

# Product datasheet

Specifications



Head for illuminated selector switch, Harmony XB4, metal, white handle, 22mm, universal LED, 2 positions, stay put

Local distributor code: 237117410 ZB4BK1213

**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**  
EAN Code : 3389110890426

## 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              | White standard handle                |
| Operator position information | 2 positions 90°                      |

## 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<br>M6 for <2 contacts using single blocks in front mounting with integral LED and transformer<br>M10 for <2 contacts using single blocks in front mounting with integral LED<br>M4 for <4 contacts using single and double blocks in front mounting with integral LED |
| Device presentation                | Basic element                                                                                                                                                                                                                                                                                                                                    |

## Environment

|                      |    |
|----------------------|----|
| Protective treatment | TH |
|----------------------|----|

|                                              |                                                                                                                                                                                |
|----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Ambient air temperature for storage</b>   | -40...70 °C                                                                                                                                                                    |
| <b>Ambient air temperature for operation</b> | -40...70 °C                                                                                                                                                                    |
| <b>Overvoltage category</b>                  | Class I conforming to IEC 60536                                                                                                                                                |
| <b>IP degree of protection</b>               | IP66 conforming to IEC 60529<br>IP67<br>IP69<br>IP69K                                                                                                                          |
| <b>NEMA degree of protection</b>             | NEMA 13<br>NEMA 4X                                                                                                                                                             |
| <b>IK degree of protection</b>               | IK04 conforming to IEC 50102                                                                                                                                                   |
| <b>Standards</b>                             | EN/IEC 60947-5-1<br>JIS C8201-5-1<br>UL 508<br>EN/IEC 60947-5-5<br>EN/IEC 60947-1<br>CSA C22.2 No 14<br>EN/IEC 60947-5-4<br>JIS C8201-1                                        |
| <b>Product certifications</b>                | UL listed<br>BV<br>DNV<br>GL<br>LROS (Lloyds register of shipping)<br>CSA                                                                                                      |
| <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 Height</b>             | 3.500 cm  |
| <b>Package 1 Width</b>              | 5.300 cm  |
| <b>Package 1 Length</b>             | 5.400 cm  |
| <b>Package 1 Weight</b>             | 41.000 g  |
| <b>Unit Type of Package 2</b>       | S03       |
| <b>Number of Units in Package 2</b> | 250       |
| <b>Package 2 Height</b>             | 30.000 cm |
| <b>Package 2 Width</b>              | 30.000 cm |
| <b>Package 2 Length</b>             | 40.000 cm |
| <b>Package 2 Weight</b>             | 10.889 kg |
| <b>Unit Type of Package 3</b>       | P06       |
| <b>Number of Units in Package 3</b> | 2000      |
| <b>Package 3 Height</b>             | 77.000 cm |
| <b>Package 3 Width</b>              | 80.000 cm |
| <b>Package 3 Length</b>             | 60.000 cm |
| <b>Package 3 Weight</b>             | 97.004 kg |

## Offer Sustainability

|                                 |                                   |
|---------------------------------|-----------------------------------|
| <b>Sustainable offer status</b> | Green Premium product             |
| <b>REACH Regulation</b>         | <a href="#">REACH Declaration</a> |

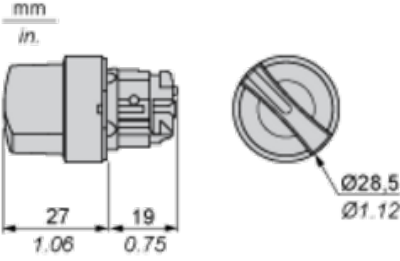
|                                   |                                                                                                   |
|-----------------------------------|---------------------------------------------------------------------------------------------------|
| <b>REACH free of SVHC</b>         | 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>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**

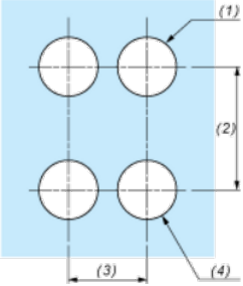
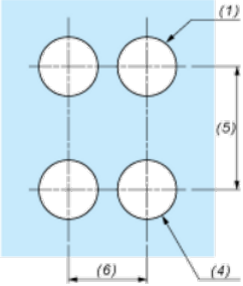
|                 |           |
|-----------------|-----------|
| <b>Warranty</b> | 18 months |
|-----------------|-----------|

**Dimensions**

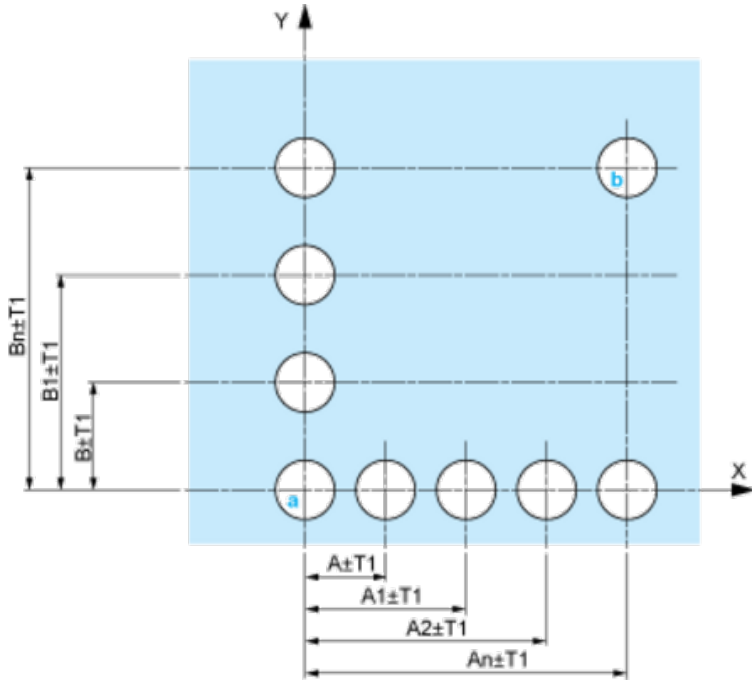
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**Panel Cut-out for Pushbuttons, Switches and Pilot Lights (Finished Holes, Ready for Installation)**

| 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>^{+0.4}_0</math> / 0.88 in. <math>^{+0.016}_0</math>)<br/>                 (5) 45 mm min. / 1.78 in. min.<br/>                 (6) 32 mm min. / 1.26 in. min.</p> |                                                                                    |

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

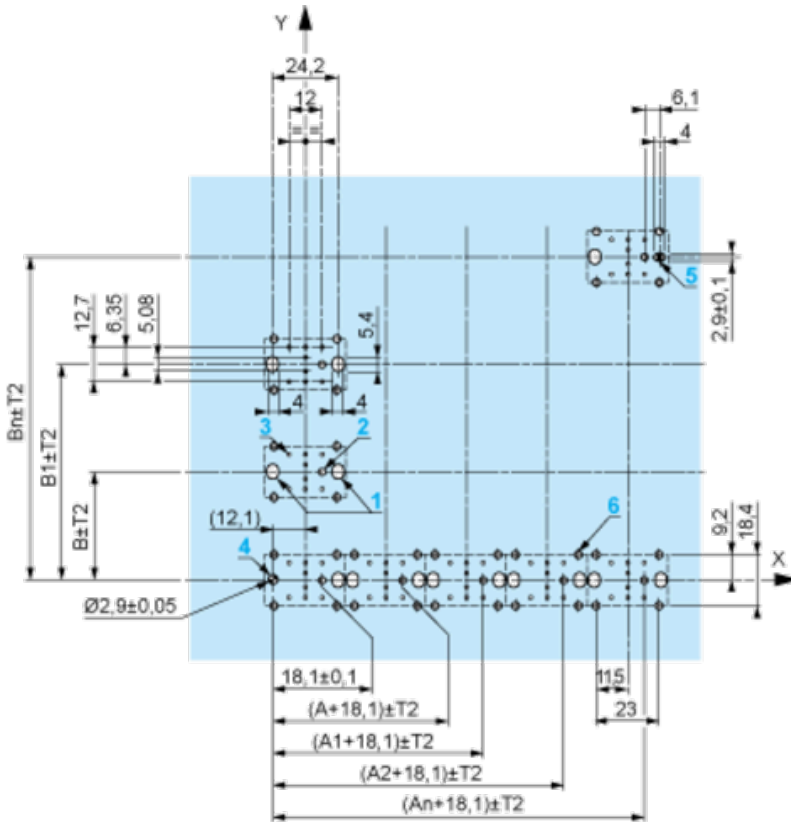


A: 30 mm min. / 1.18 in. min.

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

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

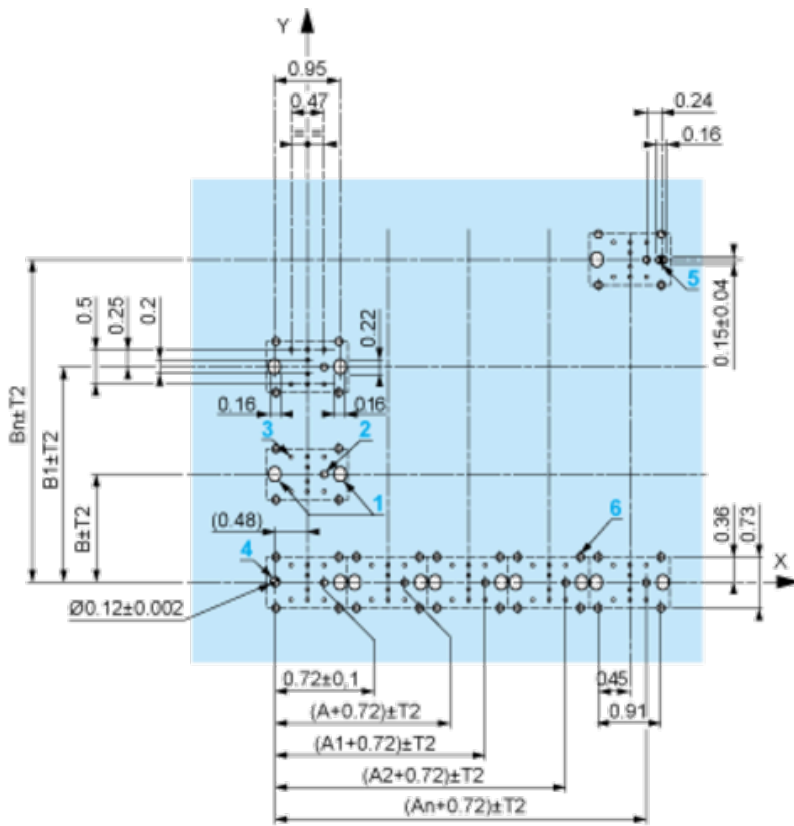
Dimensions in mm



A: 30 mm min.

B: 40 mm min.

Dimensions in in.



A: 1.18 in. min.

B: 1.57 in. min.

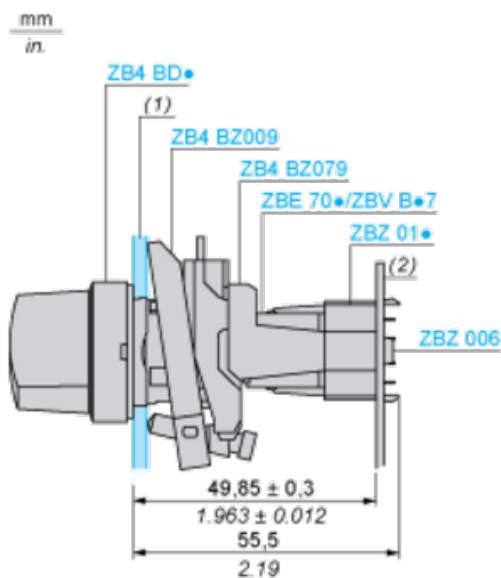
### General Tolerances of the Panel and Printed Circuit Board

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•

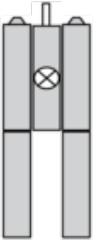
- 1 2 elongated holes for ZBZ 006 screw access
- 2 1 hole  $\varnothing$  2.4 mm  $\pm$  0.05 / 0.09 in.  $\pm$  0.002 for centring adapter ZBZ 01•
- 3 8  $\times$   $\varnothing$  1.2 mm / 0.05 in. holes
- 4 1 hole  $\varnothing$  2.9 mm  $\pm$  0.05 / 0.11 in.  $\pm$  0.002, for aligning the printed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



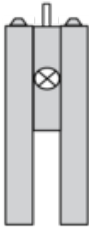
**Electrical Composition Corresponding to Code M3**

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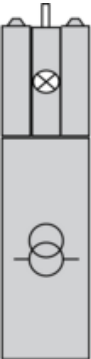
**Electrical Composition Corresponding to Code M4**

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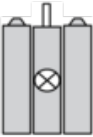
**Electrical Composition Corresponding to Codes M6 and P2**

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

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**Legend**

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Single contact



Double contact



Light block



Possible location



**Sequence of Contacts Fitted to 2-position Selector Switch Body**

**Position 315°**



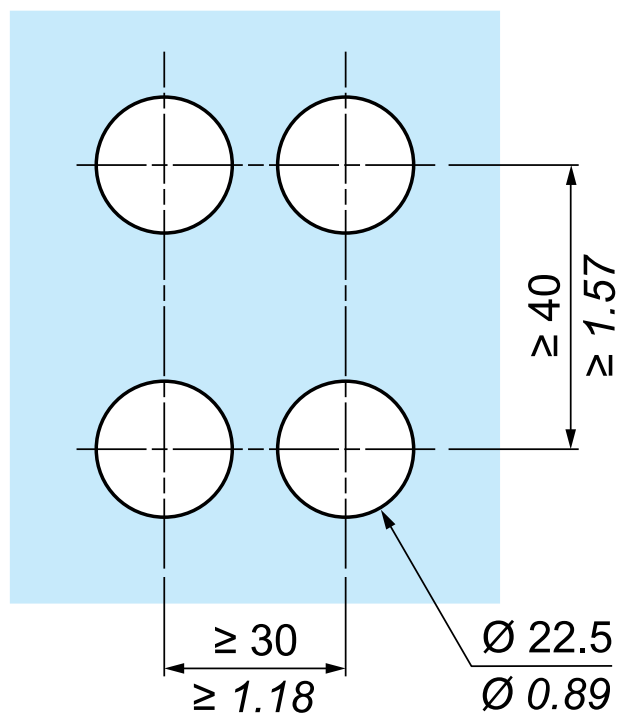
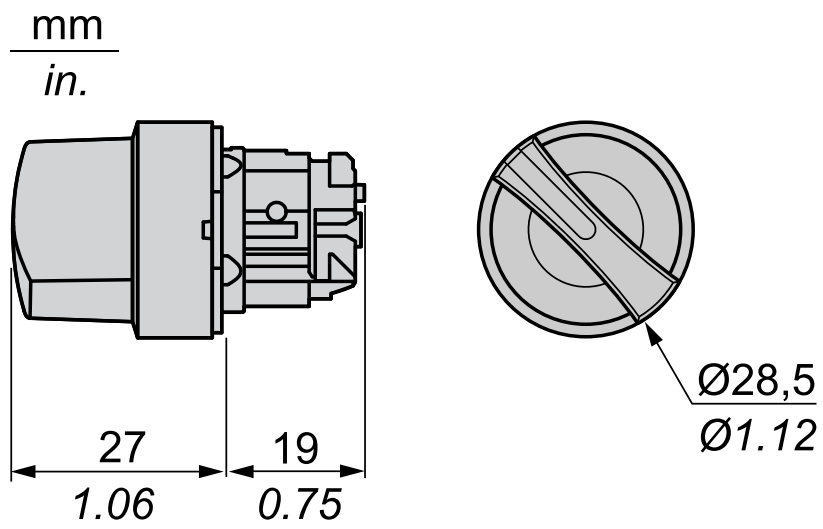
|                 |          |        |        |        |       |
|-----------------|----------|--------|--------|--------|-------|
| <b>Push</b>     | Position | Top    |        |        |       |
|                 |          | Bottom |        |        |       |
|                 | Location |      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

**Position 45°**



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

Dimensions



Recommended replacement(s)