

ISO Extreme Retrievable Well Barrier

Creates a VO-rated barrier that isolates the wellbore without the need for a nipple profile

Applications

- Packer setting and completion installation
- Contingent plugging of completions with damaged nipples
- Temporary zonal isolation and plugging
- Hanging of completion accessories within the tubing string
- Temporary well suspension
- Pressure testing of production tubing and packer setting
- Wellhead repair and replacement

Features and Benefits

- The ISO Extreme retrievable well barrier is tested to ISO 14310 V0 standards for high-performance reliability.
- The 10,000-psi (68.95-MPa) pressure rating provides high-integrity sealing and minimizes loss-of-containment risk and associated health, safety, and environmental risks.
- Retrieval is achieved by means of an internal sleeve that is shifted down to equalize the pressure and then sheared up to release. This minimizes the risk of the plug releasing before equalization.
- An internal and external fish neck for provides options for removal from wellbore.
- The short maximum running OD enables passage through wellbore restrictions.
- The ISO Extreme well barrier can be deployed on industry-standard-setting tools on any conveyance means, which enhances operational flexibility.
- The element booster system traps boost pressure into the elements for higher-pressure and -temperature applications.
- Rotational locking during milling operations facilitates removal in the event that the plug cannot be retrieved conventionally.
- Optimized slip and casing contact minimizes potential damage to tubing.
- The flow area through the ports exceeds the ID area to mitigate the risk of debris plugging the well barrier in overbalanced situations.
- The plug releases with as little as 3,000 lb (1,361 kg) to allow for the use of slickline for retrieval.
- The plugs are compatible with existing standard and trip-saver junk catchers to minimize inventory requirements.
- Body lock rings in the slip system prevent re-engagement of the slips after release.



ISO Extreme well barrier creates a V0 rated barrier to temporarily isolate the wellbore.



ISO Extreme Retrievable Well Barrier

Tool Description

The Weatherford ISO Extreme retrievable well barriers set on electric line, slickline, tubing, or coiled tubing (CT) to temporarily isolate the well. The high-performance HNBR packing element provides a V0-rated seal that holds pressure from above and below while protecting the bidirectional, low-stress slip system from debris contamination. The plug is easily retrieved on tubing, CT, or slickline with a standard GS retrieval tool. An external fish neck is incorporated into the design as an alternative retrieval method. Once the retrieval tool engages the top of the plug, jarring down will shear an equalizing valve that locks in the *open* position. Straight pull releases the plug, and a release-retention system maintains run-in diameter of the plug for easy removal from the wellbore.

Specifications

Casing/Tubing			Max. OD	To Pass Restriction	Length	Temp. Rating	ISO Rating	Pressure Rating Above and Below
Size	Weight	ID Range						
3-1/2 in. * (88.9 mm)	9.2 to 9.3 lb/ft (13.7 to 13.9 kg/m)	2.93 to 3.06 in. (74.37 to 77.75 mm)	2.720 in. (69.09 mm)	2.750 in. (69.85 mm)	98.1 in. (2491.7 mm)	40 to 325°F 4 to 163°C	V0	10,000 psi (69 MPa)
4-1/2 in. (114.3 mm)	11.6 to 13.5 lb/ft (17.3 to 20.1 kg/m)	3.853 to 4.069 in. (97.87 to 103.35 mm)	3.650 in. (92.71 mm)	3.687 in. (93.65 mm)	98.3 in. (2496.8 mm)	40 to 325°F 4 to 163°C	V0	10,000 psi (69 MPa)
	15.1 lb/ft (22.5 kg/m)	3.752 to 3.904 in. (95.30 to 99.16 mm)	3.600 in. (91.44 mm)	3.630 in. (92.20 mm)				
5-1/2 in. (139.7 mm)	17 to 20 lb/ft (25.3 – 29.8 kg/m)	4.695 to 4.976 in. (119.25 to 126.39 mm)	4.535 in. (115.19 mm)	4.562 in. (115.87 mm)	103.6 in. (2631.4 mm)	40 to 325°F 4 to 163°C	V0	10,000 psi (69 MPa)
	23 lb/ft (34.2 kg/m)	4.578 to 4.765 in. (116.28 to 121.03 mm)	4.380 in. (111.25 mm)	4.475 in. (113.67 mm)				
	26 lb/ft (38.7 kg/m)	4.445 to 4.650 in. (112.90 to 118.11 mm)	4.285 in. (108.84 mm)	4.312 in. (109.52 mm)				
7 in. * (177.8 mm)	23.0 to 26.0 lb/ft (34.2 to 38.7 kg/m)	6.100 to 6.401 in. (154.94 to 162.59 mm)	5.920 in. (150.37 mm)	TBC	TBC	40 to 325°F 4 to 163°C	V0	10,000 psi (69 MPa)
	26.0 to 38.0 lb/ft (38.7 to 56.6 kg/m)	5.799 to 6.292 in. (147.29 to 159.82 mm)	5.720 in. (145.29 mm)	TBC				

*These sizes are currently in development and testing – specifications subject to change.

