

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

with FRNC inner sheath, 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. 758 (AWM) Style 2571

Temperature range	fixed installation -40°C to +80°C during installation -5°C to +70°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. 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

- 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: UV radiation
- flame-retardant

■ TESTS

- flame-retardant acc. to CSA FT1
- bundle fire test acc. to DIN VDE 0482-332-3-24 / DIN EN 60332-3-24 / IEC 60332-3-24 (Cat. C)

■ APPLICATION

HELUKAT® 250IND CAT.6 AWM SF/UTP PVC STATIC was designed specially for extreme industrial applications. The copper data cable is especially well-suited for Category 6 Ethernet applications. It guarantees excellent transmission characteristics and may be used even under the harshest conditions. This version with PVC jacket is designed specifically for fixed installation under difficult industrial 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. mm ² , approx.	Core Ø mm, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
805681	4 x 2 x AWG 24 / 1	0.20	1.03	8.0	40.0	78.0