

HELUKAT® 100IND CAT.5e SF/UTP FRNC FLEX

flame-retardant, low smoke



TECHNICAL DATA

Industrial Ethernet cable / Cat. 5e acc. to ISO/IEC 11801, DIN EN 50173, IEC 61156-6, DIN EN 50288-2-2

Temperature range	flexible -10°C to +70°C fixed installation -30°C to +80°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. 140.0 Ohm/km
Loop resistance at 20°C	max. 280.0 Ohm/km
Insulation resistance	min. 5.0 GOhm x km
Mutual capacitance core/core	at 800 Hz, approx. 47 pF/m
Rel. Velocity of Propagation	approx. 70%
Characteristic impedance	at 1 to 100 MHz, 100 Ohm ± 15 Ohm
Caloric load	approx. 0.44 MJ/m
Minimum bending radius	flexible 15x Outer-Ø fixed installation 8x Outer-Ø

■ CABLE STRUCTURE

- Copper wire bare, 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
- flame-retardant acc. to DIN VDE 0482-332-1-2 / DIN EN 60332-1-2 / IEC 60332-1-2

■ APPLICATION

HELUKAT® 100IND CAT.5e SF/UTP FRNC FLEX is designed for flexible use. Thanks to the FRNC sheath, it also offers halogen free and flame retardant parameters.

■ 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)	8.3	10.6	21.7	27.9
NEXT (dB)	59.0	56.0	48.0	45.0
ACR (dB/100m)	50.7	45.4	26.3	17.1

Part no.	No. cores x AWG-No.	Cross-sec. mm ² , approx.	Conductor Ø mm, approx.	Core Ø mm, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
805701	2 x 2 x AWG 26 /7	0.14	0.5	0.95	5.6	19.0	44.0