



## UNITRONIC® BUS IBS



**Info**

- IBS - INTERBUS

### Benefits

- Certified by INTERBUS CLUB

### Application range

- Fixed installation

### Product features

- IBS cable - for fixed installation
- Remote bus cable + installation remote bus cable
- The stated bit rates result in the following cable lengths (maximum) of one bus segment:  
500 kbit/s = max. 400 m
- Flame-retardant according IEC 60332-1-2

### Norm references / Approvals

- In accordance with DIN 19258 and EN 50254

### Product Make-up

- UNITRONIC® BUS IBS
- Stranded conductor, bare, core identification code in accordance with DIN 47100, braided copper, PVC outer sheath, violet (RAL 4001)
- UNITRONIC® BUS IBS P COMBI
- Stranded conductor, bare, core identification code in accordance with DIN 47100 (data), stranded, bare (power supply), copper braid, PUR outer sheath, violet (RAL 4001), halogen-free
- UNITRONIC® BUS IBS A is as per UNITRONIC BUS IBS, but with UL/CSA certification

### Technical data

- ETIM 5.0 Class-ID: EC000830  
ETIM 5.0 Class-Description: Data cable
- Mutual capacitance**  
(800 Hz): max. 60 nF/km
- Peak operating voltage**  
(not for power applications) 250 V
- Conductor resistance**  
(loop): max. 186 ohm/km
- Minimum bending radius**  
Fixed installation: 8 x outer diameter
- Test voltage**  
Core/core: 1500 V rms
- Characteristic impedance**  
100 Ohm
- Temperature range**  
Fixed installation:  
-30°C to +80°C  
Flexing: -5°C to +70°C

Article number	Cable type	Article designation	Number of pairs and mm <sup>2</sup> per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
<b>for fixed installation</b>						
2170206	Remote bus cable (RBC)	UNITRONIC® BUS IBS	3 x 2 x 0.22	7.2	37	72
2170208	Installation remote bus cable (INBC)	UNITRONIC® BUS IBS P COMBI	3 x 2 x 0,22 + 3 x 1,0	7.9	60	85
<b>For fixed installation - UL/CSA CMX certification</b>						
2170209	Remote bus cable (RBC)	UNITRONIC® BUS IBS A	3 x 2 x 0.22	7.2	37	72

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.  
Copper price basis: EUR 150/100 kg. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges.  
Please find our standard lengths at: [www.lappkabel.de/en/cable-standardlengths](http://www.lappkabel.de/en/cable-standardlengths)  
Packaging size: coil ≤ 30 kg or ≤ 250 m, otherwise drum  
Please specify the preferred type of packaging (e.g. 1 x 500 m drum or 5 x 100 m coils).  
INTERBUS is a registered trademark of Phoenix Contact GmbH & Co.  
Photographs are not to scale and do not represent detailed images of the respective products.

### Accessories

- SENSOR STRIP stripping tool refer to page 1003



**UNITRONIC® BUS IBS Yv**



**Benefits**

- Certified by INTERBUS CLUB

**Application range**

- Suitable for outdoor use and direct burial

**Product features**

- IBS cable - for outdoor use or direct burial, UV-resistant (remote bus cable + installation remote bus cable)
- The stated bit rates result in the following cable lengths (maximum) of one bus segment:
- 500 kBit/s = max. 400 m
- Flame-retardant according IEC 60332-1-2

**Norm references / Approvals**

- In accordance with DIN 19258 and EN 50254

**Product Make-up**

- Data: stranded bare conductor, core colours: white-brown/green-yellow/grey-pink
- Power supply: stranded bare conductor, colours: red, blue, green/yellow
- Overall copper wire braiding
- Reinforced PVC outer sheath
- Colour: black (RAL 9005)

**Technical data**

	ETIM 5.0 Class-ID: EC000830 ETIM 5.0 Class-Description: Data cable
	<b>Mutual capacitance</b> (800 Hz): max. 60 nF/km
	<b>Peak operating voltage</b> (not for power applications) 250 V
	<b>Conductor resistance</b> (loop): max. 186 ohm/km
	<b>Minimum bending radius</b> Fixed installation: 8 x outer diameter
	<b>Test voltage</b> Core/core: 1500 V rms
	<b>Characteristic impedance</b> 100 Ohm
	<b>Temperature range</b> Fixed installation: -40°C to +70°C

Article number	Cable type	Article designation	Number of pairs and mm <sup>2</sup> per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
<b>Suitable for outdoor use and direct burial, UV-resistant</b>						
2170207	Remote bus cable (RBC)	UNITRONIC® BUS IBS Yv	3 x 2 x 0.22	9.3	37	94
2170217	Installation remote bus cable (INBC)	UNITRONIC® BUS IBS Yv COMBI	3 x 2 x 0,22 + 3 x 1,0	9.4	60	128

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.  
Copper price basis: EUR 150/100 kg. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges.  
Please find our standard lengths at: [www.lappkabel.de/en/cable-standardlengths](http://www.lappkabel.de/en/cable-standardlengths)  
Packaging size: coil ≤ 30 kg or ≤ 250 m, otherwise drum  
Please specify the preferred type of packaging (e.g. 1 x 500 m drum or 5 x 100 m coils).  
INTERBUS is a registered trademark of Phoenix Contact GmbH & Co.  
Photographs are not to scale and do not represent detailed images of the respective products.



## UNITRONIC® BUS IBS FD P



**Info**

- IBS - INTERBUS

### Benefits

- Certified by INTERBUS CLUB

### Application range

- For highly flexible use in energy supply chains or permanently moving machines and linear robots
- Dry or damp rooms
- Harsh industrial environment

### Product features

- IBS cable - for highly flexible application
- Remote bus cable + installation remote bus cable
- 500 kbit/s = max. 400 m (remote bus cable)
- Max. 50 m (installation remote bus cable)
- PUR outer sheath, tear and notch-resistant, resistant to mineral oils and abrasion when used in power chains

### Norm references / Approvals

- In accordance with DIN 19258 and EN 50254

### Product Make-up

- UNITRONIC® BUS IBS FD P
- Stranded conductor, bare, core identification code in accordance with DIN 47100, braided copper wire for overall screening, PUR outer sheath, violet (RAL 4001), halogen-free, flame-retardant in accordance with IEC 60332-1-2.
- UNITRONIC® BUS IBS FD P COMBI
- Bare stranded copper wire conductor, cores twisted to pairs, core colours: white/brown / green/yellow / grey/pink (data). Bare copper wire stranded conductor, core colours: red, blue, green/yellow (power supply).
- Overall screening of braided copper, PUR outer sheath (violet, RAL 4001), halogen-free, flame-retardant according to IEC 60332-1-2.

### Technical data

- ETIM 5.0 Class-ID: EC000830  
ETIM 5.0 Class-Description: Data cable
- Mutual capacitance**  
(800 Hz): max. 60 nF/km
- Peak operating voltage**  
(not for power applications) 250 V
- Conductor resistance**  
(loop): max. 159.8 ohm/km
- Minimum bending radius**  
Flexing: 15 x outer diameter
- Test voltage**  
Core/core: 1500 V rms
- Characteristic impedance**  
100 Ohm
- Temperature range**  
Fixed installation: -40°C to +80°C  
Flexing: -30°C to +70°C

Article number	Cable type	Article designation	Number of pairs and mm <sup>2</sup> per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
<b>For highly flexible applications (power chains, moving machine parts)</b>						
2170216	Remote bus cable (RBC)	UNITRONIC® BUS IBS FD P	3 x 2 x 0.25	7.9	39	64
2170218	Installation remote bus cable (INBC)	UNITRONIC® BUS IBS FD P COMBI	3 x 2 x 0,25 + 3 x 1,0	7.9	62	92
<b>For highly flexible applications (e.g. power chains) - with UL/CSA (CMX) certification</b>						
2170818	Installation remote bus cable (INBC)	UNITRONIC® BUS IBS FD P COMBI A	3 x 2 x 0,25 + 3 x 1,0	7.9	62	92

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.  
 Copper price basis: EUR 150/100 kg. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges.  
 Please find our standard lengths at: [www.lappkabel.de/en/cable-standardlengths](http://www.lappkabel.de/en/cable-standardlengths)  
 Packaging size: coil ≤ 30 kg or ≤ 250 m, otherwise drum  
 Please specify the preferred type of packaging (e.g. 1 x 500 m drum or 5 x 100 m coils).  
 INTERBUS is a registered trademark of Phoenix Contact GmbH & Co.  
 Photographs are not to scale and do not represent detailed images of the respective products.

### Accessories

- SILVYN® CHAIN
- Multipurpose shears A and B refer to page 998
- SMART STRIP stripping tool