

product type designation

product description

IE Connecting Cable M12-180/M12-180

flexible connecting cable (4-wire), preferred length, pre-assembled with two 4-pole M12 plugs (D-coded, 180° cable outlet, push-pull connection system in accordance with IEC 61076-2-012)

IE connecting cable M12 push pull 180 / M12 push pull 180, pre-assembled with IE FC trailing cable GP, M12 connectors (D-coded, push-pull), length 3.0 m.



suitability for use

for connecting Industrial Ethernet stations (SIMATIC ET200 or XF-200 with M12 bus adapter) with degree of protection IP20

cable designation

2YY (ST) CY 2x2x0,75/1,5-100 LI GN

wire length

3 m

electrical data

number of electrical connections

2

attenuation factor per length

- at 10 MHz / maximum

0.063 dB/m

- at 100 MHz / maximum

0.213 dB/m

impedance

- at 1 MHz ... 100 MHz

100 Ω

relative symmetrical tolerance

- of the characteristic impedance at 1 MHz ... 100 MHz

5 %

near-end crosstalk per length

- at 1 MHz ... 100 MHz

0.5 dB/m

transfer impedance per length / at 10 MHz

20 mΩ/m

loop resistance per length / maximum

120 mΩ/m

operating voltage

- RMS value

80 V

NVP value in percent

66 %

mechanical data

number of electrical cores

4

design of the shield

Overlapped aluminum-clad foil, sheathed in a braided screen of tin-plated copper wires

core diameter

- of AWG22 insulated conductor

0.75 mm

outer diameter

- of inner conductor

0.75 mm

- of the wire insulation

1.5 mm

- of the inner sheath of the cable

3.9 mm

- of cable sheath

6.5 mm

symmetrical tolerance of the outer diameter / of cable sheath

0.2 mm

material

- of the wire insulation

polyethylene (PE)

- of the inner sheath of the cable

PVC

- of cable sheath

PVC

color

<ul style="list-style-type: none"> of the insulation of data wires of cable sheath 	white/yellow/blue/orange green
bending radius	
<ul style="list-style-type: none"> with single bend / minimum permissible with multiple bends / minimum permissible with continuous bending 	32.5 mm 49 mm 100 mm
number of bending cycles	3000000; for use in cable carriers, for 3 million bending cycles with a bending radius of 200 mm, a speed of 4 m/s, and an acceleration of 4 m/s ²
tensile load / maximum	150 N
weight per length	68 kg/km

plug

type of plug interlock	screwed
connector coding	M12 push-pull
<ul style="list-style-type: none"> of the M12 circular connector 	D-coded

ambient conditions

ambient temperature	
<ul style="list-style-type: none"> during operation during storage during transport during installation note 	-25 ... +75 °C -25 ... +75 °C -25 ... +75 °C -10 ... +60 °C Electrical properties measured at 20 °C, tests according to DIN VDE 0472
fire behavior	flame resistant according to UL 1685 (CSA FT 4)
chemical resistance	
<ul style="list-style-type: none"> to mineral oil to grease 	conditional resistance Conditional resistance
radiological resistance / to UV radiation	resistant
protection class IP	IP20

product features, product functions, product components / general

product feature	
<ul style="list-style-type: none"> halogen-free silicon-free 	No Yes

standards, specifications, approvals

UL/ETL listing / 300 V Rating	Yes; c(ETL)us, CMG FT4 / (ETL)us PLTC / Sun Res / OIL RES
UL/ETL style / 600 V Rating	Yes; cRUus AWM 21694 AWM I A/B 60°C 600V FT2
certificate of suitability	
<ul style="list-style-type: none"> EAC approval CE marking RoHS conformity 	Yes Yes Yes
standard for structured cabling	Cat5e
Marine classification association	
<ul style="list-style-type: none"> American Bureau of Shipping Europe Ltd. (ABS) French marine classification society (BV) Det Norske Veritas (DNV) Germanische Lloyd (GL) Lloyds Register of Shipping (LRS) Nippon Kaiji Kyokai (NK) Polski Rejestr Statkow (PRS) 	No No No No No No No
reference code	
<ul style="list-style-type: none"> according to IEC 81346-2 according to IEC 81346-2:2019 	WG WGB

further information / internet links

internet link	
<ul style="list-style-type: none"> to web page: selection aid TIA Selection Tool to website: Industrial communication to website: Industry Mall to website: Information and Download Center to website: Selection guide for cables and connectors to website: Image database to website: CAx-Download-Manager to website: Industry Online Support 	http://www.siemens.com/tia-selection-tool http://www.siemens.com/simatic-net https://mall.industry.siemens.com http://www.siemens.com/industry/infocenter https://sie.ag/2QdlxcP http://automation.siemens.com/bilddb http://www.siemens.com/cax https://support.industry.siemens.com

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