

Single-Acting Upstrain Equalizing Valve

Applications

- Run with compression-set packers

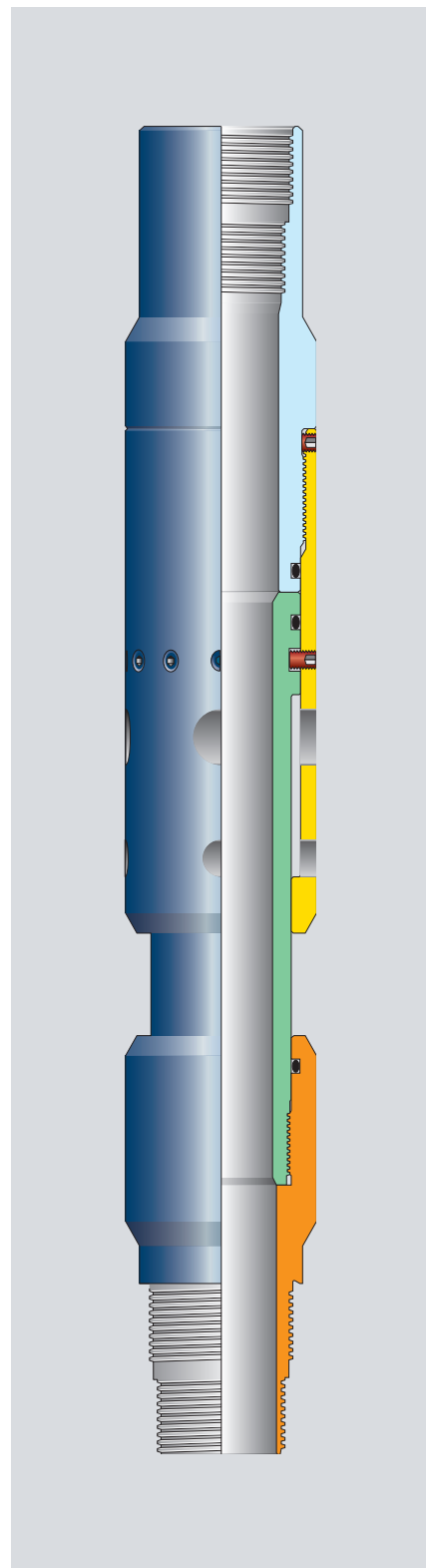
Benefits and features

- Enables safe unseating of compression-set packers
- Fullbore design allows high-rate treatments.
- Allows equalization of differential pressure across a packer
- Simple and inexpensive operation
- No flow manipulation or drop balls required
- Shear value can be easily adjusted by varying the number and type of shear pin.

The hydraulic load above a compression-set mechanical packer may hold it in the set position and prevent it from being released. The single-acting upstrain equalizing valve is intended to equalize the pressure above a compression-set packer prior to releasing it. Until the treatment is finished, the valve is kept in the closed position by shear screws. After the treatment, applied tension opens the valve and allows the pressure to equalize across the packer elements.

The single-acting equalizing valve is held in the closed position by shear screws. Upstrain must be applied to the valve to shear the screws and open the valve to the annulus. The number of shear screws installed in the tool adjusts the load that must be pulled at surface to operate the valve. After the screws are sheared, the large ports in the valve housing allow the annulus and tubing pressure to equalize.

Once the annulus and tubing pressure have equalized, there will no longer be downward force acting on the packing element of the compression packer. Continued upwards pull will then unseat the packer, and the tools can be retrieved from the well.



Single-Acting Upstrain Equalizing Valve

OD (in.)	ID (in.)	Length [†] (in.)
2.563	1.375	15.813

[†] Includes CS Hydril thread, measured in closed position