



# Hydraulic Circulating Valve

Weatherford's hydraulic circulating valve (HCV) is typically run with the M2 inflatable straddle packer (ISP™) assembly above the upper packer. Ports on the HCV enable circulation of treatment fluid to the M2 ISP assembly after both packers have been set.

Pressure acting on a differential piston area in the HCV keeps the circulating ports closed while the packers are being inflated. After the packers are inflated, the tubing pressure is released, and an upward pull is applied to the assembly to check the packer seating and to open the HCV ports. Treatment fluid is then circulated down the tubing and displaced up the annulus, above the upper packer assembly. Finally, partial string weight is applied to the tools to close the HCV ports and open the flow ports in the M2 ISP assembly.

## Applications

- Displacing fluid inside the tubing (when used above the top packer of the M2 ISP assembly)
- Spotting acid for an acid squeeze
- Pumping nitrogen to reduce the hydrostatic pressure for flow testing
- Use with any packer or in any situation where rotation is either infeasible or not needed

## Features, Advantages and Benefits

- The hydraulic circulating valve only requires axial work-string movement to open the valve, ensuring easy operation of the tool.
- O-ring seals create a reliable seal, providing pressure integrity.

## Specifications

Size (in./mm)	OD (in./mm)	ID (in./mm)	Overall Length (in./mm)	Pull Force Required to Open (lb/daN)	Stroke (in./mm)	Connections (in.)	
						Box	Pin
2-7/8 73.03	4.25 107.95	1.75 44.45	31.00 787.40	5,000 2,224	1.60 40.64	2-7/8 (8rd EUE)	

