

# BUS Cables

E-BUS



PVC



## Type Cable structure

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

## 2-pairs 2x2x0.8 mm

Copper, bare  
PVC  
wh, ye, rd, bk  
Star quad  
Polyester foil over stranded bundle  
-  
Polyester foil, aluminium-lined  
yes  
PVC  
app. 6,6 mm ± 0,3 mm  
Blue Lilac similar to RAL 4005

## 2-pairs 2x2x0.8 mm

Copper, bare  
PVC  
wh, ye, rd, bk  
Star quad  
Polyester foil over stranded bundle  
-  
Polyester foil, aluminium-lined  
yes  
PVC  
app. 6,6 mm ± 0,3 mm  
Green similar to RAL 6010

## Electrical data

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

100 Ohm  
73,2 Ohm/km  
0,1 GOhm x km  
146 Ohm/km max.  
100 nF/km nom.  
4 kV

100 Ohm  
73,2 Ohm/km  
0,1 GOhm x km  
146 Ohm/km max.  
100 nF/km nom.  
4 kV

## Technical data

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

app. 64 kg/km  
95 mm  
-30°C  
+70°C  
0,90 MJ/m  
25,00 kg/km

app. 64 kg/km  
95 mm  
-30°C  
+70°C  
0,90 MJ/m  
25,00 kg/km

## Norms

Applicable standards:

EIB standard  
Flame-retardant acc. to EN 50265-2-1

EIB standard  
Flame-retardant acc. to EN 50265-2-1

## Application

HELUKABEL® E-BUS PVC for fixed installation. The E-Bus cable is intended for transmission of bus signals in intelligent building systems. The cables ensure perfect communication in compliance with EIB regulations. They can be installed over, in and under plaster, in conduits and cable channels, in dry, damp and wet rooms as well as outdoors - if protected from direct sunlight. Wiring together with high-power cables is possible without limitation. The EIB bus can be used to control lighting, blinds, heating, ventilation, indicator boards etc.

## Part no.

81081, E-BUS

81663, E-BUS

Dimensions and specifications may be changed without prior notice.

# BUS Cables

E-BUS



FRNC + PVC



## Type Cable structure

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

## 2-pairs 2x2x0.8 mm

Copper, bare  
PE  
wh, ye, rd, bk  
Star quad  
Polyester foil over stranded bundle  
-  
Polyester foil, aluminium-lined  
yes  
FRNC  
app. 6,6 mm ± 0,3 mm  
Blue Lilac similar to RAL 4005

## 4-pairs 4x2x0.8 mm

Copper, bare  
PVC  
wh, ye, rd, gn, bu, bn, wh, wh  
Double core  
Polyester foil over stranded bundle  
-  
Polyester foil, aluminium-lined  
yes  
PVC  
app. 8,2 mm ± 0,4 mm  
Blue Lilac similar to RAL 4005

## Electrical data

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

100 Ohm  
73,2 Ohm/km  
0,1 GOhm x km  
146 Ohm/km max.  
100 nF/km nom.  
4 kV

100 Ohm  
73,2 Ohm/km  
0,1 GOhm x km  
146 Ohm/km max.  
100 nF/km nom.  
4 kV

## Technical data

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

app. 54 kg/km  
95 mm  
-30°C  
+70°C  
0,58 MJ/m  
25,00 kg/km

app. 92 kg/km  
120 mm  
-30°C  
+70°C  
1,37 MJ/m  
41,00 kg/km

## Norms

Applicable standards:

EIB standard  
Halogen-free acc. to 60754-2  
Flame-retardant acc. to EN 50265-2-1

EIB standard  
Flame-retardant acc. to EN 50265-2-1

## Application

HELUKABEL® E-BUS FRNC + PVC for fixed installation. If the application requires a halogen-free installation, the FRNC version is the right choice. The E-Bus cable is intended for transmission of bus signals in intelligent building systems. The cables ensure perfect communication in compliance with EIB regulations. They can be installed over, in and under plaster, in conduits and cable channels, in dry, damp and wet rooms as well as outdoors - if protected from direct sunlight. Wiring together with high-power cables is possible without limitation. The EIB bus can be used to control lighting, blinds, heating, ventilation, indicator boards etc.

## Part no.

80826, E-BUS

81077, E-BUS

Dimensions and specifications may be changed without prior notice.

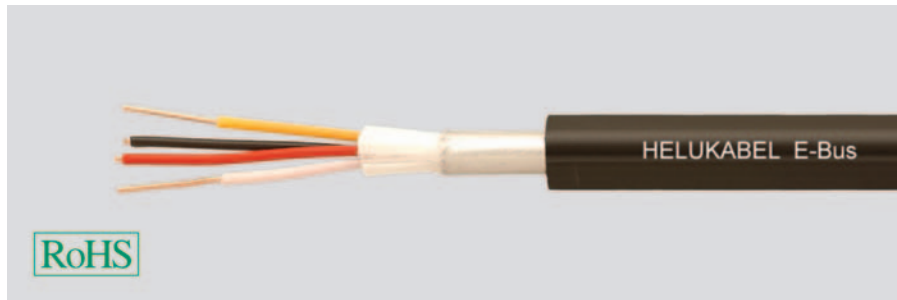
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# BUS Cables

## E-BUS DIRECT BURIAL



PE, ERD



### Type Cable structure

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

### Direct burial 2x2x0.8 mm

Copper, bare  
PE  
wh, ye, rd, bk  
Star quad  
Polyester foil over stranded bundle  
-  
Polyester foil, aluminium-lined  
PE  
app. 8,8 mm ± 0,3 mm  
Black similar to RAL 9005

### Electrical data

Characteristic impedance: 100 Ohm  
Conductor resistance, max.: 73,2 Ohm/km  
Insulation resistance, min.: 5 GOhm x km  
Loop resistance: 146 Ohm/km max.  
Mutual capacitance: 55 nF/km nom.  
Test voltage: 0,8 kV

### Technical data

Weight: app. 75 kg/km  
bending radius, repeated: 130 mm  
Operating temperature range min.: -20°C  
Operating temperature range max.: +70°C  
Caloric load, approx. value: 2,00 MJ/m  
Copper weight: 25,00 kg/km

### Norms

Applicable standards: EIB standard  
Halogen-free acc. to 60754-2

### Application

HELUKABEL® E-BUS ERD with PE jacket for fixed installation in the ground or outdoors and as a connection between buildings or to EIB components on the building. They can be installed over, in and under plaster, in conduits and cable channels, in dry, damp and wet rooms as well as outdoors - if protected from direct sunlight. Wiring together with high-power cables is possible without limitation. The EIB bus can be used to control lighting, blinds, heating, ventilation, indicator boards etc.

### Part no.

**802800**, E-BUS BURIAL

Dimensions and specifications may be changed without prior notice.