

## Product data sheet Characteristics

## ZB5AP18

Head for non illuminated push button, Harmony XB5, XB4, white flush pushbutton Ø22 mm spring return unmarked





#### Main

Range of product	Harmony XB5
Product or component type	Head for non-illuminated push-button
Device short name	ZB5
Product compatibility	Not compatible with legend holder
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	Spring return
Operator profile	White flush, unmarked
Operator additional information	Clear boot for insertion of protected legend within head

#### Complementary

CAD overall width	30 mm
CAD overall height	30 mm
CAD overall depth	37 mm
Net weight	0.023 kg
Mechanical durability	10000000 cycles
Station name	XALD 15 cut-outs XALK 25 cut-outs
Electrical composition code	C3 for <6 contacts using single blocks in front mounting C4 for <6 contacts using single and double blocks in front mounting C14 for <2 contacts using single blocks in front mounting SF2 for <2 contacts using single blocks in front mounting SR2 for <2 contacts using single blocks in rear mounting
Device presentation	Basic element

#### Environment

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 conforming to IEC 60529 IP69 conforming to IEC 60529 IP69K conforming to ISO 20653	
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	

Product certifications	UL listed[RETURN]DNV[RETURN]LROS (Lloyds register of shipping) [RETURN]GL[RETURN]CSA[RETURN]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

Unit Type of Package 1	PCE	
Number of Units in Package 1	1	
Package 1 Height	8.8 cm	
Package 1 Width	3.4 cm	
Package 1 Length	5.4 cm	
Package 1 Weight	23.0 g	

#### Offer Sustainability

Sustainable offer status	Green Premium product	
REACh Regulation	<sup>™</sup> REACh Declaration	
REACh free of SVHC	Yes	
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)	
Mercury free	Yes	
China RoHS Regulation	China RoHS Declaration	
RoHS exemption information	₽¥Yes	
Environmental Disclosure	Product Environmental Profile	
Circularity Profile	End Of Life Information	

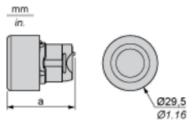
#### Contractual warranty

Warranty	1	18 months

# Product data sheet Dimensions Drawings

# ZB5AP18

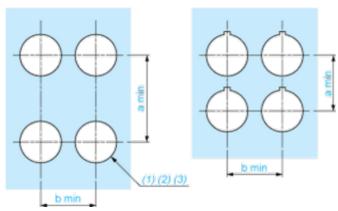
#### **Dimensions**



	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)

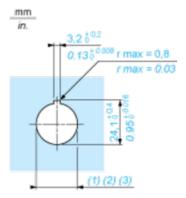
Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



- (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>)

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

#### 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 adapter ZBZ01•.

# ZB5AP18

Electrical Composition Corresponding to Code C3
Electrical Composition Corresponding to Code C4
Electrical Composition Corresponding to Codes C14, SF2 and SR2
Legend
Single contact
Double contact

Light block

Possible location

