Injection Production Packer (IPP™)

Single-Set Pull Release

Weatherford's single-set pull-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, but can be redressed at the rigsite for additional runs.

The packer is run in the well on coiled tubing or threaded pipe (drillpipe or work string) and requires only axial 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 an application of work-string hydraulic pressure. To deflate and retrieve the tool, the work string is pulled upward to shear the releasing pin. Axial tension is then reduced on the work string, which enables the pressure between the element and the annulus to equalize. An additional pull causes the element to deflate. When the element is completely deflated, the packer can be retrieved.

Applications

- Suitable for deviated or horizontal applications
- Useful in 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.

Injection Production Packer (IPP™)

Single-Set Pull Release

Features, Advantages and Benefits (continued)

- Only axial work-string movement is required to equalize and deflate the tool, enabling easy retrieval.
- 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 operations 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 *89.0*	1.25 *32*	48 *1,219*	C/S
4.25 *108.0*	2.00 *51*		C/S
4.35 *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*		

Injection Production Packer (IPP™)

Single-Set Pull Release

Specifications (continued)

Dimensions and Element Types			
Element OD (in./*mm*)	**Mandrel ID (in./*mm*)**	**Element Seal Length (in./*mm*)**	**Element Type Cable/Strip**
6.75 *171.0*	2.00 *51*	48 *1,219*	C
	2.50 *64*		
6.88 *175*	2.00 *51*		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. (63.5-mm) chassis.
** Run on 2 1/2-in. (63.5-mm) heavy-duty chassis only.

Injection Production Packer (IPP™)

Single-Set Pull Release

Specifications (continued)

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)

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.
- 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 offers a full complementary of accessory tools to use with the packer, including disconnects with retrieval overshoots, circulating valves, and plugs.