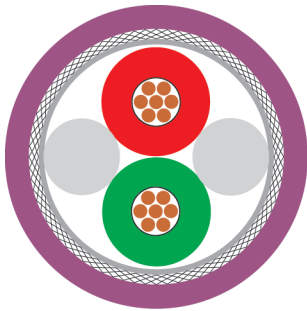


# BUS Cables

HELUKABEL® BUS Cables Profibus L2 Torsion + Festoon

 **HELUKABEL®**

PUR + PVC



## Type

### Cable structure

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

### Torsional applications 1x2x0.80 mm (stranded)

Copper, bare (AWG 22/19)  
Foam-skin-PE  
rd, gn  
2 cores + filler  
Polyester foil over stranded bundle  
Al-Foil  
Cu braid, tinned  
PUR  
app. 8,0 mm ± 0,4 mm  
Violet similar to RAL 4001

### FESTOON

### 1x2x0.65 mm (stranded)

Copper, bare (AWG 23/19)  
Cell PE  
rd, gn  
2 cores + 2 fillers stranded together  
Polyester foil over stranded bundle  
Al-Foil  
Cu braid, tinned  
PVC  
app. 8,0 mm ± 0,3 mm  
Petrol similar to RAL 5018

## Electrical data

Characteristic impedance:  
Conductor resistance, max.:  
Insulation resistance, min.:  
Loop resistance:  
Mutual capacitance:  
Test voltage:  
Relative propagation velocity:  
Attenuation:

150 Ohm ± 10 %  
49 Ohm/km  
1,6 GOhm x km  
98 Ohm/km max.  
29 nF/km nom.  
3,6 kV  
-  
9,6 kHz < 2,5 dB/km  
38,4 kHz < 3,0 dB/km  
4 MHz < 25,0 dB/km  
16 MHz < 49,0 dB/km

150 Ohm ± 10 %  
66,5 Ohm/km  
1,6 GOhm x km  
133 Ohm/km max.  
28 nF/km nom.  
2 kV  
81 %  
9,6 kHz ≤ 3,0 dB/km  
38,4 kHz ≤ 4,0 dB/km  
4 MHz ≤ 25,0 dB/km  
16 MHz ≤ 49,0 dB/km

## Technical data

Weight:  
bending radius, repeated:  
Operating temperature range min.:  
Operating temperature range max.:  
Caloric load, approx. value:  
Copper weight:

app. 66 kg/km  
100 mm  
-25°C  
+75°C  
0,89 MJ/m  
32,00 kg/km

app. 64 kg/km  
70 mm  
-40°C  
+60°C  
1,09 MJ/m  
23,00 kg/km

## Norms

Applicable standards:

Profibus acc. to DIN 19245 T3 and EN50170  
Halogen-free acc. to 60754-1  
Flame-retardant acc. to IEC 60332-1-2  
CMX 75°C (shielded)

Profibus acc. to DIN 19245 T3 and EN50170  
Flame-retardant acc. to IEC 60332-1-2

UL Style:

CMG 75°C FT4 or CL2 or AWM 21694 600V  
SUN RES  
CSA FT 4

CSA standard:

-

## Application

HELUKABEL® Profibus Torsion is used in mobile applications in robots. The special torsion construction allows this cable to be twisted (torsioned) and is halogen-free thanks to use PU sheath. The Festoon version is used for hanging/moving loads in garland applications.

## Part no.

**800109**, Profibus L2

**800649**, Profibus L2

Dimensions and specifications may be changed without prior notice.