

## Description

Distribution and trunk coaxial cable for burial installation - 75 Ohm

Underground installation cable (Screening Class A+)

Coaxial Cables

CAVEL®

since 1968

## Data Sheet

27/115FC



|   |      |       |          |       |          |       |
|---|------|-------|----------|-------|----------|-------|
| Ø | 2,70 | 11,50 | 11,60    | 12,20 |          | 15,00 |
|   | (Cu) | (PEG) | (Cu/Pet) | (Cu)  | (Jelly2) | (PE)  |

## Class CPR acc. to UE 305/2011 (DoP)

F<sub>ca</sub>

The cable can be used in the field of application of the Construction Product Regulation (DoP) UE nr. 305/2011 for the class of performance specified on the related product label.

## Standards

EN 50117-2-3

## Fire-Resistance Rating

EN50575

## Construction data

|   |             |                |    |
|---|-------------|----------------|----|
| Inner conductor of plain copper                         | (Cu)        | Ø 2,70 ± 0,10  | mm |
| Dielectric of physical foam polyethylene                | (PEG)       | Ø 11,50 ± 0,15 | mm |
| Copper/Polyester tape longitudinally overlapped         | (Cu/Pet)    |                |    |
| Water repellent sealing (dielectric)                    | (Jelly1)    |                |    |
| Braid of annealed copper wires                          | (Cu)        |                |    |
| Braid optical coverage (IEC 96-1)                       |             | 52             | %  |
| Tracer Identifier                                       | Year + Flag |                |    |
| Water repellent sealing (sheath)                        | (Jelly2)    |                |    |
| Diameter over Braid                                     |             | Ø 12,20        | mm |
| Outer sheath of Polyethylene - black - with carbonblack | (PE)        | Ø 15,00 ± 0,20 | mm |
| Printed each meter by yellow ink-jet :                  |             |                |    |

**CAVEL 2.7/11.5 FC MADE IN ITALY 75 Ohm Euroclass Fca EN50117-2-3 CEI-UNEL 36762 C-4 (U0 = 400V)**  
**gggaan m**

(ggg=day)(aa=year)(n=batch) (m=meter marking)

## Physical data

|  |           |       |
|--|-----------|-------|
| Weight of copper conductors                      | 83,87     | kg/km |
| Total weight of cable                            | 179,90    | kg/km |
| Minimum bending radius (single/repeated bending) | 200       | mm    |
| Maximum cable pulling strength                   | 800       | N     |
| Minimum installation temperature                 | -5        | °C    |
| Operating temperature                            | -40 / +80 | °C    |

## Electrical data

|                            |         |        |        |
|----------------------------|---------|--------|--------|
| Characteristic impedance   | 200 MHz | 75 ± 2 | Ohm    |
| Capacitance (@1kHz)        |         | 52 ± 2 | pF/m   |
| Velocity Ratio             |         | 85 %   |        |
| Inner conductor resistance |         | 3,40   | Ohm/km |

## ITALIANA CONDUTTORI s.r.l.

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 Tel +39-382.815150 Fax +39-0382.814212

## Date

29/02/2016

## Responsible

PierPaolo Piccinini

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|                                       |      |        |
|---------------------------------------|------|--------|
| Outer conductor resistance            | 5,80 | Ohm/km |
| Loop resistance                       | 9,20 | Ohm/km |
| Sheat Insulation voltage (spark test) | 8    | kV     |
| Maximum current (Ieff)                | 25   | A      |

|                              |        |
|------------------------------|--------|
| Structural return loss (SRL) |        |
| 5 - 470 MHz                  | >25 dB |
| 470 - 1000 MHz               | >24 dB |
| 1000 - 2000 MHz              | >23 dB |
| 2000 - 3000 MHz              | >22 dB |

|                            |             |                                |            |
|----------------------------|-------------|--------------------------------|------------|
| Screening Attenuation (SA) | SA-Class A+ | Shield Transfer Impedance (Zt) | Zt-Class A |
| 30 - 1000 MHz              | >95 dB      | 5 - 30 MHz                     | < 4 mΩ/m   |
| 1000 - 2000 MHz            | >95 dB      |                                |            |
| 2000 - 3000 MHz            | >75 dB      |                                |            |

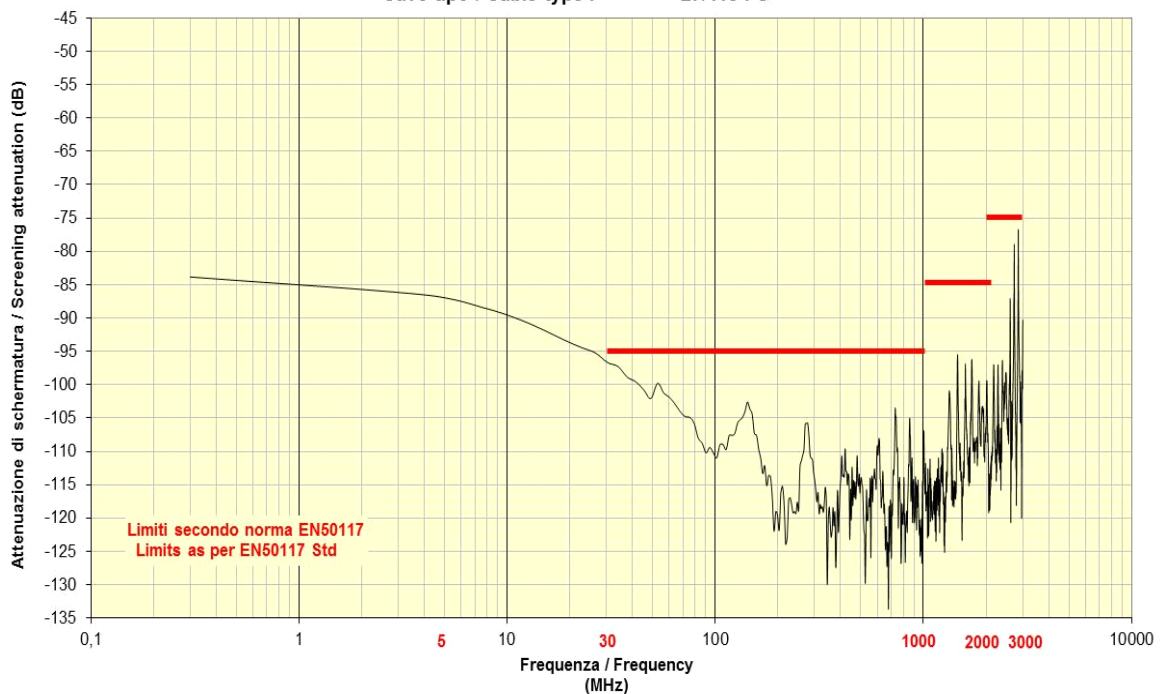
Attenuation (at 20°C )

| Frequency [MHz] | Attenuation [dB/100m] | Frequency [MHz] | Attenuation [dB/100m] |
|-----------------|-----------------------|-----------------|-----------------------|
| 5               | 0,80                  | 862             | 7,70                  |
| 10              | 1,10                  | 1000            | 8,40                  |
| 30              | 1,30                  | 1750            | 11,40                 |
| 50              | 1,70                  | 2150            | 12,80                 |
| 200             | 3,40                  | 2400            | 13,60                 |
| 300             | 4,20                  | 3000            | 15,40                 |
| 470             | 5,50                  |                 |                       |

**Attenuazione di schermatura / Screening Attenuation**

**Cavo classe A+ / A+ Class Cable**

Cavo tipo / Cable type : 27/115 FC



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**Data Sheet****27/115FC****Connectors**

|                   |  |
|-------------------|--|
| <b>3,5/12M-44</b> | 3,5/12" connector, male, for UNDERGROUND (Hardline) installation, nitin-plated brass - 75,0 mm x 25,0 mm     |
| <b>5/8MU-44</b>   | 5/8" connector, male, for UNDERGROUND (Hardline) installation, nitin-plated brass - 75,0 mm x 25,0 mm        |
| <b>FM-TL444</b>   | Series F, male, for UNDERGROUND (Hardline) installation, nitin-plated brass - 76,0 mm x 31,0 mm              |
| <b>IEC14M-44</b>  | Series IEC (toolless), male, for UNDERGROUND (Hardline) installation, nitin-plated brass - 75,0 mm x 25,0 mm |
| <b>SR21-44</b>    | Adapter, for 11/50FC - 27/115, for UNDERGROUND (Hardline) installation                                       |

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