

MVK-MPNIO DIO12 DIO4/IOL4 M12L 5P

ProfiNet, Compact module, metal

Digital inputs/outputs  
DIO12 DIO4/IOL4 (IRT)  
Ethernet 10/100 Mbit/s; M12, D-coded  
M12 Power, 5-pole, L-coded  
M12, 5-pole, A-coded  
IO-Link Master V1.1.2  
Connection cables are in the online shop under "Connection Technology".  
Housing fully potted.

Link to Product

Illustration



Product may differ from Image



| 取引条件                     |               |
|--------------------------|---------------|
| ECLASS-6.0               | 27242604      |
| ECLASS-6.1               | 27242604      |
| ECLASS-7.0               | 27242604      |
| ECLASS-8.0               | 27242604      |
| ECLASS-9.0               | 27242604      |
| ECLASS-10.1              | 27242604      |
| ECLASS-11.1              | 27242604      |
| ECLASS-12.0              | 27242604      |
| ETIM-5.0                 | EC001599      |
| GTIN                     | 4048879778701 |
| HSコード                    | 85389099      |
| Packaging unit           | 1             |
| Electrical data   Supply |               |
| Norm operating voltage   | EN 61131-2    |
| Operating voltage US DC  | 24 V          |
| Operating voltage UA DC  | 24 V          |
| Total current UA max.    | 16 A          |

Total current US max. 16 A

Electrical data | Input

|                                         |                                                                 |
|-----------------------------------------|-----------------------------------------------------------------|
| Overload resistant                      | yes                                                             |
| Short-circuit protected                 | yes                                                             |
| Type input                              | PNP, for 3-wire sensors or mechanical switches, IO-Link Devices |
| Sensor current US per input max.        | 0,2 A                                                           |
| Sensor current US per IO-Link port max. | 1 A                                                             |

Electrical data | Output

|                             |       |
|-----------------------------|-------|
| Overload resistant          | yes   |
| Short-circuit protected     | yes   |
| Output current per pin max. | 1,6 A |
| Lamp load                   | 10 W  |
| Total current output max.   | 9 A   |

Industrial communication

Supported protocol PROFINET

Industrial communication | Profinet

|                                                   |       |
|---------------------------------------------------|-------|
| Number of active connections (IO controller) max. | 2     |
| FSU (Fast-Start-Up)                               | yes   |
| Fast start up time max.                           | 0,5 s |
| IRT (network communication)                       | yes   |
| MRP client                                        | yes   |
| PROFINET Netload Class                            | III   |
| PROFINET addressing                               | DCP   |
| PROFINET conformance class                        | C     |
| PROFINET specification                            | V2.3  |
| Shared device/input                               | yes   |

Industrial communication | IO-Link

|                                    |                  |
|------------------------------------|------------------|
| Automatic baudrate detection       | yes              |
| IO-Link process data length output | 32 Bytes         |
| IO-Link process data length input  | 32 Bytes         |
| IO-Link revision ID                | V1.1.2           |
| IO-Link type                       | 4x Master        |
| IO-Link transmission rate          | COM1, COM2, COM3 |
| Port Class                         | B                |

Diagnostics

|                         |                                  |
|-------------------------|----------------------------------|
| Actuator warning        | per channel via LED and BUS      |
| Diagnostic via BUS      | per module and channel           |
| Diagnostic via LED      | per module and channel           |
| IO-Link events          | No voltage, Undervoltage supply  |
| Short circuit diagnosis | yes                              |
| LED display             | Ethernet connection/data traffic |
| Cable break             | per port                         |
| Overload diagnosis      | yes                              |

Device protection | Electrical

Degree of protection (EN IEC 60529) IP67

Mechanical data | Mounting data

|                            |                       |
|----------------------------|-----------------------|
| Suitable for mounting type | 2-hole screw mounting |
| Height                     | 37 mm                 |
| Width                      | 63 mm                 |
| Depth                      | 225 mm                |

Environmental characteristics | Climatic

|                            |        |
|----------------------------|--------|
| Operating temperature min. | -25 °C |
| Operating temperature max. | 60 °C  |
| Storage temperature min.   | -25 °C |
| Storage temperature max.   | 70 °C  |

Connection type 5

|                          |                   |
|--------------------------|-------------------|
| Connection type 1        | X0-X3             |
| Connection type 2        | X4-X7             |
| Connection type 3        | XD1               |
| Connection type 4        | XD2               |
| Connection type 5        | XF2               |
| Family construction form | M12               |
| Gender                   | female            |
| Color contact carrier    | black             |
| Coding                   | A                 |
| No. of poles             | 5                 |
| PIN 1                    | 24 V DC           |
| PIN 2                    | DI / DO           |
| PIN 3                    | 0 V               |
| PIN 4                    | DI / DO           |
| PIN 5                    | PE                |
| Family construction form | M12               |
| Gender                   | female            |
| Color contact carrier    | gray              |
| Coding                   | A                 |
| No. of poles             | 5                 |
| PIN 1                    | 24 V DC           |
| PIN 2                    | DI / DO           |
| PIN 3                    | 0 V               |
| PIN 4                    | DI / DO / IO-Link |
| PIN 5                    | 0 V               |
| Family construction form | M12               |
| Gender                   | male              |
| Color contact carrier    | black             |
| Coding                   | L                 |
| No. of poles             | 5                 |
| PIN 1                    | 24 V DC (US)      |
| PIN 2                    | 0 V               |
| PIN 3                    | 0 V               |
| PIN 4                    | 24 V DC (UA)      |
| PIN 5                    | PE                |
| Family construction form | M12               |
| Gender                   | female            |
| Color contact carrier    | black             |
| Coding                   | L                 |
| No. of poles             | 5                 |
| PIN 1                    | 24 V DC (US)      |
| PIN 2                    | 0 V               |
| PIN 3                    | 0 V               |
| PIN 4                    | 24 V DC (UA)      |
| PIN 5                    | PE                |
| Mounting method          | inserted, screwed |
| Tightening torque        | 0,6 Nm            |

|                          |        |
|--------------------------|--------|
| Family construction form | M12    |
| Gender                   | female |
| Color contact carrier    | black  |
| Coding                   | D      |
| No. of poles             | 4      |
| PIN 1                    | TD +   |
| PIN 2                    | RD +   |
| PIN 3                    | TD -   |
| PIN 4                    | RD -   |