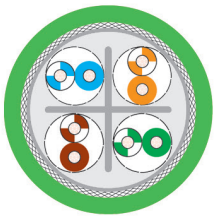
HELUKAT® 250S CAT.6 CMX SF/UTP PUR CHAIN

flame-retardant



TECHNICAL DATA

Industrial Ethernet cable / Cat. 6 acc. to ISO/IEC 11801, DIN EN 50173, IEC 61156-6, DIN EN 50288-5-2, UL-Std. 444 (CMX), CSA-Std. C22.2 No. 214 - CMX, UL-Std. 758 (AWM) Style 21576

Temperature range	flexible -30°C to +70°C fixed installation -40°C to +80°C UL (CMX) to +75°C UL (AWM) to +80°C
Peak operating voltage	125 V (not for high power current installation purposes)
Test voltage core/core	700 V
Conductor resistance at 20˚C	max. 140.0 Ohm/km
Loop resistance at 20˚C	max. 280.0 Ohm/km
Insulation resistance	min. 5.0 GOhm x km
Mutual capacitance core/core	at 800 Hz, approx. 50 pF/m
Rel. Velocity of Propagation	approx. 67%
Characteristic impedance	at 1 to 100 MHz, 100 Ohm ± 15 Ohm at 101 to 250 MHz, 100 Ohm ± 20 Ohm
Caloric load	approx. 1.35 MJ/m
Minimum bending radius	flexible 8x Outer-Ø fixed 4x Outer-Ø

CABLE STRUCTURE

- Copper wire tinned, AWG sizes
- Core insulation: PP
- 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
- 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: PUR
- Sheath colour: green
- Length marking: in metres

PROPERTIES

- resistant to: oil, UV radiation
- abrasion-resistant, notch-resistant, tear-resistant, cut-resistant, wear-resistant
- suitable for use in drag chains
- 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
- certifications and approvals:
  EAC

APPLICATION

HELUKAT 250S CAT.6 CMX SF/UTP PUR CHAIN is designed for use in cable carriers and the recurring loads caused by moving machine components. It provides excellent transmission characteristics under extremely difficult conditions.

NOTES

- Conductor sizes are based on the AWG measurement system, metric conductor sizes (mm²) are approximated and are for reference only
- UL Voltage Rating: 1000 V

TYPICAL VALUES

Frequency (MHz)	10	16	62.5	100	250
Attenuation (dB/100m)	7.7	9.9	20.8	26.7	43.1
NEXT (dB)	73.0	72.0	62.0	61.0	53.0
ACR (dB/100m)	65.3	62.1	41.2	34.3	9.9

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.
803387	4 x 2 x AWG 26 /19	0.15	0.55	1.02	7.5 - 8.1	34.0	63.0