

# Product data sheet Characteristics

# **ZB5AW553**

Head for illuminated push button, Harmony XB5, orange flush, 22mm, universal LED, spring return, clear boot, unmarked





#### Main

Range of product	Harmony XB5
Product or component type	Head for illuminated push-button
Device short name	ZB5
Product compatibility	Universal LED
Bezel material	Dark grey plastic
Mounting diameter	22 mm
Sale per indivisible quantity	1
Head type	Standard
Shape of signaling unit head	Round
Type of operator	Spring return
Operator profile	Orange flush, unmarked
Operator additional information	Clear boot

#### Complementary

CAD overall width	30 mm		
CAD overall height	30 mm		
CAD overall depth	37 mm		
Net weight	0.019 kg		
Resistance to high pressure washer	7000000 Pa at 55 °C, distance : 0.1 m		
Mechanical durability	10000000 cycles		
Main group	Illum push-button		
Group of product	Flush push integral LED		
Station name	XALD 15 cut-outs XALK 25 cut-outs		
Cap/operator or lens colour	Orange		
Marking	Unmarked		
Electrical composition code	M1 for <6 contacts using single blocks in front mounting with integral LED M2 for <6 contacts using single and double blocks in front mounting with integral LED M6 for <2 contacts using single blocks in front mounting with integral LED and transformer M10 for <2 contacts using single blocks in front mounting with integral LED MF1 for <2 contacts using single blocks in front mounting with integral LED MR1 for <2 contacts using single blocks in rear mounting with integral LED		

#### Environment

Protective treatment	TC		
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		
NEMA degree of protection	NEMA 13 NEMA 4X		
IK degree of protection	IK05 conforming to EN 50102		
Standards	UL 508 EN/IEC 60947-5-1 CSA C22.2 No 14 EN/IEC 60947-1 EN/IEC 60947-5-4 JIS C8201-5-1 GB 14048.5 JIS C8201-1		
Product certifications	GL[RETURN]DNV[RETURN]UL listed[RETURN]LROS (Lloyds register of shipping)[RETURN]CSA[RETURN]BV		
Vibration resistance	5 gn (f= 2500 Hz) conforming to IEC 60068-2-6		
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		

### Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	5.4 cm
Package 1 Width	3.4 cm
Package 1 Length	4.5 cm
Package 1 Weight	18 g
Unit Type of Package 2	BB1
Number of Units in Package 2	5
Package 2 Height	5.4 cm
Package 2 Width	3.4 cm
Package 2 Length	26.5 cm
Package 2 Weight	99 g
Unit Type of Package 3	S02
Number of Units in Package 3	150
Package 3 Height	15 cm
Package 3 Width	30 cm
Package 3 Length	40 cm
Package 3 Weight	3.294 kg

# Offer Sustainability

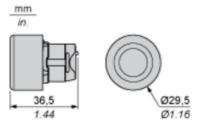
<b> </b>	
Sustainable offer status	Green Premium product
REACh Regulation	☑ REACh Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
Mercury free	Yes
China RoHS Regulation	China RoHS Declaration
RoHS exemption information	₽¥Yes
Environmental Disclosure	Product Environmental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

Warranty 18 months

# Product data sheet Dimensions Drawings

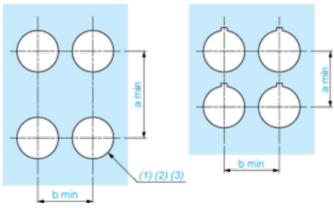
# **ZB5AW553**

#### **Dimensions**



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

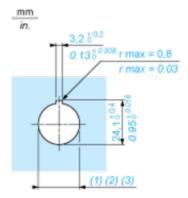
Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



- (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  $_{0}$  <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

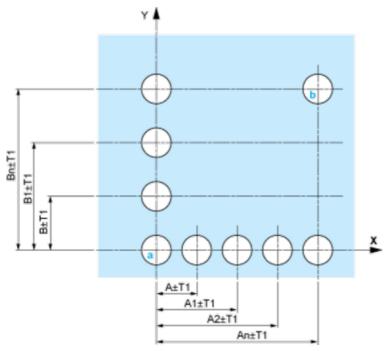
#### **Detail of Lug Recess**



- (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  $_{0}$   $^{+0.4}$ ) / Ø0.89 in. recommended (Ø0.88 in.  $_{0}$   $^{+0.016}$ )

Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

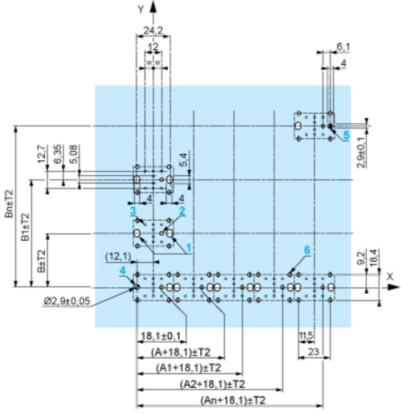
#### Panel Cut-outs (Viewed from Installer's Side)



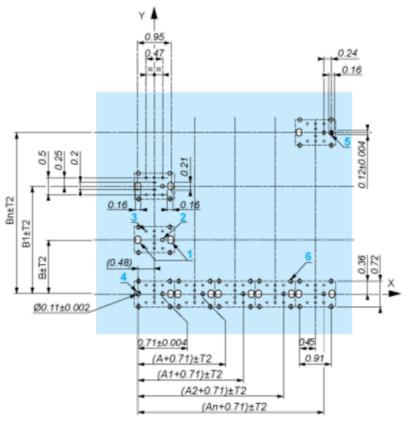
A: 30 mm min. / 1.18 in. min. B: 40 mm min. / 1.57 in. min.

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

Dimensions in mm



A: 30 mm min. B: 40 mm min. Dimensions in in.



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

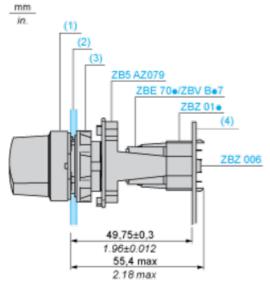
#### General Tolerances of the Panel and Printed Circuit Board

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).
  - 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•

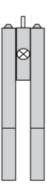
- 1 2 elongated holes for ZBZ006 screw access
- 2 1 hole Ø 2.4 mm ± 0.05 / 0.09 in. ± 0.002 for centring adapter ZBZ01•
- 3 8 × Ø 1.2 mm / 0.05 in. holes
- 4 1 hole Ø 2.9 mm ± 0.05 / 0.11 in. ± 0.002, for aligning the printed circuit board (with cut-out marked a)
- 5 1 elongated hole for aligning the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

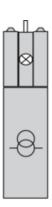
Electrical Composition Corresponding to Codes M1 and M7



Electrical Composition Corresponding to Codes M2 and M8



Electrical Composition Corresponding to Codes M6 and P2



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



Legend	
Single contact	
Double contact	
Light block	
Possible location	