



## Main

Range of product	Harmony XB5
Product or component type	Complete pushbutton
Device short name	XB5
Bezel material	Plastic
Fixing collar material	Plastic
Mounting diameter	22 mm
Sale per indivisible quantity	1
Shape of signaling unit head	Round
Type of operator	Spring return
Operator profile	Red flush unmarked
Contacts type and composition	1 NC
Contacts operation	Slow-break
Connections - terminals	Screw clamp terminals: $\leq 2 \times 1.5 \text{ mm}^2$ with cable end conforming to EN/IEC 60947-1 Screw clamp terminals: $1 \times 0.22 \dots 2 \times 2.5 \text{ mm}^2$ without cable end conforming to EN/IEC 60947-1

## Complementary

CAD overall width	30 mm
CAD overall height	42 mm
CAD overall depth	52 mm
Terminals description ISO n°1	(21-22)NC
Product weight	0.037 kg
Resistance to high pressure washer	7000000 Pa at 55 °C, distance: 0.1 m
Contacts usage	Standard contacts
Positive opening	With positive opening conforming to EN/IEC 60947-5-1 appendix K
Operating travel	4.3 mm (total travel) 1.5 mm (NC changing electrical state)
Operating force	3.5 N (NC changing electrical state)
Mechanical durability	5000000 cycles
Tightening torque	0.8...1.2 N.m conforming to EN 60947-1
Shape of screw head	Cross head compatible with Philips no 1 screwdriver Slotted head compatible with flat Ø 4 mm screwdriver Cross head compatible with pozidriv No 1 screwdriver Slotted head compatible with flat Ø 5.5 mm screwdriver
Contacts material	Silver alloy (Ag/Ni)
Short circuit protection	10 A cartridge fuse type gG conforming to EN/IEC 60947-5-1
[I <sub>th</sub> ] conventional free air thermal current	10 A conforming to EN/IEC 60947-5-1
[U <sub>i</sub> ] rated insulation voltage	600 V (degree of pollution: 3) conforming to EN/IEC 60947-1
[U <sub>imp</sub> ] rated impulse withstand voltage	6 kV conforming to EN/IEC 60947-1
[I <sub>e</sub> ] rated operational current	3 A at 240 V, AC-15, A600 conforming to EN/IEC 60947-5-1 0.55 A at 125 V, DC-13, Q600 conforming to EN/IEC 60947-5-1 0.1 A at 600 V, DC-13, Q600 conforming to EN/IEC 60947-5-1 1.2 A at 600 V, AC-15, A600 conforming to EN/IEC 60947-5-1 6 A at 120 V, AC-15, A600 conforming to EN/IEC 60947-5-1 0.27 A at 250 V, DC-13, Q600 conforming to EN/IEC 60947-5-1

Electrical durability	1000000 cycles, AC-15, 3 A at 120 V, operating rate: 3600 cyc/h, load factor: 0.5 conforming to EN/IEC 60947-5-1 appendix C 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, AC-15, 4 A at 24 V, operating rate: 3600 cyc/h, load factor: 0.5 conforming to EN/IEC 60947-5-1 appendix C 1000000 cycles, DC-13, 0.2 A at 110 V, operating rate: 3600 cyc/h, load factor: 0.5 conforming to EN/IEC 60947-5-1 appendix C 1000000 cycles, DC-13, 0.5 A at 24 V, operating rate: 3600 cyc/h, load factor: 0.5 conforming to EN/IEC 60947-5-1 appendix C
Electrical reliability IEC 60947-5-4	$\Lambda < 10\exp(-8)$ at 17 V, 5 mA in clean environment conforming to EN/IEC 60947-5-4 $\Lambda < 10\exp(-6)$ at 5 V, 1 mA in clean environment conforming to EN/IEC 60947-5-4

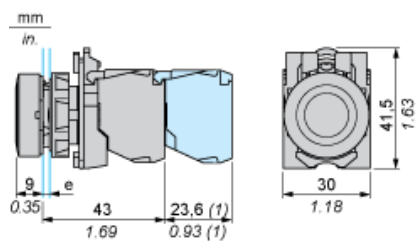
## Environment

Protective treatment	TH
Ambient air temperature for storage	-40...70 °C
Ambient air temperature for operation	-25...70 °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	IK03 conforming to IEC 50102
Standards	EN/IEC 60947-5-1 UL 508 EN/IEC 60947-5-4 EN/IEC 60947-5-5 CSA C22-2 No 14 JIS C 4520 EN/IEC 60947-1
Product certifications	CSA LRQS (Lloyds register of shipping) RINA UL listed BV DNV (Det Norske Veritas) GL
Vibration resistance	5 gn (f = 2...500 Hz) conforming to IEC 60068-2-6
Shock resistance	30 gn for 18 ms half sine wave acceleration conforming to IEC 60068-2-27 50 gn for 11 ms half sine wave acceleration conforming to IEC 60068-2-27

Dimensions of Pushbuttons

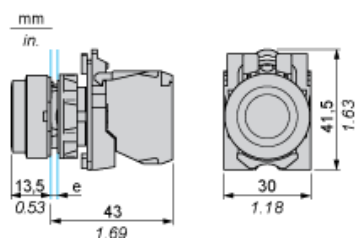
Pushbuttons, Spring Return

XB5 AA••



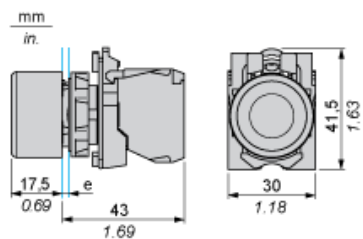
e: clamping thickness: 1 to 6 mm / 0.04 to 0.24 in.  
(1) Additional row of contacts or double contact

XB5 AL••



e: clamping thickness: 1 to 6 mm / 0.04 to 0.24 in.

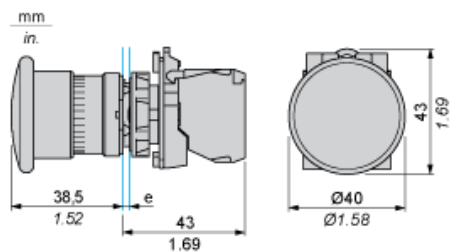
XB5 AP••



e: clamping thickness: 1 to 6 mm / 0.04 to 0.24 in.

Mushroom Head Pushbuttons, Spring Return

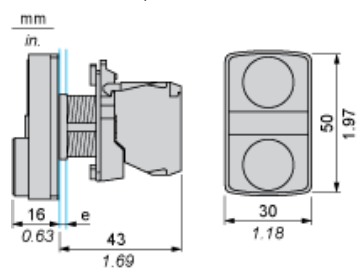
XB5 AC21



e: clamping thickness: 1 to 6 mm / 0.04 to 0.24 in.

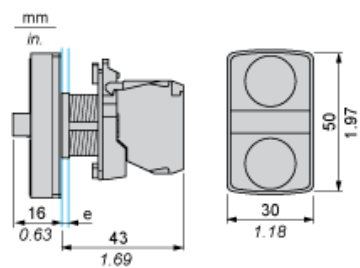
## Multiple-Headed Pushbuttons (Double or Triple), Spring Return

XB5 AL73415, XB5 AW73731•5



e: clamping thickness: 1 to 6 mm / 0.04 to 0.24 in.

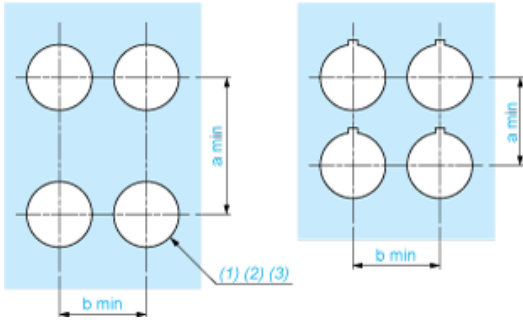
XB5 AA731327, XB5 AA711237



e: clamping thickness: 1 to 6 mm / 0.04 to 0.24 in.

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

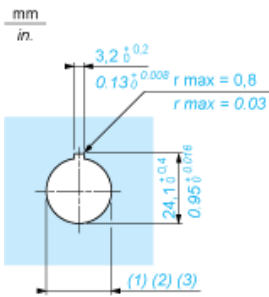
Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



- (1) Diameter on finished panel or support
- (2) For selector switches and Emergency stop buttons, use of an anti-rotation plate type ZB5 AZ902 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 ZB5 AZ902 is recommended.
- (3)  $\varnothing 22.5$  mm recommended ( $\varnothing 22.3_0^{+0.4}$ ) /  $\varnothing 0.89$  in. recommended ( $\varnothing 0.88$  in.  $_0^{+0.016}$ )