

# Product datasheet

Specifications



## black Ø40 mushroom pushbutton head Ø22 latching turn release

Local distributor code: 237184391    ZB5AS52

EAN Code : 3389110906844

### Main

|                               |                                      |
|-------------------------------|--------------------------------------|
| Range of product              | Harmony XB5                          |
| Product or component type     | Head for non-illuminated push-button |
| Device short name             | ZB5                                  |
| Bezel material                | Dark grey plastic                    |
| Head type                     | Standard                             |
| Mounting diameter             | 22 mm                                |
| Sale per indivisible quantity | 1                                    |
| Shape of signaling unit head  | Round                                |
| Type of operator              | latching                             |
| Reset                         | Turn to release                      |
| Operator profile              | Black mushroom Ø 40 mm, unmarked     |
| Device presentation           | Basic element                        |

### Complementary

|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CAD overall width           | 40 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| CAD overall height          | 40 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| CAD overall depth           | 57 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Net weight                  | 0.044 kg                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Mechanical durability       | 500000 cycles                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Station name                | XALD 1 cut-out<br>XALK 1 cut-out                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Electrical composition code | C11 for <3 contacts using single blocks in front mounting<br>C15 for <1 contacts using single blocks in front mounting<br>SF1 for <3 contacts using single blocks in front mounting<br>SR1 for <3 contacts using single blocks in rear mounting<br>C7 for <4 contacts using single blocks in front mounting<br>C8 for <4 contacts using single and double blocks in front mounting<br>C10 for <4 contacts using single and double blocks in front mounting |
| Compatibility code          | ZB5                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

### Environment

|                                     |             |
|-------------------------------------|-------------|
| Protective treatment                | TH          |
| Ambient air temperature for storage | -40...70 °C |

|                                       |                                                                                                                                                                                |
|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ambient air temperature for operation | -40...70 °C                                                                                                                                                                    |
| Overvoltage category                  | Class II conforming to IEC 60536                                                                                                                                               |
| IP degree of protection               | IP66 conforming to IEC 60529<br>IP67<br>IP69<br>IP69K                                                                                                                          |
| NEMA degree of protection             | NEMA 13<br>NEMA 4X                                                                                                                                                             |
| Resistance to high pressure washer    | 7000000 Pa at 55 °C, distance : 0.1 m                                                                                                                                          |
| IK degree of protection               | IK03 conforming to IEC 50102                                                                                                                                                   |
| Standards                             | EN/IEC 60947-5-1<br>CSA C22.2 No 14<br>EN/IEC 60947-5-4<br>EN/IEC 60947-1<br>JIS C8201-5-1<br>UL 508<br>JIS C8201-1                                                            |
| Product certifications                | GL<br>DNV<br>LROS (Lloyds register of shipping)<br>UL listed<br>CSA<br>BV                                                                                                      |
| Vibration resistance                  | 5 gn (f= 2...500 Hz) conforming to IEC 60068-2-6                                                                                                                               |
| Shock resistance                      | 30 gn (duration = 18 ms) for half sine wave acceleration conforming to IEC 60068-2-27<br>50 gn (duration = 11 ms) for half sine wave acceleration conforming to IEC 60068-2-27 |

### Packing Units

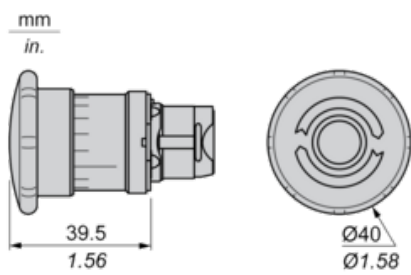
|                              |          |
|------------------------------|----------|
| Unit Type of Package 1       | PCE      |
| Number of Units in Package 1 | 1        |
| Package 1 Height             | 4.5 cm   |
| Package 1 Width              | 5.3 cm   |
| Package 1 Length             | 8.8 cm   |
| Package 1 Weight             | 42.0 g   |
| Unit Type of Package 2       | S03      |
| Number of Units in Package 2 | 100      |
| Package 2 Height             | 30.0 cm  |
| Package 2 Width              | 30.0 cm  |
| Package 2 Length             | 40.0 cm  |
| Package 2 Weight             | 4.643 kg |

### Offer Sustainability

|                            |                                                                                                   |
|----------------------------|---------------------------------------------------------------------------------------------------|
| Sustainable offer status   | Green Premium product                                                                             |
| REACH Regulation           | <a href="#">REACH Declaration</a>                                                                 |
| REACH free of SVHC         | Yes                                                                                               |
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope)<br><a href="#">EU RoHS Declaration</a> |
| Toxic heavy metal free     | Yes                                                                                               |
| Mercury free               | Yes                                                                                               |
| China RoHS Regulation      | <a href="#">China RoHS declaration</a>                                                            |
| RoHS exemption information | <a href="#">Yes</a>                                                                               |

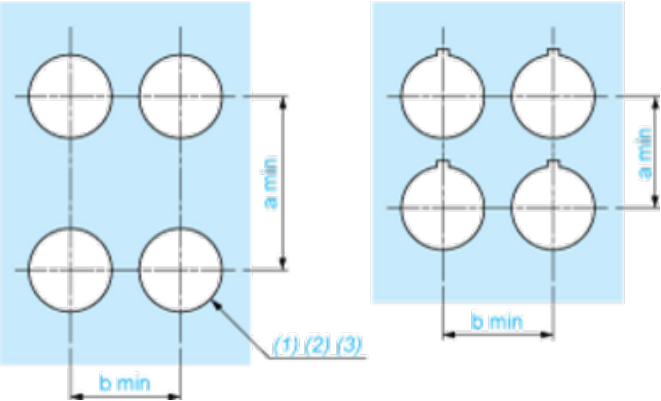
|                             |                                               |
|-----------------------------|-----------------------------------------------|
| Environmental Disclosure    | <a href="#">Product Environmental Profile</a> |
| Circularity Profile         | <a href="#">End of Life Information</a>       |
| <b>Contractual warranty</b> |                                               |
| Warranty                    | 18 months                                     |

Dimensions



Panel Cut-out for Pushbuttons, Switches and Pilot Lights (Finished Holes, Ready for Installation)

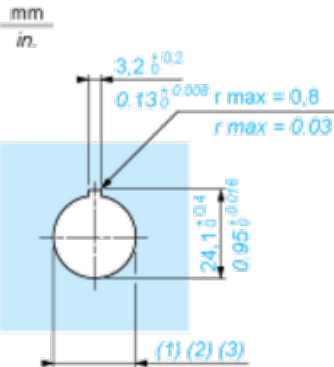
Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



- (1) Diameter on finished panel or support
- (2) For selector switches and Emergency stop buttons, use of an anti-rotation plate type ZB5AZ902 is recommended.
- (3) Ø22.5 mm recommended ( $\text{Ø}22.3 \text{ }_0^{+0.4}$ ) / Ø0.89 in. recommended ( $\text{Ø}0.88 \text{ in. }_0^{+0.016}$ )

| Connections                                   | a in mm | a in in. | b in mm | b in in. |
|-----------------------------------------------|---------|----------|---------|----------|
| By screw clamp terminals or plug-in connector | 40      | 1.57     | 30      | 1.18     |
| By Faston connectors                          | 45      | 1.77     | 32      | 1.26     |
| On printed circuit board                      | 30      | 1.18     | 30      | 1.18     |

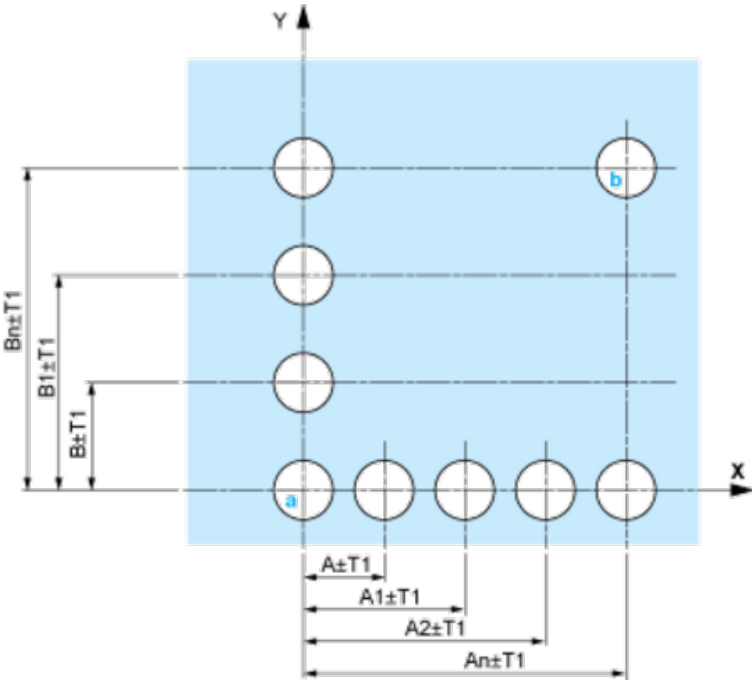
Detail of Lug Recess



- (1) Diameter on finished panel or support
- (2) For selector switches and Emergency stop buttons, use of an anti-rotation plate type ZB5AZ902 is recommended.
- (3) Ø22.5 mm recommended ( $\text{Ø}22.3 \text{ }_0^{+0.4}$ ) / Ø0.89 in. recommended ( $\text{Ø}0.88 \text{ in. }_0^{+0.016}$ )

Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

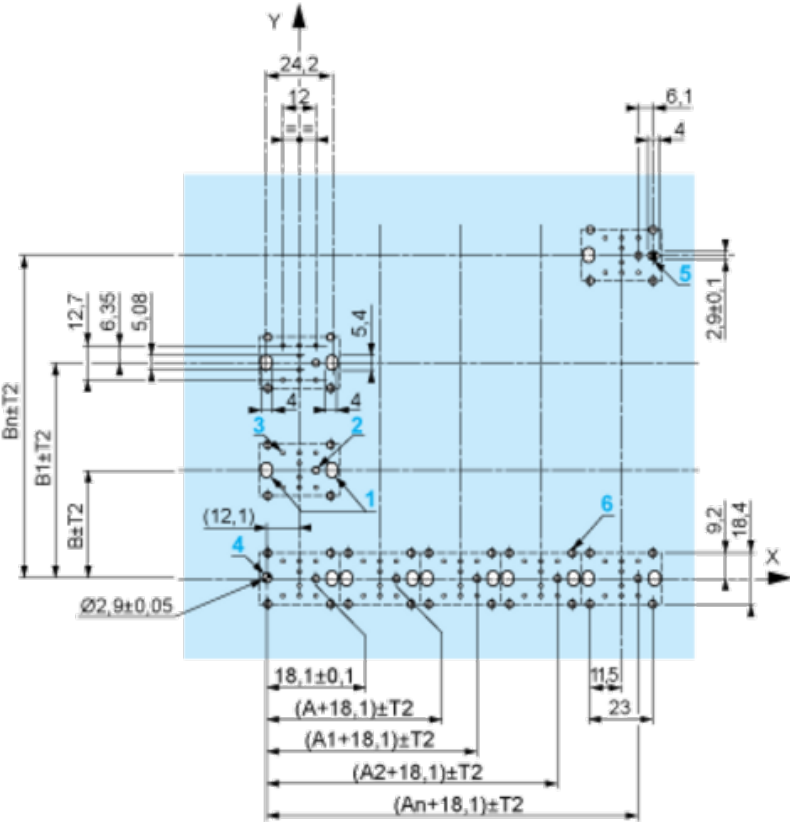
Panel Cut-outs (Viewed from Installer's Side)



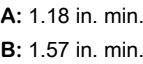
A: 30 mm min. / 1.18 in. min.  
B: 40 mm min. / 1.57 in. min.

Printed Circuit Board Cut-outs (Viewed from Electrical Block Side)

Dimensions in mm



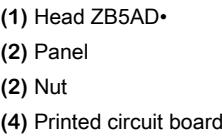
A: 30 mm min.  
B: 40 mm min.  
Dimensions in in.



The cumulative tolerance must not exceed 0.3 mm / 0.012 in.:  $T_1 + T_2 = 0.3 \text{ mm max.}$

- Minimum thickness of circuit board: 1.6 mm / 0.06 in.
- Cut-out diameter: 22.4 mm  $\pm$  0.1 / 0.88 in.  $\pm$  0.004
- Orientation of body/fixing collar ZB5AZ009:  $\pm 2^{\circ}30'$  (excluding cut-outs marked **a** and **b**).
- Tightening torque of screws ZBZ006: 0.6 N.m (5.3 lbf.in) max.
- Allow for one ZB5AZ079 fixing collar/pillar and its fixing screws:
  - every 90 mm / 3.54 in. horizontally (X), and 120 mm / 4.72 in. vertically (Y).
  - with each selector switch head (ZB5AD•, ZB5AJ•, ZB5AG•).

The fixing centers marked **a** and **b** are diagonally opposed and must align with those marked **4** and **5**.



**Mounting of Adapter (Socket) ZBZ01•**

- 1 2 elongated holes for ZBZ006 screw access
- 2 1 hole Ø 2.4 mm ± 0.05 / 0.09 in. ± 0.002 for centring adapter ZBZ01•
- 3 8 × Ø 1.2 mm / 0.05 in. holes
- 4 1 hole Ø 2.9 mm ± 0.05 / 0.11 in. ± 0.002, for aligning the printed circuit board (with cut-out marked **a**)
- 5 1 elongated hole for aligning the printed circuit board (with cut-out marked **b**)
- 6 4 holes Ø 2.4 mm / 0.09 in. for clipping in adapter ZBZ01•

Dimensions An + 18.1 relate to the Ø 2.4 mm ± 0.05 / 0.09 in. ± 0.002 holes for centring adapter ZBZ01•.

Electrical Composition Corresponding to Code C7

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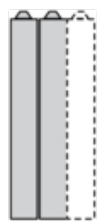
Electrical Compositions Corresponding to Code C8

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Electrical Compositions Corresponding to Code C10

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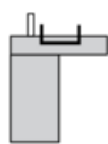
Electrical Composition Corresponding to Codes C9, C11, SF1 and SR1

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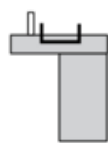


Electrical Composition Corresponding to Code C15

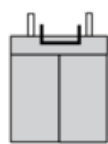
1 N/O



1 N/C



1 N/O + N/C or 1 N/O + N/O or 1 N/C + N/C



Legend

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Single contact



Double contact



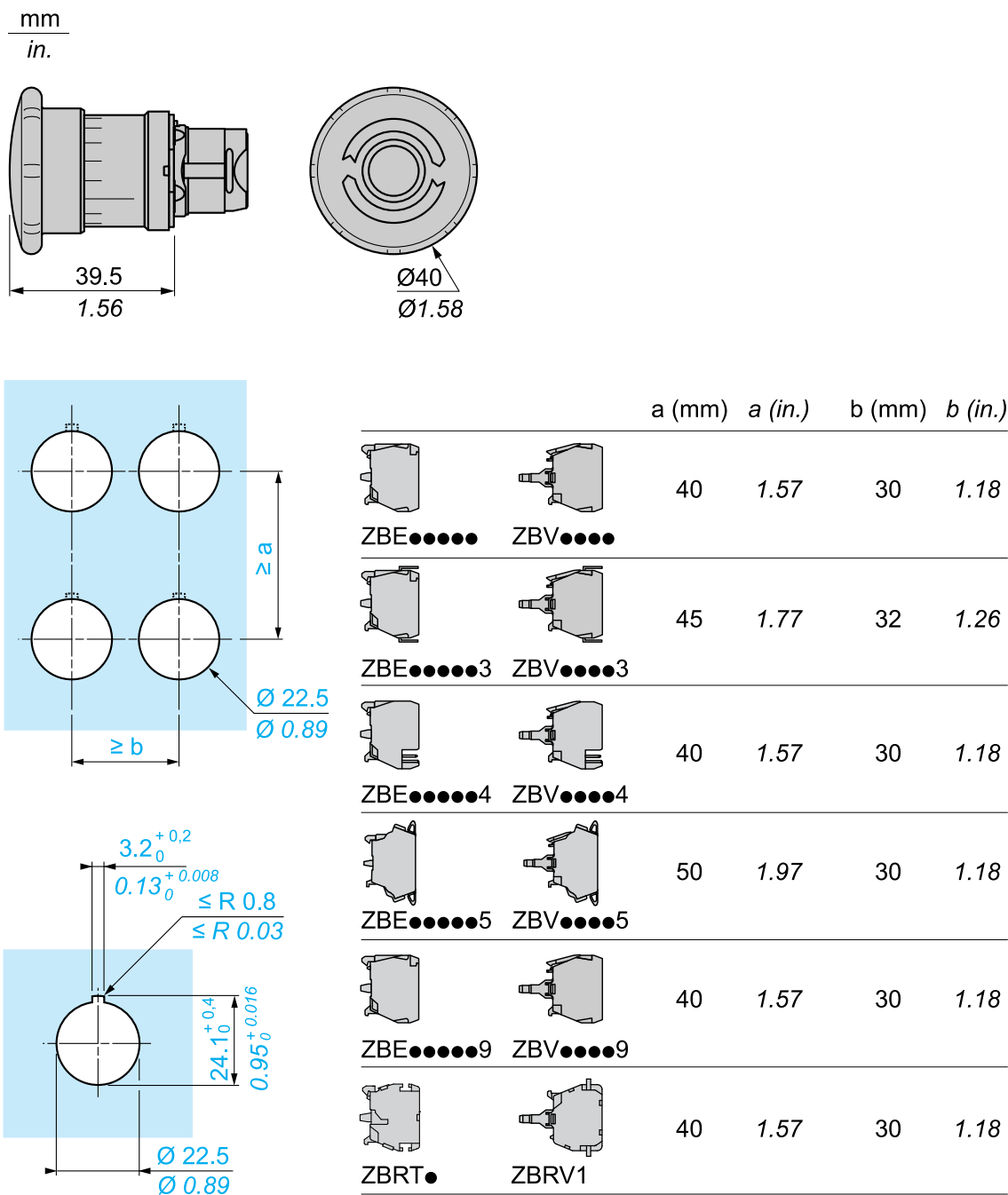
Light block



Possible location



Dimensions



Recommended replacement(s)