

Product data sheet

Specifications



head for non illuminated push button, Harmony XB5, black, 40mm mushroom pushbutton, 22mm latching key release

ZB5AS12

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
Head type	Standard
Mounting diameter	22 mm
Sale per indivisible quantity	1
Shape of signaling unit head	Round
Type of operator	latching
Reset	Key release
Operator profile	Black mushroom Ø 40 mm, unmarked
Type of keylock	Key 455
Key withdrawal position	Center
Device presentation	Basic element

Complementary

CAD overall width	40 mm
CAD overall height	40 mm
CAD overall depth	79 mm
Net weight	0.044 kg
Mechanical durability	500000 cycles
Station name	XALD 1 cut-out XALK 1 cut-out
Electrical composition code	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 C7 for <4 contacts using single blocks in front mounting C8 for <4 contacts using single and double blocks in front mounting C10 for <4 contacts using single and double blocks in front mounting
Compatibility code	ZB5

Environment

Protective treatment	TH
Ambient air temperature for storage	-40...70 °C

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Ambient air temperature for operation	-40...70 °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	JIS C8201-5-1 CSA C22.2 No 14 IEC 60947-1 UL 508 IEC 60947-5-4 IEC 60947-5-1 JIS C8201-1
Product certifications	CSA DNV BV LROS (Lloyds register of shipping) 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	5.3 cm
Package 1 Length	8.8 cm
Package 1 Weight	69.0 g
Unit Type of Package 2	S03
Number of Units in Package 2	100
Package 2 Height	30.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	7.302 kg

Contractual warranty

Warranty	18 months
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Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

 Environmental footprint	
Total lifecycle Carbon footprint	1
Environmental Disclosure	Product Environmental Profile

Use Better

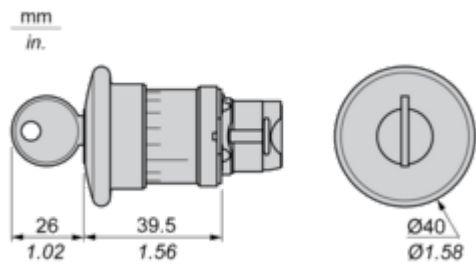
 Materials and Substances	
Packaging made with recycled cardboard	No
Packaging without single use plastic	No
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
REACH Regulation	REACH Declaration
California proposition 65	WARNING: This product can expose you to chemicals including: Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

Use Again

 Repack and remanufacture	
End of life manual availability	End of Life Information
Take-back	No

Dimensions Drawings

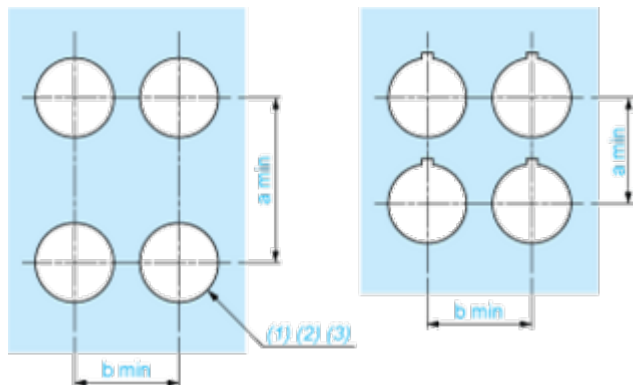
Dimensions



Mounting and Clearance

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

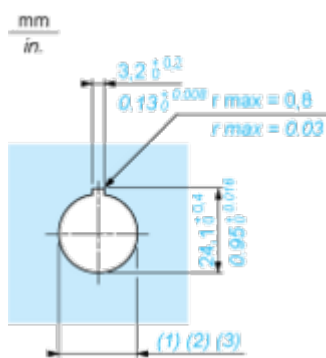
Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



- (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) Ø22.5 mm recommended ($\text{Ø}22.3 \begin{smallmatrix} +0.4 \\ 0 \end{smallmatrix}$) / Ø0.89 in. recommended ($\text{Ø}0.88 \text{ in. } \begin{smallmatrix} +0.016 \\ 0 \end{smallmatrix}$)

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

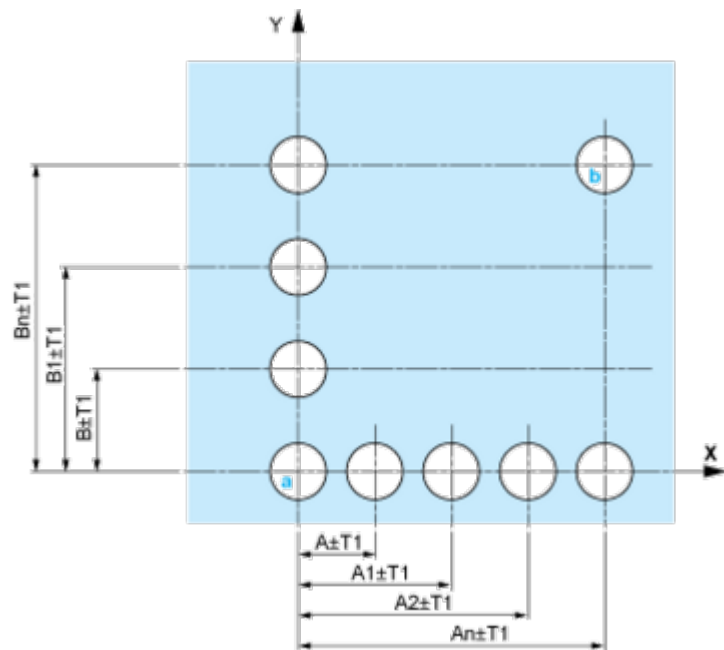
Detail of Lug Recess



- (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 ($\text{Ø}22.3 \begin{smallmatrix} +0.4 \\ 0 \end{smallmatrix}$) / Ø0.89 in. recommended ($\text{Ø}0.88 \text{ in. } \begin{smallmatrix} +0.016 \\ 0 \end{smallmatrix}$)

Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

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

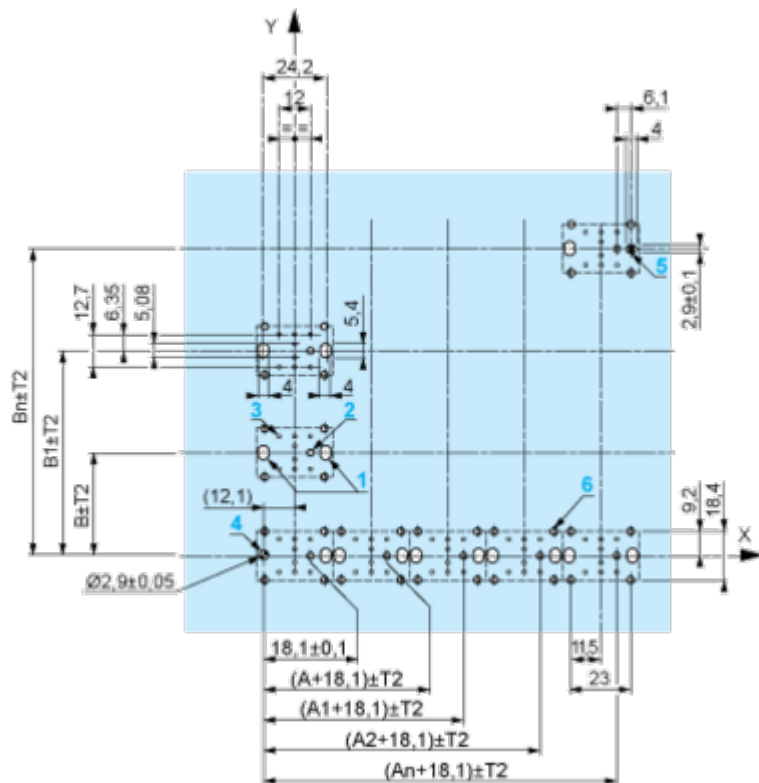


A: 30 mm min. / 1.18 in. min.

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

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

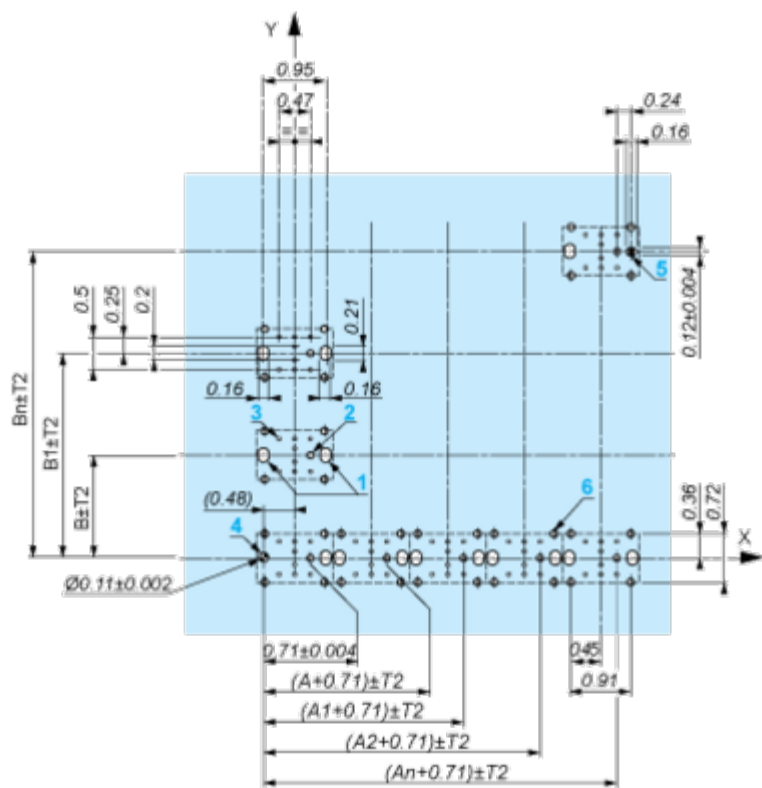
Dimensions in mm



A: 30 mm min.

B: 40 mm min.

Dimensions in in.



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

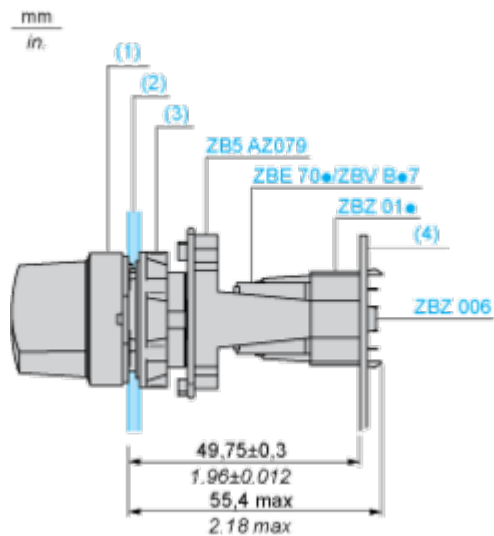
General Tolerances of the Panel and Printed Circuit Board

The cumulative tolerance must not exceed 0.3 mm / 0.012 in.: $T1 + T2 = 0.3 \text{ mm max.}$

Installation Precautions

- 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**.



- (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 $\varnothing$ 2.4 mm $\pm$ 0.05 / 0.09 in. $\pm$ 0.002 for centring adapter ZBZ01•
- 3 8 $\times$ $\varnothing$ 1.2 mm / 0.05 in. holes
- 4 1 hole $\varnothing$ 2.9 mm $\pm$ 0.05 / 0.11 in. $\pm$ 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 $\varnothing$ 2.4 mm / 0.09 in. for clipping in adapter ZBZ01•

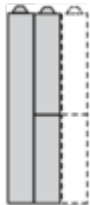
Dimensions An + 18.1 relate to the $\varnothing$ 2.4 mm $\pm$ 0.05 / 0.09 in. $\pm$ 0.002 holes for centring adapter ZBZ01•.

Technical Description

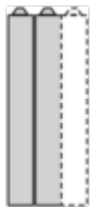
Electrical Composition Corresponding to Code C7



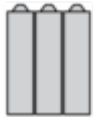
Electrical Compositions Corresponding to Code C8



Electrical Compositions Corresponding to Code C10



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



Electrical Composition Corresponding to Code C15

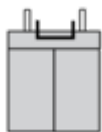
1 N/O



1 N/C



1 N/O + N/C or 1 N/O + N/O or 1 N/C + N/C



Legend

Single contact



Double contact



Light block



Possible location



Technical Illustration

Dimensions

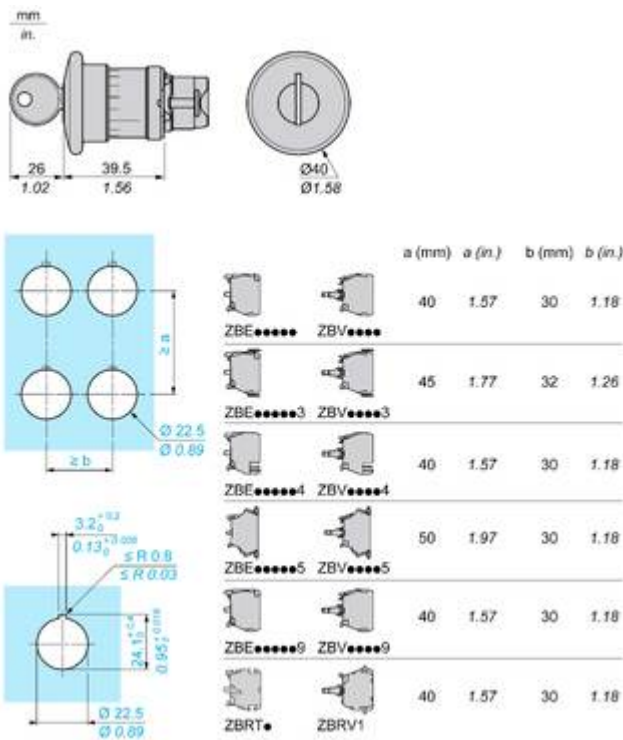


Image of product / Alternate images

Alternative





