Schlumberger

QUANTUM One-Trip Seal Latch

Allows production seals to be latched into the packer and floating seals to be landed in an appropriate sealbore

APPLICATIONS

- Completions in which extreme tubing movement is anticipated
- Sand-control completions with production packer above gravel-pack packer and lightweight packer fluid

BENEFITS

- Enhances wellbore reliability and safety
- Requires fewer tubing trips
- Streamlines completion operations
- Reduces rig time

FEATURES

- Protected seals
- Adjustable shear value
- Compatible with all Schlumberger sand-control packers
- Compatible with the shearable-type anchor latch locator
- Manufactured from materials that comply with NACE MR0175 standards

The QUANTUM* gravel-pack packer one-trip seal latch (OTSL) is recommended for applications where extreme dynamic seal movement is anticipated. It is assembled and run on the production tubing in completions where the production packer is already installed downhole.

The length of the sealbore or polished bore receptacle (PBR) is selected so that seals never leave the sealing bore. Standard PBR lengths are 10, 15, and 20 ft [3.0, 4.6, and 6.1 m], but most special lengths can be supplied. Seals are spaced out in accordance with tubing movement design criteria. During the running procedure, the OTSL attaches the seal assembly to the sealbore unit with a special running collet. After the PBR is anchored in the packer, the running collet is pulled upward, and the seal assembly is spaced out to the proper location. This activity is performed when running the production tubing. No further trips in the well are required.

The OTSL does not trap atmospheric pressure while running in the well. The complete OTSL system is made up of a snap latch, a self-aligning guide shoe, a seal assembly, a sealbore assembly, and the OTSL lift coupling.

QUANTUM one-trip seal latches are manufactured from materials that comply with NACE MR0175 standards for sulfide stress cracking-resistant metallic materials.

QUANTUM One-Trip Seal Latch Specifications[†]

Size, [‡] in [mm]	Max. OD, in [mm]	Min. ID, in [mm]	Pressure Rating,§ psi [kPa]
$5.000 \times 2.688 [127.0 \times 68.3]$	3.950 [100.3]	1.950 [49.5]	8,000 [55,160]
5.500 × 3.000 [139.7 × 76.2]	4.380 [111.3]	2.350 [59.7]	7,000 [48,265]
7.000, 7.625 × 3.250 [177.8, 193.7 × 82.6]	5.260 [133.6]	2.410 [61.2]	9,000 [62,055]
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7.000, 7.625 × 4.000 [177.8, 193.7 × 101.6]	5.680 [144.3]	3.040 [77.2]	9,000 [62,055]
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9.625 × 4.750 [244.5 × 120.7]	7.010 [178.1]	3.500 [88.9]	8,800 [60,674]

[†] EUE 8RD threads are standard configuration. Premium threads are available on request



QUANTUM one-trip seal latch.

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

[§] The PBR contains the pressure below the OTSL