Product data sheet Characteristics

ZB4BA18

Illuminated push button head, metal, flush, white, Ø22, spring return, integral LED, for insertion legend, unmarked





Main

Range of product	Harmony XB4	
Product or component type	Head for illuminated push-button	
Device short name	ZB4	
Product compatibility	Integral LED	
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	spring return	
Operator profile	White flush, unmarked	
Operator additional information	For insertion of legend	

Complementary

CAD overall width	29 mm	
CAD overall height	29 mm	
CAD overall depth	30 mm	
Net weight	0.028 kg	
Resistance to high pressure washer	7000000 Pa at 55 °C, distance : 0.1 m	_
Mechanical durability	10000000 cycles	;
Electrical composition code	M1 for <6 contacts using single blocks in front mounting with integral LED M2 for <6 contacts using single and double 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 C3 for <6 contacts using single blocks in front mounting C4 for <6 contacts using single and double blocks in front mounting C14 for <2 contacts using single blocks in front mounting	

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
ID dograp of protection	IDEC conforming to IDC COECO

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 EN 50102		
Standards	EN/IEC 60947-1 UL 508 EN/IEC 60947-5-1 CSA C22.2 No 14 EN/IEC 60947-5-5 EN/IEC 60947-5-4 JIS C8201-5-1 JIS C8201-1		
Product certifications	RINA DNV GL LROS (Lloyds register of shipping) CSA UL listed 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		

Packing Units

Packing Units	
Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	29.75 g
Package 1 Height	3.5 cm
Package 1 width	5.5 cm
Package 1 Length	9 cm
Unit Type of Package 2	S03
Number of Units in Package 2	150
Package 2 Weight	4.863 kg
Package 2 Height	30 cm
Package 2 width	30 cm
Package 2 Length	40 cm

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	
RoHS exemption information	Yes	
China RoHS Regulation	China RoHS declaration	

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	
Contractual warranty		
Warranty	18 months	

Product data sheet Dimensions Drawings

ZB4BA18

Dimensions





ZB4BA18

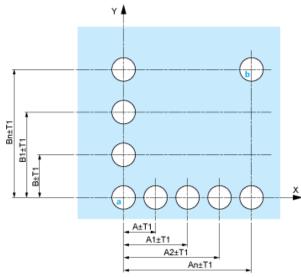
Panel Cut-out for Pushbuttons, Switches and Pilot Lights (Finished Holes, Ready for Installation)

Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board	Connection by Faston Connectors
(2)	(5)

- Diameter on finished panel or support
- 40 mm min. / 1.57 in. min.
- 30 mm min. / 1.18 in. min.
- (1) (2) (3) (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

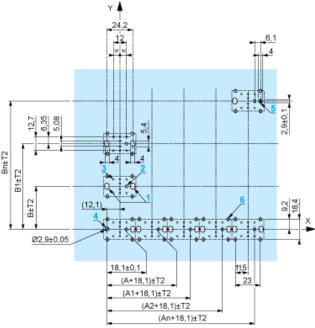
Panel Cut-outs (Viewed from Installer's Side)



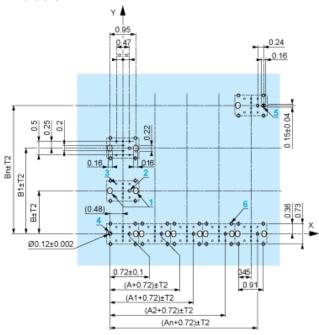
A: 30 mm min. / 1.18 in. min. B: 40 mm min. / 1.57 in. min.

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.

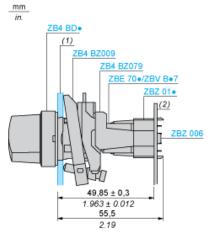
General Tolerances of the Panel and Printed Circuit Board

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 \pm 0.05 / 0.09 in. \pm 0.002 for centring adapter ZBZ 01•
- 38 × 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)
- 6 4 holes Ø 2.4 mm / 0.09 in. for clipping in adapter ZBZ 01•

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•.

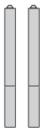
ZB4BA18

Electrical Composition Corresponding to Code C3



ZB4BA18

Electrical Composition Corresponding to Code C4



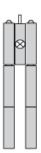
ZB4BA18

Electrical Composition Corresponding to Codes C14, SF2 and SR2



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Electrical Composition Corresponding to Codes M1 and M7



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Electrical Composition Corresponding to Codes M2 and M8



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Electrical Composition Corresponding to Codes M6 and P2



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



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- 1	00	nd
_ L	-60	IIU

Single contact



Double contact



Light block



Possible location

