Specification





Head for non illuminated push button, Harmony XB4, metal, flush, green, 22mm, spring return, marked I

ZB4BA331

Product availability: Stock - Normally stocked in distribution facility

Price\*: 18.60 USD

### 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	0.89 in (22.5 mm)
Sale Per Indivisible Quantity	1
Head Type	Standard
Shape Of Signaling Unit Head	Round
Type Of Operator	spring return
Operator Profile	Green flush, I white)
Cap/Operator Or Lens Colour	Green

## Complementary

Cad Overall Width	1.14 in (29 mm)
Cad Overall Height	1.14 in (29 mm)
Cad Overall Depth	1.10 in (28 mm)
Mechanical Durability	10000000 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	тн
Ambient Air Temperature For Storage	-40158 °F (-4070 °C)
Ambient Air Temperature For Operation	-40158 °F (-4070 °C)
Overvoltage Category	Class I IEC 60536
Ip Degree Of Protection	IP66 IEC 60529 IP67 IP69 IP69K

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

Nema Degree Of Protection	NEMA 13	
	NEMA 4X	
Ik Degree Of Protection	IK06 conforming to IEC 50102	
Standards	UL 508	
	IEC 60947-5-5	
	IEC 60947-5-1	
	CSA C22.2 No 14	
	JIS C8201-5-1	
	IEC 60947-5-4	
	IEC 60947-1	
	JIS C8201-1	
Product Certifications	UL Listed	
	CSA	
	GL	
	BV	
	DNV	
	LROS (Lloyds register of shipping)	
Vibration Resistance	5 gn 2500 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	US10CS222468
Discount Schedule	0CS2
Gtin	3389110887518
Returnability	Yes
Country Of Origin	FR

# **Packing Units**

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	1.77 in (4.5 cm)
Package 1 Width	1.34 in (3.4 cm)
Package 1 Length	2.13 in (5.4 cm)
Package 1 Weight	1.02 oz (29.0 g)
Unit Type Of Package 2	S03
Number Of Units In Package 2	300
Package 2 Height	11.81 in (30 cm)
Package 2 Width	11.81 in (30 cm)
Package 2 Length	15.75 in (40 cm)
Package 2 Weight	19.87 lb(US) (9.015 kg)

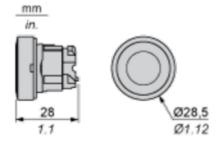
# **Contractual warranty**

Warranty 18 months

## **ZB4BA331**

## **Dimensions Drawings**

### **Dimensions**



### **ZB4BA331**

### Mounting and Clearance

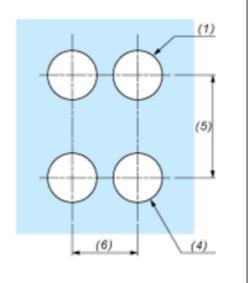
# Panel Cut-out for Pushbuttons, Switches and Pilot Lights (Finished Holes, Ready for Installation)

Connectors or on Printed Circuit Board

(1)
(2)

Connection by Screw Clamp Terminals or Plug-in

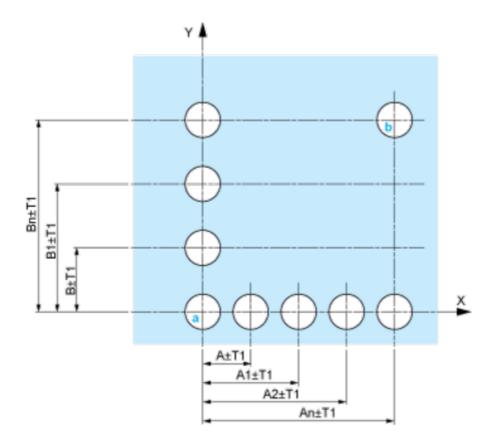
**Connection by Faston Connectors** 



- (1) Diameter on finished panel or support
- (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

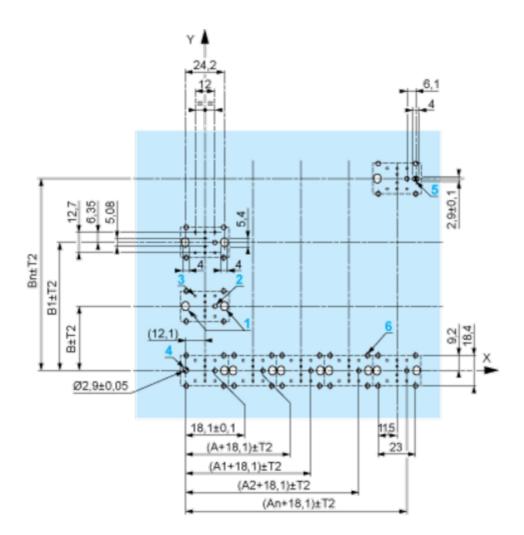
### Panel Cut-outs (Viewed from Installer's Side)



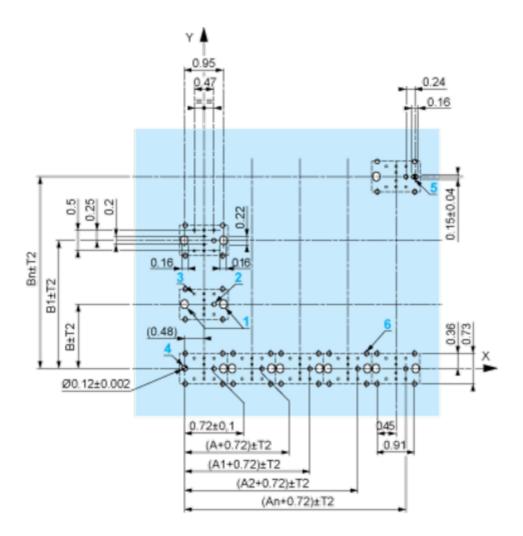
**A:** 30 mm min. / 1.18 in. min. **B:** 40 mm min. / 1.57 in. min.

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.

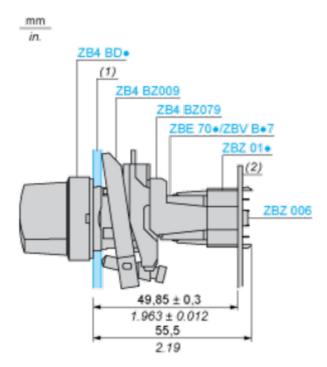
### General Tolerances of the Panel and Printed Circuit Board

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

#### **Installation Precautions**

- $_{\bullet}$  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 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  $\pm$  0.05 / 0.09 in.  $\pm$  0.002 holes for centring adapter ZBZ 01•.

## **ZB4BA331**

**Technical Description** 

**Electrical Composition Corresponding to Code C1** 



### **Electrical Composition Corresponding to Code C2**



ZB4BA331

**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

