# Product data sheet

Specifications

## Pilot light head, Harmony XB4, metal, green, 22mm, plain lens for BA9s bulb

ZB4BV03

## Main

| | |
|---|---|
| **Range of product** | Harmony XB4 |
| **Product or component type** | Head for pilot light |
| **Product compatibility** | BA 9s |
| **Device short name** | ZB4 |
| **Bezel material** | Chromium plated metal |
| **Mounting diameter** | 22 mm |
| **Sale per indivisible quantity** | 1 |
| **Head type** | Standard |
| **Shape of signaling unit head** | Round |
| **Cap/Operator or lens colour** | Green |
| **Operator additional information** | With plain lens |

## Complementary

| | |
|---|---|
| **CAD overall width** | 29 mm |
| **CAD overall height** | 29 mm |
| **CAD overall depth** | 31 mm |
| **Net weight** | 0.027 kg |
| **Resistance to high pressure washer** | 7000000 Pa at 55 °C, distance : 0.1 m |
| **Electrical composition code** | P3 in front mounting with BA 9s<br>P4 in front mounting with BA 9s and transformer |
| **Device presentation** | Basic element |

## Environment

| | |
|---|---|
| **Protective treatment** | TH |
| **Ambient air temperature for storage** | -40…70 °C |
| **Ambient air temperature for operation** | -40…55 °C |
| **Overvoltage category** | Class I conforming to IEC 60536 |
| **IP degree of protection** | IP66 conforming to IEC 60529<br>IP67<br>IP69 |

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

| | |
|---|---|
| | IP69K |
| **NEMA degree of protection** | NEMA 13<br>NEMA 4X |
| **IK degree of protection** | IK06 conforming to IEC 50102 |
| **Standards** | JIS C8201-5-1<br>EN/IEC 60947-5-4<br>CSA C22.2 No 14<br>EN/IEC 60947-5-1<br>EN/IEC 60947-1<br>UL 508<br>EN/IEC 60947-5-5<br>JIS C8201-1 |
| **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** | Db |
| **Number of Units in Package 1** | 1 |
| **Package 1 Height** | 4.5 cm |
| **Package 1 Width** | 3.4 cm |
| **Package 1 Length** | 5.4 cm |
| **Package 1 Weight** | 23 g |
| **Unit Type of Package 2** | Doboz |
| **Number of Units in Package 2** | 300 |
| **Package 2 Height** | 30 cm |
| **Package 2 Width** | 30 cm |
| **Package 2 Length** | 40 cm |
| **Package 2 Weight** | 7.435 kg |

## Offer Sustainability

| | |
|---|---|
| **Sustainable offer status** | Green Premium product |
| **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 |
| **China RoHS Regulation** | China RoHS declaration |
| **RoHS exemption information** | Yes |
| **Environmental Disclosure** | Product Environmental Profile |
| **Circularity Profile** | End of Life Information |

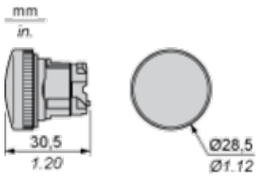
## Contractual warranty

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

# Product data sheet ZB4BV03

Dimensions Drawings

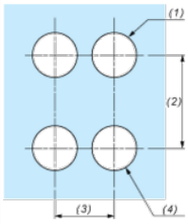
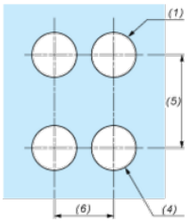
## Dimensions



# Product data sheet ZB4BV03

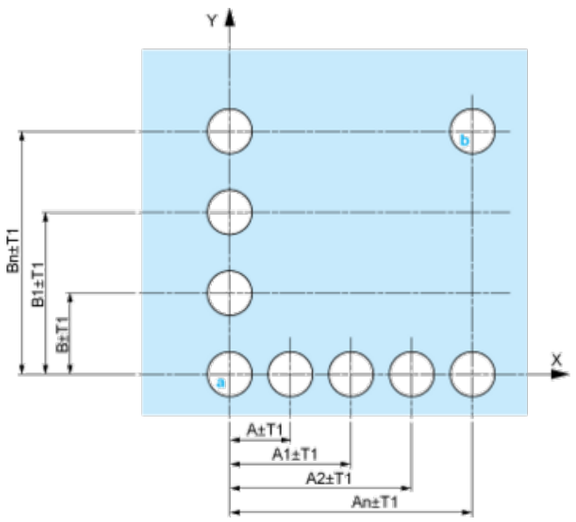
Mounting and Clearance

## 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)

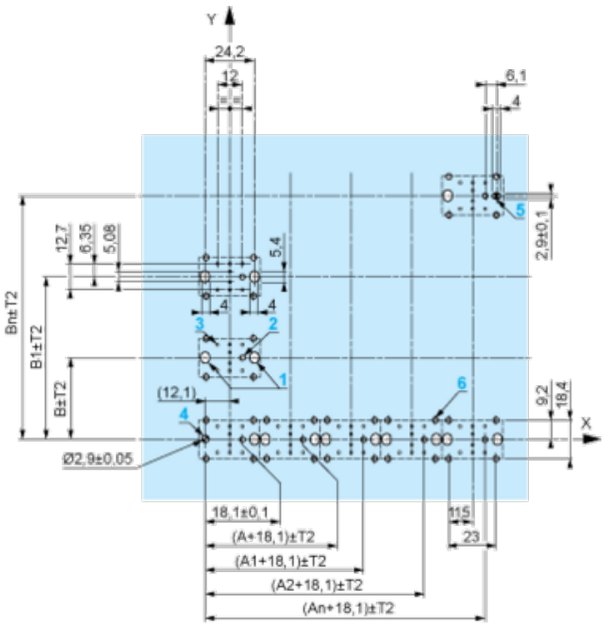



**A:** 30 mm min. / 1.18 in. min.

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

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

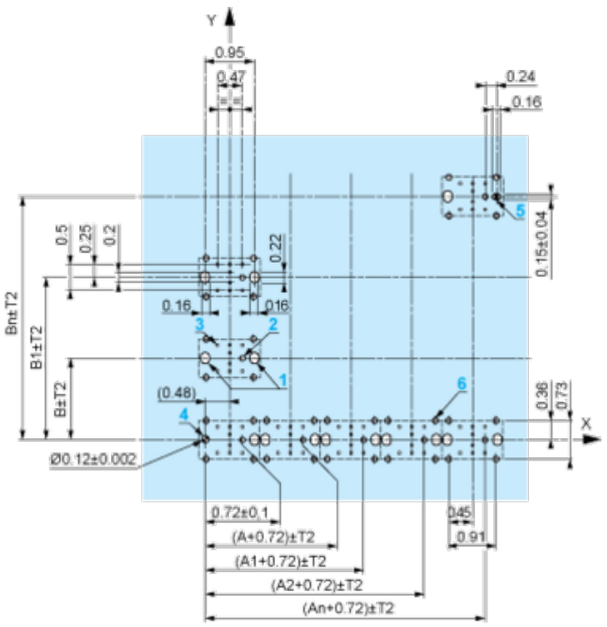
Dimensions in mm




**A:** 30 mm min.

**B:** 40 mm min.

Dimensions in in.




**A:** 1.18 in. min.

**B:** 1.57 in. min.

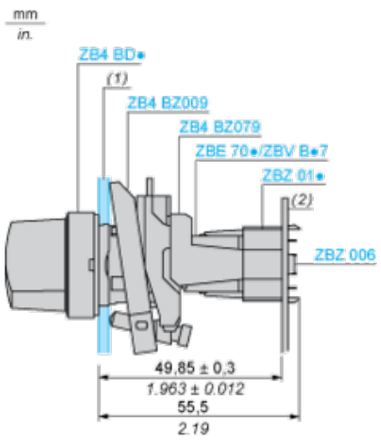
## General Tolerances of the Panel and Printed Circuit Board

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•

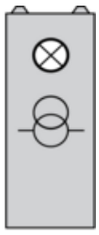
- **1** 2 elongated holes for ZBZ 006 screw access
- **2** 1 hole Ø 2.4 mm ± 0.05 / 0.09 in. ± 0.002 for centring adapter ZBZ 01•
- **3** 8 × Ø 1.2 mm / 0.05 in. holes
- **4** 1 hole Ø 2.9 mm ± 0.05 / 0.11 in. ± 0.002, for aligning the printed circuit board (with cut-out marked **a**)
- **5** 1 elongated 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 Codes P1, P3, PF1, PR1 and PF2

Light block

## Electrical Composition Corresponding to Code P4



## Legend

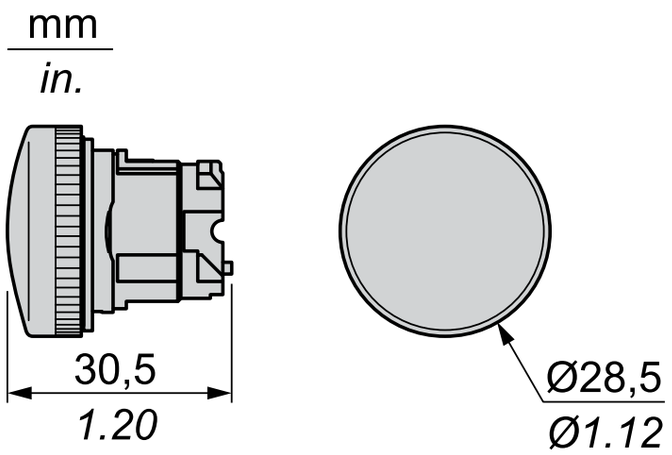
Single contact

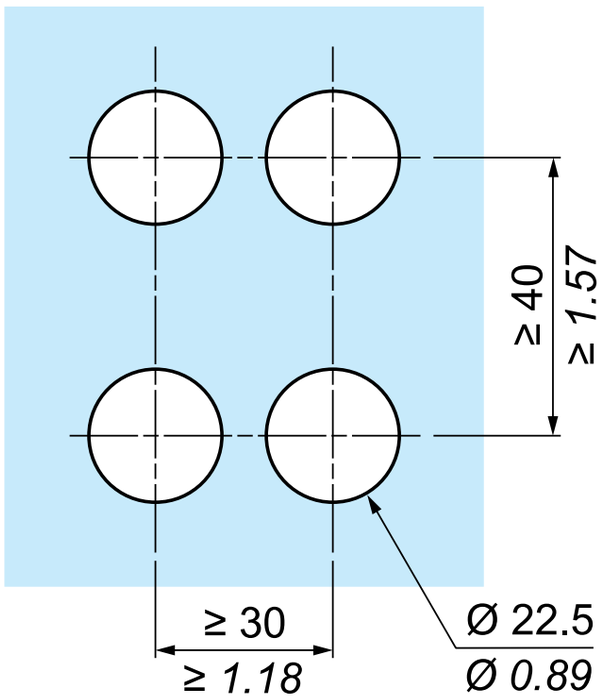
Double contact

Light block

Possible location

## Dimensions




## Recommended replacement(s)