

### 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
- of the wire insulation
- of cable sheath

0.7 mm  
1.2 mm  
5.3 mm

symmetrical tolerance of the outer diameter / of cable sheath

0.3 mm

conductor class

6

material

- of the conductor
- of the wire insulation
- of cable sheath

CU, blank  
FRNC  
PUR

product component / PE connection

No

marking / of cores

Color

color

- of the power line insulation
- of cable sheath

Brown / white / blue / black / gray  
Black

bending radius

- with single bend / minimum permissible
- with multiple bends / minimum permissible

21 mm  
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	
• 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
<b>product features, product functions, product components / general</b>	
product feature	
• halogen-free	Yes
• silicon-free	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
• EAC approval	Yes
• RoHS conformity	Yes
<b>further information / internet links</b>	
internet link	
• to website: Selection guide for cables and connectors	<a href="https://support.industry.siemens.com/cs/ww/en/view/109766358">https://support.industry.siemens.com/cs/ww/en/view/109766358</a>
• to web page: selection aid TIA Selection Tool	<a href="https://www.siemens.com/tstcloud">https://www.siemens.com/tstcloud</a>
• to website: Industrial communication	<a href="https://www.siemens.com/simatic-net">https://www.siemens.com/simatic-net</a>
• to web page: SiePortal	<a href="https://sieportal.siemens.com/">https://sieportal.siemens.com/</a>
• to website: Image database	<a href="https://www.automation.siemens.com/bilddb">https://www.automation.siemens.com/bilddb</a>
• to website: CAx-Download-Manager	<a href="https://www.siemens.com/cax">https://www.siemens.com/cax</a>
• to website: Industry Online Support	<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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