SIEMENS

Data sheet	6XV1830-6CH10
Product type designation Product description	ECOFAST Fiber Optic Hybrid Cable (DESINA conform) ECOFAST Hybrid cable (LWL fiber and energy wires), product sold by meter, unassembled ECOFAST Fiber Optic Hybrid DESINA-compliant cable, trailable cable with 2 plastic FOC and 4 copper cores 1.5 mm2, sold by the meter, Minimum order 5000 m lower quantities possible following consultation, but price on request
Suitability for use	DESINA-compliant devices (e.g. for ET 200X), construction of optical PROFIBUS DP networks indoors
Cable designation	I-(ZN)V4Y11Y 2P 980/1000 + 4x1.5
Electrical data	
Operating voltage / maximum	80 V
Operating voltage / RMS value	100 V
Conductor cross section / of the power wire	1.5 mm²
Continuous current / of the power wires	12 A
Optical data	
Damping ratio per length / at 660 nm / maximum	280 dB/km
Bandwidth length product / at 650 nm	10 GHz·m
Mechanical data	
Number of fibers / per FOC core	1
Number of FO cores / per FOC cable	2
Version of the FO conductor fiber	Step index fiber 980/1000 µm
Design of the fiber-optic cable	Segmentable
Number of electrical cores	4
Type of electrical connection / FastConnect	No
Outer diameter	
• of the cable	10.6 mm
• of cable sheath	10.6 mm
 of the optical fibers 	980 μm
 of the optical fiber sheath 	1000 μm
of the FOC core sheath	2.2 mm
Material	
• of the fiber-optic cable core	Polymethyl methacrylate (PMMA)
• of the optical fiber sheath	Fluoridated special polymer
• of the FOC core sheath	PA
• of the fiber-optic cable sheath	PUR
Color	
• of the power wire insulation	Black

 of the FOC core sheath 	Black / orange
Bending radius	
 with multiple bends / minimum permissible 	110 mm
Number of bending cycles	5000000; For use in cable carriers, for 5 million bending cycles with a bending radius of 106 mm (10 x D)
Tensile load / maximum	60 N
Short-term shear force per length	10 N/cm
Continuous lateral force per length	1 N/cm
Weight per length	146 kg/km

Ambient conditions	
Ambient temperature	
during operation	-20 +60 °C
during storage	-20 +60 °C
during transport	-20 +60 °C
during installation	-5 +50 °C
Burning behavior	flame-retardant according to IEC 60332-1
Class of burning behaviour / according to EN 13501-	Fca
6	
Chemical resistance	
• to mineral oil	Conditional resistance
• to grease	Conditional resistance
Radiological resistance / to UV radiation	resistant

Product features, product functions, product components / general

Product feature

halogen-freesilicon-freeYes

Standards, specifications, approvals	
UL/ETL listing / 300 V Rating	No
UL/ETL style / 600 V Rating	No
Certificate of suitability	
 RoHS conformity 	Yes

Further information / Internet-Links

Internet-Link

• to website: Selector SIMATIC NET http://www.siemens.com/snst 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: 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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