

# FLK 50/EZ-DR/D37SUB/200/X81-I - Cable



2302667

<https://www.phoenixcontact.com/us/products/2302667>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



Round cable set; controller: Mitsubishi Electric MELSEC Q (X81); connection 1: D-SUB socket strip (1x 37-position); connection 2: IDC/FLK socket strip (1x 50-position); cable length: 2 m

## Commercial data

Item number	2302667
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	C421
Product key	CK226M
Catalog page	Page 482 (C-5-2019)
GTIN	4017918910303
Weight per piece (including packing)	423 g
Weight per piece (excluding packing)	418 g
Customs tariff number	85444290
Country of origin	DE

## Technical data

### Product properties

Product type	System cable
Data management status	
Article revision	04

### 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

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 MITSUBISHI MELSEC Q

Suitable I/O card	QX81
-------------------	------

### Cable/line

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

#### 50X0.14 [PVC]

UL AWM Style	2464/1061
Number of positions	50
Shielded	no
Cable type	50X0.14 [PVC]
Conductor type	Round cable set
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	10.30 mm ±0.4 mm
Outer sheath, material	Semi-rigid PVC
External sheath, color	gray
Conductor material	Tin-plated Cu litz wires

# FLK 50/EZ-DR/D37SUB/200/X81-I - Cable



2302667

<https://www.phoenixcontact.com/us/products/2302667>

Cable resistance	≤ 145 Ω/km (20 °C)
Insulation resistance	≥ 20 MΩ*km (20 °C)
Smallest bending radius, fixed installation	86 mm
Smallest bending radius, movable installation	161 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

black	D-SUB37 (1) = IDC/FLK50 (3)
brown	D-SUB37 (20) = IDC/FLK50 (4)
red	D-SUB37 (2) = IDC/FLK50 (5)
orange	D-SUB37 (21) = IDC/FLK50 (6)
yellow	D-SUB37 (3) = IDC/FLK50 (7)
green	D-SUB37 (22) = IDC/FLK50 (8)
blue	D-SUB37 (4) = IDC/FLK50 (9)
violet	D-SUB37 (23) = IDC/FLK50 (10)
gray	D-SUB37 (17) = IDC/FLK50 (11)
white	D-SUB37 (18) = IDC/FLK50 (12)
white-black	D-SUB37 (5) = IDC/FLK50 (15)
white-brown	D-SUB37 (24) = IDC/FLK50 (16)
white-red	D-SUB37 (6) = IDC/FLK50 (17)
white-orange	D-SUB37 (25) = IDC/FLK50 (18)
white-yellow	D-SUB37 (7) = IDC/FLK50 (19)
white-green	D-SUB37 (26) = IDC/FLK50 (20)
white-blue	D-SUB37 (8) = IDC/FLK50 (21)
white-violet	D-SUB37 (27) = IDC/FLK50 (22)
white-gray	D-SUB37 (17) = IDC/FLK50 (23)
brown-black	D-SUB37 (18) = IDC/FLK50 (24)
brown-red	D-SUB37 (9) = IDC/FLK50 (27)
brown-orange	D-SUB37 (28) = IDC/FLK50 (28)
brown-yellow	D-SUB37 (10) = IDC/FLK50 (29)
brown-green	D-SUB37 (29) = IDC/FLK50 (30)
brown-blue	D-SUB37 (11) = IDC/FLK50 (31)
brown-violet	D-SUB37 (30) = IDC/FLK50 (32)
brown-gray	D-SUB37 (12) = IDC/FLK50 (33)
brown-white	D-SUB37 (31) = IDC/FLK50 (34)

# FLK 50/EZ-DR/D37SUB/200/X81-I - Cable



2302667

<https://www.phoenixcontact.com/us/products/2302667>

green-black	D-SUB37 (17) = IDC/FLK50 (35)
green-brown	D-SUB37 (18) = IDC/FLK50 (36)
green-red	D-SUB37 (13) = IDC/FLK50 (39)
green-orange	D-SUB37 (32) = IDC/FLK50 (40)
green-blue	D-SUB37 (14) = IDC/FLK50 (41)
green-violet	D-SUB37 (33) = IDC/FLK50 (42)
green-gray	D-SUB37 (15) = IDC/FLK50 (43)
green-white	D-SUB37 (34) = IDC/FLK50 (44)
yellow-black	D-SUB37 (16) = IDC/FLK50 (45)
yellow-brown	D-SUB37 (35) = IDC/FLK50 (46)
yellow-red	D-SUB37 (36) = IDC/FLK50 (47)
yellow-orange	D-SUB37 (36) = IDC/FLK50 (48)

## Connection data

### Connection 1

Connection in acc. with standard	IEC 60807-2 DIN 41652
Connection method	D-SUB socket strip
Screw thread	UNC 4-40 M2,5
Number of connections	1
Number of positions	37
Tightening torque	0.2 Nm
Insertion/withdrawal cycles	> 200
Pitch	2.77 mm

### Connection 2

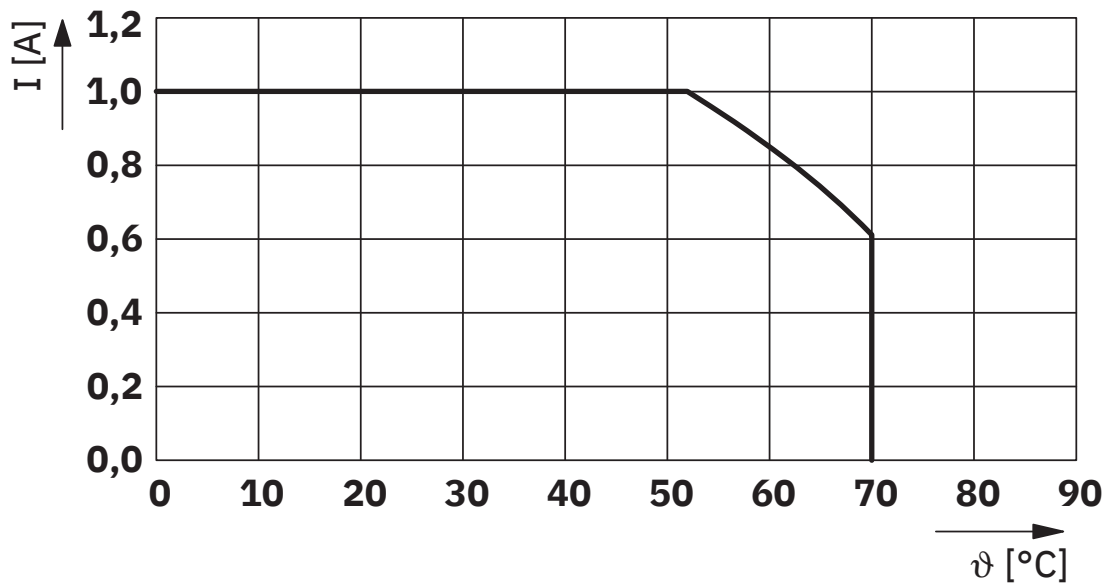
Connection in acc. with standard	based on IEC 60603-13
Connection method	IDC/FLK socket strip
Number of connections	1
Number of positions	50
Insertion/withdrawal cycles	> 50
Pitch	2.54 mm

## 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

# FLK 50/EZ-DR/D37SUB/200/X81-I - Cable



2302667

<https://www.phoenixcontact.com/us/products/2302667>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2302667>



### 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 $\text{mm}^2$
	125 V	1 A	-	-



### cUL Listed

Approval ID: E238705

	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
	125 V	1 A	-	-

### cULus Listed

# FLK 50/EZ-DR/D37SUB/200/X81-I - Cable



2302667

<https://www.phoenixcontact.com/us/products/2302667>

## Classifications

### ECLASS

ECLASS-11.0	27242220
ECLASS-12.0	27242220
ECLASS-13.0	27242220

### ETIM

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

### UNSPSC

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

2302667

<https://www.phoenixcontact.com/us/products/2302667>

## 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	71338f9f-1958-4bea-9143-5bae63f35a25



# FLK 50/EZ-DR/D37SUB/200/X81-I - Cable



2302667

<https://www.phoenixcontact.com/us/products/2302667>

## Accessories

KME - Cable marker carrier

0807083

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



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

---

Phoenix Contact 2024 © - all rights reserved  
<https://www.phoenixcontact.com>

Phoenix Contact USA  
586 Fulling Mill Road  
Middletown, PA 17057, United States  
(+717) 944-1300  
[info@phoenixcon.com](mailto:info@phoenixcon.com)