HELUKAT® 250IND CAT.6 SF/FTP PVC STATIC



with FRNC inner sheath, highly flame-retardant





HELUKAT® 250IND SF/FTP 4x2xAWG24/1 PVC

TECHNICAL DATA

Industrial Ethernet cable / Cat. 6 acc. to DIN EN 50173, ISO/ IEC 11801, IEC 61156-5, UL-Std. 444 (CMG), CSA-Std. C22.2 No. 214 - CMG

Temperature range fixed installation -30°C to

+80°C

during installation 0°C to +50°C

UL (CMG) to +75°C

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

1000 V

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

Characteristic impedance

max. 95.0 Ohm/km max. 190.0 Ohm/km min. 2.0 GOhm x km Mutual capacitance core/core at 800 Hz, approx. 43 pF/m

Rel. Velocity of Propagation approx. 76%

at 1 to 100 MHz, 100 Ohm \pm

15 Ohm

at 101 to 250 MHz, 100 Ohm

± 20 Ohm

Caloric load approx. 0.79 MJ/m

Minimum bending radius during installation 15x Outer-Ø fixed installation 12x Outer-Ø

CABLE STRUCTURE

- Copper conductor 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

- · Inner sheath: halogen-free polymer
- 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)
- · highly flame-retardant

TESTS

- flame-retardant acc. to CSA FT4, DIN VDE 0482-332-1-2 / DIN EN 60332-1-2 / IEC 60332-1-2
- bundle fire test acc. to DIN VDE 0482-332-3-24 / DIN EN 60332-3-24 / IEC 60332-3-24
- oil-resistant acc. to DIN VDE 0473-811-404 / DIN EN 60811-404 / IEC 60811-404, IRM 902 4h at +70°C
- ozone-resistant acc. to DIN VDE 0473-811-403 / DIN EN 60811-403

APPLICATION

HELUKAT® 250IND CAT.6A SF/FTP PVC STATIC was designed specifically for use in extreme industrial applications. This copper data cable is especially well suited for Cat. 6 Ethernet applications. This cable guarantees first-class data transmission properties, even under the harshest of 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)	6.3	8.0	16.0	21.0	33.0
NEXT (dB)	90.0	90.0	90.0	87.0	81.0
ACR (dB/100m)	83.7	82.0	74.0	66.0	48.0

Part no.	No. cores x AWG-No.	Cross-sec. mm², approx.	Conductor Ø mm, approx.	Core Ø mm, approx.	Outer-Ø min - max mm	Cu factor per km	Weight kg/km, approx.
11017904	4 x 2 x AWG 24 /1	0.20	0.5	1.23	7.8 - 8.2	34.0	75.0

