CUBE67 AND CUBE20
Economic Decentralization

- Modular
- Flexible
- System Independent
cube67+ The plus for added flexibility.
YOUR PLUS FOR INCREASED FLEXIBILITY

Cube67 stands for balanced and economic solutions. Murrelektronik’s innovative fieldbus system features simplified yet modern decentralized installations from the ground up. Now the new Cube67+ has a plus that means even more flexibility.

Cube67+ is a new, innovative bus node. With this module, Murrelektronik is expanding the practice-proven Cube67 System. Now fieldbus installations are even more optimized, no matter what the application.

Cube67+: the plus is for...

- an increased number of modules up to 2 x 16 modules
- increased cable lengths for installations up to 2 x 30 meters
- modules that can be installed at any position on the hybrid cable
- daisy chaining of the power supply at the bus node

Cube67+: the plus is for increased flexibility in decentralized installation technology. Now with even more modules, longer cables and higher performance.
### CUBE67+

- **2 segments**
- **Per segment:**
  - 16 modules
  - 30 meters cable length
- **Diagnostics per I/O pin**
- **Display per pin**
- **Topology**
  - Star/line
- **Transfer type**
  - Change of state
- **System connection**
  - Hybrid cable M12
- **Addressing**
  - Automatically

### CUBE67

- **4 lines**
- **Per line:**
  - 4 modules
  - 10 meters cable length
- **Diagnostics per I/O pin**
- **Display per pin**
- **Topology**
  - Star/line
- **Transfer type**
  - Change of State
- **System connection**
  - Hybrid cable M12
- **Addressing**
  - Automatically
**System Description CUBE20/67**
- Number of modules per bus node: 15
- Addressing: automatically
- Cube67 system connection: hybrid line
- Max. Cube67 system connection: 10 m
- Topology: linear
- Data security: hamming – distance 6
- Transfer type: change of state

**Diagnostics**
- Cube20: short circuit sensor, supply
- Cube67: actuator short circuit, under voltage, sensor short circuit, actuator short circuit, under voltage, wrong connection, DESINA diagnostics

**Display**
- Module OK: green
- Initialization/no data exchange: green blinking
- Diagnostics: red
- Signal status: yellow
**ECONOMIC DECENTRALIZATION – MODULAR, COMPACT AND RUGGED**

- The I/O level is where it’s needed – right in the machine, and close to the sensors and actuators, – not occupying one large area or being concentrated in the control cabinet
- Reduced dimensions ensure compact and space-saving machine design
- LEDs close to each sensor/actuator
- Easily expandable
- Shortest sensor and actuator cabling
- Reduces cable costs
- Saves space in the machine or the control cabinet
- Switching matrices is no longer needed

**“BECOME INDEPENDENT OF THE PLC PROTOCOL” MAKE A BUS CHANGE INSTEAD OF SYSTEM CHANGE – NOW CHANGE ONLY THE BUS NODE**

This makes the machine installation independent of the controls and the fieldbus. That means that the application can be adapted to the end user’s PLC specifications without having to modify the I/O periphery. The benefits of an efficient installation with Cube67 are maintained.

- Standardize the installation
- Flexible response to all end user specifications possible
- Configure the machine only once
- Create the documentation only once
- System skills needed only once
- Minimize inventory

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**BUS NODE**

**MULTIFUNCTIONAL I/O MODULES**
As a rule, each machine variation or optional enhancement requires an individual hardware configuration, and with it a separate software.

With Murrelektronik’s integrated Machine Options Management, virtually configure the fully enhanced version. The system automatically adapts to the actual hardware structure in the real machine. Elaborate software adaptation and administration for each type of machine are no longer necessary. The variety of software is reduced to one version per machine series.

PROFIBUS and PROFINET bus nodes of the Cube20, Cube67, and Cube67+ series support the Machine Options Management function.

| VALVE CLUSTER INTERFACES | SAFE OUTPUTS | TERMINAL MODULES |
Cube67 and Cube67+ are the new benchmark in automation. Small, multifunctional I/O modules and the variety of different interfaces are the key to simplified installations. They can be installed close to sensors and loads. This saves installation time and offers benefits for service work because of easy trouble-shooting.

**SIMPLIFY YOUR INSTALLATION**

Maximum flexibility through multifunctional I/Os
The two signals per port, either input, diagnostics input or output, all can be independently configured.

- Avoid unused reserves
- Double valves require only one port

"Fault detection instead of troubleshooting" – comprehensive diagnostics
Detailed information on type and location of the fault or error.

- Only the affected port shuts down
- Minimizes downtime
- Enable remote maintenance

"Assemble and plug in – that’s all!"
Quick and simple plug connections replace elaborate wiring.

- Avoids wiring errors
- Shortens start-up time
- Quick swapping of cables
Cube20 is a fieldbus I/O station with modular expandability, which can be integrated along with the Cube67 I/O system. Cube20 is designed for the requirements of modern wiring in control cabinets. High costs from dealing with many individual components are reduced when you use Cube20 thanks to the compact design and a high channel density of 32 channels per I/O module. With 488 channels on 90 cm, Cube20 can easily save space and you get more flexibility. Cube20 features maintenance-free plug terminals for single-wire connectivity that is standard in control cabinets.

PRACTICAL APPLICATION

Cube20 I/O modules are galvanically separated and have an integrated power input terminal. This simplifies the implementation of different potential groups and does not require additional power modules.

Of course, Cube20 features the same convenient diagnostic options as Cube67. This facilitates troubleshooting and minimizes downtime.

Convenient Channel Diagnostics

Transparent connection terminals provide a full view of I/O state and diagnostics

- Rapid and convenient failure localization
- Minimizes downtime
- Increases productivity

NEW IDEAS FOR AN EFFICIENT INSTALLATION

- Easier handling by a reduced number of individual components
- Compact design equals high channel density
- I/O connections with maintenance-free terminals
- Integrated power input terminals for practical applications
**CUBE20 AND CUBE67 HAVE GROWN TOGETHER**

Cube20 modules can be operated on Cube67 bus nodes. This offers new installation options for many users.

With the Cube20/67 interface module, you can operate Cube67 modules on Cube20 bus nodes. The interface module connects Cube67 modules to the Cube20 station from a distance of up to 10 meters. It doesn't require an additional Cube67 bus node. This reduces costs and facilitates the installation.

**CUBE20 BUS NODE WITH MACHINE OPTIONS MANAGEMENT**

Cube20 offers the same Machine Options Management features as Cube67 (see page 8).

With Cube20, you can now create one configuration that maps the full configuration of the machine for all hardware options. The system automatically adapts to the actual hardware structure in the real machine.

PROFIBUS and PROFINET bus nodes support the Machine Options Management function.

**NEW MODULES, NEW FUNCTIONS**

- Efficient installations by the compatibility of Cube20 and Cube67
- Minimum software requirements thanks to Machine Options Management
- Over 100 different Cube20 and Cube67 modules offer the right module for any application
**OVERVIEW**

### CUBE20

**Bus node**

<table>
<thead>
<tr>
<th>Module</th>
<th>Bus Type</th>
<th>Inputs</th>
<th>Outputs</th>
<th>Part Number</th>
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<tbody>
<tr>
<td>Cube20</td>
<td>BN-P</td>
<td>DI8</td>
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<td>Cube20</td>
<td>BN-PNIO</td>
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<td>Cube20</td>
<td>BN-E</td>
<td>DI8</td>
<td></td>
<td>56005</td>
</tr>
</tbody>
</table>

**Digital inputs**

- Cube20: DI32
- Cube20: DI32 NPN/PNP

**Digital inputs/outputs**

- Cube20: DI16 DO16

**Digital outputs**

- Cube20: DO16 2A
- Cube20: DO16 2A K3

**Analog inputs**

- Cube20: AI4 U/I
- Cube20: AI4 RTD
- Cube20: AI4 TH

**Analog outputs**

- Cube20: AO4 U/I

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### CUBE67

**Bus node**

<table>
<thead>
<tr>
<th>Module</th>
<th>Bus Type</th>
<th>Part Number</th>
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<td>BN-PNIO</td>
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<td>Cube67+</td>
<td>BN-E</td>
<td>56525</td>
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<td>Cube67</td>
<td>BN-E</td>
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<td>BN-DN</td>
<td>56507</td>
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<td>Cube67</td>
<td>BN-C</td>
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<tr>
<td>Cube67</td>
<td>BN-EC</td>
<td>56527</td>
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</tbody>
</table>

**Digital inputs**

- C - Compact modules: DI16 C 8xM12
- E - Expansion modules: DI16 C 8xM8

**Digital inputs/outputs**

- C - Compact modules: DIO16 C 8xM12
- E - Expansion modules: DIO16 C 8xM8
# Digital inputs/outputs

| Cube67 | DIO8 D18 | E TB Box | 56681 | Cube67 | DIO8 | E Cable 0,5 m | 56661 |
| Cube67 | DIO8 D18 | E TB Box | 5668100 | Cube67 | DIO8 | E Cable 2 m | 5666100 |
| Cube67 | DIO8 D18 | E TB Rail | 56691 | Cube67 | DIO16 | E Cable 0,5 m | 56662 |
| Cube67 | DIO8 | E M16 0.5 A | 56663 | Cube67 | DIO16 | E Cable 1,5 m | 5666200 |
| Cube67 | DIO8 | E Cable M12 ID | 5666500 | Cube67 | DIO16/D016 | E Cable 0,5 m | 56671 |

# Digital outputs

| Cube67 | DO8 E Valve | FESTO CPV | 5665500 | Cube67 | DO24 E Valve | FESTO CPA | 5665605 |
| Cube67 | DO8 E Valve | FESTO CPV (SUB-D9) | 5665501 | Cube67 | DO32 E Valve | BOSCH HF02/03-LG, HF04 (Sub-D25) | 5665606 |
| Cube67 | DO8 E Valve | FESTO MPA | 5665502 | Cube67 | DO32 E Valve | SMC Serie VQC (M27) | 5665607 |
| Cube67 | DO7 | E Cable M12 Modlight | 5665503 | Cube67 | DO32 E Valve | MAC VALVES | 5665609 |
| Cube67 | DO16 E Valve | 56651 | Cube67 | DO32 E Valve | VESTA (SUB-D37) | 5665610 |
| Cube67 | DO8 E Valve | 56655 | Cube67 | DO24 E Valve | VESTA (SUB-D25) | 5665611 |
| Cube67 | DO32 E Valve | 56656 | Cube67 | DO20 E Valve | FESTO VATA | 5665613 |
| Cube67 | DO16 E Valve | FESTO CPV | 5665100 | Cube67 | DO32 E Valve | SMC Serie VQC (SUB-D25) | 5665614 |
| Cube67 | DO16 E Valve | PARKER Serie V | 5665101 | Cube67 | DO32 E Valve | FESTO CPA-SC | 5665615 |
| Cube67 | DO16 E Valve | FESTO CPV-SC (SUB-D15) | 5665102 | Cube67 | DO32 E Valve | FESTO MPA-L | 5665616 |
| Cube67 | DO16 E Valve | FESTO CPV-SC (SUB-D26) | 5665103 | Cube67 | DO32 E Valve | BOSCH HF02/03-LG (Sub-D 44) | 5665617 |
| Cube67 | DO16 E Valve | FESTO VTS | 5665105 | Cube67 | DO22 E Valve | NUMATICS GENERATION 2000 | 5665618 |
| Cube67 | DO16 E Valve | METAL WORK HDM | 5665106 | Cube67 | DO24 E Valve | FESTO MPA-L (SUB-D25) | 5665619 |
| Cube67 | DO16 E Valve | NORGREN V20, V22 | 5665110 | Cube67 | DO16 E Valve | NORGREN VM10 | 566550 |
| Cube67 | DO16 E Valve | NORGREN VM10 | 5665111 | Cube67 | DO24 E Valve | NORGREN VM10 | 5665003 |
| Cube67 | DO16 E Valve | NORGREN V20, 228 | 5665112 | Cube67 | DO24 E Valve | C Valve K3 | 566505 |
| Cube67 | DO16 E Valve | SMC Serie SV, VQ, SY | 5665113 | Cube67 | DO24 E Valve | C Valve K3 | 5665003 |
| Cube67 | DO16 E Valve | SMC Serie VQC (M27) | 5665114 | Cube67 | DO24 E Valve | C Valve K3 | 566505 |
| Cube67 | DO16 E Valve | NORGREN V20, V22 | 5665115 | Cube67 | DO24 E Valve | E 6xM12 K3 | 566505 |
| Cube67 | DO16 E Valve | MAC VALVES | 5665116 | Cube67 | DO32 E Valve | E 6xM12 K3 | 566505 |
| Cube67 | DO16 E Valve | FESTO MPA | 5665118 | Cube67 | DO32 E Valve | E 6xM12 K3 | 566505 |
| Cube67 | DO24 E Valve | NORGREN VM10 | 5665600 | Cube67 | DO32 E Valve | E 6xM12 K3 | 566505 |
| Cube67 | DO24 E Valve | FESTO MPA | 5665601 | Cube67 | DO32 E Valve | E 6xM12 K3 | 566505 |
| Cube67 | DO24 E Valve | NORGREN VM10 | 5665603 | Cube67 | DO32 E Valve | E 6xM12 K3 | 566505 |
| Cube67 | DO32 E Valve | E 6xM12 K3 | 5665604 | Cube67 | DO32 E Valve | E 6xM12 K3 | 566505 |

# Safe outputs

| Cube67 | D16 | C Valve K3 | 56650 |
| Cube67 | D16 | C Valve K3 | 5665003 |
| Cube67 | DO6/DO6 | E 6xM12 K3 | 566505 |

# Analog inputs

| Cube67 | AI4 | C 4xM12 (I) | 56730 |
| Cube67 | AI4 | C 4xM12 (U) | 56700 |
| Cube67 | AI4 | C 4xM12 RTD | 56740 |
| Cube67 | AI4 | C 4xM12 TH | 56748 |
| Cube67 | AI4 | E 4xM12 (I) | 56731 |
| Cube67 | AI4 | E 4xM12 (U) | 56701 |
| Cube67 | AI4 | E 4xM12 RTD | 56741 |
| Cube67 | AI4 | E 4xM12 TH | 56749 |

# Analog outputs

| Cube67 | AO4 | C 4xM12 (I) | 56720 |
| Cube67 | AO4 | C 4xM12 (U) | 56710 |
| Cube67 | AO4 | E 4xM12 (I) | 56721 |
| Cube67 | AO4 | E 4xM12 (U) | 56711 |

# Function modules

| Cube67+ | DIO12 IOL4 | E 8xM12 | 56765 |
| Cube67 | Logic | E 4xM12 | 56771 |
| Cube67 | CNT2 | E 4xM12 | 56750 |
| Cube67+ | DIO4 RS232/485 | E 4xM12 | 56761 |
| Cube67 | DIO4 RS485 | E 3xM12 | 56760 |
### CUBE67 BUS NODE

#### Cube67+ BN-P

**Ordering data**
- Approval: cULus
- Art. No.: 56521

**Connections**
- **Fieldbus**
  - M12 male/female, B-coded, 5 pole

- **Supply voltages sensor/system/actuator**
  - 7/8” male/female, 5 pole, max. 8 A

- **Cube67 system connections**
  - M12 female, A-coded, 6-pole, max. 4 A

**Fieldbus**
- **Operating voltage**: 24 V DC (18…30.2 V), acc. to EN61131-2
- **Transfer protocol**: PROFIBUS-DP
- **Addressing**: 0...99 via rotary encoder switch
- **Transfer rate**: up to 12 Mbit/s

**System connection**
- **Ports**: 4

**Module diagnostics**
- **Fieldbus**
  - LED, acc. to standards
- **Supply voltage sensor/system/actuator**
  - per system port $U_s < 18\,\text{V (LED red)}/U_a < 18\,\text{V (LED red)}$
- **Peripheral fault**
  - M12 port-related LED (red)

**Dimensions H x W x D**: 40.5 x 151 x 62 mm

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### Cube67 BN-P

**Ordering data**
- Approval: cULus
- Art. No.: 56501

**Connections**
- **Fieldbus**
  - M12 male/female, B-coded, 5 pole

- **Supply voltages sensor/system/actuator**
  - 7/8” male/female, 5 pole, max. 9 A

- **Cube67 system connections**
  - M12 female, A-coded, 6-pole, max. 4 A

**Fieldbus**
- **Operating voltage**: 24 V DC (18…30.2 V), acc. to EN61131-2
- **Transfer protocol**: PROFIBUS-DP
- **Addressing**: 0...99 via rotary encoder switch
- **Transfer rate**: up to 12 Mbit/s

**System connection**
- **Ports**: 4

**Module diagnostics**
- **Fieldbus**
  - LED, acc. to standards
- **Supply voltage sensor/system/actuator**
  - per system port $U_s < 18\,\text{V (LED red)}/U_a < 18\,\text{V (LED red)}$
- **Peripheral fault**
  - M12 port-related LED (red)

**Dimensions H x W x D**: 50.7 x 151 x 50 mm

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### CUBE67 BUS NODE

#### Cube67 BN-P

**Ordering data**
- Approval: –
- Art. No.: 56531

**Connections**
- **Fieldbus**
  - M12 male/female, B-coded, 5 pole

- **Supply voltages sensor/system/actuator**
  - 7/8” connector, 5-pole, max. 9 A

- **Cube67 system connections**
  - M12 female, A-coded, 6-pole, max. 4 A

**Fieldbus**
- **Operating voltage**: 24 V DC (18…30.2 V), acc. to EN61131-2
- **Transfer protocol**: PROFIBUS-DP
- **Addressing**: 0...99 via rotary encoder switch
- **Transfer rate**: up to 12 Mbit/s

**System connection**
- **Ports**: 4

**Module diagnostics**
- **Fieldbus**
  - LED, acc. to standards
- **Supply voltage sensor/system/actuator**
  - per system port $U_s < 18\,\text{V (LED red)}/U_a < 18\,\text{V (LED red)}$
- **Peripheral fault**
  - M12 port-related LED (red)

**Dimensions H x W x D**: 59 x 151 x 50 mm
## CUBE67 BUS NODE

### Bus node

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<tr>
<td><strong>Cube67+ BN-PNIO</strong> PROFINET IO</td>
<td>cULus</td>
<td>56526</td>
<td>cULus</td>
<td>56525</td>
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<tr>
<td><strong>Cube67+ BN-E</strong> EtherNet/IP</td>
<td>cULus</td>
<td>56526</td>
<td>cULus</td>
<td>56525</td>
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### Connections

**Fieldbus**
- M12 female, D-coded, 5 pole
- Supply voltages sensor/system/actuator: 7/8” male/female, 5 pole, max. 8 A
- Cube67 system connections: M12 female, A-coded, 6-pole, max. 4 A

**Operating voltage**
- 24 V DC (18...30.2 V), acc. to EN61131-2

**Transfer protocol**
- PROFINET IO
- EtherNet/IP

**Addressing**
- DHCP, BOOTP, or IP address via rotary switch
- 10/100 Mbit/s Full Duplex

### System connection

- Ports: 4

### Module diagnostics

- Fieldbus: LED, acc. to standards
- Supply voltage sensor/system/actuator: per system port U_s, <18 V (LED red)/U_a, <18 V (LED red)
- Peripheral fault: M12 port-related LED (red)

### Dimensions H x W x D
- 40.5 x 151 x 62 mm

### Additional Information

- Cube67 system connections: M12 female, A-coded, 6-pole, max. 4 A
- Supply voltages sensor/system/actuator: 7/8” male/female, 5 pole, max. 8 A
- Cube67+ BN-PNIO PROFINET IO
- Cube67+ BN-E EtherNet/IP
- Ordering data
- Approval cULus
- Art. No. 56526
- Approval cULus
- Art. No. 56525
**CUBE67 BUS NODE**

**Bus node**

**Cube67 BN-E**
EtherNet/IP

**Cube67 BN-DN**
DeviceNet

**Cube67 BN-C**
CANopen

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**Ordering data**

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**Connections**

Fieldbus

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<tr>
<th>Fieldbus</th>
<th>Operating voltage</th>
<th>Transfer protocol</th>
<th>Addressing</th>
<th>Transfer rate</th>
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</thead>
<tbody>
<tr>
<td>M12 male, D-coded</td>
<td>24 V DC (18...30.2 V), acc. to EN61131-2</td>
<td>EtherNet/IP acc. to ODVA, conformance tested</td>
<td>DHCP, BOOTP, or IP address via rotary switch</td>
<td>100 Mbit/s</td>
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<td>M12 male/female, D-coded, 4-pole</td>
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<tr>
<td>M12 female, A-coded, 6-pole</td>
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</tbody>
</table>

Supply voltages sensor/system/actuator

| 7/8” connector, 5-pole, max. 9 A |

Cube67 system connections

| M12 female, A-coded, 6-pole |

**Fieldbus**

Supply voltage sensor/system/actuator

| per system port U_s <18 V (LED red)/U_a <18 V (LED red) |

Peripheral fault

| port-related LED (red) |

**Dimensions H x W x D**

| 50.7 x 151 x 50 mm |

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**Bus node**

**Cube67 BN-E**
EtherNet/IP

**Cube67 BN-DN**
DeviceNet

**Cube67 BN-C**
CANopen

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**Ordering data**

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**Connections**

Fieldbus

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<th>Transfer protocol</th>
<th>Addressing</th>
<th>Transfer rate</th>
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<tbody>
<tr>
<td>M12 male/female, A-coded, 4-pole</td>
<td>24 V DC (18...30.2 V), acc. to EN61131-2</td>
<td>DeviceNet acc. to ODVA</td>
<td>0...63 via rotary switch</td>
<td>10, 20, 50, 125, 250, 500, 800, 1000 kBit/s</td>
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<td>M12 male, D-coded</td>
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<td>M12 female, A-coded, 6-pole</td>
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Supply voltages sensor/system/actuator

| 7/8” connector, 5-pole, max. 9 A |

Cube67 system connections

| M12 female, A-coded, 6-pole, max. 4 A |

**Fieldbus**

Supply voltage sensor/system/actuator

| per system port U_s <18 V (LED red)/U_a <18 V (LED red) |

Peripheral fault

| port-related LED (red) |

**Dimensions H x W x D**

| 50.7 x 151 x 50 mm |
## CUBE67 DIGITAL INPUTS

### Input modules

#### Digital inputs

**Cube67 DI16 C 8xM12**

- **Ordering data**
  - **Approval**: cULus
  - **Art. No.**: 56602

- **System connection**
  - Communication and supply voltages: via system hybrid cable
  - Terminating resistor: integrated in the module

- **I/O ports**
  - Sensor supply: 24 V DC (18...30.2 V), acc. to EN61131-2, ≤ 200 mA per M8/M12 female
  - PIN 2: input/diagnostic
  - PIN 4: input

- **Inputs**
  - PNP: for 3-wire sensors or mechanical switches, EN61131-2 compatible

- **Diagnostic inputs**
  - Type/function: EN61131-2 compatible/24 V = high = OK (LED off); 0 V = low = error (LED red)

- **Module diagnostics**
  - Supply voltage sensor/system: U<sub>g</sub> < 18 V (LED red)
  - Peripheral fault: M12 port-related LED (red)

- **Dimensions H x W x D**: 34.5 x 126 x 50 mm

**Cube67 DI8 C 4xM12**

- **Ordering data**
  - **Approval**: cULus
  - **Art. No.**: 56612

**Cube67 DI8 C 8xM8**

- **Ordering data**
  - **Approval**: cULus
  - **Art. No.**: 56622

### Input modules

#### Digital inputs

**Cube67 DI16 E 8xM12**

- **Ordering data**
  - **Approval**: cULus
  - **Art. No.**: 56603

**Cube67 DI8 E 4xM12**

- **Ordering data**
  - **Approval**: cULus
  - **Art. No.**: 56613

**Cube67 DI8 E 8xM8**

- **Ordering data**
  - **Approval**: cULus
  - **Art. No.**: 56623

- **System connection**
  - Communication and supply voltages: via system hybrid cable

- **I/O ports**
  - Sensor supply: 24 V DC (18...30.2 V), acc. to EN61131-2, ≤ 200 mA per M8/M12 female
  - PIN 2: input/diagnostic input (only with PNP)
  - PIN 4: input

- **Inputs**
  - PNP/NPN: for 3-wire sensors or mechanical switches, EN61131-2 compatible

- **Diagnostic inputs (only with PNP)**
  - Type/function: EN61131-2 compatible/24 V = high = OK (LED off); 0 V DC = low = error (LED red)

- **Module diagnostics**
  - Supply voltage sensor/system: U<sub>g</sub> < 18 V (LED red)
  - Peripheral fault: M12 port-related LED (red)

- **Dimensions H x W x D**: 34.5 x 126 x 50 mm
## CUBE67 DIGITAL INPUTS / OUTPUTS

### — Multifunctional I/Os

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<thead>
<tr>
<th>Ordering data</th>
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<tr>
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<td>Communication and supply voltages</td>
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<td>Terminating resistor</td>
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<td>PIN 4</td>
<td>input/output</td>
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<tr>
<td>Inputs</td>
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<tr>
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<td>Type/function</td>
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<td>Module diagnostics</td>
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<td>34.5 x 126 x 30 mm</td>
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<td>Dimensions H x W x D</td>
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<td>34.5 x 151 x 30 mm</td>
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CUBE67 DIGITAL INPUTS / OUTPUTS

— Multifunctional I/Os
— Digital outputs

Cube67 DIO16 DO16 16xM12 (1.6/2A)

Cube67 DIO32 E - 16xM12

Ordering data
Approval
Art. No.
cuLife pending
56641

System connection
Communication and supply voltages
via system hybrid cable

I/O ports
Sensor supply
24 V DC (18...30.2 V), acc. to EN61131-2, ≤ 200 mA per M8/M12 female

PIN 2 (8x M12 left side)
input/output/diagnostic input

PIN 4 (8x M12 left side)
input/output/diagnostic input

PIN 2 (8x M12 right side)
set on output

PIN 4 (8x M12 right side)
set on output

Inputs
PNP
for 3-wire sensors or mechanical switches, EN61131-2 compatible

Diagnostic inputs
Type/function
EN61131-2 compatible/24 V = high = OK (LED off); 0 V = low = error (LED red)

Outputs
Actuator supply
24 V DC (18...30.2 V), acc. to EN61131-2, via 7/8” connector (∑ max. 2x 9 A)

Output load (8x M12 left side)
1.6 A short circuit and overload protection (coincidence factor 50% per port) max. 0.5 A (short circuit and overload protected)

Output load (8x M12 right side)
2 A, short circuit and overload protected (coincidence factor 50% per port) max. 0.5 A (short circuit and overload protected)

Module diagnostics
Supply voltage sensor/system/actuator
US <18 V (LED red)/UA <18 V (LED red)

Peripheral fault
M12 port-related LED (red)

Dimensions H x W x D
35 x 151 x 115 mm

— Multifunctional and user-configurable

Cube67 DIO16 E 8xM12

Cube67 DIO8 E 4xM12

Cube67 DIO8 E 8xM8

Ordering data
Approval
Art. No.
cuLife
56601

System connection
Communication and supply voltages
via system hybrid cable

I/O ports
Sensor supply
24 V DC (18...30.2 V), acc. to EN61131-2, ≤ 200 mA per M8/M12 female

PIN 2
input/output/diagnostic input

PIN 4
input/output

Inputs
PNP
for 3-wire sensors or mechanical switches, EN61131-2 compatible

Diagnostic inputs
Type/function
EN61131-2 compatible/24 V = high = OK (LED off); 0 V = low = error (LED red)

Outputs
Actuator supply
24 V DC (18...30.2 V), acc. to EN61131-2, via system connection (∑ max. 4 A)

Switching current per output
0.5 A short circuit and overload protected

Module diagnostics
Supply voltage sensor/system/actuator
Uί <18 V (LED red)/Uά <18 V (LED red)

Peripheral fault
M12 port-related LED (red)

Dimensions H x W x D
34.5 x 126 x 50 mm
34.5 x 151 x 30 mm
# CUBE67 DIGITAL INPUTS/OUTPUTS

## Multifunctional and user-configurable

### Cube67 DI08 E M16 0.5A

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### Cube67 DIO8 E Cable M12 ID

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### System connection
- **Communication and supply voltages**: via system hybrid cable

### I/O port
- **I/O channels**: input/output

### Inputs
- **Sensor supply**: 1.6 A
- **PNP**: for 3-wire sensors or mechanical switches, EN61131-2 compatible

### Outputs
- **Actuator supply**: 24 V DC (18…30.2 V), acc. to EN61131-2, max. 4 A (internal system connection)
- **Switching current per output**: max. 70 mA

### Module diagnostics
- **Supply voltage sensor/system/actuator**: $U_S < 18$ V (LED red) / $U_A < 18$ V (LED red)
- **Peripheral fault**: combined LED (red)

### Connection cable
- **Type/length**: 2m PUR cable, M16 connector, straight, art. no. 7000-16751-9590200
- **Type/length**: 2m PUR cable, M16 connector, 90°, art. no. 7000-16851-9590200

### Dimensions H x W x D
- 345 x 151 x 30 mm

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## Multifunctional I/Os

### Digital inputs

### Digital outputs

### Cube67 DIO8 E Cable

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### Cube67 DIO16 E Cable

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### Cube67 DIO16 DO16 E Cable

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<td>56671</td>
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### System connection
- **Communication and supply voltages**: via system hybrid cable

### I/O cable
- **Single wires**: input/output

### Inputs
- **Sensor supply**: 1.6 A
- **PNP**: for 3-wire sensors or mechanical switches, EN61131-2 compatible

### Outputs
- **Actuator supply**: 24 V DC (18…30.2 V), acc. to EN61131-2, max. 4 A (internal system connection)
- **Switching current per output**: max. 70 mA

### Module diagnostics
- **Supply voltage sensor/system/actuator**: $U_S < 18$ V (LED red) / $U_A < 18$ V (LED red)
- **Peripheral fault**: combined LED (red)

### Connection cable
- **Type/length**: 10 x 0.34 mm² PVC/0.5 m
- **Type/length**: 20 x 0.14 mm² PUR/0.5 m
- **Type/length**: 36 x 0.14 mm² PVC/0.5 m

### Dimensions H x W x D
- 345 x 151 x 30 mm
### CUBE67 DIGITAL OUTPUTS

**Compact module**

**Cube67 DO16 Valve**

#### Ordering data

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<th>Multipole connector (0.5 A)</th>
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<td>SMC Series SV/VQ</td>
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<td>FESTO-MPA (SUB-D25)</td>
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<td>FESTO-CPV (SUB-D25) – GOST</td>
<td>5665004</td>
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**System connection**

Communication and supply voltages: via system hybrid cable

**Outputs**

- Actuator supply: 24 V DC (18...30.2 V), to EN 61131-2, max. 4 x 2 A
- Switching current per output: 0.5 A, short circuit and overload protected

**Module diagnostics**

- Supply voltage system/actuator: U_s < 18 V (LED red)/U_a < 18 V (LED red)
- Peripheral fault: combined LED (red)

**Anschlussleitung**

- Type/length: 4 x 4 x 0.14 m² PVC, cross circuit monitoring/0.5 m
- Dimensions H x W x D: 34.5 x 151 x 30 mm

**Expansion module**

**Cube67 DIO8 E Cable**

#### Ordering data

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<th>DIO8 – 0.5 A (E) 0.5 m (M12)</th>
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<td>cULus, GOST</td>
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</table>

**System connection**

Communication and supply voltages: via system hybrid cable

**Inputs**

- Sensor supply: 0.5 A (PNP)
  - for 3-wire sensors or mechanical switches, EN61131-2 compatible

**Outputs**

- Actuator supply: 24 V DC (18...30.2 V), acc. to EN61131-2, max. 4 A (internal system connection)
- Switching current per output: max. 60 mA, short circuit and overload protected

**Module diagnostics**

- Supply voltage system/actuator: U_s < 18 V (LED red)/U_a < 18 V (LED red)
- Peripheral fault: combined LED (red)

**Connection cable**

- Type/length: 8 x 0.25 mm² PUR/0.5 m
- Dimensions H x W x D: 34.5 x 151 x 30 mm
Cube67 Digital Outputs

Valve cluster interface

**Cube67 DO8 E Valve**

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**Cube67 DO16 E Valve**

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**Cube67 DO32 E Valve**

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<td>5665600</td>
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<td>for NUMATICS GENERATION 2000</td>
<td>5665617</td>
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<td>5665619</td>
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</table>

System Connection

Communication and supply voltages via system hybrid cable

Outputs

Actuator supply 24 V DC (18...30.2 V), acc. to EN61131-2, max. 4 A (internal system connection)

Switching current per output max. 70 mA short circuit and overload protected

Module diagnostics

Supply voltage system/actuator U, <18 V (LED red)/UA <18 V (LED red)

Peripheral fault combined LED (red)

Connection cable

Type/length 10 x 0.34 mm² PUR-OB/0.5 m

Dimensions H x W x D 34.5 x 151 x 30 mm

Modlight interface, for Modlight70 base connection modules

(Art. No. 4000-75070-150002
Art.-No. 4000-75070-1500003)

**Cube67 DO7 E Cable M12 Modlight**

with pre-wired M12 connector, 8-pole

<table>
<thead>
<tr>
<th>Ordering data</th>
<th>Approval</th>
<th>Art. No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>System connection</td>
<td>cULus pending</td>
<td>5665503</td>
</tr>
</tbody>
</table>

Communication and module supply via system hybrid cable

Outputs

Actuator supply 24 V DC (18...30.2 V), acc. to EN61131-2, max. 4 A (internal system connection)

Switching current per output 0.5 A short circuit and overload protected

Module diagnostics

Supply voltage system/actuator U, <18 V (LED red)/UA <18 V (LED red)

Peripheral fault combined LED (red)

Connection cable

Type/length 8 x 0.25 mm² PUR-OB, M12 female 8 pole/0.5 m

Dimensions H x W x D 34.5 x 151 x 30 mm
## CUBE67 Passive Safety Outputs

### Valve cluster interface

- Passive safety outputs
- Up to safety category 4/PL e possible with two channel safety function possible

### Cube67 D016 C Valve K3

- With pre-wired multipole plug

### Ordering data

<table>
<thead>
<tr>
<th>Approval</th>
<th>Art. No.</th>
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</thead>
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<td>56650</td>
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</table>

### System connection

- Communication and module supply: via system hybrid cable

### Actuator supply

- 5 m, Art. No. 7000-15101-1380500
- 10 m, Art. No. 7000-15101-1381000

### Outputs

#### Actuator supply

- 24 V DC (18...30.2 V), acc. to EN 61131-2 (4 voltage circuits with cross circuit monitoring, ∑ max. 2 A)

#### Safe actuator circuits

- 4

#### Switching current per output

- 0.5 A

### Module diagnostics

#### Supply voltage system/actuator

- U≤18 V (LED red)/U≥ 18 V (LED red)

#### Peripheral fault

- Combined LED (red)

### Connection cable

- Type/length: cross link protection/0.5 m

### Dimensions H x W x D

- 34.5 x 151 x 30 mm

---

### CUBE67 D06 D06 E 6xM12 K3

- Passive safety outputs
- Up to safety category 4/PL e possible with two channel safety function

### Ordering data

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<tr>
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<th>Art. No.</th>
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<tbody>
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</table>

### System connection

- Communication and module supply: via system hybrid cable

### I/O ports

- PIN 2: output
- PIN 4: output

### Outputs

#### Actuator supply

- 24 V DC (18...30.2 V), acc. to EN 61131-2 (2 circuits ∑ each max. 4 A)

#### Safe actuator circuits

- 2

#### Switching current per output

- 1.6 A, short circuit and overload protected

### Module diagnostics

#### Supply voltage system/actuator

- U≤18 V (LED red)/U≥ > 18 V (LED green)

#### Peripheral fault

- M12 port-related LED (red)

### Dimensions H x W x D

- 34.5 x 126 x 50 mm
# CUBE67 Analog Inputs

## For Voltage

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<thead>
<tr>
<th></th>
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<td>56700</td>
<td>cULus</td>
<td>56701</td>
</tr>
</tbody>
</table>

### System Connection
Communication and supply voltages via system hybrid cable

### Inputs
- **Sensor supply**: 24 V DC (18…30.2 V), ≤ 200 mA
- **PIN 2**: voltage input (+)
- **PIN 4**: voltage input (–)

### Inputs Current/Voltage
- **Number of channels**: 4
- **Input resistance**: approx. 300 Ohm, difference input
- **Range**: ± 10 V DC, 0…10 V DC
- **Resolution**: 15 Bit + sign
- **Conversion time**: approx. 4 ms per channel

### Module Diagnostics
- **Supply voltage sensor/system**: US < 18 V (LED red)
- **Peripheral fault**: M12 port-related LED (red)

### Dimensions H x W x D
- 34.5 x 126 x 30 mm
- 34.5 x 151 x 30 mm

## For Current

<table>
<thead>
<tr>
<th></th>
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<td>cULus pending</td>
<td>56731</td>
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### System Connection
Communication and supply voltages via system hybrid cable

### Inputs
- **Sensor supply**: 24 V DC (18…30.2 V), ≤ 200 mA
- **PIN 2**: current input (+)
- **PIN 4**: current input (–)

### Inputs Current/Voltage
- **Number of channels**: 4
- **Input resistance**: approx. 300 Ohm, difference input
- **Range**: 0…20 mA, 4…20 mA
- **Resolution**: 15 Bit
- **Conversion time**: approx. 4 ms per channel

### Module Diagnostics
- **Supply voltage sensor/system**: US < 18 V (LED red)
- **Peripheral fault**: M12 port-related LED (red)

### Dimensions H x W x D
- 34.5 x 126 x 30 mm
- 34.5 x 151 x 30 mm
## CUBE67 ANALOG INPUTS

### For temperature converter

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Image</th>
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</thead>
<tbody>
<tr>
<td>Cube67 AI4 C 4xM12 RTD PT100</td>
<td>Thermo elements</td>
<td><img src="image" alt="Cube67 AI4 C 4xM12 RTD PT100" /></td>
</tr>
<tr>
<td>Cube67 AI4 E 4xM12 RTD PT100</td>
<td>Thermo elements</td>
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### Technical Data

**Ordering data**

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**System connection**

- Communication and supply voltages: via system hybrid cable

**Inputs**

<table>
<thead>
<tr>
<th>Connection technology</th>
<th>Number of channels</th>
<th>Accuracy (ambient temperature 0…50 °C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2, 3, 4 wire</td>
<td>4</td>
<td>≤ ± 0,5 %</td>
</tr>
</tbody>
</table>

**Technical Data**

<table>
<thead>
<tr>
<th>Sensor types</th>
<th>Conversion time</th>
<th>Data format</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pt 100, 200, 500, 1000, Ni 100, 120, 200, 500, 1000, R 0…3000 Ω</td>
<td>approx. 58 ms per channel</td>
<td>15 bit + sign</td>
</tr>
</tbody>
</table>

**Module diagnostics**

- Supply voltage sensor: U_s < 18 V (LED red)
- Wire break, upper/lower limit: LED red per channel

**Dimensions H x W x D**

| 34.5 x 126 x 30 mm | 34.5 x 151 x 30 mm |

### For temperature converter

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Image</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cube67 AI4 C 4xM12 TH</td>
<td>Thermo elements</td>
<td><img src="image" alt="Cube67 AI4 C 4xM12 TH" /></td>
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<tr>
<td>Cube67 AI4 E 4xM12 TH</td>
<td>Thermo elements</td>
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### Technical Data

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**System connection**

- Communication and supply voltages: via system hybrid cable

**Inputs**

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<th>Connection technology</th>
<th>Number of channels</th>
<th>Accuracy (ambient temperature 0…50 °C)</th>
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</thead>
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<tr>
<td>2 wire</td>
<td>4</td>
<td>≤ ± 0,5 %, cold junction compensation inside connector</td>
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**Technical Data**

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<th>Sensor types</th>
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<th>Data format</th>
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</thead>
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<tr>
<td>K, N, J, E, R</td>
<td>approx. 65 ms per channel</td>
<td>15 bit + sign</td>
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**Module diagnostics**

- Supply voltage sensor: U_s < 18 V (LED red)
- Wire break, upper/lower limit: LED red per channel

**Dimensions H x W x D**

| 34.5 x 126 x 30 mm | 34.5 x 151 x 30 mm |
### CUBE67 ANALOG OUTPUTS

#### For voltage

<table>
<thead>
<tr>
<th>Ordering data</th>
<th>Approval</th>
<th>Art. No.</th>
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</thead>
<tbody>
<tr>
<td>Cube7 AO4 C 4xM12 (U) Voltage</td>
<td>cULus</td>
<td>56710</td>
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</tbody>
</table>

#### System connection

Communication and supply voltages: via system hybrid cable

#### Outputs

- **Sensor supply**: ≤ 1.6 A per M12 female via actuator supply
- **PIN 4 Outputs voltage**: voltage output

#### Outputs voltage

- **Number of channels**: 4
- **Load resistance**: ≥ 500 Ohm
- **Range**: ± 10 V DC, 0...10 V DC
- **Resolution**: 11 Bit + sign
- **Conversion time**: approx. 1 ms per channel

#### Module diagnostics

- **Supply voltage system/actuator**: US <18 V (LED red)/UA <18 V (LED red)
- **Peripheral fault**: M12 port-related LED (red)

#### Dimensions H x W x D

- 34.5 x 126 x 30 mm

#### For current

<table>
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<tr>
<th>Ordering data</th>
<th>Approval</th>
<th>Art. No.</th>
</tr>
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<tbody>
<tr>
<td>Cube7 AO4 C 4xM12 (I) Current</td>
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<td>56720</td>
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</table>

#### System connection

Communication and supply voltages: via system hybrid cable

#### Outputs

- **Sensor supply**: ≤ 1.6 A per M12 female via actuator supply
- **PIN 4 Outputs current**: current output

#### Outputs current

- **Number of channels**: 4
- **Load resistance**: ≤ 500 Ohm
- **Range**: 0...20 mA, 4...20 mA
- **Resolution**: 11 Bit
- **Conversion time**: approx. 1 ms per channel

#### Module diagnostics

- **Supply voltage system/actuator**: US <18 V (LED red)/UA <18 V (LED red)
- **Peripheral fault**: M12 port-related LED (red)

#### Dimensions H x W x D

- 34.5 x 126 x 30 mm
## CUBE67 FUNCTION MODULES

### Cube67+ DI012 IOL4 E 8xM12

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#### System connection
Communication and supply voltages via system hybrid cable

#### I/O ports
<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensor supply</td>
<td>24 V DC (18...30.2 V), acc. to EN61131-2, ≤ 200 mA per port, ≤ 700 mA max. per module</td>
</tr>
<tr>
<td>PIN 2</td>
<td>input/output/diagnostic input</td>
</tr>
<tr>
<td>PIN 4</td>
<td>input/output port 0-3, input/IO Link port 4-7</td>
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</table>

#### I/O Link
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<th>Description</th>
<th>Details</th>
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<tr>
<td>Port type</td>
<td>A (B possible without galvanic separation of U_s and U_a)</td>
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<tr>
<td>Operating mode</td>
<td>SIO, COM1, COM2, COM3</td>
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<tr>
<td>IO Link specification</td>
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#### Inputs
<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
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</thead>
<tbody>
<tr>
<td>PNP</td>
<td>for 3-wire sensors or mechanical switches, EN61131-2 compatible</td>
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</table>

#### Diagnostic inputs
<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type/function</td>
<td>EN61131-2 compatible/24 V = high = OK (LED off); 0 V = low = error (LED red)</td>
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</table>

#### Outputs
<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actuator supply</td>
<td>24 V DC (18...30.2 V), acc. to EN61131-2, via system connection (max. 4 A)</td>
</tr>
<tr>
<td>Switching current per output</td>
<td>1.6 A short circuit and overload protected</td>
</tr>
</tbody>
</table>

#### Module diagnostics
<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply voltage sensor/system/actuator</td>
<td>U_s &lt; 18 V (LED red)/U_a &lt; 18 V (LED red)</td>
</tr>
<tr>
<td>Peripheral fault</td>
<td>M12 port-related LED (red)</td>
</tr>
</tbody>
</table>

#### Dimensions H x W x D
345 x 126 x 50 mm

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### Cube67 Logic E 4xM12

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#### System connection
Communication and supply voltages via system hybrid cable

#### Logic function
Inputs 3 M12 ports per 2 inputs
Outputs 1 M12 port with 2 outputs

#### Inputs
<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensor supply</td>
<td>24 V DC (18...30.2 V), acc. to EN61131-2, ≤ 200 mA per port</td>
</tr>
<tr>
<td>PIN 2/PIN 4, PNP</td>
<td>for 3-wire sensors or mechanical switches, EN61131-2 compatible</td>
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</table>

#### Outputs
<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actuator supply</td>
<td>24 V DC (18...30.2 V), acc. to EN61131-2, max. 4 A (internal system connection)</td>
</tr>
<tr>
<td>Switching current per output</td>
<td>0.5 A short circuit and overload protected</td>
</tr>
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#### Module diagnostics
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<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply voltage sensor/system/actuator</td>
<td>U_s &lt; 18 V (red)/U_a &lt; 18 V (red)</td>
</tr>
<tr>
<td>Peripheral fault</td>
<td>Port-related LED (red)</td>
</tr>
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</table>

#### Dimensions H x W x D
345 x 151 x 30 mm
### CUBE67 FUNCTION MODULES

#### Counter module with preprocessing

**Cube67 CNT 2 C 4xM12**

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<td>cULus</td>
<td>56750</td>
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</table>

**System connection**

Communication and supply voltages: via system hybrid cable

**Counter function**

- **Counter frequency**: max. 300 kHz
- **Counter inputs**: 2, acc. to EN61131-2
- **Count depth**: 32 Bit (31 Bit + sign)

**Inputs**

- **Sensor supply**: 24 V DC (18...30.2 V), acc. to EN61131-2, ≤ 200 mA per M12 port
- **PIN 2/PIN 4, PNP**: for 3-wire sensors or mechanical switches, EN61131-2 compatible

**Outputs**

- **Actuator supply**: 24 V DC (18...30.2 V), acc. to EN61131-2, ∑ max. 4 A (internal system connection)
- **Switching current per output**: 1.6 A short circuit and overload protected

**Module diagnostics**

- **Supply voltage sensor/system/actuator**: Uᵢ <18 V (LED red)/Uᵢ <18 V (LED red)
- **Peripheral fault**: port-related LED (red)

**Dimensions H x W x D**: 34.5 x 126 x 30 mm

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#### Multifunctional and user-configurable

**Cube67 DIO4 RS485 E 3xM12**

<table>
<thead>
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<th>Ordering data</th>
<th>Approval</th>
<th>Art. No.</th>
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<tbody>
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<td>cULus</td>
<td>56760</td>
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</table>

**System connection**

Communication and supply voltages: via system hybrid cable

**I/O ports**

- **PIN 2**: input/output/diagnostic
- **PIN 4**: input/output

**Inputs**

- **Sensor supply**: 24 V DC (18...30.2 V), acc. to EN61131-2, ≤ 200 mA per M12 female
- **PNP**: for 3-wire sensors or mechanical switches, EN61131-2 compatible

**Diagnostic inputs**

- **Sensor supply**: 24 V DC (18...30.2 V), acc. to EN61131-2, ≤ 200 mA per M12 female
- **Type/function**: EN61131-2 compatible/24 V = high = O K (LED off); 0 V = low = error (LED red)

**Outputs**

- **Actuator supply**: 24 V DC (18...30.2 V), acc. to EN61131-2, ∑ max. 4 A (internal system connection)
- **Switching current per output**: 0.5 A short circuit and overload protected

**Serial interface**

- **Type**: RS485, galvanically separated, M12 female, 5 pole, B-coded
- **Transfer parameter**: 9.6 kbaud, half duplex, 8 Bit, even parity, 1 stopbit

**Module diagnostics**

- **Supply voltage sensor/system/actuator**: Uᵢ <18 V (LED red)/Uᵢ <18 V (LED red) (provided output is parameterized)
- **Peripheral fault**: M12 port-related LED (red)

**Dimensions H x W x D**: 34.5 x 126 x 30 mm
## CUBE67 FUNCTION MODULES

- Multifunctional and user-configurable
- Serial interface

### Cube67+ DIO4 RS232/485 E 4xM12

---

**Ordering data**

<table>
<thead>
<tr>
<th>Approval</th>
<th>Art. No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>cULus pending</td>
<td>56761</td>
</tr>
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</table>

**System connection**

Communication and supply voltages: via system hybrid cable

**I/O ports**

- **PIN 2**: input/output/diagnostic
- **PIN 4**: input/output

**Inputs**

- **Sensor supply**: 24 V DC (18...30.2 V), acc. to EN61131-2, ≤ 200 mA per M12 female
- **PNP**: for 3-wire sensors or mechanical switches, EN61131-2 compatible

**Diagnostic inputs**

- **Sensor supply**: 24 V DC (18...30.2 V), acc. to EN61131-2, ≤ 200 mA per M12 female
- **Type/function**: EN61131-2 compatible; 24 V = high = OK (LED off); 0 V = low = error (LED red)

**Outputs**

- **Actuator supply**: 24 V DC (18...30.2 V), acc. to EN61131-2, ∑ max. 4 A (internal system connection)
- **Switching current per output**: 0.5 A, short circuit and overload protected

**Serial interface**

- **Type**: RS232 or 485, galvanically separated, M12 female, 5 pole, B-coded
  - **RS232**: up to 230.4 kbps, full duplex
  - **RS485**: up to 230.4 kbps, half duplex

**Module diagnostics**

- **Supply voltage sensor/system/actuator**: U_s < 18 V (LED red)/U_a < 18 V (LED red) (provided output is parameterized)
- **Peripheral fault**: M12 port-related LED (red)

**Dimensions H x W x D**: 34.5 x 151 x 30 mm
### CUBE67 DIGITAL INPUTS/OUTPUTS

#### Terminal connections
- Multifunctional and user-configurable

#### Ordering data

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<thead>
<tr>
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<td>56681</td>
<td></td>
<td>cULus</td>
<td>56691</td>
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<tr>
<td>with additional potential terminals</td>
<td>cULus pending</td>
<td>5668100</td>
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#### System connection
- Communication and supply voltages: via system hybrid cable

#### I/O terminals

<table>
<thead>
<tr>
<th>Terminal row X 0</th>
<th>(8 channels)</th>
<th>input</th>
</tr>
</thead>
<tbody>
<tr>
<td>Terminal row X 1</td>
<td>(8 channels)</td>
<td>input/output</td>
</tr>
<tr>
<td>Terminal row X 2</td>
<td>(sensor supply)</td>
<td>24 V DC (18...30.2 V), acc. to EN61131-2, 8 x ≤ 200 mA</td>
</tr>
<tr>
<td>Terminal row X 3</td>
<td>(reference potential)</td>
<td>0 V</td>
</tr>
<tr>
<td>Terminal row X 4</td>
<td>(free potential)</td>
<td>(only with Art. no. 5668100)</td>
</tr>
</tbody>
</table>

#### Inputs
- PNP: for 3-wire sensors or mechanical switches, EN61131-2 compatible

#### Outputs
- Actuator supply: 24 V DC (18...30.2 V), acc. to EN61131-2, via system connection (Σ max. 4 A)
- Switching current per output: 0.5 A short circuit and overload protected

#### Module diagnostics
- Supply voltage sensor/system/actuator: $U_s < 18$ V (LED red)/$U_{s2} < 18$ V (LED red)
- Peripheral fault: channel-related LED (red)

#### Dimensions H x W x D
- Cube67 DIO8/D18 E TB Box: 81 x 130 x 94 mm
- Cube67 DIO8/D18 E TB Rail: 45 x 113 x 54 mm
### CUBE20 – MODULAR I/O-STATION

#### Bus node

**Cube20 BN-P DI8**

PROFIBUS-DP

---

### Digital inputs

<table>
<thead>
<tr>
<th>Ordering data</th>
<th>Approval</th>
<th>Art. No.</th>
</tr>
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<td></td>
<td>cULus</td>
<td>56001</td>
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<table>
<thead>
<tr>
<th>Fieldbus</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal voltage</td>
<td>24 V DC (18 ... 30.2 V), acc. to EN61131-2</td>
<td></td>
</tr>
<tr>
<td>Current consumption</td>
<td>max. 150 mA</td>
<td></td>
</tr>
<tr>
<td>Type</td>
<td>PROFIBUS-DP Slave</td>
<td></td>
</tr>
<tr>
<td>Transfer rate</td>
<td>up to 12 Mbit/s</td>
<td></td>
</tr>
<tr>
<td>Addressing</td>
<td>1...99 via rotary switch</td>
<td></td>
</tr>
<tr>
<td>I/O capacity</td>
<td>modular expandability up to max. 15 Cube20/67 modules</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Inputs/outputs</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal voltage</td>
<td>24 V DC (18 ... 30.2 V), acc. to EN61131-2</td>
<td></td>
</tr>
<tr>
<td>Connections</td>
<td>pluggable spring clamp terminal; ≤ 12 A, max. 2.5 mm²</td>
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</tr>
<tr>
<td>Digital inputs</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Sensor supply Uᵢ</td>
<td>24 V DC (18...30.2 V), acc. to EN61131-2; ≤ 700 mA per module, short circuit/overload protected</td>
<td></td>
</tr>
<tr>
<td>Diagnostics</td>
<td>module related monitoring of actuator supply with diagnostic via the fieldbus and LED status indication</td>
<td></td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>General data</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions H x W x D</td>
<td>117 x 56 x 47 mm</td>
<td></td>
</tr>
</tbody>
</table>

#### Bus node

**Cube20 BN-PNIO DI8**

PROFINET IO

---

### Digital inputs

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<th>Approval</th>
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<table>
<thead>
<tr>
<th>Fieldbus</th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal voltage</td>
<td>24 V DC (18 ... 30.2 V), acc. to EN61131-2</td>
<td></td>
</tr>
<tr>
<td>Current consumption</td>
<td>max. 150 mA</td>
<td></td>
</tr>
<tr>
<td>Type</td>
<td>PROFINET IO Slave</td>
<td></td>
</tr>
<tr>
<td>Transfer rate</td>
<td>100 MBit/s Full Duplex</td>
<td></td>
</tr>
<tr>
<td>Addressing</td>
<td>name allocation via PROFINET IO</td>
<td></td>
</tr>
<tr>
<td>I/O capacity</td>
<td>modular expandability up to max. 15 Cube20/67 modules</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Inputs/outputs</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal voltage</td>
<td>24 V DC (18 ... 30.2 V), acc. to EN61131-2</td>
<td></td>
</tr>
<tr>
<td>Connections</td>
<td>pluggable spring clamp terminal; ≤ 12 A, max. 2.5 mm²</td>
<td></td>
</tr>
<tr>
<td>Digital inputs</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Sensor supply Uᵢ</td>
<td>24 V DC (18...30.2 V), acc. to EN61131-2; ≤ 700 mA per module, short circuit/overload protected</td>
<td></td>
</tr>
<tr>
<td>Diagnostics</td>
<td>module related monitoring of actuator supply with diagnostic via the fieldbus and LED status indication</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>General data</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions H x W x D</td>
<td>117 x 56 x 47 mm</td>
<td></td>
</tr>
</tbody>
</table>
## Cube20 BN-E DI8
**EtherNet/IP**

### Bus node
- **Digital inputs**

### Ordering data
- Approval: cULus
- Art. No.: 56005

### Fieldbus
- **Nominal voltage**: 24 V DC (18 ... 30.2 V), acc. to EN61131-2
- **Current consumption**: max. 150 mA
- **Type**: EtherNet/IP Slave
- **Transfer rate**: 10/100 MBit/s Full Duplex
- **Addressing**: DHCP, BOOTP, or IP address via rotary switch
- **I/O capacity**: modular expandability up to max. 15 Cube20/67 modules

### Inputs/outputs
- **Nominal voltage**: 24 V DC (18 ... 30.2 V), acc. to EN61131-2
- **Connections**: pluggable spring clamp terminal; ≤ 12 A, max. 2.5 mm²
- **Digital inputs**: 8
- **Sensor supply U_i**: 24 V DC (18...30.2 V), acc. to EN61131-2 ≤ 700 mA per module, short circuit/overload protected
- **Diagnostics**: module related monitoring of actuator supply with diagnostic via the fieldbus and LED status indication

### General data
- **Dimensions H x W x D**: 117 x 56 x 47 mm

## Cube67/20 System Connection
### Multifunctional I/Os

### Ordering data
- Approval: cULus
- Art. No.: 56450

### Fieldbus
- **Nominal voltage**: 24 V DC (18 ... 30.2 V), acc. to EN61131-2
- **Current consumption**: max. 80 mA
- **Type**: Cube67 I/O module
- **Addressing**: automatically
- **I/O capacity**: modular expandability up to max. 3 Cube20 modules

### Inputs/outputs
- **Nominal voltage**: 24 V DC (18 ... 30.2 V), acc. to EN61131-2
- **Connections**: pluggable spring clamp terminal; ≤ 12 A, max. 2.5 mm²
- **Multifunctional channels**: 8 channels alternatively inputs/outputs acc. to EN 61131-2, output load up to 0.5 A/channel, short circuit and overload protected
- **Sensor supply U_i**: 24 V DC (18...30.2 V), acc. to EN61131-2 ≤ 700 mA per module
- **Diagnostic output**: single channel diagnostic via the fieldbus and LED
- **Diagnostic input**: module related monitoring of actuator supply with diagnostic via the fieldbus and LED status indication

### General data
- **Dimensions H x W x D**: 117 x 56 x 47 mm
### CUBE20 – MODULAR I/O-STATION

#### Input module

**Cube20 DI32**

#### – Digital I/Os

<table>
<thead>
<tr>
<th><strong>Ordering data</strong></th>
<th><strong>Approval</strong></th>
<th><strong>Art. No.</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>cULus</td>
<td>56112</td>
</tr>
</tbody>
</table>

#### Internal communication

| Module supply | via system connection |
| Current consumption | max. 25 mA |

#### Inputs

| Number | 32 |
| Sensor voltage \(U_i\) | 24 V DC (18 ... 30.2 V), acc. to EN 61131-2 via pluggable spring clamp terminals, max. 2.5 mm² |
| Sensor supply \(U_s\) | 24 V DC (18 ... 30.2 V), acc. to EN 61131-2 ≤ 700 mA per module, short circuit/overload protected |
| Type | PNP acc. to EN61131-2 |
| Status indicator | LED yellow per input |
| Input filter | 1 ms |

#### Diagnostics

| I/O connection | module related monitoring of actuator supply with diagnostic via the fieldbus and LED status indication |

#### General data

| I/O connection | spring clamp plug-in terminals max. 2.5 mm² |
| Dimensions H x W x D | 117 x 56 x 47 mm |

#### Input module

**Cube20 DI32 NPN/PNP**

#### – Digital I/Os

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<thead>
<tr>
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<th><strong>Approval</strong></th>
<th><strong>Art. No.</strong></th>
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<td>56121</td>
</tr>
</tbody>
</table>

#### Internal communication

| Module supply | via system connection |
| Current consumption | max. 25 mA |

#### Inputs

| Number | 32 |
| Sensor voltage \(U_i\) | 24 V DC (18 ... 30.2 V), acc. to EN 61131-2 via pluggable spring clamp terminals, max. 2.5 mm² |
| Sensor supply \(U_s\) | 24 V DC (18 ... 30.2 V), acc. to EN 61131-2 ≤ 700 mA per module, short circuit/overload protected |
| Type | PNP or NPN acc. to EN61131-2 |
| Status indicator | LED yellow per input |
| Input filter | 1 ms |

#### Diagnostics

| I/O connection | module related monitoring of actuator supply with diagnostic via the fieldbus and LED status indication |

#### General data

| I/O connection | spring clamp plug-in terminals max. 2.5 mm² |
| Dimensions H x W x D | 117 x 56 x 47 mm |
## CUBE20 – MODULAR I/O-STATION

### Output module

<table>
<thead>
<tr>
<th>Cube20 DO32</th>
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#### Digital I/Os

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<th>Approval</th>
<th>Art. No.</th>
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<thead>
<tr>
<th>Internal communication</th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Module supply</td>
<td>via system connection</td>
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</table>

<table>
<thead>
<tr>
<th>Outputs</th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Number</td>
<td>32</td>
<td></td>
</tr>
<tr>
<td>Actuator voltage $U_a$</td>
<td>$24 , V , DC , (18 \ldots 30.2 , V)$, acc. to EN61131-2 via spring clamp terminals, ≤ 12 A, max. 2.5 mm²</td>
<td></td>
</tr>
<tr>
<td>Switching current per output</td>
<td>0.5 A, short circuit and overload protected</td>
<td></td>
</tr>
<tr>
<td>Lamp load</td>
<td>10 W</td>
<td></td>
</tr>
<tr>
<td>Max. switching frequency</td>
<td>resistive load 50 Hz, inductive load 5 Hz</td>
<td></td>
</tr>
</tbody>
</table>

#### General data

<table>
<thead>
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<th>I/O connection</th>
<th>spring clamp plug-in terminals max. 2.5 mm²</th>
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<tr>
<th>Dimensions H x W x D</th>
<th>117 x 56 x 47 mm</th>
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### Output module

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<tr>
<th>Cube20 DO16 2A</th>
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#### Digital I/Os

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<th>Internal communication</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Module supply</td>
<td>via system connection</td>
<td></td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Outputs</th>
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<tbody>
<tr>
<td>Number</td>
<td>16</td>
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</tr>
<tr>
<td>Actuator voltage $U_a$</td>
<td>$24 , V , DC , (18 \ldots 30.2 , V)$, acc. to EN61131-2 via spring clamp terminals, ≤ 12 A, max. 2.5 mm²</td>
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<tr>
<td>Switching current per output</td>
<td>2 A, short circuit and overload protected</td>
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</tr>
<tr>
<td>Lamp load</td>
<td>40 W</td>
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<tr>
<td>Max. switching frequency</td>
<td>resistive load 50 Hz, inductive load 5 Hz</td>
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#### General data

<table>
<thead>
<tr>
<th>I/O connection</th>
<th>spring clamp plug-in terminals max. 2.5 mm²</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Dimensions H x W x D</th>
<th>117 x 56 x 47 mm</th>
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</thead>
</table>
## CUBE20 – MODULAR I/O-STATION IP67/IP20

### Input/Output module

#### Digital I/Os

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<th>Ordering data</th>
<th>Approval</th>
<th>Art. No.</th>
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<tr>
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<td>cULus pending</td>
<td>56168</td>
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</tbody>
</table>

#### Internal communication

- Module supply: via system connection
- Current consumption: max. 25 mA

#### Inputs

- Number: 16
- Sensor voltage \( U_i \): 24 V DC (18 ... 30.2 V), acc. to EN 61131-2
- Sensor supply \( U_s \): 24 V DC (18 ... 30.2 V), acc. to EN 61131-2
- Type: PNP acc. to EN61131-2
- Input filter: 1 ms
- Diagnostic input: module related monitoring of actuator supply with diagnostic via the fieldbus and LED status indication

#### Outputs

- Number: 16
- Actuator voltage \( U_a \): 24 V DC (18 ... 30.2 V), acc. to EN 61131-2
- Switching current per output: 0.5 A, short circuit and overload protected
- Lamp load: 10 W
- Max. switching frequency: resistive load 50 Hz, inductive load 5 Hz
- Diagnostics: single channel diagnostic via the fieldbus and LED

#### General data

- I/O connection: spring clamp plug-in terminals max. 2.5 mm²
- Dimensions H x W x D: 117 x 56 x 47 mm
<table>
<thead>
<tr>
<th>Cube20 – MODULAR I/O-STATION IP67/IP20</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Input module</strong></td>
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<tr>
<td><strong>Output module</strong></td>
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<tr>
<td><strong>Analog I/Os</strong></td>
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<tr>
<td><strong>Internal communication</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Module supply</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current consumption</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>Inputs/outputs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of channels</td>
<td>4 analog inputs</td>
<td>4 analog outputs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supply voltage</td>
<td>24 V DC (18 ... 30.2 V), acc. to EN 61131-2 via pluggable spring clamp terminals, max. 2.5 mm²</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Sensor supply</td>
<td>24 V DC (18 ... 30.2 V), acc. to EN 61131-2 via pluggable spring clamp terminals, max. 2.5 mm²</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Input type</td>
<td>difference voltage/current input</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>Voltage inputs</strong></td>
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<td></td>
</tr>
<tr>
<td>Input resistance</td>
<td>≥ 1 MOhm acc. to EN 61131-2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range/resolution</td>
<td>-10 V ... +10 V, 0 ... 10 V/15 Bit + sign</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conversion time</td>
<td>≤ 2 ms per channel</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Current inputs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Load resistance</td>
<td>≤ 300 Ohm acc. to EN 61131-2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range/resolution</td>
<td>0 ... 20 mA, 4 ... 20 mA/15 Bit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conversion time</td>
<td>&lt;2 ms per channel</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Voltage outputs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Load resistance</td>
<td>≥ 1000 Ohm acc. to EN 61131-2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range/resolution</td>
<td>-10 V ... +10 V, 0 ... 10 V/15 Bit + sign</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conversion time</td>
<td>≤ 1 ms per channel</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Current outputs</strong></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Load resistance</td>
<td>≤ 600 Ohm acc. to EN 61131-2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range/resolution</td>
<td>0 ... 20 mA, 4 ... 20 mA/15 Bit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conversion time</td>
<td>≤ 1 ms per channel</td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>General data</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I/O connection</td>
<td>pluggable spring clamp terminals max. 2.5 mm²</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dimensions H x W x D</td>
<td>117 x 56 x 47 mm</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
CUBE20 - MODULAR I/O-STATION IP67/IP20

Input module

- Temperature converter
- Analog I/Os

Cube20 AI4 RTD
for resistors and temperature

Cube20 AI4 TH
for thermo elements

Ordering data

<table>
<thead>
<tr>
<th>Approval</th>
<th>Art. No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>cULus</td>
<td></td>
</tr>
</tbody>
</table>

Internal communication

Module supply via system connection

Current consumption
25 mA from the system, 70 mA from external UI, 25 mA from the system, 45 mA from external UI

Analog inputs

Number of channels 4

Resolution 15 Bit + sign

Inputs

Measuring resistors Pt100, 200, 500, Ni100, 120, 200, 500, 1000, R0…3000 Ohm

Conversion time approx. 600 ms per channel

Input type 3 wire input; +Rx, RLx, Rx

Thermo elements – K, N, E, J, R

Supply voltage 24 V DC (18 ... 30.2 V), acc. to EN 61131-2 via pluggable spring clamp terminals, max. 2.5 mm²

General data

I/O connection spring clamp plug-in terminals max. 2.5 mm²

Dimensions H x W x D 117 x 56 x 47 mm

System Connection Cube20/67

Cube20/67 Interface module

Ordering data

<table>
<thead>
<tr>
<th>Approval</th>
<th>Art. No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>cULus</td>
<td></td>
</tr>
</tbody>
</table>

Fieldbus

Nominal voltage 24 V DC (18 ... 30.2 V), acc. to EN61131-2

Current consumption max. 25 mA

Type Cube20 module

I/O capacity modular Cube20/67 fieldbus station: max. 16 modules (Cube20 bus node + 15 Cube20/67 modules)

Cube67 system supply

Cube67 system connection max. 10 m

Connections pluggable spring clamp terminal; ≤ 12 A, max. 2.5 mm²

Sensor supply U1 24 V DC (18...30.2 V), acc. to EN61131-2 ≤ 4 A

Actuator supply U2 24 V DC (18...30.2 V), acc. to EN61131-2 ≤ 4 A

Module diagnostics

Communication LED green

Undervoltage sensor supply U1 U ≥ 18 V (LED green), U < 18 V (LED red)

Undervoltage actuator supply U2 U ≥ 18 V (LED green), U < 18 V (LED red)

General data

Dimensions H x W x D 117 x 56 x 47 mm
## Cube67 PD 7/8"

<table>
<thead>
<tr>
<th>Ordering data</th>
<th>Approval</th>
<th>Art. No.</th>
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<tbody>
<tr>
<td>Voltage input</td>
<td>cULus</td>
<td>56955</td>
</tr>
<tr>
<td>Operating voltage</td>
<td>24 V DC (18...30.2 V), acc. to EN61131-2</td>
<td></td>
</tr>
<tr>
<td>Connection technology</td>
<td>7/8&quot; male, 5-pole</td>
<td></td>
</tr>
<tr>
<td>Current load</td>
<td>max. 9 A</td>
<td></td>
</tr>
<tr>
<td>Voltage outputs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Connection technology</td>
<td>M12 female, 6-pole</td>
<td></td>
</tr>
<tr>
<td>Current capacity</td>
<td>max. 4 A</td>
<td></td>
</tr>
<tr>
<td>Short circuit protection</td>
<td>electronically</td>
<td></td>
</tr>
<tr>
<td>Module diagnostics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supply voltage</td>
<td>M12 port-related LED (green)</td>
<td></td>
</tr>
<tr>
<td>Peripheral faults</td>
<td>M12 port-related LED (red)</td>
<td></td>
</tr>
<tr>
<td>General data</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dimensions H x W x D</td>
<td>34.5 x 151 x 30 mm</td>
<td></td>
</tr>
</tbody>
</table>

## Isolation plug connector for Cube67 system cable

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Technical Data</td>
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<tr>
<td>Operating voltage</td>
<td>24 V DC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating current</td>
<td>4 A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Connection</td>
<td>M12 female 6-pole, Han-Brìd® male, 6-pole</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mating cycles Han-Brìd®</td>
<td>≥ 500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dimensions H x W x D</td>
<td>74 x 33.5 x 28.5 mm</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**Accessories**

**Cube67 Power distributor**

**Cube67 PD 7/8"**

**Ordering data**

- **Approval**: cULus
- **Art. No.**: 56955

**Voltage input**

- **Operating voltage**: 24 V DC (18...30.2 V), acc. to EN61131-2
- **Connection technology**: 7/8" male, 5-pole
- **Current load**: max. 9 A

**Voltage outputs**

- **Number**: 4
- **Connection technology**: M12 female, 6-pole
- **Current capacity**: max. 4 A
- **Short circuit protection**: electronically

**Module diagnostics**

- **Supply voltage**: M12 port-related LED (green)
- **Peripheral faults**: M12 port-related LED (red)

**General data**

- **Dimensions H x W x D**: 34.5 x 151 x 30 mm
## ACCESSORIES

### PROFIBUS Repeater

<table>
<thead>
<tr>
<th>MPR67</th>
</tr>
</thead>
<tbody>
<tr>
<td>- 2 segments</td>
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</table>

#### Ordering data

<table>
<thead>
<tr>
<th>Approval</th>
<th>Art. No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>cULus</td>
<td>56960</td>
</tr>
</tbody>
</table>

#### Voltage input

| Operating voltage | 24 V DC (18…30.2 V), acc. to EN61131-2 |
| Module supply | via PIN 4 sensor supply (7/8" power) |
| Current consumption | approx. 80 mA |
| Transfer protocol | PROFIBUS-DP |
| Transfer rate | up to 12 Mbit/s |

#### Status indication

| Communication to fieldbus | green static = OK |
| Internal communication \(U_i\) | static = OK, blinking = no data transfer |

#### Supply voltage

| Sensor voltage | via 7/8" power, max. 9 A |
| Dimensions H x W x D | 36 x 151 x 30 mm |

### PROFIBUS Repeater

<table>
<thead>
<tr>
<th>MPR67+</th>
</tr>
</thead>
<tbody>
<tr>
<td>- 3 segments</td>
</tr>
</tbody>
</table>

#### Ordering data

<table>
<thead>
<tr>
<th>Approval</th>
<th>Art. No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>cULus pending</td>
<td>56965</td>
</tr>
</tbody>
</table>

#### Voltage input

| Operating voltage | 24 V DC (18…30.2 V), acc. to EN61131-2 |
| Module supply | via PIN 4 sensor supply (7/8" power) |
| Current consumption | approx. 80 mA |
| Transfer protocol | PROFIBUS-DP |
| Transfer rate | up to 12 Mbit/s |

#### Status indication

| Communication to fieldbus | green static = OK |
| Internal communication \(U_i\) | static = OK, blinking = no data transfer |

#### Supply voltage

| Sensor voltage | via 7/8" power, max. 9 A |
| Dimensions H x W x D | 36 x 151 x 30 mm |
## ACCESSORIES

### Blind plugs

<table>
<thead>
<tr>
<th>Description</th>
<th>Art. No.</th>
<th>Set Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screw plug M12 plastic</td>
<td>58627</td>
<td>set 10 pieces</td>
</tr>
<tr>
<td>Screw plug M8 plastic</td>
<td>3858627</td>
<td>set 10 pieces</td>
</tr>
<tr>
<td>Screw plug 7/8&quot; plastic</td>
<td>55385</td>
<td>set 1 piece</td>
</tr>
<tr>
<td>Diagnostic blind plug M12</td>
<td>7000-13481-000 0000</td>
<td>set 1 piece</td>
</tr>
<tr>
<td>Bridge PIN 1 to PIN 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Locking cap M12 plastic</td>
<td>56951</td>
<td>set 4 pieces</td>
</tr>
<tr>
<td>Locking cap 7/8&quot; plastic</td>
<td>55384</td>
<td>set 1 piece</td>
</tr>
</tbody>
</table>

### Label accessories

<table>
<thead>
<tr>
<th>Description</th>
<th>Art. No.</th>
<th>Set Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>for Cube67</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Label plate</td>
<td>55318</td>
<td>set 20 pieces</td>
</tr>
<tr>
<td>for Cube20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Label sheet</td>
<td>56113</td>
<td>label sheet with 40 labels</td>
</tr>
</tbody>
</table>

### Ground strap

- **Ground strap**
  - 4 mm² 100 mm for hole M4
  - Art. No. 4000-71001-041 0004

### Cube67 adapter plate

- **for DIN rail mounting**
  - for Cube67 bus node (8xM12)
  - for Cube67 modules (4xM12) or (8xM8)
  - Art. No. 56961, 56962, 56963

### Connection accessories

- **Cube20**
  - (40 terminal points)
    - brown/blue
    - blue/yellow
    - blue/yellow/brown/blue
    - gray/gray/brown/blue
    - gray/gray/yellow/blue
    - yellow/blue/yellow/blue
    - brown/blue/brown/blue
    - 4 x blue/brown
    - 4 x gray
  - Art. No. 56109, 56110, 56111, 56078, 56079, 56080, 56081, 56083, 56084
  - (72 terminal points)
    - art. no. 56082

- **PROFIBUS connector** (for rigid cables)
  - insulation displacement technology (90°)
  - insulation displacement technology (180°) with PD interface, IDC technology (90°)
  - Art. No. 55585, 55584, 55586

- **PROFIBUS connector** (for flexible cables)
  - insulation displacement technology (90°)
  - insulation displacement technology (180°) with PD interface, IDC technology (90°)
  - Art. No. 55587, 55583, 55588

- **PROFIBUS-Stecker M12**
  - with PD interface M12 (90°)
  - Art. No. 7000-99441-0000000

- **Cube20**
  - Coding pieces for terminals
    - set 20 pairs
    - Art. No. 56115
## ACCESSORIES

<table>
<thead>
<tr>
<th>Cube67 Connector</th>
<th>for external actuator supply</th>
<th>Cable length</th>
<th>Art. No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cube67 Connector</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M12 connector</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>female straight, with open ended wires</td>
<td>1.50 m</td>
<td>(0150)</td>
<td>7000-15001-414xxxx</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.00 m</td>
<td>(0200)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.50 m</td>
<td>(0250)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M12 connector</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>female 90°, with open ended wires</td>
<td>1.50 m</td>
<td>(0150)</td>
<td>7000-15021-414xxxx</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.00 m</td>
<td>(0200)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.50 m</td>
<td>(0250)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cube67 Connection cables</strong></td>
<td>for external actuator supply</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M12 connection cable</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>male straight, female straight</td>
<td>0.30 m</td>
<td>(0030)</td>
<td>7000-46001-414xxxx</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.60 m</td>
<td>(0060)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.00 m</td>
<td>(0100)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.50 m</td>
<td>(0150)</td>
<td></td>
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<tr>
<td></td>
<td>2.00 m</td>
<td>(0200)</td>
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</tr>
<tr>
<td>M12 connection cable</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>male 90°, female 90°</td>
<td>0.30 m</td>
<td>(0030)</td>
<td>7000-46021-414xxxx</td>
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</tr>
<tr>
<td></td>
<td>0.60 m</td>
<td>(0060)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.00 m</td>
<td>(0100)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.50 m</td>
<td>(0200)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cube67 Connection cables</strong></td>
<td>Hybrid cable for communication and supply</td>
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<td></td>
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</tr>
<tr>
<td>M12 connection cable</td>
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<td></td>
<td></td>
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<tr>
<td>male straight, female straight</td>
<td>0.15 m</td>
<td>(0015)</td>
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<td></td>
<td>0.30 m</td>
<td>(0030)</td>
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<td></td>
<td>0.60 m</td>
<td>(0060)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.00 m</td>
<td>(0100)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.50 m</td>
<td>(0150)</td>
<td></td>
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</tr>
<tr>
<td>M12 connection cable</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>male 90°, female 90°</td>
<td>0.15 m</td>
<td>(0015)</td>
<td>7000-46021-402xxxx</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.30 m</td>
<td>(0030)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.60 m</td>
<td>(0060)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.00 m</td>
<td>(0100)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.50 m</td>
<td>(0150)</td>
<td></td>
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</tr>
<tr>
<td><strong>Cube67 T-coupler</strong></td>
<td>for actuator supply</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T-coupler M12/M12, female/male</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>straight, A-coded, 6 pole, shielded</td>
<td>–</td>
<td></td>
<td>7000-46101-000 0000</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Terminating resistor</th>
<th>M12</th>
<th>for</th>
<th>Art. No.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>straight, A-coded, 6-pole</td>
<td>Cube67</td>
<td>7000-15041-000 0000</td>
</tr>
<tr>
<td></td>
<td>straight, B-coded, 4 pole</td>
<td>PROFIBUS</td>
<td>7000-14041-000 0000</td>
</tr>
<tr>
<td></td>
<td>straight, A-coded, 5 pole</td>
<td>DeviceNet, CANopen</td>
<td>7000-13461-000 0000</td>
</tr>
<tr>
<td></td>
<td>straight, A-coded, 6-pole</td>
<td>actuator supply from Cube67 + bus node</td>
<td>7000-15051-000 0000</td>
</tr>
</tbody>
</table>

**Note**

Differing cable lengths can be ordered in 0.2 m steps, from 2 m on in 0.5 m steps.

1) suitable for C-tracks, 2) suitable for robots
### ACCESSORIES

<table>
<thead>
<tr>
<th>Connectors</th>
<th>Cable length (xxxx)</th>
<th>Art. No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>M12 connector</td>
<td>male straight, with open ended wires</td>
<td>1.50 m (0150)</td>
</tr>
<tr>
<td></td>
<td>shielded, B-coded</td>
<td>3.00 m (0300)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5.00 m (0500)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7.50 m (0750)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10.00 m (1000)</td>
</tr>
<tr>
<td>M12 connector</td>
<td></td>
<td>7000-14051-841xxxx</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7000-14051-840xxxx</td>
</tr>
</tbody>
</table>

| M12 connector | male 90°, with open ended wires | 1.50 m (0150) |
| | shielded, B-coded | 3.00 m (0300) |
| | | 5.00 m (0500) |
| | | 7.50 m (0750) |
| | | 10.00 m (1000) |
| M12 connector | 7000-14081-841xxxx |
| | | 7000-14081-840xxxx |

| M12 connector | female straight, with open ended wires | 1.50 m (0150) |
| | shielded, B-coded | 3.00 m (0300) |
| | | 5.00 m (0500) |
| | | 7.50 m (0750) |
| | | 10.00 m (1000) |
| M12 connector | 7000-14061-841xxxx |
| | | 7000-14061-840xxxx |

| M12 connector | female 90°, with open ended wires | 1.50 m (0150) |
| | shielded, B-coded | 3.00 m (0300) |
| | | 5.00 m (0500) |
| | | 7.50 m (0750) |
| | | 10.00 m (1000) |
| M12 connector | 7000-14071-841xxxx |
| | | 7000-14071-840xxxx |

<table>
<thead>
<tr>
<th>Connection cables</th>
<th>PROFIBUS</th>
<th>Cable length (xxxx)</th>
<th>Art. No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>M12 connection cable</td>
<td>male straight, female straight</td>
<td>0.30 m (0030)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>shielded, B-coded</td>
<td>0.60 m (0060)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.00 m (0100)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.50 m (0150)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.00 m (0200)</td>
<td></td>
</tr>
<tr>
<td>M12 connection cable</td>
<td>male 90°, female straight</td>
<td>0.30 m (0030)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.60 m (0060)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.00 m (0100)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.50 m (0150)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2.00 m (0200)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Connectors</th>
<th>DeviceNet, CANopen</th>
<th>Cable length (xxxx)</th>
<th>Art. No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>M12 connector</td>
<td>male straight, with open ended wires</td>
<td>1.50 m (0150)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>shielded, A-coded</td>
<td>3.00 m (0300)</td>
<td></td>
</tr>
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<td></td>
<td></td>
<td>5.00 m (0500)</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>7.50 m (0750)</td>
<td></td>
</tr>
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<td></td>
<td>10.00 m (1000)</td>
<td></td>
</tr>
<tr>
<td>M12 connector</td>
<td>male 90°, with open ended wires</td>
<td>1.50 m (0150)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.00 m (0300)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>5.00 m (0500)</td>
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</tr>
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<td></td>
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<td>7.50 m (0750)</td>
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</tr>
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<td></td>
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<td>10.00 m (1000)</td>
<td></td>
</tr>
<tr>
<td>M12 connector</td>
<td>female straight, with open ended wires</td>
<td>1.50 m (0150)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.00 m (0300)</td>
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<td></td>
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<td></td>
</tr>
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<td></td>
<td></td>
<td>7.50 m (0750)</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>10.00 m (1000)</td>
<td></td>
</tr>
</tbody>
</table>

**Note**

Differing cable lengths can be ordered in 0.2 m steps, from 2 m on in 0.5 m steps.

*suitable for C-tracks, **suitable for robots
### ACCESSORIES

<table>
<thead>
<tr>
<th>Connectors</th>
<th>DeviceNet, CANopen</th>
<th>Cable length</th>
<th>Art. No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>M12 connector</td>
<td>female 90°, with open ended wires, shielded, A-coded</td>
<td>1.50 m, 3.00 m, 5.00 m, 7.50 m, 10.00 m</td>
<td>7000-13251-803xxxx</td>
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</table>

<table>
<thead>
<tr>
<th>Connection cables</th>
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<th>Art. No.</th>
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</thead>
<tbody>
<tr>
<td>M12 connection cable</td>
<td>male straight, female straight, shielded, A-coded</td>
<td>1.50 m, 3.00 m, 5.00 m, 7.50 m, 10.00 m</td>
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<table>
<thead>
<tr>
<th>Connectors</th>
<th>PROFINET, EtherNET/IP</th>
<th>Cable length</th>
<th>Art. No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>M12 connector</td>
<td>male straight, with open ended wires, shielded, D-coded</td>
<td>1.50 m, 3.00 m, 5.00 m, 7.50 m, 10.00 m</td>
<td>7000-14541-796xxxx, 7000-14541-798xxxx</td>
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</table>

<table>
<thead>
<tr>
<th>Connectors</th>
<th>PROFINET, EtherNET/IP</th>
<th>Cable length</th>
<th>Art. No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>M12 connector</td>
<td>male 90°, with open ended wires, shielded, D-coded</td>
<td>1.50 m, 3.00 m, 5.00 m, 7.50 m, 10.00 m</td>
<td>7000-14561-796xxxx, 7000-14561-798xxxx</td>
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<table>
<thead>
<tr>
<th>Connection cables</th>
<th>PROFINET, EtherNET/IP</th>
<th>Cable length</th>
<th>Art. No.</th>
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</thead>
<tbody>
<tr>
<td>M12 connection cable</td>
<td>male straight, male straight, shielded, D-coded</td>
<td>1.50 m, 3.00 m, 5.00 m, 7.50 m, 10.00 m</td>
<td>7000-44511-796xxxx, 7000-44511-798xxxx</td>
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<table>
<thead>
<tr>
<th>Connectors</th>
<th>PROFINET, EtherNET/IP</th>
<th>Cable length</th>
<th>Art. No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>M12-RJ45 connection cable</td>
<td>male 90°, male 90°, shielded, D-coded</td>
<td>1.50 m, 3.00 m, 5.00 m, 7.50 m, 10.00 m</td>
<td>7000-44711-796xxxx</td>
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<table>
<thead>
<tr>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Differing cable lengths can be ordered in 0.2 m steps, from 2 m on in 0.5 m steps.</td>
</tr>
<tr>
<td>1) suitable for C-tracks, 2) suitable for robots, 3) suitable for C-tracks, jacket color violet</td>
</tr>
</tbody>
</table>
## Accessories

### Connection Cable

<table>
<thead>
<tr>
<th>Connection Cable</th>
<th>PROFINET, EtherNET/IP</th>
<th>Cable Length</th>
<th>Art. No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>RJ45-RJ45 connection cable</td>
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<td>(xxxx)</td>
<td>7000-99711-796xxxx</td>
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<tr>
<td>male straight, male straight</td>
<td>1.50 m</td>
<td>(0150)</td>
<td>7000-99711-796xxxx</td>
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<tr>
<td>shielded</td>
<td>3.00 m</td>
<td>(0300)</td>
<td>7000-99711-796xxxx</td>
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<td></td>
<td>5.00 m</td>
<td>(0500)</td>
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<td></td>
<td>7.50 m</td>
<td>(0750)</td>
<td>7000-99711-796xxxx</td>
</tr>
<tr>
<td></td>
<td>10.00 m</td>
<td>(1000)</td>
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### 7/8” Plug Connector

<table>
<thead>
<tr>
<th>Power Supply</th>
<th>Cable Length</th>
<th>Art. No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/8” round plug connector</td>
<td>(xxxx)</td>
<td>7000-78021-961XXXX</td>
</tr>
<tr>
<td>female straight, with open ended wires, PUR,</td>
<td>1.50 m</td>
<td>(0150)</td>
</tr>
<tr>
<td>wire cross section 1.5 mm²</td>
<td>3.00 m</td>
<td>(0300)</td>
</tr>
<tr>
<td></td>
<td>5.00 m</td>
<td>(0500)</td>
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<tr>
<td></td>
<td>7.50 m</td>
<td>(0750)</td>
</tr>
<tr>
<td></td>
<td>10.00 m</td>
<td>(1000)</td>
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</tbody>
</table>

### 7/8” Connection Cables

<table>
<thead>
<tr>
<th>Power Supply</th>
<th>Cable Length</th>
<th>Art. No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/8” connection cable</td>
<td>(xxxx)</td>
<td>7000-50021-961XXXX</td>
</tr>
<tr>
<td>male straight, female straight, PUR</td>
<td>0.30 m</td>
<td>(0030)</td>
</tr>
<tr>
<td>wire cross section 1.5 mm²</td>
<td>0.60 m</td>
<td>(0060)</td>
</tr>
<tr>
<td></td>
<td>1.00 m</td>
<td>(0100)</td>
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<tr>
<td></td>
<td>1.50 m</td>
<td>(0150)</td>
</tr>
<tr>
<td></td>
<td>2.00 m</td>
<td>(0200)</td>
</tr>
</tbody>
</table>

| 7/8” connection cable                    | (xxxx)       | 7000-50051-961XXXX |
| male 90°, female 90°, PUR                | 0.30 m      | (0030)       | 7000-50051-961XXXX |
| wire cross section 1.5 mm²               | 0.60 m      | (0060)       | 7000-50051-961XXXX |
|                                          | 1.00 m      | (0100)       | 7000-50051-965XXXX |
|                                          | 1.50 m      | (0150)       | 7000-50051-965XXXX |
|                                          | 2.00 m      | (0200)       | 7000-50051-965XXXX |

### 7/8” T-coupler

<table>
<thead>
<tr>
<th>Power Supply</th>
<th>Art. No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-coupler 7/8”, male straight, female straight 5-pole</td>
<td>7000-50061-000000</td>
</tr>
</tbody>
</table>

### Note

Differing cable lengths can be ordered in 0.2 m steps, from 2 m on in 0.5 m steps.

[1] suitable for C-tracks
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