

product description

Robust, flexible connection cable (4-core), preferred length, preassembled with two 4-pole M12 connectors (D-coded)

IE Robust Connecting Cable M12-180/M12-180, IP69, pre-assembled IE FC Robust Food cable GP 2x2, with 2 M12 plugs (D-coded) length 1 m.



suitability for use

For connecting Industrial Ethernet stations with degree of protection IP65/67/69. Cable with FEP jacket (fluorinated plastic, perfluoroethylene propylene) for use in the food, beverages and tobacco industries (IP69 resistant). Line is water-repellent, weather-proof, resistant to microbes, and extremely resistant to many cleaning agents and disinfectants (such as hypochlorite, chlorine dioxide, peroxyacetic acid, and quaternary ammonium cations).

cable designation

2YY(ST)CY6Y 2X2X0.75/1.55 LI VZN

wire length

1 m

electrical data

number of electrical connections

2

attenuation factor per length

- at 10 MHz / maximum
- at 100 MHz / maximum

0.095 dB/m
0.32 dB/m

impedance

- at 1 MHz ... 100 MHz

100 Ω

relative symmetrical tolerance

- of the characteristic impedance at 1 MHz ... 100 MHz

5 %

near-end crosstalk per length

- at 1 MHz ... 100 MHz

0.353 dB/m

transfer impedance per length / at 10 MHz

80 mΩ/m

loop resistance per length / maximum

120 mΩ/m

operating voltage

- RMS value

80 V

NVP value in percent

69 %

mechanical data

number of electrical cores

4

design of the shield

Overlapped aluminum-clad foil, sheathed in a braided screen of tin-plated copper wires

type of electrical connection / FastConnect

Yes

core diameter

- of AWG22 insulated conductor

0.75 mm

outer diameter

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

0.75 mm
1.56 mm
4 mm
6.5 mm

symmetrical tolerance of the outer diameter / of cable sheath

0.2 mm

material

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

polyethylene (PE)
PVC

<ul style="list-style-type: none"> of cable sheath 	PVC/FEP; FEP transparent
color	
<ul style="list-style-type: none"> of the insulation of data wires 	white/yellow/blue/orange
<ul style="list-style-type: none"> of cable sheath 	green
bending radius	
<ul style="list-style-type: none"> with single bend / minimum permissible 	26 mm
<ul style="list-style-type: none"> with multiple bends / minimum permissible 	52 mm
<ul style="list-style-type: none"> with continuous bending 	100 mm
number of bending cycles	1000000; Acceleration 4 m/s ²
number of torsion cycles / with torsion by ± 180° on 1 m cable length	1000000
tensile load / maximum	150 N
weight per length	72 kg/km

plug	
type of plug interlock	screwed
design of plug-in connection	M12-180
connector coding	M12
<ul style="list-style-type: none"> of the M12 circular connector 	D-coded

ambient conditions	
ambient temperature	
<ul style="list-style-type: none"> during operation 	-40 ... +80 °C
<ul style="list-style-type: none"> during storage 	-40 ... +80 °C
<ul style="list-style-type: none"> during transport 	-40 ... +80 °C
<ul style="list-style-type: none"> during installation 	-40 ... +80 °C
<ul style="list-style-type: none"> note 	Electrical properties measured at 20 °C, tests according to DIN VDE 0472
fire behavior	flame resistant according to IEC 60332-1-2
chemical resistance	
<ul style="list-style-type: none"> to mineral oil 	oil resistant according to IEC 60811-404 (7x24h/90°C)
<ul style="list-style-type: none"> to grease 	Conditional resistance
<ul style="list-style-type: none"> to water 	resistant
radiological resistance / to UV radiation	resistant
protection class IP	IP65/67/69

product features, product functions, product components / general	
product feature	
<ul style="list-style-type: none"> halogen-free 	No
<ul style="list-style-type: none"> silicon-free 	Yes

standards, specifications, approvals	
UL/ETL listing / 300 V Rating	Yes; c(ETL)us 3047254 CMG FT4 75°C
UL/ETL style / 600 V Rating	Yes; AWM 22162 AWM I A/B 80°C 600V FT2
certificate of suitability	UL 2238
<ul style="list-style-type: none"> EAC approval 	Yes
<ul style="list-style-type: none"> CE marking 	Yes
<ul style="list-style-type: none"> RoHS conformity 	Yes
standard for structured cabling	Cat5e
Marine classification association	
<ul style="list-style-type: none"> American Bureau of Shipping Europe Ltd. (ABS) 	No
<ul style="list-style-type: none"> French marine classification society (BV) 	No
<ul style="list-style-type: none"> Det Norske Veritas (DNV) 	No
<ul style="list-style-type: none"> Germanische Lloyd (GL) 	No
<ul style="list-style-type: none"> Lloyds Register of Shipping (LRS) 	No
<ul style="list-style-type: none"> Nippon Kaiji Kyokai (NK) 	No
<ul style="list-style-type: none"> Polski Rejestr Statkow (PRS) 	No
reference code	
<ul style="list-style-type: none"> according to IEC 81346-2 	WG
<ul style="list-style-type: none"> according to IEC 81346-2:2019 	WGB

further information / internet links	
internet link	
<ul style="list-style-type: none"> to website: Selection guide for cables and connectors 	https://support.industry.siemens.com/cs/ww/en/view/109766358
<ul style="list-style-type: none"> to web page: selection aid TIA Selection Tool 	https://www.siemens.com/tstcloud
<ul style="list-style-type: none"> to web page: SiePortal 	https://sieportal.siemens.com/
<ul style="list-style-type: none"> to website: Image database 	https://www.automation.siemens.com/bilddb

- to website: CAx-Download-Manager
- to website: Industry Online Support

<https://www.siemens.com/cax>

<https://support.industry.siemens.com>

security information

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Approvals / Certificates

General Product Approval

Environment



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Industrial Communication

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