

product type designation

product description

Control connecting cable M12-180/M12-180

Flexible plug-in cable (5-wire), preferred length, pre-assembled with one 5-pin M12 male and one female connector (A-coded, IO-Link Port Class B, 180° cable outlet)

Control connecting cable M12-180/M12-180; 5-core; IO-Link port Class B; pre-assembled with M12 plug and M12 socket (A-coded); straight cable outlet; length 5.0 m.



Technical Product Detail Page

<https://i.siemens.com/1P6XV1801-2CH50>

suitability for use

Plug-in cable for connecting IO-Link components and sensing mechanisms to IO modules, degree of protection IP 65/67

cable designation

LIHH11Y 5X1X0.25 SW

wire length

5 m

electrical data

operating voltage / RMS value

300 V

conductor cross section / of the power line

0.4 mm²

continuous current / of the power lines

2.5 A

mechanical data

number of electrical cores

5

type of electrical connection

M12-180

AWG number

24

outer diameter

- of inner conductor

0.7 mm

- of the wire insulation

1.2 mm

- of cable sheath

5.3 mm

symmetrical tolerance of the outer diameter / of cable sheath

0.3 mm

conductor class

6

material

- of the conductor

CU, blank

- of the wire insulation

FRNC

- of cable sheath

PUR

product component / PE connection

No

marking / of cores

Color

color

- of the power line insulation

Brown / white / blue / black / gray

- of cable sheath

Black

bending radius

- with single bend / minimum permissible

21 mm

- with multiple bends / minimum permissible

42 mm

tensile load / maximum

10 N

weight per length

40 kg/km

plug

type of plug interlock

screwed

design of plug-in connection

M12-180

connector coding	M12
connector coding / of the M12 circular connector	A coded
ambient conditions	
ambient temperature	
• during operation	-15 ... +80 °C
• during storage	-25 ... +80 °C
• during transport	-25 ... +80 °C
• during installation	-15 ... +80 °C
fire behavior	Flame-resistant according to IEC 60332-1-2, UL 2556, Sec. 9.3 (FT1), CSA C22.2 No.2556, UL 1581, Sec. 1061 (cable flame)
class of burning behaviour / according to EN 13501-6	Fca
chemical resistance	
• to mineral oil	Conditional resistance
• to grease	Conditional resistance
• to water	Conditional resistance
radiological resistance / to UV radiation	sunlight resistant acc. to UL 2556 sec. 4.2.8.5 (720h)
protection class IP	IP65 / 67
product features, product functions, product components / general	
product feature	
• halogen-free	Yes
• silicon-free	Yes
standards, specifications, approvals	
UL/ETL listing / 300 V Rating	Yes; UL Style 20233 (80°C/300V) CSA C22.2 No. 210 I/II A/B FT1
certificate of suitability	UL2238 E300110
• EAC approval	Yes
• RoHS conformity	Yes
further information / internet links	
internet link	
• to website: Selection guide for cables and connectors	https://support.industry.siemens.com/cs/ww/en/view/109766358
• to web page: selection aid TIA Selection Tool	https://www.siemens.com/tstcloud
• to website: Industrial communication	https://www.siemens.com/simatic-net
• to web page: SiePortal	https://sieportal.siemens.com/
• to website: Image database	https://www.automation.siemens.com/bilddb
• to website: CAx-Download-Manager	https://www.siemens.com/cax
• to website: Industry Online Support	https://support.industry.siemens.com
security information	
security information	Siemens provides products and solutions with industrial cybersecurity functions that support the secure operation of plants, systems, machines and networks. In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial cybersecurity concept. Siemens' products and solutions constitute one element of such a concept. Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place. For additional information on industrial cybersecurity measures that may be implemented, please visit www.siemens.com/cybersecurity-industry . Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats. To stay informed about product updates, subscribe to the Siemens Industrial Cybersecurity RSS Feed under https://www.siemens.com/cert. (V4.7)
Approvals / Certificates	
General Product Approval	other



[Manufacturer Declaration](#)

[Miscellaneous](#)

EG-Konf.

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