Product datasheet

Specification





Harmony XB4, Head for non illuminated pushbutton, mushroom 40mm, metal, red, 22mm, spring return

ZB4BC4

Main

Range Of Product	Harmony XB4
Product Or Component Type	Head for non-illuminated push-button
Device Short Name	ZB4
Bezel Material	Chromium plated metal
Mounting Diameter	22 mm
Sale Per Indivisible Quantity	1
Head Type	Standard
Shape Of Signaling Unit Head	Round
Type Of Operator	spring return
Operator Profile	Red mushroom Ø 40 mm, unmarked
Cap/Operator Or Lens Colour	Red

Complementary

Cad Overall Width	40 mm	
Cad Overall Height	40 mm	
Cad Overall Depth	52 mm	
Mechanical Durability	5000000 cycles	
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	
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 I conforming to IEC 60536
Ip Degree Of Protection	IP66 conforming to IEC 60529 IP69 IP69K
Ip Degree Of Protection Nema Degree Of Protection	IP69

Standards	EN/IEC 60947-5-4 CSA C22.2 No 14 JIS C8201-5-1 UL 508 EN/IEC 60947-5-5 EN/IEC 60947-1 EN/IEC 60947-5-1 JIS C8201-1
Product Certifications	LROS (Lloyds register of shipping) DNV GL UL listed BV CSA
Vibration Resistance	5 gn (f= 2500 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

PCE
1
9.000 cm
4.400 cm
5.400 cm
77.000 g
S02
42
15.000 cm
30.000 cm
40.000 cm
3.568 kg
P06
672
75.000 cm
60.000 cm
80.000 cm
68.315 kg

Contractual warranty

Warranty 18 months



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Transparency RoHS/REACh

Well-being performance

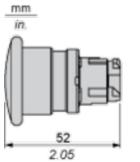
⊘	Reach Free Of Svhc	
Ø	Toxic Heavy Metal Free	
⊘	Mercury Free	
⊘	Rohs Exemption Information	Yes

Certifications & Standards

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

Dimensions Drawings

Dimensions





	Ø in mm	Ø in in.
ZB4BC•	40	1.57
ZB4BR•	60	2.36

Mounting and Clearance

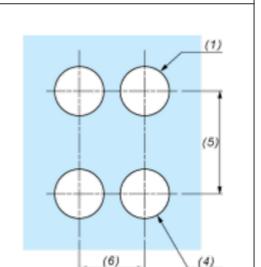
Panel Cut-out for Pushbuttons, Switches and Pilot Lights (Finished Holes, Ready for Installation)

Connectors or on Printed Circuit Board

(1)

(2)

Connection by Screw Clamp Terminals or Plug-in



Connection by Faston Connectors

(1) Diameter on finished panel or support

(3)

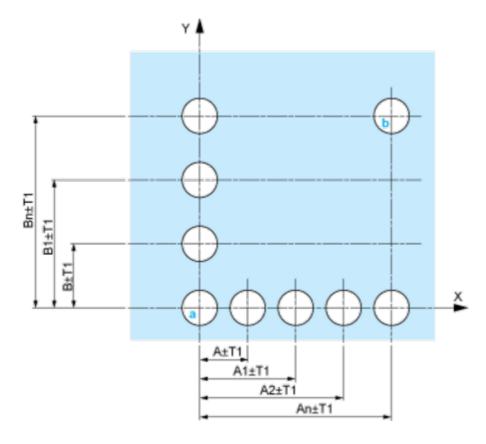
- (2) 40 mm min. / 1.57 in. min.
- (3) 30 mm min. / 1.18 in. min.
- (4) Ø 22.5 mm / 0.89 in. recommended (Ø 22.3 mm $_0^{+0.4}$ / 0.88 in. $_0^{+0.016}$)

(4)

- (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

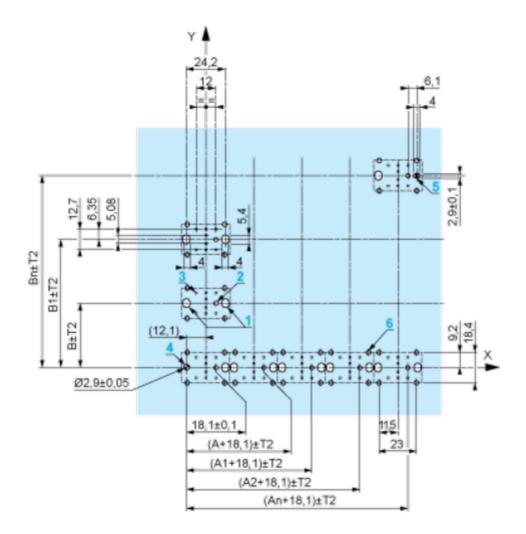
Panel Cut-outs (Viewed from Installer's Side)



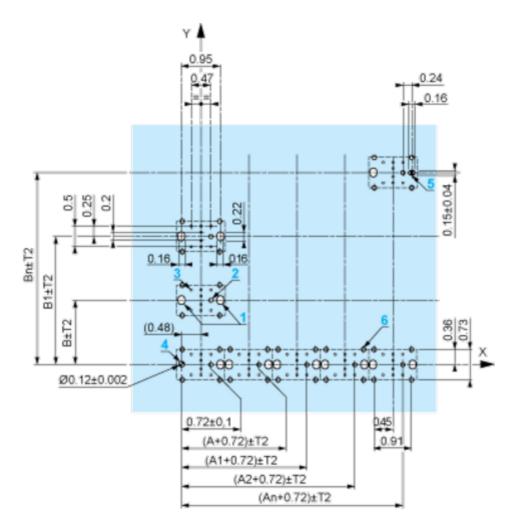
A: 30 mm min. / 1.18 in. min. **B:** 40 mm min. / 1.57 in. min.

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.

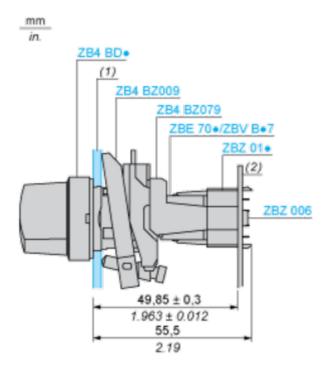
General Tolerances of the Panel and Printed Circuit Board

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

Installation Precautions

- $_{\bullet}$ 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 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:
 - $_{\circ}\;$ every 90 mm / 3.54 in. horizontally (X), and 120 mm / 4.72 in. vertically (Y).
 - o with each selector switch head (ZB4 BD•, ZB4 BJ•, ZB4 BG•).

The fixing centers marked ${\bf a}$ and ${\bf b}$ are diagonally opposed and must align with those marked ${\bf 4}$ and ${\bf 5}$.



- (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 \emptyset 2.4 mm \pm 0.05 / 0.09 in. \pm 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

