SIEMENS

Data sheet

6XV1830-3DH20

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; 2.0 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	2 m
electrical data	
number of electrical connections	2
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 insulation 	polyethylene (PE)

• of the inner sheath of the cable	PVC
of cable sheath	PUR (TPE-U)
color	
 of the insulation of data wires 	red/green
of cable sheath	petrol
bending radius	
 with single bend / minimum permissible 	40 mm
 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 $\rm m/s^2$
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 $^\circ \rm C,$ 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
reference code	
according to IEC 81346-2	WG
 according to IEC 81346-2:2019 	WGB
further information / internet links	
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