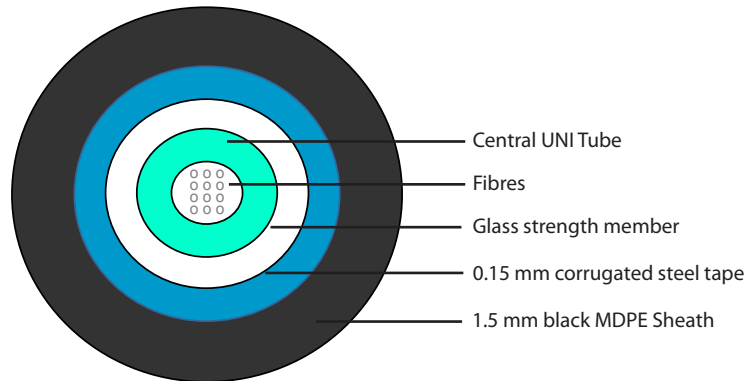


**Optic fibre cable OS1/OS2 - loose tube outdoor/corrugated steel tape**

- 2 fibres Cat. No(s): 0 322 88  
- 4 fibres Cat. No(s): 0 325 23

- 6 fibres Cat. No(s): 0 325 13  
- 8 fibres Cat. No(s): 0 325 24

- 12 fibres Cat. No(s): 0 325 15  
- 24 fibres Cat. No(s): 0 325 25



**1. APPLICATION AND INSTALLATION**

This cable can be used for LAN and WAN backbones, telecom access lines, fibre to business and fibre to the building drop connections; as well as fibre to the home drop and access connections.  
With its MDPE sheathing this cable is ideal for outdoor installation.  
The cable, having a corrugated steel tape armouring is rodent proof.  
The cable is well suited for installation in ducts and on trays.  
The cable is excellent for direct burial with proper sand back filling.

**2. CABLE TECHNICAL SPECIFICATIONS**

**2.1 Standards**

ISO 11801 2nd edition  
EN 50173-1:2002  
IEC 60794-1

**2.2 Construction**

Loose tube	ø2.8 mm jelly filled loose tube with 2-16 fibres; ø3.5 mm loose tube with 24 fibres	
Strength member	E-Glass yarns	
Armouring	0.15 mm corrugated steel tape	
Sheath	1.5 mm black MDPE sheath, IEC 60811, IEC 60708	

**2.3 Physical properties - IEC 60794-1**

Nominal outer diameter	-	8.5 mm
Nominal weight	-	2-16 fibres : 75 kg/km ; 24 fibres : 80 kg/km
Tensile strength (dynamic)	E1	1000 N
Tensile strength (permanent)	E1	500 N
Compressive strength (crush)	E3	2000N
Impact	E4	10 Nm
Torsion	E7	5 cycles ± 1 turn
Kink	E10	The cables do not form a kink when a loop is drawn together to a diameter of 100 mm
Min. Bending radius, unloaded	E11	R = 55 mm
Min. Bending radius, loaded	-	R = 110 mm
Temperature range	F1	Storage and installation: - 40°C to + 70°C
		Operation: - 40°C to + 70°C.
The max. attenuation variation in the operational temperature range is :		0.2 dB/km

## Optic fibre cable OS1/OS2 - loose tube outdoor/corrugated steel tape

- 2 fibres Cat. No(s): 0 322 88

- 6 fibres Cat. No(s): 0 325 13

- 12 fibres Cat. No(s): 0 325 15

- 4 fibres Cat. No(s): 0 325 23

- 8 fibres Cat. No(s): 0 325 24

- 24 fibres Cat. No(s): 0 325 25

### 2.4 Marking and packaging

Marking of the cable :

- Legrand
- Part number
- Description
- Date code
- Batch number
- Measurement (remaining length in meters)

Catalogue number	0 325 23	0 325 13	0 325 24	0 325 15	0 325 25	0 322 88
Description	4 fibres OS2 LT Out PE	6 fibres OS2 LT Out PE	8 fibres OS2 LT Out PE	12 fibres OS2 LT Out PE	24 fibres OS2 LT Out PE	2 fibres OS2 LT Out PE
Colour	Black	Black	Black	Black	Black	Black
Puck (m)	2000	2000	2000	2000	2000	2000
Packaging	Reel	Reel	Reel	Reel	Reel	Reel

## 3. FIBRES TECHNICAL SPECIFICATIONS

### 3.1 Standards and Norms

IEC 60793-2-50 class B1.3

EN 60793-2-50: class B1.3

ITU Recommendation G.652.D - the other ITU designations A, B and C are also fulfilled. EN 50

173-1:2007, cat. OS2; also OS1 requirements are fulfilled

ISO/IEC 11801:2002 cat. OS1.

ISO/IEC 24702:2006, cat. OS2; also OS1 requirements are fulfilled

IEEE 802.3 - 2002 incl. 802.3ae

### 3.2 Attenuation (of cable with fibres) - IEC 60793-1-40

1310 nm – 1625 nm	≤ 0.39 dB/km
1550 nm	≤ 0.25 dB/km
Inhomogeneity of OTDR trace for any two 1000 meter fibre lengths	Max. 0.1 dB/km

### 3.3 Bandwidth - IEC 60793-1-41

Group index of refraction at 1310 nm	1.467
Group index of refraction at 1550 nm	1.468
Group index of refraction at 1625 nm	1.468

### 3.4 Fibre properties according to IEC - IEC 60793-1

Attribute	Measurement method	Units	Limits
Cladding diameter	IEC/EN 60793-1-20	µm	125 ± 0.7
Cladding non-circularity	IEC/EN 60793-1-20	%	≤ 0.7
Core (MDF) - cladding concentricity error	IEC/EN 60793-1-20	µm	≤ 0.5
Primary coating diameter - uncoloured	IEC/EN 60793-1-21	µm	242 ± 7
Primary coating diameter - coloured	IEC/EN 60793-1-21	µm	250 ± 15
Primary coating non-circularity	IEC/EN 60793-1-21	%	≤ 5
Primary coating-cladding concentricity error	IEC/EN 60793-1-21	µm	≤ 12
Proof stress level	IEC/EN 60793-1-30	GPa	≥ 0.7 (≈1%)
Strip force (peak)	IEC/EN 60793-1-32	N	1.0 ≤ F <sub>peak.strip</sub> ≤ 8.9
Chromatic dispersion coefficient:	IEC/EN 60793-1-42		
In the interval 1285 nm – 1330 nm		ps/km • nm	≤ 3
At 1550 nm		ps/km • nm	≤ 18
At 1625 nm		ps/km • nm	≤ 22
Zero dispersion wavelength, λ <sub>0</sub>		nm	1311 ± 11
Zero dispersion slope		ps/(nm <sup>2</sup> • km)	≤ 0.090
Cut-off wavelength	IEC/EN 60793-1-44	λ <sub>cc</sub> nm	≤ 1260
Mode field diameter at 1310 nm	IEC/EN 60793-1-45	µm	9 ± 0.4
Mode field diameter at 1550 nm		µm	10.1 ± 0.5
Macrobending loss at :	IEC/EN 60793-1-47	dB	≤ 0.05
100 turns on a Ø 50 mm mandrel at 1310 and 1550 nm			
100 turns on a Ø 60 mm mandrel at 1625 nm			
Polarisation mode dispersion (PMD) coefficient, cabled	IEC/EN 60793-1-48	ps/√km	≤ 0.5
PMDQ Link Design Value	IEC/EN 60794-3	ps/√km	≤ 0.2