## Product data sheet Characteristics

### ZB5AP3

## green projecting pushbutton head Ø22 spring return unmarked



#### Main

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	Green projecting unmarked
Operator additional information	Clear boot
Additional information	Not compatible with legend holder

#### Complementary

CAD overall width	30 mm	
CAD overall height	30 mm	
CAD overall depth	35 mm	
Product weight	0.014 kg	
Mechanical durability	5000000 cycles	
Station name	XALK 25 cut-outs XALD 15 cut-outs	
Electrical composition code	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 C2 for <= 9 contacts using single and double blocks in front mounting C1 for <= 9 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	IP69K 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 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		
Vibration resistance	5 gn (f = 2500 Hz) conforming to IEC 60068-2-6		
Contractual warranty			
Period	18 months		

# Product data sheet Dimensions Drawings

## ZB5AP3

#### **Dimensions**

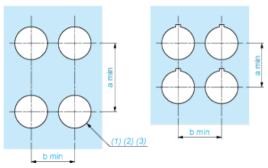




	a in mm	a in in.
ZB5AP••	36.5	1.44
ZB5AP•S	33	1.30
ZB5AP•83	32	1.26
ZB5AP•	35	1.38

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

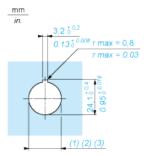
Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



- Diameter on finished panel or support
- For selector switches and Emergency stop buttons, use of an anti-rotation plate type ZB5AZ902 is recommended.  $\varnothing$ 22.5 mm recommended ( $\varnothing$ 22.3  $_0$  <sup>+0.4</sup>) /  $\varnothing$ 0.89 in. recommended ( $\varnothing$ 0.88 in.  $_0$  <sup>+0.016</sup>)

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

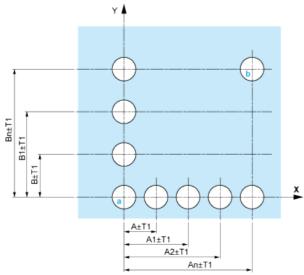
#### **Detail of Lug Recess**



- (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  $_0$  <sup>+0.4</sup>) / Ø0.89 in. recommended (Ø0.88 in.  $_0$  <sup>+0.016</sup>)

Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

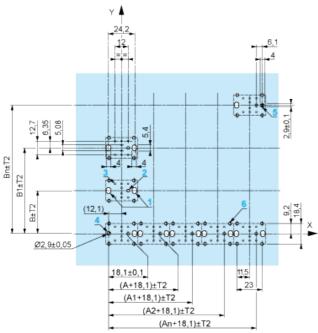
#### Panel Cut-outs (Viewed from Installer's Side)



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

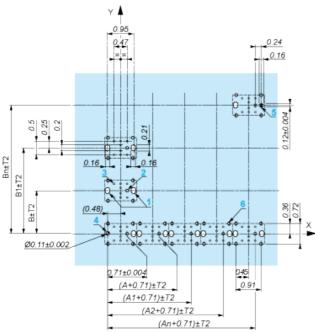
#### Printed Circuit Board Cut-outs (Viewed from Electrical Block Side)

Dimensions in mm



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

#### Dimensions in in.



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

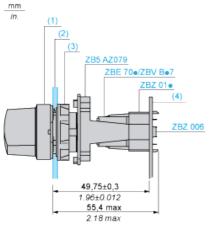
#### General Tolerances of the Panel and Printed Circuit Board

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 $\pm$ 0.05 / 0.09 in. $\pm$ 0.002 holes for centring add	apter ZBZ01•.

## ZB5AP3

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
Double contact
Light blook
Light block
8

Possible location

Schneider Electric