Product datasheet

Specification





Head for illuminated push button, Harmony XB5, plastic, orange projecting, 22mm, universal LED, for insertion of legend

ZB5CW153

! Discontinued on: 1 Jan 2008

! End-of-service on: 31 July 2023



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	Square	
Type of operator	spring return	
Operator profile	Orange projecting, unmarked	
Operator additional information	For insertion of legend	

Complementary

CAD overall width	30 mm	
CAD overall height	30 mm	
CAD overall depth	34 mm	
Net weight	0.024 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	Proj 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
device presentation	Basic element

Environment

LIMITOTITIETT			
protective treatment	TC		
Ambient air temperature for storage	-4070 °C		
Ambient air temperature for operation	temperature for -4070 °C		
Overvoltage category	Class II conforming to IEC 60536		
IP degree of protection	IP66 conforming to IEC 60529		
NEMA degree of protection NEMA 13 NEMA 4X			
IK degree of protection	IK05 conforming to EN 50102		
Standards	CSA C22.2 No 14 UL 508 GB 14048.5 EN/IEC 60947-1 EN/IEC 60947-5-4 JIS C8201-5-1 EN/IEC 60947-5-1 JIS C8201-1		
Product certifications	LROS (Lloyds register of shipping) BV GL UL listed DNV CSA		
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	8.8 cm
Package 1 Width	3.4 cm
Package 1 Length	5.4 cm
Package 1 Weight	24.0 g

Contractual warranty

Warranty	18 months
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Transparency RoHS/REACh

Well-being performance

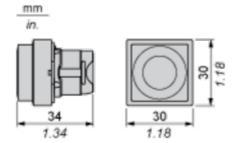
	Reach Free Of Svhc	
⊘	Mercury Free	
②	Rohs Exemption Information	Yes

Certifications & Standards

Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)		
China Rohs Regulation	China RoHS declaration		
Environmental Disclosure	Product Environmental Profile		
Circularity Profile	End of Life Information		

Dimensions Drawings

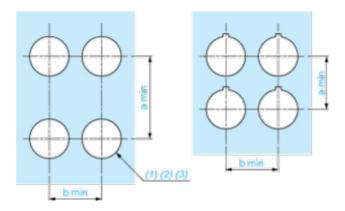
Dimensions



Mounting and Clearance

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

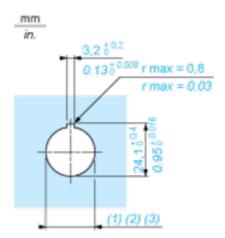
Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



- (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

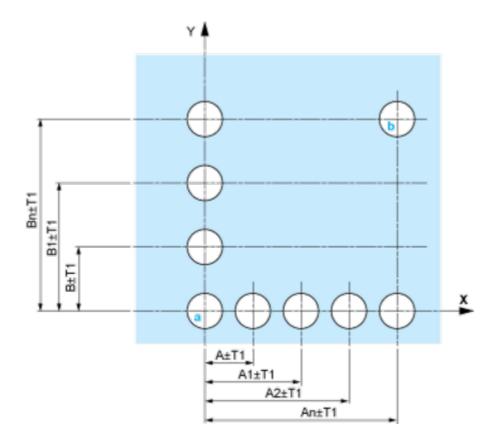
Detail of Lug Recess



- (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) \emptyset 22.5 mm recommended (\emptyset 22.3 $_0^{+0.4}$) / \emptyset 0.89 in. recommended (\emptyset 0.88 in. $_0^{+0.016}$)

Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

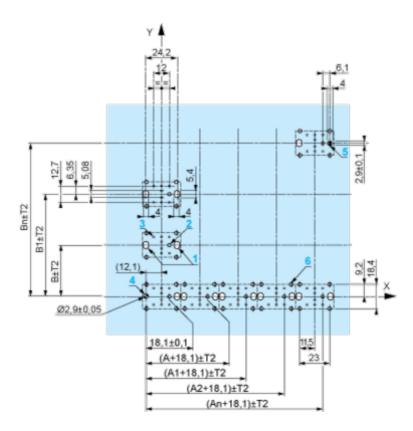
Panel Cut-outs (Viewed from Installer's Side)



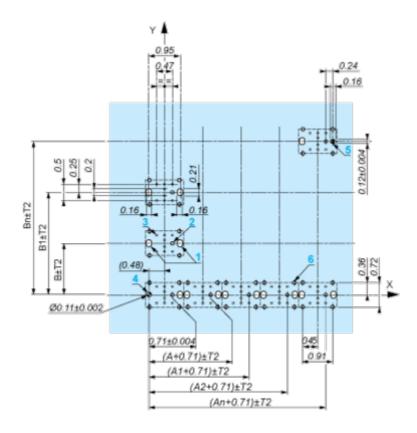
A: 30 mm min. / 1.18 in. min. **B:** 40 mm min. / 1.57 in. min.

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

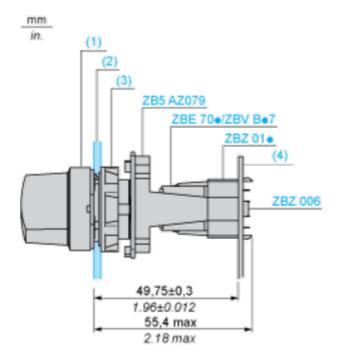
The cumulative tolerance must not exceed 0.3 mm / 0.012 in.: T1 + T2 = 0.3 mm max.

ZB5CW153

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
- (4) Printed circuit board

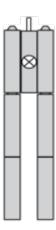
Mounting of Adapter (Socket) ZBZ01•

- 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•
- $_{\bullet}$ 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•

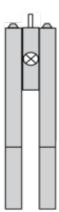
Dimensions An + 18.1 relate to the Ø 2.4 mm ± 0.05 / 0.09 in. ± 0.002 holes for centring adapter ZBZ01•.

Technical Description

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

