Product data sheet Characteristics

XCMW145

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





Main

TTT CALL	
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

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

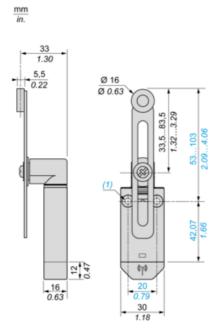
Packing Units

. Goran g Cristo	
Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	3.500 cm
Package 1 Width	5.000 cm
Package 1 Length	13.000 cm
Package 1 Weight	106.000 g
Unit Type of Package 2	S01
Number of Units in Package 2	22
Package 2 Height	15 cm
Package 2 Width	15 cm
Package 2 Length	40 cm
Package 2 Weight	2.532 kg

Offer Sustainability

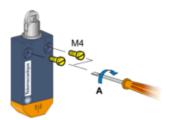
Sustainable offer status	Green Premium product
REACh Regulation	☑ REACh Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
Mercury free	Yes
RoHS exemption information	₽¥Yes
California proposition 65	WARNING: This product can expose you to chemicals including: Diisononyl 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

Dimensions



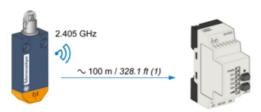
(1): 2 fixing holes Ø 4.2 mm (Ø 0.17 in.)

Screw Mounting



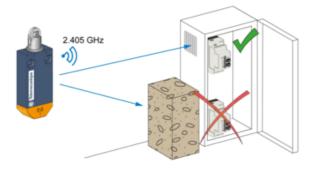
 $A = 1 \text{ Nm}^{\pm 0.1}$ $A = 8.85 \text{ lb.in.}^{\pm 0.89}$

Unobstructed Mounting

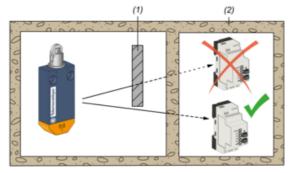


(1): Typical values that may be modified by the application environment.

Mounting in a Metal Cabinet



Signal Attenuation According to the Material



- (1): Metal structure
- (2): Wall

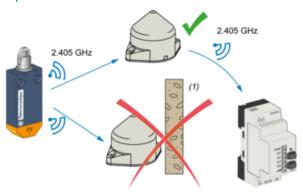
(3): Values for indication purposes only

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)

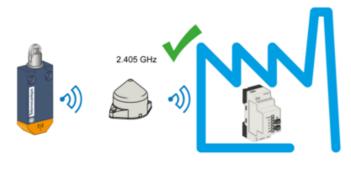
Mounting Tips for Antenna

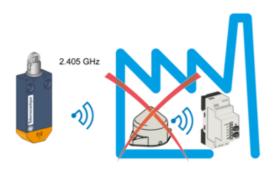
Optimized Installation



(1): Obstacle

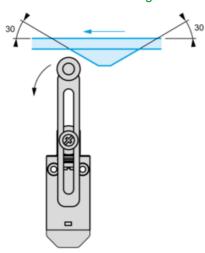
The Relay Antenna is used to Bypass an Obstacle and/or Increase the Range



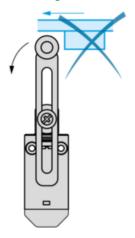


Mounting with Adjustable Roller Lever

Recommended Mounting



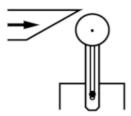
Mounting to be Avoided



Product data sheet Technical Description

XCMW145

Characteristics of Actuation



Technical Description

Functional Diagram, Travel Distance



(1): Reset(2): Set