

HPC-R High-Pressure Top No-Go Lock

The HPC-R high-pressure lock is a top no-go lock designed to be landed in D- or D-15-series landing nipples. The HPC-R lock anchors and seals an attached pressure control device into position in the tubing string.

APPLICATION

- Anchor and seal for pressure control device in single and dual completions

BENEFITS

- High-pressure rating
- Locking dogs designed to bear high pressures from above or below the lock

FEATURES

- Internal fishing neck
- Dependable ratchet hold-down
- Double-shear no-go ring for high-pressure applications
- Field-proven design
- Available in various materials
- Choice of sealing systems

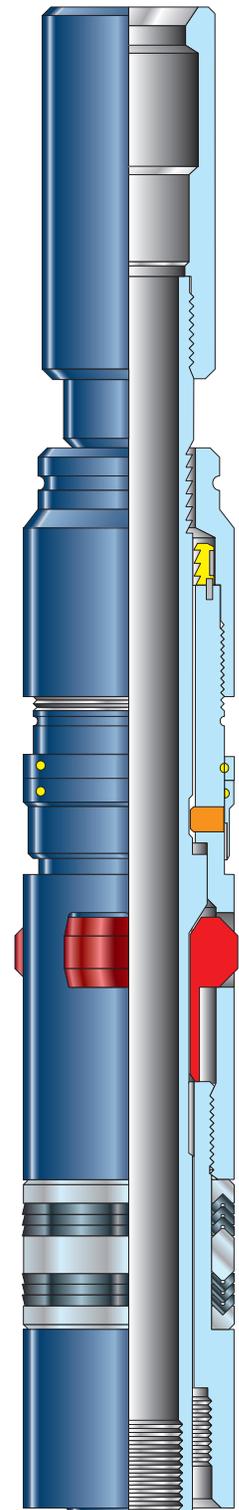
Each lock features an internal fishing neck that allows the largest bore possible through the lock. The HPC-R locks are held in the locked position with a field-proven ratchet-type locking assembly. The design of the HPC-R locks allows the locking dogs, rather than the no-go ring or the no-go release ring, to support the force from pressure applied above the lock assembly.

When installed in a D-series landing nipple, the HPC-R lock is used in applications involving differential pressures to 10,000 psi [68,950 kPa] from above or below the lock assembly. When the lock is installed in a D-15 nipple, the assembly can withstand 15,000 psi [103,425 kPa] from below and 10,000 psi [68,950 kPa] from above the lock assembly. Optional high-temperature packing for temperatures above 300°F [149°C] is available for the HPC-R locks.

DESCRIPTION AND OPERATION

When installing an HPC-R lock in the appropriate nipple, the lock and attached flow control device are attached to the appropriate D-series running tool and run into the tubing using standard slickline methods. This assembly is lowered until the no-go of the lock lands on the no-go shoulder in the landing nipple. To anchor the assembly, downward jarring moves the no-go ring up, releases the expander tube, and enables it to move down and engage the locking dogs in the nipple locking recess. Further jarring shears the release ring and allows the locking dogs to engage the upper and lower end of the locking recess. This provides a substantially larger bearing area, enabling the lock to support a pressure rating of 10,000 psi (68,950 kPa).

After pressure equalization, the lock can be removed by upward jarring with the appropriate PRS-series pulling tool. This action retracts the locking dogs and allows the lock to be pulled from the well.



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HPC-R High-Pressure Top No-Go Lock Specifications			
No-Go OD (in. [mm])	Packing OD[†] (in. [mm])	Min. ID (in. [mm])	Inside Fishing Neck ID (in. [mm])
1.859 [47.2]	1.812 [46.0]	0.750 [19.1]	1.250 [31.8]
1.905 [48.4]	1.875 [47.6]		
1.982 [50.3]	1.937 [49.2]		
2.045 [51.9]	2.000 [50.8]	0.875 [22.2]	1.500 [38.1]
2.107 [53.5]	2.062 [52.4]		
2.165 [55.0]	2.125 [54.0]	1.000 [25.4]	
2.233 [56.7]	2.188 [55.6]		
2.295 [58.3]	2.250 [57.2]		
2.345 [59.6]	2.312 [58.7]		
2.480 [63.0]	2.437 [61.9]	1.250 [31.8]	
2.610 [66.3]	2.562 [65.1]	1.250 [31.8]	
2.793 [70.9]	2.750 [69.9]		

[†] Other sizes are available on request. Contact your local Schlumberger representative.

www.slb.com/completions

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