



## Main

|                               |                                     |
|-------------------------------|-------------------------------------|
| Range of product              | Harmony XALF<br>Harmony XB5         |
| Product or component type     | Head for non-illuminated pushbutton |
| Device short name             | ZB5                                 |
| 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              | Black flush, white up arrow         |

## Complementary

|                                    |                                            |
|------------------------------------|--------------------------------------------|
| CAD overall width                  | 29 mm                                      |
| CAD overall height                 | 29 mm                                      |
| CAD overall depth                  | 28 mm                                      |
| Product weight                     | 0.018 kg                                   |
| Resistance to high pressure washer | 7000000 Pa at 55 °C, distance: 0.1 m       |
| Mechanical durability              | 5000000 cycles                             |
| Main group                         | Pushbutton                                 |
| Group of product                   | Flush push with marking                    |
| Maximum of contact NO or NC        | 9                                          |
| Station name                       | XALD 1...5 cut-outs<br>XALK 2...5 cut-outs |
| Cap/Operator or lens colour        | Black                                      |
| Marking                            | Up arrow                                   |
| Colour of marking                  | White                                      |

## Environment

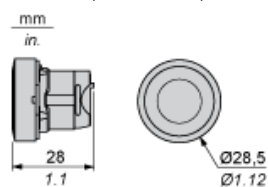
|                                            |                                                                                                                       |
|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| Protective treatment                       | TH                                                                                                                    |
| 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 13<br>NEMA 4X                                                                                                    |
| IK degree of protection                    | IK03 conforming to IEC 50102                                                                                          |
| Standards                                  | CSA C22-2 No 14<br>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 |

|                          |                                                                                                                                                      |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product certifications   | BV<br>CSA<br>DNV<br>GL<br>LROS (Lloyds register of shipping)<br>RINA<br>UL listed                                                                    |
| Vibration resistance     | 5 gn (f = 2...500 Hz) conforming to IEC 60068-2-6                                                                                                    |
| Shock resistance         | 30 gn for 18 ms half sine wave acceleration conforming to IEC 60068-2-27<br>50 gn for 11 ms half sine wave acceleration conforming to IEC 60068-2-27 |
| RoHS EUR status          | Compliant                                                                                                                                            |
| RoHS EUR conformity date | 0646                                                                                                                                                 |

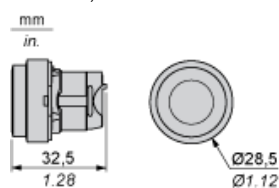
## Dimensions of Heads for Spring Return Pushbuttons

### Heads for Spring Return Pushbuttons

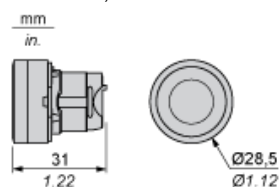
ZB5 AA•, ZB5 AA••, ZB5 AA•8



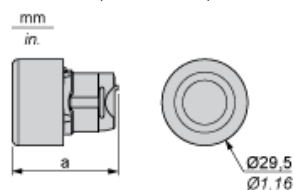
ZB5 AL•, ZB5 AL••



ZB5 AA•4, ZB5 AA•6

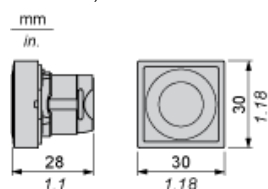


ZB5 AP••, ZB5 AP•S, ZB5 AP•83, ZB5 AP•

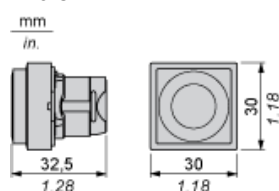


|           | a in mm | a in in. |
|-----------|---------|----------|
| ZB5 AP••  | 36.5    | 1.44     |
| ZB5 AP•S  | 33      | 1.30     |
| ZB5 AP•83 | 32      | 1.26     |
| ZB5 AP•   | 35      | 1.38     |

ZB5 CA•, ZB5 CA0

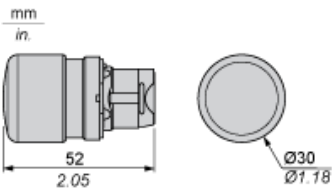


ZB5 CL•

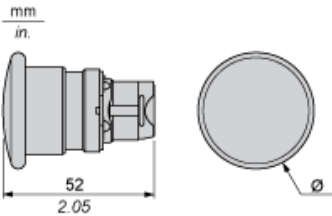


Mushroom Heads for Spring Return Pushbuttons

ZB5 AC•4

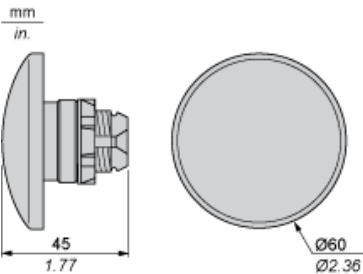


ZB5 AC•, ZB5 AR•



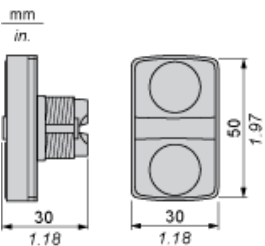
|         | Ø in mm | Ø in in. |
|---------|---------|----------|
| ZB5 AC• | 40      | 1.57     |
| ZB5 AR• | 60      | 2.36     |

ZB5 AR•16

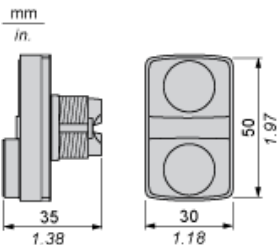


Heads for Double-Headed, Spring Return Pushbuttons

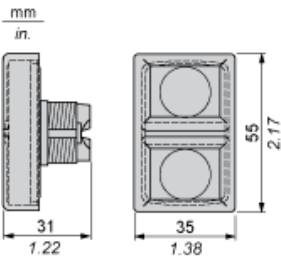
ZB5 AA712•, ZB5 AA734•, ZB5 AA79



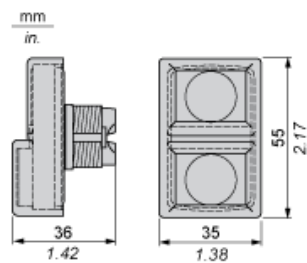
ZB5 AL734•



ZB5 AA712•, ZB5 AA734•, ZB5 AA79 + boot ZBA 708

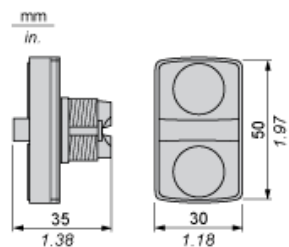


ZB5 AL734• + boot ZBA 710

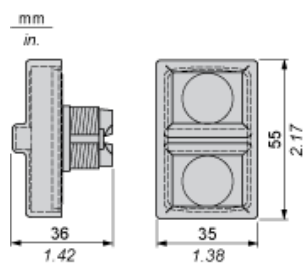


## Heads for Triple-Headed, Spring Return Pushbuttons

ZB5 AA7313•, ZB5 AA711••, ZB5 AA72124, ZB5 AA791

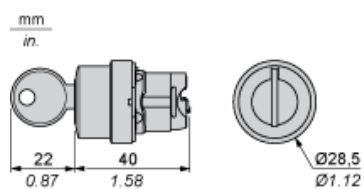


ZB5 AA7313•, ZB5 AA711••, ZB5 AA72124, ZB5 AA791 + boot ZBA 709



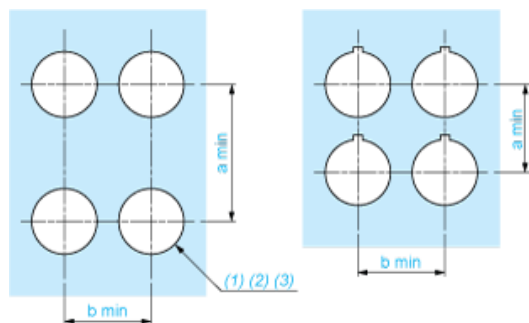
## Heads for Lockable, Push-Turn Pushbuttons

ZB5 AFD



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

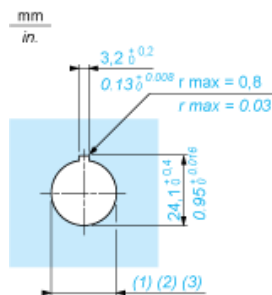
Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



- (1) Diameter on finished panel or support
- (2) For selector switches and Emergency stop buttons, use of an anti-rotation plate type ZB5 AZ902 is recommended.
- (3)  $\varnothing 22.5$  mm recommended ( $\varnothing 22.3 \text{ }_0^{+0.4}$ ) /  $\varnothing 0.89$  in. recommended ( $\varnothing 0.88 \text{ in. }_0^{+0.016}$ )

| 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     |

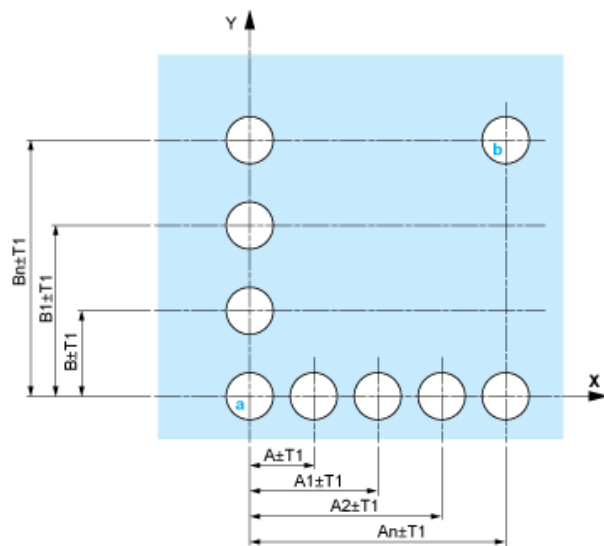
## Detail of Lug Recess



- (1) Diameter on finished panel or support
- (2) For selector switches and Emergency stop buttons, use of an anti-rotation plate type ZB5 AZ902 is recommended.
- (3)  $\varnothing 22.5$  mm recommended ( $\varnothing 22.3 \text{ }_0^{+0.4}$ ) /  $\varnothing 0.89$  in. recommended ( $\varnothing 0.88 \text{ in. }_0^{+0.016}$ )

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

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

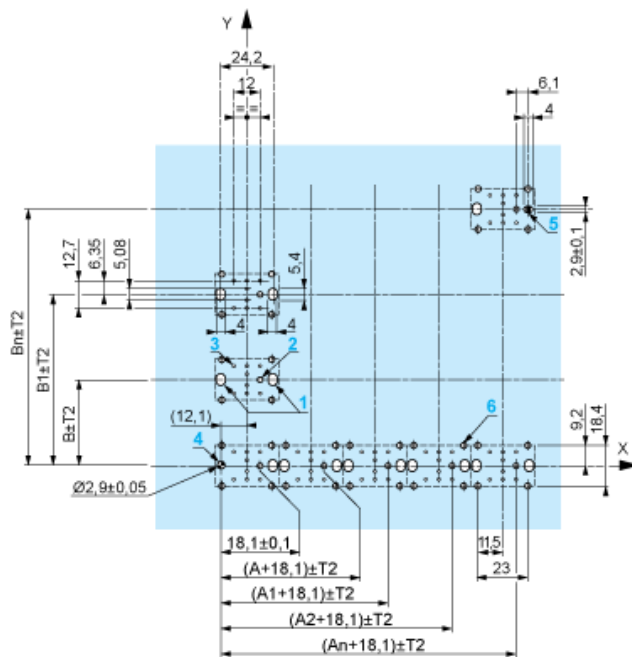


A: 30 mm min. / 1.18 in. min.

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.

[illegible]

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

- Minimum thickness of circuit board: 1.6 mm / 0.06 in.
- Cut-out diameter: 22.4 mm ± 0.1 / 0.8 in. ± 0.004
- Orientation of body/fixing collar ZB4 BZ009: ± 2°30' (excluding cut-outs marked a and b).
- Tightening torque of screws ZBZ 006: 0.6 N.m. 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 (ZB5 AD•, ZB5 AJ•, ZB5 AG•).

Technical drawing of the ZBE 70/ZBV B 7 pump assembly. The drawing shows the pump body, motor, and various components. Dimensions are given in mm and inches. The drawing includes the following labels and dimensions:

- mm
- in.
- (1)
- (2)
- (3)
- ZB5 AZ079
- ZBE 70/ZBV B 7
- ZBZ 01
- (4)
- ZBZ 006
- 49.75±0.3
- 1.96±0.012
- 55.4 max
- 2.18 max

- 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•.