

High Temperature DTS Cable for Downhole Monitoring (5) (Enhanced)

Cable Number: CAE2001L (Maximum application temperature: 400°C)

Cable structure: composed of high nickel alloy capillary tube and specialty fiber (see Figure)

Mechanical Characteristics (Enhanced):

High nickel alloy tubing material: Inconel 625 Cable outside diameter: 6.35mm

Tubing thickness: 0.89mm Weight: 128.53kg/km

Tensile strength: 1585kg Pull load (yield point): 1123kg

Thermal expansion coefficient: $12.9 \times 10^{-6} \text{m/m}^\circ\text{C}$ Work pressure limit: 135MPa

Standards: ASME: B 704; NACE MR0175/ISO 15156-3: Table A.12 (4d), A.14

Optical Fiber: Fiber tension free design

One aluminum coated multimode fiber, graded index fiber, 50/125/155um

Or: One aluminum coated single mode fiber, Silica/Silica fiber, 9/125/155um

Cable Toe End Termination: Upon customer request

Or: Upon UniSignal design:

Hermetic seal (no moving parts)

Special mechanical and optical designs at the fiber end

