

product type designation

product description

SIENOPYR FR ship cable

Bus cable (2-core), sold by the meter, unassembled

PROFIBUS marine cable SIENOPYR, copper cable for laying on ships and OFFSHORE units, Sold by the meter Delivery unit max. 1000 m/ min. 20 m.



suitability for use

Cable for fixed installation on ships and offshore facilities in all enclosed spaces and on open decks. This cable cannot be used for permanent installation in water.

cable designation

M-02Y (ST) CH X 1 x 2 x 0,35 100 V

electrical data

attenuation factor per length

- at 9.6 kHz / maximum
- at 38.4 kHz / maximum
- at 4 MHz / maximum
- at 16 MHz / maximum

0.003 dB/m
0.005 dB/m
0.022 dB/m
0.045 dB/m

impedance

- rated value
- at 9.6 kHz
- at 38.4 kHz
- at 3 MHz ... 20 MHz

150 Ω
250 Ω
185 Ω
150 Ω

relative symmetrical tolerance

- of the characteristic impedance at 9.6 kHz
- of the characteristic impedance at 38.4 kHz
- of the characteristic impedance at 3 MHz ... 20 MHz

10 %
10 %
10 %

loop resistance per length / maximum

110 mΩ/m

insulation resistance coefficient

16000 GΩ·m

operating voltage

- RMS value

100 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

No

outer diameter

- of inner conductor
- of the inner sheath of the cable
- of cable sheath
- of cable sheath / note

0.67 mm
8 mm
9.8 mm
Outer diameter > 8 mm: Bus connectors can only be connected after removing the outer cover

symmetrical tolerance of the outer diameter / of cable sheath

0.5 mm

material

- of the wire insulation
- of the inner sheath of the cable
- of cable sheath

polyethylene (PE)
Halogen-free polymer (HM4)
Halogen-free, cross-linked polymer

color	
<ul style="list-style-type: none"> • of the insulation of data wires • of cable sheath 	red/green Black
bending radius	
<ul style="list-style-type: none"> • with single bend / minimum permissible • with multiple bends / minimum permissible 	98 mm 196 mm
tensile load / maximum	100 N
weight per length	110 kg/km
ambient conditions	
ambient temperature	
<ul style="list-style-type: none"> • during operation • during storage • during transport • during installation • note 	-35 ... +80 °C -35 ... +80 °C -35 ... +80 °C -15 ... +80 °C Electrical properties measured at 20 °C, tests according to DIN 47250 part 4 respectively DIN VDE 0472
ambient condition / for operation	At ambient temperatures below -15 °C, the cable must not be subjected to any movements other than the normal vibration levels encountered on board ship
fire behavior	flame resistant according to IEC 60332-3-24, IEC 607542, IEC 61031, DIN VDE 0472 Part 805 Prüftart B
chemical resistance	
<ul style="list-style-type: none"> • to mineral oil • to grease • to water 	resistant to diesel fuel according to DIN VDE 51601, ASTM oil No. 2 according to DIN 53521, oil, NATOCode 0178, BWTL 91500031/2 according to VG 95214 Part 4, hydraulic fluid, NATOCode H515, BWTL 91500020 according to VG 95214 Part 4, cold cleaning solvent, BW-TL 68500017 according to VG 95214 Part 4, deionized water according to VG 95214 Part 4, deionized water with 3.5% NaCl resistant conditional resistance
radiological resistance / to UV radiation	resistant
product features, product functions, product components / general	
product feature	
<ul style="list-style-type: none"> • halogen-free • silicon-free 	Yes Yes
standards, specifications, approvals	
UL/ETL listing / 300 V Rating	No
UL/ETL style / 600 V Rating	No
Marine classification association	
<ul style="list-style-type: none"> • American Bureau of Shipping Europe Ltd. (ABS) • French marine classification society (BV) • Det Norske Veritas (DNV) • Germanische Lloyd (GL) • Lloyds Register of Shipping (LRS) • Nippon Kaiji Kyokai (NK) • Polski Rejestr Statkow (PRS) 	No No Yes Yes Yes No No
reference code	
<ul style="list-style-type: none"> • according to IEC 81346-2 • according to IEC 81346-2:2019 	WG WGB
further information / internet links	
internet link	
<ul style="list-style-type: none"> • to website: Selection guide for cables and connectors • to web page: selection aid TIA Selection Tool • to web page: SiePortal • to website: Image database • to website: CAX-Download-Manager • to website: Industry Online Support 	https://support.industry.siemens.com/cs/ww/en/view/109766358 https://www.siemens.com/tstcloud https://sieportal.siemens.com/ https://www.automation.siemens.com/bilddb https://www.siemens.com/cax https://support.industry.siemens.com
security information	
security information	Siemens provides products and solutions with industrial cybersecurity functions that support the secure operation of plants, systems, machines and networks. In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial cybersecurity concept. Siemens' products and solutions constitute one element of such a concept. Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected

to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place. For additional information on industrial cybersecurity measures that may be implemented, please visit www.siemens.com/cybersecurity-industry. Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats. To stay informed about product updates, subscribe to the Siemens Industrial Cybersecurity RSS Feed under <https://www.siemens.com/cert>. (V4.7)

Approvals / Certificates

General Product Approval



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formity](#)



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Marine / Shipping



Environment

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