# Product data sheet

Specifications



## Head for key selector switch, Harmony XB5, Ø22 mm 3 position spring return Dom 8D1

ZB5AG03D

**Product availability : Stock - Normally stocked in distribution facility**

**Price* : 90.00 USD**

## Main

| | |
|---|---|
| **Range of Product** | Harmony XB5 |
| **Product or Component Type** | Head for key selector switch |
| **Device short name** | ZB5 |
| **Bezel material** | Dark grey plastic |
| **Mounting diameter** | 0.87 in (22 mm) |
| **Head type** | Standard |
| **Sale per indivisible quantity** | 1 |
| **Shape of signaling unit head** | Round |
| **Type of operator** | stay put |
| **Operator profile** | Black key switch |
| **Operator position information** | 3 positions +/- 45° |
| **Type of keylock** | Dom 8D1 |
| **Key withdrawal position** | Left and center |

## Complementary

| | |
|---|---|
| **CAD overall width** | 1.14 in (29 mm) |
| **CAD overall height** | 1.14 in (29 mm) |
| **CAD overall depth** | 2.83 in (72 mm) |
| **Net weight** | 0.13 lb(US) (0.057 kg) |
| **Mechanical durability** | 1000000 cycles |
| **Station name** | XALD 1...5 cut-outs<br>XALK 2...5 cut-outs |
| **Electrical composition code** | C4 6 single and double front mounting<br>C5 5 single front mounting<br>C6 5 single and double front mounting<br>C7 4 single front mounting<br>C8 4 single and double front mounting<br>C11 3 single front mounting<br>C3 6 single front mounting<br>SF1 3 single front mounting<br>SR1 3 single rear mounting |
| **Device presentation** | Basic element |

* 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

## 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 II IEC 60536 |
| **IP degree of protection** | IP66 IEC 60529<br>IP67<br>IP69<br>IP69K |
| **NEMA degree of protection** | NEMA 13<br>NEMA 4X |
| **Resistance to high pressure washer** | 1015.26 psi (7000000 Pa) 131 °F (55 °C) 0.1 m |
| **IK degree of protection** | IK06 IEC 50102 |
| **Standards** | EN/IEC 60947-1<br>EN/IEC 60947-5-1<br>UL 508<br>CSA C22.2 No 14<br>JIS C8201-5-1<br>EN/IEC 60947-5-4<br>JIS C8201-1 |
| **Product certifications** | DNV<br>UL Listed<br>GL<br>BV<br>CSA<br>LROS (Lloyds register of shipping) |
| **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** | 22467-PUSHBUTTONS,22MM(PLASTIC) NEW |
| **Discount Schedule** | CS2 |
| **GTIN** | 3389110136609 |
| **Nbr. of units in pkg.** | 1 |
| **Package weight(Lbs)** | 2.29 oz (65 g) |
| **Returnability** | No |
| **Country of origin** | FR |

## Packing Units

| | |
|---|---|
| **Unit Type of Package 1** | PCE |
| **Package 1 Height** | 3.43 in (8.7 cm) |
| **Package 1 width** | 1.34 in (3.4 cm) |
| **Package 1 Length** | 2.05 in (5.2 cm) |
| **Unit Type of Package 2** | BB1 |
| **Number of Units in Package 2** | 5 |
| **Package 2 Weight** | 11.53 oz (327 g) |
| **Package 2 Height** | 3.43 in (8.7 cm) |
| **Package 2 width** | 1.34 in (3.4 cm) |
| **Package 2 Length** | 10.24 in (26 cm) |

| | |
|---|---|
| **Unit Type of Package 3** | S02 |
| **Number of Units in Package 3** | 50 |
| **Package 3 Weight** | 7.92 lb(US) (3.592 kg) |
| **Package 3 Height** | 5.91 in (15 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: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov |
| **EU RoHS Directive** | Pro-active compliance (Product out of EU RoHS legal scope)<br>EU RoHS Declaration |
| **Mercury free** | Yes |
| **RoHS exemption information** | Yes |
| **China RoHS Regulation** | China RoHS declaration |
| **Environmental Disclosure** | Product Environmental Profile |
| **Circularity Profile** | End of Life Information |

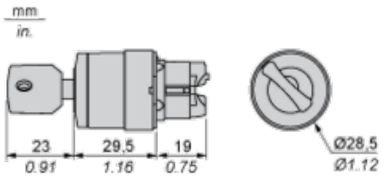
## Contractual warranty

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

# Product data sheet ZB5AG03D

Dimensions Drawings

## Dimensions

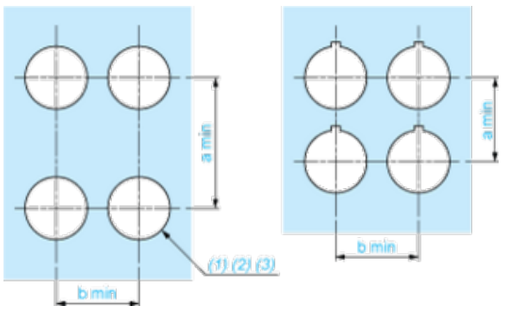


# Product data sheet ZB5AG03D

Mounting and Clearance

## 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



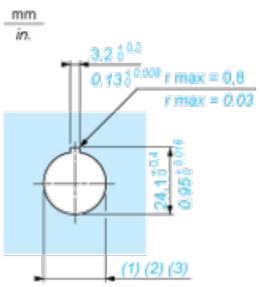

**(1)** Diameter on finished panel or support

**(2)** For selector switches and Emergency stop buttons, use of an anti-rotation plate type ZB5AZ902 is recommended.

**(3)** Ø22.5 mm recommended (Ø22.3 $_{0}^{+0.4}$) / Ø0.89 in. recommended (Ø0.88 in. $_{0}^{+0.016}$)

| Connections | a in mm | a in in. | b in mm | b in in. |
|---|---|---|---|---|
| By screw clamp terminals or plug-in connector | 40 | 1.57 | 30 | 1.18 |
| By Faston connectors | 45 | 1.77 | 32 | 1.26 |
| On printed circuit board | 30 | 1.18 | 30 | 1.18 |

### Detail of Lug Recess



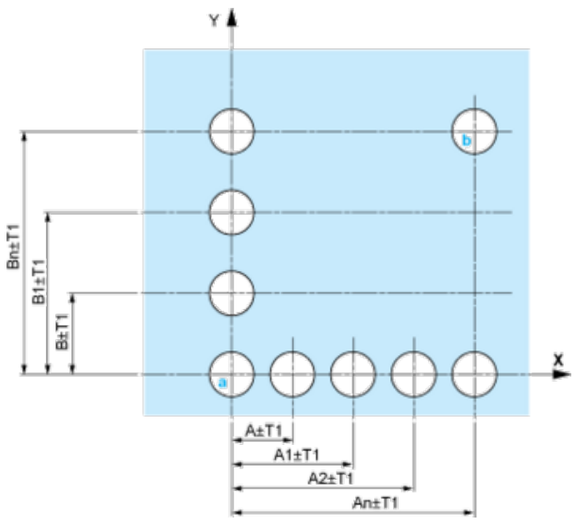

**(1)** Diameter on finished panel or support

**(2)** For selector switches and Emergency stop buttons, use of an anti-rotation plate type ZB5AZ902 is recommended.

**(3)** Ø22.5 mm recommended (Ø22.3 $_{0}^{+0.4}$) / Ø0.89 in. recommended (Ø0.88 in. $_{0}^{+0.016}$)

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

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

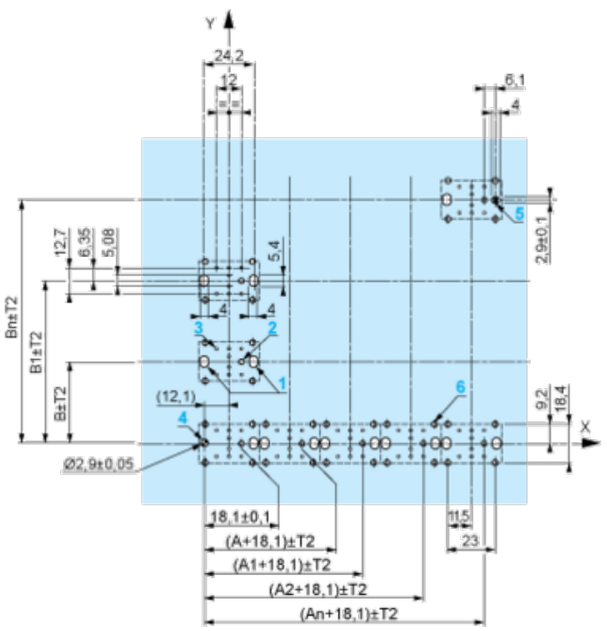



**A:** 30 mm min. / 1.18 in. min.

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

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

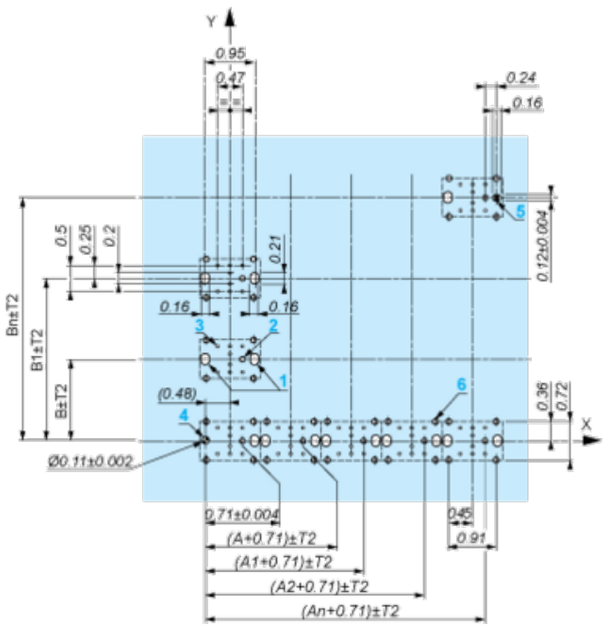
Dimensions in mm




**A:** 30 mm min.

**B:** 40 mm min.

Dimensions in in.




**A:** 1.18 in. min.

**B:** 1.57 in. min.

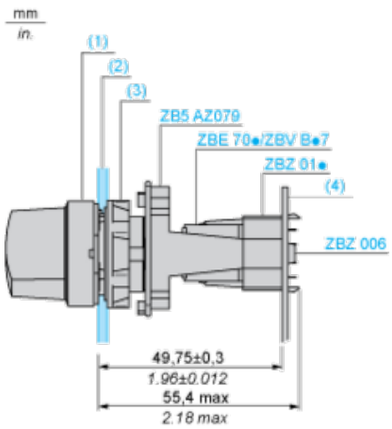
## General Tolerances of the Panel and Printed Circuit Board

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 ZB5AZ009: ± 2°30’ (excluding cut-outs marked **a** and **b**).
- Tightening torque of screws ZBZ006: 0.6 N.m (5.3 lbf.in) max.
- Allow for one ZB5AZ079 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 (ZB5AD•, ZB5AJ•, ZB5AG•).

The fixing centers marked **a** and **b** are diagonally opposed and must align with those marked **4** and **5**.




**(1)** Head ZB5AD•

**(2)** Panel

**(2)** Nut

**(4)** Printed circuit board

## Mounting of Adapter (Socket) ZBZ01•

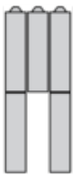
- **1** 2 elongated holes for ZBZ006 screw access
- **2** 1 hole Ø 2.4 mm ± 0.05 / 0.09 in. ± 0.002 for centring adapter ZBZ01•
- **3** 8 × Ø 1.2 mm / 0.05 in. holes
- **4** 1 hole Ø 2.9 mm ± 0.05 / 0.11 in. ± 0.002, for aligning the printed circuit board (with cut-out marked **a**)
- **5** 1 elongated 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 ZBZ01•

Dimensions An + 18.1 relate to the Ø 2.4 mm ± 0.05 / 0.09 in. ± 0.002 holes for centring adapter ZBZ01•.

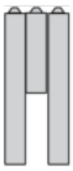
## Electrical Composition Corresponding to Code C4



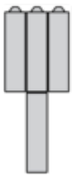
## Electrical Composition Corresponding to Code C5



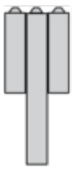
## Electrical Composition Corresponding to Code C6



## Electrical Composition Corresponding to Code C7



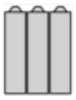
## Electrical Composition Corresponding to Code C8



## Electrical Composition Corresponding to Code C3



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



## Legend

Single contact



Double contact



Light block



Possible location



## Sequence of Contacts Fitted to 3-position Selector Switch Body

### Position 315°




| | | | | | |
|---|---|---|---|---|---|
| **Push** | Position | Top | ▭ | | |
| | | Bottom | ▭ | | △ |
| | Location | | Left | Centre | Right |
| | State | | 1 | 1 | 0 |
| **Contacts** | N/O | | closed | closed | open |
| | N/C | | open | open | closed |

### Position 0°




| | | | | | |
|---|---|---|---|---|---|
| **Push** | Position | Top | ▭ ▭ | | |
| | | Bottom | △ | △ | △ |
| | Location | | Left | Centre | Right |
| | State | | 0 | 0 | 0 |
| **Contacts** | N/O | | open | open | open |
| | N/C | | closed | closed | closed |

### Position 45°




| | | | | | |
|---|---|---|---|---|---|
| **Push** | Position | Top | ▭ | | |
| | | Bottom | △ | ▭ | |
| | Location | | Left | Centre | Right |
| | State | | 0 | 1 | 1 |
| **Contacts** | N/O | | open | closed | closed |
| | N/C | | closed | open | open |