Product data sheet Characteristics

ZB5CA3

green square flush pushbutton head Ø22 spring return unmarked



Range of product	Harmony XB5	
Product or component type	Head for non-illuminated push-button	
Device short name	ZB5	
Bezel material	Dark grey plastic	
Mounting diameter	22 mm	
Head type	Standard	
Sale per indivisible quantity	1	
Shape of signaling unit head	Square	
Type of operator	Spring return	
Operator profile	Green flush unmarked	

Complementary

Harmony XB5	
Head for non-illuminated push-button	
ZB5	
Dark grey plastic	
22 mm	
Standard	
1	
Square	
Spring return	
Green flush unmarked	
30 mm	
30 mm	
28 mm	
0.019 kg	
5000000 cycles	
XALD 15 cut-outs XALK 25 cut-outs	
C15 for 1 contacts using single blocks in front mounting C11 for 3 contacts using single blocks in front mounting SF1 for 3 contacts using single blocks in front mounting C1 for 9 contacts using single blocks in front mounting C2 for 9 contacts using single and double blocks in front mounting SR1 for 3 contacts using single blocks in rear mounting	
	Head for non-illuminated push-button ZB5 Dark grey plastic 22 mm Standard 1 Square Spring return Green flush unmarked 30 mm 30 mm 28 mm 0.019 kg 5000000 cycles XALD 15 cut-outs XALK 25 cut-outs XALK 35 cut-outs XALK 55 cut-outs

Environment

		Ø
Protective treatment	TH	ition i
Ambient air temperature for storage	-4070 °C	
Ambient air temperature for operation	-2570 °C	
Overvoltage category	Class II conforming to IEC 60536	
IP degree of protection	IP66 conforming to IEC 60529	
NEMA degree of protection	NEMA 13	SC Dai

NEMA 4X

Resistance to high pressure washer	7000000 Pa at 55 °C,distance: 0.1 m	
IK degree of protection	IK03 conforming to IEC 50102	
Standards	EN/IEC 60947-1 EN/IEC 60947-5-1 EN/IEC 60947-5-4 JIS C 4520 UL 508 CSA C22.2 No 14	
Product certifications	BV CSA DNV GL LROS (Lloyds register of shipping) RINA UL listed	
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	
Vibration resistance	5 gn (f = 2500 Hz) conforming to IEC 60068-2-6	

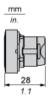
Contractual warranty

Warranty period	18 months	

Product data sheet Dimensions Drawings

ZB5CA3

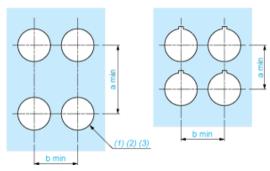
Dimensions





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

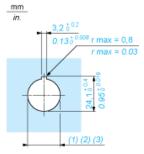
Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



- (1) Diameter on finished panel or support
- For selector switches and Emergency stop buttons, use of an anti-rotation plate type ZB5AZ902 is recommended. Ø22.5 mm recommended (Ø22.3 $_0^{+0.4}$) / Ø0.89 in. recommended (Ø0.88 in. $_0^{+0.016}$)
- (2)

Connections	a in mm	a in in.	b in mm	b in in.
By screw clamp terminals or plug-in connector	40	1.57	30	1.18
By Faston connectors	45	1.77	32	1.26
On printed circuit board	30	1.18	30	1.18

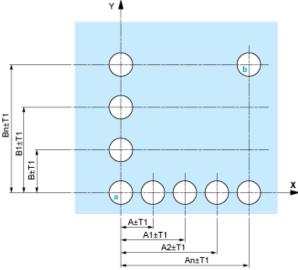
Detail of Lug Recess



- Diameter on finished panel or support
- For selector switches and Emergency stop buttons, use of an anti-rotation plate type ZB5AZ902 is recommended. \emptyset 22.5 mm recommended (\emptyset 22.3 $_0$ $^{+0.4}$) / \emptyset 0.89 in. recommended (\emptyset 0.88 in. $_0$ $^{+0.016}$)
- (1) (2) (3)

Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

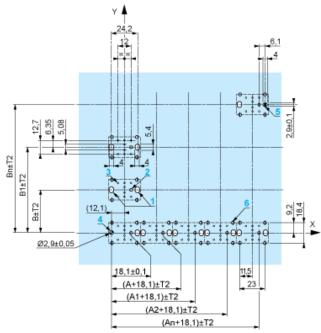
Panel Cut-outs (Viewed from Installer's Side)



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

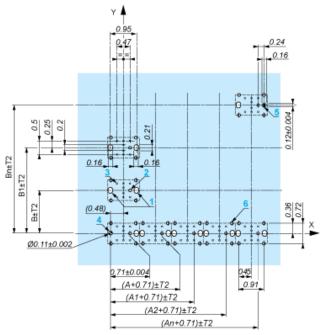
Printed Circuit Board Cut-outs (Viewed from Electrical Block Side)

Dimensions in mm



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

Dimensions in in.



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

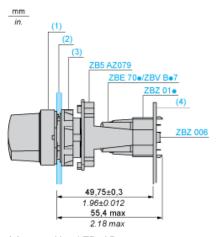
General Tolerances of the Panel and Printed Circuit Board

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 ZB5AZ009: ± 2°30' (excluding cut-outs marked a and b).
- Tightening torque of screws ZBZ006: 0.6 N.m (5.3 lbf.in) max.
- Allow for one ZB5AZ079 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 (ZB5AD•, ZB5AJ•, ZB5AG•).

The fixing centers marked a and b are diagonally opposed and must align with those marked 4 and 5.



- (1) (2) (2) Head ZB5AD•
- Panel
- Nut
- Printed circuit board

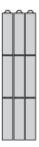
Mounting of Adapter (Socket) ZBZ01•

- 1 2 elongated holes for ZBZ006 screw access
- 2 1 hole Ø 2.4 mm ± 0.05 / 0.09 in. ± 0.002 for centring adapter ZBZ01•
- 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)
- 6 4 holes Ø 2.4 mm / 0.09 in. for clipping in adapter ZBZ01•

Dimensions An + 18.1 relate to the Ø 2.4 mm \pm 0.05 / 0.09 in. \pm 0.002 holes for centring adapter ZBZ01•.

ZB5CA3

Electrical Composition Corresponding to Code C1



ZB5CA3

Electrical Composition Corresponding to Code C2



ZB5CA3

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



ZB5CA3

Legend

Single contact



Double contact



Light block



Possible location

