

DESCRIPTION AND APPLICATION

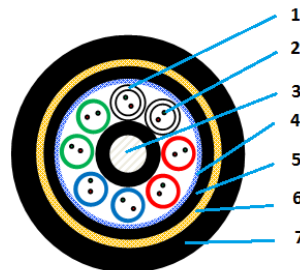
8 to 256 single mode optical fibers cables, totally dielectric, with PKP sheath for installation in outside plant underground conduits both as overhead lines.

CONSTRUCTION

1. Loose Tubes: PBT loose tubes filled up to 8 optical fibres with thixotropic compound and containing single mode optical.
2. Optical fibres: single mode optical fibres according to ITU-T G.652 D.
3. Central Element: Fibre-glass reinforced plastic central element.
4. Core formation: Loose tubes stranded in SZ. Swellable yarns and tapes to avoid water penetration and make the cable waterproof.
5. Inner sheath: Polyethylene.
6. Mechanical reinforcement: Aramid yarns as traction resistant
7. Outer jacket: Black polyethylene sheath.

Sheath marking: The cables will be marked with the following information

- CABLESCOM / Year / Fibre Num: / Fibre Type / Sheath Type / Length markings
- Other marks are available on request



OPTICAL FIBRE CHARACTERISTICS

The parameters of the optical fibres used in these cables meet the ITU-T recommendation G 652D. See our fibre product sheet for the characteristics of the fibre.

Optical transmission characteristics of cabled fibre:

Attenuation coefficient:

Average/Maximum at 1310 nm: 0.36/0.37 dB/km

Average/Maximum at 1550 nm: 0.22/0.24 dB/km

PMD link ≤ 0.20 ps/km^{1/2}

PMD Q ≤ 0.02 ps/km^{1/2}

Cut-off wavelength (λ_{cc}) ≤ 1260 nm

LOOSE TUBES COLOUR CODE

		Fibres in the cable									
# Fibres		4	8	16	24	32	48	64	96	128	256
1ª Layer	1	White	White	White	White	White	White	White	White	White	White
	2	Black	Red	Red	White	White	White	White	White	White	Black
	3	Black	Black	Black	Red	Red	Red	Red	White	Red	Green
	4	Red	Blue	Blue	Red	Red	Red	Red	Red	Red	Blue
	5	Black	Green	Green	Blue	Blue	Blue	Blue	Red	Blue	Black
	6	Black	Black	Black	Blue	Blue	Blue	Blue	Red	Blue	Red
	7					Green		Green	Blue	Green	
	8					Green		Green	Blue	Green	
	9								Blue		
	10								Green		
	11								Green		
	12								Green		
2ª Layer	1										White
	2										White
	3										White
	4										Rojo
	5										Rojo
	6										Rojo
	7										Blue
	8										Blue
	9										Blue
	10										Green
	11										Green
	12										Green
Fibres per Tube		2	2	4	4	4	8	8	8	16	16

* Note: black tubes are passive elements

All drawings, weights and dimensions details, as well as tube and fibre colours in this document are only indicative and must not be considered contractual.

OPTICAL FIBRES COLOUR CODE

Fibre Colour Abbrev.	1	2	3	4	5	6	7	8	9	10	11	12
	Green	Red	Blue	Yellow	Grey	Violet	Brown	Orange	White	Black	Pink	Turquoise
	Gr	Rd	Bl	Ye	Gy	Vi	Br	Or	Wh	Bl	Tq	Rs
Fibre Colour Abbrev.	13	14	15	16								
	White*	Yellow*	Orange*	Pink*								
	W	Ye	Or	P								

(*): Fibres from 13 to 16 are marked with black rings separated up to 50 mm apart.

PRODUCT INFORMATION

Code	Num. Fibres	Nominal OD (kg/km)	Nominal weight (mm)
EE6102A0000040WN	4	14.3	155
EE6102A0000080WN	8	14.3	155
EE6102A0000160WN	16	14.3	155
EE6102A0000240WN	24	14.3	155
EE6102A0000320WN	32	14.3	155
EE6102A0000480WN	48	14.3	155
EE6102A0000640WN	64	16.0	180
EE6102A0000960WN	96	18.4	255
EE6102A0001280WN	128	19.2	265
EE6102A0002560WN	256	20.5	300

Mechanical characteristics	Standard	Test conditions
Tensile strength ($\Delta\epsilon_f=0.05\%$, $\Delta\alpha\leq 0.05$ dB)	EN 187000 Met. 501	4200 N (8,16,24 y 48 fo) 4600 N (32 y 64 fo) 4800 N (128 fo)
Impact resistance ($\Delta\alpha\leq 0.05$ dB)	EN 187000 Met. 505	5 J, 10 mm, 3 impact
Curvature ($\Delta\alpha\leq 0.05$ dB)	EN 187000 Met. 513	R=15 x Ø cable; r ≥ 250 mm
Temperature cycling (operation, $\Delta\alpha\leq 0.05$ dB)	EN 187000 Met. 601	-25°C / 70°C
Water penetration	EN 187000 Met. 605B	LPwater ≤ 1 m (14 days)
Crush resistance ($\Delta\alpha\leq 0.05$ dB)	EN 187000 Met. 504	3000 N