

### 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 PREASS. W. 2X IE FC RJ45 PLUG 180; LENGTH 10.0 M



Suitability for use	For connecting Industrial Ethernet stations with an RJ45 interface
Cable length	10 m

### Electrical data

Damping ratio per length	
<ul style="list-style-type: none"> <li>at 10 MHz / maximum</li> <li>at 100 MHz / maximum</li> </ul>	<p>0.06 dB/m</p> <p>0.2 dB/m</p>
Impedance	
<ul style="list-style-type: none"> <li>at 1 MHz ... 100 MHz</li> </ul>	100 $\Omega$
Relative symmetrical tolerance	
<ul style="list-style-type: none"> <li>of the characteristic impedance at 1 MHz ... 100 MHz</li> </ul>	5 %
Near-end crosstalk per length	
<ul style="list-style-type: none"> <li>at 1 MHz ... 100 MHz</li> </ul>	0.5 dB/m
Transfer impedance per length / at 10 MHz	20 m $\Omega$ /m
Loop resistance per length / maximum	120 m $\Omega$ /m
Operating voltage	
<ul style="list-style-type: none"> <li>RMS value</li> </ul>	100 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	

<ul style="list-style-type: none"> <li>• of AWG22 core</li> </ul>	0.75 mm
Outer diameter	
<ul style="list-style-type: none"> <li>• of inner conductor</li> <li>• of the wire insulation</li> <li>• of the inner sheath of the cable</li> <li>• of cable sheath</li> </ul>	0.75 mm 1.5 mm 3.9 mm 6.5 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>	PE PVC PVC
Color	
<ul style="list-style-type: none"> <li>• of the insulation of data wires</li> <li>• of cable sheath</li> </ul>	white / yellow / blue / orange green
Bending radius	
<ul style="list-style-type: none"> <li>• with single bend / minimum permissible</li> <li>• with multiple bends / minimum permissible</li> <li>• with continuous bending</li> </ul>	32.5 mm 58.5 mm 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 <sup>2</sup>
Tensile load / maximum	150 N
Weight per length	68 kg/km

#### Permitted ambient conditions

Ambient temperature	
<ul style="list-style-type: none"> <li>• during operation</li> <li>• during storage</li> <li>• during transport</li> <li>• during installation</li> <li>• Note</li> </ul>	-25 ... +75 °C -25 ... +75 °C -25 ... +75 °C -10 ... +60 °C electrical properties measured at 20 Cel, tests according to DIN VDE 0472
Burning behavior	flame resistant according to UL 1685 (CSA FT 4)
Chemical resistance	
<ul style="list-style-type: none"> <li>• to mineral oil</li> <li>• to grease</li> <li>• to water</li> </ul>	Conditional resistance Conditional resistance Conditional resistance
Radiological resistance / to UV radiation	resistant

#### Product properties, functions, components / general

Product property	
<ul style="list-style-type: none"> <li>• halogen-free</li> <li>• silicon-free</li> </ul>	No Yes

## Standards, specifications, approvals

Certificate of suitability	
• RoHS conformity	Yes
Standard for structured cabling	Cat5e
Marine classification association	
• American Bureau of Shipping Europe Ltd. (ABS)	No
• Bureau Veritas (BV)	No
• Det Norske Veritas (DNV)	No
• Germanische Lloyd (GL)	No
• Lloyds Register of Shipping (LRS)	No
• Nippon Kaiji Kyokai (NK)	No
• Polski Rejestr Statkow (PRS)	No

## Further Information / Internet Links

Internet-Link	
• to website: Selector SIMATIC NET SELECTION TOOL	<a href="http://www.siemens.com/snst">http://www.siemens.com/snst</a>
• to website: Industrial communication	<a href="http://www.siemens.com/simatic-net">http://www.siemens.com/simatic-net</a>
• to website: Industry Mall	<a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a>
• to website: Information and Download Center	<a href="http://www.siemens.com/automation/net/catalog">http://www.siemens.com/automation/net/catalog</a>
• to website: Image database	<a href="http://automation.siemens.com/bilddb">http://automation.siemens.com/bilddb</a>
• to website: CAx Download Manager	<a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a>
• to website: Industry Online Support	<a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>
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