Product data sheet

Specifications

Head for illuminated selector switch, Harmony XB4, metal, orange handle, 22mm, universal LED, 3 positions, stay put

ZB4BK1353

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	stay put
Operator profile	Orange standard handle
Operator position information	3 positions +/- 45°

Complementary

CAD overall width	29 mm
CAD overall height	29 mm
CAD overall depth	43 mm
Net weight	0.036 kg
Resistance to high pressure washer	7000000 Pa at 55 °C, distance : 0.1 m
Mechanical durability	1000000 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	-40…70 °C
Ambient air temperature for operation	-40…70 °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	JIS C8201-5-1 UL 508 EN/IEC 60947-5-1 EN/IEC 60947-5-4 EN/IEC 60947-1 EN/IEC 60947-5-5 CSA C22.2 No 14 JIS C8201-1
Product certifications	LROS (Lloyds register of shipping) DNV GL CSA UL listed BV
Vibration resistance	5 gn (f= 2…500 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	Db
Number of Units in Package 1	1
Package 1 Height	5.000 cm
Package 1 Width	5.200 cm
Package 1 Length	3.300 cm
Package 1 Weight	42.000 g
Unit Type of Package 2	S02
Number of Units in Package 2	100
Package 2 Height	15.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	4.327 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
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

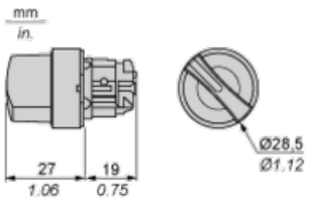
Contractual warranty

Warranty	18 months

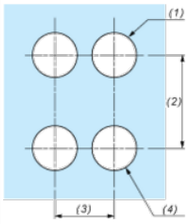
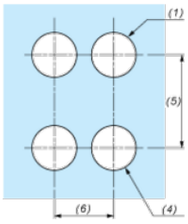
Product data sheet ZB4BK1353

Dimensions Drawings

Dimensions

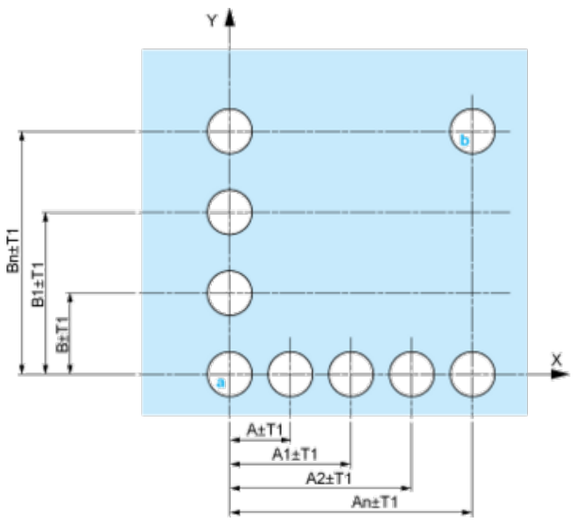


Panel Cut-out for Pushbuttons, Switches and Pilot Lights (Finished Holes, Ready for Installation)

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

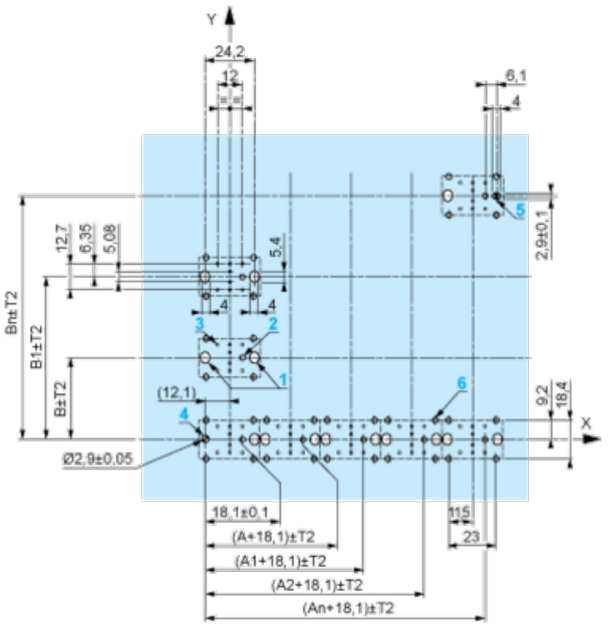


A: 30 mm min. / 1.18 in. min.

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

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

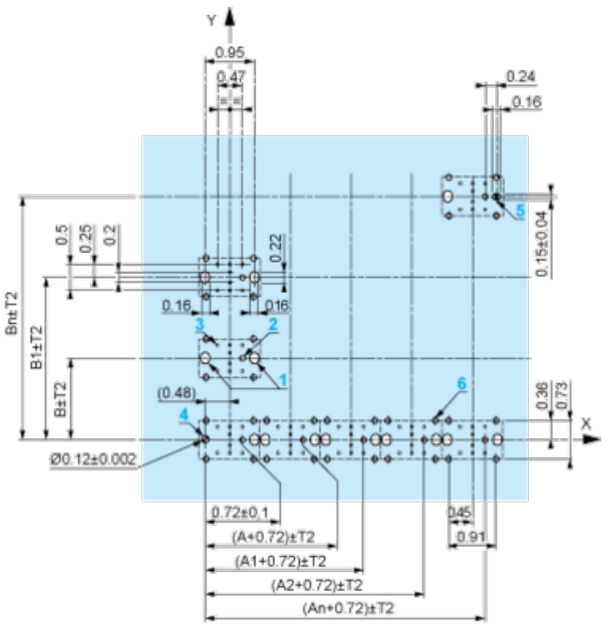
Dimensions in mm



A: 30 mm min.

B: 40 mm min.

Dimensions in in.



A: 1.18 in. min.

B: 1.57 in. min.

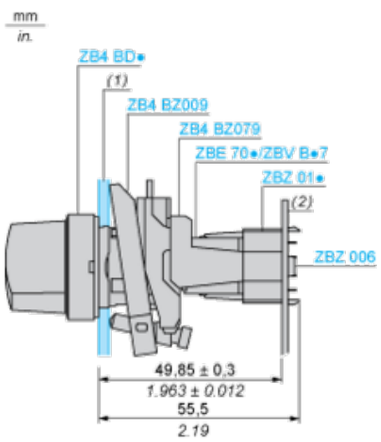
General Tolerances of the Panel and Printed Circuit Board

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:
  - every 90 mm / 3.54 in. horizontally (X), and 120 mm / 4.72 in. vertically (Y).
  - 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

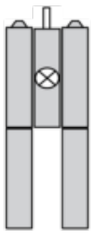
(2) Printed circuit board

Mounting of Adapter (Socket) ZBZ 01•

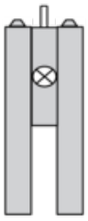
- **1** 2 elongated holes for ZBZ 006 screw access
- **2** 1 hole Ø 2.4 mm ± 0.05 / 0.09 in. ± 0.002 for centring adapter ZBZ 01•
- **3** 8 × Ø 1.2 mm / 0.05 in. holes
- **4** 1 hole Ø 2.9 mm ± 0.05 / 0.11 in. ± 0.002, for aligning the printed circuit board (with cut-out marked **a**)
- **5** 1 elongated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

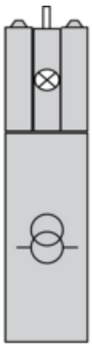
Electrical Composition Corresponding to Code M3



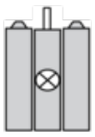
Electrical Composition Corresponding to Code M4



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

Possible location

Sequence of Contacts Fitted to 3-position Selector Switch Body

Position 315°

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

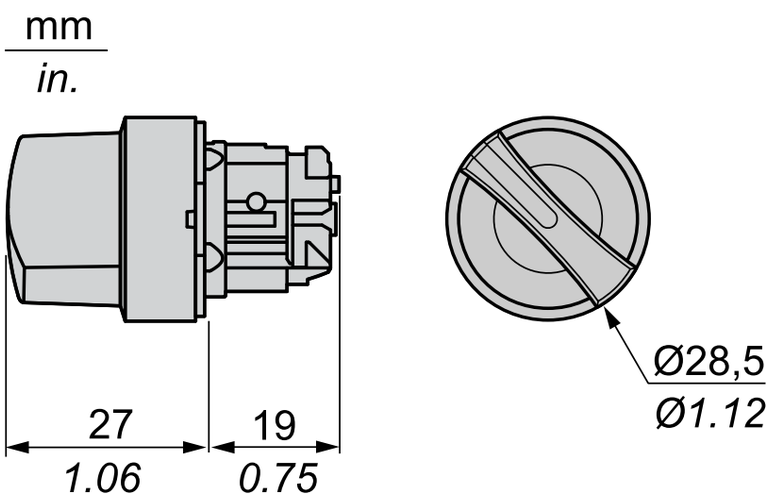
Position 0°

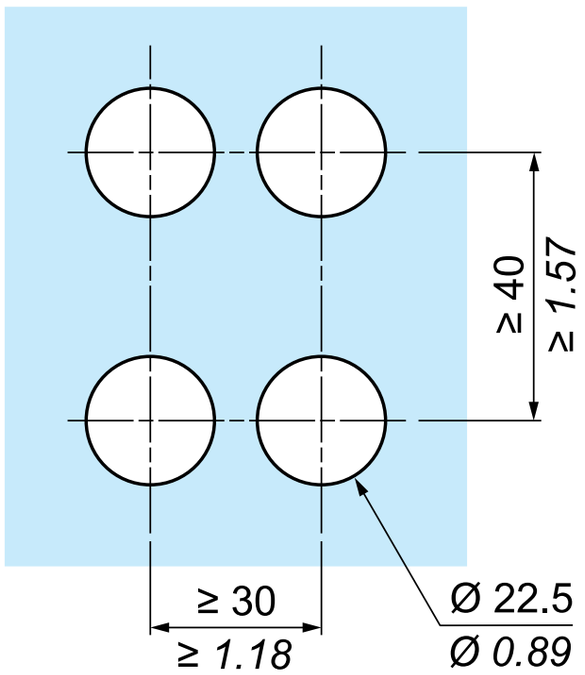
Push	Position	Top			
		Bottom			
	Location		Left		Right
	State		0		0
Contacts	N/O		open		open
	N/C		closed		closed

Position 45°

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

Dimensions





Recommended replacement(s)