



Main

Commercial Status	Commercialised
Range of product	Harmony
Product or component type	Wireless and batteryless transmitter
Device short name	XB5R
Bezel material	Plastic
Fixing collar material	Plastic
Mounting diameter	1.57 in (40 mm)

Complementary

Shape of signaling unit head	Round
Type of operator	Spring return pushbutton with transmitter
Embedding depth	<= 1.69 in (43 mm)
CAD overall height	1.68 in (42.75 mm)
CAD overall width	1.09 in (27.8 mm)
CAD overall depth	1.13 in (28.8 mm)
Operating travel	0.17 in (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
Maximum sensing distance	300 m transmitter in box type XAL D, receiver in metal enclosure and use relay-antenna 82.02 ft (25 m) transmitter in a plastic box type XAL D and receiver in a metal enclosure 328.08 ft (100 m) in free field
Acquisition time	2 ms
Response time	< 2 ms
Emission power	3 mW
Fixing mode	Fixing nut beneath head, nominal torque: 19.47 lbf.in (2.2 N.m) (tolerance: +/- 0.2 N.m)
Device composition	ZBRT1 ZB5RZC2

Environment

Ambient air temperature for storage	-40...158 °F (-40...70 °C)
Ambient air temperature for operation	-13...158 °F (-25...70 °C)
Relative humidity	95 % at 158 °F (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	25 gn (duration = 6 ms) for 6000 shocks conforming to IEC 60068-2-27 50 gn for 11 ms half sine wave acceleration conforming to IEC 60068-2-27 30 gn for 18 ms half sine wave acceleration conforming to IEC 60068-2-27
Vibration resistance	+/- 10 mm (f= 2...11 Hz) conforming to IEC 60068-2-6
Electromagnetic compatibility	Radiated emission 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)) Immunity for industrial environments
Product certifications	CCC CSA C-Tick GOST UL BT 2006/95/EC EMC directive 2004/108/EC R&TTE directive 1999/5/EC