

# Bus cables · Profibus

## LÜTZE ELECTRONIC Profibus (C) PVC



### Application

- For the cabling of industrial field bus systems like PROFIBUS DP, F.I.P.
- With solid conductor AWG22/1 for fixed wiring or with stranded conductor for moving applications without continuous flexing in the automation technology, transport and conveyor technology, machine tool manufacture

### Properties

- High active and passive interference resistance (EMC)
- Silicone free
- RoHS-compliant

### Technical data

Rated voltage	250 V
Test voltage	AC 1500 V
Loop resistance	AWG 22: ≤ 110 mΩ/m AWG 18: ≤ 39 mΩ/m
Impedance	AWG 22: approx. 150 Ω AWG 18: approx. 100 Ω
Operating capacitance wire-wire	AWG 22: approx. 30 pF/m AWG 18: approx. 52 pF/m
Temperature range moving	-5 °C ... +70 °C
Temperature range fixed	-30 °C ... +80 °C
Minimum bending radius moving	12×D
Minimum bending radius fixed	6×D
Burning behavior according to	IEC 60332-1 DIN EN 60332-1-2 VDE 0482 322-1-2
Conformity	CE RoHS

### Construction

- Conductor: AWG conductor, CU-wire bare
- Conductor insulation: Special Polyolefin
- Overall shield: Foil shield, Braid shield, Tinned copper wires, optical cover approx. 70%
- Jacket material: PVC
- Jacket color: violet RAL 4001, blue RAL 5015, black RAL 9005

Part-No.	Number of strands/ cross-section/ strand colors	Jacket color	Outer Ø mm	Weight kg/100 m	Cu-Index kg/100 m
<b>Profibus DP/FMS/FIP</b>					
104214	S* (1×2×AWG22/7)StC red, green	violet RAL 4001	7.8	6.8	3.0
<b>Profibus DP/FMS/FIP with inner jacket, halogen-free jacket (HM)</b>					
104267	S* (1×2×AWG22/1)StC FC red, green	violet RAL 4001	8.0	7.6	3.0

CE These products are in conformity with the EU Low Voltage Directive 2014/35/EU

# PVC Bus cables · Profibus

## LÜTZE ELECTRONIC Profibus (C) PVC



### Application

- For the cabling of industrial field bus systems like PROFIBUS DP, F.I.P.
- With solid conductor AWG22/1 for hard wiring or with 7-wire stranded conductor for moving use without continuous flexing in the automation technology, transport and conveyor technology, machine tool manufacture

### Properties

- High active and passive interference resistance (EMC)
- Silicone free
- RoHS-compliant

### Technical data

Rated voltage	300 V
Test voltage	AC 1500 V
Loop resistance	AWG 22: ≤ 110 mΩ/m AWG 24: ≤ 165 mΩ/m
Impedance	approx. 150 Ω
Operating capacitance wire-wire	approx. 30 pF/m
Temperature range moving	-10 °C ... +70 °C
Temperature range fixed	-40 °C ... +80 °C
Minimum bending radius moving	15×D
Minimum bending radius fixed	7.5×D
Burning behavior according to	IEC 60332-1-2 CMX: FT1 UL 1581 CMG: FT4 UL 1685
Conformity	CE RoHS REACH
Approvals	CMX cULus cURus

### Construction

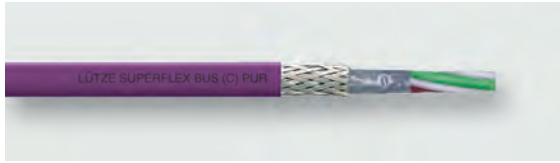
- Conductor: AWG conductor, CU-wire bare
- Conductor insulation: Special Polyolefin
- Inner jacket: PVC for version with fast connection
- Overall shield: Aluminium laminate, Foil shield, Braid shield, Tinned copper wires
- Jacket material: Special PVC
- Jacket color: violet RAL 4001

Part-No.	Number of strands/cross-section/strand colors	Outer Ø mm	Weight kg/100 m	Cu-Index kg/100 m
<b>Profibus DP/FMS/FIP, Flexible UL/CMG 75 °C, AWM 20201 600 V</b>				
104344 S*	(1×2×AWG24/7) red, green	8.0	7.2	3.0
<b>Profibus DP/FMS/FIP, Fast Connection FC UL/CMG, AWM 20201 600 V</b>				
104293 S*	(1×2×AWG22/1) red, green	8.0	7.6	3.0

CE These products are in conformity with the EU Low Voltage Directive 2014/35/EU

# PUR Bus cables · Profibus · C-track compatible

## LÜTZE SUPERFLEX® Profibus (C) PUR For highest requirements



### Application

- For the cabling of industrial field bus systems like PROFIBUS DP, SINEC L2, F.I.P.
- For continuous flexible use e.g. in c-tracks or free movement in automation technology, transport and conveyor technology, machine tool manufacture

### Properties

- High active and passive interference resistance (EMC)
- Silicone free
- Halogen free
- RoHS-compliant

### Technical data

Rated voltage	300 V
Test voltage	AC 1500 V
Loop resistance	≤ 165 mΩ/m
Impedance	approx. 150 Ω
Operating capacitance wire-wire	approx. 30 pF/m
Temperature range moving	-30 °C ... +70 °C
Temperature range fixed	-40 °C ... +80 °C
Minimum bending radius moving	7.5×DFast Connection FC15×D
Minimum bending radius fixed	5×DFast Connection FC7.5×D
Burning behavior according to	IEC 60332-1 DIN EN 60332-1-2 UL 1581 Part VW-1 Flame Test UL FT1
Halogen free according to	DIN EN 60754-1 IEC 60754-1
Conformity	CE RoHS REACH
Approvals	CMX cULus cURus

Part-No.	Number of strands/cross-section/strand colors	Outer Ø mm	Weight kg/100 m	Cu-Index kg/100 m
<b>Profibus, highly flexible UL/CMX, AWM 21198 300 V</b>				
104265 S*	(1×2×AWG24/19)	8.0	6.5	3.0
<b>Profibus Fast Connection FC UL/CMX, AWM 21198 300 V</b>				
104287 S*	(1×2×AWG24/19)	8.0	8.0	3.0
<b>Profibus ET200 UL AWM 21198 300 V</b>				
104275 S*	(3G0.75+(1×2×AWG24/19)St)C	9.8	14.4	6.6

### Construction

- Conductor: AWG conductor, CU-wire bareWire AWG 24/19 = 0.64∅
- Conductor insulation: Special Polyolefin
- Inner jacket: PE for version with fast connection FC
- Overall shield: Aluminium laminate, Foil shield, Braid shield, Tinned copper wires
- Jacket material: PUR
- Surface: adhesion-free, matt
- Jacket color: violet RAL 4001

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# PVC Bus cables · ETHERNET

## LÜTZE ELECTRONIC ETHERNET (C) PVC



### Application

- For the cabling of industrial field bus systems with the globally accepted TCP/IP protocol
- For fixed installation or mobile use without continuous flexing in automation technology, transport, conveyor technology and machine tools

### Properties

- High active and passive interference resistance (EMC)
- Silicone free
- RoHS-compliant

### Technical data

Rated voltage	300 V
Test voltage	AC 1500 V
Impedance	approx. 100 Ω
Loop resistance	AWG 22: ≤ 115 mΩ/m AWG 24: ≤ 165 mΩ/m AWG 26: ≤ 273 mΩ/m
Operating capacitance wire-wire	approx. 48 pF/m
Temperature range moving	-10 °C ... +70 °C
Temperature range fixed	-40 °C ... +80 °C
Minimum bending radius moving	15×D
Minimum bending radius fixed	10×D
Burning behavior according to	IEC 60332-3-24 CMG: FT4 UL 1685
Conformity	CE RoHS REACH
Approvals	PLTC CMG cULus cURus

### Construction

- Conductor: AWG conductor, CU-wire bare
- Conductor insulation: Special Polyolefin
- Overall shield: Foil shield, Braid shield, Tinned copper wires, optical cover approx. 85%
- Jacket material: PVC
- Surface: adhesion-free, matt
- Jacket color: green RAL 6018

Part-No.	Number of strands/cross-section/strand colors	Outer Ø mm	Weight kg/100 m	Cu-Index kg/100 m
<b>ELECTRONIC Industrial Ethernet/Profinet/EtherCat</b>				
104301 S*	(2×2×AWG22/1)StC AWM 20201 Cat.5e star quad stranding white, yellow, blue, orange	6.5	6.8	3.2
104307 S*	(2×2×AWG22/7)StC AWM 20201 Cat.5e star quad stranding white, yellow, blue, orange	6.5	6.9	3.2
104397 S*	(4×2×AWG22/1)StC AWM 2570 Cat.6A stranded pairs white/blue, blue, white/orange, orange, white/green, green, white/ brown, brown	9.6	9.6	5.3
<b>ELECTRONIC Industrial Ethernet/Ethernet IP</b>				
104335 S*	(4×2×AWG26/7)StC Cat.5e stranded pairs white/blue, blue, white/orange, orange, white/green, green, white/ brown, brown	6.3	5.5	3.0
104336 S*	(4×2×AWG24/7)StC Cat.5e stranded pairs white/blue, blue, white/orange, orange, white/green, green, white/ brown, brown	7.3	6.9	3.8
104338 S*	(4×2×AWG26/7)StC Cat.6A stranded pairs white/blue, blue, white/orange, orange, white/green, green, white/ brown, brown	6.4	5.8	3.3
104331 S*	(4×2×AWG26/7)StC Cat.7 stranded pairs white/blue, blue, white/orange, orange, white/green, green, white/ brown, brown	6.4	5.8	3.3

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# PVC Bus cables · ETHERNET

## LÜTZE ELECTRONIC ETHERNET (C) PVC



### Application

- For the cabling of industrial field bus systems with the globally accepted TCP/IP protocol
- For fixed installation or mobile use without continuous flexing in automation technology, transport, conveyor technology and machine tools

### Properties

- High active and passive interference resistance (EMC)
- Silicone free
- RoHS-compliant

### Technical data

Rated voltage	300 V
Test voltage	1000 V
Impedance	approx. 100 Ω
Loop resistance	≤ 114.8 mΩ/m
Operating capacitance wire-wire	approx. 50 pF/m
Temperature range moving	-25 °C ... +70 °C
Temperature range fixed	-40 °C ... +80 °C
Minimum bending radius moving	12×D
Minimum bending radius fixed	6×D
UL style	AWM 2570
Burning behavior according to	DIN EN 60332-3-24 UL 1685 UL FT4
Conformity	CE RoHS
Approvals	cULus PLTC cURus

Part-No.	Number of strands/cross-section/strand colors	Outer Ø mm	Weight kg/100 m	Cu-Index kg/100 m
104350 S*	(4×2×AWG22/7) AWM 2570 white/blue, blue, white/orange, orange, white/green, green, white/ brown, brown	8.6	9.2	4.8

### Construction

- Conductor: AWG conductor, CU-wire tin-plated
- Conductor insulation: foamed polyolefin
- Overall shield: aluminium-laminated film shield, Braid shield, Tinned copper wires, optical cover approx. 85%
- Jacket material: PVC
- Jacket color: green RAL 6018

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# PUR Bus cables · ETHERNET · C-track compatible

## LÜTZE SUPERFLEX® ETHERNET (C) PUR For highest requirements



### Application

- For the cabling of industrial field bus systems with the globally accepted TCP/IP protocol
- For continuous flexing use e.g. in c-tracks or free movement in the automation technology, transport and conveyor technology, machine tool manufacture

### Properties

- High active and passive interference resistance (EMC)
- Silicone free
- Halogen free
- RoHS-compliant

### Technical data

Rated voltage	300 V
Test voltage	AC 1500 V
Impedance	approx. 100 Ω
Loop resistance	AWG 22: ≤ 110 mΩ/m AWG 24: ≤ 159.5 mΩ/m AWG 26: ≤ 280 mΩ/m

Operating capacitance wire-wire approx. 48 pF/m

Temperature range moving -30 °C ... +70 °C

Temperature range fixed -40 °C ... +80 °C

Minimum bending radius moving 12×D

Minimum bending radius fixed 6×D

Burning behavior according to IEC 60332-1  
DIN EN 60332-1-2  
VDE 0482 322-1-2  
UL 1581 Part VW-1 Flame Test  
UL FT1

Halogen free according to DIN EN 60754-1  
IEC 60754-1

Conformity CE  
RoHS  
REACH

Approvals CMX  
cULus

### Construction

- Conductor: AWG conductor, CU-wire bare
- Conductor insulation: Special Polyolefin
- Overall shield: Braid shield, Tinned copper wires, optical cover approx. 85%
- Jacket material: PUR
- Surface: adhesion-free, matt
- Jacket color: green RAL 6018

Part-No.	Number of strands/cross-section/strand colors	Outer Ø mm	Weight kg/100 m	Cu-Index kg/100 m
<b>SUPERFLEX Industrial Ethernet/ProfiNet/Ethercat</b>				
104302	S* (2×2×AWG22/19)C Cat.5e star quad stranding blue, white, yellow, orange	6.6	6.3	3.2
104303	S* (2×2×AWG22/7)C Cat.5e star quad stranding blue, white, yellow, orange	6.5	6.5	3.0
104401	S* (4×2×AWG24/7)StC AWM 21198 Cat.6 <sub>A</sub> stranded pairs white, blue, white, orange, white, green, white, brown	8.9	8.8	4.0
<b>SUPERFLEX Industrial Ethernet/Ethernet IP</b>				
104379	S* (2×2×AWG26/19)StC AWM 21198 Cat.5e star quad stranding white, blue, yellow, orange	5.3	3.5	1.8
104337	S* (4×2×AWG24/19)C AWM 21198 Cat.5e stranded pairs white/blue, blue, white/orange, orange, white/green, green, white/ brown, brown	7.8	8.5	4.4
104396	S* (4×2×AWG26/19)StC AWM 21198 Cat.5e stranded pairs white/blue, blue, white/orange, orange, white/green, green, white/ brown, brown	6.7	5.1	2.8
104347	S* (4×2×AWG26/19)StC Cat.6 stranded pairs white/blue, blue, white/orange, orange, white/green, green, white/ brown, brown	7.9	7.4	3.4

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