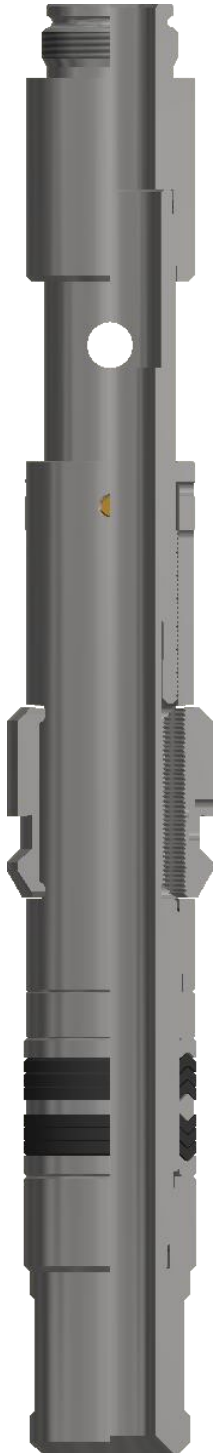


Hi-Flow X & R Non Selective Locks



The Definitive Hi-Flow non selective modified lock assembly is a single run hold down lock that is attached to a Definitive high quality plunger lift Bottom Hole Spring. The Hi-Flow lock assembly was developed to work in high liquid and flow rate wells, with the prolific Shale plays across North America in mind.

- Maximum flow through area to limit flow restriction through the hold down.
- 2 7/8 design has the largest flow through area on the market.
- Bumper spring top and Hi-Flow lock is a slickline one run holddown.
- The clear solution when the 3 cup hold downs won't stay in the profile because the well makes large production.
- The NC-720 process minimizes erosion, corrosion and helps mitigate the build up of scale.

Part Number	Description	Straight Pull Test in LBS
BHS20HMXLNC	60.3 - 2 3/8 Hi Flo Modified 5K X Lock w/Nickel Coating	3000
BHS20HMRLNC	60.3 - 2 3/8 Hi Flo Modified 10K R Lock w/Nickel Coating	3000
BHS25HMXLNC	73 - 2 7/8 Hi Flo Modified 5K X Lock w/ Nickel Coating	4055
BHS25HMXLNC	73 - 2 7/8 Hi Flo Modified 10K R Lock w/ Nickel Coating	4055

The additional Interference ring has created a very tough hold down that will not release without the use of slickline spangs and jars.

A Definitive solution to the issue of keeping the Bottom Hole Spring in place, when running plunger lifts on high rate wells.

Running and Pulling Instructions for the Hi-Flow Modified X and R Lock.

Running the Modified X and R Lock Hold Downs

The non selective key design allows the Slick Line operator to run both the lock and the attached Bottom Hole spring assembly to the top profile nipple in a single run.

- Insert both Brass Screws to give extra install strength
- Slickline runs the lock and keys into the profile, jars down slightly until the keys grab the profile stopping the downward movement of the assembly.
- Slick line then jars down on to the BHS assembly, shifting the lock into the set position.
- Once the keys are fully set an interference ring snaps in place creating a friction that in the future will require slick line to jar and release the assembly from the profile.

Pulling the Modified X and R Lock Hold Downs

- Slickline runs with a JDC over shot, latching on to the fish neck of the bumper spring assembly.
- Slickline then uses the spangs to jar upwards several times, this will release the the interference ring.
- Once the interference ring is released, it will allow the lock to be shifted and the keys to collapse and the lock release from the profile.
- Slick line can then pull the full BHS assembly to surface, where it can be redressed and re-run.

For more information on this and other products please visit www.defopt.com Or contact us at Info@defopt.com.
