

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 Pre-assembled with 2x IE FC RJ45 plug 180; length 5.0 m.



suitability for use

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

wire length

5 m

electrical data

number of electrical connections	2
attenuation factor per length	
• at 10 MHz / maximum	0.06 dB/m
• at 100 MHz / maximum	0.2 dB/m
impedance	
• at 1 MHz ... 100 MHz	100 Ω
relative symmetrical tolerance	
• of the characteristic impedance at 1 MHz ... 100 MHz	5 %
near-end crosstalk per length	
• at 1 MHz ... 100 MHz	0.5 dB/m
transfer impedance per length / at 10 MHz	20 mΩ/m
loop resistance per length / maximum	120 mΩ/m
operating voltage	
• RMS value	80 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 tinned copper wires
core diameter	
• of AWG22 insulated conductor	0.75 mm
outer diameter	
• of inner conductor	0.75 mm
• of the wire insulation	1.5 mm
• of the inner sheath of the cable	3.9 mm
• of cable sheath	6.5 mm
symmetrical tolerance of the outer diameter / of cable sheath	0.2 mm
material	
• of the wire insulation	polyethylene (PE)
• of the inner sheath of the cable	PVC
• of cable sheath	PVC
color	
• of the insulation of data wires	white/yellow/blue/orange

<ul style="list-style-type: none"> ● of cable sheath 	green
bending radius	
<ul style="list-style-type: none"> ● with single bend / minimum permissible ● with multiple bends / minimum permissible ● with continuous bending 	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 ²
tensile load / maximum	150 N
weight per length	68 kg/km

ambient conditions

ambient temperature	
<ul style="list-style-type: none"> ● during operation ● during storage ● during transport ● during installation ● note 	-25 ... +75 °C -25 ... +75 °C -25 ... +75 °C -10 ... +60 °C Electrical properties measured at 20 °C, tests according to DIN VDE 0472
fire behavior	flame resistant according to UL 1685 (CSA FT 4)
chemical resistance	
<ul style="list-style-type: none"> ● to mineral oil ● to grease ● to water 	conditional resistance Conditional resistance conditional resistance
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 	No Yes

standards, specifications, approvals

UL/ETL listing / 300 V Rating	Yes; c(ETL)us, CMG FT4 / (ETL)us PLTC / Sun Res / OIL RES
UL/ETL style / 600 V Rating	Yes; cRUus AWM 21694 AWM I A/B 60°C 600V FT2
certificate of suitability	
<ul style="list-style-type: none"> ● EAC approval ● CE marking ● RoHS conformity 	Yes Yes Yes
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) 	No No No No No No No
reference code	
<ul style="list-style-type: none"> ● according to IEC 81346-2 ● according to IEC 81346-2:2019 	WG WGB

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 ● 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/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 https://support.industry.siemens.com

last modified: 12/31/2021 