

Product data sheet

Specifications



Limit switch, Limit switches XC Standard, XCMD, roller plunger, 2NC + 2 NO, ATEX/IECEX

XCMD4102L5EX

Main

Range Of Product	Telemecanique Limit switches XC Standard
Series Name	Standard format
Product Or Component Type	Limit switch
Device Short Name	XCMD
Sensor Design	Miniature
Body Type	Fixed
Head Type	Plunger head
Material	Metal
Fixing Mode	By the body
Movement Of Operating Head	Linear
Type Of Operator	Spring return roller plunger steel
Switch Actuation	By 30° cam
Type Of Approach	Lateral approach, 2 directions
Electrical Connection	Fixed cable
Number Of Poles	4
Contacts Type And Composition	2 x (1 NC + 1 NO)
Contacts Insulation Form	Zb
Contact Operation	Snap action
Number Of Steps	1
Positive Opening	With
Minimum Force For Tripping	7 N
Maximum Actuation Speed	0.5 m/s
Ip Degree Of Protection	IP66 conforming to IEC 60529 IP67 conforming to IEC 60529

Complementary

Body Material	Zamak
Head Material	Zamak
Cable Length	5 m
Cable Composition	9 x 0.34 mm²
Wire Insulation Material	PvR
Positive Opening Minimum Force	35 N

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Minimum Actuation Speed	0.01 m/min
Contact Code Designation	R300, DC-13 (Ue = 250 V), Ie = 0.1 A conforming to IEC 60947-5-1 R300, DC-13 (Ue = 250 V), Ie = 0.1 A conforming to IEC 60947-5-1 appendix A C300, AC-15 (Ue = 240 V), Ie = 0.75 A conforming to IEC 60947-5-1 C300, AC-15 (Ue = 240 V), Ie = 0.75 A conforming to IEC 60947-5-1 appendix A
[Ithe] Conventional Enclosed Thermal Current	3 A AC
[Ui] Rated Insulation Voltage	300 V conforming to UL 508 400 V (pollution degree 3) conforming to IEC 60947-1 300 V conforming to CSA C22.2 No 14
Maximum Resistance Across Terminals	25 MOhm conforming to IEC 60255-7 category 3
[Uimp] Rated Impulse Withstand Voltage	4 kV conforming to IEC 60664 4 kV conforming to IEC 60947-1
Short-Circuit Protection	6 A cartridge fuse, type gG
Electrical Durability	5000000 cycles, DC-13, inductive load type, 24 V, 3 W, operating rate <3600 cyc/mn, load factor: 0.5, DC conforming to IEC 60947-5-1 appendix C 5000000 cycles, DC-13, inductive load type, 48 V, 2 W, operating rate <3600 cyc/mn, load factor: 0.5, DC conforming to IEC 60947-5-1 appendix C 5000000 cycles, DC-13, inductive load type, 120 V, 1 W, operating rate <3600 cyc/mn, load factor: 0.5, DC conforming to IEC 60947-5-1 appendix C
Mechanical Durability	10000000 cycles
Marking	II2 D-Ex tb IIIC T85°C Db IP66/67
Width	30 mm
Height	50 mm
Depth	16 mm

Environment

Shock Resistance	25 gn for 18 ms conforming to IEC 60068-2-27
Vibration Resistance	5 gn (f= 10...500 Hz) conforming to IEC 60068-2-6
Electrical Shock Protection Class	Class I conforming to IEC 61140 Class I conforming to NF C 20-030
Ambient Air Temperature For Operation	-20...60 °C
Protective Treatment	TC
Dust Zone	Zone 21 - 22
Product Certifications	INERIS 04ATEX0014X IEC-Ex INE 17.0020X
Standards	IEC 60079-31 IEC 60079-0
Directives	2014/34/EU - ATEX directive

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	3.000 cm
Package 1 Width	20.000 cm
Package 1 Length	17.500 cm
Package 1 Weight	475.000 g
Unit Type Of Package 2	S03
Number Of Units In Package 2	20

Package 2 Height	30.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	10.261 kg

Contractual warranty

Warranty	18 months
----------	-----------

Sustainability

Green Premium™ label is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO₂ products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

[Learn more about Green Premium >](#)

[Guide to assess a product's sustainability >](#)



RoHS/REACH

Well-being performance

✓ Mercury Free

✓ Rohs Exemption Information [Yes](#)

Certifications & Standards

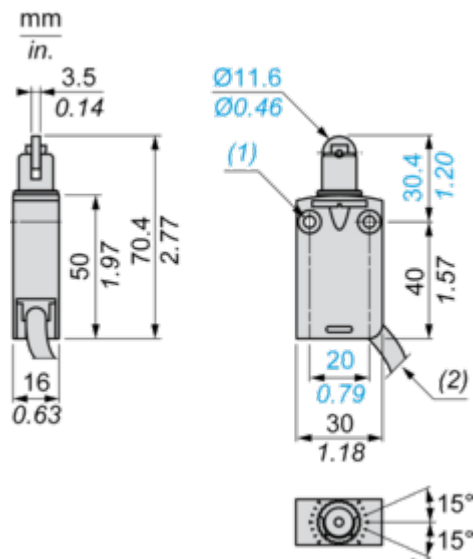
Reach Regulation [REACH Declaration](#)

Eu Rohs Directive Pro-active compliance (Product out of EU RoHS legal scope)

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 Diisodecyl 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 Drawings

Dimensions

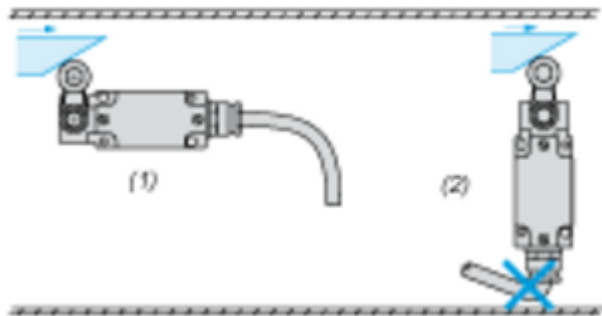


- (1) 2 fixing holes Ø 4.2 mm, counterbored Ø 8 mm by 4 mm deep.
(2) External diameter of cable 7.5 mm.

Mounting and Clearance

Mounting

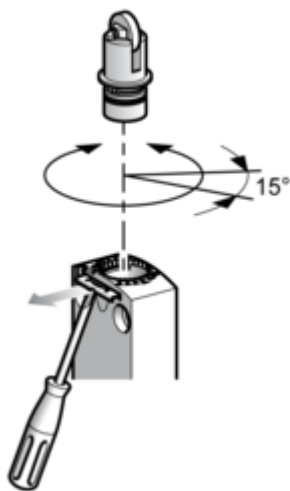
Sweep of Connecting Cable



- (1) Recommended
- (2) To be avoided

Setting-up

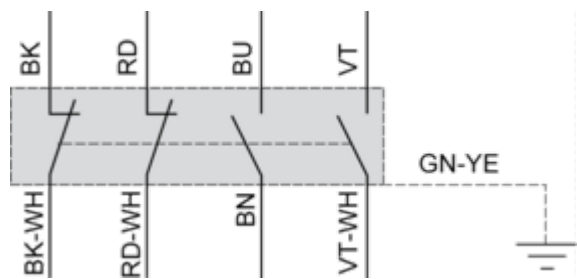
Plunger or Multi-directional Heads



Connections and Schema

Wiring Diagram

4-pole NC + NC + NO + NO Snap Action

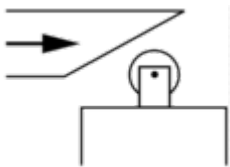


- (BK) Black
- (BK-WH) Black White
- (RD) Red
- (RD-WH) Red White
- (BU) Blue
- (BN) Brown
- (VT) Violet White
- (VT-WH) Violet White
- (GN-YE) Green Yellow

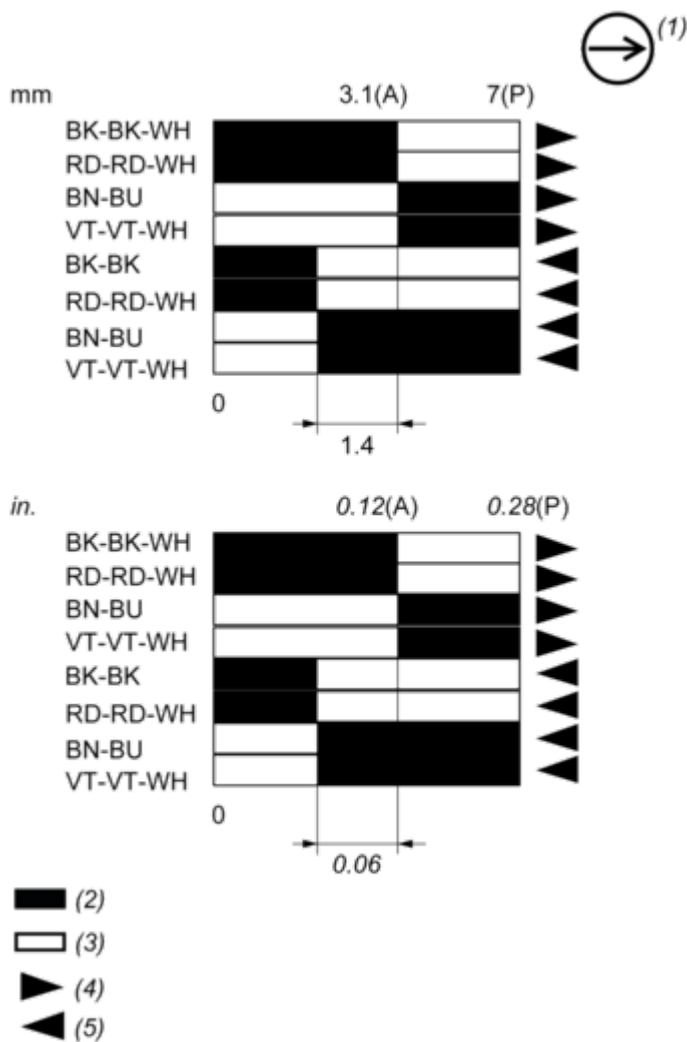
Technical Description

Characteristics of Actuation

Switch Actuation by 30° Cam



Functional Diagram



- (P) Positive opening point
(A) Cam displacement
(1) NC contact with positive opening operation
(2) Closed
(3) Open
(4) Tripping
(5) Resetting
(BK) Black
(BK-WH) Black White
(RD) Red
(RD-WH) Red White
(BN) Brown
(BU) Blue
(VT) Violet
(VT WH) Violet White