# LAN Cable
## Category 6

**HELUKAT® 450**

F/FTP





RoHS

## Cable structure

### F/FTP 4x2xAWG 24/1 FRNC
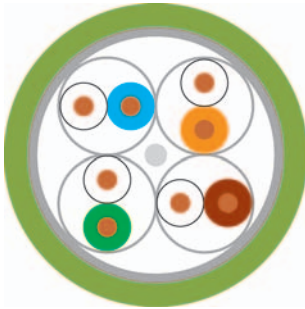
| | |
|---|---|
| Inner conductor Ø: | 0,52 mm |
| Conductor material: | Copper, bare |
| Core insulation: | Foam-skin-PE |
| Core colours: | wh/bu, wh/og, wh/gn, wh/bn |
| Shielding 1: | - |
| Screen over stranding element: | Polyester foil, aluminium-lined |
| Screen 1 over stranding: | Polyester foil, aluminium-lined |
| Screen 2 over stranding: | - |
| Drain wire: | yes |
| Outer sheath material: | FRNC |
| Outer diameter: | app. 7,4 mm |
| Outer sheath colour: | Green similar to RAL 6018 |
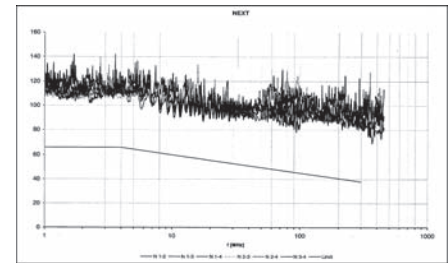


## Electrical data

| | |
|---|---|
| Characteristic impedance: | 100 Ohm ± 15 ohm at 1 to 100 MHz |
| | 100 Ohm ± 20 ohm at 101 to 450 MHz |
| Loop resistance: | 165 Ohm/km max. |
| Mutual capacitance: | 43 nF/km nom. |
| Rel. propagation velocity: | 79 % |

## Typical values

| Frequency | (MHz) | 10 | 16 | 62,5 | 100 | 200 | 300 | 450 |
|---|---|---|---|---|---|---|---|---|
| Attenuation | (dB/100m) | 5,4 | 7,0 | 13,8 | 17,6 | 26,0 | 34,0 | 38,5 |
| Next | (db) | 100,0 | 100,0 | 95,8 | 94,5 | 91,0 | 87,0 | 84,3 |
| ACR | (db) | 94,6 | 93,0 | 82,0 | 76,9 | 65,0 | 53,0 | 45,8 |

## Technical data

| | |
|---|---|
| Weight: | app. 50 kg/km |
| bending radius, repeated: | 59 mm |
| Operating temperature range min.: | -20°C |
| Operating temperature range max.: | +60°C |
| Caloric load, approx. value: | 0,57 MJ/m |
| Copper weight: | 24,00 kg/km |
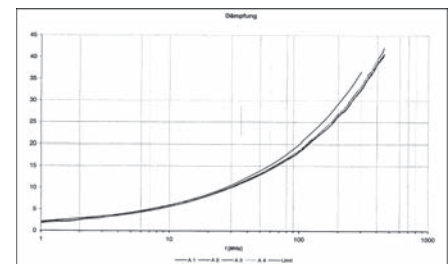


## Norms

Acc. to ISO/IEC 11801, Acc. to EN 50173, Acc. to EIA/TIA 568-A, Category 6, Flame-retardant acc. to IEC 60332-3, Smoke density acc. to IEC 61034, Halogen-free acc. to 60754-2, Corrosiveness acc. to EN50267-2-3

## Application

HELUKAT®450 data cables are used in the tertiary, but also in the secondary level of a network. They are characterized by large performance reserves and outstanding performance. They can be used to implement services such as Gigabit Ethernet, Fast Ethernet, Ethernet, ATM155, FDDI, token ring 4/16 Mbit/s or ISDN absolutely trouble-free. Likewise, the mechanical characteristics are perfectly suited for the application in tight cable channels and platforms due to their optimized construction.

## Part no.

**82501,** F/FTP 4x2xAWG 24/1 FRNC (S-STP)

Dimensions and specifications may be changed without prior notice.

**HELUKABEL®**