## **SIEMENS**

Data sheet 6XV1801-2CH20

## 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 2.0 m.



Figure similar	
suitability for use	Plug-in cable for connecting IO-Link components and sensing

suitability for use	mechanisms to IO modules, degree of protection IP 65/67
wire length	2 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	
<ul><li>of inner conductor</li></ul>	0.7 mm
<ul> <li>of the wire insulation</li> </ul>	1.2 mm
<ul> <li>of cable sheath</li> </ul>	5.3 mm
symmetrical tolerance of the outer diameter / of cable sheath	0.3 mm
material	
<ul> <li>of the conductor</li> </ul>	CU, blank
of cable sheath	PUR
product component / PE connection	No
marking / of cores	Color
color	
<ul> <li>of the power line insulation</li> </ul>	Brown / white / blue / black / gray
of cable sheath	Black
bending radius	
<ul><li>with single bend / minimum permissible</li></ul>	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	
<ul> <li>during operation</li> </ul>	-15 +80 °C
<ul><li>during storage</li></ul>	-25 +80 °C
<ul> <li>during transport</li> </ul>	-25 +80 °C
<ul> <li>during installation</li> </ul>	-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><li>to mineral oil</li></ul>	Conditional resistance
• to grease	Conditional resistance
• to water	Conditional resistance
protection class IP	IP65 / 67
product features, product functions, product components	/ general
product feature	
<ul><li>halogen-free</li></ul>	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	
<ul> <li>EAC approval</li> </ul>	Yes
<ul> <li>RoHS conformity</li> </ul>	Yes
further information / internet-Links	
Internet-Link	
<ul><li>to web page: selection aid TIA Selection Tool</li></ul>	http://www.siemens.com/tia-selection-tool
<ul> <li>to website: Industrial communication</li> </ul>	http://www.siemens.com/simatic-net
<ul><li>to website: Industry Mall</li></ul>	https://mall.industry.siemens.com
<ul> <li>to website: Information and Download Center</li> </ul>	http://www.siemens.com/industry/infocenter
<ul> <li>to website: Selection guide for cables and connectors</li> </ul>	https://sie.ag/2QdlxcP
<ul><li>to website: Image database</li></ul>	http://automation.siemens.com/bilddb
<ul><li>to website: CAx-Download-Manager</li></ul>	http://www.siemens.com/cax
• to website: Industry Online Support	https://support.industry.siemens.com

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