

Data sheet

6XV1840-4AH10

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

Damping ratio per length	
• at 10 MHz / maximum	0.06 dB/m
• at 100 MHz / maximum	0.22 dB/m
Impedance	
• at 1 MHz ... 100 MHz	100 Ω
Relative symmetrical tolerance	
• of the characteristic impedance at 1 MHz ... 100 MHz	15 %
Near-end crosstalk per length	
• 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	
• 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	
• 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

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 °C, 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
Class of burning behaviour / according to EN 13501-6	Eca
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 features, product functions, product components / general

Product feature	
• halogen-free	Yes
• silicon-free	Yes
Wire length / for Industrial Ethernet	
• 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	
• CE marking	Yes

• 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/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:

01/20/2020