



### 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             | 0.87 in (22 mm)                      |
| Sale per indivisible quantity | 1                                    |
| Head type                     | Standard                             |
| Shape of signaling unit head  | Round                                |
| Type of operator              | Push-push                            |
| Operator profile              | Black flush unmarked                 |

### Complementary

|                             |   |
|-----------------------------|---|
| CAD overall width           | 1.14 in (29 mm)   |
| CAD overall height          | 1.14 in (29 mm)   |
| CAD overall depth           | 1.1 in (28 mm)  |
| Mechanical durability       | 2000000 cycles  |
| Electrical composition code | C15 1 contacts using single blocks in front mounting<br>C15 1 contacts using single blocks in front mounting<br>C11 for 3 contacts using single blocks in front mounting<br>C9 for 3 contacts using single blocks in front mounting |

### Environment

|                                       |  |
|---------------------------------------|--|
| protective treatment                  | TH   |
| ambient air temperature for storage   | -40...158 °F (-40...70 °C)   |
| ambient air temperature for operation | -40...158 °F (-40...70 °C)   |
| overvoltage category                  | Class I conforming to IEC 60536  |
| IP degree of protection               | IP67<br>IP66 conforming to IEC 60529<br>IP69K<br>IP69  |
| NEMA degree of protection             | NEMA 13<br>NEMA 4X   |
| IK degree of protection               | IK06 conforming to IEC 50102   |
| standards                             | EN/IEC 60947-1<br>EN/IEC 60947-5-1<br>EN/IEC 60947-5-4<br>EN/IEC 60947-5-5<br>JIS C 4520<br>UL 508<br>CSA C22.2 No 14  |
| product certifications                | BV<br>CSA<br>DNV<br>GL<br>LROS (Lloyds register of shipping)<br>RINA<br>UL listed  |
| vibration resistance                  | 5 gn (f = 2...500 Hz) conforming to IEC 60068-2-6  |
| shock resistance                      | 30 gn (duration = 18 ms) half sine wave acceleration conforming to IEC 60068-2-27<br>50 gn (duration = 11 ms) half sine wave acceleration conforming to IEC 60068-2-27 |

### Offer Sustainability

WARNING: This product can expose you to chemicals including:

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Nickel compounds, which is known to the State of California to cause cancer, and

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Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm.

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For more information go to [www.p65warnings.ca.gov](http://www.p65warnings.ca.gov)

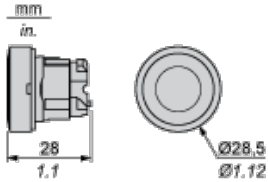
For more information go to [www.p65warnings.ca.gov](http://www.p65warnings.ca.gov)

### Contractual warranty

Warranty period

18 months

### 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 |
|---|---------------------------------|
|   |                                 |
| <p>(1) Diameter on finished panel or support</p> <p>(2) 40 mm min. / 1.57 in. min.</p> <p>(3) 30 mm min. / 1.18 in. min.</p> <p>(4) <math>\varnothing 22.5</math> mm / 0.89 in. recommended (<math>\varnothing 22.3</math> mm <math>^{+0.4}_0</math> / 0.88 in. <math>^{+0.016}_0</math>)</p> <p>(5) 45 mm min. / 1.78 in. min.</p> <p>(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)**

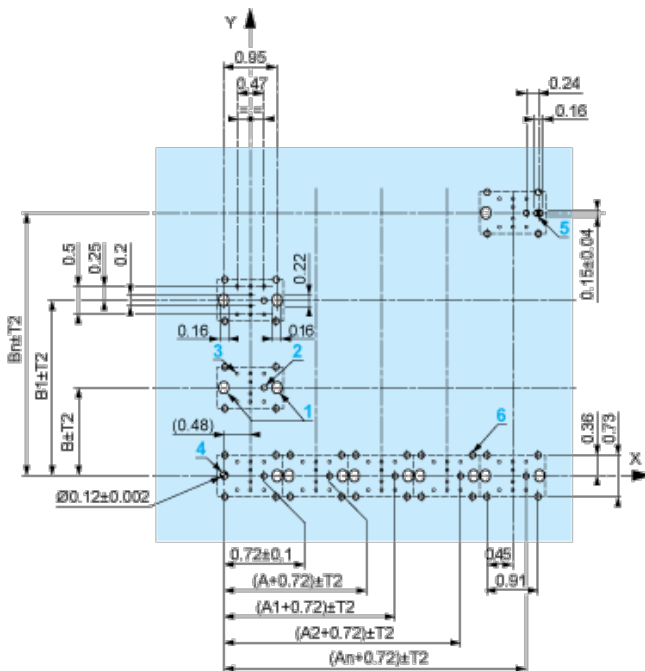
Dimensions in mm



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**.

$\frac{\text{mm}}{\text{in.}}$



(1) Panel

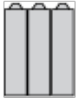
(2) Printed circuit board

### Mounting of Adapter (Socket) ZBZ 01•

- | 1 2 elongated holes for ZBZ 006 screw access
- | 2 1 hole  $\text{\O}$  2.4 mm  $\pm$  0.05 / 0.09 in.  $\pm$  0.002 for centring adapter ZBZ 01•
- | 3 8  $\times$   $\text{\O}$  1.2 mm / 0.05 in. holes
- | 4 1 hole  $\text{\O}$  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  $\text{\O}$  2.4 mm / 0.09 in. for clipping in adapter ZBZ 01•

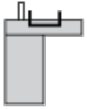
Dimensions An + 18.1 relate to the  $\varnothing 2.4 \text{ mm} \pm 0.05 / 0.09 \text{ in.} \pm 0.002$  holes for centring adapter ZBZ 01•.

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



## Electrical Composition Corresponding to Code C15

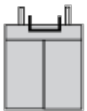
1 N/O



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

