Head for non illuminated push button, Harmony XB5, green mushroom 60mm, 22mm, spring return, unmarked

ZB5AR3

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Range of product	Harmony XB5
Product or component type	Head for non-illuminated push-button
Device short name	ZB5
Bezel material	Dark grey plastic
Head type	Standard
Mounting diameter	22 mm
Sale per indivisible quantity	1
Shape of signaling unit head	Round
Type of operator	spring return
Operator profile	Green mushroom Ø 60 mm, unmarked
Device presentation	Basic element

Complementary

CAD overall width	60 mm
CAD overall height	60 mm
CAD overall depth	52 mm
Net weight	0.065 kg
Mechanical durability	5000000 cycles
Station name	XALD 1 cut-out
Electrical composition code	C1 for <9 contacts using single blocks in front mounting C2 for <9 contacts using single and double blocks in front mounting C11 for <3 contacts using single blocks in front mounting C15 for <1 contacts using single blocks in front mounting SF1 for <3 contacts using single blocks in front mounting SR1 for <3 contacts using single blocks in rear mounting
Compatibility code	ZB5

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Environment	
Protective treatment	тн
Ambient air temperature for storage	-4070 °C
Ambient air temperature for	-4070 °C

Class II conforming to IEC 60536	
IP66 conforming to IEC 60529 IP67	
IP69 IP69K	
NEMA 13 NEMA 4X	
7000000 Pa at 55 °C, distance : 0.1 m	
IK03 conforming to IEC 50102	
UL 508 JIS C8201-5-1 EN/IEC 60947-5-4 EN/IEC 60947-5-1 EN/IEC 60947-1 CSA C22.2 No 14 JIS C8201-1	
BV UL listed CSA DNV LROS (Lloyds register of shipping) GL	
5 gn (f= 2500 Hz) conforming to IEC 60068-2-6	
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	
PCE	
1	
7.0 cm	
7.0 cm	
9.0 cm	
60.0 g	
S02	
20	
15.0 cm	
30.0 cm	
40.0 cm	
1.467 kg	
Green Premium product	
REACh Declaration	
Yes	
Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration	
Yes	
Yes	
China RoHS declaration	
Yes	
Product Environmental Profile	
End of Life Information	

California proposition 65

WARNING: This product can expose you to chemicals including: Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

Contractual warranty

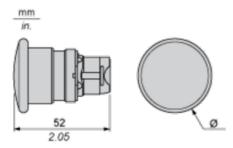
Warranty

18 months

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Dimensions Drawings

Dimensions

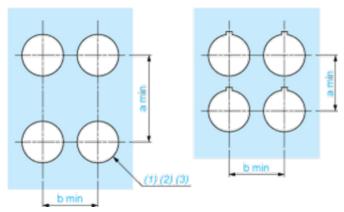


	Ø in mm	Ø in in.
ZB5AC•	40	1.57
ZB5AR•	60	2.36

Mounting and Clearance

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

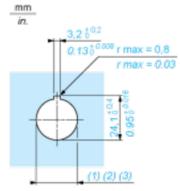
Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



- (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 (Ø22.3 $_0^{+0.4}$) / Ø0.89 in. recommended (Ø0.88 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

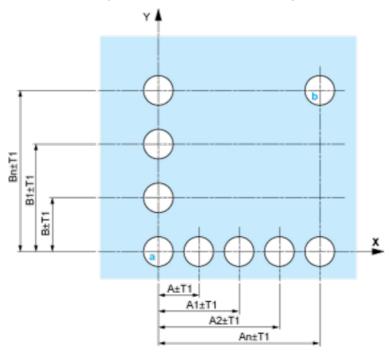
Detail of Lug Recess



- (1) Diameter on finished panel or support
- (2) For selector switches and Emergency stop buttons, use of an anti-rotation plate type ZB5AZ902 is recommended.
- (3) Ø22.5 mm recommended (Ø22.3 $_0^{+0.4}$) / Ø0.89 in. recommended (Ø0.88 in. $_0^{+0.016}$)

Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

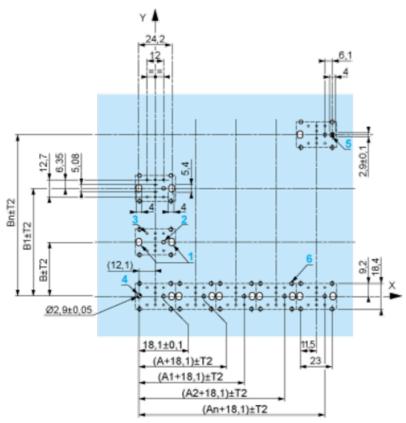
Panel Cut-outs (Viewed from Installer's Side)



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)

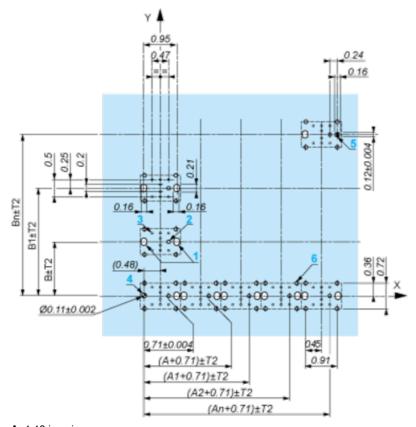
Dimensions in mm



A: 30 mm min.

B: 40 mm min.

Dimensions in in.



A: 1.18 in. min. **B:** 1.57 in. min.

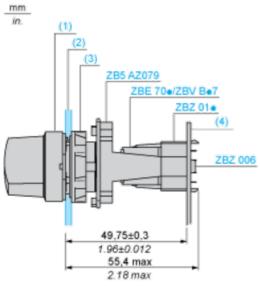
General Tolerances of the Panel and Printed Circuit Board

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 mm ± 0.1 / 0.88 in. ± 0.004
- Orientation of body/fixing collar ZB5AZ009: ± 2 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:
 - \circ every 90 mm / 3.54 in. horizontally (X), and 120 mm / 4.72 in. vertically (Y).
 - \circ $\;$ with each selector switch head (ZB5AD•, ZB5AJ•, ZB5AG•).

The fixing centers marked ${\bf a}$ and ${\bf b}$ are diagonally opposed and must align with those marked ${\bf 4}$ and ${\bf 5}$.



- (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•
- $3.8 \times \emptyset 1.2 \text{ mm} / 0.05 \text{ in. holes}$
- 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•.

ZB5AR3

Technical Description

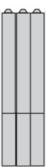
Electrical Composition Corresponding to Code C1



ZB5AR3

Technical Description

Electrical Composition Corresponding to Code C2



ZB5AR3

Technical Description

Electrical Composition Corresponding to Codes C9, C11, SF1 and SR1



Technical Description

Electrical Composition Corresponding to Code C15

1 N/O



1 N/C



1 N/O + N/C or 1 N/O + N/O or 1 N/C + N/C



ZB5AR3

Technical Description

Legend

Single contact



Double contact



Light block

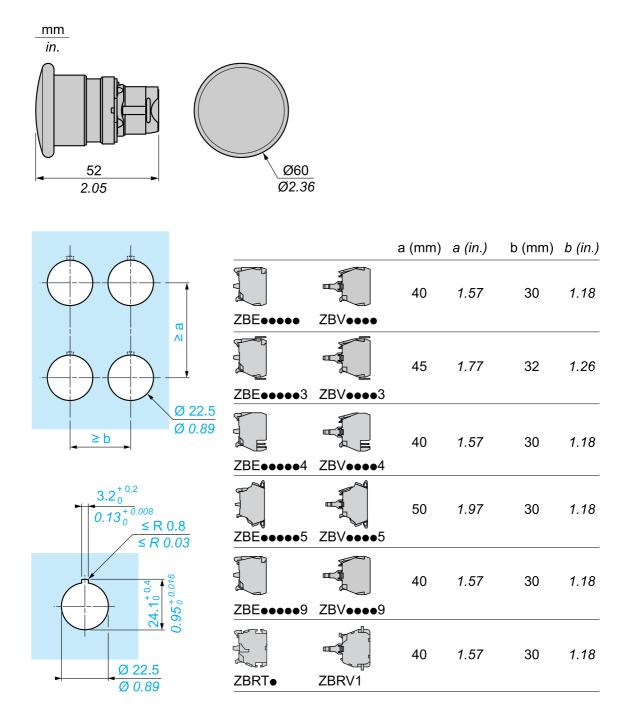


Possible location



Technical Illustration

Dimensions



Recommended replacement(s)