Reclosable Pressure-Actuated Circulating (X-PAC) Valve

Superior Completion Services’ patented X-PAC Valve provides complete isolation of the productive interval during completion operations. The X-PAC valve operates hydraulically and requires no mechanical well intervention to initiate production. The X-PAC valve provides the added benefit of being reclosable to isolate the productive interval.

Once actuated, the valve provides a full-open flow path into the production tubing. Actuation is initiated by applying differential pressure from valve ID to OD. Initial actuation pressure unlocks the valves while maintaining pressure integrity (this patented valve actuation method allows multiple PAC valves to be in the same pressure cycle). Reducing the actuation pressure to equal the annular pressure allows the valve to cycle to the full open position.

APPLICATIONS
- Interventionless zonal isolation and production initiation
- Fluid loss control
- Deviated wellbores
- Completion designs with limited tubing ID access
- Intelligent and multizone completions
- Post-completion zonal isolation

Features and Benefits

- Optimized flow areas for maximum production
- Interventionless actuation reduces operational risk and overall cost of completion
- Mechanical backup profile with compatible shifting tool
- Mechanically reclosable to provide an isolation barrier
- Provides positive bidirectional zonal isolation
- Unlocked position maintains pressure integrity
- Can be used in 7 to 10 3/4 in. (177.8 to 273.1 mm) casing sizes
- Tubing-pressure actuated
- Ideal for use in deepwater intelligent completions where mechanical access is limited
## Reclosable Pressure-Actuated Circulating (X-PAC)

### Technical Data

**Temperature rating**

250°F (121°C)

<table>
<thead>
<tr>
<th>Nominal OD</th>
<th>Minimum ID</th>
<th>Frac Mode Pressure Rating</th>
<th>Differential Pressure Rating</th>
<th>Nominal Shear Range</th>
<th>B Shifting Profile</th>
<th>Flow Area Through Valve</th>
<th>Flow Area Through ID</th>
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### References

- Complete™ System data sheets (FP, FPDZ, HST)
- HPR Isolation System data sheet
- ISO Isolation System data sheet
- Screen-wrapped sleeves data sheet