

Product data sheet

Specifications

light block ZB6ZB31B sold by 100

ZB6ZB31BTQ



⚠ Discontinued on: Nov 14, 2014

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Main

Range Of Product	Harmony XB6
Product Or Component Type	Complete body for illuminated push-button
Device Short Name	ZB6
Fixing Collar Material	Plastic
Sale Per Indivisible Quantity	10
Contacts Type And Composition	1 NO
Contact Operation	Slow-break
Connections - Terminals	Faston connector, connection size: 2.8 x 0.5 mm
Light Source	LED
Bulb Base	Integral LED
Light Source Colour	Green
[Us] Rated Supply Voltage	12...24 V AC/DC

Complementary

Contacts Usage	Standard
Positive Opening	With conforming to EN/IEC 60947-5-1 appendix K
Operating Travel	2 mm (NO changing electrical state) 4.3 mm (total travel)
Operating Force	1.6 N NO changing electrical state
Contacts Material	Silver alloy (Ag/Ni)
Short-Circuit Protection	6 A cartridge fuse type gG conforming to EN/IEC 60947-5-1
[Ui] Rated Insulation Voltage	250 V (pollution degree 3) conforming to EN/IEC 60947-1
[Uimp] Rated Impulse Withstand Voltage	4 kV conforming to EN/IEC 60947-1
[Ie] Rated Operational Current	3 A at 120 V, AC-15, B300 1.5 A at 240 V, AC-15, B300 0.1 A at 250 V, DC-13, R300 0.22 A at 125 V, DC-13, R300
Electrical Durability	1000000 cycles, AC-15, 2 A at 230 V, operating rate <3600 cyc/h, load factor: 0.5 conforming to EN/IEC 60947-5-1 appendix C 1000000 cycles, DC-15, 2 A at 230 V, operating rate <3600 cyc/h, load factor: 0.5 conforming to EN/IEC 60947-5-1 appendix C
Electrical Reliability	$\Lambda = 10\exp(-8)$ at 5 V and 1 mA with confidence level of 90 % conforming to EN/IEC 60947-5-4
Signalling Type	Steady

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Supply Voltage Limits	6...30 V AC/DC
Current Consumption	15 mA
Surge Withstand	1 kV direct contact conforming to IEC 61000-4-5 2 kV in free air conforming to IEC 61000-4-5

Environment

Protective Treatment	TC
Ambient Air Temperature For Storage	-40...70 °C
Ambient Air Temperature For Operation	-25...70 °C
Electrical Shock Protection Class	Class II conforming to IEC 61140
Standards	UL 508 EN/IEC 60947-5-5 EN/IEC 60947-5-1 CSA C22.2 No 14 EN/IEC 60947-1 JIS C 852 JIS C 4520
Product Certifications	CCC CSA GOST UL
Vibration Resistance	+/- 3 mm (f= 2...500 Hz) conforming to IEC 60068-2-6 5 gn (f= 2...500 Hz) conforming to IEC 60068-2-6
Shock Resistance	30 gn (duration = 18 ms) for half sine wave acceleration conforming to IEC 60068-2-27 50 gn (duration = 11 ms) for half sine wave acceleration conforming to IEC 60068-2-27
Resistance To Fast Transients	2 kV conforming to IEC 61000-4-4
Resistance To Electromagnetic Fields	10 V/m conforming to IEC 61000-4-3
Resistance To Electrostatic Discharge	6 kV on contact (on metal parts) conforming to IEC 61000-2-6 8 kV in free air (in insulating parts) conforming to IEC 61000-2-6
Electromagnetic Emission	Class B conforming to IEC 55011

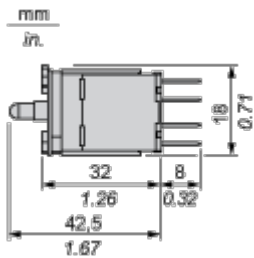
Contractual warranty

Warranty	18 months
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Dimensions Drawings

Body for Illuminated Pushbutton

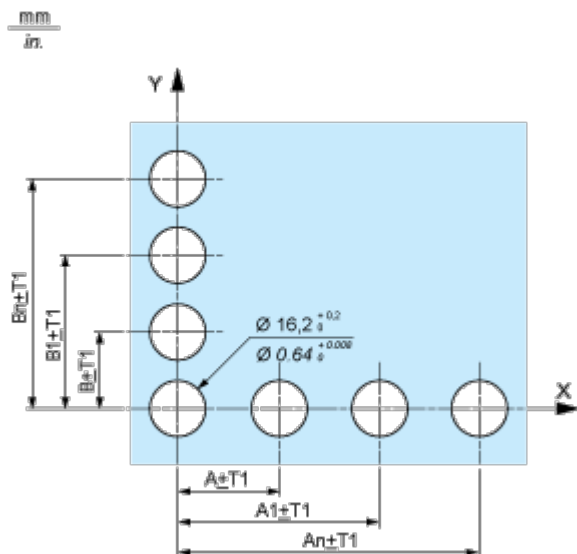
Dimensions



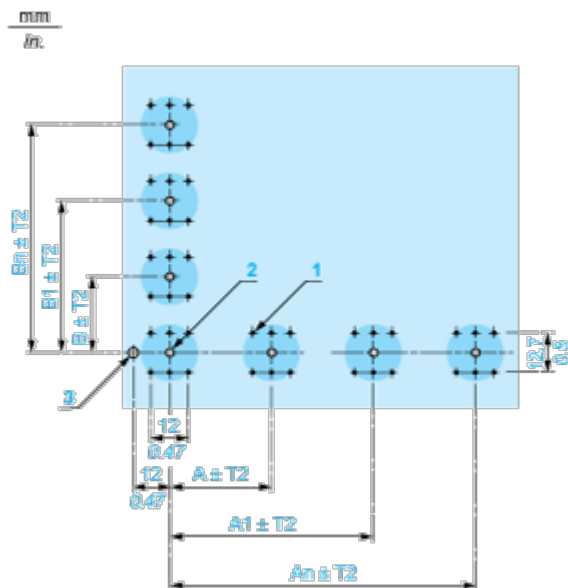
Mounting and Clearance

Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

Front Panel Cut-out (Viewed from Installer's Side)



Printed Circuit Board Drillings (Viewed from Electrical Block Side)



A 24 mm/0.94 in. minimum for rectangular heads, 18 mm/0.71 in. minimum for square or circular heads

B 18 mm/0.71 in. minimum

(1) 6 x Ø 1.1 mm / 6 x Ø 0.04 in. holes.

(2) $1 \times \varnothing 2.6_{-0.2}^0 \text{ mm} / 1 \times \varnothing 0.10_{-0.008}^0 \text{ in.}$ hole for locating pin, only when using socket adaptor ZB6Y010.

(3) $1 \times \varnothing 3.2^{0}_{-0.2}$ mm / $1 \times \varnothing 0.13^{0}_{-0.008}$ in. hole for fixing of printed circuit board onto the front panel using body bracket ZB6Y011. This hole must be drilled on the left-hand side, when heads are positioned at the normal angle. Fit a body bracket ZB6Y011 every 72 mm/2.83 in. maximum for cut-outs on 24 mm/0.94 in. centres (rectangular heads) and 54 mm/2.13 in. maximum for cut-outs on 18 mm/0.71 in. centres (square or circular heads).

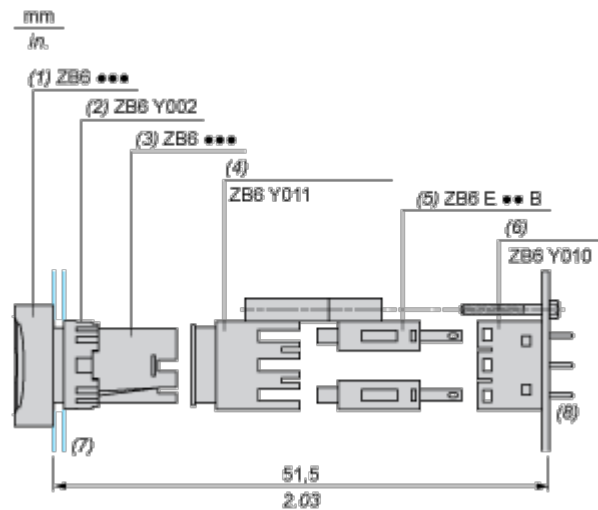
General tolerances of the panel and printed circuit board: T1, T2: T1 + T2 = 0.3 mm/0.01 in. maximum.

Installation precautions:

Thickness of printed circuit board: 1.6 mm/0.06 in. minimum.

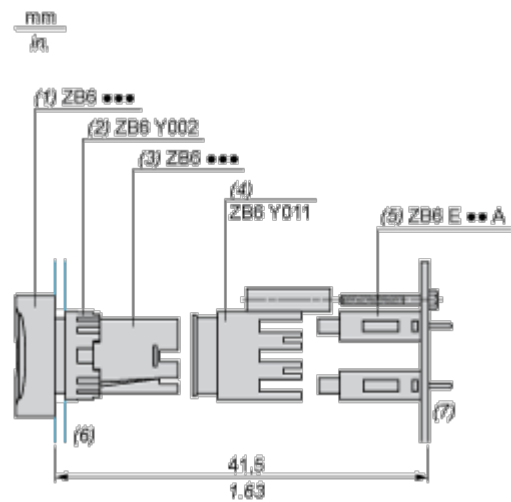
Mounting with Body Bracket

With socket adaptor ZB6Y010



- (1) Head
- (2) Nut
- (3) Body
- (4) Body bracket
- (5) Contact block
- (6) Socket adaptor
- (7) Panel
- (8) Printed circuit

Direct mounting without socket adaptor ZB6Y010



- (1) Head
- (2) Nut
- (3) Body
- (4) Body bracket
- (5) Contact block
- (6) Panel
- (7) Printed circuit

