



## MIS171S16EPH2S6

Int.Step 12-72VDC, Profinet, EncC-L, STO

ServoStep MIS is a series of integrated stepper motors with servo control (closed-loop) and up to 3000 RPM.

It consists of NEMA 17..23..34..43 size motors with holding torques from 0.36 Nm up to 25 Nm. All motors are programmable and have 8 I/O points (each can be DI or DO or AI).

Options include:

- incremental (semi-absolute) encoder\*). absolute multiturn encoder
- brake module\*)
- radial or axial\*) connectors
- CANopen
- Ethernet interface w/built-in switch for easy daisy-chaining and all protocols (Profinet. EtherNet/IP. EtherCAT. Sercos. ModbusTCP/UDP. Powerlink).
- Wireless versions are also possible: WLAN or BlueTooth.
- Special shaft versions include double shaft and hollow shaft. contact JVL to learn which combinations are possible.
- Higher IP versions are also available. \*) Depending of other options



### General information

|                                     |  |                                  |                                  |
|-------------------------------------|--|----------------------------------|----------------------------------|
| <b>Description</b>                  | Int.Step 12-72VDC, Profinet, EncC-L, STO, 4xM12. 2x4pF:Profinet 17pF:8xDIO/AI +RS422+RS485, High Resolution: 409.600 step/rev. ±0.01 RPM, Programmable (incl. current, position & velocity), with STO, Closed-Loop Semi-Abs. Encoder 4096 CPR, ø5x20 mm Round, Shaft: IP42, Motor: IP42, 43.1x73.5 mm Holding Torque: 0.18 Nm Radial Connector 12-72 VDC Mechanical Power: 48 W, Isolated from earth |                                  |                                  |
| <b>Manufacture</b>                  | JVL  | <b>Motor type</b>                | Integrated Stepper - Rotating    |
| <b>Motor resolution</b>             | 409600   | <b>Encoder type</b>              | H2<br>Incremental/abs_singleturn |
| <b>Integrated PLC</b>               | Yes  | <b>PLC no. of DI/DO/AI</b>       | 8                                |
| <b>Closed loop</b>                  | Yes  | <b>STO connector</b>             | Yes                              |
| <b>Integrated gear</b>              | No   | <b>Gear ratio</b>                |                                  |
| <b>Brake</b>                        | No   | <b>Speed [Rpm]</b>               | 3000.00                          |
| <b>Connectivity: Without module</b> | Profinet   | <b>Power Peak [W]</b>            | 92.31                            |
| <b>Flange Type Front</b>            |  | <b>Protection House/Shaft</b>    |                                  |
| <b>Shaft size - Front [mm]</b>      | 5.00 mm  |                                  |                                  |
| <b>Running torque [Nm]</b>          | 0.18   | <b>Rated Winding current [A]</b> | 4.0                              |
| <b>Main supply [V]</b>              | 12-72  | <b>Voltage type - Main</b>       | DC                               |



**MIS171S16EPH2S6**

Int.Step 12-72VDC, Profinet, EncC-L, STO

**General information**

|                                       |          |                            |      |
|---------------------------------------|----------|----------------------------|------|
| <b>Control voltage (CVI/O+) [VDC]</b> | 7-28     | <b>Holding torque [Nm]</b> | 0.18 |
| <b>Shaft Double</b>                   | No       |                            |      |
| <b>Weight net [kg]</b>                | 0.51     | <b>MTBF 100% [Year]</b>    | 13   |
| <b>Weight gross [kg]</b>              | 0.64     | <b>MTBF 30% [Year]</b>     | 15   |
| <b>Software</b>                       | MacTalk  |                            |      |
| <b>CE Marked</b>                      | Yes      |                            |      |
| <b>CE</b>                             |          |                            |      |
| <b>Approval - ROHS-3</b>              | Yes      |                            |      |
| <b>RoHS<sub>3</sub></b>               |          |                            |      |
| <b>Approval UL</b>                    | No       |                            |      |
| <b>Tariff no</b>                      | 85015100 | <b>Country Of Origin</b>   | DK   |



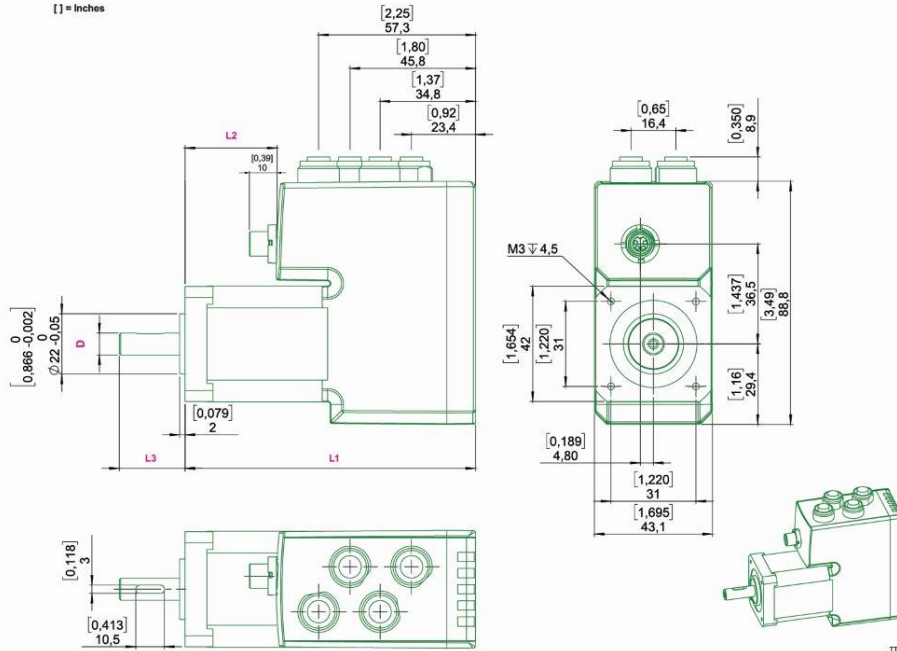
## MIS171S16EPH2S6

Int.Step 12-72VDC, Profinet, EncC-L, STO

### Mechanical information

| Motor Type  | Length (L1)<br>±2.0 [0.0787] | Length (L2)<br>±2.0 [0.0787] | Shaft length and form (L3)<br>+0 / -0.013mm[0.000512] | Shaft dia. (D)<br>+0 / -0.013mm[0.000512] |
|-------------|------------------------------|------------------------------|---|---|
| MIS171S16.. | 73.5 [2.89]                  | 0.8 [0.03]                   | 20.0 [0.79] Round                                     | 5.0 [0.19]                                |
| MIS173S8..  | 85.2 [3.35]                  | 12.5 [0.49]                  | 20.0 [0.79] D-cut                                     | 6.35 [0.25]                               |
| MIS173S16.. | 85.2 [3.35]                  | 12.5 [0.49]                  | 20.0 [0.79] Round                                     | 5.0 [0.19]                                |
| MIS176S8..  | 106 [4.17]                   | 33.3 [1.31]                  | 20.0 [0.79] D-cut                                     | 6.35 [0.25]                               |
| MIS176S35.. | 106 [4.17]                   | 33.3 [1.31]                  | 24.0 [0.94] Keyway                                    | 8.0 [0.31]                                |
| MIS176S75.. | 106 [4.17]                   | 33.3 [1.31]                  | 24.0 [0.94] D-cut                                     | 6.35 [0.25]                               |

This drawing covers only motor type MIS17xS with radial connectors



|   |                         |  |       |
|---|-------------------------|--|-------|
| <b>Motor length [mm]</b>                | 73.5                    | <b>Motor width [mm]</b>                | 43.1  |
| <b>Motor height [mm]</b>                | 88.8                    | <b>Protection house</b>                | IP42  |
| <b>Protection house</b>                 | IP42                    | <b>Protection shaft</b>                | IP42  |
| <b>Flange Type Front</b>                |                         | <b>Flange Type Rear</b>                | No    |
| <b>Motor diameter center front [mm]</b> | 22.0                    | <b>Motor diameter center rear [mm]</b> |       |
| <b>Bolt circle diameter front [mm]</b>  | 43.8                    | <b>Bolt circle diameter front [mm]</b> |       |
| <b>Mounting holes front [mm]</b>        | M3                      | <b>Mounting holes rear [mm]</b>        |       |
| <b>Flange material</b>                  | Aluminium               | <b>Flange Thickness [mm]</b>           |       |
| <b>Shaft Type Output</b>                | Round                   | <b>Shaft Double</b>                    | No    |
| <b>Shaft size - Front [mm]</b>          | 5.00 mm                 | <b>Shaft Type Rear</b>                 |       |
| <b>Shaft length Front [mm]</b>          | 20.0                    | <b>Shaft size - Rear</b>               | -     |
| <b>Shaft material</b>                   | Stainless steel AISI303 | <b>Shaft length Rear [mm]</b>          |       |
| <b>Shaft Key included</b>               | Key NOT included        | <b>Shaft Key Dimension</b>             | -     |
| <b>Front bearing type</b>               | 698ZZ                   | <b>Rear bearing type</b>               | 698ZZ |
| <b>Radial load [N]</b>                  | 476                     | <b>Radial load distance [mm]</b>       | 10    |



## MIS171S16EPH2S6

Int.Step 12-72VDC, Profinet, EncC-L, STO

### Mechanical information

|  |   |   |          |
|--|---|---|----------|
| <b>Axial load [N]</b>                        | 174   |   |          |
| <b>Axial play [mm]</b>                       | 0.08  | <b>Axial play force [N]</b>             | 4        |
| <b>Integrated gear</b>                       | No  | <b>Gear ratio</b>                       |          |
| <b>Gear efficiency [%]</b>                   | -   | <b>Gear backlash [ArcMin]</b>           | -        |
| <b>Brake</b>                                 | No  | <b>Brake - Go ON time [ms]</b>          | -        |
| <b>Brake Holding torque [Nm]</b>             | -   | <b>Brake - Go OFF time [ms]</b>         | -        |
| <b>Rotor inertia [kgcm<sup>2</sup>]</b>      | 0.020   | <b>Max inertia factor</b>               | 40       |
| <b>Precision Motor - Absolute [Deg]</b>      | 0.35  | <b>Precision Motor - Max Load [Deg]</b> |          |
| <b>Precision Motor - Repeatability [Deg]</b> | 0.15  | <b>Step angle [°/full step]</b>         | 1.8°     |
| <b>2D [PDF]</b>                              | Download  | <b>2D [DWG]</b>                         | No       |
| <b>3D [DWG]</b>                              | No  | <b>3D [EASM]</b>                        | No       |
| <b>3D [IGES]</b>                             | No  | <b>3D [STEP]</b>                        | Download |
| <b>Datasheet - pdf</b>                       |   | <b>CAD file page</b>                    | Link     |
| <b>User Manual</b>                           | Download  | <b>WEB page</b>                         | Link     |
| <b>Approval UL</b>                           | No  | <b>STO connector</b>                    | Yes      |
| <b>Approval - ATEX</b>                       | No  | <b>Approval TÜV - STO</b>               | Yes      |
| <b>Oil resistant</b>                         |   |   |          |
| <b>Temperature ambient [°C]</b>              | 0...40 °C and 0...70 °C with derating of performance                          |   |          |
| <b>Temperature storage</b>                   | -40...70 °C   |   |          |
| <b>Humidity working</b>                      | 5...93% non-condensing  |   |          |
| <b>Vibration</b>                             | 5-25 Hz: +/-1.6mm, 25-500Hz: 4G, 1.0 oct./min                                 |   |          |
| <b>Shock</b>                                 | 15G, 30ms. 6 x 1000 cycles in +/-X, +/-Y, +/-Z                                |   |          |
| <b>Withstand Voltage</b>                     | 500 VDC between earth and supply ground                                       |   |          |
| <b>EMC in general</b>                        | EMC Directive DIR2014/30/EU   |   |          |
| <b>EMC Emission</b>                          | EN61800-3 / EN61000-6-3 / EN61000-6-4 all 2. environment                      |   |          |
| <b>EMC Immunity</b>                          | En IEC 61800-3 / EN61000-6-1 all 2. environment                               |   |          |
| <b>Safety in general</b>                     | LVD DIR2014/35/EU / EL61800 - USA and Canada only MIS34x products are pending |   |          |
| <b>Safety wo STO</b>                         | EN60950-1   |   |          |
| <b>Safety w STO</b>                          | EN60950-1 / EN61508-1/-2 SIL3 / ISO13849-1/-2 / ISO62061 / EN61800-5-1/-2     |   |          |
| <b>Inviromental</b>                          | IEC 60068-2-27, Test Ea. Shock test   |   |          |
|  | IEC 60068-2-6, Test Fc. Vibration test  |   |          |
|  | IEC 60068-2-2, Test Bd. covers temperaturerise/dry heat                       |   |          |
|  | IEC 60068-2-78, Perm. moisture/Damp heat, steady state                        |   |          |
| <b>REACH SVHC document</b>                   |   |   |          |
| <b>Low voltage Directive</b>                 |   |   |          |
| <b>No Dual Use</b>                           |   |   |          |

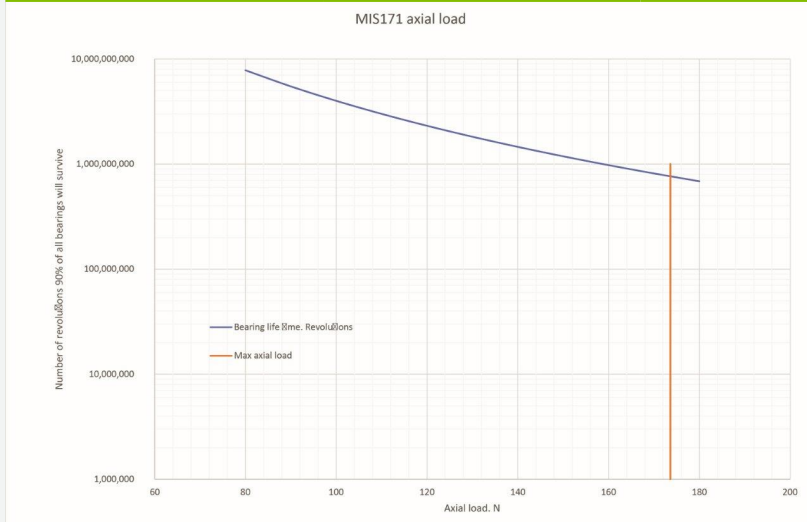


**MIS171S16EPH2S6**

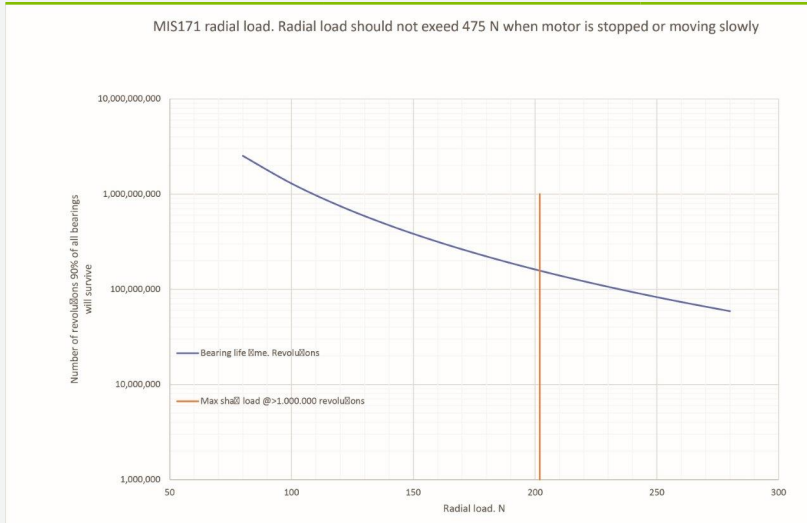
Int.Step 12-72VDC, Profinet, EncC-L, STO

**Mechanical information**

| Duty Cycle                    |     | Max Duty Cycle [%]         |    |
|-------------------------------|-----|----------------------------|----|
| <b>Axial Load Typical [N]</b> | 174 | <b>Axial Load Long [N]</b> | 96 |



|                                |     |                             |     |
|--------------------------------|-----|-----------------------------|-----|
| <b>Radial Load Typical [N]</b> | 202 | <b>Radial Load Long [N]</b> | 140 |
|--------------------------------|-----|-----------------------------|-----|



| Load typical term | Load Long term |
|-------------------|----------------|
| <b>Shaft Seal</b> |                |



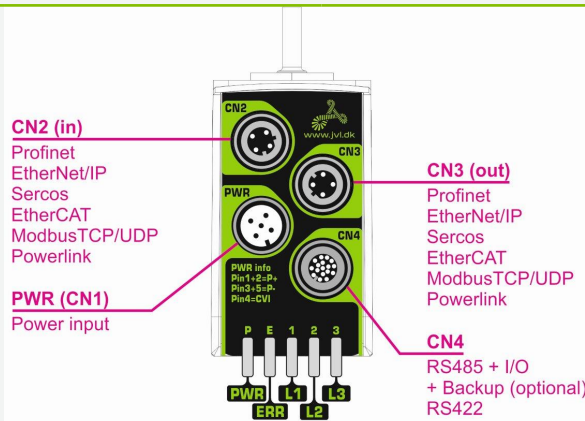
**MIS171S16EPH2S6**

Int.Step 12-72VDC, Profinet, EncC-L, STO

**Connector information**

|                          |     |                          |                                   |
|--------------------------|-----|--------------------------|-----------------------------------|
| <b>Connector 1 label</b> | PWR | <b>Connector 1</b>       | M12 5-pin male A-coded            |
| <b>Connector 2 label</b> | CN2 | <b>Connector 2</b>       | M12 4-pin female D-coded Ethernet |
| <b>Connector 3 label</b> | CN3 | <b>Connector 3</b>       | M12 4-pin female D-coded Ethernet |
| <b>Connector 4 label</b> | CN4 | <b>Connector 4</b>       | M12 17-pin female A-coded         |
| <b>Connector 1 RS485</b> | No  | <b>Connector 2 RS485</b> | No                                |
| <b>Connector 3 RS485</b> | No  | <b>Connector 4 RS485</b> | Yes                               |

**Motor connectors**



**MIS17xS - Ex**

RS485 serial communication  
in network and Ethernet

**Picture CN1**

| "PWR" (CN1) - Power input. M12 - 5pin male connector |  |         |                            |                 |
|--|--|---------|----------------------------|-----------------|
| Signal name  | Description  | Pin no. | JVL Cable W11000-M12F5TxxN | Isolation group |
| P+   | Main supply +7-72VDC. Connect with pin 2 *   | 1       | Brown                      | 1               |
| P+   | Main supply +7-72VDC. Connect with pin 1 *   | 2       | White                      | 1               |
| P-   | Main supply ground. Connect with pin 5 *   | 3       | Blue                       | 1               |
| CVI  | Control and user output supply +7-30VDC. <b>DO NOT connect &gt;30V to this terminal!</b> | 4       | Black                      | 1               |
| P-   | Main supply ground. Connect with pin 3 *   | 5       | Grey                       | 1               |

\* Note: P+ and P- are each available at 2 terminals. Make sure that both terminals are connected in order to split the supply current in 2 terminals and thereby avoid an overload of the connector.

**Picture CN2**

| "CN2" - Ethernet In port connector - M12 - 4pin female connector "D" coded |   |         |                            |                            |
|--|---|---------|----------------------------|----------------------------|
| Signal name  | Description                                     | Pin no. | JVL Cable W11046-M12M4S05R | Isolation group (See note) |
| Tx0_P  | Ethernet Transmit channel 0 - positive terminal | 1       | -                          | 2                          |
| Rx0_P  | Ethernet Receive channel 0 - positive terminal  | 2       | -                          | 2                          |
| Tx0_N  | Ethernet Transmit channel 0 - negative terminal | 3       | -                          | 2                          |
| Rx0_N  | Ethernet Receive channel 0 - negative terminal  | 4       | -                          | 2                          |



**MIS171S16EPH2S6**

Int.Step 12-72VDC, Profinet, EncC-L, STO

**Connector information**

**Picture CN3**

**“CN3” - Ethernet Out port connector. M12 - 4 pin female connector “D” coded**

| Signal name | Description                                     | Pin no. | JVL Cable<br>WI1046-<br>M12M4S05R | Isolation<br>group<br>(see note) |
|-------------|---|---------|-----------------------------------|----------------------------------|
| Tx1_P       | Ethernet Transmit channel 1 - positive terminal | 1       | -                                 | 3                                |
| Rx1_P       | Ethernet Receive channel 1 - positive terminal  | 2       | -                                 | 3                                |
| Tx1_N       | Ethernet Transmit channel 1 - negative terminal | 3       | -                                 | 3                                |
| Rx1_N       | Ethernet Receive channel 1 - negative terminal  | 4       | -                                 | 3                                |

**Picture CN4**

**“CN4” - RS485 + I/O + Backup (option) connector - M12 - 17pin female connector**

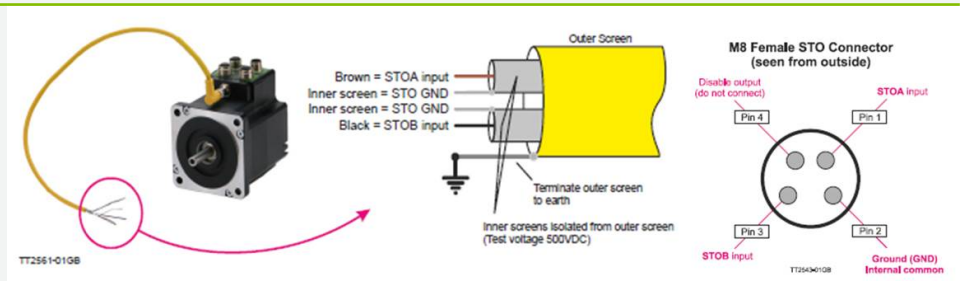
| Signal name | Description   | Pin no. | JVL Cable<br>WI1009M12<br>M17TxXN | Isolation<br>group<br>(see note) |
|-------------|---|---------|-----------------------------------|----------------------------------|
| IO1         | I/O channel 1. Can be used as input or output   | 1       | Brown                             | 1                                |
| GND         | Ground intended to be used together with the other signals in this connector  | 2       | Blue                              | 1                                |
| IO2         | I/O channel 2. Can be used as input or output   | 3       | White                             | 1                                |
| IO3         | I/O channel 3. Can be used as input or output   | 4       | Green                             | 1                                |
| RS422: B1-  | RS422 I/O terminal B-   | 5       | Pink                              | 1                                |
| IO4         | I/O channel 4. Can be used as input or output   | 6       | Yellow                            | 1                                |
| RS422: A1-  | RS422 I/O terminal A-   | 7       | Black                             | 1                                |
| RS422: B1+  | RS422 I/O terminal B+   | 8       | Grey                              | 1                                |
| CVO         | Supply output. Connected internally to the CVI terminal in the PWR connector.<br><b>DO NOT connect &gt;30V to this terminal!</b>  | 9       | Red                               | 1                                |
| RS422: A1+  | RS422 I/O terminal A+   | 10      | Violet                            | 1                                |
| IO5         | I/O channel 5. Can be used as input or output   | 11      | Grey/pink                         | 1                                |
| IO6         | I/O channel 6. Can be used as input or output   | 12      | Red/blue                          | 1                                |
| IO7         | I/O channel 7. Can be used as input or output   | 13      | White/Green                       | 1                                |
| IO8         | I/O channel 8. Can be used as input or output   | 14      | Brown/Green                       | 1                                |
| RS485: B0-  | RS485 interface. Leave open if unused   | 15      | White/Yellow                      | 1                                |
| EXTBACKUP   | Only for motors with the -H3 or -H4 option (abs. multiturn encoder). This terminal can be connected to an external supply.<br><b>Connect to ground (GND) if not used.</b> | 16      | Yellow/brown                      | 1                                |
| RS485: A0+  | RS485 interface. Leave open if unused   | 17      | White/grey                        | 1                                |

\* Note: Isolation group indicate which terminals/circuits that a galvanic connected to each other. In other words group 1, 2, 3 and 4 are all fully independently isolated from each other. Group 1 correspond to the housing of the motor which may also be connected to earth via the DC or AC input supply.

**Connector STO**

M8 4-pin female A-coded

**Picture STO Con**





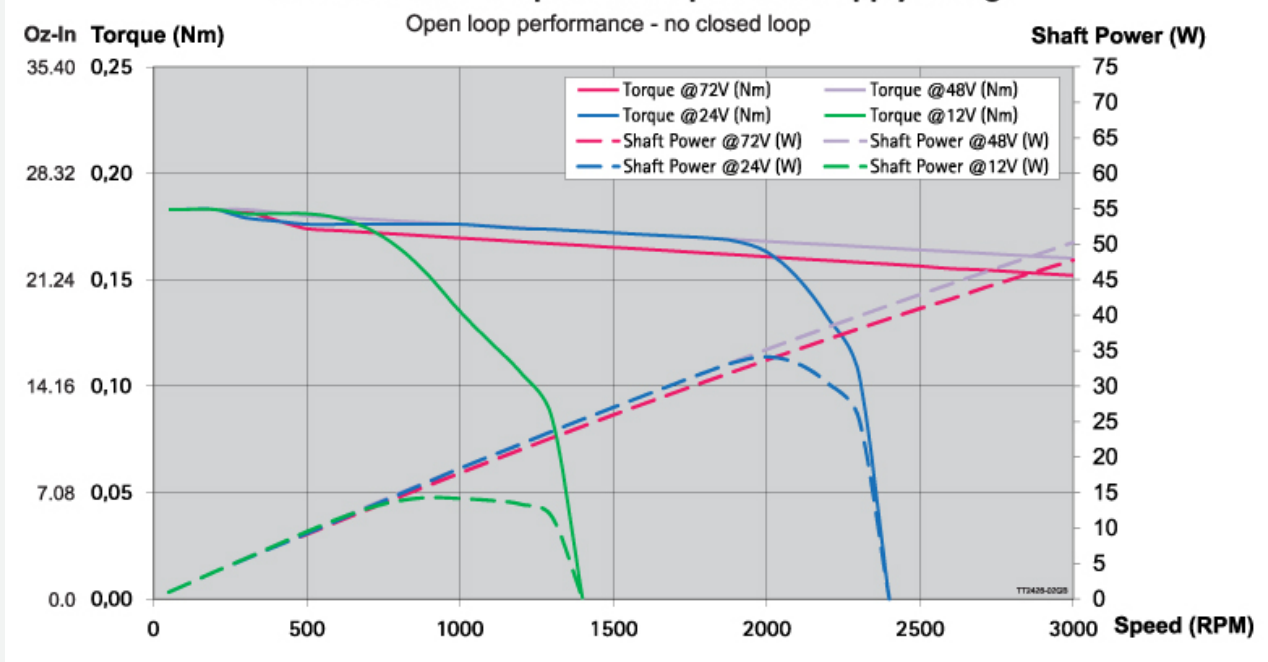
**MIS171S16EPH2S6**

Int.Step 12-72VDC, Profinet, EncC-L, STO

**Torque, force and Power information**

|                     |      |                     |       |
|---------------------|------|---------------------|-------|
| Supply Volt 1 [V]   | 12   | Power Peak 1 [W]    | 34.60 |
| Supply Volt 2 [V]   | 24   | Power Peak 2 [W]    | 72.46 |
| Supply Volt 3 [V]   | 48   | Power Peak 3 [W]    | 91.37 |
| Supply Volt 4 [V]   | 72   | Power Peak 4 [W]    | 92.31 |
| Holding torque [Nm] | 0.18 | Running torque [Nm] | 0.18  |
| Detent torque [Nm]  |      |                     |       |

**MIS171S motor torque versus speed and supply voltage**







**MIS171S16EPH2S6**

Int.Step 12-72VDC, Profinet, EncC-L, STO

**Electrical information**

|   |         |  |                                  |
|---|---------|--|----------------------------------|
| <b>Main supply [V]</b>  | 12-72   | <b>Main supply Min-Max [V]</b>                 | 7-90                             |
| <b>Rated motor current [A]</b>  | 2.7     |  |                                  |
| <b>Control voltage (CVI/O+) [VDC]</b>                                       | 7-28    | <b>Control Voltage (CVI) Min-Max [VDC]</b>     | 7-30                             |
| <b>CVI current wo Ethernet and output (12/24VDC) [mA]</b>                   | 90/55   | <b>Current Ethernet option (12/24VDC) [mA]</b> | 120/60                           |
| <b>Current brake option [mA]</b>  | -       | <b>Current for 1 Dig. output - max [mA]</b>    | 350                              |
| <b>Max current CVI [A]</b>  |         |  |                                  |
| <b>Dig. Input impedans</b>  | 30 Kohm | <b>Counter frequency max</b>                   | 12MHz                            |
| <b>MTBF 30% [Year]</b>  | 15      | <b>MTBF 100% [Year]</b>                        | 13                               |
| <b>Motor resolution</b>   | 409600  | <b>Encoder type</b>                            | H2<br>Incremental/abs_singleturn |
| <b>Encoder Resolution (H2)</b> H2 - 4096 Singleturn AbsEnc - Semi multiturn |         |  |                                  |
| <b>Encoder Resolution (H3)</b>  | -       | <b>Encoder revolutions</b>                     | +/-5242                          |
| <b>PLC no. of DI/DO/AI</b>  | 8       | <b>Analogue voltage</b>                        | 0-5VDC 12bit                     |
| <b>Standard used</b>  |         | <b>Standard used 2</b>                         |                                  |
| <b>Resistance [Ohm]</b>   |         | <b>Induction [mH]</b>                          |                                  |



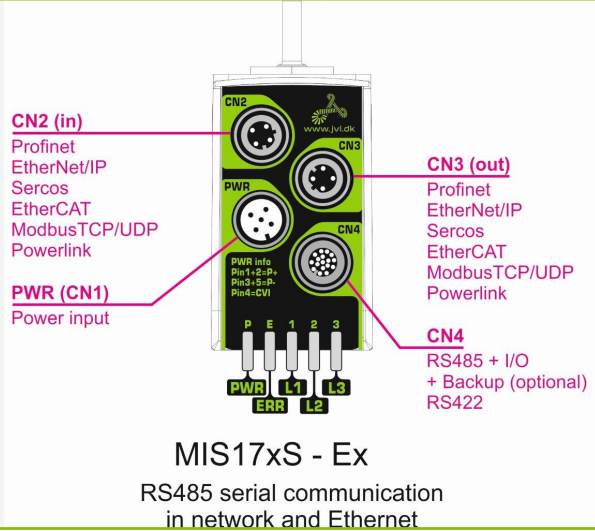
**MIS171S16EPH2S6**

Int.Step 12-72VDC, Profinet, EncC-L, STO

**Communication information**

|   |          |                          |     |
|---|----------|--------------------------|-----|
| <b>Software</b>                         | MacTalk  | <b>Connector 2 RS485</b> | No  |
| <b>Connectivity:<br/>Without module</b> | Profinet | <b>Connector 3 RS485</b> | No  |
|   |          | <b>Connector 4 RS485</b> | Yes |

**Motor connectors**



**e-PLC Files**

**Ethernet, PLC demo files**



## MIS171S16EPH2S6

Int.Step 12-72VDC, Profinet, EncC-L, STO

### Cable information

| Item number   | Mount on    | Cable con 1 +Con 1 angle   | Cable application               | Wires no totally | Cable length [m] |
|---|-------------|--|---------------------------------|------------------|------------------|
| Item description  |             | Cable con 2 +Con 2 angle   | Cable flexibility               | Wire [mm2]       | Connector 1 LED  |
| WI1000-M12F5T02N<br>M12 Shl Cable 2m 5 pin Fem 0°, Power                | Connector 1 | M12 5-pin female A-coded - 0° Straight<br>Open Ended - n/a                     | Power/Motor/com<br>Standard     | 5<br>0.32        | 2<br>No          |
| WI1000-M12F5T05N<br>M12 Shl Cable 5m 5 pin Fem 0°, Power                | Connector 1 | M12 5-pin female A-coded - 0° Straight<br>Open Ended - n/a                     | Power/Motor/com<br>Standard     | 5<br>0.32        | 5<br>No          |
| WI1000-M12F5T1.2N<br>M12 Shl Cable 1.2m 5 pin Fem 0°, Power             | Connector 1 | M12 5-pin female A-coded - 0° Straight<br>Open Ended - n/a                     | Power/Motor/com<br>Standard     | 5<br>0.32        | 1.2<br>No        |
| WI1000-M12F5T10N<br>M12 Shl Cable 10m 5 pin Fem 0°, Power               | Connector 1 | M12 5-pin female A-coded - 0° Straight<br>Open Ended - n/a                     | Power/Motor/com<br>Standard     | 5<br>0.32        | 10<br>No         |
| WI1000-M12F5T10R<br>M12 Shl Cable 10m 5 pin Fem 0°, Power, High-flex    | Connector 1 | M12 5-pin female A-coded - 0° Straight<br>Open Ended - n/a                     | Power/Motor/com<br>Robotic - 3D | 5<br>0.32        | 10<br>No         |
| WI1000-M12F5T20N<br>M12 Shl Cable 20m 5 pin Fem 0°, Power               | Connector 1 | M12 5-pin female A-coded - 0° Straight<br>Open Ended - n/a                     | Power/Motor/com<br>Standard     | 5<br>0.32        | 20<br>No         |
| WI1000-M12F5TLT0185<br>M12 shl Cable 3m 5 pin female 0°,PW SPEC         | Connector 1 | M12 5-pin female A-coded - 0° Straight<br>- n/a                                | Power<br>Standard               | 5<br>0.32        | 3<br>No          |
| WI1000-M12F5V05N<br>M12 Shl Cable 5m 5 pin Fem 90°, Power               | Connector 1 | M12 5-pin female A-coded - 90° Angled<br>Open Ended - n/a                      | Power/Motor/com<br>Standard     | 5<br>0.32        | 5<br>No          |
| WI1000-M12F5V10N<br>M12 Shl Cable 10 m 5 pin Fem 90°, Power             | Connector 1 | M12 5-pin female A-coded - 90° Angled<br>Open Ended - n/a                      | Power/Motor/com<br>Standard     | 5<br>0.32        | 10<br>No         |
| WI1000-M12F5V20N<br>M12 Shl Cable 20m 5 pin Fem 90°, Power              | Connector 1 | M12 5-pin female A-coded - 90° Angled<br>Open Ended - n/a                      | Power/Motor/com<br>Standard     | 5<br>0.32        | 20<br>No         |
| WI1000-M12F5W05N<br>M12 Shl Cable 5m LED 5p Fem 90°, Power <50V         | Connector 1 | M12 5-pin female A-coded - 90° Angled<br>Open Ended - n/a                      | Power 24/48<br>Standard         | 5<br>0.32        | 5<br>LED         |
| WI1000-M12F5W10N<br>M12 Shl Cable 10m LED 5 p Fem 90°, Power <50V       | Connector 1 | M12 5-pin female A-coded - 90° Angled<br>Open Ended - n/a                      | Power 24/48<br>Standard         | 5<br>0.32        | 10<br>LED        |
| WI1000-M12F5W15N<br>M12 Shl Cable 15m LED 5 p Fem 90°, Power <50V       | Connector 1 | M12 5-pin female A-coded - 90° Angled<br>Open Ended - n/a                      | Power 24/48<br>Standard         | 5<br>0.32        | 15<br>LED        |
| WI1000-M12F5W20N<br>M12 Shl Cable 20m LED 5 p Fem 90°, Power <50V       | Connector 1 | M12 5-pin female A-coded - 90° Angled<br>Open Ended - n/a                      | Power 24/48<br>Standard         | 5<br>0.32        | 20<br>LED        |
| WI1000-M12F5WF5W20N<br>M12 shl cab 20m LED 5 pin female 90',Pow <50V    | Connector 1 | M12 5-pin female A-coded - 90° Angled<br>M12 5-pin female A-coded - 90° Angled | Power 24/48<br>Standard         | 5<br>0.32        | 20<br>LED        |
| WI1008-M12F5SS1<br>M12 Con 5p Fem 0° Solder assembly                    | Connector 1 | M12 5-pin female A-coded - 0° Straight<br>- n/a                                | n/a                             | n/a              | Connector<br>No  |
| WI1008-M12F5TG1<br>M12 Con 5p Fem 0° Spring Shield+B222                 | Connector 1 | M12 5-pin female A-coded - 0° Straight<br>- n/a                                | n/a                             | n/a              | Connector<br>No  |
| WI1008-M12F5VG1<br>M12 Con 5p Fem 90° Spring Shield                     | Connector 1 | M12 5-pin female A-coded - 90° Angled<br>- n/a                                 | n/a                             | n/a              | Connector<br>No  |
| WI1046-M12M4S.3NRJ45<br>M12 Cab D-code Ethernet M0°-RJ45, 0.3m, Ø5      | Connector 2 | M12 4-pin male D-coded Ethernet - 0° Straight<br>RJ45 male - 0° Straight       | Ethernet<br>Standard            | 4<br>0.13        | 0.3<br>No        |
| WI1046-M12M4S01NRJ45<br>M12 Cab D-code Ethernet M0°-RJ45, 1.0m, Ø5      | Connector 2 | M12 4-pin male D-coded Ethernet - 0° Straight<br>RJ45 male - 0° Straight       | Ethernet<br>Standard            | 4<br>0.13        | 1<br>No          |
| WI1046-M12M4S05NRJ45<br>M12 Cab D-code Ethernet M0°-RJ45, SFTP, 5m, Ø5  | Connector 2 | M12 4-pin male D-coded Ethernet - 0° Straight<br>RJ45 male - 0° Straight       | Ethernet<br>Standard            | 4<br>0.13        | 5<br>No          |
| WI1046-M12M4S05R<br>M12 Cab D-code Ethernet M0°, SFTP, 5m Ø7            | Connector 2 | M12 4-pin male D-coded Ethernet - 0° Straight<br>Open Ended - n/a              | Ethernet<br>Cable chains - 2D   | 4<br>0.13        | 5<br>No          |
| WI1046-M12M4S10NRJ45<br>M12 Cab D-code Ethernet M0°-RJ45, 10m, Ø5       | Connector 2 | M12 4-pin male D-coded Ethernet - 0° Straight<br>RJ45 male - 0° Straight       | Ethernet<br>Standard            | 4<br>0.13        | 10<br>No         |
| WI1046-M12M4S15NRJ45<br>M12 Cab D-code Ethernet M0°-RJ45, 15m, RJ45 Ø5  | Connector 2 | M12 4-pin male D-coded Ethernet - 0° Straight<br>RJ45 male - 0° Straight       | Ethernet<br>Standard            | 4<br>0.13        | 15<br>No         |
| WI1046-M12M4S15R<br>M12 Cab D-code Ethernet M0°, 15m Ø7                 | Connector 2 | M12 4-pin male D-coded Ethernet - 0° Straight<br>Open Ended - n/a              | Ethernet<br>Cable chains - 2D   | 4<br>0.13        | 15<br>No         |
| WI1046-M12M4T.3TRJ45<br>M12 Cab D-code Ethernet M0°-RJ45, 0.3m, RJ45 Ø5 | Connector 2 | M12 4-pin male D-coded Ethernet - 0° Straight<br>RJ45 male - 0° Straight       | Ethernet<br>Standard            | 4<br>0.13        | 0.3<br>No        |
| WI1046-M12M4T01TRJ45<br>M12 Cab D-code Ethernet M0°-RJ45, 1m, RJ45 Ø5   | Connector 2 | M12 4-pin male D-coded Ethernet - 0° Straight<br>RJ45 male - 0° Straight       | Ethernet<br>Standard            | 4<br>0.13        | 1<br>No          |
| WI1046-M12M4T02NRJ45  | Connector 2 | M12 4-pin male D-coded Ethernet - 0° Straight                                  | Ethernet                        | 4                | 2                |



## MIS171S16EPH2S6

Int.Step 12-72VDC, Profinet, EncC-L, STO

### Cable information

| Item number                                     | Mount on      | Cable con 1 +Con 1 angle                      | Cable application | Wires no totally | Cable length [m] |
|---|---------------|---|-------------------|------------------|------------------|
| Item description                                |               | Cable con 2 +Con 2 angle                      | Cable flexibility | Wire [mm2]       | Connector 1 LED  |
| M12 Cab D-code Ethernet M0°-RJ45, 2m, Ø5        |               | RJ45 male - 0° Straight                       | Standard          | 0.13             | No               |
| WI1046-M12M4T05TRJ45                            | Connector 2   | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 5                |
| M12 Cab D-code Ethernet M0°-RJ45, 5m, Ø5        |               | RJ45 male - 0° Straight                       | Standard          | 0.13             | No               |
| WI1046-M12M4T10TRJ45                            | Connector 2   | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 10               |
| M12 Cab D-code Ethernet M0°-RJ45, 10m, Ø5       |               | RJ45 male - 0° Straight                       | Standard          | 0.13             | No               |
| WI1046-M12M4T15TRJ45                            | Connector 2   | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 15               |
| M12 Cab D-code Ethernet M0°-RJ45, SFTP, 15m, Ø5 |               | RJ45 male - 0° Straight                       | Standard          | 0.13             | No               |
| WI1046-M12M4T20TRJ45                            | Connector 2   | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 20               |
| M12 Cab D-code Ethernet M0°-RJ45, 20m, Ø5       |               | RJ45 male - 0° Straight                       | Standard          | 0.13             | No               |
| WI1046-M12M4TM4T.3R                             | Connector 2   | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 0.3              |
| M12 Cab D-code Ethernet M0°-M0°, 0,3m, Ø6       |               | M12 4-pin male D-coded Ethernet - 0° Straight | Robotic - 3D      | 0.14             | No               |
| WI1046-M12M4TM4T.3T                             | Connector 2   | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 0.3              |
| M12 Cab D-code Ethernet M0°-M0°, 0,3m, Ø6       |               | M12 4-pin male D-coded Ethernet - 0° Straight | Standard          | 0.13             | No               |
| WI1046-M12M4TM4T01R                             | Connector 2   | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 1                |
| M12 Cab D-code Ethernet M0°-M0°, 1m, Ø7         |               | M12 4-pin male D-coded Ethernet - 0° Straight | Robotic - 3D      | 0.14             | No               |
| WI1046-M12M4TM4T01T                             | Connector 2   | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 1                |
| M12 Cab D-code Ethernet M0°-M0°, 1m, Ø6         |               | M12 4-pin male D-coded Ethernet - 0° Straight | Standard          | 0.13             | No               |
| WI1046-M12M4TM4T02R                             | Connector 2   | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 2                |
| M12 Cab D-code Ethernet M0°-M0°, 2,0m, Ø7       |               | M12 4-pin male D-coded Ethernet - 0° Straight | Robotic - 3D      | 0.14             | No               |
| WI1046-M12M4TM4T02T                             | Connector 2   | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 2                |
| M12 Cab D-code Ethernet M0°-M0°, 2,0m, Ø6       |               | M12 4-pin male D-coded Ethernet - 0° Straight | Standard          | 0.13             | No               |
| WI1046-M12M4TM4T05R                             | Connector 2   | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 5                |
| M12 Cab D-code Ethernet M0°-M0°, 5m, Ø7         |               | M12 4-pin male D-coded Ethernet - 0° Straight | Robotic - 3D      | 0.14             | No               |
| WI1046-M12M4TM4T05T                             | Connector 2   | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 5                |
| M12 Cab D-code Ethernet M0°-M0°, 5m, Ø6         |               | M12 4-pin male D-coded Ethernet - 0° Straight | Standard          | 0.13             | No               |
| WI1046-M12M4TM4T10R                             | Connector 2   | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 10               |
| M12 Cab D-code Ethernet M0°-M0°, 10m, Ø7        |               | M12 4-pin male D-coded Ethernet - 0° Straight | Robotic - 3D      | 0.14             | No               |
| WI1046-M12M4TM4T10T                             | Connector 2   | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 10               |
| M12 Cab D-code Ethernet M0°-M0°, 10m, Ø6        |               | M12 4-pin male D-coded Ethernet - 0° Straight | Standard          | 0.13             | No               |
| WI1046-M12M4TM4T15R                             | Connector 2   | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 15               |
| M12 Cab D-code Ethernet M0°-M0°, 15m, Ø7        |               | M12 4-pin male D-coded Ethernet - 0° Straight | Robotic - 3D      | 0.14             | No               |
| WI1046-M12M4TM4T20R                             | Connector 2   | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 20               |
| M12 Cab D-code Ethernet M0°-M0°, 20m, Ø7        |               | M12 4-pin male D-coded Ethernet - 0° Straight | Robotic - 3D      | 0.14             | No               |
| WI1046-M12M4TM4T20T                             | Connector 2   | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 20               |
| M12 Cab D-code Ethernet M0°-M0°, 20m, Ø6        |               | M12 4-pin male D-coded Ethernet - 0° Straight | Standard          | 0.13             | No               |
| WI1046-M12M4V02TRJ45                            | Connector 2   | M12 4-pin male D-coded Ethernet - 90° Angled  | Ethernet          | 4                | 2                |
| M12 Cab D-code Ethernet M90°-RJ45, 2m, Ø5       |               | RJ45 male - 0° Straight                       | Standard          | 0.13             | No               |
| WI1046-M12M4V05TRJ45                            | Connector 2   | M12 4-pin male D-coded Ethernet - 90° Angled  | Ethernet          | 4                | 5                |
| M12 Cab D-code Ethernet M90°-RJ45, 5m, Ø6       |               | RJ45 male - 0° Straight                       | Standard          | 0.13             | No               |
| WI1046-M12M4VM4T.6N                             | Connector 2   | M12 4-pin male D-coded Ethernet - 90° Angled  | Ethernet          | 4                | 0.6              |
| M12 Cab D-code Ethernet M90°-M0°, 0,6m, Ø6      |               | M12 4-pin male D-coded Ethernet - 0° Straight | Standard          | 0.13             | No               |
| WI1046-M12M4VM4V.6N                             | Connector 2   | M12 4-pin male D-coded Ethernet - 90° Angled  | Ethernet          | 4                | 0.6              |
| M12 Cab D-code Ethernet M90°-M90°, 0,6m, Ø6     |               | M12 4-pin male D-coded Ethernet - 90° Angled  | Standard          | 0.13             | No               |
| WI1048-M12M4TTR1                                | Connector 2   | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          |                  | Connector        |
| M12 Con 4 p Male D Code Ethernet PressLock      |               | - n/a   | n/a               |                  | No               |
| WI1046-M12M4TM4T.3R                             | Connector 2-2 | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 0.3              |
| M12 Cab D-code Ethernet M0°-M0°, 0,3m, Ø6       |               | M12 4-pin male D-coded Ethernet - 0° Straight | Robotic - 3D      | 0.14             | No               |
| WI1046-M12M4TM4T.3T                             | Connector 2-2 | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 0.3              |
| M12 Cab D-code Ethernet M0°-M0°, 0,3m, Ø6       |               | M12 4-pin male D-coded Ethernet - 0° Straight | Standard          | 0.13             | No               |
| WI1046-M12M4TM4T01R                             | Connector 2-2 | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 1                |
| M12 Cab D-code Ethernet M0°-M0°, 1m, Ø7         |               | M12 4-pin male D-coded Ethernet - 0° Straight | Robotic - 3D      | 0.14             | No               |
| WI1046-M12M4TM4T01T                             | Connector 2-2 | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 1                |
| M12 Cab D-code Ethernet M0°-M0°, 1m, Ø6         |               | M12 4-pin male D-coded Ethernet - 0° Straight | Standard          | 0.13             | No               |
| WI1046-M12M4TM4T02R                             | Connector 2-2 | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 2                |
| M12 Cab D-code Ethernet M0°-M0°, 2,0m, Ø7       |               | M12 4-pin male D-coded Ethernet - 0° Straight | Robotic - 3D      | 0.14             | No               |



## MIS171S16EPH2S6

Int.Step 12-72VDC, Profinet, EncC-L, STO

### Cable information

| Item number                                     | Mount on      | Cable con 1 +Con 1 angle                      | Cable application | Wires no totally | Cable length [m] |
|---|---------------|---|-------------------|------------------|------------------|
| Item description                                |               | Cable con 2 +Con 2 angle                      | Cable flexibility | Wire [mm2]       | Connector 1 LED  |
| WI1046-M12M4TM4T02T                             | Connector 2-2 | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 2                |
| M12 Cab D-code Ethernet M0°-M0°, 2,0m, Ø6       |               | M12 4-pin male D-coded Ethernet - 0° Straight | Standard          | 0.13             | No               |
| WI1046-M12M4TM4T05R                             | Connector 2-2 | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 5                |
| M12 Cab D-code Ethernet M0°-M0°, 5m, Ø7         |               | M12 4-pin male D-coded Ethernet - 0° Straight | Robotic - 3D      | 0.14             | No               |
| WI1046-M12M4TM4T05T                             | Connector 2-2 | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 5                |
| M12 Cab D-code Ethernet M0°-M0°, 5m, Ø6         |               | M12 4-pin male D-coded Ethernet - 0° Straight | Standard          | 0.13             | No               |
| WI1046-M12M4TM4T10R                             | Connector 2-2 | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 10               |
| M12 Cab D-code Ethernet M0°-M0°, 10m, Ø7        |               | M12 4-pin male D-coded Ethernet - 0° Straight | Robotic - 3D      | 0.14             | No               |
| WI1046-M12M4TM4T10T                             | Connector 2-2 | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 10               |
| M12 Cab D-code Ethernet M0°-M0°, 10m, Ø6        |               | M12 4-pin male D-coded Ethernet - 0° Straight | Standard          | 0.13             | No               |
| WI1046-M12M4TM4T15R                             | Connector 2-2 | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 15               |
| M12 Cab D-code Ethernet M0°-M0°, 15m, Ø7        |               | M12 4-pin male D-coded Ethernet - 0° Straight | Robotic - 3D      | 0.14             | No               |
| WI1046-M12M4TM4T20R                             | Connector 2-2 | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 20               |
| M12 Cab D-code Ethernet M0°-M0°, 20m, Ø7        |               | M12 4-pin male D-coded Ethernet - 0° Straight | Robotic - 3D      | 0.14             | No               |
| WI1046-M12M4TM4T20T                             | Connector 2-2 | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 20               |
| M12 Cab D-code Ethernet M0°-M0°, 20m, Ø6        |               | M12 4-pin male D-coded Ethernet - 0° Straight | Standard          | 0.13             | No               |
| WI1046-M12M4VM4T.6N                             | Connector 2-2 | M12 4-pin male D-coded Ethernet - 90° Angled  | Ethernet          | 4                | 0.6              |
| M12 Cab D-code Ethernet M90°-M0°, 0,6m, Ø6      |               | M12 4-pin male D-coded Ethernet - 0° Straight | Standard          | 0.13             | No               |
| WI1046-M12M4VM4V.6N                             | Connector 2-2 | M12 4-pin male D-coded Ethernet - 90° Angled  | Ethernet          | 4                | 0.6              |
| M12 Cab D-code Ethernet M90°-M90°, 0,6m, Ø6     |               | M12 4-pin male D-coded Ethernet - 90° Angled  | Standard          | 0.13             | No               |
| WI1046-M12M4S.3NRJ45                            | Connector 3   | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 0.3              |
| M12 Cab D-code Ethernet M0°-RJ45, 0,3m, Ø5      |               | RJ45 male - 0° Straight                       | Standard          | 0.13             | No               |
| WI1046-M12M4S01NRJ45                            | Connector 3   | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 1                |
| M12 Cab D-code Ethernet M0°-RJ45, 1,0m, Ø5      |               | RJ45 male - 0° Straight                       | Standard          | 0.13             | No               |
| WI1046-M12M4S05NRJ45                            | Connector 3   | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 5                |
| M12 Cab D-code Ethernet M0°-RJ45, SFTP, 5m, Ø5  |               | RJ45 male - 0° Straight                       | Standard          | 0.13             | No               |
| WI1046-M12M4S05R                                | Connector 3   | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 5                |
| M12 Cab D-code Ethernet M0°, SFTP, 5m Ø7        |               | Open Ended - n/a                              | Cable chains - 2D | 0.13             | No               |
| WI1046-M12M4S10NRJ45                            | Connector 3   | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 10               |
| M12 Cab D-code Ethernet M0°-RJ45, 10m, Ø5       |               | RJ45 male - 0° Straight                       | Standard          | 0.13             | No               |
| WI1046-M12M4S15NRJ45                            | Connector 3   | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 15               |
| M12 Cab D-code Ethernet M0°-RJ45, 15m, RJ45 Ø5  |               | RJ45 male - 0° Straight                       | Standard          | 0.13             | No               |
| WI1046-M12M4S15R                                | Connector 3   | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 15               |
| M12 Cab D-code Ethernet M0°, 15m Ø7             |               | Open Ended - n/a                              | Cable chains - 2D | 0.13             | No               |
| WI1046-M12M4T.3TRJ45                            | Connector 3   | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 0.3              |
| M12 Cab D-code Ethernet M0°-RJ45, 0,3m, RJ45 Ø5 |               | RJ45 male - 0° Straight                       | Standard          | 0.13             | No               |
| WI1046-M12M4T01TRJ45                            | Connector 3   | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 1                |
| M12 Cab D-code Ethernet M0°-RJ45, 1m, RJ45 Ø5   |               | RJ45 male - 0° Straight                       | Standard          | 0.13             | No               |
| WI1046-M12M4T02NRJ45                            | Connector 3   | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 2                |
| M12 Cab D-code Ethernet M0°-RJ45, 2m, Ø5        |               | RJ45 male - 0° Straight                       | Standard          | 0.13             | No               |
| WI1046-M12M4T05TRJ45                            | Connector 3   | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 5                |
| M12 Cab D-code Ethernet M0°-RJ45, 5m, Ø5        |               | RJ45 male - 0° Straight                       | Standard          | 0.13             | No               |
| WI1046-M12M4T10TRJ45                            | Connector 3   | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 10               |
| M12 Cab D-code Ethernet M0°-RJ45, 10m, Ø5       |               | RJ45 male - 0° Straight                       | Standard          | 0.13             | No               |
| WI1046-M12M4T15TRJ45                            | Connector 3   | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 15               |
| M12 Cab D-code Ethernet M0°-RJ45, SFTP, 15m, Ø5 |               | RJ45 male - 0° Straight                       | Standard          | 0.13             | No               |
| WI1046-M12M4T20TRJ45                            | Connector 3   | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 20               |
| M12 Cab D-code Ethernet M0°-RJ45, 20m, Ø5       |               | RJ45 male - 0° Straight                       | Standard          | 0.13             | No               |
| WI1046-M12M4TM4T.3R                             | Connector 3   | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 0.3              |
| M12 Cab D-code Ethernet M0°-M0°, 0,3m, Ø6       |               | M12 4-pin male D-coded Ethernet - 0° Straight | Robotic - 3D      | 0.14             | No               |
| WI1046-M12M4TM4T.3T                             | Connector 3   | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 0.3              |
| M12 Cab D-code Ethernet M0°-M0°, 0,3m, Ø6       |               | M12 4-pin male D-coded Ethernet - 0° Straight | Standard          | 0.13             | No               |
| WI1046-M12M4TM4T01R                             | Connector 3   | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 1                |
| M12 Cab D-code Ethernet M0°-M0°, 1m, Ø7         |               | M12 4-pin male D-coded Ethernet - 0° Straight | Robotic - 3D      | 0.14             | No               |
| WI1046-M12M4TM4T01T                             | Connector 3   | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 1                |



## MIS171S16EPH2S6

Int.Step 12-72VDC, Profinet, EncC-L, STO

### Cable information

| Item number                                 | Mount on      | Cable con 1 +Con 1 angle                      | Cable application | Wires no totally | Cable length [m] |
|---|---------------|---|-------------------|------------------|------------------|
| Item description                            |               | Cable con 2 +Con 2 angle                      | Cable flexibility | Wire [mm2]       | Connector 1 LED  |
| M12 Cab D-code Ethernet M0°-M0°, 1m, Ø6     |               | M12 4-pin male D-coded Ethernet - 0° Straight | Standard          | 0.13             | No               |
| WI1046-M12M4TM4T02R                         | Connector 3   | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 2                |
| M12 Cab D-code Ethernet M0°-M0°, 2,0m, Ø7   |               | M12 4-pin male D-coded Ethernet - 0° Straight | Robotic - 3D      | 0.14             | No               |
| WI1046-M12M4TM4T02T                         | Connector 3   | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 2                |
| M12 Cab D-code Ethernet M0°-M0°, 2,0m, Ø6   |               | M12 4-pin male D-coded Ethernet - 0° Straight | Standard          | 0.13             | No               |
| WI1046-M12M4TM4T05R                         | Connector 3   | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 5                |
| M12 Cab D-code Ethernet M0°-M0°, 5m, Ø7     |               | M12 4-pin male D-coded Ethernet - 0° Straight | Robotic - 3D      | 0.14             | No               |
| WI1046-M12M4TM4T05T                         | Connector 3   | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 5                |
| M12 Cab D-code Ethernet M0°-M0°, 5m, Ø6     |               | M12 4-pin male D-coded Ethernet - 0° Straight | Standard          | 0.13             | No               |
| WI1046-M12M4TM4T10R                         | Connector 3   | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 10               |
| M12 Cab D-code Ethernet M0°-M0°, 10m, Ø7    |               | M12 4-pin male D-coded Ethernet - 0° Straight | Robotic - 3D      | 0.14             | No               |
| WI1046-M12M4TM4T10T                         | Connector 3   | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 10               |
| M12 Cab D-code Ethernet M0°-M0°, 10m, Ø6    |               | M12 4-pin male D-coded Ethernet - 0° Straight | Standard          | 0.13             | No               |
| WI1046-M12M4TM4T15R                         | Connector 3   | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 15               |
| M12 Cab D-code Ethernet M0°-M0°, 15m, Ø7    |               | M12 4-pin male D-coded Ethernet - 0° Straight | Robotic - 3D      | 0.14             | No               |
| WI1046-M12M4TM4T20R                         | Connector 3   | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 20               |
| M12 Cab D-code Ethernet M0°-M0°, 20m, Ø7    |               | M12 4-pin male D-coded Ethernet - 0° Straight | Robotic - 3D      | 0.14             | No               |
| WI1046-M12M4TM4T20T                         | Connector 3   | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 20               |
| M12 Cab D-code Ethernet M0°-M0°, 20m, Ø6    |               | M12 4-pin male D-coded Ethernet - 0° Straight | Standard          | 0.13             | No               |
| WI1046-M12M4V02TRJ45                        | Connector 3   | M12 4-pin male D-coded Ethernet - 90° Angled  | Ethernet          | 4                | 2                |
| M12 Cab D-code Ethernet M90°-RJ45, 2m, Ø5   |               | RJ45 male - 0° Straight                       | Standard          | 0.13             | No               |
| WI1046-M12M4V05TRJ45                        | Connector 3   | M12 4-pin male D-coded Ethernet - 90° Angled  | Ethernet          | 4                | 5                |
| M12 Cab D-code Ethernet M90°-RJ45, 5m, Ø6   |               | RJ45 male - 0° Straight                       | Standard          | 0.13             | No               |
| WI1046-M12M4VM4T.6N                         | Connector 3   | M12 4-pin male D-coded Ethernet - 90° Angled  | Ethernet          | 4                | 0.6              |
| M12 Cab D-code Ethernet M90°-M0°, 0,6m, Ø6  |               | M12 4-pin male D-coded Ethernet - 0° Straight | Standard          | 0.13             | No               |
| WI1046-M12M4VM4V.6N                         | Connector 3   | M12 4-pin male D-coded Ethernet - 90° Angled  | Ethernet          | 4                | 0.6              |
| M12 Cab D-code Ethernet M90°-M90°, 0,6m, Ø6 |               | M12 4-pin male D-coded Ethernet - 90° Angled  | Standard          | 0.13             | No               |
| WI1048-M12M4TTR1                            | Connector 3   | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          |                  | Connector        |
| M12 Con 4 p Male D Code Ethernet PressLock  |               | - n/a   | n/a               |                  | No               |
| WI1046-M12M4TM4T.3R                         | Connector 3-2 | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 0.3              |
| M12 Cab D-code Ethernet M0°-M0°, 0,3m, Ø6   |               | M12 4-pin male D-coded Ethernet - 0° Straight | Robotic - 3D      | 0.14             | No               |
| WI1046-M12M4TM4T.3T                         | Connector 3-2 | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 0.3              |
| M12 Cab D-code Ethernet M0°-M0°, 0,3m, Ø6   |               | M12 4-pin male D-coded Ethernet - 0° Straight | Standard          | 0.13             | No               |
| WI1046-M12M4TM4T01R                         | Connector 3-2 | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 1                |
| M12 Cab D-code Ethernet M0°-M0°, 1m, Ø7     |               | M12 4-pin male D-coded Ethernet - 0° Straight | Robotic - 3D      | 0.14             | No               |
| WI1046-M12M4TM4T01T                         | Connector 3-2 | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 1                |
| M12 Cab D-code Ethernet M0°-M0°, 1m, Ø6     |               | M12 4-pin male D-coded Ethernet - 0° Straight | Standard          | 0.13             | No               |
| WI1046-M12M4TM4T02R                         | Connector 3-2 | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 2                |
| M12 Cab D-code Ethernet M0°-M0°, 2,0m, Ø7   |               | M12 4-pin male D-coded Ethernet - 0° Straight | Robotic - 3D      | 0.14             | No               |
| WI1046-M12M4TM4T02T                         | Connector 3-2 | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 2                |
| M12 Cab D-code Ethernet M0°-M0°, 2,0m, Ø6   |               | M12 4-pin male D-coded Ethernet - 0° Straight | Standard          | 0.13             | No               |
| WI1046-M12M4TM4T05R                         | Connector 3-2 | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 5                |
| M12 Cab D-code Ethernet M0°-M0°, 5m, Ø7     |               | M12 4-pin male D-coded Ethernet - 0° Straight | Robotic - 3D      | 0.14             | No               |
| WI1046-M12M4TM4T05T                         | Connector 3-2 | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 5                |
| M12 Cab D-code Ethernet M0°-M0°, 5m, Ø6     |               | M12 4-pin male D-coded Ethernet - 0° Straight | Standard          | 0.13             | No               |
| WI1046-M12M4TM4T10R                         | Connector 3-2 | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 10               |
| M12 Cab D-code Ethernet M0°-M0°, 10m, Ø7    |               | M12 4-pin male D-coded Ethernet - 0° Straight | Robotic - 3D      | 0.14             | No               |
| WI1046-M12M4TM4T10T                         | Connector 3-2 | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 10               |
| M12 Cab D-code Ethernet M0°-M0°, 10m, Ø6    |               | M12 4-pin male D-coded Ethernet - 0° Straight | Standard          | 0.13             | No               |
| WI1046-M12M4TM4T15R                         | Connector 3-2 | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 15               |
| M12 Cab D-code Ethernet M0°-M0°, 15m, Ø7    |               | M12 4-pin male D-coded Ethernet - 0° Straight | Robotic - 3D      | 0.14             | No               |
| WI1046-M12M4TM4T20R                         | Connector 3-2 | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 20               |
| M12 Cab D-code Ethernet M0°-M0°, 20m, Ø7    |               | M12 4-pin male D-coded Ethernet - 0° Straight | Robotic - 3D      | 0.14             | No               |
| WI1046-M12M4TM4T20T                         | Connector 3-2 | M12 4-pin male D-coded Ethernet - 0° Straight | Ethernet          | 4                | 20               |
| M12 Cab D-code Ethernet M0°-M0°, 20m, Ø6    |               | M12 4-pin male D-coded Ethernet - 0° Straight | Standard          | 0.13             | No               |



## MIS171S16EPH2S6

Int.Step 12-72VDC, Profinet, EncC-L, STO

### Cable information

| Item number  | Mount on          | Cable con 1 +Con 1 angle                              | Cable application | Wires no totally | Cable length [m] |
|--|-------------------|---|-------------------|------------------|------------------|
| Item description                                   |                   | Cable con 2 +Con 2 angle                              | Cable flexibility | Wire [mm2]       | Connector 1 LED  |
| WI1046-M12M4VM4T.6N                                | Connector 3-2     | M12 4-pin male D-coded Ethernet - 90° Angled Ethernet |                   | 4                | 0.6              |
| M12 Cab D-code Ethernet M90°-M0°, 0,6m, Ø6         |                   | M12 4-pin male D-coded Ethernet - 0° Straight         | Standard          | 0.13             | No               |
| WI1046-M12M4VM4V.6N                                | Connector 3-2     | M12 4-pin male D-coded Ethernet - 90° Angled Ethernet |                   | 4                | 0.6              |
| M12 Cab D-code Ethernet M90°-M90°, 0,6m, Ø6        |                   | M12 4-pin male D-coded Ethernet - 90° Angled Standard |                   | 0.13             | No               |
| WI1005-M12M17SAA01                                 | Connector 4       | M12 17-pin male A-coded - 0° Straight                 |                   | n/a              | Connector        |
| M12 17-pin male Axis 1 Without wire                |                   | n/a - n/a   | n/a               | n/a              | No               |
| WI1005-M12M17SAA01-1                               | Connector 4       | M12 17-pin male A-coded - 0° Straight                 |                   | n/a              | Connector        |
| M12 17-pin male Axis 1, with wire 1,2m             |                   | n/a - n/a   |                   | n/a              | No               |
| WI1005-M12M17SAA02                                 | Connector 4       | M12 17-pin male A-coded - 0° Straight                 |                   | n/a              | Connector        |
| M12 17-pin male Axis 2 Without wire                |                   | n/a - n/a   | n/a               | n/a              | No               |
| WI1005-M12M17SAA03                                 | Connector 4       | M12 17-pin male A-coded - 0° Straight                 |                   | n/a              | Connector        |
| M12 17-pin male Axis 3 Without wire                |                   | n/a - n/a   | n/a               | n/a              | No               |
| WI1005-M12M17SAA04                                 | Connector 4       | M12 17-pin male A-coded - 0° Straight                 |                   | n/a              | Connector        |
| M12 17-pin male Axis 4 Without wire                |                   | n/a - n/a   | n/a               | n/a              | No               |
| WI1005-M12M17SAA05                                 | Connector 4       | M12 17-pin male A-coded - 0° Straight                 |                   | n/a              | Connector        |
| M12 17-pin male Axis 5 Without wire                |                   | n/a - n/a   | n/a               | n/a              | No               |
| WI1005-M12M17SAA06                                 | Connector 4       | M12 17-pin male A-coded - 0° Straight                 |                   | n/a              | Connector        |
| M12 17-pin male Axis 6 Without wire                |                   | n/a - n/a   | n/a               | n/a              | No               |
| WI1005-M12M17SAA06-1                               | Connector 4       | M12 17-pin male A-coded - 0° Straight                 |                   | n/a              | Connector        |
| M12 17-pin male Axis 6 with wire 1,2m              |                   | n/a - n/a   |                   | n/a              | No               |
| WI1005-M12M17SAA07                                 | Connector 4       | M12 17-pin male A-coded - 0° Straight                 |                   | n/a              | Connector        |
| M12 17-pin male Axis 7 Without wire                |                   | n/a - n/a   | n/a               | n/a              | No               |
| WI1005-M12M17SAA08                                 | Connector 4       | M12 17-pin male A-coded - 0° Straight                 |                   | n/a              | Connector        |
| M12 17-pin male Axis 8 Without wire                |                   | n/a - n/a   | n/a               | n/a              | No               |
| WI1005-M12M17SAA09                                 | Connector 4       | M12 17-pin male A-coded - 0° Straight                 |                   | n/a              | Connector        |
| M12 17-pin male Axis 9 Without wire                |                   | n/a - n/a   | n/a               | n/a              | No               |
| WI1005-M12M17SAA10                                 | Connector 4       | M12 17-pin male A-coded - 0° Straight                 |                   | n/a              | Connector        |
| M12 17-pin male Axis 10 Without wire               |                   | n/a - n/a   | n/a               | n/a              | No               |
| WI1008-M12M17SR1                                   | Connector 4       | M12 12-pin male A-coded - 0° Straight                 |                   | n/a              | Connector        |
| M12 Con 17p Male 0° Metal housing 5.4-8.2mm cable  |                   | - n/a   | n/a               | n/a              | No               |
| WI1009-M12M17T01N                                  | Connector 4       | M12 17-pin male A-coded - 0° Straight                 | Basic I/O, Com    | 17               | 1                |
| M12 Shl Cable 1m 17p Mal 0° MISxx,Ex41 twisted     |                   | Open Ended - n/a                                      | Standard          | 0.061            | No               |
| WI1009-M12M17T05N                                  | Connector 4       | M12 17-pin male A-coded - 0° Straight                 | Basic I/O, Com    | 17               | 5                |
| M12 Shl Cable 5m 17p Mal 0° MISxx,Ex41 twisted     |                   | Open Ended - n/a                                      | Standard          | 0.061            | No               |
| WI1009-M12M17T10R                                  | Connector 4       | M12 17-pin male A-coded - 0° Straight                 |                   | 17               | 5                |
| M12 Shl Cable 10m 17p Mal 0° MISxx,Ex41 twisted    |                   | Open Ended - n/a                                      | Robotic - 3D      | 0.061            | No               |
| WI1009-M12M17T20N                                  | Connector 4       | M12 17-pin male A-coded - 0° Straight                 | Basic I/O, Com    | 17               | 20               |
| M12 Shl Cable 20m 17p Mal 0° MISxx,Ex41 twisted    |                   | Open Ended - n/a                                      | Standard          | 0.061            | No               |
| WI1009-M12M17TF17T.5                               | Connector 4       | M12 17-pin male A-coded - 0° Straight                 | Basic I/O, Com    | 17               | 0.5              |
| M12 Shl Cable.5m Male17p0°-Female 17p0° twist pair |                   | M12 17-pin female A-coded - 0° Straight               | Standard          | 0.061            | No               |
| WI1009-M12M17TF17T01                               | Connector 4       | M12 17-pin male A-coded - 0° Straight                 | Basic I/O, Com    | 17               | 1                |
| M12 Shl Cable 1m Male17p0°-Female 17p0° twist pair |                   | M12 17-pin female A-coded - 0° Straight               | Standard          | 0.061            | No               |
| WI1009-M12M17TF17T02                               | Connector 4       | M12 17-pin male A-coded - 0° Straight                 | Basic I/O, Com    | 17               | 2                |
| M12 Shl Cable 2m Male17p0°-Female 17p0° twist pair |                   | M12 17-pin female A-coded - 0° Straight               | Standard          | 0.061            | No               |
| WI1009-M12M17TF17T03                               | Connector 4       | M12 17-pin male A-coded - 0° Straight                 | Basic I/O, Com    | 17               | 3                |
| M12 Shl Cable 3m Male17p0°-Female 17p0° twist pair |                   | M12 17-pin female A-coded - 0° Straight               | Standard          | 0.061            | No               |
| WI1009-M12M17TF17T04                               | Connector 4       | M12 17-pin male A-coded - 0° Straight                 | Basic I/O, Com    | 17               | 4                |
| M12 Shl Cable 4m Male17p0°-Female 17p0° twist pair |                   | M12 17-pin female A-coded - 0° Straight               | Standard          | 0.061            | No               |
| WI1009-M12M17V05N                                  | Connector 4       | M12 17-pin male A-coded - 90° Angled                  | Basic I/O, Com    | 17               | 5                |
| M12 Shl Cable 5m 17p Mal 90° MISxx,Ex41 twisted    |                   | Open Ended - n/a                                      | Standard          | 0.061            | No               |
| WI1009-M12M17V10N                                  | Connector 4       | M12 17-pin male A-coded - 90° Angled                  | Basic I/O, Com    | 17               | 10               |
| M12 Shl Cable 10m 17p Mal 90° MISxx,Ex41 twisted   |                   | Open Ended - n/a                                      | Standard          | 0.061            | No               |
| RS485-M12-1-5-17                                   | Connector 4 RS485 | M12 17-pin male A-coded - 0° Straight                 | Communication     | 3                | 5                |
| RS485 M12-17pin DSub, 5m v1.1                      |                   | D-Sub 9-pin female - RS485 - 0° Straight              | Cable chains - 2D | 0.32             | No               |
| WI1010-M08M4STO                                    | Connector STO     | M08 4-pin male A-coded - 0° Straight                  | STO               | 4                | Connector        |



## MIS171S16EPH2S6

Int.Step 12-72VDC, Profinet, EncC-L, STO

### Cable information

| Item number  | Mount on      | Cable con 1 +Con 1 angle               | Cable application | Wires no totally | Cable length [m] |
|--|---------------|--|-------------------|------------------|------------------|
| Item description                                   |               | Cable con 2 +Con 2 angle               | Cable flexibility | Wire [mm2]       | Connector 1 LED  |
| M8 STO Disable plug for MIS17/23/34/43             |               | - n/a                                  | n/a               | 0.2              | No               |
| WI1010-M08M4T03P                                   | Connector STO | M08 4-pin male A-coded - 0° Straight   | STO               | 4                | 3                |
| M8 STO 4Pin Male 0° Con Shl Yel 3m 1xcon, MIS      |               | Open Ended - n/a                       |                   | 0.2              | No               |
| WI1010-M08M4T05P                                   | Connector STO | M08 4-pin male A-coded - 0° Straight   | STO               | 4                | 10               |
| M8 STO 4Pin Male 0° Con Shl Yel 5m 1xcon, MIS      |               | Open Ended - n/a                       |                   | 0.2              | No               |
| WI1010-M08M4T15P                                   | Connector STO | M08 4-pin male A-coded - 0° Straight   | STO               | 4                | 15               |
| M8 STO 4Pin Male 0° Con. shl. Yel 15m 1xCon, MIS   |               | Open Ended - n/a                       |                   | 0.2              | No               |
| WI1010-M08M4T20P                                   | Connector STO | M08 4-pin male A-coded - 0° Straight   | STO               | 4                | 20               |
| M8 STO 4P Male 0° Con. shl. Yel 20m                |               | Open Ended - n/a                       |                   | 0.2              | No               |
| WI1010-M08M4TM4T10P                                | Connector STO | M08 4-pin male A-coded - 0° Straight   | STO               | 4                | 10               |
| M8 STO 4P Male 0°/4P Male 0° shl. Yel10m 2xCon MIS |               | M08 4-pin male A-coded - 0° Straight   |                   | 0.2              | No               |
| WI1010-M08M4TM4T20P                                | Connector STO | M08 4-pin male A-coded - 0° Straight   | STO               | 4                | 20               |
| M8 STO 4P Male 0°/4P Male 0° shl. Yel20m 2xCon MIS |               | M08 4-pin male A-coded - 0° Straight   |                   | 0.2              | No               |
| WI1010-M08M4V05P                                   | Connector STO | M08 4-pin male A-coded - 90° Angled    | STO               | 4                | 5                |
| M8 STO 4Pin Male 90° Con. shl. Yel 5m 1xCon MIS    |               | Open Ended - n/a                       |                   | 0.2              | No               |
| WI1010-M08M4V10P                                   | Connector STO | M08 4-pin male A-coded - 90° Angled    | STO               | 4                | 10               |
| M8 STO 4Pin Male 90° Con. shl. Yel 10m 1xCon MIS   |               | Open Ended - n/a                       |                   | 0.2              | No               |
| WI1010-M08M4VF4T01P                                | Connector STO | M08 4-pin male A-coded - 90° Angled    | STO               | 4                | 1                |
| M8 STO 4P Male 90°/4P Fem 0° shl. yel 1m 2xCon     |               | M08 4-pin female A-coded - 0° Straight | Standard          | 0.2              | No               |
| WI1010-M08M4VF4T02P                                | Connector STO | M08 4-pin male A-coded - 90° Angled    | STO               | 4                | 2                |
| M8 STO 4P Male 90°/4P Fem 0° shl. yel 2m 2xCon     |               | M08 4-pin female A-coded - 0° Straight | Standard          | 0.2              | No               |
| WI1010-M08M4VF4T03P                                | Connector STO | M08 4-pin male A-coded - 90° Angled    | STO               | 4                | 3                |
| M8 STO 4P Male 90°/4P Fem 0° shl. yel 3m 2xCon     |               | M08 4-pin female A-coded - 0° Straight | Standard          | 0.2              | No               |
| WI1010-M08M4VM4V10P                                | Connector STO | M08 4-pin male A-coded - 90° Angled    | STO               | 4                | 10               |
| M8 STO 4P Male 90°/4P Male 90° shl. Yel 10m 2xCon  |               | M08 4-pin male A-coded - 90° Angled    |                   | 0.2              | No               |
| WI1010-M08M4VM4V20P                                | Connector STO | M08 4-pin male A-coded - 90° Angled    | STO               | 4                | 20               |
| M8 STO 4P Male 90°/4P Male 90° shl. Yel 20m 2xCon  |               | M08 4-pin male A-coded - 90° Angled    |                   | 0.2              | No               |