### ZB4BD2

Harmony, 22mm Push Button, selector switch operating head, 2 position, maintained, black, unmarked





### Main

Range of Product	Harmony XB4
Product or Component Type	Head for selector switch
Device short name	ZB4
Bezel material	Chromium plated metal
Mounting diameter	0.87 in (22 mm)
Head type	Standard
Sale per indivisible quantity	1
Shape of signaling unit head	Round
Type of operator	Stay put
Operator profile	Black standard handle
Operator position information	2 positions 90°

### Complementary

Device presentation	Basic element			
	C11 3 single front mounting C15 1 single front mounting			
	C8 4 single and double front mounting			
	C7 4 single front mounting			
	C6 5 single and double front mounting			
	C5 5 single front mounting			
	C4 6 single and double front mounting			
Electrical composition code	C3 6 single front mounting			
Mechanical durability	1000000 cycles			
Resistance to high pressure washer	1015.26 psi (7000000 Pa) 131 °F (55 °C) 0.1 m			
Net Weight	0.09 lb(US) (0.04 kg)			
CAD overall depth	1.73 in (44 mm)			
CAD overall height	1.14 in (29 mm)			
CAD overall width	1.14 in (29 mm)			

### Environment

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	IP67 IEC 60529 IP69 IP69K
NEMA degree of protection	NEMA 13 NEMA 4X
IK degree of protection	IK06 IEC 50102

EN/IEC 60947-5-1 EN/IEC 60947-5-4 EN/IEC 60947-1 CSA C22.2 No 14		
EN/IEC 60947-1		
CSA C22.2 No 14		
EN/IEC 60947-5-5		
UL 508		
JIS C8201-1		
BV		
LROS (Lloyds register of shipping)		
DNV		
UL Listed		
CSA		
GL		
5 gn 2500 Hz)IEC 60068-2-6		
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

Grading and Grapping actano	
Category	22468 - PUSHBUTTONS,22MM(METAL) NEW
Discount Schedule	CS2
GTIN	3389110888935
Nbr. of units in pkg.	1
Package weight(Lbs)	1.55 oz (44 g)
Returnability	Yes
Country of origin	FR

### Packing Units

Unit Type of Package 1	PCE	
Package 1 Height	2.05 in (5.2 cm)	
Package 1 width	1.34 in (3.4 cm)	
Package 1 Length	2.13 in (5.4 cm)	
Unit Type of Package 2	BB1	
Number of Units in Package 2	5	
Package 2 Weight	7.80 oz (221 g)	
Package 2 Height	2.05 in (5.2 cm)	
Package 2 width	1.34 in (3.4 cm)	
Package 2 Length	10.43 in (26.5 cm)	
Unit Type of Package 3	S03	
Number of Units in Package 3	250	
Package 3 Weight	25.81 lb(US) (11.706 kg)	
Package 3 Height	11.81 in (30 cm)	
Package 3 width	11.81 in (30 cm)	
Package 3 Length	15.75 in (40 cm)	

### Offer Sustainability

Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov
REACh Regulation	REACh Declaration
REACh free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS  Declaration
Toxic heavy metal free	Yes
Mercury free	Yes
RoHS exemption information	₫Yes
China RoHS Regulation	China RoHS Declaration

Product Environmental Profile		
End Of Life Information		

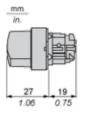
### Contractual warranty

·	Warranty 18 months	
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# Product data sheet Dimensions Drawings

## ZB4BD2

### Dimensions





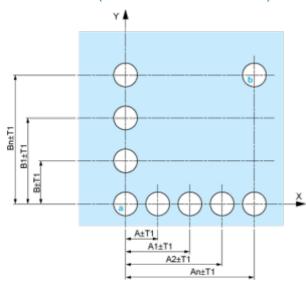
### Panel Cut-out for Pushbuttons, Switches and Pilot Lights (Finished Holes, Ready for Installation)

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

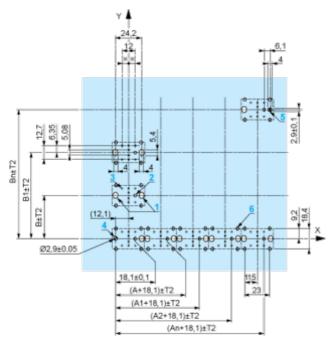


A: 30 mm min. / 1.18 in. min.

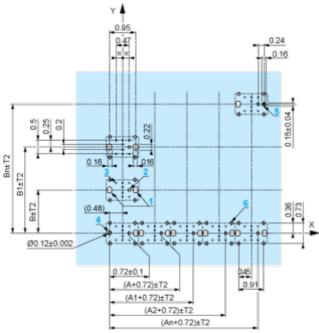
B: 40 mm min. / 1.57 in. min.

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.

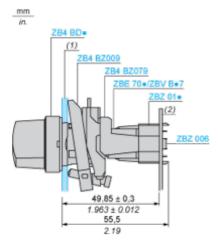
### General Tolerances of the Panel and Printed Circuit Board

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:
  - $\circ\quad$  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•
- 38 × 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•.

# Product data sheet Technical Description

## ZB4BD2

Electrical Composition Corresponding to Code C3
Electrical Composition Corresponding to Code C4
Electrical Composition Corresponding to Code C5
Electrical Composition Corresponding to Code C6
Electrical Composition Corresponding to Code C7

Electrical Composition Corresponding to Code C8
Electrical Composition Corresponding to Codes C9, C11, SF1 and SR1
Electrical Composition Corresponding to Code C15
1 N/O
I 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

### Sequence of Contacts Fitted to 2-position Selector Switch Body

### Position 315°



Push	Position	Тор			
Bottom	Δ	$\triangle$	$\triangle$		
Location		Left	Centre	Right	
State		0	0	0	
Contacts	N/O		open	open	open
N/C		closed	closed	closed	

### Position 45°



Push	Position	Тор			
Bottom					
Location		Left	Centre	Right	
State		1	1	1	
Contacts	N/O		closed	closed	closed
N/C	•	open	open	open	