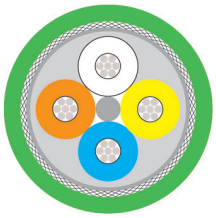
HELUKAT® PROFInet B CAT.5e SF/UTP FRNC SHIPLINE

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 Guideline, UL-Std. 444 (CM), CSA-Std. C22.2 No. 214 - CM, UL-Std. 13 (PLTC)

Temperature range	flexible 0°C to +50°C fixed installation -25°C to +75°C UL (CM) to +75°C
Peak operating voltage	60 V (not for high power current installation purposes)
Test voltage core/core	1500 V
Conductor resistance at 20°C	max. 60.0 Ohm/km
Loop resistance at 20°C	max. 120.0 Ohm/km
Insulation resistance	min. 0.5 GOhm x km
Mutual capacitance core/core	at 800 Hz, approx. 52 pF/m
Rel. Velocity of Propagation	approx. 66%
Characteristic impedance	at 1 to 100 MHz, 100 Ohm ± 15 Ohm
Caloric load	approx. 0.45 MJ/m
Minimum bending radius	flexible 7.5x Outer-Ø fixed installation 3x Outer-Ø

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
- 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

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 (mm²) 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. mm², approx.	Conductor Ø mm, approx.	Core Ø mm, approx.	Outer-Ø min - max mm	Cu factor per km	Weight kg/km, approx.
802185	2 x 2 x AWG 22 /7	0.35	0.75	1.5	6.3 - 6.7	32.0	64.0

14.10.2026 / We reserve the right to make technical changes; the imprint in the image is purely exemplary