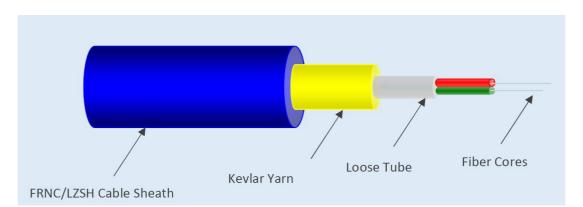




## ACP LaserLine Distributed Temperature Sensing (DTS)

The ACP LaserLine thermoplastic sensing cable is a Flame Retardant Non-Corrosive (FRNC) and Low Smoke Zero Halogen (LSZH) sensing cable which is widely used in application such as Linear Heat Detection, and used in a wide variety of scenarios and is optimised to work with F-Lser 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 (aramid) strength members surround the loose tube. The outer jacket of flexible thermoplastic ensure the cable is protected and completely electrically insulated.

## **Technical information**

Fiber Type	Multimode, Grade Index, 62.5/125 acrylate coated multimode fiber as standard 50/125 fiber also available on request
Number of Cores	2 fibers as standard
Effective Refractive Index	1.496 (850nm), 1.491 (1300nm)
Attenuation	<2.8dB/Km@850nm, <0.8dB/Km@1300nm
Bandwidth	>600MHz-km
Material Construction	1 Outer Protection Polyolefin LSZH (black) 2 Mechanical Protection Kevlar/aramid strands 3 Longitudinal Strength member Thermoplastic gel filled tube
Weight	30 Kg/Km
Outer Diameter	LSZH sheath: 5.0 mm +/- 0.2mm (High strength version 5.0mm*)
IP Rating	IP68
Tensile Resistance	Long Term: 400N (HS version 500N*) Short Term: 800N (HS version 1000N*)
Pressure Resistance	Long Term: 300N/10 cm Short Term: 1000N/10 cm
Permitted Bend Radius	Static: 50mm Dynamic: 100mm
Temperature Range	Long Term: -40°C to 85°C  Short Term: -40°C to 150°C  (120 minutes according to IEC60331-25 conditions)
Standards and Certifications	RoHS (GB/T 7424.2-2008) – FO spec & test procedures
	EN 187000-1994 /GB16280-2014
	IEC60754-1:1994 & IEC60754-2:1991 (JB/T 10707-2007) — Low smoke, zero halogen testing
	IEC61304-2:1997 (GB/T 17651.2) – Measurement of smoke density
Packaging	Wooden reel as standard
Reel Length	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 (HS) versio strength to 1000N	n of cable incorporates additional Kevlar strength members which increases tensile