

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 sheath	0.2 mm
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>
<p>color</p> <ul style="list-style-type: none"> • of the insulation of data wires 	<p>white-blue/blue, white-orange/orange, white-green/green, white-brown/brown green</p>
<p>bending radius</p> <ul style="list-style-type: none"> • of cable sheath 	
<ul style="list-style-type: none"> • with single bend / minimum permissible • with multiple bends / minimum permissible 	<p>24 mm 40 mm</p>
<p>tensile load / maximum</p>	<p>100 N</p>
<p>weight per length</p>	<p>86 kg/km</p>

ambient conditions

<p>ambient temperature</p> <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>
<p>fire behavior</p>	<p>flame resistant according to IEC 60332-3-24 (Category C)</p>
<p>chemical resistance</p> <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>
<p>radiological resistance / to UV radiation</p>	<p>resistant</p>

product features, product functions, product components / general

<p>product feature</p> <ul style="list-style-type: none"> • halogen-free • silicon-free 	<p>No Yes</p>
<p>wire length / for Industrial Ethernet</p> <ul style="list-style-type: none"> • with 100BaseTX • with 1000BaseT • for 10GBase T 	<p>80 m 80 m 70 m</p>

standards, specifications, approvals

<p>UL/ETL listing / 300 V Rating</p>	<p>Yes</p>
<p>UL/ETL style / 600 V Rating</p>	<p>No</p>
<p>certificate of suitability</p> <ul style="list-style-type: none"> • EAC approval • CE marking • RoHS conformity 	<p>Yes Yes Yes</p>
<p>product conformity</p> <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>
<p>Marine classification association</p> <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>
<p>reference code</p> <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

<p>Internet-Link</p> <ul style="list-style-type: none"> • to web page: selection aid TIA Selection Tool • to website: Industrial communication • to website: Industry Mall • to website: Information and Download Center • to website: Selection guide for cables and connectors • to website: Image database • to website: CAx-Download-Manager 	<p>http://www.siemens.com/tia-selection-tool http://www.siemens.com/simatic-net https://mall.industry.siemens.com http://www.siemens.com/industry/infocenter https://sie.ag/2QdlxcP http://automation.siemens.com/bilddb http://www.siemens.com/cax</p>
---	--

- to website: Industry Online Support

<https://support.industry.siemens.com>

last modified:

12/31/2021 