



Hauptkenndaten

Produktbereich	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	Blau bündig unbeschriftet

Zusatzdaten

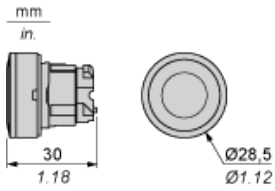
CAD-Gesamtbreite	29 mm
CAD-Gesamthöhe	29 mm
CAD-Gesamttiefe	30 mm
Gewicht	0,026 kg
Widerstandsfähigkeit gegen Hochdruckreiniger	7000000 Pa bei 55 °C, Entfernung: 0,1 m
Mechanische Lebensdauer	500000 Zyklen
Code für den elektrischen Aufbau	M10 für <= 2 Kontakte in einfach Blöcke in Frontmontage mit LED-Modul 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	-25...70 °C
Schutzart gegen Stromschlag	Klasse I gemäß IEC 60536
IP-Schutzgrad	IP66 gemäß IEC 60529
NEMA-Schutzart	NEMA 13 NEMA 4X
IK-Schutzart	IK05 gemäß 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) gemäß IEC 60068-2-6
Stoßfestigkeit	30 gn (Dauer = 18 ms) für Sinushalbwellenbeschleunigung gemäß IEC 60068-2-27 50 gn (Dauer = 11 ms) für Sinushalbwellenbeschleunigung gemäß IEC 60068-2-27

Contractual warranty

Dimensions

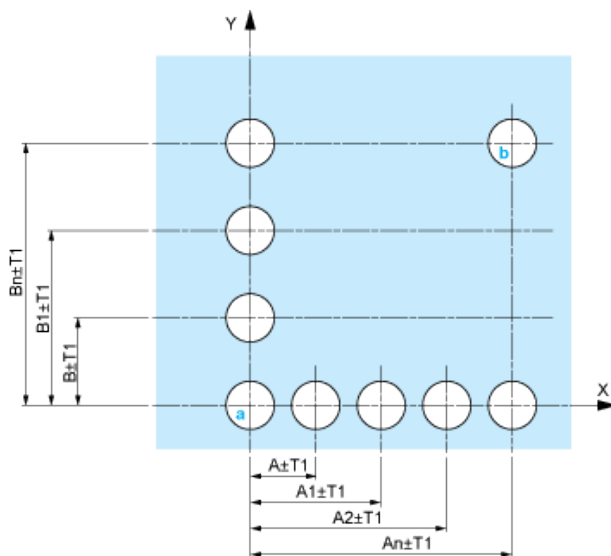


Panel Cut-out for Pushbuttons, Switches and Pilot Lights (Finished Holes, Ready for Installation)

Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board	Connection by Faston Connectors
<p>(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) $\varnothing 22.5 \text{ mm} / 0.89 \text{ in.}$ recommended ($\varnothing 22.3 \text{ mm } ^{+0.4} / 0.88 \text{ in. } ^{+0.016}$)</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

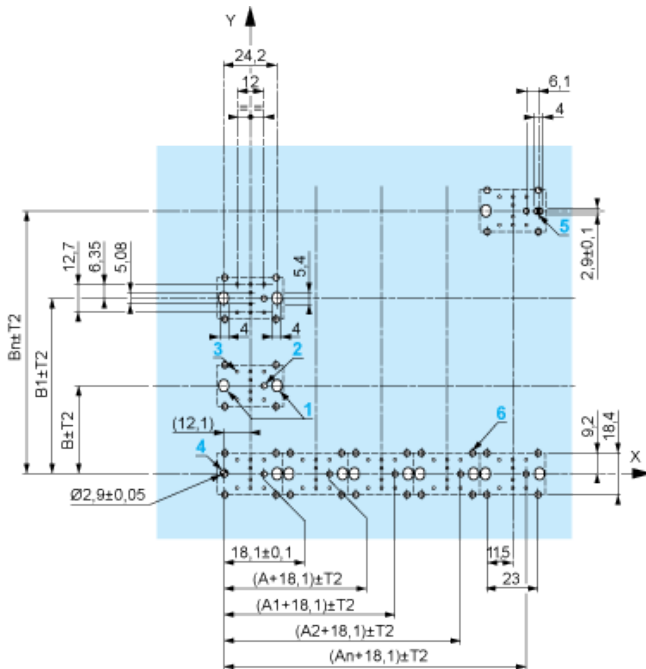
Panel Cut-outs (Viewed from Installer's Side)



- 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)

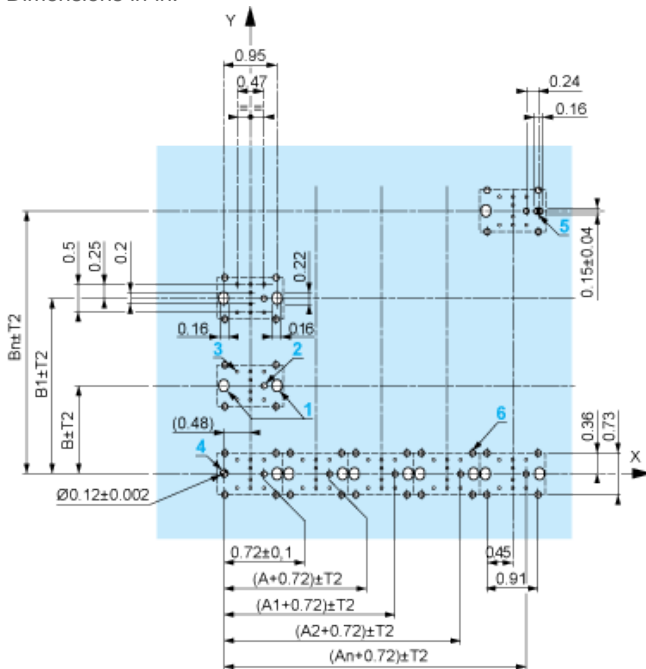
Dimensions in mm



A: 30 mm min.

B: 40 mm min.

Dimensions in in.



A: 1.18 in. min.

B: 1.57 in. min.

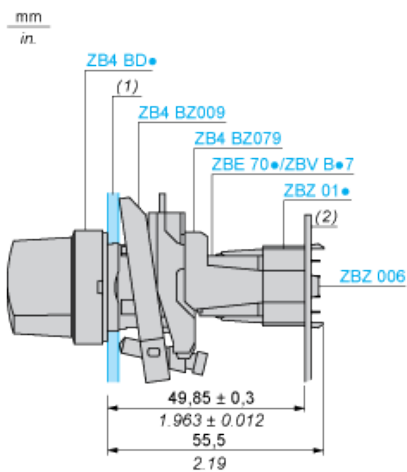
General Tolerances of the Panel and Printed Circuit Board

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 \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 mm \pm 0.05 / 0.09 in. \pm 0.002 for centring adapter ZBZ 01•
- 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 ZBZ 01•

Dimensions An + 18.1 relate to the \varnothing 2.4 mm \pm 0.05 / 0.09 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

