

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

extended performance up to 1200 MHz, flame-retardant, low smoke



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 21143

Temperature range	fixed installation -40°C to +80°C during installation -5°C to +50°C UL (AWM) to +80°C
Peak operating voltage	125 V (not for high power current installation purposes)
Test voltage core/core	1500 V
Conductor resistance at 20°C	max. 74.5 Ohm/km
Loop resistance at 20°C	max. 149.0 Ohm/km
Insulation resistance	min. 5.0 GOhm x km
Mutual capacitance core/core	at 800 Hz, approx. 43 pF/m
Rel. Velocity of Propagation	approx. 77%
Characteristic impedance	at 1 to 100 MHz, 100 Ohm ± 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 7x Outer-Ø

- Screen: braided screen of tinned copper wires
- Outer sheath: halogen-free, flame retardant compound (FRNC)
- Sheath colour: green
- Length marking: in metres

PROPERTIES

- resistant to: UV radiation
- 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
- flame-retardant acc. to DIN VDE 0482-332-1-2 / DIN EN 60332-1-2 / IEC 60332-1-2

APPLICATION

HELUKAT® 600IND CAT.7e S/FTP FRNC STATIC is used for industrial environments with halogen free and low smoke characteristics. 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

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

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

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.
11007775	4 x 2 x AWG 23 / 1	0.26	1.45	7.8	34.0	68.0