

ZB4BW453

orange Ø40 illum mushroom pushbutton head
Ø22 spring return for integral LED



Main

Commercial Status	Commercialised
Range of product	Harmony XB4
Product or component type	Head for illuminated pushbutton
Device short name	ZB4
Product compatibility	Integral LED
Bezel material	Chromium plated metal
Mounting diameter	22 mm
Sale per indivisible quantity	1
Shape of signaling unit head	Round
Type of operator	Spring return
Operator profile	Orange mushroom Ø 40 mm unmarked

Complementary

CAD overall width	40 mm
CAD overall height	40 mm
CAD overall depth	53 mm
Product weight	0.051 kg
Resistance to high pressure washer	7000000 Pa at 55 °C, distance: 0.1 m
Mechanical durability	5000000 cycles

Environment

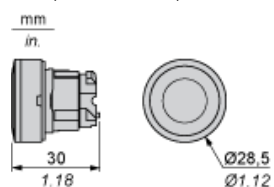
Protective treatment	TH
Ambient air temperature for storage	-40...70 °C
Ambient air temperature for operation	-25...70 °C
Class of protection against electric shock	Class I conforming to IEC 60536
IP degree of protection	IP66 conforming to IEC 60529
NEMA degree of protection	NEMA 4X NEMA 13
IK degree of protection	IK05 conforming to EN 50102
Standards	CSA C22-2 No 14 EN/IEC 60947-1 EN/IEC 60947-5-1 EN/IEC 60947-5-4 EN/IEC 60947-5-5 JIS C 4520 UL 508
Product certifications	BV CSA DNV GL LROS (Lloyds register of shipping) RINA UL listed
Vibration resistance	5 gn (f = 2...500 Hz) conforming to IEC 60068-2-6
Shock resistance	50 gn for 11 ms half sine wave acceleration conforming to IEC 60068-2-27 30 gn for 18 ms half sine wave acceleration conforming to IEC 60068-2-27

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. 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. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

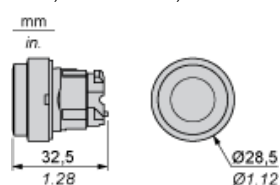
Dimensions of Heads for Illuminated Pushbuttons

Heads for Spring Return Illuminated Pushbuttons, for Light Source Types

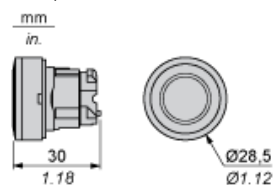
LED, ZB4 BW3•3, ZB4 BW3•3S, ZB4 BW5•3, ZB4 BA•8



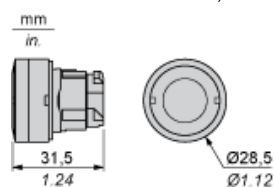
LED, ZB4 BW1•3, ZB4 BL•8



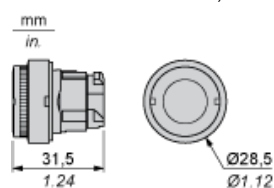
LED, ZB4 BW9•3



Incandescent or neon, ZB4 BW3•3, ZB4 BW3•3S

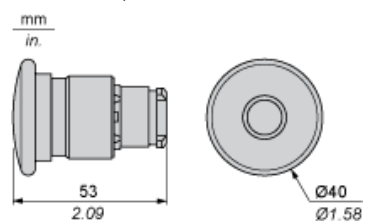


Incandescent or neon, ZB4 BW1•



Heads for Ø 40 mm Mushroom Head Illuminated Pushbuttons with LED

ZB4 BW4•3, ZB4 BW6•3

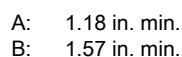
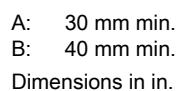


Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board	Connection by Faston Connectors
The diagram shows a 2x2 grid of circular terminals on a light blue rectangular panel. Dimension (1) is the diameter of one terminal. Dimension (2) is the vertical distance between the centers of the two rows of terminals. Dimension (3) is the horizontal distance between the centers of the two columns of terminals. Dimension (4) is the distance from the center of a terminal to the right edge of the panel.	The diagram shows a 2x2 grid of circular terminals on a light blue rectangular panel. Dimension (1) is the diameter of one terminal. Dimension (5) is the vertical distance between the centers of the two rows of terminals. Dimension (6) is the horizontal distance between the centers of the two columns of terminals. Dimension (4) is the distance from the center of a terminal to the right edge of the panel.
(1) Diameter on finished panel or support (2) 40 mm min. / 1.57 in. min. (3) 30 mm min. / 1.18 in. min. (4) $\varnothing 22.5 \text{ mm} / 0.89 \text{ in. recommended } (\varnothing 22.3 \text{ mm}_0^{+0.4} / 0.88 \text{ in.}_0^{+0.016})$ (5) 45 mm min. / 1.78 in. min. (6) 32 mm min. / 1.26 in. min.	

The diagram shows a rectangular area defined by X and Y axes. The Y-axis is vertical, and the X-axis is horizontal. The area is divided into horizontal strips of height $B \pm T_1$. The X-axis is divided into vertical strips of width $A \pm T_1$. The points are labeled 'a' and 'b'. The area is shaded light blue.

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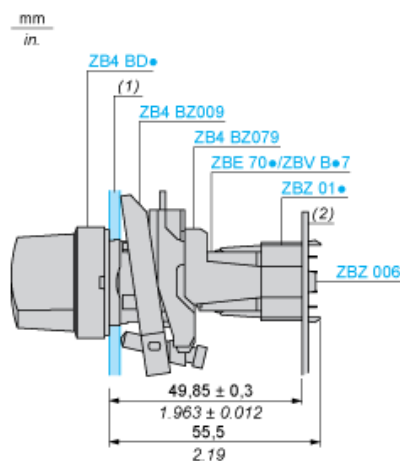
Dimensions in mm



The cumulative tolerance must not exceed 0.3 mm / 0.012 in: T1 + T2 = 0.3 mm max.

- 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 $\varnothing 2.4 \text{ mm} \pm 0.05 / 0.09 \text{ in.} \pm 0.002$ for centring adapter ZBZ 01•
- 3 8 × $\varnothing 1.2 \text{ mm} / 0.05 \text{ in.}$ holes
- 4 1 hole $\varnothing 2.9 \text{ mm} \pm 0.05 / 0.11 \text{ in.} \pm 0.002$, 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 $\varnothing 2.4 \text{ mm} / 0.09 \text{ in.}$ for clipping in adapter ZBZ 01•

Dimensions An + 18.1 relate to the $\varnothing 2.4 \text{ mm} \pm 0.05 / 0.09 \text{ in.} \pm 0.002$ holes for centring adapter ZBZ 01•.