# Product data sheet Characteristics

# **ZB4BA16**

# white recessed pushbutton head Ø22 spring return unmarked





### 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	0.87 in (22 mm)
Sale per indivisible quantity	1
Head type	Standard
Shape of signaling unit head	Round
Type of operator	Spring return
Operator profile	White recessed, unmarked
Operator additional information	High guard

### Complementary

CAD overall height  1.14 in (29 mm)  CAD overall depth  1.22 in (31 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
CAD overall depth 1.22 in (31 mm)  Mechanical durability 10000000 cycles  Electrical composition code C1 9 single front mounting C2 9 single and double front mounting		C15 1 single front mounting
CAD overall depth 1.22 in (31 mm)  Mechanical durability 1000000 cycles  Electrical composition code C1 9 single front mounting		
CAD overall depth 1.22 in (31 mm)  Mechanical durability 10000000 cycles	·	C2 9 single and double front mounting
CAD overall depth 1.22 in (31 mm)	Electrical composition code	C1 9 single front mounting
	Mechanical durability	10000000 cycles
CAD overall height 1.14 in (29 mm)	CAD overall depth	1.22 in (31 mm)
	CAD overall height	1.14 in (29 mm)
CAD overall width 1.14 in (29 mm)		

### **Environment**

ZIIVII OI III OI II	
Protective treatment	TH
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
NEMA degree of protection	NEMA 13 NEMA 4X
IK degree of protection	IK06 IEC 50102
Standards	UL 508 EN/IEC 60947-5-1 CSA C22.2 No 14 JIS C8201-5-1 EN/IEC 60947-1 EN/IEC 60947-5-5 EN/IEC 60947-5-4 JIS C8201-1

Product certifications	CSA
	UL Listed
	LROS (Lloyds register of shipping)
	BV
	DNV
	RINA
	GL
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

22468 - PUSHBUTTONS,22MM(METAL) NEW
CS2
00785901381662
5
0.06 lb(US) (0.03 kg)
Yes
FR

# Packing Units

Unit Type of Package 1	PCE	
Package 1 Height	1.89 in (4.8 cm)	
Package 1 width	2.09 in (5.3 cm)	
Package 1 Length	1.42 in (3.6 cm)	

### Offer Sustainability

Sustainable offer status	Green Premium product
REACh free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
Toxic heavy metal free	Yes
Mercury free	Yes
RoHS exemption information	₫Yes
China RoHS Regulation	China RoHS Declaration
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End Of Life Information

### Contractual warranty

Warranty	18 months
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# Product data sheet Dimensions Drawings

# **ZB4BA16**

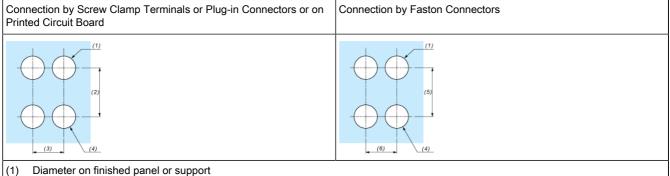
### **Dimensions**





## **ZB4BA16**

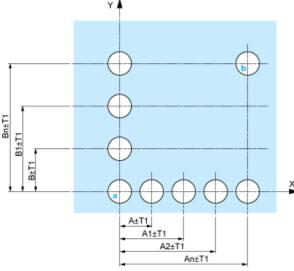
### Panel Cut-out for Pushbuttons, Switches and Pilot Lights (Finished Holes, Ready for Installation)



- 40 mm min. / 1.57 in. min.
- (3) 30 mm min. / 1.18 in. min.
- Ø 22.5 mm / 0.89 in. recommended (Ø 22.3 mm  $_0$  <sup>+0.4</sup> / 0.88 in.  $_0$  <sup>+0.016</sup>) (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)



- 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).

0.16

- 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:
  - o 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.

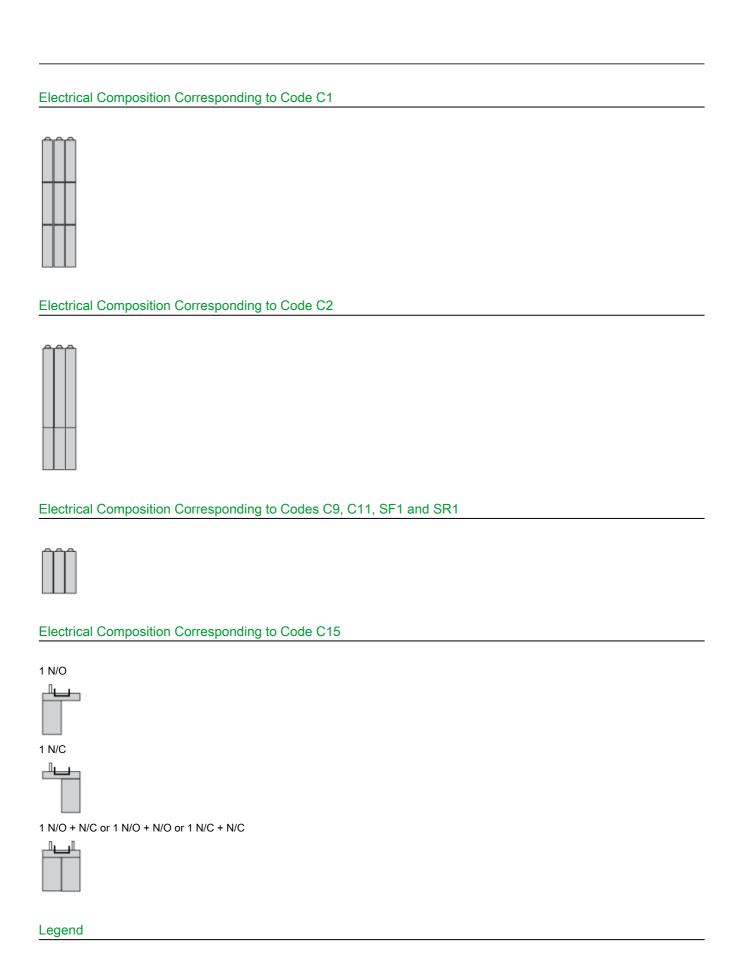


- (1) Panel
- (2) Printed circuit board

### 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  $\pm$  0.05 / 0.11 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 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•.



Single contact

Double contact



Light block



Possible location

