



Injection Production Packer (IPP™)

Single-Set Rotation Release

Weatherford's single-set rotation-release injection production packer (IPP) is a field-proven and extremely versatile, downhole service tool that can be installed in either cased or open hole, on a temporary or long-term basis. This packer is designed to be inflated, deflated, and retrieved one time per run; however, the packer can be redressed at the rigsite for additional runs.

The packer is run in the well on threaded pipe (drillpipe or work string) and requires only limited rotational movement to operate. With a relatively small OD, the packer can be run through restricted IDs and then set in larger openings. The standard elastomers are suitable for severe-service applications.

The packer is inflated with application of work-string hydraulic pressure. To deflate and retrieve the tool, the work string is pulled upward and then rotated five turns to the right, enabling pressure between the element and the annulus above the packer to equalize. An additional pull causes the element to deflate into the tubing and annulus below the packer. When the element is completely deflated, the packer can be retrieved.

Applications

- Suitable for use in vertical, high-angle, or horizontal applications
- Useful for open- or cased-hole zonal isolation
- Capable of acting as a permanent or retrievable bridge plug
- Functional as a retainer for squeezing or treating formations below the tool
- Effective in locating casing or liner leaks
- Ideal for short-term production tests
- Useful for isolating casing patches

Features, Advantages and Benefits

- Relatively small OD permits the packer to pass through tight restrictions, enabling the packer to be inflated and set in larger openings where mechanical packers and bridge plugs cannot be used.
- Hydraulically activated inflation valve enables the packer to be set without manipulation, providing reliability.



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Features, Advantages and Benefits (continued)

- Versatile design enables the packer to be run in open or cased hole, providing application flexibility.
- Elements can be inflated with cement for permanent installation, saving the cost of additional runs.
- The packer can be redressed at the rigsite for additional runs, saving time.
- Elements are manufactured from application-specific elastomers, providing resistance to high temperatures, corrosive fluids, and gases.
- Elements are adaptable to different mandrel sizes, making the packer suitable for use in a variety of applications.

Specifications

Dimensions and Element Types			
Element OD (in./mm)	Mandrel ID (in./mm)	Element Seal Length (in./mm)	Element Type Cable/Strip
3.50 89	1.25 32	48 1,219	C/S
4.25 108.0	2.00 51		C/S
4.350 110.5	2.00 51		S
4.63 117.0	2.00 51		C/S
	2.50 64		
5.00 127.0	2.00 51		S
5.50 140.0	2.00 51		C/S
	2.50 64		
6.25 159.0	2.00 51		C
	2.50 64		
6.75 171.0	2.00 51		C
	2.50 64		



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Specifications (continued)

Dimensions and Element Types			
Element OD (in./mm)	Mandrel ID (in./mm)	Element Seal Length (in./mm)	Element Type Cable/Strip
6.88 175.0	2.00 51	48 1,219	S
	2.50 64		
7.00 177.8	2.50 64		C
7.50 190.0	2.50 64		C
9.00 229.0	2.50* 64		S
9.25 235.0			C
10.50 267.0			S
13.25 336.6	2.50** 64		S
13.88 352.4			
15.00 381.0			
17.75 450.8			

* Can be run on standard 2 1/2-in. (63.5-mm) ID chassis or heavy-duty 2 1/2-in. chassis.

** Run on 2 1/2-in. (63.5-mm) heavy-duty chassis only.

Corresponding Chassis and Element Sizes		
IPP Chassis ID (in./mm)	Element Size (in./mm)	Connections (in.)
1-1/4 31.8	3.50 88.9	2-3/8 × 2-3/8 (EUE box up × EUE pin down)
2 50.8	4.25 to 6.75 108.0 to 171.5	2-3/8 × 2-7/8 (EUE box up × EUE pin down)
2-1/2 63.5	4.63 to 10.50 118.0 to 266.7	2-7/8 × 3-1/2 (EUE box up × EUE pin down)
Heavy duty	7.50 and larger 191.0 and larger	3-1/2 × 3-1/2 (API IF box up × EUE pin down)

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Options

- Elements are available in a variety of sizes, ranging from 3 1/2- to 10 1/2-in. (89.9- to 266.7-mm) OD, and can be changed to fit various hole sizes. (Weatherford also offers elements, ranging from 13 1/4- to 18 5/8-in. (336.5- to 472.4-mm) OD, for use with the heavy-duty version of this packer.)
- Elements can be constructed with fully covered or partially exposed steel-rib reinforcement (strip) or fully covered cable reinforcement. Strip elements can incorporate an exposed rib section to provide anchoring in the wellbore when required.
- A delayed opening feature, available for some sizes, enables the packer to be run where other hydraulic events occur first.
- Weatherford provides a variety of complementary tools for use with this packer such as circulating valves, disconnects with overshots and plugs.