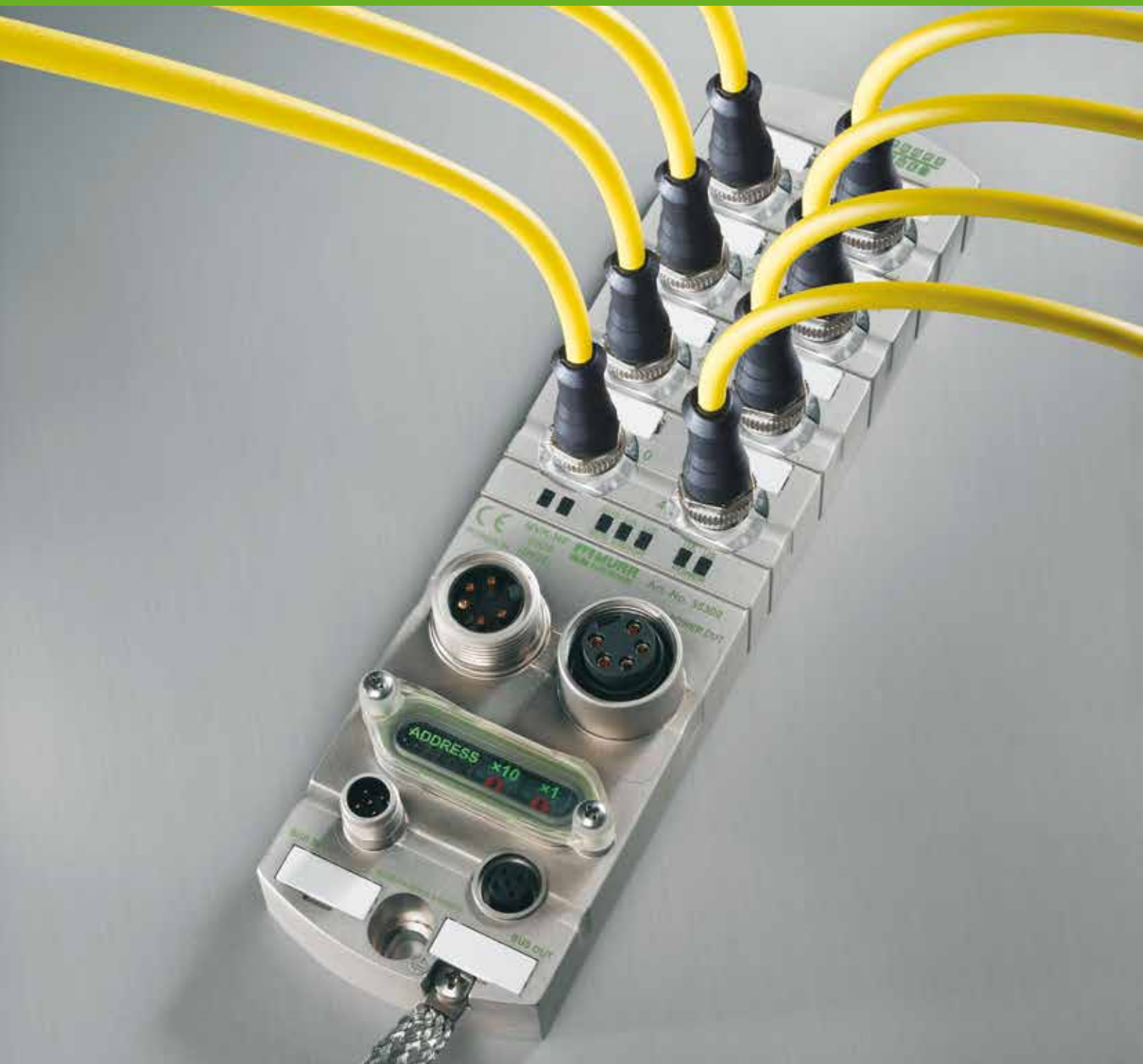


- ↘ Robust
- ↘ Vibration-resistant
- ↘ Fully Potted

# MVK METAL AND IMPACT67

Compact IP67 Modules





### FACTS ABOUT MURRELEKTRONIK

- Worldwide presence with 26 branches and many partners
- Over 2.000 employees
- 2 million articles in stock, ensure fast delivery
- Over 65.000 different products

### MURRELEKTRONIK OFFERS

- System solutions for a wide range of applications
- Robust products
- Sophisticated logistics for fast deliveries

## MVK METAL AND IMPACT67 COMPACT IP67 BUS MODULES

**Fieldbus modules with IP67 protection are a key element in machine installation and can replace complex, and therefore expensive, wiring required for terminal boxes. Fieldbuses replace conventional parallel wiring. This helps save space in the control cabinet.**

The modules are placed close to the operating area. They connect sensors and actuators to the control via pluggable, pre-wired connectors. Compared to conventional wiring, it reduces the costs for assembly and maintenance.

### **Cost-effective decentralization – compact and robust**

- **Short I/O cables** – reduce the amount of wiring
- **Pluggable connections** – avoid wiring errors and simplify service work
- **Easy to install** – does not require elaborate parallel wiring

## APPLICATIONS



- **MVK Metal**
  - Machine tools and machining centers
  - Forming and sheet metal working
  - Foundry plants and forges
  - Cutting machines and welding machines
- **IMPACT67**
  - Logistics
  - Sheet metal working
  - Handling robotics
  - Transfer and materials-handling technology

## MVK METAL

### | **MAXIMUM FLEXIBILITY – THROUGH MULTIFUNCTIONAL I/O**

Both signals on each M12 port can be configured independently, whether input, output or diagnostic input. Now, modules can be used more efficiently.

- Double valves occupy only one M12 port
- No separate modules for inputs and outputs
- No unplanned reserves
- Maximum flexibility for expansions
- Fewer variations required – minimizes inventory cost

### **DON'T LOOK FOR ERRORS, FIND THEM – TOTAL DIAGNOSTICS**

That means detailed information on the types and locations of errors.

- Only the affected port is switched off and not the complete module
- Detailed message to the control + LED on-the-spot
- Errors are found more rapidly, problems are solved faster: this minimizes system downtime and shortens start-up time

### **DURABLE – AND ROBUST DESIGN**

- Metal housing with surface finishing is welding spark resistant
- Fully potted electronic unit for maximum strength against shock and vibration
- Resistant to a whole series of coolants and lubricants
- Robust design for universal applications

### **DID YOU KNOW?**

#### **MVK-PROFINET – MODULES FOR QUICK CHANGE OF TOOLS**

The Fast Start Up function (FSU) starts up PROFINET IO modules quickly: in less than 500 ms, in connection with the right control. This is a clear advantage for for applications in tool changing systems like with robots.



# IMPACT67

## | ECONOMIC DECENTRALIZATION

Impact67 is the perfect fieldbus solution for basic applications that need to be cost-effective. The modules in this product range are available with different bus protocols: PROFIBUS, CanOpen, DeviceNet, EtherCat, EtherNet/IP and PROFINET. Impact67 features pluggable connections, diagnostic options and IP67 tested seals.

This makes Impact67 the perfect choice for an electrical engineer whose objective is minimizing costs while maintaining digital inputs and outputs under normal conditions. Impact67 can be used in many different applications: in the plant engineering field (logistics, packaging and recycling industry, palletizing), in the non-cutting metal industry (sheet metal working, robotics, wood processing) and in the transfer and materials-handling industry.

## FOCUS ON ESSENTIALS...

- Predefined inputs and outputs – helps facilitate configuration
- Single channel diagnostic via LEDs – don't look for errors, find them
- Group diagnostics via the bus – easy remote diagnostics
- Port-related shut-off – only the failed port is switched off



## MVK METAL

### Input/output modules

– digital

Protection IP67

### Approvals



#### MVK-MPNIO



#### MVK+ -MPNIO



| Ordering data   | Approvals  | Art.-No.          | Art.-No.                           | Approvals                 | Art.-No.                       |
|---|--|-------------------|------------------------------------|---------------------------|--------------------------------|
| DI8 (DI8)   |  | 55287             |                                    |                           | 55268                          |
| DIO8 (DI8)  |  | 55288             |                                    |                           |                                |
| DIO8 (DIO8)   |  | 55289             | 55283                              |                           |                                |
| DI8 (DO8)   |  |                   |                                    |                           | 55269                          |
| DO8 (DI4 DI4)   |  | 55339             |                                    |                           |                                |
| <b>Field bus</b>  |  |                   |                                    |                           |                                |
| Connection  | M12, D-coded   |                   |                                    | data connector, Push Pull |                                |
| Transfer protocol   | PROFINET IO  |                   |                                    |                           |                                |
| Typ   | PROFINET IO Device with integrated switch, Conformance Class B   |                   |                                    |                           |                                |
| MRP   | no   |                   | yes                                |                           | no                             |
| Operation mode  | Auto-negotiation/Auto MDI/MDI-X (MRP f. 55339)   |                   | Autonegotiation/Auto MDI/MDI-X/MRP |                           | Autonegotiation/Auto MDI/MDI-X |
| Transfer rate   | 100 Mbit/s full duplex   |                   |                                    |                           |                                |
| FSU support   | no/yes für 55339   |                   | no                                 |                           | yes                            |
| <b>Supply voltage</b>   |  |                   |                                    |                           |                                |
| Connection  | 7/8"; 5-pole; max. 9 A   |                   | power plug Push Pull; max. 12 A    |                           |                                |
| Supply voltage  | 24 V DC (18...30.2 V), acc. to EN61131-2   |                   |                                    |                           |                                |
| Galvanic separation between U <sub>S</sub> and U <sub>A</sub> | no/yes für 55339   |                   | no                                 |                           | yes                            |
| <b>I/O-ports</b>  |  |                   |                                    |                           |                                |
| Connection  | M12, A-coded   |                   |                                    |                           |                                |
| Digital inputs (DI)   | acc. to EN61131-2, sensor supply < 200 mA/port   |                   |                                    |                           |                                |
| Multifunctional channels (DI/DO)                              | 8 M12 ports (black) each 2 digital inputs/outputs to EN61131-2, current capacity per output up to 1.6 A, sensor supply < 200 mA/port |                   |                                    |                           |                                |
| Outputs (DO)  | output loads up to 1.6 A/channel   |                   |                                    | up to 2 A                 |                                |
| <b>Module diagnostic</b>                                      |  |                   |                                    |                           |                                |
| Field bus   | LED, according to standards  |                   |                                    |                           |                                |
| Under voltage sensor/system/actuator                          | U <sub>S</sub> < 18 V (LED red)/U <sub>A</sub> < 18 V (LED red)  |                   |                                    |                           |                                |
| Periphery   | port-related LED (red)   |                   |                                    |                           |                                |
| <b>Dimension</b>  |  |                   |                                    |                           |                                |
| H x W x D   | 225 x 63 x 39 mm   |                   | 225 x 63 x 42,7 mm                 |                           |                                |
| <b>Accessories</b>  |  |                   |                                    |                           |                                |
|   |  | Art.-No.          |                                    |                           | Art.-No.                       |
| Cover Push Pull RJ45  |  |                   |                                    |                           | 7000-99671-000000              |
| Push Pull protective cover power plug                         |  |                   |                                    |                           | 7000-99661-000000              |
| Push Pull dust protection set                                 |  |                   |                                    |                           | 553260                         |
| Blind plug, metal M12 x 1                                     | 1 piece  | 996049            |                                    |                           | 996049                         |
| Blind plug, plastic M12 x 1                                   | 10 pieces  | 58627             |                                    |                           | 58627                          |
| Blind plug, 7/8"  | 1 piece  | 55390             |                                    |                           |                                |
| Diagnostic blind plug M12 x 1                                 | 1 piece  | 7000-13481-000000 |                                    |                           | 7000-13481-000000              |
| Addressing cap metal  | 1 piece  | 55317             |                                    |                           |                                |
| Label plates  | set 20 pieces  | 55318             |                                    |                           | 55318                          |



More information, for example manuals, is conveniently available in our online shop on the specific product pages

## MVK METAL

### Input/output modules

- digital
- FSU (Fast-Start-Up)

Protection IP67

#### MVK+ MPNIO POF IRT



#### MVK+ MPNIO IRT



| Ordering data   | Art.-No.  | Art.-No.  |
|---|---|---|
| DI8 (DI8)   | 55254   | 55528   |
| DI8 (DO8)   | 55255   | 55529   |
| <b>Field bus</b>  |   |   |
| Connection  | 2xSCRJ45 POF-Push Pull  | RJ45 data plug, Push Pull                                     |
| Transfer protocol   | PROFINET IO   |   |
| PROFINET Netload Class  | III   |   |
| Shared Device/Input   | yes, for 2 controls   |   |
| Typ   | V2.2, Conformance Class C (IRT)                                 |   |
| MRP   | yes   |   |
| Operating modes   | Autonegotiation/Auto MDI/MDI-X/MRP                              | Autonego./Auto MDI/MDI-X/Redundancy via MRP/Shared device/IRT |
| Transfer rate   | up to 100 MBit/s full duplex                                    |   |
| FSU (Fast-Start-Up)   | max. 500 ms   |   |
| <b>Supply voltage</b>   |   |   |
| Connection  | Power plug Push Pull; max. 12 A                                 |   |
| Operating voltage   | 24 V DC (18...30.2 V), acc. to EN61131-2                        |   |
| Galvanic separation between U <sub>S</sub> and U <sub>A</sub> | yes   |   |
| <b>I/O-ports</b>  |   |   |
| Connection  | M12, A-coded, 5-pole  |   |
| Digital Input (DI)  | acc. to EN61131-2, sensor supply < 200 mA/port                  |   |
| Output (DO)   | output loads up to 2 A/channel                                  |   |
| <b>Module diagnostic</b>                                      |   |   |
| Field bus   | LED, according to standards                                     |   |
| Under voltage sensor/system/actuator                          | U <sub>S</sub> < 18 V (LED red)/U <sub>A</sub> < 18 V (LED red) |   |
| Periphery   | port-related LED (red)  |   |
| <b>Dimension</b>  |   |   |
| H x B x T   | 225 x 63 x 56,2 mm  | 225 x 63 x 42,7 mm  |
| <b>Accessories</b>  |   |   |
| Cover Push Pull RJ45  |   | 7000-99671-000000   |
| Cover Push Pull power   |   | 7000-99661-000000   |
| Push Pull SCRJ confection tool                                | 1 piece   | 7000-98111-000000   |
| Push Pull SCRJ Connector                                      | 1 piece   | 7000-99701-000000   |
| Push Pull dust protection set                                 |   | 553260  |
| Blind plug, metal M12 x 1                                     | 1 piece   | 996049  |
| Blind plug, plastic M12 x 1                                   | 10 pieces   | 58627   |
| Blind plug diagnostic M12 x 1                                 | 1 piece   | 7000-13481-000000   |
| Label plates  | Set 20 pieces   | 55318   |



## MVK METAL

### Input/output modules

- active
- safe inputs/outputs up to cat. 4/PLe (EN ISO 13849-1), up to SIL 3 (IEC 61508), up to SILCL 3 (IEC 62061)

Protection IP67

### Approval



### MVK-MPNIO Safety



### MVK-MPNIO Safety



| Ordering data                         | Art.-No.   | Art.-No.                       | Art.-No.                         | Art.-No.                       |
|---------------------------------------|--|--------------------------------|----------------------------------|--------------------------------|
| F DI16/8 IRT                          | 55556  |                                | 55562                            |                                |
| F DI8/4 F DO4 IRT                     |  | 55557                          |                                  | 55563                          |
| <b>Field bus</b>                      |  |                                |                                  |                                |
| Connection                            | M12, D-coded   |                                | RJ45 data plug, Push Pull        |                                |
| Transfer protocol                     | PROFINET IO  |                                |                                  |                                |
| Typ                                   | V2.2, Conformance Class C (IRT)  |                                |                                  |                                |
| MRP                                   | yes  |                                |                                  |                                |
| Addressing                            | DCP, Safety addressing by rotary switch  |                                |                                  |                                |
| Transfer rate                         | to 100 MBit/s full duplex  |                                |                                  |                                |
| <b>Supply voltage</b>                 |  |                                |                                  |                                |
| Connection                            | 7/8", 5-pole, 2 × max. 9 A   |                                | Power plug, Push Pull, max. 12 A |                                |
| Operating voltage                     | 24 V DC (EN 61131-2)   |                                |                                  |                                |
| <b>I/O-ports</b>                      |  |                                |                                  |                                |
| Connection                            | M12, A-coded, 5-pole   |                                |                                  |                                |
| Safe input (DI)                       | 24 V DC (EN 61131-2), max. 200 mA (PIN 1+5), short-circuit/overload protected, or max. 700 mA only for one PIN |                                |                                  |                                |
| Safe output (DO)                      | –  | 24 V DC (EN 61131-2), max. 2 A | –                                | 24 V DC (EN 61131-2), max. 2 A |
| <b>Diagnostic</b>                     |  |                                |                                  |                                |
| Communication status                  | per LED  |                                |                                  |                                |
| Diagnostic via LED/diagnostic via bus | per module and channel   |                                |                                  |                                |
| Monitoring - under voltage            | yes  |                                |                                  |                                |
| Monitoring - no voltage               | yes  |                                |                                  |                                |
| Short circuit and overload            | yes  |                                |                                  |                                |
| Actuator warning                      | per channel via LED and bus  |                                |                                  |                                |
| Cross-link detection                  | sensor/actuator  |                                |                                  |                                |
| Wire break detection                  | yes  |                                |                                  |                                |
| <b>Dimension</b>                      |  |                                |                                  |                                |
| H x B x T                             | 225 x 63 x 42 mm   |                                | 225 x 63 x 42,7 mm               |                                |
| <b>Accessories</b>                    |  |                                |                                  |                                |
|                                       |  | Art.-No.                       |                                  | Art.-No.                       |
| Cover Push Pull RJ45                  |  |                                |                                  | 7000-99671-000000              |
| Cover Push Pull power                 |  |                                |                                  | 7000-99661-000000              |
| Push Pull dust protection set         |  |                                |                                  | 553260                         |
| Blind plug, metal M12 x 1             | 1 piece  |                                |                                  | 996049                         |
| Blind plug, plastic M12 x 1           | 10 pieces  |                                |                                  | 58627                          |
| Blind plug, 7/8"                      | 1 piece  | 55390                          |                                  |                                |
| Blind plug diagnostic M12 x 1         | 1 piece  |                                |                                  | 7000-13481-000000              |
| Addressing cap metal                  | 1 piece  | 55317                          |                                  |                                |
| Cable fixation 8xM12                  | 1 piece  |                                |                                  | 55554                          |
| Label plates, yellow                  | Set 20 pieces  |                                |                                  | 55316                          |
| Label plates, white                   | Set 20 pieces  |                                |                                  | 55318                          |



More information, for example manuals, is conveniently available in our online shop on the specific product pages



## MVK METAL

Input/output modules

– digital

Protection IP67

Approval



MVK-MP



MVK-MDN

DeviceNet

MVK-MC

CANopen

MVK-ME

EtherNet/IP



| Ordering data                        | Art.-No.   | Art.-No.                | Art.-No.                | Art.-No.          |
|--------------------------------------|--|-------------------------|-------------------------|-------------------|
| DI8 (DI8)                            | 55307  | 55297                   | 55304                   |                   |
| DIO8 (DI8)                           | 55308  | 55298                   | 55305                   |                   |
| DIO8 (DIO8)                          | 55309  | 55299                   | 55306                   | 55099             |
| DO8 (DO8)                            | 55290  |                         |                         |                   |
| DO4 (DO4) DI4 (DI4)                  | 55274  |                         |                         |                   |
| <b>Field bus</b>                     |  |                         |                         |                   |
| Connection                           | M12, B-coded   | M12, A-coded            | M12, A-coded            | M12, D-coded      |
| Transfer protocol                    | PROFIBUS-DP  | DeviceNet to ODVA       | CANopen                 | EthernetIP        |
| Addressing                           | 0..99 via rotary switch  | 0..63 via rotary switch | 1..99 via rotary switch | rotary switch     |
| Transfer rate                        | up to 12 Mbit/s  | 125, 250 and 500 kbit/s | up to 1 Mbits           | up to 100 Mbits   |
| <b>Supply voltage</b>                |  |                         |                         |                   |
| Connection                           | 7/8"; 5-pole; max. 9 A   |                         |                         |                   |
| Supply voltage                       | 24 V DC (18...30.2 V), acc. to EN61131-2   |                         |                         |                   |
| <b>I/O-ports</b>                     |  |                         |                         |                   |
| Connection                           | M12, A-coded   |                         |                         |                   |
| Digital inputs (DI)                  | acc. to EN61131-2, sensor supply < 200 mA/port   |                         |                         |                   |
| Multifunctional channels (DI/DO)     | 8 M12 ports (black) each 2 digital inputs/outputs to EN61131-2, current capacity per output up to 1.6 A, sensor supply < 200 mA/port |                         |                         |                   |
| Outputs (DO)                         | output loads up to 1.6 A/channel (Art.-No. 5546100 2 A/channel)  |                         |                         |                   |
| <b>Module diagnostic</b>             |  |                         |                         |                   |
| Field bus                            | LED, according to standards  |                         |                         |                   |
| Under voltage sensor/system/actuator | $U_s < 18\text{ V}$ (LED red)/ $U_A < 18\text{ V}$ (LED red)   |                         |                         |                   |
| Periphery                            | port-related LED (red)   |                         |                         |                   |
| <b>Dimension</b>                     |  |                         |                         |                   |
| H x W x D                            | 225 x 63 x 50.5 mm   |                         |                         |                   |
| <b>Accessories</b>                   |  |                         |                         |                   |
| Blind plug                           | metal M12 x 1, 1 piece   |                         |                         | 996049            |
| Blind plug                           | plastic M12 x 1, 10 pieces   |                         |                         | 58627             |
| Blind plug                           | 7/8", 1 piece  |                         |                         | 55390             |
| Diagnostic blind plug                | M12 x 1, 1 piece   |                         |                         | 7000-13481-000000 |
| Addressing cap                       | metal, 1 piece   |                         |                         | 55317             |
| Label plates                         | set 20 pieces  |                         |                         | 55318             |



More information, for example manuals, is conveniently available in our online shop on the specific product pages

## MVK METAL

### Input/output modules

– analog and digital

Protection IP67

### Approval



### MVK-MP



| Ordering data                        |  | Art.-No.   |
|--------------------------------------|--|--|
| AO4 (I) DIO4 (DIO4)                  |  | 55292  |
| AO4 (U) DIO4 (DIO4)                  |  | 55293  |
| Field bus                            |  |  |
| Connection                           | M12, B-coded   |  |
| Transfer protocol                    | PROFIBUS-DP  |  |
| Addressing                           | 0...99 via rotary switch                                       |  |
| Transfer rate                        | up to 12 Mbit/s  |  |
| Supply voltage                       |  |  |
| Connection sensor/system/actuator    | 7/8"; 5-pole; max 9A   |  |
| Supply voltage                       | 24 V DC(18...30.2 V), acc. to EN61131-2                        |  |
| I/O-ports                            |  |  |
| Connection                           | M12, A-coded   |  |
| Multifunctional channels             | (DI/DO)  | 4 M12 ports (black) each 2 digital inputs/outputs to EN61131-2, current capacity per output up to 1.6 A  |
| Analog channels                      |  | 4 M12 ports (green) each with 1 analog channel (input 0...10 V, output 0 (4)...20 mA),<br>Input 0 (4)...20 mA via adaptor Art.-No. 7000-42251-000000<br>Output 0...10 V via adaptor Art.-No. 7000-42252-000000 |
| Module diagnostic                    |  |  |
| Field bus                            | LED, according to standards                                    |  |
| Under voltage sensor/system/actuator | $U_s < 18 \text{ V}$ (LED red)/ $U_A < 18 \text{ V}$ (LED red) |  |
| Periphery                            | port-related LED (red)   |  |
| Dimension                            |  |  |
| H x W x D                            | 225 x 63 x 50.5 mm   |  |
| Accessories                          |  | Art.-No.   |
| Blind plug                           | metal M12 x 1, 1 piece   | 996049   |
| Blind plug                           | plastic M12 x 1, 10 pieces                                     | 58627  |
| Blind plug                           | 7/8", 1 piece  | 55390  |
| Diagnostic blind plug                | M12 x 1, 1 piece   | 7000-13481-000000  |
| Addressing cap                       | metal, 1 piece   | 55317  |
| Label plates                         | set 20 pieces  | 55318  |



## MVK METAL

### Input/output modules

- passive
- output groups up to PLd (EN ISO 13849-1) can be switched off via safety relays

Protection IP67

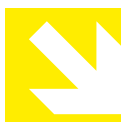
Approval



### MVK-MP-Safety



| Ordering data                         |   | Art.-No.           |
|---------------------------------------|---|--------------------|
| K3 DO4 (DO4) DIO4 (DIO4)              |   | 55291              |
| Field bus                             |   |                    |
| Connection                            | M12, B-coded  |                    |
| Transfer protocol                     | PROFIBUS-DP   |                    |
| Addressing                            | 0...99 via rotary switch  |                    |
| Transfer rate                         | to 12 MBit/s  |                    |
| Supply voltage                        |   |                    |
| Connection sensor/system/actuator     | 7/8", 5-pole, max. 9 A, safe circuits (1 + 2) via separate 7/8" supply (yellow), 2-pole disconnectable  |                    |
| Operating voltage                     | 24 V DC(18...30.2 V), acc. to EN61131-2   |                    |
| I/O-ports                             |   |                    |
| Connection                            | M12, A-coded  |                    |
| Multifunctional channels (DI/DO)      | 4 M12 ports (black) each 2 digital inputs/outputs to EN61131-2, current capacity per output up to 1.6 A |                    |
| Safe output (DO)                      | 4 M12 ports (yellow), divided in 2 voltage circuits, 2 outputs per port, current capacity up to 2 A     |                    |
| Diagnostic                            |   |                    |
| Communication status                  | per LED   |                    |
| Diagnostic via LED/diagnostic via bus | per module and channel  |                    |
| Monitoring - under voltage            | yes   |                    |
| Monitoring - no voltage               | yes   |                    |
| Short circuit and overload            | yes   |                    |
| Actuator warning                      | per channel via LED and bus   |                    |
| Cross-link detection                  | sensor/actuator   |                    |
| Cable break                           | per port  |                    |
| Dimension                             |   |                    |
| H x B x T                             | 225 x 63 x 39 mm  |                    |
| Accessories                           |   | Art.-No.           |
| Blind plug                            | metal M12 x 1, 1 piece  | 996049             |
| Blind plug                            | plastic M12 x 1, 10 pieces  | 58627              |
| Blind plug                            | 7/8", 1 piece   | 55390              |
| Diagnostic blind plug                 | M12 x 1, 1 piece  | 7000-13481-0000000 |
| Addressing cap                        | metal, 1 piece  | 55317              |
| Label plates                          | set 20 pieces   | 55318              |



## IMPACT67

### Input/output modules

– digital

Protection IP67

Approval



### IMPACT67-P



### IMPACT67-DN

DeviceNet

### IMPACT67-C

CANopen



| Ordering data            | Art.-No.   | Art.-No.                           | Art.-No.       |
|--------------------------|--|------------------------------------|----------------|
| DI16                     | 55345  | 55071                              | 55075          |
| DI8/DO8 – 2A             | 55346  | 55072                              | 55076          |
| DO8 – 2A                 | 55347  | 55073                              | 55077          |
| DO16 – 0,5A              | 55348  | 55074                              | 55078          |
| <b>Field bus</b>         |  |                                    |                |
| Connection               | M12, B-coded   | M12, A-coded                       |                |
| Transfer protocol        | PROFIBUS-DP  | DeviceNet to ODVA                  | CANopen        |
| Addressing               | 0...99 via rotary switch   |                                    |                |
| Transfer rate            | up to 12 Mbit/s  | 125 Kbit/s, 250 Kbit/s, 500 Kbit/s | up to 1 Mbit/s |
| <b>Supply voltage</b>    |  |                                    |                |
| Connection               | 7/8"; 5-pole; U <sub>A</sub> max. 9 A, U <sub>S</sub> max. 9 A                     |                                    |                |
| Supply voltage           | 24 V DC (18...30.2 V), acc. to EN61131-2   |                                    |                |
| <b>I/O-ports</b>         |  |                                    |                |
| Connection               | M12, A-coded   |                                    |                |
| Inputs                   | (DI) for 3-wire sensors or mech. switches  |                                    |                |
| Sensor supply            | 24 V DC (18...30, 2V), acc. to EN61131-2, <= 200 mA/port                           |                                    |                |
| Outputs                  | (DO) Semiconductor output short-circuit/overload protected, with 0.5 A or max. 2 A |                                    |                |
| Overload cutoff          | port-related   |                                    |                |
| <b>Module diagnostic</b> |  |                                    |                |
| Field bus                | RUN-LED  |                                    |                |
| Supply voltage           | LED, alarm via the bus   |                                    |                |
| I/O overload             | LED on the port, group alarm via the bus   |                                    |                |
| <b>Dimension</b>         |  |                                    |                |
| H x W x D                | 225 x 63 x 36 mm   |                                    |                |
| <b>Accessories</b>       |  |                                    |                |
| Blind plug               | M12 x 1, 10 pieces   |                                    | 58627          |
| Label plates             | 20 pieces  |                                    | 55318          |
| Blind plug               | 7/8", 1 piece  |                                    | 55390          |



More information, for example manuals, is conveniently available in our online shop on the specific product pages

## IMPACT67

Input/output modules

– digital

Protection IP67

Approval



**IMPACT67-E**

EtherNet/IP™

**IMPACT67-EC**

EtherCAT™



**IMPACT67-PNIO**



| Ordering data            | Art.-No.   | Art.-No.         | Art.-No.                  |
|--------------------------|--|------------------|---------------------------|
| DI16                     | 55085  | 55081            | 55091                     |
| DI8/DO8 – 2 A            | 55086  | 55082            | 55092                     |
| DO8 – 2 A                | 55087  | 55083            | 55093                     |
| DO16 – 0,5 A             | 55088  | 55084            | 55094                     |
| DIO8 (DIO8) – 1,6 A      | 55089  |                  |                           |
| <b>Field bus</b>         |  |                  |                           |
| Connection               | M12, D-coded   |                  |                           |
| Transfer protocol        | Ethernet IP  | EtherCat         | PROFINET IO               |
| Addressing               | 0...99 via rotary switch   | automatically    |                           |
| Transfer rate            | up to 100 Mbit/s, full duplex  | up to 100 Mbit/s | 10/100 Mbit/s full duplex |
| <b>Supply voltage</b>    |  |                  |                           |
| Connection               | 7/8"; 5-pole; U <sub>A</sub> max. 9 A, U <sub>S</sub> max. 9 A                     |                  |                           |
| Supply voltage           | 24 V DC (18...30.2 V), acc. to EN61131-2   |                  |                           |
| <b>I/O-ports</b>         |  |                  |                           |
| Connection               | M12, A-coded   |                  |                           |
| Inputs                   | (DI) for 3-wire sensors or mech. switches  |                  |                           |
| Sensor supply            | 24 V DC (18...30, 2V), acc. to EN61131-2, <= 200 mA/port                           |                  |                           |
| Outputs                  | (DO) Semiconductor output short-circuit/overload protected, with 0.5 A or max. 2 A |                  |                           |
| Overload cutoff          | port-related   |                  |                           |
| <b>Module diagnostic</b> |  |                  |                           |
| Field bus                | RUN-LED  |                  |                           |
| Supply voltage           | LED, alarm via the bus   |                  |                           |
| I/O overload             | LED on the port, group alarm via the bus   |                  |                           |
| <b>Dimension</b>         |  |                  |                           |
| H x W x D                | 225 x 63 x 36mm  |                  |                           |
| <b>Accessories</b>       |  |                  |                           |
| Blind plug               | M12 x 1, 10 pieces   |                  | 58627                     |
| Label plates             | 20 pieces  |                  | 55318                     |
| Blind plug               | 7/8", 1 piece  |                  | 55390                     |



## IO-LINK MASTER MODULES

| Input/output modules  | DIO16 4P  |                                      |                 | DIO14<br>DIO2/IOL2 4P  |                                      |                 | DIO12<br>DIO4/IOL4 4P |                 |  |
|-----------------------|---|--------------------------------------|-----------------|--|--------------------------------------|-----------------|-----------------------|-----------------|--|
| – digital             |   |                                      |                 |  |                                      |                 |                       |                 |  |
| Protection IP67       |   |                                      |                 |  |                                      |                 |                       |                 |  |
| EtherNet/IP           |   |                                      |                 |  |                                      |                 |                       |                 |  |
|                       |            |                                      |                 |  |                                      |                 |                       |                 |  |
| <b>Ordering data</b>  | <b>Art.-No.</b>   | <b>Art.-No.</b>                      | <b>Art.-No.</b> | <b>Art.-No.</b>  | <b>Art.-No.</b>                      | <b>Art.-No.</b> | <b>Art.-No.</b>       | <b>Art.-No.</b> |  |
|                       | 55542   | 55543                                | 55544           | 55142  | 55143                                | 55143           | 55144                 | 55144           |  |
| <b>Field bus</b>      |   |                                      |                 |  |                                      |                 |                       |                 |  |
| Connection            | M12, D-codiert  |                                      |                 |  |                                      |                 |                       |                 |  |
| Transfer protocol     | EtherNet IP 10/100 Mbit/s   |                                      |                 |  |                                      |                 |                       |                 |  |
| Addressing            | DHCP, BOOTP or IP address by DIP switch   |                                      |                 |  |                                      |                 |                       |                 |  |
| IO-Link               | –   | 2 x Master                           | 4 x Master      | –  | 2 x Master                           | 4 x Master      | –                     | –               |  |
| Operating mode        | –   | COM1; COM2; COM3 (automatic)         |                 | –  | COM1; COM2; COM3 (automatic)         |                 | –                     | –               |  |
| Transfer parameter    | –   | 32 Byte (via IO-Link Port)           |                 | –  | 32 Byte (via IO-Link Port)           |                 | –                     | –               |  |
| Port class            | –   | Class B (not galvanically separated) |                 | –  | Class B (not galvanically separated) |                 | –                     | –               |  |
| Specification         | –   | IO-Link Master V1.12                 |                 | –  | IO-Link Master V1.12                 |                 | –                     | –               |  |
| <b>Supply voltage</b> |   |                                      |                 |  |                                      |                 |                       |                 |  |
| Connection            | 7/8", 4-pole, 2 x max. 9 A  |                                      |                 |  |                                      |                 |                       |                 |  |
| Supply voltage        | 24 V DC (18...30.2 V), acc. to EN61131-2  |                                      |                 |  |                                      |                 |                       |                 |  |
| <b>Technical Data</b> |   |                                      |                 |  |                                      |                 |                       |                 |  |
| Digital inputs        | 24 V DC (EN 61131-2), max. 200 mA (M12 fem.), short-circuit a. overload protected           |                                      |                 |  |                                      |                 |                       |                 |  |
| Digital outputs       | 24 V DC (EN 61131-2), max. 9 mA, max. 1.6 A per output, short-circuit a. overload protected |                                      |                 |  |                                      |                 |                       |                 |  |



## IO-LINK MASTER MODULES

Profinet V2.3  
Conformance Class B/  
Conformance Class C

Protection IP67

IO-Link



DIO16 IRT



DIO14  
DIO2/IOL2 IRT

DIO12  
DIO4/IOL4 IRT

DIO16 IRT



DIO14  
DIO2/IOL2 IRT

DIO12  
DIO4/IOL4 IRT

| Ordering data              | Art.-No.   | Art.-No.        | Art.-No.                | Art.-No. | Art.-No.        | Art.-No.                |
|----------------------------|--|-----------------|-------------------------|----------|-----------------|-------------------------|
|                            | 55530  | 55531           | 55532                   | 55130    | 55131           | 55132                   |
| <b>Field bus</b>           |  |                 |                         |          |                 |                         |
| Connection                 | M12, D-codiert   |                 |                         |          |                 |                         |
| Transfer protocol          | PROFINET IO  |                 |                         |          |                 |                         |
| PROFINET Netload Class     | III  |                 |                         |          |                 |                         |
| Shared Device/Input        | yes, for 2 controls  |                 |                         |          |                 |                         |
| Typ                        | V2.3, Conformance Class C IRT  |                 |                         |          |                 |                         |
| MRP                        | yes  |                 |                         |          |                 |                         |
| Operation mode             | Autonegotiation/Auto MDI/MDI-X   |                 |                         |          |                 |                         |
| Transfer rate              | up to 100 Mbits Full Duplex  |                 |                         |          |                 |                         |
| FSU support                | max. 500 ms  |                 |                         |          |                 |                         |
| <b>Supply voltage</b>      |  |                 |                         |          |                 |                         |
| Connection                 | 7/8"; 5-pole; max. 9 A   |                 |                         |          |                 |                         |
| Supply voltage             | 24 V DC (18...30.2 V), acc. to EN61131-2                                     |                 |                         |          |                 |                         |
| <b>Technical Data</b>      |  |                 |                         |          |                 |                         |
| Multifunctional channels   | 8 M12 ports, with deactivated IO-Link up to 16 dig. inputs/outputs           |                 |                         |          |                 |                         |
| Digital inputs             | acc. to EN 61131-2, Type3 (200 mA), single channel protection                |                 |                         |          |                 |                         |
| Digital outputs            | Max. 1.6 A per output cycle frequency max. 50 Hz, single channel protection  |                 |                         |          |                 |                         |
| IO-Link                    | V 1.12 / EN61131-2 Typ 1, Com1/Com2/Com3, automatic startup, bis zu 1 A Last |                 |                         |          |                 |                         |
| IO-Link 1.1 Class A Port   | –  | max. 2 (X6, X7) | max. 4 (X4, X5, X6, X7) | –        | max. 2 (X5, X7) | max. 4 (X1, X3, X5, X7) |
| IO-Link 1.1 Class B Port   | –  | max. 2 (X6, X7) | max. 2 (X4, X5)         | –        | max. 2 (X5, X7) | max. 2 (X1, X3)         |
| Shock (EN 60068 Part 2-27) | 50 g   |                 |                         | 15 g     |                 |                         |





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