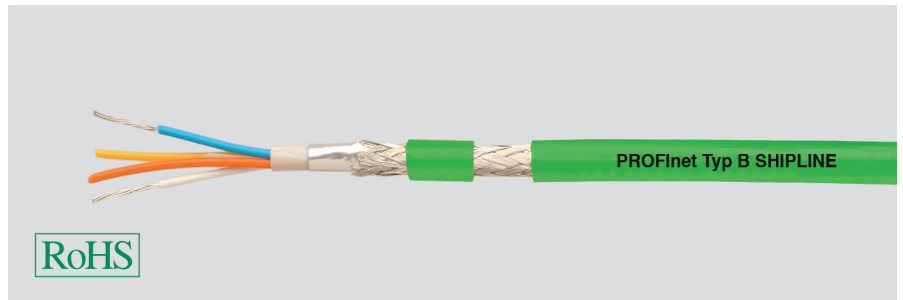
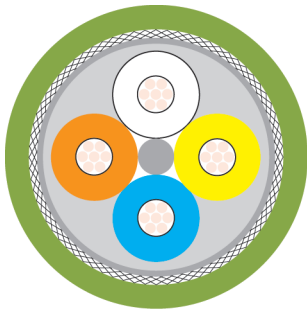


# Industrial Ethernet

PROFInet Typ B SHIPLINE \* FESTOON

**HELUKAT**<sup>®</sup>

FRNC + PVC



## Type Cable structure

Inner conductor diameter:  
Core insulation:  
Core colours:  
Stranding element:  
Separator:  
Inner sheath material:  
Shielding 1:  
Total shielding:  
Outer sheath material:  
Cable external diameter:  
Outer sheath colour:

## Marine and Offshore 2x2x0,75 mm (stranded)

Copper, tinned (AWG 22/7)  
PP  
wh, ye, bu, og  
Star quad  
Polyester foil over stranded bundle  
FRNC  
Al-Foil  
Cu braid, tinned  
FRNC  
app. 6,5 mm ± 0,4 mm  
Green similar to RAL 6018

## FESTOON 2x2x0.75 mm (stranded)

Copper, tinned (AWG 22/7)  
PE  
wh, ye, bu, og  
Star quad  
Polyester foil over stranded bundle  
PVC  
Al-Foil  
Cu braid, tinned  
PVC  
app. 6,5 mm ± 0,2 mm  
Green similar to RAL 6018

## Electrical data

Characteristic impedance:  
Conductor resistance, max.:  
Insulation resistance, min.:  
Loop resistance:  
Mutual capacitance:  
Test voltage:

100 Ohm ± 15 Ohm at 1 to 100 MHz  
60 Ohm/km  
0,5 GOhm x km  
120 Ohm/km max.  
52 nF/km nom.  
0,7 kV

100 Ohm ± 15 %  
60 Ohm/km  
0,5 GOhm x km  
120 Ohm/km max.  
52 nF/km nom.  
2 kV

## 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)	64,0	57,4	39,0	29,0

## Technical data

Weight:  
bending radius, repeated:  
Operating temperature range min.:  
Operating temperature range max.:  
Caloric load, approx. value:  
Copper weight:

app. 64 kg/km  
50 mm  
-40°C  
+75°C  
0,45 MJ/m  
32,00 kg/km

app. 68 kg/km  
70 mm  
-10°C  
+80°C  
1,20 MJ/m  
32,00 kg/km

## Norms

Applicable standards:

PROFInet Guideline + IEC 61158-2  
Acc. to ISO/IEC 11801  
Acc. to EN 50173  
Category 5e  
Halogen-free acc. to 60754-2  
Flame-retardant acc. to IEC 60332-3  
Corrosiveness acc. to EN50267-2-3  
Low-smoke acc. to EN50268-2  
CMG 75°C PLTC FT4  
CSA FT 4

PROFInet Guideline + IEC 61158-2  
Acc. to ISO/IEC 11801  
Acc. to EN 50173  
Category 5e  
Flame-retardant acc. to IEC 60332-3

UL Style:  
CSA standard:

CMG 75°C or PLTC or AWM 21694 600V  
CSA FT 4

## Application

HELUKAT<sup>®</sup> PROFInet Type B Category 5e SHIPLINE + FESTOON designed specially for marine/offshore applications as well as FESTOON applications. The SHIPLINE version is certified by the **Germanische Lloyd** and suitable for flexible **marine and offshore applications**.

## Part no.

**802185**, PROFInet type B (SK)

**803295**, PROFInet type B (SK)

Dimensions and specifications may be changed without prior notice.