



### Hauptkenndaten

Produktserie	Harmony XB4
Produkt oder Komponententyp	Kopf für Leuchtdrucktaste
Produktkompatibilität	LED-Modul
Kurzbezeichnung des Geräts	ZB4
Blendenmaterial	Chrom-beschichtetes Metall
Montagedurchmesser	22 mm
Verkauf je unteilbare Menge	1
Form des Signaleinheitkopfes	Rund
Operatortyp	Mit Rastung
Profil Betätigungselement	Grün bündig unbeschriftet

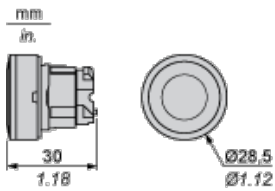
### Zusatzdaten

CAD-Gesamtbreite	29 mm
CAD-Gesamthöhe	29 mm
CAD-Gesamttiefe	30 mm
Produktgewicht	0,026 kg
Widerstandsfähigkeit gegen Hochdruckreiniger	7000000 Pa bei 55 °C, Entfernung: 0,1 m
Mechanische Lebensdauer	500000 Zyklen
Code für den elektrischen Aufbau	M10 für ≤ 2 Kontakte in einfach Blöcke in Frontmontage mit LED-Modul M6 für ≤ 2 Kontakte in einfach Blöcke in Frontmontage mit LED-Modul und Transformator M5 für ≤ 2 Kontakte in einfach Blöcke in Frontmontage mit LED-Modul

### Umgebung

Schutzbehandlung	TH
Umgebungstemperatur bei Lagerung	-40-70 °C
Umgebungstemperatur bei Betrieb	-40-70 °C
Schutzart gegen Stromschlag	Klasse I entspricht IEC 60536
Überspannungskategorie	Klasse I entspricht IEC 60536
Schutzart (IP)	IP67 IP66 entspricht IEC 60529 IP69K IP69
Schutzart (NEMA)	NEMA 13 NEMA 4X
IK-Schutzart	IK06 entspricht IEC 50102
Normen	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 No 14
Produktzertifizierungen	BV CSA DNV GL LROS (Lloyds register of shipping) RINA UL gelistet
Vibrationsfestigkeit	5 gn (f = 2...500 Hz) entspricht IEC 60068-2-6
Stoßfestigkeit	30 gn (Dauer = 18 ms) für Sinushalbwellenbeschleunigung entspricht IEC 60068-2-27 50 gn (Dauer = 11 ms) für Sinushalbwellenbeschleunigung entspricht IEC 60068-2-

## Dimensions

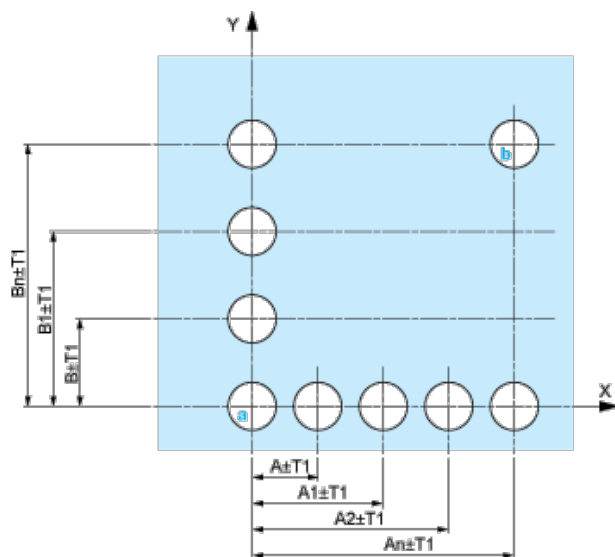


## Panel Cut-out for Pushbuttons, Switches and Pilot Lights (Finished Holes, Ready for Installation)

Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board	Connection by Faston Connectors
<p>Diagram showing a 2x2 grid of circular cut-outs on a light blue panel. Dimensions are labeled: (1) for diameter, (2) for vertical spacing, (3) for horizontal spacing, and (4) for the cut-out diameter.</p>	<p>Diagram showing a 2x2 grid of circular cut-outs on a light blue panel. Dimensions are labeled: (1) for diameter, (5) for vertical spacing, (6) for horizontal spacing, and (4) for the cut-out diameter.</p>
<p>(1) Diameter on finished panel or support</p> <p>(2) 40 mm min. / 1.57 in. min.</p> <p>(3) 30 mm min. / 1.18 in. min.</p> <p>(4) <math>\varnothing 22.5</math> mm / 0.89 in. recommended (<math>\varnothing 22.3</math> mm <math>^{+0.4}_0</math> / 0.88 in. <math>^{+0.016}_0</math>)</p> <p>(5) 45 mm min. / 1.78 in. min.</p> <p>(6) 32 mm min. / 1.26 in. min.</p>	

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

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

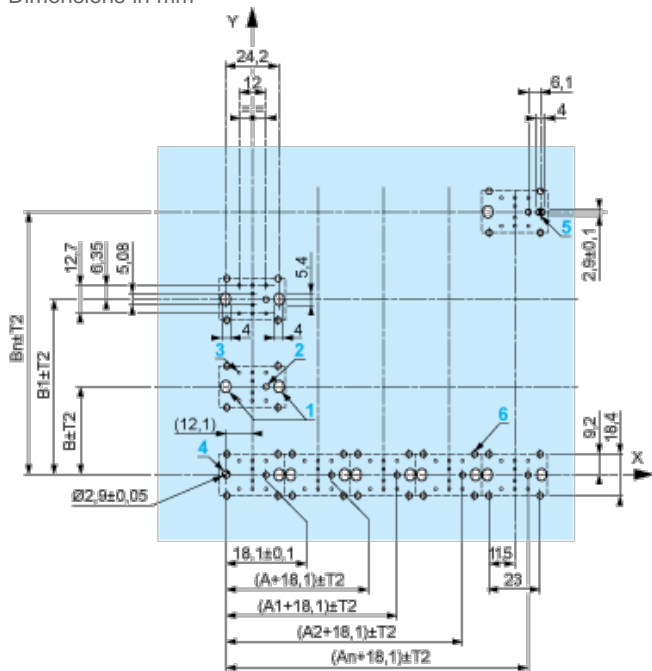


A: 30 mm min. / 1.18 in. min.

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

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

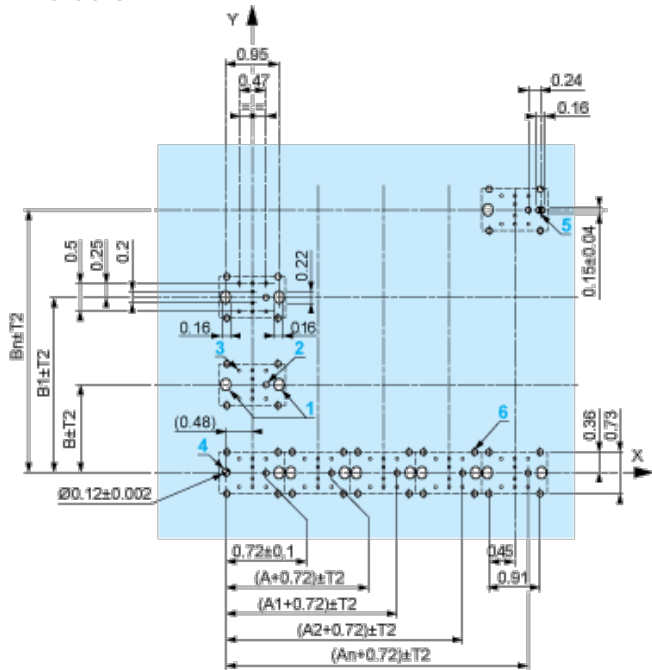
Dimensions in mm



A: 30 mm min.

**B:** 40 mm min.

Dimensions in in.



**A:** 1.18 in. min.

**B:** 1.57 in. min.

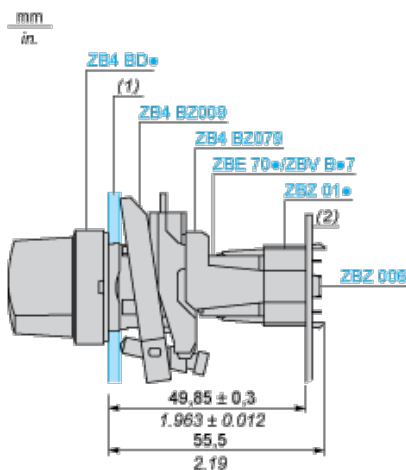
### General Tolerances of the Panel and Printed Circuit Board

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 ± 0.1 / 0.88 in. ± 0.004
- Orientation of body/fixing collar ZB4 BZ009: ± 2°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**.



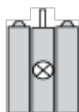
- (1) Panel
- (2) Printed circuit board

#### 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 ×  $\varnothing 1.2 \text{ mm} / 0.05 \text{ in.}$  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 Codes M5, M10, MF1, MR1 and MF2



#### Electrical Composition Corresponding to Codes M6 and P2



#### Legend

Single contact



Double contact



Light block



Possible location

