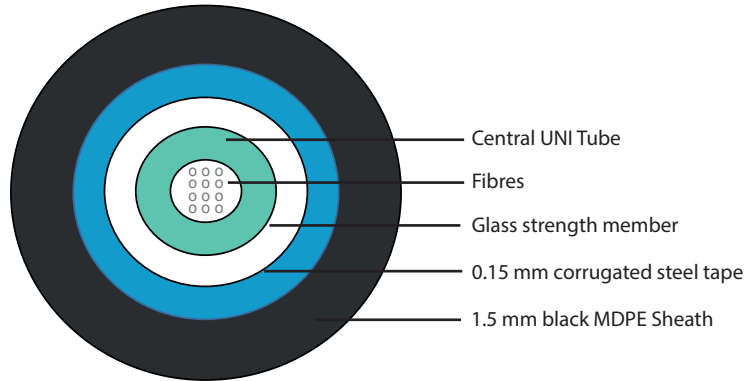


**Optic fibre cable OM4 - loose tube outdoor/corrugated steel tape**

- 4 fibres	Cat. No(s): 0 325 46	- 12 fibres	Cat. No(s): 0 325 48	- 6 fibres	Cat. No(s): 0 329 39
- 8fibres	Cat. No(s): 0 325 47	- 2 fibres	Cat. No(s): 0 329 27	- 24 fibres	Cat. No(s): 0 329 40



**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 4-24 fibres	
Fibre colour code	1 Blue	13 Blue w/mark every 70 mm
	2 Orange	14 Orange w/mark every 70 mm
	3 Green	15 Green w/mark every 70 mm
	4 Brown	16 Brown w/mark every 70 mm
	5 Grey	17 Grey w/mark every 70 mm
	6 White	18 White w/mark every 70 mm
	7 Red	19 Red w/mark every 35 mm
	8 Black	20 White w/mark every 35 mm
	9 Yellow	21 Yellow w/mark every 35 mm
	10 Violet	22 Violet w/mark every 35 mm
	11 Pink	23 Pink w/mark every 35 mm
	12 Aqua	24 Turquoise w/mark every 35 mm
Strength member	Glass yarns	
Armouring	0.15 mm corrugated steel tape	
Sheath	1.5 mm black MDPE sheath (IEC 60811, IEC 60708)	

## Optic fibre cable OM4 - loose tube outdoor/corrugated steel tape

- 4 fibres Cat. No(s): 0 325 46

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- 2 fibres Cat. No(s): 0 329 27

- 24 fibres Cat. No(s): 0 329 40

### 2.3 Physical properties - IEC 60794-1

Nominal outer diameter	-	8.5 mm
Nominal weight	-	2-24 fibres : 75 kg/km
Tensile strength (dynamic)	E1	3000 N (fibre strain ≤ 0.6%)
Tensile strength (permanent)	E1	1000 N (fibre strain ≤ 0.2%)
Compressive strength (crush)	E3	2200N
Impact	E4	30 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 = 85 mm
Min. Bending radius, loaded	-	R = 170 mm
Temperature range	F1	Storage and installation: - 40°C to + 70°C
		Operation: - 40°C to + 70°C.

### 2.4 Marking and packaging

Marking of the cable :

- Legrand
- Part number
- Description

- Euroclass : Dca s<sub>2</sub>, d<sub>2</sub>, a<sub>1</sub>
- Date code
- Batch number
- Measurement (remaining length in meters)

Catalogue number	0 325 46	0 325 47	0 325 48	0 329 27	0 329 39	0 329 40
Description	4 fibres OM4 LT Out PE	8 fibres OM4 LT Out PE	12 fibres OM4 LT Out PE	2 fibres OM4 LT Out PE	6 fibres OM4 LT Out PE	24 fibres OM4 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

## Optic fibre cable OM4 - loose tube outdoor/corrugated steel tape

- 4 fibres Cat. No(s): 0 325 46

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- 24 fibres Cat. No(s): 0 329 40

### 3. FIBRES TECHNICAL SPECIFICATIONS

#### 3.1 Standards and Norms

IEC 60793-2-10 : type A1a.3 (in development)

EN 60793-2-10: type A1a.3 (in development)

TIA/EIA-492 AAAD

EN 50173-1:2007 Amendment AB category OM4

ISO/IEC 11801:2002 Amendment 2 category OM4

IEEE 802.3-2002 incl. amendment 802.3ae - 2002.

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

Maximum attenuation value of cable at 850 nm	≤ 3.0 dB/km
Maximum attenuation value of cable at 1300 nm	≤ 1.0 dB/km
Attenuation limit according to IEC 60793-2-10 at 850 nm	≤ 2.5 dB/km
Attenuation limit according to IEC 60793-2-10 at 1300 nm	≤ 0.7 dB/km
Point discontinuity at 850 nm and 1300 nm	Max. 0.1 dB
Fibre bending loss R = 7.5 mm 850/1300 nm	≤ 0.2 dB / ≤ 0.5 dB
Fibre bending loss R = 15 mm 850/1300 nm	≤ 0.1 dB / ≤ 0.3 dB

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

OFL value at 850 nm	≥ 3500 MHz·km
OFL value at 1300 nm	≥ 500 MHz·km
Effective Modal Bandwidth (EMB) at 850 nm (assured by means of differential mode delay (DMD) measurement as specified in IEC 60793-1-49)	≥ 4700 MHz·km
Group index of refraction at 850 nm	1.482
Group index of refraction at 1300 nm	1.477

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

Attribute	Measurement method	Units	Limits
Core diameter	IEC/EN 60793-1-20	µm	50 ± 2.5
Cladding diameter	IEC/EN 60793-1-20	µm	125.0 ± 1.0
Cladding non-circularity	IEC/EN 60793-1-20	%	≤ 0.7
Core non-circularity	IEC/EN 60793-1-20	%	≤ 5
Core-cladding concentricity error	IEC/EN 60793-1-20	µm	≤ 1
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	≤ 10
Proof stress level	IEC/EN 60793-1-30	GPa	≥ 0.7 (≈1%)
Typical average strip force	IEC/EN 60793-1-32	N	1.0 ≤ Fav. strip ≤ 3.0
Strip force (peak)	IEC/EN 60793-1-32	N	1.3 ≤ F <sub>peak,strip</sub> ≤ 8.9
Numerical aperture	IEC/EN 60793-1-43	N	0.200 ± 0.015