

Service Packers

For production, injection, and cleanup treatments



Rated up to 10,000 psi
[69 MPa]



Rated up to 121 degC
[250 degF]

APPLICATIONS

- Remedial work and service applications
- Acidizing
- Fracturing
- Squeeze cementing
- Casing test applications

BENEFITS

- Enables controlled production, injection, or treatment by reliably isolating the annulus
- Reduces rig time and simplifies operations with mechanical jay slot or optional indexing lug assembly

FEATURES

- Multiple hold-down button slip assembly for maximum pressure performance
- Large internal bypass to run in well at higher speeds without surging the well
- Pressure equalization before unsetting the slips
- Three-piece packing element system for reliable performance
- Simple setting and releasing procedure
- Field-proven design
- Fullbore mandrel to ensure reliability
- Case-hardened friction blocks for durability
- Available with either manual or automatic jays, left- or right-hand set
- Optional top and bottom tubing connections

Schlumberger service packers are fullbore, compression-set squeeze packers, used for squeeze cementing, acidizing, fracturing, or well testing. The packers use piston-type hold-down buttons, a three-element packing system, and a large internal bypass for reliable and trouble-free performance. They have internal reversing pistons to help keep the bypass system closed at high tubing pressures.

Service packers have lower slips that are set against a lower cone and drag block housing. The hold-down buttons are hydraulically actuated when pressure below the packer exceeds pressure above the packer. The rugged packer is available with either manual or automatic jays. It features indexing lug assembly, which allows the packer to be set and unset without rotation using only axial movement.

Setting operation

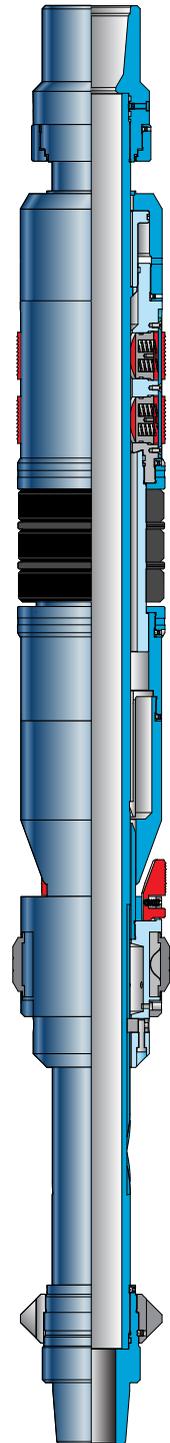
After running the packer to the desired depth, set the packer by making the last movement up and rotating the tubing a quarter turn at the tool to release a manual jay. To release an automatic jay, apply and hold torque as the tubing is lowered. With the jay released, slack off the appropriate amount of weight to pack off the elements. It can be set with either a right or left quarter-turn rotation and applied tubing weight.

Releasing operation

Picking up on the tool will open the bypass and equalize pressure between the tubing and casing. Without differential pressure, the hydraulic hold-down buttons will automatically retract. The packer is released and may now be retrieved.

Resetting operation

To reposition the packer downhole, reset the slip assembly to the running position. Manual jays require a quarter turn counter to the direction of setting. Automatic jays do not require rotation or torque to rejay. Simply pick up to unset the packer. When picked up, the upward movement of the mandrel will rejay the automatic assembly.



7,500-psi service packer.

Service Packers

Service Packer Specifications

Casing size, in	7	9%	13%
Casing weight range, lbm/ft [kg/m]	26 [39]	47 [70]	77 [115]
Maximum OD, in [mm]	6.091 [154.71]	8.465 [215.01]	12.059 [306.30]
Minimum ID, in [mm]	2.426 [61.62]	2.675 [67.95]	3.99 [101.35]
Drift diameter, in [mm]	2.347 [59.61]	2.625 [66.68]	3.875 [98.43]
Top connection	3½ IF box	4½ IF box	5½ IF box
Bottom connection	3½ IF pin	4½ IF pin	5½ IF pin
Overall length, in [mm]	84 [2,134]	112 [2,845]	117 [2,971]
Differential pressure rating (above), psi [MPa]	3,500 [24]	3,500 [24]	3,500 [24]
Differential pressure rating (below), psi [MPa]	10,000 [69]	7,500 [52]	5,000 [34]
Maximum set-down, lbf [kN]	232,200 [1,033]	300,000 [1,334]	300,000 [1,334]
Minimum setting force, lbf [kN]	20,000 [89]	20,000 [89]	75,000 [334]
Maximum temperature, degF [degC]	250 [121]	250 [121]	250 [121]
Minimum temperature, degF [degC]	150 [66]	150 [66]	150 [66]
Maximum ΔT, degF [degC]	100 [38]	100 [38]	100 [38]
Qualification level	ISO-V3 [150-250]	ISO-V3 [150-250]	ISO-V3 [150-250]

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