Head for key selector switch, Harmony XB5, XB4, Ø22 mm 3 position stay put 455

ZB5AG09

Product availability : Stock - Normally stocked in distribution facility

Price* : 90.00 USD

<table>
<thead>
<tr>
<th>Main</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Range of Product</td>
<td>Harmony XB5</td>
</tr>
<tr>
<td>Product or Component Type</td>
<td>Head for key selector switch</td>
</tr>
<tr>
<td>Device short name</td>
<td>ZB5</td>
</tr>
<tr>
<td>Bezel material</td>
<td>Dark grey plastic</td>
</tr>
<tr>
<td>Mounting diameter</td>
<td>0.87 in (22 mm)</td>
</tr>
<tr>
<td>Head type</td>
<td>Standard</td>
</tr>
<tr>
<td>Sale per indivisible quantity</td>
<td>1</td>
</tr>
<tr>
<td>Shape of signaling unit head</td>
<td>Round</td>
</tr>
<tr>
<td>Type of operator</td>
<td>stay put</td>
</tr>
<tr>
<td>Operator profile</td>
<td>Black key switch</td>
</tr>
<tr>
<td>Operator position information</td>
<td>3 positions +/- 45°</td>
</tr>
<tr>
<td>Type of Keylock</td>
<td>Key 455</td>
</tr>
<tr>
<td>Key withdrawal position</td>
<td>Right</td>
</tr>
</tbody>
</table>

| 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 |
|                                                                    | XALK 2...5 cut-outs |
| Electrical composition code                                         |                   |
|                                                                    | C4 6 single and double front mounting |
|                                                                    | C5 5 single front mounting |
|                                                                    | C6 5 single and double front mounting |
|                                                                    | C7 4 single front mounting |
|                                                                    | C8 4 single and double front mounting |
|                                                                    | C11 3 single front mounting |
|                                                                    | C3 6 single front mounting |
|                                                                    | SF1 3 single front mounting |
|                                                                    | 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.
### Environment

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protective treatment</td>
<td>TH</td>
</tr>
<tr>
<td>Ambient Air Temperature for Storage</td>
<td>-40…158 °F (-40…70 °C)</td>
</tr>
<tr>
<td>Ambient air temperature for operation</td>
<td>-40…158 °F (-40…70 °C)</td>
</tr>
<tr>
<td>Overvoltage category</td>
<td>Class II IEC 60536</td>
</tr>
<tr>
<td>IP degree of protection</td>
<td>IP66 IEC 60529 IP67 IP69 IP69K</td>
</tr>
<tr>
<td>NEMA degree of protection</td>
<td>NEMA 13 NEMA 4X</td>
</tr>
<tr>
<td>Resistance to high pressure washer</td>
<td>1015.26 psi (7000000 Pa) 131 °F (55 °C) 0.1 m</td>
</tr>
<tr>
<td>IK degree of protection</td>
<td>IK06 IEC 50102</td>
</tr>
<tr>
<td>Standards</td>
<td>CSA C22.2 No 14 JIS C8201-5-1 EN/IEC 60947-1 EN/IEC 60947-5-4 EN/IEC 60947-5-1 UL 508 JIS C8201-1</td>
</tr>
<tr>
<td>Product Certifications</td>
<td>LROS (Lloyds register of shipping) CSA DNV UL Listed BV GL</td>
</tr>
<tr>
<td>Vibration resistance</td>
<td>5 gn 2…500 Hz IEC 60068-2-6</td>
</tr>
<tr>
<td>Shock resistance</td>
<td>30 gn 18 ms half sine wave acceleration IEC 60068-2-27 50 gn 11 ms half sine wave acceleration IEC 60068-2-27</td>
</tr>
</tbody>
</table>

### Ordering and shipping details

<table>
<thead>
<tr>
<th>Category</th>
<th>22467-PUSHBUTTONS.22MM(PLASTIC) NEW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discount Schedule</td>
<td>CS2</td>
</tr>
<tr>
<td>GTIN</td>
<td>3389110905786</td>
</tr>
<tr>
<td>Returnability</td>
<td>No</td>
</tr>
<tr>
<td>Country of origin</td>
<td>FR</td>
</tr>
</tbody>
</table>

### Packing Units

<table>
<thead>
<tr>
<th>Unit Type of Package 1</th>
<th>PCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Units in Package 1</td>
<td>1</td>
</tr>
<tr>
<td>Package 1 Height</td>
<td>1.34 in (3.4 cm)</td>
</tr>
<tr>
<td>Package 1 Width</td>
<td>2.05 in (5.2 cm)</td>
</tr>
<tr>
<td>Package 1 Length</td>
<td>3.43 in (8.7 cm)</td>
</tr>
<tr>
<td>Package 1 Weight</td>
<td>2.36 oz (67.0 g)</td>
</tr>
<tr>
<td>Unit Type of Package 2</td>
<td>S02</td>
</tr>
<tr>
<td>Number of Units in Package 2</td>
<td>50</td>
</tr>
<tr>
<td>Package 2 Height</td>
<td>5.91 in (15.0 cm)</td>
</tr>
<tr>
<td>Package 2 Width</td>
<td>11.81 in (30.0 cm)</td>
</tr>
<tr>
<td>Package 2 Length</td>
<td>15.75 in (40.0 cm)</td>
</tr>
<tr>
<td>Package 2 Weight</td>
<td>8.50 lb(US) (3.855 kg)</td>
</tr>
</tbody>
</table>
### Offer Sustainability

<table>
<thead>
<tr>
<th>Sustainable offer status</th>
<th>Green Premium product</th>
</tr>
</thead>
<tbody>
<tr>
<td>California proposition 65</td>
<td>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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a></td>
</tr>
<tr>
<td>REACh Regulation</td>
<td>REACh Declaration</td>
</tr>
<tr>
<td>EU RoHS Directive</td>
<td>Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration</td>
</tr>
<tr>
<td>Mercury free</td>
<td>Yes</td>
</tr>
<tr>
<td>China RoHS Regulation</td>
<td>China RoHS declaration</td>
</tr>
<tr>
<td>RoHS exemption information</td>
<td>Yes</td>
</tr>
<tr>
<td>Environmental Disclosure</td>
<td>Product Environmental Profile</td>
</tr>
<tr>
<td>Circularity Profile</td>
<td>End of Life Information</td>
</tr>
</tbody>
</table>

### Contractual warranty

| Warranty | 18 months |
Dimensions

<table>
<thead>
<tr>
<th>mm</th>
<th>in</th>
</tr>
</thead>
<tbody>
<tr>
<td>23</td>
<td>0.91</td>
</tr>
<tr>
<td>29.5</td>
<td>1.16</td>
</tr>
<tr>
<td>19</td>
<td>0.75</td>
</tr>
<tr>
<td>Ø26.5</td>
<td></td>
</tr>
<tr>
<td>Ø1.12</td>
<td></td>
</tr>
</tbody>
</table>
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 +0.4) / Ø0.89 in. recommended (Ø0.88 in. ±0.016)

<table>
<thead>
<tr>
<th>Connections</th>
<th>a in mm</th>
<th>a in in.</th>
<th>b in mm</th>
<th>b in in.</th>
</tr>
</thead>
<tbody>
<tr>
<td>By screw clamp terminals or plug-in connector</td>
<td>40</td>
<td>1.57</td>
<td>30</td>
<td>1.18</td>
</tr>
<tr>
<td>By Faston connectors</td>
<td>45</td>
<td>1.77</td>
<td>32</td>
<td>1.26</td>
</tr>
<tr>
<td>On printed circuit board</td>
<td>30</td>
<td>1.18</td>
<td>30</td>
<td>1.18</td>
</tr>
</tbody>
</table>

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 ±0.4) / Ø0.89 in. recommended (Ø0.88 in. ±0.016)
Mounting and Clearance

Product data sheet ZB5AG09

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.: \( T_1 + T_2 = 0.3 \text{ mm max.} \)

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
(3) 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
Product data sheet

Technical Description

Electrical Composition Corresponding to Code C6

---
Electrical Composition Corresponding to Code C7
Electrical Composition Corresponding to Code C8
Electrical Composition Corresponding to Code C3
## Sequence of Contacts Fitted to 3-position Selector Switch Body

### Position 315°

**Push State**

<table>
<thead>
<tr>
<th>Position</th>
<th>Top</th>
<th>Bottom</th>
<th>Location</th>
<th>State</th>
<th>Contacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>315°</td>
<td></td>
<td></td>
<td>Left</td>
<td>1</td>
<td>N/O</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Centre</td>
<td>1</td>
<td>closed</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Right</td>
<td>0</td>
<td>open</td>
</tr>
</tbody>
</table>

### Position 0°

**Push State**

<table>
<thead>
<tr>
<th>Position</th>
<th>Top</th>
<th>Bottom</th>
<th>Location</th>
<th>State</th>
<th>Contacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>0°</td>
<td></td>
<td></td>
<td>Left</td>
<td>0</td>
<td>N/O</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Centre</td>
<td>0</td>
<td>open</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Right</td>
<td>0</td>
<td>open</td>
</tr>
</tbody>
</table>

### Position 45°

**Push State**

<table>
<thead>
<tr>
<th>Position</th>
<th>Top</th>
<th>Bottom</th>
<th>Location</th>
<th>State</th>
<th>Contacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>45°</td>
<td></td>
<td></td>
<td>Left</td>
<td>0</td>
<td>N/O</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Centre</td>
<td>1</td>
<td>closed</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Right</td>
<td>1</td>
<td>closed</td>
</tr>
</tbody>
</table>

**Push State**

<table>
<thead>
<tr>
<th>Location</th>
<th>State</th>
<th>Contacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Left</td>
<td>0</td>
<td>open</td>
</tr>
<tr>
<td>Centre</td>
<td>1</td>
<td>closed</td>
</tr>
<tr>
<td>Right</td>
<td>1</td>
<td>closed</td>
</tr>
</tbody>
</table>
Product data sheet

ZB5AG09

Technical Illustration

Dimensions

<table>
<thead>
<tr>
<th>a (mm)</th>
<th>a (in.)</th>
<th>b (mm)</th>
<th>b (in.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>40</td>
<td>1.57</td>
<td>30</td>
<td>1.18</td>
</tr>
<tr>
<td>45</td>
<td>1.77</td>
<td>32</td>
<td>1.26</td>
</tr>
<tr>
<td>50</td>
<td>1.97</td>
<td>30</td>
<td>1.18</td>
</tr>
</tbody>
</table>

Recommended replacement(s)

- ZBE●●●●● ZBV●●●●
- ZBE●●●●●3 ZBV●●●●3
- ZBE●●●●●4 ZBV●●●●4
- ZBE●●●●●5 ZBV●●●●5
- ZBE●●●●●9 ZBV●●●●9
- ZBRT● ZBRV1