

Mechanical and Environmental Specifications

This data sheet provides a general reference to the the Geolink MWD system Mechanical and Environmental Specifications. Detailed reference and operating procedures are available in each of the corresponding Equipment Operation Manuals.

Mechanical Specifications

| Standard Tool Dimensions, Connections and Mechanical Specifications | | | | | | | |
|---|----------------------------|-------------------------------------|--|-----|--|---|----------------------------------|
| Drill Collar OD x ID (inches) | Tool Joints ⁽¹⁾ | Rec. Make- up Torque (lbf.ft) | Equivalent Collar Stiffness (OD x ID) and % Strength of Standard DC ⁽²⁾ | | Max. DLS (deg/ft) Sliding & Rotating ⁽³⁾ | Max. Flow Rate (USGPM) ⁽⁴⁾ | ΔP across tool (psi) Water |
| 2.88 x 2.20 | Geolink | 2,500 | 2.66 x 1.50 | 71 | 1.0 / 0.5 | 115 | 15 |
| 3.125 x 2.38 | Geolink | 3,000 | 2.96 x 2.12 | 85 | 1.0 / 0.5 | 150 | 30 |
| 3.50 x 2.50 | Geolink | 3,500 | 3.45 x 2.38 | 98 | 1.0 / 0.5 | 150 | 30 |
| 4.75 x 2.81 | 3½in IF | 9,900 | 4.75 x 2.81 | 100 | 0.3 / 0.15 | 480 | 60 |
| 6.25 x 2.81 | 4in API IF | 16,200 | 6.25 x 2.81 | 100 | 0.21 / 0.1 | 480 | 60 |
| 6.25 x 3.25 | 4in API IF | 16,200 | 6.20 x 2.81 | 97 | 0.21 / 0.1 | 800 | 64 |
| 6.75 x 3.25 | 4½in API IF | 25,800 | 6.71 x 2.81 | 98 | 0.21 / 0.1 | 800 | 64 |
| 8.00 x 3.75 | 6½in API Reg | 47,000 | 7.93 x 2.81 | 97 | 0.14 / 0.08 | 1,100 | 39 |
| 9.50 x 4.25 | 7½in API Reg | 62,000 | 9.42 x 2.81 | 97 | 0.07 / 0.04 | 1,200 | 29 |

⁽¹⁾ Slim hole tubulars for Geolink systems utilise proprietary tool joints for optimum performance.

⁽²⁾ TRIM Resistivity Sensor Sub Yield and Tensile Strength, Torque, and Maximum DLS conform or exceed performance of equivalent Standard Drill Collar size (API Spec 7).

⁽³⁾ Figures for Ultra-Slim equipment are based on calculations. Figures for sizes from 4½in or greater are for guidance only and are based on typical drill collar configurations.

Intermediate sizes, non-standard tool joints and high flow rate configurations (up to 1,500 gpm in 9½ in OD) are available on request.

Environmental Specifications

| | |
|------------------------------------|---|
| Pressure | 15,000 psi (20,000 psi upgrade is available on request) |
| Temperature | 0 - 150°C operating (Higher rated equipment is available on request) |
| Shock | 1,000 g/0.5 ms |
| Vibration | 20 g RMS 30-300 Hz Random 30 g 50-300 Hz Sine |
| Mud Condition⁽⁴⁾ | Continuous operation at the Maximum flow rate should maintain Mud Sand content below 0.5%. Higher levels may be sustained under controlled circumstances. LCM Limit is 30 lb/bbl of Medium Nut Plug (evenly mixed). No limitation for Mud Weight or Solids as long as conventional weighting agents are used and mud is evenly mixed (refer to Geolink Operations Manual for flow de-rating tables). Contact your Sondex Drilling Division representative for additional information and details. |

