

Product data sheet

Specifications



Emergency stop head, Harmony XB4, switching off, metal, red mushroom 40mm, 22mm, trigger latching key release

ZB4BS944

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

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

Environment

Protective treatment	TH
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Ambient air temperature for storage	-40...70 °C
Ambient air temperature for operation	-40...70 °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	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	Db
Number of Units in Package 1	1
Package 1 Height	4.4 cm
Package 1 Width	5.3 cm
Package 1 Length	8.8 cm
Package 1 Weight	103.0 g
Unit Type of Package 2	Doboz
Number of Units in Package 2	100
Package 2 Height	30.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	10.778 kg

Offer Sustainability

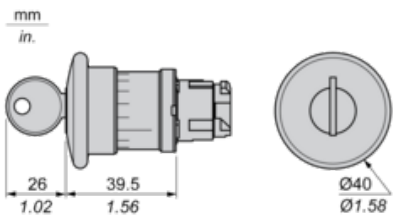
Sustainable offer status	Green Premium product
REACH Regulation	REACH Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes
China RoHS Regulation	China RoHS declaration

RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

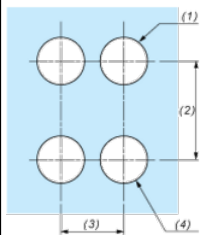
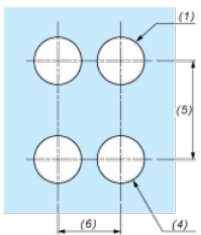
Contractual warranty

Warranty	18 months
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Dimensions

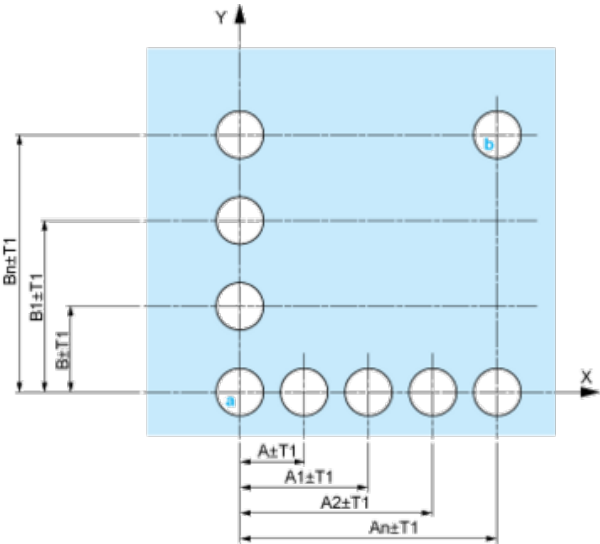


Panel Cut-out for Pushbuttons, Switches and Pilot Lights (Finished Holes, Ready for Installation)

Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board	Connection by Faston Connectors
	
<div>(1) Diameter on finished panel or support</div> <div>(2) 40 mm min. / 1.57 in. min.</div> <div>(3) 30 mm min. / 1.18 in. min.</div> <div>(4) Ø 22.5 mm / 0.89 in. recommended (Ø 22.3 mm ^{+0.4}₀ / 0.88 in. ^{+0.016}₀)</div> <div>(5) 45 mm min. / 1.78 in. min.</div> <div>(6) 32 mm min. / 1.26 in. min.</div>	

Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

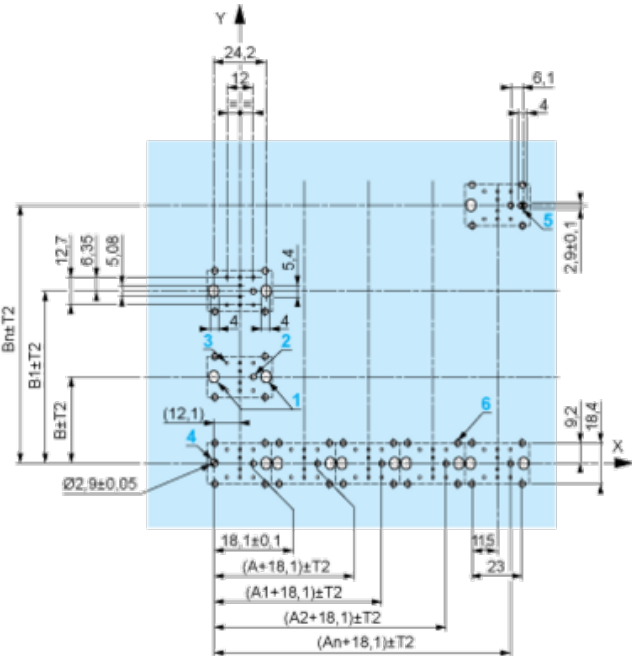
Panel Cut-outs (Viewed from Installer’s Side)



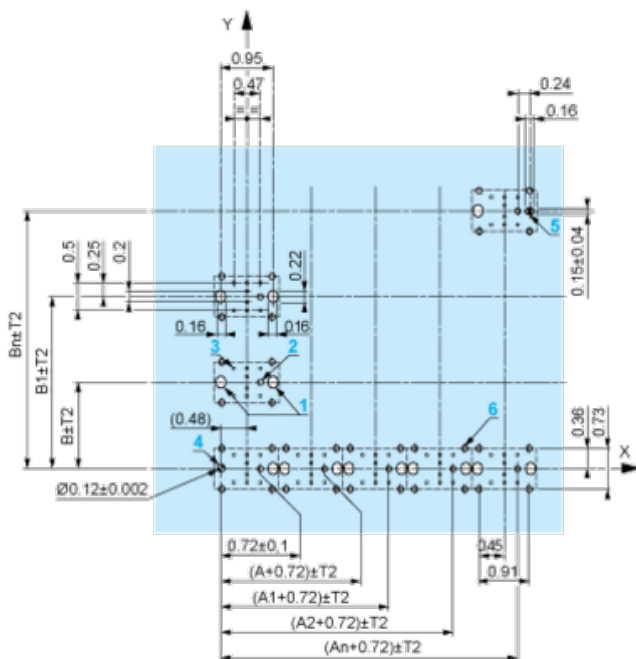
- A: 30 mm min. / 1.18 in. min.
B: 40 mm min. / 1.57 in. min.

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.

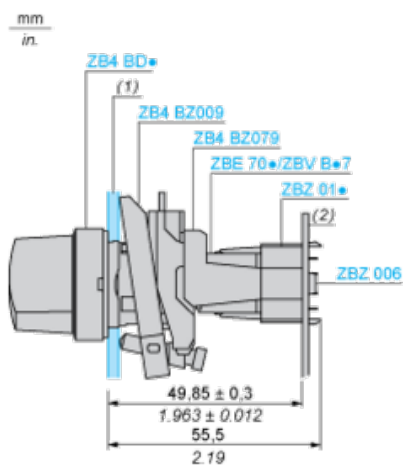
General Tolerances of the Panel and Printed Circuit Board

The cumulative tolerance must not exceed 0.3 mm / 0.012 in: $T1 + T2 = 0.3 \text{ mm max.}$

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: $\pm 2^\circ 30'$ (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•

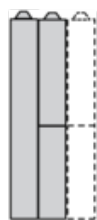
- 1 2 elongated holes for ZBZ 006 screw access
- 2 1 hole $\varnothing 2.4 \text{ mm} \pm 0.05$ / 0.09 in. ± 0.002 for centring adapter ZBZ 01•
- 3 8 $\times \varnothing 1.2 \text{ mm}$ / 0.05 in. holes
- 4 1 hole $\varnothing 2.9 \text{ mm} \pm 0.05$ / 0.11 in. ± 0.002 , for aligning the printed circuit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

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

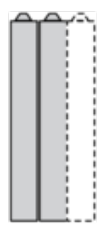
Electrical Composition Corresponding to Code C7



Electrical Compositions Corresponding to Code C8



Electrical Compositions Corresponding to Code C10

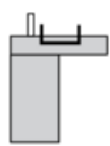


Electrical Composition Corresponding to Codes C9, C11, SF1 and SR1

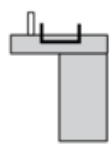


Electrical Composition Corresponding to Code C15

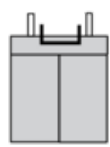
1 N/O



1 N/C



1 N/O + N/C or 1 N/O + N/O or 1 N/C + N/C



Legend

Single contact



Double contact



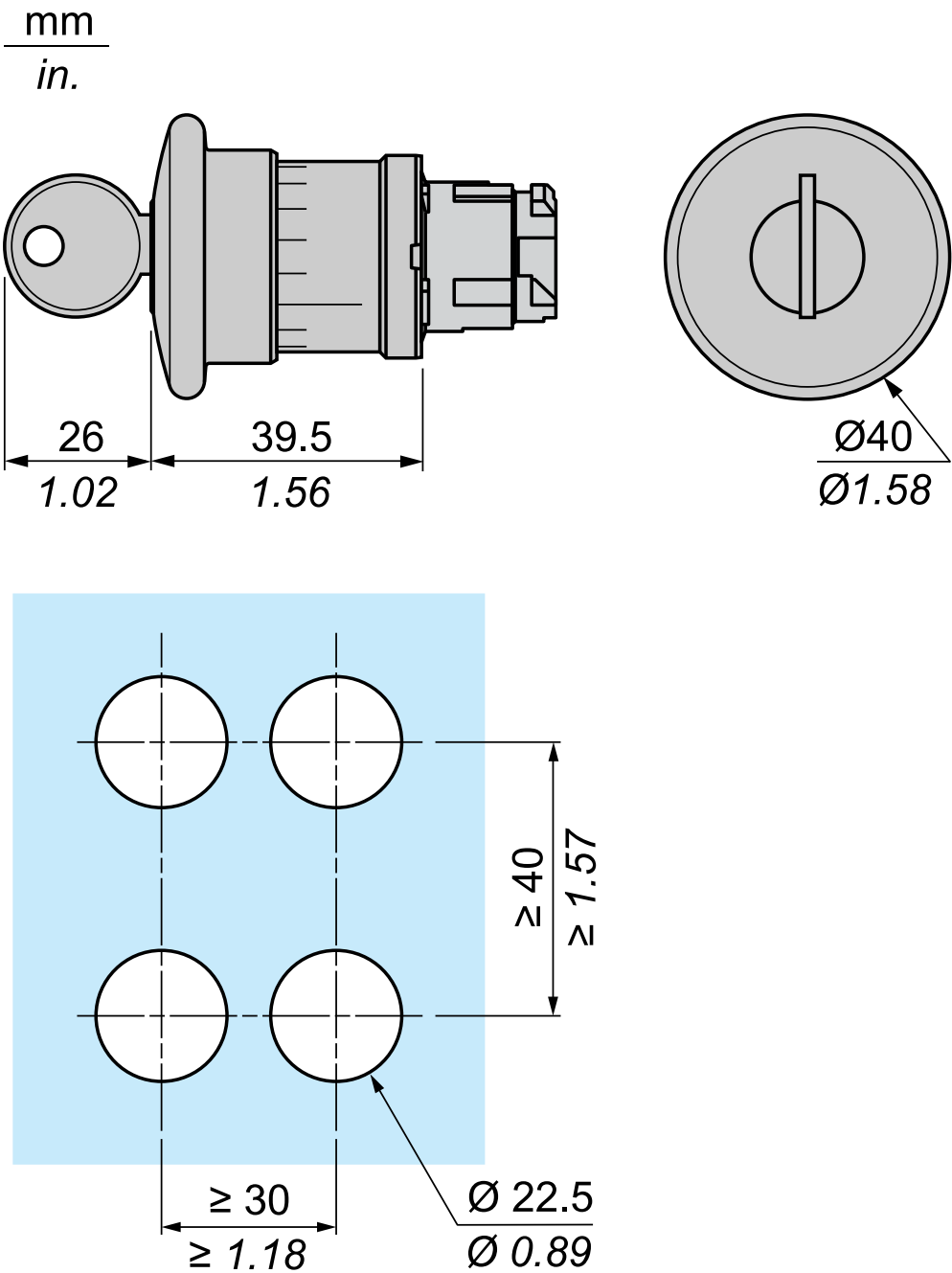
Light block



Possible location



Dimensions



Recommended replacement(s)