

product type designation

product description

IE Connecting Cable M12-180/IE FC RJ45-145

Flexible plug-in cable (4-core), preferred length, preassembled with one 4-pole M12 connector (D-coded) and one IE FC RJ45 plug 145

IE connecting cable M12-180/IE FC RJ45 Plug-145; IE FC Trailing cable GP pre-assembled with M12 connector (D-coded) and IE FC RJ45 plug; Length 10.0 m.



suitability for use

For connecting Industrial Ethernet stations (e.g. SIMATIC ET200pro, SCALANCE X208PRO and SIMOTION)

cable designation

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

wire length

10 m

electrical data

number of electrical connections

2

attenuation factor per length

- at 10 MHz / maximum
- at 100 MHz / maximum

0.063 dB/m
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 tinned copper wires

core diameter

- of AWG22 insulated conductor

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

polyethylene (PE)
PVC

| | |
|---|--|
| <ul style="list-style-type: none"> 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; 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 |
| 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 to water | conditional resistance Conditional resistance conditional resistance |
| radiological resistance / to UV radiation | resistant |
| 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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