

# Product datasheet

Specifications



## black selector switch head Ø22 2-position stay put

Local distributor code: 237184524    ZB5AD2

EAN Code : 3389110904963

### Main

|                               |                             |
|-------------------------------|-----------------------------|
| Range of product              | Harmony XALF<br>Harmony XB5 |
| Product or component type     | Head for selector switch    |
| Device short name             | ZB5                         |
| Bezel material                | Dark grey plastic           |
| Mounting diameter             | 22 mm                       |
| Head type                     | Standard                    |
| Sale per indivisible quantity | 1                           |
| Shape of signaling unit head  | Round                       |
| Type of operator              | stay put                    |
| Operator profile              | Black standard handle       |
| Operator position information | 2 positions 90°             |

### Complementary

|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CAD overall width           | 29 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| CAD overall height          | 29 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| CAD overall depth           | 46 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Net weight                  | 0.017 kg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Mechanical durability       | 1000000 cycles                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Station name                | XALD 1...5 cut-outs<br>XALK 2...5 cut-outs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Electrical composition code | C3 for <6 contacts using single blocks in front mounting<br>C4 for <6 contacts using single and double blocks in front mounting<br>C5 for <5 contacts using single blocks in front mounting<br>C6 for <5 contacts using single and double blocks in front mounting<br>C7 for <4 contacts using single blocks in front mounting<br>C8 for <4 contacts using single and double blocks in front mounting<br>C11 for <3 contacts using single blocks in front mounting<br>C15 for <1 contacts using single blocks in front mounting<br>SF1 for <3 contacts using single blocks in front mounting<br>SR1 for <3 contacts using single blocks in rear 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 II conforming to IEC 60536                                                                                                                                               |
| IP degree of protection               | IP67 conforming to IEC 60529<br>IP69 conforming to IEC 60529<br>IP69K                                                                                                          |
| NEMA degree of protection             | NEMA 13<br>NEMA 4X                                                                                                                                                             |
| Resistance to high pressure washer    | 7000000 Pa at 55 °C, distance : 0.1 m                                                                                                                                          |
| IK degree of protection               | IK06 conforming to IEC 50102                                                                                                                                                   |
| Standards                             | JIS C8201-5-1<br>CSA C22.2 No 14<br>UL 508<br>EN/IEC 60947-1<br>EN/IEC 60947-5-4<br>EN/IEC 60947-5-1<br>JIS C8201-1                                                            |
| Product certifications                | GL<br>CSA<br>BV<br>DNV<br>LROS (Lloyds register of shipping)<br>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<br>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             | 3.700 cm  |
| Package 1 Width              | 5.400 cm  |
| Package 1 Length             | 6.000 cm  |
| Package 1 Weight             | 24.000 g  |
| Unit Type of Package 2       | BB1       |
| Number of Units in Package 2 | 5         |
| Package 2 Height             | 5.000 cm  |
| Package 2 Width              | 3.400 cm  |
| Package 2 Length             | 26.500 cm |
| Package 2 Weight             | 121.000 g |
| Unit Type of Package 3       | S03       |
| Number of Units in Package 3 | 200       |
| Package 3 Height             | 30.000 cm |
| Package 3 Width              | 30.000 cm |
| Package 3 Length             | 40.000 cm |
| Package 3 Weight             | 5.304 kg  |

### Offer Sustainability

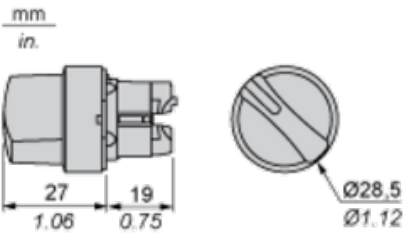
|                          |                                   |
|--------------------------|-----------------------------------|
| Sustainable offer status | Green Premium product             |
| REACH Regulation         | <a href="#">REACH Declaration</a> |

|                            |                                                                                                   |
|----------------------------|---------------------------------------------------------------------------------------------------|
| REACH free of SVHC         | Yes                                                                                               |
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope)<br><a href="#">EU RoHS Declaration</a> |
| Toxic heavy metal free     | Yes                                                                                               |
| Mercury free               | Yes                                                                                               |
| China RoHS Regulation      | <a href="#">China RoHS declaration</a>                                                            |
| RoHS exemption information | <a href="#">Yes</a>                                                                               |
| Environmental Disclosure   | <a href="#">Product Environmental Profile</a>                                                     |
| Circularity Profile        | <a href="#">End of Life Information</a>                                                           |

Contractual warranty

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

Dimensions



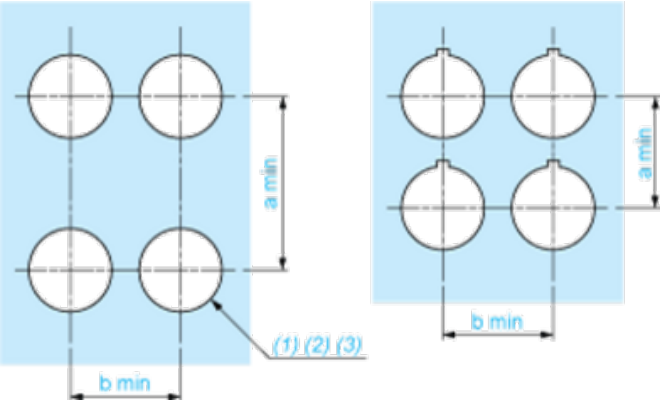
Product datasheet

ZB5AD2

Mounting and Clearance

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

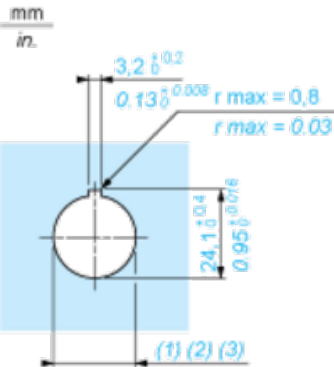
Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



- (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 ( $\text{Ø}22.3\text{ }_0^{+0.4}$ ) / Ø0.89 in. recommended ( $\text{Ø}0.88\text{ in. }_0^{+0.016}$ )

| 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 ( $\text{Ø}22.3\text{ }_0^{+0.4}$ ) / Ø0.89 in. recommended ( $\text{Ø}0.88\text{ in. }_0^{+0.016}$ )

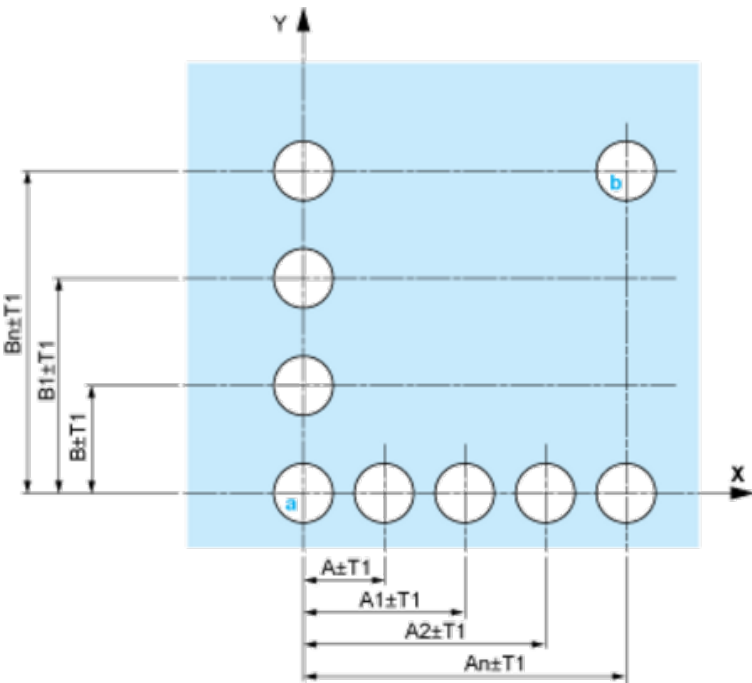
## Product datasheet

### ZB5AD2

#### Mounting and Clearance

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

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

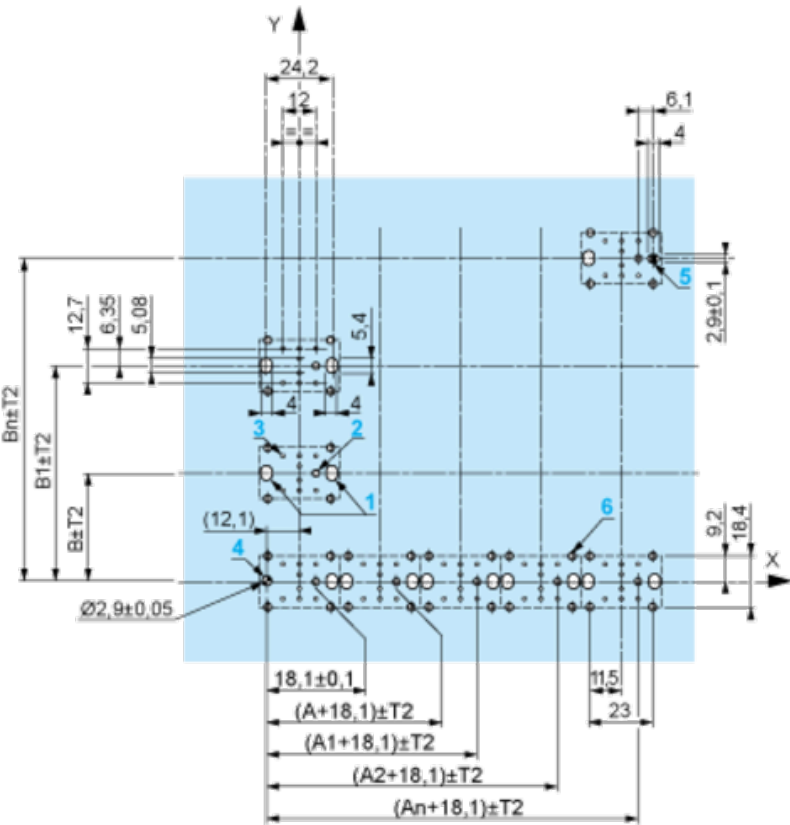


**A:** 30 mm min. / 1.18 in. min.

**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.



**Mounting of Adapter (Socket) ZBZ01•**

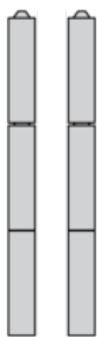
- 1 2 elongated holes for ZBZ006 screw access
- 2 1 hole Ø 2.4 mm ± 0.05 / 0.09 in. ± 0.002 for centring adapter ZBZ01•
- 3 8 × Ø 1.2 mm / 0.05 in. holes
- 4 1 hole Ø 2.9 mm ± 0.05 / 0.11 in. ± 0.002, for aligning the printed circuit board (with cut-out marked **a**)
- 5 1 elongated hole for aligning 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 C3

---



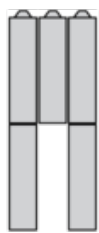
Electrical Composition Corresponding to Code C4

---



Electrical Composition Corresponding to Code C5

---



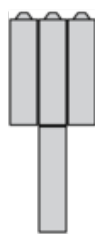
Electrical Composition Corresponding to Code C6

---



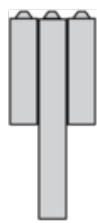
Electrical Composition Corresponding to Code C7

---



Electrical Composition Corresponding to Code C8

---



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

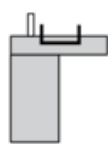
---



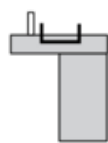
Electrical Composition Corresponding to Code C15

---

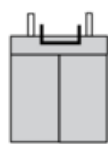
1 N/O



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



Sequence of Contacts Fitted to 2-position Selector Switch Body

Position 315°



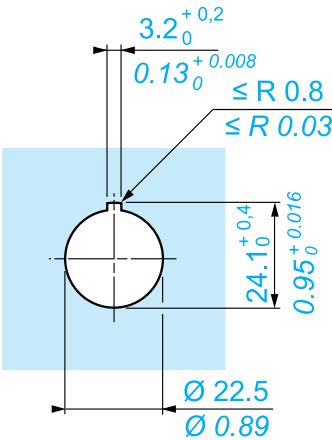
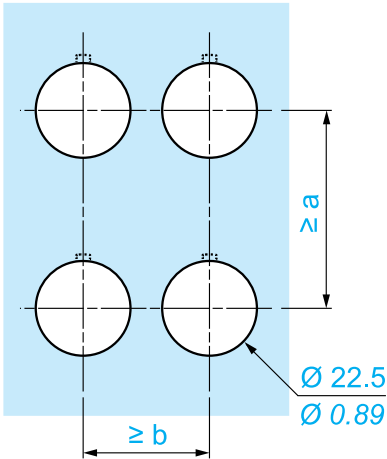
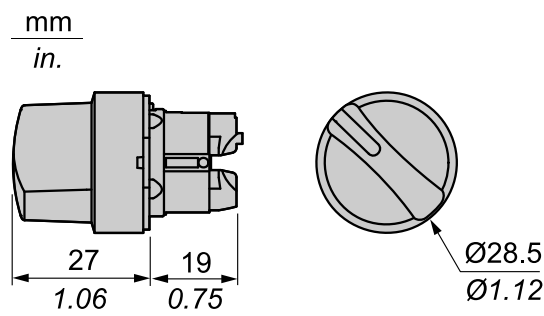
|          |          |        |                                                                                    |                                                                                     |                                                                                     |
|----------|----------|--------|------------------------------------------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

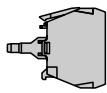
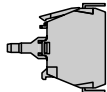
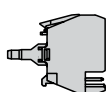
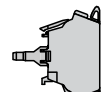
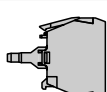
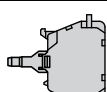
Position 45°



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

Dimensions



|                                                                                     |                                                                                     | a (mm) | a (in.) | b (mm) | b (in.) |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|---------|--------|---------|
|    |    | 40     | 1.57    | 30     | 1.18    |
| ZBE●●●●●                                                                            | ZBV●●●●●                                                                            |        |         |        |         |
|   |   | 45     | 1.77    | 32     | 1.26    |
| ZBE●●●●●3                                                                           | ZBV●●●●●3                                                                           |        |         |        |         |
|  |  | 40     | 1.57    | 30     | 1.18    |
| ZBE●●●●●4                                                                           | ZBV●●●●●4                                                                           |        |         |        |         |
|  |  | 50     | 1.97    | 30     | 1.18    |
| ZBE●●●●●5                                                                           | ZBV●●●●●5                                                                           |        |         |        |         |
|  |  | 40     | 1.57    | 30     | 1.18    |
| ZBE●●●●●9                                                                           | ZBV●●●●●9                                                                           |        |         |        |         |
|  |  | 40     | 1.57    | 30     | 1.18    |
| ZBRT●                                                                               | ZBRV1                                                                               |        |         |        |         |

Recommended replacement(s)