# **ZB5CW143**

# red square projecting illum pushbutton head Ø22 spring return for integral LED

Product availability: Stock - Normally stocked in distribution facility

Price\*: 27.00 USD



Main	
Commercial Status	Commercialised
Range of product	Harmony XB5
Product or component type	Head for illuminated push-button
Device short name	ZB5
Product compatibility	Integral LED
Bezel material	Plastic
Mounting diameter	0.87 in (22 mm)
Sale per indivisible quantity	1
Shape of signaling unit head	Square
Type of operator	Spring return
Operator profile	Red projecting unmarked
Operator additional information	For insertion of legend

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CAD overall width	1.18 in (30 mm)
CAD overall height	1.18 in (30 mm)
CAD overall depth	1.34 in (34 mm)
Product weight	0.05 lb(US) (0.024 kg)
Resistance to high pressure washer	1015.26 psi (7000000 Pa) at 131 °F (55 °C),distance: 0.1 m
Mechanical durability	5000000 cycles
Station name	XALK 25 cut-outs XALD 15 cut-outs
Electrical composition code	MR1 <= 2 contacts using single blocks in rear mounting with integral LED MF1 <= 2 contacts using single blocks in front mounting with integral LED M10 <= 2 contacts using single blocks in front mounting with integral LED M6 <= 2 contacts using single blocks in front mounting with integral LED and transformer M2 <= 6 contacts using single and double blocks in front mounting with integral LED M1 <= 6 contacts using single blocks in front mounting with integral LED

## Environment

Protective treatment	TC	
Ambient air temperature for storage	-40158 °F (-4070 °C)	
Ambient air temperature for operation	-13158 °F (-2570 °C)	
Class of protection against electric shock	Class II conforming to IEC 60536	
IP degree of protection	IP66 conforming to IEC 60529	
NEMA degree of protection	NEMA 4X NEMA 13	
IK degree of protection	IK05 conforming to EN 50102	

Standards	EN/IEC 60947-1		
	EN/IEC 60947-5-1		
	EN/IEC 60947-5-4		
	JIS C 4520		
	UL 508		
	GB 14048.5		
	CSA C22.2 No 14		
Product certifications	BV		
	CSA		
	DNV		
	GL		
	LROS (Lloyds register of shipping)		
	RINA		
	UL listed		
Vibration resistance	5 gn (f = 2500 Hz) conforming to IEC 60068-2-6		
Shock resistance	50 gn (duration = 11 ms) half sine wave acceleration conforming to IEC 60068-2-27 30 gn (duration = 18 ms) half sine wave acceleration conforming to IEC 60068-2-27		

# Ordering and shipping details

Category	22467 - PUSHBUTTONS,22MM(PLASTIC) NEW
Discount Schedule	CS2
GTIN	00785901386957
Nbr. of units in pkg.	1
Product availability	Stock - Normally stocked in distribution facility
Returnability	Υ
Country of origin	FR

# Contractual warranty

Warranty period	18 months	

# Product data sheet Dimensions Drawings

# **ZB5CW143**

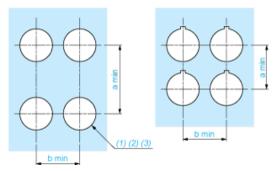
# **Dimensions**





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

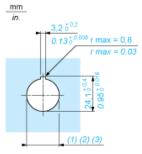
Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



- Diameter on finished panel or support (1)
- For selector switches and Emergency stop buttons, use of an anti-rotation plate type ZB5AZ902 is recommended.  $\varnothing$ 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

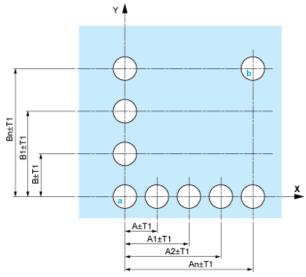
#### **Detail of Lug Recess**



- Diameter on finished panel or support
- For selector switches and Emergency stop buttons, use of an anti-rotation plate type ZB5AZ902 is recommended.
- Ø22.5 mm recommended (Ø22.3  $_0$   $^{+0.4}$ ) / Ø0.89 in. recommended (Ø0.88 in.  $_0$   $^{+0.016}$ )

Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

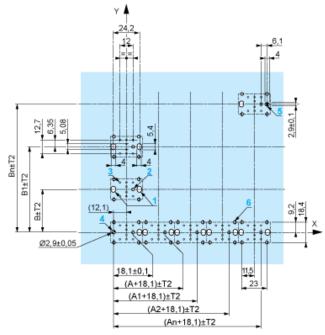
# Panel Cut-outs (Viewed from Installer's Side)



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

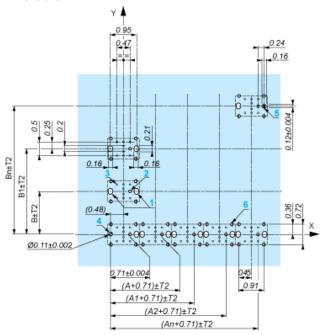
# Printed Circuit Board Cut-outs (Viewed from Electrical Block Side)

#### Dimensions in mm



- A: 30 mm min.
- B: 40 mm min.

#### Dimensions in in.



A: 1.18 in. min. B: 1.57 in. min.

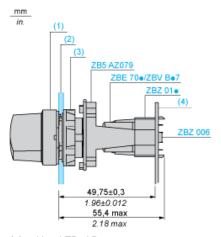
#### General Tolerances of the Panel and Printed Circuit Board

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 ZB5AZ009: ± 2 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:
  - o every 90 mm / 3.54 in. horizontally (X), and 120 mm / 4.72 in. vertically (Y).
  - $\circ$  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

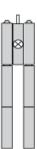
### Mounting of Adapter (Socket) ZBZ01•

- 1 2 elongated holes for ZBZ006 screw access
- 2 1 hole Ø 2.4 mm ± 0.05 / 0.09 in. ± 0.002 for centring adapter ZBZ01•
- 3 8 × Ø 1.2 mm / 0.05 in. holes
- 4 1 hole Ø 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 Ø 2.4 mm / 0.09 in. for clipping in adapter ZBZ01•

Dimensions An + 18.1 relate to the Ø 2.4 mm  $\pm$  0.05 / 0.09 in.  $\pm$  0.002 holes for centring adapter ZBZ01•.



Electrical Composition Corresponding to Codes M1 and M7



Electrical Composition Corresponding to Codes M2 and M8



Electrical Composition Corresponding to Codes M6 and P2



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



Legend



Double contact



Light block



Possible location

