

## Control and signal devices



### Simple assembly concept

- by screw-mounting
- geared to 40 mm profile rail
- with a powerful magnet for variable applications

### 2-colored lighted (red/green)



(figure similar)



| Figure                                                                              | Switches/Buttons     | Lighted    | Montage                    | Article No.   |
|-------------------------------------------------------------------------------------|----------------------|------------|----------------------------|---------------|
|    | E-STOP button module | red/green  | 2 holes for screw mounting | <b>BW2773</b> |
|                                                                                     | E-STOP button module | red/green  | retaining clip             | <b>BW2529</b> |
|                                                                                     | E-STOP button module | red/green  | magnet                     | <b>BW2709</b> |
|                                                                                     | E-STOP button module | no         | retaining clip             | <b>BW2585</b> |
|  | light button module  | red/green  | 2 holes for screw mounting | <b>BW3159</b> |
|                                                                                     | light button module  | red/green  | retaining clip             | <b>BW2528</b> |
|                                                                                     | light button module  | red/green  | magnet                     | <b>BW2708</b> |
|                                                                                     | light button module  | white/blue | 2 holes for screw mounting | <b>BW3474</b> |

# Control and signal devices



| Article no.                          | BW2709                                                                                                                                                                                               | BW2773                  | BW2529         | BW2585 |
|--------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|----------------|--------|
| General data                         |                                                                                                                                                                                                      |                         |                |        |
| Device type                          | Safety E-STOP button module ASi                                                                                                                                                                      |                         |                |        |
| Connection                           |                                                                                                                                                                                                      |                         |                |        |
| Connections                          | M12                                                                                                                                                                                                  |                         |                |        |
| ASi                                  |                                                                                                                                                                                                      |                         |                |        |
| Profile                              | S-7.B.0, ID1=F                                                                                                                                                                                       |                         |                |        |
| Address                              | 1 single slave                                                                                                                                                                                       |                         |                |        |
| Required Master Profile              | ≥M3                                                                                                                                                                                                  |                         |                |        |
| Since ASi specification              | 2.1                                                                                                                                                                                                  |                         |                |        |
| Operating voltage                    | 18 ... 31,6 V                                                                                                                                                                                        |                         |                |        |
| Max. current consumption             | <50 mA                                                                                                                                                                                               |                         |                |        |
| Display                              |                                                                                                                                                                                                      |                         |                |        |
| LED (green)                          | see table<br>"BW2529 / BW2709 / BW2773 operating options"                                                                                                                                            |                         |                | –      |
| LED (red)                            | see table<br>"BW2529 / BW2709 / BW2773 operating options"                                                                                                                                            |                         |                | –      |
| Robustness                           |                                                                                                                                                                                                      |                         |                |        |
| Robustness                           | –                                                                                                                                                                                                    |                         |                |        |
| Shock resistance                     | –                                                                                                                                                                                                    | acc. EN 60068-2-27      |                |        |
| Vibration resistance                 | –                                                                                                                                                                                                    | acc. EN 60068-2-6       |                |        |
| Environmental stability              | acc. EN 60068-2                                                                                                                                                                                      |                         |                |        |
| UL-specifications (UL508)            |                                                                                                                                                                                                      |                         |                |        |
| External protection                  | An isolated PELV/SELV voltage source of ≤30 V <sub>DC</sub> has to be protected by a 3 A maximum over current protection. Over current protection is not required when a Class 2 source is employed. |                         |                |        |
| In general                           | UL mark does not provide UL certification for any functional safety rating or aspects of the above devices.                                                                                          |                         |                |        |
| Environment                          |                                                                                                                                                                                                      |                         |                |        |
| Applied standards                    | EN ISO 13849-1 PLe Kat 4<br>EN ISO 13849-2<br>EN 62061 SIL 3<br>EN ISO 13850<br>EN ISO 60947-5-1<br>EN ISO 60947-5-5<br>EN 61000-6-2<br>EN 61000-6-4<br>EN 60529<br>EN 62026-2                       |                         |                |        |
| Operating altitude                   | max. 2000 m                                                                                                                                                                                          |                         |                |        |
| Ambient temperature                  | 0 °C ... +70 °C                                                                                                                                                                                      |                         |                |        |
| Storage temperature                  | -25 °C ... +85 °C                                                                                                                                                                                    |                         |                |        |
| Pollution degree                     | 2                                                                                                                                                                                                    |                         |                |        |
| Protection category                  | IP54 (in unlocked state)                                                                                                                                                                             |                         |                |        |
| Installation depth                   | –                                                                                                                                                                                                    |                         |                |        |
| Mounting options                     | magnet                                                                                                                                                                                               | rail mounting or screws | retaining clip |        |
| Contacts                             | gold contacts, for 100% reliable switching                                                                                                                                                           |                         |                |        |
| Contact assignment                   | 2 normally closed                                                                                                                                                                                    |                         |                |        |
| Shock resistance min.                | 100 N                                                                                                                                                                                                |                         |                |        |
| Mushroom diameter                    | 30 mm                                                                                                                                                                                                |                         |                |        |
| Life cycle min.<br>(switching cycle) | 50.000                                                                                                                                                                                               |                         |                |        |
| Dimensions<br>(W / H / D in mm)      | 123 / 42 / 66                                                                                                                                                                                        | 123 / 42 / 62           |                |        |

# Control and signal devices



| Article no.                       | BW3159                                                                                                                                                                                               | BW2528         | BW2708        | BW3474                  |
|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|---------------|-------------------------|
| General data                      |                                                                                                                                                                                                      |                |               |                         |
| Device type                       | ASi pushbutton module                                                                                                                                                                                |                |               |                         |
| Connection                        |                                                                                                                                                                                                      |                |               |                         |
| Connections                       | M12                                                                                                                                                                                                  |                |               |                         |
| ASi                               |                                                                                                                                                                                                      |                |               |                         |
| Profile                           | S-7.A.7, ID1=7 (fixed)                                                                                                                                                                               |                |               |                         |
| Address                           | 1 AB slave                                                                                                                                                                                           |                |               |                         |
| Required Master Profile           | ≥M4                                                                                                                                                                                                  |                |               |                         |
| Since ASi specification           | 3.0                                                                                                                                                                                                  |                |               |                         |
| Operating voltage                 | 18 ... 31,6 V                                                                                                                                                                                        |                |               |                         |
| Max. current consumption          | < 80 mA                                                                                                                                                                                              |                |               |                         |
| Display                           |                                                                                                                                                                                                      |                |               |                         |
| LED (green)                       | D0 / D2                                                                                                                                                                                              |                |               | –                       |
| LED (red)                         | D1 / D3                                                                                                                                                                                              |                |               | –                       |
| LED (white)                       | –                                                                                                                                                                                                    |                |               | DO2                     |
| LED (blue)                        | –                                                                                                                                                                                                    |                |               | DO0                     |
| Robustness                        |                                                                                                                                                                                                      |                |               |                         |
| Robustness                        | –                                                                                                                                                                                                    |                |               |                         |
| Shock resistance                  | acc. EN 60068-2-27                                                                                                                                                                                   |                | –             | acc. EN 60068-2-27      |
| Vibration resistance              | acc. EN 60068-2-6                                                                                                                                                                                    |                | –             | acc. EN 60068-2-6       |
| Environmental stability           | acc. EN 60068-2                                                                                                                                                                                      |                |               |                         |
| UL-specifications (UL508)         |                                                                                                                                                                                                      |                |               |                         |
| External protection               | An isolated PELV/SELV voltage source of ≤30 V <sub>DC</sub> has to be protected by a 3 A maximum over current protection. Over current protection is not required when a Class 2 source is employed. |                |               |                         |
| In general                        | UL mark does not provide UL certification for any functional safety rating or aspects of the above devices.                                                                                          |                |               |                         |
| Environment                       |                                                                                                                                                                                                      |                |               |                         |
| Applied standards                 | EN 61 000-6-2<br>EN 61 000-6-4<br>EN 62026-2<br>EN 60529                                                                                                                                             |                |               |                         |
| Operating altitude                | max. 2000 m                                                                                                                                                                                          |                |               |                         |
| Ambient temperature               | 0 °C ... +70 °C                                                                                                                                                                                      |                |               |                         |
| Storage temperature               | -25 °C ... +85 °C                                                                                                                                                                                    |                |               |                         |
| Protection category (EN 60529)    | IP54                                                                                                                                                                                                 |                |               |                         |
| Installation depth                | –                                                                                                                                                                                                    |                |               |                         |
| Mounting options                  | rail mounting or screws                                                                                                                                                                              | retaining clip | magnet        | rail mounting or screws |
| Contacts                          | gold contacts, for 100% reliable switching                                                                                                                                                           |                |               |                         |
| Contact assignment                | normally opened contact, per button 1 normally opened contact                                                                                                                                        |                |               |                         |
| Shock resistance min.             | 100 N                                                                                                                                                                                                |                |               |                         |
| Mushroom diameter                 | –                                                                                                                                                                                                    |                |               |                         |
| Life cycle min. (switching cycle) | 1.000.000                                                                                                                                                                                            |                |               |                         |
| Dimensions (W / H / D in mm)      | 123 / 42 / 38                                                                                                                                                                                        |                | 123 / 42 / 42 | 123 / 42 / 38           |

## BW2529 / BW2709 / BW2773 operating options

|                     | Parameter bit    |                  | LED display |          |           |                        |
|---------------------|------------------|------------------|-------------|----------|-----------|------------------------|
|                     | P1               | P0               | green       | red      | yellow    | yellow flashing (1 Hz) |
| Operation by switch | 1 <sup>(1)</sup> | 1 <sup>(1)</sup> | unlocked    | operated | –         | no ASi communication   |
|                     | 0                | 1                | operated    | unlocked |           |                        |
| Operation via ASi   | x                | 0                | DO1         | DO0      | DO0 + DO1 | no ASi communication   |

(1) default

# Control and signal devices



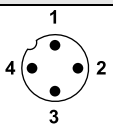
## BW2528, BW2708, BW3159:

|              |                                                                                   | DO3 | DO2   | DO1 | DO0   | DI1 | DI0 |
|--------------|-----------------------------------------------------------------------------------|-----|-------|-----|-------|-----|-----|
| Button above |  | red | green | –   | –     | •   | –   |
| Button below |                                                                                   | –   | –     | red | green | –   | •   |

## BW3474:

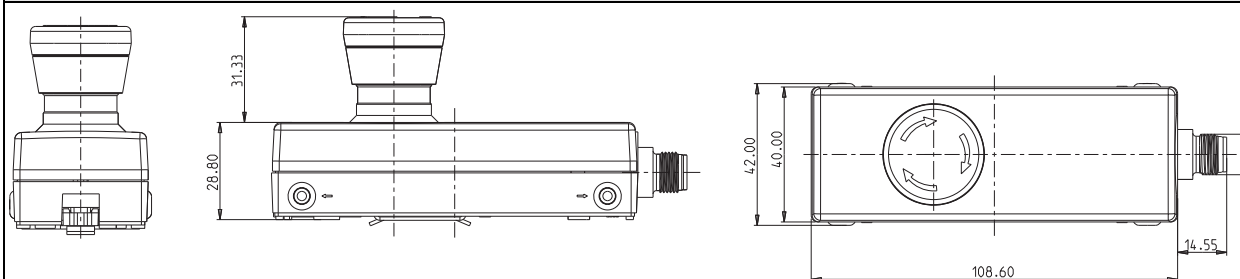
|              |                                                                                   | DO3 | DO2   | DO1 | DO0  | DI1 | DI0 |
|--------------|-----------------------------------------------------------------------------------|-----|-------|-----|------|-----|-----|
| Button above |  | –   | white | –   | –    | •   | –   |
| Button below |                                                                                   | –   | –     | –   | blue | –   | •   |

## Pin assignment

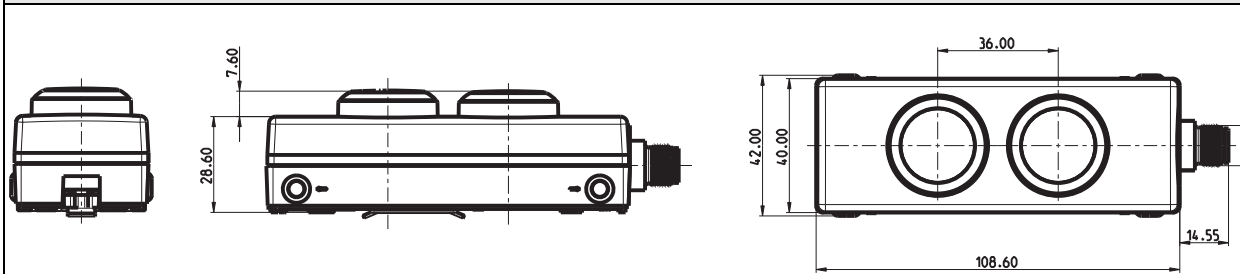
| Connections                                                             |      |      |      |      |                                                                                       |
|-------------------------------------------------------------------------|------|------|------|------|---------------------------------------------------------------------------------------|
| Article no.                                                             | Pin1 | Pin2 | Pin3 | Pin4 |                                                                                       |
| BW2528, BW2529,<br>BW2585, BW2708,<br>BW2709, BW2773,<br>BW3159, BW3474 | ASI+ | n.c. | ASI- | n.c. |  |

## Dimensions:

### BW2529, BW2585, BW2709, BW2773



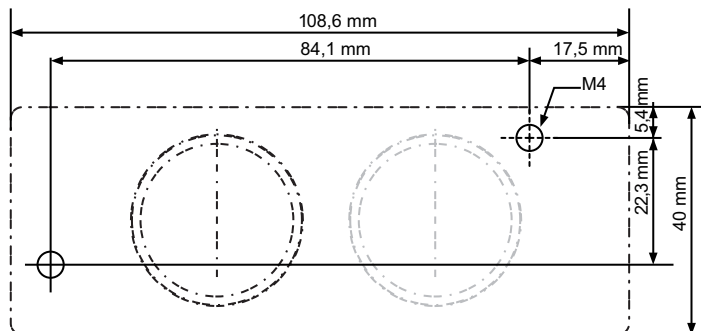
### BW2528, BW2708, BW3159



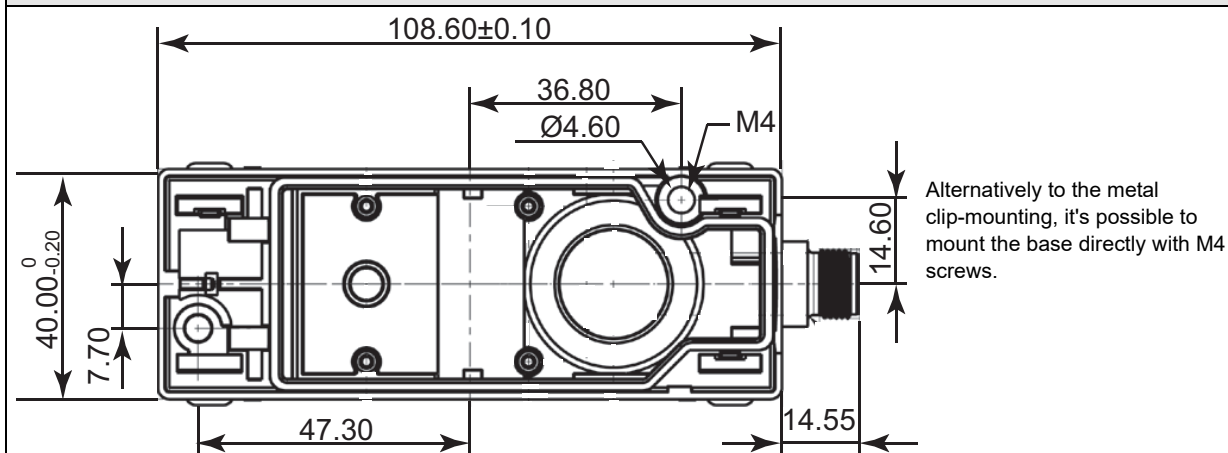
## Control and signal devices

### Drilling pattern for direct mounting via screws

BW2773, BW3159, BW3474



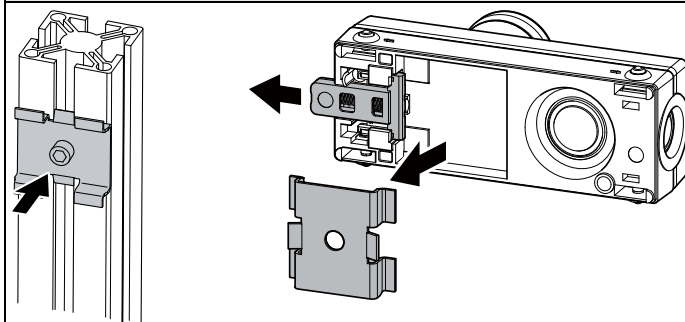
BW2528



### Image for rail mounting:

BW2528, BW2529, BW2585, BW2773

(BW2529 and BW2585: Mounting only about retaining clip!)



### Accessories:

- Passive Distributor ASi, housing depth 30 mm, IP67, connection for 1 x ASi profile cable to 1 x M12 socket, 5 poles (article no. BWU1239)
- Passive Distributor ASi/AUX, housing depth 28 mm, IP67, connections for 1 x ASi and 1 x AUX profile cables to 1 x M12 socket, 5 poles (article no. BW3803)



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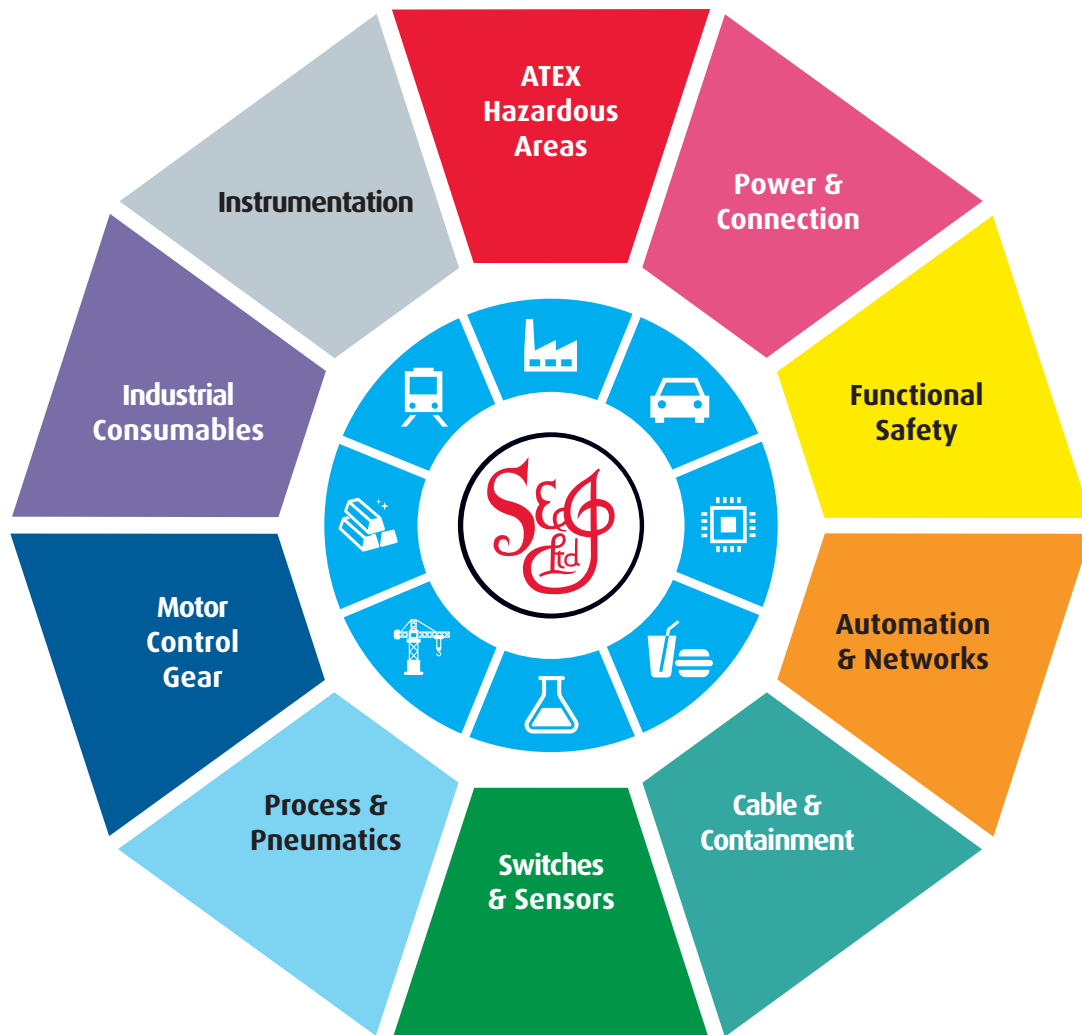
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