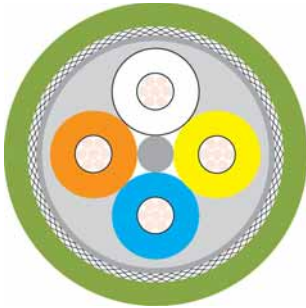


Industrial Ethernet

PROFINet Type B flexible



PVC + FRNC



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:

Mobile use 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

Mobile use 2x2x0,75 mm (stranded)

Copper, tinned (AWG 22/7)
PE
wh, ye, bu, og
Star quad
Polyester foil over stranded bundle
FRNC
Al-Foil
Cu braid, tinned
FRNC
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:
Relative propagation velocity:

100 Ohm ± 15 Ohm at 1 to 100 MHz
57,5 Ohm/km
0,5 GOhm x km
115 Ohm/km max.
48 nF/km nom.
2 kV
65 %

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
-

Typical values

Frequency	(MHz)	10	16	62,5	100
Attenuation	(dB/100m)	6,3	8,0	16,5	21,3
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. 67 kg/km
100 mm
-40°C
+80°C
0,32 MJ/m
32,00 kg/km

app. 65 kg/km
100 mm
-25°C
+75°C
0,32 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

PROFINet Guideline + IEC 61158-2
Acc. to ISO/IEC 11801
Acc. to EN 50173
Category 5e
Halogen-free acc. to 60754-1
Flame-retardant acc. to IEC 60332-3
Corrosiveness acc. to EN50267-2-3
Low-smoke acc. to EN50268-2
CMG 75°C or PLTC or AWM 21279 600V
CSA FT 4

UL Style:

CSA standard:

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

Application

HELUKAT® PROFINet Type B (flexible) Cat.5e for use on moving parts. The cables listed here correspond to the PROFINet classifications Type B for moving cables and are designed to withstand mechanical loads. The version PVC is the standard cable; the FRNC version is used for halogen free requirements.

Part no.

800654, PROFINet type B (SK)

805654, PROFINet type B (SK)

Dimensions and specifications may be changed without prior notice.

Ideal accessory:

RJ45 copper connector
805401 + 805402
chapter 4, page 294

