

# Product data sheet

Specifications



Harmony, 22mm Push Button, selector switch operating head, 3 position, spring return, black, unmarked

ZB4BD5

Product availability : Stock - Normally stocked in distribution facility

Price\* : 29.40 USD

## 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	0.87 in (22 mm)
Head type	Standard
Sale per indivisible quantity	1
Shape of signaling unit head	Round
Type of operator	To centre spring return
Operator profile	Black standard handle
Operator position information	3 positions +/- 45°

## Complementary

CAD overall width	1.14 in (29 mm)
CAD overall height	1.14 in (29 mm)
CAD overall depth	1.73 in (44 mm)
Net Weight	0.09 lb(US) (0.04 kg)
Resistance to high pressure washer	1015.26 psi (7000000 Pa) 131 °F (55 °C) 0.1 m
Mechanical durability	1000000 cycles
Electrical composition code	C3 6 single front mounting C4 6 single and double front mounting C5 5 single front mounting C6 5 single and double front mounting C7 4 single front mounting C8 4 single and double front mounting C11 3 single front mounting
Device presentation	Basic element

## Environment

Protective treatment	TH
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\* Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

<b>Ambient Air Temperature for Storage</b>	-40...158 °F (-40...70 °C)
<b>Ambient Air Temperature for Operation</b>	-40...158 °F (-40...70 °C)
<b>Overvoltage category</b>	Class I IEC 60536
<b>IP degree of protection</b>	IP67 IEC 60529 IP69 IP69K
<b>NEMA degree of protection</b>	NEMA 13 NEMA 4X
<b>IK degree of protection</b>	IK06 IEC 50102
<b>Standards</b>	IEC 60947-5-5 IEC 60947-1 IEC 60947-5-4 CSA C22.2 No 14 IEC 60947-5-1 JIS C8201-5-1 UL 508 JIS C8201-1
<b>Product Certifications</b>	UL Listed GL DNV LROS (Lloyds register of shipping) CSA BV
<b>Vibration resistance</b>	5 gn 2...500 Hz)IEC 60068-2-6
<b>Shock resistance</b>	30 gn 18 ms) half sine wave acceleration IEC 60068-2-27 50 gn 11 ms) half sine wave acceleration IEC 60068-2-27

## Ordering and shipping details

<b>Category</b>	22468-PUSHBUTTONS,22MM(METAL) NEW
<b>Discount Schedule</b>	CS2
<b>GTIN</b>	3389110888973
<b>Returnability</b>	Yes
<b>Country of origin</b>	FR

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	1.38 in (3.500 cm)
<b>Package 1 Width</b>	2.09 in (5.300 cm)
<b>Package 1 Length</b>	2.13 in (5.400 cm)
<b>Package 1 Weight</b>	1.55 oz (44.000 g)
<b>Unit Type of Package 2</b>	S03
<b>Number of Units in Package 2</b>	250
<b>Package 2 Height</b>	11.81 in (30.000 cm)
<b>Package 2 Width</b>	11.81 in (30.000 cm)
<b>Package 2 Length</b>	15.75 in (40.000 cm)
<b>Package 2 Weight</b>	25.34 lb(US) (11.495 kg)
<b>Unit Type of Package 3</b>	P06
<b>Number of Units in Package 3</b>	2000
<b>Package 3 Height</b>	30.31 in (77.000 cm)
<b>Package 3 Width</b>	31.50 in (80.000 cm)

<b>Package 3 Length</b>	23.62 in (60.000 cm)
<b>Package 3 Weight</b>	229.73 lb(US) (104.204 kg)

## Offer Sustainability

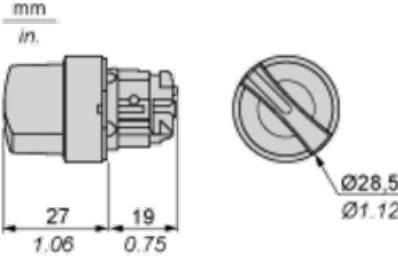
<b>Sustainable offer status</b>	Green Premium product
<b>California proposition 65</b>	WARNING: This product can expose you to chemicals including: Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>
<b>REACH Regulation</b>	<a href="#">REACH Declaration</a>
<b>REACH free of SVHC</b>	Yes
<b>EU RoHS Directive</b>	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
<b>Toxic heavy metal free</b>	Yes
<b>Mercury free</b>	Yes
<b>China RoHS Regulation</b>	<a href="#">China RoHS declaration</a>
<b>RoHS exemption information</b>	<a href="#">Yes</a>
<b>Environmental Disclosure</b>	<a href="#">Product Environmental Profile</a>
<b>Circularity Profile</b>	<a href="#">End of Life Information</a>

## Contractual warranty

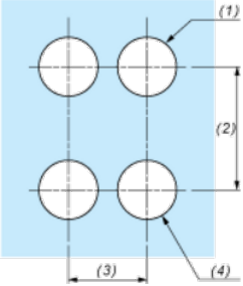
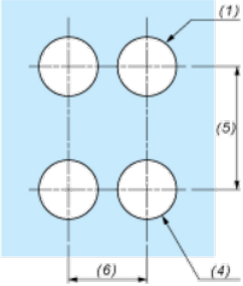
<b>Warranty</b>	18 months
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Dimensions

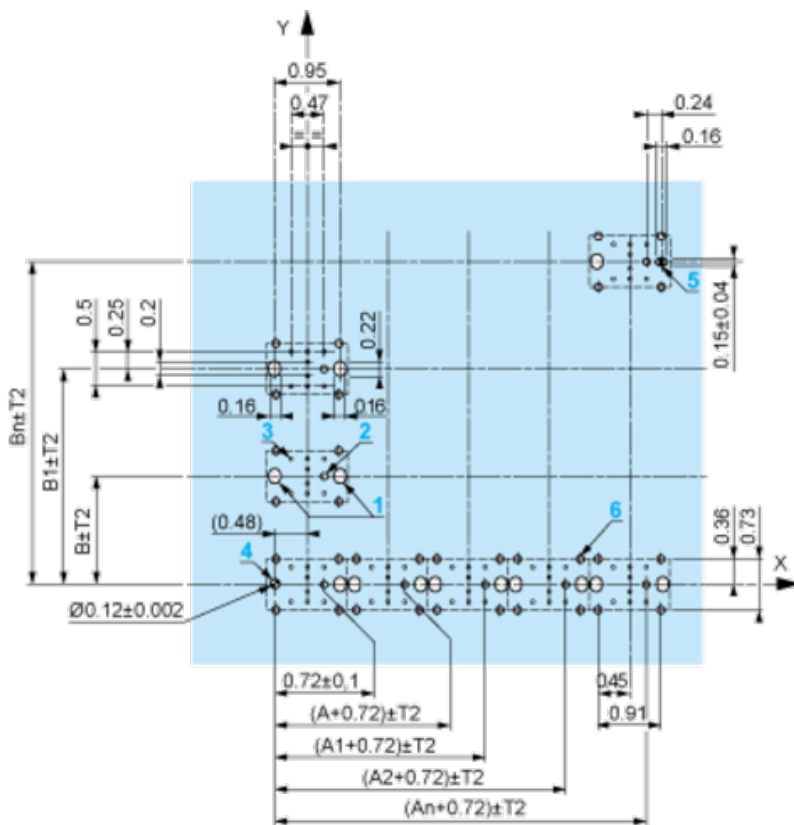
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**Panel Cut-out for Pushbuttons, Switches and Pilot Lights (Finished Holes, Ready for Installation)**

Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board	Connection by Faston Connectors
	
<p>(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 <sup>+0.4</sup> / 0.88 in. <sup>+0.016</sup>)                  (5) 45 mm min. / 1.78 in. min.                  (6) 32 mm min. / 1.26 in. min.</p>	





A: 1.18 in. min.

B: 1.57 in. min.

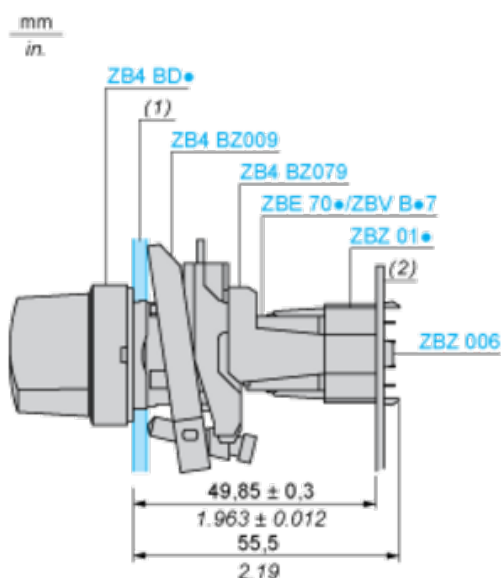
### General Tolerances of the Panel and Printed Circuit Board

The cumulative tolerance must not exceed 0.3 mm / 0.012 in:  $T1 + T2 = 0.3 \text{ mm max.}$

### Installation Precautions

- Minimum thickness of circuit board: 1.6 mm / 0.06 in.
- Cut-out diameter: 22.4 mm  $\pm$  0.1 / 0.88 in.  $\pm$  0.004
- Orientation of body/fixing collar ZB4 BZ009:  $\pm 2^\circ 30'$  (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•

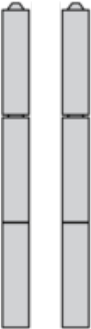
- 1 2 elongated holes for ZBZ 006 screw access
- 2 1 hole  $\varnothing$  2.4 mm  $\pm$  0.05 / 0.09 in.  $\pm$  0.002 for centring adapter ZBZ 01•
- 3 8  $\times$   $\varnothing$  1.2 mm / 0.05 in. holes
- 4 1 hole  $\varnothing$  2.9 mm  $\pm$  0.05 / 0.11 in.  $\pm$  0.002, for aligning the printed 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  $\varnothing$  2.4 mm / 0.09 in. for clipping in adapter ZBZ 01•

Dimensions An + 18.1 relate to the  $\varnothing 2.4 \text{ mm} \pm 0.05 / 0.09 \text{ in.} \pm 0.002$  holes for centring adapter ZBZ 01•.



**Electrical Composition Corresponding to Code C3**

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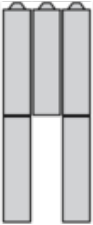
**Electrical Composition Corresponding to Code C4**

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**Electrical Composition Corresponding to Code C5**

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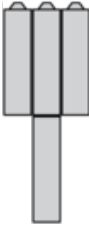
**Electrical Composition Corresponding to Code C6**

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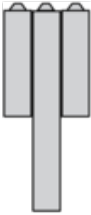
**Electrical Composition Corresponding to Code C7**

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**Electrical Composition Corresponding to Code C8**

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**Electrical Composition Corresponding to Codes C9, C11, SF1 and SR1**

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**Legend**

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Single contact



Double contact



Light block



Possible location





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

**Position 315°**



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

**Position 0°**



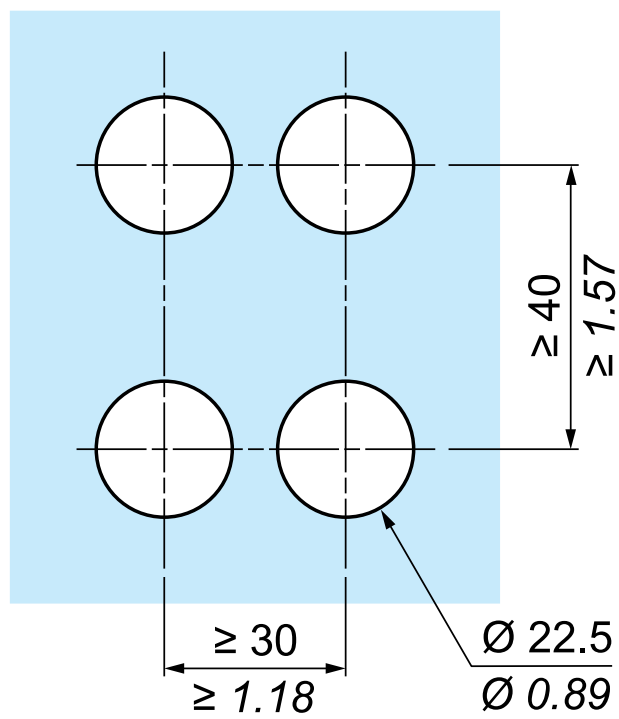
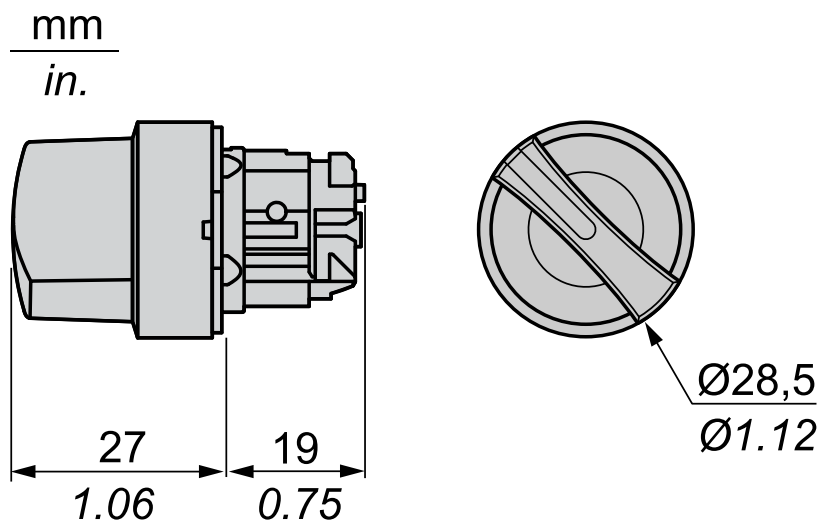
<b>Push</b>	Position	Top			
		Bottom			
	Location		Left	Centre	Right
	State		0	0	0
<b>Contacts</b>	N/O		open	open	open
	N/C		closed	closed	closed

**Position 45°**



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

Dimensions



Recommended replacement(s)