

# HELUKAT® PROFINet B CAT.5e SF/UTP FRNC SHIPLINE



PROFINet Type B, FastConnect (SK) capable, Marine and Offshore



## TECHNICAL DATA

Industrial Ethernet cable / Cat. 5e acc. to ISO/IEC 11801, DIN EN 50173, IEC 61156-6, PROFINet Guidline, UL-Std. 444 (CM), CSA-Std. C22.2 No. 214 - CM, UL-Std. 13 (PLTC)

<b>Temperature range</b>	flexible 0°C to +50°C fixed installation -25°C to +75°C UL (CM) to +75°C
<b>Peak operating voltage</b>	125 V (not for high power current installation purposes)
<b>Test voltage core/core</b>	1500 V
<b>Conductor resistance at 20°C</b>	max. 60.0 Ohm/km
<b>Loop resistance at 20°C</b>	max. 120.0 Ohm/km
<b>Insulation resistance</b>	min. 0.5 GOhm x km
<b>Mutual capacitance core/core</b>	at 800 Hz, approx. 52 pF/m
<b>Rel. Velocity of Propagation</b>	approx. 66%
<b>Characteristic impedance</b>	at 1 to 100 MHz, 100 Ohm ± 15 Ohm
<b>Caloric load</b>	approx. 0.45 MJ/m
<b>Minimum bending radius</b>	flexible 7.5x Outer-Ø fixed installation 3x Outer-Ø

- 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
- Suitable for naval and offshore applications

## 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
- 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
- certifications and approvals:  
EAC  
DNV

## CABLE STRUCTURE

- Copper wire tinned, AWG sizes
- Core insulation: PP
- Core identification: white, yellow, blue, orange
- Cores twisted into a star quad with optimal lay lengths
- Foil wrapping
- 1. Screen: plastic-coated aluminium foil (St)
- 2. Screen: braided screen of tinned copper wires

## APPLICATION

HELUKAT® PROFINet B CAT.5e SF/UTP FRNC SHIPFLEX designed specially for marine/offshore applications.

## NOTES

- Conductor sizes are based on the AWG measurement system, metric conductor sizes (mm<sup>2</sup>) are approximated and are for reference only

## TYPICAL VALUES

Frequency (MHz)	10	16	62.5	100
Attenuation (dB/100m)	6.0	7.6	16.0	21.0
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 <sup>2</sup> , approx.	Conductor Ø mm, approx.	Core Ø mm, approx.	Outer Ø mm, approx.	Cu-weight kg/km	Weight kg/km, approx.
802185	2 x 2 x AWG 22 /7	0.35	0.75	1.5	6.5	32.0	64.0