



Main

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|---------------------------|--------------------------------------|
| 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 red |
| 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 |

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. 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. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

Environment

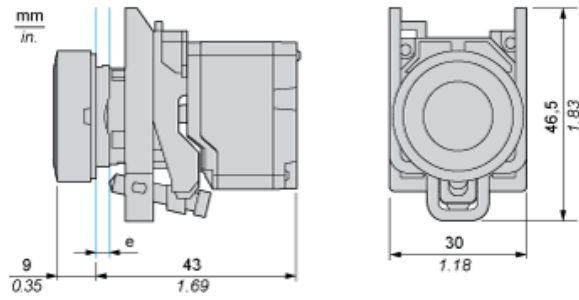
| | |
|---------------------------------------|---|
| Protective treatment | TH |
| Ambient air temperature for storage | -40...70 °C |
| Ambient air temperature for operation | -25...55 °C |
| Relative humidity | 95 % at 70 °C without condensation |
| IP degree of protection | IP65 on front face conforming 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

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

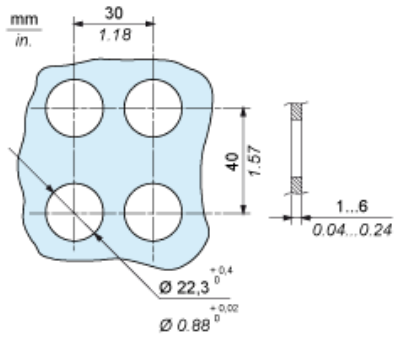
Wireless and Batteryless Pushbutton - Transmitter

With Metal Pushbutton without Cap

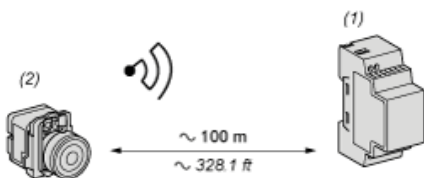


e: panel thickness 1 to 6 mm / 0.039 to 0.24 in.

Transmitter Mounting

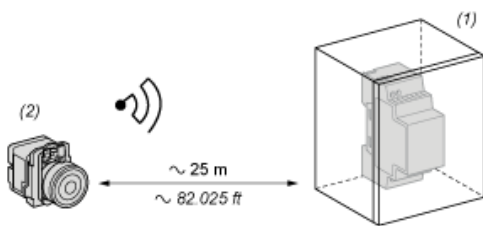


Transmitter Clearance in Free Field Unobstructed



- (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 % |