# **Industrial Ethernet**

# **PROFInet Type A**







#### **Type**

#### **Cable structure**

Inner conductor diameter:
Core insulation:
Core colours:
Stranding element:
Shielding 1:
Inner sheath material:
Shielding 2:
Total shielding:
Armouring:
Outer sheath material:
Cable external diameter:
Outer sheath colour:

#### **Electrical data**

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

# ray loaded areas

# 2x2x0.64 mm

Copper, bare (AWG 22/1)
XLPE ray cross-linking
wh, ye, bu, og
Star quad
Polyester foil over stranded bundle
TPR ray cross-linking
Polyester foil, aluminium-lined
Cu braid, tinned

approx. 6,5 mm  $\pm$  0,2 mm Green similar to RAL 6018

100 0hm ± 15 ohm at 1 to 100 MHz 62 0hm/km 0,5 G0hm x km 124 0hm/km max. 50 nF/km nom. 2 kV

# Fixed installation, outdoor 2x2x0.64 mm

Copper, bare (AWG 22/1)
PE
wh, ye, bu, og
Star quad
Polyester foil over stranded bundle
PVC
Polyester foil, aluminium-lined
Cu braid, tinned
Steel rib
PE
approx. 9,3 mm ± 0,5 mm
Black

100 0hm ± 15 0hm at 1 to 100 MHz 62 0hm/km 0,5 G0hm x km 124 0hm/km max. 50 nF/km nom. 2 kV

# **Typical values**

Frequency	(MHz)	10	16	62,5	100	
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: approx. 63 kg/km approx. 124 kg/km bending radius, repeated: 100 mm 120 mm Operating temperature range min.: -40°C -40°C +80°C +70°C Operating temperature range max.: Caloric load, approx. value: 0,29 MJ/m 2,14 MJ/m Copper weight: 32,00 kg/km 31,00 kg/km

#### Norms

Applicable standards: PROFInet Guideline Acc. to ISO/IEC 11801 Acc. to ISO/IEC 11801 Acc. to EN 50173 Acc. to EN 50173 Category 5e PROFInet Guideline Acc. to EN 50173 Category 5e

#### **Application**

These copper data cables, designed especially for heavy-duty industrial applications are very well suited for Ethernet applications. They ensure superiour transmission properties and can be used even under most severe conditions. The line specified here correspond to the PROFInet type A and because of the special construction with cross-linked inner-jacket and PUR outer-jacket it is suitable for fixed installation applications inside radiated areas and with the PVC inner-jacket/PE outer-jacket it is suitable for areas with rodent problems.

Part no. 801195, PROFinet type A (SK) 801650, PROFinet type A (SK)

Dimensions and specifications may be changed without prior notice.





