Product datasheet

Specifications





black projecting pushbutton head Ø22 spring return unmarked

Local distributor code: 237162180

7162180 ZB5AL2

EAN Code: 3389110906387

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	Black projecting unmarked	

Complementary

Cad Overall Width	29 mm	
Cad Overall Height	29 mm	
Cad Overall Depth	33 mm	
Net Weight	Weight 0.019 kg	
Mechanical Durability 10000000 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		
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	IEC 60947-5-4 IEC 60947-5-1 JIS C8201-5-1 UL 508 IEC 60947-1 CSA C22.2 No 14 JIS C8201-1		
Product Certifications	DNV UL listed CSA LROS (Lloyds register of shipping) GL BV		
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 an (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	17.800 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	89.000 g
Unit Type Of Package 3	S03
Number Of Units In Package 3	150
Package 3 Height	30.000 cm
Package 3 Width	30.000 cm
Package 3 Length	40.000 cm
Package 3 Weight	3.160 kg

Contractual warranty

Warranty 18 months



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Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

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Transparency RoHS/REACh

Well-being performance

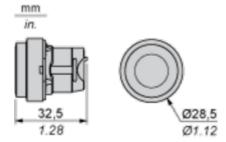
⊘	Reach Free Of Svhc	
Ø	Mercury Free	
⊘	Rohs Exemption Information	Yes

Certifications & Standards

Reach Regulation	REACh Declaration		
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)		
China Rohs Regulation	China RoHS declaration		
Environmental Disclosure	Product Environmental Profile		
Circularity Profile	End of Life Information		

Dimensions Drawings

Dimensions

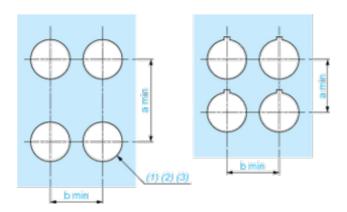


ZB5AL2

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. $_0^{+0.016}$)

				0
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

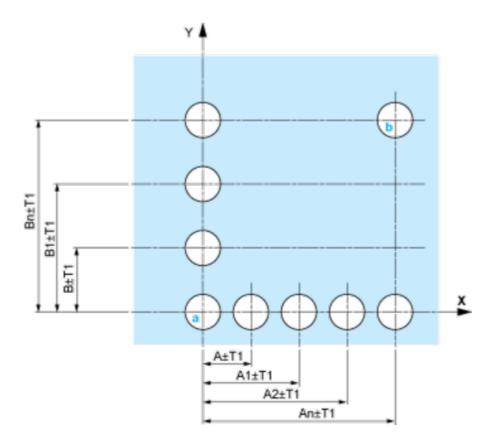
Detail of Lug Recess



- (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)

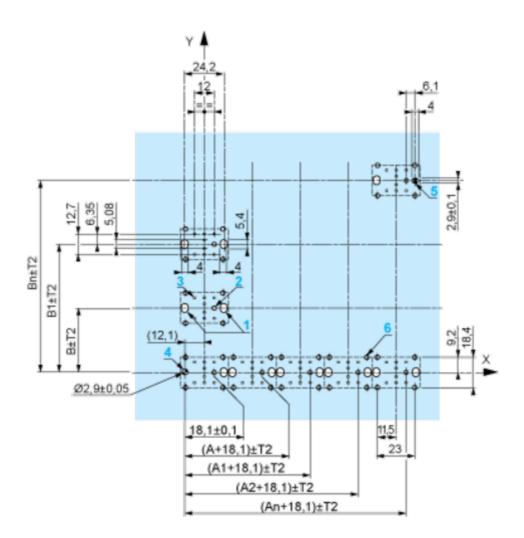


A: 30 mm min. / 1.18 in. min. **B:** 40 mm min. / 1.57 in. min.

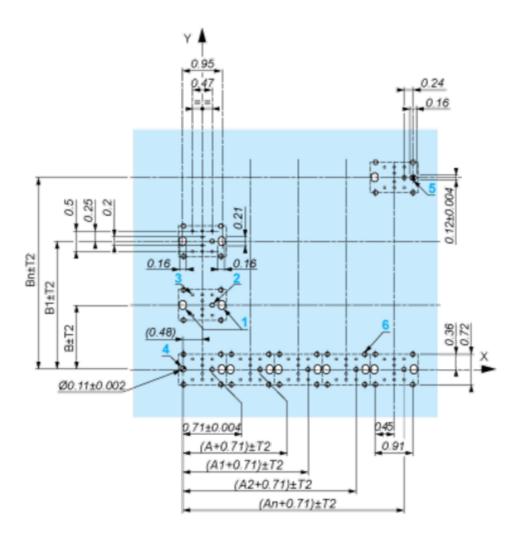
Printed Circuit Board Cut-outs (Viewed from Electrical Block Side)

Dimensions in mm

ZB5AL2



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

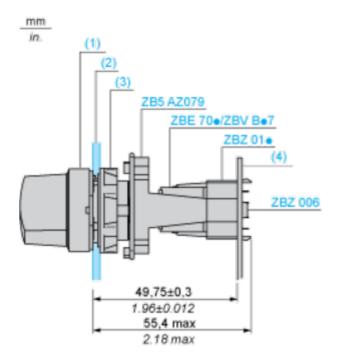
The cumulative tolerance must not exceed 0.3 mm / 0.012 in.: T1 + T2 = 0.3 mm max.

Installation Precautions

- $_{\bullet}$ 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.

ZB5AL2



- (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•

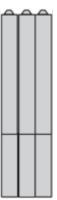
Dimensions An + 18.1 relate to the Ø 2.4 mm \pm 0.05 / 0.09 in. \pm 0.002 holes for centring adapter ZBZ01•.

Technical Description

Electrical Composition Corresponding to Code C1



Electrical Composition Corresponding to Code C2



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



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



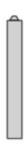
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Legend

Single contact



Double contact



Light block



Possible location

