ZB5CH313

white square flush illuminated pushbutton head Ø22 push-push for integral LED



Main

Range of product	Harmony XB5
Product or component type	Head for illuminated pushbutton
Product compatibility	Integral LED
Device short name	ZB5
Bezel material	Plastic
Mounting diameter	22 mm
Sale per indivisible quantity	1
Shape of signaling unit head	Square
Type of operator	Push-push
Operator profile	White flush unmarked

Complementary

CAD overall width	30 mm
CAD overall height	30 mm
CAD overall depth	29 mm
Product weight	0.018 kg
Mechanical durability	5000000 cycles
Station name	XALK 25 cut-outs XALD 15 cut-outs
Electrical composition code	MR1 for <= 2 contacts using single blocks in rear mounting with integral LED MF1 for <= 2 contacts using single blocks in front mounting with integral LED M10 for <= 2 contacts using single blocks in front mounting with integral LED and transformer M5 for <= 2 contacts using single blocks in front mounting with integral LED and transformer

Environment

Environment			
Protective treatment	TH		
Ambient air temperature for storage	-4070 °C		
Ambient air temperature for operation	-2570 °C		
Class of protection against electric shock	Class II conforming to IEC 60536		
IP degree of protection	IP66 conforming to IEC 60529		
NEMA degree of protection	NEMA 4X NEMA 13		
Resistance to high pressure washer	7000000 Pa at 55 °C,distance: 0.1 m		
IK degree of protection	IK05 conforming to IEC 50102		
Standards	CSA C22-2 No 14 EN/IEC 60947-1 EN/IEC 60947-5-1 EN/IEC 60947-5-4 EN/IEC 60947-5-5 JIS C 4520 UL 508		
Product certifications	BV CSA DNV GL LROS (Lloyds register of shipping) RINA UL listed		

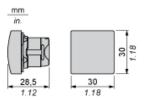
Vibration resistance	5 gn (f = 2500 Hz) conforming to IEC 60068-2-6
Shock resistance	50 gn for 11 ms half sine wave acceleration conforming to IEC 60068-2-27 30 gn for 18 ms half sine wave acceleration conforming to IEC 60068-2-27



Product data sheet Dimensions Drawings

ZB5CH313

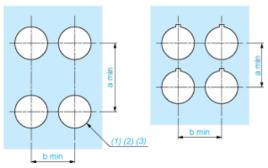
Dimensions



ZB5CH313

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

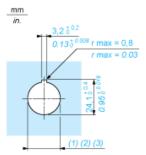
Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



- 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. $_0$ $^{+0.016}$)

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

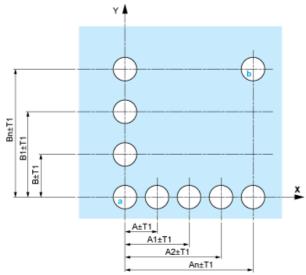
Detail of Lug Recess



- (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})

Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

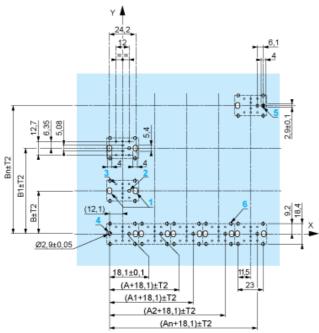
Panel Cut-outs (Viewed from Installer's Side)



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

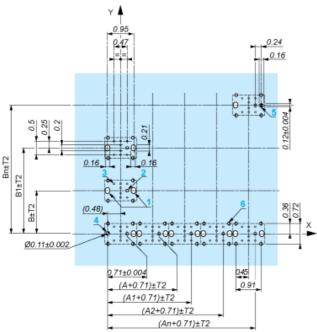
Printed Circuit Board Cut-outs (Viewed from Electrical Block Side)

Dimensions in mm



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

Dimensions in in.



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

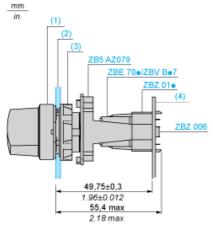
General Tolerances of the Panel and Printed Circuit Board

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:
 - $\circ~$ 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) Head ZB5AD•
- (2) Panel
- (2) Nut
- (4) 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 ± 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 Ø 2.4 mm / 0.09 in. for clipping in adapter ZBZ01•

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

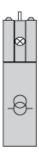
Product data sheet Technical Description

ZB5CH313

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



Electrical Composition Corresponding to Codes M6 and P2



Legend

Single contact



Double contact



Light block



Possible location



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Schneider Electric: ZB5CH313