# Product data sheet
## Characteristics

# ZB4BA17
Head for non illuminated push button, Harmony XB4, white flush pushbutton Ø22 mm spring return unmarked



## Main

| | |
|---|---|
| Range of product | Harmony XB4 |
| Product or Component Type | Head for non-illuminated push-button |
| Device short name | ZB4 |
| Bezel material | Black metal |
| Mounting diameter | 0.87 in (22 mm) |
| Sale per indivisible quantity | 1 |
| Head type | Standard |
| Shape of signaling unit head | Round |
| Type of operator | spring return |
| Operator profile | White flush, unmarked |

## Complementary

| | |
|---|---|
| CAD overall width | 1.14 in (29 mm) |
| CAD overall height | 1.14 in (29 mm) |
| CAD overall depth | 1.10 in (28 mm) |
| Mechanical durability | 10000000 cycles |
| Electrical composition code | C1 9 single front mounting<br>C2 9 single and double front mounting<br>C11 3 single front mounting<br>C15 1 single front mounting |
| Device presentation | Basic element |

## Environment

| | |
|---|---|
| Protective treatment | TH |
| Ambient Air Temperature for Storage | -40…158 °F (-40…70 °C) |

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

| | |
|---|---|
| Ambient Air Temperature for Operation | -40…158 °F (-40…70 °C) |
| Overvoltage category | Class I IEC 60536 |
| IP degree of protection | IP66 IEC 60529<br>IP67<br>IP69<br>IP69K |
| NEMA degree of protection | NEMA 13<br>NEMA 4X |
| IK degree of protection | IK06 IEC 50102 |
| Standards | UL 508<br>JIS C8201-5-1<br>EN/IEC 60947-5-4<br>EN/IEC 60947-5-1<br>CSA C22.2 No 14<br>EN/IEC 60947-1<br>EN/IEC 60947-5-5<br>JIS C8201-1 |
| Product Certifications | GL<br>DNV<br>UL Listed<br>LROS (Lloyds register of shipping)<br>BV<br>CSA |
| 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

| | |
|---|---|
| GTIN | 3389110220063 |
| Nbr. of units in pkg. | 1 |
| Package weight(Lbs) | 0.97 oz (27.6 g) |

## Packing Units

| | |
|---|---|
| Unit Type of Package 1 | PCE |
| Package 1 Height | 2.13 in (5.4 cm) |
| Package 1 width | 1.34 in (3.4 cm) |
| Package 1 Length | 1.73 in (4.4 cm) |
| Unit Type of Package 2 | BB1 |
| Number of Units in Package 2 | 5 |
| Package 2 Weight | 4.87 oz (138 g) |
| Package 2 Height | 1.34 in (3.4 cm) |
| Package 2 width | 2.13 in (5.4 cm) |
| Package 2 Length | 10.43 in (26.5 cm) |
| Unit Type of Package 3 | S03 |
| Number of Units in Package 3 | 150 |
| Package 3 Weight | 9.93 lb(US) (4.502 kg) |
| Package 3 Height | 11.81 in (30 cm) |
| Package 3 width | 11.81 in (30 cm) |
| Package 3 Length | 15.75 in (40 cm) |

## Offer Sustainability

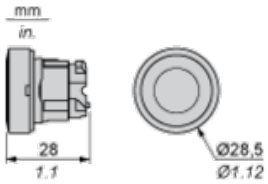
| | |
|---|---|
| Sustainable offer status | Green Premium product |
| California proposition 65 | WARNING: This product can expose you to chemicals including: Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov |
| REACh Regulation | REACh Declaration |
| REACh free of SVHC | Yes |

| | |
|---|---|
| EU RoHS Directive | Pro-active compliance (Product out of EU RoHS legal scope)<br>EU RoHS Declaration |
| Toxic heavy metal free | Yes |
| Mercury free | Yes |
| RoHS exemption information | Yes |
| China RoHS Regulation | China RoHS declaration |
| Environmental Disclosure | Product Environmental Profile |
| Circularity Profile | End of Life Information |

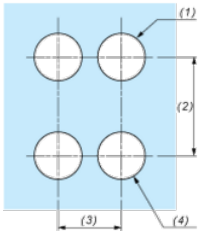
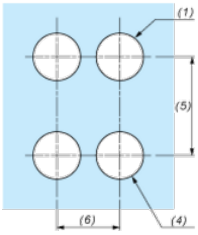
## Contractual warranty

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

## Dimensions

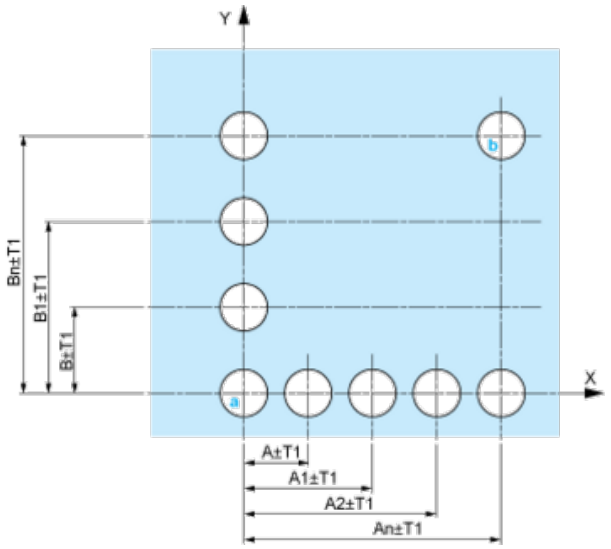


## Panel Cut-out for Pushbuttons, Switches and Pilot Lights (Finished Holes, Ready for Installation)

| Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board | Connection by Faston Connectors |
|---|---|
|  |  |
| (1) Diameter on finished panel or support<br>(2) 40 mm min. / 1.57 in. min.<br>(3) 30 mm min. / 1.18 in. min.<br>(4) Ø 22.5 mm / 0.89 in. recommended (Ø 22.3 mm $_{0}^{+0.4}$ / 0.88 in. $_{0}^{+0.016}$)<br>(5) 45 mm min. / 1.78 in. min.<br>(6) 32 mm min. / 1.26 in. min. | |

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

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

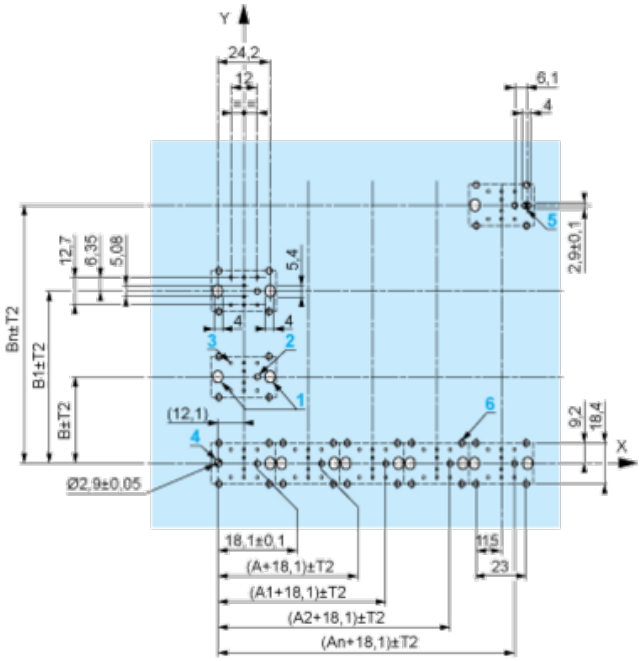



A: 30 mm min. / 1.18 in. min.

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

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

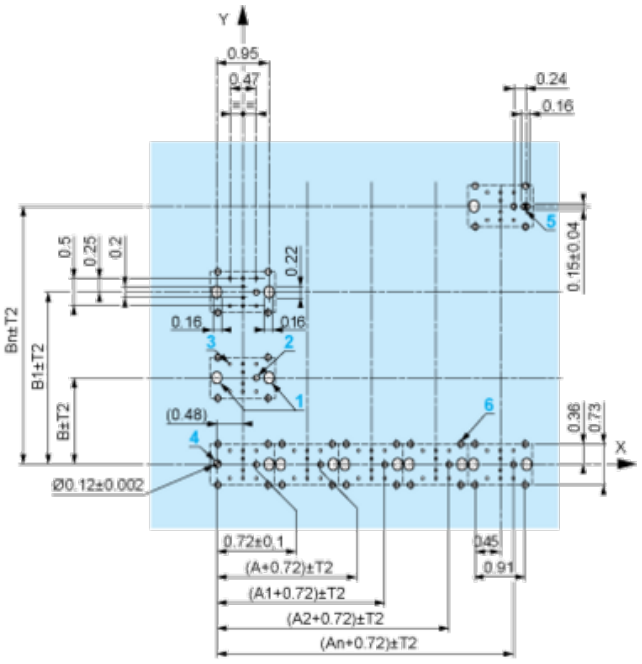
Dimensions in mm




A: 30 mm min.

B: 40 mm min.

Dimensions in in.




A: 1.18 in. min.

B: 1.57 in. min.

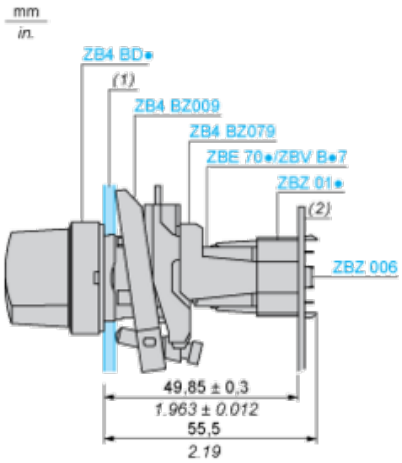
## General Tolerances of the Panel and Printed Circuit Board

The cumulative tolerance must not exceed 0.3 mm / 0.012 in: T1 + T2 = 0.3 mm max.

## Installation Precautions

- Minimum thickness of circuit board: 1.6 mm / 0.06 in.
- Cut-out diameter: 22.4 mm ± 0.1 / 0.88 in. ± 0.004
- Orientation of body/fixing collar ZB4 BZ009: ± 2°30' (excluding cut-outs marked a and b).
- Tightening torque of screws ZBZ 006: 0.6 N.m (5.3 lbf.in) max.
- Allow for one ZB4 BZ079 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 (ZB4 BD•, ZB4 BJ•, ZB4 BG•).

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




(1) Panel

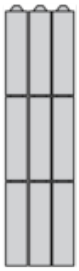
(2) Printed circuit board

## Mounting of Adapter (Socket) ZBZ 01•

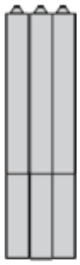
- 1 2 elongated holes for ZBZ 006 screw access
- 2 1 hole Ø 2.4 mm ± 0.05 / 0.09 in. ± 0.002 for centring adapter ZBZ 01•
- 3 8 × Ø 1.2 mm / 0.05 in. holes
- 4 1 hole Ø 2.9 mm ± 0.05 / 0.11 in. ± 0.002, for aligning the printed circuit board (with cut-out marked a)
- 5 1 elongated hole for aligning the printed circuit board (with cut-out marked b)
- 6 4 holes Ø 2.4 mm / 0.09 in. for clipping in adapter ZBZ 01•

Dimensions An + 18.1 relate to the Ø 2.4 mm ± 0.05 / 0.09 in. ± 0.002 holes for centring adapter ZBZ 01•.

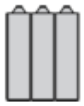
## Electrical Composition Corresponding to Code C1



## Electrical Composition Corresponding to Code C2



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



## Electrical Composition Corresponding to Code C15

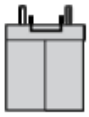
1 N/O



1 N/C



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



## Legend

Single contact



Double contact



Light block



Possible location

