

DESCRIPTION

The **Model "R-3" Retrievable Casing Packer** is a retrievable set-down packer that features a large bypass area through the Packer. The bypass area is controlled by a face-seal type bypass valve which is actuated by a 30" inch stroke mandrel. The Packer is available in a single-grip version for use as a conventional long-stroke production packer and in a double-grip version (with hold-down) for combination production and well stimulation operations.

Features

The double-grip packer, for use where pressure differential from below the packer is anticipated, features an integral hydraulic button-type hold down that is located below the bypass. It also incorporates a unique, built-in "differential lock" which utilizes a balance sleeve actuated by pressure from below the packer. This pressure creates an additional downward force which, combined with set-down weight, helps maintain the force necessary to keep the bypass valve closed.

Running Procedure

The Model "R-3" Retrievable Casing Packer is run in with the bypass valve in the open position to permit free circulation both through and around the packer. The packer, which is mechanically set by means of a J-Slot arrangement, should be run one foot below setting depth and then raised to the required position (to properly position the J-Slot). To release from the J-Slot, pick up the tubing, rotate to the right, and then slack off. The J-Pin will move clear of the J-Slot and the Cone will move under the slips. Application of set-down weight closes and seals the bypass valve, sets the slips and packs off the packing elements. The formation below the packer, which is now completely isolated from the annulus above, is accessible only through the tubing string.

To release the packer, raise the tubing string the full length of the packer. When the J-Pin shoulders, the J-Slot will be re-engaged, since the J-Pins on the Bottom Sub are so spaced as to always have one J-Pin located in the J-Slot when the "R-3" Single and Double-Grip Retrievable Casing Packers tubing is picked up. When the tubing is lowered slightly, the J-Pin automatically engages the J-Slot if no right-hand torque is in the tubing at the tool.

When the tubing is raised to release the packer, the bypass valve opens to permit circulation through and around the packer.



"SR-3" DOUBLE
GRIP PACKER

"SR-3" SINGLE
GRIP PACKER

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Specifications

Casing		Packer Size	Preferred Range of Casing ID's		Gage & Guide Ring OD	Packing Element OD	Packing Element Spacer OD	Absolute Limits of Slip & Button Travel		Thread Specifications Box up/ Pin Down
O.D.	Wt In Lbs T & C		Min	Max				Min	Max	
4-1/2 114.30	15.1 22.47	41B	3.754 95.35	3.826 97.18	3.620 91.95	3-19/32 91.29	3.620 91.95	3.620 91.95	3.878 98.50	2-3/8 OD EU 8 Rd 60,33
4-1/2 114.30	9.5-13.5 14.4-16.37		43A	3.910 99.31	4.090 103.9	3.771 95.78	3-5/8 92.08	3.771 95.78	3.895 98.93	
5 127.00	15-18 22.32-26.78	43B	4.250 107.9	4.408 112.0	4.125 104.78	3-15/16 100.02	4.125 104.78	4.211 106.96	4.409 111.99	
5 127.00	11.5-15 17.11-22.32	43C	4.408 112.0	4.560 115.8	4.250 107.95	4-5/32 105.57	4.250 107.95	4.363 110.82	4.561 115.85	
5-1/2 139.70	26.0 38.69		45A2	4.625 117.5	4.777 124.3	4.500 114.30	4-3/8 111, 13	4.500 114.30	4.543 115.39	
5-1/2 139.70	20-23 29.76-34.22	45A4	4.778 121.4	4.950 125.7	4.641 117.88	4-3/8 111, 13	4.500 114.30	4.543 115.39	4.950 125.73	
5-1/2 139.70	15.5-20 23.06-29.76		45B	4.950 125.7	5.190 131.8	4.781 121.44	4-11/16 119.06	4.781 121.44	4.825 122.56	
5-1/2 139.70	13-15.5 19.34-23.06	45B	4.950 125.7	5.190 131.8	4.781 121.44	4-11/16 119.06	4.781 121.44	4.825 122.56	5.196 131.98	
5-3/4 146.05	22.5 33.48		45A2 (2-3/8) 60.33	4.625 117.5	4.777 121.3	4.500 114.30	4-3/8 111, 13	4.500 114.30	4.534 115.39	
6 152.40	26 38.69	45A4 (2-3/8) 60.33	4.778 121.4	4.892 124.25	4.641 117.88	4-3/8 111, 13	4.500 114.30	4.641 117.88	4.892 124.26	
5-1/2 139.70	13-15.5 19.34-23.06	45B (2-3/8) 60.33	4.893 124.3	5.044 128.1	4.781 121.44	4-11/16 119.06	4.781 121.44	4.850 123.19	5.062 128.57	
6-5/8 168.28	24 35.71	47A2	5.830 148.1	5.937 50.8	5.656 143.66	4-11/16 119.06	4.781 121.44	4.850 123.19	5.062 128.57	
7 177.80	38 56.54		47A4	5.938 150.8	6.135 155.8	5.812 147.62	5-1/2 139.7	5.656 143.66	5.653 143.59	6.139 155.93
6-5/8 168.28	17-20 25.30-29.76	47B2	6.136 155.8	6.276 159.4	5.968 151.59	5-1/2 139.7	5.656 143.66	5.653 143.59	6.139 155.93	
7 177.80	32-35 47.62-52.08		47B4	6.276 159.4	6.456 164.0	6.078 154.38	5-3/4 146.05	5.968 151.59	5.919 150.34	6.456 163.98
7 177.80	26-29 38.69-43.15	47C2	6.136 155.8	6.276 159.4	5.968 151.59	5-3/4 146.05	5.968 151.59	5.919 150.34	6.456 163.98	
7 177.80	20-26 ? 29.76-38.69		47C4	6.276 159.4	6.456 164.0	6.078 154.38	6-1/8 155.58	6.266 159.16	6.357 161.47	6.966 176.94
7 177.80	17-20 ? 25.30-29.76	47D2	6.456 164.0	6.578 167.1	6.266 159.16	6-1/8 155.58	6.266 159.16	6.357 161.47	6.966 176.94	
7-5/8 193.68	33.7-39 50.15-58.03		47D4	6.579 167.1	6.797 172.6	6.453 163.91	6-1/2 165.1	6.672 169.47	6.607 167.82	7.216 183.29
7-5/8 193.68	24-29.7 35.71-44.19	51A2	6.798 172.7	7.025 178.4	6.672 169.47	6-1/2 165.1	6.672 169.47	6.607 167.82	7.216 183.29	
7-5/8 193.68	20-24 29.76-35.71		51A4	7.025 178.4	7.125 181.0	6.812 173.02	7-15/16 201.61	8.218 208.74	8.169 207.49	8.935 226.95
9-5/8 244.48	47-53.5 69.94-79.61	51B	8.343 211.9	8.681 220.5	8.218 208.74	7-15/16 201.61	8.218 208.74	8.169 207.49	8.935 226.95	
9-5/8 244.48	40-47 59.52-69.94		51B	8.681 220.5	8.835 224.4	8.437 214.30	8-3/8 212.73	8.593 218.26	8.548 217.12	9.083 230.71
9-5/8 244.48	29.3-36 43.60-53.57		8.836 224.4	9.063 230.2	8.593 218.26	8-3/8 212.73	8.593 218.26	8.548 217.12	9.083 230.71	

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