

# Product data sheet

Specifications



Wireless and batteryless transmitter, Harmony XB5R, push button, plastic, red, 22mm, spring return

ZB5RTA4

## Main

Range of product	Harmony XB5
Product or component type	Wireless and batteryless transmitter
Device short name	XB5R
Bezel material	Dark grey plastic
Fixing collar material	Plastic
Mounting diameter	22 mm
Transmission frequency	2405 MHz
Emission class	5M00G7W
Antenna type	Omnidirectional

## Complementary

Shape of signaling unit head	Round
Type of operator	spring return push-button with transmitter
Operator profile	Red flush
Max power consumption in W	1 mW
Number of channels	16
Modulation Technique	O-QPSK
Bandwidth	5 MHz
Antenna gain	0 dBi
Embedding depth	42 mm
CAD overall height	41.5 mm
CAD overall width	30 mm
CAD overall depth	43 mm
Net weight	0.045 kg
Operating travel	4.3 mm (total travel)
Operating force	10 N C/O changing electrical state
Mechanical robustness	Free fall resistance 1000 mm conforming to EN/IEC 60068-2-32
Standards	CSA C22.2 No 14 EN/IEC 60947-1 EN/IEC 60947-5-1 UL 508

<b>Radio agreement</b>	ANATEL ARIB T66 FCC ICASA RSS
<b>Communication port protocol</b>	Zigbee green power at 2.4 GHz conforming to IEEE 802.15.4
<b>Maximum sensing distance</b>	100 m in free field 25 m transmitter in a plastic box type XAL D and receiver in a metal enclosure 300 m transmitter in box type XAL D, receiver in metal enclosure and use relay-antenna
<b>Acquisition time</b>	2 ms
<b>Response time</b>	< 2 ms
<b>Emission power</b>	3 mW
<b>Fixing mode</b>	Fixing nut beneath head: 2...2.4 N.m
<b>Station name</b>	XALD 1...5 cut-outs XALK 2...5 cut-outs
<b>Electrical composition code</b>	PW1

## Environment

<b>Ambient air temperature for storage</b>	-40...70 °C
<b>Ambient air temperature for operation</b>	-40...70 °C
<b>Relative humidity</b>	95 % at -40...70 °C without condensation
<b>IP degree of protection</b>	IP66 (front face) conforming to IEC 60529 IP67 (front face) conforming to IEC 60529 IP69 (front face) conforming to IEC 60529 IP69K (front face) conforming to IEC 60529
<b>IK degree of protection</b>	IK03 conforming to IEC 50102
<b>Mechanical durability</b>	1000000 cycles
<b>Shock resistance</b>	25 gn (duration = 6 ms) for 6000 shocks conforming to IEC 60068-2-27 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
<b>Vibration resistance</b>	5 gn (f= 11...500 Hz) conforming to IEC 60068-2-6 +/- 10 mm (f= 2...11 Hz) conforming to IEC 60068-2-6
<b>Electromagnetic compatibility</b>	Electrostatic discharge immunity test - test level: 8 kV (in free air (in insulating parts)) conforming to IEC 61000-4-2 Electrostatic discharge immunity test - test level: 4 kV (on contact (on metal parts)) conforming to IEC 61000-4-2 Susceptibility to electromagnetic fields - test level: 20 V/m (80...3000 MHz) conforming to IEC 61000-4-3 Susceptibility to electromagnetic fields - test level: 6 V/m (3000...6000 MHz, distance = 20 m) conforming to IEC 61000-4-3
<b>Product certifications</b>	BT 2006/95/EC CCC UL GOST CSA C-Tick
<b>Directives</b>	1999/5/EC - R&TTE directive 2004/108/EC - electromagnetic compatibility

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	3.4 cm
<b>Package 1 Width</b>	5.3 cm
<b>Package 1 Length</b>	8.7 cm
<b>Package 1 Weight</b>	38 g
<b>Unit Type of Package 2</b>	S01

<b>Number of Units in Package 2</b>	25
<b>Package 2 Height</b>	15 cm
<b>Package 2 Width</b>	15 cm
<b>Package 2 Length</b>	40 cm
<b>Package 2 Weight</b>	1.151 kg

## Offer Sustainability

<b>Sustainable offer status</b>	Green Premium product
<b>REACH Regulation</b>	<a href="#">REACH Declaration</a>
<b>REACH free of SVHC</b>	Yes
<b>EU RoHS Directive</b>	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
<b>Mercury free</b>	Yes
<b>China RoHS Regulation</b>	<a href="#">China RoHS declaration</a>
<b>RoHS exemption information</b>	Yes
<b>Environmental Disclosure</b>	<a href="#">Product Environmental Profile</a>
<b>Circularity Profile</b>	<a href="#">End of Life Information</a>
<b>WEEE</b>	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
<b>California proposition 65</b>	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>

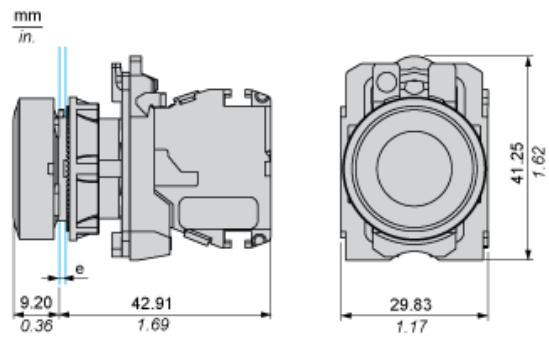
## Contractual warranty

<b>Warranty</b>	18 months
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## Wireless and Batteryless Pushbutton - Transmitter

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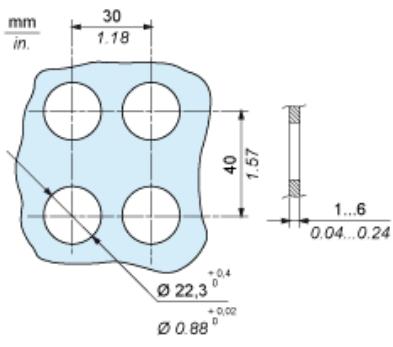
### With Plastic Pushbutton without Cap



e: panel thickness 1 to 6 mm / 0.039 to 0.24 in.

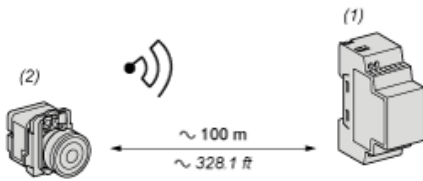
Transmitter Mounting

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**Transmitter Clearance in Free Field Unobstructed**

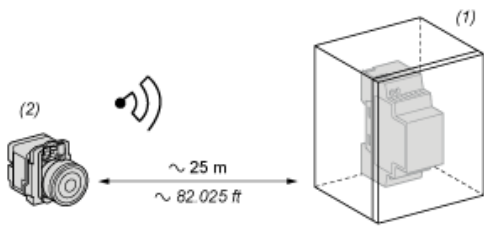
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- (1): Receiver
- (2): Transmitter

**Transmitter Clearance in a Metal Enclosure**

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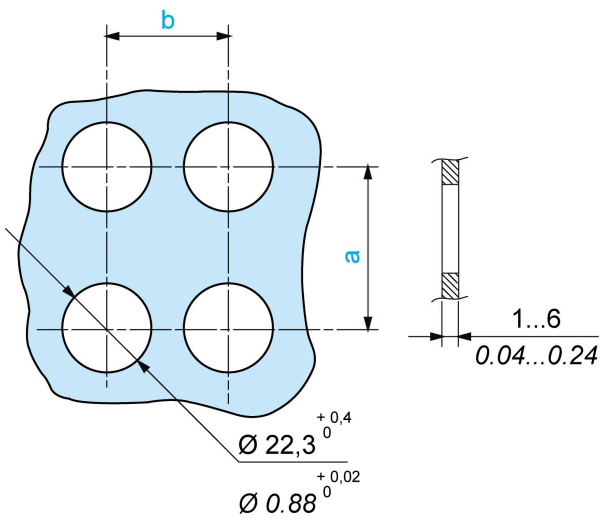
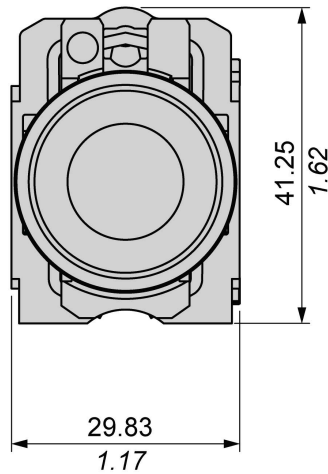
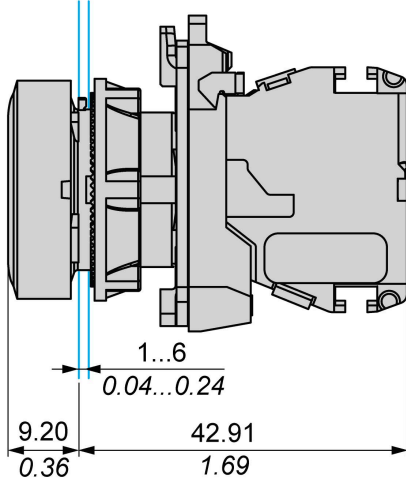
- (1): Metal enclosure
- (2): Transmitter

The range is reduced if the transmitter is placed in a metal enclosure (reduction factor: approx 10%)

Glass window	10...20 %
Plaster wall	30...45 %
Brick wall	60 %
Concrete wall	70...80 %
Metal structure	50...100 %

## Dimensions

mm  
in.



a (mm) a (in.) b (mm) b (in.)

		40	1.57	30	1.18
ZBE●●●●●	ZBV●●●●●				
		45	1.77	32	1.26
ZBE●●●●●3	ZBV●●●●●3				
		40	1.57	30	1.18
ZBE●●●●●4	ZBV●●●●●4				
		50	1.97	30	1.18
ZBE●●●●●5	ZBV●●●●●5				
		40	1.57	30	1.18
ZBE●●●●●9	ZBV●●●●●9				
		40	1.57	30	1.18
ZBRT●	ZBRV1				

## Recommended replacement(s)