ZB5AD401

white selector switch head Ø22 2-position spring return





Main

Range of product	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	Right to left spring return
Operator profile	White standard handle
Operator position information	2 positions 90°

Complementary

CAD overall width	29 mm
CAD overall height	29 mm
CAD overall depth	46 mm
Net weight	0.02 kg
Mechanical durability	1000000 cycles
Station name	XALD 15 cut-outs XALK 25 cut-outs
Electrical composition code	C3 for <6 contacts using single blocks in front mounting C4 for <6 contacts using single and double 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 C7 for <4 contacts using single blocks in front mounting C8 for <4 contacts using single and double blocks in front mounting C11 for <3 contacts using single blocks in front mounting C15 for <1 contacts using single blocks in front mounting SF1 for <3 contacts using single blocks in front mounting SR1 for <3 contacts using single blocks in rear mounting
Device presentation	Basic element

Environment

TH		
-4070 °C		
-4070 °C		
Class II conforming to IEC 60536		
IP67 conforming to IEC 60529 IP69 conforming to IEC 60529 IP69K		
NEMA 13 NEMA 4X		
7000000 Pa at 55 °C, distance : 0.1 m		
IK06 conforming to IEC 50102		
CSA[RETURN]LROS (Lloyds register of shipping) [RETURN]GL[RETURN]DNV[RETURN]UL listed[RETURN]BV		

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			
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) EVEN 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			
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			

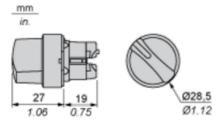
18 months

Warranty

Product data sheet Dimensions Drawings

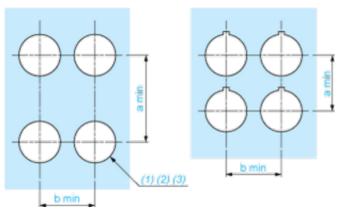
ZB5AD401

Dimensions



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

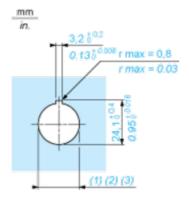
Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



- (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:
 - $\circ \quad$ 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

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

ZB5AD401

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

Electrical Composition Corresponding to Code C7

Floatrical Composition Corresponding to Code C9
Electrical Composition Corresponding to Code C8
Electrical Composition Corresponding to Codes C9, C11, SF1 and SR1
Electrical Composition Corresponding to Code C15
1 N/O
1 N/C
4 N/O + N/O + 4 N/O + N/O + 4 N/O + N/O
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	\triangle	\triangle		
Location		Left	Centre	Right	
State		0	0	0	
Contacts	N/O		open	open	open
N/C		closed	closed	closed	

Position 45°



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