



Main

| | |
|---------------------------------|---------------------------------|
| Range of product | Harmony XB5 |
| Product or component type | Head for illuminated pushbutton |
| Device short name | ZB5 |
| Product compatibility | Integral LED |
| Bezel material | Plastic |
| Mounting diameter | 22 mm |
| Sale per indivisible quantity | 1 |
| Shape of signaling unit head | Round |
| Type of operator | Spring return |
| Operator profile | Blue projecting unmarked |
| Operator additional information | With plain lens |

Complementary

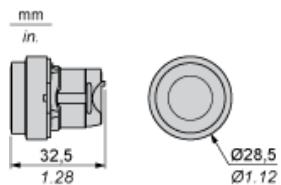
| | |
|------------------------------------|---|
| CAD overall width | 29 mm |
| CAD overall height | 29 mm |
| CAD overall depth | 33 mm |
| Product weight | 0.018 kg |
| Resistance to high pressure washer | 7000000 Pa at 55 °C, distance: 0.1 m |
| Mechanical durability | 5000000 cycles |
| Station name | XALK 2...5 cut-outs XALD 1...5 cut-outs |
| Electrical composition code | MR1 for <= 2 contacts using single blocks in rear mounting with integral LED MF1 for <= 2 contacts using single blocks in front mounting with integral LED M10 for <= 2 contacts using single blocks in front mounting with integral LED M6 for <= 2 contacts using single blocks in front mounting with integral LED and transformer M2 for <= 6 contacts using single and double blocks in front mounting with integral LED M1 for <= 6 contacts using single blocks in front mounting with integral LED |

Environment

| | |
|--|---|
| Protective treatment | TC |
| Ambient air temperature for storage | -40...70 °C |
| Ambient air temperature for operation | -25...70 °C |
| Class of protection against electric shock | Class II conforming to IEC 60536 |
| IP degree of protection | IP66 conforming to IEC 60529 |
| NEMA degree of protection | NEMA 4X NEMA 13 |
| IK degree of protection | IK05 conforming to EN 50102 |
| Standards | CSA C22-2 No 14 EN/IEC 60947-1 EN/IEC 60947-5-1 EN/IEC 60947-5-4 JIS C 4520 UL 508 GB 14048.5 |

| | |
|------------------------|--|
| Product certifications | BV CSA DNV GL LROS (Lloyds register of shipping) RINA UL listed |
| Vibration resistance | 5 gn ($f = 2\ldots 500$ Hz) conforming to IEC 60068-2-6 |
| Shock resistance | 50 gn for 11 ms half sine wave acceleration conforming to IEC 60068-2-27 30 gn for 18 ms 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



- (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 ($\text{Ø}22.3 \text{ mm}^{+0.4}$) / Ø0.89 in. recommended ($\text{Ø}0.88 \text{ in.}^{+0.016}$)

| 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 ($\text{Ø}22.3 \text{ mm}^{+0.4}$) / Ø0.89 in. recommended ($\text{Ø}0.88 \text{ in.}^{+0.016}$)

Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

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

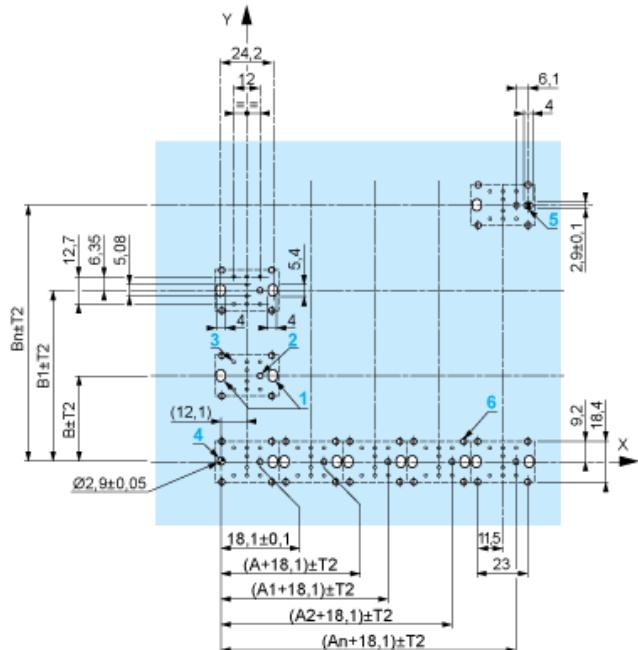


A: 30 mm min. / 1.18 in. min.

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

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

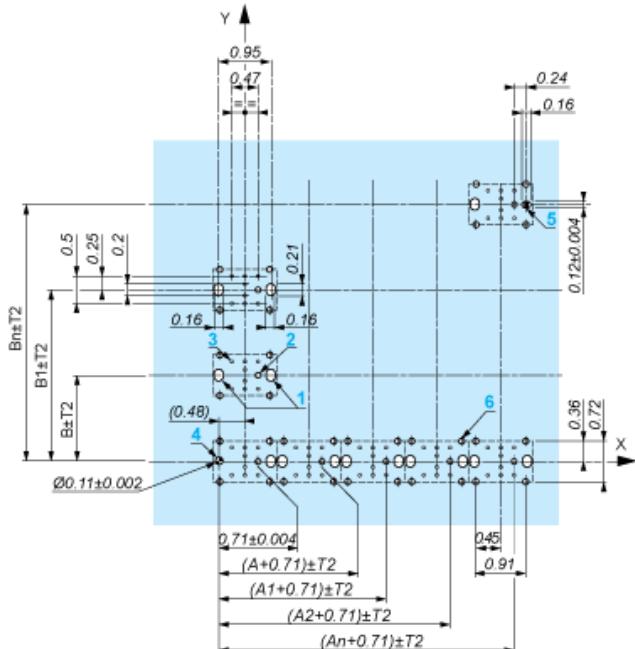
Dimensions in mm



A: 30 mm min.

B: 40 mm min.

Dimensions in in.



A: 1.18 in. min.

B: 1.57 in. min.

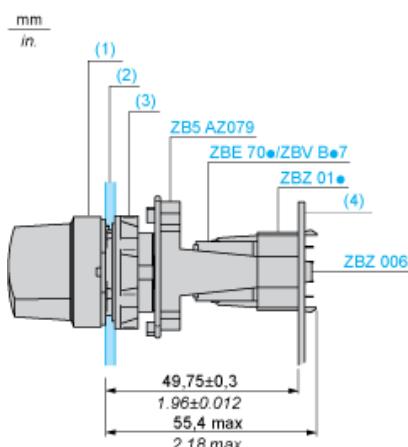
General Tolerances of the Panel and Printed Circuit Board

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: $22.4 \text{ mm} \pm 0.1$ / $0.88 \text{ in.} \pm 0.004$
- 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.



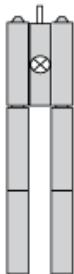
- (1) Head ZB5AD•
- (2) Panel
- (2) Nut
- (4) Printed circuit board

Mounting of Adapter (Socket) ZBZ01•

- 1 2 elongated holes for ZBZ006 screw access
- 2 1 hole Ø 2.4 mm ± 0.05 / 0.09 in. ± 0.002 for centring adapter ZBZ01•
- 3 8 \times 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 ZBZ01•

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

Electrical Composition Corresponding to Codes M1 and M7



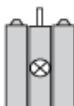
Electrical Composition Corresponding to Codes M2 and M8



Electrical Composition Corresponding to Codes M6 and P2



Electrical Composition Corresponding to Codes M5, M10, MF1, MR1 and MF2



Legend

Single contact



Double contact



Light block



Possible location



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Schneider Electric:](#)

[ZB5AW163](#)