

Product data sheet

Specifications



blue projecting illuminated pushbutton head Ø22 spring return for integral LED

ZB5AW163S

⚠ Discontinued on: Jan 29, 2021

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Main

Range Of Product	Harmony XB5
Product Or Component Type	Head for illuminated push-button
Device Short Name	ZB5
Product Compatibility	Integral LED
Bezel Material	Plastic
Mounting Diameter	0.87 in (22 mm)
Sale Per Indivisible Quantity	1
Shape Of Signaling Unit Head	Round
Type Of Operator	spring return
Operator Profile	Blue projecting, unmarked
Operator Additional Information	With grooved lens
Environmental Characteristic	High ambient lighting environment

Complementary

Cad Overall Width	1.14 in (29 mm)
Cad Overall Height	1.14 in (29 mm)
Cad Overall Depth	1.30 in (33 mm)
Net Weight	0.04 lb(US) (0.017 kg)
Resistance To High Pressure Washer	1015.26 psi (7000000 Pa) 131 °F (55 °C) 0.1 m
Mechanical Durability	10000000 cycles
Main Group	Illum push-button
Group Of Product	Proj push with inser of legend
Station Name	XALD 1...5 cut-outs XALK 2...5 cut-outs
Cap/Operator Or Lens Colour	Blue
Marking	Unmarked
Electrical Composition Code	M1 6 single front mounting integral LED M2 6 single and double front mounting integral LED M6 2 single front mounting integral LED and transformer M10 2 single front mounting integral LED MF1 2 single front mounting integral LED MR1 2 single rear mounting integral LED
Device Presentation	Basic sub-assemblies

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

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

Environment

Protective Treatment	TC
Ambient Air Temperature For Storage	-40...158 °F (-40...70 °C)
Ambient Air Temperature For Operation	-40...158 °F (-40...70 °C)
Overvoltage Category	Class II IEC 60536
Ip Degree Of Protection	IP66 IEC 60529 IP69 IP69K
Nema Degree Of Protection	NEMA 13 NEMA 4X
Ik Degree Of Protection	IK05 conforming to EN 50102
Product Certifications	LROS (Lloyds register of shipping) DNV BV GL CSA UL Listed
Vibration Resistance	5 gn 2...500 Hz)IEC 60068-2-6
Shock Resistance	30 gn 18 ms) half sine wave acceleration IEC 60068-2-27 50 gn 11 ms) half sine wave acceleration IEC 60068-2-27

Ordering and shipping details

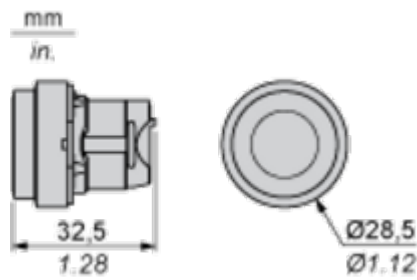
Category	22467-PUSHBUTTONS,22MM(PLASTIC) NEW
Discount Schedule	CS2
Gtin	3389110175967
Returnability	No

Contractual warranty

Warranty	18 months
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Dimensions Drawings

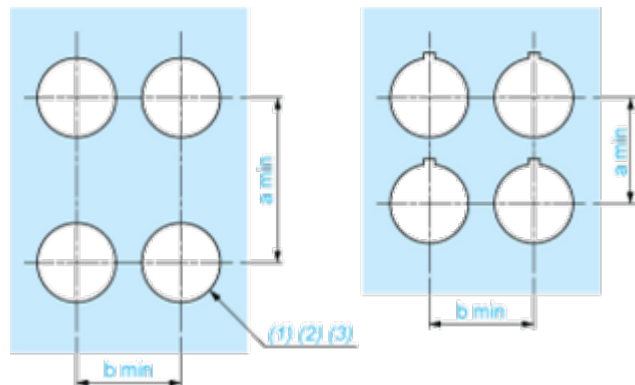
Dimensions



Mounting and Clearance

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

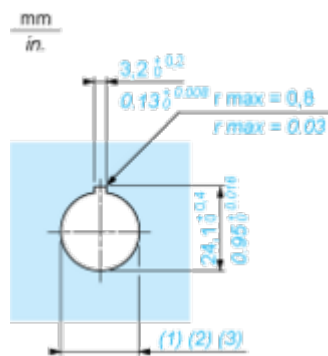
Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



- (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

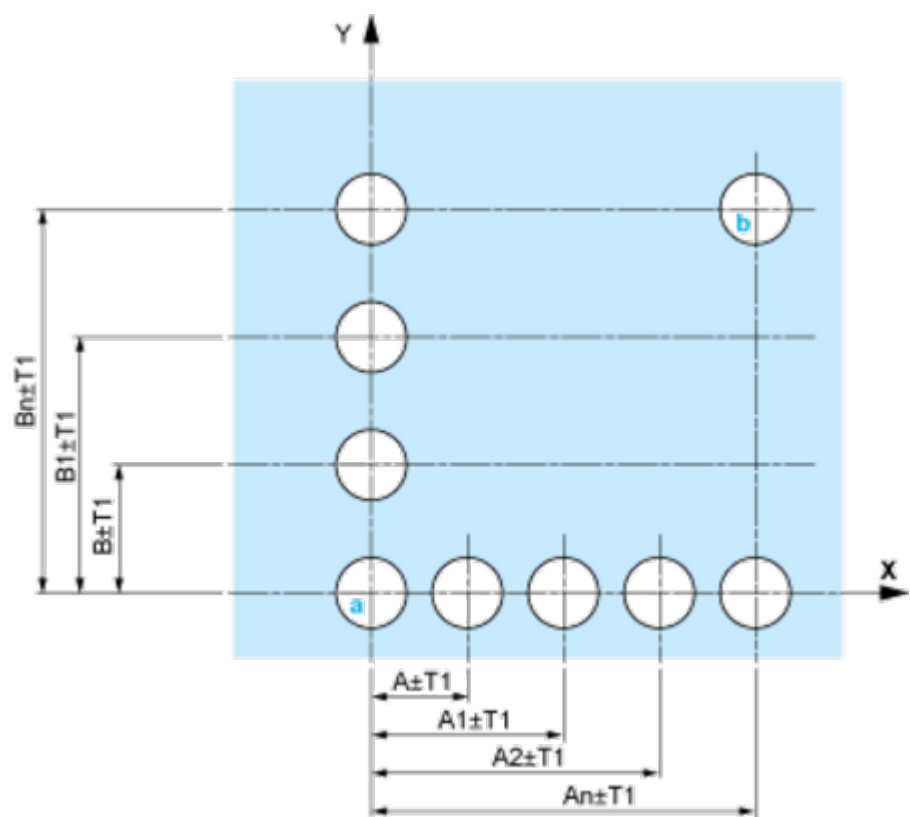
Detail of Lug Recess



- (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)

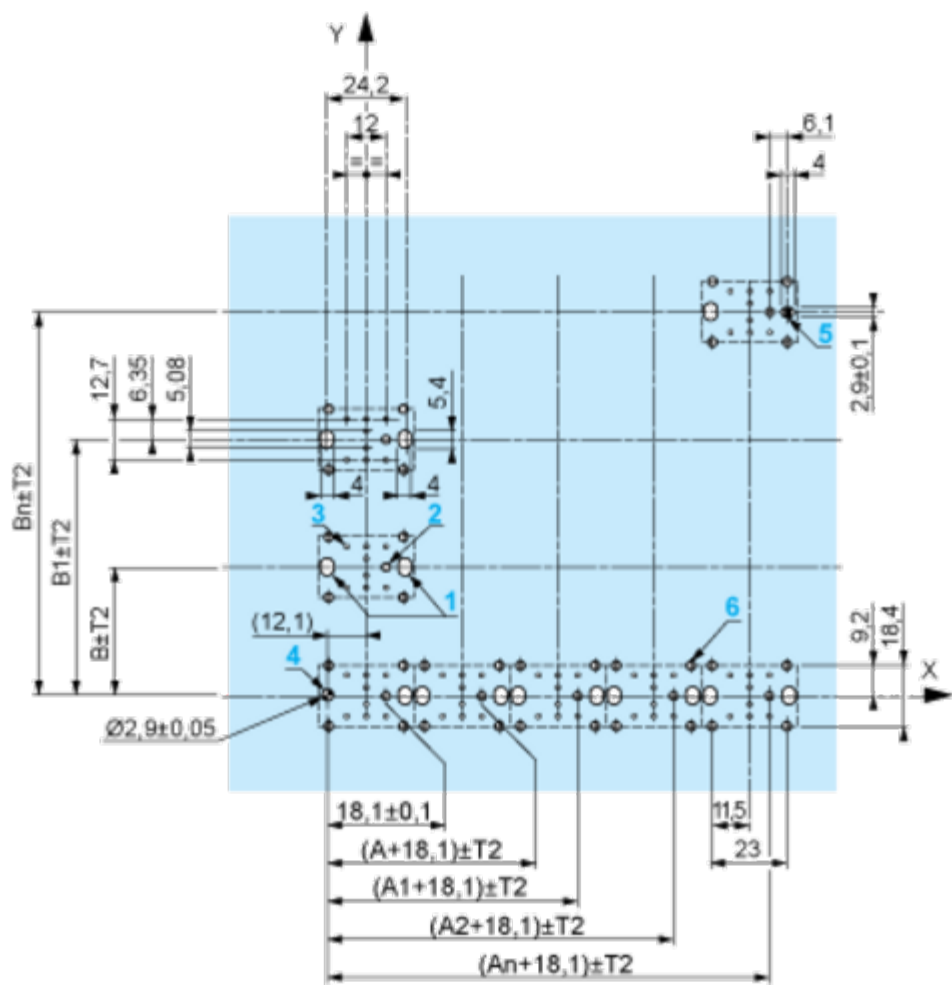


A: 30 mm min. / 1.18 in. min.

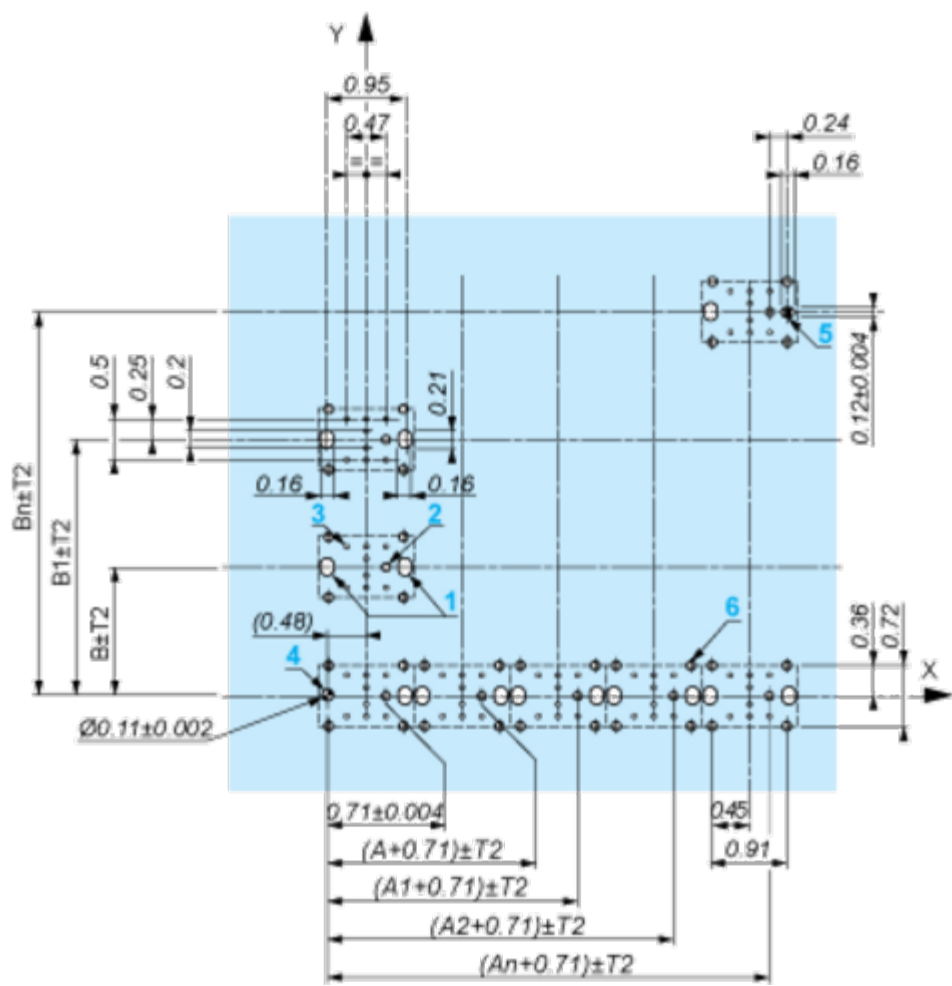
B: 40 mm min. / 1.57 in. min.

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.

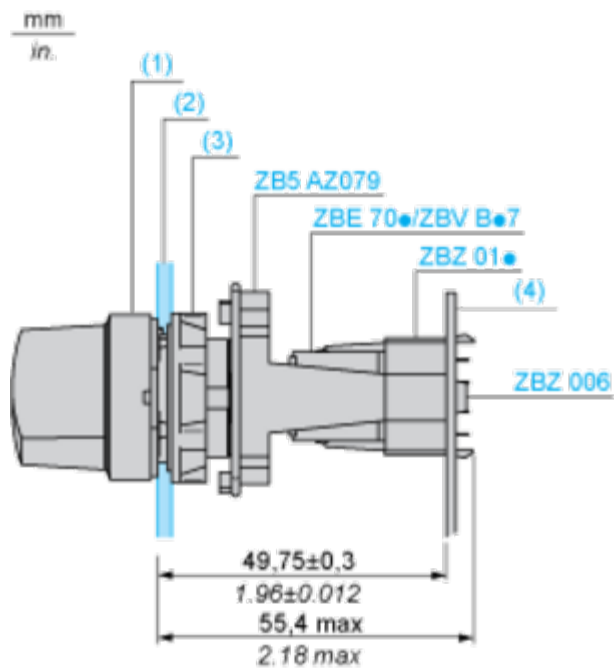
General Tolerances of the Panel and Printed Circuit Board

The cumulative tolerance must not exceed 0.3 mm / 0.012 in.: T1 + T2 = 0.3 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: $\pm 2^{\circ}30'$ (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

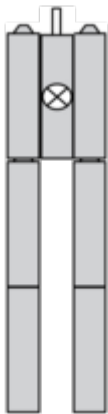
Mounting of Adapter (Socket) ZBZ01•

- 1 2 elongated holes for ZBZ006 screw access
- 2 1 hole $\varnothing 2.4 \text{ mm} \pm 0.05 / 0.09 \text{ in.} \pm 0.002$ for centring adapter ZBZ01•
- 3 $8 \times \varnothing 1.2 \text{ mm} / 0.05 \text{ in.}$ holes
- 4 1 hole $\varnothing 2.9 \text{ mm} \pm 0.05 / 0.11 \text{ in.} \pm 0.002$, 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 $\varnothing 2.4 \text{ mm} / 0.09 \text{ in.}$ for clipping in adapter ZBZ01•

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

Technical Description

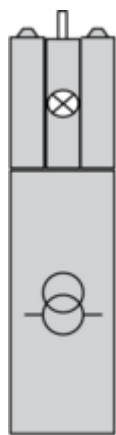
Electrical Composition Corresponding to Codes M1 and M7



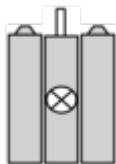
Electrical Composition Corresponding to Codes M2 and M8



Electrical Composition Corresponding to Codes M6 and P2



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



Legend

Single contact



Double contact



Light block



Possible location

