

Universal central loose tube cable, Euroclass E_{ca}

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



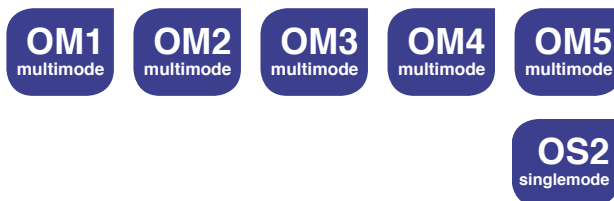
features

- 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
- fully dielectric construction, halogen-free and fire retardant sheath
- tensile elements made of water blocking glass yarns
- primary protection of 250 µm
- central loose tube filled with water blocking gel
- suitable for outdoor as well as for indoor environment
- resistant to moisture, water and UV radiation
- partial rodent protection (glass rodent protection - GRP)
- ideal for horizontal campus duct installations using blowing and pulling technique

4-fibers

P/N: CLTD04OM1-Eca
P/N: CLTD04OM2-Eca
P/N: CLTD04OM3-Eca
P/N: CLTD04OM4-Eca
P/N: CLTD04OM5-Eca
P/N: CLTD04OS2-Eca

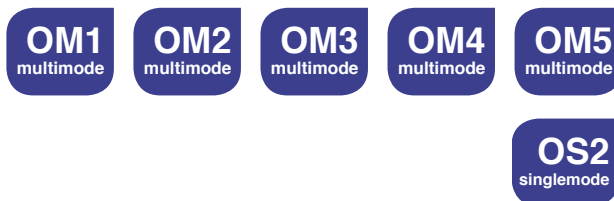
OM1 multimode 62,5/125 µm
 OM2 multimode 50/125 µm
 OM3 multimode 50/125 µm
 OM4 multimode 50/125 µm
 OM5 multimode 50/125 µm
 OS2 singlemode 9/125 µm (ITU-T G.652.D)



8-fibers

P/N: CLTD08OM1-Eca
P/N: CLTD08OM2-Eca
P/N: CLTD08OM3-Eca
P/N: CLTD08OM4-Eca
P/N: CLTD08OM5-Eca
P/N: CLTD08OS2-Eca

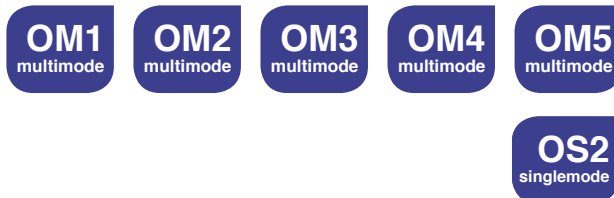
OM1 multimode 62,5/125 µm
 OM2 multimode 50/125 µm
 OM3 multimode 50/125 µm
 OM4 multimode 50/125 µm
 OM5 multimode 50/125 µm
 OS2 singlemode 9/125 µm (ITU-T G.652.D)



12-fibers

P/N: CLTD12OM1-Eca
P/N: CLTD12OM2-Eca
P/N: CLTD12OM3-Eca
P/N: CLTD12OM4-Eca
P/N: CLTD12OM5-Eca
P/N: CLTD12OS2-Eca

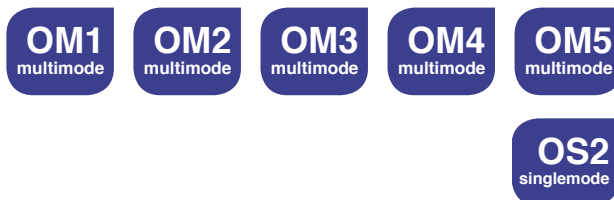
OM1 multimode 62,5/125 µm
 OM2 multimode 50/125 µm
 OM3 multimode 50/125 µm
 OM4 multimode 50/125 µm
 OM5 multimode 50/125 µm
 OS2 singlemode 9/125 µm (ITU-T G.652.D)



24-fibers

P/N: CLTD24OM1-Eca
P/N: CLTD24OM2-Eca
P/N: CLTD24OM3-Eca
P/N: CLTD24OM4-Eca
P/N: CLTD24OM5-Eca
P/N: CLTD24OS2-Eca

OM1 multimode 62,5/125 µm
 OM2 multimode 50/125 µm
 OM3 multimode 50/125 µm
 OM4 multimode 50/125 µm
 OM5 multimode 50/125 µm
 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
	smoke performance	IEC 60754-1, IEC 60754-2

mechanical properties

	4	8	12	24
number of fibres	4	8	12	24
Loose tube diameter	6,0 mm	6,0 mm	6,0 mm	6,5 mm
Sheath	1,0 mm	1,0 mm	1,0 mm	1,0 mm
Nominal cable diameter	2,8 mm	2,8 mm	2,8 mm	3,5 mm
Cable weight netto	40 kg/km	40 kg/km	40 kg/km	45 kg/km
Min. bending radius	installation	90 mm	90 mm	90 mm
	operation	60 mm	60 mm	60 mm
Tensile strength	installation	1000 N	1000 N	1000 N
	operation	500 N	500 N	500 N
Impact resistance		15 Nm		
Crush resistance		1500 N		
Temperature range	installation	-30°C to 40°C		
	operation	-30°C to 60°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 pri 850 / 953 (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
Attenuation @ 1310 / 1383 / 1550 nm (dB/km)	≤ 0,35 / ≤ 0,35 / ≤ 0,21
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

