

PosiTest

Retrievable compression packer

APPLICATIONS

- Horizontal and highly deviated wells
- Testing and tubing-conveyed perforating (TCP) operations
- Single-trip, tubing-conveyed perforating and gravel-pack operations

BENEFITS

- Simple operation
- Minimized set-unset time
- High set–unset reliability regardless of deviation
- Efficient fluid-loss and well-kill control

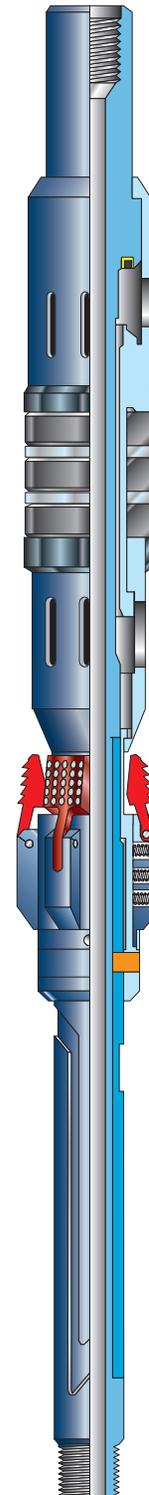
FEATURES

- Three-piece, dual-durometer sealing element
- Fullbore mandrel
- Integral and internal bypass to minimize surge and swab effects in all sizes of casing
- Tungsten-carbide slip inserts to grip the hardest casings
- Specially sized gauge rings
- Continuous J-slot for simple setting and unsetting
- Simple modification for different casing weights
- No string rotation requirement to set packer

The long-stroke PosiTest* retrievable compression packer is set by string reciprocation instead of string rotation. The long-stroke PosiTest packer is a fullbore, cased hole, retrievable, compression-set packer with a large internal bypass. It is designed to withstand high flow rates, high temperatures, and high pressures when the appropriate amount of weight is on the packer. When set, the sealing elements isolate annulus fluids from the perforated interval. The long-stroke PosiTest packer has a rugged, simple design that can be easily redressed between operations or converted quickly to run in another casing weight. In applications where the tubing pressure is expected to exceed the annulus pressure, the hydraulic hold-down should be run above the packer.

The long-stroke PosiTest packer is set by string reciprocation. Setting is achieved by the use of continuous long J-slot configurations that allow the packer to be cycled from the safety to the set position and back to the safety position, simply by string reciprocation. This feature is particularly advantageous in highly deviated wells, where it may be difficult to apply rotation down to the rotation set packers. Reciprocation setting also eliminates rotation of subsea umbilicals during the setting process.

When the tool is in position to enter the wellbore, the pipe must be picked up and lowered two complete cycles to set the packer. The packer remains in this position unless it is picked up more than 32 in [0.813 m]. The packer can be returned to this slot by picking it up 15 in [0.381 m] and then lowering it. The main applications for this packer are tests in horizontal or highly deviated wells and as a sump packer in the single-trip, tubing-conveyed, perforating gravel-pack system. For these jobs, rotating the string should be avoided. This packer is not recommended for operations on floating drilling rigs whenever heave exceeds 30 in [0.762 m] to avoid fully stroking to the setting position.



PosiTest packer.

Specifications

	PSPK-M-PP	PSPK-LS-PP
Casing size range, in, lbm/ft	6 $\frac{5}{8}$, 20–24	9 $\frac{5}{8}$, 43.5–53.5
	7, 24–38	
	7 $\frac{5}{8}$, 20–39	
Tool ID, in [mm]	2.00 [50.8]	2.50 [63.5]
Pressure ratings		
Differential pressure, [†] psi [MPa]	10,000 [69]	8,000 [55]
Element differential, psi [MPa]	7,500 [52]	7,500 [52]
ID test pressure (packer not set at surface), psi [MPa]	7,500 [52]	7,500 [52]
Temperature rating, degF [degC]	300 [149]	300 [149]
Length, ft [m]	8.47 [2.58]	10.14 [3.09]
Service (NACE International MR-0175)	No	No
Tensile strength min. yield, lbf [kN]	198,000 [881]	295,000 [1,312]
Tensile strength with working pressure, lbf [kN]	159,000 [707]	246,000 [1,094]
Connection		
Top	3 $\frac{1}{2}$ IF or 2 $\frac{7}{8}$ EUE	3 $\frac{1}{2}$ EUE
Bottom	2 $\frac{7}{8}$ EUE	3 $\frac{1}{2}$ EUE

[†] Max. differential pressure may be limited by element rating.