


<b>Product-type designation</b>	<b>IE connecting cable IE FC RJ45-180 / IE FC RJ45-180</b>
 <p>Acceptability for application</p> <p>Cable length</p>	<p>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 1.0 M</p> <p>For connecting Industrial Ethernet stations with an RJ45 interface</p> <p>1 m</p>
<b>Electrical data</b>	
<p>Damping ratio per length</p>	
<ul style="list-style-type: none"> <li>• at 10 MHz / maximum</li> </ul>	<p>0.06 dB/m</p>
<ul style="list-style-type: none"> <li>• at 100 MHz / maximum</li> </ul>	<p>0.2 dB/m</p>
<p>Impedance</p>	
<ul style="list-style-type: none"> <li>• for frequency range 1 MHz ... 100 MHz</li> </ul>	<p>100 Ω</p>
<p>Relative symmetrical tolerance</p>	
<ul style="list-style-type: none"> <li>• of the surge impedance at 1 MHz ... 100 MHz</li> </ul>	<p>5 %</p>
<p>Near-end crosstalk per length</p>	
<ul style="list-style-type: none"> <li>• at 1 MHz ... 100 MHz</li> </ul>	<p>0.5 dB/m</p>
<p>Transfer impedance / at 10 MHz</p>	<p>20 mΩ/m</p>
<p>Loop resistance per length / maximum</p>	<p>120 Ω/km</p>
<p>Operating voltage</p>	
<ul style="list-style-type: none"> <li>• RMS value</li> </ul>	<p>100 V</p>
<p>percentage NVP value</p>	<p>66 %</p>
<b>Mechanical data</b>	
<p>Number of electrical wires</p>	<p>4</p>

Design of shield	Overlapped aluminum-clad foil, sheathed in a braided screen of tin-plated copper wires
Core diameter	
• of the AWG22 core	0.75 mm
Outer diameter	
• of the inner conductor	0.75 mm
• of the wire insulation	1.5 mm
• of the inner sheath of the cable	3.9 mm
• of the cable sheath	6.5 mm
Symmetrical tolerance of outer diameter / of cable sheath	0.2 mm
Material	
• of the wire insulation	PE
• of the inner sheath of the cable	PVC
• of the cable sheath	PVC
Color	
• of the insulation of data wires	white / yellow / blue / orange
• of the cable sheath	green
Bending radius	
• with single bend / minimum permissible	32.5 mm
• with multiple bends / minimum permissible	58.5 mm
• with continuous bending	100 mm
Number of bending cycles	3000000
• Note	For use in cable carriers, for 3 million bending cycles with a bending radius of 100 mm, a speed of 4 m/s, and an acceleration of 4 m/s <sup>2</sup>
Traction stress / maximum	150 N
Weight per length	68 kg/km
<b>Permitted ambient conditions</b>	
Ambient temperature	
• during operating	-25 ... +75 °C
• during storage	-25 ... +75 °C
• during transport	-25 ... +75 °C
• during installation	-10 ... +60 °C
• Comment	Electrical characteristics measured at 20 °C, tests according to DIN VDE 0472
Burning behaviour	flame resistant according to UL 1685 (CSA FT 4)
Chemical resistance	
• to mineral oil	Conditional resistance
• to grease	Conditional resistance
• to water	Conditional resistance
Radiological resistance / to UV radiation	Resistant
<b>Product properties, functions, components / general</b>	

Product feature	
• halogen-free	No
• silicon-free	Yes
<b>Standards, specifications, approvals</b>	
UL/ETL listing / with 300 V rating	Yes: c(UL)us, CMG / PLTC / Sun Res / OIL RES
UL/ETL style / with 600 V rating	yes
Verification 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
<b>Further Information / Internet Links</b>	
Internet-Link	
• to website: Industry Mall	<a href="https://www.siemens.com/industrymall">https://www.siemens.com/industrymall</a>
• 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: 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="http://support.automation.siemens.com">http://support.automation.siemens.com</a>
<b>letzte Änderung:</b>	Aug 9, 2014