



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
Max power consumption 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

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Radio agreement	RSS SRRC ICASA ANATEL ARIB T66 FCC
Communication port protocol	Zigbee (green power) at 2.4 GHz conforming to IEEE 802.15.4
Maximum sensing distance	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
Acquisition time	2 ms
Response time	< 2 ms
Emission power	3 mW
Fixing mode	Fixing screw beneath head recommended torque: 0.8...1.2 N.m
Electrical composition code	PW1

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 IEC 60529 IP30 on back face conforming to IEC 60529 IP65 on front face conforming to UL Type 12
IK degree of protection	IK03 conforming to IEC 50102
Mechanical durability	1000000 cycles
Shock resistance	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
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	Immunity for industrial environments Radiated emission Electrostatic discharge immunity test (test level: 8 kV - in free air (in insulating parts)) Electrostatic discharge immunity test (test level: 6 kV - on contact (on metal parts)) Susceptibility to electromagnetic fields (test level: 10 V/m - 80...2000 MHz) Susceptibility to electromagnetic fields (test level: 3 V/m - 80...2700 MHz, distance = 20 m)
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

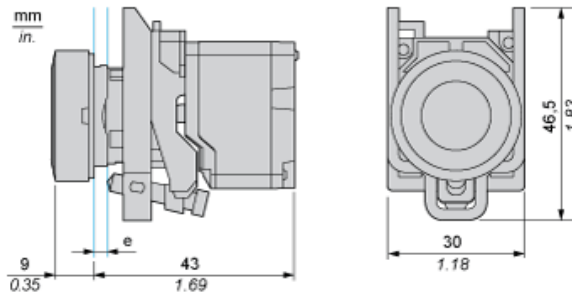
Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 1108 - Schneider Electric declaration of conformity Schneider Electric declaration of conformity
REACH	Reference not containing SVHC above the threshold Reference not containing SVHC above the threshold
Product environmental profile	Available
Product end of life instructions	Available

Contractual warranty

Warranty period	18 months
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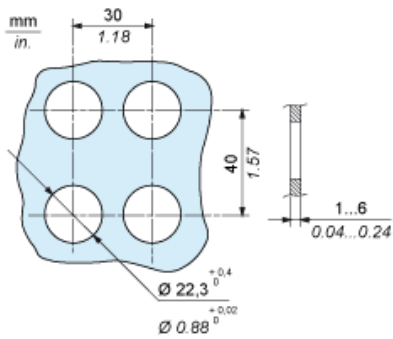
Wireless and Batteryless Pushbutton - Transmitter

With Metal Pushbutton without Cap

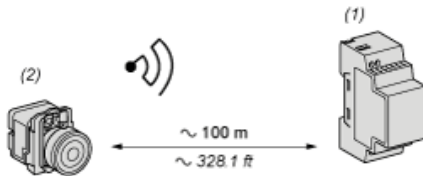


e: panel thickness 1 to 6 mm / 0.039 to 0.24 in.

Transmitter Mounting

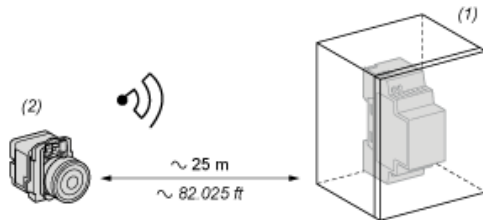


Transmitter Clearance in Free Field Unobstructed



- (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 %