



### 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	Plunger head

### Complementary

Body material	Plastic
Head material	Metal
Lever material	Metal
Fixing mode	By 2 screws
Type of operator	Spring return plunger metal
Switch actuation	On end
Type of approach	Vertical approach, 1 direction
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 300 M with external antenna 25 m in industrial environment
Contact operation	Snap action
Number of steps	1
Maximum force for tripping	50 N
Maximum actuation speed	0.5 m/s
Maximum operating rate	60 cyc/mn
Mechanical durability	400000 cycles
Switching operation per hour	3600
Maximum Width	1.18 in (30.0 mm)
Height	2.91 in (74 mm)
Depth	0.63 in (16.0 mm)
Net Weight	0.09 lb(US) (0.039 kg)

## Environment

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))
Shock resistance	50 gn 11 ms IEC 60068-2-27
Vibration resistance	25 gn 10...500 Hz)IEC 60068-2-6 +/- 10 mm 2...11 Hz)IEC 60068-2-6
IP degree of protection	IP65 IEC 60529
IK degree of protection	IK04 EN 50102
Ambient air temperature for operation	-13...131 °F (-25...55 °C)
Ambient air temperature for storage	-40...158 °F (-40...70 °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 conforming to RSS FCC conforming to RCM

## Ordering and shipping details

Category	22412 - LIMIT SWITCHES,IEC,XCKW WIRELESS
Discount Schedule	T
Nbr. of units in pkg.	1
Package weight(Lbs)	0.35 lb(US) (0.16 kg)
Returnability	No

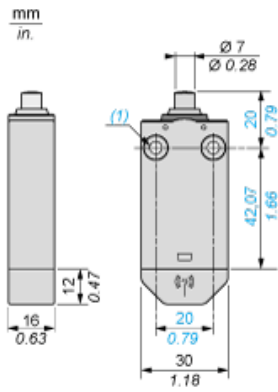
## Packing Units

Package 1 Height	1.26 in (32.000 mm)
Package 1 width	1.85 in (47.000 mm)
Package 1 Length	5.00 in (127.000 mm)

## Offer Sustainability

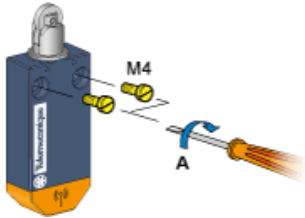
Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Diisononyl phthalate (DINP), which is known to the State of California to cause cancer, and Di-isodecyl phthalate (DIDP), which is known to the State of California to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

Dimensions



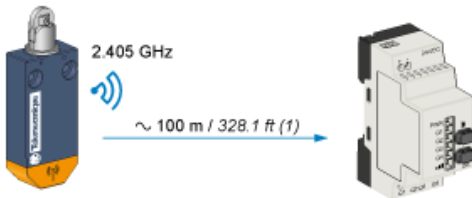
(1) : 2 fixing holes  $\varnothing$  4.2 mm ( $\varnothing$  0.17 in.)

Screw Mounting



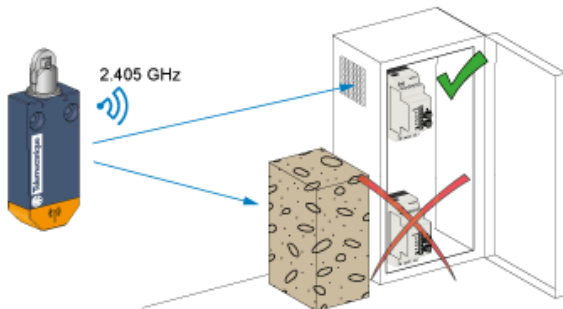
A = 1 Nm  $\pm 0.1$   
A = 8.85 lb.in.  $\pm 0.89$

Unobstructed Mounting

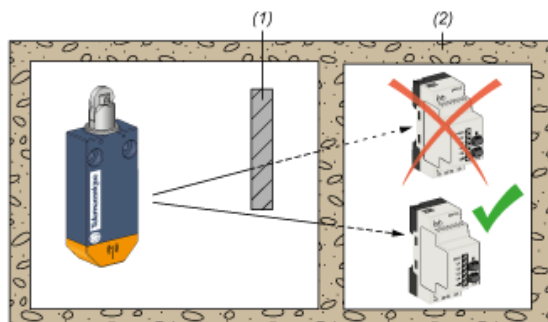


(1) : Typical values that may be modified by the application environment.

Mounting in a Metal Cabinet



Signal Attenuation According to the Material



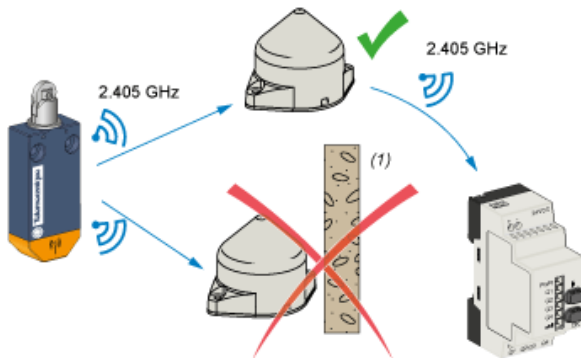
(1) : Metal structure  
(2) : Wall  
(3) : Values for indication purposes only

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)

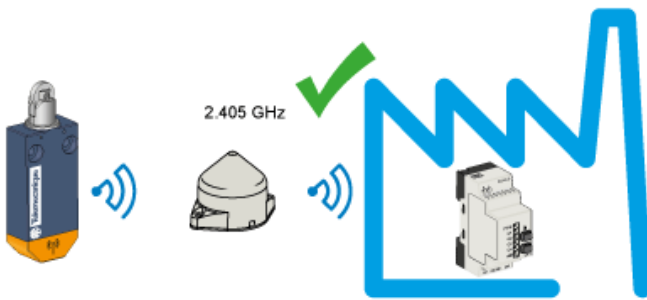
## Mounting Tips for Antenna

### Optimized Installation



(1): Obstacle

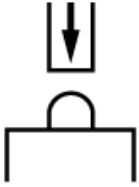
The Relay Antenna is used to Bypass an Obstacle and/or Increase the Range



---

Characteristics of Actuation

---



---

Technical Description

---

Functional Diagram, Travel Distance



(1): Reset  
(2): Set