HYDRAULIC TOE FRAC VALVES

APPLICATION

The Hydraulic Toe Sleeve is used for the first fracturing stage in wells with multistage fracturing completion. The sleeve is opened by pressurizing the liner. The locking mechanism holds the sleeve in the open position.

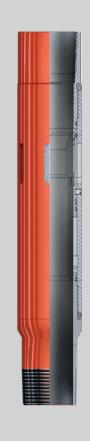
DESIGN FEATURES AND ADVANTAGES

- The sleeve is opened by creating pressure in the liner;
- Once activated, the locking mechanism holds the sleeve in the open position;
- The sleeve provides full-bore diameter with no need to mill out;
- Small size provides accident-free running.

WELL COMPLETION SYSTEMS

SPECIFICATIONS

Liner size, in	4	4 1/2	4 1/2	5 1/2	5 3/4
Tool OD, in	4,65	5,24	5,75	6,54	6,54
Tool ID, in	3,46	3,90	3,90	4,84	5,08
Activation pressure, psi	3 500	3 500	3 500	3 000	2 700
Pressure raiting, psi	10 000	10 000	10 000	10 000	10 000
Max working temperature, °F	250	300	300	250	250
Thread size*	4,0	4,5	4,5	5,5	5,75



^{*}Thread type, metallurgy and elastomers are as per Customer`s requirements