

# ZB4BW553

orange flush illuminated pushbutton head Ø22  
spring return for integral LED



## Main

Range of product	Harmony XB4
Product or component type	Head for illuminated push-button
Device short name	ZB4
Product compatibility	Integral LED
Bezel material	Chromium plated metal
Head type	Standard
Mounting diameter	22 mm
Sale per indivisible quantity	1
Shape of signaling unit head	Round
Type of operator	spring return
Operator profile	Orange flush, unmarked
Operator additional information	Clear boot

## Complementary

CAD overall width	29 mm
CAD overall height	29 mm
CAD overall depth	30 mm
Net weight	0.031 kg
Resistance to high pressure washer	7000000 Pa at 55 °C, distance : 0.1 m
Mechanical durability	10000000 cycles
Electrical composition code	M1 for <6 contacts using single blocks in front mounting with integral LED M2 for <6 contacts using single and double blocks in front mounting with integral LED M6 for <2 contacts using single blocks in front mounting with integral LED and transformer M10 for <2 contacts using single blocks in front mounting with integral LED
Device presentation	Basic sub-assemblies

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

## Environment

Protective treatment	TH
Ambient air temperature for storage	-40...70 °C
Ambient air temperature for operation	-40...70 °C
Overvoltage category	Class I conforming to IEC 60536
IP degree of protection	IP66 conforming to IEC 60529 IP67
NEMA degree of protection	NEMA 13 NEMA 4X
IK degree of protection	IK06 conforming to EN 50102
Standards	JIS C8201-5-1 EN/IEC 60947-5-1 CSA C22.2 No 14 EN/IEC 60947-5-5 EN/IEC 60947-5-4 EN/IEC 60947-1 UL 508 JIS C8201-1
Product certifications	GL LROS (Lloyds register of shipping) UL listed CSA DNV BV RINA
Vibration resistance	5 gn (f= 2...500 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

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	30 g
Package 1 Height	3.6 cm
Package 1 width	4.8 cm
Package 1 Length	3.2 cm
Unit Type of Package 2	BB1
Number of Units in Package 2	5
Package 2 Weight	150 g
Package 2 Height	4.5 cm
Package 2 width	26.5 cm
Package 2 Length	3.4 cm
Unit Type of Package 3	S02
Number of Units in Package 3	150
Package 3 Weight	4.75 kg
Package 3 Height	15 cm
Package 3 width	30 cm
Package 3 Length	40 cm

## Offer Sustainability

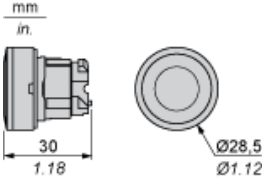
Sustainable offer status	Green Premium product
REACH Regulation	<a href="#">REACH Declaration</a>
REACH free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Toxic heavy metal free	Yes

Mercury free	Yes
RoHS exemption information	<a href="#">Yes</a>
China RoHS Regulation	<a href="#">China RoHS declaration</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End of Life Information</a>

### Contractual warranty

Warranty	18 months
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Dimensions

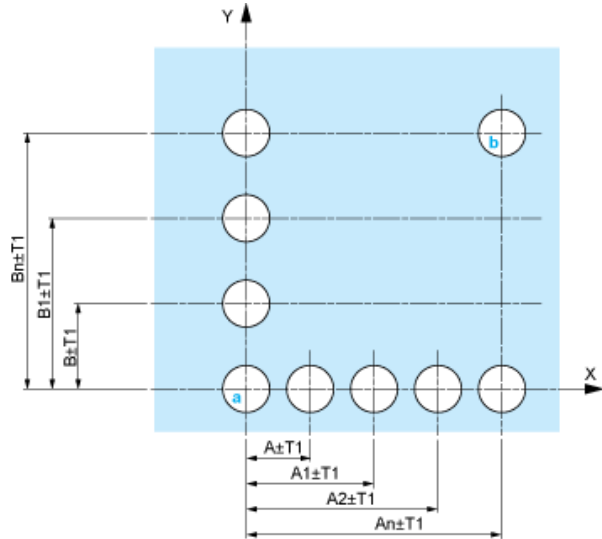


Panel Cut-out for Pushbuttons, Switches and Pilot Lights (Finished Holes, Ready for Installation)

Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board	Connection by Faston Connectors
	
<p>(1) Diameter on finished panel or support                  (2) 40 mm min. / 1.57 in. min.                  (3) 30 mm min. / 1.18 in. min.                  (4) <math>\text{Ø } 22.5 \text{ mm} / 0.89 \text{ in. recommended } (\text{Ø } 22.3 \text{ mm }_0^{+0.4} / 0.88 \text{ in. }_0^{+0.016})</math>                  (5) 45 mm min. / 1.78 in. min.                  (6) 32 mm min. / 1.26 in. min.</p>	

Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

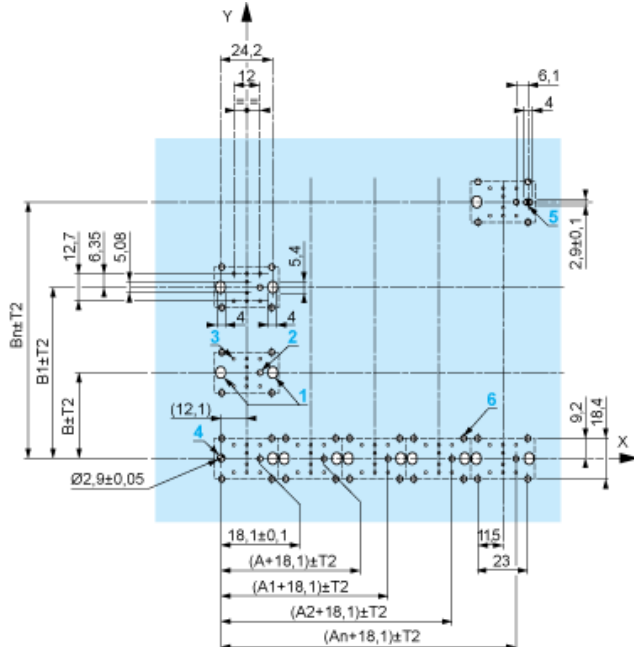
Panel Cut-outs (Viewed from Installer's Side)



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

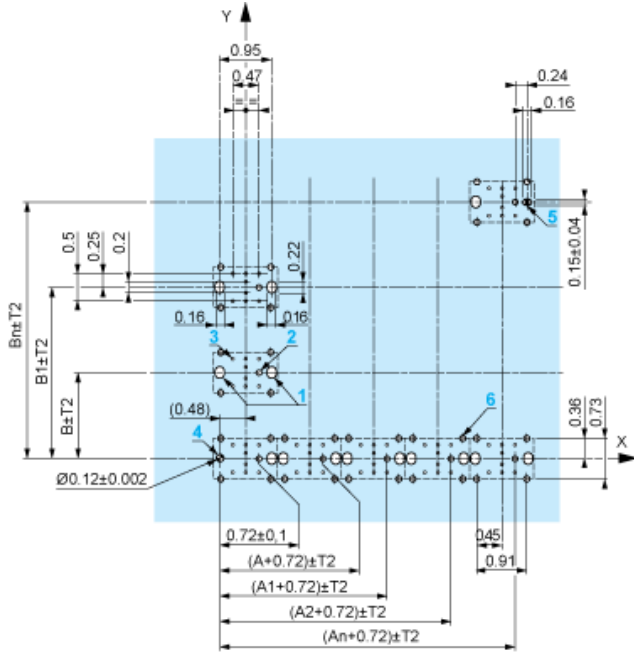
Printed Circuit Board Cut-outs (Viewed from Electrical Block Side)

Dimensions in mm



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

Dimensions in in.



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

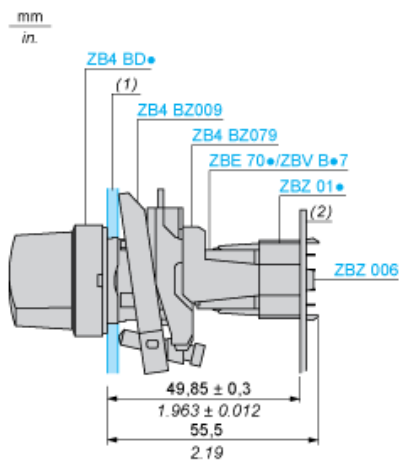
### General Tolerances of the Panel and Printed Circuit Board

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  $\varnothing$  2.4 mm  $\pm$  0.05 / 0.09 in.  $\pm$  0.002 for centring adapter ZBZ 01•
- 3 8  $\times$   $\varnothing$  1.2 mm / 0.05 in. holes
- 4 1 hole  $\varnothing$  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  $\varnothing$  2.4 mm / 0.09 in. for clipping in adapter ZBZ 01•

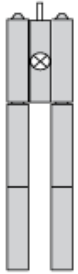
Dimensions An + 18.1 relate to the  $\varnothing$  2.4 mm  $\pm$  0.05 / 0.09 in.  $\pm$  0.002 holes for centring adapter ZBZ 01•.



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Electrical Composition Corresponding to Codes M1 and M7

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Electrical Composition Corresponding to Codes M2 and M8

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Electrical Composition Corresponding to Codes M6 and P2

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Electrical Composition Corresponding to Codes M5, M10, MF1, MR1 and MF2

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Legend

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Single contact



Double contact



Light block



Possible location

