



## Main

|                               |  |
|-------------------------------|--|
| Range of product              | Harmony XB5                            |
| Product or component type     | Head for emergency stop push-button    |
| Product destination           | Emergency stop push-button             |
| Device short name             | ZB5                                    |
| Bezel material                | Dark grey plastic                      |
| Head type                     | Standard                               |
| Mounting diameter             | 22 mm                                  |
| Sale per indivisible quantity | 1                                      |
| Shape of signaling unit head  | Round                                  |
| Type of operator              | trigger action and mechanical latching |
| Reset                         | Turn to release                        |
| Operator profile              | Red mushroom Ø 40 mm, unmarked         |
| Device presentation           | Basic element                          |

## Complementary

|                             |  |
|-----------------------------|--|
| CAD overall width           | 40 mm  |
| CAD overall height          | 40 mm  |
| CAD overall depth           | 57 mm  |
| Net weight                  | 0.046 kg   |
| Mechanical durability       | 300000 cycles  |
| Station name                | XALD 1 cut-out<br>XALK 1 cut-out   |
| Electrical composition code | 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 |

|                    |     |
|--------------------|-----|
| Compatibility code | ZB5 |
|--------------------|-----|

## 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               | IP66 conforming to IEC 60529<br>IP67<br>IP69<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               | IK03 conforming to IEC 50102   |
| Product certifications                | CSA<br>DNV<br>LROS (Lloyds register of shipping)<br>UL listed<br>GL<br>BV  |
| 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 Weight             | 42 g      |
| Package 1 Height             | 5.4 cm    |
| Package 1 width              | 4.4 cm    |
| Package 1 Length             | 8.8 cm    |
| Unit Type of Package 2       | S03       |
| Number of Units in Package 2 | 100       |
| Package 2 Weight             | 4.68 kg   |
| Package 2 Height             | 30 cm     |
| Package 2 width              | 30 cm     |
| Package 2 Length             | 40 cm     |
| Unit Type of Package 3       | P06       |
| Number of Units in Package 3 | 800       |
| Package 3 Weight             | 47.804 kg |
| Package 3 Height             | 77 cm     |
| Package 3 width              | 80 cm     |
| Package 3 Length             | 60 cm     |

## Offer Sustainability

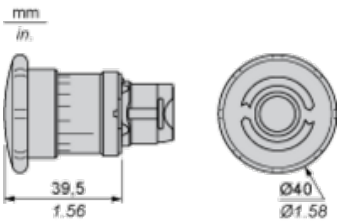
|                            |   |
|----------------------------|---|
| Sustainable offer status   | Green Premium product   |
| REACH Regulation           | <a href="#">REACH Declaration</a>   |
| REACH free of SVHC         | Yes   |
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope)<br><a href="#">EU RoHS Declaration</a> |
| Toxic heavy metal free     | Yes   |
| Mercury free               | Yes   |
| RoHS exemption information | <a href="#">Yes</a>   |

|                          |   |
|--------------------------|---|
| China RoHS Regulation    | <a href="#">China RoHS declaration</a>        |
| Environmental Disclosure | <a href="#">Product Environmental Profile</a> |
| Circularity Profile      | <a href="#">End of Life Information</a>       |

### Contractual warranty

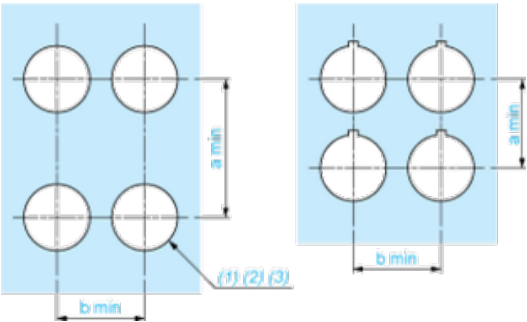
|          |           |
|----------|-----------|
| Warranty | 12 months |
|----------|-----------|

Dimensions



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

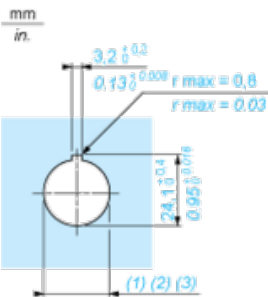
Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



- (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) 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     |

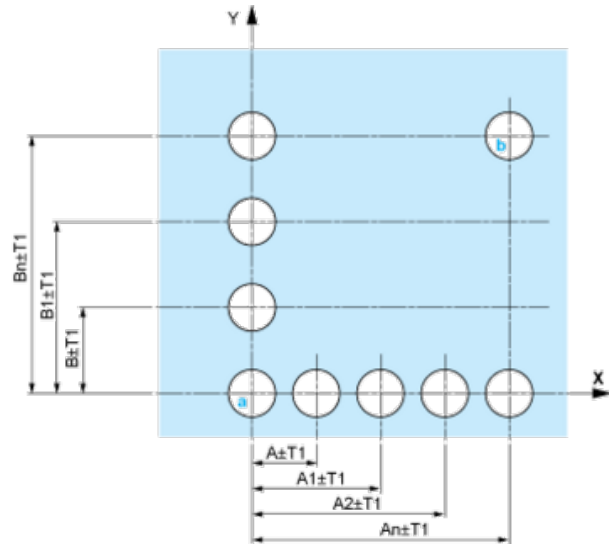
Detail of Lug Recess



- (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 ( $\text{Ø}0.88 \text{ in. }_0^{+0.016}$ )

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

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

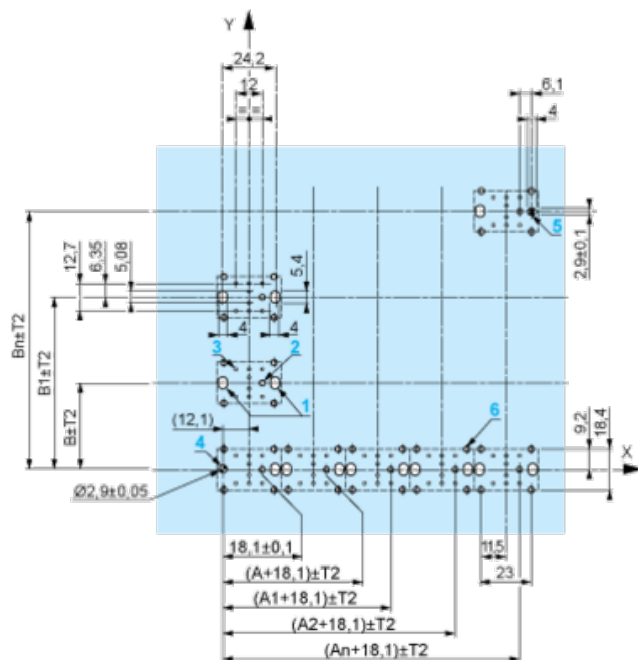


A: 30 mm min. / 1.18 in. min.

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

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

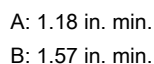
Dimensions in mm



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 the ZBE 70 pump assembly. The drawing shows a side view of the pump with various components labeled. The dimensions are as follows:

- Overall length:  $49,75 \pm 0,3$
- Distance from inlet to centerline:  $1,96 \pm 0,012$
- Distance from inlet to outlet:  $55,4 \text{ max}$
- Distance from inlet to mounting flange:  $2,18 \text{ max}$

Component labels include:

- (1) Inlet
- (2) Inlet
- (3) Inlet
- ZB5 AZ070
- ZBE 70 • ZBV B • 7
- ZBZ 01 •
- (4) Outlet
- ZBZ 006

- 7

### 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 C7



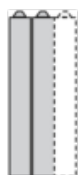
Electrical Compositions Corresponding to Code C8



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Electrical Compositions Corresponding to Code C10

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



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Electrical Composition Corresponding to Code C15

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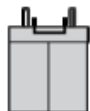
1 N/O



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

