Product data sheet Characteristics

ZB5AW113

white projecting illuminated pushbutton head Ø22 spring return for integral LED



Main

Commercial Status	Commercialised
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	White 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			
Maximum of contact NO or NC	6			
Station name	XALK 25 cut-outs XALD 15 cut-outs			

Environment

Environment				
Protective treatment	TC			
Ambient air temperature for storage	-4070 °C			
Ambient air temperature for operation	-2570 °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 EN/IEC 60947-5-5 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 = 2500 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



ZB5AW113

Dimensions of Heads for Spring Return Illuminated Pushbuttons, for Light Source Types

LED

ZB5 AW3•3, ZB5 AW3•3S, ZB5 AA•8







ZB5 AW1•3, ZB5 AW1•3S, ZB5 AL•8







ZB5 AW9•3

mm in





ZB5 AW5•3

in.





ZB5 CW3•3

in.





ZB5 CW1•3

mm in





Bulb with BA9s Base Fitting ZB5 AW3•, ZB5 AW3•S







ZB5 AW1•, ZB5 AW1••S

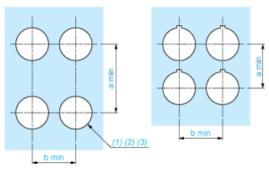
in.





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

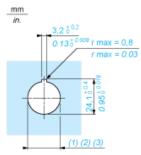
Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



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

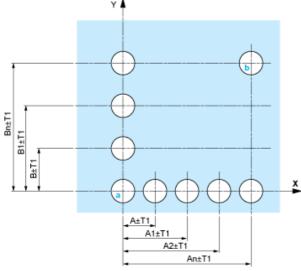
Detail of Lug Recess



- (1) Diameter on finished panel or support
- For selector switches and Emergency stop buttons, use of an anti-rotation plate type ZB5 AZ902 is recommended.
- 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)

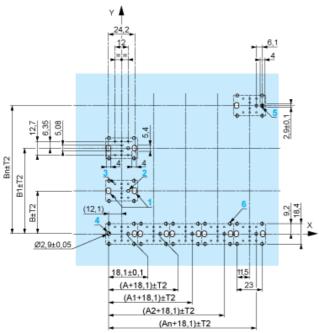


A: 30 mm min. / 1.18 in. min.

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

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

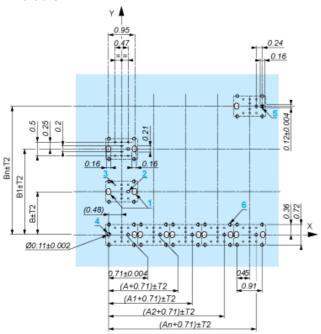
Dimensions in mm



A: 30 mm min.

B: 40 mm min.

Dimensions in in.



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

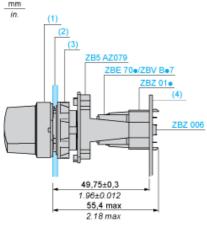
General Tolerances of the Panel and Printed Circuit Board

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 ZB4 BZ009: ± 2 30' (excluding cut-outs marked a and b).
- Tightening torque of screws ZBZ 006: 0.6 N.m (5.3 lbf.in) max.
- Allow for one ZB4 BZ079 fixing collar/pillar and its fixing screws:
 - o every 90 mm / 3.54 in. horizontally (X), and 120 mm / 4.72 in. vertically (Y).
 - o with each selector switch head (ZB5 AD•, ZB5 AJ•, ZB5 AG•).

The fixing centers marked a and b are diagonally opposed and must align with those marked 4 and 5.



- (1) Head ZB5 AD•
- (2) Panel
- (2) Nut
- (4) Printed circuit board

Mounting of Adapter (Socket) ZBZ 01•

- 1 2 elongated holes for ZBZ 006 screw access
- 2 1 hole Ø 2.4 mm ± 0.05 / 0.09 in. ± 0.002 for centring adapter ZBZ 01•
- 3 8 × 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 ZBZ 01•

Dimensions An + 18.1 relate to the Ø 2.4 mm \pm 0.05 / 0.09 in. \pm 0.002 holes for centring adapter ZBZ 01•.