

**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.



Technical Product Detail Page

<https://l.siemens.com/1P6XV1830-0MH10>

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

wire length

sold by the meter

**electrical data**

attenuation factor per length

- at 9.6 kHz / maximum 0.003 dB/m
- at 38.4 kHz / maximum 0.005 dB/m
- at 4 MHz / maximum 0.022 dB/m
- at 16 MHz / maximum 0.045 dB/m

impedance

- rated value 150 Ω
- at 9.6 kHz 250 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

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 0.67 mm
- of the inner sheath of the cable 8 mm
- of cable sheath 9.8 mm
- of cable sheath / note 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

<ul style="list-style-type: none"> <li>• of the wire insulation</li> <li>• of the inner sheath of the cable</li> <li>• of cable sheath</li> </ul>	<p>polyethylene (PE)</p> <p>Halogen-free polymer (HM4)</p> <p>Halogen-free, cross-linked polymer</p>
<p>color</p> <ul style="list-style-type: none"> <li>• of the insulation of data wires</li> <li>• of cable sheath</li> </ul>	<p>red/green</p> <p>Black</p>
<p>bending radius</p> <ul style="list-style-type: none"> <li>• with single bend / minimum permissible</li> <li>• with multiple bends / minimum permissible</li> </ul>	<p>98 mm</p> <p>196 mm</p>
tensile load / maximum	100 N
weight per length	110 kg/km
<b>ambient conditions</b>	
<p>ambient temperature</p> <ul style="list-style-type: none"> <li>• during operation</li> <li>• during storage</li> <li>• during transport</li> <li>• during installation</li> </ul>	<p>-35 ... +80 °C</p> <p>-35 ... +80 °C</p> <p>-35 ... +80 °C</p> <p>-15 ... +80 °C</p>
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
<p>chemical resistance</p> <ul style="list-style-type: none"> <li>• to mineral oil</li> <li>• to grease</li> <li>• to water</li> </ul>	<p>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</p> <p>resistant</p> <p>conditional resistance</p>
radiological resistance / to UV radiation	resistant
<b>product features, product functions, product components / general</b>	
<p>product feature</p> <ul style="list-style-type: none"> <li>• halogen-free</li> <li>• silicon-free</li> </ul>	<p>Yes</p> <p>Yes</p>
<b>standards, specifications, approvals</b>	
UL/ETL listing / 300 V Rating	No
UL/ETL style / 600 V Rating	No
<p>Marine classification association</p> <ul style="list-style-type: none"> <li>• American Bureau of Shipping Europe Ltd. (ABS)</li> <li>• French marine classification society (BV)</li> <li>• Det Norske Veritas (DNV)</li> <li>• Germanische Lloyd (GL)</li> <li>• Lloyds Register of Shipping (LRS)</li> <li>• Nippon Kaiji Kyokai (NK)</li> <li>• Polski Rejestr Statkow (PRS)</li> </ul>	<p>No</p> <p>No</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>No</p> <p>No</p>
<b>further information / internet links</b>	
<p>internet link</p> <ul style="list-style-type: none"> <li>• to website: Selection guide for cables and connectors</li> <li>• to web page: selection aid TIA Selection Tool</li> <li>• to web page: SiePortal</li> <li>• to website: Image database</li> <li>• to website: CAx-Download-Manager</li> <li>• to website: Industry Online Support</li> </ul>	<p><a href="https://support.industry.siemens.com/cs/ww/en/view/109766358">https://support.industry.siemens.com/cs/ww/en/view/109766358</a></p> <p><a href="https://www.siemens.com/tstcloud">https://www.siemens.com/tstcloud</a></p> <p><a href="https://sieportal.siemens.com/">https://sieportal.siemens.com/</a></p> <p><a href="https://www.automation.siemens.com/bilddb">https://www.automation.siemens.com/bilddb</a></p> <p><a href="https://www.siemens.com/cax">https://www.siemens.com/cax</a></p> <p><a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a></p>
<b>security information</b>	
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

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## Approvals / Certificates

### General Product Approval



EG-Konf.

[Declaration of Conformity](#)



CCC

[Manufacturer Declaration](#)

[China RoHS](#)

### General Product Approval

### Maritime application



RCM



BUREAU  
VERITAS



DNV



GL



LRS



RMRS

## Environment

[Environmental Conformations](#)

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