

## QUAD CABLES – MOISTURE BARRIER SHEATH. ANTEL STANDARD

Telecommunications  
cable

UV Resistant



ROHS compliant

### STANDARDS

Construction: ANTEL C1A04-01/2009

### DESCRIPTION AND APPLICATION

Cables from 102 to 2020 pairs (101-1010 quads), conductors of 0.4, 0.5 and 0.6 mm with solid PE insulation. The stranded element is the quad “star”. They are assembled into 50 and 100 pairs (25 and 50 quads) units and protected with a moisture barrier sheath. They are used as distribution cables in local networks. Their installation inside ducts.

### CONSTRUCTION

- **Conductors:** Annealed copper, diameters 0.40, 0.50 and 0.60 mm.
- **Insulation:** Solid HDPE.
- **Cabling elements:** Star quads. Color coding in accordance with table 2 C1A04-01/2009.
- **Lay-up.** Up to 100 pairs (50 quads) in layers. From 150 to 800 pairs (75-400 quads) in units of 50 pairs (25 quads). For greater cables in units of 100 pairs (50 quads). Lay-up of units and the number of spare pairs according to Tables 3 and 4 of C1A04-01/2009.
- **Core wrapping.** Dielectric longitudinal tape applied with overlap.
- **Screen.** Copolymer coated aluminium tape longitudinally applied with overlap and bonded to the outer sheath.
- **Sheath:** UV resistant black polyethylene.
- **Sheath marking :** The outer sheath shall be marked at regular intervals with the following information:
  - *Name of Manufacturer / year / Length markings*
  - *Other type of markings is also possible according to the customer.*



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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<b>ELECTRICAL CHARACTERISTICS (20°C)</b>	0,40	0,50	0,60
<i>Conductor resistance (<math>\Omega/km</math>)</i>			
• Maximum average value	144.0	91.0	63.0
• Maximum Individual value	147.6	94.5	65.7
<i>Resistance unbalance (%) <math>100 \times (R_{max} - R_{min}) / (R_{max} + R_{min})</math></i>			
• Maximum average value		2.0 %	
• Máximo individual value		4.5 %	
<i>Minimum insulation resistance (<math>M\Omega \times km</math>, 20°C, 500 V)</i>		15000	
<i>Mutual capacitance (nF/km, 800 Hz)</i>	Average: 52.5 / Maximum: 55		
<i>Capacitance unbalance (pF/300m, 800 Hz)</i>			
Pair-pair		Average: 400 Maximum: 900	
Pair-ground		Maximum: 780	
<i>Dielectric strength (Vac)</i>			
conductor – conductor (30 seg)		500	
conductor – screen (2 min)		2000	

<b>TRANSMISSION CHARACTERISTICS (20°C)</b>	0,40	0,50	0,60
<i>Nominal attenuation (dB/km)</i>			
0,8 KHz	1.65	1.32	1.10

**MECHANICAL CHARACTERISTICS**

Temperature range: from -25° C to +75° C

Minimum bending radius: 12 x R<sub>cable</sub>

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### DIMENSIONS AND WEIGHTS

Diameter : 0.40 mm					
Code	No. Paires	cable (mm)	Weight approx. (kg/km)	Length (m)	Drum
EA5E03040040002N	400	29.6	1346	1000	A6
EA5E03040060002N	600	34.4	1952	1000	A8
EA5E03040080002N	800	39.7	2565	1000	B1
EA5E03040100002N	1000	43.0	3156	1000	B0
EA5E03040120002N	1200	47.5	3763	1000	BB
EA5E03040140002N	1400	51.3	4383	700	B0
EA5E03040180002N	1800	56.5	5577	500	B0
EA5E03040200002N	2000	60.3	6167	500	B0

Diameter : 0.50 mm					
Code	No. Paires	cable (mm)	Weight approx. (kg/km)	Length (m)	Drum
EA5E03050040002N	400	37.2	1990	1000	B0
EA5E03050060002N	600	40.7	2441	1000	B1
EA5E03050080002N	800	43.3	2888	1000	B0
EA5E03050100002N	1000	49.1	3783	800	B0
EA5E03050120002N	1200	55.1	4734	650	B1
EA5E03050140002N	1400	58.3	5628	500	B1
EA5E03050180002N	1800	64.0	6548	500	BB

Diameter : 0.60 mm					
Code	No. Paires	cable (mm)	Weight approx. (kg/km)	Length (m)	Drum
EA5E03060040002N	400	40.6	2739	1000	B1
EA5E03060050002N	500	46.6	3415	1000	BB
EA5E03060060002N	600	48.6	3971	1000	B0
EA5E03060080002N	800	57.6	5403	500	B1

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