

# Packer Service Tools



**PetroForge  
Technology**



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## PFT-DLT Retrievable Service Packer

The PFT-DLT Compression-Set Service Packer is specifically engineered to withstand rigorous conditions, including high pressure and temperature environments. Its hydraulic upper hold-down buttons ensure the packer remains securely anchored even during significant differential pressures from below. Featuring positive rotational locks on all internal connections, the PFT-DLT enables the transmission of extreme torque without compromise. Additionally, backup rings are incorporated on all O-rings to ensure dependable sealing under high temperatures and pressures. Equipped with tool joint connections on extended top and bottom subs, the packer facilitates hydraulic tong makeup and breakout operations with ease.

## Applications

- High-pressure and high-temperature testing and treating operations
- Storm packer applications
- Drillstem & Production testing

## Features, Advantages, and Benefits

- The heavy-duty mandrel offers robust support for substantial hang-off weights.
- End connections are rotationally locked to ensure efficient torque transmission
- The set and unset process operates with a quarter-turn mechanism.
- Standard automatic jay mechanism.
- Hold-down buttons with a large diameter minimize casing damage.
- The high torque rating enables the manipulation of heavy drill pipe into confined spaces.
- A variety of sizes are offered to accommodate diverse needs.
- The operation is straightforward and conducive to rig operations.



## Specifications

		Casing		Packer		
OD in/mm	Weight lb/ft	Min ID in/mm	Max ID in/mm	Max OD in/mm	Min ID in/mm	Standard Thread Connections
4-1/2 114.3	15.1-17.7	3.696 93.88	3.826 97.18	3.593 91.26	1.750 44.45	2-3/8" IF
	13.5-17.0	3.740 95.00	3.920 99.57	3.781 96.04	1.750 44.45	2-3/8" IF
	11.6-13.5	3.920 99.57	4.000 101.60	3.781 96.04	1.750 44.45	2-3/8" IF
5 127.0	15.0-18.0	4.276 108.61	4.408 111.96	4.125 104.78	1.750 44.45	2-3/8" IF
	11.5-15.0	4.408 111.96	4.560 115.82	4.250 107.95	1.750 44.45	2-3/8" IF
5-1/2 139.7	17.0-23.0	4.670 118.62	4.892 124.26	4.500 114.30	1.750 44.45	2-3/8" IF
	13.0-17.0	4.892 124.26	5.044 128.12	4.641 117.88	1.750 44.45	2-3/8" IF
7 177.8	38.0-46.4	5.626 142.90	5.920 150.37	5.525 140.34	2.688 68.28	3-1/2" IF
	32.0-38.0	5.920 150.37	6.094 154.79	5.781 146.84	2.688 68.28	3-1/2" IF
	26.0-32.0	6.094 154.79	6.276 159.41	5.954 151.23	2.688 68.28	3-1/2" IF
	17.0-23.0	6.366 161.70	6.538 166.07	6.188 157.18	2.688 68.28	3-1/2" IF
7-5/8 193.7	33.7-39.0	6.625 168.28	6.765 171.83	6.453 163.91	2.688 68.28	3-1/2" IF
	24.0-29.7	6.875 174.63	7.025 178.44	6.670 169.42	2.688 68.28	3-1/2" IF
9-5/8 244.5	58.4-59.4	8.407 213.54	8.435 214.25	8.250 209.55	3.750 95.25	4-1/2" IF
	43.5-53.5	8.535 216.79	8.755 222.38	8.365 212.47	3.750 95.25	4-1/2" IF
	32.3-43.5	8.755 222.38	9.001 228.63	8.584 218.03	3.750 95.25	4-1/2" IF

Casing				Packer		
OD in/mm	Weight lb/ft	Min ID in/mm	Max ID in/mm	Max OD in/mm	Min ID in/mm	Standard Thread Connections
10-3/4 273.05	71.1-73.2	9.460 238.91	9.450 240.03	9.125 231.78	3.750 95.25	4-1/2" IF
	60.7-65.7	9.560 242.82	9.660 245.36	9.375 238.13	3.750 95.25	4-1/2" IF
	51.0-55.5	9.760 247.90	9.850 250.19	9.500 241.30	3.750 95.25	4-1/2" IF
11-3/4 298.45	60.0-71.0	10.586 268.88	10.772 273.61	10.406 264.31	3.750 95.25	4-1/2" IF
13-3/8 339.7	48.0-77.0	12.275 311.79	12.715 322.96	12.000 304.80	3.690 93.73	4-1/2" IF

## PFT-RTTS Retrievable Service Packer

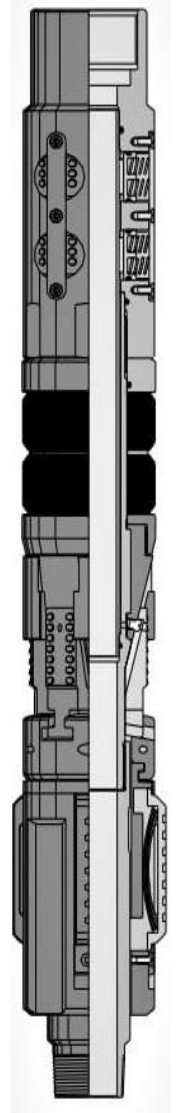
PFT-RTTS packer is a full-opening, hook wall packer used for testing, treating, and squeeze operations. In most cases, the tool runs with a circulating valve assembly. The full-opening feature permits large volumes of fluid to be pumped with a minimal pressure drop and allows the passage of a through-tubing perforating gun. A J-slot mechanism, mechanical slips, packer elements, and hydraulic slips are all included in the packer body. The hydraulic hold-down mechanism's large, heavy-duty slips aid in preventing the tool from being pumped uphole. Model PFT-RTTS packer runs with circulating valve and it is also run with Safety Joint but it is optional.

## Applications

- used for testing, treating, and squeeze cementing operations

## Features, Advantages, and Benefits

- The packer mandrel bore's full opening design enables the tool to handle large amounts of fluid. Wireline tools or tubing type guns can be run through the packer
- The packer can be set and repositioned as many times as necessary with simple tubing manipulation
- The optional inbuilt circulating valve locks into open or closed position during squeezing or treating operations and opens quickly to allow circulation above the packer
- Tungsten carbide slips improve the holding ability and wear resistance in high strength casing.



## Specifications

OD in/mm	Weight lb/ft	Casing		Packer		
		Min ID in/mm	Max ID in/mm	Max OD in/mm	Min ID in/mm	Max Working Pressure Psi
7 177.8	17.0-38.0	5.799 147.29	6.551 166.40	5.65 143.5	2.38 60.30	10,000
	49.5	5.384 136.76	5.701 144.81	5.25 133.40	2.00 50.80	10,000
9-5/8 244.5	36.0-53.5	8.403 213.43	9.049 229.85	8.25 209.60	3.75 95.30	7,500
	58.4-71.8	7.958 202.13	8.587 218.11	7.80 198.10	3.00 76.20	7,500
13-3/8 339.7	54.5-72.0	12.203 309.96	12.783 324.69	11.94 303.30	3.75 95.30	5,000
	72.0-98.0	11.760 298.70	12.403 315.04	11.50 292.10	3.75 95.30	5,000

## PFT-HD Compression-set Retrievable Service packer

The PFT-HD compression-set retrievable service packer is designed to isolate the annulus from the production conduit for general service purposes. It can be deployed with a mechanically set bridge plug to cover specific intervals work as a straddle system.

The internal bypass feature facilitates circulation around the packer and allows for quicker trips with reduced swabbing. Hydraulically operated upper hold-down buttons secure the packer against high differential pressure from below. Additionally, an internal unloader makes packer retrieval easier by enabling circulation below the buttons.

## Applications

- Squeeze cementing
- Testing and treating
- General service
- Cased-hole production testing

## Features, Advantages, and Benefits

- The packer can be set with 1/4 turn right hand rotation and set down weight.
- Straight Pick-up release.
- Rocker type slips
- Repositionable, automatically returns to the run-in hole position when moved up the hole.





## Specifications

Casing				Packer		
OD in/mm	Weight lb/ft	Min ID in/mm	Max ID in/mm	Max OD in/mm	Min ID in/mm	Standard Thread Connections
4-1/2 114.3	9.5-13.5	3.920 99.57	4.090 103.89	3.755 95.38	1.485 37.72	2-3/8" EU 8RD
	11.6-15.1	3.826 97.18	4.000 101.60	3.656 92.86		
5 127.0	11.5-15.0	4.408 111.96	4.560 115.82	4.130 104.90	1.860 47.24	2-3/8" EU 8RD
5-1/2 139.7	14.0-17.0	4.892 124.26	5.012 101.90	4.630 117.60	1.923 48.84	2-3/8" EU 8RD
	20.0-23.0	4.670 118.62	4.778 121.36	4.505 114.43		
6-5/8 168.3	28.0-35.0	5.595 142.11	5.791 147.09	5.380 136.65	2.485 63.12	2-7/8" EU 8RD
7 177.8	17.0-26.0	6.276 159.41	6.538 166.07	6.125 155.58	2.485 63.12	2-7/8" EU 8RD
	26.0-32.0	6.094 154.79	6.276 159.41	5.880 149.35		
7-5/8 193.7	33.7-39.0	6.625 168.28	6.765 171.83	6.458 164.03	2.485 63.12	2-7/8" EU 8RD
	24.0-29.7	6.875 174.63	7.025 178.44	6.693 170.00		
9-5/8 244.5	43.5-53.5	8.535 216.79	8.755 222.38	8.255 209.68	3.985 101.22	4-1/2" EU 8RD

## PFT-RBP Retrievable Bridge Plug

PFT-RBP Retrievable Bridge Plug is a high-pressure retrievable bridge plug suitable for use in selective treating and testing of multiple zones. It is typically set mechanically on tubing or drill pipe but can be supplied in an electric line set version for special applications. The design includes a large internal by-pass area, to prevent swabbing while running or retrieving. The by-pass closes off during the setting process and re-opens during the retrieving process prior to the upper slips releasing so as to equalize pressure across the plug before it un-sets. It can be set in tension making it ideal for use in both shallow applications, such as testing wellheads, and in deep set operations.

## Applications

- Temporary zonal isolation
- Shallow set to test wellhead
- Deep high-pressure testing
- Squeeze cementing
- Fracturing
- Multi selective zone treating and testing operations

## Features, Advantages, and Benefits

- Suitable for use at any depth
- Standard tool is set and released by a 1/4-turn to the right and pipe reciprocation
- Other J-slot configurations are available
- An emergency shear release mechanism is part of the design
- Large by-pass area to prevent swabbing.
- Utilizes a spring-loaded retrieving tool
- Pressure equalizes prior to releasing upper slips.



## Specifications

OD in/mm	Weight lb./ft.	Casing		Bridge Plug
		Min. I.D. in/mm	Max ID in/mm	Max OD in/mm
4-1/2 114.3	9.5-13.5	3.920	4.090	3.750
		99.57	103.89	95.25
5 127.0	11.5-15.0	4.408	4.560	4.280
	18.0-20.8	111.96	115.82	108.71
5-1/2 139.7	20.0-23.0	4.156	4.276	4.000
	14.0-20.0	105.56	108.61	101.60
7 177.8	26.0-32.0	4.670	4.778	4.500
	20.0-26.0	118.62	121.36	114.30
7-5/8 193.7	24.0-29.7	4.778	5.004	4.625
	33.7-39.0	121.36	127.10	117.48
8-5/8 219.08	28.0-40.0	6.094	6.276	5.875
	32.3-43.5	154.79	159.41	149.23
9-5/8 244.5	40.0-53.5	6.276	6.456	5.969
	32.3-43.5	159.41	163.98	151.61
9-5/8 244.5	40.0-53.5	6.875	7.025	6.672
	32.3-43.5	174.63	178.44	169.47
9-5/8 244.5	40.0-53.5	6.625	6.765	6.453
	32.3-43.5	168.28	171.83	163.91
9-5/8 244.5	40.0-53.5	7.725	8.017	7.531
	32.3-43.5	196.22	203.63	191.29
9-5/8 244.5	40.0-53.5	8.535	8.835	8.250
	32.3-43.5	216.79	224.41	209.55
9-5/8 244.5	40.0-53.5	8.755	9.001	8.500
	32.3-43.5	222.38	228.63	215.90

## PFT-SLRT Spring Loaded Retrieving Tool

PFT-SLRT Spring Loaded Retrieving Tool is used to run and retrieve the Retrievable Bridge Plug.

### Applications

- Running & retrieving of PFT-MRBP

### Features, Advantages, and Benefits

- Mill-toothed shoe
- Sturdy design
- Left-hand release
- Straight set down to latch on MRBP

### Specifications

OD in/mm	Max. OD in/mm	Min. ID in/mm	Thread Connection Box Up
4-1/2 114.3	3.766 95.66	1.984 50.39	2-3/8" EU 8RD
5 127.0	4.141 105.18	1.984 50.39	2-3/8" EU 8RD
5-1/2 139.7	4.516 114.71	1.984 50.39	2-3/8" EU 8RD
	4.516 114.71	2.359 59.92	2-7/8" EU 8RD
7 177.8	5.875 149.23	2.500 63.50	2-7/8" EU 8RD
	5.891 149.63	2.475 62.87	2-7/8" IF
7-5/8 193.7	6.250 158.75	2.500 63.50	2-7/8" EU 8RD
8-5/8 219.08	7.500 190.50	2.500 63.50	2-7/8" EU 8RD
8-5/8 219.08	7.500 190.50	2.475 62.87	3-1/2" IF
9-5/8 244.5	8.000 203.20	2.500 63.50	2-7/8" EU 8RD
	8.010 203.45	2.475 62.87	3-1/2" IF



## PFT-WRBP Wireline Retrievable Bridge Plug

The PFT-WRBP Bridge Plug is a wireline-set, retrievable plug capable of holding differential pressure from above or below. The PFT-WRBP may be set on conventional wireline or hydraulic packer-setting tools, such as the HST setting tool. Short design is easy to retrieve on tubing, coil tubing, or sandline, using the appropriate retrieval tool. When the retrieval tool engages the top of the bridge plug, the equalizing valve opens before the bridge plug is released, preventing the bridge plug from moving with differential pressure.

### Applications

- Acidizing, fracturing, and cementing
- Zonal isolation.
- Wellhead repair or replacement
- Casing pressure testing

### Features, Advantages, and Benefits

- Wireline Set & wireline retrieve.
- Bidirectional slips
- Rotational emergency-release mechanism
- Bidirectional slips



## Specifications

Casing				Bridge Plug
O.D. (in./mm)	Weight (lb./ft )	Min. I.D. (in./mm)	Max. O.D. (in./mm)	Max. O.D. (in./mm)
3 1/2 88.9	10.2	2.922 74.22	2.922 72.22	2.781 70.64
	7.7-9.2	2.992 76.00	3.068 77.93	2.867 72.82
4 1/2 114.3	9.5-13.5	3.920 99.57	4.000 101.60	3.771 95.78
5 127.0	15.0-18.0	4.250 107.95	4.408 111.96	4.125 104.78
5 1/2 139.7	20.0-23.0	4.625 117.48	4.777 121.34	4.500 114.30
	15.5-20.0	4.778 121.36	4.950 125.73	4.641 117.88
	13.0-15.5	4.950 125.73	5.190 131.83	4.781 121.44
6 5/8 168.3	24.0-32.0	5.675 144.15	5.920 150.37	5.484 139.29
	17.0-20.0	5.938 150.83	6.135 155.83	5.812 147.62
7 177.8	38.0	5.830 148.08	5.937 150.80	5.656 143.66
	32.0-35.0	5.938 150.83	6.135 155.83	5.812 147.62
	26.0-29.0	6.136 155.85	6.276 159.41	5.968 151.59
	23.0-26.0	6.276 159.41	6.366 161.70	6.078 154.38
	17.0-20.0	6.456 163.98	6.578 167.08	6.266 159.16
9 5/8 244.5	47.0-53.5	8.343 211.91	8.681 220.50	8.218 208.74
	40.0-47.0	8.681 220.50	8.835 224.41	8.437 214.30
	29.3-36.0	8.836 224.43	9.063 230.20	8.593 218.26

## PFT-UV Unloader Valve

The PFT-UV Unloader Valve is a high-pressure accessory tool for a compression-set service packer. The PFT-UV allows pressure to equalize above and below the packer before the packer is unset and permits fluid bypass during running in or out of the hole. It can be locked in the open or closed position by a quarter-turn of the pipe. The valve can be equipped with tool joint connections, making it compatible with the PFT-RTTS/PFT-DLT & PFT-SP packer

### Applications

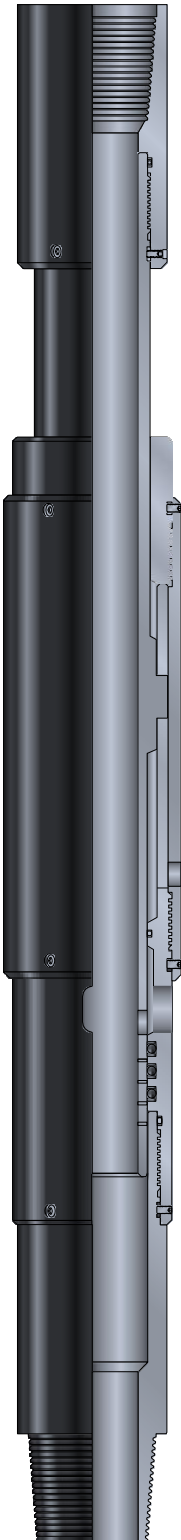
- High-pressure and high-temperature testing and treating operations.
- Drillstem and production testing Features.

### Features, Advantages, and Benefits

- Can be locked in an open or closed position.
- Large bypass area for fluid circulation
- Tool joint or tubing connections available
- Top connection keyed to prevent torque overload.
- Unloader seals protected from fluid flow in an open position.
- High-strength alloy steel construction.

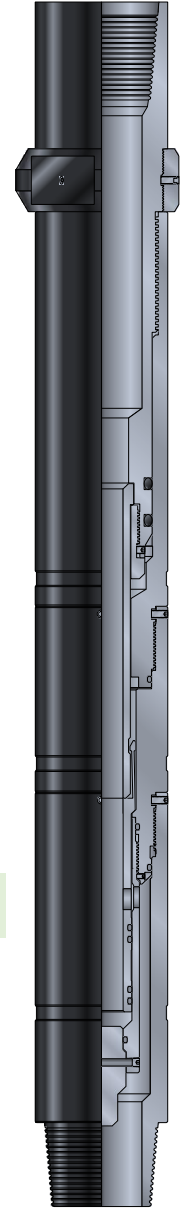
### Specifications

Size	Max OD	Min ID	Standard Thread Connections
in/mm	in/mm	in/mm	
2-3/8	3.750	1.750	2-3/8" EU 8RD
60.3	95.25	44.45	2-3/8" I.F.
2-7/8	4.118	2.125	2-7/8" EU 8RD
73.0	104.60	53.98	
3-1/2	5.500	2.688	3-1/2" I.F.
88.9	139.70	68.28	
4-1/2	7.250	3.750	4-1/2" I.F.
114.3	184.15	95.25	



## PFT-ASV Storm Valve

The PFT-ASV Storm Valve run above the PFT-DLT/PFT-RTTS Compression-Set Packer provides a means to isolate the tubing below the packer and disconnect the running string. The string is rotated twenty-two turns to the left to disconnect. The running string can be reconnected, and the valve opened to equalize pressure for packer retrieval. Storm Valve features an expendable plug that provides through bore access for circulation or wireline passage.



## Applications

- Weather-related emergencies
- Wellhead repair

## Features, Advantages, and Benefits

- Valve closes automatically when disconnecting the running string
- Valve equalizes automatically when reconnecting running string
- Expendable plug for through-bore access
- Rugged alloy steel construction
- Tool-joint connections
- Simple to operate
- Compatible with compression packer operation
- Dependable design
- Easy to redress

## Specifications

Size in/mm	Min ID in/mm	Max OD in/mm	Thread Connection Box up x Pin Down
4-3/4 120,65	1.490 37,85	4.750 120,65	3-1/2" IF
6-1/8 155,58	2.000 50,80	6.125 155,58	4-1/2" IF
6-1/8 155,58	2.000 50,80	6.125 155,58	5-1/2" HT55-375