JetLanOptic

The JetLanOptic system is a solution for optical networks including a full range of cables, both for indoor and outdoor installations, and all the components and accessories required for the cabling installation.
This system is covered by the 25 years Warranty offered by General Cable.

JetLanOptic includes:
- Indoor cables with LSZH sheaths
- Universal cables
- External cables with metallic or dielectric armouring
- Panels for installation in racks
- Connectors and adaptors (ST, SC, SMA, FDI, FC/PC and MT-RJ)
- Optical patchcables

General Cable offers optical fibre cables with different types of fibre:
- Multimode 62.5/125 µm, 50/125 µm and OM3
- Single mode 10/125 µm

Market demand for larger bandwidths in LAN's resulted in the development of Standard IEEE 802.3ae (10 Gigabit Ethernet) to satisfy improved requirements.
The limit of 10 Gigabit imposed by standard fibres (50/125 µm e 62.5/125 µm) imposed the development of a multimode fibre - OM3 - able to carry 10 Gigabit per second to distances up to 300 m.
General Cable may offer this type of fibre in several cable designs on special request.

General Cable

JetLanOptic

STANDARDS

Attenuation	EN-188000
Water progression	IEC 794-1-F5A
Sheath dimensions	ITI 015
Tensile performance	IEC 794-1-E1
Crush test	IEC 794-1-E3
Impact test	IEC 794-1-E4
Temperature cycling	IEC 794-1-F1
Bending test	IEC 794-1-E11, proc.1
PMD	IEC TS 61941

SINGLE MODE FIBRES 10-125 µm

Single mode fibres used in our cables have the proprieties below. They all comply with UIT Recommendation G-652 and EN-188000.

OPTICAL AND PHYSICAL PROPERTIES

		standard	max.
Attenuation (dB/km)	1310 nm	0,35	0,40
	1550 nm	0,21	0,25
Mode field diameter (µm)	1310 nm		9,1 ± 0,5
	1550 nm		10,5 ± 1
Cut-off wavelength (nm)			≤ 1270
Minimum bending radius (mm)			40
Elongation at 700 g/OF			≤ 1%
PMD, cabled fibre (Ps/√km)			≤ 0,5
Total dispersion, max (Ps/nm x km)	1288 - 1339 nm		3,5
	1271 - 1360 nm		5,3
	1550 nm		18

MECHANICAL AND GEOMETRIC PROPERTIES

Cladding diameter (µm)	125 ± 1
Cladding noncircularity	≤ 2%
Concentricity core-cladding	≤ 0,6%
Coating diameter (µm)	245 ± 10
Coating noncircularity	≤ 5%
Concentricity of coating (µm)	≤ 12
Core noncircularity (µm)	≤ 1

Tensile strength (kpsi)	100
Adherence	with selected solvents
Zero dispersion wavelength (nm)	±1311
Slope of dispersion at the zero dispersion wavelength (Ps/nm².km)	≤ 0,093
Cut-off wavelength (nm)	1150 - 1330

MULTIMODE FIBRES

Multimode optical fibres used in cablemaking have the characteristics listed below, all in agreement with EN 188000.

OPTICAL PROPERTIES

50-125 µm

Attenuation (dB/km)	850 nm (max.)	2,4
	1300 nm (max.)	0,6
Bandwidth, min (MHz x km)	850 nm	≥ 400
	1300 nm	≥ 600
Numerical Aperture		0,200 ± 0,015

62.5-125 µm

Attenuation (dB/km)	850 nm (max.)	3
	1300 nm (max.)	0,7
Bandwidth, min (MHz x km)	850 nm	200
	1300 nm	600
Numerical aperture		0,275 ± 0,015

PHYSICAL PROPERTIES

Core diameter (µm)	50 ± 3
	62.5 ± 2,5
Core noncircularity	≤ 6%
Cladding diameter (µm)	125 ± 2

Cladding concentricity	≤ 1%
Coating diameter (µm)	245 ± 10
Tensile strength (kpsi)	100

COLOUR CODE

Optical fibres (single or multitube designs)

fibre	colour
1	Gr - green
2	Rd - red
3	Bl - blue
4	Ye - yellow
5	Gy - grey
6	Vi - violet
7	Br - brown
8	Or - orange
9	Nt - natural
10	Wh - white
11	Bk - black
12	Lb - light blue

Tube colour code (multitube designs)

	tube nr.											
fibre	1	2	3	4	5	6	7	8	9	10	11	12
1,2,4	Wh	Bk	Bk	Bk	Bk	Bk						
8,12	Wh	Rd	Bk	Bk	Bk	Bk						
16,24,32	Wh	Wh	Rd	Gr	Bk	Bk						
36,48	Wh	Wh	Wh	Wh	Rd	Gr						
64	Wh	Wh	Rd	Rd	Bl	Bl	Gr	Gr				
128(1)	Wh	Rd	Bk	Bl	Gr	Bk						
128 (2)	Wh	Wh	Wh	Rd	Rd	Rd	Bl	Bl	Bl	Gr	Gr	Gr

Multitube designs

Total fibre count	128	64	48	36	32	24	16	12	8	6
Nr. of fibres/tube	8	8	8	6	8	6	4	6	4	6
Total nr. of tubes	16	8	6	6	4	4	4	2	2	1
Total nr. of fillers	–	–	–	–	2	2	2	4	4	5

Armoured cable with high mechanical resistance
Cable with improved mechanical and chemical resistance

Good water blocking proprieties
In case of external sheath cracks, water does not progress along the cable.

NON metallic cables
Unscreened non metallic cable, immune to electromagnetic fields.

Rodent protection
Cable with excellent rodent protection.

Rodent protection
Cable with good rodent protection.

Rodent protection
Cable with light rodent protection.

High impact strength
Impact resistance up to 400 N/cm. The load doesn't affect the characteristics of the fibres and the cable suffers no damage.

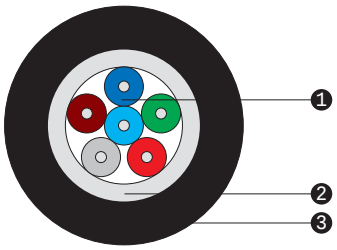
Cable with halogen free flame retardant sheath
The halogen free sheath is self-extinguishable. Flame retardant and halogen free.

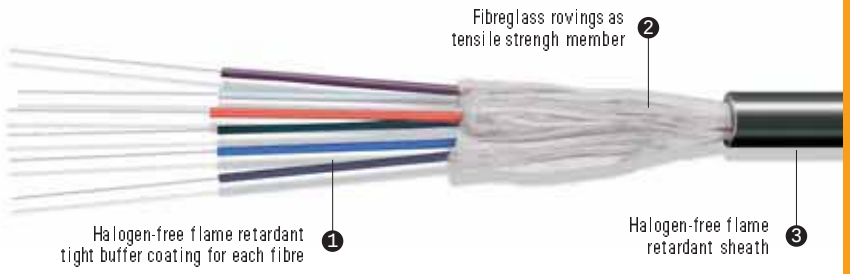
General Cable

JetLanOptic

Indoor Dielectric Armour Fibre-Optic Cable

Tight fibre design, LSZH sheath.





Code	Fibre count
Multimode 62.5/125 µm	
C046TILNGP	4
C066TILNGP	6
C086TILNGP	8
C126TILNGP	12
Multimode 50/125 µm	
C045TILNGP	4
C065TILNGP	6
C085TILNGP	8
C125TILNGP	12
Single mode 10/125 µm	
C049TILNGP	4
C069TILNGP	6
C089TILNGP	8
C129TILNGP	12

CONSTRUCTION

Fibre protection	900 µm acrylate layer
Pulling element	Fibreglass rovings
Outer sheath	LSZH flame retardant sheath (IEC 60332-1)

PHYSICAL PROPERTIES

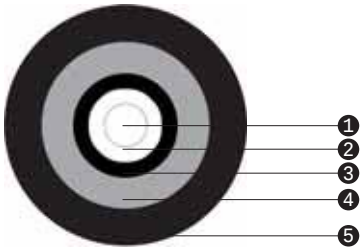
		Value	Standard
Maximum pulling load		700 N	IEC-794-1-E1
Impact strength		5 J	IEC-794-1-E4
Maximum radial pressure		10 bar	IEC-794-1-E3
Static radial pressure		2 bar	IEC-794-1-E3
Water progression		Sheaths	IEC-794-1-F5A
Thermal cycling		–20ºC to +70ºC	IEC-794-1-F1
Minimum bending radius		10 x Ø	IEC-794-1-E11
Cable weight	4 OF	24 kg/km	
	6 OF	33 kg/km	
	8 OF	38 kg/km	
	12 OF	44 kg/km	
External diameter	4 OF	6,3 mm	
	6 OF	6,6 mm	
	8 OF	6,9 mm	
	12 OF	7,2 mm	

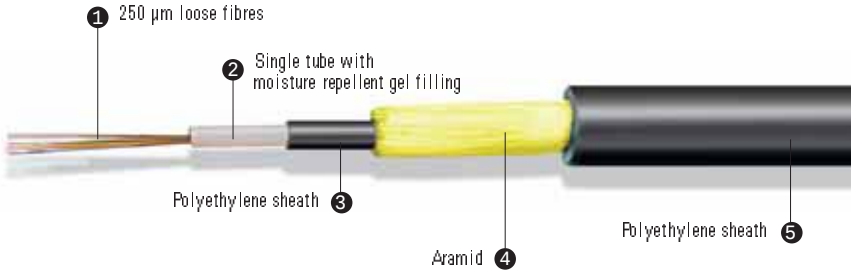
General Cable

JetLanOptic

General purpose OF cable for internal and external applications

PBT tube with moisture repellent filling, Aramid and PE sheath.





Code	Fibre count
Multimode 62.5/125 µm	
C046PKPNGP	4
C066PKPNGP	6
C086PKPNGP	8
C126PKPNGP	12
C166PKPNGP	16
C246PKPNGP	24
C326PKPNGP	32
C486PKPNGP	48
C646PKPNGP	64
Multimode 50/125 µm	
C045PKPNGP	4
C065PKPNGP	6
C085PKPNGP	8
C125PKPNGP	12
C165PKPNGP	16
C245PKPNGP	24
C325PKPNGP	32
C485PKPNGP	48
C645PKPNGP	64
Single mode 10/125 µm	
C049PKPNGP	4
C069PKPNGP	6
C089PKPNGP	8
C129PKPNGP	12
C169PKPNGP	16
C249PKPNGP	24
C329PKPNGP	32
C489PKPNGP	48
C649PKPNGP	64

SINGLE TUBE (up to 12 fibres)

CONSTRUCTION

Secondary protection	Loose PBT tube
Tube filling	Water repellent, non toxic, non-irritant gel
Inner sheath	Low density black polyethylene (PE)
Pulling element	Aramid fibres
Outer sheath	High density black polyethylene (PE)

PHYSICAL CHARACTERISTICS

	Value	Standard
Maximum pulling load	1500 N	IEC-794-1-E1
Impact strength	1 J	IEC-794-1-E4
Maximum radial pressure	10 bar	IEC-794-1-E3
Static radial pressure	2 bar	IEC-794-1-E3
Water progression	Sheaths	IEC-794-1-F5A
Thermal cycling	–20 ºC to +70 ºC	IEC-794-1-F1
Minimum bending radius	20 cm	IEC-794-1-E11
Cable weight	60 kg/km (approx.)	
External diameter	8,5 mm (approx.)	

MULTITUBE (> 12 fibres)

CONSTRUCTION

Central element	GRP rod
Secondary protection	Loose PBT tube, colours as per table
Tube filling	Water repellent, non toxic, non irritant gel
Cable core	Active and passive tubes laid around the central element, the spaces being filled with a water repellent compound
Inner sheath	Low density black polyethylene (PE)
Pulling element	Aramid fibres
Outer sheath	High density black polyethylene (PE)

PHYSICAL CHARACTERISTICS

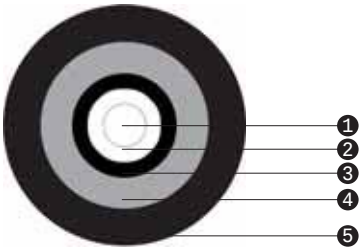
	Value	Standard
Maximum pulling load	6500 N	IEC-794-1-E1
Impact strength	5 J	IEC-794-1-E4
Maximum radial pressure	10 bar	IEC-794-1-E3
Static radial pressure	2 bar	IEC-794-1-E3
Water progression	Sheaths	IEC-794-1-F5A
Thermal cycling	–20 ºC to +70 ºC	IEC-794-1-F1
Minimum bending radius	20 cm	IEC-794-1-E11
Cable weight	145 kg/km (approx.)	
External diameter	13,5 mm (approx.)	

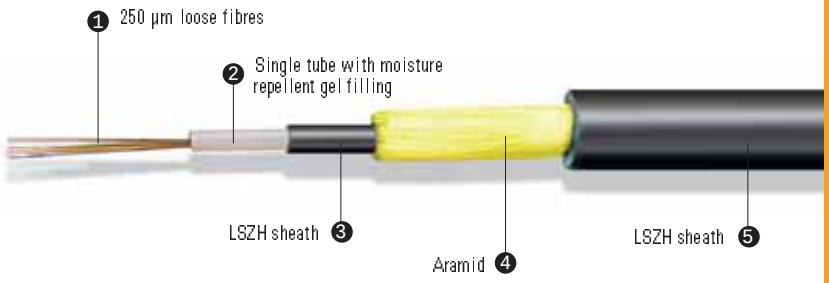
General Cable

JetLanOptic

General purpose OF cable for internal and external applications, LSZH sheath

PBT tube with moisture repellent filling, Aramid and LSZH flame retardant thermoplastic sheath.





Code	Fibre count
Multimode 62.5/125 µm	
C046TKTNGP	4
C066TKTNGP	6
C086TKTNGP	8
C126TKTNGP	12
C166TKTNGP	16
C246TKTNGP	24
C326TKTNGP	32
C486TKTNGP	48
C646TKTNGP	64
Multimode 50/125 µm	
C045TKTNGP	4
C065TKTNGP	6
C085TKTNGP	8
C125TKTNGP	12
C165TKTNGP	16
C245TKTNGP	24
C325TKTNGP	32
C485TKTNGP	48
C646TKTNGP	64
Single mode 10/125 µm	
C049TKTNGP	4
C069TKTNGP	6
C089TKTNGP	8
C129TKTNGP	12
C169TKTNGP	16
C249TKTNGP	24
C329TKTNGP	32
C489TKTNGP	48
C649TKTNGP	64

SINGLE TUBE (up to 12 fibres)

CONSTRUCTION

Secondary protection	Loose PBT tube
Tube filling	Water repellent, non toxic, non irritant gel
Inner sheath	Flame retardant, zero halogen, low smoke emission thermoplastic compound
Pulling element	Aramid fibres
Outer sheath	Flame retardant, zero halogen, low smoke emission thermoplastic compound

PHYSICAL CHARACTERISTICS

	Value	Standard
Maximum pulling load	1500 N	IEC-794-1-E1
Impact strength	1 J	IEC-794-1-E4
Maximum radial pressure	10 bar	IEC-794-1-E3
Static radial pressure	2 bar	IEC-794-1-E3
Water progression	Sheaths	IEC-794-1-F5A
Thermal cycling	–20 ºC to +70 ºC	IEC-794-1-F1
Minimum bending radius	20 cm	IEC-794-1-E11
Cable weight	110 kg/km (approx.)	
External diameter	8,4 mm (approx.)	

MULTITUBE (>12 fibres)

CONSTRUCTION

Central element	GRP rod
Secondary protection	Loose PBT tube, colours as per table
Tube filling	Water repellent, non toxic, non irritant gel
Cable core	Active and passive tubes laid around the central element, the spaces being filled with a water repellent compound
Inner sheath	Flame retardant, zero halogen, low smoke emission thermoplastic compound
Pulling element	Aramid fibres
Outer sheath	Flame retardant, zero halogen, low smoke emission thermoplastic compound

PHYSICAL CHARACTERISTICS

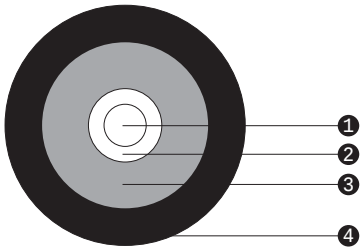
	Value	Standard
Maximum pulling load	6500 N	IEC-794-1-E1
Impact strength	5 J	IEC-794-1-E4
Maximum radial pressure	10 bar	IEC-794-1-E3
Static radial pressure	2 bar	IEC-794-1-E3
Water progression	Sheaths	IEC-794-1-F5A
Thermal cycling	–20 ºC to +70 ºC	IEC-794-1-F1
Minimum bending radius	20 cm	IEC-794-1-E11
Cable weight	185 kg/km (approx.)	
External diameter	13,5 mm (approx.)	

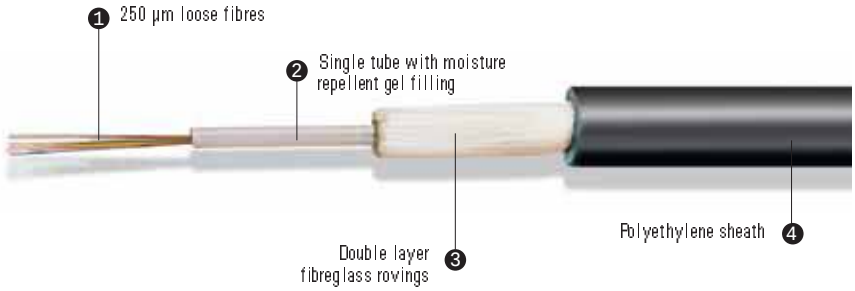
General Cable

JetLanOptic

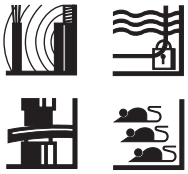
OF cable for external installations (dielectric armouring)

PE sheath, moisture repellent filling and dielectric armour.





Code	Fibre count
Multimode 62.5/125 µm	
C046LFLNGP	4
C066LFLNGP	6
C086LFLNGP	8
C126LFLNGP	12
C166LFLNGP	16
C246LFLNGP	24
C326LFLNGP	32
C486LFLNGP	48
C646LFLNGP	64
Multimode 50/125 µm	
C045LFLNGP	4
C065LFLNGP	6
C085LFLNGP	8
C125LFLNGP	12
C165LFLNGP	16
C245LFLNGP	24
C325LFLNGP	32
C485LFLNGP	48
C646LFLNGP	64
Single mode 10/125 µm	
C049LFLNGP	4
C069LFLNGP	6
C089LFLNGP	8
C129LFLNGP	12
C169LFLNGP	16
C249LFLNGP	24
C329LFLNGP	32
C489LFLNGP	48
C649LFLNGP	64



SINGLE TUBE (up to 12 fibres)

CONSTRUCTION

Secondary protection	Loose PBT tube
Tube filling	Water repellent, non toxic, non irritant gel
Pulling element	Longitudinal fibreglass rovings
Outer sheath	High density black polyethylene (PE)

PHYSICAL CHARACTERISTICS

	Value	Standard
Maximum pulling load	1500 N	IEC-794-1-E1
Impact strength	5 J	IEC-794-1-E4
Maximum radial pressure	10 bar	IEC-794-1-E3
Static radial pressure	2 bar	IEC-794-1-E3
Water progression	Sheaths	IEC-794-1-F5A
Thermal cycling	–20 ºC to +70 ºC	IEC-794-1-F1
Minimum bending radius	20 cm	IEC-794-1-E11
Cable weight	44 kg/km (approx.)	
External diameter	6,7 mm (approx.)	

MULTITUBE (>12 fibres)

CONSTRUCTION

Central element	GRP rod
Secondary protection	Loose PBT tube, colours as per table
Tube filling	Water repellent, non toxic, non irritant gel
Cable core	Active and passive tubes laid around the central element, the spaces being filled with a water repellent compound
Pulling element	Longitudinal fibreglass rovings
Outer sheath	High density black polyethylene (PE)

PHYSICAL CHARACTERISTICS

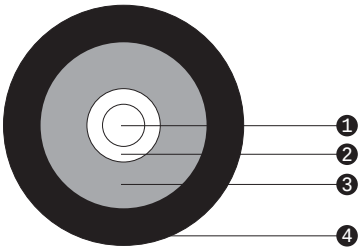
	Value	Standard
Maximum pulling load	6500 N	IEC-794-1-E1
Impact strength	5 J	IEC-794-1-E4
Maximum radial pressure	10 bar	IEC-794-1-E3
Static radial pressure	2 bar	IEC-794-1-E3
Water progression	Sheaths	IEC-794-1-F5A
Thermal cycling	–20 ºC to +70 ºC	IEC-794-1-F1
Minimum bending radius	20 cm	IEC-794-1-E11
Cable weight	125 kg/km (approx.)	
External diameter	11,8 mm (approx.)	

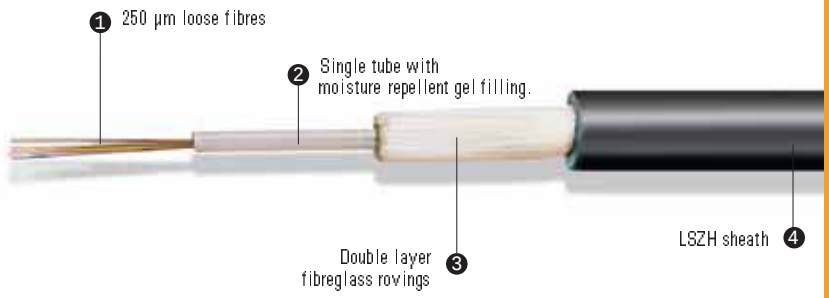
General Cable

JetLanOptic

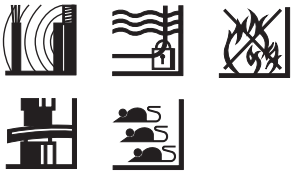
OF cable for external installations (dielectric armouring and LSZH sheath)

PBT tube with moisture repellent filling, dielectric armour and flame retardant LSZH sheath.





Code	Fibre count
Multimode 62.5/125 µm	
C046HFHNGP	4
C066HFHNGP	6
C086HFHNGP	8
C126HFHNGP	12
C166HFHNGP	16
C246HFHNGP	24
C326HFHNGP	32
C486HFHNGP	48
C646HFHNGP	64
Multimode 50/125 µm	
C045HFHNGP	4
C065HFHNGP	6
C085HFHNGP	8
C125HFHNGP	12
C165HFHNGP	16
C245HFHNGP	24
C325HFHNGP	32
C485HFHNGP	48
C646HFHNGP	64
Single mode 10/125 µm	
C049HFHNGP	4
C069HFHNGP	6
C089HFHNGP	8
C129HFHNGP	12
C169HFHNGP	16
C249HFHNGP	24
C329HFHNGP	32
C489HFHNGP	48
C649HFHNGP	64



SINGLE TUBE (up to 12 fibres)

CONSTRUCTION

Secondary protection	Loose PBT tube
Tube filling	Water repellent, non toxic, non irritant gel
Pulling element	Longitudinal fibreglass rovings
Outer sheath	Flame retardant, zero halogen, low smoke emission thermoplastic compound

PHYSICAL CHARACTERISTICS

	Value	Standard
Maximum pulling load	1500 N	IEC-794-1-E1
Impact strength	5 J	IEC-794-1-E4
Maximum radial pressure	10 bar	IEC-794-1-E3
Static radial pressure	2 bar	IEC-794-1-E3
Water progression	Sheaths	IEC-794-1-F5A
Thermal cycling	–20 °C to +70 °C	IEC-794-1-F1
Minimum bending radius	20 cm	IEC-794-1-E11
Cable weight	64 kg/km (approx.)	
External diameter	6,7 mm (approx.)	

MULTITUBE (>12 fibres)

CONSTRUCTION

Central element	GRP rod
Secondary protection	Loose PBT tube, colours as per table
Tube filling	Water repellent, non toxic, non irritant gel
Cable core	Active and passive tubes wound around the central element, the spaces being filled with a water repellent compound
Pulling element	Longitudinal fibreglass rovings
Outer sheath	Flame retardant, zero halogen, low smoke emission thermoplastic compound

PHYSICAL CHARACTERISTICS

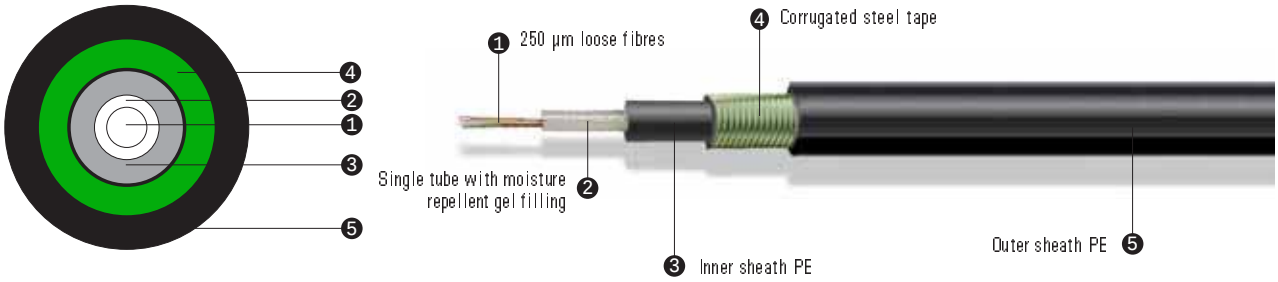
	Value	Standard
Maximum pulling load	6500 N	IEC-794-1-E1
Impact strength	5 J	IEC-794-1-E4
Maximum radial pressure	10 bar	IEC-794-1-E3
Static radial pressure	2 bar	IEC-794-1-E3
Water progression	Sheaths	IEC-794-1-F5A
Thermal cycling	–20 °C to +70 °C	IEC-794-1-F1
Minimum bending radius	20 cm	IEC-794-1-E11
Cable weight	150 kg/km (approx.)	
External diameter	12 mm (approx.)	

General Cable

JetLanOptic

OF cable for external installations (metallic armour, PE Sheath)

Polyethylene sheath, moisture repellent filling, metal armour.



Code	Fibre count
Multimode 62.5/125 µm	
C046LCLNGP	4
C066LCLNGP	6
C086LCLNGP	8
C126LCLNGP	12
C166LCLNGP	16
C246LCLNGP	24
C326LCLNGP	32
C486LCLNGP	48
C646LCLNGP	64
Multimode 50/125 µm	
C045LCLNGP	4
C065LCLNGP	6
C085LCLNGP	8
C125LCLNGP	12
C165LCLNGP	16
C245LCLNGP	24
C325LCLNGP	32
C485LCLNGP	48
C645LCLNGP	64
Single mode 10/125 µm	
C049LCLNGP	4
C069LCLNGP	6
C089LCLNGP	8
C129LCLNGP	12
C169LCLNGP	16
C249LCLNGP	24
C329LCLNGP	32
C489LCLNGP	48
C649LCLNGP	64

SINGLE TUBE (up to 12 fibres)

CONSTRUCTION

Secondary protection	Loose PBT tube
Tube filling	Water repellent, non toxic, non irritant gel
Inner sheath	Low density black polyethylene (PE)
Pulling element	Corrugated steel tape with copolymer layer
Outer sheath	High density black polyethylene (PE)

PHYSICAL CHARACTERISTICS

	Value	Standard
Maximum pulling load	1500 N	IEC-794-1-E1
Impact strength	5 J	IEC-794-1-E4
Maximum radial pressure	10 bar	IEC-794-1-E3
Static radial pressure	2 bar	IEC-794-1-E3
Water progression	Sheaths	IEC-794-1-F5A
Thermal cycling	–20 °C to +70 °C	IEC-794-1-F1
Minimum bending radius	20 cm	IEC-794-1-E11
Cable weight	85 kg/km (approx.)	
External diameter	10 mm (approx.)	

MULTITUBE (>12 fibres)

CONSTRUCTION

Central element	GRP rod
Secondary protection	Loose PBT tube, colours as per table
Tube filling	Water repellent, non toxic, non irritant gel
Cable core	Active and passive tubes wound around the central element, the spaces being filled with a water repellent compound
Inner sheath	Low density black polyethylene (PE)
Pulling element	Corrugated steel tape with copolymer layer
Outer sheath	High density black polyethylene (PE)

PHYSICAL CHARACTERISTICS

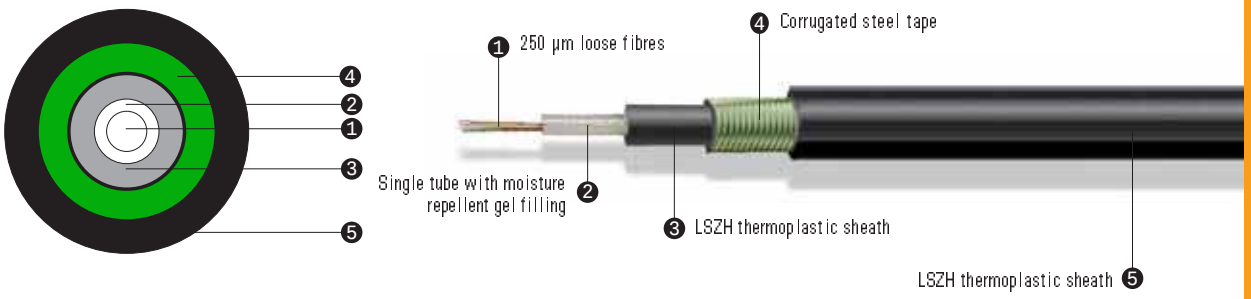
	Value	Standard
Maximum pulling load	6500 N	IEC-794-1-E1
Impact strength	5 J	IEC-794-1-E4
Maximum radial pressure	10 bar	IEC-794-1-E3
Static radial pressure	2 bar	IEC-794-1-E3
Water progression	Sheaths	IEC-794-1-F5A
Thermal cycling	–20 °C to +70 °C	IEC-794-1-F1
Minimum bending radius	20 cm	IEC-794-1-E11
Cable weight	190 kg/km (approx.)	
External diameter	14 mm (approx.)	

General Cable

JetLanOptic

OF cable for external installations (metallic armour, LSZH sheath)

PBT tube with moisture repellent filling, metal armour and flame retardant LSZH sheath.



Code	Fibre count
Multimode 62.5/125 µm	
C046HCHNGP	4
C066HCHNGP	6
C086HCHNGP	8
C126HCHNGP	12
C166HCHNGP	16
C246HCHNGP	24
C326HCHNGP	32
C486HCHNGP	48
C646HCHNGP	64
Multimode 50/125 µm	
C045HCHNGP	4
C065HCHNGP	6
C085HCHNGP	8
C125HCHNGP	12
C165HCHNGP	16
C245HCHNGP	24
C325HCHNGP	32
C485HCHNGP	48
C645HCHNGP	64
Single mode 10/125 µm	
C049HCHNGP	4
C069HCHNGP	6
C089HCHNGP	8
C129HCHNGP	12
C169HCHNGP	16
C249HCHNGP	24
C329HCHNGP	32
C489HCHNGP	48
C649HCHNGP	64

SINGLE TUBE (up to 12 fibres)

CONSTRUCTION

Secondary protection	Loose PBT tube
Tube filling	Water repellent, non toxic, non irritant gel
Inner sheath	Flame retardant, zero halogen, low smoke emission thermoplastic compound
Pulling element	Corrugated steel tape with copolymer layer
Outer sheath	Flame retardant, zero halogen, low smoke emission thermoplastic compound

PHYSICAL CHARACTERISTICS

	Value	Standard
Maximum pulling load	1500 N	IEC-794-1-E1
Impact strength	5 J	IEC-794-1-E4
Maximum radial pressure	10 bar	IEC-794-1-E3
Static radial pressure	2 bar	IEC-794-1-E3
Water progression	Sheaths	IEC-794-1-F5A
Thermal cycling	–20 ºC to +70 ºC	IEC-794-1-F1
Minimum bending radius	20 cm	IEC-794-1-E11
Cable weight	85 kg/km (approx.)	
External diameter	10 mm (approx.)	

MULTITUBE (>12 fibres)

CONSTRUCTION

Central element	GRP rod
Secondary protection	Loose PBT tube, colours as per table
Tube filling	Water repellent, non toxic, non irritant gel
Cable core	Active and passive tubes wound around the central element, the spaces being filled with a water repellent compound
Inner sheath	Flame retardant, zero halogen, low smoke emission thermoplastic compound
Pulling element	Corrugated steel tape with copolymer layer
Outer sheath	Flame retardant, zero halogen, low smoke emission thermoplastic compound

PHYSICAL CHARACTERISTICS

	Value	Standard
Maximum pulling load	6500 N	IEC-794-1-E1
Impact strength	5 J	IEC-794-1-E4
Maximum radial pressure	10 bar	IEC-794-1-E3
Static radial pressure	2 bar	IEC-794-1-E3
Water progression	Sheaths	IEC-794-1-F5A
Thermal cycling	–20 ºC to +70 ºC	IEC-794-1-F1
Minimum bending radius	20 cm	IEC-794-1-E11
Cable weight	190 kg/km (approx.)	
External diameter	14 mm (approx.)	

JetLanOptic

General Cable

Optical patchpanels

Our patchpanels are made from cold formed steel and finished with a black electrostatic layer. The extractable tray allows for easy internal access and wiring and the panels can accommodate ST & Duplex SC format adaptors; they have three fibre optic cable ports at the rear. 19" 1U height rack mount. Supplied with the accessories required to sustain the fibre optic cables (fibre guide, flanges, compression glands, plugs).

PANELS for ST Adaptors		
Code	Description	Packing
CFPPOSTNGP	Vacant 24 ST port 19" 1U fibre optic panel	1

PANELS for SC Adaptors		
Referencia	Description	Packing
CFPPOSCNGP	Vacant 16 duplex SC port 19" 1U fibre optic panel	1

Optical fibre cassettes, supports and protectors

These products enable us to accommodate and protect splices made mechanically or by fusion inside the patchpanels and wall-boxes; available on metallic or plastic material.

OPTICAL FIBRE CASSETTES, SUPPORTS AND PROTECTORS		
Code	Description	Packing
CCFPPSPE99P	Plastic 12-unit splice support	1
CFPPCSE99P	Metal 12-unit splice cassette	1
CFPPCS299P	Plastic 24-unit splice cassette	1
CFPPTB499P	40 mm splice protector	25
CFPPTB599P	45 mm splice protector	25
CFPPTB699P	60 mm splice protector	25

Optical fibre wall-box

Wall-boxes are an efficient solution in fibre-optic installations where we cannot use distribution racks. Fitted with a vacant extractable panel to accommodate twelve ST adaptors or twelve Duplex SC adaptors. Made from black 1.2 mm thick steel, with die-cast sides for compression glands and fibre-guides for the correct internal distribution of the optical fibres.

SPLICE CASSETTES		
Code	Description	Packing
CFMUOST99P	Vacant 12 ST port optical fibre panel (measuring 22 x 22 x 4.5 cm)	1
CFMUOCC99P	Fibre optic panel with 12 vacant Duplex SC ports (measuring 22 x 22 x 4.5 cm)	1

Optical ST connectors

ST connectors are supplied with PC, SPC or UPC finish, for multimode and single mode. The connectors have a metallic casing with a bayonet-type fastening system, including caps, Zipcord fibre metallic crimping sleeve and dust-cap. This connector takes fibres with a 250 µm or 900 µm sheath and 2.4 mm & 3 mm Zipcord, 128 µm diam. Zirconium ferrule. It has a cold curing Epoxy/Anaerobic connection system. It complies with ANSI/TIA/EIA 568-B.3 standard. Insertion losses MM=0.5 dB and SM=0.3 dB. The operation and storage temperature range is between -40°C and +80°C.

ST CONNECTORS		
Code	Description	Packing
CFCSTMS99P	Zirconium ST multimode connector	1
CFCSTSS99P	Zirconium ST/PC single mode connector	1

Optical SC connectors

SC connectors are supplied with PC, SPC, UPC or APC finish, for multimode and single mode. The connectors have a plastic casing with a PUSH/PULL-type fastening system, including caps, Zipcord fibre metallic crimping sleeve and dust-cap. This connector takes fibres with a 250 µm or 900 µm sheath and 2.4 mm & 3 mm Zipcord, 128 µm diam. Zirconium ferrule. It has a cold curing Epoxy/Anaerobic connection system. It complies with ANSI/TIA/EIA 568-B.3 standard. Insertion losses: MM=0.5 dB and SM=0.3 dB. The operation and storage temperature range is between -40°C and +80°C.

SC CONNECTORS		
Code	Description	Packing
CFCSCMS99P	SC/PC multimode connector	1
CFCSCMD99P	SC/PC single mode connector	1

Optical MT-RJ connectors

SFF (small form factor) MT/RJ connectors are compatible with multimode and single mode fibres. This connector includes a small pre-polished 900 mm internal fibre. It complies with ANSI/TIA/EIA 568A and IEC 60874 standards. Typical insertion losses: MM=0.40 dB and SM=0.30 dB.

MT-RJ CONNECTORS		
Code	Description	Packing
CFCMTMS99P	MT/RJ multimode connector	1
CFCMTSS99P	MT/RJ single mode connector	1

Optical LC connectors

The LC connectors are high-density (SFF) and they are designed to enable us to reduce the space for the connections. This connector complies with IEC 60874 standards. Available with SPC and UPC polish finishing. Typical insertion losses = 0.20 dB.

LC CONNECTORS		
Code	Description	Packing
CFCMTMS99P	LC multimode connector	1
CFCMTSS99P	LC single mode connector	1

Optical ST adaptors

Optical ST adaptors are the interface between the cable and the patchcords to enable devices to be connected, as they are easy to install. The adaptor protection is Zinc Die-cast with a bayonet-type fastening system. The inner sleeve is made from Phosphor/Bronze for multimode fibres and Zirconium or Phosphor/Bronze for single mode fibres. It complies with ANSI/TIA/EIA 568-B.3 standards. The operation and storage temperature range is between -40°C and +80°C.

ST ADAPTORS		
Code	Description	Packing
CFASTMS99P	Phosphor/Bronze ST multimode adaptor	1
CFASTSS99P	Phosphor/Bronze ST/PC single mode adaptor	1

Optical SC adaptors

Optical SC adaptors are the interface between the cable and the patchcords to enable devices to be connected, as they are easy to install. The protection of the adaptor is plastic, complying with UL standards. Colour coding for the adaptor: Beige for multimode, Blue for single mode and Green for APC single mode. The inner sleeve is made from Phosphor/Bronze for multimode fibres and Zirconium or Phosphor/Bronze for single mode fibres. Simplex or Duplex format with a PUSH/PULL-type coupling system. This adaptor complies with ANSI/TIA/EIA 568-B.3 & JIS C5970 F04 SC standards. The operation and storage temperature range is between -40°C and +80°C.

SC ADAPTORS		
Code	Description	Packing
CFASCMS99P	Phosphor/Bronze Simplex SC multimode adaptor	1
CFASCMD99P	Phosphor/Bronze Duplex SC multimode adaptor	1
CFASCSD99P	Phosphor/Bronze Duplex SC/PC single mode adaptor	1
CFASASD99P	Ceramic Duplex SC/APC single mode adaptor	1

Optical MT-RJ adaptors

SFF (small form factor) MT/RJ adaptors are available for multimode and single mode fibres. The body is polymeric and takes two fibres.

MT-RJ ADAPTORS		
Code	Description	Packing
CFAMTMS99P	MT/RJ multimode adaptor	1
CFAMTMS99P	MT/RJ single mode adaptor	1

Optical LC adaptors

The LC adaptors are Duplex and the interior has ceramic (Zirconium) sleeves for single mode fibres and Phosphorus/Bronze for multimode fibres to enable the connector's ferrules to be aligned and losses to be minimised. The body is polymeric.

LC ADAPTORS		
Code	Description	Packing
CFALCMD99P	Duplex LC multimode adaptor	1
CFALCSD99P	Duplex LC single mode adaptor	1

General Cable

JetLanOptic

62.5/125 µm multimode optical patchcords

JetLan patchcords are used for connections of work stations to the devices or from the active network equipment to the patchpanels. Construction using 62.5/125 µm multimode Zipcord fibres for single-fibre, 2.4 mm and 3 mm twin-fibres. The cords can be fitted with ST, SC, MT-RJ and LC connectors. Insertion loss in multimode < 0.35 dB. Coupled pair insertion loss in multimode < 0.60 dB (typically 0.25 dB). Operation/storage temperature range is -40°C to +80°C

Code	Description	Packing
62.5/125 µm multimode patchcords		
Simplex ST / ST		
CF6TTS199P	SIMPLEX ST-ST, 1m	1
CF6TTS299P	SIMPLEX ST-ST, 2m	1
CF6TTS399P	SIMPLEX ST-ST, 3m	1
Simplex SC / SC		
CF6CCS199P	SIMPLEX SC-SC, 1m	1
CF6CCS299P	SIMPLEX SC-SC, 2m	1
CF6CCS399P	SIMPLEX SC-SC, 3m	1
Simplex ST / SC		
CF6CTS199P	SIMPLEX ST-SC, 1m	1
CF6CTS299P	SIMPLEX ST-SC, 2m	1
CF6CTS399P	SIMPLEX ST-SC, 3m	1
Simplex LC / LC		
CF6LLS199P	SIMPLEX LC-LC, 1m	1
CF6LLS299P	SIMPLEX LC-LC, 2m	1
CF6LLS399P	SIMPLEX LC-LC, 3m	1
Simplex SC / LC		
CF6CLS199P	SIMPLEX SC-LC, 1m	1
CF6CLS299P	SIMPLEX SC-LC, 2m	1
CF6CLS399P	SIMPLEX SC-LC, 3m	1
Simplex ST / LC		
CF6LTS199P	SIMPLEX LC-ST, 1m	1
CF6LTS299P	SIMPLEX LC-ST, 2m	1
CF6LTS399P	SIMPLEX LC-ST, 3m	1
Duplex MT-RJ / MT-RJ		
CF6MMD199P	DUPLEX MTRJ-MTRJ, 1m	1
CF6MMD299P	DUPLEX MTRJ-MTRJ, 2m	1
CF6MMD399P	DUPLEX MTRJ-MTRJ, 2m	1
Duplex MT-RJ / SC		
CF6CMD199P	DUPLEX MTRJ-SC, 1m	1
CF6CMD299P	DUPLEX MTRJ-SC, 2m	1
CF6CMD399P	DUPLEX MTRJ-SC, 3m	1

Code	Description	Packing
62.5/125 µm multimode patchcords		
Duplex ST / ST		
CF6TTD199P	DUPLEX ST-ST, 1m	1
CF6TTD299P	DUPLEX ST-ST, 2m	1
CF6TTD399P	DUPLEX ST-ST, 3m	1
Duplex SC / SC		
CF6CCD199P	DUPLEX SC-SC, 1m	1
CF6CCD299P	DUPLEX SC-SC, 2m	1
CF6CCD399P	DUPLEX SC-SC, 3m	1
Duplex ST / SC		
CF6TCD199P	DUPLEX ST-SC, 1m	1
CF6TCD299P	DUPLEX ST-SC, 2m	1
CF6TCD399P	DUPLEX ST-SC, 3m	1
Duplex LC / LC		
CF6LLD199P	DUPLEX LC-LC, 1m	1
CF6LLD299P	DUPLEX LC-LC, 2m	1
CF6LLD399P	DUPLEX LC-LC, 3m	1
Duplex SC / LC		
CF6CLD199P	DUPLEX SC-LC, 1m	1
CF6CLD299P	DUPLEX SC-LC, 2m	1
CF6CLD399P	DUPLEX SC-LC, 3m	1
Duplex ST / LC		
CF6LTD199P	DUPLEX LC-ST, 1m	1
CF6LTD299P	DUPLEX LC-ST, 2m	1
CF6LTD399P	DUPLEX LC-ST, 3m	1
Duplex MT-RJ / LC		
CF6LMD199P	DUPLEX MTRJ-LC, 1m	1
CF6LMD299P	DUPLEX MTRJ-LC, 2m	1
CF6LMD399P	DUPLEX MTRJ-LC, 3m	1
Duplex MT-RJ / ST		
CF6MD199P	DUPLEX MTRJ-ST, 1m	1
CF6MD299P	DUPLEX MTRJ-ST, 2m	1
CF6MD399P	DUPLEX MTRJ-ST, 3m	1

[Comments: Contact us for other patchcord lengths or connectors]

JetLanOptic

General Cable

50/125 µm multimode optical patchcords

JetLan patch cords are used for connections of work stations to the devices or from the active network equipment to the patchpanels. Construction using 50/125 µm multimode Zipcord fibres for single-fibre, 2.4 mm and 3 mm twin-fibres. The cords can be fitted with ST, SC, MT-RJ and LC connectors. Insertion loss in multimode < 0.35 dB. Coupled pair insertion loss in multimode < 0.60 dB (typically 0.25 dB). Operation/storage temperature range is -40°C to +80°C.

Code	Description	Packing
50/125 µm multimode patchcords		
Simplex ST / ST		
CF5TTS199P	SIMPLEX ST-ST, 1m	1
CF5TTS299P	SIMPLEX ST-ST, 2m	1
CF5TTS399P	SIMPLEX ST-ST, 3m	1
Simplex SC / SC		
CF5CCS199P	SIMPLEX SC-SC, 1m	1
CF5CCS299P	SIMPLEX SC-SC, 2m	1
CF5CCS399P	SIMPLEX SC-SC, 3m	1
Simplex ST / SC		
CF5CTS199P	SIMPLEX ST-SC, 1m	1
CF5CTS299P	SIMPLEX ST-SC, 2m	1
CF5CTS399P	SIMPLEX ST-SC, 3m	1
Simplex LC / LC		
CF5LLS199P	SIMPLEX LC-LC, 1m	1
CF5LLS299P	SIMPLEX LC-LC, 2m	1
CF5LLS399P	SIMPLEX LC-LC, 3m	1
Simplex SC / LC		
CF5CLS199P	SIMPLEX SC-LC, 1m	1
CF5CLS299P	SIMPLEX SC-LC, 2m	1
CF5CLS399P	SIMPLEX SC-LC, 3m	1
Simplex ST / LC		
CF5LTS199P	SIMPLEX LC-ST, 1m	1
CF5LTS299P	SIMPLEX LC-ST, 2m	1
CF5LTS399P	SIMPLEX LC-ST, 3m	1
Duplex MT-RJ / MT-RJ		
CF5MMD199P	DUPLEX MTRJ-MTRJ, 1m	1
CF5MMD299P	DUPLEX MTRJ-MTRJ, 2m	1
CF5MMD399P	DUPLEX MTRJ-MTRJ, 2m	1
Duplex MT-RJ / SC		
CF5CMD199P	DUPLEX MTRJ-SC, 1m	1
CF5CMD299P	DUPLEX MTRJ-SC, 2m	1
CF5CMD399P	DUPLEX MTRJ-SC, 3m	1

Code	Description	Packing
50/125 µm multimode patchcords		
Duplex ST / ST		
CF5TTD199P	DUPLEX ST-ST, 1m	1
CF5TTD299P	DUPLEX ST-ST, 2m	1
CF5TTD399P	DUPLEX ST-ST, 3m	1
Duplex SC / SC		
CF5CCD199P	DUPLEX SC-SC, 1m	1
CF5CCD299P	DUPLEX SC-SC, 2m	1
CF5CCD399P	DUPLEX SC-SC, 3m	1
Duplex ST / SC		
CF5TCD199P	DUPLEX ST-SC, 1m	1
CF5TCD299P	DUPLEX ST-SC, 2m	1
CF5TCD399P	DUPLEX ST-SC, 3m	1
Duplex LC / LC		
CF5LLD199P	DUPLEX LC-LC, 1m	1
CF5LLD299P	DUPLEX LC-LC, 2m	1
CF5LLD399P	DUPLEX LC-LC, 3m	1
Duplex SC / LC		
CF5CLD199P	DUPLEX SC-LC, 1m	1
CF5CLD299P	DUPLEX SC-LC, 2m	1
CF5CLD399P	DUPLEX SC-LC, 3m	1
Duplex ST / LC		
CF5LTD199P	DUPLEX LC-ST, 1m	1
CF5LTD299P	DUPLEX LC-ST, 2m	1
CF5LTD399P	DUPLEX LC-ST, 3m	1
Duplex MT-RJ / LC		
CF5LMD199P	DUPLEX MTRJ-LC, 1m	1
CF5LMD299P	DUPLEX MTRJ-LC, 2m	1
CF5LMD399P	DUPLEX MTRJ-LC, 3m	1
Duplex MT-RJ / ST		
CF5MD199P	DUPLEX MTRJ-ST, 1m	1
CF5MD299P	DUPLEX MTRJ-ST, 2m	1
CF5MD399P	DUPLEX MTRJ-ST, 3m	1

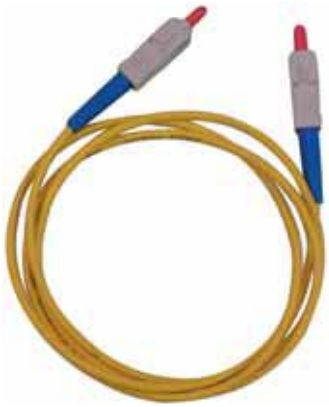
[Comments: Contact us for other patchcord lengths or connectors]

General Cable

JetLanOptic

9/125 µm single mode optical patchcords

JetLan patchcords are used for connections of work stations to the devices or from the active network equipment to the patchpanels. Construction using 9/125 µm single mode Zipcord fibres for single-fibre, 2.4 mm and 3 mm twin-fibres. The cords can be fitted with ST/PC & APC, SC/PC 6 APC, MT-RJ and LC/UPC connectors. Coupled pair return loss in single mode < 0.55 dB. Operation/storage temperature range is -40°C to +80°C.



Code	Description	Packing
9/125 µm single mode patchcords		
Simplex ST / ST		
CF9TTS199P	SIMPLEX ST-ST, 1m	1
CF9TTS299P	SIMPLEX ST-ST, 2m	1
CF9TTS399P	SIMPLEX ST-ST, 3m	1
Simplex SC / SC		
CF9CCS199P	SIMPLEX SC-SC, 1m	1
CF9CCS299P	SIMPLEX SC-SC, 2m	1
CF9CCS399P	SIMPLEX SC-SC, 3m	1
Simplex ST / SC		
CF9CTS199P	SIMPLEX ST-SC, 1m	1
CF9CTS299P	SIMPLEX ST-SC, 2m	1
CF9CTS399P	SIMPLEX ST-SC, 3m	1
Simplex LC / LC		
CF9LLS199P	SIMPLEX LC-LC, 1m	1
CF9LLS299P	SIMPLEX LC-LC, 2m	1
CF9LLS399P	SIMPLEX LC-LC, 3m	1
Simplex SC / LC		
CF9CLS199P	SIMPLEX SC-LC, 1m	1
CF9CLS299P	SIMPLEX SC-LC, 2m	1
CF9CLS399P	SIMPLEX SC-LC, 3m	1
Simplex ST / LC		
CF9LTS199P	SIMPLEX LC-ST, 1m	1
CF9LTS299P	SIMPLEX LC-ST, 2m	1
CF9LTS399P	SIMPLEX LC-ST, 3m	1
Duplex MT-RJ / MT-RJ		
CF9MMD199P	DUPLEX MTRJ-MTRJ, 1m	1
CF9MMD299P	DUPLEX MTRJ-MTRJ, 2m	1
CF9MMD399P	DUPLEX MTRJ-MTRJ, 2m	1
Duplex MT-RJ / SC		
CF9CMD199P	DUPLEX MTRJ-SC, 1m	1
CF9CMD299P	DUPLEX MTRJ-SC, 2m	1
CF9CMD399P	DUPLEX MTRJ-SC, 3m	1

Code	Description	Packing
9/125 µm single mode patchcords		
Duplex ST / ST		
CF9TTD199P	DUPLEX ST-ST, 1m	1
CF9TTD299P	DUPLEX ST-ST, 2m	1
CF9TTD399P	DUPLEX ST-ST, 3m	1
Duplex SC / SC		
CF9CCD199P	DUPLEX SC-SC, 1m	1
CF9CCD299P	DUPLEX SC-SC, 2m	1
CF9CCD399P	DUPLEX SC-SC, 3m	1
Duplex ST / SC		
CF9TCD199P	DUPLEX ST-SC, 1m	1
CF9TCD299P	DUPLEX ST-SC, 2m	1
CF9TCD399P	DUPLEX ST-SC, 3m	1
Duplex LC / LC		
CF9LLD199P	DUPLEX LC-LC, 1m	1
CF9LLD299P	DUPLEX LC-LC, 2m	1
CF9LLD399P	DUPLEX LC-LC, 3m	1
Duplex SC / LC		
CF9CLD199P	DUPLEX SC-LC, 1m	1
CF9CLD299P	DUPLEX SC-LC, 2m	1
CF9CLD399P	DUPLEX SC-LC, 3m	1
Duplex ST / LC		
CF9LTD199P	DUPLEX LC-ST, 1m	1
CF9LTD299P	DUPLEX LC-ST, 2m	1
CF9LTD399P	DUPLEX LC-ST, 3m	1
Duplex MT-RJ / LC		
CF9LMD199P	DUPLEX MTRJ-LC, 1m	1
CF9LMD299P	DUPLEX MTRJ-LC, 2m	1
CF9LMD399P	DUPLEX MTRJ-LC, 3m	1
Duplex MT-RJ / ST		
CF9MD199P	DUPLEX MTRJ-ST, 1m	1
CF9MD299P	DUPLEX MTRJ-ST, 2m	1
CF9MD399P	DUPLEX MTRJ-ST, 3m	1

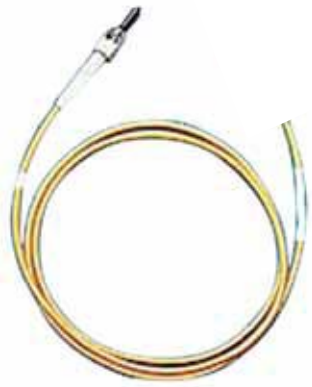
[Comments: Contact us for other patchcord lengths or connectors]

JetLanOptic

General Cable

Multimode and single mode optical pigtails

JetLan pigtails are used to enable optical fibres to be connected by mechanical splicing or by fusion. Construction with 2.4 mm, 3 mm, 250 µm and 900 µm single fibres. The standard lengths are 1 and 2 metres. The patchcords can be fitted using ST, SC and LC connectors.



Code	Description	Packing
62.5/125 µm multimode pigtails		
ST Connectors		
CF6PTS199P	ST - 1m	1
SC Connectors		
CF6PCS199P	SC - 1m	1
LC Connectors		
CF6PLS199P	LC - 1m	1
50/125 µm multimode pigtails		
ST Connectors		
CF5PTS199P	ST - 1m	1
SC Connectors		
CF5PCS199P	SC - 1m	1
LC Connectors		
CF5PLS199P	LC - 1m	1
9/125 µm single mode pigtails		
ST/PC Connectors		
CF9PTS199P	ST / PC - 1m	1
SC/PC Connectors		
CF9PCS199P	SC / PC - 1m	1
LC/PC Connectors		
CF9PLS199P	LC / PC - 1m	1

Code	Description	Packing
62.5/125 µm multimode pigtails		
ST Connectors		
CF6PTS299P	ST - 2m	1
SC Connectors		
CF6PCS299P	SC - 2m	1
LC Connectors		
CF6PLS299P	LC - 2m	1
50/125 µm multimode pigtails		
ST Connectors		
CF5PTS299P	ST - 2m	1
SC Connectors		
CF5PCS299P	SC - 2m	1
LC Connectors		
CF5PLS299P	LC - 2m	1
9/125 µm single mode pigtails		
ST/PC Connectors		
CF9PTS299P	ST / PC - 2m	1
SC/PC Connectors		
CF9PCS299P	SC / PC - 2m	1
LC/PC Connectors		
CF9PLS299P	LC / PC - 2m	1

[Comments: Contact us for other lengths for patchcords and connectors]


25
years

General Cable

General Cable Warranty Plan

25 years JetLan Cabling System

The warranty plan covers all the General Cable data transmission systems complying with Standards and Specifications such as ANSI/EIA/TIA 568B2, ANSI/EIA/TIA 568B3, ISO 11801, CENELEC EN 50173 and ANSI/EIA/TIA 568B2-1, and for this reason we may guarantee the design and transmission characteristics of every installation based on our cables and components (Copper or Optical Fibre) for a period of 25 years.

This warranty is conceded to installations made and tested as specified in the JetLan Warranty Certificate, which is presented to the owner of the installation by the JetLan certified installers.

General Cable aims through its Warranty Plan to offer updated information and training to all certified installers through technical courses and seminars.

APPLICATIONS

- Supports full and half duplex operation
- Digital/analogic video
- 16 Mbps Token Ring
- 100 Mbps TP-PMOD
- 100 BASE-T (IEEE 802.3)
- 1000 BASE-T (Gigabit Ethernet)
- 155/622 Mbps ATM
- 1.2 Gbps ATM

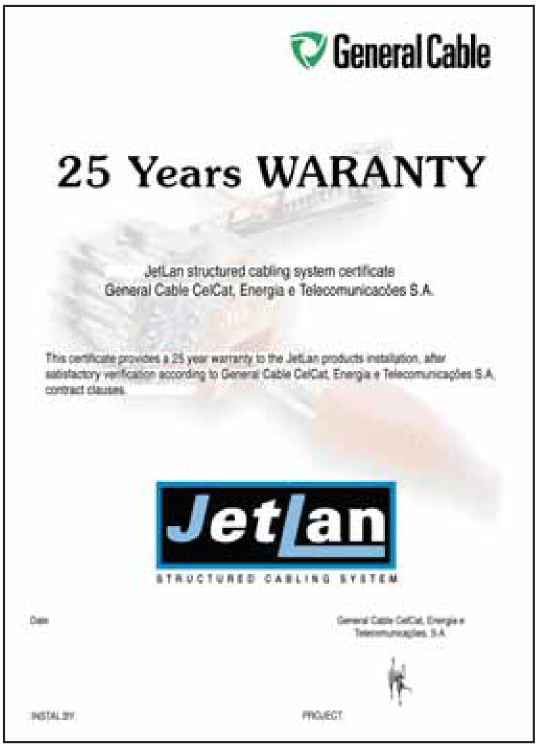
COMPLIANCES

ISO/IEC 11801 : 2002
EN 50173-1 : 2002
ANSI/TIA/EIA 568-B.2 (Category 5e)
ANSI/TIA/EIA 568-B.2-1 (Category 6)
Options UTP and FTP (Copper)

Special cable designs:
LSZH: EN 50268 and EN 50267-2-1
Exzhellent range: IEC 60332-3-24 and EN 50266-2-4 (fire retardant cable)

CERTIFICATION

EC Verified (DELTA)


General Cable

25 Years WARANTY

JetLan structured cabling system certificate
General Cable CelCat, Energia e Telecomunicacões S.A.

This certificate provides a 25 year warranty to the JetLan products installation, after satisfactory verification according to General Cable CelCat, Energia e Telecomunicações S.A. contract clauses.

JetLan
STRUCTURED CABLING SYSTEM

Date

General Cable CelCat, Energia e Telecomunicações, S.A.

INSTAL.BY

PROJECT


COMPLIANCE STATEMENT

No. 2001-025 - Data communication cable

Company
General Cable CelCat
Portugal

Product description
Unshielded cable (UTP), characterised up to 300 MHz*
Horizontal floor wiring cable, 100 Ω
4 twisted pairs
24 AWG, flame retardant, PVC jacket

Product identification
UTP Category 6

Generic cabling standards, cable standards

Standards for flame retardancy

Technical report