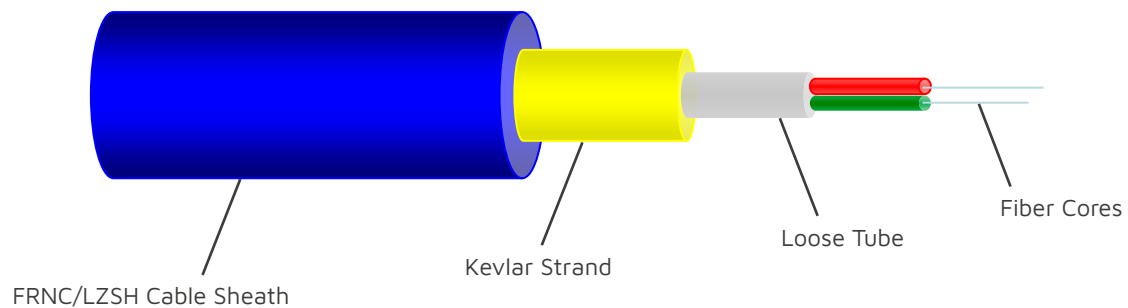
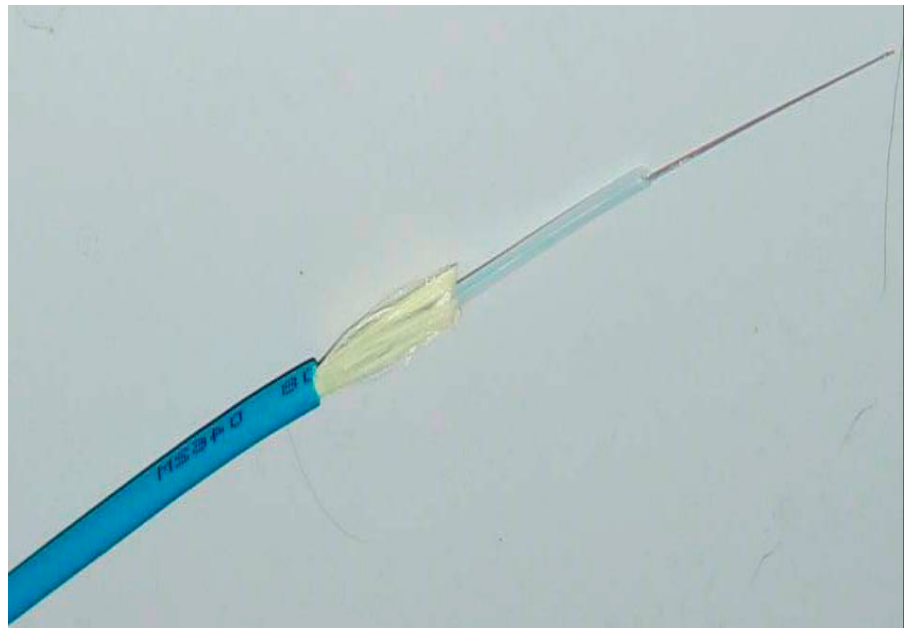


# FireFiber TT (Thermoplastic Tube) Sensing Cable

The FireFiber Thermoplastic Tube (TT) sensing cable is a Flame Retardant Non-Corrosive (FRNC) and Low Smoke Zero Halogen (LSZH) sensing cable which is widely used in applications such as Linear Heat Detection, and used in a wide variety of scenarios and is optimised to work with Bandweaver's range of Distributed Temperature Sensing (DTS) systems. This cable is typically deployed in areas where a non-metal cable is required (e.g. high levels of EMC activity)

The central member of the cable consists of a gel filled thermoplastic loose tube construction. Kevlar strength members surround the loose tube. The outer jacket of flexible thermoplastic ensure the cable is protected and completely electrically insulated.



## Technical Information

<b>Fiber Type</b>	Multimode, Grade Index, 62.5/125 acrylate coated multimode fiber as standard (50/125 fiber also available on request)	
<b>Number of Cores</b>	2 fibers as standard	
<b>Effective Refractive Index</b>	1.496 (850nm), 1.491 (1300nm)	
<b>Attenuation</b>	<3.0dB/Km@850nm, <1.0dB/Km@1300nm	
<b>Bandwidth</b>	50/125: 500Mhz @ 1300nm/850nm 62.5/125: 500 Mhz @1300nm, 200Mhz @ 850nm	
<b>Material Construction</b>	1 Outer Protection 2 Longitudinal Strength member 3 Pressure resistance	Polyolefin LSZH FRNC Kevlar strands Thermoplastic gel filled tube
<b>Weight</b>	30kg/km	
<b>Outer Diameter</b>	LSZH sheath: 5.0 mm +/- 0.2mm (High strength version 5.0mm*)	
<b>IP Rating</b>	IP68	
<b>Tensile Resistance</b>	Long Term: 400N (High strength 500N*)	Short Term: 800N (High strength 1000N*)
<b>Pressure Resistance</b>	Long Term: 300N/100mm	Short Term: 1000N/100mm
<b>Permitted Bend Radius</b>	Static: 50mm	Dynamic: 100mm
<b>Temperature Range</b>	Long Term: -40°C to 85°C	Short Term: -40°C to 150°C
<b>Standards and Certifications</b>	RoHS (GB/T 7424.2-2008) – FO spec & test procedures EN 187000-1994 / GB16280-2014	
<b>Packaging</b>	Wooden reel as standard	
<b>Reel Length</b>	Minimum 1km / Maximum reel length 2.5km as standard Longer reel lengths available on request but will incur additional cost and lead times	

\*High strength version of cable incorporates additional Kevlar strength members which increases tensile strength to 1000N