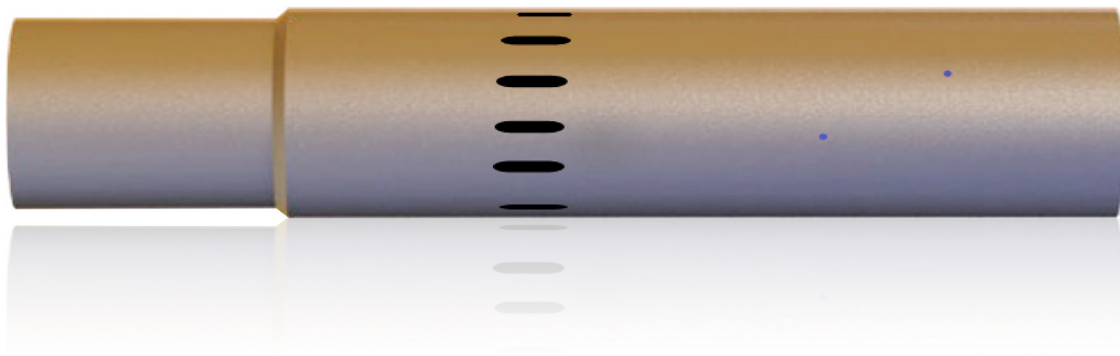


CIRCULATION-SETTING VALVE

SHFRAC CIRCULATION-SETTING VALVE

The SHfrac Circulation-Setting valve is a normally open valve located just above the float equipment but below the initiator valve. In the open position the valve allows fluid to be circulated through the casing string when needed during deployment into the wellbore. Once at setting depth, the valve is shifted closed with the use of a setting ball pumped down from the surface. This action closes off the internal circulation ports turning the valve into a virtual blanking plug which then allows for hydraulic activation of all tools in the casing string above. After tools are set, casing surface pressure can then be released leaving the tool string closed to the reservoir until the well is ready to be stimulated.



SPECIAL FEATURES

- Ball activated closing
- Remains closed after being shifted
- Large exit ports for circulation and reduction of trash build up.
- Acts as blanking plug after closure
- P110 material construction

CASING SIZE	TOOL OD (IN.)	MIN SETTING BALL OD (IN.)	CLOSING PRESSURE (PSI)	MAX PUMP RATE (BPM)	W.P. (PSI)	MAX. TEMPERATURE °F
4 ½"	5	0.925	1,800-2,000	12	10,000	300
5 ½"	7.5	1.5	2,600-2,700			