

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

Damping ratio 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 %
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<ul style="list-style-type: none"> • of the characteristic impedance at 38.4 kHz 	10 %
<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • of inner conductor 	0.67 mm
<ul style="list-style-type: none"> • of the inner sheath of the cable 	8 mm
<ul style="list-style-type: none"> • of cable sheath 	9.8 mm
<ul style="list-style-type: none"> • 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"> • of the wire insulation 	polyethylene (PE)
<ul style="list-style-type: none"> • of the inner sheath of the cable 	Halogen-free polymer (HM4)
<ul style="list-style-type: none"> • of cable sheath 	Halogen-free, cross-linked polymer
Color	
<ul style="list-style-type: none"> • of the insulation of data wires 	red/green
<ul style="list-style-type: none"> • of cable sheath 	Black
Bending radius	
<ul style="list-style-type: none"> • with single bend / minimum permissible 	98 mm
<ul style="list-style-type: none"> • with multiple bends / minimum permissible 	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 	-35 ... +80 °C
<ul style="list-style-type: none"> • during storage 	-35 ... +80 °C
<ul style="list-style-type: none"> • during transport 	-35 ... +80 °C
<ul style="list-style-type: none"> • during installation 	-15 ... +80 °C
<ul style="list-style-type: none"> • Note 	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

Burning behavior	flame resistant according to IEC 60332-3-24, IEC 607542, IEC 61031, DIN VDE 0472 Part 805 Prüfarm B
Chemical resistance	<ul style="list-style-type: none"> • 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
<ul style="list-style-type: none"> • to mineral oil 	
<ul style="list-style-type: none"> • to grease • to water 	
Radiological resistance / to UV radiation	resistant

Product features, product functions, product components / general

Product feature	
<ul style="list-style-type: none"> • halogen-free 	Yes
<ul style="list-style-type: none"> • silicon-free 	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) 	No
<ul style="list-style-type: none"> • Bureau Veritas (BV) 	No
<ul style="list-style-type: none"> • Det Norske Veritas (DNV) 	Yes
<ul style="list-style-type: none"> • Germanische Lloyd (GL) 	Yes
<ul style="list-style-type: none"> • Lloyds Register of Shipping (LRS) 	Yes
<ul style="list-style-type: none"> • Nippon Kaiji Kyokai (NK) 	No
<ul style="list-style-type: none"> • Polski Rejestr Statkow (PRS) 	No

Further information / Internet-Links

Internet-Link	
<ul style="list-style-type: none"> • to website: Selector SIMATIC NET SELECTION TOOL 	http://www.siemens.com/snst
<ul style="list-style-type: none"> • to website: Industrial communication 	http://www.siemens.com/simatic-net
<ul style="list-style-type: none"> • to website: Industry Mall 	https://mall.industry.siemens.com
<ul style="list-style-type: none"> • to website: Information and Download Center 	http://www.siemens.com/industry/infocenter
<ul style="list-style-type: none"> • to website: Image database 	http://automation.siemens.com/bilddb
<ul style="list-style-type: none"> • to website: CAx Download Manager 	http://www.siemens.com/cax
<ul style="list-style-type: none"> • to website: Industry Online Support 	https://support.industry.siemens.com

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