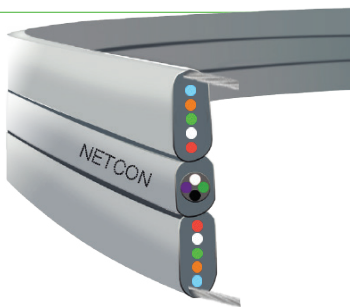


4 SM Fiber + 10 Core Copper Cable



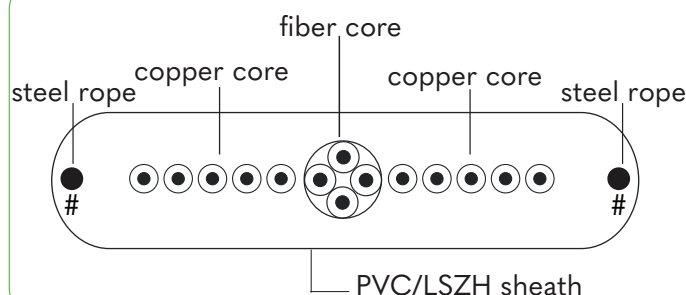
DESCRIPTION

Netcon Hybrid Flat Elevator Cable with 4F Single-Mode Fiber Optic + 10 Core 1.5 sqmm(16 AWG) Multistrand Copper Power Cable – designed for high-rise, smart elevator.

APPLICATIONS:

The Netcon Hybrid Flat Elevator Cable is engineered for integrated power + data transmission in modern vertical mobility systems. Its compact, flexible, and rugged design makes it ideal for:

1. High-Rise Elevators
2. Modern Smart Elevator Systems
3. Intelligent Control & Communication
4. Industrial & Commercial Vertical Transport



PRODUCT OVERVIEW

Cable Type: Flat ribbon cable.

Fiber Optic Component: Single-mode, 4-core fiber optic cable.

Power Component: 4-core, 1.5 Sqmm(16 Awg)

Copper Cable. Application: Specifically designed for high-rise elevator systems.

KEY FEATURES:

Efficient Space Utilization: The flat design allows the cable to fit in narrow spaces, ideal for elevator shafts where space is limited.

Data Transmission: The single-mode fiber optic cores ensure long-distance, high-speed data communication, critical for modern elevator control systems.

Power Supply: The 1.5 Sqmm (16AWG) Copper cores provide sufficient power to elevator systems, supporting essential functions like lighting, communication, and control systems.

High Durability: Designed to withstand the mechanical stresses typical in elevator applications, such as frequent bending and movement within the shaft.

TECHNICAL SPECIFICATIONS

Fiber Optic Component

Cable Type	4 -core Single Mode (ITU-T G.657A1 or G.652D)
Optical Characteristics	9 μm (core)
Core Diameter	125 μm
Cladding Diameter	250 μm
Coating Diameter	1310 nm and 1550 nm
Wavelengths Supported	≤ 0.35 dB/km at 1310 nm
Attenuation	≤ 0.22 dB/km at 1550 nm
Bandwidth	Typically >10 GHz·km at 1550 nm
Data Transmission Distance & Speed	1 Km @ 10 Gbps
Running Speed	≤ 6 M/s
Cable Cutoff Wavelength	≤ 1260 nm, $9.2 \mu\text{m} \pm 0.4 \mu\text{m}$ at 1310 nm
Travelig height	250 Mtrs
Minimum Bend Radius	10x cable diameter during installation, 5x cable diameter post-installation
Max Suspension Length	80-100 Meters

contd...

HYBRID FIBEROPTIC ELEVATOR CABLE

4 SM Fiber + 10 Core Copper Cable

TECHNICAL SPECIFICATIONS (Contd..)

Environmental Characteristics

Temperature Range:	Operating: -15°C to +70°C
	Storage: -40°C to +85°C
	Installation: -20°C to +60°C
Water Blocking	Gel-filled or dry tube options available for moisture resistance
Jacket Material	PVC / LSZH

Power Cable Component

Cable Type	10 Core 16 Awg, Multi Strand Copper
Voltage Rating	300/500V (IEC 60227) 450/750V (IEC 60502-1)
Current Carrying Capacity	5 -10 Amps - based On Application
Conductor Resistance	Per IEC 60228, approximately 12.1 Ω/km at 20°C for 1.5 sqmm copper
Insulation Resistance	≥ 20 MΩ.km at 20°C

Mechanical Characteristics

Insulation Material	PVC / XLPE
Sheath Material	PVC / LSZH, Grey
Bend Radius	10x the cable thickness during installation, 5x the cable thickness in static conditions
Conductor Classification	IEC 60228 Class 5
Standard	EN50214
Elements	4C Single mode Fibre cable with 10 Core x 16 Awg Copper core
Mx. Distance for Power Cable	12V DC, 5A : 35Mtrs / 24V DC, 5A :58 Mtrs / 230V AC, 10A : 480 Mtrs

General Properties

Coax	Grey
Core	Black, white numbered, G = with green-yellow core(s)
Pair/quad	Various colours or black with white numbers
Operating temperature	-15 °C - +70 °C
Outer sheath colour	Grey
Outer sheath material	PVC

Electrical Properties

Rated voltage Uo/U	According to table
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Mechanical Properties

Acceleration	1.2 m/s ²
Maximum free suspension	100 m
Maximum running speed	6.0 m/s
Maximum travelling height	250 m
Recommended loop diameter	According to table, tolerance -50/+100 mm

ORDERING INFORMATION

Part No	
NTL4FXXCXXP	Netcon high raise flat lift traveling cable with 4C SM fiber + 10 Core 1.5sq mm (16 AWG) copper cable + Supporting steel cable.

Notes: NTL4F - XX- number of core- C - XX- Cable size - P- PVC / L- LSZH