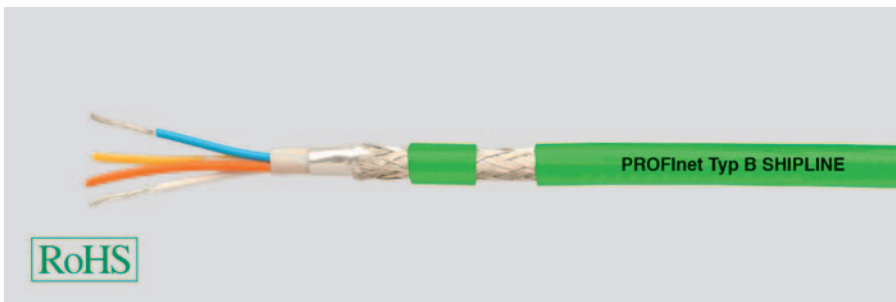


# Industrial Ethernet

PROFInet Typ B

**HELUKAT®**

SHIPLINE + FESTOON



## Type

### Cable structure

Inner conductor diameter:  
Core insulation:  
Core colours:  
Stranding element:  
Shielding 1:  
Inner sheath material:  
Shielding 2:  
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  
Polyester foil, aluminium-lined  
Cu braid, tinned  
FRNC  
approx. 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  
Polyester foil, aluminium-lined  
Cu braid, tinned  
PVC  
approx. 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.  
2 kV

100 Ohm ± 5 %  
60 Ohm/km  
0,5 GOhm x km  
120 Ohm/km max.  
52 nF/km nom.  
0,7 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:

approx. 68 kg/km  
50 mm  
-40°C  
+70°C  
0,45 MJ/m  
32,00 kg/km

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

## Norms

Applicable standards:

PROFInet Guideline  
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  
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

This copper data cable, designed especially for heavy-duty industrial applications is very well suited for Ethernet applications. It ensures superior transmission properties and can be used even under most severe conditions. The lines specified here corresponds the PROFInet type B and are certified by the **Germanische Lloyd** (SHIPLINE), i.e. designed for **flexible marine and offshore** applications and **Festoon** applications.

## Part no.

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

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

Dimensions and specifications may be changed without prior notice.