

QUAD CABLES FOR DISTRIBUTION NETWORKS SERIES 88 AND 89



Telecommunications
cable



UV resistant



ROHS compliant

STANDARDS

Construction: UTE C 93-526 and UTE C 93-527-2

DESCRIPTION AND APPLICATION

Telecommunication cables from 8 to 1792 pairs (896 quads). Copper conductor of 0.4, 0.6 and 0.8 mm, solid PE insulation. Stranded in star quads. Moisture barrier sheath. Cables for telephone distribution networks to be installed in underground ducts. They are used for transmission between the exchange and the distribution network connection point.

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
- **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 for 95% of pairs	-	-	1%
Maximum for 100% of pairs	-	-	2%
<i>Minimum insulation resistance ($M\Omega \times km$, 20°C, 500 V)</i>		5000	
<i>Mutual capacitance (nF/km, 1000 Hz)</i>			
Maximum	62.5 (4 pairs) / 57.5 (8 pairs and above)		
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

MECHANICAL CHARACTERISTICS

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

Minimum bending radius: 12 x R_{cable}

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DIMENSIONS AND WEIGHTS

Diameter : 0.40 mm					
Code	# Quad	Cable diam (mm)	Weight approx. (kg/km)	Length (m)	Drum
EA5503040000402N	4	8.1	56	600	AB
EA5503040000702N	7	8.2	72	600	AB
EA5503040001402N	14	10.0	121	600	AB
EA5503040002802N	28	12.5	213	600	AB
EA5503040005702N	56	16.0	391	600	BB
EA5503040011402N	112	21.5	739	600	DB
EA5503040022802N	224	28.9	1439	300	DB
EA5503040045402N	448	38.8	2759	300	FB
EA5503040090302N	896	53.0	5358	300	GB

Diameter : 0.60 mm					
Code	# Quad	Cable diam (mm)	Weight approx. (kg/km)	Length (m)	Drum
EA5503060000402N	4	9.8	91	600	AB
EA5503060000702N	7	10.5	132	600	AB
EA5503060001402N	14	13.1	232	600	BB
EA5503060002802N	28	16.9	424	600	BB
EA5503060005602N	56	22.2	797	600	DB
EA5503060011302N	112	29.9	1565	600	FB
EA5503060022602N	224	40.2	3006	300	FB
EA5503060045102N	448	56.9	5870	300	GB

Diameter : 0.80 mm					
Code	# Quad	Cable diam (mm)	Weight approx. (kg/km)	Length (m)	Drum
EA5503080000402N	4	11.5	136	600	AB
EA5503080000702N	7	12.6	208	600	BB
EA5503080001402N	14	16.1	377	600	BB
EA5503080002802N	28	21.1	703	600	DB
EA5503080005602N	56	28.6	1376	600	FB

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