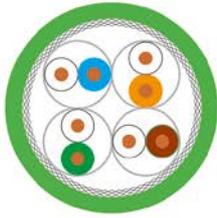


# HELUKAT 500IND CAT.6A S/FTP FRNC STATIC

flame-retardant, low smoke



## TECHNICAL DATA

Industrial Ethernet cable / Cat. 6A acc. to ISO/IEC 11801, DIN EN 50173, IEC 61156-5, DIN EN 50288-10-1, UL-Std. 444 (CM), CSA-Std. C22.2 No. 214 - CM

<b>Temperature range</b>	fixed installation -40°C to +80°C during installation 0°C to +70°C UL (CM) to +75°C
<b>Peak operating voltage</b>	125 V (not for high power current installation purposes)
<b>Test voltage core/core</b>	2000 V
<b>Conductor resistance at 20°C</b>	max. 59.0 Ohm/km
<b>Loop resistance at 20°C</b>	max. 118.2 Ohm/km
<b>Insulation resistance</b>	min. 5.0 GOhm x km
<b>Mutual capacitance core/core</b>	at 800 Hz, approx. 50 pF/m
<b>Rel. Velocity of Propagation</b>	approx. 77%
<b>Characteristic impedance</b>	at 1 to 100 MHz, 100 Ohm ± 15 Ohm at 101 to 500 MHz, 100 Ohm ± 20 Ohm
<b>Caloric load</b>	approx. 0.95 MJ/m
<b>Minimum bending radius</b>	during installation 10x Outer-Ø fixed installation 5x Outer-Ø

## CABLE STRUCTURE

- Copper conductor bare, conductor diameter: 0.64 mm, AWG sizes
- Core insulation: Foam PE
- Core identification: colour coded, pairs:
  - No. 1: white-blue / blue
  - No. 2: white-orange / orange
  - No. 3: white-green / green
  - No. 4: white-brown / brown
- Cores stranded in pairs with optimal lay lengths

- Screening element: pairs, plastic-coated aluminium foil (St)
- Pairs stranded in layers with optimal lay lengths
- Screen: braided screen of tinned copper wires
- Outer sheath: halogen-free, flame retardant compound (FRNC)
- Sheath colour: green
- 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
- bundle fire test acc. to DIN VDE 0482-332-3-24 / DIN EN 60332-3-24 / IEC 60332-3-24
- UL Vertical-Tray Flame Exposure acc. to UL Std. 1685 Sec. 4-11

## APPLICATION

HELUKAT® 500IND CAT.6A S/FTP FRNC STATIC was designed specially for extreme industrial applications for fixed installation. The copper data cable is especially well-suited for Category 6A 10 Giga-bit/500MHz (IEC 61156-5) Ethernet applications. It guarantees excellent transmission characteristics and may be used even under the harshest conditions.

## NOTES

- Conductor sizes are based on the AWG measurement system, metric conductor sizes (mm<sup>2</sup>) are approximated and are for reference only

## TYPICAL VALUES

Frequency (MHz)	10	16	62.5	100	250	500
Attenuation (dB/100m)	5.9	7.5	15.0	19.1	31.1	45.3
NEXT (dB)	60.3	57.2	48.4	45.3	39.3	34.8
ACR (dB/100m)	54.4	49.7	43.4	26.2	8.2	-10.5

Part no.	No. cores x AWG-No.	Cross-sec. mm <sup>2</sup> , approx.	Core Ø mm, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
11007777	4 x 2 x AWG 22 / 1	0.32	1.55	8.7	53.0	103.0