

Push button head, Harmony XB5, plastic, flush, red, 22mm, spring return, marked O

ZB5AA432

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Range of product	Harmony XB5
Product or component type	Head for non-illuminated push-button
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
Type of operator	spring return
Operator profile	Red flush, O (white)

Complementary

Device presentation	Basic element
	SR1 for <3 contacts using single blocks in rear mounting
	SF1 for <3 contacts using single blocks in front mounting
	C11 for <3 contacts using single blocks in front mounting C15 for <1 contacts using single blocks in front mounting
	C2 for <9 contacts using single and double blocks in front mounting
Electrical composition code	C1 for <9 contacts using single blocks in front mounting
	XALK 25 cut-outs
Station name	XALD 15 cut-outs
Mechanical durability	10000000 cycles
	40000000
Product weight	0.018 kg
CAD overall depth	28 mm
CAD overall height	29 mm
CAD overall width	29 mm

Environment

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

Pedicordomang to IEC 6/9529 Pedi		
NEMA degree of protection NEMA 13 NEMA 43 Resistance to high pressure washer IK degree of protection IK 03 conforming to IEC 50102 Standards US 5020-5-1 LU 500 ENVEC 60047-1 ENVEC 60047-1 ENVEC 60047-3-1 ENVEC 60047-3 EN	IP degree of protection	IP67 IP69
Washer IK degree of protection IK 03 conforming to IEC 50102 Standards US CR00-5-1 ENIEC 80847-1 ENIEC 80847-5-1 ENIEC 80848-2-27 Shock resistance 30 on (duration = 18 ms) for half sine wave acceleration conforming to IEC 80088-2-27 Stream of the eniec en	NEMA degree of protection	NEMA 13
Standards JIS C8201-5-1 LL DE BOSAT-1 FOR	= :	7000000 Pa at 55 °C, distance : 0.1 m
UL 588 ENIEC 00047-1 ENIEC 00047-5-1 ENIEC 00048-2-27 Shock resistance 5 gn (= 2500 Hz) conforming to IEC 60068-2-27 Vibration resistance 5 gn (= 2500 Hz) conforming to IEC 60068-2-8 Packing Units Unit Type of Package 1 PCE Number of Units in Package 1 Package 1 Height 4.5 cm Package 1 Height 7.0 g Unit Type of Package 2 S03 Number of Units in Package 3 S0 cm Package 2 Height S0 cm Package 2 Weight FO cm Forestive Compliance (Product out of EU RoHS legal scope) EU RoHS Directive EU RoHS Directive Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Directive Pro-active Compliance (Product out of EU RoHS legal scope) EU RoHS Directive Pro-active Compliance (Product out of EU RoHS legal scope) EU RoHS Directive Pro-active Compliance (Product out of EU RoHS legal scope) EU RoHS Directive Pro-active Compliance (Product out of EU RoHS legal scope) EU RoHS Directive Pro-active Compliance (Product out of EU RoHS legal scope) EU RoHS Directive Pro-active Compliance (Product out of EU RoHS legal scope) EU RoHS Recomption Information Ves Environmental Disclosure	IK degree of protection	IK03 conforming to IEC 50102
CSA UL listed GL ROS (Lloyds register of shipping) BV Shock resistance 30 gn (duration = 18 ms) for half sine wave acceleration conforming to IEC 80088-2-27 50 gn (duration = 11 ms) for half sine wave acceleration conforming to IEC 80088-2-27 Vibration resistance 5 gn (f= 2500 Hz) conforming to IEC 80088-2-6 Packing Units Unit Type of Package 1 PCE Number of Units in Package 1 Package 1 Height A.5 cm Package 1 Width 3.4 cm Package 1 Weight 17.0 g Unit Type of Package 2 S03 Number of Units in Package 2 S04 Package 2 Height S0 cm Package 2 Weight S0 cm Package 2 Weight S0 cm Package 2 Weight Foreactive compliance (Product out of EU RoHS legal scope) EU RoHS Directive Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Directive Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Directive Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Regulation RoHS Regulation RoHS Resemption information Ves Environmental Disclosure Product Environmental Profile	Standards	UL 508 EN/IEC 60947-1 EN/IEC 60947-5-1 CSA C22.2 No 14 EN/IEC 60947-5-4
So gn (duration = 11 ms) for half sine wave acceleration conforming to IEC 60068-2-27 Vibration resistance S gn (f= 2500 Hz) conforming to IEC 60068-2-6 Packing Units	Product certifications	CSA UL listed GL LROS (Lloyds register of shipping)
Packing Units Unit Type of Package 1 PCE Number of Units in Package 1 1 Package 1 Height 4.5 cm Package 1 Width 3.4 cm Package 1 Length 5.4 cm Package 1 Weight 17.0 g Unit Type of Package 2 S03 Number of Units in Package 2 S03 Number of Units in Package 2 S03 Package 2 Height 30 cm Package 2 Width 30 cm Package 2 Length 40 cm Package 2 Length 40 cm Package 2 Weight 5.644 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 Directive Yes Mercury free Yes China ROHS Regulation China ROHS declaration ROHS exemption information Yes Environmental Disclosure Product Environmental Profile	Shock resistance	
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Package 2 Length 40 cm Package 2 Weight 5.644 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	Package 2 Height	30 cm
Package 2 Weight 5.644 kg Offer Sustainability Sustainable offer status Green Premium product REACh Regulation REACh Regulation 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	Package 2 Width	30 cm
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	Package 2 Length	40 cm
Sustainable offer status 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	Package 2 Weight	5.644 kg
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China RoHS Regulation China RoHS declaration RoHS exemption information Yes Environmental Disclosure Product Environmental Profile	Toxic heavy metal free	Yes
RoHS exemption information Yes Environmental Disclosure Product Environmental Profile	Mercury free	Yes
Environmental Disclosure Product Environmental Profile	China RoHS Regulation	China RoHS declaration
	RoHS exemption information	Yes
Circularity Profile End of Life Information	Environmental Disclosure	Product Environmental Profile
	Circularity Profile	End of Life Information

California proposition 65

WARNING: This product can expose you to chemicals including: Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

Contractual warranty

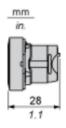
Warranty

18 months

ZB5AA432

Dimensions Drawings

Dimensions

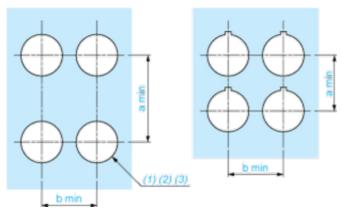




Mounting and Clearance

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

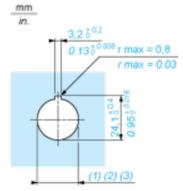
Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



- (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

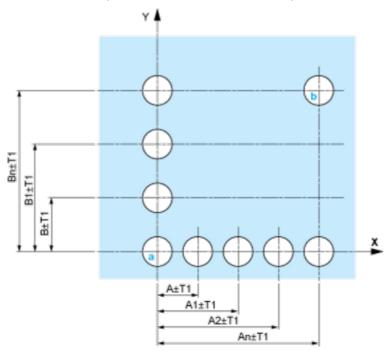


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Mounting and Clearance

Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

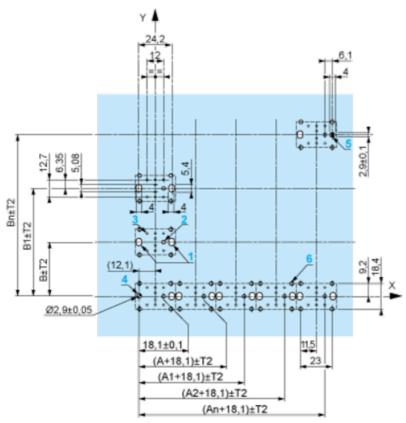
Panel Cut-outs (Viewed from Installer's Side)



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)

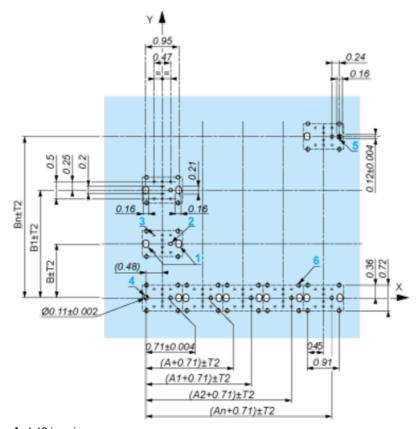
Dimensions in mm



A: 30 mm min.

B: 40 mm min.

Dimensions in in.



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

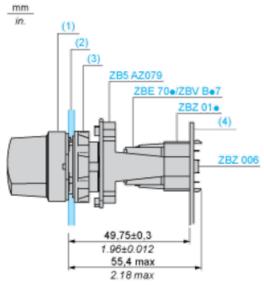
General Tolerances of the Panel and Printed Circuit Board

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•.

ZB5AA432

Technical Description

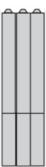
Electrical Composition Corresponding to Code C1



ZB5AA432

Technical Description

Electrical Composition Corresponding to Code C2



ZB5AA432

Technical Description

Electrical Composition Corresponding to Codes C9, C11, SF1 and SR1



Technical Description

Electrical Composition Corresponding to Code C15

1 N/O



1 N/C



1 N/O + N/C or 1 N/O + N/O or 1 N/C + N/C



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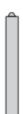
Technical Description

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Single contact



Double contact



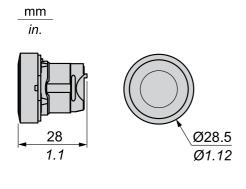
Light block

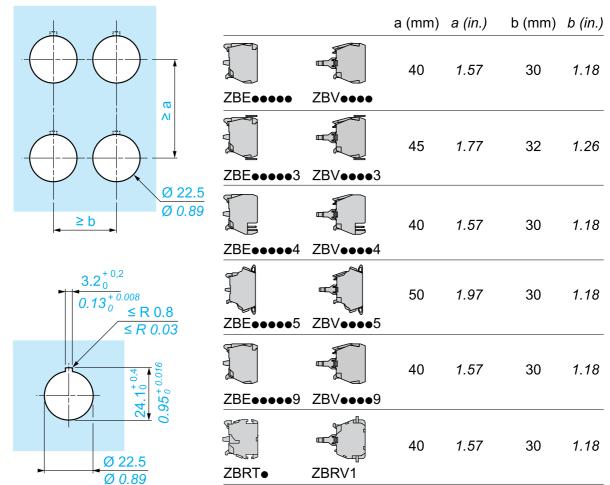


Possible location



Dimensions





Recommended replacement(s)