#### ZB4BG2

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





#### Main

Range of product	Harmony XB4
Product or component type	Head for key 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
Operator profile	Black key switch
Operator position information	2 positions 90°
Type of keylock	Ronis 455
Key withdrawal position	Left

#### Complementary

CAD overall width	1.14 in (29 mm)			
CAD overall height	1.14 in (29 mm)			
CAD overall depth	2.83 in (72 mm)			
Net Weight	0.22 lb(US) (0.098 kg)			
Resistance to high pressure washer	7000000 Pa at 55 °C, distance : 0.1 m			
Mechanical durability	1000000 cycles			
Electrical composition code	C3 6 single front mounting C4 6 single and double front mounting C5 5 single front mounting C6 5 single and double front mounting C7 4 single front mounting C8 4 single and double front mounting C11 3 single front mounting C15 1 single front mounting			
Device presentation	Basic element			

#### 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	IP66 IEC 60529 IP67 IP69 IP69K		
NEMA degree of protection	NEMA 13 NEMA 4X		
IK degree of protection	IK06 IEC 50102		

Standards	EN/IEC 60947-1 GB 14048.5 EN/IEC 60947-5-5 EN/IEC 60947-5-1 EN/IEC 60947-5-4 UL 508 CSA C22.2 No 14
Product certifications	DNV GL LROS (Lloyds register of shipping) CSA BV UL Listed RINA
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
Ordering and shipping details	
Category	22468 - PUSHBUTTONS,22MM(METAL) NEW
Discount Schedule	CS2
GTIN	00785901354673
Nbr. of units in pkg.	50
Package weight(Lbs)	0.22 lb(US) (0.10 kg)

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Package weight(Lbs)	0.22 lb(US) (0.10 kg)
Returnability	Yes
Country of origin	FR

### Packing Units

Unit Type of Package 1	PCE
Package 1 Height	3.39 in (8.6 cm)
Package 1 width	2.05 in (5.2 cm)
Package 1 Length	1.30 in (3.3 cm)

#### Offer Sustainability

Sustainable offer status	Green Premium product			
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov			
REACh Regulation	☑ REACh Declaration			
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)			
Mercury free	Yes			
RoHS exemption information	€Yes			
China RoHS Regulation	China RoHS Declaration			
Environmental Disclosure	Product Environmental Profile			
Circularity Profile				

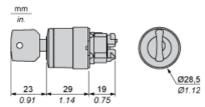
#### Contractual warranty

·	Warranty	18 months
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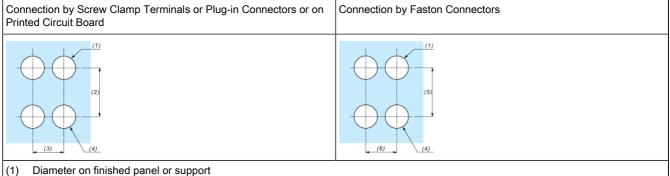
# Product data sheet Dimensions Drawings

## ZB4BG2

#### **Dimensions**



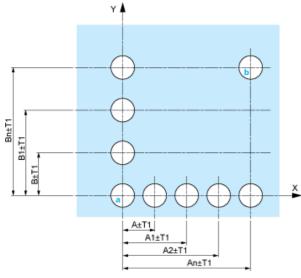
#### Panel Cut-out for Pushbuttons, Switches and Pilot Lights (Finished Holes, Ready for Installation)



- 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

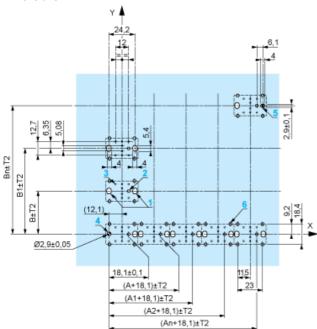
#### Panel Cut-outs (Viewed from Installer's Side)



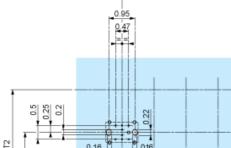
- 30 mm min. / 1.18 in. min.
- B: 40 mm min. / 1.57 in. min.

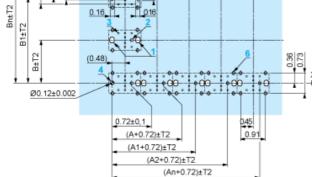
#### Printed Circuit Board Cut-outs (Viewed from Electrical Block Side)

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.

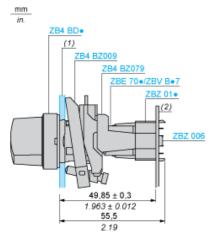
#### **Installation Precautions**

- 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•.

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 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



#### Position 315°



Push Position Top					
Bottom	Δ	Δ	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	