### Product data sheet Characteristics

## **ZB5AV033**

green pilot light head Ø22 plain lens for integral LED



#### Main

Main		
Range of product	Harmony XB5	
Product or component type	Head for pilot light	
Product compatibility	Integral LED	
Device short name	ZB5	
Bezel material	Plastic	
Mounting diameter	22 mm	
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 width	29 mm 29 mm	
CAD overall width CAD overall height	29 mm	
CAD overall width CAD overall height CAD overall depth	29 mm 31 mm	
CAD overall width CAD overall height CAD overall depth Product weight	29 mm 31 mm 0.017 kg XALD 15 cut-outs	
CAD overall width CAD overall height CAD overall depth Product weight Station name	29 mm   31 mm   0.017 kg   XALD 15 cut-outs   XALK 25 cut-outs   P1 in front mounting with integral LED   P2 in front mounting with integral LED and transformer   PF1 in front mounting with integral LED	
CAD overall width CAD overall height CAD overall depth Product weight Station name Electrical composition code	29 mm   31 mm   0.017 kg   XALD 15 cut-outs   XALK 25 cut-outs   P1 in front mounting with integral LED   P2 in front mounting with integral LED and transformer   PF1 in front mounting with integral LED	
CAD overall width CAD overall height CAD overall depth Product weight Station name Electrical composition code	29 mm   31 mm   0.017 kg   XALD 15 cut-outs   XALK 25 cut-outs   P1 in front mounting with integral LED   P2 in front mounting with integral LED and transformer   PF1 in front mounting with integral LED   PR1 in rear mounting with integral LED   PR1 in rear mounting with integral LED	
CAD overall width CAD overall height CAD overall depth Product weight Station name Electrical composition code Environment Protective treatment	29 mm   31 mm   0.017 kg   XALD 15 cut-outs   XALK 25 cut-outs   P1 in front mounting with integral LED   P2 in front mounting with integral LED and transformer   PF1 in front mounting with integral LED   PR1 in rear mounting with integral LED   PR1 in rear mounting with integral LED   TH	

#### Complementary

CAD overall width	29 mm	
CAD overall height	29 mm	
CAD overall depth	31 mm	
Product weight	0.017 kg	
Station name	XALD 15 cut-outs XALK 25 cut-outs	
Electrical composition code	P1 in front mounting with integral LED P2 in front mounting with integral LED and transformer PF1 in front mounting with integral LED PR1 in rear mounting with integral LED	

#### Environment

Protective treatment	TH
Ambient air temperature for storage	-4070 °C
Ambient air temperature for operation	-4070 °C
Overvoltage category	Class II IEC 60536

IP degree of protection	IP67		
	IP66 conforming to IEC 60529		
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 60947-5-5		
	UL 508		
	EN/IEC 60947-1		
	EN/IEC 60947-5-4		
	JIS C 4520		
	EN/IEC 60947-5-1		
	CSA C22.2 No 14		
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		

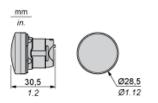
18 months

#### Contractual warranty

Warranty period

Product data sheet Dimensions Drawings ZB5AV033

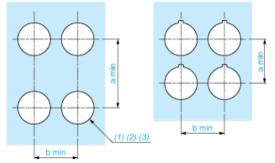
#### Dimensions



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

**ZB5AV033** 

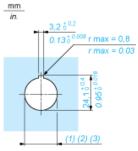
Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



- Diameter on finished panel or support (1)
- 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.  $_0^{+0.016}$ ) (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**

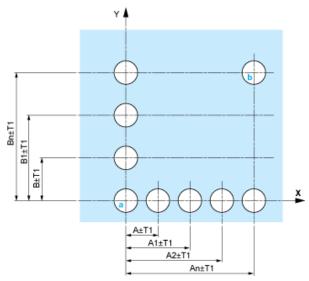


- Diameter on finished panel or support (1)
- For selector switches and Emergency stop buttons, use of an anti-rotation plate type ZB5AZ902 is recommended.  $\emptyset$ 22.5 mm recommended ( $\emptyset$ 22.3  $_0^{+0.4}$ ) /  $\emptyset$ 0.89 in. recommended ( $\emptyset$ 0.88 in.  $_0^{+0.016}$ ) (2)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

#### Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

**ZB5AV033** 

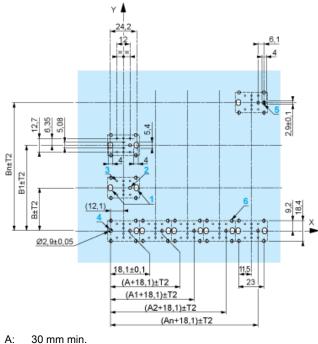
Panel Cut-outs (Viewed from Installer's Side)



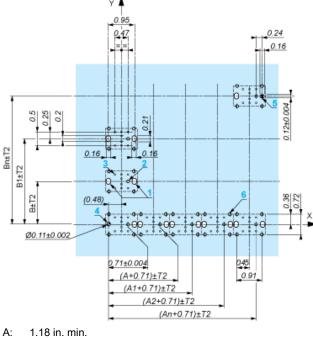
- A: 30 mm min. / 1.18 in. min.
- B: 40 mm min. / 1.57 in. min.

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

Dimensions in mm



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



B: 1.57 in. min.

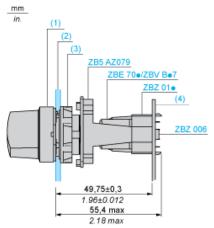
#### General Tolerances of the Panel and Printed Circuit Board

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:
  - every 90 mm / 3.54 in. horizontally (X), and 120 mm / 4.72 in. vertically (Y).
  - $^{\circ}$  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

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**Technical Description** 

Electrical Composition Corresponding to Codes M6 and P2



Product data sheet

## **ZB5AV033**

**Technical Description** 

# Legend Single contact Double contact Light block 8 Possible location 4