

™ The Tejas logo is a trademark of Tejas Research & Engineering LLC

† Opening and closing pressure are dependent on setting depth and fluid gradient. The engineering data provided illustrate the scope of this product offering and are not all inclusive. Additional sizes and pressure ratings are available upon request.

Direct request for quotations to: [product.sales@tejasre.com](mailto:product.sales@tejasre.com)