SIEMENS

## Data sheet 6XV1801-6DH20

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| **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, 2.0 m. |



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| product brand name | SIMATIC NET |
| Technical Product Detail Page | https://i.siemens.com/1P6XV1801-6DH20 |
| 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 | 2 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 |


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| **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 |
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Manufacturer Declaration







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