

Item for Sensing Cable	Requirement
Applications	Specially Designed Monitoring of suspension cables and post tension tendons and other structures elements
Construction	Textured, Polyamide plastic jacket
Fiber optic sensing fibers	1) Two strain-sensing optical fibers in metal tubes 2) Gel-filled 316L stainless steel Fiber in Metal Tube for temperature and/or acoustic sensing
Optical fibers type	<ul style="list-style-type: none"> <li>• Single-mode fibers for DSS and DAS</li> </ul>
Tube types	<ul style="list-style-type: none"> <li>• Hermetically sealed tubes</li> <li>• Tight-buffered optical fibers for strain sensing</li> <li>• Loose tube fibers for temperature and acoustic sensing</li> <li>• Twisted tubes</li> <li>• Excellent rodent protection</li> <li>• Robust outer sheath</li> <li>• Halogen-free cable sheath (for Tunnel Applications)</li> </ul>
Temperature range and rating	<ul style="list-style-type: none"> <li>• Operating temp.: -22°F -158° (-30°C- +70°C)</li> <li>• Storage temp.: -22°F -158° (-30°C- +70°C)</li> <li>• Installation temp.: 23°F -122° (-5°C ... +50°C)</li> </ul>
<b>Technical data at 20°C for parameters below</b>	
Cable diameter ø	6.5 mm
Max. number of fibers	2 DSS + 2 DTS + 2 DAS
Crush resistance	300 N/cm
Max. tensile strength installation	500 N
Typ. load at 1% elongation	2,000 N
Min. bending radius with tensile load mm	20 x cable diameter (mm)
Min. bending radius without tensile load mm	15 x cable diameter (mm)
Hydrostatic pressure resistance x100kPa	300 bar
Compatible for Fiber optic systems with sample Acoustic length and for wire break detection;	1 Meter
Compatible for Fiber optic systems with sample temperature compensation for strain;	10 cm gauge length and 0.5° C sensitivity
Compatible for Fiber optic systems with sample strain gauge length and strain sensitive of;	10 cm gauge length and <5 µstrain sensitivity
<b>End of specification</b>	