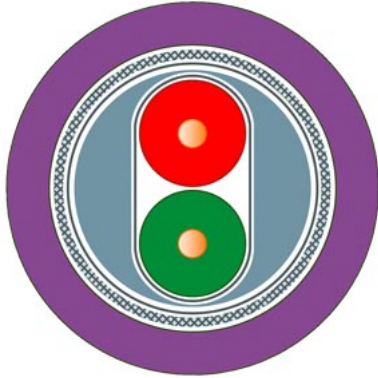


product type designation

product description



PROFIBUS FC FRNC Cable GP

flame-retardant and halogen-free bus cable acc. to IEC 60754-1/2 (2-core), sold by the meter, unassembled

PROFIBUS FC FRNC Cable GP, flame-retardant bus cable and halogen-free bus cable with copolymer sheath, FRNC sold by the meter, delivery unit max. 1000 m, minimum order quantity 20 m .

Technical Product Detail Page

<https://i.siemens.com/1P6XV1830-0LH10>

suitability for use

Halogen-free cable, suitable for use in buildings

cable designation

02YSH (ST) CH 1x2x0,64/2,55-150 VI KF 25 FRNC FC

wire length

sold by the meter

electrical data

attenuation factor per length

| | |
|-------------------------|-------------|
| • at 9.6 kHz / maximum | 0.0025 dB/m |
| • at 38.4 kHz / maximum | 0.004 dB/m |
| • at 4 MHz / maximum | 0.022 dB/m |
| • at 16 MHz / maximum | 0.042 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

110 mΩ/m

shield resistance per length / maximum

9.5 Ω/km

capacity per length / at 1 kHz

28.5 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 | 0.65 mm |
| • of the wire insulation | 2.55 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) |
|--------------------------|-------------------|

| | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> • of the inner sheath of the cable • of cable sheath | FRNC FRNC |
| color <ul style="list-style-type: none"> • of the insulation of data wires • of cable sheath | red/green Violet |
| bending radius <ul style="list-style-type: none"> • with single bend / minimum permissible • with multiple bends / minimum permissible | 60 mm 80 mm |
| tensile load / maximum | 100 N |
| weight per length | 72 kg/km |
| ambient conditions | |
| ambient temperature <ul style="list-style-type: none"> • during operation • during storage • during transport • during installation | -25 ... +80 °C -25 ... +80 °C -25 ... +80 °C -25 ... +80 °C |
| fire behavior | flame resistant according to IEC 60332-3-24 (Category C), IEC 60332-3-22 (Category A), EN 50267-2-1/2, IEC 61034 |
| class of burning behaviour / according to EN 13501-6 | Eca |
| chemical resistance <ul style="list-style-type: none"> • to mineral oil • to grease • to water | oil-resistant according to IEC 60811-401 Conditional resistance 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 • low-emission according to IEC 61034-2 | Yes; halogen-free according to EN 60754-1-2 Yes Yes |
| standards, specifications, approvals | |
| UL/ETL listing / 300 V Rating | Yes; c(UL)us, CM / CL3 / Sun Res |
| UL/ETL style / 600 V Rating | Yes |
| certificate of suitability <ul style="list-style-type: none"> • EAC approval • CE marking • RoHS conformity | Yes Yes Yes |
| 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 No No No No No |
| 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 | |
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Approvals / Certificates

General Product Approval

[Manufacturer Declaration](#)



[Declaration of Conformity](#)



[China RoHS](#)

General Product Approval

Environment

[Fire safety / Physical security](#)



[Environmental Conformations](#)

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