

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



2321101

<https://www.phoenixcontact.com/us/products/2321101>

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: 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: 1 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	2321101
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	C421
Product key	DK226S
GTIN	4046356331838
Weight per piece (including packing)	173.2 g
Weight per piece (excluding packing)	171.2 g
Customs tariff number	85444290
Country of origin	DE

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



2321101

<https://www.phoenixcontact.com/us/products/2321101>

## 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	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
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

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



2321101

<https://www.phoenixcontact.com/us/products/2321101>

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)
	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)
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)

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



2321101

<https://www.phoenixcontact.com/us/products/2321101>

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

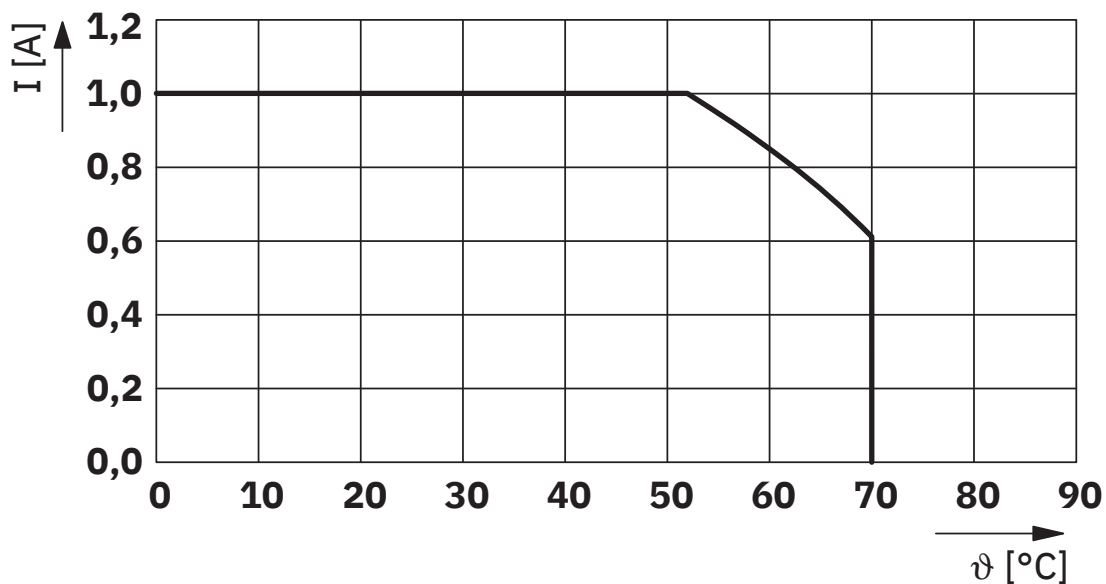
Connection in acc. with standard	IEC 60603-13 (in compliance)
Connection method	IDC/FLK socket strip
Number of connections	1
Number of positions	50
Insertion/withdrawal cycles	> 50
Pitch	2.54 mm

## 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.
--------------------	--

## Drawings

Diagram



Maximum permissible current per path in uncoiled state

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



2321101

<https://www.phoenixcontact.com/us/products/2321101>

## Classifications

### ECLASS

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

### ETIM

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

### UNSPSC

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

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



2321101

<https://www.phoenixcontact.com/us/products/2321101>

## 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	4005e931-da1d-434b-827b-ff2405e69ad4

Phoenix Contact 2025 © - 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)