Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications



Harmony XB4, Illuminated selector switch head, metal, green, Ø22, integral LED, 3 positions, spring return to center

ZB4BK1533

Product availability: Stock - Normally stocked in distribution facility

### Main

Range of Product	Harmony XB4		
Product or Component Type	Head for illuminated selector switch		
Product Compatibility	Integral LED		
Device short name	ZB4		
Bezel material	Chromium plated metal		
Head type	Standard		
Mounting diameter	0.87 in (22 mm)		
Sale per indivisible quantity	1		
Shape of signaling unit head	Round		
Type of operator	To centre spring return		
Operator profile	Green 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	1.69 in (43 mm)
Product Weight	0.08 lb(US) (0.036 kg)
Resistance to high pressure washer	1015.26 psi (7000000 Pa) 131 °F (55 °C) 0.1 m
Mechanical durability	500000 cycles
Electrical composition code	M3 4 single front mounting integral LED M6 2 single front mounting integral LED and transformer M10 2 single front mounting integral LED M4 4 single and double front mounting integral LED
Device presentation	Basic element

#### **Environment**

Protective treatment	TH		

Web: https://www.bolenscontrol.com/ - Phone: (800) 658-5241 - Email: sales@bolenscontrol.com

Ambient Air Temperature for Storage	-40158 °F (-4070 °C)		
Ambient Air Temperature for Operation	-40158 °F (-4070 °C)		
Overvoltage category	Class I IEC 60536		
IP degree of protection	IP66 IEC 60529 IP67 IP69 IP69K		
NEMA degree of protection	NEMA 13 NEMA 4X		
IK degree of protection	IK06 IEC 50102		
Standards	UL 508 EN/IEC 60947-5-4 EN/IEC 60947-5-1 CSA C22.2 No 14 EN/IEC 60947-5-5 EN/IEC 60947-1 JIS C8201-5-1 JIS C8201-1		
Product Certifications	GL LROS (Lloyds register of shipping) UL Listed DNV CSA 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 de	etails		
Category	22468-PUSHBUTTONS,22MM(METAL) NEW		
Discount Schedule	CS2		
GTIN	3389110890884		
Nbr. of units in pkg.	1		
Package weight(Lbs)	1.41 oz (40.0 g)		
Returnability	Yes		
Country of origin	FR		
Packing Units			
Unit Type of Package 1	PCE		
Package 1 Height	1.38 in (3.5 cm)		
Package 1 width	2.13 in (5.4 cm)		
Package 1 Length	2.17 in (5.5 cm)		
Unit Type of Package 2	S02		

 Number of Units in Package 2
 100

 Package 2 Weight
 9.72 lb(US) (4.41 kg)

 Package 2 Height
 5.91 in (15 cm)

 Package 2 width
 11.81 in (30 cm)

 Package 2 Length
 15.75 in (40 cm)

 Unit Type of Package 3
 BB1

 Number of Units in Package 3
 5

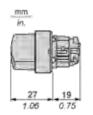
 Package 3 Weight
 7.34 oz (208.0 g)

Package 3 Height	1.97 in (5 cm)			
Package 3 width	1.30 in (3.3 cm)			
Package 3 Length	10.43 in (26.5 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 information 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			

# **ZB4BK1533**

**Dimensions Drawings** 

#### **Dimensions**





## **ZB4BK1533**

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

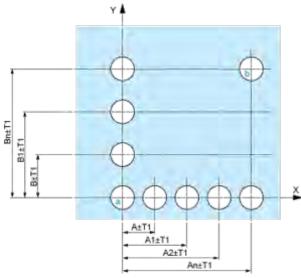
Connection by Faston Connectors

- (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)

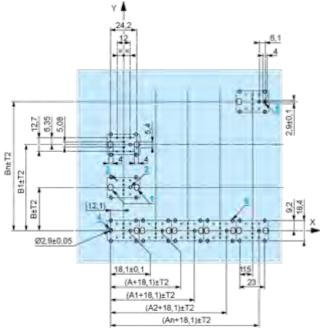


A: 30 mm min. / 1.18 in. min.

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

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

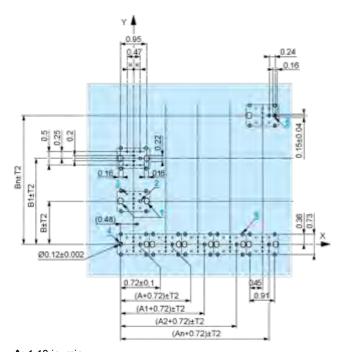
Dimensions in mm



A: 30 mm min.

**B**: 40 mm min.

Dimensions in in.



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

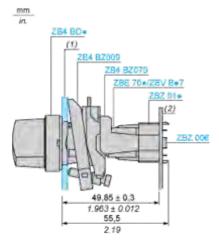
#### **General Tolerances of the Panel and Printed Circuit Board**

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•.

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**ZB4BK1533** 

**Technical Description** 

**Electrical Composition Corresponding to Code M3** 



# **ZB4BK1533**

**Technical Description** 

**Electrical Composition Corresponding to Code M4** 



**ZB4BK1533** 

**Technical Description** 

**Electrical Composition Corresponding to Codes M6 and P2** 



**ZB4BK1533** 

**Technical Description** 

Electrical Composition Corresponding to Codes M5, M10, MF1, MR1 and MF2



**ZB4BK1533** 

**Technical Description** 

Single contact

Double contact



Light block



Possible location



# **ZB4BK1533**

**Technical Description** 

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

### Position 315°



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

#### Position 0°



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

### Position 45°



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