

product type designation

product description

Power Connecting Cable M12-90/M12-90

Flexible plug-in cable (4-wire), preferred length, pre-assembled with one 4-pin M12 male and one female connector (L-coded, 90° cable outlet)

Power connecting cable M12-90/M12-90 for the power supply of the terminal devices / network components: pre-assembled cable with M12 plug and M12 socket, L-coded, 4 pin, 3 m.



suitability for use

Cable for connecting the 24 V power supply to RF185C, RF186C, RF188C to IP65/67 degree of protection

cable designation

LIYY 4X1X1.5 BK

wire length

3 m

electrical data

operating voltage / RMS value

600 V

conductor cross section / of the power line

1.5 mm²

continuous current / of the power lines

16 A

mechanical data

number of electrical cores

4

type of electrical connection

M12-90

outer diameter

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

1.6 mm
2.3 mm
7.7 mm

symmetrical tolerance of the outer diameter / of cable sheath

0.3 mm

conductor class

5

material

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

CU, blank
PVC
PVC

product component / PE connection

No

marking / of cores

Color

color

- of the power line insulation
- of cable sheath

brown / white / blue / black
Black

bending radius

- with single bend / minimum permissible
- with multiple bends / minimum permissible
- with continuous bending

31 mm
62 mm
62 mm

number of bending cycles

2000000

tensile load / maximum

100 N

weight per length

97 kg/km

plug

type of plug interlock

screwed

design of plug-in connection

M12-90

connector coding

M12

connector coding / of the M12 circular connector

L-coded

ambient conditions	
ambient temperature	
• during operation	-20 ... +90 °C
• during storage	-30 ... +90 °C
• during transport	-30 ... +90 °C
• during installation	-20 ... +90 °C
ambient condition / for operation	temperature range for permanent installation -30 °C to 90 °C
fire behavior	Flame-resistant acc. to IEC 60332-1-2
chemical resistance	
• to mineral oil	Oil resistant according to EN 50290-2-22 (VDE 0819), compound type TM55 (7x24h/90 °C)
• to grease	Conditional resistance
• to water	Conditional resistance
radiological resistance / to UV radiation	resistant
protection class IP	IP65 / 67

product features, product functions, product components / general

product feature	
• halogen-free	No
• silicon-free	Yes

standards, specifications, approvals

UL/ETL listing / 300 V Rating	Yes
certificate of suitability	UL2238 E300110
• EAC approval	Yes
• RoHS conformity	Yes
reference code	
• according to IEC 81346-2:2019	WDB

further information / internet links

internet link	
• to website: Selection guide for cables and connectors	https://support.industry.siemens.com/cs/ww/en/view/109766358
• to web page: selection aid TIA Selection Tool	https://www.siemens.com/tstcloud
• to website: Industrial communication	https://www.siemens.com/simatic-net
• to web page: SiePortal	https://sieportal.siemens.com/
• to website: Image database	https://www.automation.siemens.com/bilddb
• to website: CAX-Download-Manager	https://www.siemens.com/cax
• to website: Industry Online Support	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)
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Approvals / Certificates

General Product Approval	Industrial Communication
 EG-Konf.	 UL

[Manufacturer Declaration](#)

[PROFINET](#)

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