

FORTRESS TRV

TUBING RETRIEVABLE GAS LIFT VALVE



The Fortress TRV from Tier 1 is an injection pressure operated (IPO) valve that is installed in conjunction with a Fortress Tubing Retrievable Mandrel (TRM) and positioned in the well bore via the tubing string.

Pressurized gas is injected down the annulus between the tubing and the casing. The Fortress TRV diverts and diffuses this gas into the tubing string to provide lifting assistance of the producing liquids.

As the gas enters the tubing string it partially displaces the liquid level above the Fortress TRV and subsequently reduces the density of this fluid column. By designing the gas lift installation using well specific information the system will provide a reduction in hydrostatic head within the tubing that will permit production from the formation to surface. Multiple valves are often installed to minimize the injected gas pressure requirements and maximize longevity of the gas lift system throughout the production cycle of the well.

CURRENT SIZES

- ⇒ 25.4mm (1")
- ⇒ 38.1mm (1.5")

STANDARD OFFERING

- ⇒ Viton packing
- ⇒ Monel or Tungsten seats
- ⇒ 68.9 MPa (10,000 psi) rating
- ⇒ Orifice sizes: 4.76mm (0.1875"), 6.35mm (0.25"), or 7.94mm (0.3125")
- ⇒ Check valve

OPTIONS

- ⇒ Sour service
- ⇒ Various elastomer materials
- ⇒ Reverse flow valve
- ⇒ API certified

FEATURES & BENEFITS

- ⇒ Compatible with sand-laden production for diversity of application
- ⇒ Minimal moving parts ensuring reliability
- ⇒ Three-ply Monel bellows with viscous fluid protection providing functional longevity
- ⇒ Mechanical stop limiting over-stroke of bellows which prevents damage from high pressure
- ⇒ Integral check valve reducing the risk of debris contamination within the valve

APPLICATIONS

- ⇒ Artificially lifted production wells
- ⇒ Liquid loaded wells
- ⇒ High liquids content production
- ⇒ Liquid rich gas production
- ⇒ Oil wells
- ⇒ Vertical / Deviated / Horizontal
- ⇒ Continuous or intermittent flow

