

HELUKAT® 100IND CAT.5 SF/UTP FRNC STATIC

flame-retardant, low smoke



TECHNICAL DATA

Industrial Ethernet cable / Cat. 5 acc. to ISO/IEC 11801, DIN EN 50173, IEC 61156-2, DIN EN 50288-2-1

| | |
|-------------------------------------|--|
| Temperature range | fixed installation -25°C to +80°C during installation -5°C to +60°C |
| Peak operating voltage | 125 V (not for high power current installation purposes) |
| Test voltage core/core | 1000 V |
| Conductor resistance at 20°C | max. 96.0 Ohm/km |
| Loop resistance at 20°C | max. 192.0 Ohm/km |
| Insulation resistance | min. 5.0 GOhm x km |
| Mutual capacitance core/core | at 800 Hz, approx. 48 pF/m |
| Rel. Velocity of Propagation | approx. 70% |
| Characteristic impedance | at 1 to 100 MHz, 100 Ohm ± 15 Ohm |
| Caloric load | approx. 0.43 MJ/m |
| Minimum bending radius | during installation 15x Outer-Ø fixed installation 8x Outer-Ø |

■ CABLE STRUCTURE

- Copper conductor bare, conductor diameter: 0.51 mm, AWG sizes
- Core insulation: Foam PE
- Core identification: colour coded, pairs:
No. 1: white-orange / orange
No. 2: white-green / green
- Cores stranded in pairs with optimal lay lengths

- Foil wrapping
- Pairs stranded with optimal lay lengths
- 1. Screen: plastic-coated aluminium foil (St)
- 2. Screen: braided screen of tinned copper wires
- Outer sheath: halogen-free, flame retardant compound (FRNC)
- Sheath colour: blue
- Length marking: in metres

■ PROPERTIES

- halogen-free
- flame-retardant, low smoke development

■ TESTS

- halogen-free acc. to DIN VDE 0482-754-1 / DIN EN 60754-1 / IEC 60754-1
- corrosiveness of combustion gases acc. to DIN VDE 0482-754-2 / DIN EN 60754-2 / IEC 60754-2
- flame-retardant acc. to DIN VDE 0482-332-1-2 / DIN EN 60332-1-2 / IEC 60332-1-2

■ APPLICATION

HELUKAT® 100IND CAT.5 SF/UTP FRNC STATIC for fixed installation indoor in halogen free and flame retardent edition.

■ NOTES

- Conductor sizes are based on the AWG measurement system, metric conductor sizes (mm²) are approximated and are for reference only

■ TYPICAL VALUES

| Frequency (MHz) | 10 | 16 | 62.5 | 100 |
|-----------------------|------|------|------|------|
| Attenuation (dB/100m) | 5.7 | 7.1 | 14.2 | 18.3 |
| NEXT (dB) | 57.0 | 54.0 | 45.0 | 42.0 |
| ACR (dB/100m) | 51.3 | 46.9 | 30.8 | 23.7 |

| Part no. | No. cores x AWG-No. | Cross-sec. mm ² , approx. | Core Ø mm, approx. | Outer Ø mm, approx. | Cu-weight kg/km | Weight kg/km, approx. |
|----------|---------------------|--------------------------------------|--------------------|---------------------|-----------------|-----------------------|
| 805699 | 2 x 2 x AWG 24 / 1 | 0.20 | 1.03 | 5.6 | 22.0 | 45.0 |