

# ReAct Inflow Valve

The React™ inflow valve (RIV) is a permanently installed and electronically actuated sleeve-type valve that facilitates the control of well flow through ports or installed chokes.

The onboard electronics require no connection to surface as the valve utilizes our ReAct remote signaling technology. Multiple valves can be installed in a wellbore with isolation packers above and below in order to provide zonal control and isolation. The flexible functionality and modular design allow the valves to be used for a range of applications such as remote water shut off, selective start-up, sand screen optimization, and zonal fracturing.

A typical valve features two independent ReAct electronics modules, either of which can provide the actuation for the device. The electronics are easily programmed at the wellsite from a laptop computer running standard Windows software.

Depending on the application, the valves can be run in either the open position or closed position, and current functionality allows the valve to be cycled twice. This means that a valve run in the closed position can be remotely signaled open and then remotely signaled back to the closed position once in the well. Contingency exists to open or close the valves at any time using conventional wireline techniques to mechanically shift the valves to the open or closed position or by coiled tubing using our proprietary hydraulic shifting tool.



## Features

- Field-proven electronics
- Delayed opening for up to 365 days
- Top selective profile for pressure control accessories
- Defaults to mechanical sleeve
- Multiple valves in one well
- Uses existing wireline intervention procedures when mechanically actuated
- Large flow areas
- Economical option to smart well equipment
- Sleep mode to extend valve life

## Benefits

- Increased production due to better contribution from minor zones
- Increased production from improved recovery
- Increased production from subsequent water shut off
- No hydraulic lines or cables from the surface required to function
- Wirelessly open or close via demand signal from surface removing the need for wireline conveyance

## Applications

- Delay startup of particular zone
- Isolate laterals to allow staged startup
- Flow control in laterals
- Water shut off after startup
- Test individual zones following or during startup
- Fracturing operations

## ReAct Inflow Valve Specifications

### Technical data

Size in.	End connections*	Material*	Max. OD* in.	Min. ID* in.	Flow area in. <sup>2</sup>	Length in.	Tensile rating lbf	Compressive rating lbf	Working pressure psi	Temperature rating °C	Time delay
4.500	4½-in. 12.6# SL-HT	13% Cr & Inconel 718	5.750	3.250	8.295	114.0	288,000*	215,700*	5,000	135	Programmable up to 365 days
5.500	5½-in. 15.5# SL-HT	13% Cr	7.578	4.313	14.610	136.0	361,200*	181,300*	5,000	135	Programmable up to 365 days

\*Governed by end connection rating

\*\*Other sizes and materials available on request.