



Main

Range of product	Harmony XB4
Product or component type	Head for pilot light
Product compatibility	Integral LED
Device short name	ZB4
Bezel material	Chromium plated metal
Mounting diameter	22 mm
Sale per indivisible quantity	1
Shape of signaling unit head	Round
Cap/operator or lens colour	White
Operator additional information	With plain lens

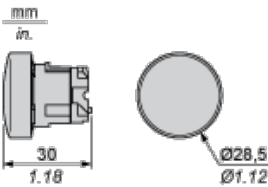
Complementary

CAD overall width	29 mm
CAD overall height	29 mm
CAD overall depth	30 mm
Product weight	0.026 kg
Resistance to high pressure washer	7000000 Pa at 55 °C, distance: 0.1 m
Electrical composition code	P1 in front mounting with integral LED P2 in front mounting with integral LED and transformer
Main group	Pilot light
Group of product	Lens fitted integral LED
Cap/operator or lens colour	White
Compatibility code	ZB4

Environment

protective treatment	TH
ambient air temperature for storage	-40...70 °C
ambient air temperature for operation	-40...70 °C
class of protection against electric shock	Class I conforming to IEC 60536
overvoltage category	Class I conforming to IEC 60536
IP degree of protection	IP67 IP66 conforming to IEC 60529 IP69K IP69
NEMA degree of protection	NEMA 13 NEMA 4X
IK degree of protection	IK06 conforming to IEC 50102
standards	EN/IEC 60947-1 EN/IEC 60947-5-1 EN/IEC 60947-5-4 EN/IEC 60947-5-5 JIS C 4520 UL 508 CSA C22.2 No 14
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 50 gn (duration = 11 ms) for half sine wave acceleration conforming to IEC 60068-2-27

Dimensions

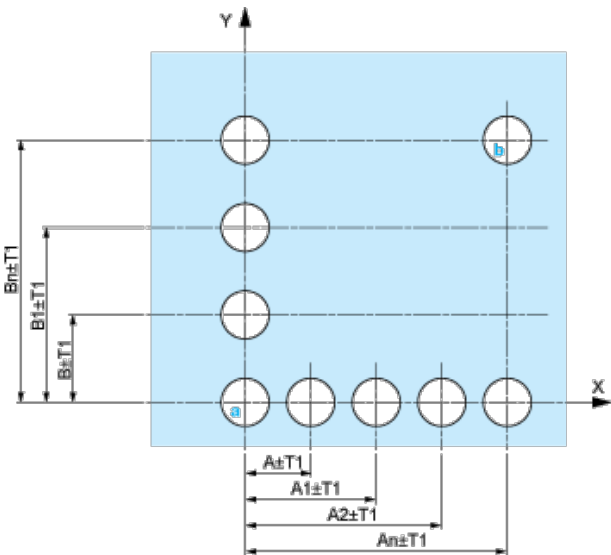


Panel Cut-out for Pushbuttons, Switches and Pilot Lights (Finished Holes, Ready for Installation)

Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board	Connection by Faston Connectors
Diagram showing a 2x2 grid of circular cut-outs. Dimension (1) is the diameter. (2) is the vertical spacing between rows. (3) is the horizontal spacing between columns. (4) is the diameter of the mounting hole.	Diagram showing a 2x2 grid of circular cut-outs. Dimension (1) is the diameter. (5) is the vertical spacing between rows. (6) is the horizontal spacing between columns. (4) is the diameter of the mounting hole.
(1) Diameter on finished panel or support (2) 40 mm min. / 1.57 in. min. (3) 30 mm min. / 1.18 in. min. (4) Ø 22.5 mm / 0.89 in. recommended (Ø 22.3 mm $^{+0.4}_0$ / 0.88 in. $^{+0.016}_0$) (5) 45 mm min. / 1.78 in. min. (6) 32 mm min. / 1.26 in. min.	

Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

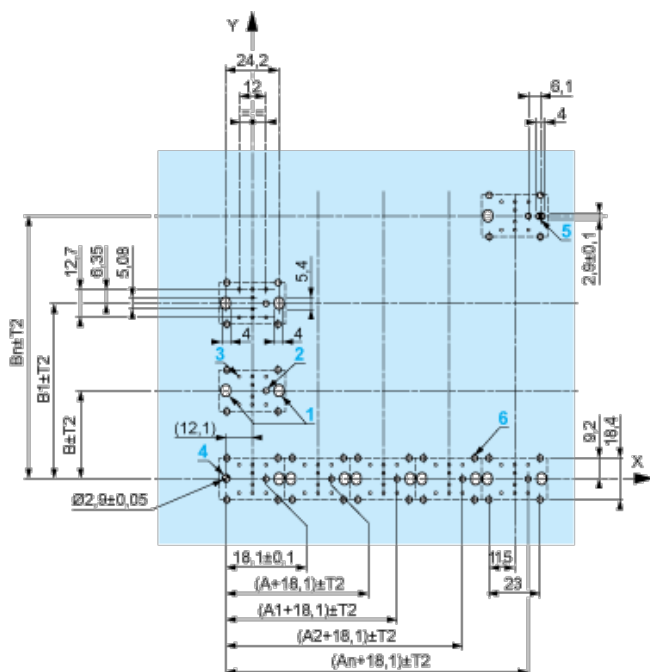
Panel Cut-outs (Viewed from Installer's Side)



- 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)

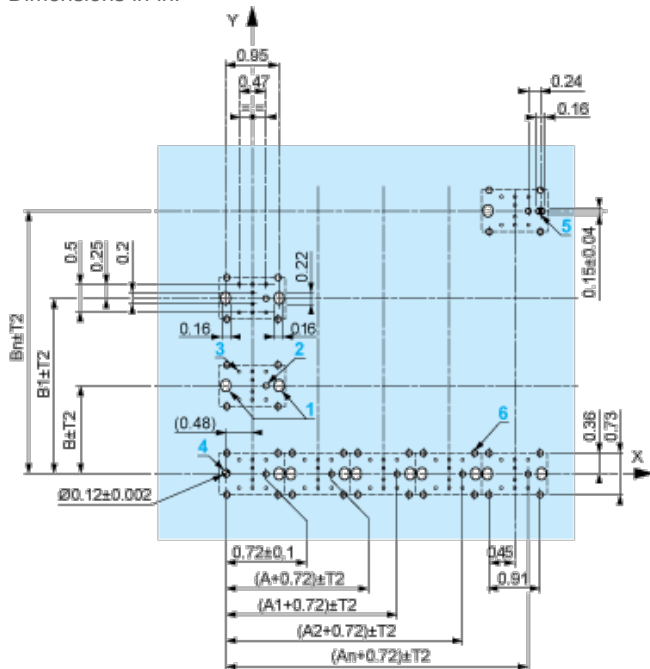
Dimensions in mm



A: 30 mm min.

B: 40 mm min.

Dimensions in in.



A: 1.18 in. min.

B: 1.57 in. min.

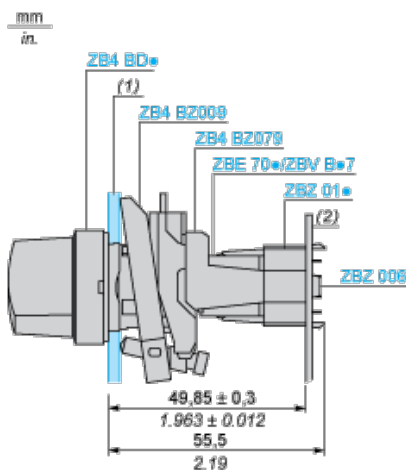
General Tolerances of the Panel and Printed Circuit Board

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 ± 0.1 / 0.88 in. ± 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 $\varnothing 2.4 \text{ mm} \pm 0.05 / 0.09 \text{ in.} \pm 0.002$ for centring adapter ZBZ 01•
- 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 ZBZ 01•

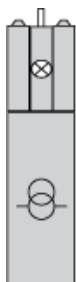
Dimensions An + 18.1 relate to the $\varnothing 2.4 \text{ mm} \pm 0.05 / 0.09 \text{ in.} \pm 0.002$ holes for centring adapter ZBZ 01•.

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

Light block



Electrical Composition Corresponding to Codes M6 and P2



Legend

Single contact



Double contact



Light block



Possible location

