



### Hlavní parametry

Řada výrobků	Harmony XB5
Typ produktu nebo součásti	Hlava pro přepínač
Označení přístroje	ZB5
Materiál obruby	Dark grey plastic
Průměr pro montáž	22 mm
Typ hlavy	Standard
Prodej v nedělitelném množství	1
Tvar hlavice	Kruh
Typ ovládací hlavice	S návratem z levé strany na střed
Provedení ovládače	Černá standardní rukojeť
Informace o polohách ovládače	3 pozice +/- 45°

### Doplňěk

CAD celková šířka	29 mm
CAD celková výška	29 mm
CAD celková hloubka	46 mm
Hmotnost přístroje	0,017 kg
Mechanická životnost	1000000 cykly
Označení skříně	XALD 1...5 výřezů XALK 2...5 výřezů
Označení el. složení	C11 pro 3 kontakty použitím jednoduchý bloky v čelní montáž SF1 pro 3 kontakty použitím jednoduchý bloky v čelní montáž C7 pro 4 kontakty použitím jednoduchý bloky v čelní montáž C8 pro 4 kontakty použitím jednoduchý a dvojitý bloky v čelní montáž SR1 pro 3 kontakty použitím jednoduchý bloky v montáž na desku ve dně skříně C4 pro 6 kontakty použitím jednoduchý a dvojitý bloky v čelní montáž C5 pro 5 kontakty použitím jednoduchý bloky v čelní montáž C6 pro 5 kontakty použitím jednoduchý a dvojitý bloky v čelní montáž C3 pro 6 kontakty použitím jednoduchý bloky v čelní montáž

### Životní prostředí

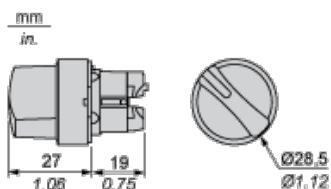
stupeň ochrany	TH
teplota okolí pro uskladnění	-40...70 °C
teplota okolního vzduchu pro provoz	-40...70 °C
kategorie přepětí	Třída II podle IEC 60536
stupeň krytí IP	IP67 podle IEC 60529 IP69K IP69 podle IEC 60529
stupeň krytí NEMA	NEMA 13 NEMA 4X
odolnost proti vysokému tlaku mytí	7000000 Pa při 55 °C, vzdálenost: 0,1 m
stupeň ochrany IK	IK06 podle IEC 50102
standarty	EN/IEC 60947-1 EN/IEC 60947-5-1 EN/IEC 60947-5-4 JIS C 4520 UL 508 CSA C22.2 č. 14
certifikace výrobku	BV CSA DNV GL LROS (Lloyds register of shipping) RINA UL listed

odolnost proti vibracím	5 gn (f = 2...500 Hz) podle IEC 60068-2-6
odolnost proti otřesům	30 gn (doba trvání = 18 ms) pro akcelerace polovina sin. vlny podle IEC 60068-2-27 50 gn (doba trvání = 11 ms) pro akcelerace polovina sin. vlny podle IEC 60068-2-27

## Contractual warranty

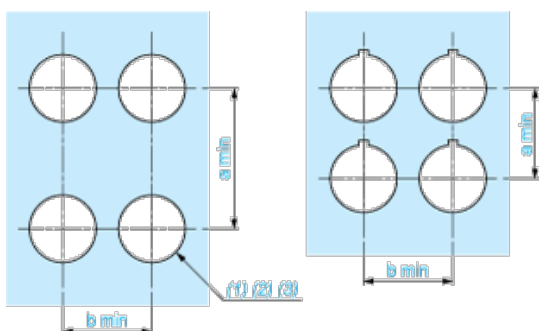
Záruční lhůta	18 měsíců
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## Dimensions



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

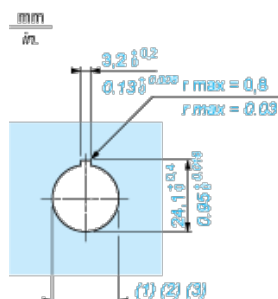
### Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



- (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

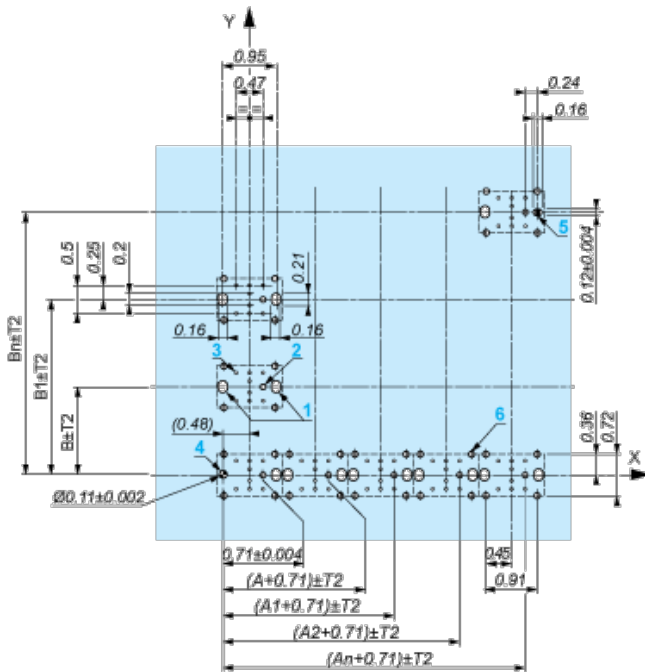


- (1) Diameter on finished panel or support
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## Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

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





A: 1.18 in. min.

B: 1.57 in. min.

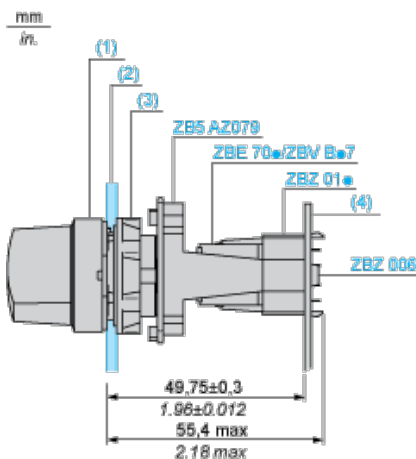
### General Tolerances of the Panel and Printed Circuit Board

The cumulative tolerance must not exceed 0.3 mm / 0.012 in.:  $T1 + T2 = 0.3 \text{ mm max.}$

### Installation Precautions

- | 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°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

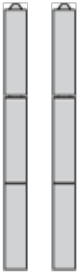
### Mounting of Adapter (Socket) ZBZ01•

- | 1 2 elongated holes for ZBZ006 screw access
- | 2 1 hole  $\varnothing$  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**)

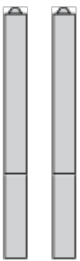
- | 5 1 elongated hole for aligning the printed circuit board (with cut-out marked **b**)
- | 6 4 holes  $\varnothing$  2.4 mm / 0.09 in. for clipping in adapter ZBZ01•

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•.

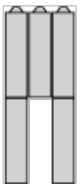
### Electrical Composition Corresponding to Code C3



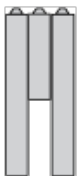
### Electrical Composition Corresponding to Code C4



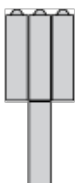
### Electrical Composition Corresponding to Code C5



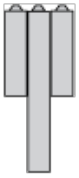
### Electrical Composition Corresponding to Code C6



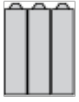
### Electrical Composition Corresponding to Code C7



### Electrical Composition Corresponding to Code C8

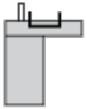


**Electrical Composition Corresponding to Codes C9, C11, SF1 and SR1**



**Electrical Composition Corresponding to Code C15**

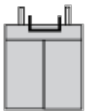
1 N/O



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 3-position Selector Switch Body**





**Position 315°**



<b>Push</b>	Position	Top			
		Bottom			
	Location		Left	Centre	Right
	State		1	1	0
<b>Contacts</b>	N/O		closed	closed	open
	N/C		open	open	closed




**Position 0°**



<b>Push</b>	Position	Top			
		Bottom			
	Location		Left	Centre	Right
	State		0	0	0
<b>Contacts</b>	N/O		open	open	open
	N/C		closed	closed	closed

**Position 45°**



<b>Push</b>	Position	Top			
		Bottom			
	Location		Left	Centre	Right
	State		0	1	1
<b>Contacts</b>	N/O		open	closed	closed
	N/C		closed	open	open