KELINE

Universal CLT cable, Euroclass D_{ca} - s2, d1, a1



P/N: CLTDxxyyy-Dca





LSFROH | GRP | INDOOR OUTDOOR | D_{ca}

OM2 multimode | OM3 multimode | OM4 multimode | OM5 multimode | OS2 singlemode

Features

- 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 (CLT - central loose tube)
- 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

OM2 P/N: CLTD04OM2-Dca
OM2 multimode 50/125 µm

OM3 P/N: CLTD04OM3-Dca
OM3 multimode 50/125 µm

OM4 P/N: CLTD04OM4-Dca
OM4 multimode 50/125 µm

OM5 P/N: CLTD04OM5-Dca
OM5 multimode 50/125 µm

OS2 P/N: CLTD04OS2-Dca
OS2 singlemode 9/125 µm (ITU-T G.652.D and G.657.A1)

8 fibers

OM2 P/N: CLTD08OM2-Dca
OM2 multimode 50/125 µm

OM3 P/N: CLTD08OM3-Dca
OM3 multimode 50/125 µm

OM4 P/N: CLTD08OM4-Dca
OM4 multimode 50/125 µm

OM5 P/N: CLTD08OM5-Dca
OM5 multimode 50/125 µm

OS2 P/N: CLTD08OS2-Dca
OS2 singlemode 9/125 µm (ITU-T G.652.D and G.657.A1)

12 fibers

OM2 P/N: CLTD12OM2-Dca
OM2 multimode 50/125 µm

OM3 P/N: CLTD12OM3-Dca
OM3 multimode 50/125 µm

OM4 P/N: CLTD12OM4-Dca
OM4 multimode 50/125 µm

OM5 P/N: CLTD12OM5-Dca
OM5 multimode 50/125 µm

OS2 P/N: CLTD12OS2-Dca
OS2 singlemode 9/125 µm (ITU-T G.652.D and G.657.A1)

24 fibers

OM2 P/N: CLTD24OM2-Dca
OM2 multimode 50/125 µm

OM3 P/N: CLTD24OM3-Dca
OM3 multimode 50/125 µm

OM4 P/N: CLTD24OM4-Dca
OM4 multimode 50/125 µm

OM5 P/N: CLTD24OM5-Dca
OM5 multimode 50/125 µm

OS2 P/N: CLTD24OS2-Dca
OS2 singlemode 9/125 µm (ITU-T G.652.D and G.657.A1)

Reaction to fire and flame resistance

Reaction to fire	D_{ca} - s2, d1, a1	
Fire safety	flame retardancy	EN 60332-3-22 (cat. A)
	smoke performance	EN 61034-1, EN 61034-2
	halogen acidity	EN 60754-2

Mechanical properties

Number of fibres		**4**	**8**	**12**	**24**
Loose tube diameter		2,3 mm	2,3 mm	2,3 mm	3,0 mm
Sheath		1,0 mm	1,0 mm	1,0 mm	1,2 mm
Nominal cable diameter		5,2 mm	5,2 mm	5,2 mm	7,2 mm
Cable weight netto		33 kg/km	33 kg/km	33 kg/km	58 kg/km
Min. bending radius	installation	104 mm	104 mm	104 mm	144 mm
	operation	52 mm	52 mm	52 mm	72 mm
Tensile strenght	installation	1 000 N	1 000 N	1 000 N	2 000 N
	operation	300 N	300 N	300 N	800 N
Impact resistance		10 Nm	10 Nm	10 Nm	10 Nm
Crush resistance		1 000 N	1 000 N	1 000 N	1 000 N
Temperature range	installation	-5°C to 50°C	-5°C to 50°C	-5°C to 50°C	-5°C to 50°C
	operation	-30°C to 70°C	-30°C to 70°C	-30°C to 70°C	-30°C to 70°C

Fiber properties

Cabled optical fibre ISO/IEC 11801	OM2	OM3	OM4	OM5	OS2
IEC 60793-2	10-A1a.1	10-A1a.2	10-A1a.3	10-A1a.4	50-B1.3
ITU-T P1	G.651.1	—	—	—	G.652.D and G.657.A1
Attenuation @ 850 / 953 / 1300 nm (dB/km)	≤ 2,5 / ≤ 0,6	≤ 2,5 / ≤ 0,6	≤ 2,5 / ≤ 0,6	≤ 2,4 / ≤ 1,8 / ≤ 0,6	—
Attenuation @ 1310 / 1550 nm (dB/km)	—	—	—	—	≤ 0,33 / ≤ 0,20
Bandwidth 850 / 953 / 1300 nm (MHz.km)	≥ 500 / ≥ 500	≥ 1500 / ≥ 500	≥ 3500 / ≥ 500	≥ 3500 / ≥1850 / ≥ 500	—
Numerical Aperture	0,200 ± 0,015	0,200 ± 0,015	0,200 ± 0,015	0,200 ± 0,015	—
Refractive index @ 850 / 1300 nm	1,482 / 1,477	1,482 / 1,477	1,482 / 1,477	1,482 / 1,477	—
Refractive index @ 1310 / 1550 nm	—	—	—	—	1,467 / 1,468
MFD (µm)	—	—	—	—	9,2 ± 0,4
Core diameter (µm)	50 ± 2	50 ± 2	50 ± 2	50 ± 2	—
Overall coating diameter (µm)	125 ± 1	125 ± 1	125 ± 1	125 ± 1	125 ± 0,7

The determination of Reaction to Fire Class Performance of this cable has been performed by Product Certification Body notified by European Commision, which also carries out the assessment and verification of constant performance (AVCP) in the System 3.