

product type designation	IE FC TP Marine Cable 2 x 2 (Type B)
product description	Halogen-free bus cable acc. to IEC 60754-1/2 (4-core), sold by the meter, unassembled Industrial Ethernet FC TP Marine Cable, TP installation cable for connection to FC outlet RJ45, shipbuilding certified, 4-core, shielded CAT 5, sold by the meter, delivery unit max. 1000 m, minimum order 20 m
suitability for use	For marine and offshore use
cable designation	L-9YH (ST) CH 2 x 2 x 0,34/1,5-100 GN VZN FRNC SF/UTP

electrical data

attenuation factor per length	
<ul style="list-style-type: none"> at 10 MHz / maximum at 100 MHz / maximum 	0.06 dB/m 0.22 dB/m
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 mΩ/m
loop resistance per length / maximum	120 mΩ/m
operating voltage	
<ul style="list-style-type: none"> 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 tin-plated copper wires
type of electrical connection / FastConnect	Yes
core diameter	
<ul style="list-style-type: none"> of AWG22 insulated conductor 	0.75 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 	0.75 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"> • of the wire insulation • of the inner sheath of the cable • of cable sheath 	PP FRNC FRNC
color	
<ul style="list-style-type: none"> • of the insulation of data wires • of cable sheath 	white/yellow/blue/orange green
bending radius	
<ul style="list-style-type: none"> • with single bend / minimum permissible • with multiple bends / minimum permissible 	39 mm 97.5 mm
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 ... +70 °C -40 ... +85 °C -40 ... +85 °C 0 ... 50 °C Electrical properties measured at 20 °C, tests according to DIN VDE 0472
ambient condition / for operation	Temperature range for permanent installation -40 °C to 85 °C
fire behavior	flame resistant according to IEC 60332-3-22 (Category A/F), smoke density according to IEC 61034-1/2
class of burning behaviour / according to EN 13501-6	Eca
chemical resistance	
<ul style="list-style-type: none"> • to mineral oil • to grease • to water 	conditional resistance, IEC 60811-2-1 (4 hours / 70 °C) 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 	Yes Yes
wire length / for Industrial Ethernet	
<ul style="list-style-type: none"> • with 100BaseTX 	85 m

standards, specifications, approvals

UL/ETL listing / 300 V Rating	Yes; cULus / CMG / PLTC / Sun Res
UL/ETL style / 600 V Rating	No
certificate of suitability	
<ul style="list-style-type: none"> • EAC approval • CE marking 	Yes Yes

• RoHS conformity	Yes
standard for structured cabling	Cat5e
Marine classification association	
• American Bureau of Shipping Europe Ltd. (ABS)	Yes
• French marine classification society (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 TIA 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 |

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