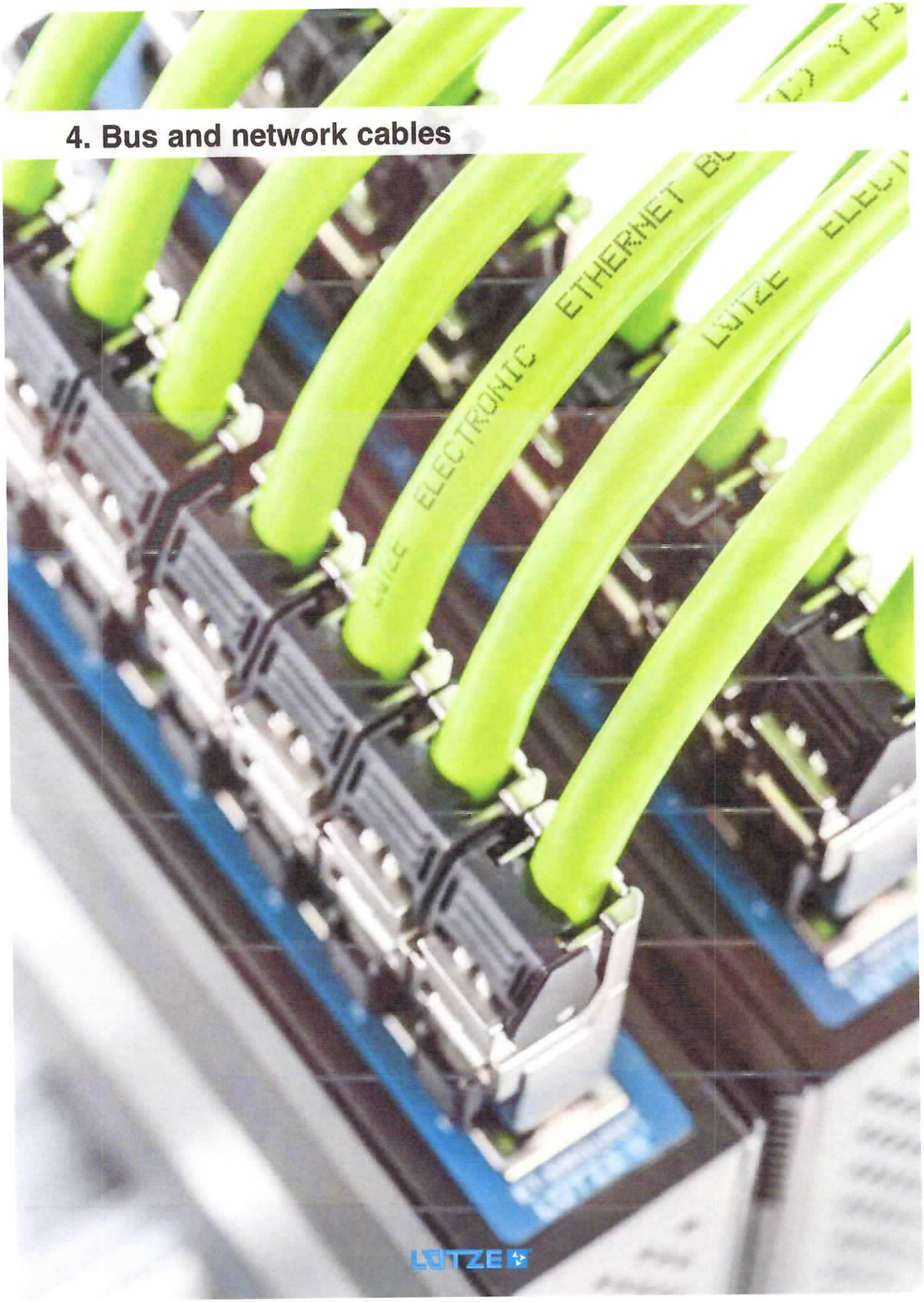
4. Bus and network cables



4. Bus and network cables

	Jacket	Shielding	Approval	Application	
LÜTZE ELECTRONIC ASI BUS TPE	TPE		CE	For Stationary and Flexible Applications within Machine- and Plant Wiring According to ASI BUS standard	4.3
LÜTZE ELECTRONIC Profibus (C) PVC	PVC	•	CE	For Stationary and Flexible Applications within Machine- and Plant Wiring According to Profibus standard	4.4
LÜTZE ELECTRONIC Profibus (C) PVC	PVC	•	CE	For Stationary and Flexible Applications within Machine- and Plant Wiring According to Profibus standard	4.5
LÜTZE SUPERFLEX® Profibus (C) PUR	PUR	•	CE, UL	Continuous Moving in Drag Chains According to Profibus standard with international approvals For highest requirements	4.6
LÜTZE ELECTRONIC CAN-BUS (C) PVC	PVC	•	CE, UL	For Stationary and Flexible Applications within Machine- and Plant Wiring According to CAN-BUS standard with international approvals	4.7
LÜTZE SUPERFLEX® CAN-BUS (C) PUR	PUR		CE, UL	Continuous Moving in Drag Chains According to CAN-BUS standard with international approvals For extremely harsh operating conditions	4.8
LÜTZE ELECTRONIC INTERBUS (C) PVC	PVC	•	CE, UL	For Stationary and Flexible Applications within Machine- and Plant Wiring According to INTERBUS standard with International approvals	4.9
LÜTZE SUPERFLEX® INTERBUS (C) PUR	PUR	•	CE, UL	Continuous Moving in Drag Chains According to INTERBUS standard with international approvals For extremely harsh operating conditions	4.10
LÜTZE ELECTRONIC DeviceNet™ (C) PVC	PVC	•	CE, UL	For Stationary and Flexible Applications within Machine- and Plant Wiring According to DeviceNet™ standard with International approvals	4.11
LÜTZE SUPERFLEX® DeviceNet™ (C) PUR	PUR	•	CE, UL	Continuous Moving in Drag Chains According to DeviceNet™ standard with international approvals For extremely harsh operating conditions	4.12
LÜTZE ELECTRONIC ETHERNET (C) PVC	PVC	•	CE, UL, AWM	For Stationary and Flexible Applications within Machine- and Plant Wiring Industrial Ethernet/Profinet/EtherCat Industrial Ethernet/Ethernet IP Cat 5e, Cat 6a, Cat 7	4.13
LÜTZE SUPERFLEX® ETHERNET (C) PUR	PUR	•	CE, UL, AWM	Continuous Moving in Drag Chains Industrial Ethernet/Profinet/EtherCat Industrial Ethernet/Ethernet IP Cat 5e, Cat 6 For extremely harsh operating conditions	4.14

* Registered Trade Marks

LÜTZE ELECTRONIC ASI BUS TPE

Application
- System cables for connection of actuator interface components
- Application in the automation technology, in tool and machine construction, plants and device construction, transport and conveyor technology

Properties
- Inverse polarity-proof flat cable
- Fast contacting due to penetration technology
- TPE construction especially suitable in areas in which oils, greases and cooling lubricants occur
- Silicone free
- RoHS-compliant

Technical data

Rated voltage	300 V
Test voltage	2000 V
Temperature range	
moving	-15 °C to +80 °C
fixed	-30 °C to +80 °C
Minimum bending radius	
moving	D × 12
fixed	D × 6
Loop resistance	27.4 mΩ/m

Construction
- Tinned copper wire
- Braid 1.5 mm² according to VDE 0295 Class 6
- Conductor insulation PVC
- Jacket TPE profiled
- Jacket color
  black RAL 9005: for auxiliary energy 30 V_{DC}
  yellow RAL 1021: data and energy transfer

Part-No.	Number of strands/cross-section/ strand colors	Weight kg/100 m	Cu-Index kg/100 m	Jacket
1.5 mm²				
104216	2×1.5 blue, brown	6.2	2.8	yellow
104217	2×1.5 blue, brown	6.2	2.8	black

CE These products are in conformity with the EU Low Voltage Directive 2006/95/EC

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	1500 V
Impedance	AWG 22: nom. 150 Ω 1.0 mm²: nom. 100 Ω
Loop resistance	AWG 22: <110 Ω/km 1.0 mm²: 39 Ω/km
Operating capacitance	AWG 22: nom. 30 pF/m 1.0 mm²: nom. 52 pF/m
Temperature range	
moving	-5 °C to +70 °C
fixed	-30 °C to +80 °C
Minimum bending radius	
moving	D × 12
fixed	D × 6
Burning behavior	Flame-retardant according to VDE 0482 part 265-2, HM version: halogen free, low smoke

Construction
- Bare copper wire
- Wire according to AWG or DIN
- Conductor insulation special polyolefin
- ST Static foil shield
- Braid from tinned copper wire, optical coverage ≥ 70 %
- PVC jacket or HM version with special thermoplastic
- Jacket color violet RAL 4001, blue RAL 5015, black RAL 9005 (see item description)

Part-No.	Number of strands/cross-section/ strand colors	Jacket color	Outer Ø ca. mm	Weight kg/100 m	Cu-Index kg/100 m
Profibus DP/FMS/FIP					
104214	(1×2×AWG22/7)StC red/green	violet RAL 4001	7.8	6.8	3.0
Profibus DP/FMS/FIP with inner jacket, halogen-free jacket (HM)					
104267	(1×2×AWG22/1)StC FC red/green	violet RAL 4001	7.8	7.7	3.0
Profibus PA					
104277	(1×2×AWG18/1) red/green	blue RAL 5015	8.0	8.4	4.5
104278	(1×2×AWG18/1) red/green	black RAL 9005	8.0	8.4	4.5

CE These products are in conformity with the EU Low Voltage Directive 2006/95/EC

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	1500 V
Impedance	nom. 150 Ω
Loop resistance	
Solid 22/1	<110 Ω/km
Flexible 24/7	<165 Ω/km
Operating capacitance	nom. 30 pF/m
Temperature range	
moving	-10 °C to +70 °C
fixed	-40 °C to +80 °C
Minimum bending radius	
moving	D × 15
fixed	D × 7.5
Burning behavior	CMX: FT1 UL 1581, IEC 60332-3-24 CMG: FT4 UL 1685, CSA UL, IEC 60332-1
Approvals	cULus

Construction
- Bare copper wire
- Wire according to AWG
- Conductor insulation Special polyolefin
- Inner jacket for versions with fast assembly FC
- ST static shield
- Braid shield from tinned copper, optical coverage ca. 70 %.
- Jacket special-PVC
- Jacket color violet RAL 4001

Part-No.	Number of strands/cross-section/ strand colors	Outer Ø ca. mm	Weight kg/100 m	Cu-Index kg/100 m
Profibus DP/FMS/FIP, single wire UL/CMX, AWM 20601 300 V				
104378	(1×2×AWG22/1) red/green	8.0	5.8	3.0
Profibus DP/FMS/FIP, Flexible UL/CMG 75 °C, AWM 21694 600 V				
104344	(1×2×AWG24/7) red/green	8.0	7.2	3.0
Profibus DP/FMS/FIP, Fast Connection FC UL/CMG, AWM 20201 600 V				
104293	(1×2×AWG22/1) red/green	7.8	7.4	3.0

CE These products are in conformity with the EU Low Voltage Directive 2006/95/EC

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	1500 V
Impedance	nom. 150 Ω
Loop resistance	<165 Ω/km
Operating capacitance	<30 pF/m
Temperature range	
moving	-30 °C to +70 °C
fixed	-40 °C to +80 °C
Minimum bending radius	
moving	D × 7.5
fixed	D × 5
moves quick assembly FC	D × 15
fixed	D × 7.5
Burning behavior	VW-1, FT 1 UL 1581, IEC 60332-1
Halogen free	according to EN 50267-2-1
Approvals	cULus CMX, UL AWM 21198 300 V 80 °C

Construction
- Bare copper wire
- Wire according to AWG
  Wire AWG 24/19 = 0.64 mm ∅
- Conductor insulation special polyolefin
- Inner jacket versions with fast assembly FC
- ST foil shield
- Braid shield from tinned copper, optical coverage approx. ≥ 85 %, at FC 70 %
- Jacket special-PUR, matte, adhesion-free surface
- Jacket color violet, RAL 4001

Part-No.	Number of strands/cross-section/ strand colors	Outer ∅ ca. mm	Weight kg/100 m	Cu-index kg/100 m
Profibus, high flexing UL/CMX				
104265	(1×2×AWG24/19) red/green	8.0	6.5	3.0
Profibus Fast Connection FC UL/CMX				
104287	(1×2×AWG24/19) red/green	8.0	8.0	3.0
Profibus ET200 UL AWM 21198				
104275	((1×2×AWG24/19)St+3G0.75)C red/green, blue/black/greenyellow	9.8	14.4	6.6

CE These products are in conformity with the EU Low Voltage Directive 2006/95/EC

LÜTZE ELECTRONIC CAN-BUS (C) PVC

Application
- For wiring of industrial field bus systems like CAN-BUS
- For fixed wiring or 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	300 V
Test voltage	1500 V
Impedance	nom. 120 Ω
Loop resistance	
AWG 24/7	<175.2 Ω/km
AWG 22/7	<110.8 Ω/km
Operating capacitance	<60 pF/m
Temperature range	
moving	-10 °C to +70 °C
fixed	-40 °C to +75 °C
Minimum bending radius	
moving	D × 15
fixed	D × 7.5
Burning behavior	Flame-retardant according to VDE 0482 part 265-2; IEC 60332-1
Approvals	cULus CMX

Construction
- Bare copper wire
- Wire according to AWG or DIN
- Conductor insulation Special polyolefin
- Conductors stranded pairs, foil tape
- Braid from tinned copper wire, optical coverage ≥ 85 %
- Jacket special PVC TM2 according to VDE 0281-1, matte, adhesion-free surface
- Jacket color violet, RAL 4001

Part-No.	Number of strands/cross-section/ strand colors	Outer Ø ca. mm	Weight kg/100 m	Cu-Index kg/100 m
CAN-BUS UL/CMX, 40 m max.				
104386	(1×2×AWG24/7) white/brown	5.4	4.3	2.0
104387	(2×2×AWG24/7) white/brown, green/yellow	7.5	6.8	3.5
CAN-BUS UL/CMX, 200 m max.				
104388	(1×2×AWG22/7) white/brown	6.1	5.8	2.6
104389	(2×2×AWG22/7) white/brown, green/yellow	8.8	8.6	4.6

CE These products are in conformity with the EU Low Voltage Directive 2006/95/EC

LÜTZE SUPERFLEX® CAN-BUS (C) PUR
For highest requirements

Application
- For wiring of industrial field bus systems like CAN-BUS
- for continuous flexible 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	3000 V
Impedance	nom. 120 Ω
Operating capacitance	<60 pF/m
Temperature range	
moving	-30 °C to +70 °C
fixed	-40 °C to +75 °C
Minimum bending radius	
moving	D × 15
fixed	D × 7.5
Burning behavior	Flame-retardant according to VDE 0482 part 265-2; IEC 60332-1 UL 1581 section VW-1 Flame-Test, CSA FT 1
Halogen free	according to EN 50267-2-1
Approvals	cULus CMX

Construction
- Bare copper wire
- Conductor insulation Special polyolefin
- Stranded pair conductors or star quad, foil tape
- Braid from tinned copper wire, optical coverage ≥ 85 %
- Jacket special PUR, matte, adhesion-free surface
- Jacket color violet RAL 4001

Part-No.	Number of strands/cross-section/ strand colors	Outer Ø ca. mm	Weight kg/100 m	Cu-Index kg/100 m
CAN-BUS UL/CMX, 40 m max.				
104390	(1×2×AWG24) white/brown	5.4	4.4	2.4
104391	(2×2×AWG24) white/brown, green/yellow	7.2	7.2	3.3

CE These products are in conformity with the EU Low Voltage Directive 2006/95/EC

LÜTZE ELECTRONIC INTERBUS (C) PVC

Application
- For wiring of industrial field bus systems such as Interbus
- For fixed installation or 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

UL approval	AWM 21500
Nominal voltage	300 V 60 °C
Test voltage	1500 V
Impedance	nom. 100 Ω
Loop resistance	<165 Ω/km
Operating capacitance	<60 pF/m
Temperature range	
moving	-10 °C to +70 °C
fixed	-40 °C to +80 °C
Minimum bending radius	
moving	D × 15
fixed	D × 7.5
Burning behavior	Flame retardant according to VDE 0482 part 265-2; IEC 60332-1 UL Horizontal Flame

Construction
- Bare copper wire
- Wire according to AWG or DIN
- Conductor insulation Special polyolefin
- Conductors stranded pairs, foil tape
- Braid from tinned copper wire, optical coverage ≥ 85 %
- Jacket special PVC TM2 according to VDE 0281-1, matte, adhesion-free surface
- Jacket color violet RAL 4001

Part-No.	Number of strands/cross-section/ strand colors	Outer Ø ca. mm	Weight kg/100 m	Cu-Index kg/100 m
104207	(3×2×0.22) white/brown, green/yellow, grey/pink	7.5	5.5	3.2

CE These products are in conformity with the EU Low Voltage Directive 2006/95/EC

LÜTZE SUPERFLEX® INTERBUS (C) PUR

Application
- For wiring of industrial field bus systems such as Interbus
- For continuous flexible 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

UL approval	AWM 20549
Nominal voltage	300 V 80 °C
Test voltage	3000 V
Impedance	nom. 100 Ω
Loop resistance	<155 Ω/km
Operating capacitance	<60 pF/m
Temperature range	
moving	-20 °C to +80 °C
fixed	-40 °C to +80 °C
Minimum bending radius	
moving	D × 12
fixed	D × 6
Burning behavior	Flame-retardant according to VDE 0482 part 265-2; IEC 60332-1 UL 1581 section VW-1 Flame-Test, CSA FT 1
Halogen free	according to EN 50267-2-1

Construction
- Bare copper wire
- Wire according to AWG or DIN
- Conductor insulation Special polyolefin
- Conductors stranded pairs, foil tape
- Braid from tinned copper wire, optical coverage ≥ 85 %
- Jacket special-PUR, matte, adhesion-free surface
- Jacket color violet RAL 4001

Part-No.	Number of strands/cross-section/ strand colors	Outer Ø ca. mm	Weight kg/100 m	Cu-Index kg/100 m
104258	(3×2×0.24) white/brown; green/yellow; grey/pink	7.7	6.5	2.9
104259	(3G1.0+3×2×0.24) white/brown; green/yellow; grey/pink	8.5	9.9	6.5

CE These products are in conformity with the EU Low Voltage Directive 2006/95/EC

LÜTZE ELECTRONIC DeviceNet™ (C) PVC

Application
- For the wiring of industrial devices, sensors, control devices (SPS), valves
- DeviceNet™ is the leading BUS system for industry automation in the USA
- For fixed wiring or 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	300 V
Test voltage	2000 V
Impedance	nom. 120 Ω
Loop resistance	
AWG 16	<22.6 Ω/km
AWG 18	<54.4 Ω/km
AWG 22	<114.8 Ω/km
AWG 24	<181.8 Ω/km
Operating capacitance	<40 pF/m
Temperature range	
moving	-10 °C to +75 °C
fixed	-40 °C to +75 °C
Minimum bending radius	
moving	D × 10
fixed	D × 5
Burning behavior	Flame-retardant according to VDE 0482 part 265-2, IEC 60332-3-24 UL 1581 section VW-1 Flame-Test, CSA FT 4
Approvals	cULus CMG UL AWM 20201 600 V 60 °C

Construction
- Tinned copper wire
- Conductor insulation Special polyolefin (BUS element)
- Overall shield: Braid from galvanised Cu wire, optical coverage ≥ 70 %
- Jacket special-PVC, matte, adhesion-free surface
- Jacket color violet RAL 4001

Part-No.	Number of strands/cross-section/ strand colors	Outer Ø ca. mm	Weight kg/100 m	Cu-Index kg/100 m
DeviceNet™ Thick UL/CMG, PLTC				
104288	((2xAWG18)+(2xAWG16)) white/blue, red/black	12.2	20.1	8.8
DeviceNet™ Thin UL/CMG/CL2				
104282	((2xAWG24)+(2xAWG22)) white/blue, red/black	7.0	6.6	3.2

CE These products are in conformity with the EU Low Voltage Directive 2006/95/EC

LÜTZE SUPERFLEX® and LÜTZE SUPERFLEX® PLUS

LÜTZE SUPERFLEX®

connected

LÜTZE SUPERFLEX® sets Industry Standards: longevity, reliability, flexibility

LÜTZE SUPERFLEX® flexing cables are specifically designed for use in continuous motion applications such as drag chains.

Find here more informations about LÜTZE SUPERFLEX®
http://bit.ly/ZUdgUK

PUR Bus cables · DeviceNet™ · C-track compatible

LÜTZE SUPERFLEX® DeviceNet™ (C) PUR
For highest requirements

Application
- For the wiring of industrial devices, sensors, control devices (SPS), valves
- DeviceNet™ is the leading BUS system for industry automation in the USA
- For continuous flexible 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
- RoHS compliant

Technical data

Impedance	nom. 120 Ω
Operating capacitance	<40 pF/m
Rated voltage	300 V
Test voltage	3000 V
Temperature range	
moving	-20 °C to +80 °C
fixed	-40 °C to +75 °C
Minimum bending radius	
moving	D × 10
fixed	D × 5
Burning behavior	Flame-retardant according to VDE 0482 part 265-2; IEC 60332-1; UL 1581 section VW-1 Flame-Test; CSA FT 1
Halogen free	according to EN 50267-2-1, EN 60684-2
Approvals	cULus CMX

Construction
- Tinned copper wire
- Special polyolefin (BUS element)
- BUS element statically shielded
- Total shield: Braid from galvanised Cu wire, optical coverage ≥ 85 %
- Jacket special-PUR, matte, adhesion-free surface
- Jacket color violet RAL 4001

Part-No.	Number of strands/cross-section/ strand colors	Outer Ø ca. mm	Weight kg/100 m	Cu-Index kg/100 m
DeviceNet™ Thick UL/CMX				
104279	((2×AWG18)+(2×AWG16)) white/blue, red/black	11.3	18.0	2.1
DeviceNet™ Thin UL/CMX				
104289	((2×AWG24)+(2×AWG22)) white/blue, red/black	7.3	8.5	2.8

CE These products are in conformity with the EU Low Voltage Directive 2006/95/EC

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	1500 V
Impedance	nom. 100 Ω
Loop resistance	
Wire AWG 22/1= 0.34^2	<110 Ω/km
Wire AWG 24/7= 0.22^2	<165 Ω/km
Wire AWG 26/7=0.14^2	<273 Ω/km
Operating capacitance	<50 pF/m
Temperature range	
moving	-5 °C to +70 °C
run	-30 °C to +80 °C
Minimum bending radius	
moving	D × 12
fixed	D × 6
Burning behavior	Flame-retardant according to VDE 0482 part 265-2; IEC 60332-1 UL 1581 section VW-1 Flame-Test, CSA FT 4
Approvals	cULus CMG cULus PLTC cURus AWM

Construction
- Bare copper wire
- Wire according to AWG
- Conductor insulation Special polyolefin
- ST static shield
- Braid from tinned copper wire, optical coverage ≥ 85 %
- Jacket PVC, matte, adhesion-free surface
- Jacket color green RAL 6018

Part-No.	Number of strands/cross-section/ strand colors	Outer Ø ca. mm	Weight kg/100 m	Cu-Index kg/100 m
ELECTRONIC Industrial Ethernet/Profinet/EtherCat				
104301	(2x2×AWG22/1)StC CMG, PLTC, AWM 20201 600 V Cat5 100 MHz, SF/UTQ Star quad, FC, ProfiNet type A Transmission pair white/blue, yellow/ orange	6.5	6.5	3.7
104307	(2x2xAWG22/7)StC CMG, PLTC, AWM 20201 600 V Cat5 100 MHz, SF/UTQ Star quad, FC, ProfiNet type B Transmission pair white/blue, yellow/ orange	6.5	6.5	3.1
104397	(4×(2×AWG22/1)St)C CMG, PLTC, AWM 2570 600 V Cat6a 600 MHz, S/FTP whiteblue/blue, whiteorange/orange, whitegreen/green, whitebrown/brown	9.6	9.6	5.3
ELECTRONIC Industrial Ethernet/Ethernet IP				
104335	(4x2xAWG26/7 StC) CMG Cat5e 100 MHZ, SF/UTP whiteblue/blue, whiteorange/orange, whitegreen/green, whitebrown/brown	6.3	5.5	3.0
104336	(4x2xAWG24/7 StC) CMG Cat5e 100 MHZ, SF/UTP whiteblue/blue, whiteorange/orange, whitegreen/green, whitebrown/brown	7.3	6.9	3.8
104338	(4x(2xAWG26/7)St)C CMG Cat6a 500 MHZ, S/FTP whiteblue/blue, whiteorange/orange, whitegreen/green, whitebrown/brown	6.4	5.3	3.3
104331	(4x(2xAWG26/7)St)C CMG Cat7 600 MHZ, S/FTP whiteblue/blue, whiteorange/orange, whitegreen/green, whitebrown/brown	7.0	6.2	3.3

CE These products are in conformity with the EU Low Voltage Directive 2006/95/EC

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 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
- Halogen free
- RoHS-compliant

Technical data

Rated voltage	250 V
Test voltage	1500 V
Impedance	nom. 100 Ω
Loop resistance	
AWG 22/7= 0.34²	<110 Ω/km
AWG 22/19= 0.34²	<110 Ω/km
AWG 24/19= 0.24²	<159,5 Ω/km
AWG 26/19= 0.14²	<280 Ω/km
Operating capacitance	<50 pF/m
Temperature range	
moving	-30 °C to +70 °C
fixed	-40 °C to +80 °C
Minimum bending radius	
moving	D × 12
fixed	D × 6
Burning behavior	Flame-retardant according to VDE 0482 part 265-2; IEC 60332-1, UL 1581 section VW-1 Flame-Test, CSA FT 1
Halogen free	according to EN 50267-2-1
Approvals	cULus CMX cURus AWM

Construction
- Bare copper wire
- Wire according to AWG
- Conductor insulation Special polyolefin
- ST static shield
- Halogen-free sub jacket
- Braid from tinned copper wire, optical coverage ≥ 85 %
- Jacket special-PUR, matte, adhesion-free surface
- Jacket color green RAL 6018

Part-No.	Number of strands/cross-section/ strand colors	Outer Ø ca. mm	Weight kg/100 m	Cu-Index kg/100 m
SUPERFLEX Industrial Ethernet/ProfiNet/Ethercat				
104302	(2×2×AWG22/19)StC CMX Cat5 100 MHZ, SF/UTQ Star quad Transmission pair white/blue, yellow/ orange	6.6	7.5	3.7
104303	(2×2×AWG22/7)StC CMX Cat5 100 MHZ, SF/UTQ Star quad, Profinet type C Transmission pair white/blue, yellow/ orange	6.5	6.1	3.1
SUPERFLEX Industrial Ethernet/Ethernet IP				
104379	(2×2×AWG26/19) AWM 21198 Cat5e 100 MHz, SF/UTQ white, blue, yellow, orange	5.3	3.5	1.8
104337	(4×2×AWG24/19) AWM 21198 Cat5e 100 MHz, S/UTP whiteblue/blue, whiteorange/orange, whitegreen/green, whitebrown/brown	7.8	6.8	5.5
104396	(4×2×AWG26/19) AWM 21198 Cat5e 100 MHz, SF/UTP whiteblue/blue, whiteorange/orange, whitegreen/green, whitebrown/brown	6.7	5.4	2.8
104347	(4×2×AWG26/19) CMX Cat6 350 MHZ, SF/UTP whiteblue/blue, whiteorange/orange, whitegreen/green, whitebrown/brown	7.9	6.3	4.2

CE These products are in conformity with the EU Low Voltage Directive 2006/95/EC