



Main

| | |
|---------------------------------|--------------------------------------|
| Range of product | Harmony XB4 |
| Product or component type | Head for non-illuminated push-button |
| Device short name | ZB4 |
| Product compatibility | Not compatible with legend holder |
| 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 projecting, unmarked |
| Operator additional information | Clear boot |

Complementary

| | |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CAD overall width | 30 Mm |
| CAD overall height | 30 Mm |
| CAD overall depth | 35 Mm |
| Mechanical durability | 10000000 Cycles |
| Electrical composition code | C1 for <9 contacts using single blocks in front mounting C2 for <9 contacts using single and double blocks in front mounting C11 for <3 contacts using single blocks in front mounting 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 IP67 |
| NEMA degree of protection | NEMA 13 NEMA 4X |
| IK degree of protection | IK06 conforming to IEC 50102 |

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

Packing Units

| | |
|------------------------------|-----------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 4.500 Cm |
| Package 1 Width | 3.400 Cm |
| Package 1 Length | 5.400 Cm |
| Package 1 Weight | 32 G |
| Unit Type of Package 2 | S03 |
| Number of Units in Package 2 | 300 |
| Package 2 Height | 30.000 Cm |
| Package 2 Width | 30.000 Cm |
| Package 2 Length | 40.000 Cm |
| Package 2 Weight | 10.107 Kg |
| Unit Type of Package 3 | P06 |
| Number of Units in Package 3 | 2400 |
| Package 3 Height | 77.000 Cm |
| Package 3 Width | 80.000 Cm |
| Package 3 Length | 60.000 Cm |
| Package 3 Weight | 91.004 Kg |

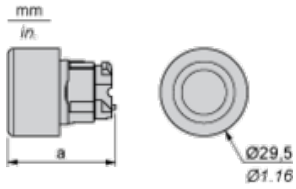
Offer Sustainability

| | |
|----------------------------|------------------------------------------------------------------------------------------------|
| Sustainable offer status | Green Premium product |
| REACH Regulation | REACH Declaration |
| REACH free of SVHC | Yes |
| EU RoHS Directive | Pro-active compliance (Product out of EU RoHS legal scope) 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



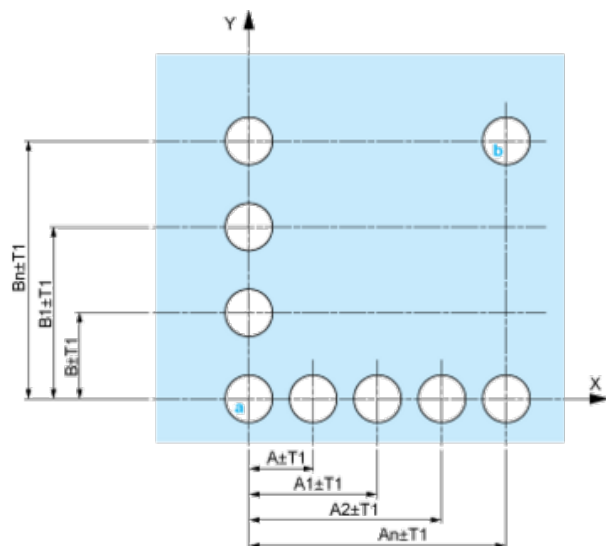
| | a in mm | a in in. |
|----------|---------|----------|
| ZB4BP•• | 36.5 | 1.44 |
| ZB4BP•S | 33 | 1.30 |
| ZB4BP•83 | 32 | 1.26 |
| ZB4BP• | 35 | 1.38 |

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 Pushbutton 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) $\varnothing 22.5$ mm / 0.89 in. recommended ($\varnothing 22.3$ mm $_0^{+0.4}$ / 0.88 in. $_0^{+0.016}$) (5) 45 mm min. / 1.78 in. min. (6) 32 mm min. / 1.26 in. min.</p> | |

Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

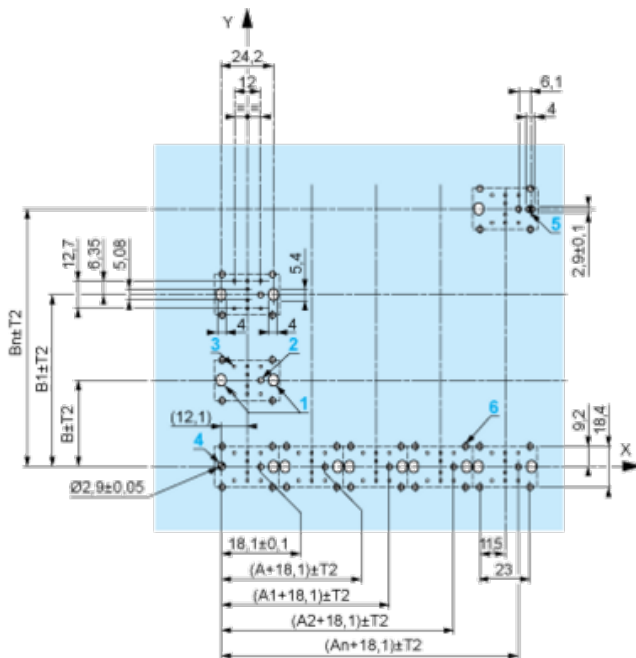
Panel Cut-outs (Viewed from Installer's Side)



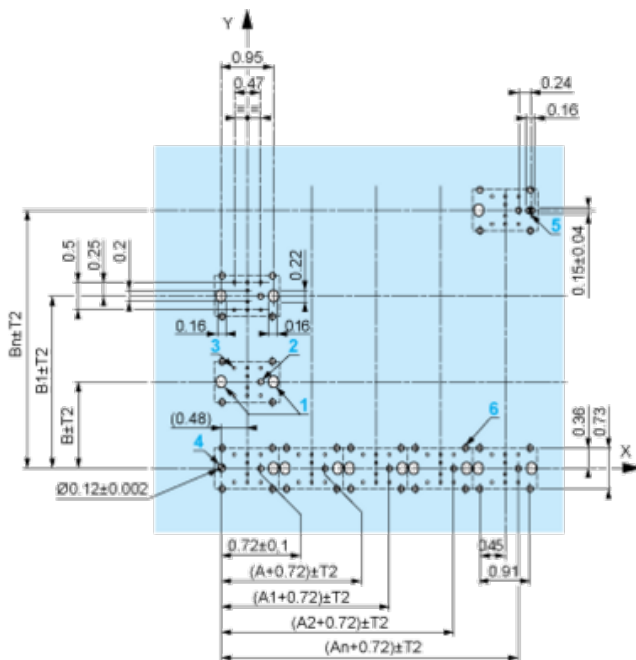
A: 30 mm min. / 1.18 in. min.
 B: 40 mm min. / 1.57 in. min.

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.

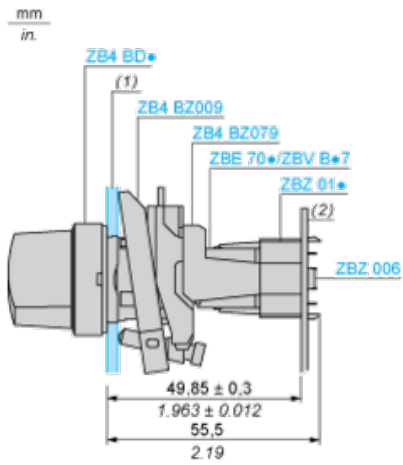
General Tolerances of the Panel and Printed Circuit Board

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

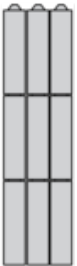
(2) Printed circuit board

Mounting of Adapter (Socket) ZBZ 01*

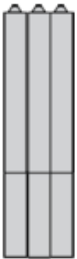
- 1 2 elongated holes for ZBZ 006 screw access
- 2 1 hole $\varnothing 2.4 \text{ mm} \pm 0.05 / 0.09 \text{ in.} \pm 0.002$ for centring adapter ZBZ 01*
- 3 8 × $\varnothing 1.2 \text{ mm} / 0.05 \text{ in.}$ holes
- 4 1 hole $\varnothing 2.9 \text{ mm} \pm 0.05 / 0.11 \text{ in.} \pm 0.002$, for aligning 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 $\varnothing 2.4 \text{ mm} / 0.09 \text{ in.}$ 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 C1



Electrical Composition Corresponding to Code C2



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



Electrical Composition Corresponding to Code C15

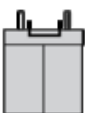
1 N/O



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



Product Life Status : Commercialised