Product data sheet Characteristics

ZB5AW133

green projecting illuminated pushbutton head \varnothing 22 spring return for integral LED





Main

Man		5
Range of product	Harmony XB5	ž
Product or component type	Head for illuminated push-button	
Device short name	ZB5	
Product compatibility	Integral LED	, i i i i i i i i i i i i i i i i i i i
Bezel material	Dark grey plastic	
Mounting diameter	22 mm	<u></u>
Sale per indivisible quantity	1	
Head type	Standard	
Shape of signaling unit head	Round	
Type of operator	spring return	
Operator profile	Green projecting, unmarked	
Operator additional information	With plain lens	<u> </u>

Complementary

CAD overall width	29 mm
CAD overall height	29 mm
CAD overall depth	33 mm
Net weight	0.018 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	Green
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 sub-assemblies

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 IP69 IP69K
NEMA degree of protection	NEMA 13 NEMA 4X
IK degree of protection	IK05 conforming to EN 50102
Standards	CSA C22.2 No 14 EN/IEC 60947-1 EN/IEC 60947-5-4 GB 14048.5 JIS C8201-5-1 EN/IEC 60947-5-1 UL 508 JIS C8201-1
Product certifications	DNV GL BV CSA UL listed LROS (Lloyds register of shipping) RINA
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

Offer Sustainability

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

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Dimensions

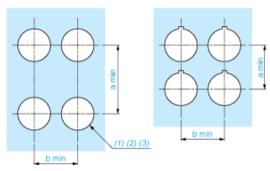




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Panel Cut-out for Pushbuttons, Switches and Pilot Lights (Finished Holes, Ready for Installation)

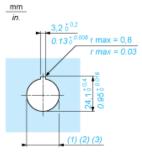
Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



- (1) Diameter on finished panel or support
- For selector switches and Emergency stop buttons, use of an anti-rotation plate type ZB5AZ902 is recommended. \varnothing 22.5 mm recommended (\varnothing 22.3 $_0^{+0.4}$) / \varnothing 0.89 in. recommended (\varnothing 0.88 in. $_0^{+0.016}$)
- (2) (3)

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

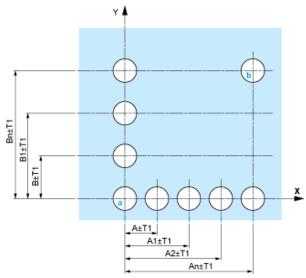
Detail of Lug Recess



- 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. $_0$ $^{+0.016}$)
- (1) (2) (3)

Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

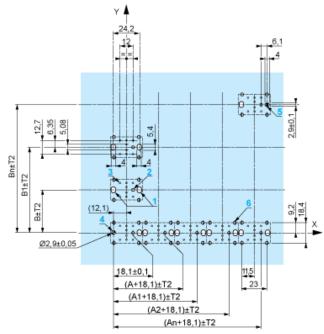
Panel Cut-outs (Viewed from Installer's Side)



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

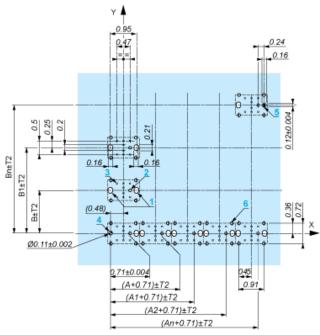
Printed Circuit Board Cut-outs (Viewed from Electrical Block Side)

Dimensions in mm



- A: 30 mm min.
- B: 40 mm min.

Dimensions in in.



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

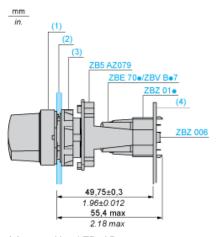
General Tolerances of the Panel and Printed Circuit Board

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) (2) (2) Head ZB5AD•
- Panel
- Nut
- Printed circuit board

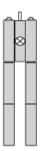
Mounting of Adapter (Socket) ZBZ01•

- 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•
- 3 8 × Ø 1.2 mm / 0.05 in. holes
- 4 1 hole Ø 2.9 mm \pm 0.05 / 0.11 in. \pm 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•.

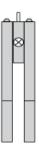
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Electrical Composition Corresponding to Codes M1 and M7



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Electrical Composition Corresponding to Codes M2 and M8



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Electrical Composition Corresponding to Codes M6 and P2



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



ZB5AW133

Legend

Single contact



Double contact



Light block



Possible location

