

readycable® power cable suitable for Siemens

6FX\_002-5CS24, basic cable PVC 7.5xd

MAT9761570



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- For heavy duty applications
- PVC outer jacket
- Overall shield
- Flame retardant
- Silicone-free
- UV resistance: medium
- Oil resistant (following DIN EN 50363-4-1)
- CFRIP®
- Guarantee up to 4 years

Product description

Introducing the readycable® power cable, designed specifically for Siemens 6FX\_002-5CS24 applications. This heavy-duty cable features a durable PVC outer jacket and is flame retardant, ensuring safety and reliability. With medium UV resistance and oil resistance, it's perfect for both indoor and outdoor use in temperatures above 5°C. Ideal for storage and retrieval units, machining, and quick handling, this cable supports unsupported travel distances up to 100m, making it a versatile choice for your power needs.

Manufacturer attributes

|                      |               |
|----------------------|---------------|
| Manufacturer Part No | 6FX_002-5CS24 |
| Cable type           | Basic cable   |

Connectors

|             |                              |
|-------------|------------------------------|
| Connector A | M40 connector, socket, 6-pin |
| Connector B | Ring cable lug               |

General properties

|                                                     |            |
|-----------------------------------------------------|------------|
| Number of cores and conductor nominal cross-section | (4G16)C    |
| Outer diameter (d) max. mm                          | 23 mm      |
| Weight per km                                       | 1035 kg/km |
| Copper index kg/km                                  | 738 kg/km  |



Electricity attributes

|                                                                                  |                                                 |                                          |
|----------------------------------------------------------------------------------|-------------------------------------------------|------------------------------------------|
|  | Nominal voltage                                 | 600/1,000V (according to DIN VDE 0298-3) |
|                                                                                  | UL Voltage Rating                               | 1000 V                                   |
|  | Test voltage                                    | 4000V (according to DIN EN 50395)        |
|                                                                                  | Maximum conductor resistance at 20°C [ $\mu$ m] | 1.2100                                   |



## Cable structure



### Conductor

Conductor cable made of stranded wires (according to DIN EN 60228).



### Core insulation

Mechanically high-quality, especially low-capacity XLPE mixture.



### Core stranding

Cores wound with a short pitch length around a high tensile strength centre element.



### Conductor colours

Cores black with white numbers, one core green-yellow. 1st core: U / L1 / C / L+ 2nd core: V / L2  
3rd core: W / L3 / D / L- 4th core: 4 / N  
(4G16)C

### Core group 1 core structure



### Inner jacket

PVC mixture adapted to suit the requirements in e-chains®.



### Overall shield

Extremely flexible braiding made of tinned copper wires. Coverage linear approx. 70%, optical approx. 90%



### Outer jacket

Low-adhesion, oil-resistant PVC mixture, adapted to suit the requirements in e-chains® (according to DIN EN 50363-4-1).



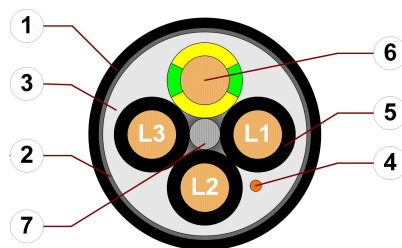
### Outer jacket colour

Jet black (comparable to RAL 9005)



### CFRIP®

Strip cables faster: a tear strip is moulded into the inner jacket



1. Outer jacket: pressure extruded, oil-resistant PVC mixture
2. Overall shield: extremely flexible braiding made of tinned copper wires
3. Inner jacket: pressure-extruded, gusset-filling PVC mixture
4. CFRIP: tear strip for faster stripping
5. Core insulation: mechanically high-quality, especially low-capacity XLPE mixture
6. Conductor: particularly flexible version consisting of bare copper wires
7. Strain relief: high tensile strength centre element



## Properties and approvals

|                                                                                    |                        |                                                                                                                                                     |
|------------------------------------------------------------------------------------|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
|    | <b>UV resistance</b>   | Medium                                                                                                                                              |
|    | <b>Oil resistance</b>  | Oil-resistant (according to DIN EN 50363-4-1), Class 2                                                                                              |
|    | <b>Flame-retardant</b> | According to IEC 60332-1-2, Cable Flame, VW-1, FT1, FT2/Horizontal Flame                                                                            |
|    | <b>Silicone-free</b>   | Free from silicone which can affect paint adhesion (according to PV 3.10.7 – status 1992)                                                           |
|    | <b>UL verified</b>     | Certificate no. V293650: "igus 4-year chainflex cable guarantee and service life calculator based on 2 billion test cycles per year"                |
|    | <b>UL/CSA AWM</b>      | Style 30052 und 20886, 1000V, 90°C                                                                                                                  |
|    | <b>NFPA</b>            | According to NFPA 79-2018, chapter 12.9                                                                                                             |
|   | <b>REACH</b>           | In accordance with Regulation (EC) No. 1907/2006 (REACH)                                                                                            |
|  | <b>Lead-free</b>       | According to 2011/65/EU (RoHS-II/RoHS-III)                                                                                                          |
|  | <b>Cleanroom</b>       | According to ISO Class 2. The outer jacket material of this series complies with CF5.10.07 - tested by IPA according to standard DIN EN ISO 14644-1 |
|  | <b>CE</b>              | According to 2014/35/EU                                                                                                                             |



## Dynamic properties

|                                                                                    |                                     |                                               |
|------------------------------------------------------------------------------------|-------------------------------------|-----------------------------------------------|
|    | Min. bend radius, e-chain (factor)  | 7.5 x d                                       |
|    | Min. bend radius, e-chain           | 172.5 mm                                      |
|    | Min. bend radius, flexible (factor) | 6 x d                                         |
|    | Min. bend radius, fixed (factor)    | 4 x d                                         |
|    | Temperature e-chain®                | +5°C up to +70°C                              |
|    | Temperature, flexible               | -5°C to +70°C (according to DIN EN 60811-504) |
|    | Temperature, fixed                  | -15°C to +70°C (according to DIN EN 50305)    |
|    | v max. unsupported (speed)          | 10 m/s                                        |
|   | v max. gliding (speed)              | 5 m/s                                         |
|  | a max. (acceleration)               | 80 m/s <sup>2</sup>                           |
|  | travel length                       | Class 5                                       |
|  | torsion                             | No torsion                                    |



chainflex®Lifetime

Guaranteed service life for this series according to guarantee conditions  
Further information: [chainflex® guarantee](#)

| Double strokes* | 5 million    | 7.5 million  | 10 million   |
|-----------------|--------------|--------------|--------------|
| Temperature,    | R min.       | R min.       | R min.       |
| from/to [°C]    | [Factor x d] | [Factor x d] | [Factor x d] |
| +5 / +15        | 10           | 11           | 12           |
| +15 / +60       | 7.5          | 8.5          | 9.5          |
| +60 / +70       | 10           | 11           | 12           |

\* Higher number of double strokes possible - use the service life calculation function on this page.

Certificates and standards

