ZB5AD2

black selector switch head Ø22 2-position stay put





Main

Range of product	Harmony XALF Harmony XB5
Product or component type	Head for selector switch
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	Stay put
Operator profile	Black standard handle
Operator position information	2 positions 90°

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
	C15 for <1 contacts using single blocks in front mounting
	C11 for <3 contacts using single blocks in front mounting
	C8 for <4 contacts using single blocks in front mounting
	C7 for <4 contacts using single blocks in front mounting
	C5 for <5 contacts using single blocks in front mounting C6 for <5 contacts using single and double blocks in front mounting
	C4 for <6 contacts using single and double blocks in front mounting
Electrical composition code	C3 for <6 contacts using single blocks in front mounting
Station name	XALK 25 cut-outs
Station name	XALD 15 cut-outs
Mechanical durability	1000000 cycles
Net weight	0.017 kg
CAD overall depth	46 mm
CAD overall height	29 mm
CAD overall width	29 mm

Environment

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	
IP degree of protection	IP67 conforming to IEC 60529 IP69 conforming to IEC 60529 IP69K	
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	IK06 conforming to IEC 50102	

Standards	JIS C8201-5-1
	CSA C22.2 No 14
	UL 508
	EN/IEC 60947-1
	EN/IEC 60947-5-4
	EN/IEC 60947-5-1
	JIS C8201-1
Product certifications	GL
	CSA
	BV
	DNV
	RINA
	LROS (Lloyds register of shipping)
	UL listed
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

Packing Units

r doking office	
Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	24 g
Package 1 Height	3.3 cm
Package 1 width	5.2 cm
Package 1 Length	5.4 cm
Unit Type of Package 2	BB1
Number of Units in Package 2	5
Package 2 Weight	123 g
Package 2 Height	5 cm
Package 2 width	26.5 cm
Package 2 Length	3.4 cm
Unit Type of Package 3	S03
Number of Units in Package 3	200
Package 3 Weight	5.304 kg
Package 3 Height	30 cm
Package 3 width	30 cm
Package 3 Length	40 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)				
Toxic heavy metal free	Yes				
Mercury free	Yes				
RoHS exemption information	₫Yes				
China RoHS Regulation	☑ China RoHS Declaration				
Environmental Disclosure	Product Environmental Profile				
Circularity Profile	☑ End Of Life Information				

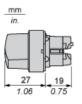
Contractual warranty

contraction marranty	
Warranty	18 months

Product data sheet Dimensions Drawings

ZB5AD2

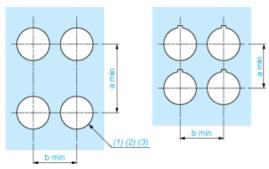
Dimensions





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

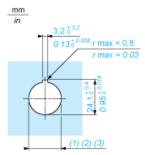
Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



- 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. $_0$ $^{+0.016}$)

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

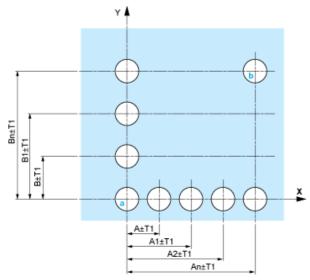
Detail of Lug Recess



- (1) Diameter on finished panel or support
- For selector switches and Emergency stop buttons, use of an anti-rotation plate type ZB5AZ902 is recommended.
- 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

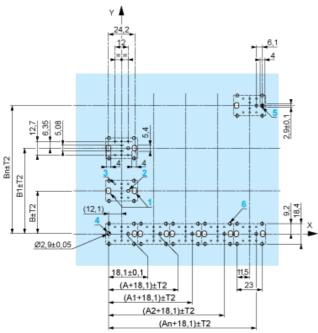
Panel Cut-outs (Viewed from Installer's Side)



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

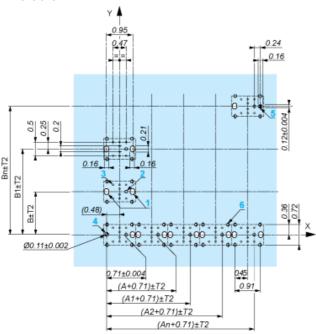
Printed Circuit Board Cut-outs (Viewed from Electrical Block Side)

Dimensions in mm



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

Dimensions in in.



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

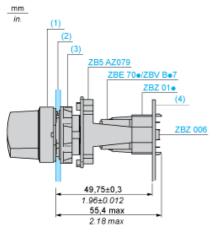
General Tolerances of the Panel and Printed Circuit Board

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:
 - 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) 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 \pm 0.05 / 0.09 in. \pm 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 \pm 0.05 / 0.09 in. \pm 0.002 holes for centring adapter ZBZ01•.

ZB5AD2

Electrical Composition Corresponding to Code C3
Electrical Composition Corresponding to Code C4
Electrical Composition Corresponding to Code C5
Electrical Composition Corresponding to Code C6
Electrical Composition Corresponding to Code C7



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



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



Legend

Single contact



Double contact



Light block



Possible location



Sequence of Contacts Fitted to 2-position Selector Switch Body

Position 315°



Push	Position	Тор			
Bottom	Δ	Δ	Δ		
Location		Left	Centre	Right	
State		0	0	0	
Contacts	N/O		open	open	open
N/C		closed	closed	closed	

Position 45°



Push	Position	Тор			
Bottom					
Location		Left	Centre	Right	
State		1	1	1	
Contacts	N/O		closed	closed	closed
N/C		open	open	open	