

Flow Activated Valve (FAV)



Description

The FAV is a valve designed to be run open to enable high rate circulation / displacement in the reverse direction. It's closed by increasing the flow rate through the unit to above a predetermined value. Alternatively, it can be closed by dropping a ball to land on a ball seat and applying pressure. Either way will create a positive differential pressure over the valve. A changeable orifice can adjust the flow rate limits required for closing.

After the FAV has closed, the valve provides a barrier tested and qualified in accordance with :2008 iVo up to 345 bar (5000 psi) at 4-150 °C and 483 bar (7000 psi) at 60-130 °C and validation grade V6 up to 517 bar (7500 psi) at 4 °C.

Application

The FAV is installed below an intervention or pre-installed packer. It's intended to be used as a circulation device to displace or replace fluid in forward or reversed direction.

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Benefits

- Short makeup length and a large flow area.
- Provides an ISO Vo approved barrier when closed.
- Adaptable to different packers by using an interface.
- Resistant to closing in an event of reverse flow to kill the well.
- Adjustable sizes.
- Multiple closure options.
- Optional ball drop closure.
- Adjustable closing flowrate.

Technical Specifications

OD	3.27" (83.0 mm)
ID	0.956" (24.5 mm) ⁽¹⁾
Min Flow Area	0.85in ² (547.0 mm ²) ⁽¹⁾
Safe Flow Rate (not closing)	500 l/min ⁽²⁾ (orifice and fluid dependant)
Safe Flow Rate (reverse flow)	1000 l/min ⁽²⁾ (fluid dependant)
Max Differential Pressure	7000 psi (483 bar) ⁽¹⁾
Max Temperature	302 °F (150 °C)

⁽¹⁾ Configuration dependent

⁽²⁾ Reference fluid water