

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



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TECHNICAL DATA

Temperature rating 250°F (121°C)

Reclosable Pressure-Actuated Circulating (X-PAC)															
Nominal OD		Minimum ID		Frac Mode Pressure Rating		Differential Pressure Rating		Nominal Shear Range		B Shifting Profile		Flow Area Through Valve		Flow Area Through ID	
inch	mm	inch	mm	psi	MPa	psi	MPa	psi	MPa	in	mm	inch ²	cm ²	inch ²	cm ²
5.57	141.2	2.188	55.6	12,500	86.2	10,000	69.0	1,761-8,289		2.19	55.6	4.28	27.6	3.76	24.3
5.57	141.2	2.313	58.8					2,200-4,800		2.31	58.8	4.2	27.1	4.20	27.1
6.64	168.7	2.750	70.2	2,090-4,270				2.75	69.9	5.67	36.6	6.00	38.7		
6.64	168.7	2.813	71.5	2.81	71.5			5.67	36.6	6.21	40.1				
6.65	168.91	2.750	71.5	12,500	86.2	12,500	89.2	916-6,411	6.3-44.5	2.75	69.85	6.00	38.7	6.00	38.7
6.65	168.91	2.562	65.07	15,000	103.5	15,000	103.5	916-6,911	6.3-44.5	2.562	65.07	6.00	38.7	6.00	38.7

REFERENCES

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