

ReAct™ Completion Circulation Valve (RCCV)

The ReAct Completion Circulation Valve (RCCV) is a remotely activated completion valve that is run above the upper completion production packer. The valve incorporates our unique ReAct technology, which allows downhole tools to be remotely activated without the need of control lines or intervention runs.

The valve offers significant cost and time savings compared to conventional operations. Dependent on the well design, either multiple wireline runs can be eliminated or in many cases entire middle completion strings can be eliminated; saving both significant rig time and cost.

The RCCV can be deployed above any packer and is run closed to allow for packer setting and packer/ tubing testing. Once the production packer is set, the operator can pressure test the tubing against the closed RCCV. Applying increased annulus pressure then bursts a rupture disk to open communication ports to circulate between the tubing and the annulus and vice versa.

Once the tool is open, tubing fluid is then circulated out to a lighter fluid to allow the well to flow naturally. The valve is then closed by applying a ReAct pressure signal. In addition to fully redundant primary and back up ReAct modules; the RCCV has full mechanical redundancy with a standard mechanical shifting tool in the unlikely event that it is not possible to activate any of the ReAct modules.

The ReAct Completion Circulation Valve has great flexibility as all of the operational parameters are fully adjustable up until deployment.

Features

- Incorporates NOV's unique ReAct Technology
- Allows on-demand annulus-to-tubing communication above the production packer
- Dual electronic redundancy
- Valve permanently locked shut after operation
- Shifting profiles provided to allow manual override
- ISO 14998 V0 barrier qualified

Benefits

- No need for control lines
- No need for intervention runs to operate valve
- Potentially removes the requirement for a middle completion string
- Maximum flow area through circulating ports
- Pressure signal can be fully adjusted up until deployment

Applications

- Displacement of completion fluids

Technical Data

Tool Size	5.500"
End Connections	Customer Specific
Material	13%cr-80, L-80, etc.*
OD	8.250" max
ID	4.562"
Length	161.0"
Flow Area	16.345 in
Pressure Rating	10,000 psi
Operating Temperature	150°C Max

*Other materials available on request.

