

### PERMANENT SEAL BORE PACKER

#### **DESCRIPTION**

#### A-PSP, A-263 – Permanent Seal Bore Packer

Permanent Seal Bole high-performance and versatile retainer production packers are considered industry standards among permanent production packers, designed to withstand high differential pressure while the seal assembly is latched into the packers. The packer run with the adapter kit (wireline/hydraulic) and wireline pressure setting assembly/hydraulic setting tool based on required application. Hydraulic setting mechanism makes the Packer particularly suitable for use in highly deviated wells. Careful choice of materials for components, which are exposed to the well fluids, enables the packer to be used in a wide range of operating conditions.

The Packer is equipped with two sets of upper and lower slips and cones which ensure effective pressure induced force distribution into the casing.

#### **FEATURES/ BENEFITS**

- Solid, slim-lined construction and a packing element system which resists swaboff. This permits a fast run-in, making significant rig-time savings possible (when compared with earlier models of permanent packers) without fear of impact damage or premature setting, yet packs off securely and permanently when the packer is set
- Two opposed sets of full-circle, full-strength slips ensure packer will remain properly set
- Packing element resists swab-off and packs off securely when packer is set
- Interlocked, expandable metal back-up rings contact the casing and create a positive barrier to packing element extrusion
- Setting requires no rotation or reciprocation, thereby eliminating the problems of spacing out, landing etc.
- The Packer is normally run with the adapter kit and wireline pressure setting assembly, the packer may be run with a hydraulic Setting Tool.
- Packer designed to withstand pressure differentials up to 10,000 psi
- Bottom guide furnished as standard, allowing the attachment of a seal bore extension, mill-out extension or other equipment below the packer.
- Fluid displacement is possible after well is flanged up and prior to setting the packer

#### **APPLICATIONS**

- High flow production wells.
- High pressure and temperature applications.
- High volume fracking applications.

Available in sizes for various casing sizes for their respective weight ranges with varying standard or exotic material and elastomers including seal system based on compatibility with the well environment and application requirement. In addition, packers are furnished with required all accessories e.g. locator tubing seal assembly, anchor latch tubing seal assembly, seal bore extensions, mill-out extension etc. with different end connections (Standard API EUE or NUE or premium), to meet customer's requirements.

Also available in dual bore and large bore versions for different casing sizes ranges.





## **PERMANENT SEAL BORE PACKER**

### **SPECIFICATION GUIDE**

	Casi	ng			Packer	Seal Assembly				
	)D	Weight		Ma	x OD	Diame			Min Bore	
in. mm		lb/ft	Size	in.	mm	Sealing in.	g Bore mm	Size	Thru S in.	mm
		17.0–18.9	19-25	3.475	88.2			20.25		
		15.1-17.0	21-25	3.562	90.4	2.500	63.5	20–25	1.865	47.3
		11.6-15.1	22-19	3.593	91.2	1.968	49.9	21-19	1.312	33.3
4-1/2	114.3							20/40–19 40/80–26	.984 1.968	24.9 49.9
		10.5-13.5	23–26	3.750	95.2	2.688	68.2	41/81-26	1.750	44.4
		9.5–11.6	24–19	3.812	96.8	1.968	49.9	21-19	1.312	33.3
		3.5 11.0	2. 23	5.012	30.0	1.500	13.3	20/40-19	.984	24.9
	127.0		32-26	3.968	100.7	2.688	68.2	40/80–26 41/81–26	1.968	49.9 44.4
			32-25			2.500	63.5	20-25	1.865	47.3
5		18-21.4	32–19			1.968	49.9	21–19	1.312	33.3
	127.0		JE 13			2.500	13.3	20/40-19	.984	24.9
		11.5–13	34–26	4.250	107.9	2.688	68.2	40/80–26 41/81–26	1.968	49.9 44.4
		11.5 15	34-25			2.500	63.5	20-25	1.865	47.3
		23–26.8	34–19	4.250	107.9	1.968	49.9	21-19	1.312	33.3
					107.3	1.500		20/40-19	.984	24.9
			42-26			2.688	68.2	40/80–26 41/81–26	1.968	49.9 44.4
F 4/2	420.7	20–23	42.40	4.328	109.9		40.0	21–19	1.312	33.3
5-1/2	139.7		42–19			1.968	49.9	20/40-19	.984	24.9
			44-26			2.688	68.2	40/80-26	1.968	49.9
		14–17		4.500	114.3			41/81–26 21–19	1.750	44.4 33.3
			44–19			1.968	49.9	20/40-19	.984	24.9
		24–32	81–32	5.350	135.8			60/80-32	2.406	61.1
	168.2		01 32	3.330	133.0	3.250	82.5	61/81-32	1.990	50.5
		20–32	82-32	5.468	138.8			60/80–32 61/81–32	2.406 1.990	61.1 50.5
6-5/8			00.00			2.688	68.2	40/80-26	1.968	49.9
			82–26					41/81-26	1.750	44.4
		20	84-32	5.687	144.4	3.250	82.5	60/80-32	2.406	61.1
								61/81–32 40/80–26	1.990	50.5 49.9
			84–26			2.688	68.2	41/81-26	1.750	44.4
		53.60-57.10	64-30	4.937	125.40	3.000	76.2	42/62-30	2.375	60.3
								40/60-30	1.970	50.0
		38–46.4	81–32	5.350	135.8			60/80–32 61/81–32	2.406 1.990	61.1 50.5
			02 22	5.468	138.8 144.4 149.2	3.250	82.5	60/80-32	2.406	61.1
		32-42.7	82–32					61/81-32	1.990	50.5
			82-26			2.688	68.2	40/80-26	1.968	49.9 44.4
								41/81–26 60/80–32	1.750 2.406	61.1
7	177.8	23–32	84–32	5.687		3.250	82.5	61/81–32	1.990	50.5
				3.067				40/80-26	1.968	49.9
						2.688	68.2	41/81–26 60/80–32	1.750 2.406	44.4 61.1
			86–32	5.875		3.250	82.5	61/81-32	1.990	50.5
			88-32			3.250	82.5	60/80-32	2.406	61.1
			00-32	6.187	157.1	3.230	02.3	61/81-32	1.990	50.5
		17–20	88-26			2.688	68.2	40/80–26 41/81–26	1.968	49.9 44.4
								60/80-32	2.406	61.1
		33.7–39 24–33.7	86–32	5.875	149.2	3.250	82.5	61/81-32	1.990	50.5
			88-32			3.250	82.5	60/80-32	2.406	61.1
7-5/8	193.6			6.187	157.1		02.3	61/81–32 40/80–26	1.990	50.5 49.9
			88–26	0.18/		2.688	68.2	41/81–26	1.750	44.4
			92–32		161.9	3.250 2.688	82.5 68.2	60/80-32	2.406	61.1
				6.375				61/81-32	1.990	50.5
			92–26					40/80–26 41/81–26	1.968	49.9 44.4
						2 252	02.5	60/80-32	2.406	61.1
	196.9		88–32	6.187	157.1	3.250	82.5	61/81-32	1.990	50.5
7-3/4		46.1–48.6	88–26	0.18/		2.688	68.2	40/80-26	1.968	49.9
				l				41/81-26	1.750	44.4

	Cacin	<u> </u>			Packer	Seal Assembly				
Casing						Diame	ter of	Jea	Min	
OD		Weight		Max OD		Diameter of Sealing Bore			Thru	
in.	mm	lb/ft	Size s	in. mm		in.	mm	Size	in.	mm
		36–49	126-38	7.425	400.0	3.875	98.4	120-38	2.468	62.6
8-5/8	219.0		126-40	7.125	180.9	4.000	101.6	80-40	2.985	75.8
8-3/8		24–36	128-38	7.500	190.5	3.875	98.4	120-38	2.468	62.6
		24 30	128-40	7.500	150.5	4.000	101.6	80-40	2.985	75.8
			404 47			4 750	120.6	192-47	3.875	98.4
			194–47		206.3	4.750	120.6	190–47 191–47	3.000 2.500	76.2 63.5
9-5/8	244.4	36-53.5	194–40	8.125		4.000	101.6	80-40	2.985	75.8
								60/80-32	2.406	61.1
			194–32			3.250	82.5	61/81-32	1.990	50.5
								192-47	3.875	98.4
		62.8	194–47		206.3	4.750	120.6	190-47	3.000	76.2
9-7/8	250.1		404.40	8.125				191-47	2.500	63.5
			194–40			4.000	101.6	80-40	2.985	75.8
			194-32			3.250	82.5	60/80-32 61/81-32	2.406 1.990	61.1 50.5
								190–47	3.000	76.2
	273.0	60.7–79.2 32.75–60.7	212–47	9.000	228.6	4.750	120.6	190–47 191–47 or	2.500	63.5
								192-47	3.875	98.4
			212–32			3.250	82.5	80–32 or	2.406	61.1
10-3/4								81–32	1.990	50.5
10-3/4			214-47	9.437	239.7	4.750	120.6	190-47	3.000	76.2
								191–47 or	2.500	63.5
								192–47	3.875	98.4
								80-32 or	2.406	61.1
			214-32			3.250	82.5	81-32	1.990	50.5
	298.4	42–60	220–47	10.437	265.1		120.6	190-47	3.000	76.2
						4.750		191–47 or	2.500	63.5
11-3/4								192-47	3.875	98.4
			220-32			3.250	82.5	80–32 or	2.406	61.1
								81–32	1.990	50.5
		61–102 48–72	230–60			6.000	152.4	190-60	4.875	123.8
								190-47	3.000	76.2
			230–47	11.562	293.6	4.750	120.6	191–47 or	2.500 3.875	63.5 98.4
								192–47		
	339.7		230–32			3.250	82.5	80–32 or 81–32	2.406 1.990	61.1 50.5
13-3/8			240-60		304.8	6.000		190–60	4.875	123.8
			240-00			6.000	152.4	190-60	3.000	76.2
			240–47	12.000		4.750	120.6	190–47 191–47 or	2.500	63.5
								192-47	3.875	98.4
			240-32			3.250	82.5	80–32 or	2.406	61.1
								81–32		

Additional sizes with weight ranges are available as required.



# **PERMANENT SEAL BORE PACKER**

## **SPECIFICATION GUIDE (Dual Seal bore)**

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Casing		Packer													
						U	Jpper Sealing	Bore		Lower Sealing Bore					
Siz	Size W		OD		Size	Seal Bore		Seal Assembly	Min Bore Thru Seals		Seal Bore		Seal Assembly	Min Bore Thru Seals	
in.	mm	nm lb/ft	in.	mm		in.	mm	Size	in.	mm	in.	mm	Size	in.	mm
4-1/2	114.3	11.6-15.1	3.593	91.2	22-25 x 19	2.500	63.5	20-25	1.875	47.6	1.968	49.9	21–19 or 20/40–19	1.312 or	33.3 or
7 1/2	114.5	9.5–11.6	3.812	96.8	24-25 x 19									0.984	24.9
5-1/2	139.7	20–23	4.328	109.9	42-32 x 26	3.250	82.5	40-32	2.500	63.5	2.688	68.2	40/80–26	1.968	49.9
3-1/2	139.7	14–17	4.500	114.3	44-32 x 26	3.230	02.3								
6-5/8	168.2	20-32	5.468	138.8	82-40 x 32	4.000	101.6	80-40	3.250	82.5	3.250	82.5	60/80–32 or 61/81–32	2.406 or 1.990	61.1 or 50.5
0-3/8	100.2	20	5.687	144.4	84-40 x 32										
	177.8	53.6-57.1	4.937	125.4	64-36 x 30	3.625	92.0	60-36 or 61-36	3.000 or 2.875	76.2 or 73.0	3.000	76.2	42/62-30 or 40/60-30	2.375 or 1.968	60.3 or 49.9
_		32-42.7	5.468	138.8	82-40 x 32	4.000	101.6	80-40	3.250	82.5	3.250	82.5	60/80–32 or 61/81–32		
7		23-32	5.687	144.4	84-40 x 32									2.406 or 1.990	61.1 or 50.5
		17–20	6.187	157.1	88-40 x 32										
	193.6	33.7–39	6.187	157.1	88-40 x 32	4.000	101.6	80-40	3.250	82.5	3.250	82.5	60/80–32 or 61/81–32	2.406 or	61.1 or
7-5/8		24-33.7	6.375	161.9	92-40 x 32									1.990	50.5
7-3/4	196.9	46.1–48.6	6.187	157.1	88-40 x 32	4.000	101.6	80-40	3.250	82.5	3.250	82.5	60/80–32 or 61/81–32	2.406 or 1.990	61.1 or 50.5
		36–49	7.125	180.9	126-47 x 38	4.750	120.6	82-47 or 81-47	4.000 or 3.875	101.6 or 98.4	3.875	98.4	120–38	2.468	82.5
8-5/8	219.0	24–36	7.500	190.5	128-47 x 38										
	244.4	.4 36–53.5	8.125 206.3										192–47	3.875	98.4
9-5/8				194-60 x 47	6.000	152.4	190-60	4.875	123.8	4.750	120.6	190–47	3.000	76.2	
													191–47	2.500	63.5
	250.1	.1 62.8	62.8 8.125 206.			6.000	152.4	190-60	4.875	123.8	4.750	120.6	192–47	3.875	98.4
9-7/8				206.3	194-60 x 47								190–47	3.000	76.2
													191–47	2.500	63.5

Additional sizes with weight ranges are available as required.