Product data sheet Characteristics

XCMW116

Wireless limit switch, Limit switches XC Standard, XCMW, steel roller lever





Main

| Range of Product | Telemecanique Limit switches XC Standard |
|------------------------------|--|
| Series name | Miniature format |
| Product or Component Type | Wireless limit switch |
| Device short name | XCMW |
| Sensor design | Miniature |
| Body type | Fixed |
| Head type | Rotary head |
| | |

Complementary

| Complementary | |
|------------------------------|---|
| Body Material | Plastic |
| Head material | Metal |
| Lever material | Metal |
| Fixing Mode | By 2 screws |
| Type of operator | Spring return roller lever elastomer roller diameter 50 mm |
| Switch actuation | By 30° cam |
| Type of approach | Lateral approach, 2 directions |
| Communication network type | ZigBee green power 2.4 GHz IEEE 802.15.4 |
| Electrical composition code | PW1 |
| Emission Power | 3 mW |
| Response Time | <= 2 ms |
| Maximum sensing distance | 328.08 Ft (100 m) in free field 984.25 Ft (300 m) with external antenna 82.02 ft (25 m) in industrial environment |
| Contact operation | Snap action |
| Number of steps | 1 |
| Maximum torque for tripping | 4.43 lbf.in (0.5 N.m) |
| Maximum actuation speed | 0.33 ft/s (0.1 m/s) |
| Maximum operating rate | 60 cyc/mn |
| Mechanical durability | 400000 cycles |
| Switching operation per hour | 3600 |
| Width | 1.18 in (30.0 mm) |
| Height | 4.25 in (108 mm) |
| Depth | 0.63 in (16.0 mm) |
| Net Weight | 0.19 lb(US) (0.088 kg) |

Environment

| Electromagnetic compatibility | Radiated emission Immunity for industrial environments Susceptibility to electromagnetic fields 3 V/m 802700 MHz, distance = 20 m) Susceptibility to electromagnetic fields 10 V/m 802000 MHz) Electrostatic discharge immunity test 6 kV on contact (on metal parts)) Electrostatic discharge immunity test 8 kV in free air (in insulating parts)) |
|---------------------------------------|--|
| Shock resistance | 50 gn 11 ms IEC 60068-2-27 |
| Vibration resistance | +/- 10 mm 211 Hz)IEC 60068-2-6 25 gn 10500 Hz)IEC 60068-2-6 |
| IP degree of protection | IP65 conforming to IEC 60529 |
| IK degree of protection | IK04 EN 50102 |
| Ambient air temperature for operation | -13131 °F (-2555 °C) |
| Ambient Air Temperature for Storage | -40158 °F (-4070 °C) |
| Directives | 1999/5/EC - R&TTE directive 2004/108/EC - electromagnetic compatibility |
| Standards | EN/IEC 60947-1 EN/IEC 60947-5-1 |
| Radio agreement | IC RSS FCC RCM |
| | |

Ordering and shipping details

| Category | 22412 - LIMIT SWITCHES,IEC,XCKW WIRELESS |
|-----------------------|--|
| Discount Schedule | Т |
| GTIN | 3389119643955 |
| Nbr. of units in pkg. | 1 |
| Package weight(Lbs) | 3.67 oz (104 g) |
| Returnability | Yes |

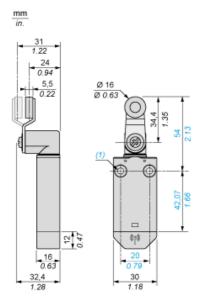
Packing Units

| Unit Type of Package 1 | PCE |
|------------------------------|------------------------|
| Package 1 Height | 1.26 in (3.2 cm) |
| Package 1 width | 1.85 in (4.7 cm) |
| Package 1 Length | 5.00 in (12.7 cm) |
| Unit Type of Package 2 | S01 |
| Number of Units in Package 2 | 22 |
| Package 2 Weight | 5.43 lb(US) (2.464 kg) |
| Package 2 Height | 5.91 in (15 cm) |
| Package 2 width | 5.91 in (15 cm) |
| Package 2 Length | 15.75 in (40 cm) |
| | |

Offer Sustainability

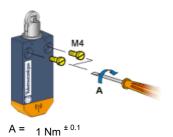
| Sustainable offer status | Green Premium product |
|----------------------------|---|
| California proposition 65 | WARNING: This product can expose you to chemicals including: Diisononyl phthalate (DINP), which is known to the State of California to cause cancer, and Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov |
| REACh Regulation | [™] REACh Declaration |
| EU RoHS Directive | Pro-active compliance (Product out of EU RoHS legal scope) |
| Mercury free | Yes |
| RoHS exemption information | €Yes |
| Environmental Disclosure | Product Environmental Profile |
| Circularity Profile | End Of Life Information |

Dimensions



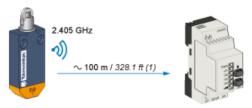
(1): 2 fixing holes Ø 4.2 mm (Ø 0.17 in.)

Screw Mounting



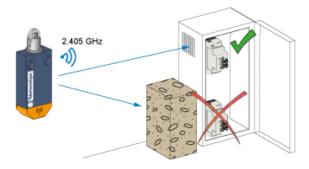
A = 8.85 lb.in. ± 0.89

Unobstructed Mounting

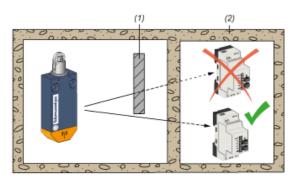


(1): Typical values that may be modified by the application environment.

Mounting in a Metal Cabinet



Signal Attenuation According to the Material



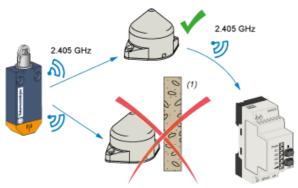
- (1): Metal structure
- (2): Wall (3): Values for indication purposes only

NOTE: Actual values depend on the thickness and nature of the material.

| Material | Signal attenuation (%) |
|-----------------|------------------------|
| Glass window | 1020% (3) |
| Plaster wall | 2045% (3) |
| Brick wall | 60% (3) |
| Concrete wall | 7080% (3) |
| Metal structure | 50100% (3) |

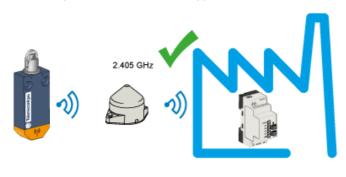
Mounting Tips for Antenna

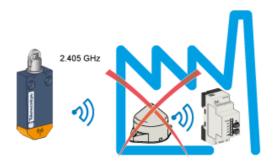
Optimized Installation



(1): Obstacle

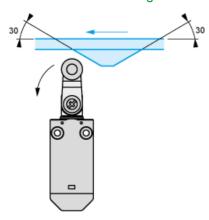
The Relay Antenna is used to Bypass an Obstacle and/or Increase the Range



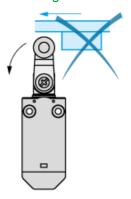


Mounting with roller lever

Recommended Mounting



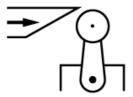
Mounting to be Avoided



Product data sheet Technical Description

XCMW116

Characteristics of Actuation



Technical Description

Functional Diagram, Travel Distance



(1): Reset (2): Set