

# Emergency stop head, switching off, metal, red mushroom Ø40, Ø22, trigger latching key release

Local distributor code: 237090524 ZB4BS944

EAN Code: 3389110888881

#### Main

Range of product	Harmony XB4
Product or component type	Head for emergency switching off push-button
Device short name	ZB4
Bezel material	Chromium plated metal
Mounting diameter	22 mm
Sale per indivisible quantity	1
Shape of signaling unit head	Round
Type of operator	trigger action and mechanical latching
Reset	Key release
Operator profile	Red mushroom Ø 40 mm, unmarked
Type of keylock	Key 455
Key withdrawal position	Center
Head type	Standard

## Complementary

Device presentation	Basic element
	C10 for <4 contacts using single and double blocks in front mounting
Electrical composition code	C15 for <1 contacts using single blocks in front mounting
	C11 for <3 contacts using single blocks in front mounting
	C7 for <4 contacts using single blocks in front mounting C8 for <4 contacts using single and double blocks in front mounting
Electrical composition code	C7 for <4 contacts using single blocks in front mounting
Mechanical durability	300000 cycles
washer	
Resistance to high pressure	7000000 Pa at 55 °C, distance : 0.1 m
Net weight	0.098 kg
CAD overall depth	79 mm
CAD overall height	40 mm
CAD overall width	40 mm

### **Environment**

Protective treatment TH

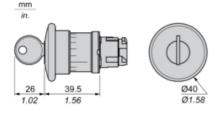
	-4070 °C		
Ambient air temperature for storage	-4070		
Ambient air temperature for operation	-4070 °C		
Electrical shock protection class	Class I conforming to IEC 61140		
IP degree of protection	IP66 conforming to IEC 60529 IP67 IP69 IP69K		
NEMA degree of protection	NEMA 13 NEMA 4X NEMA 4 NEMA 12		
IK degree of protection	IK03 conforming to IEC 50102		
Standards	CSA C22.2 No 14 EN/IEC 60204-1 EN/IEC 60947-1 GB 14048.5 EN/IEC 60947-5-1 EN/ISO 13850 EN/IEC 60947-5-5 JIS C8201-5-1 EN/IEC 60947-5-4 UL 508 IEC 60364-5-53 JIS C8201-1		
Product certifications	GL BV CSA LROS (Lloyds register of shipping) DNV		
	UL listed		
Vibration resistance	UL listed  5 gn (f= 2500 Hz) conforming to IEC 60068-2-6		
Vibration resistance Shock resistance			
Shock resistance	5 gn (f= 2500 Hz) conforming to IEC 60068-2-6  30 gn (duration = 18 ms) for half sine wave acceleration conforming to IEC 60068-2-27		
	5 gn (f= 2500 Hz) conforming to IEC 60068-2-6  30 gn (duration = 18 ms) for half sine wave acceleration conforming to IEC 60068-2-27		
Shock resistance  Packing Units  Unit Type of Package 1	5 gn (f= 2500 Hz) conforming to IEC 60068-2-6  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		
Shock resistance  Packing Units  Unit Type of Package 1  Number of Units in Package 1	5 gn (f= 2500 Hz) conforming to IEC 60068-2-6  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 Number of Units in Package 1 Package 1 Height	5 gn (f= 2500 Hz) conforming to IEC 60068-2-6  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  PCE		
Packing Units Unit Type of Package 1 Number of Units in Package 1 Package 1 Height Package 1 Width	5 gn (f= 2500 Hz) conforming to IEC 60068-2-6  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  PCE  1  4.4 cm		
Packing Units Unit Type of Package 1 Number of Units in Package 1 Package 1 Height Package 1 Width Package 1 Length	5 gn (f= 2500 Hz) conforming to IEC 60068-2-6  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  PCE  1  4.4 cm  5.3 cm		
Packing Units Unit Type of Package 1 Number of Units in Package 1 Package 1 Height Package 1 Width Package 1 Length Package 1 Weight	5 gn (f= 2500 Hz) conforming to IEC 60068-2-6  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  PCE  1  4.4 cm  5.3 cm  8.8 cm		
Packing Units Unit Type of Package 1 Number of Units in Package 1 Package 1 Height Package 1 Width Package 1 Length Package 1 Weight Unit Type of Package 2	5 gn (f= 2500 Hz) conforming to IEC 60068-2-6  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  PCE  1  4.4 cm  5.3 cm  8.8 cm		
Packing Units Unit Type of Package 1 Number of Units in Package 1 Package 1 Height Package 1 Width Package 1 Length Package 1 Weight Unit Type of Package 2 Number of Units in Package 2	5 gn (f= 2500 Hz) conforming to IEC 60068-2-6  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  PCE  1  4.4 cm  5.3 cm  8.8 cm  103.0 g  S03		
Packing Units Unit Type of Package 1 Number of Units in Package 1 Package 1 Height Package 1 Width Package 1 Length Package 1 Weight Unit Type of Package 2 Number of Units in Package 2 Package 2 Height	5 gn (f= 2500 Hz) conforming to IEC 60068-2-6  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  PCE  1  4.4 cm  5.3 cm  8.8 cm  103.0 g  S03		
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Shock resistance Packing Units	5 gn (f= 2500 Hz) conforming to IEC 60068-2-6  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  PCE  1  4.4 cm  5.3 cm  8.8 cm  103.0 g  S03  100  30.0 cm		
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Packing Units Unit Type of Package 1 Number of Units in Package 1 Package 1 Height Package 1 Width Package 1 Length Package 1 Weight Unit Type of Package 2 Number of Units in Package 2 Package 2 Height Package 2 Width Package 2 Width Package 2 Weight Offer Sustainability	5 gn (f= 2500 Hz) conforming to IEC 60068-2-6  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  PCE  1  4.4 cm  5.3 cm  8.8 cm  103.0 g  S03  100  30.0 cm  40.0 cm		
Packing Units Unit Type of Package 1 Number of Units in Package 1 Package 1 Height Package 1 Width Package 1 Length Package 1 Weight Unit Type of Package 2 Number of Units in Package 2 Package 2 Height Package 2 Width Package 2 Width Package 2 Width Package 2 Weight Offer Sustainability Sustainable offer status	5 gn (f= 2500 Hz) conforming to IEC 60068-2-6  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  PCE  1  4.4 cm  5.3 cm  8.8 cm  103.0 g  S03  100  30.0 cm  30.0 cm  40.0 cm		
Packing Units Unit Type of Package 1 Number of Units in Package 1 Package 1 Height Package 1 Width Package 1 Length Package 1 Weight Unit Type of Package 2 Number of Units in Package 2 Package 2 Height Package 2 Width Package 2 Width Package 2 Width Package 2 Width Package 2 Weight  Offer Sustainability Sustainable offer status REACh Regulation	5 gn (f= 2500 Hz) conforming to IEC 60068-2-6  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  PCE  1  4.4 cm  5.3 cm  8.8 cm  103.0 g  S03  100  30.0 cm  40.0 cm  10.778 kg		
Packing Units Unit Type of Package 1 Number of Units in Package 1 Package 1 Height Package 1 Width Package 1 Length Package 1 Weight Unit Type of Package 2 Number of Units in Package 2 Package 2 Height Package 2 Uidth Package 2 Length	5 gn (f= 2500 Hz) conforming to IEC 60068-2-6  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  PCE  1  4.4 cm  5.3 cm  8.8 cm  103.0 g  S03  100  30.0 cm  40.0 cm  10.778 kg  Green Premium product  REACh Declaration  Pro-active compliance (Product out of EU RoHS legal scope)		

RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information
Contractual warranty	
Warranty	18 months

# **ZB4BS944**

**Dimensions Drawings** 

## **Dimensions**



## **ZB4BS944**

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

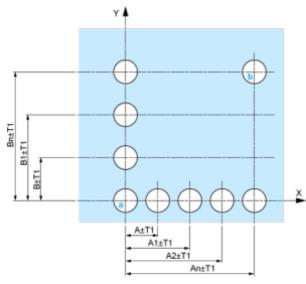
Connection by Faston Connectors

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)

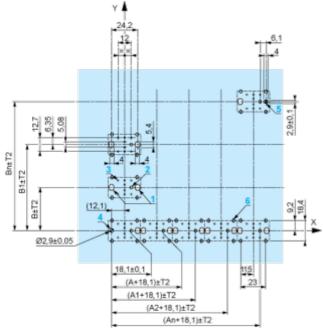


**A:** 30 mm min. / 1.18 in. min.

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

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

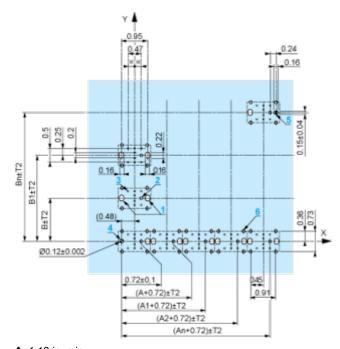
Dimensions in mm



A: 30 mm min.

**B**: 40 mm min.

Dimensions in in.



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

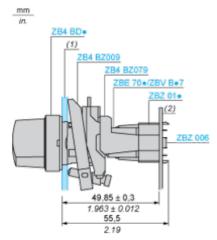
#### **General Tolerances of the Panel and Printed Circuit Board**

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•

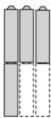
- 1 2 elongated holes for ZBZ 006 screw access
- 2 1 hole Ø 2.4 mm ± 0.05 / 0.09 in. ± 0.002 for centring adapter ZBZ 01•
- 3 8 × Ø 1.2 mm / 0.05 in. holes
- 4 1 hole Ø 2.9 mm  $\pm$  0.05 / 0.11 in.  $\pm$  0.002, for aligning the printed circuit board (with cut-out marked a)
- 5 1 elongated hole for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

**ZB4BS944** 

Technical Description

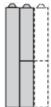
**Electrical Composition Corresponding to Code C7** 



**ZB4BS944** 

Technical Description

**Electrical Compositions Corresponding to Code C8** 



**ZB4BS944** 

Technical Description

**Electrical Compositions Corresponding to Code C10** 



## **ZB4BS944**

Technical Description

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



**Technical Description** 

## **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



## **ZB4BS944**

**Technical Description** 

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Single contact



Double contact



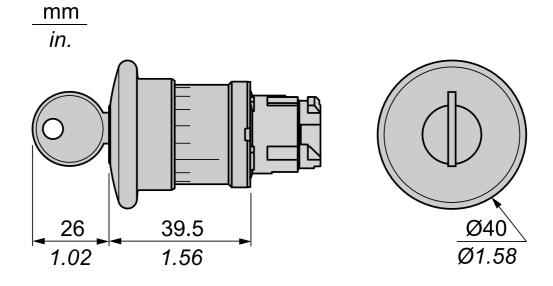
Light block

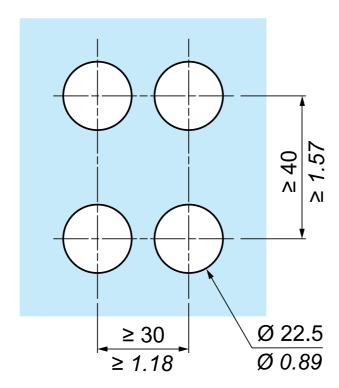


Possible location



#### **Dimensions**





Recommended replacement(s)