

# Product datasheet

Specifications



Push button head, metal, flush, green, Ø22, spring return, marked START

Local distributor code: 23708062 ZB4BA333

## Main

|                               |                                      |
|-------------------------------|--------------------------------------|
| Range of product              | Harmony XB4                          |
| Product or component type     | Head for non-illuminated push-button |
| Device short name             | ZB4                                  |
| Bezel material                | Chromium plated metal                |
| Mounting diameter             | 22 mm                                |
| Sale per indivisible quantity | 1                                    |
| Head type                     | Standard                             |
| Shape of signaling unit head  | Round                                |
| Type of operator              | spring return                        |
| Operator profile              | Green flush, START (white)           |

## Complementary

|                             |   |
|-----------------------------|---|
| CAD overall width           | 29 mm   |
| CAD overall height          | 29 mm   |
| CAD overall depth           | 28 mm   |
| Mechanical durability       | 10000000 cycles   |
| Electrical composition code | C1 for <9 contacts using single blocks in front mounting<br>C2 for <9 contacts using single and double blocks in front mounting<br>C11 for <3 contacts using single blocks in front mounting<br>C15 for <1 contacts using single blocks in front mounting |
| 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<br>IP67<br>IP69<br>IP69K |
| NEMA degree of protection             | NEMA 13   |

NEMA 4X

|                                |  |
|--------------------------------|--|
| <b>IK degree of protection</b> | IK06 conforming to IEC 50102   |
| <b>Standards</b>               | EN/IEC 60947-5-4<br>CSA C22.2 No 14<br>EN/IEC 60947-5-5<br>EN/IEC 60947-1<br>EN/IEC 60947-5-1<br>UL 508<br>JIS C8201-5-1<br>JIS C8201-1  |
| <b>Product certifications</b>  | UL listed<br>BV<br>LROS (Lloyds register of shipping)<br>CSA<br>GL<br>DNV  |
| <b>Vibration resistance</b>    | 5 gn (f= 2...500 Hz) conforming to IEC 60068-2-6   |
| <b>Shock resistance</b>        | 30 gn (duration = 18 ms) for half sine wave acceleration conforming to IEC 60068-2-27<br>50 gn (duration = 11 ms) for half sine wave acceleration conforming to IEC 60068-2-27 |

## Packing Units

|                                     |           |
|-------------------------------------|-----------|
| <b>Unit Type of Package 1</b>       | PCE       |
| <b>Number of Units in Package 1</b> | 1         |
| <b>Package 1 Weight</b>             | 28.0 g    |
| <b>Package 1 Height</b>             | 3.5 cm    |
| <b>Package 1 width</b>              | 4.6 cm    |
| <b>Package 1 Length</b>             | 5.2 cm    |
| <b>Unit Type of Package 2</b>       | P06       |
| <b>Number of Units in Package 2</b> | 1200      |
| <b>Package 2 Weight</b>             | 47.804 kg |
| <b>Package 2 Height</b>             | 77 cm     |
| <b>Package 2 width</b>              | 80 cm     |
| <b>Package 2 Length</b>             | 60 cm     |
| <b>Unit Type of Package 3</b>       | S03       |
| <b>Number of Units in Package 3</b> | 150       |
| <b>Package 3 Weight</b>             | 4.716 kg  |
| <b>Package 3 Height</b>             | 30 cm     |
| <b>Package 3 width</b>              | 30 cm     |
| <b>Package 3 Length</b>             | 40 cm     |

## Offer Sustainability

|                                   |   |
|-----------------------------------|---|
| <b>Sustainable offer status</b>   | Green Premium product   |
| <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)<br><a href="#">EU RoHS Declaration</a> |
| <b>Toxic heavy metal free</b>     | Yes   |
| <b>Mercury free</b>               | Yes   |
| <b>RoHS exemption information</b> | <a href="#">Yes</a>   |
| <b>China RoHS Regulation</b>      | <a href="#">China RoHS declaration</a>  |
| <b>Environmental Disclosure</b>   | <a href="#">Product Environmental Profile</a>   |

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### Contractual warranty

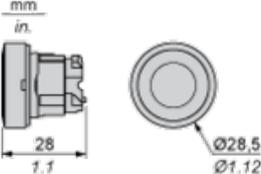
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|          |           |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|

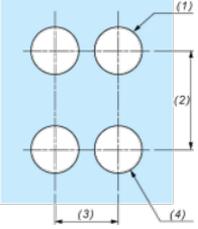
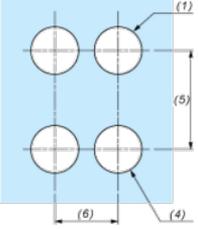
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**Dimensions**

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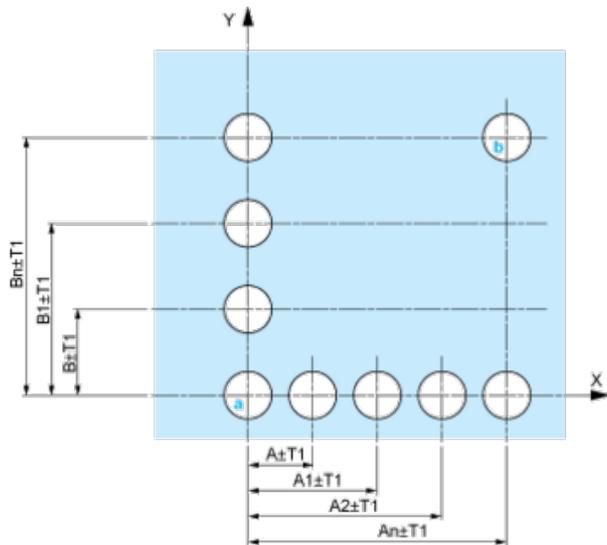


**Panel Cut-out for Pushbuttons, Switches and Pilot Lights (Finished Holes, Ready for Installation)**

| 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<br/>                 (2) 40 mm min. / 1.57 in. min.<br/>                 (3) 30 mm min. / 1.18 in. min.<br/>                 (4) <math>\varnothing</math> 22.5 mm / 0.89 in. recommended (<math>\varnothing</math> 22.3 mm <math>_0^{+0.4}</math> / 0.88 in. <math>_0^{+0.016}</math>)<br/>                 (5) 45 mm min. / 1.78 in. min.<br/>                 (6) 32 mm min. / 1.26 in. min.</p> |  |

**Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection**

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

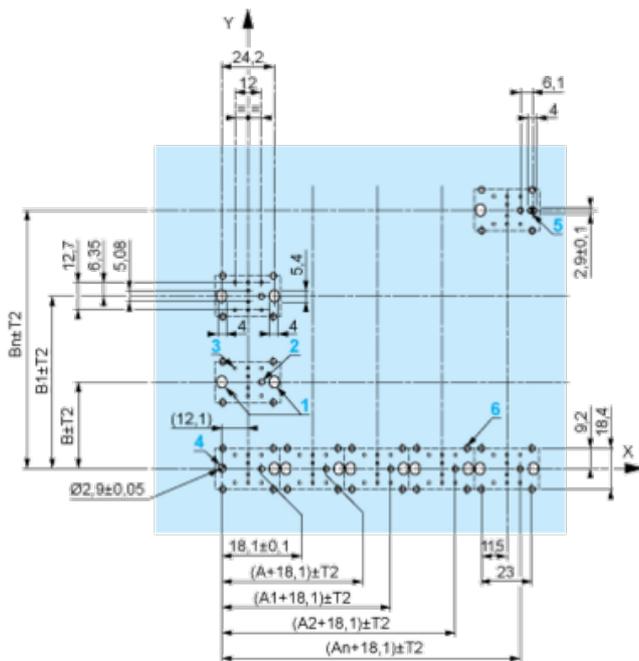


**A:** 30 mm min. / 1.18 in. min.

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

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

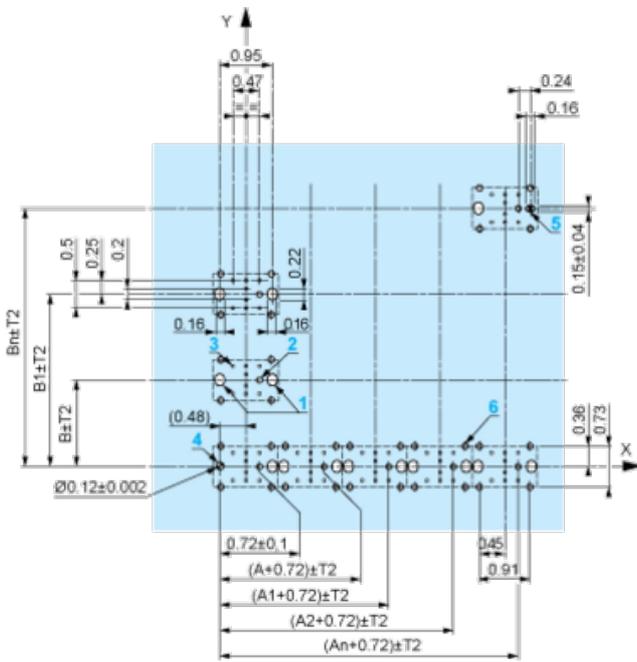
Dimensions in mm



**A:** 30 mm min.

**B:** 40 mm min.

Dimensions in in.



A: 1.18 in. min.

B: 1.57 in. min.

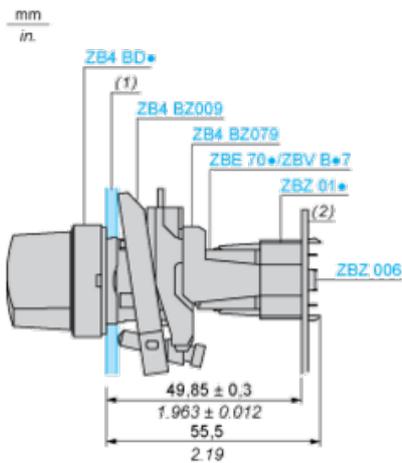
### General Tolerances of the Panel and Printed Circuit Board

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

### 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 mm  $\pm$  0.05 / 0.09 in.  $\pm$  0.002 holes for centring adapter ZBZ 01\*.

**Electrical Composition Corresponding to Code C1**

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**Electrical Composition Corresponding to Code C2**

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

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**Electrical Composition Corresponding to Code C15**

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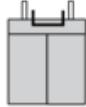
1 N/O



1 N/C



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



**Legend**

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Single contact



Double contact



Light block



Possible location

