

product type designation

product description

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

Flexible plug-in cable (8-wire), preferred length, prefabricated with two IE FC RJ45 connectors 4X2

IE connecting cable IE FC RJ45 Plug-180/IE FC RJ45 Plug-180; IE FC flexible GP 4x2 cable Pre-assembled with 2x IE FC RJ45 plug 180 4 x 2; Length 15.0 m.



suitability for use

For connecting Industrial Ethernet stations with an RJ45 interface (10/100/1000/10000Mbps)

wire length

15 m

electrical data

number of electrical connections

2

attenuation factor per length

| | |
|------------------------|------------|
| • at 10 MHz / maximum | 0.089 dB/m |
| • at 100 MHz / maximum | 0.287 dB/m |
| • at 250 MHz / maximum | 0.466 dB/m |
| • at 300 MHz / maximum | 0.514 dB/m |
| • at 500 MHz / maximum | 0.679 dB/m |

impedance

| | |
|------------------------|-------|
| • at 1 MHz ... 100 MHz | 100 Ω |
|------------------------|-------|

near-end crosstalk per length

| | |
|------------------------|------------|
| • at 1 MHz ... 100 MHz | 0.453 dB/m |
| • at 1 MHz ... 250 MHz | 0.393 dB/m |
| • at 1 MHz ... 300 MHz | 0.381 dB/m |
| • at 1 MHz ... 500 MHz | 0.348 dB/m |

transfer impedance per length / at 10 MHz

20 mΩ/m

loop resistance per length / maximum

180 mΩ/m

insulation resistance coefficient

5000 GΩ·m

operating voltage

| | |
|-------------|------|
| • RMS value | 80 V |
|-------------|------|

NVP value in percent

68 %

mechanical data

number of electrical cores

8

design of the shield

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

type of electrical connection / FastConnect

Yes

core diameter

| | |
|--------------------------------|---------|
| • of AWG24 insulated conductor | 0.51 mm |
|--------------------------------|---------|

outer diameter

| | |
|------------------------------------|---------|
| • of inner conductor | 0.6 mm |
| • of the wire insulation | 1.05 mm |
| • of the inner sheath of the cable | 6.4 mm |
| • of cable sheath | 8 mm |

symmetrical tolerance of the outer diameter / of cable

0.2 mm

| | |
|---|--|
| sheath | |
| material | |
| <ul style="list-style-type: none"> • of the wire insulation • of the inner sheath of the cable • of cable sheath | <p>polyethylene (PE) FRNC PVC</p> |
| color | |
| <ul style="list-style-type: none"> • of the insulation of data wires • of cable sheath | <p>white-blue/blue, white-orange/orange, white-green/green, white-brown/brown green</p> |
| bending radius | |
| <ul style="list-style-type: none"> • with single bend / minimum permissible • with multiple bends / minimum permissible | <p>24 mm 40 mm</p> |
| tensile load / maximum | 100 N |
| weight per length | 86 kg/km |
| ambient conditions | |
| ambient temperature | |
| <ul style="list-style-type: none"> • during operation • during storage • during transport • during installation | <p>-40 ... +80 °C -40 ... +80 °C -40 ... +80 °C -40 ... +80 °C</p> |
| fire behavior | flame resistant according to IEC 60332-3-24 (Category C) |
| chemical resistance | |
| <ul style="list-style-type: none"> • to mineral oil • to grease • to water | <p>oil resistant according to IEC 60811-2-1 (4 h / 70°C) Conditional resistance conditional resistance</p> |
| 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 | <p>No Yes</p> |
| wire length / for Industrial Ethernet | |
| <ul style="list-style-type: none"> • with 100BaseTX • with 1000BaseT • for 10GBase T | <p>80 m 80 m 70 m</p> |
| standards, specifications, approvals | |
| UL/ETL listing / 300 V Rating | Yes |
| UL/ETL style / 600 V Rating | No |
| certificate of suitability | |
| <ul style="list-style-type: none"> • EAC approval • CE marking • RoHS conformity | <p>Yes Yes Yes</p> |
| product conformity | |
| <ul style="list-style-type: none"> • ANSI/TIA-EIA 568-B.2 Cat.5e • IEC 61784-5-2-CP 2/2 (Ethernet/IP) | <p>Yes Yes</p> |
| 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) | <p>No No No No No No No</p> |
| reference code | |
| <ul style="list-style-type: none"> • according to IEC 81346-2 • according to IEC 81346-2:2019 | <p>WG WGB</p> |
| 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 | <p>http://www.siemens.com/tia-selection-tool http://www.siemens.com/simatic-net https://mall.industry.siemens.com</p> |

- 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/industry/infocenter>
<https://sie.ag/2QdlxcP>
<http://automation.siemens.com/bilddb>
<http://www.siemens.com/cax>
<https://support.industry.siemens.com>

last modified:

12/31/2021 