

### 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 1.0 m.



Technical Product Detail Page

<https://i.siemens.com/1P6XV1801-2CH10>

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

1 m

### electrical data

operating voltage / RMS value

300 V

conductor cross section / of the power line

0.4 mm<sup>2</sup>

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
<b>ambient conditions</b>	
ambient temperature	
<ul style="list-style-type: none"> <li>during operation</li> <li>during storage</li> <li>during transport</li> <li>during installation</li> </ul>	-15 ... +80 °C -25 ... +80 °C -25 ... +80 °C -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	
<ul style="list-style-type: none"> <li>to mineral oil</li> <li>to grease</li> <li>to water</li> </ul>	Conditional resistance Conditional resistance Conditional resistance
radiological resistance / to UV radiation	sunlight resistant acc. to UL 2556 sec. 4.2.8.5 (720h)
protection class IP	IP65 / 67
<b>product features, product functions, product components / general</b>	
product feature	
<ul style="list-style-type: none"> <li>halogen-free</li> <li>silicon-free</li> </ul>	Yes Yes
<b>standards, specifications, approvals</b>	
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
<ul style="list-style-type: none"> <li>EAC approval</li> <li>RoHS conformity</li> </ul>	Yes Yes
<b>further information / internet links</b>	
internet link	
<ul style="list-style-type: none"> <li>to website: Selection guide for cables and connectors</li> <li>to web page: selection aid TIA Selection Tool</li> <li>to website: Industrial communication</li> <li>to web page: SiePortal</li> <li>to website: Image database</li> <li>to website: CAx-Download-Manager</li> <li>to website: Industry Online Support</li> </ul>	<a href="https://support.industry.siemens.com/cs/ww/en/view/109766358">https://support.industry.siemens.com/cs/ww/en/view/109766358</a> <a href="https://www.siemens.com/tstcloud">https://www.siemens.com/tstcloud</a> <a href="https://www.siemens.com/simatic-net">https://www.siemens.com/simatic-net</a> <a href="https://sieportal.siemens.com/">https://sieportal.siemens.com/</a> <a href="https://www.automation.siemens.com/bilddb">https://www.automation.siemens.com/bilddb</a> <a href="https://www.siemens.com/cax">https://www.siemens.com/cax</a> <a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>
<b>security information</b>	
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**Approvals / Certificates**

**General Product Approval**

[Manufacturer Declaration](#)



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