

QUANTUM Long-String Seal Assembly

Part of a seal system designed to be used on multiple-zone wells

APPLICATIONS

- Multiple-zone completions
- Intelligent completions

BENEFITS

- Design provides an effective, leak-proof seal between packers and production tubing
- Integral polished bore provides reliable operation
- Design provides optimal space out of seals in polished bores

FEATURES

- Debris- and movement-tolerant seals
- Polished bore for use in selective zones or for long strings in dual completions
- NACE MR0175-compliant materials

If the upper zone is to be a selective zone, a QUANTUM* gravel-pack packer long-string seal assembly (LSSA) (and tubing with appropriate internal profile nipples), flow couplings, blast joints, and a sliding sleeve are assembled below the upper packer. The string is spaced out, so when the seals in the upper packer are landed, the LSSA is sealed in the bore of the lower-zone multiseal assembly (LZMSA) in the lower packer.

In a dual completion, the long string is assembled with an LSSA on the bottom to seal in the LZMSA inside the lower packer. The LSSA assembly consists of a locator, usually a series of seal units, and a guide shoe. The LSSA components are individually selected to meet specific application requirements.

LSSA assemblies are manufactured from materials that comply with NACE MR0175 standards for sulfide stress cracking-resistant metallic materials.



QUANTUM Long-String Seal Assembly Specifications

Size, [†] in [mm]	Max. OD, in [mm]	Min. ID, in [mm]	Pressure Rating, [‡] psi [kPa]	Lower Threads, in-TPI
5.500 × 2.688 [139.7 × 68.3]	2.676 [68.0]	1.955 [49.7]	9,000 [62,055]	2.312-8 SA
7.000, 7.625 × 2.688 [177.8, 193.7 × 68.3]	2.676 [68.0]	1.955 [49.7]	9,000 [62,055]	2.312-8 SA
7.000, 7.625 × 3.000 [177.8, 193.7 × 76.2]	2.985 [75.8]	2.340 [59.4]	7,000 [62,055]	2.488-10 UNS
7.000, 7.625 × 3.250 [177.8, 193.7 × 82.6]	3.210 [81.5]	2.375 [60.3]	9,300 [64,124]	2.875-8 SA
9.625 × 3.250 [244.5 × 82.6]	3.210 [81.5]	2.375 [60.3]	9,300 [64,124]	2.875-8 SA
9.625 × 4.000 [244.5 × 101.6]	3.960 [100.6]	3.030 [77.0]	9,100 [62,745]	3.625-8 SA
9.625 × 4.750 [244.5 × 120.7]	4.710 [119.6]	3.490 [88.7]	8,000 [55,160]	4.094-8 UNS

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

[‡] Values shown are for 80,000-psi [551,600-kPa] material derated for 250 degF [121 degC] with a 20% safety factor.

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