

IE CONNECTING CABLE IE FC RJ45 PLUG-180/IE FC RJ45 PLUG-180; IE FC TRAILING CABLE GP 4X2 PREASSEM. W/ 2X IE FC RJ45 PLUG 180 4 X 2; LENGTH 20 M

Wire length	20 m
-------------	------

Electrical data

Damping ratio per length	
<ul style="list-style-type: none"> • at 10 MHz / maximum • at 100 MHz / maximum • at 250 MHz / maximum • at 300 MHz / maximum • at 500 MHz / maximum 	0.089 dB/m 0.287 dB/m 0.466 dB/m 0.514 dB/m 0.679 dB/m
Impedance	
<ul style="list-style-type: none"> • at 1 MHz ... 100 MHz 	100 Ω
Near-end crosstalk per length	
<ul style="list-style-type: none"> • at 1 MHz ... 100 MHz • at 1 MHz ... 250 MHz • at 1 MHz ... 300 MHz • at 1 MHz ... 500 MHz 	0.453 dB/m 0.393 dB/m 0.381 dB/m 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	
<ul style="list-style-type: none"> • 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 tin-plated copper wires
Type of electrical connection / FastConnect	Yes
Core diameter	
<ul style="list-style-type: none"> • of the AWG24 core 	0.51 mm
Outer diameter	
<ul style="list-style-type: none"> • of inner conductor • of the wire insulation • of the inner sheath of the cable • of cable sheath 	0.6 mm 1.05 mm 6.4 mm 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 	PE FRNC PVC
Color	
<ul style="list-style-type: none"> • of the insulation of data wires • of cable sheath 	white-blue/blue, white-orange/orange, white-green/green, white-brown/brown green
Bending radius	
<ul style="list-style-type: none"> • with single bend / minimum permissible • with multiple bends / minimum permissible 	24 mm 40 mm
Tensile load / maximum	100 N
Weight per length	86 kg/km

Permitted ambient conditions

Ambient temperature	
<ul style="list-style-type: none"> • during operation • during storage • during transport • during installation 	-40 ... +80 °C -40 ... +80 °C -40 ... +80 °C -40 ... +80 °C
Burning 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 	oil resistant according to IEC 60811-2-1 (4 h / 70°C) Conditional resistance conditional resistance
Radiological resistance / to UV radiation	resistant

Product properties, functions, components / general

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

Standards, specifications, approvals

UL/ETL listing / 300 V Rating	Yes; c(ETL)us, CMG
UL/ETL style / 600 V Rating	No
Certificate of suitability	
<ul style="list-style-type: none"> • CE marking • RoHS conformity 	Yes Yes
Product conformity	
<ul style="list-style-type: none"> • ANSI/TIA-EIA 568-B.2 Cat.5e 	Yes

• IEC 61784-5-2-CP 2/2 (Ethernet/IP)	Yes
Standard for structured cabling	Cat6A
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 <http://www.siemens.com/snst>
- to website: Industrial communication <http://www.siemens.com/simatic-net>
- to website: Industry Mall <https://mall.industry.siemens.com>
- to website: Information and Download Center <http://www.siemens.com/industry/infocenter>
- to website: Image database <http://automation.siemens.com/bilddb>
- to website: CAx Download Manager <http://www.siemens.com/cax>
- to website: Industry Online Support <https://support.industry.siemens.com>

last modified:

08/28/2017