HELUKAT 1000IND CAT.7$_A$ S/FTP PUR ROBUSTFLEX

performance up to 1000 MHz

TECHNICAL DATA

Industrial Ethernet cable / Cat. 7$_A$ acc. to ISO/IEC 11801, DIN EN 50173, IEC 61156-6, DIN EN 50288-4-2, UL-Std. 758 (AWM) Style 21238

Temperature range	flexible -25°C to +60°C fixed installation -40°C to +80°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. 145.0 Ohm/km
Loop resistance at 20°C	max. 290.0 Ohm/km
Insulation resistance	min. 5.0 GOhm x km
Mutual capacitance core/core	at 800 Hz, approx. 44 pF/m
Rel. Velocity of Propagation	approx. 77%
Characteristic impedance	at 1 to 100 MHz, 100 Ohm ± 15 Ohm at 101 to 1000 MHz, 100 Ohm ± 20 Ohm
Caloric load	approx. 0.45 MJ/m
Minimum bending radius	flexible 8x Outer-Ø fixed installation 6x Outer-Ø

CABLE STRUCTURE

- Copper wire bare, 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: green
- Length marking: in metres

PROPERTIES

- resistant to: oil, UV radiation, hydrolysis, microbes, coolants, greases
- 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® 1000IND CAT.7$_A$ S/FTP PUR ROBUSTFLEX is an Ethernet cable that, thanks to use of a halogen-free PU outer sheath, is ideal for harsh industrial surroundings. This cable is configurable with common RJ45 plugs (industrial and office version), as well as with some Sub-D and M12 plugs.

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	100	250	600	800	1000
Attenuation (dB/100m)	7.7	27.0	42.0	71.0	83.0	93.0
NEXT (dB)	100.0	99.0	95.0	94.0	85.0	77.0
ACR (dB/100m)	92.3	72.0	53.0	23.0	2.0	-16.0

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.
805684	4 x 2 x AWG 26 /7	0.14	0.48	1.05	6.2	23.0	40.0