

Armoured central loose tube cable, Euroclass E_{ca}

CLTDxxyyy-PANC-Eca - KELINE SYSTEM - Optical Fibre Cable X x Y - LSOH - Euroclass Eca - Rodent Protected OP2 (ID number, WW/YYYY)



features

- complies with the Construction Products Regulation (CPR) EU No. 305/2011 and reaction to fire requirements according to the harmonized standards EN 50575: 2014+A1: 2016
- halogen-free sheath
- corrugated steel tape armor
- central loose tube filled with water blocking gel
- tensile elements made of glass yarns
- primary protection of 250 µm
- suitable for direct burial campus backbone applications, cable channels and cable bridges without the need of additional protection
- resistant to mechanical damage, moisture, water, UV radiation, corrosive liquids, also resistant to welding spark
- 100% protection against rodents

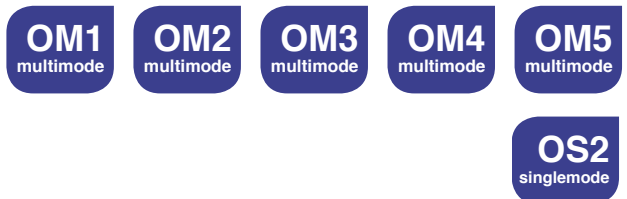
4-fibers

P/N: CLTD04OM1-PANC-Eca	OM1 multimode 62,5/125 µm
P/N: CLTD04OM2-PANC-Eca	OM2 multimode 50/125 µm
P/N: CLTD04OM3-PANC-Eca	OM3 multimode 50/125 µm
P/N: CLTD04OM4-PANC-Eca	OM4 multimode 50/125 µm
P/N: CLTD04OM5-PANC-Eca	OM5 multimode 50/125 µm
P/N: CLTD04OS2-PANC-Eca	OS2 singlemode 9/125 µm (ITU-T G.652.D)



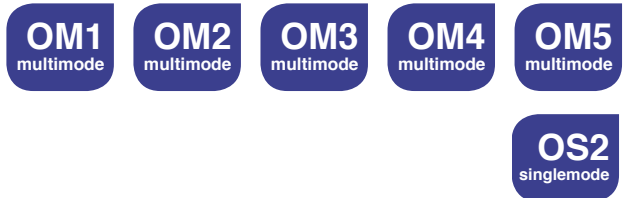
8-fibers

P/N: CLTD08OM1-PANC-Eca	OM1 multimode 62,5/125 µm
P/N: CLTD08OM2-PANC-Eca	OM2 multimode 50/125 µm
P/N: CLTD08OM3-PANC-Eca	OM3 multimode 50/125 µm
P/N: CLTD08OM4-PANC-Eca	OM4 multimode 50/125 µm
P/N: CLTD08OM5-PANC-Eca	OM5 multimode 50/125 µm
P/N: CLTD08OS2-PANC-Eca	OS2 singlemode 9/125 µm (ITU-T G.652.D)



12-fibers

P/N: CLTD12OM1-PANC-Eca	OM1 multimode 62,5/125 µm
P/N: CLTD12OM2-PANC-Eca	OM2 multimode 50/125 µm
P/N: CLTD12OM3-PANC-Eca	OM3 multimode 50/125 µm
P/N: CLTD12OM4-PANC-Eca	OM4 multimode 50/125 µm
P/N: CLTD12OM5-PANC-Eca	OM5 multimode 50/125 µm
P/N: CLTD12OS2-PANC-Eca	OS2 singlemode 9/125 µm (ITU-T G.652.D)



24-fibers

P/N: CLTD24OM1-PANC-Eca	OM1 multimode 62,5/125 µm
P/N: CLTD24OM2-PANC-Eca	OM2 multimode 50/125 µm
P/N: CLTD24OM3-PANC-Eca	OM3 multimode 50/125 µm
P/N: CLTD24OM4-PANC-Eca	OM4 multimode 50/125 µm
P/N: CLTD24OM5-PANC-Eca	OM5 multimode 50/125 µm
P/N: CLTD24OS2-PANC-Eca	OS2 singlemode 9/125 µm (ITU-T G.652.D)



reaction to fire and flame resistance

Reaction to fire	E _{ca}	
Fire safety	flame retardancy	IEC 60332-1-2
	halogen acidity	IEC 61034-2
	IEC 60332-1-2	IEC 60754-1, IEC 60754-2

mechanical properties

number of fibres	4	8	12	24
Nominal cable diameter	8,5 mm	8,5 mm	8,5 mm	8,5 mm
Sheath	1,5 mm	1,5 mm	1,5 mm	1,5 mm
Armouring	0,15 mm	0,15 mm	0,15 mm	0,15 mm
Loose tube diameter	2,8 mm	2,8 mm	2,8 mm	3,5 mm
Cable weight netto	75 kg/km	75 kg/km	75 kg/km	85 kg/km
Min. bending radius	installation	110 mm	110 mm	110 mm
	operation	110 mm	110 mm	110 mm
Tensile strength	installation	1000 N	1000 N	1000 N
	operation	500 N	500 N	500 N
Crush resistance	2000 N / 100 mm			
Temperature range	installation	-40°C to 70°C		
	operation	-40°C to 70°C		

fibre properties MM

Cabled optical fibre (ISO/IEC 11801)	OM1	OM2	OM3	OM4	OM5
IEC 60793-2	10-A1b	10-A1a.1	10-A1a.2	10-A1a.3	10-A1a.4
ITU-T P1	-	G.651.1	-	-	-
Attenuation @ 850 / 1300 / 953 nm (dB/km)	≤ 3,2 / ≤ 0,8	≤ 2,8 / ≤ 0,8	≤ 2,8 / ≤ 0,8	≤ 2,8 / ≤ 0,8	≤ 2,4 / ≤ 0,6 ≤ 1,8
Bandwidth 850 / 1300 / 953 nm (MHz.km)	≥ 200 / ≥ 500	≥ 500 / ≥ 800	≥ 1500 / ≥ 500	≥ 3500 / ≥ 500	≥ 3500 / ≥ 500 / ≥ 1850
EMBc @ 850 / 953 nm (MHz.km)	-	-	≥ 2000	≥ 4700	≥ 4700 / ≥ 2470
Numerical Aperture	0,275 ± 0,015	0,200 ± 0,015	0,200 ± 0,015	0,200 ± 0,015	0,200 ± 0,015
Refractive index @ 850 / 1300 nm	1,495 / 1,490	1,482 / 1,477	1,482 / 1,477	1,482 / 1,477	1,482 / 1,477
Core diameter (µm)	62,5 ± 2	50 ± 2	50 ± 2	50 ± 2	50 ± 2
Core / cladding concentricity error (µm)	≤ 1	≤ 1	≤ 1	≤ 1	≤ 1,5
Overall coating diameter (µm)	125 ± 1	125 ± 1	125 ± 1	125 ± 1	125 ± 1

fibre properties SM

Cabled optical fibre (ISO/IEC 11801)	OS2
IEC 60793-2	50-B1.3
ITU-T P1	G.652.D
Refractive index @ 1310 / 1550 nm	1,470
MFD (µm)	9,2 ± 0,4
Core / cladding concentricity error (µm)	≤ 0,5
Overall coating diameter (µm)	125 ± 0,7

