

Multi-Cycle Annulus Operated Circulation Reversing Valve



Description

The Multi-Cycle Circulating Valve Annulus (MCVA) is an annulus pressure operated tool with 5 closed positions, 1 reverse position, and/ or 1 circulating position. The tool can cycle through this sequence as many times as required by the well program. The MCVA is fully compatible with other pressure operated equipment typically used in DST, TCP and Stimulation/Treatment operations.

Typical uses for the circulating valve are:

- Reverse out tubing contents to remove hydrocarbons and debris from the work string while the formation is isolated by the closed tester valve.
- Spot lighter weight fluid (including nitrogen) to create or increase an underbalance to formation in order to surge perforations or establish flow in a drill stem test.
- Efficiently spot viscous pills to cure fluid loss to formation. (Spot pill to the circulating ports close MCV, then open the ball valve to allow the pill to move to the perforations)

The MCVA cycles using applied annulus pressure to move the ported mandrel to the proper position to establish communication between the annulus and tubing.

This tool is NOT rate dependent/ differential pressure operated.

Annulus pressure cycles are used to place the tool in the circulating, reversing and closed positions

Operating Specification

NOMINAL TOOL SIZE	OD	5.00 in.
	ID	2.25 in.
	Length	12.75 ft. / 15.25 ft.
THREAD CONNECTIONS	Standard	3 1/2 in. I.F.
	Optional	Premium Threads
TEMPERATURE RATING	350 °F	
WORKING PRESSURE	15,000 psi	
TENSILE STRENGTH	425,000 lbs. @ 0 psi differential	
SERVICE	H2S, CO2, Acid	

