



Main

| | |
|---------------------------|-----------------------|
| Range of product | OsiSense XC |
| 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

| | |
|------------------------------|--------------------------------------------------------------------------------------|
| Body material | Plastic |
| Head material | Metal |
| Lever material | Metal |
| Fixing mode | By 2 screws |
| Type of operator | Thermoplastic spring return roller lever with variable length |
| Switch actuation | By 30° cam |
| Type of approach | 1 or 2 programmable direction lateral approach |
| Communication network type | ZigBee green power 2.4 GHz conforming to IEEE 802.15.4 |
| Electrical composition code | PW1 |
| Emission power | 3 mW |
| Response time | <= 2 ms |
| Maximum sensing distance | 100 m in free field 25 m in industrial environment 300 m with external antenna |
| Contact operation | Snap action |
| Number of steps | 1 |
| Maximum torque for tripping | 0.5 N.m |
| Maximum actuation speed | 1 m/s |
| Operating rate | <= 60 cyc/mn |
| Mechanical durability | 400000 cycles |
| Switching operation per hour | 3600 |
| Width | 30 mm |
| Height | 157 mm |

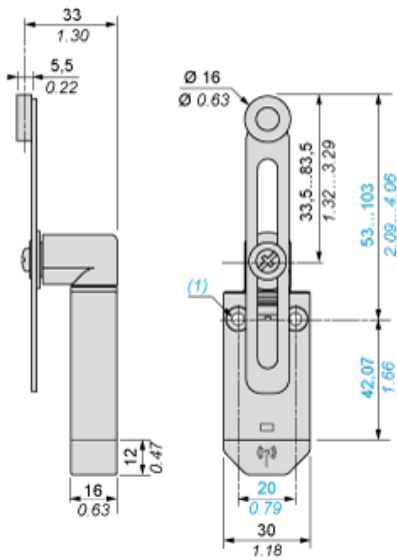
| | |
|----------------|---------|
| Depth | 16 mm |
| Product weight | 0.09 kg |

Environment

| | |
|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Electromagnetic compatibility | Immunity for industrial environments Radiated emission Susceptibility to electromagnetic fields : 3 V/m, 80...2700 MHz, distance = 20 m Susceptibility to electromagnetic fields : 10 V/m, 80...2000 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 (duration = 11 ms) conforming to IEC 60068-2-27 |
| Vibration resistance | +/- 10 mm (vibration frequency: 2...11 Hz) conforming to IEC 60068-2-6 25 gn (vibration frequency: 10...500 Hz) conforming to IEC 60068-2-6 |
| IP degree of protection | IP65 conforming to IEC 60529 |
| IK degree of protection | IK04 conforming to EN 50102 |
| Ambient air temperature for operation | -25...55 °C |
| Ambient air temperature for storage | -40...70 °C |
| Directives | 2004/108/EC - electromagnetic compatibility 1999/5/EC - R&TTE directive |
| Standards | EN/IEC 60947-1 EN/IEC 60947-5-1 |
| Radio agreement | IC RSS FCC RCM |

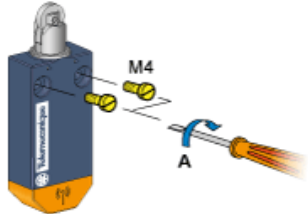
Dimensions

mm
in.



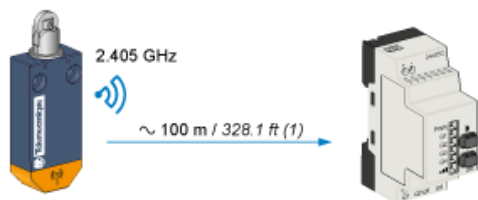
(1) : 2 fixing holes \varnothing 4.2 mm (\varnothing 0.17 in.)

Screw Mounting



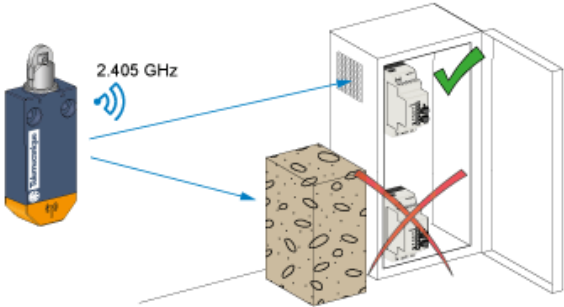
A = 1 Nm ± 0.1
A = 8.85 lb.in. ± 0.89

Unobstructed Mounting

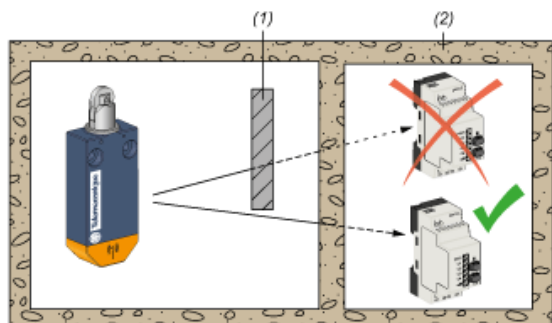


(1) : Typical values that may be modified by the application environment.

Mounting in a Metal Cabinet



Signal Attenuation According to the Material



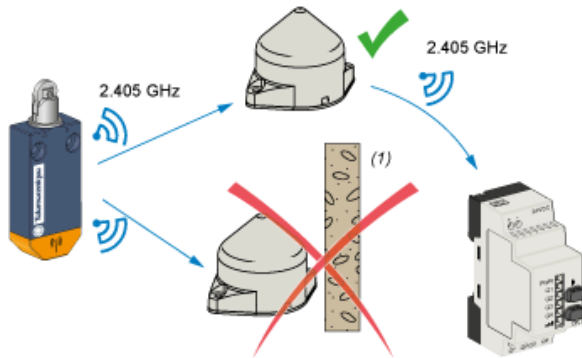
- (1) : Metal structure
- (2) : Wall
- (3) : Values for indication purposes only

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

| Material | Signal attenuation (%) |
|-----------------|------------------------|
| Glass window | 10...20% (3) |
| Plaster wall | 20...45% (3) |
| Brick wall | 60% (3) |
| Concrete wall | 70...80% (3) |
| Metal structure | 50...100% (3) |

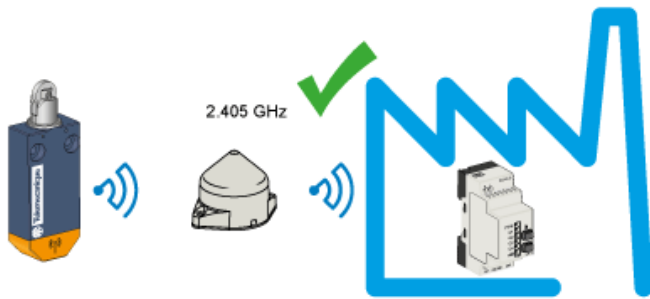
Mounting Tips for Antenna

Optimized Installation



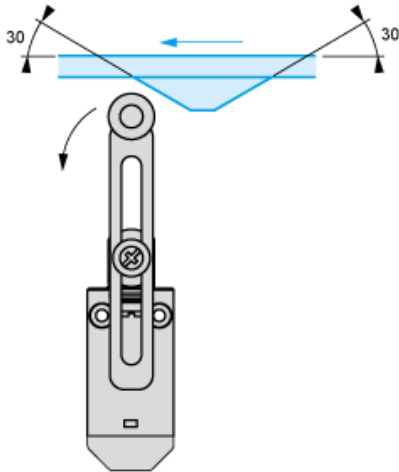
(1): Obstacle

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

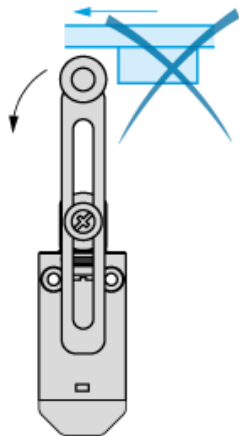


Mounting with Adjustable Roller Lever

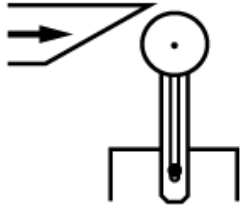
Recommended Mounting



Mounting to be Avoided



Characteristics of Actuation



Technical Description

Functionnal Diagram, Travel Distance



- (1) : Reset
- (2) : Set