Product data sheet

Specifications

blue Ø30 mushroom pushbutton head Ø22 spring return

ZB4BC647

Discontinued on: Dec 2, 2020

End-of-service on: Dec 31, 2020

Discontinued

Main

Range Of Product	Harmony XB4
Product Or Component Type	Head for non-illuminated push-button
Device Short Name	ZB4
Bezel Material	Black metal
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 mushroom Ø 30 mm, unmarked

Complementary

Cad Overall Width	1.18 in (30 mm)
Cad Overall Height	1.18 in (30 mm)
Cad Overall Depth	2.05 in (52 mm)
Mechanical Durability	5000000 cycles
Electrical Composition Code	C1 9 single front mounting C2 9 single and double front mounting C11 3 single front mounting C15 1 single front mounting
Device Presentation	Basic element

Environment

Protective Treatment	TH
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 I IEC 60536
Ip Degree Of Protection	IP66 IEC 60529 IP69 IP69K
Nema Degree Of Protection	NEMA 13 NEMA 4X
Ik Degree Of Protection	IK06 conforming to IEC 50102

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

Standards	UL 508 CSA C22.2 No 14 EN/IEC 60947-1 EN/IEC 60947-5-1 JIS C8201-5-1 EN/IEC 60947-5-4 EN/IEC 60947-5-5 JIS C8201-1
Product Certifications	UL Listed LROS (Lloyds register of shipping) DNV BV CSA GL
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

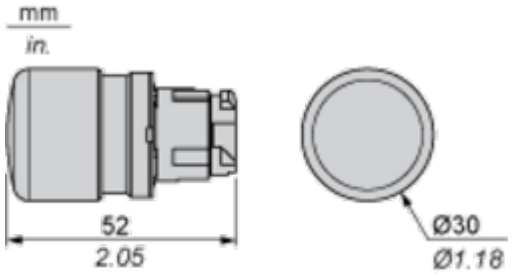
Gtin	3389110823714

Contractual warranty

Warranty	18 months

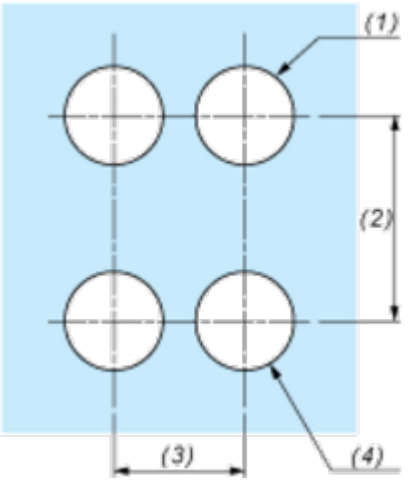
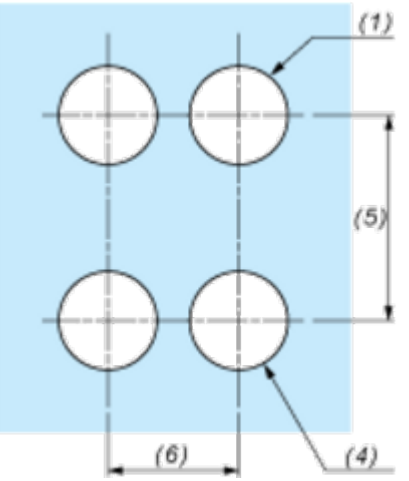
Dimensions Drawings

Dimensions



Mounting and Clearance

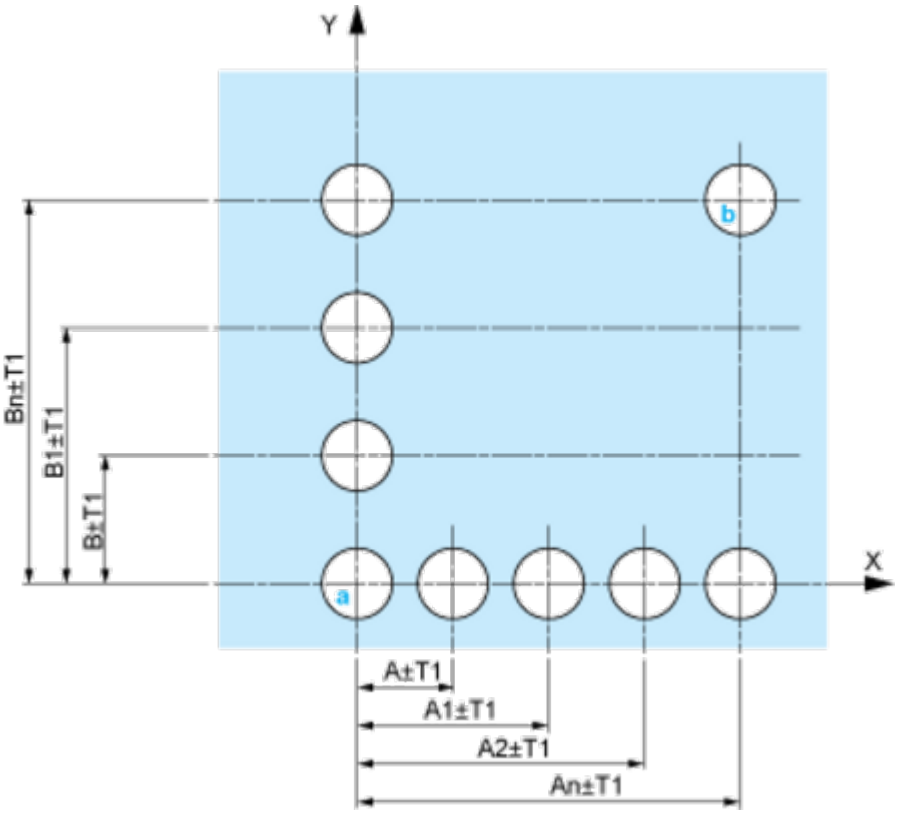
Panel Cut-out for Pushbuttons, Switches and Pilot Lights (Finished Holes, Ready for Installation)

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

(1) Diameter on finished panel or support
(2) 40 mm min. / 1.57 in. min.
(3) 30 mm min. / 1.18 in. min.
(4) Ø 22.5 mm / 0.89 in. recommended (Ø 22.3 mm $_{0}^{+0.4}$ / 0.88 in. $_{0}^{+0.016}$)
(5) 45 mm min. / 1.78 in. min.
(6) 32 mm min. / 1.26 in. min.

Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

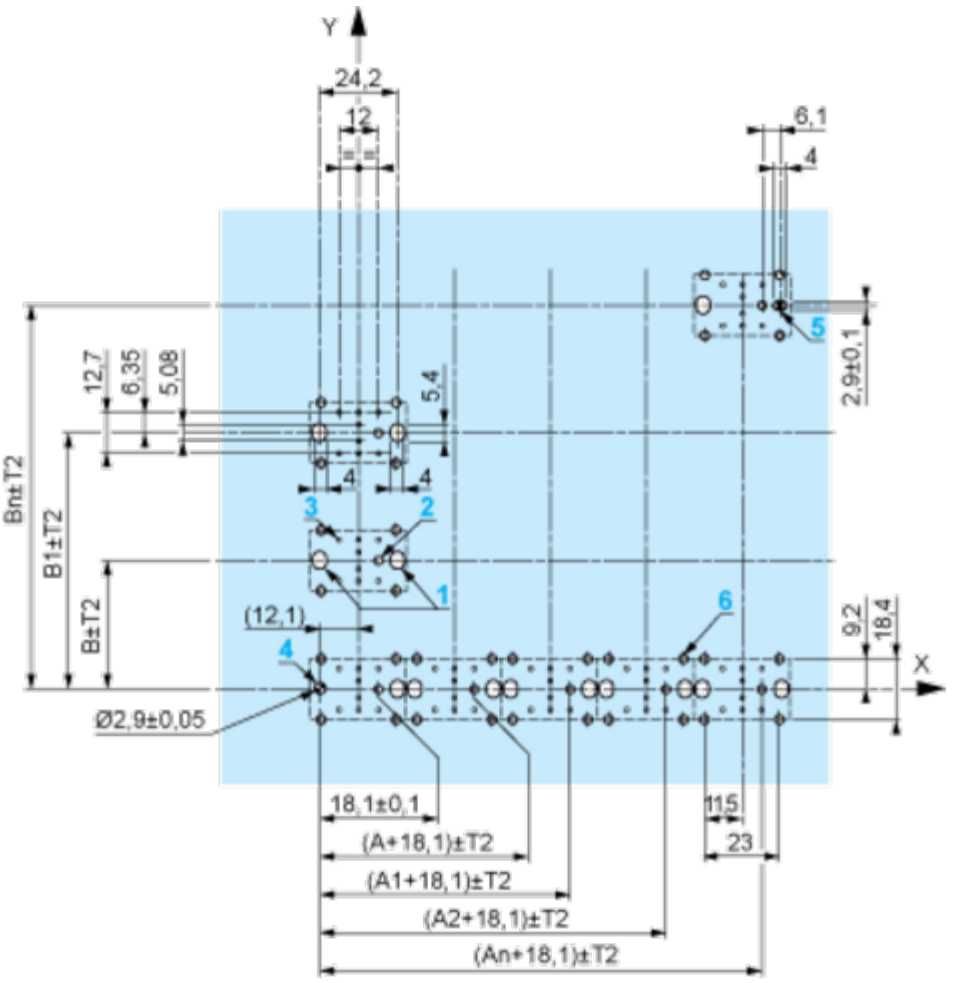
Panel Cut-outs (Viewed from Installer's Side)



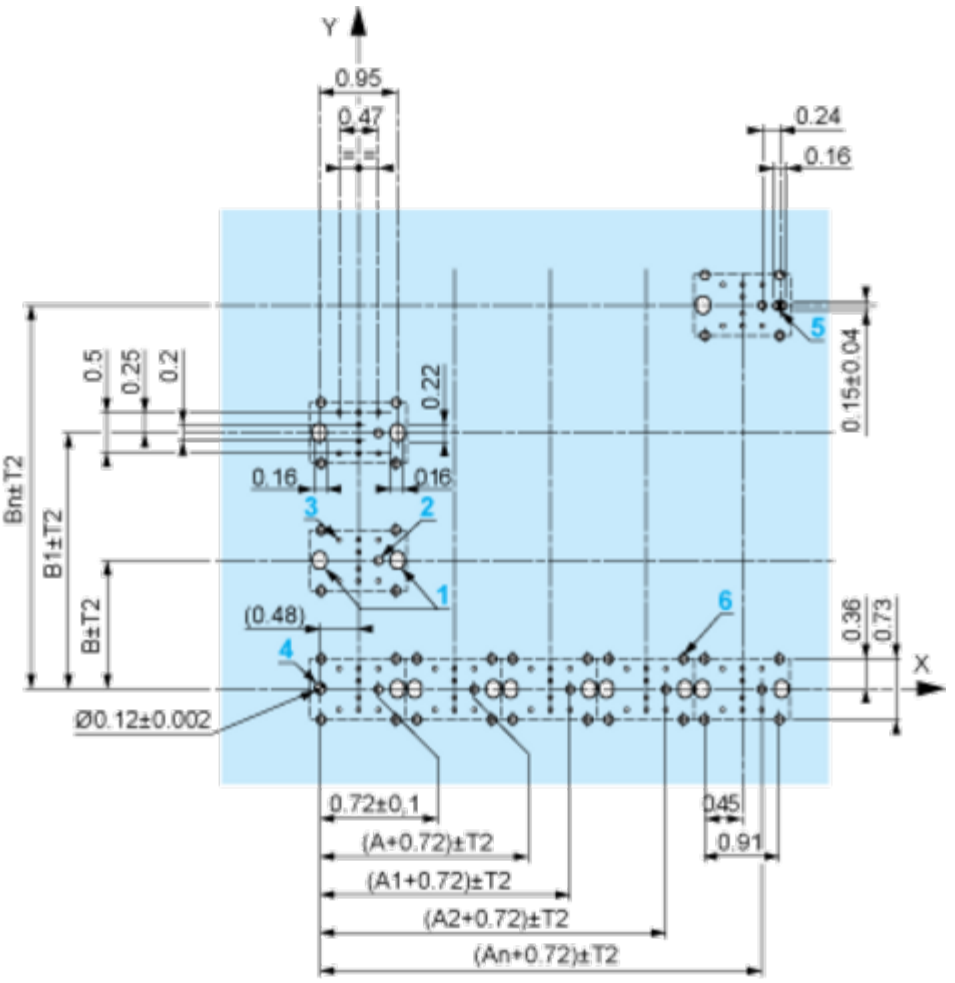
A: 30 mm min. / 1.18 in. min.
B: 40 mm min. / 1.57 in. min.

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.

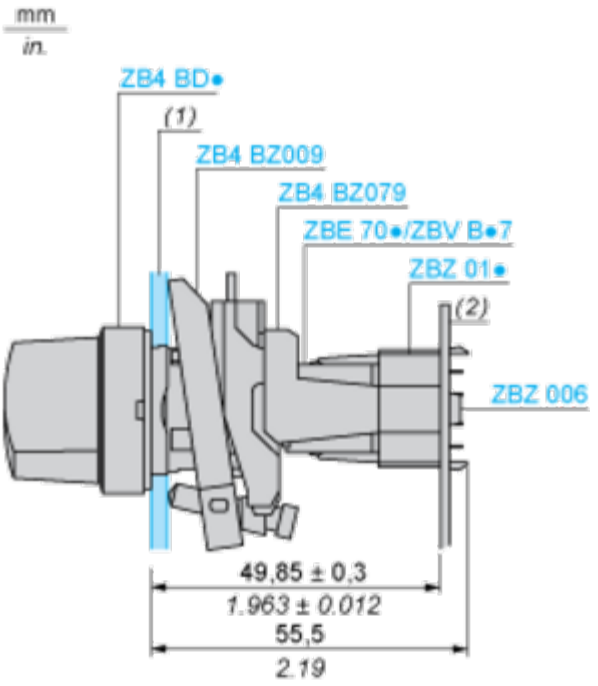
General Tolerances of the Panel and Printed Circuit Board

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 ZB4 BZ009: ± 2°30' (excluding cut-outs marked **a** and **b**).
- Tightening torque of screws ZBZ 006: 0.6 N.m (5.3 lbf.in) max.
- Allow for one ZB4 BZ079 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 (ZB4 BD•, ZB4 BJ•, ZB4 BG•).

The fixing centers marked **a** and **b** are diagonally opposed and must align with those marked **4** and **5**.



(1) Panel
(2) Printed circuit board

Mounting of Adapter (Socket) ZBZ 01•

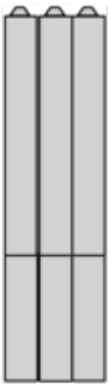
- **1** 2 elongated holes for ZBZ 006 screw access
- **2** 1 hole Ø 2.4 mm ± 0.05 / 0.09 in. ± 0.002 for centring adapter ZBZ 01•
- **3** 8 × Ø 1.2 mm / 0.05 in. holes
- **4** 1 hole Ø 2.9 mm ± 0.05 / 0.11 in. ± 0.002, for aligning the printed circuit board (with cut-out marked **a**)
- **5** 1 elongated 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 ZBZ 01•

Dimensions An + 18.1 relate to the Ø 2.4 mm ± 0.05 / 0.09 in. ± 0.002 holes for centring adapter ZBZ 01•.

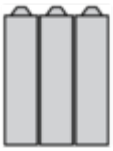
Technical Description

Electrical Composition Corresponding to Code C1

Electrical Composition Corresponding to Code C2

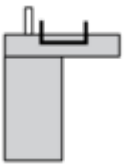


Electrical Composition Corresponding to Codes C9, C11, SF1 and SR1

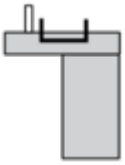


Electrical Composition Corresponding to Code C15

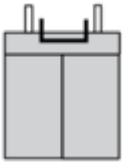
1 N/O



1 N/C



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



Legend

Single contact

Double contact

Light block

Possible location