

# FLK 14/16/EZ-DR/HF/ 200/S7 - Cable



2296948

<https://www.phoenixcontact.com/gb/products/2296948>

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Assembled, halogen-free round cable; controller: SIMATIC® TOP connect; connection 1: IDC/FLK socket strip (1x 16-position); connection 2: IDC/FLK socket strip (1x 14-position); cable length: 2 m

## Commercial data

Item number	2296948
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	DK221S
Product key	DK221S
GTIN	4017918733636
Weight per piece (including packing)	124 g
Weight per piece (excluding packing)	104.1 g
Customs tariff number	85444290
Country of origin	DE

## Technical data

### Product properties

Product type	System cable
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### 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)

### Cable/line

Cable length	2 m
UL AWM Style	21946
Number of positions	14
Shielded	no
Conductor type	Assembled, halogen-free round cable
Conductor structure signal line	7x 0.16 mm
AWG signal line	26
Conductor cross section	14x 0.14 mm <sup>2</sup>
Wire diameter incl. insulation	1 mm ±0.03 mm
External cable diameter	5.80 mm ±0.4 mm
Outer sheath, material	halogen-free (type 2)
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	50 mm
Smallest bending radius, movable installation	93 mm
Dynamic load capacity (bending)	Max. bending cycles: 5000 (at a radius of ≥ 15x outside diameter)
Halogen-free	yes
	IEC 60332-1-2 (raw cable)

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Flame resistance	VDE 0842, Part 332-1-2 (raw cable) IEC 60332-3-22 (raw cable)
Resistance to oil	can withstand occasional splashes (raw cable)
Cable type	Cable for one module

## Color code: Single-core wire

white	IDC/FLK16 (1) = IDC/FLK14 (10)
violet	IDC/FLK16 (2) = IDC/FLK14 (8)
white-brown	IDC/FLK16 (3) = IDC/FLK14 (12)
blue	IDC/FLK16 (4) = IDC/FLK14 (7)
white-orange	IDC/FLK16 (5) = IDC/FLK14 (14)
green	IDC/FLK16 (6) = IDC/FLK14 (6)
yellow	IDC/FLK16 (8) = IDC/FLK14 (5)
gray	IDC/FLK16 (9) = IDC/FLK14 (9)
orange	IDC/FLK16 (10) = IDC/FLK14 (4)
white-black	IDC/FLK16 (11) = IDC/FLK14 (11)
red	IDC/FLK16 (12) = IDC/FLK14 (3)
white-red	IDC/FLK16 (13) = IDC/FLK14 (13)
brown	IDC/FLK16 (14) = IDC/FLK14 (2)
black	IDC/FLK16 (16) = IDC/FLK14 (1)

## Connection data

### Connection 1

Connection in acc. with standard	IEC 60603-13 (in compliance)
Connection method	IDC/FLK socket strip
Number of connections	1
Number of positions	16
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	14
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.
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Drawings

Connection diagram

<b>14-pos. Socket strip PIN</b>	<b>16-pos. Socket strip PIN</b>	<b>Wire color</b>
<b>1</b>	<b>16</b>	<b>Black</b>
<b>2</b>	<b>14</b>	<b>Brown</b>
<b>3</b>	<b>12</b>	<b>Red</b>
<b>4</b>	<b>10</b>	<b>Orange</b>
<b>5</b>	<b>8</b>	<b>Yellow</b>
<b>6</b>	<b>6</b>	<b>Green</b>
<b>7</b>	<b>4</b>	<b>Blue</b>
<b>8</b>	<b>2</b>	<b>Violet</b>
<b>9</b>	<b>9</b>	<b>Gray</b>
<b>10</b>	<b>1</b>	<b>White</b>
<b>11</b>	<b>11</b>	<b>White-black</b>
<b>12</b>	<b>3</b>	<b>White-brown</b>
<b>13</b>	<b>13</b>	<b>White-red</b>
<b>14</b>	<b>5</b>	<b>White-orange</b>
	<b>7</b>	<b>-</b>
	<b>15</b>	<b>-</b>

Pin assignment and color code

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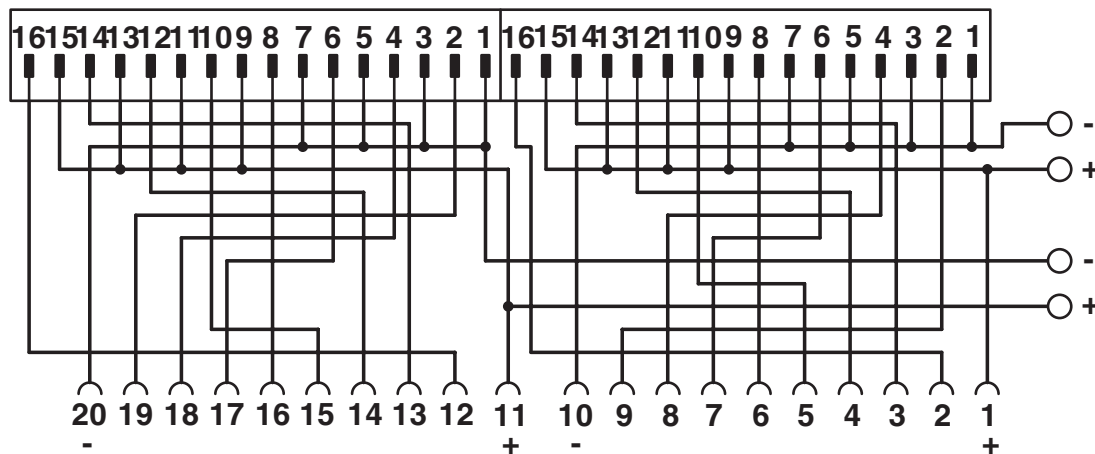
<https://www.phoenixcontact.com/gb/products/2296948>

Diagram



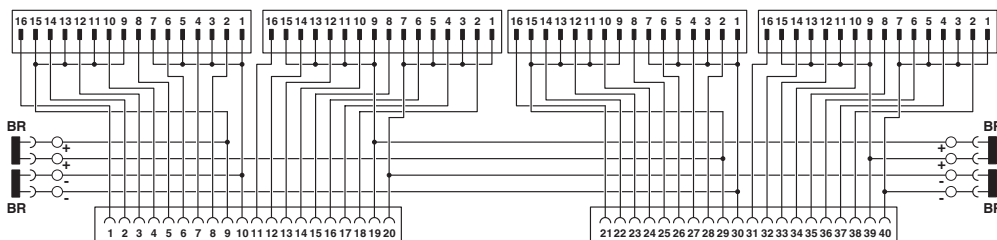
Maximum permissible current per path in uncoiled state

Circuit diagram



Pin assignment Siemens S7 front connector modules 6ES7 921-3...

Circuit diagram



Pin assignment of digital Siemens S7 front plug-in modules 6ES7 921-5AB20-0AA0 or 6ES7 921-5AH20-0AA0

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## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/gb/products/2296948>



**EAC**

Approval ID: RU\*-DE.HB\*35.B00385



**UL Listed**

Approval ID: E238705

	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $mm^2$
keine				
	125 V	1 A	-	-



**cUL Listed**

Approval ID: E238705

	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $mm^2$
keine				
	125 V	1 A	-	-

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## Classifications

### ECLASS

ECLASS-13.0	27242220
ECLASS-15.0	27242220

### ETIM

ETIM 9.0	EC000237
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### UNSPSC

UNSPSC 21.0	26121600
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## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
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### China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

### EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%
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