

# CABLE-FCN40/1X50/ 2,0M/S7-IN - Cable



2321114

<https://www.phoenixcontact.com/us/products/2321114>

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Round cable set; controller: Siemens S7-300 (6ES7 321-1BP00-0AA0, plus-reading operation); connection 1: Fujitsu connector (1x 40-position); connection 2: IDC/FLK socket strip (1x 50-position); cable length: 2 m



## Your advantages

- Signal transfer of 1 x 32 channels
- System cable: 40-pos. connector to 50-pos. flat-ribbon cable strip

## Commercial data

|                                      |                                |
|--------------------------------------|--------------------------------|
| Item number                          | 2321114                        |
| Packing unit                         | 1 pc                           |
| Minimum order quantity               | 1 pc                           |
| Note                                 | Made to order (non-returnable) |
| Sales key                            | C421                           |
| Product key                          | DK226S                         |
| GTIN                                 | 4046356331845                  |
| Weight per piece (including packing) | 305.6 g                        |
| Weight per piece (excluding packing) | 298.4 g                        |
| Customs tariff number                | 85444290                       |
| Country of origin                    | DE                             |

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## Technical data

### Product properties

|              |              |
|--------------|--------------|
| Product type | System cable |
|--------------|--------------|

### Environmental and real-life conditions

#### Ambient conditions

|   |  |
|---|--|
| Degree of protection                                    | IP00                                     |
| Degree of protection (Installation location)            | ≥ IP54 (Installation location)           |
| Ambient temperature (operation) (fixed installation)    | -40 °C ... 70 °C (fixed installation)    |
| Ambient temperature (operation) (flexible installation) | -10 °C ... 70 °C (flexible installation) |
| Ambient temperature (storage/transport)                 | -40 °C ... 80 °C                         |
| Altitude  | ≤ 2000 m                                 |

### Electrical properties

|                          |                                  |
|--------------------------|----------------------------------|
| Operating voltage (AC)   | ≤ 30 V AC                        |
| Operating voltage (DC)   | ≤ 60 V DC                        |
| Nominal operating mode   | 100% operating factor            |
| Current (Per path, 50°C) | ≤ 1 A (Uncoiled, see derating)   |
| Current (Per path, 70°C) | ≤ 0.6 A (Uncoiled, see derating) |

### Supported controller SIEMENS S7-300 / ET 200 M

|                   |                    |
|-------------------|--------------------|
| Suitable I/O card | 6ES7321-1BP00-0AA0 |
|-------------------|--------------------|

### Cable/line

|              |     |
|--------------|-----|
| Cable length | 2 m |
|--------------|-----|

#### 40X0.14 [PVC]

|   |                          |
|---|--------------------------|
| UL AWM Style                                | 2464/1061                |
| Number of positions                         | 40                       |
| Shielded                                    | no                       |
| Cable type                                  | 40X0.14 [PVC]            |
| Conductor type                              | Round cable set          |
| Conductor structure signal line             | 7x 0.16 mm               |
| AWG signal line                             | 26                       |
| Conductor cross section                     | 40x 0.14 mm <sup>2</sup> |
| Wire diameter incl. insulation              | 1 mm ±0.03 mm            |
| External cable diameter                     | 9.90 mm ±0.4 mm          |
| Outer sheath, material                      | Semi-rigid PVC           |
| External sheath, color                      | gray                     |
| Conductor material                          | Tin-plated Cu litz wires |
| Cable resistance                            | ≤ 145 Ω/km (20 °C)       |
| Insulation resistance                       | ≥ 20 MΩ*km (20 °C)       |
| Smallest bending radius, fixed installation | 82 mm                    |

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|   |   |
|---|---|
| Smallest bending radius, movable installation | 155 mm  |
| Dynamic load capacity (bending)               | Max. bending cycles: 5000 (at a radius of $\geq$ 15x outside diameter)                        |
| Halogen-free                                  | no  |
| Flame resistance                              | IEC 60332-1-2 (raw cable)<br>VDE 0842, Part 332-1-2 (raw cable)<br>IEC 60332-3-22 (raw cable) |
|   | UL VW-1<br>CSA FT-1   |
| Resistance to oil                             | can withstand occasional splashes (raw cable)   |
| Cable type                                    | Cable for one module  |

Color code: Single-core wire

|              |                                  |
|--------------|----------------------------------|
| black        | Fujitsu40 (A1) = IDC/FLK50 (3)   |
| red          | Fujitsu40 (A2) = IDC/FLK50 (4)   |
| yellow       | Fujitsu40 (A3) = IDC/FLK50 (5)   |
| blue         | Fujitsu40 (A4) = IDC/FLK50 (6)   |
| gray         | Fujitsu40 (A5) = IDC/FLK50 (7)   |
| white-black  | Fujitsu40 (A6) = IDC/FLK50 (8)   |
| white-red    | Fujitsu40 (A7) = IDC/FLK50 (9)   |
| white-yellow | Fujitsu40 (A8) = IDC/FLK50 (10)  |
| white-blue   | Fujitsu40 (A9) = IDC/FLK50 (11)  |
| white-gray   | Fujitsu40 (A10) = IDC/FLK50 (15) |
| brown-red    | Fujitsu40 (A11) = IDC/FLK50 (16) |
| brown-yellow | Fujitsu40 (A12) = IDC/FLK50 (17) |
| brown-blue   | Fujitsu40 (A13) = IDC/FLK50 (18) |
| brown-gray   | Fujitsu40 (A14) = IDC/FLK50 (19) |
| green-black  | Fujitsu40 (A15) = IDC/FLK50 (20) |
| green-red    | Fujitsu40 (A16) = IDC/FLK50 (21) |
| green-blue   | Fujitsu40 (A17) = IDC/FLK50 (22) |
| green-gray   | Fujitsu40 (A18) = IDC/FLK50 (23) |
| yellow-black | Fujitsu40 (A19) = IDC/FLK50 ()   |
| yellow-red   | Fujitsu40 (A20) = IDC/FLK50 ()   |
| brown        | Fujitsu40 (B1) = IDC/FLK50 (27)  |
| orange       | Fujitsu40 (B2) = IDC/FLK50 (28)  |
| green        | Fujitsu40 (B3) = IDC/FLK50 (29)  |
| violet       | Fujitsu40 (B4) = IDC/FLK50 (30)  |
| white        | Fujitsu40 (B5) = IDC/FLK50 (31)  |
| white-brown  | Fujitsu40 (B6) = IDC/FLK50 (32)  |
| white-orange | Fujitsu40 (B7) = IDC/FLK50 (33)  |
| white-green  | Fujitsu40 (B8) = IDC/FLK50 (34)  |
| white-violet | Fujitsu40 (B9) = IDC/FLK50 (35)  |
| brown-black  | Fujitsu40 (B10) = IDC/FLK50 (39) |
| brown-orange | Fujitsu40 (B11) = IDC/FLK50 (40) |

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|               |                                  |
|---------------|----------------------------------|
| brown-green   | Fujitsu40 (B12) = IDC/FLK50 (41) |
| brown-violet  | Fujitsu40 (B13) = IDC/FLK50 (42) |
| brown-white   | Fujitsu40 (B14) = IDC/FLK50 (43) |
| green-brown   | Fujitsu40 (B15) = IDC/FLK50 (44) |
| green-orange  | Fujitsu40 (B16) = IDC/FLK50 (45) |
| green-violet  | Fujitsu40 (B17) = IDC/FLK50 (46) |
| green-white   | Fujitsu40 (B18) = IDC/FLK50 (47) |
| yellow-brown  | Fujitsu40 (B19) = IDC/FLK50 ()   |
| yellow-orange | Fujitsu40 (B20) = IDC/FLK50 ()   |

## Connection data

### Connection 1

|                             |                   |
|-----------------------------|-------------------|
| Connection method           | Fujitsu connector |
| Type                        | FCN 367           |
| Number of connections       | 1                 |
| Number of positions         | 40                |
| Insertion/withdrawal cycles | > 50              |
| Pitch                       | 2.54 mm           |

### Connection 2

|                                  |                              |
|----------------------------------|------------------------------|
| Connection in acc. with standard | IEC 60603-13 (in compliance) |
| Connection method                | IDC/FLK socket strip         |
| Number of connections            | 1                            |
| Number of positions              | 50                           |
| Insertion/withdrawal cycles      | > 50                         |
| Pitch                            | 2.54 mm                      |

## Notes

|                    |  |
|--------------------|--|
| Notes on operation | For proper use, the specifications of the installation directive (see Downloads) must be observed. For applications or use with third-party products, the specifications, and the safety and warning instructions of the respective third-party manufacturer must also be met. |
|--------------------|--|

# CABLE-FCN40/1X50/ 2,0M/S7-IN - Cable

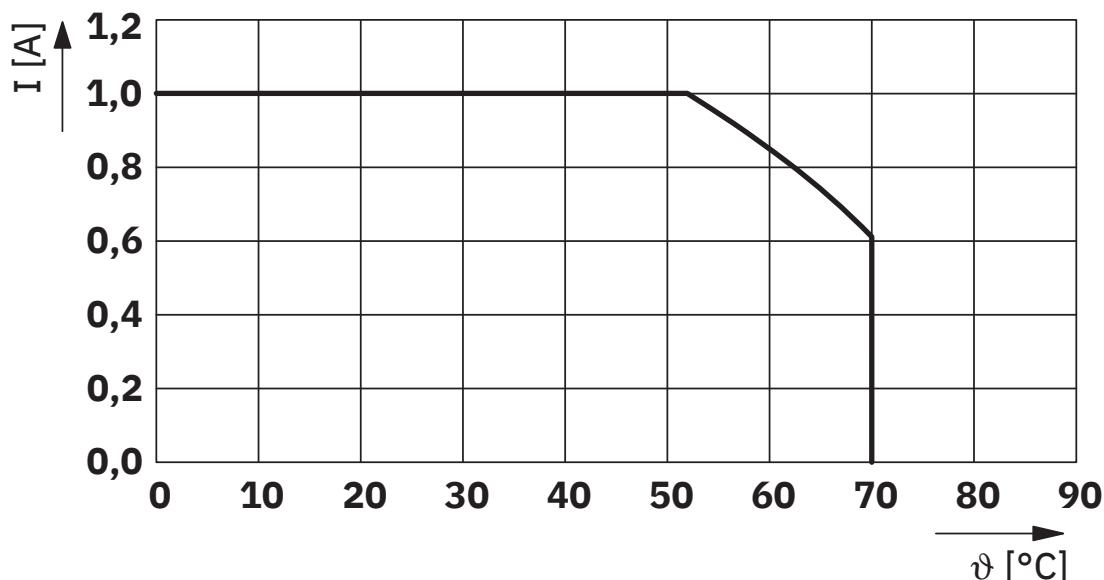
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## Drawings

Diagram



Maximum permissible current per path in uncoiled state

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## Classifications

### ECLASS

|             |          |
|-------------|----------|
| ECLASS-13.0 | 27242220 |
|-------------|----------|

### ETIM

|          |          |
|----------|----------|
| ETIM 9.0 | EC000237 |
|----------|----------|

### UNSPSC

|             |          |
|-------------|----------|
| UNSPSC 21.0 | 26121600 |
|-------------|----------|

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## Environmental product compliance

### EU RoHS

|   |      |
|---|------|
| Fulfills EU RoHS substance requirements | Yes  |
| Exemption                               | 6(c) |

### China RoHS

|   |         |
|---|---------|
| Environment friendly use period (EFUP)  | EFUP-50 |
| An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required. |         |

### EU REACH SVHC

|                                     |                                      |
|-------------------------------------|--------------------------------------|
| REACH candidate substance (CAS No.) | Lead(CAS: 7439-92-1)                 |
| SCIP                                | c841072d-d86b-4517-b175-c37a8cb339f4 |

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