# Product data sheet Characteristics

# **ZB5AW13**

Head for illuminated push button, Harmony XB5, XB4, green projecting pushbutton Ø22 mm spring return BA9s bulb





Main	
Range of Product	Harmony XB5
Product or Component Type	Head for illuminated push-button
Device short name	ZB5
Product Compatibility	BA 9s
Bezel material	Dark grey plastic
Mounting diameter	0.87 in (22 mm)
Sale per indivisible quantity	1
Head type	Standard
Shape of signaling unit head	Round
Type of operator	Spring return
Operator profile	Green projecting, unmarked
Operator additional information	With plain lens

#### Complementary

M7 6 single front mounting BA 9s M8 6 single and double front mounting BA 9s M9 2 single front mounting BA 9s and transformer MF2 2 single front mounting BA 9s		
Unmarked		
Green		
XALD 15 cut-outs XALK 25 cut-outs		
Projected push BA9s		
Illum push-button		
10000000 cycles		
1015.26 psi (7000000 Pa) 131 °F (55 °C) 0.1 m		
0.04 lb(US) (0.017 kg)		
1.26 in (32 mm)		
1.14 in (29 mm)		
1.14 in (29 mm)		
-	1.14 in (29 mm)   1.26 in (32 mm)   0.04 lb(US) (0.017 kg)   1015.26 psi (7000000 Pa) 131 °F (55 °C) 0.1 m   10000000 cycles   Illum push-button   Projected push BA9s   XALD 15 cut-outs   XALK 25 cut-outs   Green	

#### Environment

Protective treatment	TC	
Ambient Air Temperature for Storage	-40158 °F (-4070 °C)	
Ambient Air Temperature for Operation	-40131 °F (-4055 °C)	
Overvoltage category	Class II IEC 60536	
IP degree of protection	IP66 IEC 60529 IP69 IP69K	
NEMA degree of protection	NEMA 13 NEMA 4X	
IK degree of protection	IK05 EN 50102	



Standards	UL 508	
	EN/IEC 60947-1	
	EN/IEC 60947-5-4	
	CSA C22.2 No 14	
	EN/IEC 60947-5-1	
	JIS C8201-5-1	
	GB 14048.5	
	JIS C8201-1	
Product Certifications	CSA	
	DNV	
	GL	
	BV	
	LROS (Lloyds register of shipping)	
	UL Listed	
Vibration resistance	5 gn 2500 Hz)IEC 60068-2-6	
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	
/ibration resistance	DNV GL BV LROS (Lloyds register of shipping) UL Listed 5 gn 2500 Hz)IEC 60068-2-6 30 gn 18 ms) half sine wave acceleration IEC 60068-2-27	

# Ordering and shipping details

22467-PUSHBUTTONS,22MM(PLASTIC) NEW	
CS2	
3389110909838	
1	
0.56 oz (16.0 g)	
Yes	
CZ	

# Packing Units

Unit Type of Package 1	PCE
Package 1 Height	1.57 in (4 cm)
Package 1 width	2.52 in (6.4 cm)
Package 1 Length	1.42 in (3.6 cm)
Unit Type of Package 2	S01
Number of Units in Package 2	50
Package 2 Weight	2.27 lb(US) (1.028 kg)
Package 2 Height	5.91 in (15 cm)
Package 2 width	5.91 in (15 cm)
Package 2 Length	15.75 in (40 cm)

# Offer Sustainability

Sustainable offer status	Green Premium product			
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and 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)			
Mercury free	Yes			
RoHS exemption information	₫ Yes			
China RoHS Regulation	China RoHS Declaration			
Environmental Disclosure	Product Environmental Profile			
Circularity Profile	End Of Life Information			

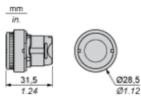
# Contractual warranty

Warranty

18 months

Product data sheet Dimensions Drawings ZB5AW13

## Dimensions

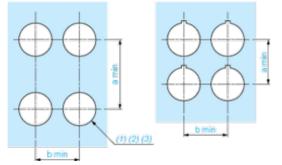




# **ZB5AW13**

#### 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



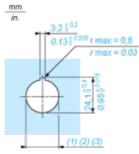
(1) Diameter on finished panel or support

(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**



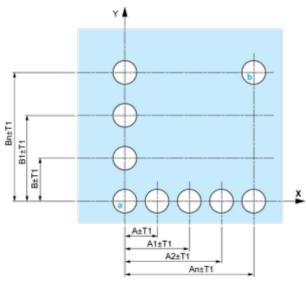
(1) Diameter on finished panel or support

(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  $_{0}^{+0.4}$ ) / 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)

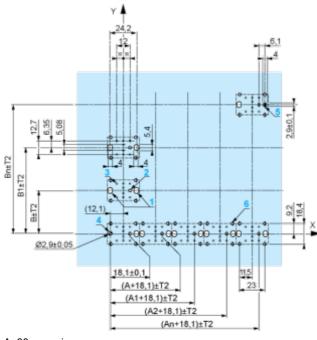


A: 30 mm min. / 1.18 in. min.

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

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

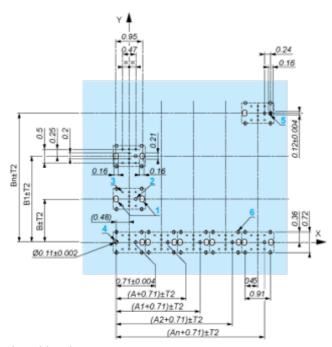
Dimensions in mm



A: 30 mm min.

B: 40 mm min.

Dimensions in in.







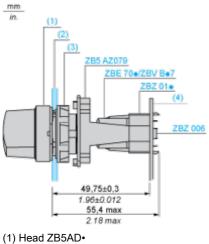
#### General Tolerances of the Panel and Printed Circuit Board

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).
  - 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.



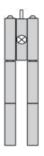
- (2) Panel
- (2) Nut
- (4) Printed circuit board

#### Mounting of Adapter (Socket) ZBZ01•

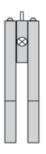
- 1 2 elongated holes for ZBZ006 screw access
- 2 1 hole Ø 2.4 mm  $\pm$  0.05 / 0.09 in.  $\pm$  0.002 for centring adapter ZBZ01•
- 3 8 × Ø 1.2 mm / 0.05 in. holes
- 4 1 hole Ø 2.9 mm ± 0.05 / 0.11 in. ± 0.002, for aligning the printed circuit board (with cut-out marked a)
- 5 1 elongated hole for 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.

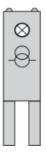
# Electrical Composition Corresponding to Codes M1 and M7



### Electrical Composition Corresponding to Codes M2 and M8



## Electrical Composition Corresponding to Code M9



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



#### Legend

Single contact

Double contact

Light block

#### Possible location

