ZB5AJ2

black selector switch head Ø22 2-position stay put



Main

| Range of product | Harmony XB5 |
|------------------------------------|--------------------------|
| Product or component type | Head for selector switch |
| Device short name | ZB5 |
| Bezel material | Plastic |
| Mounting diameter | 22 mm |
| Sale per indivisible quantity | 1 |
| Shape of signaling unit head | Round |
| Type of operator | Stay put |
| Operator profile | Black long handle |
| Operator additional information | Non padlockable |
| Operator position infor- mation | 2 positions 90° |

Complementary

| CAD overall width | 29 mm |
|-----------------------------|--|
| CAD overall height | 38 mm |
| CAD overall depth | 46 mm |
| Product weight | 0.017 kg |
| Mechanical durability | 1000000 cycles |
| Station name | XALK 25 cut-outs XALD 15 cut-outs |
| Electrical composition code | SR1 for <= 3 contacts using single blocks in rear mounting SF1 for <= 3 contacts using single blocks in front mounting C15 for 1 contacts using single blocks in front mounting C11 for <= 3 contacts using single blocks in front mounting C8 for <= 4 contacts using single and double blocks in front mounting C7 for <= 4 contacts using single blocks in front mounting C6 for <= 5 contacts using single and double blocks in front mounting C5 for <= 5 contacts using single blocks in front mounting C4 for <= 6 contacts using single and double blocks in front mounting C3 for <= 6 contacts using single blocks in front mounting |

Environment

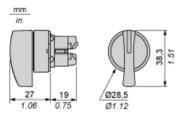
| Protective treatment | TH | |
|--|---|--|
| Ambient air temperature for storage | -4070 °C | |
| Ambient air temperature for operation | -2570 °C | |
| Class of protection against electric shock | Class II conforming to IEC 60536 | |
| IP degree of protection | IP69K conforming to IEC 60529 IP66 conforming to IEC 60529 | |
| NEMA degree of protection | NEMA 4X NEMA 13 | |
| Resistance to high pressure washer | 7000000 Pa at 55 °C,distance: 0.1 m | |
| IK degree of protection | IK06 conforming to IEC 50102 | |
| Standards | CSA C22-2 No 14 EN/IEC 60947-1 EN/IEC 60947-5-1 EN/IEC 60947-5-4 JIS C 4520 UL 508 | |

| Product certifications | BV |
|------------------------|---|
| | CSA |
| | DNV |
| | GL |
| | LROS (Lloyds register of shipping) |
| | RINA |
| | UL listed |
| Vibration resistance | 5 gn (f = 2500 Hz) conforming to IEC 60068-2-6 |
| Shock resistance | 50 gn for 11 ms half sine wave acceleration conforming to IEC 60068-2-27 30 gn for 18 ms half sine wave acceleration conforming to IEC 60068-2-27 |

Product data sheet Dimensions Drawings

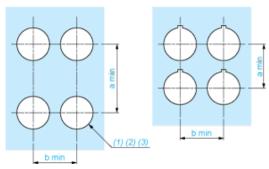
ZB5AJ2

Dimensions



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

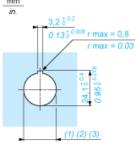
Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



- Diameter on finished panel or support
- For selector switches and Emergency stop buttons, use of an anti-rotation plate type ZB5AZ902 is recommended. \emptyset 22.5 mm recommended (\emptyset 22.3 $_0$ $^{+0.4}$) / \emptyset 0.89 in. recommended (\emptyset 0.88 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 |

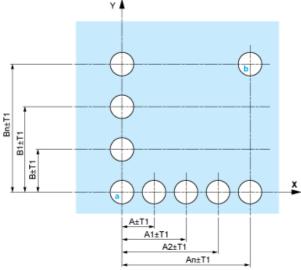
Detail of Lug Recess



- (1) Diameter on finished panel or support
- For selector switches and Emergency stop buttons, use of an anti-rotation plate type ZB5AZ902 is recommended.
- 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

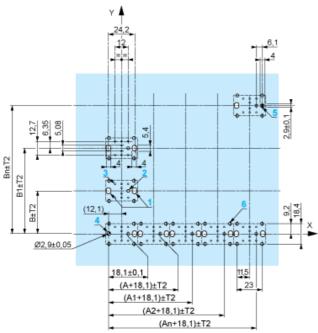
Panel Cut-outs (Viewed from Installer's Side)



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

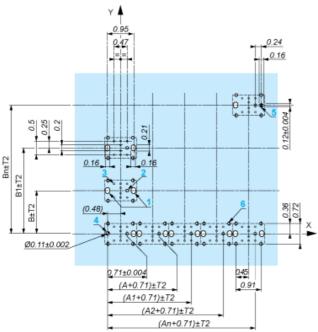
Printed Circuit Board Cut-outs (Viewed from Electrical Block Side)

Dimensions in mm



A: 30 mm min. B: 40 mm min.

Dimensions in in.



A: 1.18 in. min. B: 1.57 in. min.

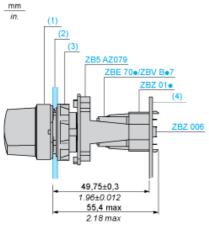
General Tolerances of the Panel and Printed Circuit Board

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:
 - $\circ~$ every 90 mm / 3.54 in. horizontally (X), and 120 mm / 4.72 in. vertically (Y).
 - o 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•. | | | | | | |
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ZB5AJ2

| Electrical Composition Corresponding to Code C3 |
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| Electrical Composition Corresponding to Code C4 |
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| Electrical Composition Corresponding to Code C5 |
| Liectrical Composition Corresponding to Code Co |
| Electrical Composition Corresponding to Code C6 |
| Electrical Composition Corresponding to Code Co |
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| Electrical Composition Corresponding to Code C7 |
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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



Position 315°



| Push | Position | Тор | | | |
|----------|----------|-------------|--------|--------|------|
| Bottom | Δ | \triangle | Δ | | |
| Location | | Left | Centre | Right | |
| State | | 0 | 0 | 0 | |
| Contacts | N/O | | open | open | open |
| N/C | | closed | closed | closed | |

Position 45°



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