Produktdatenblatt
Technische Daten

ZB4BL3

Frontelem., rund f. Drucktast. Ø 22 - o. Rastung - vorstehend - grün - neutral

Hauptkenndaten

Produktbereich	Harmony XB4
Produkt oder Komponententyp	Frontelement für unbeleuchteten Taster
Kurzbezeichnung des Geräts	ZB4
Blendenmaterial	Chrom-beschichtes Metall
Montagedurchmesser	22 mm
Verkauf je unteilbare Menge	1
Form des Signaleinheitkopfes	Rund
Operatortyp	Rückstellung
Profil Betätigungselement	Grün vorstehend unbeschriftet

Zusatzdaten

CAD-Gesamtbreite	29 mm
CAD-Gesamthöhe	29 mm
CAD-Gesamttiefe	33 mm
Mechanische Lebensdauer	5000000 Zyklen
Code für den elektrischen Aufbau	C1 für <= 9 Kontakte in einfach Blöcke in Frontmontage C2 für <= 9 Kontakte in einfach und doppelt Blöcke in Frontmontage C11 für <= 3 Kontakte in einfach Blöcke in Frontmontage C15 für 1 Kontakte in einfach Blöcke in Frontmontage

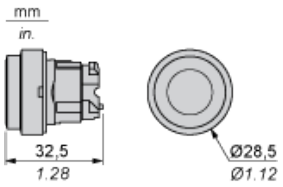
Umgebung

Schutzbehandlung	TH
Umgebungstemperatur bei Lagerung	-40-70 °C
Umgebungstemperatur bei Betrieb	-25...70 °C
Überspannungskategorie	Klasse I gemäß IEC 60536
IP-Schutzgrad	IP66 gemäß IEC 60529
NEMA-Schutzart	NEMA 13 NEMA 4X
IK-Schutzart	IK03 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

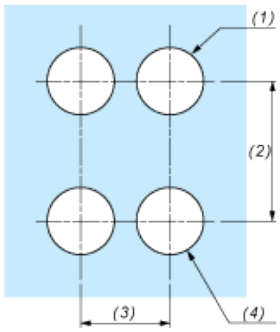
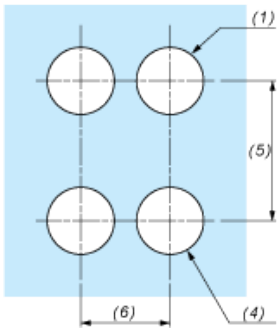
Contractual warranty

Periode	18 Monate

Dimensions



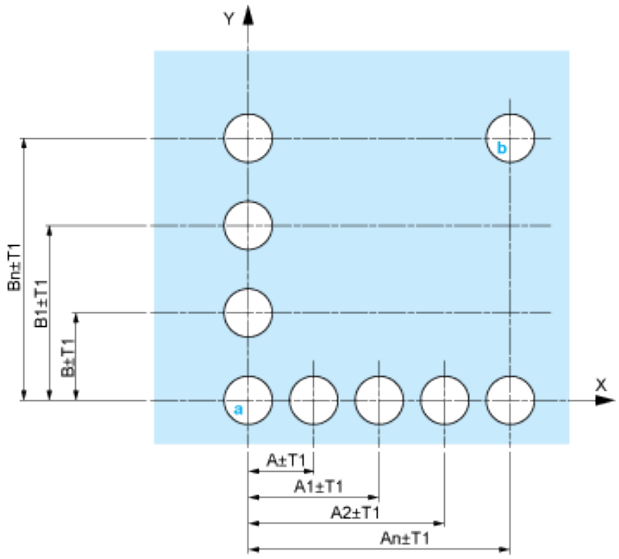
Panel Cut-out for Pushbuttons, Switches and Pilot Lights (Finished Holes, Ready for Installation)

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

(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 $_{0}^{+0.4}$ / 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

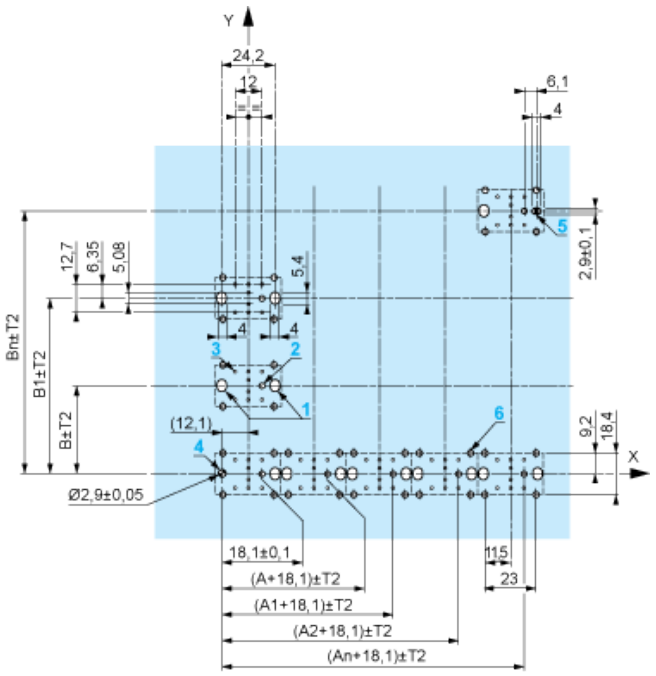
Panel Cut-outs (Viewed from Installer's Side)



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)

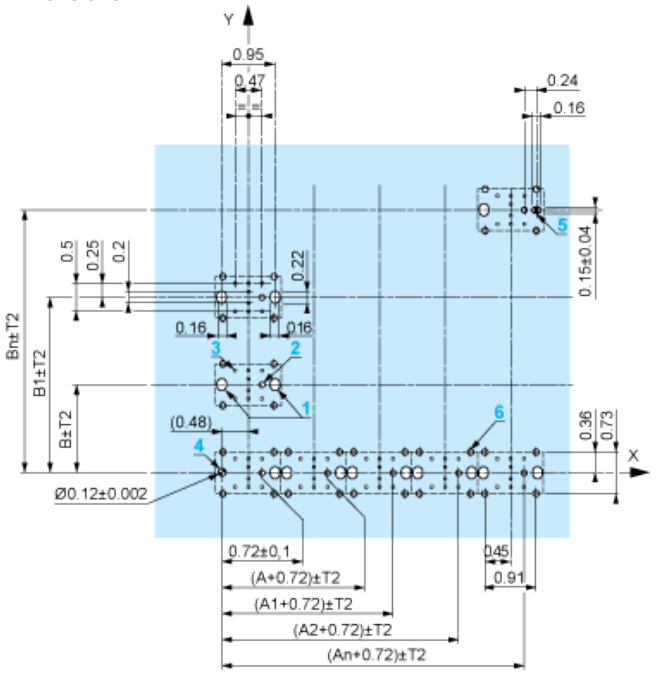
Dimensions in mm



A: 30 mm min.

B: 40 mm min.

Dimensions in in.



A: 1.18 in. min.

B: 1.57 in. min.

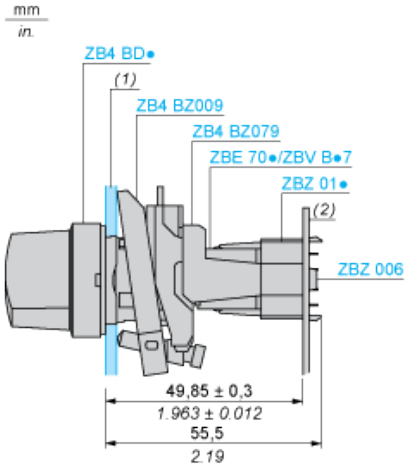
General Tolerances of the Panel and Printed Circuit Board

The cumulative tolerance must not exceed 0.3 mm / 0.012 in: T1 + T2 = 0.3 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

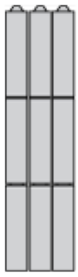
(2) Printed circuit board

Mounting of Adapter (Socket) ZBZ 01•

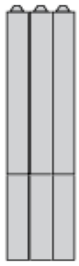
- **1** 2 elongated holes for ZBZ 006 screw access
- **2** 1 hole Ø 2.4 mm ± 0.05 / 0.09 in. ± 0.002 for centring adapter ZBZ 01•
- **3** 8 × Ø 1.2 mm / 0.05 in. holes
- **4** 1 hole Ø 2.9 mm ± 0.05 / 0.11 in. ± 0.002, for aligning the printed circuit board (with cut-out marked **a**)
- **5** 1 elongated hole for aligning the printed circuit board (with cut-out marked **b**)
- **6** 4 holes Ø 2.4 mm / 0.09 in. for clipping in adapter ZBZ 01•

Dimensions An + 18.1 relate to the Ø 2.4 mm ± 0.05 / 0.09 in. ± 0.002 holes for centring adapter ZBZ 01•.

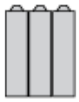
Electrical Composition Corresponding to Code C1



Electrical Composition Corresponding to Code C2

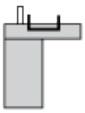


Electrical Composition Corresponding to Codes C9, C11, SF1 and SR1

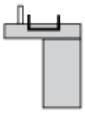


Electrical Composition Corresponding to Code C15

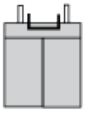
1 N/O



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