

# TRSV-25T HPHT Series

Tandem Tubing Retrievable SCSSV



## Applications:

- xHPHT wells
- Sweet to severely corrosive environments
- Temperatures from 75 deg F to 500 deg F

## Benefits:

- Fit for service design rigorously tested and qualified to in-situ conditions
- Reduced potential for flow erosion
- No internal shifting components for Lock-out
- Fully tested and qualified for class 4S service
- Piston / seal system qualified to 30,000 psi @ 500 deg F

## Features:

- Robust, compact design w/reduced OD
- Minimized internal components and leak paths
- Non-equalizing design
- API-14A Class 1 certified
- Metal to metal body joint design, four quadrant envelope tested at temperature to ISO 13679 standards

## Description:

The Tejas TRSV HPHT Series is a Tubing Retrievable Surface Controlled Subsurface Safety Valve (SCSSV). It is a non-equalizing, HPHT safety valve. The TRSV HPHT is designed to minimize the loss of reservoir fluids or production equipment by shutting in the well in the event a catastrophic surface or subsurface event were to occur.

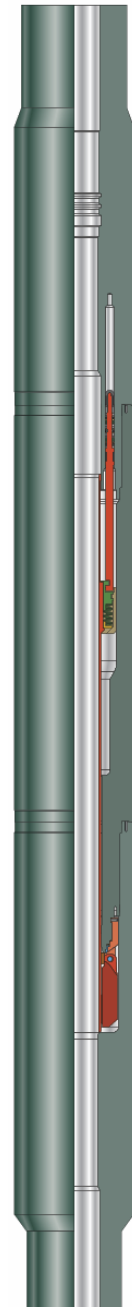
The valve is a rod piston actuated, normally spring closed safety valve which is held open with control pressure supplied from the surface by a hydraulic control line that extends to the valve, through the wellhead from an emergency shut-down (ESD) system at the surface. Removing the control line pressure will return the valve to the normally closed position.

The Tejas TRSV HPHT is offered with a remediation tool to permanently lock the safety valve in the full opened position, allowing the non-functioning SCSSV to be permanently disabled for the extraction with the tubing or allowing unrestricted operation of the secondary SCSSV if one is deployed.

Since wireline retrievable back-up valves are not desired in xHPHT applications, the TRSV HPHT is available as a tandem redundant assembly.

The Tejas TRSV HPHT SCSSV has been designed, validation tested, and qualified to meet, or exceed the requirements of the latest editions of API-14A and the PER-15K standards to address current and future challenges faced by the industry as it moves into more extreme environments.

Tejas implemented Failure Mode and Effects Analysis (FMEA) techniques to manage risk in design and evaluate the design systemically to account for external load cases that could have an effect on the SCSSV's performance or life expectancy. Coupled with an exhaustive testing program the TRSV HPHT SCSSV offers a robust, reliable, and proven solution to xHPHT challenges.



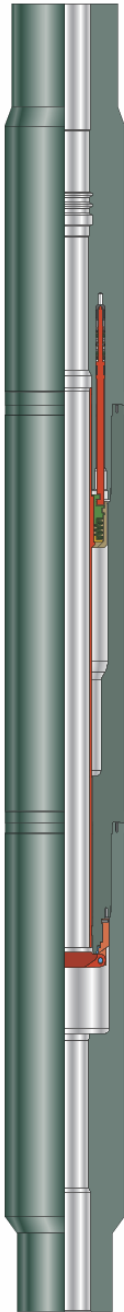
TRSV-25T  
Section  
Open Position



Q1-0099

# TRSV-25T HPHT Series

## Tandem Tubing Retrievable SCSSV



TRSV-25T  
Section  
Closed Position

The Tejas TRSV-25T (Tandem) uHPHT Tubing Retrievable Safety Valves are 25,000 psi rated working pressure, non-equalizing, tandem mounted dual safety valves; designed to provide a fully redundant SCSSV system to minimize the loss of reservoir fluids or production equipment by shutting in the well if some catastrophic surface or subsurface event were to occur.

Each valve is a fully independent, rod piston actuated, normally spring closed safety valve which is held open with independent control pressure supplied from the surface by a dedicated hydraulic control line that extends from each valve, through the wellhead to an emergency shut-down (ESD) system at the surface. Releasing control line pressure will return the valves to their normally closed position.

The Tejas Lock Open Tool permanently locks the corresponding tubing retrievable safety valve in the full opened position, allowing the SCSSV to be permanently disabled thereby allowing unrestricted operation of the secondary SCSSV if one is deployed.

### Engineering Data†:

Model	TRSV-25	TRSV-25
<b>Tubing Size</b> in [mm]	3.500 [88.9]	4.500 [114.3]
<b>Max OD</b> in [mm]	5.710 [145]	7.220 [183.2]
<b>Polished Bore</b> in [mm]	2.375 [60.3]	3.190 [60.3]
<b>Working Pressure</b> psi [kPa]	25,000 [172,368]	25,000 [172,368]
<b>Tensile Strength</b> lbf [N]	1,476,252 [669,616]	2,174,330 [988,331]
<b>Over All Length</b> ft [m]	5.71 [1.74]	6.5 [1.98]

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† 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)