

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

Local distributor code: 23707584 ZB4BA58

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: 3389110887730

#### 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	Orange flush, unmarked
Operator additional information	For insertion of legend

#### Complementary

o o in promontary			
CAD overall width	29 mm		
CAD overall height	29 mm		
CAD overall depth	30 mm		
Net weight	0.028 kg		
Resistance to high pressure washer	7000000 Pa at 55 °C, distance : 0.1 m		
Mechanical durability	10000000 cycles		
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 transform M10 for <2 contacts using single blocks in front mounting with integral LED  C3 for <6 contacts using single blocks in front mounting  C4 for <6 contacts using single and double blocks in front mounting  C14 for <2 contacts using single blocks in front mounting			
Device presentation	Basic element		

#### **Environment**

**Protective treatment** 

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	UL 508 EN/IEC 60947-5-4 EN/IEC 60947-1 JIS C8201-5-1 CSA C22.2 No 14 EN/IEC 60947-5-1 EN/IEC 60947-5-5 JIS C8201-1
Product certifications	UL listed LROS (Lloyds register of shipping) BV CSA GL DNV
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	3.500 cm
Package 1 Width	5.500 cm
Package 1 Length	9.000 cm
Package 1 Weight	30.000 g
Unit Type of Package 2	S03
Number of Units in Package 2	150
Package 2 Height	30.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	4.826 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

Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information
Contractual warranty	

18 months

Warranty

## **ZB4BA58**

**Dimensions Drawings** 

### **Dimensions**





### **ZB4BA58**

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

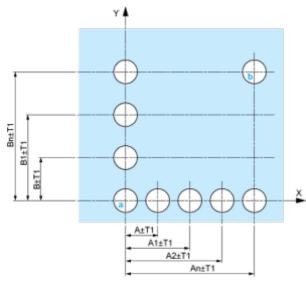
Connection by Faston Connectors

- (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.

Mounting and Clearance

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

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

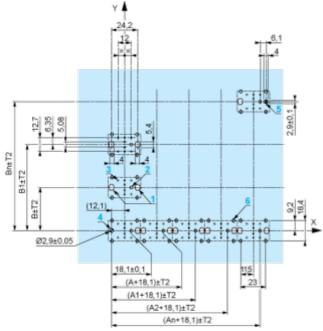


**A:** 30 mm min. / 1.18 in. min.

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

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

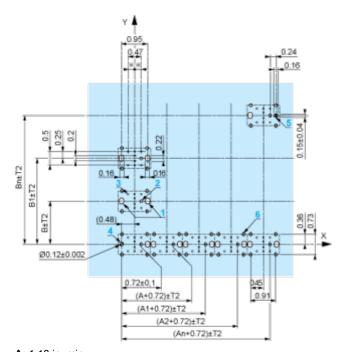
Dimensions in mm



A: 30 mm min.

**B**: 40 mm min.

Dimensions in in.



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

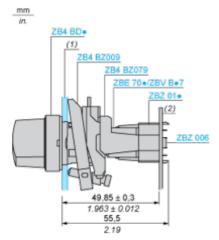
#### General Tolerances of the Panel and Printed Circuit Board

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•

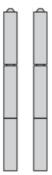
- 1 2 elongated holes for ZBZ 006 screw access
- 2 1 hole Ø 2.4 mm ± 0.05 / 0.09 in. ± 0.002 for centring adapter ZBZ 01•
- 3 8 × Ø 1.2 mm / 0.05 in. holes
- 4 1 hole Ø 2.9 mm ± 0.05 / 0.11 in. ± 0.002, for aligning the printed circuit board (with cut-out marked a)
- 5 1 elongated hole for aligning the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

**ZB4BA58** 

Technical Description

**Electrical Composition Corresponding to Code C3** 



**ZB4BA58** 

Technical Description

**Electrical Composition Corresponding to Code C4** 



**ZB4BA58** 

**Technical Description** 

Electrical Composition Corresponding to Codes C14, SF2 and SR2



### **ZB4BA58**

Technical Description

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



**ZB4BA58** 

Technical Description

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



### **ZB4BA58**

Technical Description

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



### **ZB4BA58**

Technical Description

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



### **ZB4BA58**

Technical Description

Lea	en	d
Leg	en	u

Single contact



Double contact



Light block

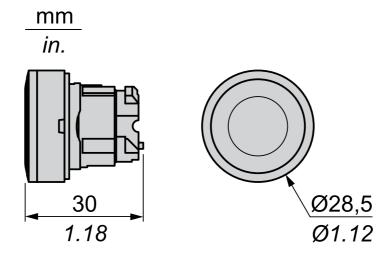


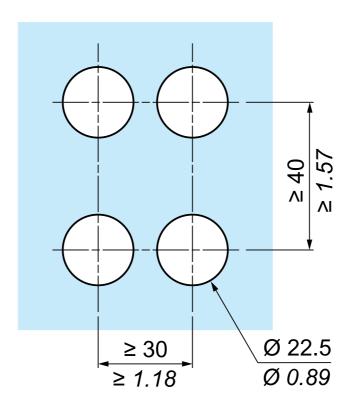
Possible location



**Technical Illustration** 

#### **Dimensions**





Recommended replacement(s)