Schlumberger

# LineSlot

## Premium direct-wire-wrapped screens

### APPLICATIONS

- Openhole and cased-hole completions
- Vertical, deviated, and horizontal completions of oil, gas, and injector wells
- Stand-alone completions
- Gravel-pack and frac-pack completions
- Completions that use Alternate Path† gravel-pack shunt tube technologies
- Long and extreme-reservoir-contact wells
- Wells with severe downhole conditions
- Installations with inflow or injection control devices
- Sandface sensor installations
- High-rate-gas environments

### BENEFITS

- Reduced rig time through use of standard casing-handling equipment
- Increased completion longevity because of erosion and corrosion resistance

### FEATURES

- Robust design that mimizes risk of screen damage during installation and helps ensure that screen will reach bottom in extended-reach wells
- Consistent, accurate slot openings and unique wrapping-wire profile
- No requirement for welding on basepipe (screen wire is shrink-fitted to basepipe)
- Suitability for short-radius with sand control maintained
- Curved wrapping-wire surface that reduces friction and increases wear resistance
- Installation with conventional casing equipment
- Optional external protective shroud

LineSlot* premium direct-wire-wrapped screens are made of a wire jacket shrink-wrapped directly to the basepipe. Screen components are welded to each other, enabling the screen and basepipe to act as a single unit and ensuring that the tension, compression, and torque ratings of the screen are the same as those of the basepipe. The curved, wrapped wire surface made of heavy-duty materials reduces friction and increases resistance to erosion and corrosion. Basepipe perforations are designed to optimize flow without affecting the screen's strength. The consistent, accurate slot openings enhance sand control.

Direct-wire-wrapped sand screens are robust yet lightweight. They are suitable for high mechanical loads, short-radius wellbores, and applications that require a strong but lightweight screen with a tight slot-opening tolerance. Because of the special clearance geometry, flush end rings, and slim wire design, they are also suitable for completions that require an optimized ID/OD ratio, such as sandface sensor installations. LineSlot screens are constructed with 4-mm × 3-mm axial wire and wrapping wire with wire materials ranging from 316L to 825. They can be manufactured with different axial- and wrapping-wire configurations according to well configuration and reservoir needs.

### LineSlot LT screen wire construction

LineSlot LT* direct-wire-wrapped screens are constructed using the same design as LineSlot screens and with 4-mm × 3-mm axial wire, but these screens are constructed with 90A wire. They can be manufactured with different axial and wrapping-wire configurations.

### LineSlot HRG screen for high-rate-gas wells

LineSlot HRG* high-rate-gas direct-wire-wrapped screens are configured specifically for wells with high-rate-gas flow conditions. They can be used with or instead of current completion methods. Whereas conventional screens are affected by the high inflow velocity of the gas and hot-spotting, LineSlot HRG screens feature specially engineered perforations and rib wires that force inflow at the heel to be distributed more uniformly over a longer length of screen compared with that of conventional screens. This reduces radial velocity below the critical level and eliminates erosion hot spots without the need to choke production, extending the life of the well and protecting topside equipment from formation sand.

### Quality control

LineSlot screen slots are created with precisely controlled processes that result in high-precision apertures. Schlumberger ResGauge* slot-opening measurement system is a photometric QC device that measures every slot opening on a screen joint (±2,500 data points per joint) with a resolution of 1 um and an accuracy of 5 um.

*LineSlot premium direct-wire-wrapped screen.*

# LineSlot

## LineSlot and LineSlot HRG Screen Specifications

| Basepipe Size, in | Basepipe Weight, lbm/ft | Basepipe ID, in | Additional Assembly Weight,† lbm/ft | Max. OD, in | | Perforation Holes/ft‡ | Tensile Rating,‡ lbf | | Torque Rating,§ lbf.ft | Collapse Rating,‡ psi | | Burst Rating,‡ psi | | Bending Limit,‡ °/100 ft |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | LineSlot | LineSlot HRG | | LineSlot | LineSlot HRG | | LineSlot | LineSlot HRG | LineSlot | LineSlot HRG | |
| 3.500 | 9.2 | 2.992 | NA†† | 4.32 | 4.50 | 24 | 200,800 | 203,100 | 6,900 | 10,500 | 10,500 | 3,200 | 3,100 | 53.3 |
| 4.000 | 9.5 | 3.548 | 5.2 | 4.82 | 5.00 | 28 | 207,200 | 210,800 | 7,400 | 6,500 | 6,500 | 2,800 | 2,700 | 46.7 |
| 4.000 | 11.0 | 3.476 | 5.2 | 4.82 | 5.00 | 28 | 237,800 | 242,000 | 8,600 | 8,800 | 8,800 | 2,800 | 2,700 | 46.7 |
| 4.500 | 11.6 | 4.000 | 5.5 | 5.32 | 5.50 | 28 | 259,100 | 263,000 | 9,900 | 6,300 | 6,300 | 2,500 | 2,400 | 41.5 |
| 4.500 | 12.6 | 3.958 | 5.5 | 5.32 | 5.50 | 28 | 279,500 | 283,700 | 11,000 | 7,500 | 7,500 | 2,500 | 2,400 | 41.5 |
| 5.000 | 15.0 | 4.408 | 6.0 | 5.82 | 6.00 | 28 | 340,600 | 345,200 | 8,700 | 7,200 | 7,200 | 2,300 | 2,200 | 37.3 |
| 5.000 | 18.0 | 4.276 | 6.0 | 5.82 | 6.00 | 28 | 410,500 | 416,200 | 12,600 | 9,400 | 8,800 | 2,300 | 2,200 | 37.3 |
| 5.500 | 17.0 | 4.892 | 6.6 | 6.30 | 6.50 | 32 | 387,400 | 392,200 | 10,800 | 6,200 | 6,200 | 2,000 | 2,100 | 33.9 |
| 5.500 | 20.0 | 4.778 | 6.6 | 6.30 | 6.50 | 32 | 454,800 | 460,500 | 14,000 | 8,800 | 8,800 | 2,000 | 2,100 | 33.9 |
| 6.625 | 20.0 | 6.049 | 7.8 | 7.44 | 7.62 | 36 | 449,600 | 454,100 | 13,800 | 3,400 | 3,400 | 1,800 | 1,700 | 28.2 |
| 6.625 | 24.0 | 5.921 | 7.8 | 7.44 | 7.62 | 36 | 543,800 | 549,400 | 20,600 | 5,700 | 5,700 | 1,800 | 1,700 | 28.2 |
| 6.625 | 28.0 | 5.791 | 7.8 | 7.44 | 7.62 | 36 | 637,400 | 644,000 | 26,000 | 8,100 | 8,100 | 1,800 | 1,700 | 28.2 |
| 7.000 | 23.0 | 6.366 | 8.2 | 7.82 | 8.00 | 36 | 522,400 | 527,400 | 18,600 | 3,800 | 3,800 | 1,700 | 1,700 | 26.7 |

†Data based on 34-ft filter length
‡Data based on 12-gauge screen openings, 316L wire, 80,000-psi basepipe, and SLHT coupling
§Torque value based on 80,000-psi SLHT coupling
††Not applicable

## LineSlot LT Screen Specifications

| Basepipe Size, in | Basepipe Weight, lbm/ft | Basepipe ID, in | Additional Assembly Weight,† lbm/ft | Max. OD, in | Perforation Holes/ft‡ | Tensile Rating,‡ lbf | Torque Rating,§ lbf.ft | Collapse Rating,‡ psi | Burst Rating,‡ psi | Bending Limit,‡ °/100 ft |
|---|---|---|---|---|---|---|---|---|---|---|
| 2.375 | 4.6 | 1.995 | 2.5 | 3.07 | 24 | 99,500 | 3,000 | 9,700 | 3,300 | 78.6 |
| 2.875 | 6.4 | 2.441 | 3.0 | 3.57 | 24 | 139,400 | 5,000 | 6,900 | 2,800 | 64.9 |
| 3.500 | 9.2 | 2.992 | 3.3 | 4.19 | 24 | 200,800 | 6,900 | 4,800 | 2,400 | 53.3 |
| 4.000 | 9.5 | 3.548 | 3.6 | 4.70 | 28 | 207,200 | 7,400 | 5,100 | 2,100 | 46.7 |
| 4.000 | 11.0 | 3.476 | 3.6 | 4.70 | 28 | 237,800 | 8,600 | 5,100 | 2,100 | 46.7 |
| 4.500 | 11.6 | 4.000 | 4.0 | 5.20 | 28 | 259,100 | 9,900 | 4,100 | 1,900 | 41.5 |
| 4.500 | 12.6 | 3.958 | 4.0 | 5.20 | 28 | 279,500 | 9,900 | 4,100 | 1,900 | 41.5 |
| 5.000 | 15.0 | 4.408 | 4.2 | 5.70 | 28 | 340,600 | 8,700 | 3,400 | 1,700 | 37.3 |
| 5.000 | 18.0 | 4.276 | 4.2 | 5.70 | 28 | 410,500 | 12,600 | 3,400 | 1,700 | 37.3 |
| 5.500 | 17.0 | 4.892 | 4.6 | 6.20 | 32 | 387,400 | 10,800 | 3,700 | 1,600 | 33.9 |
| 5.500 | 20.0 | 4.778 | 4.6 | 6.20 | 32 | 454,800 | 14,000 | 3,700 | 1,600 | 33.9 |
| 6.625 | 20.0 | 6.049 | 5.5 | 7.33 | 36 | 449,600 | 13,800 | 3,200 | 1,300 | 28.2 |
| 6.625 | 24.0 | 5.921 | 5.5 | 7.33 | 36 | 543,800 | 20,600 | 3,200 | 1,300 | 28.2 |
| 6.625 | 28.0 | 5.791 | 5.5 | 7.33 | 36 | 637,400 | 26,000 | 3,200 | 1,300 | 28.2 |
| 7.000 | 23.0 | 6.366 | 5.6 | 7.68 | 36 | 524,400 | 18,600 | 3,600 | 1,200 | 26.7 |

†Data based on 34-ft filter length
‡Data based on 12-gauge screen openings, 316L wire, 80,000-psi basepipe, and SLHT coupling
§Torque value based on 80,000-psi SLHT coupling

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