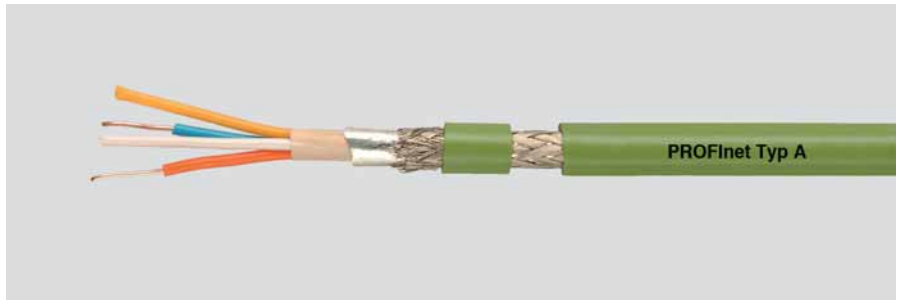


# Industrial Ethernet

PROFInet Type A fixed installed + robust



PVC + PUR



## 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:

## Fixed installation, indoor 2x2x0.64 mm

Copper, bare (AWG 22/1)  
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

## Industrial Area 2x2x0.64 mm

Copper, bare (AWG 22/1)  
PE  
wh, ye, bu, og  
Star quad  
Polyester foil over stranded bundle  
PVC  
Al-Foil  
Cu braid, tinned  
PUR  
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  
57,5 Ohm/km  
5 GOhm x km  
115 Ohm/km max.  
48 nF/km nom.  
2 kV

100 Ohm ± 15 Ohm at 1 to 100 MHz  
62,5 Ohm/km  
0,5 GOhm x km  
115 Ohm/km max.  
50 nF/km nom.  
2 kV

## Typical values

		10	16	62,5	100
Frequency	(MHz)				
Attenuation	(dB/100m)	5,2	6,9	15,0	19,5
Next	(db)	70,0	65,0	55,0	50,0
ACR	(db)	64,8	58,1	40,0	30,5

## Technical data

Weight: app. 67 kg/km  
bending radius, repeated: 65 mm  
Operating temperature range min.: -40°C  
Operating temperature range max.: +80°C  
Caloric load, approx. value: 0,34 MJ/m  
Copper weight: 32,00 kg/km

app. 64 kg/km  
65 mm  
-40°C  
+70°C  
0,91 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  
Flame-retardant acc. to IEC 60332-3  
CMG 75°C or PLTC or AWM 21694 600V  
CSA FT 4

PROFInet Guideline + IEC 61158-2  
Acc. to ISO/IEC 11801  
Acc. to EN 50173  
Category 5e  
Flame-retardant acc. to IEC 60332-1-2

UL Style:  
CSA standard:

-  
-

## Application

HELUKAT® PROFInet Type A Category 5e 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; this means the version with PVC sheath is designed for normal fixed installations and the version with PUR sheath is for difficult fixed installations in harsh industrial environments.

## Part no.

**800653**, PROFInet type A (SK)

**801194**, PROFInet type A (SK)

Dimensions and specifications may be changed without prior notice.

### Ideal accessory:

RJ45 copper connector  
805401 + 805402  
chapter 4, page 294

