

# Cable - FLK 50/EZ-DR/ 300/KONFEK/S



2299136

<https://www.phoenixcontact.com/gb/products/2299136>

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Assembled shielded round cable; connection 1: IDC/FLK socket strip (1x 50-position); connection 2: IDC/FLK socket strip (1x 50-position) (The braided shield is routed to a separate cable end.); cable length: 3 m

## Commercial Data

Item number	2299136
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to Order (non-returnable)
Sales Key	CK2132
Product Key	CK2132
Catalog Page	Page 536 (C-5-2019)
GTIN	4017918832193
Weight per Piece (including packing)	571.1 g
Weight per Piece (excluding packing)	571.1 g
Customs tariff number	85444290
Country of origin	DE

## Technical Data

### Product properties

Product type	System cable
Insulation characteristics	
Overvoltage category	II
Pollution degree	2
Insulation	Functional insulation

### Environmental and real-life conditions

#### Ambient conditions

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

### Electrical properties

Max. permissible operating voltage	25 V AC
	60 V DC
Nominal operating mode	100% operating factor
Max. current carrying capacity per path	1 A (50 °C)
	0.6 A (70 °C)
Rated insulation voltage	63 V
Rated surge voltage	0.6 kV

#### Supported controller SIEMENS S7-1500

Suitable I/O card	6ES7521-1BL00-0AB0
	6ES7521-1BL10-0AA0
	6ES7522-1BL00-0AB0
	6ES7522-1BL01-0AB0
	6ES7522-1BL10-0AA0
	6ES7523-1BL00-0AA0
	6ES7531-7KF00-0AB0
	6ES7531-7LH00-0AB0
	6ES7531-7MH00-0AB0
	6ES7531-7NF00-0AB0
	6ES7531-7NF10-0AB0
	6ES7531-7PF00-0AB0
	6ES7532-5HF00-0AB0

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

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Suitable I/O card	CPU 313C
	CPU 313C-2DP
	CPU 313C-2PiP
	CPU 314C-2DP
	CPU 314C-2PiP
	6ES7321-1BL00-0AA0
	6ES7322-1BL00-0AA0
	6ES7322-8BH01-0AB0
	6ES7323-1BL00-0AA0
	6ES7331-1KF01-0AB0
	6ES7331-7NF00-0AB0
	6ES7331-7NF10-0AB0
	6ES7331-7PF01-0AB0
	6ES7331-7PF11-0AB0
	6ES7332-5HF00-0AB0
	6ES7350-2AH01-0AE0
6ES7357-4AH01-0AE0	

## Supported controller SIEMENS S7-400

Suitable I/O card	6ES7421-1BL01-0AA0
	6ES7421-7BH01-0AB0
	6ES7421-7DH00-0AA0
	6ES7422-1BL00-0AA0
	6ES7422-7BL00-0AB0
	6ES7431-0HH0-0AB0
	6ES7431-1KF00-0AB0
	6ES7431-1KF10-0AB0
	6ES7431-1KF20-0AB0
	6ES7431-7KF00-0AB0
	6ES7431-7KF10-0AB0
	6ES7431-7QH00-0AB0
	6ES7432-1HF00-0AB0

## Supported controller SCHNEIDER ELECTRIC Modicon TSX QUANTUM

Suitable I/O card	DDI 353
	DDI 841
	DDI 853
	DAI 340
	DAI 440
	DAI 453
	DDO 353
	DDM 390
	ACI 030
	ACI 040
	ATI 030

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	ARI 030
	AVI 030
	ACO 020
	ACO 130
	AVO 020
	EHC 105
	EHC 202

Supported controller ALLEN-BRADLEY ControlLogix

Suitable I/O card	1756-IA16I
	1756-IB16D
	1756-IB16I
	1756-IB32
	1756-IH16I
	1756-OB32
	1756-IF8
	1756-IF16
	1756-HSC
	1756-M02AE

Supported controller HONEYWELL Experion PKS C200

Suitable I/O card	TC-IDK 161
	TC-IDX 161
	TC-IDJ 161
	TC-IDD 321
	TC-ODD 321
	TC-IAH 161

## Cable / line

Cable length	3 m
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50X0.14 [PVC]

UL AWM Style	2464/1061
Number of positions	50
Shielded	yes
Cable type	50X0.14 [PVC]
Conductor type	Assembled shielded round cable
Conductor structure signal line	7x 0.16 mm
AWG signal line	26
Conductor cross section	50x 0.14 mm <sup>2</sup>
Wire diameter incl. insulation	1 mm ±0.03 mm
External cable diameter	11 mm ±0.3 mm
Outer sheath, material	Semi-rigid PVC
External sheath, color	gray
Conductor material	Tin-plated Cu litz wires

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Cable resistance	≤ 145 Ω/km (at 20 °C)
Insulation resistance	≥ 20 MΩ*km (20 °C)
Smallest bending radius, fixed installation	114 mm
Smallest bending radius, movable installation	205 mm
Max. bending cycles	5000 (at a radius of ≥ 18x 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)
Type	Cable for one module
Cable, preassembly	Insulation displacement, IEC 60352-4/DIN EN 60352-4

## color code

IDC/FLK50 (1)	IDC/FLK50 (1) = black
IDC/FLK50 (2)	IDC/FLK50 (2) = brown
IDC/FLK50 (3)	IDC/FLK50 (3) = red
IDC/FLK50 (4)	IDC/FLK50 (4) = orange
IDC/FLK50 (5)	IDC/FLK50 (5) = yellow
IDC/FLK50 (6)	IDC/FLK50 (6) = green
IDC/FLK50 (7)	IDC/FLK50 (7) = blue
IDC/FLK50 (8)	IDC/FLK50 (8) = violet
IDC/FLK50 (9)	IDC/FLK50 (9) = gray
IDC/FLK50 (10)	IDC/FLK50 (10) = white
IDC/FLK50 (11)	IDC/FLK50 (11) = white-black
IDC/FLK50 (12)	IDC/FLK50 (12) = white-brown
IDC/FLK50 (13)	IDC/FLK50 (13) = white-red
IDC/FLK50 (14)	IDC/FLK50 (14) = white-orange
IDC/FLK50 (15)	IDC/FLK50 (15) = white-yellow
IDC/FLK50 (16)	IDC/FLK50 (16) = white-green
IDC/FLK50 (17)	IDC/FLK50 (17) = white-blue
IDC/FLK50 (18)	IDC/FLK50 (18) = white-violet
IDC/FLK50 (19)	IDC/FLK50 (19) = white-gray
IDC/FLK50 (20)	IDC/FLK50 (20) = brown-black
IDC/FLK50 (21)	IDC/FLK50 (21) = brown-red
IDC/FLK50 (22)	IDC/FLK50 (22) = brown-orange
IDC/FLK50 (23)	IDC/FLK50 (23) = brown-yellow
IDC/FLK50 (24)	IDC/FLK50 (24) = brown-green
IDC/FLK50 (25)	IDC/FLK50 (25) = brown-blue
IDC/FLK50 (26)	IDC/FLK50 (26) = brown-violet
IDC/FLK50 (27)	IDC/FLK50 (27) = brown-gray
IDC/FLK50 (28)	IDC/FLK50 (28) = brown-white

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IDC/FLK50 (29)	IDC/FLK50 (29) = green-black
IDC/FLK50 (30)	IDC/FLK50 (30) = green-brown
IDC/FLK50 (31)	IDC/FLK50 (31) = green-red
IDC/FLK50 (32)	IDC/FLK50 (32) = green-orange
IDC/FLK50 (33)	IDC/FLK50 (33) = green-blue
IDC/FLK50 (34)	IDC/FLK50 (34) = green-violet
IDC/FLK50 (35)	IDC/FLK50 (35) = green-gray
IDC/FLK50 (36)	IDC/FLK50 (36) = green-white
IDC/FLK50 (37)	IDC/FLK50 (37) = yellow-black
IDC/FLK50 (38)	IDC/FLK50 (38) = yellow-brown
IDC/FLK50 (39)	IDC/FLK50 (39) = yellow-red
IDC/FLK50 (40)	IDC/FLK50 (40) = yellow-orange
IDC/FLK50 (41)	IDC/FLK50 (41) = yellow-blue
IDC/FLK50 (42)	IDC/FLK50 (42) = yellow-violet
IDC/FLK50 (43)	IDC/FLK50 (43) = yellow-gray
IDC/FLK50 (44)	IDC/FLK50 (44) = yellow-white
IDC/FLK50 (45)	IDC/FLK50 (45) = gray-black
IDC/FLK50 (46)	IDC/FLK50 (46) = gray-brown
IDC/FLK50 (47)	IDC/FLK50 (47) = gray-red
IDC/FLK50 (48)	IDC/FLK50 (48) = gray-orange
IDC/FLK50 (49)	IDC/FLK50 (49) = gray-yellow
IDC/FLK50 (50)	IDC/FLK50 (50) = gray-green

## Connection data

### Field level

Connection in acc. with standard	IEC 60603-13
Connection method	IDC/FLK socket strip
Number of connections	1
Number of positions	50
Note	The braided shield is routed to a separate cable end. The separate cable end is approximately 0.5 m long (H05V-K 1 mm <sup>2</sup> , black)
Insertion/withdrawal cycles	> 50
Pitch	2.54 mm

### Controller level

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

## Standards and regulations

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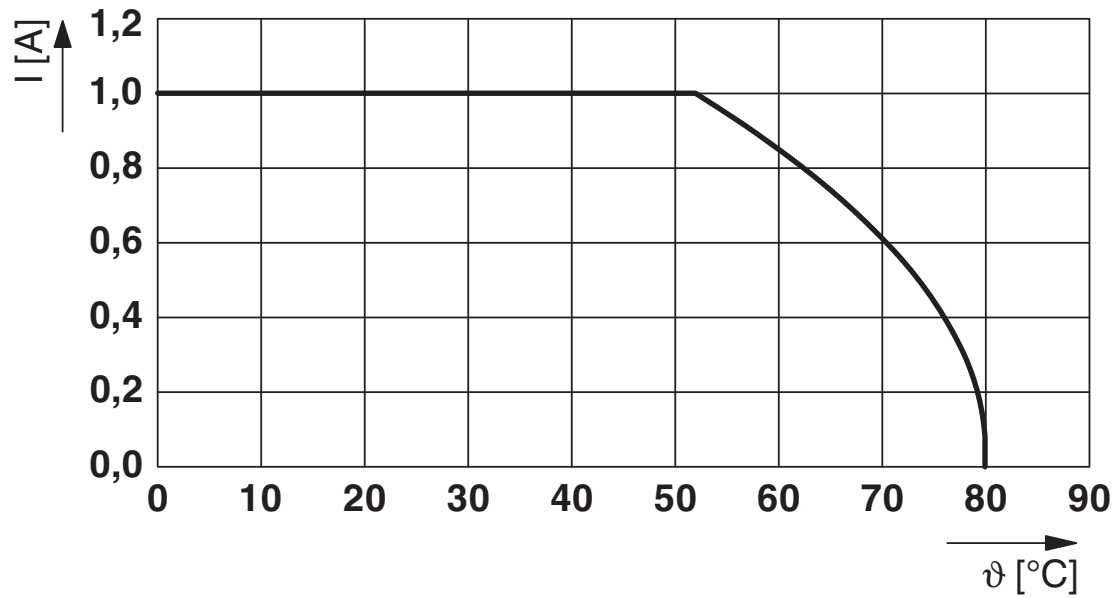
## Air clearances and creepage distances

Standards/regulations

DIN EN 50178

Drawings

Diagram



Maximum permissible current per path in uncoiled state

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## Approvals



### EAC

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



### UL Listed

Approval ID: FILE E 238705

	Nominal Voltage $U_N$	Nominal Current $I_N$	Cross Section AWG	Cross Section $\text{mm}^2$
	125 V	1 A	-	-



### cUL Listed

Approval ID: FILE E 238705

	Nominal Voltage $U_N$	Nominal Current $I_N$	Cross Section AWG	Cross Section $\text{mm}^2$
	125 V	1 A	-	-

### cULus Listed

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## Classifications

### ECLASS

ECLASS-9.0	27242220
ECLASS-10.0.1	27242220
ECLASS-11.0	27242220

### ETIM

ETIM 8.0	EC000237
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### UNSPSC

UNSPSC 21.0	26121600
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## Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

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## Accessories

### Cable marker carrier

Cable marker carrier - KME - 0807083

<https://www.phoenixcontact.com/gb/products/0807083>



Cable marker carrier, white, unlabeled, mounting type: Assembly with cable ties, cable diameter: > 5 mm, lettering field size: 20 mm x 8 mm

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