# ZB5AA9

Harmony XB5, Push button head, plastic, flush, Ø22, spring return, with 6 coloured caps unmarked





#### Main

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	0.87 in (22 mm)
Head type	Standard
Sale per indivisible quantity	1
Shape of signaling unit head	Round
Type of operator	Spring return
Operator profile	6 colors choice flush, unmarked
Operator additional information	With set of 6 color cap

#### Complementary

CAD overall width	1.14 in (29 mm)
CAD overall height	1.14 in (29 mm)
CAD overall depth	1.10 in (28 mm)
Net Weight	0.06 lb(US) (0.027 kg)
Mechanical durability	10000000 cycles
Station name	XALD 15 cut-outs XALK 25 cut-outs
Electrical composition code	C1 9 single front mounting C2 9 single and double front mounting C11 3 single front mounting C15 1 single front mounting SF1 3 single front mounting SR1 3 single rear mounting
Device presentation	Basic element

#### Environment

Protective treatment	TH		
Ambient Air Temperature for Storage	-40158 °F (-4070 °C)		
Ambient Air Temperature for Operation	-40158 °F (-4070 °C)		
Overvoltage category	Class II IEC 60536		
IP degree of protection	IP66 IEC 60529 IP67 IP69 IP69K		
NEMA degree of protection	NEMA 13 NEMA 4X		
Resistance to high pressure washer	1015.26 psi (7000000 Pa) 131 °F (55 °C) 0.1 m		
IK degree of protection	IK03 IEC 50102	IK03 IEC 50102	

Standards	EN/IEC 60947-5-4	
	JIS C8201-5-1	
	EN/IEC 60947-1	
	EN/IEC 60947-5-1	
	CSA C22.2 No 14	
	UL 508	
	JIS C8201-1	
Product Certifications	BV	
	UL Listed	
	GL	
	LROS (Lloyds register of shipping)	
	CSA	
	DNV	
Shock resistance	30 gn 18 ms) half sine wave acceleration IEC 60068-2-27	
	50 gn 11 ms) half sine wave acceleration IEC 60068-2-27	
Vibration resistance	5 gn 2500 Hz)IEC 60068-2-6	

## Ordering and shipping details

22467-PUSHBUTTONS,22MM(PLASTIC) NEW
CS2
3389110134544
1
0.85 oz (24.0 g)
Yes
FR

## Packing Units

Unit Type of Package 1	PCE	
Package 1 Height	3.46 in (8.8 cm)	
Package 1 width	1.34 in (3.4 cm)	
Package 1 Length	2.13 in (5.4 cm)	

# Offer Sustainability

Sustainable offer status	Green Premium product	
California proposition 65	WARNING: This product can expose you to chemicals including: Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov	
REACh Regulation	REACh Declaration	
REACh free of SVHC	Yes	
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <sup>™</sup> EU RoHS Declaration	
Toxic heavy metal free	Yes	
Mercury free	Yes	
RoHS exemption information	₽¥Yes	
China RoHS Regulation	<b>☑</b> China RoHS Declaration	
Environmental Disclosure	Product Environmental Profile	
rcularity Profile		

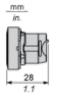
#### Contractual warranty

Warranty	18 months	

# Product data sheet Dimensions Drawings

# ZB5AA9

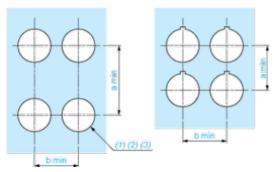
#### **Dimensions**





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

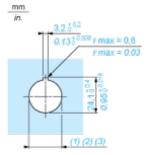
Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



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

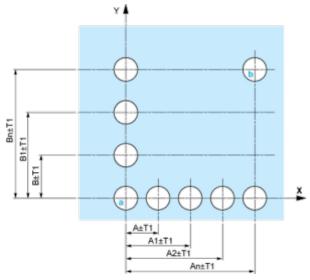
### **Detail of Lug Recess**



- (1) Diameter on finished panel or support
- (2) For selector switches and Emergency stop buttons, use of an anti-rotation plate type ZB5AZ902 is recommended.
- (3) 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)

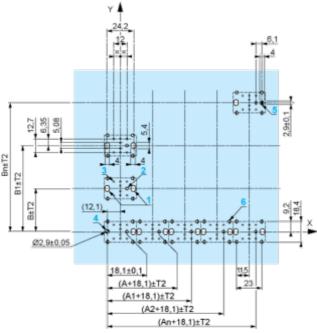


A: 30 mm min. / 1.18 in. min.

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

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

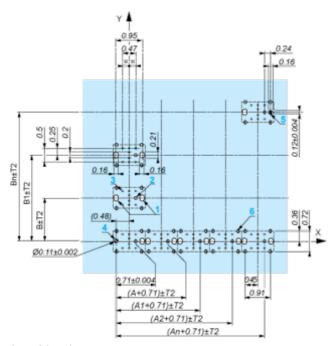
#### Dimensions in mm



A: 30 mm min.

B: 40 mm min.

Dimensions in in.



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

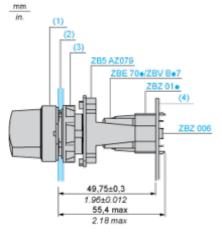
#### General Tolerances of the Panel and Printed Circuit Board

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:
  - $\circ\quad$  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  $\pm$  0.05 / 0.09 in.  $\pm$  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 adapter ZBZ01•.

# Product data sheet Technical Description

# ZB5AA9

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