

Product datasheet

Specifications



black selector switch head Ø22 2-position stay put

ZB4BD28

Main

Range of product	Harmony XB4
Product or component type	Head for selector switch
Device short name	ZB4
Bezel material	Chromium plated metal
Mounting diameter	22 mm
Head type	Standard
Sale per indivisible quantity	1

Complementary

CAD overall width	29 mm
CAD overall height	29 mm
CAD overall depth	45 mm
Net weight	0.026 kg
Overvoltage category	Class I conforming to IEC 60536
Resistance to high pressure washer	7000000 Pa at 55 °C, distance : 0.1 m
Shape of signaling unit head	Round
Type of operator	stay put
Operator profile	Black toggle switch
Operator position information	2 positions 90°
Mechanical durability	500000 cycles
Electrical composition code	C11 for <3 contacts using single blocks in front mounting C12 for <6 contacts using single blocks in front mounting C15 for <1 contacts using single blocks in front mounting C13 for <6 contacts using single and double blocks in front mounting
Device presentation	Basic element

Environment

Protective treatment	TH
Ambient air temperature for storage	-40...70 °C

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

Ambient air temperature for operation	-40...70 °C
IP degree of protection	IP69 conforming to IEC 60529 IP69K
NEMA degree of protection	NEMA 13 NEMA 4X
IK degree of protection	IK06 conforming to IEC 50102
Standards	UL 508 EN/IEC 60947-5-4 CSA C22.2 No 14 JIS C8201-5-1 EN/IEC 60947-1 EN/IEC 60947-5-5 EN/IEC 60947-5-1 JIS C8201-1
Product certifications	CSA UL listed BV GL LROS (Lloyds register of shipping) DNV
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	PCE
Number of Units in Package 1	1
Package 1 Weight	32.0 g
Package 1 Height	3.6 cm
Package 1 width	4.7 cm
Package 1 Length	5.4 cm
Unit Type of Package 2	S03
Number of Units in Package 2	200
Package 2 Weight	6.878 kg
Package 2 Height	30 cm
Package 2 width	30 cm
Package 2 Length	40 cm
Package 3 Height	30 cm

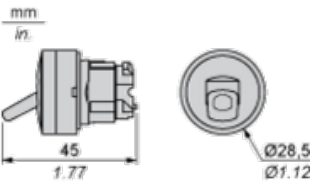
Offer Sustainability

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

Contractual warranty

Warranty	18 months
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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
	
<div>(1) Diameter on finished panel or support</div> <div>(2) 40 mm min. / 1.57 in. min.</div> <div>(3) 30 mm min. / 1.18 in. min.</div> <div>(4) Ø 22.5 mm / 0.89 in. recommended (Ø 22.3 mm^{+0.4}₀ / 0.88 in. ^{+0.016}₀)</div> <div>(5) 45 mm min. / 1.78 in. min.</div> <div>(6) 32 mm min. / 1.26 in. min.</div>	

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.

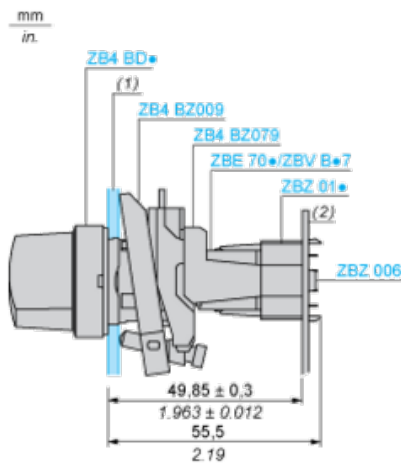
General Tolerances of the Panel and Printed Circuit Board

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•

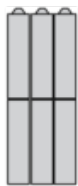
- 1 2 elongated holes for ZBZ 006 screw access
- 2 1 hole Ø 2.4 mm ± 0.05 / 0.09 in. ± 0.002 for centring adapter ZBZ 01•
- 3 8 × Ø 1.2 mm / 0.05 in. holes
- 4 1 hole Ø 2.9 mm ± 0.05 / 0.11 in. ± 0.002, for aligning the printed circuit board (with cut-out marked **a**)
- 5 1 elongated hole for aligning 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 Codes C9, C11, SF1 and SR1



Electrical Composition Corresponding to Code C12

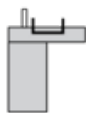


Electrical Composition Corresponding to Code C13



Electrical Composition Corresponding to Code C15

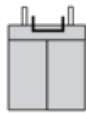
1 N/O



1 N/C



1 N/O + N/C or 1 N/O + N/O or 1 N/C + N/C



Legend

Single contact



Double contact



Light block



Possible location

