# **ZB4BT3**





## 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	Latching	
Reset	Push-pull	
Operator profile	Green mushroom Ø 40 mm unmarked	

# Complementary

Mechanical durability	300000 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	IK06 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	
shock resistance	30 gn (duration = 18 ms) half sine wave acceleration conforming to IEC 60068-2-27 50 gn (duration = 11 ms) half sine wave acceleration conforming to IEC 60068-2-27	

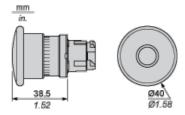
## Offer Sustainability

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 Stat of California to cause birth defects or other reproductive harm.	eDi-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	For more information go to www.p65warnings.ca.gov

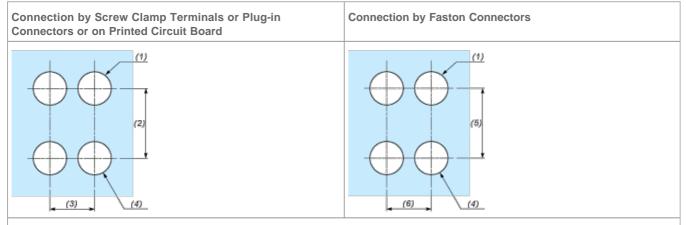
## Contractual warranty

Warranty period 18 months		18 months	
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## **Dimensions**



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

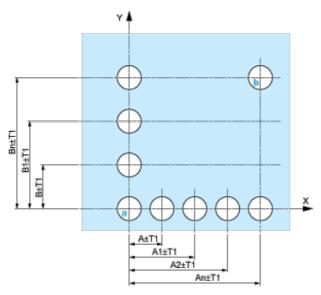


- (1) Diameter on finished panel or support
- (2) 40 mm min. / 1.57 in. min.
- (3) 30 mm min. / 1.18 in. min.
- (4) Ø 22.5 mm / 0.89 in. recommended (Ø 22.3 mm  $_{0}^{+0.4}$  / 0.88 in.  $_{0}^{+0.016}$ )
- (5) 45 mm min. / 1.78 in. min.
- (6) 32 mm min. / 1.26 in. min.

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

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

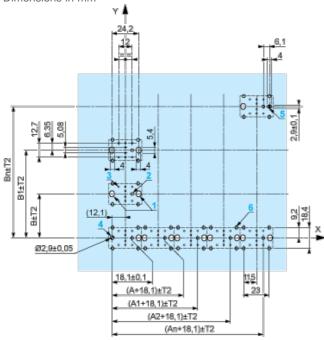




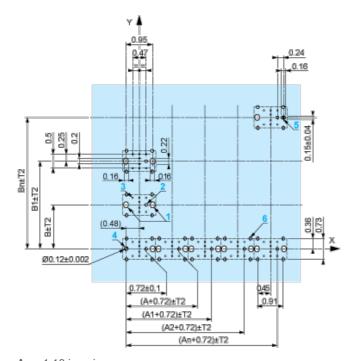
A: 30 mm min. / 1.18 in. min.B: 40 mm min. / 1.57 in. min.

## 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.

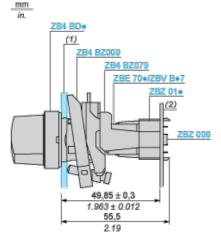
#### **General Tolerances of the Panel and Printed Circuit Board**

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:
  - every 90 mm / 3.54 in. horizontally (X), and 120 mm / 4.72 in. vertically (Y).
  - 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 2 1 hole Ø 2.4 mm ± 0.05 / 0.09 in. ± 0.002 for centring adapter ZBZ 01•
- $\mathbf{3.8 \times \varnothing}$  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•



# **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/O + N/C or 1 N/O + N/O or 1 N/C + N/C



# Legend

Single contact



Double contact

Light block

Possible location