

HELUKAT 500IND CAT.6A SK S/FTP PVC STATIC



CC-Link IE Field certified, FastConnect (SK) capable, highly flame-retardant



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 (CMG), CSA-Std. C22.2 No. 214 - CMG

Temperature range	fixed installation -40°C to +80°C during installation -5°C to +70°C UL (CMG) to +75°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. 56.5 Ohm/km
Loop resistance at 20°C	max. 112.9 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. 1.63 MJ/m
Minimum bending radius	during installation 8x Outer-Ø fixed installation 4x 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
 - 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 stranded in layers with optimally matched lay lengths
- Inner sheath: halogen-free, flame retardant compound (FRNC)
- drain wire
- 1. Screen: plastic-coated aluminium foil (St)
- 2. Screen: braided screen of tinned copper wires
- Outer sheath: PVC
- Sheath colour: green
- Length marking: in metres

PROPERTIES

- resistant to: oil, UV radiation (SUN RES)
- flame-retardant

TESTS

- flame-retardant acc. to CSA FT4
- bundle fire test acc. to DIN VDE 0482-332-3-24 / DIN EN 60332-3-24 / IEC 60332-3-24 (Cat. C)
- certifications and approvals:
 - EAC
 - CC-Link IE

APPLICATION

HELUKAT® 500IND CAT.6A SK S/FTP PVC 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 (mm²) are approximated and are for reference only

TYPICAL VALUES

Frequency (MHz)	10	16	62.5	100	250	500
Attenuation (dB/100m)	4.8	6.2	12.7	16.2	25.9	37.0
NEXT (dB)	108.3	107.1	100.2	99.5	90.2	80.0
PS-NEXT (dB)	57.3	54.2	45.4	42.3	36.3	31.8
ACR (dB/100m)	103.5	100.9	87.5	83.3	64.3	43.0

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.
803693	4 x 2 x AWG 22 / 1	0.32	1.55	9.6	44.0	115.0