ZB5AG02D



Main

mann	
Range of product	Harmony XB5
Product or component type	Head for key selector switch
Device short name	ZB5
Bezel material	Plastic
Mounting diameter	0.87 in (22 mm)
Head type	Standard
Sale per indivisible quantity	1
Shape of signaling unit head	Round
Type of operator	Stay put
Operator profile	Black key switch
Operator position information	2 positions 90°
Type of keylock	Dom 8D1
Key withdrawal position	Right

Complementary

CAD overall width	1.14 in (29 mm)				
CAD overall height	1.14 in (29 mm)				
CAD overall depth	2.83 in (72 mm)				
Product weight	0.13 lb(US) (0.057 kg)				
Mechanical durability	1000000 cycles				
Station name	XALD 15 cut-outs XALK 25 cut-outs				
Electrical composition code	XALK 25 cut-outs C15 1 contacts using single blocks in front mounting C15 1 contacts using single blocks in front mounting C11 for 3 contacts using single blocks in front mounting SF1 for 3 contacts using single blocks in front mounting C7 for 4 contacts using single blocks in front mounting C8 for 4 contacts using single and double blocks in front mounting SR1 for 3 contacts using single blocks in rear mounting C4 6 contacts using single and double blocks in front mounting C5 for 5 contacts using single blocks in front mounting C6 for 5 contacts using single and double blocks in front mounting C6 for 5 contacts using single blocks in front mounting C3 6 contacts using single blocks in front mounting				
Customizable	No				

Environment

Environment				
protective treatment	TH			
ambient air temperature for storage	-40158 °F (-4070 °C)			
ambient air temperature for operation	-40158 °F (-4070 °C)			
overvoltage category	Class II conforming to IEC 60536			
IP degree of protection	IP67 IP66 conforming to IEC 60529 IP69K IP69			
NEMA degree of protection	NEMA 13 NEMA 4X			
resistance to high pressure washer	1015.26 psi (7000000 Pa) at 131 °F (55 °C),distance: 0.1 m			
IK degree of protection	IK06 conforming to IEC 50102			
standards	EN/IEC 60947-1 EN/IEC 60947-5-1 EN/IEC 60947-5-4 JIS C 4520 UL 508 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 resistance30 gn (duration = 18 ms) half sine wave acceleration conforming to 50 gn (duration = 11 ms) half sine wave acceleration conforming to	

Offer Sustainability

 WARNING: This product can expose you to chemicals including:
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 Nickel compounds, which is known to the State of California to cause cancer, and
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Di-isodecyl phthalate (DIDP), which is known to the StateDi-isodecyl phthalate (DIDP), which is known to the State of California to cause birth of California to cause birth defects or other reproductive defects or other reproductive harm.

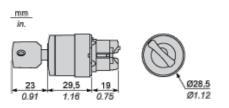
For more information go to www.p65warnings.ca.gov For more information go to www.p65warnings.ca.gov

Contractual warranty

Warranty period

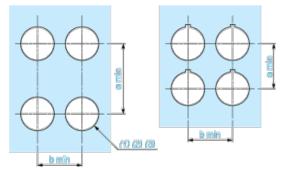
18 months

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

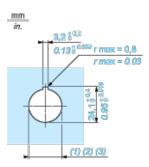


- (1) Diameter on finished panel or support
- (2) For selector switches and Emergency stop buttons, use of an anti-rotation plate type ZB5AZ902 is recommended.
- (3) Ø22.5 mm recommended (Ø22.3 $_{0}^{+0.4}$) / Ø0.89 in. recommended (Ø0.88 in. $_{0}^{+0.016}$)

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

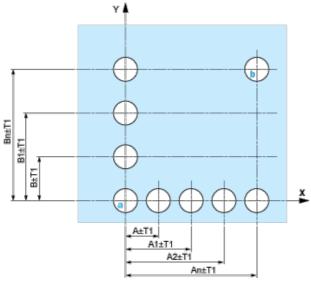




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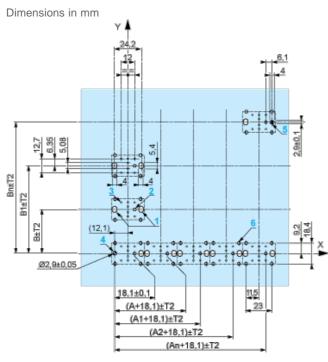
Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

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



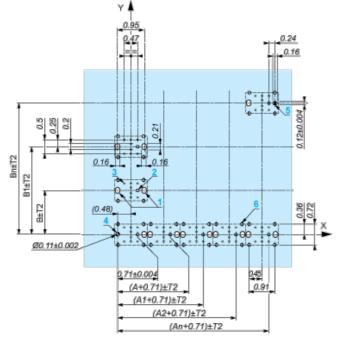
- A: 30 mm min. / 1.18 in. min.
- B: 40 mm min. / 1.57 in. min.

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



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





A: 1.18 in. min.

B: 1.57 in. min.

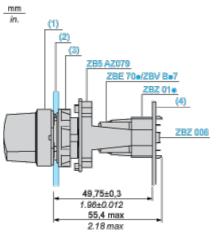
General Tolerances of the Panel and Printed Circuit Board

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:
 - i every 90 mm / 3.54 in. horizontally (X), and 120 mm / 4.72 in. vertically (Y).
 - i 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•

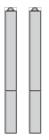
- 1 2 elongated holes for ZBZ006 screw access
- $\scriptstyle\rm I$ 2 1 hole Ø 2.4 mm \pm 0.05 / 0.09 in. \pm 0.002 for centring adapter ZBZ01•
- 1 3 8 × Ø 1.2 mm / 0.05 in. holes
- + 4 1 hole Ø 2.9 mm ± 0.05 / 0.11 in. ± 0.002, for aligning the printed circuit board (with cut-out marked a)



- 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 Code C4



Electrical Composition Corresponding to Code C5



Electrical Composition Corresponding to Code C6



Electrical Composition Corresponding to Code C7



Electrical Composition Corresponding to Code C8



Electrical Composition Corresponding to Code C3





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



Legend

Single contact



Double contact



Light block



Possible location

Sequence of Contacts Fitted to 2-position Selector Switch Body

Position 315°



Push	Position	Тор			
		Bottom	\bigtriangleup	\bigtriangleup	\bigtriangleup
	Location		Left	Centre	Right
	State		0	0	0
Contacts	N/O		open	open	open
	N/C		closed	closed	closed

Position 45°





Push	Position	Тор			
		Bottom			
	Location		Left	Centre	Right
	State		1	1	1
Contacts	N/O		closed	closed	closed
	N/C		open	open	open

