



ReelFrac Compression-Set Straddle Packer System

The ReelFrac compression-set straddle packer system enables multizone isolation and fracturing in a single trip. The anchor and packer are set by reciprocating the tubing to cycle the auto J-slot once the bottomhole assembly is run to depth. Set-down weight is then applied to anchor the straddle and actuate the packing element of the bottom packer. When the packing element is actuated (with or without a cup system) and the wellbore engaged, both unloaders are in their closed positions.

After the packers have been set and the desired zone stimulated, the unloaders are then sequentially moved to their open positions. This is achieved by picking up on the coiled tubing to activate the unloaders. With the unloaders in the open position, the portion of the wellbore above and below each packing element (with or without a cup system) may be communicated while the element is in the set position. Once the pressure is equalized, the packer can be easily disengaged from the wellbore and repositioned for multiple uses.

Applications

- Straddle existing perforations for acid stimulation, fracturing, and scale squeeze operations
- Test zones

Features, Advantages, and Benefits

- Single-trip operation and multiset capability enhance efficiency.
- Pressure equalization occurs above and below the two seals to aid in releasing the work string after each stage.
- A debris barrier protects the auto-J mechanism for reliable resetting.
- The cup seals are rated to a 10,000-psi (34,475-kPa) differential pressure.
- The system offers deployment options in both vertical and horizontal wells, and it can be conveyed by coiled tubing or jointed pipe.





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Specifications

Cup/Cup System

Tubing Size (in., mm)	Tubing Weight (lb-ft, N•m)	ID Range (in., mm)	Maximum Cup Gauge Ring OD (in., mm)	Body ID (in., mm)	Chassis OD Maximum (in., mm)	Maximum Straddle Length (ft, m)	Temperature Rating (°F, °C)	Pressure Rating (psi, kPa)	Tensile Rating (lb, kg)	Top Connection	Bottom Connection
4 1/2 114.3	15.1 20.5	3.752 to 3.904 95.30 to 99.16	3.622 91.999	1.50 38.10	3.625 92.075	40 122	40° to 275° 4.5° to 135°	10,000 34,475	Top unloader (ports) 100,000 45,359	2 3/8-in., 4.7-lb/ft WTS-8 Box	2 3/8-in., 4.7-lb/ft EUE 8RD Pin
	12.6 to 13.5 17.1 to 18.3	3.853 to 4.029 97.86 to 102.33	3.756 95.402								
	10.5 to 11.6 14.2 to 15.7	3.940 to 4.118 100.07 to 104.59	3.835 97.409								

Cup/Element System

OD (in., mm)	Weight (lb-ft, N•m)	ID Range (in., mm)	Chassis OD, Maximum (in., mm)	Chassis ID, Maximum (in., mm)	Gauge Ring OD (in., mm)	Pressure Rating at 275°F (135°C) (psi, MPa)	Top Connection	Bottom Connection
4 1/2 114.3	10.5 14.2	3.752 to 3.904 95.30 to 99.16	3.625 92.08	1.50 38.10	Standard	10,000 70	2 3/8-in., 4.7-lb/ft WTS-8 Box	2 3/8-in., 4.7-lb/ft EUE 8RD Pin
					3.898 99.01			
	11.6 15.7	3.853 to 4.029 97.86 to 102.33			3.846 97.69			
	13.5 18.3	3.940 to 4.118 100.07 to 104.59			3.766 95.66			
15.1 20.5	3.752 to 3.904 95.30 to 99.16	3.672 93.27						