

Product type designation

IE Connecting Cable M12-180/M12-180

SIMATIC NET, IE CONNECTING CABLE M12-180/M12-180,
PREASSEMBL. IE FC TRAILING CABLE GP, WITH 2 M12
CONNECTORS (D-CODED), LENGTH 3.0 M



Cable designation	2YY (ST) CY 2x2x0,75/1,5-100 LI GN
Wire length	3 m
Electrical data	
Damping ratio 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 m Ω /m
Loop resistance per length / maximum	120 m Ω /m
Operating voltage	
• RMS value	100 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 core	0.75 mm
Outer diameter • of inner conductor • of the wire insulation • of the inner sheath of the cable • of cable sheath	0.75 mm 1.5 mm 3.9 mm 6.5 mm
Symmetrical tolerance of the outer diameter / of cable sheath	0.2 mm
Material • of the wire insulation • of the inner sheath of the cable • of cable sheath	PE PVC PVC
Color • of the insulation of data wires • of cable sheath	white/yellow/blue/orange green
Bending radius • 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; Drag chain suitable for 3 million bending cycles at a bending radius of 100 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

Permitted ambient conditions	
Ambient temperature • 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
Burning behavior	flame resistant according to UL 1685 (CSA FT 4)
Chemical resistance • to mineral oil • to grease	conditional resistance Conditional resistance
Radiological resistance / to UV radiation	resistant
Protection class IP	IP65, IP67

Product properties, functions, components / general

Product feature

- | | |
|----------------|-----|
| • halogen-free | No |
| • silicon-free | Yes |

Standards, specifications, approvals

UL/ETL listing / 300 V Rating	Yes; c(UL)us, CMG / PLTC / Sun Res / OIL RES
-------------------------------	--

UL/ETL style / 600 V Rating	Yes
-----------------------------	-----

Certificate of suitability

- | | |
|-------------------|-----|
| • RoHS conformity | Yes |
|-------------------|-----|

Standard for structured cabling	Cat5e
---------------------------------	-------

Marine classification association

- | | |
|---|----|
| • American Bureau of Shipping Europe Ltd. (ABS) | No |
| • Bureau Veritas (BV) | No |
| • Det Norske Veritas (DNV) | No |
| • Germanische Lloyd (GL) | No |
| • Lloyds Register of Shipping (LRS) | No |
| • Nippon Kaiji Kyokai (NK) | No |
| • Polski Rejestr Statkow (PRS) | No |

Further Information / Internet Links

Internet-Link

- | | |
|---|---|
| • to website: Selector SIMATIC NET SELECTION TOOL | http://www.siemens.com/snst |
| • to website: Industrial communication | http://www.siemens.com/simatic-net |
| • to website: Industry Mall | https://mall.industry.siemens.com |
| • to website: Information and Download Center | http://www.siemens.com/industry/infocenter |
| • to website: Image database | http://automation.siemens.com/bilddb |
| • to website: CAx Download Manager | http://www.siemens.com/cax |
| • to website: Industry Online Support | https://support.industry.siemens.com |

last modified: 10/15/2016