HELUKAT 500S CAT.6$_A$ SF/FTP SLIM PUR CHAIN

halogen-free, flame-retardant

TECHNICAL DATA

Industrial Ethernet cable / Cat. 6$_A$ acc. to ISO/IEC 11801, DIN EN 50173, IEC 61156-6, DIN EN 50288-10-2, UL-Std. 444 (CMX), CSA-Std. C22.2 No. 214 - CMX, UL-Std. 758 (AWM) Style 21576

Temperature range	flexible -20°C to +70°C fixed installation -40°C to +80°C UL (CMX) to +75°C UL (AWM) to +80°C
Peak operating voltage	125 V (not for high power current installation purposes)
Test voltage core/core	2000 V
Conductor resistance at 20°C	max. 150.0 Ohm/km
Loop resistance at 20°C	max. 300.0 Ohm/km
Insulation resistance	min. 5.0 GOhm x km
Mutual capacitance core/core	at 800 Hz, approx. 50 pF/m
Rel. Velocity of Propagation	approx. 76%
Characteristic impedance	at 1 to 100 MHz, 100 Ohm ± 15 Ohm at 101 to 500 MHz, 100 Ohm ± 20 Ohm
Caloric load	approx. 1.35 MJ/m
Minimum bending radius	flexible 10x Outer-Ø fixed installation 8x Outer-Ø

CABLE STRUCTURE

- Copper wire tinned, AWG sizes
- Core insulation: Foam PE
- Core identification: colour coded, pairs:
  No. 1: white / blue
  No. 2: white / orange
  No. 3: white / green
  No. 4: white / brown
- Cores stranded in pairs with optimal lay lengths
- Screening element: pairs, plastic-coated aluminium foil (St)
- Pairs with optimal lay lengths stranded around a central cross-shaped filler
- 1. Screen: plastic-coated aluminium foil (St)
  2. Screen: braided screen of tinned copper wires
- Outer sheath: PUR
- Sheath colour: green
- Length marking: in metres

PROPERTIES

- resistant to: oil, UV radiation, hydrolysis, microbes, coolants, greases
- abrasion-resistant, notch-resistant, tear-resistant, cut-resistant, wear-resistant, low adhesion
- suitable for use in drag chains
- halogen-free
- flame-retardant

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® 500S CAT.6$_A$ SF/FTP SLIM PUR CHAIN is designed for use in cable carriers and the recurring loads caused by moving machine components. It provides excellent transmission characteristics under extremely difficult conditions.

NOTES

- Conductor sizes are based on the AWG measurement system, metric conductor sizes (mm²) are approximated and are for reference only
- UL Voltage Rating: 1000 V

TYPICAL VALUES

Frequency (MHz)	10	16	62.5	100	300	500
Attenuation (dB/100m)	9.0	11.0	23.0	29.0	51.0	68.0
NEXT (dB)	60.3	57.2	48.4	45.3	38.1	34.8
ACR (dB/100m)	59.4	56.1	46.1	42.6	33.0	28.0

Part no.	No. cores x AWG-No.	Cross-sec. mm², approx.	Conductor Ø mm, approx.	Core Ø mm, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
805548	4 x 2 x AWG 26 /7	0.14	0.55	1.05	7.8	34.0	81.0

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