

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 Pre-assembled with 2x IE FC RJ45 plug 180 4 x 2; Length 20 m.



suitability for use

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

wire length

20 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 