Product data sheet
Characteristics

ZB4BC2
Mushroom push button head Ø40, metal, black, Ø22, spring return

Product availability : Stock - Normally stocked in distribution facility



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	spring return
Operator profile	Black mushroom Ø 40 mm, unmarked

Complementary

CAD overall width	1.57 in (40 mm)
CAD overall height	1.57 in (40 mm)
CAD overall depth	2.05 in (52 mm)
Mechanical durability	5000000 cycles
Electrical composition code	C1 9 single front mounting C2 9 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	-40…158 °F (-40…70 °C)

* Price is “List Price” and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Ambient air temperature for operation	-40…158 °F (-40…70 °C)
Overvoltage category	Class I IEC 60536
IP degree of protection	IP66 IEC 60529 IP69 IP69K
NEMA degree of protection	NEMA 13 NEMA 4X
IK degree of protection	IK06 IEC 50102
Standards	EN/IEC 60947-1 EN/IEC 60947-5-5 CSA C22.2 No 14 EN/IEC 60947-5-4 UL 508 JIS C8201-5-1 EN/IEC 60947-5-1 JIS C8201-1
Product certifications	LROS (Lloyds register of shipping) CSA RINA UL Listed GL BV DNV
Vibration resistance	5 gn 2…500 Hz)IEC 60068-2-6
Shock resistance	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

Category	22468 - PUSHBUTTONS,22MM(METAL) NEW
Discount Schedule	CS2
GTIN	00785901354277
Nbr. of units in pkg.	1
Package weight(Lbs)	0.15 lb(US) (0.07 kg)
Returnability	Yes
Country of origin	CZ

Packing Units

Unit Type of Package 1	PCE
Package 1 Height	1.73 in (4.4 cm)
Package 1 width	2.13 in (5.4 cm)
Package 1 Length	3.46 in (8.8 cm)
Package 2 Weight	7.80 lb(US) (3.54 kg)
Package 3 Weight	147.38 lb(US) (66.852 kg)

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
Environmental Disclosure	Product Environmental Profile

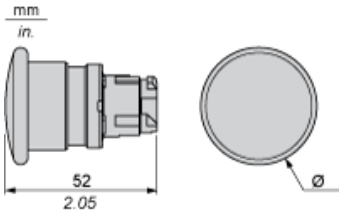
Circularity Profile	End of Life Information

Contractual warranty

Warranty	18 months

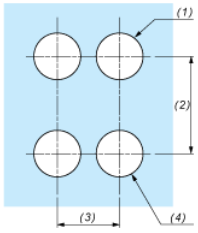
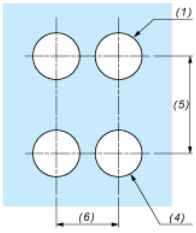
ZB4BC2

Dimensions



	Ø in mm	Ø in in.
ZB4BC•	40	1.57
ZB4BR•	60	2.36

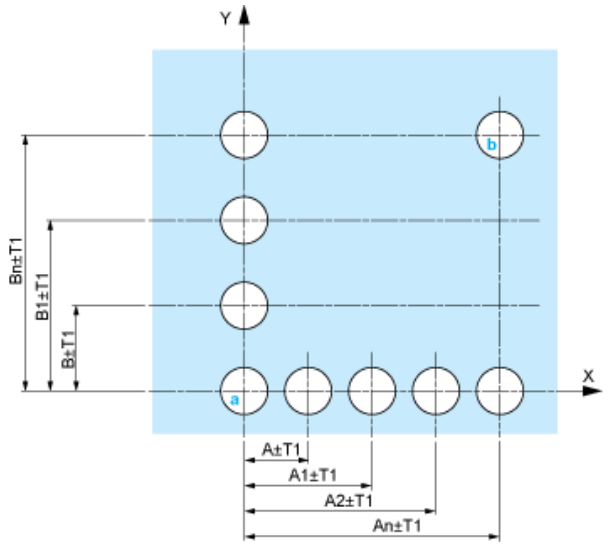
Panel Cut-out for Pushbuttons, Switches and Pilot Lights (Finished Holes, Ready for Installation)

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

(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

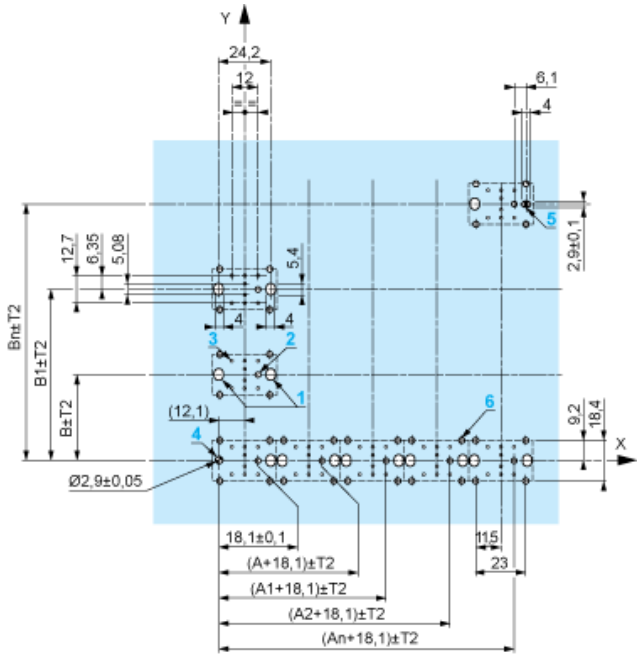
Panel Cut-outs (Viewed from Installer's Side)



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

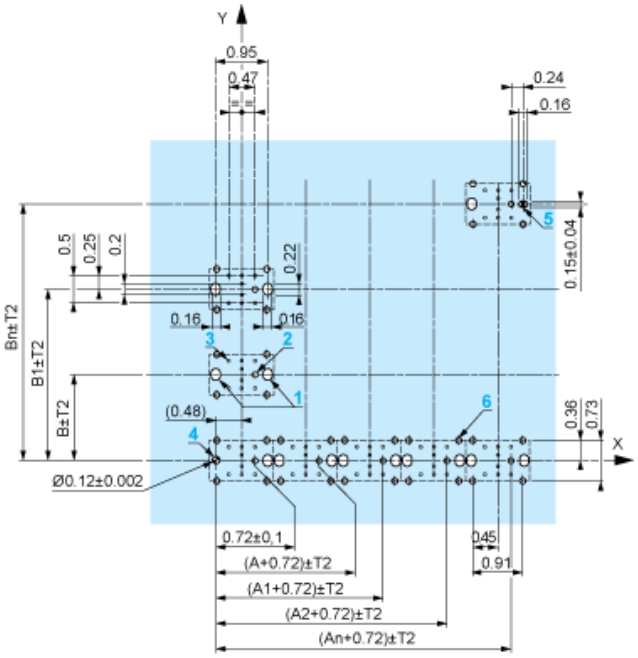
Printed Circuit Board Cut-outs (Viewed from Electrical Block Side)

Dimensions in mm



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

Dimensions in in.



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

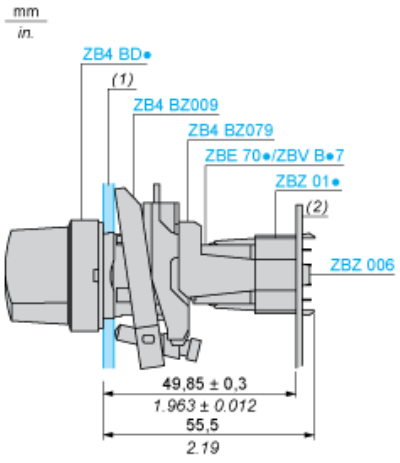
General Tolerances of the Panel and Printed Circuit Board

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•

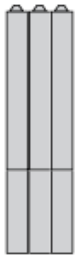
- 1 2 elongated holes for ZBZ 006 screw access
- 2 1 hole Ø 2.4 mm ± 0.05 / 0.09 in. ± 0.002 for centring adapter ZBZ 01•
- 3 8 × Ø 1.2 mm / 0.05 in. holes
- 4 1 hole Ø 2.9 mm ± 0.05 / 0.11 in. ± 0.002, for aligning the printed circuit board (with cut-out marked a)
- 5 1 elongated hole for aligning the 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 ± 0.05 / 0.09 in. ± 0.002 holes for centring adapter ZBZ 01•.

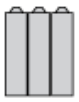
Electrical Composition Corresponding to Code C1



Electrical Composition Corresponding to Code C2

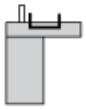


Electrical Composition Corresponding to Codes C9, C11, SF1 and SR1

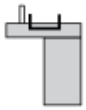


Electrical Composition Corresponding to Code C15

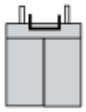
1 N/O



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

