# Product datasheet **Characteristics**

# **ZB4BX2**







### Main

Harmony XB4
Head for non-illuminated push-button
ZB4
Chromium plated metal
0.87 in (22 mm)
1
Standard
Round
Latching
Push-pull
Black mushroom Ø 60 mm unmarked

#### Complementary

CAD overall width	2.36 in (60 mm)	
CAD overall height	2.36 in (60 mm)	
CAD overall depth	2.2 in (56 mm)	
Product weight	0.21 lb(US) (0.095 kg)	
Mechanical durability 500000 cycles		
Electrical composition code	C15 1 contacts using single blocks in front mounting C15 1 contacts using single blocks in front mounting C11 for 3 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 C10 for 4 contacts using single and double blocks in front mounting	

### **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 conforming to IEC 60536	
IP degree of protection	IP67 IP66 conforming to IEC 60529 IP69K IP69	
NEMA degree of protection	NEMA 13 NEMA 4X	
IK degree of protection	IK03 conforming to IEC 50102	
standards	EN/IEC 60947-1 EN/IEC 60947-5-1 EN/IEC 60947-5-4 EN/IEC 60947-5-5 JIS C 4520 UL 508 CSA C22.2 No 14	
product certifications	BV CSA DNV GL LROS (Lloyds register of shipping) RINA UL listed	
vibration resistance	5 gn (f = 2500 Hz) conforming to IEC 60068-2-6	



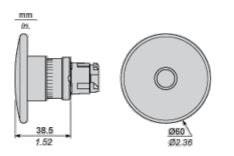
#### **Offer Sustainability**

Green Premium product	Green Premium product		
Compliant - since 0627 - Schneider Electric declaration of conformity	Compliant - since 0627 - Schneider Electric declaration of conformity		
Reference not containing SVHC above the threshold	Reference not containing SVHC above the threshold		
Available	Available		
Need no specific recycling operations	Need no specific recycling operations		
WARNING: This product can expose you to chemicals including:	WARNING: This product can expose you to chemicals including:		
Nickel compounds, which is known to the State of California to cause cancer, and	Nickel compounds, which is known to the State of California to cause cancer, and		
Di-isodecyl phthalate (DIDP), which is known to the StateDi-isodecyl phthalate (DIDP), which is known to the State of California to cause birth of California to cause birth defects or other reproductive defects or other reproductive harm.			
For more information go to www.p65warnings.ca.gov	For more information go to www.p65warnings.ca.gov		

#### Contractual warranty

Warranty period	18 months	

#### **Dimensions**

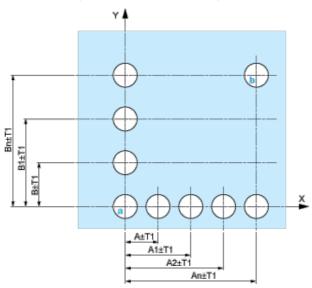


#### Panel Cut-out for Pushbuttons, Switches and Pilot Lights (Finished Holes, Ready for Installation)

	nnection by Screw Clamp Terminals or Plug-in nnectors or on Printed Circuit Board	Connection by Faston Connectors	
-			
(1)	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.		

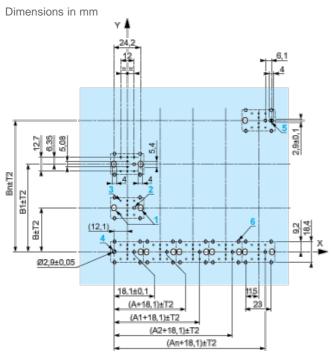
#### Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection





- 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)

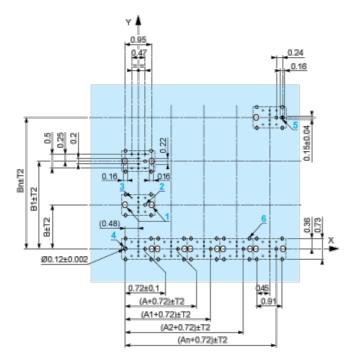


A: 30 mm min.

**B:** 40 mm min.

Dimensions in in.





A: 1.18 in. min.

B: 1.57 in. min.

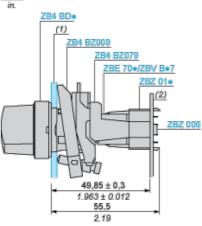
#### General Tolerances of the Panel and Printed Circuit Board

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
- 1 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:
  - i every 90 mm / 3.54 in. horizontally (X), and 120 mm / 4.72 in. vertically (Y).
  - i 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

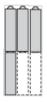
#### Mounting of Adapter (Socket) ZBZ 01•

- 1 2 elongated holes for ZBZ 006 screw access
- 1 1 hole Ø 2.4 mm ± 0.05 / 0.09 in. ± 0.002 for centring adapter ZBZ 01•
- 1 3 8 × Ø 1.2 mm / 0.05 in. holes
- 1 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)
- 1 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 ± 0.05 / 0.09 in. ± 0.002 holes for centring adapter ZBZ 01•.

# **Electrical Composition Corresponding to Code C7**



### **Electrical Compositions Corresponding to Code C8**



# **Electrical Compositions Corresponding to Code C10**



#### Electrical Composition Corresponding to Codes C9, C11, SF1 and SR1



### **Electrical Composition Corresponding to Code C15**





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

