

## Product data sheet

### Characteristics

## ZB4BV07TQ

### pilot light head ZB4BV07 sold by 100



#### 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   | 100                   |
| Shape of signaling unit head    | Round                 |
| Cap/operator or lens colour     | Clear                 |
| Operator additional information | With plain lens       |

#### Complementary

|                                    |                                                                                    |
|------------------------------------|------------------------------------------------------------------------------------|
| CAD overall width                  | 29 mm                                                                              |
| CAD overall height                 | 29 mm                                                                              |
| CAD overall depth                  | 30 mm                                                                              |
| 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 |

#### Environment

|                                       |                                                                                                                                                                                |
|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Protective treatment                  | TH                                                                                                                                                                             |
| Ambient air temperature for storage   | -40...70 °C                                                                                                                                                                    |
| Ambient air temperature for operation | -40...70 °C                                                                                                                                                                    |
| Overvoltage category                  | Class I 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                                                                                                                                                             |
| IK degree of protection               | IK06 conforming to IEC 50102                                                                                                                                                   |
| Standards                             | UL 508<br>EN/IEC 60947-1<br>JIS C8201-5-1<br>EN/IEC 60947-5-1<br>CSA C22.2 No 14<br>EN/IEC 60947-5-5<br>EN/IEC 60947-5-4<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 |

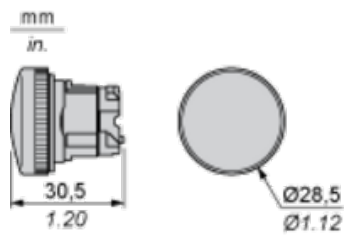
Contractual warranty

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

---

Dimensions

---

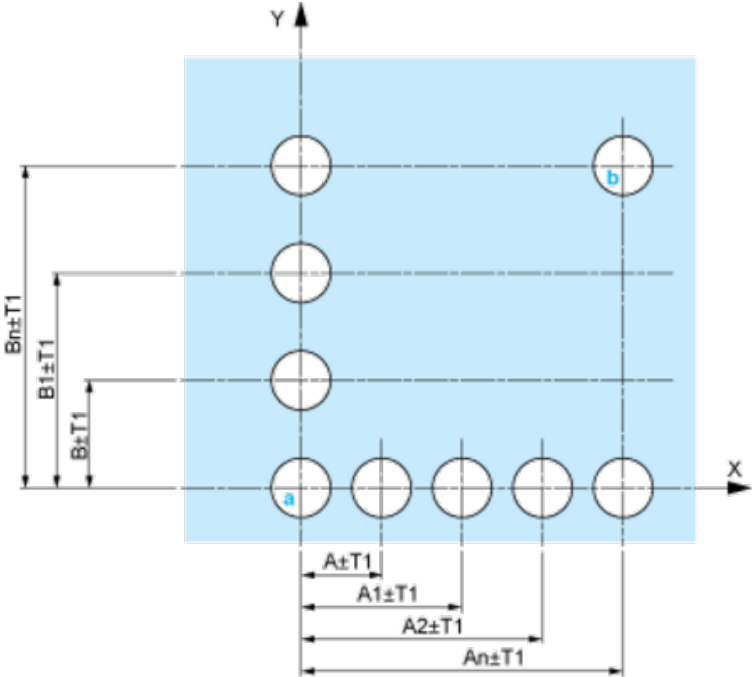


Panel Cut-out for Pushbuttons, Switches and Pilot Lights (Finished Holes, Ready for Installation)

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

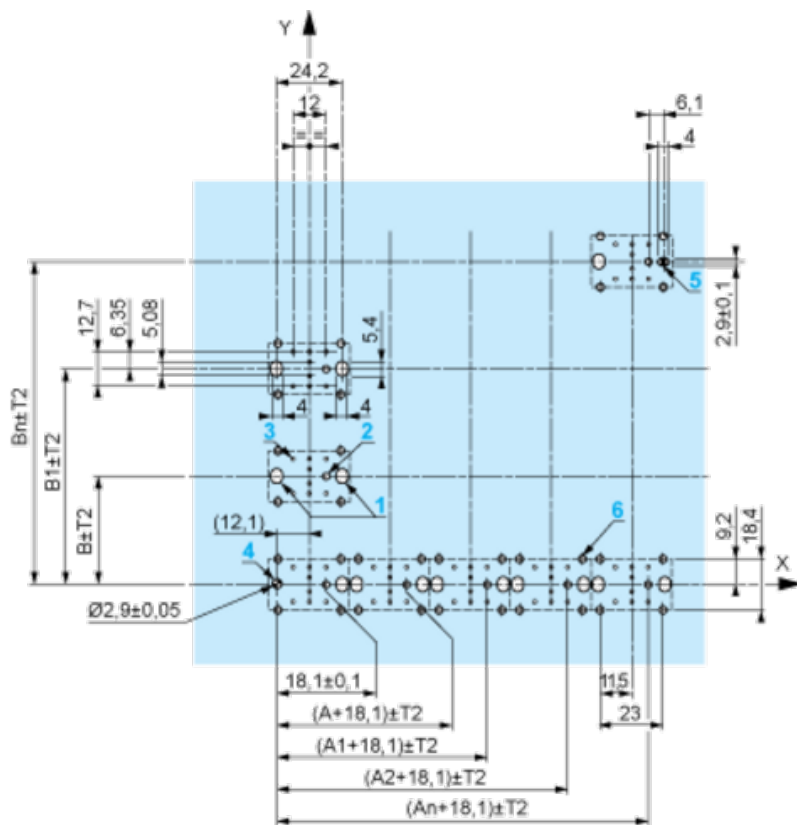
Panel Cut-outs (Viewed from Installer's Side)



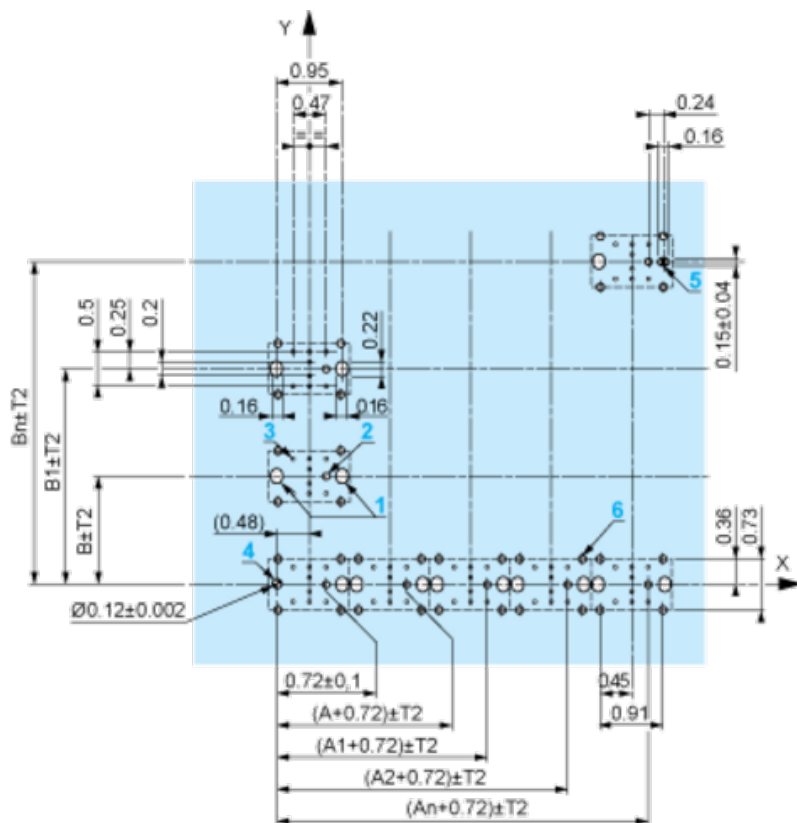
A: 30 mm min. / 1.18 in. min.  
 B: 40 mm min. / 1.57 in. min.

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.

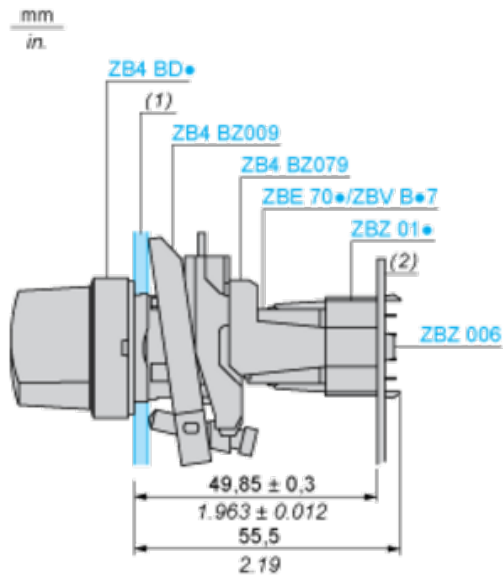
### General Tolerances of the Panel and Printed Circuit Board

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

## 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 ZB4 BZ009:  $\pm 2^\circ 30'$  (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  $\varnothing$  2.4 mm  $\pm$  0.05 / 0.09 in.  $\pm$  0.002 for centring adapter ZBZ 01•
- 3 8  $\times$   $\varnothing$  1.2 mm / 0.05 in. holes
- 4 1 hole  $\varnothing$  2.9 mm  $\pm$  0.05 / 0.11 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 mm / 0.09 in. for clipping in adapter ZBZ 01•

Dimensions An + 18.1 relate to the  $\varnothing$  2.4 mm  $\pm$  0.05 / 0.09 in.  $\pm$  0.002 holes for centring adapter ZBZ 01•.

---

Electrical Composition Corresponding to Codes P1, P3, PF1, PR1 and PF2

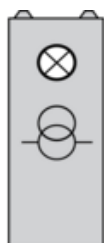
---

Light block

---

Electrical Composition Corresponding to Code P4

---



---

Legend

---

Single contact

Double contact

Light block

Possible location

