

**Description**

Triple shielded coaxial cable for Broadband Distribution Networks 75 Ohm  
Triple shielded cable (Screening Attenuation - Class A++)



Data Sheet

**TS703J**

|   |      |       |                 |        |                 |       |
|---|------|-------|-----------------|--------|-----------------|-------|
| Ø | 1,13 | 4,80  | 4,97            | 5,37   | 5,49            | 6,90  |
|   | (Cu) | (PEG) | (Al/Pet/Al+Sur) | (CuSn) | (Al/Pet J-foil) | (PVC) |

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

Eca

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**

EN50117-9-2

CEI-UNEL 36762

**Reaction to Fire**

EN50575

**Application**

DOCSIS 3.1 (Data Over Coax System)

4K-UHD

Indoor Installation

**Construction data**

|  |                 |               |    |
|--|-----------------|---------------|----|
| Inner conductor of plain copper  | (Cu)            | Ø 1,13 ± 0,02 | mm |
| Dielectric of physical foam polyethylene   | (PEG)           | Ø 4,80 ± 0,10 | mm |
| Aluminum/Polyester/Aluminum+Surlyn tape longitudinally overlapped and bonded to the dielectric | (Al/Pet/Al+Sur) |               |    |
| Braid of tinned copper wires   | (CuSn)          |               |    |
| Braid optical coverage (IEC 96-1)  |                 | 45            | %  |
| Outer Aluminum/Polyester j-folded and longitudinally overlapped                                | (Al/Pet J-foil) |               |    |
| Diameter under Sheath  |                 | Ø 5,49        | mm |
| Outer sheath of Polyvinylchloride - white - lead-free  | (PVC)           | Ø 6,90 ± 0,20 | mm |
| Printed each meter by blue ink-jet :   |                 |               |    |

**CAVEL TS 703 J MADE IN ITALY 75 Ohm Euroclass Eca EN50117-9-2 SA Class A++ CEI-UNEL 36762 C-4**  
(U0 = 400V) ULTRA HD / 4K gggaa(n) m

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

**Physical data**

|  |           |       |
|--|-----------|-------|
| Weight of copper conductors                          | 14,62     | kg/km |
| Total weight of cable                                | 44,10     | kg/km |
| Minimum bending radius (single/repeated bending)     | 35/70     | mm    |
| Maximum cable pulling strength                       | 150       | N     |
| Stripping force between braid and sheath over 200 mm | > 130     | N     |
| Minimum installation temperature                     | -5        | °C    |
| Operating temperature                                | -20 / +70 | °C    |

**Electrical data****ITALIANA CONDUTTORI s.r.l.**

Viale Zanotti 90 I - 27027 Gropello Cairoli  
Tel +39-382.815150 Fax +39-0382.814212

Date

06/09/2021

Responsible

A. Bergaglio

**Description**

Triple shielded coaxial cable for Broadband Distribution Networks 75 Ohm  
 Triple shielded cable (Screening Attenuation - Class A++)

**Data Sheet****TS703J**

|                                       |         |        |        |
|---------------------------------------|---------|--------|--------|
| Characteristic impedance              | 200 MHz | 75 ± 3 | Ohm    |
| Capacitance (@1kHz)                   |         | 52 ± 2 | pF/m   |
| Velocity Ratio                        |         | 85 %   |        |
| Inner conductor resistance            |         | 18     | Ohm/km |
| Outer conductor resistance            |         | 14     | Ohm/km |
| Loop resistance                       |         | 32     | Ohm/km |
| Sheat Insulation voltage (spark test) |         | 3      | kV     |
| Maximum current (I <sub>eff</sub> )   |         | 8      | A      |

**Structural return loss (SRL)**

|                 |        |
|-----------------|--------|
| 5 - 470 MHz     | >30 dB |
| 470 - 1000 MHz  | >28 dB |
| 1000 - 2000 MHz | >26 dB |
| 2000 - 3000 MHz | >22 dB |

**Screening Attenuation (SA)****SA-Class A++**

|                 |         |
|-----------------|---------|
| 30 - 1000 MHz   | >105 dB |
| 1000 - 2000 MHz | >100 dB |
| 2000 - 3000 MHz | >85 dB  |

**Transfer Impedance (Z<sub>t</sub>)**

5 - 30 MHz &lt; 4,5 mOhm/m

**Attenuation (at 20°C )**

| Frequency<br>[MHz] | Attenuation<br>[dB/100m] | Frequency<br>[MHz] | Attenuation<br>[dB/100m] |
|--------------------|--------------------------|--------------------|--------------------------|
| 5                  | 1,60                     | 862                | 17,20                    |
| 10                 | 2,30                     | 1000               | 18,60                    |
| 30                 | 3,20                     | 1750               | 25,20                    |
| 50                 | 4,10                     | 2150               | 28,10                    |
| 200                | 8,00                     | 2400               | 29,70                    |
| 300                | 9,80                     | 3000               | 33,70                    |
| 470                | 12,50                    |                    |                          |

**ITALIANA CONDUTTORI s.r.l.**

Viale Zanotti 90 I - 27027 Gropello Cairoli  
 Tel +39-382.815150 Fax +39-0382.814212

**Date****06/09/2021****Responsible****A. Bergaglio**

**Description**

Triple shielded coaxial cable for Broadband Distribution  
 Networks 75 Ohm  
 Triple shielded cable (Screening Attenuation - Class A++)



Data Sheet

**TS703J****Connectors**

|                 |   |
|-----------------|---|
| <b>BNCC703</b>  | Series BNC Compression, BNC Compression, for OUTDOOR installation, nitin-plated brass - 35,0 mm x 14,0 mm |
| <b>C75-5L</b>   | Indoor Fittings, 75 Ohm Terminator, for INDOOR installation   |
| <b>CCFM75GI</b> | Indoor Fittings, 75 Ohm Terminator, for INDOOR installation   |
| <b>CS03J</b>    | Stripper for Drop Cables, just for RP and TS Cables, Tools -  |
| <b>DR01</b>     | Adapter, Nut and Washer, for INDOOR installation  |
| <b>F703</b>     | Series F Crimp, F Crimp, for INDOOR installation, nitin-plated brass - 21,0 mm x 12,0 mm                  |
| <b>F81-HQ</b>   | Adapter, F Adapter FF, for INDOOR installation  |
| <b>F90</b>      | Series F Crimp, F Crimp, for INDOOR installation  |
| <b>FA703</b>    | Series F Twist-On, F Twist-On, for INDOOR installation, nitin-plated brass - 21,0 mm x 12,0 mm            |
| <b>FC7.0QM</b>  | Series F Compression, Quick Mount, for OUTDOOR installation   |
| <b>FC703</b>    | Series F Compression, F Compression, for OUTDOOR installation, nitin-plated brass - 30,0 mm x 12,0 mm     |
| <b>FC703C</b>   | Series F Compression, F Compression, for OUTDOOR installation   |
| <b>FCEM7.0C</b> | Series F Compression, F Compression, for OUTDOOR installation, nitin-plated brass                         |
| <b>FCPO5.1C</b> | Series F Compression, Ø 5,1 Push-On, for OUTDOOR installation, nitin-plated brass                         |
| <b>FM-FF90</b>  | Adapter, FM - FF 90°, for INDOOR installation   |
| <b>FR703</b>    | Series F Crimp, F crimp, "Rapid", for INDOOR installation   |
| <b>IECF5.1C</b> | Series IEC (toolless), female, no tool, for INDOOR installation   |
| <b>IECF90C</b>  | Series IEC (toolless), Ø 5,1 90° female, for INDOOR installation  |
| <b>IECF703</b>  | Series IEC Compression, female, no tool, for OUTDOOR installation   |
| <b>IECM5.1C</b> | Series IEC (toolless), male, no tool, for INDOOR installation   |
| <b>IECM90C</b>  | Series IEC (toolless), Ø 5,1 90° male, for INDOOR installation  |
| <b>IECM703</b>  | Series IEC Compression, male, for OUTDOOR installation  |
| <b>LTE790</b>   | Indoor Fittings, Filter, for INDOOR installation  |
| <b>MM-F703</b>  | Adapter, F Adapter MM, for INDOOR installation  |
| <b>MM-FR703</b> | Adapter, F Adapter MM, for INDOOR installation  |
| <b>SAT2VS</b>   | Indoor Fittings, F SAT 2-way Splitter, for INDOOR installation  |
| <b>TV2VS</b>    | Indoor Fittings, IEC TV 2-way Splitter, for INDOOR installation   |

**ITALIANA CONDUTTORI s.r.l.**

Viale Zanotti 90 I - 27027 Gropello Cairoli  
 Tel +39-382.815150 Fax +39-0382.814212

Date

**06/09/2021**

Responsible

**A. Bergaglio**