EE5325G-Ed1

RAILWAY ARMOURED CABLES. MICROMODULE STRUCTURE - Type CT 2242

Optic Fibre | Impact resistant | Rodent resistant | Water blocked | UV resistant | RoHS Compliant

SPECIFICATIONS

Gen to.CT 2242

DESCRIPTION AND APPLICATION

Outdoor fibre optic cables, from 6 to 144 fibres. Waterproof through yarns and ribbons. Polyethylene double sheath with corrugated steel armouring and peripheral fibreglass reinforcements. Installation on gutters or directly buried. Designed for telecommunication connections in a medium-or long-distance with singlemode fibre according to ITU-T G 652D (EN 60793-2 - Class B 50 B 1.3).

CONSTRUCTION

- ***Micromodule: :*** the fibers are grouped in a micro-structure (group of fibers inside of a thin-walled tube) of 6 or 12 fibers with filling compound inside and a maximum diameter of 1.4 mm. The identification of the fibers and the micromodule is effected by means of colors in accordance with Tables 1 and 2.
- ***Core*:** The micromodules are grouped inside without any central reinforcing element.
- **Water blocking elements:** Sweallable yarns and tapes to avoid water penetration and make the cable waterproof.
- ***Inner sheath*:** Polyethylene with a rip cord.
- ***Reinforcing elements*:** Aramid Yarns or fiberglass
- ***Armour:*** longitudinal corrugated steel copolymer tape with overlap.
- ***Outer sheath:*** High density PE (HDPE) UV resistant with a rip cord and three green bands. .
- ***Sheath marking*** : The cable sheath will be marked with white ink at regular intervals with the following information:
  - *Manufacture year / CABLESCOM)/ cable identification / owner + length markings*
  - *Other sheath marks available upon request*

OPTICAL FIBRE CHARACTERISTICS

Optical fibres are according to ITU-T G.652D recommendations and EN 60793-2 - Class B 50 B 1.3
See our product sheet of the fibre characteristics.

Optical transmission characteristics of cabled fibre :

Attenuation coefficient:

Maximum at 1310 nm: 0,36 dB/km

Average/ Maximum at 1550 nm: 0,21 / 0,24 dB/km

PMD ≤ 0,20 ps/km$^{1/2}$

Cut-off wavelength (λcc) ≤ 1260 nm

All drawings, designs, specifications and particulars of weights, dimensions, etc. in this documentation are only indicative and must not be considered contractual.

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Certified Company **ISO 9001** - **ISO 14001**

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TABLE 1: MICROMODULE COLOUR CODE

	Fibres in cable				
Micromodule	**6**	**12**	**36**	**72**	**144**
1	Red	Red	Red	Red	Red
2		Blue	Blue	Blue	Blue
3			Green	Green	Green
4			Yellow	yellow	Yellow
5			Violet	Violet	Violet
6			White	White	White
7					Orange
8					Grey
9					Brown
10					Black
11					Turquoise
12					Pink
# fibres per micromodule	6	6	6	12	12
Micromodule diameter (mm)	1,20	1,20	1,20	1,40	1,40

TABLE 2: OPTICAL FIBERS COLOUR CODE

Fibre nº	1	2	3	4	5	6	7	8	9	10	11	12
Colour	Red	Blue	green	Yellow	Violet	White	Orange	Grey	Brown	Black	Turquoise	Pink

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MECHANICAL CHARACTERISTICS	Method	Test Conditions
Tensile Strength (Δεf reversible, Δα<0,2)	IEC 60794-1-2 E1	275 daN
Impact resistance (Δα<0,05 dB/km)	IEC 60794-1-2 E4	20 J, r = 300mm
Crush resistance (Δα<0,05 dB/km)	IEC 60794-1-2 E3	30 daN/cm
Bending resistance	IEC 60794-1-2 E10	D= 20 x Ø câble
Temperature cycling (operación, Δα<0,1 dB/km)	IEC 60794-1-2 F1	-30ºC / +60ºC
Torsion (Δα<0,05 dB/km)	IEC 60794-1-2 E7	± 180º, 2 cycles
Water penetration	IEC 60794-1-2 F5B	LP_{water} ≤ 3 m (168 hours)

DIMENSIONS AND WEIGHT

Code	# fibres	Diameter (mm)	Weight (kg/km)
EE5325G00000600N	6	15,8	210
EE5325G00001200N	12	15,8	210
EE5325G00003600N	36	15,8	215
EE5325G00007200N	72	15,5	225
EE5325G00014400N	144	17,5	260

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