

# Product data sheet Characteristics

# **ZB4BW343**

# red flush illuminated pushbutton head Ø22 spring return for integral LED





# Main

Range of product	Harmony XB4
Product or component type	Head for illuminated push-button
Device short name	ZB4
Product compatibility	Universal LED
Bezel material	Chromium plated metal
Head type	Standard
Mounting diamete	22.5 mm
Sale per indivisible quantity	1
Shape of signaling unit head	Round
Type of operator	Spring return
Operator profile	Red flush, unmarked
Operator additional information	With plain lens
Cap/operator or lens colour	Red

### Complementary

Device presentation	Basic sub-assemblies
Electrical composition code	M2 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
Mechanical durability  Electrical composition code	10000000 cycles  M1 for <6 contacts using single blocks in front mounting with integral LED
Resistance to high pressure washer	7000000 Pa at 55 °C, distance : 0.1 m
Net weight	0.026 kg
CAD overall depth	30 mm
CAD overall height	29 mm
CAD overall width	29 mm

### Environment

Protective treatment	ТН
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 62262

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

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	4.500 cm
Package 1 Width	3.400 cm
Package 1 Length	5.400 cm
Package 1 Weight	27.000 g
Unit Type of Package 2	S03
Number of Units in Package 2	300
Package 2 Height	30.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	8.432 kg
Unit Type of Package 3	P06
Number of Units in Package 3	2400
Package 3 Height	75.000 cm
Package 3 Width	60.000 cm
Package 3 Length	80.000 cm
Package 3 Weight	75.456 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	
China RoHS Regulation	China RoHS Declaration	
RoHS exemption information	€Yes	
Environmental Disclosure	Product Environmental Profile	
Circularity Profile	End Of Life Information	

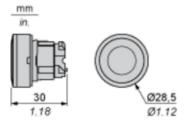
# Contractual warranty

Warranty	18 개월

# Product data sheet Dimensions Drawings

# **ZB4BW343**

# **Dimensions**



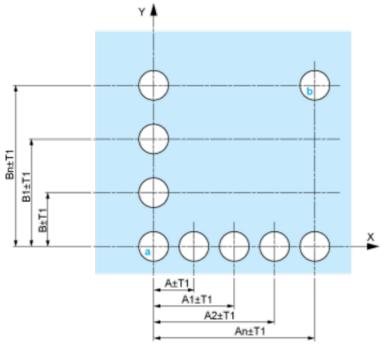
# Panel Cut-out for Pushbuttons, Switches and Pilot Lights (Finished Holes, Ready for Installation)

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

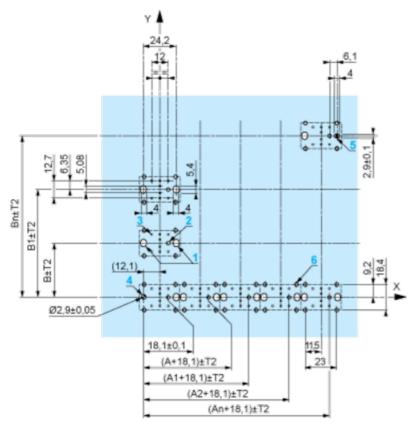


A: 30 mm min. / 1.18 in. min.

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

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

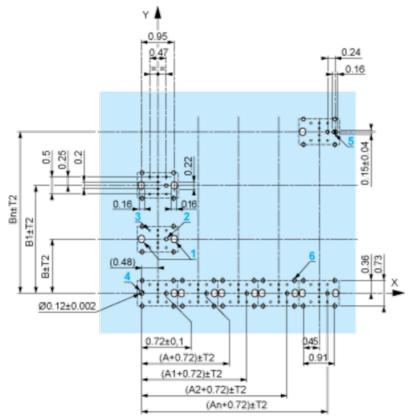
Dimensions in mm



A: 30 mm min.

B: 40 mm min.

Dimensions in in.



A: 1.18 in. min.

B: 1.57 in. min.

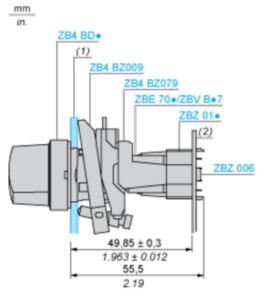
### General Tolerances of the Panel and Printed Circuit Board

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•

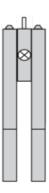
- 1 2 elongated holes for ZBZ 006 screw access
- 2 1 hole Ø 2.4 mm ± 0.05 / 0.09 in. ± 0.002 for centring adapter ZBZ 01•
- 38 × Ø 1.2 mm / 0.05 in. holes
- 4 1 hole Ø 2.9 mm ± 0.05 / 0.11 in. ± 0.002, for aligning the printed circuit board (with cut-out marked a)
- 5 1 elongated hole for aligning the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

Electrical Composition Corresponding to Codes M1 and M7



Electrical Composition Corresponding to Codes M2 and M8



Electrical Composition Corresponding to Codes M6 and P2



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



Legend		
Single contact		
Double contact		
Light block		
Light 5150k		
Possible location		