

Product data sheet

Specifications



Pilot light head, Harmony XB5, metal, green, 22mm, plain lens for BA9s bulb

ZB5AV03

Main

Range of product	Harmony XB5
Product or component type	Head for pilot light
Product compatibility	BA 9s
Device short name	ZB5
Bezel material	Dark grey plastic
Mounting diameter	22 mm
Head type	Standard
Sale per indivisible quantity	1
Shape of signaling unit head	Round
Cap/Operator or lens colour	Green
Operator additional information	With plain lens

Complementary

CAD overall width	29 mm
CAD overall height	29 mm
CAD overall depth	31 mm
Product weight	0.018 kg
Station name	XALD 1...5 cut-outs XALK 2...5 cut-outs
Electrical composition code	P3 in front mounting with BA 9s P4 in front mounting with BA 9s and transformer PF2 in front mounting with BA 9s
Device presentation	Basic element

Environment

Protective treatment	TH
Ambient air temperature for storage	-40...70 °C
Ambient air temperature for operation	-40...70 °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	IK05 conforming to IEC 50102
Standards	EN/IEC 60947-5-4 JIS C8201-5-1 EN/IEC 60947-1 CSA C22.2 No 14 EN/IEC 60947-5-1 EN/IEC 60947-5-5 UL 508 JIS C8201-1
Vibration resistance	5 gn (f= 2...500 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	4.500 cm
Package 1 Width	3.400 cm
Package 1 Length	5.400 cm
Package 1 Weight	15.000 g
Unit Type of Package 2	S03
Number of Units in Package 2	300
Package 2 Height	30 cm
Package 2 Width	30 cm
Package 2 Length	40 cm
Package 2 Weight	5.194 kg
Unit Type of Package 3	P06
Number of Units in Package 3	2400
Package 3 Height	77.000 cm
Package 3 Width	80.000 cm
Package 3 Length	60.000 cm
Package 3 Weight	50.604 kg

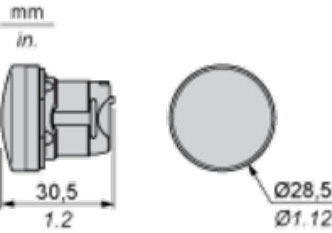
Offer Sustainability

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
Toxic heavy metal free	Yes
Mercury free	Yes
China RoHS Regulation	China RoHS declaration
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile

Contractual warranty

Warranty	18 months
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Dimensions



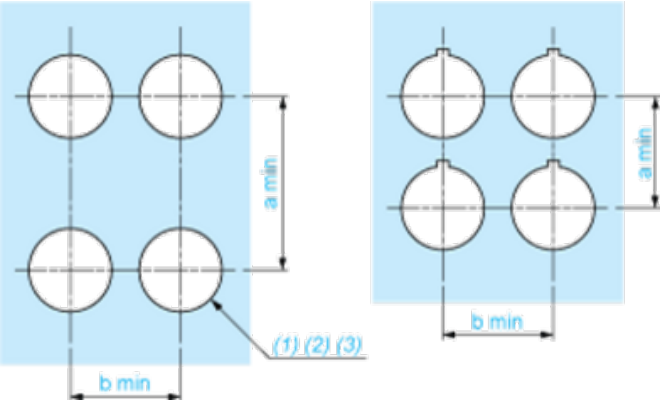
Product data sheet

ZB5AV03

Mounting and Clearance

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

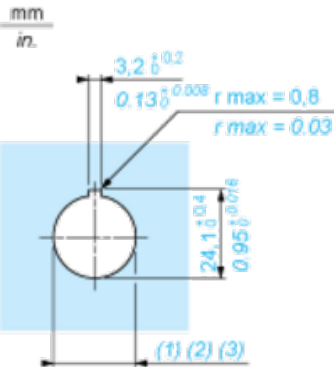
Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



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

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

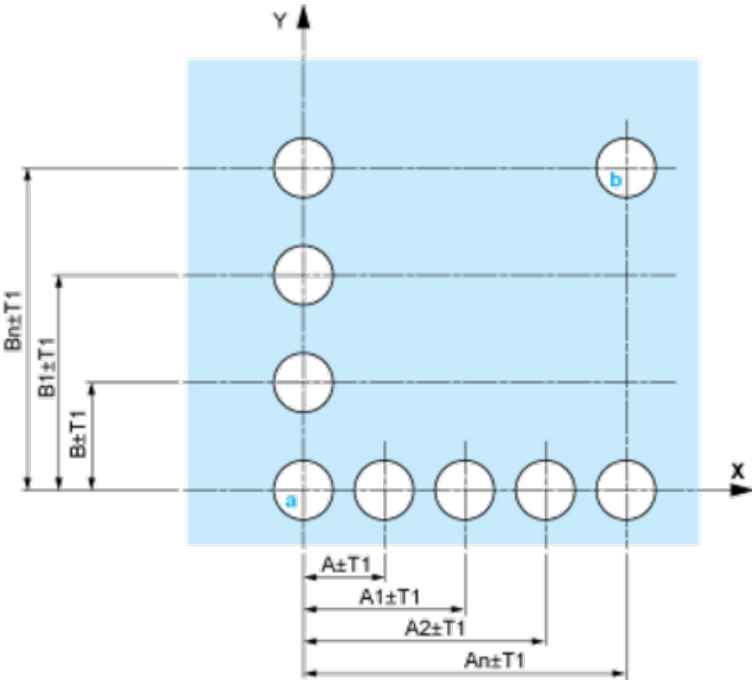
Detail of Lug Recess



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

Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

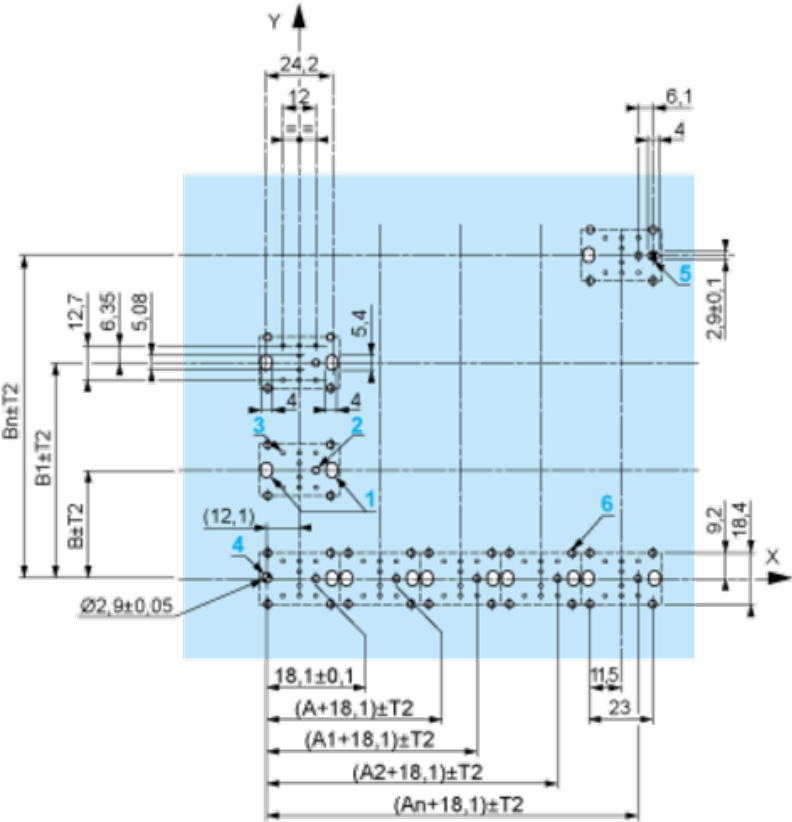
Panel Cut-outs (Viewed from Installer's Side)



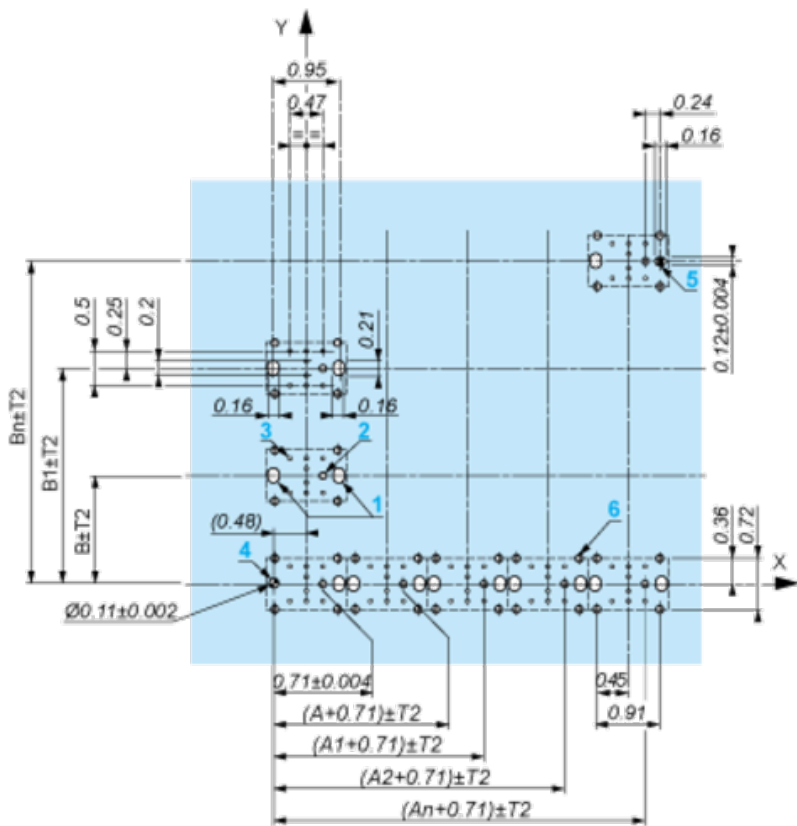
- A: 30 mm min. / 1.18 in. min.
- B: 40 mm min. / 1.57 in. min.

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.

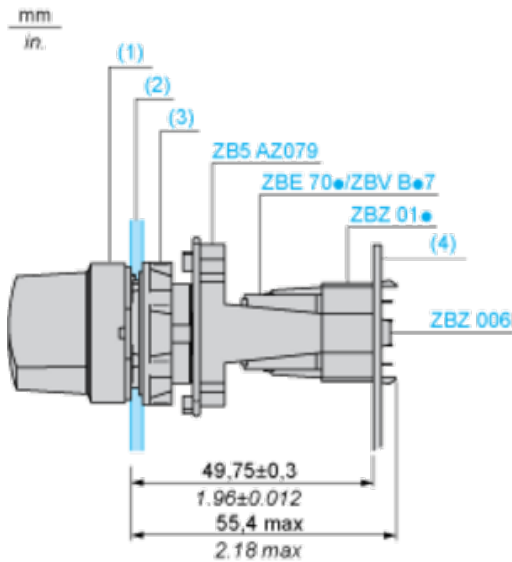
General Tolerances of the Panel and Printed Circuit Board

The cumulative tolerance must not exceed 0.3 mm / 0.012 in.: $T1 + T2 = 0.3 \text{ mm max.}$

Installation Precautions

- Minimum thickness of circuit board: 1.6 mm / 0.06 in.
- Cut-out diameter: 22.4 mm \pm 0.1 / 0.88 in. \pm 0.004
- Orientation of body/fixing collar ZB5AZ009: $\pm 2^\circ 30'$ (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:
 - 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 ± 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•

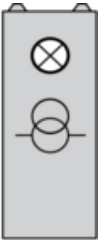
Dimensions An + 18.1 relate to the Ø 2.4 mm ± 0.05 / 0.09 in. ± 0.002 holes for centring adapter ZBZ01•.

Electrical Composition Corresponding to Codes P1, P3, PF1, PR1 and PF2

Light block



Electrical Composition Corresponding to Code P4



Legend

Single contact



Double contact



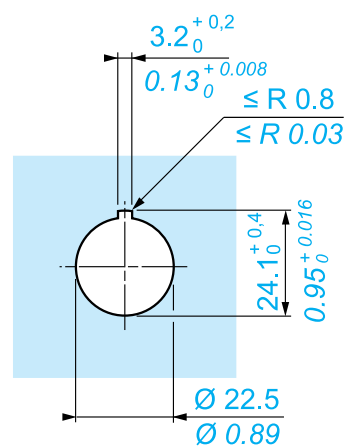
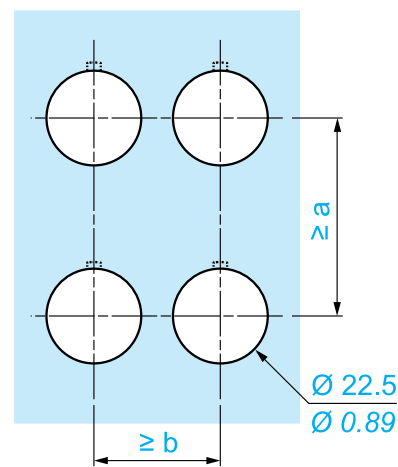
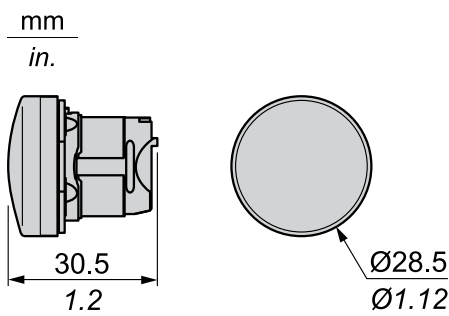
Light block



Possible location



Dimensions



		a (mm)	a (in.)	b (mm)	b (in.)
		40	1.57	30	1.18
ZBE●●●●●	ZBV●●●●●				
		45	1.77	32	1.26
ZBE●●●●●3	ZBV●●●●●3				
		40	1.57	30	1.18
ZBE●●●●●4	ZBV●●●●●4				
		50	1.97	30	1.18
ZBE●●●●●5	ZBV●●●●●5				
		40	1.57	30	1.18
ZBE●●●●●9	ZBV●●●●●9				
		40	1.57	30	1.18
ZBRT●	ZBRV1				

Recommended replacement(s)