# Product datasheet Characteristics

# XCMD4124L5EX



#### Main

Range of product	OsiSense ATEX D
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	Steel spring return roller lever plunger, retractable
Switch actuation	By 30° cam
Type of approach	Lateral approach, 1 direction
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	2.5 N
Maximum actuation speed	1.64 ft/s (0.5 m/s)
IP degree of protection	IP66 conforming to IEC 60529 IP67 conforming to IEC 60529

#### Complementary

Complementary		
Body material	Zamak	
Head material	Zamak	
Cable length	16.4 ft (5 m)	
Cable composition	9 x 0.34 mm <sup>2</sup>	
Wire insulation material	PvR	
Positive opening minimum force	12.5 N	
Minimum actuation speed	0.01 m/min	
Contact code designation	C300, AC-15 (240 V, le = 0.75 A) conforming to EN 60947-5-1 C300, AC-15 (240 V, le = 0.75 A) conforming to IEC 60947-5-1 appendix A R300, DC-13 (250 V, le = 0.1 A) conforming to EN 60947-5-1 R300, DC-13 (250 V, le = 0.1 A) conforming to IEC 60947-5-1 appendix A	
[Ithe] conventional enclosed thermal current	3 A AC	
[Ui] rated insulation voltage	400 V, pollution degree: 3 conforming to IEC 60947-1 300 V conforming to UL 508 300 V conforming to CSA C22.2 No 14	
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	500000 cycles DC-13 24 V 3 W, <= 3600 cyc/mn load factor: 0.5 conforming to IEC 60947-5-1 appendix C inductive DC 5000000 cycles DC-13 48 V 2 W, <= 3600 cyc/mn load factor: 0.5 conforming to IEC 60947-5-1 appendix C inductive DC 5000000 cycles DC-13 120 V 1 W, <= 3600 cyc/mn load factor: 0.5 conforming to IEC 60947-5-1 appendix C inductive DC	
Mechanical durability	1000000 cycles	



Marking	II2 D-Ex tb IIIC T85°C Db IP66/67
Width	1.18 in (30 mm)
Height	1.97 in (50 mm)
Depth	0.63 in (16 mm)

#### Environment

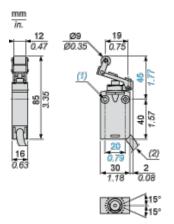
shock resistance	25 gn 18 ms conforming to IEC 60068-2-27	
vibration resistance	5 gn 10500 Hz IEC 60068-2-6	
electrical shock protection class	Class I conforming to IEC 61140 Class I conforming to NF C 20-030	
ambient air temperature for operation	-4140 °F (-2060 °C)	
protective treatment	TC	
dust zone	Zone 21 - 22	
product certifications	INERIS 04ATEX0014X IEC-Ex INE 17.0020X	
standards	EN/IEC 60079-0 EN/IEC 60079-31	
directives	2014/34/EU - ATEX directive	

#### **Offer Sustainability**

Not Green Premium product	Not Green Premium product
Compliant - since 1001 - Schneider Electric declaration of conformity	Compliant - since 1001 - Schneider Electric declaration of conformity
Available	Available
Available	Available
WARNING: This product can expose you to chemicals including:	WARNING: This product can expose you to chemicals including:
Diisononyl phthalate (DINP), which is known to the State of California to cause cancer, and	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.	eDi-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 more information go to www.p65warnings.ca.gov

#### Dimensions



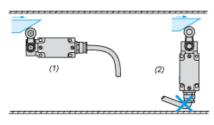
(1) 2 fixing holes Ø 4.2 mm, counterbored Ø 8 mm by 4 mm deep.

(2) External diameter of cable 7.5 mm.

#### Mounting

Sweep of Connecting Cable

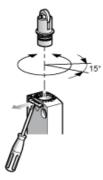




- (1) Recommended
- (2) To be avoided

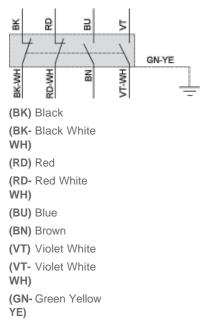
# Setting-up

Plunger or Multi-directional Heads



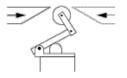
## Wiring Diagram

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



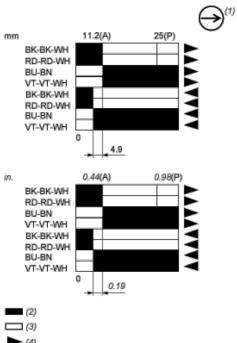
## **Characteristics of Actuation**

Switch Actuation by 30° Cam



#### **Functionnal 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- Black White

WH)

- (RD) Red
- (RD- Red White
- WH)
- (BN) Brown
- (BU) Blue
- (VT) Violet
- (VT Violet White
- WH)

