# white flush illuminated pushbutton head Ø22 spring return for integral **LED**

Local distributor code: 237116628 ZB4BW313

Important message: A change in appearance may be noted on the product but does not affect its use in terms of function and safety. This makes it compatible with our Universal LED blocks

EAN Code: 3389110889796

### Main

Range of product	Harmony XB4
Product or component type	Head for illuminated push-button
Device short name	ZB4
Product compatibility	Universal 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	White flush, unmarked
Operator additional information	With plain lens

### Complementary

CAD overall width	29 mm			
CAD overall height	29 mm			
CAD overall depth	30 mm			
Net weight	0.026 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			

### **Environment**

Protective treatment	TH
Ambient air temperature for storage	-4070 °C

Ambient air temperature for operation	-4070 °C		
Overvoltage category	Class I conforming to IEC 60536		
IP degree of protection	IP66 conforming to IEC 60529 IP67 IP69 IP69K		
NEMA degree of protection	NEMA 13 NEMA 4X		
IK degree of protection	IK06 conforming to EN 50102		
Standards	EN/IEC 60947-5-4 EN/IEC 60947-1 CSA C22.2 No 14 EN/IEC 60947-5-1 JIS C8201-5-1 EN/IEC 60947-5-5 UL 508 JIS C8201-1		
Product certifications	GL BV DNV CSA LROS (Lloyds register of shipping) UL listed		
Vibration resistance	5 gn (f= 2500 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 Height	4.500 cm		
Package 1 Width	3.400 cm		
Package 1 Length	5.400 cm		
Package 1 Weight	26.000 g		
Unit Type of Package 2	BB1		
Number of Units in Package 2	5		
Package 2 Height	4.500 cm		
Package 2 Width	3.400 cm		
Package 2 Length	26.500 cm		
Package 2 Weight	133.000 g		
Unit Type of Package 3	S03		
Number of Units in Package 3	300		
Package 3 Height	30.000 cm		
Package 3 Width	30.000 cm		
Package 3 Length	40.000 cm		
Package 3 Weight	8.490 kg		
Offer Sustainability			
Sustainable offer status	Green Premium product		
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
China RoHS Regulation	China RoHS declaration
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information
Contractual warranty	

18 months Warranty

# **ZB4BW313**

**Dimensions Drawings** 

### **Dimensions**





### **ZB4BW313**

Mounting and Clearance

### 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

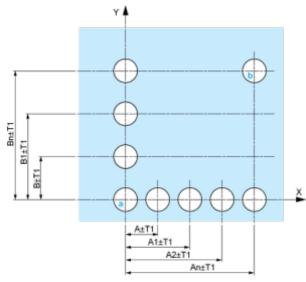
Connection by Faston Connectors

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)

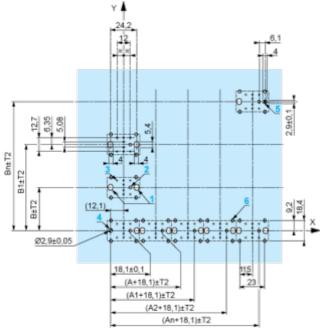


**A:** 30 mm min. / 1.18 in. min.

**B:** 40 mm min. / 1.57 in. min.

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

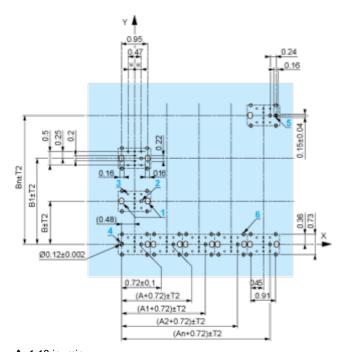
Dimensions in mm



A: 30 mm min.

**B**: 40 mm min.

Dimensions in in.



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

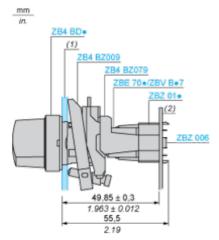
### General Tolerances of the Panel and Printed Circuit Board

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

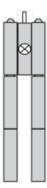
- 1 2 elongated holes for ZBZ 006 screw access
- 2 1 hole Ø 2.4 mm ± 0.05 / 0.09 in. ± 0.002 for centring adapter ZBZ 01•
- 3 8 × Ø 1.2 mm / 0.05 in. holes
- 4 1 hole Ø 2.9 mm ± 0.05 / 0.11 in. ± 0.002, for aligning the printed circuit board (with cut-out marked a)
- 5 1 elongated hole for aligning the printed circuit board (with cut-out marked b)
- $\bullet~$  6 4 holes Ø 2.4 mm / 0.09 in. for clipping in adapter ZBZ 01  $\bullet~$

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

# **ZB4BW313**

Technical Description

**Electrical Composition Corresponding to Codes M1 and M7** 



# **ZB4BW313**

Technical Description

**Electrical Composition Corresponding to Codes M2 and M8** 



# **ZB4BW313**

Technical Description

**Electrical Composition Corresponding to Codes M6 and P2** 



# **ZB4BW313**

Technical Description

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



# **ZB4BW313**

Technical Description

Lea	en	d
-09		•

Single contact



Double contact



Light block

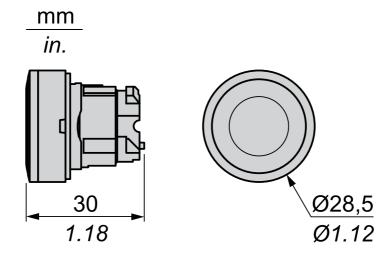


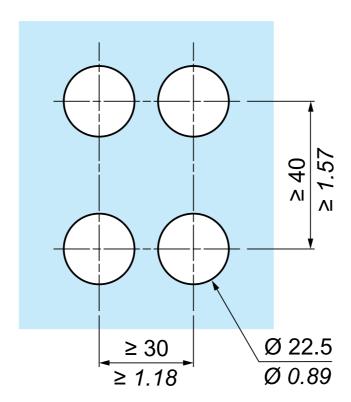
Possible location



**Technical Illustration** 

### **Dimensions**





Recommended replacement(s)