### ZB5AW33

# green flush illuminated pushbutton head $\emptyset$ 22 spring return for BA9s bulb



Main	
Commercial Status	Commercialised
Range of product	Harmony XB5
Product or component type	Head for illuminated pushbutton
Device short name	ZB5
Product compatibility	BA 9s
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	Green flush unmarked
Operator additional information	With plain lens

#### Complementary

CAD overall width	29 mm			
CAD overall height	29 mm			
CAD overall depth	32 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 25 cut-outs XALD 15 cut-outs			
Electrical composition code	MF2 for <= 2 contacts using single blocks in front mounting with BA 9s M9 for <= 2 contacts using single blocks in front mounting with BA 9s and transformer M8 for <= 6 contacts using single and double blocks in front mounting with BA 9s M7 for <= 6 contacts using single blocks in front mounting with BA 9s			

#### 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	EN/IEC 60947-1 EN/IEC 60947-5-1 EN/IEC 60947-5-4 JIS C 4520 UL 508 GB 14048.5 CSA C22.2 No 14		

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

# Product data sheet Dimensions Drawings

## ZB5AW33

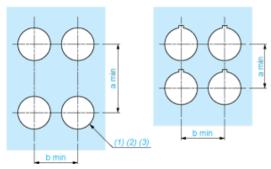
#### **Dimensions**





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

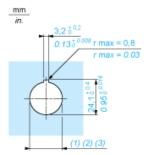
#### Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



- Diameter on finished panel or support
- For selector switches and Emergency stop buttons, use of an anti-rotation plate type ZB5AZ902 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

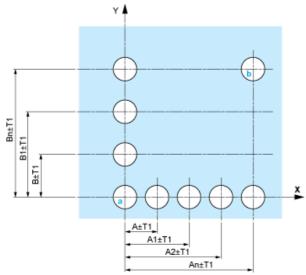
#### **Detail of Lug Recess**



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

Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

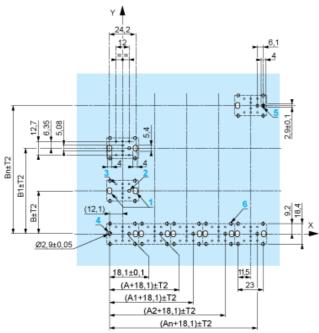
#### Panel Cut-outs (Viewed from Installer's Side)



A: 30 mm min. / 1.18 in. min. B: 40 mm min. / 1.57 in. min.

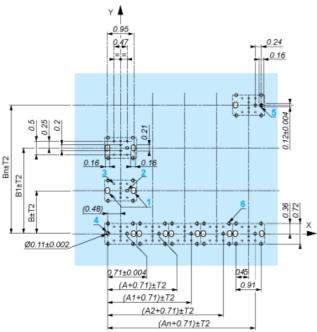
#### Printed Circuit Board Cut-outs (Viewed from Electrical Block Side)

Dimensions in mm



A: 30 mm min. B: 40 mm min.

#### Dimensions in in.



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

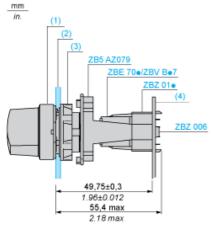
#### General Tolerances of the Panel and Printed Circuit Board

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).
  - o 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

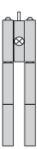
#### Mounting of Adapter (Socket) ZBZ01•

- 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 × 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 ± 0.05 / 0.09 in. ± 0.002 holes for centring adapter ZBZ01•.						

### ZB5AW33

Electrical Composition Corresponding to Codes M1 and M7



Electrical Composition Corresponding to Codes M2 and M8



Electrical Composition Corresponding to Code M9



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



Legend

Single contact



Double contact



Light block



Possible location

