Product datasheet

Specifications



Head for non illuminated push button, Harmony XB4, red flush, 22mm, spring return, clear boot, unmarked

Local distributor code:

23707681 ZB4BP48

Important message: A change in appearance may be noted on the product but does not affect its use in terms of function and safety. This makes it compatible with our Universal LED blocks
EAN Code: 3389110888058

Main

Range of product	Harmony XB4
Product or component type	Head for non-illuminated push-button
Device short name	ZB4
Product compatibility	not compatible with legend holder
Bezel material	Chromium plated metal
Mounting diameter	22.5 mm
Sale per indivisible quantity	1
Head type	Standard
Shape of signaling unit head	Round
Type of operator	spring return
Operator profile	Red flush, unmarked
Operator additional information	Clear boot for insertion of protected legend within head
Cap/operator or lens colour	Red

Complementary

CAD overall width	30 mm
CAD overall height	30 mm
CAD overall depth	37 mm
Mechanical durability	10000000 cycles
Electrical composition code	C3 for <6 contacts using single blocks in front mounting C4 for <6 contacts using single and double blocks in front mounting C14 for <2 contacts using single blocks in front mounting
Device presentation	Basic element

Environment

Protective treatment	TH
Ambient air temperature for storage	-40…70 °C
Ambient air temperature for operation	-40…70 °C
Overvoltage category	Class I conforming to IEC 60536
IP degree of protection	IP66 conforming to IEC 60529 IP67

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

Enclosure Type	UL type 4X/13
IK degree of protection	IK06 conforming to IEC 50102
Standards	CSA C22.2 No 14 IEC 60947-5-4 IEC 60947-5-1 IEC 60947-1 UL 508 JIS C8201-5-1 IEC 60947-5-5 JIS C8201-1
Product certifications	BV CSA DNV 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	3.200 cm
Package 1 Width	5.200 cm
Package 1 Length	8.200 cm
Package 1 Weight	33.000 g
Unit Type of Package 2	BB1
Number of Units in Package 2	5
Package 2 Height	8.800 cm
Package 2 Width	3.400 cm
Package 2 Length	26.500 cm
Package 2 Weight	167.000 g
Unit Type of Package 3	S03
Number of Units in Package 3	150
Package 3 Height	30 cm
Package 3 Width	30 cm
Package 3 Length	40 cm
Package 3 Weight	5.633 kg

Logistical informations

Country of origin	FR

Contractual warranty

Warranty (in months)	18

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	**0.3 kg CO2 eq.**
Carbon footprint of the manufacturing phase [A1 to A3]	**0.2 kg CO2 eq.**
Carbon footprint of the distribution phase [A4]	**0 kg CO2 eq.**
Carbon footprint of the installation phase [A5]	**0 kg CO2 eq.**
Carbon footprint of the use phase [B2, B3, B4, B6]	**0 kg CO2 eq.**
Carbon footprint of the end-of-life phase [C1 to C4]	**0 kg CO2 eq.**
Environmental Disclosure	**Product Environmental Profile**

Use Better

Materials and Substances

Average percentage of recycled plastic content	**14 %**
Average percentage of recycled metal content	**21 %**
Packaging made with recycled cardboard	**Yes**
Packaging without single use plastic	**No**
EU RoHS Directive	**Compliant**
REACh Regulation	**Reference contains Substances of Very High Concern above the threshold**

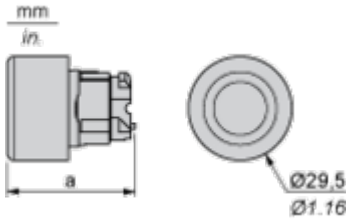
Use Again

Repack and remanufacture

Recyclability potential, in %	**84**
End of life manual availability	**End of Life Information**
Take-back	**No**

Dimensions Drawings

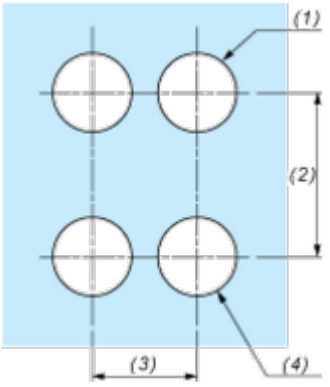
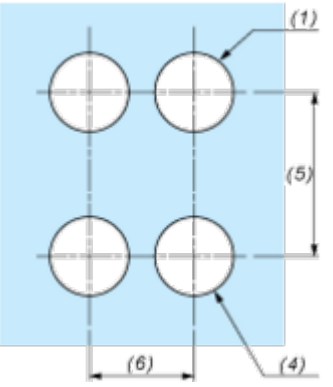
Dimensions



	a in mm	a in in.
ZB4BP••	36.5	1.44
ZB4BP•S	33	1.30
ZB4BP•83	32	1.26
ZB4BP•	35	1.38

Mounting and Clearance

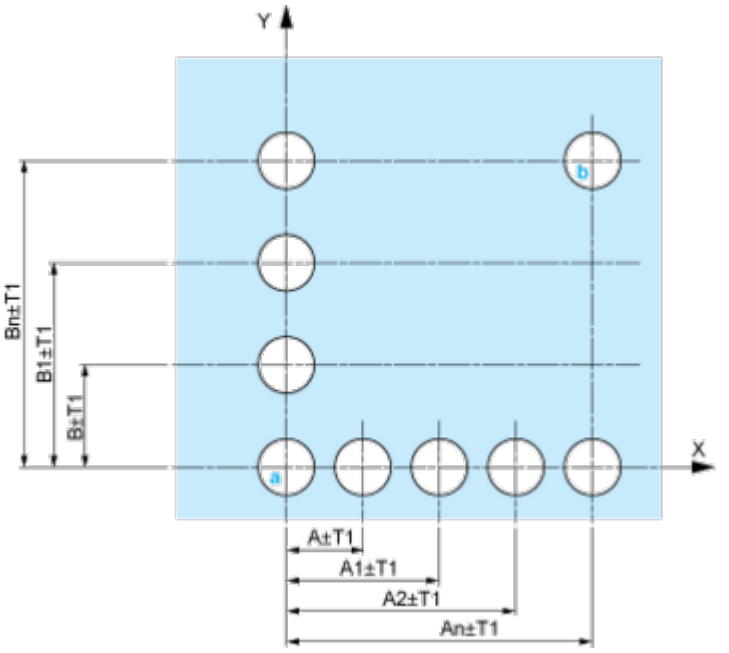
Panel Cut-out for Pushbuttons, Switches and Pilot Lights (Finished Holes, Ready for Installation)

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

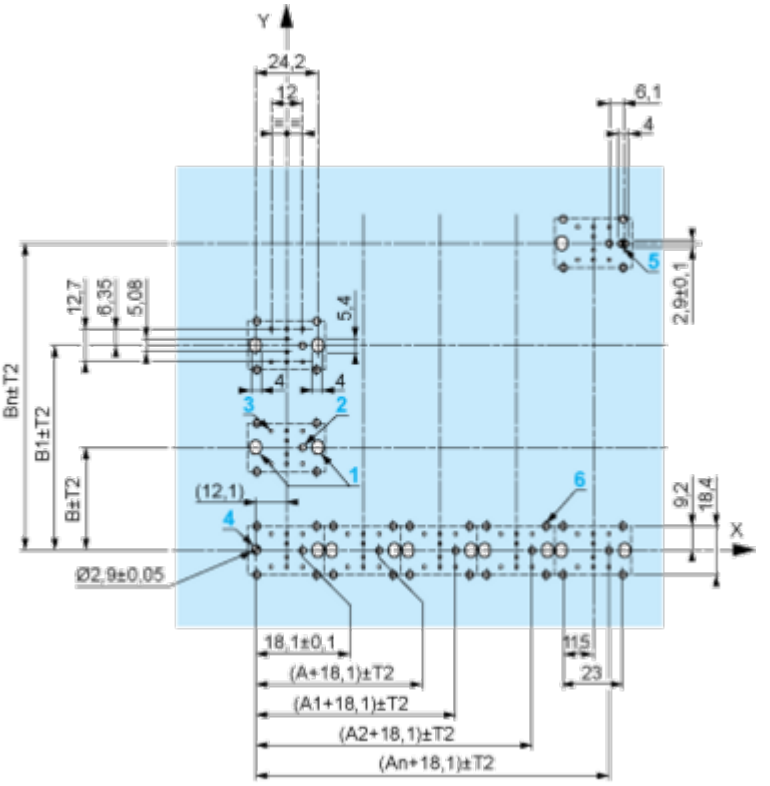
Panel Cut-outs (Viewed from Installer's Side)



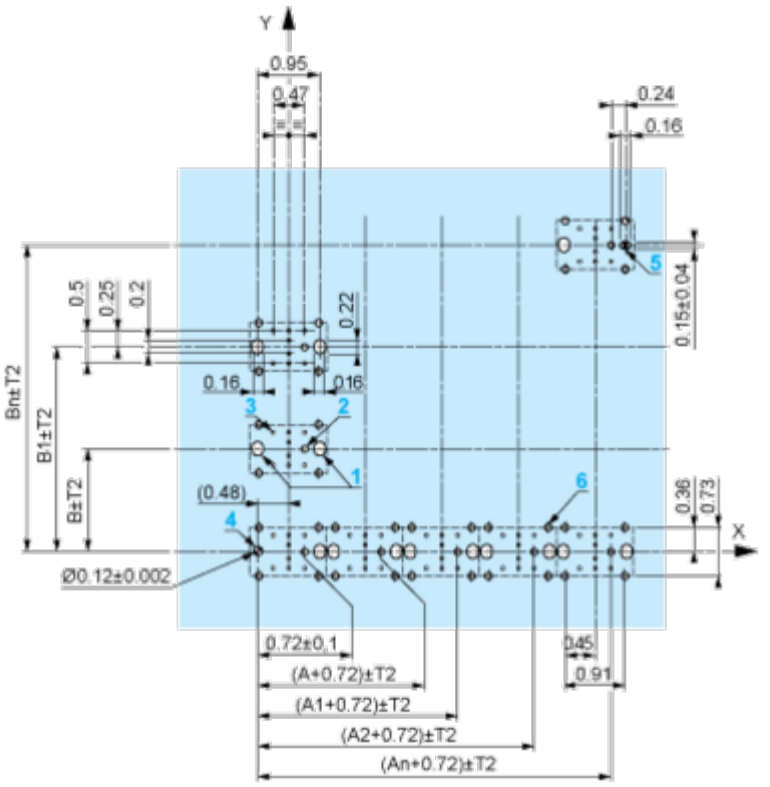
A: 30 mm min. / 1.18 in. min.
B: 40 mm min. / 1.57 in. min.

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.

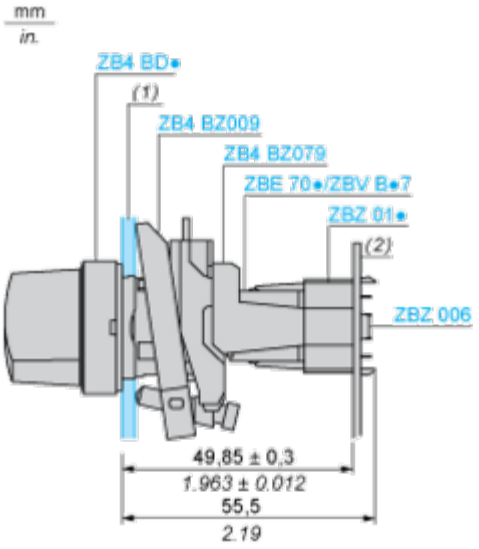
General Tolerances of the Panel and Printed Circuit Board

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 C3



Electrical Composition Corresponding to Code C4



Electrical Composition Corresponding to Codes C14, SF2 and SR2



Legend

Single contact



Double contact



Light block



Possible location



Image of product / Alternate images

Alternative

