Hydraulic Circulating Valve

The **Hydraulic Circulating Valve** serves as a bypass around the packer or as a circulating valve to circulate a well after testing.
When run below a closed valve, the tool serves as a bypass around the packer and helps relieve pressure buildup below the closed valve when it is stung into a production packer.
When run above a closed valve, the tool can be used as a circulating valve when the workstring is picked up.

Features

1) Permits passage of wireline tools through its full-opening bore
2) Requires no pipe rotation to operate

Operation

Bypass ports close when weight is set down and reopen when weight is lifted.
A hydraulic metering system provides a 2 to 3-minute delay in closing after weight is applied. This delay allows either the RTTS Packer to be set or the test string to be stung into a permanent packer before the bypass ports close. The ports re-open without a time delay.
During stimulation work, the latching piston adds a downward force on the circulating sleeve to help keep the valve closed.
Operation of the valve is the same whether it is used as a circulating valve or as a bypass. No torque is required. Weight is applied to close the tool, and the workstring is picked up to re-open it.

Hydraulic Circulating Valve										
Tool Size	**O.D.**	**I.D.**	**Stroke Length**	**Length**	**End Connection**	**Service Temp.**	**Tensile Rating**	**W.P.**	**Flow Area**	**Number of Ports**
In.	In.	In.	in	In.	/	°F	lb	Psi.	In.²	/
3-7/8"	3.90	1.77	3.98	94.78	2-7/8" CAS 2-7/8" EUE	400	230361	15000	1.17	4
				93.41	2-7/8" REG					
5"	5.02	2.24	3.15	91.02	3-7/8" CAS	400	328219	15000	1.67	4
				90.55	3-1/2" IF					

1) *Other sizes available on request.*
2) *Meets requirements of NACE-0175 (>175°F)*
3) *The values of tensile, burst, and collapse strength are calculated with new tool conditions.*
4) *Pressure rating is the differential pressure at the tool. (Differential pressure is the difference in pressure between the casing annulus and the tool ID.)*

Subject to change without notice