

Uniset[®] Flow Control



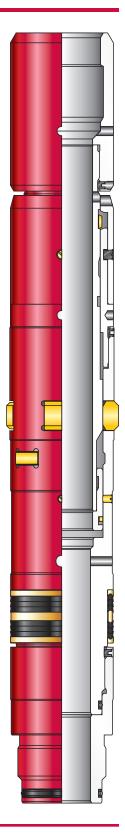
Weatherford's Uniset[®] CRQ lock mandrel is part of the innovative Petroline[®] series of lock mandrels and features a retractable no-go to maximize pressure ratings and minimize no-go string taper in "blanking" and "injection" applications. Simplicity of the design allows multiple methods for setting the lock mandrel: slickline, coiled tubing, or hydraulic polished-rod lubricator.

Applications

- Blanking plug for shutting in the well or testing tubing
- · Pump-through plug for injecting fluids into the well
- Standing valve for setting packers or testing tubing
- Tubing hanger plugs for installing the tree
- · Well conditions in which debris may be an issue

Features, Advantages and Benefits

- Retractable no-go keys accurately locate the lock mandrel in the nipple profile and then retract upon full expansion of the lock-out keys, providing higher pressure-holding capability. A working pressure rating of 10 ksi (68.95 MPa) is standard, but a rating of 15 ksi (103.42 MPa) is available.
- Modular design allows use with all conventional Uniset plugging and injection flow-control devices, reducing inventory requirements.
- The running tool attaches securely to the fishing neck with retainer keys, ensuring that impact loads do not cause the running tool to release prematurely from the lock mandrel and necessitate expensive fishing operations.
- A check pull feature and a running tool telltale provide positive indication of successful installation, minimizing operational risk.
- The release mechanism does not require radial expansion of the C-ring into a confined recess, ensuring exceptional ease of recovery in difficult and debrisladen environments, avoiding costly additional runs to wash debris.





CRQ Lock Mandrel

Specifications

Lock Seal OD (in./ <i>mm</i>)	Top No-go Lock Maximum OD (in./ <i>mm</i>)	Connection POP Pin (in./mm)	Minimum Connection ID (in. <i>/mm</i>)	DU and GS Pulling Tools
3.500 88.90	3.545 90.04	3.310 <i>84.07</i>	1.939 <i>49.25</i>	3.5
3.562 90.47	3.607 91.62			
3.875 98.42	3.920 99.57			4.0
4.125 104.78	4.170 105.92	3.810 96.77	2.186 55.52	4.0
4.500 114.30	4.545 115.44		2.627 66.72	5.0
4.562 115.87	4.607 117.02			
4.688 119.07	4.750 120.65			
4.875 123.82	4.935 125.35			
6.080 154.43	6.160 <i>156.46</i>	5.700 144.78	3.486 88.54	6.0
6.187 <i>157.15</i>	6.252 158.80			
6.250 158.75	6.319 <i>160.50</i>			7.0
6.855 174.12	6.937 176.20			

Other sizes available upon request.

For Internal Use Only: Link to Endeca assembly numbers: <u>CRQ Lock Mandrel</u>

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