



■ Connectivity Solutions

Cable assembly in compliance with SIEMENS 6FX Standard

Efficiency in Automation

Cable • Connectivity • Cabinet • Control

Welcome to LÜTZE

Cable Solutions



Connectivity Solutions



Cabinet Solutions



Control Solutions



Transportation Solutions



Efficiency in Automation - These few words reflect our entire company philosophy.

As experienced specialists in automation technology, with solutions for high flexing cables, cable manufacture, interfaces, power supply and current monitoring, and control cabinet wiring, we have concerned ourselves with the subject of efficiency for many years.

Efficiency in automation is extremely important to LÜTZE. It is our goal to raise the performance of our customers' systems by means of sustainable products and solutions. We realise this by using components for highly efficient control systems, products with above-average life cycles and raising energy efficiency in control cabinets by means of the LSC wiring system.

Efficiency in Automation also reflects our efforts to strive for efficient working relationships with our customers. Based on the short communication channels and flat hierarchies typical for medium sized family owned companies.

LÜTZE therefore creates values by means of efficiency. LÜTZE provides answers and shows ways to handle resources, our environment and, in the end, our future in a responsible manner.

LÜTZE - Efficiency in Automation

For more information on our products, please visit www.luetze.com



Motor and servo feedback: Best possible efficiency by means of maximum power transmission

Full power in all drive situations - the low-capacity cables from LÜTZE have the lowest losses which means that the maximum output can be transferred as a ratio to the cross-section. The special LÜTZE cable design therefore offers a maximum of efficiency and also helps to save energy.



Your efficient connection to the drive

Are you looking for the right connection between the control cabinet and the drive? LÜTZE can offer you a complete solution from one source. 100% compatible to standard servo systems: Quality is LÜTZE's top priority.

LÜTZE cables are specially designed for rough industrial environments which exceed some standard requirements.

Or are you looking for a very individual solution? We adapt cable assemblies to meet your requirements. Just ask us! We have a wide range of cables, connectors, protective hoses and openings to choose from - all readily available!

The LÜTZE cable specialists are familiar with all applications and technologies in the broad field of automation solutions. Ultimately,

LÜTZE and its product ranges Cable, Connectivity, Cabinet and Control are a part of the industrial automation field!

Assemblies for all standards

Allen-Bradley
Bosch Rexroth
Lenze
SEW
Siemens 6FX



Always connected properly Cable assemblies by LÜTZE

Helical cables - Manufactured to meet your specifications, our helical cables are suitable for high mechanical loads such as high-performance machines, lifting



platforms and lots of other moving applications. Also highly suited for use outside for millions of load changes without failure!



Moulded closed

LÜTZE Tamper-proof connector plastic moulded round plug connectors M23 for industrial use offer the user an economical and, at the same time, safe solution for the electrical connection of machines and systems.

The LÜTZE program contains various termination numbers and cable lengths. This means terminations of 6 - 28 and transfer outputs of up to 30 A

at 630 V, and therefore robust, safe cabling is available for numerous signal and power applications.

The integrated protection against kinking and the inner metal housing with 360° EMC shielding ensure the cable assemblies meet the requirements for the industrial sector - **they really are sealed as if potted!**

Other benefits:

- Tamper-proof: To prevent the connector casing from being opened or wrong connections within the connector
- Integrated anti-kink device
- 100 % compatible with SIEMENS®, BOSCH REXROTH®, LENZE®, SEW®...
- Production from a lot size of 1
- Available at short notice
- Protection class IP66/67

Customer-specific solutions

Each installation is different. Therefore, make use of our cable assembly expertise; experts will plan your project and document your application making use of a

product range containing more than 1700 cables, connectors, strain relief elements and protective hoses.



Servo cable assemblies without brake cores for fixed installation

Acc. to SIEMENS-6FX5002 standard Base cable



Application

- Base cable for Siemens servo drives
- For flexible applications without continuous flexing
- More cost-effective alternative to the cable chain version 6FX8002

Properties

- PVC Flame-retardant, self-extinguishing
- Silicone free
- RoHS-compliant

Technical data

UL approval	cURus
Nominal voltage	1000 V 80 °C
Voltage	
U_0/U	0.6/1 kV
Test voltage	4000 V
Insulation resistance	min. 500 MΩ × km
Temperature range	
moving	-5 °C to +80 °C
fixed	-25 °C to +80 °C
Minimum bending radius	
moving	D × 10
fixed	D × 6
Burning behavior	Flame-retardant according to VDE 0482 T 265-2, DIN EN 50265-2, IEC 60332-1, UL 1581 section 1080 VW-1, CSA FT 1
Product photo	The product photos are not to scale and do not represent detailed images of the respective products.

Construction

- Bare copper wire, multi-strand according to DIN VDE 0295 class 5, IEC 60228 class 5
- Special TPM/PP-conductor insulation, UL certified
- Conductor marking Power conductors black with numbered print U/L1/C/L+, V/L2, W/L3/D/L-
- Ground conductor green/yellow according to DIN EN 50334
- Fleece wrap over cable core
- Braid from tinned copper wire, optical coverage ≥ 85 %
- Jacket color orange RAL 2003

Part-No.	SIEMENS designation	Length m	Number of conductors/ cross-section	Outer Ø ca. mm
SINAMICS, speed-connect/Booksize				
198098.1000	6FX5002-5CN01-1BA0*	10.0	(4G1.5)	8.4
198103.1000	6FX5002-5CN11-1BA0*	10.0	(4G2.5)	10.6
198104.1000	6FX5002-5CN21-1BA0*	10.0	(4G1.5)	8.4
198106.1000	6FX5002-5CN31-1BA0*	10.0	(4G2.5)	10.6
198107.1000	6FX5002-5CN41-1BA0*	10.0	(4G4)	11.5
198108.1000	6FX5002-5CN51-1BA0*	10.0	(4G6)	13.2
198109.1000	6FX5002-5CN61-1BA0*	10.0	(4G10)	16.5
SINAMICS, full thread/Booksize				
198205.1000	6FX5002-5CS01-1BA0*	10.0	(4G1.5)	8.4
198124.1000	6FX5002-5CS11-1BA0*	10.0	(4G2.5)	10.6
198128.1000	6FX5002-5CS13-1BA0*	10.0	(4G10)	16.5
198129.1000	6FX5002-5CS21-1BA0*	10.0	(4G1.5)	8.4
198132.1000	6FX5002-5CS31-1BA0*	10.0	(4G2.5)	10.6
198133.1000	6FX5002-5CS41-1BA0*	10.0	(4G4)	11.5
198136.1000	6FX5002-5CS51-1BA0*	10.0	(4G6)	13.2
198139.1000	6FX5002-5CS61-1BA0*	10.0	(4G10)	16.5
SINAMICS, open end/Booksize				
198123.1000	6FX5002-5CS02-1BA0*	10.0	(4G1.5)	8.4
198126.1000	6FX5002-5CS12-1BA0*	10.0	(4G2.5)	10.6
198321.1000	6FX5002-5CS42-1BA0*	10.0	(4G4)	16.5
198322.1000	6FX5002-5CS52-1BA0*	10.0	(4G6)	14.0
198323.1000	6FX5002-5CS62-1BA0*	10.0	(4G10)	16.5

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Servo cable assemblies without brake cores for fixed installation

Acc. to SIEMENS-6FX5002 standard Base cable



Application

- Base cable for Siemens servo drives
- For flexible applications without continuous flexing
- More cost-effective alternative to the cable chain version 6FX8002

Properties

- PVC Flame-retardant, self-extinguishing
- Silicone free
- RoHS-compliant

Technical data

UL approval	cURus
Nominal voltage	1000 V 80 °C
Voltage	
U ₀ /U	0.6/1 kV
Test voltage	4000 V
Insulation resistance	min. 500 MΩ × km
Temperature range	
moving	-5 °C to +80 °C
fixed	-25 °C to +80 °C
Minimum bending radius	
moving	D × 10
fixed	D × 6
Burning behavior	Flame-retardant according to VDE 0482 T 265-2, DIN EN 50265-2, IEC 60332-1, UL 1581 section 1080 VW-1, CSA FT 1
Product photo	The product photos are not to scale and do not represent detailed images of the respective products.

Construction

- Bare copper wire, multi-strand according to DIN VDE 0295 class 5, IEC 60228 class 5
- Special TPM/PP-conductor insulation, UL certified
- Conductor marking Power conductors black with numbered print U/L1/C/L+, V/L2, W/L3/D/L-
- Ground conductor green/yellow according to DIN EN 50334
- Fleece wrap over cable core
- Braid from tinned copper wire, optical coverage ≥ 85 %
- Jacket color orange RAL 2003

Part-No.	SIEMENS designation	Length m	Number of conductors/ cross-section	Outer Ø ca. mm
SIMODRIVE, full thread/open end				
198042.1000	6FX5002-5CA01-1BA0*	10.0	(4G1.5)	8.4
198046.1000	6FX5002-5CA11-1BA0*	10.0	(4G2.5)	10.6
198048.1000	6FX5002-5CA13-1BA0*	10.0	(4G10)	16.5
198051.1000	6FX5002-5CA21-1BA0*	10.0	(4G1.5)	8.4
198052.1000	6FX5002-5CA23-1BA0*	10.0	(4G16)	21.2
198054.1000	6FX5002-5CA31-1BA0*	10.0	(4G2.5)	10.6
198059.1000	6FX5002-5CA41-1BA0*	10.0	(4G4)	11.5
198063.1000	6FX5002-5CA51-1BA0*	10.0	(4G6)	13.2
198066.1000	6FX5002-5CA61-1BA0*	10.0	(4G10)	16.5
SINAMICS, full thread/open end				
198068.1000	6FX5002-5CG01-1BA0*	10.0	(4G1.5)	8.4
198071.1000	6FX5002-5CG11-1BA0*	10.0	(4G2.5)	10.6
198292.1000	6FX5002-5CG13-1BA0*	10.0	(4G10)	16.5
198073.1000	6FX5002-5CG21-1BA0*	10.0	(4G1.5)	8.4
198293.1000	6FX5002-5CG23-1BA0*	10.0	(4G16)	21.2
198078.1000	6FX5002-5CG31-1BA0*	10.0	(4G2.5)	10.6
198083.1000	6FX5002-5CG41-1BA0*	10.0	(4G4)	11.5
198088.1000	6FX5002-5CG51-1BA0*	10.0	(4G6)	14.0
198093.1000	6FX5002-5CG61-1BA0*	10.0	(4G10)	16.5
198273.1000	6FX5002-5CS14-1BA0*	10.0	(4G10)	16.5
198294.1000	6FX5002-5CS23-1BA0*	10.0	(4G16)	21.2
198299.1000	6FX5002-5CS54-1BA0*	10.0	(4G6)	14.0
198309.1000	6FX5002-5CS64-1BA0*	10.0	(4G10)	16.5
198353.1000	6FX5002-5CG32-1BA0*	10.0	(4G2.5)	10.6

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Servo cable assemblies with brake cores for fixed installation

Acc. to SIEMENS-6FX5002 standard Base cable



Application

- Base cable for Siemens servo drives
- For flexible applications without continuous flexing
- More cost-effective alternative to the cable chain version 6FX8002

Properties

- PVC Flame-retardant, self-extinguishing
- Silicone free
- RoHS-compliant

Technical data

UL approval	cURus
Nominal voltage	1000 V 80 °C
Voltage	
U ₀ /U	0.6/1 kV
Test voltage	4000 V
Insulation resistance	min. 500 MΩ × km
Temperature range	
moving	-5 °C to +80 °C
fixed	-25 °C to +80 °C
Minimum bending radius	
moving	D × 10
fixed	D × 6
Burning behavior	Flame-retardant according to VDE 0482 T 265-2, DIN EN 50265-2, IEC 60332-1, UL 1581 section 1080 VW-1, CSA FT 1
Product photo	The product photos are not to scale and do not represent detailed images of the respective products.

Construction

- Bare copper wire, multi-strand according to DIN VDE 0295 class 5, IEC 60228 class 5
- Special TPM/PP-conductor insulation, UL certified
- Conductor marking Power conductors black with numbered print U/L1/C/L+, V/L2, W/L3/D/L-
- Ground conductor green/yellow according to DIN EN 50334
- Signal conductor: white/black (1 pair)
- Fleece wrap over cable core
- Braid from tinned copper wire, optical coverage ≥ 85 %
- Jacket color orange RAL 2003

Part-No.	SIEMENS designation	Length m	Number of con- ductors/cross- section	Outer Ø ca. mm
SINAMICS, speed-connect/Booksize				
198340.1000	6FX5002-5DN01-1BA0*	10.0	(4G1.5+(2×1.5))	11.6
198341.1000	6FX5002-5DN11-1BA0*	10.0	(4G2.5+(2×1.5))	13.0
198342.1000	6FX5002-5DN21-1BA0*	10.0	(4G1.5+(2×1.5))	11.6
198343.1000	6FX5002-5DN31-1BA0*	10.0	(4G2.5+(2×1.5))	13.0
198344.1000	6FX5002-5DN41-1BA0*	10.0	(4G4+(2×1.5))	14.0
198345.1000	6FX5002-5DN51-1BA0*	10.0	(4G6+(2×1.5))	15.8
198346.1000	6FX5002-5DN61-1BA0*	10.0	(4G10+(2×1.5))	18.5
SINAMICS, full thread/Booksize				
198320.1000	6FX5002-5DS01-1BA0*	10.0	(4G1.5+(2×1.5))	11.6
198325.1000	6FX5002-5DS11-1BA0*	10.0	(4G2.5+(2×1.5))	13.0
198176.1000	6FX5002-5DS13-1BA0*	10.0	(4G10+(2×1.5))	18.5
198177.1000	6FX5002-5DS21-1BA0*	10.0	(4G1.5+(2×1.5))	11.6
198245.1000	6FX5002-5DS31-1BA0*	10.0	(4G2.5+(2×1.5))	13.0
198178.1000	6FX5002-5DS41-1BA0*	10.0	(4G6+(2×1.5))	14.0
198179.1000	6FX5002-5DS51-1BA0*	10.0	(4G6+(2×1.5))	15.8
198182.1000	6FX5002-5DS61-1BA0*	10.0	(4G10+(2×1.5))	18.5

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Servo cable assemblies with brake cores for fixed installation

Acc. to SIEMENS-6FX5002 standard Base cable



Application

- Base cable for Siemens servo drives
- For flexible applications without continuous flexing
- More cost-effective alternative to the cable chain version 6FX8002

Properties

- PVC Flame-retardant, self-extinguishing
- Silicone free
- RoHS-compliant

Technical data

UL approval	cURus
Nominal voltage	1000 V 80 °C
Voltage	
U ₀ /U	0.6/1 kV
Test voltage	4000 V
Insulation resistance	min. 500 MΩ × km
Temperature range	
moving	-5 °C to +70 °C
fixed	-25 °C to +70 °C
Minimum bending radius	
moving	D × 10
fixed	D × 6
Burning behavior	Flame-retardant according to VDE 0482 T 265-2, DIN EN 50265-2, IEC 60332-1, UL 1581 section 1080 VW-1, CSA FT 1
Product photo	The product photos are not to scale and do not represent detailed images of the respective products.

Construction

- Bare copper wire, multi-strand according to DIN VDE 0295 class 5, IEC 60228 class 5
- Special TPM/PP-conductor insulation, UL certified
- Conductor marking Power conductors black with numbered print U/L1/C/L+, V/L2, W/L3/D/L-
- Ground conductor green/yellow according to DIN EN 50334
- Control pair color-coded (bk, wh)
- Control pair with braided shield and foil tape
- Fleece wrap over cable core
- Braid from tinned copper wire, optical coverage ≥ 85 %
- Jacket color orange RAL 2003

Part-No.	SIEMENS designation	Length m	Number of conductors/cross-section	Outer Ø ca. mm
SIMODRIVE, full thread/open end				
198461.1000	6FX5002-5DA01-1BA0*	10.0	(4G1.5+(2×1.5))	11.6
198481.1000	6FX5002-5DA11-1BA0*	10.0	(4G2.5+(2×1.5))	13.0
198146.1000	6FX5002-5DA13-1BA0*	10.0	(4G10+(2×1.5))	18.5
198501.1000	6FX5002-5DA21-1BA0*	10.0	(4G1.5+(2×1.5))	11.6
198871.1000	6FX5002-5DA23-1BA0*	10.0	(4G16+(2×1.5))	23.6
198531.1000	6FX5002-5DA31-1BA0*	10.0	(4G2.5+(2×1.5))	13.0
198881.1000	6FX5002-5DA33-1BA0*	10.0	(4G25+(2×1.5))	28.5
198561.1000	6FX5002-5DA41-1BA0*	10.0	(4G4+(2×1.5))	14.0
198571.1000	6FX5002-5DA51-1BA0*	10.0	(4G6+(2×1.5))	15.8
198581.1000	6FX5002-5DA61-1BA0*	10.0	(4G10+(2×1.5))	18.5
SINAMICS, full thread/open end				
198076.1000	6FX5002-5DG01-1BA0*	10.0	(4G1.5+(2×1.5))	11.6
198086.1000	6FX5002-5DG11-1BA0*	10.0	(4G2.5+(2×1.5))	13.0
198287.1000	6FX5002-5DG13-1BA0*	10.0	(4G10+(2×1.5))	18.5
198081.1000	6FX5002-5DG21-1BA0*	10.0	(4G1.5+(2×1.5))	11.6
198288.1000	6FX5002-5DG23-1BA0*	10.0	(4G16+(2×1.5))	23.6
198091.1000	6FX5002-5DG31-1BA0*	10.0	(4G2.5+(2×1.5))	13.0
198289.1000	6FX5002-5DG33-1BA0*	10.0	(4G25+(2×1.5))	28.6
198096.1000	6FX5002-5DG41-1BA0*	10.0	(4G4+(2×1.5))	14.0
198101.1000	6FX5002-5DG51-1BA0*	10.0	(4G6+(2×1.5))	15.8
198116.1000	6FX5002-5DG61-1BA0*	10.0	(4G10+(2×1.5))	18.5
198296.1000	6FX5002-5DS14-1BA0*	10.0	(4G10+(2×1.5))	18.5
198264.1000	6FX5002-5DS23-1BA0*	10.0	(4G16+(2×1.5))	23.6
198297.1000	6FX5002-5DS54-1BA0*	10.0	(4G6+(2×1.5))	15.8
198298.1000	6FX5002-5DS64-1BA0*	10.0	(4G10+(2×1.5))	18.5

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Servo cable assemblies without brake cores for fixed installation

Acc. to SIEMENS-6FX5002 standard Extension



Application

- Base cable for Siemens servo drives
- For flexible applications without continuous flexing
- More cost-effective alternative to the cable chain version 6FX8002

Properties

- PVC Flame-retardant, self-extinguishing
- Silicone free
- RoHS-compliant

Notes:

- The extension can also be used for **SPEED-CONNECT** plug connection, for this the O-ring must be removed on the outer thread. This does not affect the tightness of the plug connection.

Technical data

UL approval	cURus
Nominal voltage	1000 V 80 °C
Voltage	
U_0/U	0.6/1 kV
Test voltage	4000 V
Insulation resistance	min. 500 MΩ × km
Temperature range	
moving	-5 °C to +80 °C
fixed	-25 °C to +80 °C
Minimum bending radius	
moving	D × 10
fixed	D × 6
Burning behavior	Flame-retardant according to VDE 0482 T 265-2, DIN EN 50265-2, IEC 60332-1, UL 1581 section 1080 VW-1, CSA FT 1
Product photo	The product photos are not to scale and do not represent detailed images of the respective products.

Construction

- Bare copper wire, multi-strand according to DIN VDE 0295 class 5, IEC 60228 class 5
- Special TPM/PP-conductor insulation, UL certified
- Conductor marking Power conductors black with numbered print U/L1/C/L+, V/L2, W/L3/D/L-
- Ground conductor green/yellow according to DIN EN 50334
- Fleece wrap over cable core
- Braid from tinned copper wire, optical coverage ≥ 85 %
- Jacket color orange RAL 2003

Part-No.	SIEMENS designation	Length m	Number of conductors/ cross-section	Outer Ø ca. mm
SINAMICS/SIMODRIVE, full thread				
198044.1000	6FX5002-5CA05-1BA0*	10.0	(4G1.5)	8.4
198049.1000	6FX5002-5CA15-1BA0*	10.0	(4G2.5)	10.6
198053.1000	6FX5002-5CA28-1BA0*	10.0	(4G1.5)	8.4
198058.1000	6FX5002-5CA38-1BA0*	10.0	(4G2.5)	10.6
198062.1000	6FX5002-5CA48-1BA0*	10.0	(4G4)	11.5
198064.1000	6FX5002-5CA58-1BA0*	10.0	(4G6)	13.2
198067.1000	6FX5002-5CA68-1BA0*	10.0	(4G10)	16.5
198143.1000	6FX5002-5CX18-1BA0*	10.0	(4G10)	16.5
198144.1000	6FX5002-5CX28-1BA0*	10.0	(4G16)	21.2

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Servo cable assemblies with brake cores for fixed installation

Acc. to SIEMENS-6FX5002 standard Extension



Application

- Extension, for Siemens servo drives
- For flexible application without continuous flexing
- Cost-effective alternative to the c-tracks suitable 6FX8002 version

Properties

- PVC Flame-retardant, self-extinguishing
- Silicone free
- RoHS-compliant

Notes:

- The extension can also be used for **SPEED-CONNECT** plug connection, for this the O-ring must be removed on the outer thread. This does not affect the tightness of the plug connection.

Technical data

UL approval	cURus
Nominal voltage	1000 V 80 °C
Voltage	
U_0/U	0.6/1 kV
Test voltage	4000 V
Insulation resistance	min. 500 MΩ × km
Temperature range	
moving	-5 °C to +80 °C
fixed	-25 °C to +80 °C
Minimum bending radius	
moving	D × 10
fixed	D × 6
Burning behavior	Flame-retardant according to VDE 0482 T 265-2, DIN EN 50265-2, IEC 60332-1, UL 1581 section 1080 VW-1, CSA FT 1
Product photo	The product photos are not to scale and do not represent detailed images of the respective products.

Construction

- Bare copper wire, multi-strand according to DIN VDE 0295 class 5, IEC 60228 class 5
- Special TPM/PP-conductor insulation, UL certified
- Conductor marking Power conductors black with numbered print U/L1/C/L+, V/L2, W/L3/D/L-
- Ground conductor green/yellow according to DIN EN 50334
- Control pair color-coded (bk, wh)
- Control pair with braided shield and foil tape
- Fleece wrap over cable core
- Braid from tinned copper wire, optical coverage ≥ 85 %
- Jacket color orange RAL 2003

Part-No.	SIEMENS designation	Length m	Number of con- ductors/cross- section	Outer Ø ca. mm
SINAMICS/SIMODRIVE, full thread				
198731.1000	6FX5002-5DA05-1BA0*	10.0	(4G1.5+(2×1.5))	11.6
198991.1000	6FX5002-5DA15-1BA0*	10.0	(4G2.5+(2×1.5))	13.0
198791.1000	6FX5002-5DA28-1BA0*	10.0	(4G1.5+(2×1.5))	11.6
198801.1000	6FX5002-5DA38-1BA0*	10.0	(4G2.5+(2×1.5))	13.0
198006.1000	6FX5002-5DA48-1BA0*	10.0	(4G4+(2×1.5))	14.0
198011.1000	6FX5002-5DA58-1BA0*	10.0	(4G6+(2×1.5))	15.8
198026.1000	6FX5002-5DA68-1BA0*	10.0	(4G10+(2×1.5))	18.5
198183.1000	6FX5002-5DX18-1BA0*	10.0	(4G10+(2×1.5))	18.5
198184.1000	6FX5002-5DX28-1BA0*	10.0	(4G16+(2×1.5))	23.6
198186.1000	6FX5002-5DX38-1BA0*	10.0	(4G25+(2×1.5))	28.5

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Signal cables for fixed installation

According to SIEMENS-6FX5002 standard Base cable DRIVE-CLIQ®



Application

- Resolver cable
- For flexible application without continuous flexing
- Cost-effective alternative to the c-tracks suitable 6FX8002 version

Properties

- Silicone free
- RoHS-compliant

Technical data

UL approval	cURus
Nominal voltage	30 V 80 °C
Test voltage	500 V
Insulation resistance	min. 20 MΩ × km
Temperature range	
moving	-5 °C to +80 °C
fixed	-25 °C to +80 °C
Minimum bending radius	
moving	D × 15
fixed	D × 7.5
Burning behavior	Flame-retardant according to VDE 0482 T 265-2, DIN EN 50265-2, IEC 60332-1
Product photo	The product photos are not to scale and do not represent detailed images of the respective products.

Part-No.	SIEMENS designation	Length m	Outer Ø ca. mm
SINAMICS			
198036.1000	6FX5002-2DC00-1BA0*	10.0	7.2
198037.1000	6FX5002-2DC10-1BA0*	10.0	7.2
198038.1000	6FX5002-2DC20-1BA0*	10.0	7.2

Construction

- Bare copper wire, multi-strand according to DIN VDE 0295 class 5, IEC 60228 class 5
- Special thermoplastic conductor insulation
- Color coded conductor
- Ground conductor green/yellow according to DIN EN 50334
- Braid from tinned copper wire, optical coverage ≥ 85 %
- Jacket special PVC TM2 according to HD21.1, matte, adhesion-free surface
- Jacket color green RAL 6018

* Siemens article designations are registered trademarks of Siemens AG, and are for reference purposes only

LÜTZE SUPERFLEX® and LÜTZE SUPERFLEX® PLUS



LÜTZE SUPERFLEX® sets industrial standards: durable, reliable and flexible

LÜTZE has a broad range of highly flexible cables specially developed for permanently moving applications in drag chains.

LÜTZE SUPERFLEX® and LÜTZE SUPERFLEX® PLUS cables are available for control, motor and electronic applications. LÜTZE SUPERFLEX® cables are compatible with metal and plastic drag chains of all reputed manufacturers.

LÜTZE SUPERFLEX® N is suitable for medium to high mechanical loads in drag chains with short to medium travel paths. LÜTZE SUPERFLEX® N is available with PVC or 'High Glide' insulation (TPE) and a special PVC jacket.

LÜTZE SUPERFLEX® Plus PUR is suitable for very high mechanical loads in drag chains and very long travel paths. LÜTZE SUPERFLEX® Plus PUR is available in high-quality materials such as 'High Glide' insulation (TPE) and a PUR jacket. This material configuration allows applications with state-of-the-art and very fast machines.

All highly flexible cables for the drag chain must satisfy special requirements in terms of handling and installation of the cables in the drag chain. To ensure a long service life of the cables, it is important to select the correct cable for the application and to observe the handling and installation regulations.



For more information about the
LÜTZE SUPERFLEX®:
<http://bit.ly/10lj9xh>



Bending cycles of highly flexible cables

LÜTZE SUPERFLEX® - durable, reliable, flexible

The high mechanical requirements in a drag chain require the use of special cables that have been specially designed for permanently moving applications. The service life of the cables in the drag chain is also highly dependent on the mechanical parameters of the application, and the care taken during installation.

Cables	Travel path in m	Bending radius = Factor x cable-Ø (mm)	Speed m/s	Acceleration m/s ²	Bending cycles mill.
LÜTZE SUPERFLEX® PLUS					
Unshielded cable with	≤ 5	≥ 10 Ø	≤ 3	≤ 5	≥ 20
Special TPE or HGI	≤ 20	≥ 7,5 Ø	≤ 5	≤ 10	≥ 10
Insulation, PUR or TPE	≤ 100	≥ 7.5 Ø	≤ 5	≤ 10	≥ 2
Jacket					
LÜTZE SUPERFLEX® PLUS (C)					
Shielded cable with	≤ 5	≥ 12 Ø	≤ 3	≤ 5	≥ 20
Special TPE or HGI	≤ 20	≥ 10 Ø	≤ 5	≤ 10	≥ 10
Insulation, PUR or TPE	≤ 100	≥ 10 Ø	≤ 5	≤ 10	≥ 2
Jacket					
LÜTZE SUPERFLEX®					
Unshielded cable	≤ 5	≥ 12 Ø	≤ 3	≤ 5	≥ 10
	≤ 15	≥ 10 Ø	≤ 5	≤ 10	≥ 5
LÜTZE SUPERFLEX® (C)					
Shielded cable	≤ 5	≥ 15 Ø	≤ 3	≤ 5	≥ 10
	≤ 15	≥ 12 Ø	≤ 5	≤ 10	≥ 5

The values in this table shows the application parameters and satisfied cycles in independent tests. The cycle performance can only be compared, if all values are considered together. An assessment after 'millions of operating cycles' is meaningless, if the travel path, speed and bending radius are unknown.

LÜTZE SUPERFLEX® PLUS M (C) PUR UL Servo 0,6 / 1 kV in compliance with SIEMENS* standard based on SIEMENS MOTION-CONNECT 800PLUS

	Travel path in m	Bending radius = Factor x cable-Ø (mm)	Speed m/s	Acceleration m/s ²	Bending cycles mill.
LÜTZE SUPERFLEX® PLUS M (C)					
PUR UL Servo 0.6 / 1 kV					
	≤ 3	≥ 10 Ø	≤ 5	≤ 50	≥ 10
	≤ 5	≥ 10 Ø	≤ 5	≤ 30	≥ 10
	≤ 10	≥ 10 Ø	≤ 5	≤ 15	≥ 10
	≤ 15	≥ 10 Ø	≤ 5	≤ 10	≥ 10
	≤ 50	≥ 10 Ø	≤ 5	≤ 5	≥ 10

Servo cable assemblies without brake cores for C-tracks

Acc. to SIEMENS-6FX8002 standard Base cable



Application

- Base cable DRIVE-CLIQ®, for SIEMENS SERVO drives
- Due to full PUR jacket and TPE conductor insulation optimally suited for c-tracks, extremely rough operating conditions, aggressive coolants and lubricants
- Especially for industrial environments, machines and plants

Properties

- Silicone free
- RoHS-compliant

Technical data

UL approval	cURus
Nominal voltage	1000 V 80 °C
Voltage	
U ₀ /U	0.6/1 kV
Test voltage	4000 V
Insulation resistance	min. 500 MΩ × km
Temperature range	
moving	-25 °C to +80 °C
fixed	-40 °C to +80 °C
Minimum bending radius	
moving	D × 10
fixed	D × 6
Burning behavior	Flame-retardant according to VDE 0482 T 265-2, DIN EN 50265-2, IEC 60332-1, UL 1581 section 1080 VW-1, CSA FT 1
Halogen free	according to DIN EN 50267-2-1
Product photo	The product photos are not to scale and do not represent detailed images of the respective products.

Construction

- Bare copper wire, finely stranded according to DIN VDE 0295 class 6, IEC 60228 class 6
- Special TPE/HGI conductor insulation, UL qualified
- Conductor marking Power conductors black with numbered print U/L1/C/L+, V/L2, W/L3/D/L-
- Ground conductor green/yellow according to DIN EN 50334
- Conductors cabled in layers without mechanical stress, layer pitch optimised
- Fleece wrap over cable core
- Braid from tinned copper wire, optical coverage ≥ 85 %
- Full polyurethane jacket, matte, adhesion-free surface
- Jacket color orange RAL 2003



Part-No.	SIEMENS designation	Length m	Number of conductors/ cross-section	Outer Ø ca. mm
SINAMICS, speed-connect/Booksize				
198326.1000	6FX8002-5CN01-1BA0*	10.0	(4G1.5)	8.6
198327.1000	6FX8002-5CN11-1BA0*	10.0	(4G2.5)	10.8
198328.1000	6FX8002-5CN21-1BA0*	10.0	(4G1.5)	8.6
198329.1000	6FX8002-5CN31-1BA0*	10.0	(4G2.5)	10.8
198330.1000	6FX8002-5CN41-1BA0*	10.0	(4G4)	12.2
198331.1000	6FX8002-5CN51-1BA0*	10.0	(4G6)	14.0
198332.1000	6FX8002-5CN61-1BA0*	10.0	(4G10)	17.6
SINAMICS, full thread/Booksize				
198300.1000	6FX8002-5CS01-1BA0*	10.0	(4G1.5)	8.6
198302.1000	6FX8002-5CS11-1BA0*	10.0	(4G2.5)	10.8
198214.1000	6FX8002-5CS13-1BA0*	10.0	(4G10)	17.6
198304.1000	6FX8002-5CS21-1BA0*	10.0	(4G1.5)	8.6
198305.1000	6FX8002-5CS31-1BA0*	10.0	(4G2.5)	10.8
198317.1000	6FX8002-5CS41-1BA0*	10.0	(4G4)	12.2
198318.1000	6FX8002-5CS51-1BA0*	10.0	(4G6)	14.0
198319.1000	6FX8002-5CS61-1BA0*	10.0	(4G10)	17.6
SINAMICS, open end/Booksize				
198301.1000	6FX8002-5CS02-1BA0*	10.0	(4G1.5)	8.6
198303.1000	6FX8002-5CS12-1BA0*	10.0	(4G2.5)	10.6
198306.1000	6FX8002-5CS42-1BA0*	10.0	(4G4)	12.2
198307.1000	6FX8002-5CS52-1BA0*	10.0	(4G6)	14.0
198308.1000	6FX8002-5CS62-1BA0*	10.0	(4G10)	17.6

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Servo cable assemblies without brake cores for C-tracks

Acc. to SIEMENS-6FX8002 standard Base cable



Application

- Base cable, for Siemens servo drives
- Due to full PUR jacket and TPE conductor insulation optimally suited for c-tracks, extremely rough operating conditions, aggressive coolants and lubricants

Properties

- Silicone free
- RoHS-compliant

Technical data

UL approval	cURus
Nominal voltage	1000 V 80 °C
Voltage	
U ₀ /U	0.6/1 kV
Test voltage	4000 V
Insulation resistance	min. 500 MΩ × km
Temperature range	
moving	-25 °C to +80 °C
fixed	-40 °C to +80 °C
Minimum bending radius	
moving	D × 10
fixed	D × 6
Burning behavior	Flame-retardant according to VDE 0482 T 265-2, DIN EN 50265-2, IEC 60332-1, UL 1581 section 1080 VW-1, CSA FT 1
Halogen free	according to DIN EN 50267-2-1
Product photo	The product photos are not to scale and do not represent detailed images of the respective products.

Part-No.	SIEMENS designation	Length m	Number of conductors/ cross-section	Outer Ø ca. mm
SIMODRIVE, full thread/open end				
198360.1000	6FX8002-5CA01-1BA0*	10.0	(4G1.5)	8.6
198380.1000	6FX8002-5CA11-1BA0*	10.0	(4G2.5)	10.8
198845.1000	6FX8002-5CA13-1BA0*	10.0	(4G10)	17.6
198400.1000	6FX8002-5CA21-1BA0*	10.0	(4G1.5)	8.6
198810.1000	6FX8002-5CA23-1BA0*	10.0	(4G16)	21.2
198410.1000	6FX8002-5CA31-1BA0*	10.0	(4G2.5)	10.8
198430.1000	6FX8002-5CA41-1BA0*	10.0	(4G4)	12.2
198440.1000	6FX8002-5CA51-1BA0*	10.0	(4G6)	14.0
198450.1000	6FX8002-5CA61-1BA0*	10.0	(4G10)	17.6
SINAMICS, full thread/open end				
198950.1000	6FX8002-5CG01-1BA0*	10.0	(4G1.5)	8.6
198040.1000	6FX8002-5CG11-1BA0*	10.0	(4G2.5)	10.8
198283.1000	6FX8002-5CG13-1BA0*	10.0	(4G10)	17.6
198035.1000	6FX8002-5CG21-1BA0*	10.0	(4G1.5)	8.6
198803.1000	6FX8002-5CG23-1BA0*	10.0	(4G16)	21.2
198045.1000	6FX8002-5CG31-1BA0*	10.0	(4G2.5)	10.8
198050.1000	6FX8002-5CG41-1BA0*	10.0	(4G4)	12.2
198055.1000	6FX8002-5CG51-1BA0*	10.0	(4G6)	14.0
198060.1000	6FX8002-5CG61-1BA0*	10.0	(4G10)	17.6
198284.1000	6FX8002-5CS14-1BA0*	10.0	(4G10)	17.6
198285.1000	6FX8002-5CS23-1BA0*	10.0	(4G16)	21.2
198980.1000	6FX8002-5CS54-1BA0*	10.0	(4G6)	14.0
198286.1000	6FX8002-5CS64-1BA0*	10.0	(4G10)	17.6
198198.1000	6FX8002-5CG32-1BA0*	10.0	(4G2.5)	10.8

Construction

- Bare copper wire, finely stranded according to DIN VDE 0295 class 6, IEC 60228 class 6
- Special TPE/HGI conductor insulation, UL qualified
- Conductor marking Power conductors black with numbered print U/L1/C/L+, V/L2, W/L3/D/L-
- Ground conductor green/yellow according to DIN EN 50334
- Conductors cabled in layers without mechanical stress, layer pitch optimised
- Braid from tinned copper wire, optical coverage ≥ 85 %
- Full polyurethane jacket, matte, adhesion-free surface
- Jacket color orange RAL 2003

* Siemens article designations are registered trademarks of Siemens AG, and are for reference purposes only

Servo cable assemblies with brake cores for C-tracks

Acc. to SIEMENS-6FX8002 standard Base cable



Application

- Base cable for Siemens servo drives
- Full PUR jacket and TPE conductor insulation optimally suited for c-tracks, extremely rough operating conditions, aggressive coolants and lubricants
- Especially for industrial environments, machines and plants

Properties

- Silicone free
- RoHS-compliant

Technical data

UL approval	cURus
Nominal voltage	1000 V 80 °C
Voltage	
U_0/U	0.6/1 kV
Test voltage	4000 V
Insulation resistance	min. 500 MΩ × km
Temperature range	
moving	-25 °C to +80 °C
fixed	-40 °C to +80 °C
Minimum bending radius	
moving	D × 10
fixed	D × 6
Burning behavior	Flame-retardant according to VDE 0482 T 265-2, DIN EN 50265-2, IEC 60332-1, UL 1581 section 1080 VW-1, CSA FT 1
Halogen free	according to DIN EN 50267-2-1, EN 60684-2
Product photo	The product photos are not to scale and do not represent detailed images of the respective products.

Construction

- Bare copper wire, finely stranded according to DIN VDE 0295 class 6, IEC 60228 class 6
- Special TPE/HGI conductor insulation, UL certified
- Conductor marking Power conductors black with numbered print U/L1/C/L+, V/L2, W/L3/D/L-
- Ground conductor green/yellow according to DIN EN 50334
- Control pair color-coded (bk, wh)
- Control pair with braided shield and foil tape
- Conductors cabled in layers without mechanical stress, layer pitch optimised
- Fleece wrap over cable core
- Braid from tinned copper wire, optical coverage ≥ 85 %
- Outer jacket Full polyurethane jacket, matte, adhesion-free surface
- Jacket color orange RAL 2003

Part-No.	SIEMENS designation	Length m	Number of conduc- tors/cross-section	Outer Ø ca. mm
SINAMICS, speed-connect/Booksize				
198333.1000	6FX8002-5DN01-1BA0*	10.0	(4G1.5+(2×1.5))	11.4
198334.1000	6FX8002-5DN11-1BA0*	10.0	(4G2.5+(2×1.5))	12.9
198335.1000	6FX8002-5DN21-1BA0*	10.0	(4G1.5+(2×1.5))	11.4
198336.1000	6FX8002-5DN31-1BA0*	10.0	(4G2.5+(2×1.5))	12.9
198337.1000	6FX8002-5DN41-1BA0*	10.0	(4G4+(2×1.5))	14.5
198338.1000	6FX8002-5DN51-1BA0*	10.0	(4G6+(2×1.5))	16.1
198339.1000	6FX8002-5DN61-1BA0*	10.0	(4G10+(2×1.5))	19.5
SINAMICS, full thread/Booksize				
198310.1000	6FX8002-5DS01-1BA0*	10.0	(4G1.5+(2×1.5))	11.4
198311.1000	6FX8002-5DS11-1BA0*	10.0	(4G2.5+(2×1.5))	12.9
198312.1000	6FX8002-5DS21-1BA0*	10.0	(4G1.5+(2×1.5))	11.4
198313.1000	6FX8002-5DS31-1BA0*	10.0	(4G2.5+(2×1.5))	12.9
198314.1000	6FX8002-5DS41-1BA0*	10.0	(4G4+(2×1.5))	14.5
198315.1000	6FX8002-5DS51-1BA0*	10.0	(4G6+(2×1.5))	16.1
198316.1000	6FX8002-5DS61-1BA0*	10.0	(4G10+(2×1.5))	19.5
198247.1000	6FX8002-5DS13-1BA0*	10.0	(4G10+(2×1.5))	19.5

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Servo cable assemblies with brake cores for C-tracks

Acc. to SIEMENS-6FX8002 standard Base cable



Application

- Base cable, for Siemens servo drives
- Due to full PUR jacket and TPE conductor insulation optimally suited for c-tracks, extremely rough operating conditions, aggressive coolants and lubricants
- Especially for industrial environments, machines and plants

Properties

- Silicone free
- RoHS-compliant

Technical data

UL approval	cURus
Nominal voltage	1000 V 80 °C
Voltage	
U ₀ /U	0.6/1 kV
Test voltage	4000 V
Insulation resistance	min. 500 MΩ × km
Temperature range	
moving	-25 °C to +80 °C
fixed	-40 °C to +80 °C
Minimum bending radius	
moving	D × 10
fixed	D × 6
Burning behavior	Flame-retardant according to VDE 0482 T 265-2, DIN EN 50265-2, IEC 60332-1, UL 1581 section 1080 VW-1, CSA FT 1
Halogen free	according to DIN EN 50267-2-1, EN 60684-2
Product photo	The product photos are not to scale and do not represent detailed images of the respective products.

Construction

- Bare copper wire, finely stranded according to DIN VDE 0295 class 6, IEC 60228 class 6
- Special TPE/HGI conductor insulation, UL certified
- Conductor marking Power conductors black with numbered print U/L1/C/L+, V/L2, W/L3/D/L-
- Ground conductor green/yellow according to DIN EN 50334
- Control pair color-coded (bk, wh)
- Control pair with braided shield and foil tape
- Conductors cabled in layers without mechanical stress, layer pitch optimised
- Fleece wrap over cable core
- Braid from tinned copper wire, optical coverage ≥ 85 %
- Outer jacket Full polyurethane jacket, matte, adhesion-free surface
- Jacket color orange RAL 2003

Part-No.	SIEMENS designation	Length m	Number of conductors/cross-section	Outer Ø ca. mm
SIMODRIVE, full thread/open end				
198460.1000	6FX8002-5DA01-1BA0*	10.0	(4G1.5+(2×1.5))	11.4
198480.1000	6FX8002-5DA11-1BA0*	10.0	(4G2.5+(2×1.5))	12.9
198840.1000	6FX8002-5DA13-1BA0*	10.0	(4G10+(2×1.5))	19.5
198500.1000	6FX8002-5DA21-1BA0*	10.0	(4G1.5+(2×1.5))	11.4
198870.1000	6FX8002-5DA23-1BA0*	10.0	(4G16+(2×1.5))	23.6
198530.1000	6FX8002-5DA31-1BA0*	10.0	(4G2.5+(2×1.5))	12.9
198880.1000	6FX8002-5DA33-1BA0*	10.0	(4G25+(2×1.5))	28.5
198560.1000	6FX8002-5DA41-1BA0*	10.0	(4G4+(2×1.5))	14.5
198349.1000	6FX8002-5DA43-1BA0*	10.0	(4G35+(2×1.5))	32.0
198570.1000	6FX8002-5DA51-1BA0*	10.0	(4G6+(2×1.5))	16.1
198580.1000	6FX8002-5DA61-1BA0*	10.0	(4G10+(2×1.5))	19.5
SINAMICS, full thread/open end				
198075.1000	6FX8002-5DG01-1BA0*	10.0	(4G1.5+(2×1.5))	11.4
198085.1000	6FX8002-5DG11-1BA0*	10.0	(4G2.5+(2×1.5))	12.9
198275.1000	6FX8002-5DG13-1BA0*	10.0	(4G10+(2×1.5))	19.5
198080.1000	6FX8002-5DG21-1BA0*	10.0	(4G1.5+(2×1.5))	11.4
198276.1000	6FX8002-5DG23-1BA0*	10.0	(4G16+(2×1.5))	23.6
198090.1000	6FX8002-5DG31-1BA0*	10.0	(4G2.5+(2×1.5))	12.9
198277.1000	6FX8002-5DG33-1BA0*	10.0	(4G25+(2×1.5))	28.5
198095.1000	6FX8002-5DG41-1BA0*	10.0	(4G4+(2×1.5))	14.5
198278.1000	6FX8002-5DG43-1BA0*	10.0	(4G35+(2×1.5))	32.0
198100.1000	6FX8002-5DG51-1BA0*	10.0	(4G6+(2×1.5))	16.1
198279.1000	6FX8002-5DG53-1BA0*	10.0	(4G50+(2×1.5))	37.3
198115.1000	6FX8002-5DG61-1BA0*	10.0	(4G10+(2×1.5))	19.5
198263.1000	6FX8002-5DS14-1BA0*	10.0	(4G10+(2×1.5))	19.5
198267.1000	6FX8002-5DS23-1BA0*	10.0	(4G16+(2×1.5))	23.6
198259.1000	6FX8002-5DS54-1BA0*	10.0	(4G6+(2×1.5))	16.1
198262.1000	6FX8002-5DS64-1BA0*	10.0	(4G10+(2×1.5))	19.5

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Servo cable assemblies without brake cores for C-tracks

Acc. to SIEMENS-6FX8002 standard Extension



Application

- Extension, for Siemens servo drives
- Due to full PUR jacket and TPE conductor insulation optimally suited for c-tracks, extremely rough operating conditions, aggressive coolants and lubricants

Properties

- Silicone free
- RoHS-compliant

Notes:

- The extension can also be used for **SPEED-CONNECT** plug connection, for this the O-ring must be removed on the outer thread. This does not affect the tightness of the plug connection.

Technical data

UL approval	cURus
Nominal voltage	1000 V 80 °C
Voltage	
U ₀ /U	0.6/1 kV
Test voltage	4000 V
Insulation resistance	min. 500 MΩ × km
Temperature range	
moving	-25 °C to +80 °C
fixed	-40 °C to +80 °C
Minimum bending radius	
moving	D × 10
fixed	D × 6
Burning behavior	Flame-retardant according to VDE 0482 T 265-2, DIN EN 50265-2, IEC 60332-1, UL 1581 section 1080 VW-1, CSA FT 1
Halogen free	according to DIN EN 50267-2-1, EN 60684-2
Product photo	The product photos are not to scale and do not represent detailed images of the respective products.

Construction

- Bare copper wire, finely stranded according to DIN VDE 0295 class 6, IEC 60228 class 6
- Special TPE/HGI conductor insulation, UL certified
- Conductor marking Power conductors black with numbered print U/L1/C/L+, V/L2, W/L3/D/L-
- Ground conductor green/yellow according to DIN EN 50334
- Conductors cabled in layers without mechanical stress, optimised lay pitch
- Fleece wrap over cable core
- Braid from tinned copper wire, optical coverage ≥ 85 %
- Outer jacket Full polyurethane jacket, matte, adhesion-free surface
- Jacket color orange RAL 2003

Part-No.	SIEMENS designation	Length m	Number of conductors/ cross-section	Outer Ø ca. mm
SINAMICS/SIMODRIVE, full thread				
198820.1000	6FX8002-5CA05-1BA0*	10.0	(4G1.5)	8.6
198985.1000	6FX8002-5CA15-1BA0*	10.0	(4G2.5)	10.8
198765.1000	6FX8002-5CA28-1BA0*	10.0	(4G1.5)	8.6
198995.1000	6FX8002-5CA38-1BA0*	10.0	(4G2.5)	10.8
198015.1000	6FX8002-5CA48-1BA0*	10.0	(4G4)	12.2
198020.1000	6FX8002-5CA58-1BA0*	10.0	(4G6)	14.0
198030.1000	6FX8002-5CA68-1BA0*	10.0	(4G10)	17.6
198216.1000	6FX8002-5CX18-1BA0*	10.0	(4G10)	17.6
198217.1000	6FX8002-5CX28-1BA0*	10.0	(4G16)	21.2
SINAMICS, speed-connect				
198204.1000	6FX8002-5CN05-1BA0*		(4G1.5)	8.6

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Servo cable assemblies with brake cores for C-tracks

Acc. to SIEMENS-6FX8002 standard Extension



Application

- Extension, for Siemens servo drives
- Due to full PUR jacket and TPE conductor insulation optimally suited for c-tracks, extremely rough operating conditions, aggressive coolants and lubricants
- Especially for industrial environments, machines and plants

Properties

- Silicone free
- RoHS-compliant
- The extension can also be used for **SPEED-CONNECT** plug connection, for this the O-ring must be removed on the outer thread. This does not affect the tightness of the plug connection.

Technical data

UL approval	cURus
Nominal voltage	1000 V 80 °C
Voltage	
U_0/U	0.6/1 kV
Test voltage	4000 V
Insulation resistance	min. 500 MΩ × km
Temperature range	
moving	-25 °C to +80 °C
fixed	-40 °C to +80 °C
Minimum bending radius	
moving	D × 10
fixed	D × 6
Burning behavior	Flame-retardant according to VDE 0482 T 265-2, DIN EN 50265-2, IEC 60332-1, UL 1581 section 1080 VW-1, CSA FT 1
Halogen free	according to DIN EN 50267-2-1
Product photo	The product photos are not to scale and do not represent detailed images of the respective products.

Construction

- Bare copper wire, finely stranded according to DIN VDE 0295 class 6, IEC 60228 class 6
- Special TPE/HGI conductor insulation, UL certified
- Conductor marking Power conductors black with numbered print U/L1/C/L+, V/L2, W/L3/D/L-
- Ground conductor green/yellow according to DIN EN 50334
- Control pair color-coded (bk, wh)
- Control pair with braided shield and foil tape
- Conductors cabled in layers without mechanical stress, optimised lay pitch
- Fleece wrap over cable core
- Braid from tinned copper wire, optical coverage ≥ 85 %
- Outer jacket Full polyurethane jacket, matte, adhesion-free surface
- Jacket color orange RAL 2003

Part-No.	SIEMENS designation	Length m	Number of conduc- tors/cross-section	Outer Ø ca. mm
SINAMICS/SIMODRIVE, full thread				
198730.1000	6FX8002-5DA05-1BA0*	10.0	(4G1.5+(2×1.5))	11.4
198990.1000	6FX8002-5DA15-1BA0*	10.0	(4G2.5+(2×1.5))	12.9
198790.1000	6FX8002-5DA28-1BA0*	10.0	(4G1.5+(2×1.5))	11.4
198800.1000	6FX8002-5DA38-1BA0*	10.0	(4G2.5+(2×1.5))	12.9
198005.1000	6FX8002-5DA48-1BA0*	10.0	(4G4+(2×1.5))	14.5
198010.1000	6FX8002-5DA58-1BA0*	10.0	(4G6+(2×1.5))	16.1
198025.1000	6FX8002-5DA68-1BA0*	10.0	(4G10+(2×1.5))	19.5
198248.1000	6FX8002-5DX18-1BA0*	10.0	(4G10+(2×1.5))	19.5
198249.1000	6FX8002-5DX28-1BA0*	10.0	(4G16+(2×1.5))	23.6
198252.1000	6FX8002-5DX38-1BA0*	10.0	(4G25+(2×1.5))	28.5
198187.1000	6FX8002-5DX48-1BA0*	10.0	(4G35+(2×1.5))	32.0
198254.1000	6FX8002-5DX58-1BA0*	10.0	(4G50+(2×1.5))	37.3
SINAMICS, speed-connect				
198735.1000	6FX8002-5DN05-1BA0*		(4G1.5+(2×1.5))	11.4

* Siemens article designations are registered trademarks of Siemens AG, and are for reference purposes only

Signal cables for C-tracks

Acc. to SIEMENS-6FX8002 standard Base cable DRIVE-CLIQ®



LÜTZE SUPERFLEX®
connected



Application

- Resolver cable
- Due to full PUR jacket and TPE conductor insulation optimally suited for c-tracks, extremely rough operating conditions, aggressive coolants and lubricants

Properties

- Silicone free
- RoHS-compliant

Technical data

UL approval	cURus
Nominal voltage	30 V 80 °C
Test voltage	500 V
Insulation resistance	min. 2000 MΩ × km
Temperature range	
moving	-25 °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 T 265-2, DIN EN 50265/2, IEC 60332-1, UL 1581 section 1080 VW-1 CSA FT 1
Halogen free	according to DIN EN 50267-2-1
Product photo	The product photos are not to scale and do not represent detailed images of the respective products.

Construction

- Bare copper wire, finely stranded according to DIN VDE 0295 class 6, IEC 60228 class 6
- Special TPE conductor insulation, UL qualified
- Conductors color-coded for specific system
- Conductors cabled in layers without mechanical stress, layer pitch optimised
- Fleece wrap over cable core
- Braid from tinned copper wire, optical coverage ≥ 85 %
- Full polyurethane jacket, matte adhesion-free surface
- Jacket color green RAL 6018

Part-No.	SIEMENS designation	Length m	Outer Ø ca. mm
SINAMICS			
198890.1000	6FX8002-2DC00-1BA0*	10.0	6.8
198900.1000	6FX8002-2DC10-1BA0*	10.0	6.8
198910.1000	6FX8002-2DC20-1BA0*	10.0	6.8

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Signal cables for C-tracks

Acc. to SIEMENS-6FX8002 standard base cable and extension



Application

- Resolver cable
- Due to full PUR jacket and TPE conductor insulation optimally suited for c-tracks, extremely rough operating conditions, aggressive coolants and lubricants

Properties

- Silicone free
- RoHS-compliant

Technical data

UL approval	cURus
Nominal voltage	30 V 80 °C
Test voltage	500 V
Insulation resistance	min. 2000 MΩ × km
Temperature range	
moving	-25 °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 T 265-2, DIN EN 50265/2, IEC 60332-1, UL 1581 section 1080 VW-1 CSA FT 1
Halogen free	according to DIN EN 50267-2-1
Product photo	The product photos are not to scale and do not represent detailed images of the respective products.

Construction

- Bare copper wire, finely stranded according to DIN VDE 0295 class 6, IEC 60228 class 6
- Special TPE conductor insulation, UL qualified
- Conductors color-coded for specific system
- Conductors cabled in layers without mechanical stress, layer pitch optimised
- Fleece wrap over cable core
- Braid from tinned copper wire, optical coverage ≥ 85 %
- Full polyurethane jacket, matte adhesion-free surface
- Jacket color green RAL 6018



Part-No.	SIEMENS designation	Length m	Outer Ø ca. mm
SIMODRIVE base cable			
198110.1000	6FX8002-2AD00-1BA0*	10.0	8.6
198830.1000	6FX8002-2AH00-1BA0*	10.0	9.0
198120.1000	6FX8002-2CA11-1BA0*	10.0	9.0
198130.1000	6FX8002-2CA15-1BA0*	10.0	8.6
198628.1000	6FX8002-2CA31-1BA0*	10.0	9.5
198850.1000	6FX8002-2CA51-1BA0*	10.0	8.6
198150.1000	6FX8002-2CA61-1BA0*	10.0	8.6
198200.1000	6FX8002-2CB51-1BA0*	10.0	9.0
198210.1000	6FX8002-2CC11-1BA0*	10.0	9.0
198220.1000	6FX8002-2CD01-1BA0*	10.0	9.0
198240.1000	6FX8002-2CF02-1BA0*	10.0	8.6
198170.1000	6FX8002-2CG00-1BA0*	10.0	9.0
198250.1000	6FX8002-2CH00-1BA0*	10.0	8.6
198280.1000	6FX8002-2EQ10-1BA0*	10.0	9.5
198140.1000	6FX8002-2CA21-1BA0*	10.0	8.6
198260.1000	6FX8002-2CE07-1BA0*	10.0	9.0
SIMODRIVE extension			
198160.1000	6FX8002-2CA34-1BA0*	10.0	9.5
198740.1000	6FX8002-2CF04-1BA0*	10.0	8.6
198700.1000	6FX8002-2EQ14-1BA0*	10.0	9.5
198105.1000	6FX8002-2AD04-1BA0*	10.0	8.6
198295.1000	6FX8002-2CB54-1BA0*	10.0	9.0

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PVC servo cables · shielded

LÜTZE SILFLEX® M (C) PVC SERVO 0.6/1 kV Motor/energy supply cable for Siemens and other systems



Application

- For Siemens 6FX5008* standard system (and similar)
- Connection cable motor or motor/brake especially for frequency converters and SERVO drives in machine and plant construction, transport and conveyor technology
- Flexible construction for easy installation
- Suitable for static laying and slight movement of machine components (not C-track)
- Low capacitance for high dielectric strength for long cable guide from inverter to motor
- In dry and damp rooms
- Especially for industrial environments in mechanical and system engineering

Properties

- Low capacitance for high dielectric strength
- High active and passive interference resistance (EMC)
- PVC, flame-retardant and self-extinguishing
- Orange RAL 2003 per DESINA
- Resistant to most oils, greases, alcohol-free benzines and kerosene
- Silicone free
- RoHS compliant

Technical data

UL approval	AWM 2570
Nominal voltage	1000 V 80 °C
Voltage	
U ₀ /U	0.6/1 kV
Test voltage	4000 V
Insulation resistance	min. 500 MΩ × km
Temperature range	
moving	-5 °C to +80 °C
fixed	-25 °C to +80 °C
Minimum bending radius	
moving	D × 10
fixed	D × 6
Burning behavior	Flame-retardant according to VDE 0482 part 265-2, DIN EN 50265-2, IEC 60332-1, UL 1581 section 1080 VW-1, CSA FT 1

Construction

- Bare copper wire, super finely stranded according to DIN VDE 0295 Kl. 5 or IEC 60228 cl. 5
- Conductor insulation Special TPM/PP
- Conductor marking Power conductors black with number print U/ L1/C/L+, V/L2, W/L3/D/L-
- Ground conductor green/yellow according to DIN EN 50334 in the top layer
- G = with green/yellow ground conductor, × = without ground conductor
- Signal strands: white/black (1 pair)
- Fleece wrap over cable core
- Braid from tinned copper wire, optical coverage ≥ 85 %
- Jacket special-PVC, matte, adhesion-free surface
- Jacket color orange RAL 2003

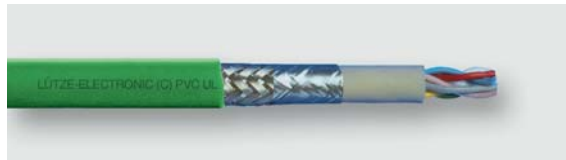
Part-No.	Number of conductors/cross-section	SIE-MENS designation	Outer Ø ca. mm	Weight kg/100 m	Cu-Index kg/100 m
Construction without signal strands					
116401	(4G1.5)	1BB11*	8.4	13.1	8.8
116402	(4G2.5)	1BB21*	10.6	21.9	13.2
116403	(4G4)	1BB31*	11.5	31.2	19.5
116404	(4G6)	1BB41*	13.2	38.0	28.0
116405	(4G10)	1BB51*	16.5	62.0	44.5
116406	(4G16)	1BB61*	21.2	106.0	71.5
116407	(4G25)	1BB25*	25.0	165.0	111.0
116408	(4G35)	1BB35*	31.8	231.0	154.0
Construction with 1 signal pair					
116415	(4G1.5+(2×1.5))	1BA11*	11.6	24.8	15.5
116416	(4G2.5+(2×1.5))	1BA21*	13.0	31.0	19.5
116417	(4G4+(2×1.5))	1BA31*	14.0	44.5	27.5
116418	(4G6+(2×1.5))	1BA41*	15.8	55.4	35.3
116419	(4G10+(2×1.5))	1BA51*	18.5	80.6	53.7
116420	(4G16+(2×1.5))	1BA61*	23.6	108.5	75.9
116421	(4G25+(2×1.5))	1BA25*	28.5	168.5	115.4

CE These products are in conformity with the EU Low Voltage Directive 2006/95/EC
*Siemens article designations are registered trademarks of Siemens AG

PVC feedback cables · shielded

LÜTZE SILFLEX® (C) PVC FEEDBACK

Feedback cable for Siemens DRIVE-CLIQ 6FX5008 standard system



Application

- Digital feedback cable compatible with Siemens DRIVE-CLIQ standard system
- In dry and damp rooms
- For flexible applications without continuous flexing

Properties

- High active and passive interference resistance (EMC)
- PVC Flame-retardant, self-extinguishing
- Resistant to most oils, greases, acids and bases
- Silicone free
- RoHS compliant

Technical data

UL approval	AWM 2502
Nominal voltage	30 V 80 °C
Test voltage	500 V
Insulation resistance	min. 20 MΩ × km
Temperature range	
moving	-5 °C to +80 °C
fixed	-25 °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, DIN EN 50265-2, IEC 60332-1,

Construction

- Bare copper wire, super finely stranded according to DIN VDE 0295 Kl. 5 or IEC 60228 cl. 5
- Conductor insulation Special thermoplast
- Conductors color-coded
- Braid from tinned copper wire, optical coverage ≥ 85 %
- Jacket special PVC TM2 according to VDE 0281-1, 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
For Siemens system DRIVE-CLIQ 2DC00				
104313	(2×2×AWG26) green/yellow/blue/pink	6.4	7.3	3.4
104341	(2×2×AWG26+2×AWG22) AWG26: green/yellow/blue/pink AWG22: red/black	6.8	8.5	4.2

PUR servo cables · C-track compatible · shielded

LÜTZE SUPERFLEX® PLUS M (C) PUR SERVO 0.6/1 kV Supply line for Siemens and other systems For highest requirements



Application

- Connection cable motor or motor/brake especially for frequency converters and SERVO drives in machine and plant construction, transport and conveyor technology
- Due to optimized cable construction optimally suited for continuous flexing applications in C-tracks
- Very good resistance against aggressive coolants and lubricants
- Especially for industrial environments in mechanical and system engineering

Properties

- High active and passive interference resistance (EMC)
- Braided shield optimised for continuous flexible use
- Very good alternating bending strength
- Low adhesion, abrasion-resistant, nick-resistant, tear-propagation-resistant
- Hydrolysis-resistant, microbe-resistant, and rot-resistant
- Weatherproof, ozone and UV resistant (normal lighting conditions)
- Good ruggedness and salt water resistance
- Excellent coolant and lubricant resistance
- Resistant to most oils, greases, alcohol-free benzines and kerosene
- Silicone free
- RoHS compliant

Technical data

UL approval	AWM 21223
Nominal voltage	1000 V 80 °C
Voltage U ₀ /U	0.6/1 kV
Test voltage	4000 V
Insulation resistance	min. 500 MΩ × km
Temperature range	
moving	-25 °C to +80 °C
fixed	-40 °C to +80 °C
Minimum bending radius	
moving	D × 10
fixed	D × 6
Burning behavior	Flame-retardant according to VDE 0482 part 265-2, DIN EN 50265-2, IEC 60332-1, UL 1581 section 1080 VW-1, CSA FT 1
Halogen free	according to EN 50267-2-1

Construction

- Bare copper wire, super finely stranded according to DIN VDE 0295 class 6, IEC 60228 class 6
- Conductor insulation Special TPE, high glide
- Power conductors black with numbered print U/L1/C/L+, V/L2, W/L3/D/L-
- Ground conductor green/yellow according to DIN EN 50334
G = with green/yellow ground conductor, × = without ground conductor
- Control pair color-coded (bk, wh)
- Control pair with braided shield and foil tape
- Conductors cabled in layers without mechanical stress, layer pitch optimised
- Fleece wrap over cable core
- Braid from tinned copper wire, optical coverage ≥ 85 %
- Jacket special-PUR, matte, adhesion-free surface
- Jacket color orange RAL 2003

Part-No.	Number of conductors/cross-section	SIE-MENS designation	Outer Ø ca. mm	Weight kg/100 m	Cu-Index kg/100 m
Construction without signal strands					
111879	(4G1.0)	-----*	7.4	10.8	6.5
111460	(4G1.5)	1BB11*	8.6	11.7	8.3
111461	(4G2.5)	1BB21*	10.8	17.3	13.0
111462	(4G4)	1BB31*	12.2	24.5	19.3
111463	(4G6)	1BB41*	14.0	36.5	27.5
111464	(4G10)	1BB51*	17.6	54.9	45.0
111465	(4G16)	1BB61*	21.2	84.9	72.0
111466	(4G25)	1BB25*	25.0	129.9	108.0
111467	(4G35)	1BB35*	28.8	169.2	152.4
111468	(4G50)	1BB50*	33.9	244.2	216.8
Assembly with 1 signal pair					
111420	(4G1.5+(2×1.5))	1BA11*	11.4	21.0	14.9
111421	(4G2.5+(2×1.5))	1BA21*	12.9	23.5	19.3
111422	(4G4+(2×1.5))	1BA31*	14.5	32.0	25.5
111423	(4G6+(2×1.5))	1BA41*	16.1	43.0	33.9
111424	(4G10+(2×1.5))	1BA51*	19.5	68.0	52.6
111425	(4G16+(2×1.5))	1BA61*	23.6	95.6	77.3
111426	(4G25+(2×1.5))	1BA25*	28.5	136.5	113.0
111427	(4G35+(2×1.5))	1BA35*	31.0	274.6	159.0
111428	(4G50+(2×1.5))	1BA50*	34.5	373.7	224.0

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

PUR feedback cables · C-track compatible

LÜTZE SUPERFLEX® PLUS (C) PUR FEEDBACK

Encoder cables for Siemens and other systems

For highest requirements in drive technology



Application

- Incremental encoder cable, connection cable for tacho sensor, brake sensor, speed sensor
- Due to Full PUR jacket and TPE conductor insulation optimally suited for c-tracks, extremely rough operating conditions and aggressive coolants and lubricants
- Especially for industrial environments in mechanical and system engineering

Properties

- High active and passive interference resistance (EMC)
- Braided shield optimised for continuous flexible use
- Very good alternating bending strength
- Low adhesion, abrasion-resistant, nick-resistant, tear-propagation-resistant
- Hydrolysis-resistant, microbe-resistant, and rot-resistant
- Weatherproof, ozone and UV resistant (normal lighting conditions)
- Good ruggedness and salt water resistance
- Excellent coolant and lubricant resistance
- Resistant to most oils, greases, alcohol-free benzines and kerosene
- Silicone free
- RoHS compliant

Technical data

UL approval	AWM 20236
Nominal voltage	30 V 80 °C
Test voltage	500 V
Insulation resistance	min. 200 MΩ × km
Temperature range	
moving	-25 °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, DIN EN 50265-2, IEC 60332-1, UL 1581 section 1080 VW-1, CSA FT 1
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Halogen free

	according to EN 50267-2-1
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Construction

- Bare copper wire, super finely stranded according to DIN VDE 0295 class 6, IEC 60228 class 6
- Conductor insulation Special-TPE
- Conductors color-coded for specific system
- Conductors cabled in layers without mechanical stress, layer pitch optimised
- Fleece wrap over cable core
- Braid from tinned copper wire, optical coverage ≥ 85 %
- Full polyurethane jacket, matte, adhesion-free surface
- Jacket color green RAL 6018

Part-No.	Number of strands/cross-section/ strand colors	SIEMENS designation	Outer Ø ca. mm	Weight kg/100 m	Cu-Index kg/100 m
For Siemens 6FX8000* standard system (and similar)					
111412	(8×2×0.18) black/brown, red/orange, yellow/ green, blue/violet, grey/white, whiteblack/whitebrown, whitered/ whiteorange, whitegreen/whiteyel- low	1BD11*	8.1	13.1	7.3
111456	(4×0.5+4×2×0.38) 0.5: whiteblue, whiteblack, whitered, whiteyellow 0.38: black/brown, red/orange, green/yellow, blue/violet	1BD21*	9.2	13.2	8.6
111459	(2×(0.5)+3×(2×0.14)) 0.5: black, red 0.14: black/brown, red/orange, green/yellow	1BD31*	8.7	12.8	6.9
111458	(2×0.5+3×(2×0.14)+4×0.14) 0.5: brownblue, brownred (0.14) black/brown, red/orange, green/yellow 0.14: blue, grey, whiteblack, whi- teyellow	1BD41*	9.0	12.2	6.1
111457	(2×0.5+3×(2×0.14)+4×0.23+4×0.14) 0.5: brownblue, brownred 0.23: greenblack, greenred, brow- nyellow, browngrey (0.14) black/brown, red/orange, yel- low/green 0.14: blue, grey, whiteblack, whi- teyellow	1BD51*	9.6	15.3	9.3
111453	(4×2×0.18) black/brown, red/orange, green/yel- low, blue/violet	1BD61*	6.4	7.6	3.2
111452	(2×2×0.18) Star quad, black, red, orange, brown	1BD71*	5.0	4.2	2.2
111454	(12×0.23) black, brown, red, orange, green, yellow, blue, violet, grey, white, whiteblack, whitebrown	1BD81*	6.7	8.5	4.7
For Siemens-System Drive CliQ standard system (and similar)					
104310	(2×2×0.15+1×2×0.34) 0.34: red/black 0.15: pink/blue, yellow/green	2DC00*	6.8	7.3	3.4

CE These products are in conformity to the EC Low Voltage Direc-
tive 73/23/EWG or 93/68/EWG respectively
*Siemens and DRIVE CliQ are registered trademarks

Connectors used with LUTZE Cable Assemblies

Connectors – Standard thread vs. Speed-connect

Female

Standard thread



Speed-connect



Male

Standard thread – with o-ring



Speed-connect – Remove o-ring



General features

- High quality industrial grade connectors
- Proper low resistance crimp and shield termination
- Quality tested and verified
- Fully compatible with SIEMENS servo systems
- Available in various industrial protection grades (IP)

Speed-connect features

- Fast connection due to one-quarter turn lock
- No o-ring required
- Full protection against vibration

Male connector can be used with female standard thread and female Speed-connect connectors.

Important: Remove o-ring for Speed-connect option

LUTZE Safecon Connectors



For special applications, LUTZE offers Safecon connectors with the following advantages:

- tamper proof connector
- increased kink protection for flexing applications
- similar benefits to overmold connectors

Handling and Installation LÜTZE SUPERFLEX® – Quick Overview

1. Selecting Cables for Continuous Motion Applications – C-Tracks

We recommend special high flexing cables such as LÜTZE SUPERFLEX® cables, for use in C-tracks to ensure long life times:

- LÜTZE SUPERFLEX® cable is proven to be compatible with all major brands of C-tracks.
- LÜTZE SUPERFLEX® N is designed for moderate flexing in short to medium length C-tracks.
- LÜTZE SUPERFLEX® Plus PUR is designed for high performance flexing or longer C-tracks.

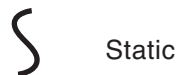
High Flexing Cables such as LÜTZE SUPERFLEX® cables are different from standard flexible cables:

Standard Flexible Cables – LÜTZE SILFLEX®

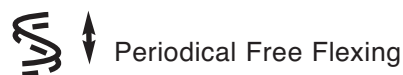


long pitch

- Low number of strands per conductor
- longer pitch layering
- designed as a pliable cable for easy routing and installation



Static

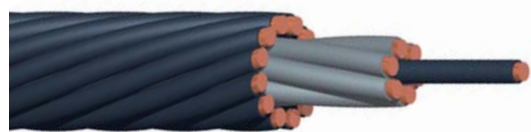


Periodical Free Flexing



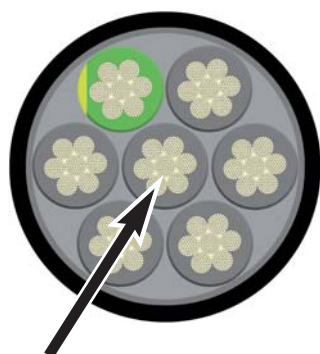
Bend & Route

High Flexing Cables – LÜTZE SUPERFLEX®

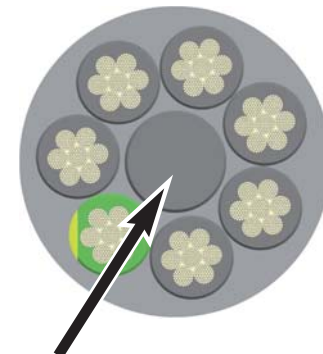


short pitch, layered design with control core

- high number of super fine strands per conductor
- short pitch layering
- conductors are cabled without mechanical back twist
- higher quality of materials
- slower and more complex manufacturing process on high-end equipment
- designed for linear constant flexing



- no central core
- mostly PVC as insulation material
- foil shield or braid shield
- jacket material depends on application

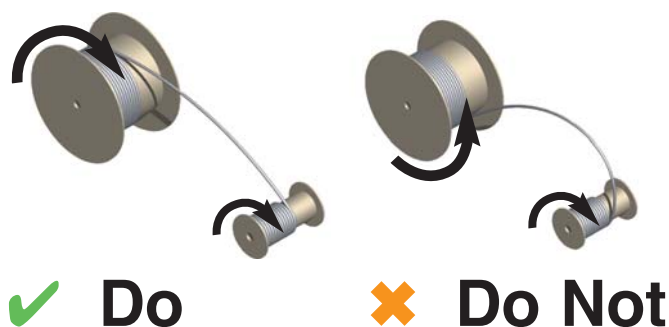


- central core for single layer construction
- special PVC or TPE as insulation material
- tinned copper braid shield
- high abrasion resistant jacket material such as PUR

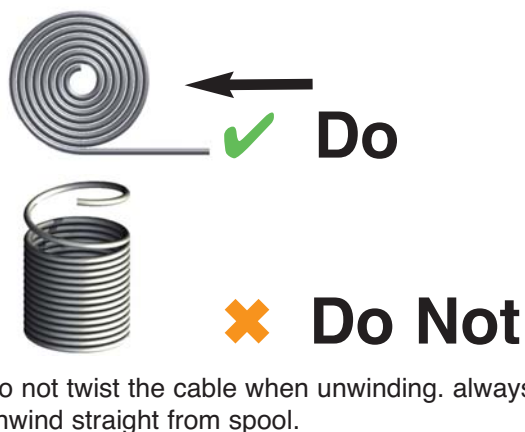
Handling and Installation LÜTZE SUPERFLEX® – Quick Overview

2. Correct Handling of LÜTZE SUPERFLEX® Cables

When unreeling the cable, do not change the bend direction. The cable has to go on the new reel in the same direction it came off the reel. Low and equal tensile force during spooling!

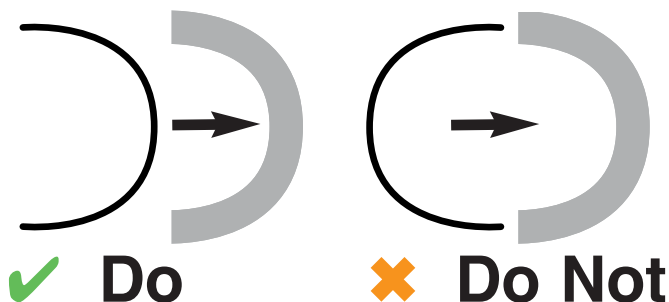


Ring put ups require careful uncoiling by rolling the ring upright over the floor

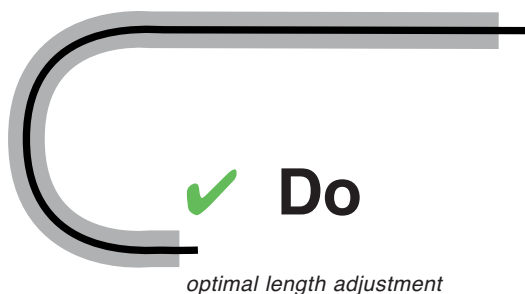


3. Correct Installation of LÜTZE SUPERFLEX® Cables

Cable retains bend from reel. Do not flex against original bend or relax cable for 24 hrs by laying it flat.



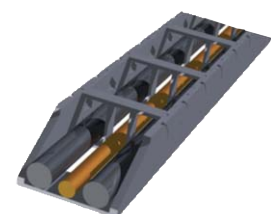
Observe the minimum bending radius for optimum performance. Make sure that all cables are length-adjusted and run in the neutral zone.



Use dividers horizontally and vertically to separate the track into separate cavities. Install just one cable per separated cavity. If absolutely necessary, two small or a small and a big cable can share a cavity.



Try to ensure balanced weight distribution. If you have more than one heavy cable, we recommend installing the heavy cables evenly to each side of the track.



Customer questionnaire Connectivity

Company: _____
 Contact person: _____
 Department: _____
 Street: _____
 ZIP / City: _____
 Telephone: _____
 Fax: _____



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Ready-made

Name: _____
 Lot sizes / Scale quantities: _____
 Annual requirement: _____
 Delivery time / -deadline: _____

Line

Name / Description: _____
 Jacket material: _____
 Jacket colour: _____
 Licences: _____
 Operating conditions: _____
 Length(s): _____

Side A

☐ Connector

Name / Description: _____
 Supplier: _____
 Supplier item number: _____

☐ Machined open end

Name / Description: _____
 Stepped dimensions / Wire lengths: _____
 Contacts / Connector: _____
 Supplier item number: _____

☐ Cut off smoothly

☐ Labelled ☐ Not labelled

Side B

☐ Connector

Name / Description: _____
 Supplier: _____
 Supplier item number: _____

☐ Machined open end

Name / Description: _____
 Stepped dimensions / Wire lengths: _____
 Contacts / Connector: _____
 Supplier item number: _____

☐ Cut off smoothly

☐ labelled ☐ Not labelled

Special features

Customer questionnaire Connectivity

Description side A	Description side B																														
Pin assignment ☐ View connection side ☐ View machining side	Pin assignment ☐ View connection side ☐ View machining side																														
Non-used wires ☐ insulate ☐ cut off	Non-used wires ☐ insulate ☐ cut off																														
Cable outlet ☐ straight ☐ angled in PIN direction: _____	Cable outlet ☐ straight ☐ angled in PIN direction: _____																														
Code settings Towards: _____	Code settings Towards: _____																														
Screen machining <table style="width: 100%; border: none;"> <tr> <td style="width: 80%;">Cut off</td> <td style="width: 10%; text-align: center;">outside</td> <td style="width: 10%; text-align: center;">inside</td> </tr> <tr> <td></td> <td style="text-align: center;">☐</td> <td style="text-align: center;">☐</td> </tr> <tr> <td>On housing</td> <td style="text-align: center;">☐</td> <td style="text-align: center;">☐</td> </tr> <tr> <td>On PIN</td> <td style="text-align: center;">☐</td> <td style="text-align: center;">☐</td> </tr> <tr> <td>Execute with wire</td> <td style="text-align: center;">☐</td> <td style="text-align: center;">☐</td> </tr> </table> Insulate outer screen against inner screen ☐ Connect inner screens ☐ Insulate inner screens against each other ☐ Cut off outer screen, put on jacket ☐ Screen window ☐ Width: _____ Position: _____	Cut off	outside	inside		☐	☐	On housing	☐	☐	On PIN	☐	☐	Execute with wire	☐	☐	Screen machining <table style="width: 100%; border: none;"> <tr> <td style="width: 80%;">Cut off</td> <td style="width: 10%; text-align: center;">outside</td> <td style="width: 10%; text-align: center;">inside</td> </tr> <tr> <td></td> <td style="text-align: center;">☐</td> <td style="text-align: center;">☐</td> </tr> <tr> <td>On housing</td> <td style="text-align: center;">☐</td> <td style="text-align: center;">☐</td> </tr> <tr> <td>On PIN</td> <td style="text-align: center;">☐</td> <td style="text-align: center;">☐</td> </tr> <tr> <td>Execute with wire</td> <td style="text-align: center;">☐</td> <td style="text-align: center;">☐</td> </tr> </table> Insulate outer screen against inner screen ☐ Connect inner screens ☐ Insulate inner screens against each other ☐ Cut off outer screen, put on jacket ☐ Screen window ☐ Width: _____ Position: _____	Cut off	outside	inside		☐	☐	On housing	☐	☐	On PIN	☐	☐	Execute with wire	☐	☐
Cut off	outside	inside																													
	☐	☐																													
On housing	☐	☐																													
On PIN	☐	☐																													
Execute with wire	☐	☐																													
Cut off	outside	inside																													
	☐	☐																													
On housing	☐	☐																													
On PIN	☐	☐																													
Execute with wire	☐	☐																													
Label text Wire printing available on request	Label text Wire printing available on request																														
Label position After connector (mm): _____	Label position After connector (mm): _____																														
Special Test parameters: _____																															
Packaging: _____																															

Construction questionnaire for LÜTZE SAFECON

Company: _____
 Contact person: _____
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 Street: _____
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Please tell us your requirements by filling in this construction questionnaire:

Batch size: _____ pieces

Page 1



Page

Page 1 / View X

- ☐ clockwise
☐ anti-clockwise

Signal



6-pin



7-pin



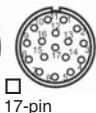
8+1-pin



9-pin



12-pin



17-pin



6+3-pin

Pin layouts (more on request)

Output



6-pin



8-pin



9-pin

Type page 1

- ☐ Connector – inner thread M23 x 1
☐ Connector – speedtec quick release fastener
☐ Coupling – outer thread M23 x 1
☐ Coupling – speedtec quick release fastener
☐ Socket contacts ☐ pin contacts
 Signal coding: ☐ 0° ☐ 80° ☐ 120° ☐ 20°

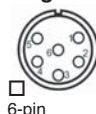
Line

- Assembly length L: _____ mm
☐ LÜTZE cable part number: _____
☐ Description / Requirement / Purpose / Specification: _____

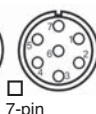
Page 2 / View Y

- ☐ clockwise
☐ anti-clockwise

Signal



6-pin



7-pin



8+1-pin



9-pin



12-pin



17-pin



6+3-pin

Pin layouts (more on request)

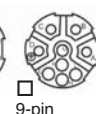
Output



6-pin



8-pin



9-pin

Type page 2

- ☐ Connector – inner thread M23 x 1
☐ Connector – speedtec quick release fastener
☐ Coupling – outer thread M23 x 1
☐ Coupling – speedtec quick release fastener
☐ Socket contacts ☐ pin contacts
 Signal coding: ☐ 0° ☐ 80° ☐ 120° ☐ 20°
☐ Other connectors type/variant: _____
 Manufacturer: _____
 Manufacturer part number: _____

- ☐ Finishing of cable end (remove jacket, strip, machine screen, shrink tubing, copper tape etc.)

Description: _____

- ☐ Cable end cut smoothly

Identification marking

- ☐ Wrap-round label printing text: _____
☐ Cable printing text: _____
☐ Other labelling – Description: _____
☐ No labelling

Note: Please indicate pin assignment!

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Cables

Cable assemblies

Cable fittings

LSC Wiring System

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Interface Technology**

Ethernet Connectivity

Suppression Technology

Power Supplies

Railway Technology

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