

QUADDED SELF SUPPORTED CABLES FOR DISTRIBUTION NETWORKS SERIES 98 AND 99



Telecommunications
cable



UV resistant



Overhead line
cable



ROHS compliant

STANDARDS

Construction: UTE C 93-526 y UTE C 93-527-3

DESCRIPTION AND APPLICATION

Telecommunication cables from 2 to 112 pairs (56 quads). Copper conductor of 0.4, 0.6 and 0.8 mm, solid PE insulation. Stranded into quad "star." Self supporting figure "8" sheath. Cables for aerial installation in the distribution network. They are used in the distribution network from the connection point to the end user.

CONSTRUCTION

- **Conductors:** Annealed copper, diameters of 0.4, 0.6 and 0.8 mm.
- **Insulation:** Solid PE.
- **Cabling elements:** Star Quads.
- **Lay-up:** The cables up to 28 pairs are stranded in layers. Cables from 56 pairs are stranded in units. Colour coding in accordance to UTE C 93-526.
- **Core wrapping.** Longitudinal dielectric tape applied with overlap.
- **Screen.** Copolymer coated aluminium tape longitudinally applied with overlap and bonded to the sheath. Continuity tinned copper wire.
- **Sheath:** Black UV resistant polyethylene with an integral suspension galvanized steel strand to form a figure "8".
- **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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ELECTRICAL CHARACTERISTICS (20°C)	0,4	0,6	0,8
<i>Conductor resistance (Ω/km)</i>			
Maximum individual	150	66.6	36.8
Average value	144	63.9	35.3
<i>Resistance unbalance $100 \times (R_{max} - R_{min}) / (R_{max} + R_{min})$</i>			
Maximum 95% of pairs	-	-	1%
Maximum 100% of pairs.	-	-	2%
<i>Minimum insulation resistance (MΩxkm, 20°C, 500 V)</i>		5000	
<i>Mutual capacitance (nF/km, 1000 Hz)</i>			
Maximum	62.5 (4 pairs) / 57.5 (more than 4 pairs)		
Average	55 (28 pairs) / 52.5 (more than 28 pairs)		
<i>Capacitance unbalance (pF/300m, 1000 Hz)</i>			
<u>Inside the quad</u>			
Average	70	70	35
95%	200	200	100
Maximum	300	300	150
<u>Between quads</u>			
Average	30	30	15
95%	100	100	50
Maximum	150	150	75
<u>Maximum conductor - earth</u>			
-	-	-	600
<i>Dielectric strength (Vdc, 1 min)</i>			
conductor – conductor	600	1150	1500
conductor– screen	1500	1500	2250

STRENGTH MEMBER CHARACTERISTICS

Cable type		Strength member diameter	Strength member composition	Minimum breaking load (daN)
No. Pairs	Conductor diameters			
4	0.8	2.4	7 x 0.8 mm	460
8	0.6			
14	0.4			
8	0.6 y 0.8	3	7 x 1 mm	716
14	0.6 y 0.8			
28	0.4 y 0.6			
56	0.4			
28	0.8	4	19 x 0.8 mm	1225
56	0.6			
112	0.4			
56	0.8	5.5	19 x 1.1 mm	2305
112	0.6			

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MECHANICAL CHARACTERISTICS

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

Minimum bending radius: 12 x R_{cable}

DIMENSIONS AND WEIGHTS

Diameter: 0.40 mm

Code	No. Quad.	Cable diam (mm)	Weight approx. (kg/km)	Length (m)	Drum
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EA5503A40000400N	4	7.8	99	1200	BB
EA5503A40000700N	7	7.9	116	1200	BB
EA5503A40001400N	14	10	189	1200	BC
EA5501A40002802N	28	12.5	281	1200	BD
EA5503A40005600N	56	16.4	516	1200	FB

Diameter : 0.60 mm

Code	No. Quad.	Cable diam (mm)	Weight approx. (kg/km)	Length (m)	Drum
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EA5503A60000400N	4	10	163	1200	CB
EA5503A60000700N	7	10.5	202	1200	DB
EA5503A60001400N	14	13.1	302	1200	DB
EA5503A60002800N	28	17.3	549	1200	FB
EA5503A60005600N	56	22.6	1015	1200	GB

Diameter : 0.80 mm

Code	No. Quad.	Cable diam (mm)	Weight approx. (kg/km)	Length (m)	Drum
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EA5503A80000200N	2	10.0	132	1200	CB
EA5503A80000400N	4	11.5	206	1200	DB
EA5503A80000700N	7	12.6	277	1200	DB
EA5503A80001400N	14	16.8	509	1200	FB
EA5503A80002800N	28	21.9	935	1200	GB

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