

FIRE SURVIVAL OPTICAL CABLE

Fibre Characteristics	
Crush	(IEC 60794-1-2-E3) 2500
Impact	(IEC 60794-1-2-E4) 30
Torsion	(IEC 60794-1-2-E7) 1
Acid gas emissions	IEC 60754-1
Smoke index	IEC 61034

Temperature	
Operation	(IEC 60794-1-2-F1) -40°C to +70°C
Storage	(IEC 60794-1-2-F1) -40°C to +70°C
Insulation	(IEC 60794-1-2-F1) -10°C to +70°C
Fire	(IEC 60331-25) Pass (90min. @ 750°C) (BSEN50200 -2000) Pass PH120

	Diameter mm	Weight kg / km	Max Tensile Load N	Min Static Bend mm	Min Dynamic Bend mm
4-24 Fibre	13.00	210	700	130	195

PRODUCT DESCRIPTION:

For environments where a Fire Survival Cable is required the UFS 01 range offers a high performance robust cable. This product range consists of a single loose tube containing up to 24 fibres, a layer of water blocking glass yarns. The cable has two LSZH sheaths separated by a layer of corrugated steel tape armour.

PRODUCT CHARACTERISTICS

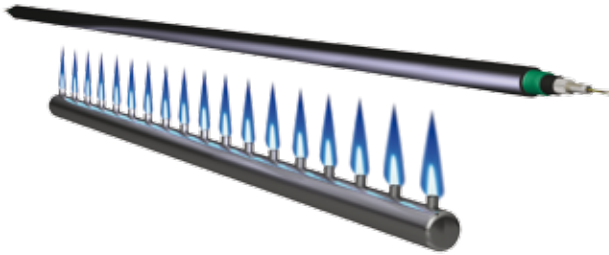
- Tube: Central polymeric tube containing upto 24 singlemode or multmode optical fibres and filling gel
- Tape: Flame retardant tape
- Strength members: Water blocking strength elements
- Inner sheath: High performance LSZH inner sheath
- Armour: Corrugated polymer coated steel tape
- Outer sheath: High performance LSZH outer sheath

Fire

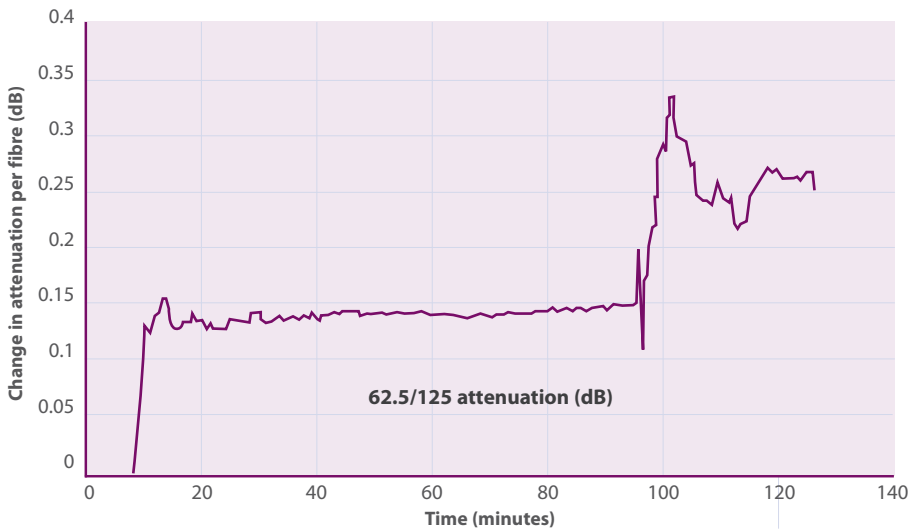
Flammability: PASS (IEC 60331-25)
PASS (BS EN 502 00-2000)

The cable has been independently tested to confirm compliance to IEC 60331-25

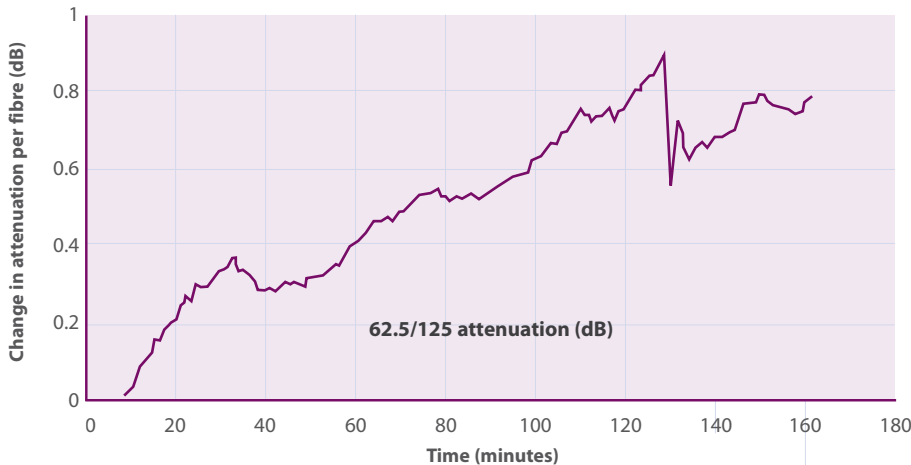
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Flame Test on HF 062 UNI 8 L STA LU FS cable
to IEC 60331-25 @ 750°C for 90 mins



BSEN 50200: 2000 Class PH120 Fire Resistance Test on HF 062 UNI 8 L STA LU FS



The UFS 01 Fire Survival Cable has been designed to meet the requirements of IEC 60794 and exceed the requirements of IEC 60331 Part 25.

The IEC 60331 Fire Test, commonly known as the Fire Survival Test, was developed for electric cables, but Part 25, issued in 1999, covers optical cables. The minimum flame temperature is 750°C, with a recommended flame application time of 90 minutes, plus 15 minutes cooling time. While the specification does not detail an acceptance criteria, aside from maintaining circuit integrity, Brand-Rex has adopted a pass criteria of no more than 1.5dB increase in attenuation under test conditions.

The BSEN 50200:2000 Class PH120 test subjects the sample cable to additional mechanical shock and water spray during the 'flame on' period. This enhanced requirement simulates a real life situation with fire containment systems in operation and potential impacts from falling debris.

Test Details	
Standard:	IEC 60331-25
Function:	Circuit integrity of an optical fibre cable
Sample Length:	5,000mm
Test Duration:	90 minutes

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