# ZB5AH05

Head for non illuminated push button, Harmony XB5, XB4, yellow flush pushbutton Ø22 mm 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	22 mm
Head type	Standard
Sale per indivisible quantity	1
Shape of signaling unit head	Round
Type of operator	push-push
Operator profile	Yellow flush, unmarked

## Complementary

CAD overall width	29 mm				
CAD overall height	29 mm				
CAD overall depth	28 mm				
Net weight	0.018 kg				
Mechanical durability	2000000 cycles				
Station name	XALD 15 cut-outs XALK 25 cut-outs				
Electrical composition code	C11 for <3 contacts using single blocks in front mounting C15 for <1 contacts using single blocks in front mounting SF1 for <3 contacts using single blocks in front mounting SR1 for <3 contacts using single blocks in rear mounting C9 for <3 contacts using single blocks in front mounting				
Device presentation	Basic element				

#### **Environment**

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Protective treatment	TH				
Ambient air temperature for storage	-4070 °C				
Ambient air temperature for operation	-4070 °C				
Overvoltage category	Class II conforming to IEC 60536				
IP degree of protection	IP66 conforming to IEC 60529 IP67 IP69 IP69K				
NEMA degree of protection	NEMA 13 NEMA 4X				
Resistance to high pressure washer	7000000 Pa at 55 °C, distance : 0.1 m				
IK degree of protection	IK03 conforming to IEC 50102				
Standards	UL 508 CSA C22.2 No 14 EN/IEC 60947-1 EN/IEC 60947-5-1 JIS C8201-5-1 EN/IEC 60947-5-4 JIS C8201-1				

Product certifications	DNV	
	UL listed	
	RINA	
	LROS (Lloyds register of shipping)	
	CSA	
	GL	
	BV	
Shock resistance	30 gn (duration = 18 ms) for half sine wave acceleration conforming to IEC 60068-2-27	
	50 gn (duration = 11 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	
Packing Units		
Package 1 Weight	0.018 kg	
Package 1 Height	0.540 dm	
Package 1 width	0.340 dm	
Package 1 Length	0.440 dm	
Offer Sustainability		
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Sustainable offer status	Green Premium product	

Sustainable offer status	Green Premium product  REACh Declaration				
REACh Regulation					
REACh free of SVHC	Yes				
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EPEU RoHS  Declaration				
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

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Warranty	18 months

# Product data sheet Dimensions Drawings

# ZB5AH05

## **Dimensions**



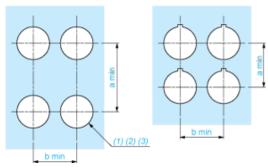




# **ZB5AH05**

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

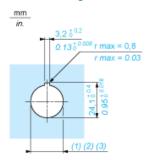
#### Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



- 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

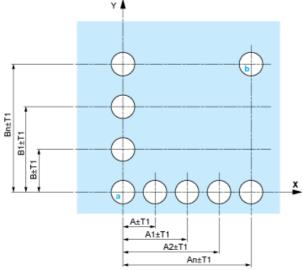
#### **Detail of Lug Recess**



- (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  $_0$  <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

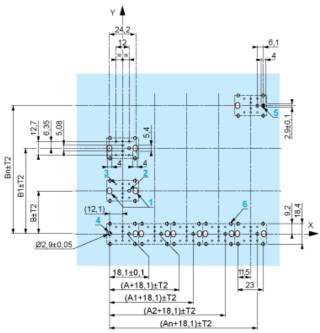
## Panel Cut-outs (Viewed from Installer's Side)



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:
  - o 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  $\pm$  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

# ZB5AH05

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

