

Product data sheet

Characteristics

ZB5AW743

red Ø40 illum mushroom pushbutton head Ø22
latching for integral LED



Main

Range of product	Harmony XB5
Product or component type	Head for illuminated emergency switching off pushbutton
Device short name	ZB5
Product compatibility	Integral LED
Bezel material	Dark grey plastic
Mounting diameter	22 mm
Sale per indivisible quantity	1
Head type	Standard
Shape of signaling unit head	Round
Type of operator	latching
Reset	Turn to release
Operator profile	Red mushroom Ø 40 mm, unmarked

Complementary

CAD overall width	40 mm
CAD overall height	40 mm
CAD overall depth	50 mm
Net weight	0.022 kg
Resistance to high pressure washer	7000000 Pa at 55 °C, distance : 0.1 m
Mechanical durability	300000 cycles
Main group	Switching off
Group of product	Emer swi off illum turn to rel
Station name	XALD 1 cut-out XALK 1 cut-out
Cap/operator or lens colour	Red
Marking	Unmarked
Electrical composition code	M6 for <2 contacts using single blocks in front mounting with integral LED and transformer M10 for <2 contacts using single blocks in front mounting with integral LED MF1 for <2 contacts using single blocks in front mounting with integral LED MR1 for <2 contacts using single blocks in rear mounting with integral LED
Device presentation	Basic sub-assemblies

Environment

Protective treatment	TC
Ambient air temperature for storage	-40...70 °C
Ambient air temperature for operation	-40...70 °C
Overvoltage category	Class II conforming to IEC 60536
IP degree of protection	IP66 conforming to IEC 60529 IP69 IP69K
NEMA degree of protection	NEMA 13 NEMA 4X
IK degree of protection	IK05 conforming to EN 50102

Standards	EN/IEC 60947-5-4 EN/IEC 60947-1 GB 14048.5 EN/IEC 60947-5-1 CSA C22.2 No 14 JIS C8201-5-1 UL 508 JIS C8201-1
Product certifications	UL listed LROS (Lloyds register of shipping) BV GL CSA DNV
Vibration resistance	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

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	36 g
Package 1 Height	8.6 cm
Package 1 width	4.2 cm
Package 1 Length	5.4 cm
Unit Type of Package 2	S03
Number of Units in Package 2	120
Package 2 Weight	4.85 kg
Package 2 Height	30 cm
Package 2 width	30 cm
Package 2 Length	40 cm

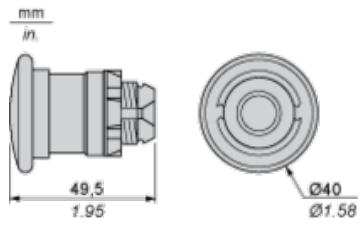
Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	REACH Declaration
REACH free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Toxic heavy metal free	Yes
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS Declaration
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End Of Life Information

Contractual warranty

Warranty	12 months
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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



- (1) Diameter on finished panel or support
- (2) For selector switches and Emergency stop buttons, use of an anti-rotation plate type ZB5AZ902 is recommended.
- (3) $\varnothing 22.5$ mm recommended ($\varnothing 22.3_0^{+0.4}$) / $\varnothing 0.89$ in. recommended ($\varnothing 0.88$ in. $_0^{+0.016}$)

Connections	a in mm	a in in.	b in mm	b in in.
By screw clamp terminals or plug-in connector	40	1.57	30	1.18
By Faston connectors	45	1.77	32	1.26
On printed circuit board	30	1.18	30	1.18

Detail of Lug Recess



- (1) Diameter on finished panel or support
- (2) For selector switches and Emergency stop buttons, use of an anti-rotation plate type ZB5AZ902 is recommended.
- (3) $\varnothing 22.5$ mm recommended ($\varnothing 22.3_0^{+0.4}$) / $\varnothing 0.89$ in. recommended ($\varnothing 0.88$ in. $_0^{+0.016}$)

Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

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



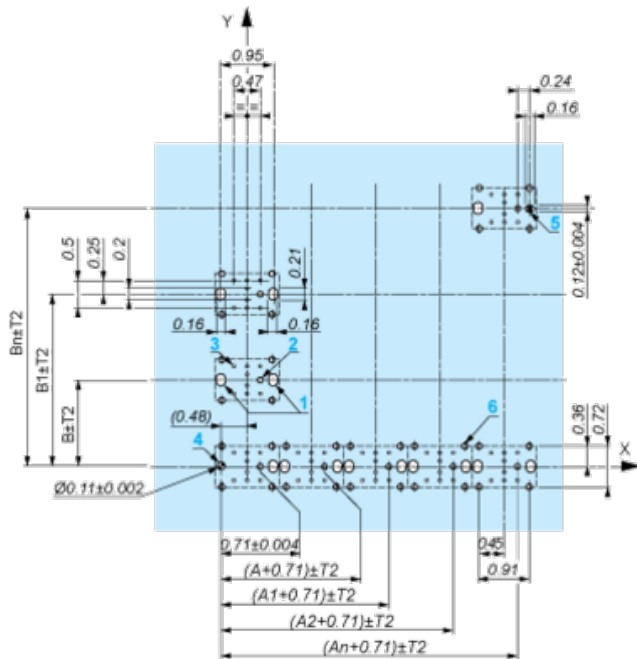
A: 30 mm min. / 1.18 in. min.
 B: 40 mm min. / 1.57 in. min.

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.

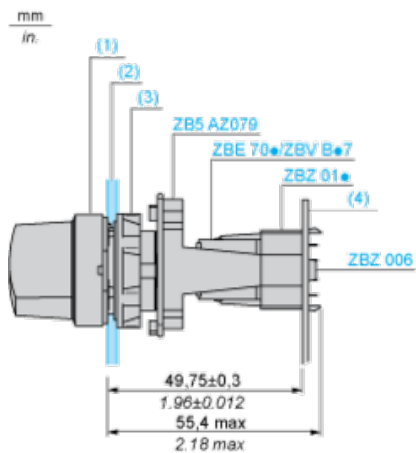
General Tolerances of the Panel and Printed Circuit Board

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: $22.4 \text{ mm} \pm 0.1 / 0.88 \text{ in.} \pm 0.004$
- Orientation of body/fixing collar ZB5AZ009: $\pm 2^{\circ}30'$ (excluding cut-outs marked a and b).
- Tightening torque of screws ZBZ006: 0.6 N.m (5.3 lbf.in) max.
- Allow for one ZB5AZ079 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 (ZB5AD•, ZB5AJ•, ZB5AG•).

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



- (1) Head ZB5AD•
(2) Panel
(2) Nut
(4) Printed circuit board

Mounting of Adapter (Socket) ZBZ01•

- 1 2 elongated holes for ZBZ006 screw access
- 2 1 hole $\varnothing 2.4 \text{ mm} \pm 0.05 / 0.09 \text{ in.} \pm 0.002$ for centring adapter ZBZ01•
- 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 ZBZ01•

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 ZBZ01•.

Electrical Composition Corresponding to Codes M6 and P2



Electrical Composition Corresponding to Codes M5, M10, MF1, MR1 and MF2



Legend

Single contact

Double contact

Light block

Possible location

