

HELUKAT® PROFInet C CAT.5e SF/UTP PUR CHAIN

PROFInet Type C, FastConnect (SK) capable, flame-retardant



TECHNICAL DATA

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

Temperature range	flexible -30°C to +75°C fixed installation -40°C to +80°C
Peak operating voltage	125 V (not for high power current installation purposes)
Test voltage core/core	2500 V
Conductor resistance at 20°C	max. 58.6 Ohm/km
Loop resistance at 20°C	max. 117.1 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. 66%
Characteristic impedance	at 1 to 100 MHz, 100 Ohm ± 15 Ohm
Caloric load	approx. 0.85 MJ/m
Minimum bending radius	flexible 12x Outer-Ø fixed installation 4x Outer-Ø

■ CABLE STRUCTURE

- Copper wire bare, AWG sizes
- Core insulation: PE
- Core identification: white, yellow, blue, orange
- Cores twisted into a star quad with optimal lay lengths
- Foil wrapping
- 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, hydrolysis, microbes, coolants, greases
- 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® PROFInet C CAT.5e SF/UTP PUR CHAIN for use on moving parts and in cable carriers. The cable listed here correspond to the PROFInet classifications Type C for moving cables and is designed to withstand mechanical loads. This PUR version has UL CMX listing and offers higher values in chain and chemical resistance.

■ 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)	6.3	8.0	16.5	21.3
NEXT (dB)	70.0	65.0	55.0	50.0
ACR (dB/100m)	64.0	57.4	39.0	29.0

Part no.	No. cores x AWG-No.	Cross-sec. mm ² , approx.	Conductor Ø mm, approx.	Core Ø mm, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
800655	2 x 2 x AWG 22 /7	0.35	0.75	1.5	6.5	32.0	61.0