SIEMENS

Data sheet 6XV1801-6DH50

product type designation	**Power Connecting Cable M12-180/M12-180**
product description	Flexible plug-in cable (4-wire), preferred length, pre-assembled with one 4-pin M12 male and one female connector (L-coded, 180° cable outlet)
	Power connecting cable M12-180/M12-180 for the power supply of the terminal devices / network components: pre-assembled cable with M12 plug and M12 socket, L-coded, 4-pole, 5 m.



product brand name	SIMATIC NET
Technical Product Detail Page	https://i.siemens.com/1P6XV1801-6DH50
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	5 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	15 A; at 40°C according to DIN VDE 0891-1 (17 A at 20°C according to DIN VDE 0891-1)
mechanical data	
number of electrical cores	4
type of electrical connection	M12-180
outer diameter	
● of inner conductor	1.6 mm
● of the wire insulation	2.3 mm
● of cable sheath	7.7 mm
symmetrical tolerance of the outer diameter / of cable sheath	0.3 mm
conductor class	5
material	
● of the conductor	CU, blank
● of the wire insulation	PVC
● of cable sheath	PVC
product component / PE connection	No
marking / of cores	Color
color	
● of the power line insulation	brown / white / blue / black
● of cable sheath	Black
bending radius	
● with single bend / minimum permissible	31 mm
● with multiple bends / minimum permissible	62 mm
● with continuous bending	62 mm
number of bending cycles	2000000; for use in cable carriers, for 2 million bending cycles with a bending radius of 100 mm, speed of 4 m/s, and acceleration of 4 m/s²
tensile load / maximum	100 N
weight per length	97 kg/km

Subject to change without notice
© Copyright Siemens

plug	
type of plug interlock	screwed
design of plug-in connection	M12-180
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	
• EAC approval	Yes
• RoHS conformity	Yes
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)

Approvals / Certificates

General Product Approval	Industrial Communication

Subject to change without notice
© Copyright Siemens

Manufacturer Declaration







PROFINET

last modified: 5/9/2026

Subject to change without notice
© Copyright Siemens