

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 12.0 m.



suitability for use

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

wire length

12 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 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

- of the insulation of data wires

white/yellow/blue/orange

- of cable sheath

green

bending radius	<ul style="list-style-type: none"> • with single bend / minimum permissible • with multiple bends / minimum permissible • with continuous bending 	<p>32.5 mm</p> <p>58.5 mm</p> <p>100 mm</p>
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
plug		
design of plug-in connection		RJ45-180
ambient conditions		
ambient temperature	<ul style="list-style-type: none"> • during operation • during storage • during transport • during installation • note 	<p>-25 ... +75 °C</p> <p>-25 ... +75 °C</p> <p>-25 ... +75 °C</p> <p>-10 ... +60 °C</p> <p>Electrical properties measured at 20 °C, tests according to DIN VDE 0472</p>
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 	<p>conditional resistance</p> <p>Conditional resistance</p> <p>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</p> <p>Yes</p>
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 	<p>Yes</p> <p>Yes</p> <p>Yes</p>
standard for structured cabling		Cat5e, Class D
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</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p>
reference code	<ul style="list-style-type: none"> • according to IEC 81346-2 • according to IEC 81346-2:2019 	<p>WG</p> <p>WGB</p>
further information / internet links		
internet link	<ul style="list-style-type: none"> • to website: Selection guide for cables and connectors • to web page: selection aid TIA Selection Tool • to web page: SiePortal • to website: Image database • to website: CAx-Download-Manager • to website: Industry Online Support 	<p>https://support.industry.siemens.com/cs/ww/en/view/109766358</p> <p>https://www.siemens.com/tstcloud</p> <p>https://sieportal.siemens.com/</p> <p>https://www.automation.siemens.com/bilddb</p> <p>https://www.siemens.com/cax</p> <p>https://support.industry.siemens.com</p>
security information		
security information		Siemens provides products and solutions with industrial cybersecurity functions that support the secure operation of plants, systems, machines and networks. In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial cybersecurity concept. Siemens' products and solutions constitute one element of such a concept. Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected

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Approvals / Certificates

General Product Approval



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tion](#)

[PROFINET](#)

Industrial Communication

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