# **XCMW145**

Wireless limit switch, Limit switches XC Standard, XCMW, adjustable plastic 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

o o i i provinci i da	
Body material	Plastic
Head material	Metal
Lever material	Metal
Fixing mode	By 2 screws
Type of operator	Spring return roller lever thermoplastic
Switch actuation	By 30° cam
Type of approach	Lateral approach, 2 directions
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 torque for tripping	0.5 N.m
Maximum actuation speed	0.1 m/s
Maximum operating rate	60 cyc/mn
Mechanical durability	400000 cycles
Switching operation per hour	3600
Width	30.0 mm
Height	157 mm
Depth	16.0 mm
Net weight	0.09 kg

#### **Environment**

Electromagnetic compatibility	Radiated emission Immunity for industrial environments Susceptibility to electromagnetic fields - test level: 3 V/m (802700 MHz, distance = 20 m) Susceptibility to electromagnetic fields - test level: 10 V/m (802000 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 for 11 ms conforming to IEC 60068-2-27
Vibration resistance	25 gn (f= 10500 Hz) conforming to IEC 60068-2-6 +/- 10 mm (f= 211 Hz) conforming to IEC 60068-2-6
IP degree of protection	IP65 conforming to IEC 60529
IK degree of protection	IK04 conforming to IEC 62262
Ambient air temperature for operation	-2555 °C
Ambient air temperature for storage	-4070 °C
Directives	1999/5/EC - R&TTE directive 2004/108/EC - electromagnetic compatibility
Standards	IEC 60947-1 IEC 60947-5-1
Radio agreement	IC conforming to RSS[RETURN]FCC conforming to RCM

#### **Packing Units**

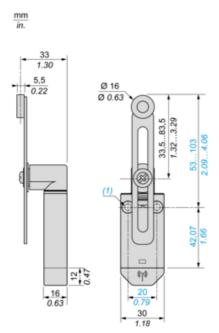
PCE
1
3.500 cm
5.000 cm
13.000 cm
106.000 g
S01
22
15 cm
15 cm
40 cm
2.532 kg

## 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
For all Reach Rohs enquiries contact us at	sustainability@tesensors.com

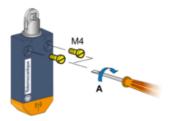


#### **Dimensions**



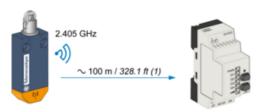
(1): 2 fixing holes Ø 4.2 mm (Ø 0.17 in.)

#### **Screw Mounting**



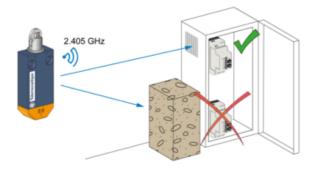
 $A = 1 \text{ Nm}^{\pm 0.1}$  $A = 8.85 \text{ lb.in.}^{\pm 0.89}$ 

#### **Unobstructed Mounting**

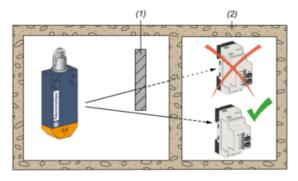


(1): Typical values that may be modified by the application environment.

#### Mounting in a Metal Cabinet



#### Signal Attenuation According to the Material



(1): Metal structure

(2): Wall

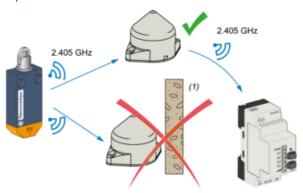
#### (3): Values for indication purposes only

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

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

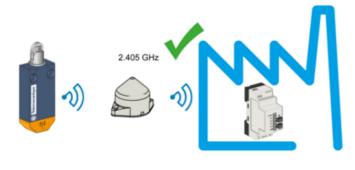
#### Mounting Tips for Antenna

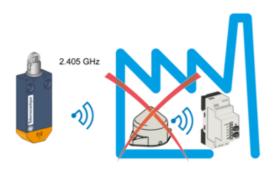
#### Optimized Installation



(1): Obstacle

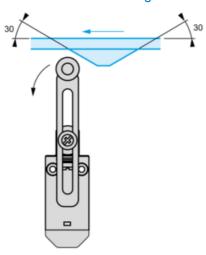
## The Relay Antenna is used to Bypass an Obstacle and/or Increase the Range



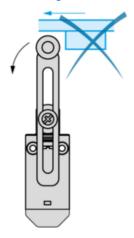


#### Mounting with Adjustable Roller Lever

#### **Recommended Mounting**



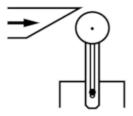
# Mounting to be Avoided



# Product data sheet Technical Description

# XCMW145

#### **Characteristics of Actuation**



#### **Technical Description**

#### Functional Diagram, Travel Distance



(1): Reset(2): Set