

Product data sheet

Characteristics

XCMW110

Wireless limit switch, Limit switches XC Standard, XCMW, plunger



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	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 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 force for tripping	50 N
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	2.91 in (74 mm)
Depth	0.63 in (16.0 mm)
Net Weight	0.09 lb(US) (0.039 kg)

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Environment

Electromagnetic compatibility	Radiated emission Immunity for industrial environments 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 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 conforming to 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 RSS FCC RCM

Ordering and shipping details

Category	22412-LIMIT SWITCHES,IEC,XCKW WIRELESS
Discount Schedule	T
GTIN	3389119643924
Returnability	No

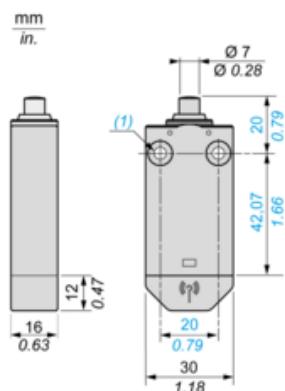
Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	1.30 in (3.3 cm)
Package 1 Width	1.97 in (5.0 cm)
Package 1 Length	5.12 in (13.0 cm)
Package 1 Weight	1.90 oz (54.0 g)
Unit Type of Package 2	S01
Number of Units in Package 2	22
Package 2 Height	5.91 in (15.0 cm)
Package 2 Width	5.91 in (15.0 cm)
Package 2 Length	15.75 in (40.0 cm)
Package 2 Weight	3.02 lb(US) (1.371 kg)

Offer Sustainability

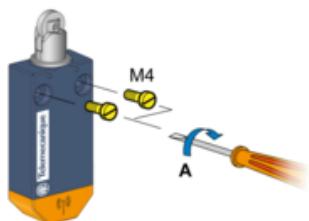
Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Diisobutyl phthalate (DINP), which is known to the State of California to cause cancer, and Di-isodecyl phthalate (DIDP), which is known to the State of California to 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)  EU RoHS Declaration
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.)

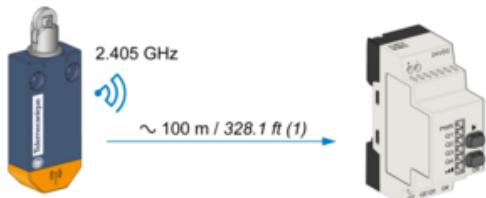
Screw Mounting



$A = 1 \text{ Nm} \pm 0.1$

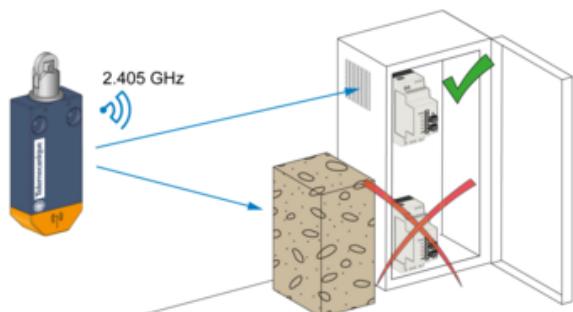
$A = 8.85 \text{ lb.in.} \pm 0.89$

Unobstructed Mounting

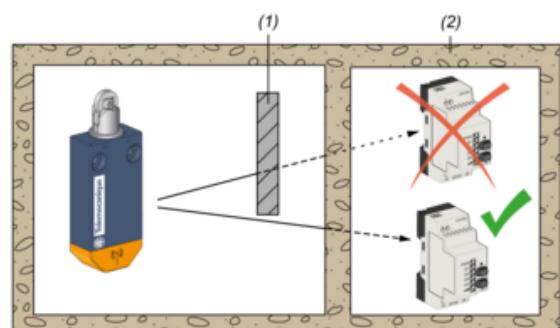


(1) : Typical values that may be modified by the application environment.

Mounting in a Metal Cabinet



Signal Attenuation According to the Material



(1) : Metal structure

(2) : Wall

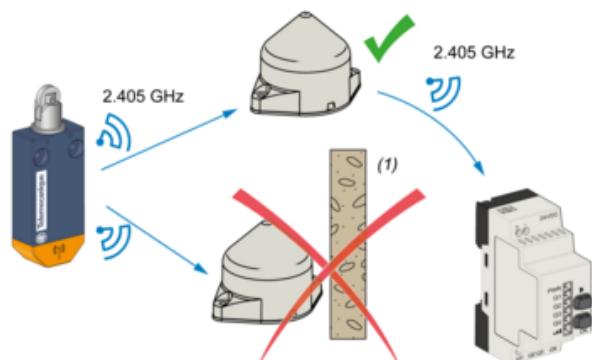
(3) : Values for indication purposes only

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)

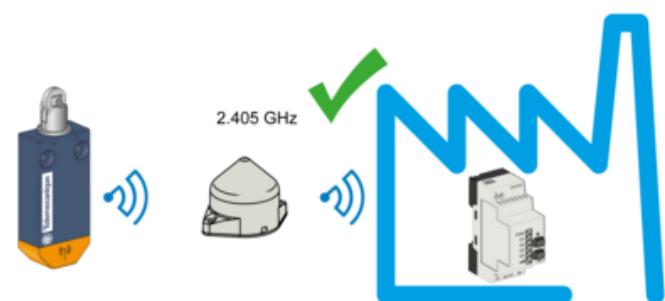
Mounting Tips for Antenna

Optimized Installation

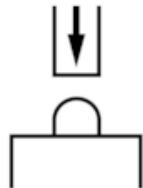


(1) : Obstacle

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

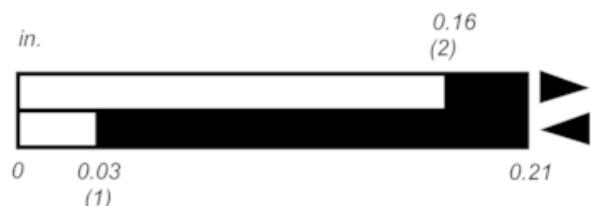


Characteristics of Actuation



Technical Description

Functional Diagram, Travel Distance



(1) : Reset

(2) : Set