

**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 25 m.



suitability for use

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

cable designation

SF/UTP

wire length

25 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

SF/UTP, overlapped aluminum-clad foil, sheathed in a protective braided shield 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 sheath

0.2 mm

material	<ul style="list-style-type: none"> <li>of the wire insulation</li> <li>of the inner sheath of the cable</li> <li>of cable sheath</li> </ul>	<p>polyethylene (PE) FRNC PVC</p>
color	<ul style="list-style-type: none"> <li>of the insulation of data wires</li> <li>of cable sheath</li> </ul>	<p>white-blue/blue, white-orange/orange, white-green/green, white-brown/brown green</p>
bending radius	<ul style="list-style-type: none"> <li>with single bend / minimum permissible</li> <li>with multiple bends / minimum permissible</li> </ul>	<p>24 mm 40 mm</p>
tensile load / maximum		100 N
weight per length		86 kg/km
<b>plug</b>		
design of plug-in connection		RJ45-180
<b>ambient conditions</b>		
ambient temperature	<ul style="list-style-type: none"> <li>during operation</li> <li>during storage</li> <li>during transport</li> <li>during installation</li> </ul>	<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"> <li>to mineral oil</li> <li>to grease</li> <li>to water</li> </ul>	<p>oil resistant according to IEC 60811-2-1 (4 h / 70°C) Conditional resistance conditional resistance</p>
radiological resistance / to UV radiation		resistant
<b>product features, product functions, product components / general</b>		
product feature	<ul style="list-style-type: none"> <li>halogen-free</li> <li>PoE capability</li> <li>PoE+ capability</li> <li>PoE++ capability</li> <li>silicon-free</li> </ul>	<p>No Yes Yes Yes Yes</p>
wire length / for Industrial Ethernet	<ul style="list-style-type: none"> <li>with 100BaseTX</li> <li>with 1000BaseT</li> <li>for 10GBase T</li> </ul>	<p>80 m 80 m 70 m</p>
<b>standards, specifications, approvals</b>		
UL/ETL listing / 300 V Rating		Yes; c(ETL)us, CMG, wiring harness
UL/ETL style / 600 V Rating		No
certificate of suitability	<ul style="list-style-type: none"> <li>EAC approval</li> <li>CE marking</li> <li>RoHS conformity</li> </ul>	<p>Yes Yes Yes</p>
product conformity	<ul style="list-style-type: none"> <li>ANSI/TIA-EIA 568 A</li> <li>IEC 61784-5-2-CP 2/2 (Ethernet/IP)</li> </ul>	<p>Yes Yes</p>
standard for structured cabling		Cat6A, Class EA
Marine classification association	<ul style="list-style-type: none"> <li>American Bureau of Shipping Europe Ltd. (ABS)</li> <li>French marine classification society (BV)</li> <li>Det Norske Veritas (DNV)</li> <li>Germanische Lloyd (GL)</li> <li>Lloyds Register of Shipping (LRS)</li> <li>Nippon Kaiji Kyokai (NK)</li> <li>Polski Rejestr Statkow (PRS)</li> </ul>	<p>No No No No No No No</p>
reference code	<ul style="list-style-type: none"> <li>according to IEC 81346-2</li> <li>according to IEC 81346-2:2019</li> </ul>	<p>WG WGB</p>
<b>further information / internet links</b>		

internet link

- 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

- <https://support.industry.siemens.com/cs/ww/en/view/109766358>
- <https://www.siemens.com/tstcloud>
- <https://sieportal.siemens.com/>
- <https://www.automation.siemens.com/bilddb>
- <https://www.siemens.com/cax>
- <https://support.industry.siemens.com>

security information

security information

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Approvals / Certificates

General Product Approval

Industrial Communication



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[Manufacturer Declaration](#)

[PROFINET](#)

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