### ZB5AJ2C0

# black selector switch head long handle 2 pos stay cp grey



Main	
Range of product	Harmony XB5
Product or component type	Head for selector switch
Device short name	ZB5
Bezel material	Plastic colour plated grey
Mounting diameter	0.87 in (22 mm)
Head type	Standard
Sale per indivisible quantity	1
Shape of signaling unit head	Round
Type of operator	Stay put
Operator profile	Black long handle
Operator additional information	Non padlockable
Operator position information	2 positions 90°

#### Complementary

Basic element			
SR1 3 single rear mounting			
SF1 3 single front mounting			
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XALK 25 cut-outs			
XALD 15 cut-outs			
0.04 lb(US) (0.017 kg)			
1.81 in (46 mm)			
1.50 in (38 mm)			
1.14 in (29 mm)			
	1.50 in (38 mm)  1.81 in (46 mm)  0.04 lb(US) (0.017 kg)  1000000 cycles  XALD 15 cut-outs  XALK 25 cut-outs  C3 6 single front mounting  C4 6 single and double front mounting  C5 5 single front mounting  C6 5 single and double front mounting  C7 4 single front mounting  C8 4 single and double front mounting  C1 3 single front mounting  C11 3 single front mounting  C15 1 single front mounting  SF1 3 single front mounting  SR1 3 single rear mounting		

#### Environment

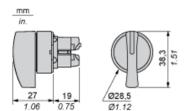
Protective treatment	TH			
Ambient air temperature for storage	-40158 °F (-4070 °C)	F (-4070 °C)		
Ambient air temperature for operation	-40158 °F (-4070 °C)			
Overvoltage category				
IP degree of protection	IP67 IEC 60529			
NEMA degree of protection	NEMA 13 NEMA 4X			
Resistance to high pressure washer	1015.26 psi (7000000 Pa) 131 °F (55 °C) 0.1 m			
IK degree of protection	IK06 IEC 50102			

Ctandarda	EN/IEC 60047 F 1			
Standards	EN/IEC 60947-5-1 EN/IEC 60947-1			
	EN/IEC 60947-1 EN/IEC 60947-5-4			
	CSA C22.2 No 14			
	JIS C8201-5-1			
	UL 508			
	JIS C8201-1			
Product certifications	LROS (Lloyds register of shipping)			
	GL			
	CSA			
	BV RINA			
	DNV			
	UL Listed			
Vibration resistance	5 gn 2500 Hz)IEC 60068-2-6			
Shock resistance	30 gn 18 ms) half sine wave acceleration IEC 60068-2-27			
	50 gn 11 ms) half sine wave acceleration IEC 60068-2-27			
Package weight(Lbs)	0.85 oz (24.000 g)			
D 1: 11 "				
	4.05 : /4.000			
Package 1 Height	1.65 in (4.200 cm)			
Package 1 Height Package 1 width	1.30 in (3.300 cm)			
Package 1 Height Package 1 width				
Package 1 Height Package 1 width Package 1 Length	1.30 in (3.300 cm)			
Package 1 Height Package 1 width Package 1 Length  Offer Sustainability	1.30 in (3.300 cm)			
Package 1 Height Package 1 width Package 1 Length  Offer Sustainability	1.30 in (3.300 cm) 2.05 in (5.200 cm)  Yes			
Package 1 Height Package 1 width Package 1 Length  Offer Sustainability REACh free of SVHC	1.30 in (3.300 cm) 2.05 in (5.200 cm)			
Package 1 Height Package 1 width Package 1 Length  Offer Sustainability REACh free of SVHC EU RoHS Directive	1.30 in (3.300 cm)  2.05 in (5.200 cm)  Yes  Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS			
Packing Units Package 1 Height Package 1 width Package 1 Length  Offer Sustainability REACh free of SVHC EU RoHS Directive  Toxic heavy metal free Mercury free	1.30 in (3.300 cm)  2.05 in (5.200 cm)  Yes  Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS  Declaration			
Package 1 Height Package 1 width Package 1 Length  Offer Sustainability REACh free of SVHC EU RoHS Directive  Toxic heavy metal free	1.30 in (3.300 cm)  2.05 in (5.200 cm)  Yes  Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration Yes			
Package 1 Height Package 1 width Package 1 Length  Offer Sustainability REACh free of SVHC EU RoHS Directive  Toxic heavy metal free Mercury free	1.30 in (3.300 cm)  2.05 in (5.200 cm)  Yes  Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration  Yes Yes			

# Product data sheet Dimensions Drawings

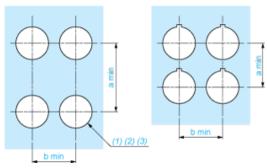
## ZB5AJ2C0

#### **Dimensions**



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

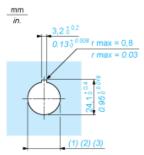
#### Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



- 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  $_0$  <sup>+0.4</sup>) / Ø0.89 in. recommended (Ø0.88 in.  $_0$  <sup>+0.016</sup>)

#### 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.

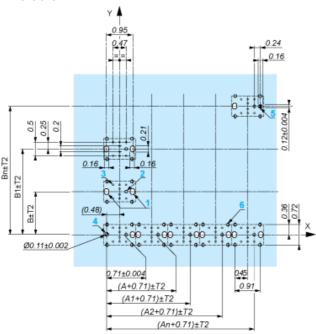
#### Printed Circuit Board Cut-outs (Viewed from Electrical Block Side)

#### Dimensions in mm



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

#### Dimensions in in.



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

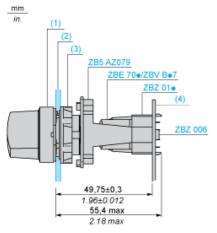
#### General Tolerances of the Panel and Printed Circuit Board

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•.

## ZB5AJ2C0

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	