

Telecommunications  
cableImpact  
resistant

Water blocked



UV resistant



Rodent resistant



ROHS compliant

## STANDARDS

Construction: Network Rail NR/PS/TEL/00015

## DESCRIPTION AND APPLICATION

Cables from 2 to 100 pairs, copper conductors of 0.63 or 0.9 mm diameters. Solid PE insulation, twisted into pairs, stranded in units of 10 pairs with filling compound. "Moisture barrier" sheath and steel tape armour. Outdoor telecommunication cable reinforced with steel tape for mechanical and rodent protection.

## CONSTRUCTION

- **Conductors:** Annealed copper, diameter: 0.63 and 0.90 mm.
- **Insulation:** Solid HDPE.
- **Cabling elements:** Pairs.
- **Lay-up:** Up to 10 pairs into layers. Larger cables of 10 pairs into units.
- **Filing compound:** Petroleum jelly.
- **Core wrapping:** Longitudinal dielectric tape applied with overlap.
- **Screen:** Copolymer coated aluminium tape longitudinally applied with overlap and bonded to the inner sheath.
- **Inner sheath:** Black LDPE.
- **Armour:** Corrugated copolymer coated steel tape longitudinally applied with overlap.
- **Outer sheath:** Black UV resistant LDPE.
- **Sheath marking:** The outer sheath shall be marked at regular intervals with the following information:
  - CABLESCOM / year / Length markings
  - Other type of markings is also possible according to the customer



ELECTRICAL CHARACTERISTICS (20°C)	0,63	0,90		
Maximum conductor resistance ( $\Omega/\text{km}$ )	Average 58 Maximum: 60	Average: 28 Maximum: 30		
Resistance unbalance (%) $100 \times (R_{\text{max}} - R_{\text{min}}) / (R_{\text{max}} + R_{\text{min}})$	Average: 0,5 % / maximum 2,0 %			
Minimum insulation resistance ( $M\Omega \times \text{km}$ , 15°C, 500 V)	1500			
Mutual capacitance (nF/km, 1000 Hz)	Average	Maximum	Average	Maximum
Up to 20 pairs	70	79	79	85
More than 20 pairs	67	75	75	81
Capacitance unbalance pair-pair ( $\mu\text{F}/500 \text{ m}$ , 1000 Hz)			800	
2 pair cable			275	
Other cables				
Dielectric strength (Vac, 2 min)				
conductor – pantalla	2000		2000	

All drawings, designs, specifications and particulars of weights, dimensions, etc. in this documentation are only indicative and must not be considered contractual.

TRANSMISSION CHARACTERISTICS (20°C)	0,63	0,90
<i>Maximum average attenuation (dB/km)</i>		
1 KHz ( $R_t=600\Omega$ )	1.4	0.95
2.4 KHz ( $R_t=600\Omega$ )	2.15	1.46
1024 KHz ( $R_t=120\Omega$ )	18.7	14.6
<i>NEXT (dB/500m)</i>		
1 KHz ( $R_t=600\Omega$ )	Minimum: 70 / Average: 75	
1024 KHz ( $R_t=120\Omega$ )	Same unit pairs: 40 Different unit pairs: 75	

### MECHANICAL CHARACTERISTICS

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

Minimum bending radius: 15 x R<sub>cable</sub>

### DIMENSIONS AND WEIGHTS

Diameter : 0.63 mm						
Code	PAD #	# Pairs	Cable diam (mm)	Weight approx. (kg/km)	Length (m)	Drum

EA3H0CF63000202N	006/168011	2	14.4	208	1000	A0
EA3H0CF63000502N	006/168012	5	17.3	311	1000	A2
EA3H0CF63001002N	006/168013	10	18.2	341	1000	A2
EA3H0CF63002002N	006/168014	20	20.4	469	1000	A4
EA3H0CF63003002N	006/168015	30	22.4	617	1000	A4
EA3H0CF63004002N	006/168016	50	26.0	855	1000	A4
EA3H0CF63007502N	006/168017	75	28.7	1117	1000	A6
EA3H0CF63010002N	006/168018	100	32.6	1422	1000	A6

Diameter : 0.90 mm						
Code	PAD #	# Pairs	Cable diam (mm)	Weight approx. (kg/km)	Length (m)	Drum

EA3H0CF90000202N	006/168061	2	15.3	235	1000	A0
EA3H0CF90000502N	006/168062	5	18.3	345	1000	A2
EA3H0CF90001002N	006/168063	10	20.5	470	1000	A4
EA3H0CF90002002N	006/168064	20	23.9	694	1000	A4
EA3H0CF90003002N	006/168065	30	26.9	923	1000	A4
EA3H0CF90004002N	006/168066	50	31.8	1367	1000	A6
EA3H0CF90007502N	006/168067	75	36.8	1835	1000	B0
EA3H0CF90010002N	006/168068	100	41.4	1375	1000	B0

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