Specifications



Push button head, Harmony XB5, plastic, flush, green, 22mm, spring return, unmarked

ZB5AA3

Main

Main	
Range of product	Harmony XB5
Product or component type	Head for non-illuminated push-button
Device short name	ZB5
Bezel material	Dark grey plastic
Mounting diameter	22 mm
Head type	Standard
Sale per indivisible quantity	1
Shape of signaling unit head	Round
Type of operator	spring return
Operator profile	Green flush, unmarked
Complementary	
CAD overall width	29 mm

CAD overall width	29 mm
CAD overall height	29 mm
CAD overall depth	28 mm
Product weight	0.018 kg
Mechanical durability	1000000 cycles
Station name	XALD 15 cut-outs XALK 25 cut-outs
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

Device presentation

Basic element

Environment

Protective treatment	тн
Ambient air temperature for storage	-4070 °C
Ambient air temperature for operation	-4070 °C
Overvoltage category	Class II conforming to IEC 60536

1



IP degree of protection	IP66 conforming to IEC 60529 IP67 IP69				
	IP69K				
NEMA degree of protection	NEMA 13 NEMA 4X				
Resistance to high pressure washer	7000000 Pa at 55 °C, distance : 0.1 m				
IK degree of protection	IK03 conforming to IEC 50102				
Standards	UL 508 EN/IEC 60947-1 EN/IEC 60947-5-1 CSA C22.2 No 14 EN/IEC 60947-5-4 JIS C8201-5-1 JIS C8201-1				
Product certifications	UL listed LROS (Lloyds register of shipping) DNV BV GL CSA				
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				
Vibration resistance	5 gn (f= 2500 Hz) conforming to IEC 60068-2-6				
Packing Units					
Unit Type of Package 1	PCE				
Number of Units in Package 1	1				
Package 1 Height	4.500 cm				
Package 1 Width	3.400 cm				
Package 1 Length	5.400 cm				
Package 1 Weight	16.800 g				
Unit Type of Package 2	BB1				
Number of Units in Package 2	5				
Package 2 Height	4.500 cm				
Package 2 Width	3.400 cm				
Package 2 Length	26.500 cm				
Package 2 Weight	84.000 g				
Unit Type of Package 3	S03				
Number of Units in Package 3	300				
Package 3 Height	30 cm				
Package 3 Width	30 cm				
Package 3 Length	40 cm				
Package 3 Weight	5.564 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				
	Ver			

Toxic heavy metal free

Mercury free	Yes			
China RoHS Regulation	China RoHS declaration			
RoHS exemption information	Yes			
Environmental Disclosure	Product Environmental Profile			
Circularity Profile	End of Life Information			
California proposition 65	WARNING: This product can expose you to chemicals including: Di-isodecyl phthalate (DIDP), which known to the State of California to cause birth defects or other reproductive harm. For more informat go to www.P65Warnings.ca.gov			

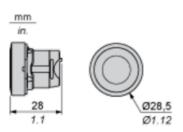
Contractual warranty

Warranty

18 months

Dimensions Drawings

Dimensions

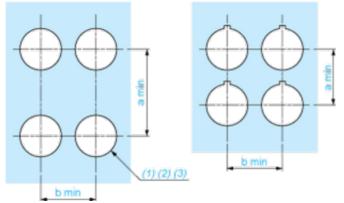




Mounting and Clearance

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



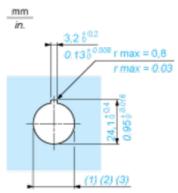
(1) Diameter on finished panel or support

(2) For selector switches and Emergency stop buttons, use of an anti-rotation plate type ZB5AZ902 is recommended.

(3) \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

(2) For selector switches and Emergency stop buttons, use of an anti-rotation plate type ZB5AZ902 is recommended.

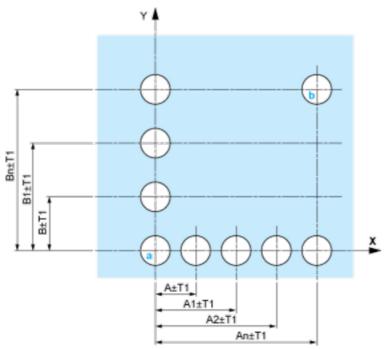
(3) Ø22.5 mm recommended (Ø22.3 $_{0}^{+0.4}$) / Ø0.89 in. recommended (Ø0.88 in. $_{0}^{+0.016}$)

ZB5AA3

Mounting and Clearance

Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

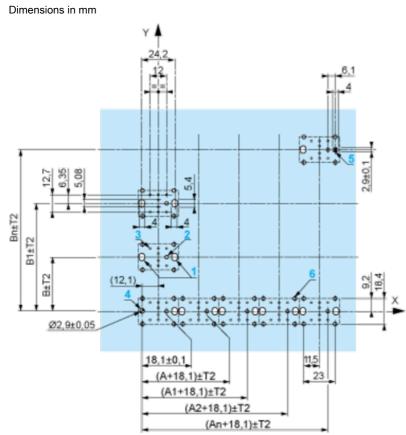
Panel Cut-outs (Viewed from Installer's Side)



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

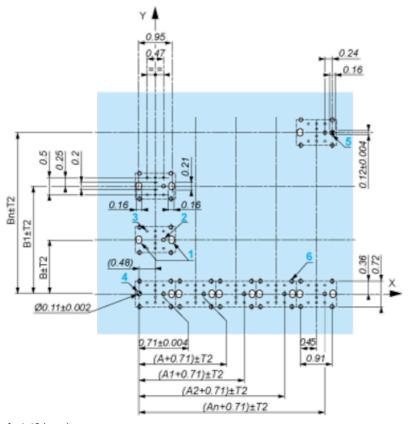
B: 40 mm min. / 1.57 in. min.

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



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

Dimensions in in.





B: 1.57 in. min.

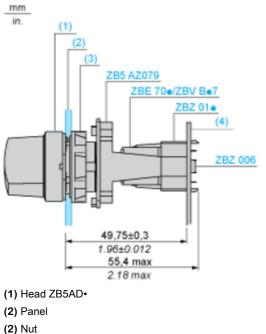
General Tolerances of the Panel and Printed Circuit Board

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



(4) Printed circuit board

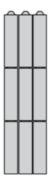
Mounting of Adapter (Socket) ZBZ01•

- 1 2 elongated holes for ZBZ006 screw access
- 2 1 hole Ø 2.4 mm \pm 0.05 / 0.09 in. \pm 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 \pm 0.05 / 0.09 in. \pm 0.002 holes for centring adapter ZBZ01+.

Technical Description

Electrical Composition Corresponding to Code C1





Technical Description

Electrical Composition Corresponding to Code C2



ZB5AA3

Technical Description

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





ZB5AA3

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



Technical Description

Legend

Single contact



Double contact



Light block

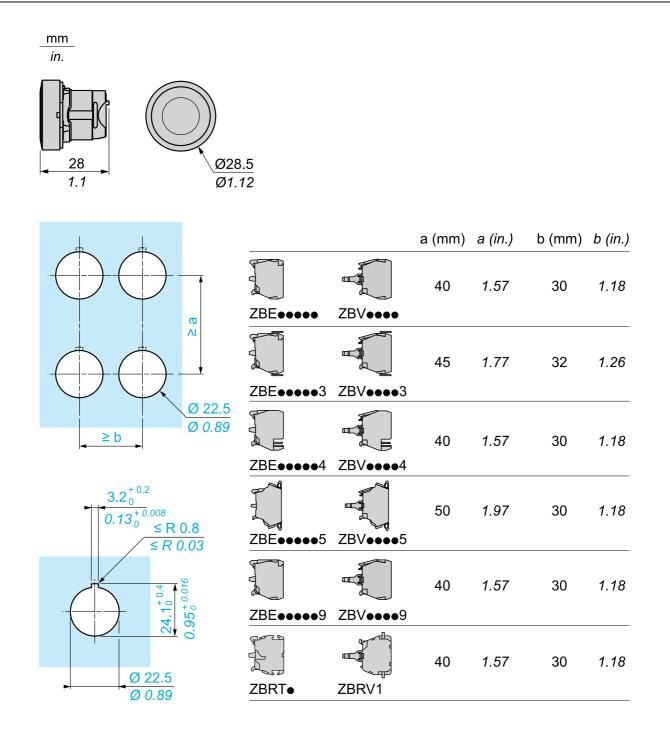


Possible location



Technical Illustration

Dimensions



Recommended replacement(s)