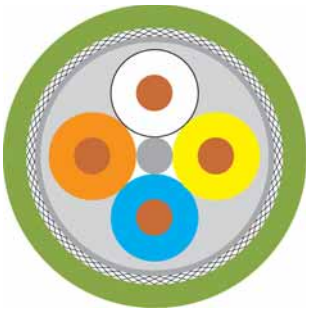
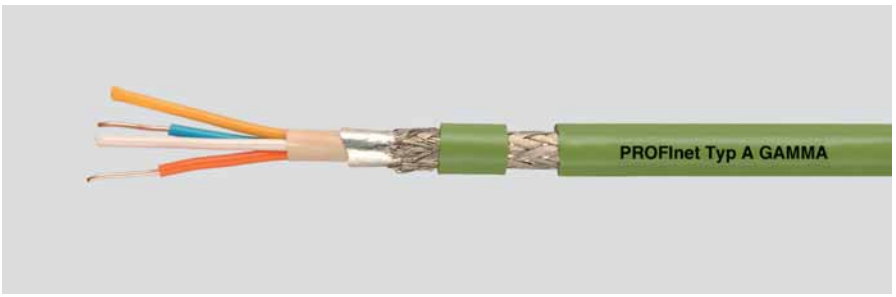
Industrial Ethernet

PROFInet Type A radiation resistant + armoured

HELUKAT®

PUR + PE





Type	**ray loaded areas**	**Fixed installation, outdoor**
Cable structure	**2x2x0.64 mm**	**2x2x0.64 mm**
Inner conductor diameter:	Copper, bare (AWG 22/1)	Copper, bare (AWG 22/1)
Core insulation:	XLPE ray cross-linking	PE
Core colours:	wh, ye, bu, og	wh, ye, bu, og
Stranding element:	Star quad	Star quad
Separator:	Polyester foil over stranded bundle	Polyester foil over stranded bundle
Inner sheath material:	TPR ray cross-linking	PVC
Shielding 1:	Al-Foil	Al-Foil
Total shielding:	Cu braid, tinned	Cu braid, tinned
Armouring:	-	Steel band
Outer sheath material:	PUR	PE
Cable external diameter:	app. 6,5 mm ± 0,2 mm	app. 9,3 mm ± 0,5 mm
Outer sheath colour:	Green similar to RAL 6018	Black

Electrical data

Characteristic impedance:	100 Ohm ± 15 Ohm at 1 to 100 MHz	100 Ohm ± 15 Ohm at 1 to 100 MHz
Conductor resistance, max.:	62 Ohm/km	57,5 Ohm/km
Insulation resistance, min.:	0,5 GOhm x km	0,5 GOhm x km
Loop resistance:	124 Ohm/km max.	115 Ohm/km max.
Mutual capacitance:	50 nF/km nom.	50 nF/km nom.
Test voltage:	2 kV	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:	app. 63 kg/km	app. 124 kg/km
bending radius, repeated:	100 mm	100 mm
Operating temperature range min.:	-40°C	-40°C
Operating temperature range max.:	+80°C	+70°C
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 + IEC 61158-2 Acc. to ISO/IEC 11801 Acc. to EN 50173 Category 5e	PROFInet Guideline + IEC 61158-2 Acc. to ISO/IEC 11801 Acc. to EN 50173 Category 5e

Application

HELUKAT® PROFInet Type A Cat 5e is radiation-resistant + armoured for fixed installation in industrial networks. It guarantees excellent transmission characteristics and may be used even under the harshest conditions. The cables listed here correspond to PROFInet Type A and thanks to their special construction with cross-linked PVC-inner sheath/PUR outer sheath are well-suited for fixed applications inside irradiated areas, while the armoured type with PVC inner sheath/PE outer sheath is ideal 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.