SIEMENS

Data sheet

6XV1830-3DH50

product type designation

product description

PROFIBUS M12-Cable

Flexible plug-in cable (2-core), preferred length, preassembled with two 5-pole M12 male/female connectors (B-coded)

PROFIBUS M12 plug-in cable (ET 200), Pre-assembled PB FC Trailing Cable with 2 M12 connectors, B-coded, 5-pole; 5 m $\,$



suitability for use	Cable for connecting PROFIBUS stations (e.g. SIMATIC ET 200) to IP 65 degree of protection
cable designation	02YY (ST) C11Y 1x2x0,65/2,56-150 LI KF 40 FR petrol
wire length	5 m
electrical data	
attenuation factor per length	
• at 9.6 kHz / maximum	0.003 dB/m
• at 38.4 kHz / maximum	0.004 dB/m
• at 4 MHz / maximum	0.025 dB/m
• at 16 MHz / maximum	0.049 dB/m
impedance	
 rated value 	150 Ω
• at 9.6 kHz	270 Ω
• at 38.4 kHz	185 Ω
• at 3 MHz 20 MHz	150 Ω
relative symmetrical tolerance	
 of the characteristic impedance at 9.6 kHz 	10 %
 of the characteristic impedance at 38.4 kHz 	10 %
• of the characteristic impedance at 3 MHz 20 MHz	10 %
loop resistance per length / maximum	133 mΩ/m
shield resistance per length / maximum	14 Ω/km
capacity per length / at 1 kHz	28 pF/m
operating voltage	
RMS value	80 V
mechanical data	
number of electrical cores	2
design of the shield	Overlapped aluminum-clad foil, sheathed in a braided screen of tin- plated copper wires
type of electrical connection / FastConnect	Yes
outer diameter	
of inner conductor	0.67 mm
 of the wire insulation 	2.56 mm
 of the inner sheath of the cable 	5.4 mm
of cable sheath	8 mm
symmetrical tolerance of the outer diameter / of cable sheath	0.4 mm
material	

• of the wire inculation	polyethylene (PE)
 of the wire insulation of the inper checkth of the cohio 	polyethylene (PE)
 of the inner sheath of the cable of cable sheath 	
	PUR (TPE-U)
 of the insulation of data wires 	rod/arcon
of cable sheath	red/green
bending radius	petrol
with single bend / minimum permissible	40 mm
with single bend / minimum permissible with continuous bending	120 mm
number of bending cycles	3000000; Drag chain suitable for 3 million bending cycles at a bending
	radius of 120 mm (15x D) and an acceleration of 4 m/s ²
tensile load / maximum	100 N
weight per length	77 kg/km
ambient conditions	
ambient temperature	
 during operation 	-40 +60 °C
 during storage 	-40 +60 °C
 during transport 	-40 +60 °C
 during installation 	-40 +60 °C
note	Electrical properties measured at 20 °C, tests according to DIN 47250 part 4 respectively DIN VDE 0472
ambient condition / for operation	Limited segment length (see manual for PROFIBUS networks)
fire behavior	flame resistant according to IEC 60332-1-2
chemical resistance	
• to mineral oil	oil resistant according to IEC 60811-2-1 (7x24h/90°C)
• to grease	resistant
• to water	conditional resistance
radiological resistance / to UV radiation	resistant
protection class IP	IP65, IP67
product features, product functions, product components	/ general
product feature	
 halogen-free 	No
• silicon-free	Yes
standards, specifications, approvals	
UL/ETL listing / 300 V Rating	Yes; CMX
UL/ETL style / 600 V Rating	No
certificate of suitability	
 EAC approval 	Yes
CE marking	Yes
RoHS conformity	Yes
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
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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