



Hlavní parametry

Řada výrobků	Harmony XB4
Typ produktu nebo součásti	Hlava pro přepínač
Označení přístroje	ZB4
Materiál obruby	Kovová chromovaná
Průměr pro montáž	22 mm
Typ hlavy	Standard
Prodej v nedělitelném množství	1
Tvar hlavice	Kruh
Typ ovládací hlavice	S návratem na střed
Provedení ovládače	Modrá standardní rukojeť
Informace o polohách ovládače	3 pozice +/- 45°

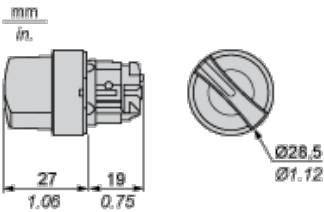
Doplňěk

CAD celková šířka	29 mm
CAD celková výška	29 mm
CAD celková hloubka	44 mm
Hmotnost přístroje	0,04 kg
Odolnost proti vysokému tlaku mytí	7000000 Pa při 55 °C, vzdálenost: 0,1 m
Mechanická životnost	1000000 cykly
Označení el. složení	C11 pro 3 kontakty použitím jednoduchých bloky v čelní montáž C7 pro 4 kontakty použitím jednoduchých bloky v čelní montáž C8 pro 4 kontakty použitím jednoduchých a dvojité bloky v čelní montáž C4 pro 6 kontakty použitím jednoduchých a dvojité bloky v čelní montáž C5 pro 5 kontakty použitím jednoduchých bloky v čelní montáž C6 pro 5 kontakty použitím jednoduchých a dvojité bloky v čelní montáž C3 pro 6 kontakty použitím jednoduchých 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 I podle IEC 60536
stupeň krytí IP	IP67 podle IEC 60529 IP69K IP69
stupeň krytí NEMA	NEMA 13 NEMA 4X
stupeň ochrany IK	IK06 podle IEC 50102
standards	EN/IEC 60947-1 EN/IEC 60947-5-1 EN/IEC 60947-5-4 EN/IEC 60947-5-5 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

Dimensions

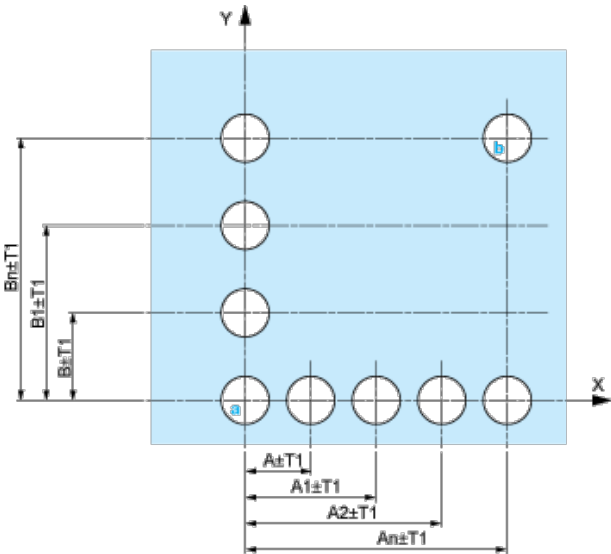


Panel Cut-out for Pushbuttons, Switches and Pilot Lights (Finished Holes, Ready for Installation)

Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board	Connection by Faston Connectors
Diagram showing a 2x2 grid of circular holes in a light blue panel. Dimensions are labeled: (1) for diameter, (2) for vertical spacing, (3) for horizontal spacing, and (4) for hole diameter.	Diagram showing a 2x2 grid of circular holes in a light blue panel. Dimensions are labeled: (1) for diameter, (5) for vertical spacing, (6) for horizontal spacing, and (4) for hole diameter.
(1) Diameter on finished panel or support (2) 40 mm min. / 1.57 in. min. (3) 30 mm min. / 1.18 in. min. (4) Ø 22.5 mm / 0.89 in. recommended (Ø 22.3 mm ^{+0.4} / 0.88 in. ₀ ^{+0.016}) (5) 45 mm min. / 1.78 in. min. (6) 32 mm min. / 1.26 in. min.	

Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

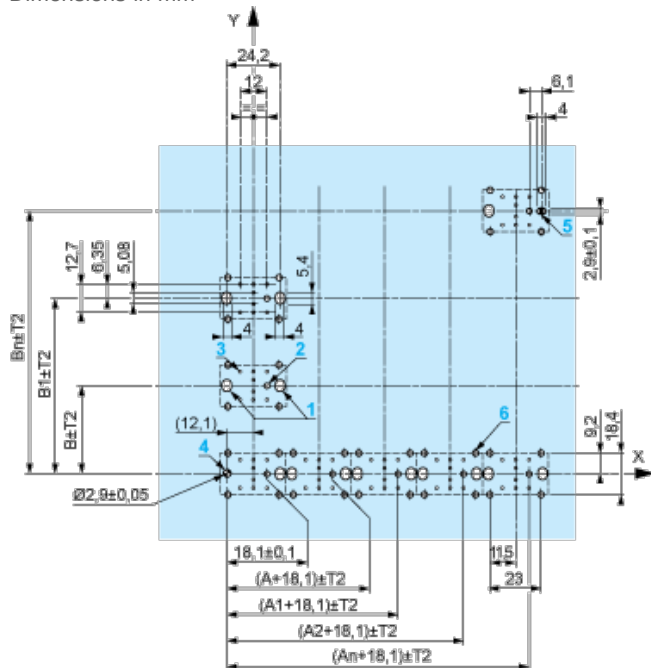
Panel Cut-outs (Viewed from Installer's Side)



- 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)

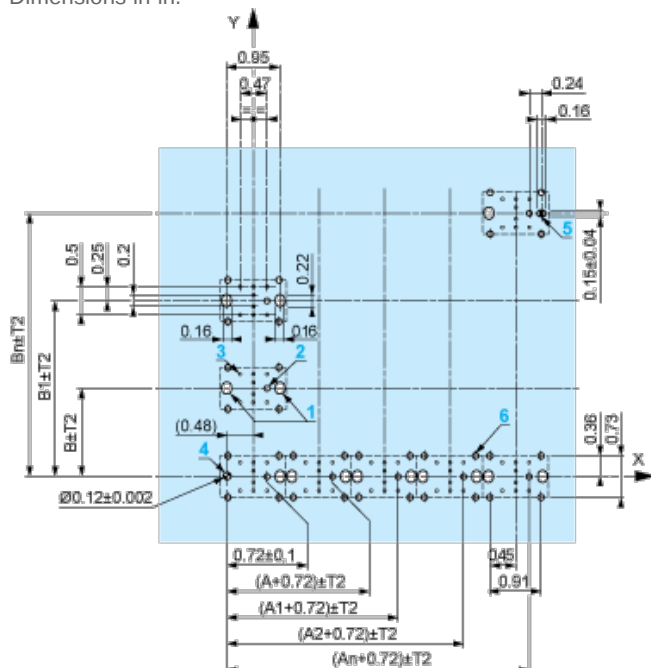
Dimensions in mm



A: 30 mm min.

B: 40 mm min.

Dimensions in in.



A: 1.18 in. min.

B: 1.57 in. min.

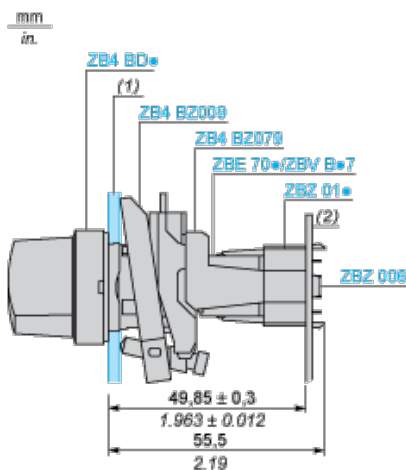
General Tolerances of the Panel and Printed Circuit Board

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

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 ZB4 BZ009: $\pm 2^\circ 30'$ (excluding cut-outs marked **a** and **b**).
- ▮ Tightening torque of screws ZBZ 006: 0.6 N.m (5.3 lbf.in) max.
- ▮ Allow for one ZB4 BZ079 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 (ZB4 BD•, ZB4 BJ•, ZB4 BG•).

The fixing centers marked **a** and **b** are diagonally opposed and must align with those marked **4** and **5**.



- (1) Panel
(2) Printed circuit board

Mounting of Adapter (Socket) ZBZ 01•

- | 1 2 elongated holes for ZBZ 006 screw access
- | 2 1 hole $\varnothing 2.4 \text{ mm} \pm 0.05 / 0.09 \text{ in.} \pm 0.002$ for centring adapter ZBZ 01•
- | 3 $8 \times \varnothing 1.2 \text{ mm} / 0.05 \text{ in.}$ holes
- | 4 1 hole $\varnothing 2.9 \text{ mm} \pm 0.05 / 0.11 \text{ in.} \pm 0.002$, 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 $\varnothing 2.4 \text{ mm} / 0.09 \text{ in.}$ for clipping in adapter ZBZ 01•

Dimensions An + 18.1 relate to the $\varnothing 2.4 \text{ mm} \pm 0.05 / 0.09 \text{ in.} \pm 0.002$ holes for centring adapter ZBZ 01•.

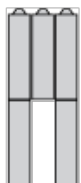
Electrical Composition Corresponding to Code C3



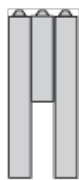
Electrical Composition Corresponding to Code C4



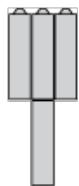
Electrical Composition Corresponding to Code C5



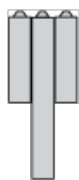
Electrical Composition Corresponding to Code C6



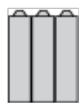
Electrical Composition Corresponding to Code C7



Electrical Composition Corresponding to Code C8



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



Legend

Single contact



Double contact



Light block



Possible location



Sequence of Contacts Fitted to 3-position Selector Switch Body

Position 315°



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

Position 0°



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

Position 45°



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