

Head for illuminated selector switch, Harmony XB4, chromium metal, blue handle, 22mm, universal LED, 3 positions,

ZB4BK1563

Important message: A change in appearance may be noted on the product but does not affect its use in terms of function and safety. This makes it compatible with our Universal LED blocks

#### Main

Range of product	Harmony XB4			
Product or component type	Head for illuminated selector switch			
Product compatibility	Universal LED			
Device short name	ZB4			
Bezel material	Chromium plated metal			
Head type	Standard			
Mounting diameter	22 mm			
Sale per indivisible quantity	1			
Shape of signaling unit head	Round			
Type of operator	To centre spring return			
Operator profile	Blue standard handle			
Operator position information	3 positions +/- 45°			

### Complementary

CAD overall width	29 mm			
CAD overall height	29 mm			
CAD overall depth	43 mm			
Product weight	0.036 kg			
Resistance to high pressure washer	7000000 Pa at 55 °C, distance : 0.1 m			
Mechanical durability	500000 cycles			
Electrical composition code	M3 for <4 contacts using single blocks in front mounting with integral LED M6 for <2 contacts using single blocks in front mounting with integral LED and transformer M10 for <2 contacts using single blocks in front mounting with integral LED M4 for <4 contacts using single and double blocks in front mounting with integral LED			
Device presentation	Basic element			

### **Environment**

Protective treatment TH

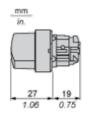
Ambient air temperature for storage	-4070 °C			
Ambient air temperature for operation	-4070 °C			
Overvoltage category	Class I conforming to IEC 60536			
IP degree of protection	IP66 conforming to IEC 60529 IP67 IP69 IP69K			
NEMA degree of protection	NEMA 13 NEMA 4X			
IK degree of protection	IK06 conforming to IEC 50102			
Standards	UL 508 EN/IEC 60947-1 CSA C22.2 No 14 JIS C8201-5-1 EN/IEC 60947-5-1 EN/IEC 60947-5-4 EN/IEC 60947-5-5 JIS C8201-1			
Product certifications	LROS (Lloyds register of shipping) UL listed BV CSA GL DNV			
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				
Unit Type of Package 1	PCE			
Number of Units in Package 1	1			
Package 1 Height	3.600 cm			
Package 1 Width	5.400 cm			
Package 1 Length	5.900 cm			
Package 1 Weight	41.700 g			
Unit Type of Package 2	S03			
Number of Units in Package 2	250			
Package 2 Height	30.000 cm			
Package 2 Width	30.000 cm			
Package 2 Length	40.000 cm			
Package 2 Weight	10.902 kg			
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) EU RoHS Declaration			
Toxic heavy metal free	Yes			
Mercury free	Yes			
Mercury free				
China RoHS Regulation	China RoHS declaration			

<b>Environmental Disclosure</b>	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
Contractual warranty	
Warranty	18 months

# **ZB4BK1563**

**Dimensions Drawings** 

### **Dimensions**





## **ZB4BK1563**

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

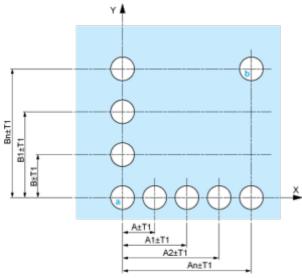
Connection by Faston Connectors

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.

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

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

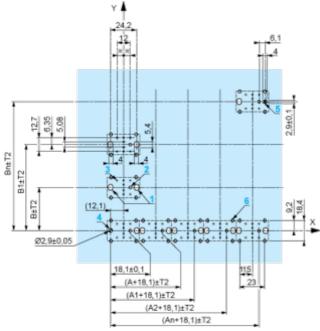


A: 30 mm min. / 1.18 in. min.

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

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

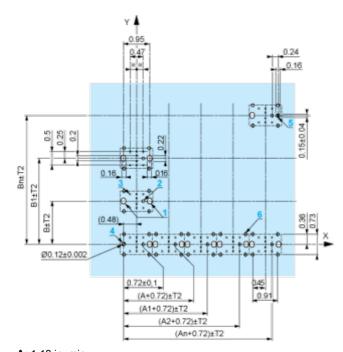
Dimensions in mm



A: 30 mm min.

**B**: 40 mm min.

Dimensions in in.



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

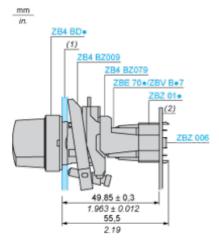
#### General Tolerances of the Panel and Printed Circuit Board

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  $\pm$  0.05 / 0.11 in.  $\pm$  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•.

# **ZB4BK1563**

Technical Description

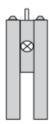
**Electrical Composition Corresponding to Code M3** 



# **ZB4BK1563**

Technical Description

**Electrical Composition Corresponding to Code M4** 



**ZB4BK1563** 

Technical Description

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



# **ZB4BK1563**

Technical Description

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



Technical Description

Lea	en	d
Leg	en	u

Single contact



Double contact



Light block



Possible location



# **ZB4BK1563**

Technical Description

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

#### Position 315°



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

#### Position 0°



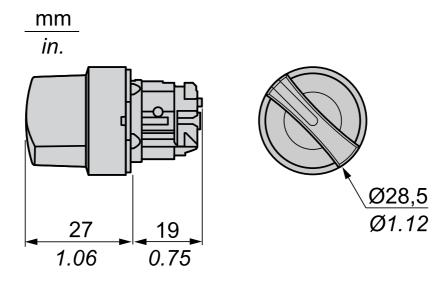
Push	Position	Тор		
		Bottom	$\triangle$	$\triangle$
	Location		Left	Right
	State		0	0
Contacts	N/O		open	open
	N/C		closed	closed

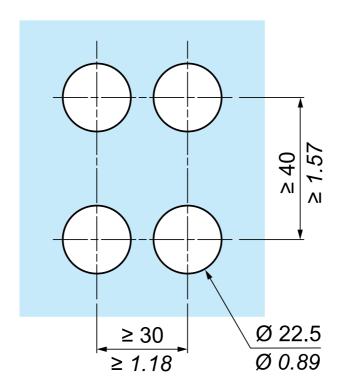
#### Position 45°



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

#### **Dimensions**





Recommended replacement(s)