

MVK-MPNIO F DI16/8

MVK ProfiNet/PROFIsafe Compact module, metal,

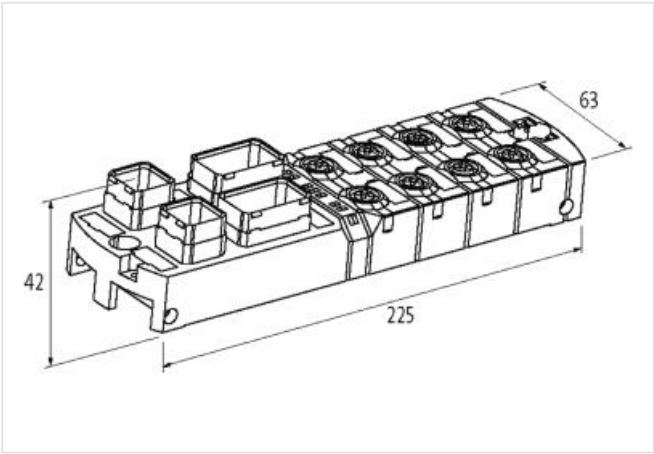
safe inputs up to cat.4/PL<sub>e</sub> (EN ISO 13849-1), up to SIL3 (IEC 61508), up to SILCL3 (IEC 62061)  
FDI16/8 (IRT)  
Ethernet 10/100 Mbit/s; Push Pull RJ45 Data connector  
Push Pull Power connector, max. 12 A  
M12, 5-pole, A-coded

Link to Product

Illustration



Product may differ from Image



Commercial data

|                       |               |
|-----------------------|---------------|
| 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      |
| customs tariff number | 85389099      |
| GTIN                  | 4048879454209 |
| Packaging unit        | 1             |

Safety codes

|                                    |           |
|------------------------------------|-----------|
| DCavg (EN ISO 13849-1)             | 98 %      |
| Service life                       | 20 a      |
| Category (EN ISO 13849-1)          | 4         |
| PfHd (IEC 61508)                   | 17 E-10/h |
| Performance level (EN ISO 13849-1) | e         |
| SIL (IEC 61508)                    | 3         |
| SIL CL (IEC 62061)                 | 3         |

**Electrical data | Supply**

|                                |                                                                     |
|--------------------------------|---------------------------------------------------------------------|
| Operating current per pin max. | when using pin 1 and pin 5, when using pin 1 or pin 5, 0.2 A, 0.7 A |
| Total current UA max.          | 12 A                                                                |
| Total current US max.          | 12 A                                                                |

**Electrical data | Input**

|                           |                                                 |
|---------------------------|-------------------------------------------------|
| Operating voltage F input | 24 V                                            |
| Type Safety input         | for electronical sensors or mechanical switches |

**Industrial communication**

|                    |          |
|--------------------|----------|
| Supported protocol | PROFINET |
|--------------------|----------|

**Industrial communication | Profinet**

|                                                   |      |
|---------------------------------------------------|------|
| Number of active connections (IO controller) max. | 2    |
| IRT (network communication)                       | yes  |
| MRP client                                        | yes  |
| PROFINET addressing                               | DCP  |
| PROFINET conformance class                        | C    |
| PROFINET specification                            | V2.2 |
| Shared device/input                               | yes  |

**Diagnostics**

|                         |                                  |
|-------------------------|----------------------------------|
| Actuator warning        | per channel via LED and BUS      |
| Diagnostic              | No voltage, Under voltage        |
| Diagnostic via BUS      | per module and channel           |
| Diagnostic via LED      | per module and channel           |
| Wire break detection    | yes                              |
| Short circuit diagnosis | yes                              |
| LED display             | Ethernet connection/data traffic |
| Cross-link detection    | Sensor/Actuator                  |
| Overload diagnosis      | yes                              |

**Device protection | Electrical**

|                                     |      |
|-------------------------------------|------|
| Degree of protection (EN IEC 60529) | IP67 |
| Overload resistant                  | yes  |
| Short-circuit protected             | yes  |

**Mechanical data | Mounting data**

|                            |                       |
|----------------------------|-----------------------|
| Suitable for mounting type | 2-hole screw mounting |
| Height                     | 44 mm                 |
| Width                      | 63 mm                 |
| Depth                      | 225 mm                |

**Environmental characteristics | Climatic**

|                            |        |
|----------------------------|--------|
| Operating temperature min. | -20 °C |
| Operating temperature max. | 55 °C  |
| Storage temperature min.   | -40 °C |
| Storage temperature max.   | 70 °C  |

**Conformity**

|                  |            |
|------------------|------------|
| Product standard | EN 61131-2 |
|------------------|------------|

**Connection type 3**

|                          |                     |
|--------------------------|---------------------|
| Connection type 1        | 4-7                 |
| Connection type 2        | Port1, Port2        |
| Connection type 3        | Power In, Power Out |
| Family construction form | M12                 |
| Gender                   | female              |
| Color contact carrier    | yellow              |

|                          |                               |
|--------------------------|-------------------------------|
| Coding                   | A                             |
| No. of poles             | 5                             |
| PIN 1                    | 24 V DC (US 1) Test Pulse P 4 |
| PIN 2                    | FDI                           |
| PIN 3                    | 0 V (US 1)                    |
| PIN 4                    | FDI                           |
| PIN 5                    | 24 V DC (US 1) Test Pulse P 2 |
| Family construction form | RJ45                          |
| Gender                   | female                        |
| Color contact carrier    | black                         |
| No. of poles             | 8                             |
| PIN 1                    | TD +                          |
| PIN 2                    | TD -                          |
| PIN 3                    | RD +                          |
| PIN 4                    | n.c.                          |
| PIN 5                    | n.c.                          |
| PIN 6                    | RD -                          |
| PIN 7                    | n.c.                          |
| PIN 8                    | n.c.                          |
| Family construction form | Push Pull                     |
| Gender                   | male                          |
| Color contact carrier    | green                         |
| No. of poles             | 5                             |
| PIN 1                    | 24 V DC (US)                  |
| PIN 2                    | 0 V (US)                      |
| PIN 3                    | 24 V DC (UA)                  |
| PIN 4                    | 0 V (UA)                      |
| PIN 5                    | PE                            |