

# PGV-S-DS Deep-set Packer Gas Vent Valve



## Applications:

- Sweet to moderately corrosive environments
- Gas lift operations
- Electrical submersible pump installations

## Benefits:

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

## Features:

- Unique sleeve-closure system
- Proven rod-piston actuation system
- Erosion resistant materials in gas flow path
- Radial adjustability after make-up to packer

## Description:

The Camco\* PGV-S-DS Deep-set 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-DS is normally installed with a dedicated hydraulic control line for positive surface control.

The PGV-DS valve can accommodate deep set applications of 10,000 ft [3,048 m] TVD through an innovative parallel spring design. Operating pressures are reduced through magnet stacks enabling low surface equipment requirements. When hydraulic operating pressure is relieved, spring force alone returns the valve to the normally closed position. The isolation sleeve coupled to a 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.

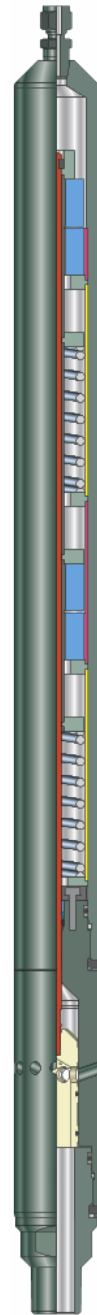
## Operation:

### *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 body.

### *Close*

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

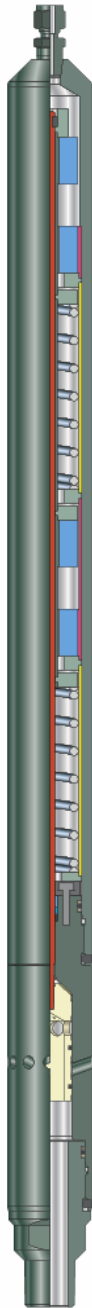


PGV-S-DS  
Open Position



Q1-0099

# PGV-S-DS Deep-set Packer Gas Vent Valve



PGV-S-DS  
Closed Position

## 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]	0.860 [21.8]	0.039 [251.6]	26.620 [676.2]	1.780 [45.2]	0.780 [19.8]

Lower Connection NPT in [mm]	Hydraulic Connection NPT in [mm]	Working Pressure psi [kPa]	External Parts	O-ring/ Back-ups	Tee Seal/ Back-ups
0.750 [20]	0.250 [8]	10,000 [68,948]	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]
12.500 [86,184]	3.000 [20,684] †	1,500 [10,342] †

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† 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)