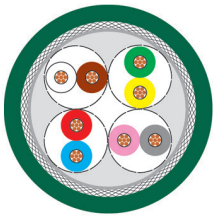
HELUKAT® 200S CAT.5 4P SF/UTP PUR CHAIN

flame-retardant



TECHNICAL DATA

Industrial Ethernet cable / Cat. 5 acc. to ISO/IEC 11801, DIN EN 50173, IEC 61156-3, DIN EN 50288-2-2

Temperature range	flexible -25°C to +70°C fixed installation -35°C 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. 78.0 Ohm/km
Loop resistance at 20°C	max. 156.0 Ohm/km
Insulation resistance	min. 2.0 GOhm x km
Mutual capacitance core/core	at 800 Hz, approx. 51 pF/m
Rel. Velocity of Propagation	approx. 67%
Characteristic impedance	at 1 to 100 MHz, 100 Ohm ± 15 Ohm
Caloric load	approx. 2.08 MJ/m
Minimum bending radius	flexible 12x Outer-Ø fixed installation 6x Outer-Ø

CABLE STRUCTURE

- Copper wire bare, AWG sizes
- Core insulation: PE
- Core identification: colour coded, pairs:
  No. 1: white / brown
  No. 2: green / yellow
  No. 3: grey / pink
  No. 4: blue / red
- Cores stranded in pairs with optimal lay lengths
- Foil wrapping
- Pairs stranded in layers with optimal lay lengths
- Inner sheath: TPE
- 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
- abrasion-resistant, notch-resistant, tear-resistant, cut-resistant, wear-resistant, low adhesion
- 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® 200S CAT.5 4P SF/UTP PUR CHAIN is designed for use in cable carriers and the extreme loads caused by moving machine components and provides excellent transmission characteristics under the most difficult and extreme conditions. Thanks to the clever structure, it is also suitable mechanically for use even in cable carriers with a high packing density.

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
Attenuation (dB/100m)	7.0	9.0	20.0	25.0
NEXT (dB)	57.0	54.0	45.0	43.0
ACR (dB/100m)	50.0	45.0	25.0	18.0

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.
81155	4 x 2 x AWG 24 /19	0.24	0.64	1.25	9.3 - 9.7	54.3	110.0

11.08.2025 / We reserve the right to make technical changes; the imprint in the image is purely exemplary