## ZB5AH05C1

yellow flush pushbutton head push push colour plated white



#### Main Range

Range of product	Harmony XB5
Product or component type	Head for non-illuminated push-button
Device short name	ZB5
Bezel material	Plastic colour plated white
Mounting diameter	0.87 in (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

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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	0.04 lb(US) (0.018 kg)			
Mechanical durability	2000000 cycles			
Station name	XALD 15 cut-outs XALK 25 cut-outs			
Electrical composition code	C11 3 single front mounting C15 1 single front mounting SF1 3 single front mounting SR1 3 single rear mounting C9 3 single front mounting			

#### Environment

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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				
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				
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 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				
Package weight(Lbs)	0.63 oz (18.000 g)			
Packing Units				
Package 1 Height	1.65 in (4.200 cm)			
Package 1 width	1.30 in (3.300 cm)			
Package 1 Length	2.05 in (5.200 cm)			
Offer Sustainability				
REACh free of SVHC	Yes			
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU Roh Declaration			
Toxic heavy metal free	Yes			
Mercury free	Yes			
RoHS exemption information	₫Yes			
China RoHS Regulation	☑ China RoHS Declaration			

# Product data sheet Dimensions Drawings

# ZB5AH05C1

#### **Dimensions**



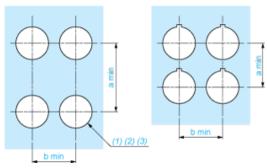




### ZB5AH05C1

#### 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

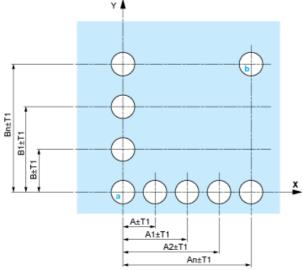
#### **Detail of Lug Recess**



- (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

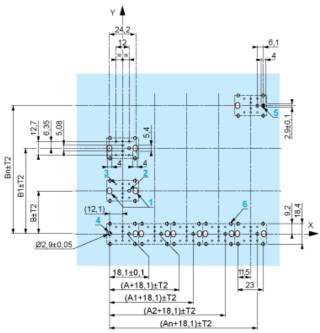
#### Panel Cut-outs (Viewed from Installer's Side)



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

## ZB5AH05C1

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

