Product data sheet Characteristics

ZB5AC44 red Ø30 mushroom pushbutton head Ø22 spring return



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Commercial Status	Commercialised
Range of product	Harmony XB5
Product or component type	Head for non-illuminated pushbutton
Device short name	ZB5
Bezel material	Plastic
Mounting diameter	22 mm
Sale per indivisible quantity	1
Shape of signaling unit head	Round
Type of operator	Spring return
Operator profile	Red mushroom Ø 30 mm unmarked

Complementary

CAD overall width	30 mm			
CAD overall height	30 mm			
CAD overall depth	52 mm			
Product weight	30 mm 52 mm 0.027 kg 500000 cycles XALK 25 cut-outs XALD 15 cut-outs SR1 for <= 3 contacts using single blocks in rear mounting SF1 for <= 3 contacts using single blocks in front mounting C15 for 1 contacts using single blocks in front mounting C11 for <= 3 contacts using single blocks in front mounting			
Mechanical durability	500000 cycles XALK 25 cut-outs			
Station name				
Electrical composition code	SF1 for <= 3 contacts using single blocks in front mounting C15 for 1 contacts using single blocks in front mounting			

Environment

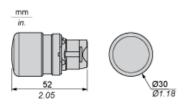
Protective treatment	TH			
Ambient air temperature for storage	-4070 °C			
Ambient air temperature for operation	-2570 °C			
Class of protection against electric shock	Class II conforming to IEC 60536			
IP degree of protection	IP66 conforming to IEC 60529			
NEMA degree of protection	NEMA 4X NEMA 13			
Resistance to high pressure washer	7000000 Pa at 55 °C,distance: 0.1 m			
IK degree of protection	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	50 gn (duration = 11 ms) for half sine wave acceleration conforming to IEC 60068-2-27 30 gn (duration = 18 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

Product data sheet Dimensions Drawings ZB5AC44

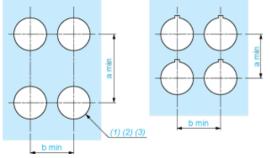
Dimensions



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

ZB5AC44

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



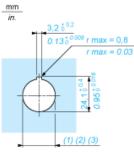
Diameter on finished panel or support (1)

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. $_0^{+0.016}$) (2)

(3)

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

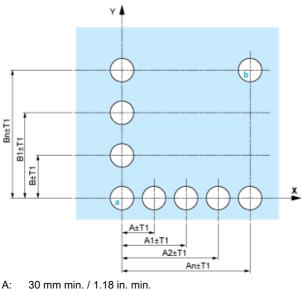


(1) Diameter on finished panel or support

- For selector switches and Emergency stop buttons, use of an anti-rotation plate type ZB5AZ902 is recommended. (2)
- (3) Ø22.5 mm recommended (Ø22.3 $_{0}^{+0.4}$) / Ø0.89 in. recommended (Ø0.88 in. $_{0}^{+0.016}$)

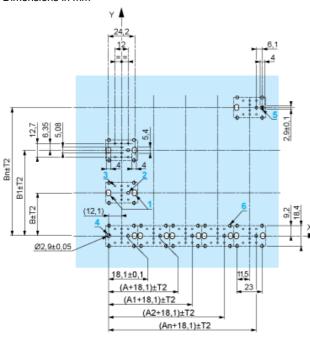
Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

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

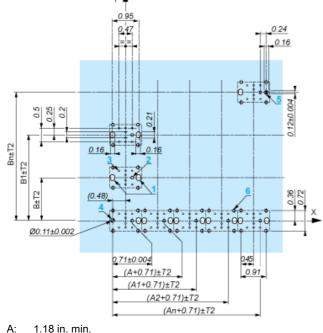


B: 40 mm min. / 1.57 in. min.

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



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



B: 1.57 in. min.

B: 1.57 in. min.

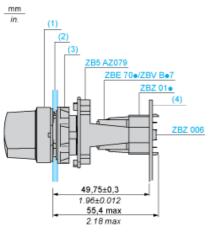
General Tolerances of the Panel and Printed Circuit Board

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:
 - every 90 mm / 3.54 in. horizontally (X), and 120 mm / 4.72 in. vertically (Y).
 - 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•

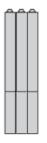
- 1 2 elongated holes for ZBZ006 screw access
- 2 1 hole Ø 2.4 mm ± 0.05 / 0.09 in. ± 0.002 for centring adapter ZBZ01•
- 38 × Ø 1.2 mm / 0.05 in. holes
- 4 1 hole Ø 2.9 mm ± 0.05 / 0.11 in. ± 0.002, for aligning the printed circuit board (with cut-out marked a)
- 5 1 elongated hole for aligning the 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 \pm 0.05 / 0.09 in. \pm 0.002 holes for centring adapter ZBZ01•.

Electrical Composition Corresponding to Code C1



Electrical Composition Corresponding to Code C2



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

