

eSV (Beta)

Electric Tubing Retrievable SCSSV



Applications:

- Up to 2,000 ft setting depth
- Up to 5,000 psi tubing shut-in pressure
- Sweet to severely corrosive environments

Benefits:

- Best in class designed reliability
- Simple to bring wells into production
- Easy to run in any well configuration
- Choice of metallurgy, NACE Materials

Features:

- Simple, robust design minimizing internal components and leak path
- Equalizing and Non-equalizing options available
- Compact design with lower cost
- Reduced OD that allows for ease of running in the hole
- API 14A 12th ed. Validation Grade V2 (Class 1 & 2) Certification
- Fully qualified four quadrant ISO 13679 tested metal to metal body joint connections
- Working pressures to 5,000 psi

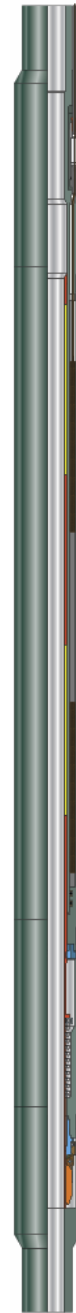
Description:

The eSV Story,

Camco* Products & Services built the first production electronic solenoid valve under license from the original inventors in the 1980s. There have been 12 or more installations of this valve design in wells over the years, deployed by Camco. At that point in its history, Camco was the world leader in the hydraulic SCSSV market and subsequently made a business decision not to pursue further development of the eValve believing it was consuming its own market.

Deep set SCSSV applications at that time were non-existent. As a result, assignment and ownership of eValve returned to the original inventor/licensors. With recent renewed industry interest in electric SCSSVs for deep set applications, the owners of the eValve contacted Tejas about bringing it up to current industry standards, converting the old solenoid valve into the new Tejas "eSV".

The original principal of operation is simple, very straight forward and exceedingly rugged. A magnetic flux generated by an energized solenoid coil motivates an armature's movement which opens the eSV. Power off closes the valve. A beta eSV currently exists and is immediately available for testing. Tejas' recommended approach for further development would comprise technical "gates" as a part of a comprehensive product development and qualification program to your specific well requirements.



eTRSV
Open Position



Q1-0099

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Significant advances in electronics, metallurgy, sealing systems, cabling as well as validation/verification methodologies have been incorporated into the new Tejas eSV. Application of these technological advances and incorporating them into the eSV design by Tejas' experienced SCSSV engineers, has moved the eSV's capabilities forward. When coupled with Tejas' rigorous validation and verification program in our world class HPHT SCSSV laboratory, the result is an electric valve which operates reliably in the subsea environment. Tejas offshore certified service engineers ensure proper installation of the equipment.

* Camco is a trademark of Schlumberger

Engineering Data:

Pressure Rating psi [kPa]	Temperature Rating °F [°C]	Power to Open amps	Power To Hold Open amps	Power to Close	Close Time	FSSD
5,000 to 15,000 [34,474 to 103,421]	350 [177]	25	8	Power Off	Immediate	Unlimited
<p>* Equalizing & Non-Equalizing models available * API-14A Certification Available ™ The Tejas logo is a trademark of Tejas Research a& Engineering LLC † 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.</p> <p style="text-align: center;">Direct request for quotations to: product.sales@tejasre.com</p>						