HELUKAT® 600IND CAT.7e S/FTP PUR STATIC









HELUKAT® 600IND

TECHNICAL DATA

Industrial Ethernet cable / Cat. 7e acc. to ISO/IEC 11801, DIN EN 50173, IEC 61156-5, DIN EN 50288-4-1, UL-Std. 758 (AWM) Style 21238

Temperature range fixed installation -40°C to

+80°C

during installation -5°C to

+50°C

UL (AWM) to +80°C

max. 74.5 Ohm/km

Peak operating voltage 125 V (not for high power current installation purposes)

2000 V

Test voltage core/core
Conductor resistance at 20°C
Loop resistance at 20°C
Insulation resistance

Mutual capacitance core/core

max. 149.0 Ohm/km min. 5.0 GOhm x km at 800 Hz, approx. 43 pF/m

Rel. Velocity of Propagation approx. 77%

Characteristic impedance at 1 to 100 MHz, 100 Ohm \pm

15 Ohm

at 101 to 1200 MHz, 100

Ohm ± 20 Ohm

Caloric load approx. 0.74 MJ/m

Minimum bending radius during installation 10x Outer-Ø fixed installation 8x Outer-Ø

CABLE STRUCTURE

- Copper conductor bare, conductor diameter: 0.57 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 optimal lay lengths
- Screen: braided screen of tinned copper wires
- · Outer sheath: PUR

- Sheath colour: see table
- · 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
- · halogen-free
- flame-retardant

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
- certifications and approvals: EAC CC-Link IE

APPLICATION

HELUKAT® 600IND CAT.7e S/FTP PUR STATIC is used for harsh industrial environments. Mechanically, this product exhibits excellent resistance to mineral oils, greases and cooling lubricants and has good microbe and hydrolysis resistance. Electrically, this cable is characterized by high reserve capacity and outstanding performance. This allows you to create services such as 10 Gigabit Ethernet, Gigabit Ethernet, Fast Ethernet, Ethernet, ATM155, FDDI, Token Ring 4/16 Mbit/s or ISDN without difficulty. These cables considerably exceed the requirement for compliance with Class B interference emission to EN55022, as well as interference immunity to EN55024. This gives the series outstanding EMC characteristics.

NOTES

- Conductor sizes are based on the AWG measurement system, metric conductor sizes (mm²) are approximated and are for reference only
- UL Voltage Rating: 600 V

TYPICAL VALUES

Frequency (MHz)	10	16	62.5	100	250	350	600	900	1000	1200
Attenuation (dB/100m)	5.6	7.0	13.8	17.6	28.3	34.0	45.2	57.1	60.8	66.0
NEXT (dB)	95.0	95.0	89.0	87.0	82.0	79.0	74.0	70.0	66.0	63.0
ACR (dB/100m)	89.4	88.0	75.2	69.4	53.7	43.0	27.8	13.9	5.2	-3.0



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CC-Link IE Field certified, extended performance up to 1200 MHz

Part no.	No. cores x AWG-No.	Cross-sec. mm², approx.	Sheath colour	Core Ø mm, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
801197	4 x 2 x AWG 23 /1	0.26	green	1.42	7.7	34.0	64.0
11022997	4 x 2 x AWG 23 /1	0.26	grey	1.42	7.7	34.0	64.0
11022998	4 x 2 x AWG 23 /1	0.26	blue	1.42	7.7	34.0	64.0
803815	4 x 2 x AWG 23 /1	0.26	red	1.42	7.7	34.0	64.0

