



Main

Range of product	Harmony XB5
Product or component type	Wireless and batteryless transmitter
Device short name	XB5R
Bezel material	Chromium plated metal
Fixing collar material	Zamak
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	Flush black
Rated power in W	<= 1 mW
Number of channels	1
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
Product weight	0.045 kg
Operating travel	4.3 mm total travel
Operating force	< 25 N C/O changing electrical state
Mechanical robustness	Free fall resistance (test level: 1000 mm) conforming to EN/IEC 60068-2-32
Standards	EN/IEC 60947-1 EN/IEC 60947-5-1 UL 508 CSA C22.2 No 14
Radio agreement	SRRC RSS ICASA FCC ARIB T66 ANATEL
Communication port protocol	Zigbee (green power) at 2.4 GHz conforming to IEEE 802.15.4
Maximum sensing distance	300 m transmitter in box type XAL D, receiver in metal enclosure and use relay-antenna 25 m transmitter in a plastic box type XAL D and receiver in a metal enclosure 100 m in free field
Acquisition time	2 ms
Response time	< 2 ms
Emission power	3 mW
Fixing mode	Fixing screw beneath head, nominal torque: 0.8...1.2 N.m
Electrical composition code	PW1

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Environment

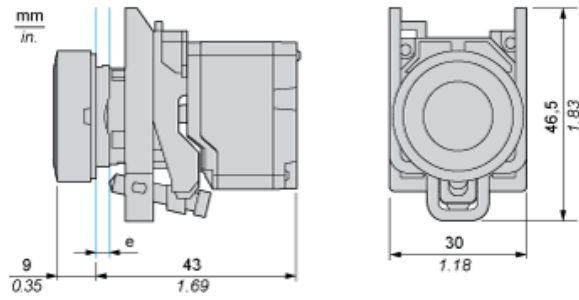
Protective treatment	TH
Ambient air temperature for storage	-40...70 °C
Ambient air temperature for operation	-25...55 °C
Relative humidity	95 % at 70 °C without condensation
IP degree of protection	IP65 on front face conforming to UL Type 12 IP30 on back face conforming to IEC 60529 IP65 on front face conforming to IEC 60529
IK degree of protection	IK03 conforming to IEC 50102
Mechanical durability	1000000 cycles
Shock resistance	50 gn (duration = 11 ms) for half sine wave acceleration conforming to IEC 60068-2-27 30 gn (duration = 18 ms) for half sine wave acceleration conforming to IEC 60068-2-27 25 gn (duration = 6 ms) for 6000 shocks conforming to IEC 60068-2-27
Vibration resistance	+/- 10 mm (f= 2...11 Hz) conforming to IEC 60068-2-6 5 gn (f= 11...500 Hz) conforming to IEC 60068-2-6
Electromagnetic compatibility	Radiated emission Immunity for industrial environments Susceptibility to electromagnetic fields (test level:3 V/m - 80...2700 MHz, distance = 20 m) Susceptibility to electromagnetic fields (test level:10 V/m - 80...2000 MHz) Electrostatic discharge immunity test (test level:6 kV - on contact (on metal parts)) Electrostatic discharge immunity test (test level:8 kV - in free air (in insulating parts))
Product certifications	CCC CSA C-Tick GOST UL BT 2006/95/EC
Directives	2004/108/EC - electromagnetic compatibility 1999/5/EC - R&TTE directive

Offer Sustainability

Sustainable offer status	Not Green Premium product
RoHS (date code: YYWW)	Compliant - since 1108 - Schneider Electric declaration of conformity

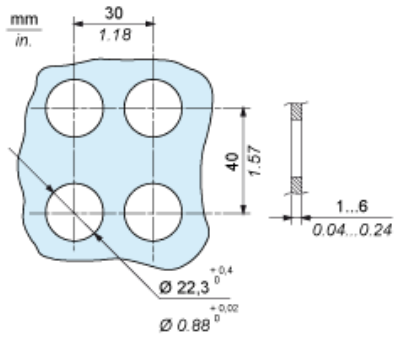
Wireless and Batteryless Pushbutton - Transmitter

With Metal Pushbutton without Cap

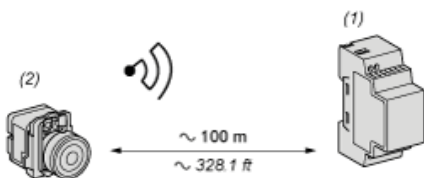


e: panel thickness 1 to 6 mm / 0.039 to 0.24 in.

Transmitter Mounting

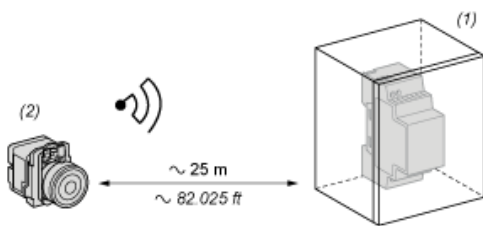


Transmitter Clearance in Free Field Unobstructed



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

Transmitter Clearance in a Metal Enclosure



- (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 %