



## Main

|                                 |                      |
|---------------------------------|----------------------|
| Range of product                | Harmony XB5          |
| Product or component type       | Head for pilot light |
| Product compatibility           | Integral LED         |
| Device short name               | ZB5                  |
| Bezel material                  | Plastic              |
| Mounting diameter               | 0.87 in (22 mm)      |
| Head type                       | Standard             |
| Sale per indivisible quantity   | 1                    |
| Shape of signaling unit head    | Square               |
| Cap/operator or lens colour     | White                |
| Operator additional information | With plain lens      |

## Complementary

|                             |                                                                                                                                                                                       |
|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CAD overall width           | 1.18 in (30 mm)                                                                                                                                                                       |
| CAD overall height          | 1.18 in (30 mm)                                                                                                                                                                       |
| CAD overall depth           | 1.14 in (29 mm)                                                                                                                                                                       |
| Product weight              | 0.04 lb(US) (0.02 kg)                                                                                                                                                                 |
| Station name                | XALD 1...5 cut-outs<br>XALK 2...5 cut-outs                                                                                                                                            |
| Electrical composition code | P1 in front mounting with integral LED<br>P2 in front mounting with integral LED and transformer<br>PF1 in front mounting with integral LED<br>PR1 in rear mounting with integral LED |

## Environment

|                                       |                                                                                                                                                                        |
|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| protective treatment                  | TH                                                                                                                                                                     |
| ambient air temperature for storage   | -40...158 °F (-40...70 °C)                                                                                                                                             |
| ambient air temperature for operation | -13...158 °F (-25...70 °C)                                                                                                                                             |
| overvoltage category                  | Class II IEC 60536                                                                                                                                                     |
| IP degree of protection               | IP66 conforming to IEC 60529                                                                                                                                           |
| NEMA degree of protection             | NEMA 13<br>NEMA 4X                                                                                                                                                     |
| resistance to high pressure washer    | 1015.26 psi (7000000 Pa) at 131 °F (55 °C), distance: 0.1 m                                                                                                            |
| IK degree of protection               | IK05 conforming to IEC 50102                                                                                                                                           |
| standards                             | EN/IEC 60947-1<br>EN/IEC 60947-5-1<br>EN/IEC 60947-5-4<br>EN/IEC 60947-5-5<br>JIS C 4520<br>UL 508<br>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) half sine wave acceleration conforming to IEC 60068-2-27<br>50 gn (duration = 11 ms) half sine wave acceleration conforming to IEC 60068-2-27 |

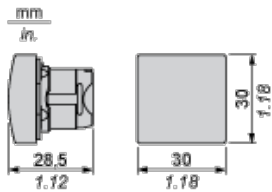
## Offer Sustainability

|                                                                                                                      |                                                                                                                            |
|----------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| WARNING: This product can expose you to chemicals including:                                                         | WARNING: This product can expose you to chemicals including:                                                               |
| Nickel compounds, which is known to the State of California to cause cancer, and                                     | Nickel compounds, which is known to the State of California to cause cancer, and                                           |
| Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive | Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm. |

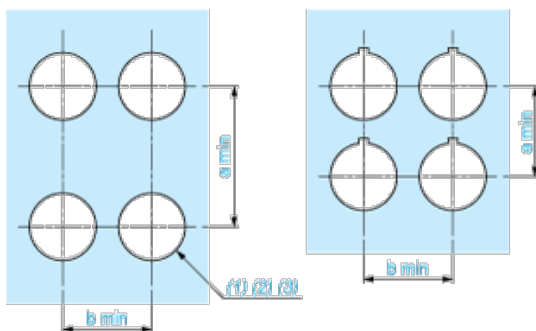
**Contractual warranty**

Warranty period

18 months

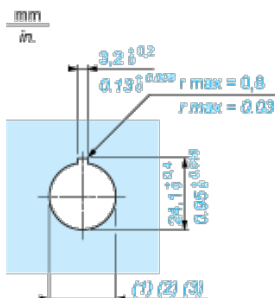
**Dimensions****Panel Cut-out for Pushbuttons, Switches and Pilot Lights (Finished Holes, Ready for Installation)**

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



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

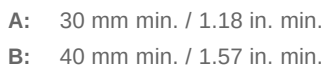
| Connections                                   | a in mm | a in in. | b in mm | b in in. |
|-----------------------------------------------|---------|----------|---------|----------|
| By screw clamp terminals or plug-in connector | 40      | 1.57     | 30      | 1.18     |
| By Faston connectors                          | 45      | 1.77     | 32      | 1.26     |
| On printed circuit board                      | 30      | 1.18     | 30      | 1.18     |

**Detail of Lug Recess**

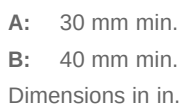
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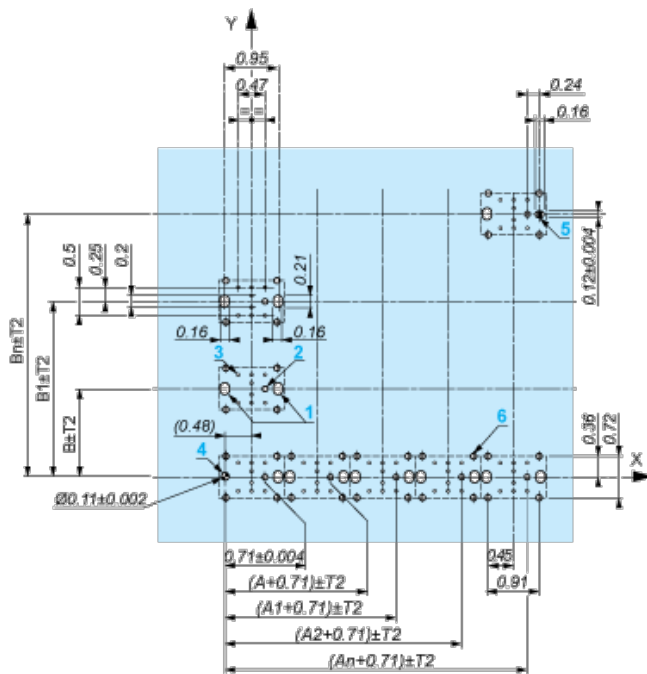
**Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection**

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



Dimensions in mm





A: 1.18 in. min.

B: 1.57 in. min.

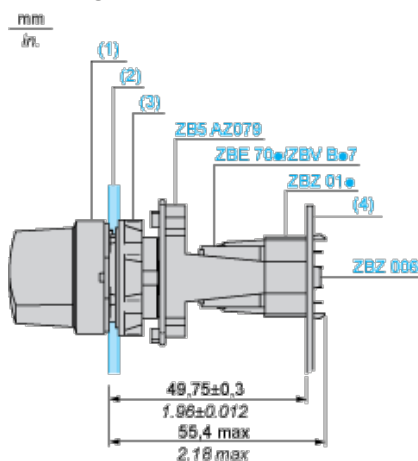
### General Tolerances of the Panel and Printed Circuit Board

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 in.  $\pm 0.002$  for centring adapter ZBZ01•
- | 3  $8 \times \varnothing 1.2 \text{ mm}$  / 0.05 in. holes
- | 4 1 hole  $\varnothing 2.9 \text{ mm} \pm 0.05$  / 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 Ø 2.4 mm / 0.09 in. for clipping in adapter ZBZ01•

Dimensions An + 18.1 relate to the Ø 2.4 mm ± 0.05 / 0.09 in. ± 0.002 holes for centring adapter ZBZ01•.

## 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

