



GENERAL PRODUCT SHEET

Permanent Liner Hanger Packer

PRODUCT DESCRIPTION:

The Permanent Liner Hanger Packer is a robust, high-performance, hydraulic, dual bore permanent packer designed for installation in a single trip. The packer incorporates an upper bore to allow it to be latched to a work string or frac string while maintaining full bore capabilities.

PROVIDE SOLUTIONS FOR:

- Horizontal open hole multi-stage hydraulic fracturing completions

FEATURES:

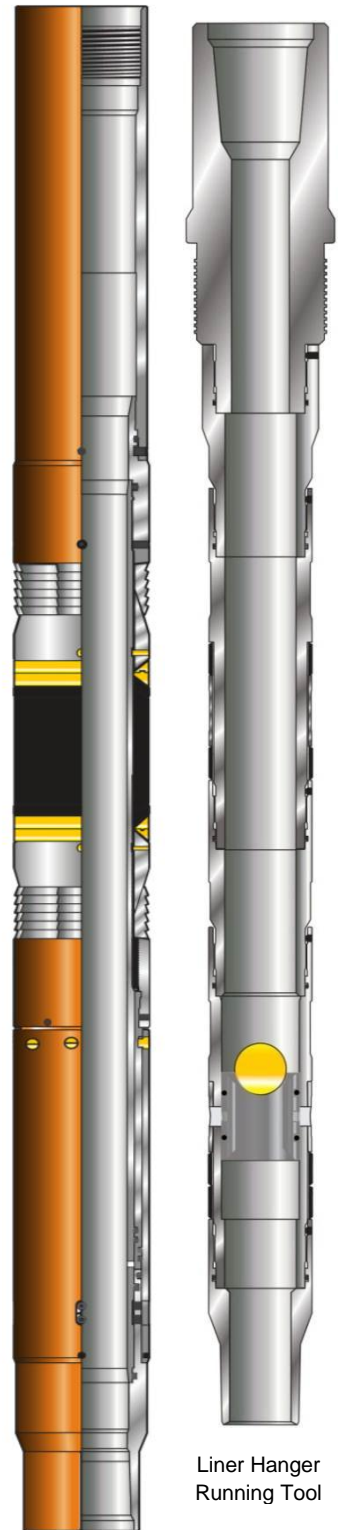
- The hydraulic packer is set with a pressure-isolating setting tool that is run in hole and includes a ball seat
- Full circle slips ensure a robust design
- The dual seal bore provides full ID with the use of a frac string or production string
- Expandable metal backup rings provide a metal-to-metal barrier with the casing wall
- Left-hand thread on the top seal bore allows use of an anchor latch

BENEFITS:

- Isolation of the setting port while running the system in hole
- Pressure application at the tool versus relying on pressure integrity throughout the entire liner
- Allows maximum seat size in the frac sleeves
- Prevention of element extrusion
- Easy snap-in and right-hand rotation out of the packer
- Reduced potential of presetting while running in hole

TOOL SIZES:

| Casing | | | | Packer | | |
|----------------------------|-----------------------|---------------------------------|---------------------------------|---------------------------------|--------------------------------|---------------------------------|
| OD | Weight (lb/ft) | Minimum ID | Maximum ID | Upper Bore | Lower Bore | Maximum OD |
| 7 in. (177.8 mm) | 23 to 32 lb/ft | 6.094 in. (154.79 mm) | 6.366 in. (162.53 mm) | 4.750 in. (120.65 mm) | 4.00 in. (101.60 mm) | 5.875 in. (149.23 mm) |



Liner Hanger Running Tool

Liner Hanger Packer