

HYDRAULIC ACTIVATED TOE SLEEVE WITH ISOLATION VALVE



TOE SLEEVE WITH ISOLATION VALVE

APPLICATION

Hydraulic Activated Toe Sleeve with Isolation Valve is designed to be used as a first stage for multistage hydraulic fracturing. Hydraulic activated Toe Sleeve in terms of construction consists of an activation sleeve and a toe sleeve.

- Uncemented casing / liner applications.
- Vertical, directional and horizontal wells.

FEATURES AND BENEFITS

- Acid-resistant design of all assembly elements (HCL 14%).
- Lock mechanism that prevents spontaneous closing of ports.
- Withstands high tensile loads and high differential pressures.
- Can be milled out after operations providing the fullbore ID.
- Re-closable Toe Sleeve.

OPERATION SEQUENCE

- Activation Ball is pumped down to the landing seat to achieve bump pressure.
- After pressure increasing the inner sleeve is sheared down to close circulation ports in activation valve.
- Provide well casing and Tie-back Seal Assembly stab in.
- Increase pressure to the desired value to open the circulation frac ports.

SUPPLY PACKAGE

- Hydraulic Activated Toe Sleeve with isolation valve.
- Activation Ball - primary.
- Activation Ball - back-up.

TECHNICAL DATASHEET

TECHNICAL CHARACTERISTICS	VALUE
Liner OD, in	4.500
Max OD, in	5.500
Min ID after milling, in	3.819
Length, ft	2.2
Max pressure against the ball, psi	10,000
Closing pressure, psi	1,450
Opening pressure, psi	4,500
Ports flow area, in ²	11.78
Material*	Q-125
Max working temperature, °F	320
Burst, psi	14,500
Collapse, psi	14,500
Tensile, kip	247

* Other options are available as per Customer request.