

product type designation

product description

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

Flexible plug-in cable (4-core), preferred length, preassembled with two IE FC RJ45 connectors 2x2

IE connecting cable IE FC RJ45 Plug-180/IE FC RJ45 Plug-180; IE FC Trailing Cable GP Pre-assembled with 2x IE FC RJ45 plug 180; length 2.0 m.



suitability for use

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

wire length

2 m

electrical data

number of electrical connections

2

attenuation factor per length

- at 10 MHz / maximum

0.06 dB/m

- at 100 MHz / maximum

0.2 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

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

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

- of the insulation of data wires

white/yellow/blue/orange

| | |
|---|---|
| <ul style="list-style-type: none"> • of cable sheath | green |
| bending radius | |
| <ul style="list-style-type: none"> • with single bend / minimum permissible | 32.5 mm |
| <ul style="list-style-type: none"> • with multiple bends / minimum permissible | 58.5 mm |
| <ul style="list-style-type: none"> • with continuous bending | 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 | -25 ... +75 °C |
| <ul style="list-style-type: none"> • during storage | -25 ... +75 °C |
| <ul style="list-style-type: none"> • during transport | -25 ... +75 °C |
| <ul style="list-style-type: none"> • during installation | -10 ... +60 °C |
| <ul style="list-style-type: none"> • note | 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 | conditional resistance |
| <ul style="list-style-type: none"> • to grease | Conditional resistance |
| <ul style="list-style-type: none"> • to water | 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 | No |
| <ul style="list-style-type: none"> • silicon-free | 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 | Yes |
| <ul style="list-style-type: none"> • CE marking | Yes |
| <ul style="list-style-type: none"> • RoHS conformity | Yes |
| Marine classification association | |
| <ul style="list-style-type: none"> • American Bureau of Shipping Europe Ltd. (ABS) | No |
| <ul style="list-style-type: none"> • French marine classification society (BV) | No |
| <ul style="list-style-type: none"> • Det Norske Veritas (DNV) | No |
| <ul style="list-style-type: none"> • Germanische Lloyd (GL) | No |
| <ul style="list-style-type: none"> • Lloyds Register of Shipping (LRS) | No |
| <ul style="list-style-type: none"> • Nippon Kaiji Kyokai (NK) | No |
| <ul style="list-style-type: none"> • Polski Rejestr Statkow (PRS) | No |
| reference code | |
| <ul style="list-style-type: none"> • according to IEC 81346-2 | WG |
| <ul style="list-style-type: none"> • according to IEC 81346-2:2019 | WGB |
| further information / internet-Links | |
| Internet-Link | |
| <ul style="list-style-type: none"> • to web page: selection aid TIA Selection Tool | http://www.siemens.com/tia-selection-tool |
| <ul style="list-style-type: none"> • to website: Industrial communication | http://www.siemens.com/simatic-net |
| <ul style="list-style-type: none"> • to website: Industry Mall | https://mall.industry.siemens.com |
| <ul style="list-style-type: none"> • to website: Information and Download Center | http://www.siemens.com/industry/infocenter |
| <ul style="list-style-type: none"> • to website: Selection guide for cables and connectors | https://sie.ag/2QdlxcP |
| <ul style="list-style-type: none"> • to website: Image database | http://automation.siemens.com/bilddb |
| <ul style="list-style-type: none"> • to website: CAX-Download-Manager | http://www.siemens.com/cax |
| <ul style="list-style-type: none"> • to website: Industry Online Support | https://support.industry.siemens.com |
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