

# Accessories

## Modular bus covers

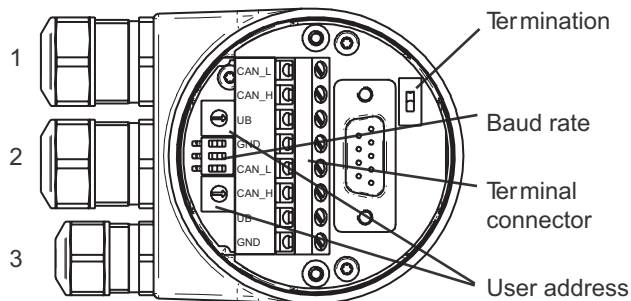
### CANopen®

#### Shaft / end shaft encoders

able gland



#### View inside bus cover



Cable: 1, 2 =  $\varnothing$ 8-10 mm (-40-85 °C) /  $\varnothing$ 5-9 mm (-25-85 °C),  
Cable: 3 =  $\varnothing$ 4.5-6 mm

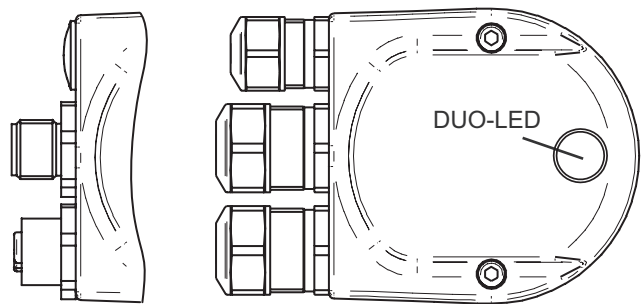
#### Features - CANopen®

|                    |  |
|--------------------|--|
| Bus protocol       | CANopen®   |
| Device profile     | CANopen® - CiA DSP 406, V 3.0 (Device Class 2, CAN 2.0B)   |
| Operating mode     | Event-triggered<br>Time-triggered<br>Rotary-requested<br>Sync (cyclic)<br>Sync (acyclic)   |
| Preset             | Parameter for setting the encoder to a requested position value assigned to a defined shaft position of the system. The offset of encoder zero point and mechanical zero point is stored in the encoder. |
| Rotating direction | Parameter for defining the rotating direction in which there have to be ascending or descending position values.   |
| Scaling            | Parameter defining the steps per turn as well as the total resolution.   |
| Diagnosis          | The encoder supports the following error warnings:<br>- Position and parameter error<br>- Lithium battery voltage control (Multiturn)  |
| Node ID monitoring | Default: 50 kbit/s, Node ID 1  |

#### Part number

|                   |  |
|-------------------|--|
| <b>Z 163.5P32</b> | CANopen/Cable gland  |
| <b>Z 163.5PA2</b> | CANopen/Connector M12  |
| <b>10140832</b>   | CANopen/Cable gland  |
| <b>10147370</b>   | CANopen/Cable gland in stainless steel V2A without DUO-LED   |
| <b>10167265</b>   | CANopen/Connector M12  |
| <b>10167266</b>   | CANopen/Connector M12 in stainless steel V2A without DUO-LED |
| <b>11048898</b>   | CANopen/ATEX cable gland                                     |

#### Bus cover

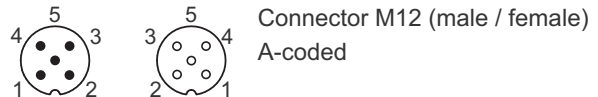


Connector M12 C

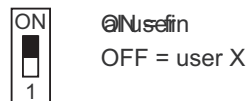
#### Terminal assignment

|       |       |                     |
|-------|-------|---------------------|
| Pin 1 | GND   | Ground connection   |
| Pin 2 | 5V    | 5V supply voltage   |
| Pin 3 | -     | -                   |
| Pin 4 | CAN_H | CAN (dominant High) |
| Pin 5 | CAN_L | CAN (dominant Low)  |

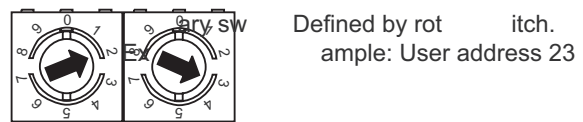
Terminals of the same significance are internally connected and identical in their functions. Max. load on the internal terminal connections UB-UB and GND-GND is 1 A each.



#### Termination



#### User address (identifier)



#### Baud rate

| Baud rate  | Dip switch position |     |     |
|------------|---------------------|-----|-----|
|            | 1                   | 2   | 3   |
| 10 kbit/s  | OFF                 | OFF | OFF |
| 20 kbit/s  | OFF                 | OFF | ON  |
| 50 kbit/s  | OFF                 | ON  | OFF |
| 125 kbit/s | OFF                 | ON  | ON  |
| 250 kbit/s | ON                  | OFF | OFF |
| 500 kbit/s | ON                  | OFF | ON  |
| 800 kbit/s | ON                  | ON  | OFF |
| 1 MBit/s   | ON                  | ON  | ON  |

If the user address is 00 the baud rate and Node ID are programmable via CAN bus.

# Accessories

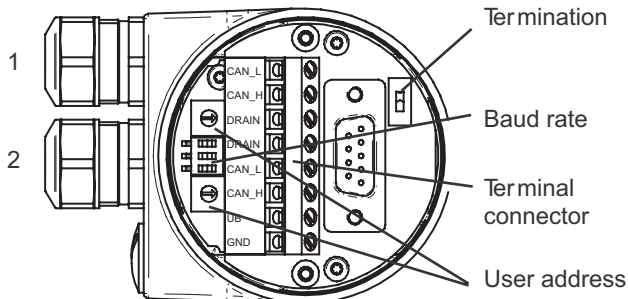
## Modular bus covers

### DeviceNet



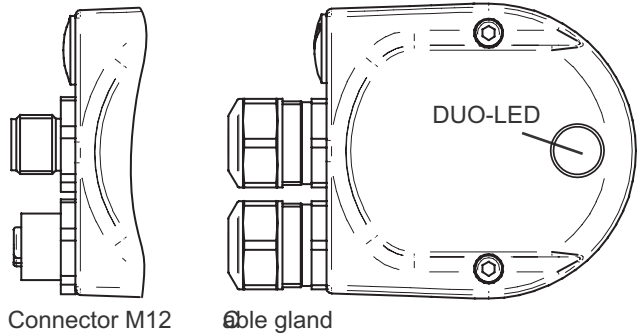
## Shaft / end shaft encoders

### View inside bus cover



Cable: 1, 2 = ø8-10 mm (-40-85 °C) / ø5-9 mm (-25-85 °C)

### Bus cover



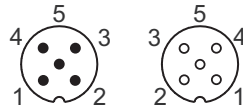
### Features - DeviceNet

|                    |  |
|--------------------|--|
| Bus protocol       | DeviceNet  |
| Device profile     | Device Profile for Encoders V 1.0  |
| Operating modes    | I/O-Polling<br>Cyclic<br>Change of State   |
| Preset             | Parameter for setting the encoder to a requested position value assigned to a defined shaft position of the system. The offset of encoder zero point and mechanical zero point is stored in the encoder. |
| Rotating direction | Parameter for defining the rotating direction in which there have to be ascending or descending position values.   |
| Scaling            | Parameter defining the steps per turn as well as the total resolution.   |
| Diagnosis          | The encoder supports the following error warnings:<br>- Position and parameter error<br>- Lithium battery voltage control (Multiturn)  |
| Default            | 125 kBit/s, M  |

### Terminal assignment

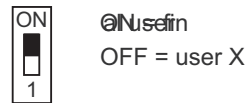
|       |           |                     |
|-------|-----------|---------------------|
| Pin 1 | DRAIN     | Shield              |
| Pin 2 | 5V supply | 0.30 VDC            |
| Pin 3 | GND       | Ground connection   |
| Pin 4 | CAN_H     | CAN (dominant High) |
| Pin 5 | CAN_L     | CAN (dominant Low)  |

Terminals of the same significance are internally connected and identical in their functions. Max. load on the internal terminal connections UB-UB and GND-GND is 1 A each.

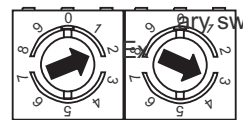


Connector M12 (male / female), A-coded

### Termination



### User address (identifier)



Defined by rotating. Example: User address 23

### Part number

|            |  |
|------------|--|
| Z 163.8P22 | DeviceNet/Cable gland  |
| Z 163.8PA2 | DeviceNet/Connector M12  |
| 10140833   | DeviceNet/Cable gland  |
| 10147371   | DeviceNet/Cable gland in stainless steel V2A without DUO-LED   |
| 10167269   | DeviceNet/Connector M12  |
| 10167273   | DeviceNet/Connector M12 in stainless steel V2A without DUO-LED |

### Baud rate

| Baud rate   | Dip switch position |     |     |
|-------------|---------------------|-----|-----|
|             | 1                   | 2   | 3   |
| 125 kBit/s  | X                   | OFF | OFF |
| 250 kBit/s  | X                   | OFF | ON  |
| 500 kBit/s  | X                   | ON  | OFF |
| 125 kBit/s* | X                   | ON  | ON  |

X = w/o function

\* = This switch position is not defined, therefore internally set to default 125 kBit/s.

# Accessories

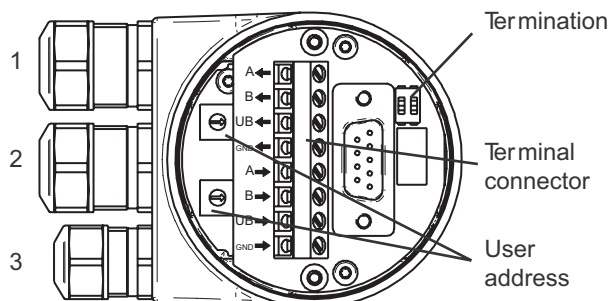
## Modular bus covers

### Profibus-DPV0



### Shaft / end shaft encoders

#### View inside bus cover



Cable: 1, 2 =  $\varnothing 8-10$  mm (-40-85 °C) /  $\varnothing 5-9$  mm (-25-85 °C),  
Cable: 3 =  $\varnothing 4.5-6$  mm

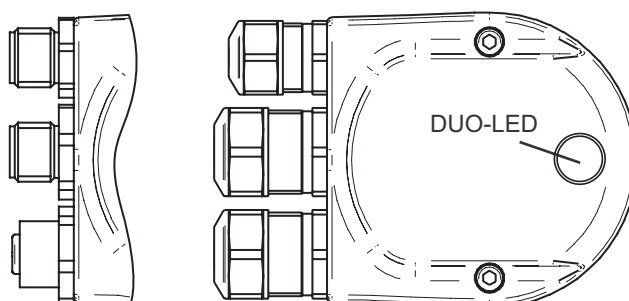
#### Features - Profibus-DPV0

|                      |   |
|----------------------|---|
| Bus protocol         | Profibus-DPV0   |
| Device profile       | Devices C1 and 2  |
| Cyclic data exchange | Communication in line with DPV0   |
| Input data           | Position value. In addition optionally speed signal parametering (output of current rotation speed).                                      |
| Output data          | Preset  |
| Preset               | Parameter for setting the encoder to a requested position value assigned to a defined shaft position of the system. Storage non-volatile. |
| Rotating direction   | Parameter for defining the rotating direction in which there have to be ascending or descending position values.                          |
| Scaling              | Parameter defining the steps per turn as well as the total resolution.  |
| Diagnosis            | The encoder supports the following error warnings:<br>- Position and parameter error<br>- Lithium battery voltage control (Multiturn)     |
| Default              | User address 00<br>Termination OFF  |

#### Part number

|                   |   |
|-------------------|---|
| <b>Z 163.3P32</b> | Profibus-DPV0/Cable gland                                       |
| <b>Z 163.3PA2</b> | Profibus-DPV0/Connector M12                                     |
| <b>10140831</b>   | Profibus-DPV0/Cable gland                                       |
| <b>10147369</b>   | Profibus-DPV0/Cable gland stainless steel V2A without DUO-LED   |
| <b>10167254</b>   | Profibus-DPV0/Connector M12                                     |
| <b>10167256</b>   | Profibus-DPV0/Connector M12 stainless steel V2A without DUO-LED |
| <b>11048897</b>   | Profibus-DPV0/ATEX cable gland                                  |

#### Bus cover



Connector M12 Cable gland

#### Terminal assignment

##### Connector M12 (male), A-coded

|       |     |                   |            |
|-------|-----|-------------------|------------|
| Pin 1 | UB  | Supply voltage    | 0...30 VDC |
| Pin 3 | GND | Ground connection |            |



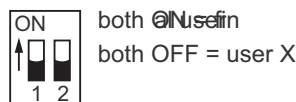
##### Connector M12 (male / female), B-coded

|       |   |                  |            |
|-------|---|------------------|------------|
| Pin 2 | A | Active data line | leg        |
| Pin 4 | B | Data line        | Positive d |

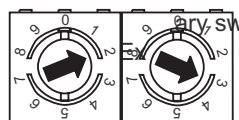


Terminals of the same significance are internally connected and identical in their functions. Max. load on the internal terminal connections UB-UB and GND-GND is 1 A each.

#### Termination



#### User address (identifier)



Defined by rotation. Example: User address 23

# Accessories

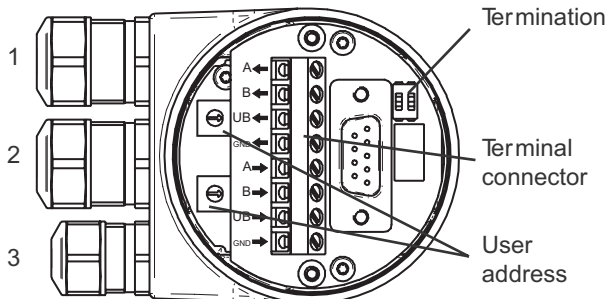
## Modular bus covers

### Profibus-DPV2



## Shaft / end shaft encoders

### View inside bus cover



Cable: 1, 2 =  $\varnothing$ 8-10 mm (-40-85 °C) /  $\varnothing$ 5-9 mm (-25-85 °C),  
Cable: 3 =  $\varnothing$ 4.5-6 mm

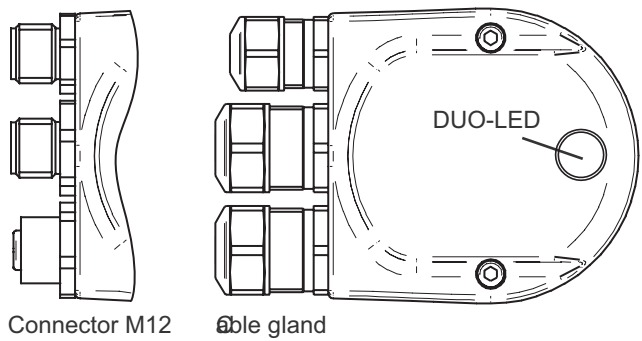
### Features - Profibus-DPV2

|                       |   |
|-----------------------|---|
| Bus protocol          | Profibus-DPV2   |
| Device profile        | Devices 3 and 4   |
| Cyclic data exchange  | Communication by synchronous clock (IsoM) in line with DPV2<br>application: DVI (clock function)  |
| Acyclic data exchange | I&M (Identification and Maintenance) Functions  |
| Input data            | Position value. In addition optionally speed signal parametering (output of current rotation speed).                                      |
| Output data           | Preset  |
| Preset                | Parameter for setting the encoder to a requested position value assigned to a defined shaft position of the system. Storage non-volatile. |
| Rotating direction    | Parameter for defining the rotating direction in which there have to be ascending or descending position values.                          |
| Scaling               | Parameter defining the steps per turn as well as the total resolution.  |
| Diagnosis             | The encoder supports the following error warnings:<br>- Position and parameter error<br>- Lithium battery voltage control (Multiturn)     |
| Default               | User address 00<br>Termination OFF  |

### Part number

|                   |   |
|-------------------|---|
| <b>Z 163.3V32</b> | Profibus-DPV2/Cable gland                                       |
| <b>Z 163.3VA2</b> | Profibus-DPV2/Connector M12                                     |
| <b>10167260</b>   | Profibus-DPV2/Cable gland                                       |
| <b>10167262</b>   | Profibus-DPV2/Cable gland stainless steel V2A without DUO-LED   |
| <b>10167281</b>   | Profibus-DPV2/Connector M12                                     |
| <b>10167263</b>   | Profibus-DPV2/Connector M12 stainless steel V2A without DUO-LED |

### Bus cover



### Terminal assignment

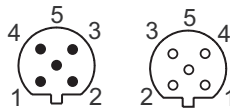
#### Connector M12 (male), A-coded

|       |     |                   |            |
|-------|-----|-------------------|------------|
| Pin 1 | UB  | Supply voltage    | 0...30 VDC |
| Pin 3 | GND | Ground connection | UB         |



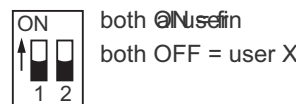
#### Connector M12 (male / female), B-coded

|       |   |                  |            |
|-------|---|------------------|------------|
| Pin 2 | A | Active data line | leg        |
| Pin 4 | B | Data line        | Positive d |

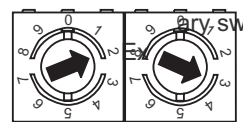


Terminals of the same significance are internally connected and identical in their functions. Max. load on the internal terminal connections UB-UB and GND-GND is 1 A each.

### Termination



### User address (identifier)



Defined by rotary switch.  
Example: User address 23

# Accessories

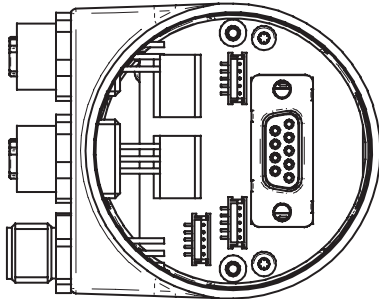
## Modular bus covers

### EtherCAT

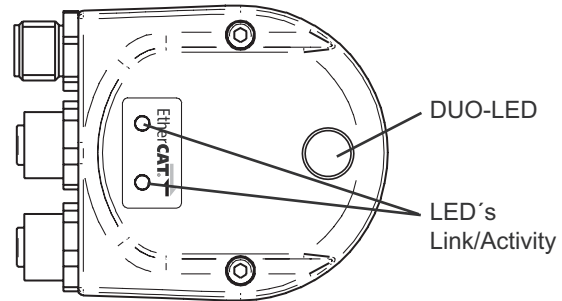
#### Shaft / end shaft encoders



#### View inside bus cover



#### Bus cover



#### Features - EtherCAT

|                 |   |
|-----------------|---|
| Bus protocol    | EtherCAT  |
| Device profile  | CoE (CANopen over EtherCAT)<br>DSP406   |
| Features        | <ul style="list-style-type: none"> <li>- 100 MBaud Ethernet</li> <li>- Automatic address designation</li> <li>- Distributed clock for precise synchronization. Optional device configuration as „Reference Clock“</li> <li>- Default 10 byte PDO, configurable 4 byte PDO / 2 byte PDO for shorter cycle times</li> </ul> |
| Process data    | Position value<br>Warnings<br>System time   |
| Cycle times     | Depending on sensor type, enabled scaling functionality and length of PDO.<br>Min. cycle time: 62,5 µs  |
| Synchronization | 0x00 Free Run, not synchronized<br>0x03 Distributed clocks DC, synchronized with SYNCO/SYNC1 Event  |

#### Part number

**Z 163.EPA6** Bus cover EtherCAT

#### Terminal assignment

##### Voltage supply

| Terminal | Assigned     | Significance |
|----------|--------------|--------------|
| Pin 1    | UBage supply | Volt         |
| Pin 2    | N.C.assigned | Not          |
| Pin 3    | GND          | Ground       |
| Pin 4    | N.C.assigned | Not          |



1 x Connector M12 (male), A-coded

##### EtherCAT (data line)

| Terminal | Assigned                  | Significance |
|----------|---------------------------|--------------|
| Pin 1    | TxD+ / Transmission data+ |              |
| Pin 2    | RxD+ / Receiving d        |              |
| Pin 3    | TxD- / Transmission data- |              |
| Pin 4    | RxD- / Receiving d        |              |



2 x Connector M12 (female), D-coded

#### Accessories

|                  |  |
|------------------|--|
| <b>Z 185.E05</b> | Connector M12, on both sides, CuZn nickel-plated/TPU, 5 m cable PUR (data line)    |
| <b>Z 185.P05</b> | Connector M12, CuZn nickel-plated/TPU, 5 m cable PUR, 360° screen (voltage supply) |

# Accessories

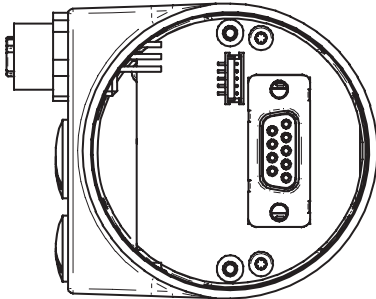
## Modular bus covers

### PoE - Power over EtherCAT

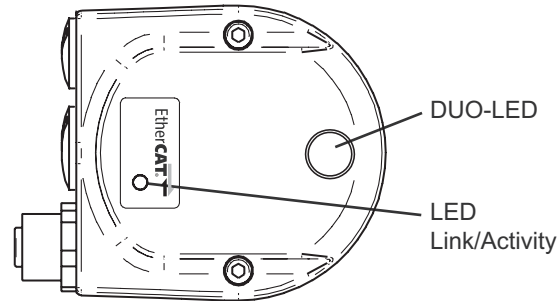


#### Shaft / end shaft encoders

##### View inside bus cover



##### Bus cover



##### Features - Power over EtherCAT

|                    |   |
|--------------------|---|
| Bus protocol       | EtherCAT  |
| Device profile     | CoE (CANopen over EtherCAT)<br>DSP406   |
| Features           | <ul style="list-style-type: none"> <li>- 100 MBaud Ethernet</li> <li>- Automatic address designation</li> <li>- Distributed clock for precise synchronization. Optional device configuration as „Reference Clock“</li> <li>- Default 10 byte PDO, configurable 4 byte PDO / 2 byte PDO for shorter cycle times</li> </ul> |
| Process data       | Position value<br>Warnings<br>System time   |
| Cycle times        | Depending on sensor type, enabled scaling functionality and length of PDO.<br>Min. cycle time: 62,5 µs  |
| Synchronization    | 0x00 Free Run, not synchronized<br>0x03 Distributed clocks DC, synchronized with SYNC0/SYNC1 Event  |
| Function PoE       | compliant to standard IEEE Std 802.3af  |
| Excess temperature | Protection against excess temperature   |
| PoE mains unit     | electrically insulated  |
| Hot-Connect        | Connecting/disconnecting the device during operation  |

##### Technical data - Power over EtherCAT

|                     |                 |
|---------------------|-----------------|
| Capacity class      | 1 (max. 4 W)    |
| Supply voltage      | 44...57 VDC     |
| Current consumption | ≤50 mA (48 VDC) |
| Cable length        | ax. 100 m       |

##### Part number

**Z 163.EEA2** Bus cover PoE - Power over EtherCAT

##### Terminal assignment

| Terminal | Assigned                | Significance |
|----------|-------------------------|--------------|
| Pin 1    | TxD+ Transmission data+ | Receiving d  |
| Pin 2    | RxD+ Receiving d        | Receiving d  |
| Pin 3    | TxD- Transmission data- | Receiving d  |
| Pin 4    | RxD- Receiving d        | Receiving d  |



2 x Connector M12 (female), D-coded

Power supply of PSE module (Power Sourcing Equipment) is also by these lines.

##### Accessories

**Z 185.E05** Ethernet cable, connector M12 on both sides with 5 m cable

# Accessories

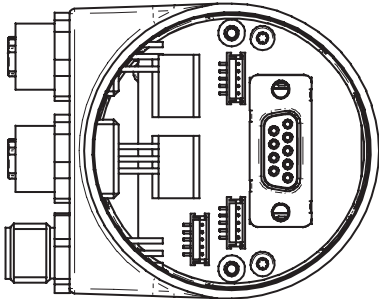
## Modular bus covers

### PROFINET

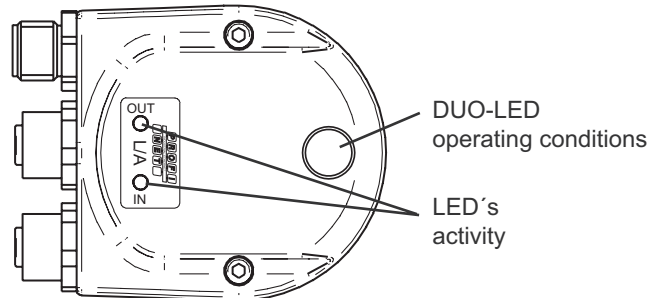


## Shaft / end shaft encoders

### View inside bus cover



### Bus cover



### Features - PROFINET

|                |  |
|----------------|--|
| Bus protocol   | PROFINET   |
| Device profile | Encoder Profile PNO 3.162  |
| Features       | - 100 MBaud Fast Ethernet<br>- Automatic address designation<br>- Realtime (RT) Class 1, IRT Class 2,<br>IRT Class 3 |
| Process data   | Position value 32 bit input data   |

### Part number

**Z 163.3EA2** Bus cover PROFINET

### Terminal assignment

#### Voltage supply

| Terminal | Assigned                | Significance |
|----------|-------------------------|--------------|
| Pin 1    | U <sub>Age supply</sub> | Volt         |
| Pin 2    | N.C.assigned            | Not          |
| Pin 3    | GND                     | Ground       |
| Pin 4    | N.C.assigned            | Not          |



1 x Connector M12 (male), A-coded

#### PROFINET (data line)

| Terminal | Assigned                    | Significance |
|----------|-----------------------------|--------------|
| Pin 1    | TxD <sub>transmission</sub> | data+        |
| Pin 2    | RxD <sub>receiving</sub>    | data-        |
| Pin 3    | TxD <sub>transmission</sub> | data-        |
| Pin 4    | RxD <sub>receiving</sub>    | data+        |



2 x Connector M12 (female), D-coded

### Accessories

|                  |  |
|------------------|--|
| <b>Z 185.E05</b> | Ethernet cable, connector M12 on both sides with 5 m cable (data line) |
| <b>Z 185.P05</b> | Connector M12 with 5 m cable, 360° screen (current line)               |

# Accessories

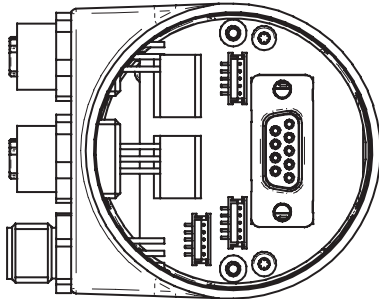
## Modular bus covers

### EtherNet/IP

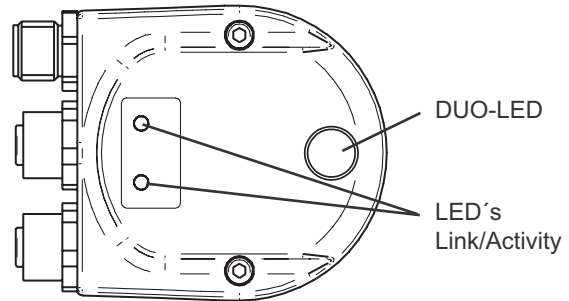


## Shaft / end shaft encoders

### View inside bus cover



### Bus cover



### Features - EtherNet/IP

|                |  |
|----------------|--|
| Bus protocol   | EtherNet/IP  |
| Device profile | Encoder Device, type 22hex, according to CIP specification   |
| Features       | <ul style="list-style-type: none"> <li>- 100 MBaud Fast Ethernet</li> <li>- IP address programmable</li> <li>- Automatic IP address designation (DHCP)</li> <li>- Rotation direction, resolution, total resolution and preset are programmable according to CIP specification</li> </ul> |
| Process data   | Position value, Warning Flag, Alarmflag<br>Assembly Instances 1 and 2 according to CIP specification   |

### Part number

**Z 163.8EA2** Bus cover EtherNet/IP

### Terminal assignment

#### Voltage supply

| Terminal | Assigned                | Significance |
|----------|-------------------------|--------------|
| Pin 1    | U <sub>Age</sub> supply | Volt         |
| Pin 2    | N.C.assigned            | Not          |
| Pin 3    | GND                     | Ground       |
| Pin 4    | N.C.assigned            | Not          |



1 x Connector M12 (male), A-coded

#### EtherNet/IP (data line)

| Terminal | Assigned                      | Significance |
|----------|-------------------------------|--------------|
| Pin 1    | TxD <sub>+</sub> transmission | data+        |
| Pin 2    | RxD <sub>+</sub>              | Receiving d  |
| Pin 3    | TxD <sub>-</sub> transmission | data-        |
| Pin 4    | RxD <sub>-</sub>              | Receiving d  |



2 x Connector M12 (female), D-coded

### Accessories

|                  |  |
|------------------|--|
| <b>Z 185.E05</b> | Ethernet cable, connector M12 on both sides with 5 m cable (data line) |
| <b>Z 185.P05</b> | Connector M12 with 5 m cable, 360° screen (current line)               |



# Accessories

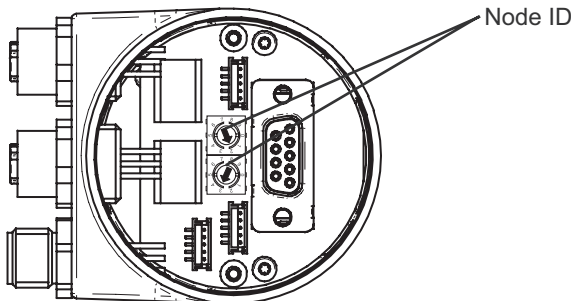
## Modular bus covers

### POWERLINK

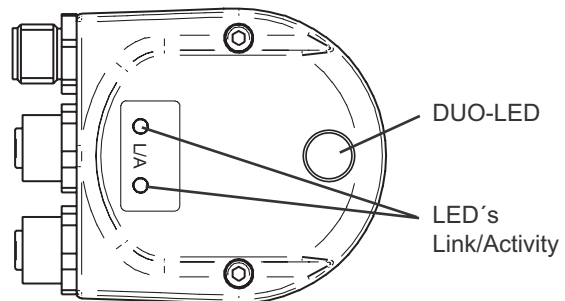
ETHERNET   
**POWERLINK**

## Shaft / end shaft encoders

### View inside bus cover



### Bus cover



### Features - POWERLINK

|                |   |
|----------------|---|
| Bus protocol   | Ethernet/IP 2.0   |
| Device profile | DSP406  |
| Address        | Free configurable via software or rotary switch<br>Standard node 1<br>Standard IP 192.168.100.1   |
| Features       | <ul style="list-style-type: none"> <li>- 100 MBaud Ethernet</li> <li>- Response times &lt;2 µs</li> <li>- Cycle times &lt;200 µs</li> <li>- Jitter from Start of Cycle (SoC) to position detection &lt;200 ns</li> <li>- Daisy Chain is possible</li> <li>- Rotation direction, resolution, total resolution and preset are programmable</li> </ul> |
| Process data   | Position value  |

### Part number

**Z 163.5EA2** Bus cover POWERLINK

### Accessories

|                  |  |
|------------------|--|
| <b>Z 185.E05</b> | Ethernet cable, connector M12 on both sides with 5 m cable (data line) |
| <b>Z 185.P05</b> | Connector M12 with 5 m cable, 360° screen (current line)               |
| <b>133852</b>    | Connector M12 straight with 2 m cable, (current line)                  |
| <b>133853</b>    | Connector M12 straight with 5 m cable, (current line)                  |
| <b>135247</b>    | Connector M12 straight with 10 m cable, (current line)                 |
| <b>160565</b>    | Ethernet cable, connector M12 on both sides with 5 m cable (data line) |

### Terminal assignment

#### Voltage supply

| Terminal | Assigned     | Significance |
|----------|--------------|--------------|
| Pin 1    | UBase supply | Volt         |
| Pin 2    | N.C.assigned | Not          |
| Pin 3    | GND          | Ground       |
| Pin 4    | N.C.assigned | Not          |



1 x Connector M12 (male), A-coded

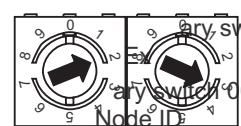
#### POWERLINK (data line)

| Terminal | Assigned         | Significance |
|----------|------------------|--------------|
| Pin 1    | TxD+transmission | data+        |
| Pin 2    | RxD+receiving    | data         |
| Pin 3    | TxD-transmission | data-        |
| Pin 4    | RxD-receiving    | data         |



2 x Connector M12 (female), D-coded

### Node ID



Defined by rotary switch. Example: User address 23.

00 the rotary switch are programmable via bus.

# Accessories

## Modular bus covers

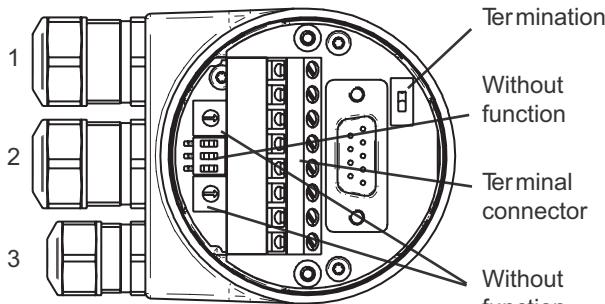
### SAEJ1939

#### Shaft / end shaft encoders

able gland

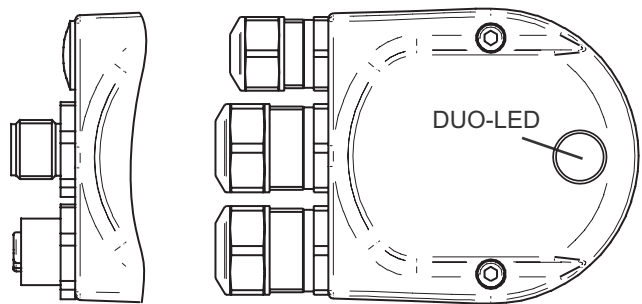
#### SAEJ1939

##### View inside bus cover



Cable: 1, 2 =  $\varnothing 8 \dots 10$  mm / 3 =  $\varnothing 4.5 \dots 6$  mm

##### Bus cover



##### Features - SAE J1939

|                    |  |
|--------------------|--|
| Bus protocol       | SAE J1939  |
| Device profile     | Industry Group 5, Industrial process control   |
| Operating mode     | Time-triggered, On Request   |
| Preset             | Parameter for setting the encoder to a requested position value assigned to a defined shaft position of the system. The offset of encoder zero point and mechanical zero point is stored in the encoder. |
| Rotating direction | Parameter for defining the rotating direction in which there have to be ascending or descending position values.   |
| Scaling            | Parameter defining the steps per turn as well as the total resolution.   |
| Diagnosis          | The encoder supports the following error warnings:<br>- Position and parameter error<br>- Lithium battery voltage control (Multiturn)  |
| Node ID monitoring | heartbeat, Nodeguard, ringing  |
| Cycle time         | Repetition rate for data: position, speed, diagnostic  |

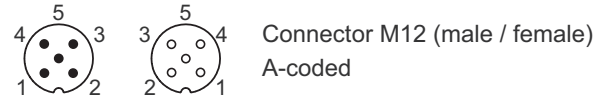
##### Part number

|            |                        |
|------------|------------------------|
| Z 163.5B32 | SAEJ1939/Cable gland   |
| Z 163.5BA2 | SAEJ1939/Connector M12 |

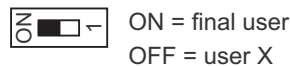
##### Terminal assignment

|       |       |                            |
|-------|-------|----------------------------|
| Pin 1 | GND   | Ground connection          |
| Pin 2 | UB    | Supply voltage 10...30 VDC |
| Pin 3 | -     | -                          |
| Pin 4 | CAN_H | CAN (dominant High)        |
| Pin 5 | CAN_L | CAN (dominant Low)         |

Terminals of the same significance are internally connected and identical in their functions. Max. load on the internal terminal connections UB-UB and GND-GND is 1 A each.



##### Termination



##### J1939 Definitions (Default settings)

|  |                                     |
|--|-------------------------------------|
| Baud rate                                      | 250 kbit/s                          |
| Address  | 172 (0xAC)                          |
| Arbitrary address capable                      | 1                                   |
| Industry Group                                 | 5                                   |
| Vehicle System                                 | 0                                   |
| System Instance, ECU instance                  | 0                                   |
| Function                                       | 142 (0x8E)                          |
| Function instance                              | 0                                   |
| Manufacturer                                   | 343 (0x157)                         |
| Identity Number                                | Device-individual                   |
| PGN 65450: encoder position, speed, diagnostic | Priority B, Broadcast communication |
| Transmission repetition rate                   | 50 ms                               |
| Data length                                    | 8 bytes                             |
| PDU format PF                                  | 255 (0xFF)                          |
| PDU specific PS                                | 0xAA                                |
| Default priority                               | 6                                   |
| Parameter group number PGN                     | 65450 (0xFFAA)                      |