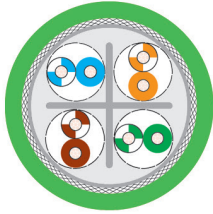


# HELUKAT® 250S CAT.6 CMX SF/UTP PUR CHAIN

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

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

- 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 (mm<sup>2</sup>) 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. mm <sup>2</sup> , approx. | Conductor Ø mm, approx. | Core Ø mm, approx. | Outer Ø mm, approx. | Cu factor per km | Weight kg/km, approx. |
|----------|---------------------|--------------------------------------|-------------------------|--------------------|---------------------|------------------|-----------------------|
| 803387   | 4 x 2 x AWG 26 / 19 | 0.15                                 | 0.55                    | 1.02               | 8.0                 | 34.0             | 63.0                  |