

# HELUKAT® PROFINet A CAT.5e SF/UTP FRNC STATIC

PROFINet Type A, FastConnect (SK) capable, flame-retardant, low smoke



## TECHNICAL DATA

Industrial Ethernet cable / Cat. 5e acc. to ISO/IEC 11801, DIN EN 50173, IEC 61156-5, PROFINet Guideline, UL-Std. 444 (CM), CSA-Std. C22.2 No. 214 - CM, UL-Std. 13 (PLTC), UL-Std. 758 (AWM) Style 21279

<b>Temperature range</b>	fixed installation -25°C to +75°C during installation -25°C to +75°C UL (CM) to +75°C 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>	2000 V
<b>Conductor resistance at 20°C</b>	max. 57.5 Ohm/km
<b>Loop resistance at 20°C</b>	max. 115.0 Ohm/km
<b>Insulation resistance</b>	min. 5.0 GOhm x km
<b>Mutual capacitance core/core</b>	at 800 Hz, approx. 48 pF/m
<b>Rel. Velocity of Propagation</b>	approx. 62%
<b>Characteristic impedance</b>	at 1 to 100 MHz, 100 Ohm ± 15 Ohm
<b>Caloric load</b>	approx. 0.34 MJ/m
<b>Minimum bending radius</b>	during installation 10x Outer-Ø fixed installation 5x Outer-Ø

## ■ CABLE STRUCTURE

- Copper conductor bare, conductor diameter: 0.64 mm, 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: halogen-free, flame retardant compound (FRNC)
- Sheath colour: green
- Length marking: in metres

## ■ PROPERTIES

- resistant to: UV radiation
- halogen-free
- flame-retardant, low smoke development

## ■ TESTS

- halogen-free acc. to DIN VDE 0482-754-1 / DIN EN 60754-1 / IEC 60754-1
- corrosiveness of combustion gases acc. to DIN VDE 0482-754-2 / DIN EN 60754-2 / IEC 60754-2
- flame-retardant acc. to CSA FT4
- bundle fire test acc. to DIN VDE 0482-332-3 / DIN EN 60332-3 / IEC 60332-3
- smoke density acc. to DIN VDE 0482-1034-1+2 / DIN EN 61034-1+2 / IEC 61034-1+2

## ■ APPLICATION

HELUKAT® PROFINet A CAT.5e SF/UTP FRNC STATIC for fixed installation in industrial networks, rugged. It guarantees excellent transmission characteristics and may be used even under the harshest conditions. The cable listed here corresponds to PROFINet Type A in halogen free and flame retardant design.

## ■ 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: 600 V

## ■ TYPICAL VALUES

Frequency (MHz)	10	16	62.5	100
Attenuation (dB/100m)	5.2	6.9	15.0	19.5
NEXT (dB)	70.0	65.0	55.0	50.0
ACR (dB/100m)	64.8	58.1	40.0	30.5

Part no.	No. cores x AWG-No.	Cross-sec. mm <sup>2</sup> , approx.	Core Ø mm, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
805653	2 x 2 x AWG 22 / 1	0.32	1.5	6.5	32.0	65.0