

Product data sheet Characteristics

ZB4BD4

black selector switch head Ø22 2-position spring return





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	22 mm
Head type	Standard
Sale per indivisible quantity	1
Shape of signaling unit head	Round
Type of operator	Right to left spring return
Operator profile	Black standard handle
Operator position information	2 positions 90°

Complementary

Basic element			
Co for <4 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			
C7 for <4 contacts using single blocks in front mounting C8 for <4 contacts using single and double blocks in front mounting			
C6 for <5 contacts using single and double blocks in front mounting			
C5 for <5 contacts using single blocks in front mounting			
C4 for <6 contacts using single and double blocks in front mounting			
C3 for <6 contacts using single blocks in front mounting			
1000000 cycles			
7000000 Pa at 55 °C, distance : 0.1 m			
0.045 kg			
44 mm			
29 mm			
29 mm			

Environment

Protective treatment	TH			
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	IP67 conforming to IEC 60529 IP69 IP69K			
NEMA degree of protection	NEMA 13 NEMA 4X			
IK degree of protection	IK06 conforming to IEC 50102			

Standards	EN/IEC 60947-5-4
	EN/IEC 60947-5-5
	EN/IEC 60947-1
	UL 508
	CSA C22.2 No 14
	EN/IEC 60947-5-1
	JIS C8201-5-1
	JIS C8201-1
Product certifications	CSA
	BV
	UL listed
	GL
	DNV
	LROS (Lloyds register of shipping)
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

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Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	50.9 g
Package 1 Height	5 cm
Package 1 width	3.4 cm
Package 1 Length	5.4 cm
Unit Type of Package 2	S03
Number of Units in Package 2	200
Package 2 Weight	10.566 kg
Package 2 Height	30 cm
Package 2 width	30 cm
Package 2 Length	40 cm
Unit Type of Package 3	BB1
Number of Units in Package 3	5
Package 3 Weight	252 g
Package 3 Height	3.3 cm
Package 3 width	5 cm
Package 3 Length	26.5 cm

Offer Sustainability

Sustainable offer status	Green Premium product				
REACh Regulation	REACh Declaration				
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				

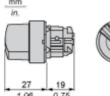
Contractual warranty

Warranty	12 months

Product data sheet Dimensions Drawings

ZB4BD4

Dimensions





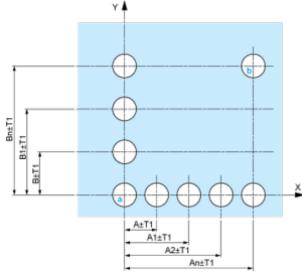
Panel Cut-out for Pushbuttons, Switches and Pilot Lights (Finished Holes, Ready for Installation)

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)

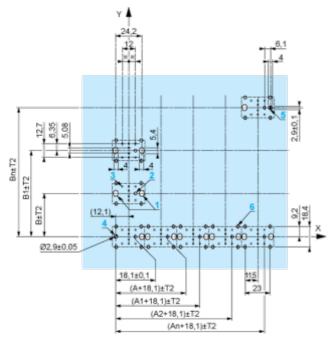


A: 30 mm min. / 1.18 in. min.

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

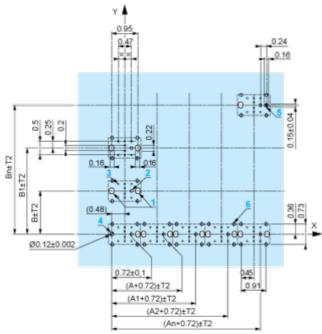
Printed Circuit Board Cut-outs (Viewed from Electrical Block Side)

Dimensions in mm



A: 30 mm min. B: 40 mm min.

Dimensions in in.



A: 1.18 in. min. B: 1.57 in. min.

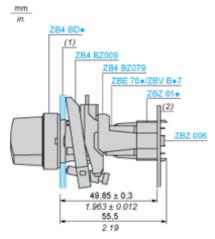
General Tolerances of the Panel and Printed Circuit Board

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:
 - 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•
- 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

ZB4BD4

Electrical Composition Corresponding to Code C3
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
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		\triangle	Δ		
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	