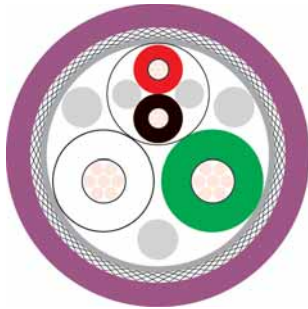


# BUS Cables

## USB Bus S 2.0 drag chain



### Type

#### Cable structure

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

### Drag chain applications

#### 1x2xAWG28 + 1x2xAWG20

Copper, tinned (AWG 28/19)  
Copper, tinned (AWG 20/64)  
PP  
PP  
wh, gn  
rd, bk  
2 cores + 2 fillers stranded together  
Polyester foil over stranded bundle  
-  
AL-Foil + braid  
PUR  
app. 5,0 mm ± 0,2 mm  
Violet similar to RAL 4001

### Electrical data

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

90 Ohm ± 15 %  
230 Ohm/km  
0,1 GOhm x km  
460 Ohm/km max.  
60 nF/km nom.  
0,5 kV

### Typical values

Frequency (MHz)	1	10	16	62,5	100	200	300	400
Attenuation (db/100m)	4,5	12,0	15,4	31,0	39,0	60,0	76,2	99,0

### Technical data

Weight: app. 45 kg/km  
bending radius, repeated: 50 mm  
Operating temperature range min.: -30°C  
Operating temperature range max.: +70°C  
Caloric load, approx. value: 0,55 MJ/m  
Copper weight: 30,00 kg/km

### Norms

Applicable standards: USB-Standard 2.0  
Halogen-free acc. to 60754-1  
Flame-retardant CSA FT1  
UL Style: AWM 20963 (80°C/30V)  
CSA standard: CSA FT1

### Application

HELUKABEL® USB BUS S is designed for continuous moving in cable carriers and lengths up to max. 5m. Conventional USB cables fail within a short period of time, which is why HELUKABEL developed this special cable. Thanks to the PUR sheath, it also offers excellent resistance to common mineral oils, greases and cooling lubricants.

### Part no.

**802469**, USB S

Dimensions and specifications may be changed without prior notice.