## **SIEMENS**

Data sheet 6XV1830-3DH15

## 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; 1.5 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	1.5 m
electrical data	
number of electrical connections	2
attenuation factor per length	
<ul><li>at 9.6 kHz / maximum</li></ul>	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	
<ul> <li>of the characteristic impedance at 9.6 kHz</li> </ul>	10 %
<ul> <li>of the characteristic impedance at 38.4 kHz</li> </ul>	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	
<ul><li>RMS value</li></ul>	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	
<ul> <li>of inner conductor</li> </ul>	0.67 mm
of the wire insulation	2.56 mm
<ul> <li>of the inner sheath of the cable</li> </ul>	5.4 mm
<ul> <li>of cable sheath</li> </ul>	8 mm
symmetrical tolerance of the outer diameter / of cable sheath	0.4 mm

material	
of the wire insulation	polyethylene (PE)
<ul> <li>of the inner sheath of the cable</li> </ul>	PVC
of cable sheath	PUR (TPE-U)
color	
<ul> <li>of the insulation of data wires</li> </ul>	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
3 · , · · · · · · · · · · · · · · · · ·	radius of 120 mm (15x D) and an acceleration of 4 m/s <sup>2</sup>
tensile load / maximum	100 N
weight per length	77 kg/km
ambient conditions	
ambient temperature	
during operation	-40 +60 °C
	-40 +60 °C
during storage	
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	No
product feature • halogen-free	No Yes
product feature  • halogen-free  • silicon-free	No Yes
product feature	Yes
product feature	Yes; CMX
product feature  • halogen-free  • silicon-free  standards, specifications, approvals  UL/ETL listing / 300 V Rating  UL/ETL style / 600 V Rating	Yes
product feature • halogen-free • silicon-free  standards, specifications, approvals  UL/ETL listing / 300 V Rating  UL/ETL style / 600 V Rating  certificate of suitability	Yes; CMX No
product feature     • halogen-free     • silicon-free  standards, specifications, approvals  UL/ETL listing / 300 V Rating  UL/ETL style / 600 V Rating  certificate of suitability     • EAC approval	Yes; CMX No Yes
product feature     • halogen-free     • silicon-free  standards, specifications, approvals  UL/ETL listing / 300 V Rating  UL/ETL style / 600 V Rating  certificate of suitability     • EAC approval     • CE marking	Yes; CMX No  Yes Yes
product feature     • halogen-free     • silicon-free  standards, specifications, approvals  UL/ETL listing / 300 V Rating  UL/ETL style / 600 V Rating  certificate of suitability     • EAC approval     • CE marking     • RoHS conformity	Yes; CMX No Yes
product feature     • halogen-free     • silicon-free  standards, specifications, approvals  UL/ETL listing / 300 V Rating  UL/ETL style / 600 V Rating  certificate of suitability     • EAC approval     • CE marking     • RoHS conformity  Marine classification association	Yes; CMX No  Yes Yes
product feature     • halogen-free     • silicon-free  standards, specifications, approvals  UL/ETL listing / 300 V Rating  UL/ETL style / 600 V Rating  certificate of suitability     • EAC approval     • CE marking     • RoHS conformity  Marine classification association     • American Bureau of Shipping Europe Ltd. (ABS)	Yes; CMX No  Yes Yes
product feature     • halogen-free     • silicon-free  standards, specifications, approvals  UL/ETL listing / 300 V Rating  UL/ETL style / 600 V Rating  certificate of suitability     • EAC approval     • CE marking     • RoHS conformity  Marine classification association	Yes; CMX No Yes Yes Yes Yes
product feature     • halogen-free     • silicon-free  standards, specifications, approvals  UL/ETL listing / 300 V Rating  UL/ETL style / 600 V Rating  certificate of suitability     • EAC approval     • CE marking     • RoHS conformity  Marine classification association     • American Bureau of Shipping Europe Ltd. (ABS)	Yes; CMX No Yes Yes Yes Yes Yes
product feature	Yes; CMX No Yes Yes Yes Yes You Yes
product feature	Yes; CMX No Yes Yes Yes You No No No
product feature	Yes; CMX No Yes Yes Yes You No No No No No No
product feature	Yes; CMX No Yes Yes Yes Yes No No No No No No
product feature	Yes; CMX No Yes Yes Yes Yes No
product feature	Yes; CMX No Yes Yes Yes Yes No
product feature	Yes; CMX No Yes Yes Yes Yes No
product feature	Yes; CMX No Yes Yes Yes Yes No
product feature	Yes; CMX No Yes Yes Yes Yes No
product feature	Yes; CMX No Yes Yes Yes Yes Yes  No No No No No No No No No WG WGB
product feature	Yes; CMX No Yes Yes Yes Yes Yes No No No No No No WG WG WGB
product feature	Yes; CMX No  Yes Yes Yes Yes Yes No No No No No No No WG WGB  http://www.siemens.com/tia-selection-tool http://www.siemens.com/simatic-net
product feature	Yes; CMX No  Yes Yes Yes Yes Yes  No No No No No No No No WG WGB  http://www.siemens.com/tia-selection-tool https://www.siemens.com/simatic-net https://mall.industry.siemens.com
product feature	Yes; CMX No  Yes Yes Yes Yes Yes No
product feature	Yes; CMX No  Yes Yes Yes Yes Yes  No No No No No No No No WG WGB  http://www.siemens.com/tia-selection-tool https://www.siemens.com/simatic-net https://mall.industry.siemens.com

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