

FLK 50/EZ-DR/FCN40/100/OMR-OUT - Cable



2304144

<https://www.phoenixcontact.com/us/products/2304144>

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Round cable set; controller: OMRON CJ1 (OD 231, OD 261) CS1, C200H (OD 218, OD 219); connection 1: Fujitsu connector (1x 40-position); connection 2: IDC/FLK socket strip (1x 50-position); cable length: 1 m

Your advantages

- Signal transfer of 32 channels

Commercial data

| | |
|--------------------------------------|--------------------------------|
| Item number | 2304144 |
| Packing unit | 1 pc |
| Minimum order quantity | 1 pc |
| Note | Made to order (non-returnable) |
| Sales key | C421 |
| Product key | DK226O |
| GTIN | 4017918927356 |
| Weight per piece (including packing) | 172.2 g |
| Weight per piece (excluding packing) | 170.6 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: OMRON CQM1

| | |
|-------------------|-------|
| Suitable I/O card | OD213 |
|-------------------|-------|

Supported controller: OMRON CS1/C200H

| | |
|-------------------|-------|
| Suitable I/O card | OD218 |
| | OD219 |

Supported controller: OMRON C200H

| | |
|-------------------|-------|
| Suitable I/O card | OD218 |
| | OD219 |

Supported controller: OMRON CJ1

| | |
|-------------------|-------|
| Suitable I/O card | OD231 |
| | OD261 |

Cable/line

| | |
|--------------|-----|
| Cable length | 1 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 |

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| | |
|---|---|
| Conductor structure signal line | 7x 0.16 mm |
| AWG signal line | 26 |
| Conductor cross-section | 40x 0.14 mm ² |
| 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 |
| Smallest bending radius, movable installation | 155 mm |
| Dynamic load capacity (bending) | Max. bending cycles: 5000 (at a radius of ≥ 15x outside diameter) |
| Halogen-free | no |
| Flame resistance | IEC 60332-1-2 (raw cable) |
| | VDE 0842, Part 332-1-2 (raw cable) |
| | IEC 60332-3-22 (raw cable) |
| | UL VW-1 |
| | 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) |
| brown | Fujitsu40 (B1) = IDC/FLK50 (27) |
| red | Fujitsu40 (A2) = IDC/FLK50 (4) |
| orange | Fujitsu40 (B2) = IDC/FLK50 (28) |
| yellow | Fujitsu40 (A3) = IDC/FLK50 (5) |
| green | Fujitsu40 (B3) = IDC/FLK50 (29) |
| blue | Fujitsu40 (A4) = IDC/FLK50 (6) |
| violet | Fujitsu40 (B4) = IDC/FLK50 (30) |
| gray | Fujitsu40 (A5) = IDC/FLK50 (7) |
| white | Fujitsu40 (B5) = IDC/FLK50 (31) |
| white-black | Fujitsu40 (A6) = IDC/FLK50 (8) |
| white-brown | Fujitsu40 (B6) = IDC/FLK50 (32) |
| white-red | Fujitsu40 (A7) = IDC/FLK50 (9) |
| white-orange | Fujitsu40 (B7) = IDC/FLK50 (33) |
| white-yellow | Fujitsu40 (A8) = IDC/FLK50 (10) |
| white-green | Fujitsu40 (B8) = IDC/FLK50 (34) |
| white-blue | Fujitsu40 (A9) = IDC/FLK50 (11) |
| white-violet | Fujitsu40 (B9) = IDC/FLK50 (35) |
| white-gray | Fujitsu40 (A10) = IDC/FLK50 (1) |
| brown-black | Fujitsu40 (B10) = IDC/FLK50 (25) |

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| | |
|---------------|----------------------------------|
| brown-red | Fujitsu40 (A11) = IDC/FLK50 (15) |
| brown-orange | Fujitsu40 (B11) = IDC/FLK50 (39) |
| brown-yellow | Fujitsu40 (A12) = IDC/FLK50 (16) |
| brown-green | Fujitsu40 (B12) = IDC/FLK50 (40) |
| brown-blue | Fujitsu40 (A13) = IDC/FLK50 (17) |
| brown-violet | Fujitsu40 (B13) = IDC/FLK50 (41) |
| brown-gray | Fujitsu40 (A14) = IDC/FLK50 (18) |
| brown-white | Fujitsu40 (B14) = IDC/FLK50 (42) |
| green-black | Fujitsu40 (A15) = IDC/FLK50 (19) |
| green-brown | Fujitsu40 (B15) = IDC/FLK50 (43) |
| green-red | Fujitsu40 (A16) = IDC/FLK50 (20) |
| green-orange | Fujitsu40 (B16) = IDC/FLK50 (44) |
| green-blue | Fujitsu40 (A17) = IDC/FLK50 (21) |
| green-violet | Fujitsu40 (B17) = IDC/FLK50 (45) |
| green-gray | Fujitsu40 (A18) = IDC/FLK50 (22) |
| green-white | Fujitsu40 (B18) = IDC/FLK50 (46) |
| yellow-black | Fujitsu40 (A19) = IDC/FLK50 (23) |
| yellow-brown | Fujitsu40 (B19) = IDC/FLK50 (47) |
| yellow-red | Fujitsu40 (A20) = IDC/FLK50 (13) |
| yellow-orange | Fujitsu40 (B20) = IDC/FLK50 (37) |

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

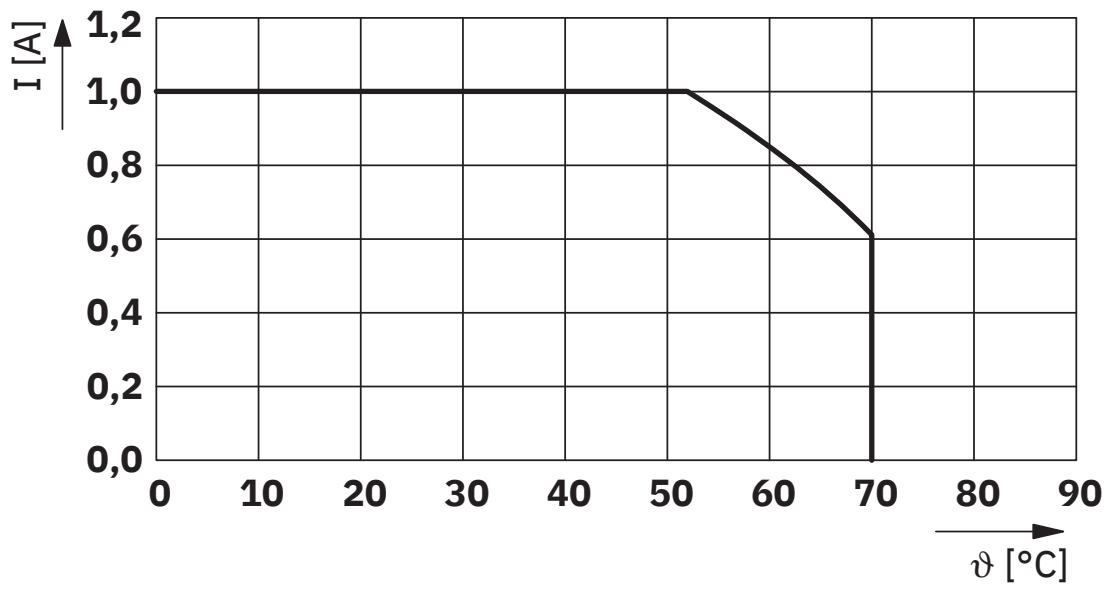
| | |
|----------------------------------|------------------------------|
| Connection in acc. with standard | IEC 60603-13 (in compliance) |
| Connection method | IDC/FLK socket strip |
| Number of connections | 1 |
| Number of positions | 50 |
| Insertion/withdrawal cycles | > 50 |
| Pitch | 2.54 mm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

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. |
|--------------------|--|

Drawings

Diagram



Maximum permissible current per path in uncoiled state

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Classifications

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) |
|-------------------------------------|----------------------|

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