HELUKAT® 250IND CAT.6 CMG SF/UTP PVC STATIC

with FRNC inner sheath, highly flame-retardant

TECHNICAL DATA

Industrial Ethernet cable / Cat. 6 acc. to ISO/IEC 11801, DIN EN 50173, IEC 61156-5, DIN EN 50288-5-1, 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	1500 V
Conductor resistance at 20°C	max. 95.0 Ohm/km
Loop resistance at 20°C	max. 190.0 Ohm/km
Insulation resistance	min. 0.5 GOhm x km
Mutual capacitance core/core	at 800 Hz, approx. 72 pF/m
Rel. Velocity of Propagation	approx. 62%
Characteristic impedance	at 1 to 100 MHz, 100 Ohm ± 15 Ohm at 101 to 250 MHz, 100 Ohm ± 20 Ohm
Caloric load	approx. 1.69 MJ/m
Minimum bending radius	during installation 10x Outer-Ø fixed installation 5x Outer-Ø

CABLE STRUCTURE

- Copper conductor bare, conductor diameter: 0.51 mm, AWG sizes
- Core insulation: PE
- Core identification: colour coded, pairs:
  No. 1: white-blue / blue
  No. 2: white-orange / orange
  No. 3: white-green / green
  No. 4: white-brown / brown
- Cores stranded in pairs with optimal lay lengths
- Foil wrapping
- Screening element: pairs
- Pairs with optimal lay lengths stranded around a central cross-shaped filler
- Inner sheath: halogen-free, flame retardant compound (FRNC)
- 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
- 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

APPLICATION

HELUKAT® 250IND CAT.6 CMG SF/UTP PVC STATIC was designed specially for extreme industrial applications. The copper data cable is especially well-suited for Ethernet applications Category 6. 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
Attenuation (dB/100m)	5.6	7.1	14.5	18.4	30.3
NEXT (dB)	77.0	75.9	66.4	64.7	57.2
ACR (dB/100m)	71.4	68.8	51.9	46.3	26.9

Part no.	No. cores x AWG-No.	Cross-sec. mm², approx.	Core Ø mm, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
805655	4 x 2 x AWG 24 /1	0.20	1.03	8.0	37.0	76.0