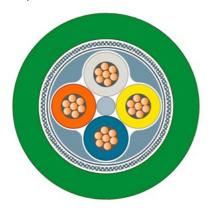# SIEMENS

Data sheet 6XV1840-3AH10

product description	Highly flexible bus cable (4-core), sold by the meter, unassembled

Industrial Ethernet FC TP Trailing Cable, 2x2 (PROFINET type C), TP installation cable for connection to FC outlet RJ45, for cable carrier applications, 4-core, shielded, Cat5e, sold by the meter (4 million bending cycles), max. delivery unit 2000 m, minimum order quantity 20 m.

suitability for use	Continuous motion control in a cable carrier
cable designation	2YH (ST) C11Y 2x2x0,75/1,5-100 LI GN VZN FRNC SF/UTP
electrical data	
attenuation factor 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	69 %
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 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	FRNC
● of cable sheath	PUR (TPE-U)
color	
● of the insulation of data wires	white/yellow/blue/orange
● of cable sheath	green
bending radius	
● with single bend / minimum permissible	19.5 mm

● with multiple bends / minimum permissible	49 mm
● with continuous bending	100 mm
number of bending cycles	4000000; Drag chain suitable for 4 million bending cycles at a bending radius of 100 mm, a speed of 4 m/s and an acceleration of 4 m/s²
tensile load / maximum	150 N
weight per length	63 kg/km

ambient conditions

ambient temperature	
● during operation	-40 ... +75 °C
● during storage	-50 ... +75 °C
● during transport	-50 ... +75 °C
● during installation	-20 ... +60 °C
● note	Electrical properties measured at 20 °C, tests according to DIN VDE 0472
fire behavior	flame resistant according to IEC 60332-1-2
class of burning behaviour / according to EN 13501-6	Eca
chemical resistance	
● to mineral oil	oil resistant according to IEC 60811-2-1 (7x24h/90°C)
● to grease	resistant
● to water	resistant
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 / CMX
UL/ETL style / 600 V Rating	Yes; cRU AWM I A/B 80°C 600V
certificate of suitability	
● EAC approval	Yes
● CE marking	Yes
● RoHS conformity	Yes
standard for structured cabling	Cat5e
Marine classification association	
● American Bureau of Shipping Europe Ltd. (ABS)	No
● French marine classification society (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
reference code	
● according to IEC 81346-2	WG
● according to IEC 81346-2:2019	WGB

further information / internet links

internet link	
● to web page: selection aid TIA Selection Tool	http://www.siemens.com/tia-selection-tool
● 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: Selection guide for cables and connectors	https://sie.ag/2QdlxcP
● 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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