

Product type designation

Product description

IE FC TP Marine Cable 2 x 2 (Type B)

Halogen-free bus cable acc. to IEC 60754-1/2 (4-core), sold by the meter, unassembled

SIMATIC NET, IE FC TP MARINE CABLE, TP INSTALLATION CABLE FOR CONNECTION TO FC OUTLET RJ45, CERTIFIED FOR SHIPBUILDING INDUSTRY CAT. 5, SOLD BY THE METER
MAX. CONSIGNMENT: 1000 M, MIN. ORDERING QUANTITY: 20 M



Suitability for use

For marine and offshore use

Electrical data

Damping ratio per length	
<ul style="list-style-type: none"> at 10 MHz / maximum at 100 MHz / maximum 	<p>0.06 dB/m</p> <p>0.22 dB/m</p>
Impedance	
<ul style="list-style-type: none"> at 1 MHz ... 100 MHz 	100 Ω
Relative symmetrical tolerance	
<ul style="list-style-type: none"> of the characteristic impedance at 1 MHz ... 100 MHz 	15 %
Near-end crosstalk per length	
<ul style="list-style-type: none"> at 1 MHz ... 100 MHz 	0.5 dB/m
Transfer impedance per length / at 10 MHz	10 m Ω /m
Loop resistance per length / maximum	120 m Ω /m
Operating voltage	
<ul style="list-style-type: none"> RMS value 	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
Type of electrical connection / FastConnect	Yes
Core diameter	
• of AWG22 core	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	PP
• of the inner sheath of the cable	FRNC
• of cable sheath	FRNC
Color	
• of the insulation of data wires	white / yellow / blue / orange
• of cable sheath	green
Bending radius	
• with single bend / minimum permissible	39 mm
• with multiple bends / minimum permissible	97.5 mm
Tensile load / maximum	150 N
Weight per length	68 kg/km
Permitted ambient conditions	
Ambient temperature	
• during operation	-25 ... +70 °C
• during storage	-40 ... +85 °C
• during transport	-40 ... +85 °C
• during installation	0 ... 50 °C
• Note	electrical properties measured at 20 Cel, tests according to DIN VDE 0472
Ambient condition / for operation	Temperature range for permanent installation -40 °C to 85 °C
Burning behavior	flame resistant according to IEC 60332-3-22 (Category A/F), smoke density according to IEC 61034-1/2
Chemical resistance	
• to mineral oil	Conditional resistance, IEC 60811-2-1 (4 hours / 70 °C)
• to grease	Conditional resistance
• to water	Conditional resistance
Radiological resistance / to UV radiation	resistant

Product properties, functions, components / general

Product property	
• halogen-free	Yes
• silicon-free	Yes
Cable length / for Industrial Ethernet	
• with 100BaseTX	85 m

Standards, specifications, approvals

UL/ETL listing / 300 V Rating	Yes
UL/ETL style / 600 V Rating	No
Certificate of suitability	
• RoHS conformity	Yes
Standard for structured cabling	Cat5e
Marine classification association	
• American Bureau of Shipping Europe Ltd. (ABS)	Yes
• Bureau Veritas (BV)	Yes
• Det Norske Veritas (DNV)	Yes
• Germanische Lloyd (GL)	Yes
• Lloyds Register of Shipping (LRS)	Yes
• 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/automation/net/catalog
• 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:	24.07.2015