



The BreakThru™ Multi-Cycle Barrier Valve system boosts efficiency and saves costs.

INNOVATION REVEALED

BREAKTHRU™ MULTI-CYCLE BARRIER VALVE

This product may be covered by one or more patents or pending patent applications.

SO 14998 V0, 14310 V0 AND ISO 28781 CERTIFIED WELL BARRIER

Nine's BreakThru™ Multi-Cycle Barrier Valve is an interventionless pressure actuated ISO V0 certified well barrier plug. It provides operators with a remotely operated and cost effective, ISO V0 certified premium well barrier. It effectively isolates the wellbore reservoir pressure utilizing glass. The BreakThru™ Multi-Cycle Barrier Valve is made of a proprietary glass material that gives them incredible strength and durability in a variety of downhole conditions up to 10,000psi (68.9MPa) differential pressure.

Unlike the interventionless BreakThru™ Single-Cycle Barrier Valve that provides 1 single pressure cycle to activate, the BreakThru™ Multi-Cycle Barrier Valve provides the operator with up to 15 pressure cycles before activating / opening. This gives the operator full flexibility to set hydraulic packers, inflow test DHSV, test the tubing and packer from above and perform any other tests needed to perform. The counter system incorporated in the plug registers the pressure cycles, is a self-calibrating mechanical system protected in a clean environment to ensure proper function in all harsh environments. Once all preset pressure cycles are set, the BreakThru™ Multi-Cycle Barrier Valve will activate and open. Once the tool is opened, the wellbore fluids can be produced up through the full ID of the production tubing as the tool provides no restrictions to tubing ID once activated.

Applications

- Pressure Testing of Completion
- Well Barrier Plug
- Setting of hydraulic Packers
- Fluid loss control
- Flotation of Completion
- Isolate Lower Completion

Benefits

- ISO 14998 V0 / ISO 14310 V0 and ISO 28781 certified well barrier
- Does not require Nine personnel to RIH and operate
- Reduced rig time over wire line plugs no intervention needed
- Self calibrating counter system allowing multiple pressure cycles
- Easy removal remotely by surface applied pressure
- RIH as an integrated part of the completion
- Can be run in hostile environments (H₂S and CO₂)
- Debris tolerant pressure activation
- Full bore access post opening
- Patented Technology

BREAKTHRU™ MULTI-CYCLE BARRIER VALVE CASING SPECS					
Description inch	O.D. inch	Tool I.D. inch	Overall Length inch	ISO Differential Pressure Rating 125 ksi	Temperature
3-1/2	4.80	2.91	80.0	10k psi	320° F
4-1/2	5.91	3.93	80.0	7.5k psi	
5-1/2	7.00	4.89	80.0	7.5k psi	
6-5/8	8.13	5.88	80.0	7.5k psi	

Other sizes and higher pressure/temperature ratings may be available upon request.
Casing Specs are according to API Tubing/Casing Dimension Chart Information.

For more information, and to find a representative near you, visit nineenergyservice.com