

Lok-Set Packer

The Lok-Set is a compression set, retrievable packer that allows the tubing to be left in a tension, compression, or neutral condition. Application is mostly production, injection and zone isolation operations.

Special Features

- Internal by-pass
- Opposed dovetail slips for positive set
- Holds pressure from above or below
- Can leave tubing in a tension, compression, or neutral condition
- Right-hand rotation sets and releases the packer
- Retracted dovetail slips
- Converts to mechanical bridge plug with the addition of a valve
- Optional packing element systems
- Large bore available (45LLS and/or 47LLS)
- Parts interchangeable with other manufacturers

Setting Procedure

Hang the Packer to completely stretch it out before starting in the hole. Immediately prior to running in, rotate the drag block housing sub-assembly several turns to the left to make sure the segments are functioning properly. Do not rotate the drag block housing sub-assembly to the right as this will bind the control segments and prevent them from moving after reaching setting depth.

Upon reaching setting depth, slowly lower the packer while rotating the tubing (approximately two turns right at the tool) until the packer takes weight. Set-down a minimum of 6,000 lb. to initially set the upper slips. Lowering of the tool must take place while rotating for the tool to set properly.

To fully engage the lower slips, apply an upstrain (10,000 to 20,000 lb. for sizes 4½ thru 5½ and 7", and 20,000 to 30,000 lb. for sizes 8% and 9%) against the tool. When the tubing is to be landed in tension, a strain greater than the landing strain should be applied during the setting operation.

To completely set the upper slips and pack-off the packing element system apply set-down weight (6,000 lb. for sizes 4½ thru 5½, 10,000 lb. for size 7", and 15,000 lb. for 8% and 9%). If sufficient set-down weight is not available, such as in very shallow wells, the tool can be set and packed-off by left-hand rotation or spudding.

The tubing may now be hung in tension, compression or neutral.

Releasing Procedure

Apply an upstrain of approximately 3,000 to 6,000 lb. and rotate the tubing (four to eight turns at the tool) to the right until the tool moves up the hole. When releasing the packer with pressure in favor of the tubing, rotate tubing to the right slowly enough to equalize before the lower slips disengage. Continue to rotate to the right several turns while moving up the hole to be certain the slips are fully retracted.



Specification Guide

| Casing | | | | Packer | | |
|--------|--------------|----------|----------|----------|--------------------------------|---------------------|
| O.D. | Weight lb/ft | Min I.D. | Max I.D. | Max O.D. | Standard Thread Connections | Base Product Number |
| 4½ | 11.6 - 13.5 | 3.920 | 4.000 | 3.771 | 2% EU 8RD | 43LS-A2 |
| 41/2 | 9.5 - 10.5 | 4.052 | 4.090 | 3.771 | 2% EU 8RD | 43LS-A4 |
| 5 | 15.0 - 18.0 | 4.250 | 4.408 | 4.125 | 2% EU 8RD | 43LS-B |
| 5 | 11.5 - 15.0 | 4.408 | 4.560 | 4.250 | 2% EU 8RD | 43LS-C |
| 5½ | 26.0 | 4.408 | 4.560 | 4.250 | 2% EU 8RD | 43LS-C |
| 5½ | 20.0 - 23.0 | 4.625 | 4.777 | 4.500 | 2% EU 8RD | 45LLS-A2 X 2.38 |
| 5½ | 20.0 - 23.0 | 4.670 | 4.778 | 4.500 | 2% EU 8RD | 45LS-A2 |
| 5½ | 17.0 - 20.0 | 4.778 | 4.892 | 4.641 | 2% EU 8RD | 45LLS-A4 X 2.38 |
| 5½ | 15.5 - 20.0 | 4.778 | 4.950 | 4.641 | 2% EU 8RD | 45LS-A4 |
| 5½ | 13.0 - 15.5 | 4.950 | 5.044 | 4.781 | 2% EU 8RD | 45LLS-A4 X 2.38 |
| 5½ | 13.0 - 15.5 | 4.950 | 5.044 | 4.781 | 2% EU 8RD | 45LS-B |
| 53/4 | 22.5 | 4.893 | 5.044 | 4.781 | 2% EU 8RD | 45LLS-B X 2.38 |
| 6 | 26.0 | 4.893 | 5.044 | 4.781 | 2% EU 8RD | 45LLS-B X 2.38 |
| 6 | 26.0 | 4.950 | 5.190 | 4.781 | 2% EU 8RD | 45LS-B |
| 65/8 | 20.0 | 5.989 | 6.094 | 5.812 | 3½ EU 8RD | 47LLS-A4 X 3.00 |
| 6% | 17.0 | 6.136 | 6.276 | 5.968 | 3½ EU 8RD | 47LLS-B4 X 3.00 |
| 65/8 | 24.0 | 5.830 | 5.937 | 5.656 | 2% EU 8RD | 47LS-A2 |
| 65/8 | 17.0 - 20.0 | 6.049 | 6.135 | 5.812 | 2% EU 8RD | 47LS-A4 |
| 7 | 38.0 | 5.830 | 5.937 | 5.656 | 2% EU 8RD | 47LS-A2 |
| 7 | 32.0 - 35.0 | 6.004 | 6.094 | 5.812 | 3½ EU 8RD | 47LLS-A4 X 3.00 |
| 7 | 32.0 - 35.0 | 6.004 | 6.094 | 5.812 | 2% EU 8RD | 47LS-A4 |
| 7 | 26.0 - 29.0 | 6.184 | 6.276 | 5.968 | 3½ EU 8RD | 47LLS-B2 X 3.00 |
| 7 | 26.0 - 29.0 | 6.184 | 6.276 | 5.968 | 2% EU 8RD | 47LS-B2 |
| 7 | 20.0 - 26.0 | 6.276 | 6.456 | 6.078 | 3½ EU 8RD | 47LLS-B4 X 3.00 |
| 7 | 23.0 - 26.0 | 6.276 | 6.366 | 6.078 | 2% EU 8RD | 47LS-B4 |
| 7 | 17.0 - 20.0 | 6.456 | 6.538 | 6.266 | 3½ EU 8RD | 47LLS-C2 X 3.00 |
| 7 | 17.0 - 20.0 | 6.456 | 6.538 | 6.266 | 2% EU 8RD | 47LS-C2 |
| 75/8 | 33.7 - 39.0 | 6.625 | 6.765 | 6.453 | 2% EU 8RD | 47LS-C4 |
| 75/8 | 24.0 - 29.7 | 6.875 | 7.025 | 6.672 | 2% EU 8RD | 47LS-D2 |
| 75/8 | 20.0 - 24.0 | 7.025 | 7.125 | 6.812 | 2% EU 8RD | 47LS-D4 |
| 85/8 | 44.0 - 49.0 | 7.511 | 7.625 | 7.312 | 4 NU 8RD | 49LS-A2 |
| 85/8 | 32.0 - 40.0 | 7.725 | 7.921 | 7.531 | 4 NU 8RD | 49LS-A4 |
| 85/8 | 24.0 - 28.0 | 8.017 | 8.191 | 7.781 | 4 NU 8RD | 49LS-B |
| 95/8 | 47.0 - 53.5 | 8.535 | 8.681 | 8.218 | 4 NU 8RD | 51LS-A2 |
| 95/8 | 40.0 - 47.0 | 8.681 | 8.835 | 8.437 | 4 NU 8RD | 51LS-A4 |
| 95/8 | 29.3 - 36.0 | 8.921 | 9.063 | 8.593 | 4 NU 8RD | 51LS-B |