

Harmony XB4, Selector switch head, metal, black, Ø22, 3 positions, spring return from right to center

ZB4BD8

Product availability: Stock - Normally stocked in distribution facility

Main	
Range of Product	Harmony XB4
Product or Component Type	Head for selector switch
Device short name	ZB4
Bezel material	Chromium plated metal
Mounting diameter	0.87 in (22 mm)
Head type	Standard
Sale per indivisible quantity	1
Shape of signaling unit head	Round
Type of operator	Right to centre spring return
Operator profile	Black standard handle
Operator position information	3 positions +/- 45°
Complementary	
CAD overall width	1.14 in (29 mm)
CAD overall height	1.14 in (29 mm)
CAD overall depth	1.73 in (44 mm)
Net Weight	0.09 lb(US) (0.04 kg)
Resistance to high pressure washer	1015.26 psi (7000000 Pa) 131 °F (55 °C) 0.1 m
Mechanical durability	1000000 cycles
Electrical composition code	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 C11 3 single front mounting
Device presentation	Basic element
Environment	
Protective treatment	TH
Ambient Air Temperature for Storage	-40158 °F (-4070 °C)

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Ambient Air Temperature for Operation	-40158 °F (-4070 °C)
Overvoltage category	Class I IEC 60536
IP degree of protection	IP67 IEC 60529 IP69 IP69K
NEMA degree of protection	NEMA 13 NEMA 4X
IK degree of protection	IK06 IEC 50102
Standards	EN/IEC 60947-1 UL 508 EN/IEC 60947-5-5 EN/IEC 60947-5-4 EN/IEC 60947-5-1 JIS C8201-5-1 CSA C22.2 No 14 JIS C8201-1
Product certifications	CSA DNV LROS (Lloyds register of shipping) UL Listed GL BV
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
Ordering and shipping d	otaile
Ordering and shipping d	etails 22468-PUSHBUTTONS,22MM(METAL) NEW
Category	22468-PUSHBUTTONS,22MM(METAL) NEW
Category Discount Schedule	22468-PUSHBUTTONS,22MM(METAL) NEW CS2
Category  Discount Schedule  GTIN	22468-PUSHBUTTONS,22MM(METAL) NEW  CS2  3389110889000
Category  Discount Schedule  GTIN  Nbr. of units in pkg.	22468-PUSHBUTTONS,22MM(METAL) NEW  CS2  3389110889000  1
Category  Discount Schedule  GTIN  Nbr. of units in pkg.  Package weight(Lbs)	22468-PUSHBUTTONS,22MM(METAL) NEW  CS2  3389110889000  1  1.55 oz (44.0 g)
Category  Discount Schedule  GTIN  Nbr. of units in pkg.  Package weight(Lbs)  Returnability  Country of origin	22468-PUSHBUTTONS,22MM(METAL) NEW  CS2  3389110889000  1  1.55 oz (44.0 g)  Yes
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Category  Discount Schedule  GTIN  Nbr. of units in pkg.  Package weight(Lbs)  Returnability  Country of origin  Packing Units  Unit Type of Package 1	22468-PUSHBUTTONS,22MM(METAL) NEW  CS2  3389110889000  1  1.55 oz (44.0 g)  Yes  FR
Category  Discount Schedule  GTIN  Nbr. of units in pkg.  Package weight(Lbs)  Returnability  Country of origin  Packing Units  Unit Type of Package 1  Package 1 Height	22468-PUSHBUTTONS,22MM(METAL) NEW  CS2  3389110889000  1  1.55 oz (44.0 g)  Yes  FR  PCE  1.38 in (3.5 cm)
Category  Discount Schedule  GTIN  Nbr. of units in pkg.  Package weight(Lbs)  Returnability  Country of origin  Packing Units  Unit Type of Package 1  Package 1 Height  Package 1 width	22468-PUSHBUTTONS,22MM(METAL) NEW  CS2  3389110889000  1  1.55 oz (44.0 g)  Yes  FR  PCE  1.38 in (3.5 cm)  2.13 in (5.4 cm)
Category  Discount Schedule  GTIN  Nbr. of units in pkg.  Package weight(Lbs)  Returnability  Country of origin  Packing Units  Unit Type of Package 1  Package 1 Height  Package 1 width  Package 1 Length	22468-PUSHBUTTONS,22MM(METAL) NEW  CS2  3389110889000  1  1.55 oz (44.0 g)  Yes  FR  PCE  1.38 in (3.5 cm)  2.13 in (5.4 cm)  2.20 in (5.6 cm)
Category  Discount Schedule  GTIN  Nbr. of units in pkg.  Package weight(Lbs)  Returnability  Country of origin  Packing Units  Unit Type of Package 1  Package 1 Height  Package 1 Length  Unit Type of Package 2	22468-PUSHBUTTONS,22MM(METAL) NEW  CS2  3389110889000  1  1.55 oz (44.0 g)  Yes  FR  PCE  1.38 in (3.5 cm)  2.13 in (5.4 cm)  2.20 in (5.6 cm)  S02
Category  Discount Schedule  GTIN  Nbr. of units in pkg.  Package weight(Lbs)  Returnability  Country of origin  Packing Units  Unit Type of Package 1  Package 1 Height  Package 1 Width  Package 1 Length  Unit Type of Package 2  Number of Units in Package 2	22468-PUSHBUTTONS,22MM(METAL) NEW  CS2  3389110889000  1  1.55 oz (44.0 g)  Yes  FR  PCE  1.38 in (3.5 cm)  2.13 in (5.4 cm)  2.20 in (5.6 cm)  S02  100

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11.81 in (30 cm)

15.75 in (40 cm)

7.83 oz (222.0 g)

1.30 in (3.3 cm)

10.24 in (26 cm)

BB1

5

Package 2 width

Package 2 Length

Package 3 Weight

Package 3 Height

Package 3 width

Unit Type of Package 3

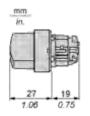
Number of Units in Package 3

Package 3 Length	1.89 in (4.8 cm)			
Offer Sustainability				
Sustainable offer status	Green Premium product			
California proposition 65	WARNING: This product can expose you to chemicals including: Di-isodecyl phthalate (DIDP), which known to the State of California to cause birth defects or other reproductive harm. For more informati go to P65Warnings website			
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			
RoHS exemption information	Yes			
China RoHS Regulation	China RoHS declaration			
Environmental Disclosure	Product Environmental Profile			
Circularity Profile	End of Life Information			
Contractual warranty				
Warranty	18 months			

**ZB4BD8** 

**Dimensions Drawings** 

### **Dimensions**





Apr 20, 2022

### ZB4BD8

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

Connection by Faston Connectors

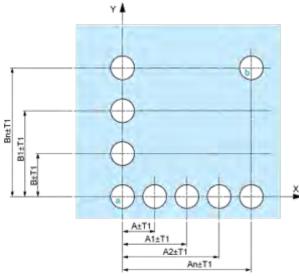
Connection by Faston Connectors

- (1) Diameter on finished panel or support
- (2) 40 mm min. / 1.57 in. min.
- (3) 30 mm min. / 1.18 in. min.
- (4) Ø 22.5 mm / 0.89 in. recommended (Ø 22.3 mm  $_0^{+0.4}$  / 0.88 in.  $_0^{+0.016})$
- **(5)** 45 mm min. / 1.78 in. min.
- (6) 32 mm min. / 1.26 in. min.

Mounting and Clearance

### Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

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

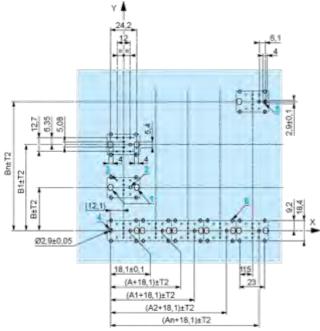


**A:** 30 mm min. / 1.18 in. min.

**B:** 40 mm min. / 1.57 in. min.

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

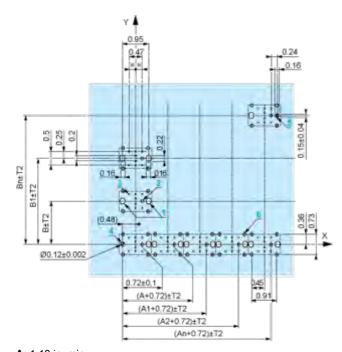
Dimensions in mm



A: 30 mm min.

**B**: 40 mm min.

Dimensions in in.



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

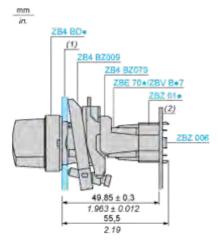
#### **General Tolerances of the Panel and Printed Circuit Board**

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 ZB4 BZ009: ± 2 30' (excluding cut-outs marked a and b).
- Tightening torque of screws ZBZ 006: 0.6 N.m (5.3 lbf.in) max.
- Allow for one ZB4 BZ079 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 (ZB4 BD•, ZB4 BJ•, ZB4 BG•).

The fixing centers marked a and b are diagonally opposed and must align with those marked 4 and 5.



- (1) Panel
- (2) Printed circuit board

### Mounting of Adapter (Socket) ZBZ 01•

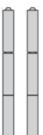
- 1 2 elongated holes for ZBZ 006 screw access
- 2 1 hole Ø 2.4 mm ± 0.05 / 0.09 in. ± 0.002 for centring adapter ZBZ 01•
- 3 8 × Ø 1.2 mm / 0.05 in. holes
- 4 1 hole Ø 2.9 mm ± 0.05 / 0.11 in. ± 0.002, for aligning the printed circuit board (with cut-out marked a)
- 5 1 elongated hole for aligning the printed circuit board (with cut-out marked b)
- $\bullet~$  6 4 holes Ø 2.4 mm / 0.09 in. for clipping in adapter ZBZ 01  $\bullet~$

Dimensions An + 18.1 relate to the Ø 2.4 mm  $\pm$  0.05 / 0.09 in.  $\pm$  0.002 holes for centring adapter ZBZ 01•.

**Technical Description** 

ZB4BD8

**Electrical Composition Corresponding to Code C3** 



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## Product data sheet ZB4BD8

**Technical Description** 



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**Technical Description** 



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ZB4BD8



ZB4BD8

**Technical Description** 

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



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# **ZB4BD8**

**Technical Description** 

Lea	en	d
Leg	en	u

Single contact



Double contact



Light block



Possible location



### **ZB4BD8**

**Technical Description** 

### Sequence of Contacts Fitted to 3-position Selector Switch Body

### Position 315°



Push	Position	Тор			
	Bottom				Δ
	Location		Left	Centre	Right
	State		1	1	0
Contacts	N/O		closed	closed	open
	N/C		open	open	closed

#### Position 0°



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

### Position 45°



Push	Position	Тор			
			Δ		
	Location		Left	Centre	Right
	State		0	1	1
Contacts	N/O		open	closed	closed
	N/C		closed	open	open