SIEMENS

Data sheet 6XV1801-6EH20

product type designation	**Robust Power Connecting Cable M12-180/M12-180, IP69, 2 m**
product description	Rugged, flexible plug-in cable (4-core), preferred length, preassembled with two 4-pole M12 plugs (L-coded)
	robust power connecting cable M12-180/M12-180; IP69; 4x1.5 sq. mm for power supply of end devices/network components, preassembled cable with M12 plug and M12 socket, L-coded, 4-pole, 2 m.



product brand name	SIMATIC NET
Technical Product Detail Page	https://i.siemens.com/1P6XV1801-6EH20
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, beverage and tobacco industry (IP69 resistant). Cable 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	LI9YY6Y 4X1X1.5 VZN GY
wire length	2 m
electrical data	
insulation resistance coefficient	20000 MΩ·m
operating voltage / RMS value	300 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
outer diameter	
● of inner conductor	1.5 mm
● of the wire insulation	2.4 mm
● of cable sheath	7.6 mm
symmetrical tolerance of the outer diameter / of cable sheath	0.2 mm
conductor class	5
material	
● of the conductor	CU, tin-coated
● of the wire insulation	PP
● of cable sheath	PVC/FEP; FEP transparent
property of the cable sheath / oil-resistant	Yes
product component / PE connection	No
marking / of cores	Color
color	
● of the power line insulation	brown / blue, white / black
● of cable sheath	gray
bending radius	
● with single bend / minimum permissible	30 mm
● with multiple bends / minimum permissible	61 mm
● with continuous bending	100 mm

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number of bending cycles	500000; acceleration 4 m/s²
number of torsion cycles / with torsion by ± 180° on 1 m cable length	1000000
tensile load / maximum	150 N
weight per length	107 kg/km
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	-40 ... +90 °C
● during storage	-40 ... +90 °C
● during transport	-40 ... +90 °C
● during installation	-40 ... +90 °C
fire behavior	Flame-resistant acc. to IEC 60332-1-2
chemical resistance	
● to mineral oil	oil resistant according to DIN EN 60811-404 (7x24h/90°C)
● to grease	resistant
● to water	resistant
radiological resistance / to UV radiation	resistant according to UL 2556 Sec. 4.2.8.5
protection class IP	IP67/IP69
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	CMG FT4 75°C or (ETL)us PLTC-ER SUN RES OIL RES I or E502506-LFR AWM 22165 AWM I A/B 90°C 300V FT2
● EAC approval	Yes
● RoHS conformity	Yes
● for hygienic design	EHEDG (cable material)
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	

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General Product Approval				Food, Pharmaceutical, Medical
Manufacturer Declaration				EHEDG

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