# Product data sheet
## Characteristics

# ZB4BA48
## Harmony XB4, Illuminated push button head, metal, flush, red, Ø22, spring return, integral LED, for insertion legend, unmarked

Product availability : Stock - Normally stocked in distribution facility

Green Premium™

Price* : 16.00 USD



## Main

| | |
|---|---|
| Range of product | Harmony XB4 |
| Product or Component Type | Head for illuminated push-button |
| Device short name | ZB4 |
| Product Compatibility | Integral LED |
| Bezel material | Chromium plated metal |
| Head type | Standard |
| Mounting diameter | 0.87 in (22 mm) |
| Sale per indivisible quantity | 1 |
| Shape of signaling unit head | Round |
| Type of operator | spring return |
| Operator profile | Red flush, unmarked |
| Operator additional information | For insertion of legend |

## Complementary

| | |
|---|---|
| CAD overall width | 1.14 in (29 mm) |
| CAD overall height | 1.14 in (29 mm) |
| CAD overall depth | 1.18 in (30 mm) |
| Product Weight | 0.06 lb(US) (0.028 kg) |
| Resistance to high pressure washer | 1015.26 psi (7000000 Pa) 131 °F (55 °C) 0.1 m |
| Mechanical durability | 10000000 cycles |
| Electrical composition code | M1 6 single front mounting integral LED<br>M2 6 single and double front mounting integral LED<br>M6 2 single front mounting integral LED and transformer<br>M10 2 single front mounting integral LED<br>C3 6 single front mounting |

* Price is “List Price” and may be subject to a trade discount – check with your local distributor or retailer for actual price.

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

| | |
|---|---|
| | C4 6 single and double front mounting<br>C14 2 single front mounting |
| Device presentation | Basic element |

## 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 IEC 60536 |
| IP degree of protection | IP66 IEC 60529<br>IP67<br>IP69<br>IP69K |
| NEMA degree of protection | NEMA 13<br>NEMA 4X |
| IK degree of protection | IK06 EN 50102 |
| Standards | 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 60947-5-1<br>EN/IEC 60947-5-4<br>JIS C8201-1 |
| Product Certifications | LROS (Lloyds register of shipping)<br>GL<br>DNV<br>UL Listed<br>CSA<br>BV |
| Vibration resistance | 5 gn 2…500 Hz)IEC 60068-2-6 |
| Shock resistance | 30 gn 18 ms) half sine wave acceleration IEC 60068-2-27<br>50 gn 11 ms) half sine wave acceleration IEC 60068-2-27 |

## Ordering and shipping details

| | |
|---|---|
| Category | 22468 - PUSHBUTTONS,22MM(METAL) NEW |
| Discount Schedule | CS2 |
| GTIN | 3389110887723 |
| Nbr. of units in pkg. | 1 |
| Package weight(Lbs) | 1.02 oz (29 g) |
| Returnability | Yes |
| Country of origin | FR |

## Packing Units

| | |
|---|---|
| Unit Type of Package 1 | PCE |
| Package 1 Height | 1.34 in (3.4 cm) |
| Package 1 width | 2.09 in (5.3 cm) |
| Package 1 Length | 2.20 in (5.6 cm) |
| Unit Type of Package 2 | BB1 |
| Number of Units in Package 2 | 5 |
| Package 2 Weight | 5.19 oz (147 g) |
| Package 2 Height | 1.34 in (3.4 cm) |
| Package 2 width | 2.20 in (5.6 cm) |
| Package 2 Length | 10.43 in (26.5 cm) |
| Unit Type of Package 3 | S03 |
| Number of Units in Package 3 | 100 |
| Package 3 Weight | 7.60 lb(US) (3.446 kg) |

| | |
|---|---|
| Package 3 Height | 11.81 in (30 cm) |
| Package 3 width | 11.81 in (30 cm) |
| Package 3 Length | 15.75 in (40 cm) |

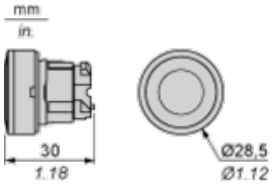
## Offer Sustainability

| | |
|---|---|
| Sustainable offer status | Green Premium product |
| California proposition 65 | 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 www.P65Warnings.ca.gov |
| REACh Regulation | REACh Declaration |
| REACh free of SVHC | Yes |
| EU RoHS Directive | Pro-active compliance (Product out of EU RoHS legal scope)<br>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

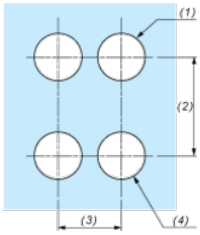
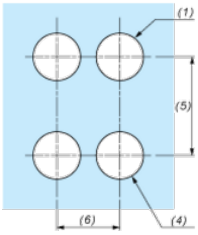
| | |
|---|---|
| Warranty | 18 months |

## Dimensions



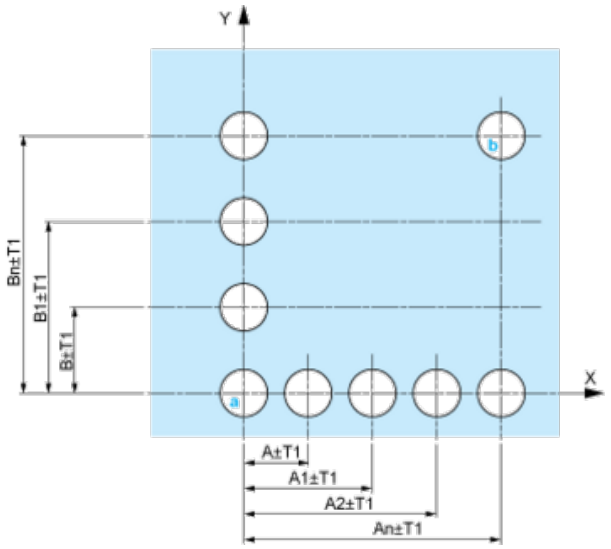
# ZB4BA48

## 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 |
|---|---|
|  |  |
| (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) Ø 22.5 mm / 0.89 in. recommended (Ø 22.3 mm $_{0}^{+0.4}$ / 0.88 in. $_{0}^{+0.016}$)<br>(5) 45 mm min. / 1.78 in. min.<br>(6) 32 mm min. / 1.26 in. min. | |

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

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

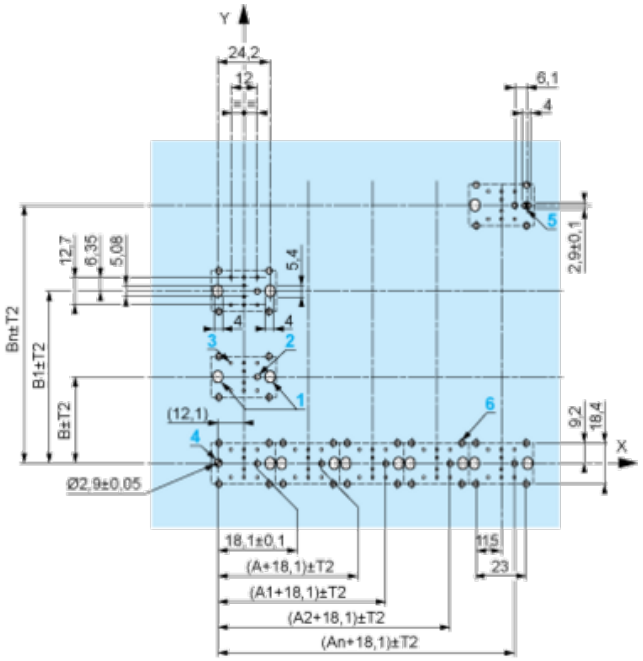



A: 30 mm min. / 1.18 in. min.

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

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

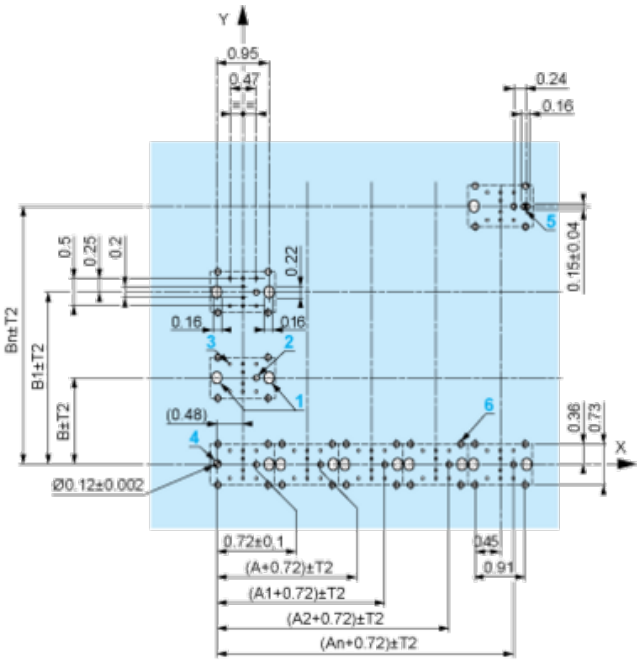
Dimensions in mm




A: 30 mm min.

B: 40 mm min.

Dimensions in in.




A: 1.18 in. min.

B: 1.57 in. min.

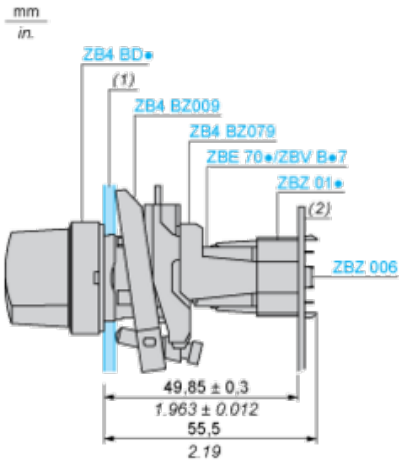
## General Tolerances of the Panel and Printed Circuit Board

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

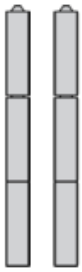
(2) Printed circuit board

## 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 Code C3



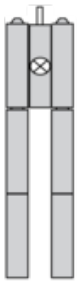
## Electrical Composition Corresponding to Code C4



## Electrical Composition Corresponding to Codes C14, SF2 and SR2



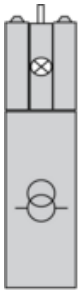
## Electrical Composition Corresponding to Codes M1 and M7



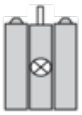
## Electrical Composition Corresponding to Codes M2 and M8



## Electrical Composition Corresponding to Codes M6 and P2



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



## Legend

Single contact



Double contact



Light block



Possible location

