

Product data sheet

Characteristics

ZB5AA48

Head for illuminated push button, Harmony XB5, plastic, red flush, 22mm, universal LED, for insetion of legend



Main

| | |
|---------------------------------|----------------------------------|
| Range of product | Harmony XB5 |
| Product or component type | Head for illuminated push-button |
| Device short name | ZB5 |
| Product compatibility | Universal LED |
| Bezel material | Dark grey plastic |
| 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 | Red flush, unmarked |
| Operator additional information | For insertion of legend |

Complementary

| | |
|------------------------------------|--|
| CAD overall width | 29 mm |
| CAD overall height | 29 mm |
| CAD overall depth | 30 mm |
| Net weight | 0.018 kg |
| Resistance to high pressure washer | 7000000 Pa at 55 °C, distance : 0.1 m |
| Mechanical durability | 10000000 cycles |
| Main group | Illum push-button |
| Group of product | Flush push with inser of legend |
| Station name | XALD 1...5 cut-outs XALK 2...5 cut-outs |
| Cap/operator or lens colour | Red |
| Marking | Unmarked |
| Electrical composition code | M1 for <6 contacts using single blocks in front mounting with integral LED M2 for <6 contacts using single and double blocks in front mounting with integral LED M6 for <2 contacts using single blocks in front mounting with integral LED and transformer M10 for <2 contacts using single blocks in front mounting with integral LED MF1 for <2 contacts using single blocks in front mounting with integral LED MR1 for <2 contacts using single blocks in rear mounting with integral LED C3 for <6 contacts using single blocks in front mounting C4 for <6 contacts using single and double blocks in front mounting C14 for <2 contacts using single blocks in front mounting SF2 for <2 contacts using single blocks in front mounting SR2 for <2 contacts using single blocks in rear mounting |
| Device presentation | Basic element |

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Environment




| | |
|---------------------------------------|--|
| Protective treatment | TC |
| 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 | IP66 conforming to IEC 60529 IP67 IP69 IP69K |
| NEMA degree of protection | NEMA 13 NEMA 4X |
| IK degree of protection | IK03 conforming to IEC 62262 |
| Standards | IEC 60947-5-1 UL 508 CSA C22.2 No 14 GB 14048.5 IEC 60947-1 JIS C8201-5-1 IEC 60947-5-4 JIS C8201-1 |
| Product certifications | DNV[RETURN]BV[RETURN]GL[RETURN]CSA[RETURN]UL listed[RETURN]LROS (Lloyds register of shipping) |
| 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 | 3.4 cm |
| Package 1 Width | 5.4 cm |
| Package 1 Length | 9 cm |
| Package 1 Weight | 20 g |
| Unit Type of Package 2 | BB1 |
| Number of Units in Package 2 | 5 |
| Package 2 Height | 3.4 cm |
| Package 2 Width | 9 cm |
| Package 2 Length | 26.5 cm |
| Package 2 Weight | 100 g |
| Unit Type of Package 3 | S03 |
| Number of Units in Package 3 | 150 |
| Package 3 Height | 30 cm |
| Package 3 Width | 30 cm |
| Package 3 Length | 40 cm |
| Package 3 Weight | 3.454 kg |

Offer Sustainability

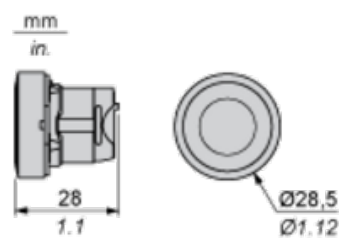
| | |
|--------------------------|--|
| Sustainable offer status | Green Premium product |
| REACH Regulation |  REACH Declaration |
| REACH free of SVHC | Yes |
| EU RoHS Directive | Pro-active compliance (Product out of EU RoHS legal scope)  EU RoHS Declaration |
| Toxic heavy metal free | Yes |
|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

| | |
|----------------------------|---|
| RoHS exemption information |  Yes |
| Environmental Disclosure |  Product Environmental Profile |
| Circularity Profile |  End Of Life Information |

Contractual warranty

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

Dimensions



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

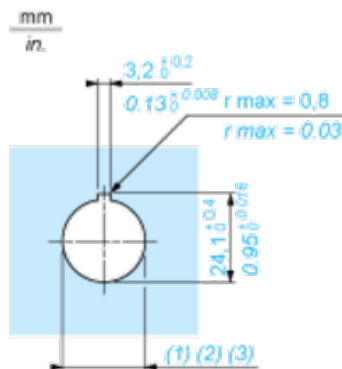
Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



- (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) $\varnothing 22.5$ mm recommended ($\varnothing 22.3 \text{ }_0^{+0.4}$) / $\varnothing 0.89$ in. recommended ($\varnothing 0.88 \text{ in. }_0^{+0.016}$)

| 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) $\varnothing 22.5$ mm recommended ($\varnothing 22.3 \text{ }_0^{+0.4}$) / $\varnothing 0.89$ in. recommended ($\varnothing 0.88 \text{ in. }_0^{+0.016}$)

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)

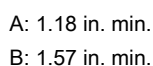
Dimensions in mm



A: 30 mm min.

B: 40 mm min.

Dimensions in in.



The cumulative tolerance must not exceed 0.3 mm / 0.012 in.: T1 + T2 = 0.3 mm max.

- 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 ZB5AZ009: $\pm 2^{\circ}30'$ (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•).

Technical drawing of a ZB5 AZ079 assembly. The drawing shows a side view of the component with various dimensions and labels. The dimensions are:

- 49,75±0,3
- 1,96±0,012
- 55,4 max
- 2,18 max

The labels and callouts are:

- (1)
- (2)
- (3)
- ZB5 AZ079
- ZBE 70●/ZBV B●7
- ZBZ 01●
- (4)
- ZBZ 006

The drawing also includes a scale bar indicating mm and in.

- (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 \varnothing 2.4 mm \pm 0.05 / 0.09 in. \pm 0.002 for centring adapter ZBZ01•
- 3 8 \times \varnothing 1.2 mm / 0.05 in. holes
- 4 1 hole \varnothing 2.9 mm \pm 0.05 / 0.11 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 mm / 0.09 in. for clipping in adapter ZBZ01•

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

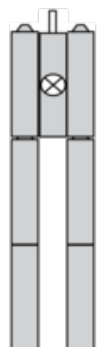
Electrical Composition Corresponding to Code C3



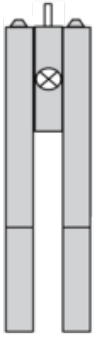
Electrical Composition Corresponding to Code C4

Electrical Composition Corresponding to Codes C14, SF2 and SR2

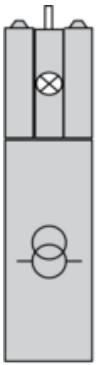
Electrical Composition Corresponding to Codes M1 and M7



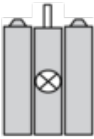
Electrical Composition Corresponding to Codes M2 and M8



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

