



Main

| | |
|---------------------------------|----------------------|
| Range of product | Harmony XB5 |
| Product or component type | Head for pilot light |
| Product compatibility | BA 9s |
| 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 | Round |
| Cap/operator or lens colour | Yellow |
| Operator additional information | With grooved lens |

Complementary

| | |
|-----------------------------|--|
| CAD overall width | 1.14 in (29 mm) |
| CAD overall height | 1.14 in (29 mm) |
| CAD overall depth | 1.22 in (31 mm) |
| Product weight | 0.04 lb(US) (0.017 kg) |
| Station name | XALD 1...5 cut-outs XALK 2...5 cut-outs |
| Electrical composition code | P3 in front mounting with BA 9s P4 in front mounting with BA 9s and transformer PF2 in front mounting with BA 9s |

Environment

| | |
|---------------------------------------|--|
| protective treatment | TH |
| ambient air temperature for storage | -40...158 °F (-40...70 °C) |
| ambient air temperature for operation | -40...158 °F (-40...70 °C) |
| overvoltage category | Class II IEC 60536 |
| IP degree of protection | IP66 conforming to IEC 60529 IP67 conforming to IEC 60529 IP69 conforming to IEC 60529 IP69K conforming to ISO 20653 |
| NEMA degree of protection | NEMA 13 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 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 |
| environmental characteristic | High ambient lighting environment |
| 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 50 gn (duration = 11 ms) half sine wave acceleration conforming to IEC 60068-2-27 |

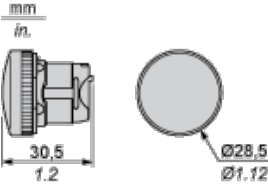
Offer Sustainability

| | |
|--|--|
| WARNING: This product can expose you to chemicals including: | WARNING: This product can expose you to chemicals including: |
| Lead and lead compounds, which is known to the State | Lead and lead compounds, which is known to the State of California to cause cancer |

Contractual warranty

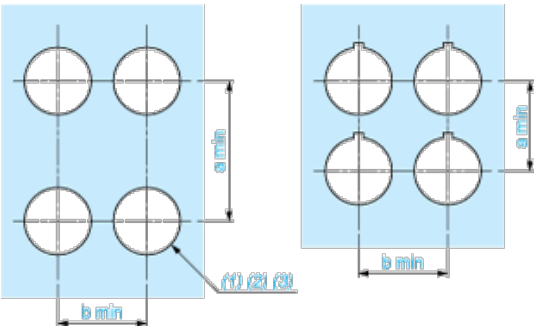
| | |
|-----------------|-----------|
| Warranty period | 18 months |
|-----------------|-----------|

Dimensions



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

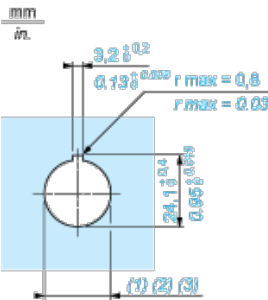
Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



- (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) Ø22.5 mm recommended ($\text{Ø}22.3_{0}^{+0.4}$) / Ø0.89 in. recommended ($\text{Ø}0.89_{0}^{+0.016}$)

| 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



- (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) Ø22.5 mm recommended ($\text{Ø}22.3_{0}^{+0.4}$) / Ø0.89 in. recommended ($\text{Ø}0.89_{0}^{+0.016}$)

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.: $T_1 + T_2 = 0.3 \text{ mm max.}$

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 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
- (3) 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. ± 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. ± 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 ZBZ01•

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

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

