

HYBRID FIBEROPTIC ELEVATOR CABLE

4 Fiber + 4 Power Flat Cable

DESCRIPTION

The Netcon flat ribbon cable designed for high-rise elevators, combining both data and power transmission in a single, streamlined solution. This cable solution is tailored for the demanding environment of high-rise buildings, offering a reliable, efficient, and space-saving option for modern elevator systems.

APPLICATIONS

Elevator Control Systems: Ensures reliable data communication between the elevator car and the control room while supplying power for operational components.

High-Rise Buildings: Specifically engineered for the unique challenges of high-rise elevators, where long cable runs and reliable performance are essential.

PRODUCT OVERVIEW

Cable Type:

Flat ribbon cable.

Fiber Optic Component:

Single-mode, 4-core fiber optic cable.

Power Component:

4-core, 0.75 sqmm power cable.

Application:

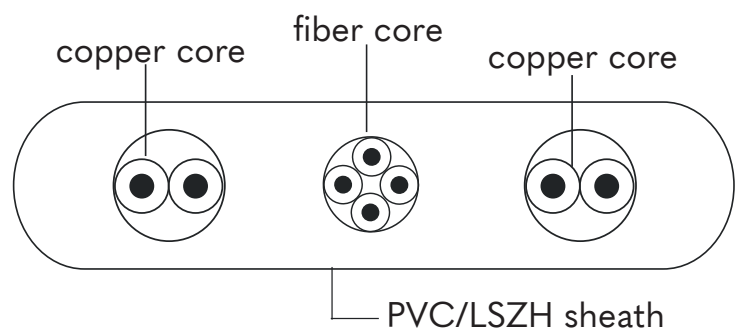
Specifically designed for high-rise elevator systems.

KEY FEATURES:

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



Hybrid Fiber Optic Elevator Cable



Data Transmission:

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

Power Supply:

The 0.75 sqmm power 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 µm ± 0.4 µm at 1310 nm
Travelling height	300 Mtrs
Minimum Bend Radius	10x cable diameter during installation, 5x cable diameter post-installation
Max Suspension Length	80-100Meters

Environmental Characteristics

Temperature Range:	Operating: -40°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	4 core 0.75 Sq. mm, 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 M Ω·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 2P x 0.75 mm Copper Core
Maximum Distance for Power Cable	12V DC, 5A : 23Mtrs / 24V DC, 5A :46 Mtrs / 230V AC, 5A : 450 Mtrs

ORDERING INFORMATION

Part	Description
NTL4P4FSP	Hybrid Elevator Cable, 4F Single Mode Fiber with 2P, 0.75 Sqmm Flexible Copper power cable, PVC Jacket