

Product datasheet

Specifications



green flush illuminated pushbutton
head Ø22 spring return for BA9s
bulb

Local distributor code: 237217789 ZB5AW33

EAN Code : 3389110909937

Main

Range of product	Harmony XB5
Product or component type	Head for illuminated push-button
Device short name	ZB5
Product compatibility	BA 9s
Bezel material	Dark grey plastic
Mounting diameter	22 mm
Sale per indivisible quantity	1
Head type	Standard
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
Net weight	0.018 kg
Resistance to high pressure washer	7000000 Pa at 55 °C, distance : 0.1 m
Mechanical durability	10000000 cycles
Main group	Illum push-button
Group of product	Flush push BA9s
Station name	XALD 1...5 cut-outs XALK 2...5 cut-outs
Cap/Operator or lens colour	Green
Marking	Unmarked
Electrical composition code	M7 for <6 contacts using single blocks in front mounting with BA 9s M8 for <6 contacts using single and double blocks in front mounting with BA 9s M9 for <2 contacts using single blocks in front mounting with BA 9s and transformer MF2 for <2 contacts using single blocks in front mounting with BA 9s
Device presentation	Basic sub-assemblies

Environment

Protective treatment	TC
Ambient air temperature for storage	-40...70 °C
Ambient air temperature for operation	-40...55 °C
Overvoltage category	Class II conforming to IEC 60536
IP degree of protection	IP66 conforming to IEC 60529 IP67 IP69 IP69K
NEMA degree of protection	NEMA 13 NEMA 4X
IK degree of protection	IK05 conforming to EN 50102
Standards	EN/IEC 60947-5-4 EN/IEC 60947-1 CSA C22.2 No 14 EN/IEC 60947-5-1 GB 14048.5 JIS C8201-5-1 UL 508 JIS C8201-1
Product certifications	GL DNV LROS (Lloyds register of shipping) CSA BV UL listed
Vibration resistance	5 gn (f= 2...500 Hz) conforming to IEC 60068-2-6
Shock resistance	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

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	4.5 cm
Package 1 Width	3.4 cm
Package 1 Length	5.4 cm
Package 1 Weight	18.0 g
Unit Type of Package 2	S01
Number of Units in Package 2	50
Package 2 Height	15.0 cm
Package 2 Width	15.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	1.062 kg

Offer Sustainability

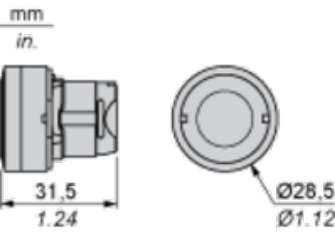
Sustainable offer status	Green Premium product
REACH Regulation	REACH Declaration
REACH free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes

China RoHS Regulation	China RoHS declaration
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information

Contractual warranty

Warranty	18 months
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Dimensions



Product datasheet

ZB5AW33

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 ($\text{Ø}22.3\text{ }_0^{+0.4}$) / Ø0.89 in. recommended ($\text{Ø}0.88\text{ in. }_0^{+0.016}$)

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



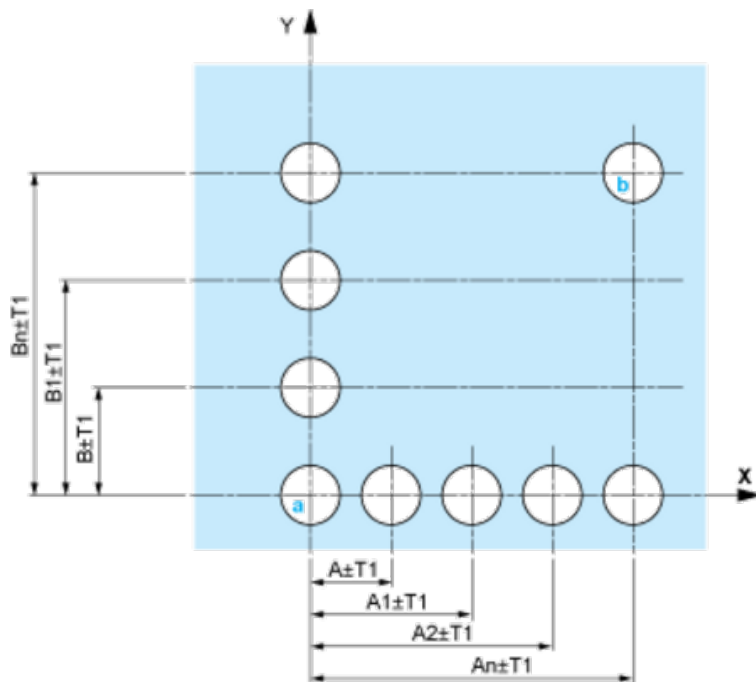
- (1) Diameter on finished panel or support
- (2) For selector switches and Emergency stop buttons, use of an anti-rotation plate type ZB5AZ902 is recommended.
- (3) Ø22.5 mm recommended ($\text{Ø}22.3\text{ }_0^{+0.4}$) / Ø0.89 in. recommended ($\text{Ø}0.88\text{ in. }_0^{+0.016}$)

Mounting and Clearance

ZB5AW33

Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

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

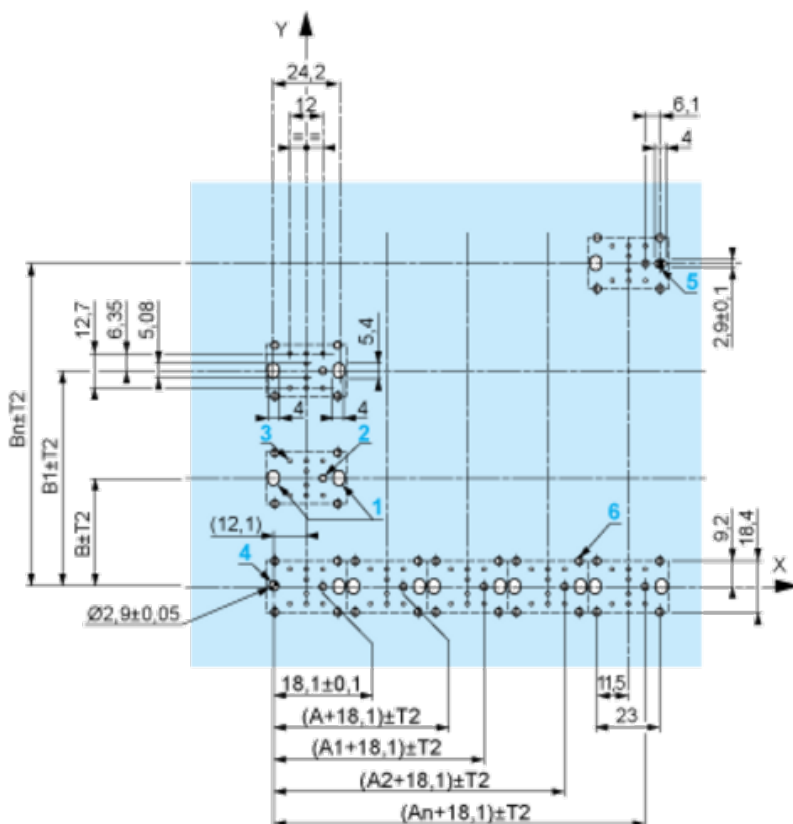


A: 30 mm min. / 1.18 in. min.

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.



The cumulative tolerance must not exceed 0.3 mm / 0.012 in.: $T_1 + T_2 = 0.3 \text{ mm max.}$

- Minimum thickness of circuit board: 1.6 mm / 0.06 in.
- Cut-out diameter: 22.4 mm $\pm$ 0.1 / 0.88 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**.

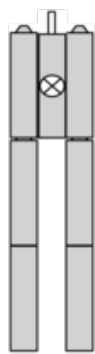


Mounting of Adapter (Socket) ZBZ01•

- 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•.

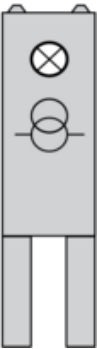
Electrical Composition Corresponding to Codes M1 and M7



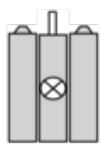
Electrical Composition Corresponding to Codes M2 and M8



Electrical Composition Corresponding to Code M9



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



Legend

Single contact



Double contact



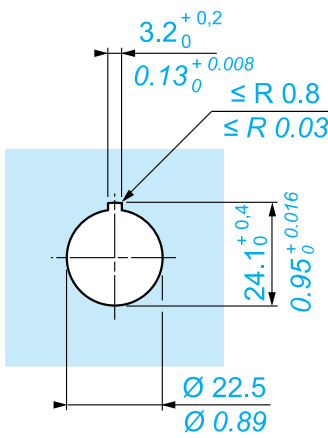
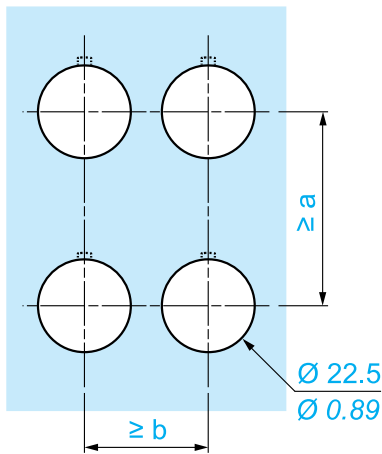
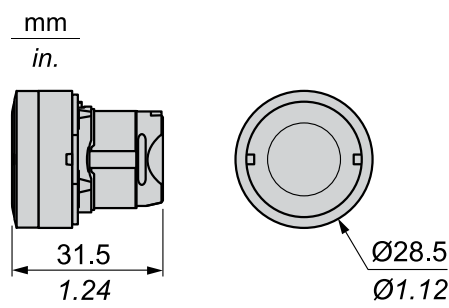
Light block



Possible location



Dimensions



		a (mm)	a (in.)	b (mm)	b (in.)
		40	1.57	30	1.18
ZBE.....	ZBV.....				
		45	1.77	32	1.26
ZBE.....3	ZBV.....3				
		40	1.57	30	1.18
ZBE.....4	ZBV.....4				
		50	1.97	30	1.18
ZBE.....5	ZBV.....5				
		40	1.57	30	1.18
ZBE.....9	ZBV.....9				
		40	1.57	30	1.18
ZBRT●	ZBRV1				

Recommended replacement(s)