

## ZB5AT24

Head for non illuminated push button, Harmony XB5, black mushroom 30mm, 22mm, latching, push-pull to release, unmarked



### 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             | 0.87 in (22 mm)                      |
| Sale per indivisible quantity | 1                                    |
| Shape of signaling unit head  | Round                                |
| Type of operator              | latching                             |
| Reset                         | Push-pull                            |
| Operator profile              | Black mushroom Ø 30 mm, unmarked     |
| Device presentation           | Basic element                        |

### Complementary

|                             |                                                                                                                                                                                                                                          |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CAD overall width           | 1.18 in (30 mm)                                                                                                                                                                                                                          |
| CAD overall height          | 1.18 in (30 mm)                                                                                                                                                                                                                          |
| CAD overall depth           | 2.20 in (56 mm)                                                                                                                                                                                                                          |
| Net Weight                  | 0.10 lb(US) (0.044 kg)                                                                                                                                                                                                                   |
| Mechanical durability       | 500000 cycles                                                                                                                                                                                                                            |
| Station name                | XALD 1...5 cut-outs<br>XALK 2...5 cut-outs                                                                                                                                                                                               |
| Electrical composition code | C11 3 single front mounting<br>C15 1 single front mounting<br>SF1 3 single front mounting<br>SR1 3 single rear mounting<br>C7 4 single front mounting<br>C8 4 single and double front mounting<br>C10 4 single and double front mounting |
| Compatibility code          | ZB5                                                                                                                                                                                                                                      |

### Environment

|                                       |                                               |
|---------------------------------------|-----------------------------------------------|
| Protective treatment                  | TH                                            |
| Ambient Air Temperature for Storage   | -40...158 °F (-40...70 °C)                    |
| Ambient Air Temperature for Operation | -40...158 °F (-40...70 °C)                    |
| Overvoltage category                  | Class II IEC 60536                            |
| IP degree of protection               | IP66 IEC 60529<br>IP67<br>IP69<br>IP69K       |
| NEMA degree of protection             | NEMA 13<br>NEMA 4X                            |
| Resistance to high pressure washer    | 1015.26 psi (7000000 Pa) 131 °F (55 °C) 0.1 m |
| IK degree of protection               | IK03 IEC 50102                                |

|                        |                                                                                                                     |
|------------------------|---------------------------------------------------------------------------------------------------------------------|
| Standards              | CSA C22.2 No 14<br>EN/IEC 60947-1<br>EN/IEC 60947-5-4<br>UL 508<br>EN/IEC 60947-5-1<br>JIS C8201-5-1<br>JIS C8201-1 |
| Product Certifications | UL Listed<br>GL<br>CSA<br>BV<br>DNV<br>LROS (Lloyds register of shipping)                                           |
| Vibration resistance   | 5 gn 2...500 Hz)IEC 60068-2-6                                                                                       |
| Shock resistance       | 30 gn 18 ms) half sine wave acceleration IEC 60068-2-27<br>50 gn 11 ms) half sine wave acceleration IEC 60068-2-27  |

## Ordering and shipping details

|                   |                                     |
|-------------------|-------------------------------------|
| Category          | 22467-PUSHBUTTONS,22MM(PLASTIC) NEW |
| Discount Schedule | CS2                                 |
| GTIN              | 3389110906981                       |
| Returnability     | No                                  |
| Country of origin | CZ                                  |

## Packing Units

|                              |                        |
|------------------------------|------------------------|
| Unit Type of Package 1       | PCE                    |
| Number of Units in Package 1 | 1                      |
| Package 1 Height             | 1.65 in (4.2 cm)       |
| Package 1 Width              | 2.13 in (5.4 cm)       |
| Package 1 Length             | 3.31 in (8.4 cm)       |
| Package 1 Weight             | 1.62 oz (46.0 g)       |
| Unit Type of Package 2       | S02                    |
| Number of Units in Package 2 | 42                     |
| Package 2 Height             | 5.91 in (15.0 cm)      |
| Package 2 Width              | 11.81 in (30.0 cm)     |
| Package 2 Length             | 15.75 in (40.0 cm)     |
| Package 2 Weight             | 5.06 lb(US) (2.297 kg) |

## Offer Sustainability

|                            |                                                                                                                                                                                                                                                                                       |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status   | Green Premium product                                                                                                                                                                                                                                                                 |
| California proposition 65  | WARNING: This product can expose you to chemicals including: Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> |
| 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) <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>                                                                                                                                                                                                                                               |

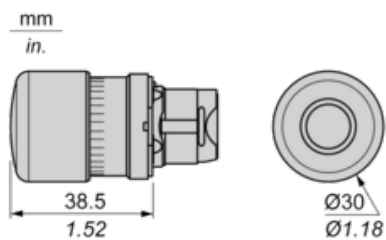
## Contractual warranty

|          |           |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|

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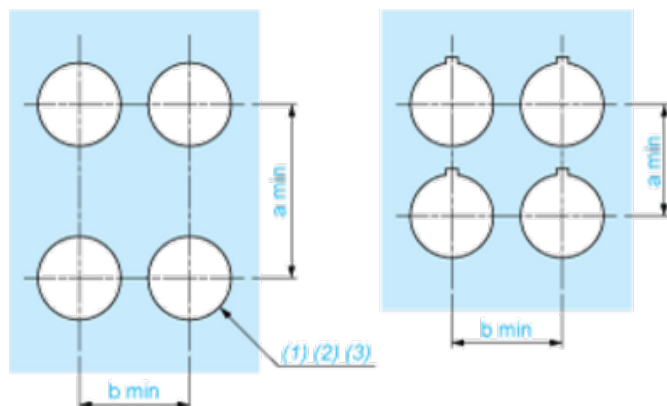
Dimensions

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

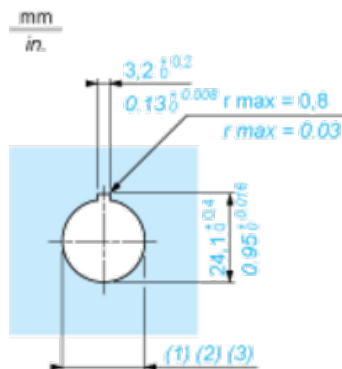
### Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



- (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)  $\varnothing 22.5$  mm recommended ( $\varnothing 22.3 \text{ }_0^{+0.4}$ ) /  $\varnothing 0.89$  in. recommended ( $\varnothing 0.88 \text{ in. }_0^{+0.016}$ )

| 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     |

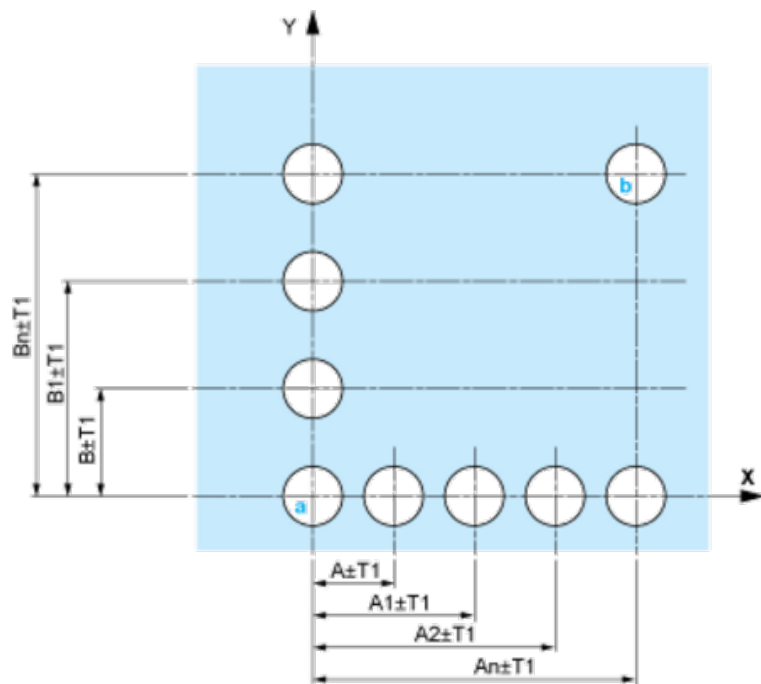
### Detail of Lug Recess



- (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)  $\varnothing 22.5$  mm recommended ( $\varnothing 22.3 \text{ }_0^{+0.4}$ ) /  $\varnothing 0.89$  in. recommended ( $\varnothing 0.88 \text{ in. }_0^{+0.016}$ )

### Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

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

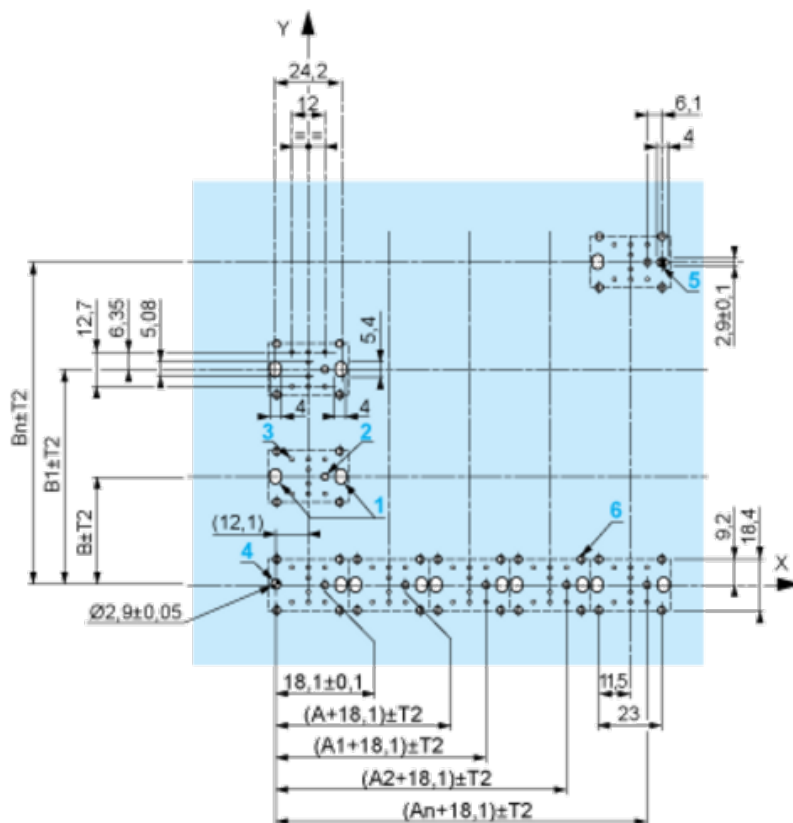


A: 30 mm min. / 1.18 in. min.

B: 40 mm min. / 1.57 in. min.

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

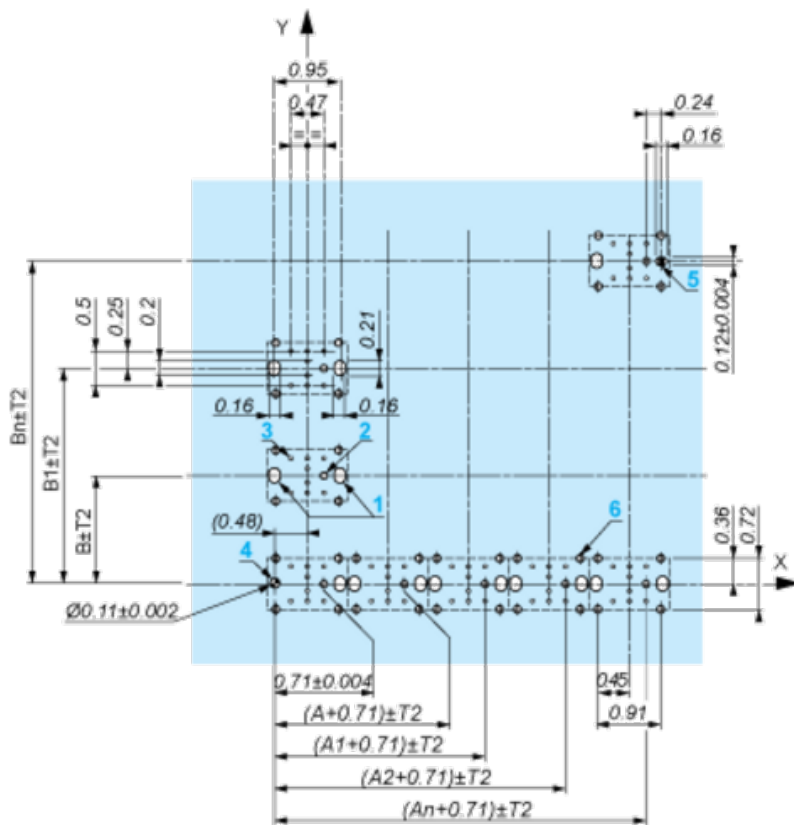
Dimensions in mm



A: 30 mm min.

B: 40 mm min.

Dimensions in in.



A: 1.18 in. min.

B: 1.57 in. min.

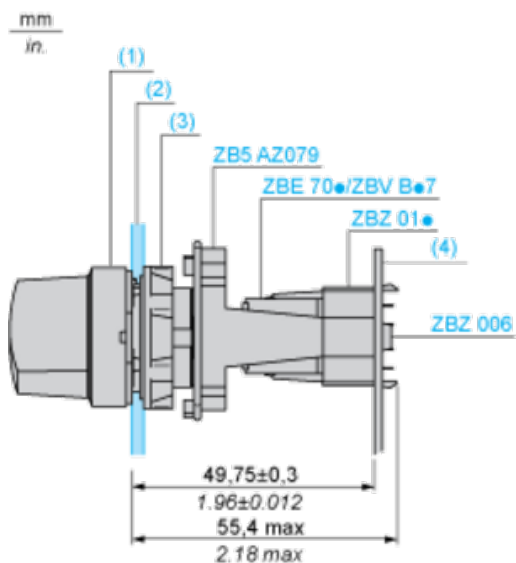
### General Tolerances of the Panel and Printed Circuit Board

The cumulative tolerance must not exceed 0.3 mm / 0.012 in.:  $T1 + T2 = 0.3 \text{ mm max.}$

### Installation Precautions

- 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.



(1) Head ZB5AD•

(2) Panel

(2) Nut

#### (4) Printed circuit board

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

- 1 2 elongated holes for ZBZ006 screw access
- 2 1 hole  $\varnothing 2.4 \text{ mm} \pm 0.05 / 0.09 \text{ in.} \pm 0.002$  for centring adapter ZBZ01•
- 3  $8 \times \varnothing 1.2 \text{ mm} / 0.05 \text{ in.}$  holes
- 4 1 hole  $\varnothing 2.9 \text{ mm} \pm 0.05 / 0.11 \text{ in.} \pm 0.002$ , 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  $\varnothing 2.4 \text{ mm} / 0.09 \text{ in.}$  for clipping in adapter ZBZ01•

Dimensions An + 18.1 relate to the  $\varnothing 2.4 \text{ mm} \pm 0.05 / 0.09 \text{ in.} \pm 0.002$  holes for centring adapter ZBZ01•.

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Electrical Composition Corresponding to Code C7

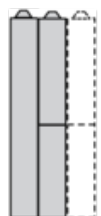
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Electrical Compositions Corresponding to Code C8

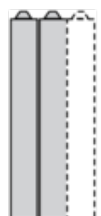
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Electrical Compositions Corresponding to Code C10

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

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Electrical Composition Corresponding to Code C15

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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

