# orange flush illuminated pushbutton head Ø22 spring return for integral

**ZB5AW353** 

Important message: A change in appearance may be noted on the product but does not affect its use in terms of function and safety. This makes it compatible with our Universal LED blocks

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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	With plain lens

## Complementary

CAD overall width	29 mm		
CAD overall height	29 mm		
CAD overall depth	30 mm		
Net weight	0.017 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

Device presentation	Basic sub-assemblies

_				•
_	nvi	-	 -	<b>n</b> +
_	HV		 10	

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 IP69 IP69K	
NEMA degree of protection	NEMA 13 NEMA 4X	
IK degree of protection	IK05 conforming to EN 50102	
Standards	UL 508 CSA C22.2 No 14 EN/IEC 60947-5-1 EN/IEC 60947-5-4 EN/IEC 60947-1 GB 14048.5 JIS C8201-5-1 JIS C8201-1	
Product certifications	BV CSA DNV UL listed LROS (Lloyds register of shipping) GL	
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 6006 50 gn (duration = 11 ms) for half sine wave acceleration conforming to IEC 6006		

# **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	17.0 g
Unit Type of Package 2	S03
Number of Units in Package 2	300
Package 2 Height	30.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	5.647 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 55.484 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
Mercury free	Yes
China RoHS Regulation	China RoHS declaration
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information

# **Contractual warranty**

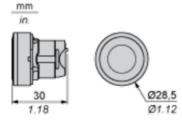
Warranty 18 months

# **Product datasheet**

# **ZB5AW353**

**Dimensions Drawings** 

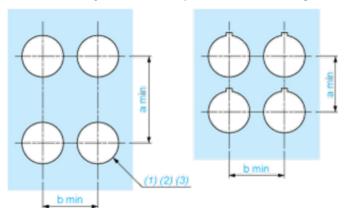
## **Dimensions**



Mounting and Clearance

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

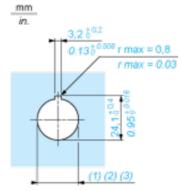
#### Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



- (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) 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

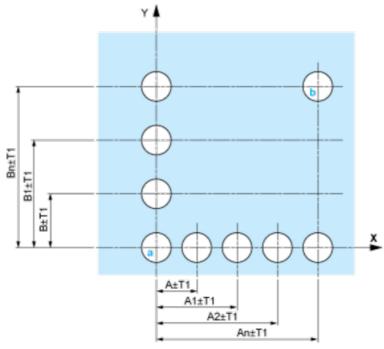
#### **Detail of Lug Recess**



- (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) 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

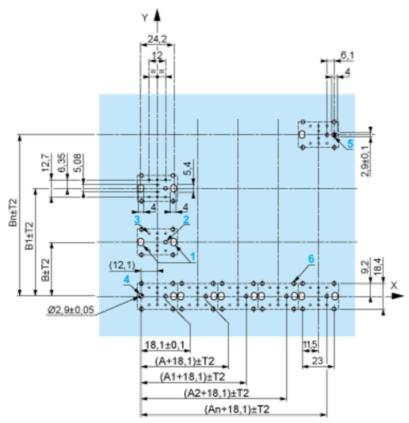
#### Panel Cut-outs (Viewed from Installer's Side)



**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)

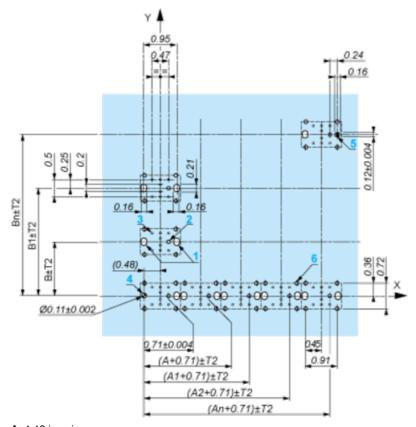
Dimensions in mm



**A:** 30 mm min.

**B**: 40 mm min.

Dimensions in in.



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

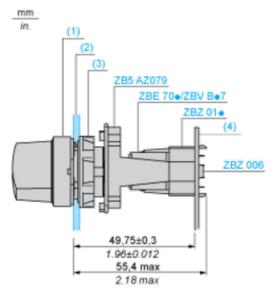
#### General Tolerances of the Panel and Printed Circuit Board

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:
  - $\circ$  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  ${\bf a}$  and  ${\bf b}$  are diagonally opposed and must align with those marked  ${\bf 4}$  and  ${\bf 5}$ .



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

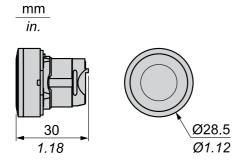
## Mounting of Adapter (Socket) ZBZ01•

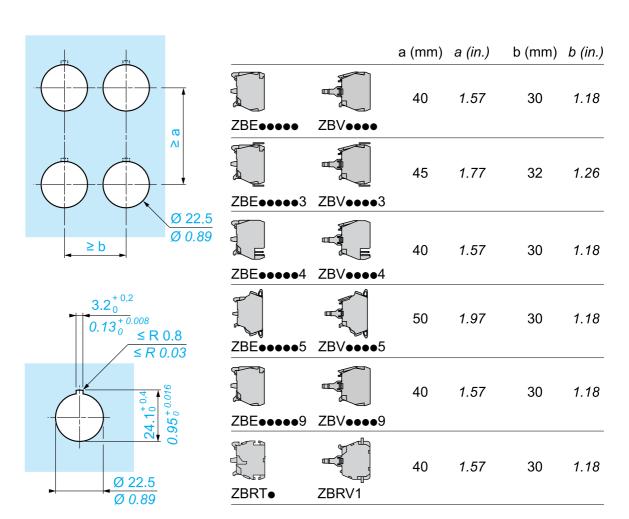
- 1 2 elongated holes for ZBZ006 screw access
- 2 1 hole Ø 2.4 mm ± 0.05 / 0.09 in. ± 0.002 for centring adapter ZBZ01•
- $3.8 \times \emptyset 1.2 \text{ mm} / 0.05 \text{ in. holes}$
- 4 1 hole Ø 2.9 mm ± 0.05 / 0.11 in. ± 0.002, for aligning the printed circuit board (with cut-out marked a)
- 5 1 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•.

**Technical Illustration** 

#### **Dimensions**





Recommended replacement(s)