

OptiPkr™ Production Packer

Provides a reliable production tubing-to-casing seal that withstands the most demanding wellbore conditions

Applications

- Conventional, monobore, and stacked completions
- Liner-top isolations
- Subsea environments
- Extended-reach; deviated; and high-pressure, high-temperature (HPHT) wells

Features and Benefits

- Withstands pressures up to 10,000 psi (69 MPa), temperatures up to 350°F (177°C), and achieves a reliable seal by locking the element in place under variable loads and pressure cycling
- Enhances tool reliability by incorporating a patented fold-backup system to provide extrusion protection
- Reduces the risk of premature setting or pin shearing if the packer encounters downhole obstructions
- Includes versatile actuation options, including hydraulic, hydrostatic, or electronic, the latter of which uses a radio-frequency identification (RFID) trigger
- Accommodates monobore completions
- Eliminates mandrel movement while setting, which enables stacked completions
- Offers near-360° casing contact through the patent-pending slip design, which reduces slip-to-casing stress and minimizes internal casing damage
- Minimizes overpull and simplifies removal
- Enables easy removal even after the packer has been placed under extreme loads through its cut-to-release technology
- Contains an antireset mechanism that prevents the slips or element from resetting during retrieval

Tool Description

The Weatherford OptiPkr production packer combines the robust performance of a permanent packer with the flexibility of a retrievable packer into one tool. It provides a reliable seal between the outside of the production tubing and the inside of the casing in demanding wellbore conditions. The packer has a modular design that adapts to most applications and wellbore conditions and enables conversion between hydraulic-, hydrostatic-, and RFID-setting modes. It exceeds the International Organization for Standardization (ISO) 14310 Level V0 standards for load and pressure.



The Weatherford OptiPkr production packer provides a reliable production tubing-to-casing seal that withstands the most demanding wellbore conditions, and it can be retrieved for enhanced operational flexibility.



OptiPkr™ Production Packer

Specifications

Outside Diameter (OD)		7 in. (177.8 mm)				
Weight		23 to 26 lb/ft (34.2 to 38.7 kg/m)	29 to 32 lb/ft (43.1 to 47.6 kg/m)	32 to 35 lb/ft (47.6 to 52.1 kg/m)	29 to 32 lb/ft (43.1 to 47.6 kg/m)	32 to 35 lb/ft (47.6 to 52.1 kg/m)
Minimum ID		6.187 in. (157.10 mm)	5.990 in. (152.10 mm)	5.892 in. (149.60 mm)	5.990 in. (152.10 mm)	5.892 in. (149.60 mm)
Maximum ID		6.466 in. (164.20 mm)	6.293 in. (159.80 mm)	6.208 in. (157.90 mm)	6.293 in. (159.80 mm)	6.208 in. (157.90 mm)
Maximum OD		6.000 in. (152.40 mm)	5.910 in. (150.10 mm)	5.820 in. (147.80 mm)	5.910 in. (150.10 mm)	5.820 in. (147.80 mm)
Standard thread connection		3 1/2-in. VAM® TOP			4 1/2-in. VAM® TOP	
Minimum ID		2.962 in. (75.23 mm)			3.833 in. (97.40 mm)	
80-ksi material	Differential pressure rating	10,000 psi (69 MPa)			8,400 psi (58 MPa)	
	Tensile rating	200,000 lb (890 KN)			178,128 lb (792 KN)	
95-ksi material	Differential pressure rating	10,000 psi (69 MPa)				15,000 psi (103 MPa)
	Tensile rating	200,000 lb (890 KN)			212,546 lb (945 KN)	212,000 lb (943 KN)
110-ksi material	Differential pressure rating	10,000 psi (69 MPa)				15,000 psi (103 MPa)
	Tensile rating	200,000 lb (890 KN)			212,546 lb (945 KN)	212,000 lb (943 KN)
Element type		HNBR			HNBR	HNBR and AFLAS
Flow-test rating at 80°F (27°C)		—			10 bbl/min (1.6 m³/min)	—
Flow-test rating at 176°F (79°C)		—				
Temperature range		80 to 350°F (27 to 177°C)				200 to 400°F (93 to 204°C)
ISO 14310-tested		V0				

The above ratings are not combined loading and are for the OptiPkr production packer with a hydraulic module. Consult with an applications engineer for packer ratings with different setting modules.



OptiPkr™ Production Packer

Specifications

Outside Diameter (OD)		9-5/8 in. (244.5 mm)			10-3/4 in. (273 mm)	
Weight		47 to 53.5 lb/ft (69.9 to 79.6 kg/m)			60.7 to 65.7 lb/ft (90.3 to 97.7 kg/m)	
Minimum ID		8.405 in. (213.50 mm)			9.417 in. (239.20 mm)	
Maximum ID		8.822 in. (224.00 mm)			9.819 in. (249.40 mm)	
Maximum OD		8.310 in. (211.10 mm)			9.345 in. (237.40 mm)	
Standard thread connection		4 1/2-in. VAM® TOP		5 1/2-in. VAM® TOP HC	7-in. VAM® TOP HC	5 1/2-in. VAM® TOP HC
Minimum ID		3.894 in. (98.91 mm)		4.650 in. (118.10 mm)	6.060 in. (149.20 mm)	4.750 in. (120.60 mm)
80-ksi material	Differential pressure rating	8,000 psi (55 MPa)			6,700 psi (46 MPa)	6,500 psi (45 MPa)
	Tensile rating	400,000 lb (1,779 KN)		360,380 lb (1,603 KN)	302,264 lb (1,345 KN)	400,000 lb (1,779 KN)
95-ksi material	Differential pressure rating	8,000 psi (55 MPa)				6,500 psi (45 MPa)
	Tensile rating	400,000 lb (1,779 KN)			360,380 lb (1,603 KN)	400,000 lb (1,779 KN)
110-ksi material	Differential pressure rating	8,000 psi (55 MPa)				6,500 psi (45 MPa)
	Tensile rating	400,000 lb (1,779 KN)				
Element type		HNBR				
Flow-test rating at 80°F (27°C)		14 bbl/min (2.2 m³/min)				
Flow-test rating at 176°F (79°C)		10 bbl/min (1.6 m³/min)				
Temperature range		80 to 350°F (27 to 177°C)				
ISO 14310-tested		V0				

The above ratings are not combined loading and are for the OptiPkr production packer with a hydraulic module. Consult with an applications engineer for packer ratings with different setting modules.

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