

Armoured fire-resistant universal central loose tube cable, 180 min. at 750°C, B2_{ca} - s1, d1, a1

CLTFRxyyy-PANC-B2ca - KELINE SYSTEM - Optical Fibre Cable X_x_Y_ - Fire-resistant 180min./750°C - LSFROH – Euroclass B2ca - s1, d1, a1 - Rodent Protected OP3 (ID number, WW/YYYY)



features

- fire-resistant (180 min. at 750°C) according to the standard IEC 60331-25
- 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
- corrugated steel tape armor
- fully dielectric construction, halogen-free and fire retardant sheath
- 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
- suitable for outdoor as well as for indoor environment
- 100% protection against rodents

12 fibres

- P/N: **CLTFR12OM3-PANC-B2ca** OM3 multimode 50/125 µm
- P/N: **CLTFR12OS2-PANC-B2ca** OS2 singlemode 9/125 µm (ITU-T G.652.D)



24 fibres

- P/N: **CLTFR24OM3-PANC-B2ca** OM3 multimode 50/125 µm
- P/N: **CLTFR24OS2-PANC-B2ca** OS2 singlemode 9/125 µm (ITU-T G.652.D)



fire reaction and fire safety

Fire reaction	B2 _{ca} - s1, d0, a1	EN 50575, EN 13501-6
Fire safety	flame spread	EN 60332-3-22
	smoke emission	EN 61034-1, EN 61034-2
	zero halogen, non-corrosive	EN 60754-2
Fire resistance	180min./750°C	IEC 60331-25

mechanical properties

number of fibres		12	24
Nominal cable diameter		11,0mm	11,0mm
Nominal sheath thickness		1,2mm	1,2mm
Loose tube diameter		3,0mm	3,0mm
Cable weight netto		150kg/km	150kg/km
Min. bending radius	installation	220mm	220mm
	operation	110mm	110mm
Max. tensile strength	installation	3000N	3000N
	operation	1000N	1000N
Crush	installation	4000N	4000N
	operation	2000N	2000N
Temperature range	installation	-5°C to 50°C	
	operation	-30°C to 70°C	

fibre properties MM

	OM3	OS2
Cabled optical fibre (ISO/IEC 11801)	OM3	OS2
IEC 60793-2	10-A1a.2	50-B1.3
ITU-T	G.651.1	G.652D
Attenuation @ 850 / 1300 nm (dB/km)	≤ 2,5 / ≤ 0,6	-
Bandwidth (850 / 1300 nm)	≥ 1500 / ≥ 500	-
Attenuation @ 1310 / 1550 nm (dB/km)	-	≤ 0,33 / ≤ 0,20
Numerical Aperture	0,200 +/- 0,015	-
Refractive index @ 850 / 1300 nm	1,482 / 1,477	-
Refractive index @ 1310 / 1550 nm	-	1,467/1,468
Core diameter (µm)	50 +/- 2	-
MFD (µm)	-	8,8 +/- 0,4 / 9,8 +/- 0,5
Overall coating diameter (µm)	242 +/- 5	242 +/- 7