## **SIEMENS**

Data sheet 6XV1801-2CN10

Control connecting cable M12-180/M12-180; 5-core; IO-Link port Class B; pre-ass. with M12 plug and M12 socket (A-coded); Straight cable outlet; Length 10 m  $\,$ 



| wire length   | 10 m       |  |
|---|------------|--|
| electrical data   |            |  |
| operating voltage / RMS value                                 | 300 V      |  |
| conductor cross section / of the power line                   | 0.4 mm²    |  |
| continuous current / of the power lines                       | 2.5 A      |  |
| mechanical data   |            |  |
| number of electrical cores                                    | 5          |  |
| type of electrical connection                                 | M12-180    |  |
| AWG number  | 24         |  |
| outer diameter  |            |  |
| <ul> <li>of inner conductor</li> </ul>                        | 0.7 mm     |  |
| <ul> <li>of the wire insulation</li> </ul>                    | 1.2 mm     |  |
| of cable sheath   | 5.3 mm     |  |
| symmetrical tolerance of the outer diameter / of cable sheath | 0.3 mm     |  |
| material  |            |  |
| of the conductor  | CU, blank  |  |
| of cable sheath   | PUR        |  |
| product component / PE connection                             | No         |  |
| marking / of cores  | Color      |  |
| color   |            |  |
| of cable sheath   | Black      |  |
| bending radius  |            |  |
| <ul><li>with single bend / minimum permissible</li></ul>      | 21 mm      |  |
| with multiple bends / minimum permissible                     | 42 mm      |  |
| tensile load / maximum  | 10 N       |  |
| weight per length   | 40 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              | A coded    |  |
| ambient conditions  |            |  |
| ambient temperature   |            |  |
| <ul> <li>during operation</li> </ul>                          | -15 +80 °C |  |
| during storage  | -25 +80 °C |  |
| <ul> <li>during transport</li> </ul>                          | -25 +80 °C |  |
| <ul> <li>during installation</li> </ul>                       | -15 +80 °C |  |

| class of burning behaviour / according to EN 13501-6  chemical resistance   |   |  |
|---|---|--|
| to mineral oil     to grease     to water     conditional resistance     to water  protection class IP  product features, product functions, product components / general  product feature     • halogen-free     • silicon-free     • silicon-free     ves  standards, specifications, approvals  UL/ETL listing / 300 V Rating  UL/ETL style / 600 V Rating  Ves  UL/ETL style / 600 V Rating  Certificate of suitability     • EAC approval     RoHS conformity  further information / internet-Links  Internet-Link  • to web page: selection aid TIA Selection Tool     • to website: Industrial communication     • to website: Industry Mall     • to website: Information and Download Center     • to website: Selection guide for cables and connectors     • to website: Image database     • to website: Image database     • to website: CAx-Download-Manager  Conditional resistance Ped Conditional resistance  IP65 / 67  Product Feature      • halogen-free     • yes      • successional resistance      • pode conditional resistance      Ped Conditiona | class of burning behaviour / according to EN 13501-6              | Fca  |
| to grease     to water     protection class IP     product features, product functions, product components / general  product feature     • halogen-free     • silicon-free     • s | chemical resistance   |  |
| to water  protection class IP  product features, product functions, product components / general  product feature   | to mineral oil  | Conditional resistance                     |
| protection class IP  product features, product functions, product components / general  product feature  • halogen-free  • silicon-free  Yes  standards, specifications, approvals  UL/ETL listing / 300 V Rating  UL/ETL style / 600 V Rating  Ves  UL/ETL style / 600 V Rating  Ves  UL/ETL style / 600 V Rating  • EAC approval  • RoHS conformity  • EAC approval  • RoHS conformity  further information / internet-Links  Internet-Link  • to web page: selection aid TIA Selection Tool  • to website: Industrial communication  • to website: Industry Mall  • to website: Information and Download Center  • to website: Selection guide for cables and connectors  • to website: Image database  • to website: CAx-Download-Manager  IP65 / 67  Product features  Yes  Yes  Yes  No  Attriction in the product feature  Yes  Yes  Internet-Link  http://www.siemens.com/tia-selection-tool  http://www.siemens.com/simatic-net  http://www.siemens.com/simatic-net  http://www.siemens.com/simatic-net  http://www.siemens.com/industry/infocenter  http://www.siemens.com/industry/infocenter  http://www.siemens.com/bilddb  http://www.siemens.com/cax   | • to grease   | Conditional resistance                     |
| product feature  • halogen-free • silicon-free  • silicon-free  • silicon-free  • yes  standards, specifications, approvals  UL/ETL listing / 300 V Rating  UL/ETL style / 600 V Rating  certificate of suitability • EAC approval • RoHS conformity  further information / internet-Links  Internet-Link  • to web page: selection aid TIA Selection Tool • to website: Industry Mall • to website: Industry Mall • to website: Information and Download Center • to website: Information and Download Center • to website: Selection guide for cables and connectors • to website: Image database • to website: CAx-Download-Manager  http://www.siemens.com/bilddb  http://www.siemens.com/bilddb  http://www.siemens.com/bilddb  http://www.siemens.com/cax   | • to water  | Conditional resistance                     |
| product feature   | protection class IP   | IP65 / 67                                  |
| • halogen-free     • silicon-free     • silicon-free     • silicon-free     • silicon-free      *Yes  **Standards, specifications, approvals  UL/ETL listing / 300 V Rating  UL/ETL style / 600 V Rating  Pes  UL/ETL style / 600 V Rating  No  certificate of suitability  EAC approval  RoHS conformity  Yes  **Internet-Link*  Internet-Link  • to web page: selection aid TIA Selection Tool  • to website: Industrial communication  • to website: Industrial communication  • to website: Industry Mall  • to website: Information and Download Center  • to website: Selection guide for cables and connectors  • to website: Image database  • to website: CAx-Download-Manager  *Yes  Yes  No  No  **No  **Internet-Link**  **Internet-Link*   | product features, product functions, product components / general |  |
| • silicon-free Yes  standards, specifications, approvals  UL/ETL listing / 300 V Rating Yes  UL/ETL style / 600 V Rating No  certificate of suitability • EAC approval Yes • RoHS conformity Yes  further information / internet-Links  Internet-Link • to web page: selection aid TIA Selection Tool • to website: Industrial communication • to website: Industry Mall • to website: Information and Download Center • to website: Selection guide for cables and connectors • to website: Image database • to website: CAx-Download-Manager  Yes  Yes  No  No  Inttp://www.siemens.com/tia-selection-tool  http://www.siemens.com/tia-selection-tool  http://www.siemens.com/simatic-net  https://mall.industry.siemens.com  https://sie.ag/2QdlxcP  https://sie.ag/2QdlxcP  https://automation.siemens.com/bilddb  http://www.siemens.com/cax   | product feature   |  |
| standards, specifications, approvals  UL/ETL listing / 300 V Rating  Yes  UL/ETL style / 600 V Rating  No  certificate of suitability  EAC approval  RoHS conformity  Yes  further information / internet-Links  Internet-Link  to web page: selection aid TIA Selection Tool  to website: Industrial communication  to website: Industry Mall  to website: Information and Download Center  to website: Selection guide for cables and connectors  to website: Image database  to website: CAx-Download-Manager  Yes  Yes  Yes  Internet-Link  http://www.siemens.com/tia-selection-tool  http://www.siemens.com/simatic-net  http://www.siemens.com/simatic-net  http://www.siemens.com/industry/infocenter  http://www.siemens.com/industry/infocenter   | <ul><li>halogen-free</li></ul>                                    | Yes  |
| UL/ETL listing / 300 V Rating  UL/ETL style / 600 V Rating  No  certificate of suitability  EAC approval  RoHS conformity  further information / internet-Links  Internet-Link  to web page: selection aid TIA Selection Tool  to website: Industrial communication  to website: Industry Mall  to website: Information and Download Center  to website: Information and Download Center  to website: Selection guide for cables and connectors  to website: Image database  to website: Image database  to website: CAx-Download-Manager  Yes  No  No  No  Http://www.siemens.com/tia-selection-tool  http://www.siemens.com/fia-selection-tool  http://www.siemens.com/simatic-net  https://www.siemens.com/simatic-net  https://www.siemens.com/industry/infocenter  http://www.siemens.com/industry/infocenter  http://www.siemens.com/bilddb  http://www.siemens.com/cax   | • silicon-free  | Yes  |
| UL/ETL style / 600 V Rating  certificate of suitability  EAC approval  RoHS conformity  Yes  further information / internet-Links  Internet-Link  to web page: selection aid TIA Selection Tool  to website: Industrial communication  to website: Industry Mall  to website: Information and Download Center  to website: Selection guide for cables and connectors  to website: Image database  to website: CAx-Download-Manager  No  Yes  Yes  http://www.siemens.com/tia-selection-tool  http://www.siemens.com/simatic-net  https://mall.industry.siemens.com/  https://sie.ag/2QdlxcP  https://sie.ag/2QdlxcP  http://automation.siemens.com/bilddb  http://www.siemens.com/cax   | standards, specifications, approvals                              |  |
| certificate of suitability  EAC approval  RoHS conformity  Yes  further information / internet-Links  Internet-Link  to web page: selection aid TIA Selection Tool  to website: Industrial communication  to website: Industry Mall  to website: Information and Download Center  to website: Selection guide for cables and connectors  to website: Image database  to website: Image database  to website: CAx-Download-Manager  Yes  Yes  Yes  Internet-Link  http://www.siemens.com/tia-selection-tool  http://www.siemens.com/simatic-net  https://mall.industry.siemens.com/  http://www.siemens.com/industry/infocenter  https://sie.ag/2QdlxcP  http://automation.siemens.com/bilddb  http://www.siemens.com/cax  | UL/ETL listing / 300 V Rating                                     | Yes  |
| EAC approval     RoHS conformity Yes  further information / internet-Links  Internet-Link     to web page: selection aid TIA Selection Tool     to website: Industrial communication     to website: Industry Mall     to website: Information and Download Center     to website: Selection guide for cables and connectors     to website: Image database     to website: Image database     to website: CAx-Download-Manager  Yes  Yes  Yes  Yes  Nttp://www.siemens.com/tia-selection-tool  http://www.siemens.com/simatic-net  https://mall.industry.siemens.com/  https://www.siemens.com/industry/infocenter  https://sie.ag/2QdlxcP  http://automation.siemens.com/bilddb  http://www.siemens.com/cax   | UL/ETL style / 600 V Rating                                       | No   |
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| • to website: CAx-Download-Manager <a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a>  |   | https://sie.ag/2QdlxcP                     |
|   | <ul><li>to website: Image database</li></ul>                      | http://automation.siemens.com/bilddb       |
| • to website: Industry Online Support  https://support.industry.siemens.com   | <ul><li>to website: CAx-Download-Manager</li></ul>                | http://www.siemens.com/cax                 |
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