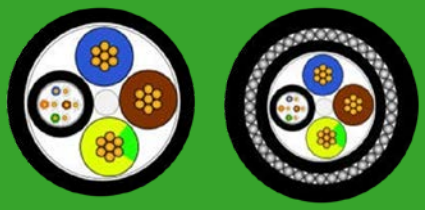
EV POINT

Conducting Value

Cables for EV Charging Points



Applications

These cables are designed for installation at EV charging points.

The cables are composed by Power element with 3 or 5 cores and a Data element with 4 pairs.

The cables can be supply with or without galvanized steel wire armour, for extra protection.

Jacket can be LSZH or PVC low halogen compound.

General Construction

DATA - LAN CABLE CAT.5e F/UTP - LSZH - 4x2x24/1 AWG

(Available also LAN CABLE CAT.6 F/UTP and 6A F/FTP - LSZH - 4x2x23/1 AWG)

Power elements

Conductor
Plain annealed copper class 2 (stranded) or class 5 (flexible)

Insulation
Cross-linked polyethylene

Colours
3 cores:
5 cores:

Total cabling

Inner sheath (for armoured cables)
LSZH or Low Halogen PVC

Armour (on request)
Galvanized steel wire

Outer sheath
LSZH or Low Halogen PVC

Colour

MADE IN ITALY

DATA ELEMENT	POWER ELEMENTS	
	Stranded Conductor	Flexible Conductor
LAN CABLE CAT.5e F/UTP - LSZH - 4x2x24/1 AWG	R-XLPE - 3G2.5 mm²	F-XLPE - 3G2.5 mm²
LAN CABLE CAT.6 F/UTP - LSZH - 4x2x23/1 AWG	R-XLPE - 5G2.5 mm²	F-XLPE - 5G2.5 mm²
LAN CABLE CAT.6A F/FTP - LSZH - 4x2x23/1 AWG	R-XLPE - 3G4 mm²	F-XLPE - 3G4 mm²
	R-XLPE - 5G4 mm²	F-XLPE - 5G4 mm²
	R-XLPE - 3G6 mm²	F-XLPE - 3G6 mm²
	R-XLPE - 5G6 mm²	F-XLPE - 5G6 mm²
	R-XLPE - 3G10 mm²	F-XLPE - 3G10 mm²
	R-XLPE - 5G10 mm²	F-XLPE - 5G10 mm²

TECHNICAL DATA

ELECTRIC DATA

DATA ELEMENT - (LAN CABLE - LSZH - formation)	
Dielectric test (core/core)	1000 Va.c. for 1 min
Dielectric test (core/screen)	500 Va.c. for 1 min
Max. Conductor resistance (20°C)	95 Ω/km for 24/1 AWG
	80 Ω/km for 23/1 AWG
Min. Insulation resistance	1000 MΩxkm
Max. attenuation (20°C)	as per IEC 61156-6 (6.3.3.1)
Nom. core/core capacitance (800 Hz)	48 nF/km for Cat.5e and Cat.6
	43 nF/km for Cat.6A
Characteristic Impedance Z (1 MHz)	100 ± 20 Ω
Max. Phase or Propagation delay (100 MHz)	537.6 nsec/100 m
Velocity of propagation	67% for Cat.5e and Cat.6
	77% for Cat.6A
Max. delay skew	45 nsec/100 m

POWER ELEMENT - (Cu-XLPE - formation)	
Dielectric test (core/core + armour)	as per IEC 60502-1
Max. Conductor resistance (20°C)	as per IEC 60228
Min. Insulation resistance	1000 MΩxkm

PHYSICAL DATA

Min. bending radius	6xD	for unarmoured cables with flexible conductors
	8xD	for unarmoured cables with stranded conductors
	10xD	for armoured cables with flexible conductors
	12xD	for armoured cables with stranded conductors
Flex/installation temperature	-5/+65 °C	
Static/working temperature	-30/+80 °C	

STANDARDS

DATA ELEMENT - (LAN CABLE - LSZH - formation)	
Construction (as far as applicable)	EIA-TIA 568; ISO/IEC 11801; IEC 61156; EN 50173; EN 50288

POWER ELEMENT - (Cu-XLPE - formation)	
Conductors	IEC 60228
Construction (as far as applicable)	IEC 60502-1

FIRE BEHAVIOUR

Fire retardant	IEC 60332-3-24 Cat. C	
Flame retardant	IEC 60332-1-2	
Acid gas emission	IEC 60754-1 (HCl ≤ 22%)	for PVC
	IEC 60754-1 (HCl ≤ 0.5%)	for LSZH
	IEC 60754-2 (pH ≥ 4.3, Conductivity ≤ 10 µS/mm)	for LSZH
Smoke density	IEC 61034-2 (Light transmittance ≥ 20%)	for PVC
	IEC 61034-2 (Light transmittance ≥ 60%)	for LSZH

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