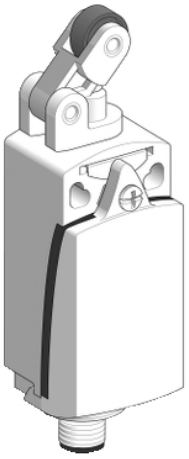
Product data sheet
Characteristics

XCKD2121M12
limit switch XCKD - th.plastic roller lever plung. Hor - 1NC+1NO - snap - M12



Main

Range of product	OsiSense XC
Series name	Standard format
Product or component type	Limit switch
Device short name	XCKD
Sensor design	Compact form E CENELEC EN 50047
Body type	Fixed
Head type	Plunger head
Material	Metal
Body material	Zamak
Head material	Zamak
Fixing mode	By the body
Movement of operating head	Linear
Type of operator	Spring return roller lever plunger thermoplastic
Type of approach	Lateral approach, 1 direction
Number of poles	2
Contacts type and composition	1 NC + 1 NO
Contact operation	Snap action

Complementary

Switch actuation	By 30° cam
Electrical connection	Male connector M12, 5 pins
Contacts insulation form	Zb
Positive opening	With
Positive opening minimum force	18 N
Minimum force for tripping	6 N
Maximum actuation speed	3.28 ft/s (1 m/s)
Repeat accuracy	0.1 mm on the tripping points with 1 million operating cycles
[Ie] rated operational current	3 A 50 V, AC-15 EN/IEC 60947-5-1 appendix A 0.27 A at 50 V, DC-13 conforming to EN/IEC 60947-5-1 appendix A
[Ithe] conventional enclosed thermal current	4 A
[Ui] rated insulation voltage	60 V (pollution degree 3) conforming to IEC 60947-1
Maximum resistance across terminals	25 MOhm IEC 60255-7 category 3
[Uimp] rated impulse withstand voltage	0.8 KV IEC 60664 0.8 kV IEC 60947-1
Short-circuit protection	4 A cartridge fuse gG
Electrical durability	5000000 Cycles, DC-13, 24 V, 10 W 60 cyc/mn 0.5 IEC 60947-5-1 appendix C 5000000 cycles, DC-13, 48 V, 7 W 60 cyc/mn 0.5 IEC 60947-5-1 appendix C
Mechanical durability	15000000 cycles
Maximum Width	1.22 in (31 mm)
Height	2.56 in (65 mm)
Depth	1.18 in (30 mm)
Net Weight	0.45 lb(US) (0.205 kg)
Terminals description ISO n°1	(13-14)NO (21-22)NC

Environment

Shock resistance	50 gn 11 ms IEC 60068-2-27
Vibration resistance	25 gn 10…500 Hz)IEC 60068-2-6
IK degree of protection	IK06 EN 50102
Electrical shock protection class	Class I IEC 61140 Class I NF C 20-030
Ambient air temperature for operation	-13…158 °F (-25…70 °C)
Ambient air temperature for storage	-40…158 °F (-40…70 °C)
Protective treatment	TC
Product certifications	CSA CCC UL
Standards	IEC 60947-5-1 EN 60204-1 UL 508 EN 60947-5-1 IEC 60204-1 CSA C22.2 No 14

Ordering and shipping details

Category	22418 - LIMIT SWITCH,IEC,XCKP&XCKT
Discount Schedule	T
GTIN	00785901942825
Nbr. of units in pkg.	1
Package weight(Lbs)	1 lb(US) (0.45 kg)
Returnability	No
Country of origin	FR

Packing Units

Unit Type of Package 1	PCE
Package 1 Height	1.38 in (3.5 cm)
Package 1 width	1.93 in (4.9 cm)
Package 1 Length	5.12 in (13 cm)

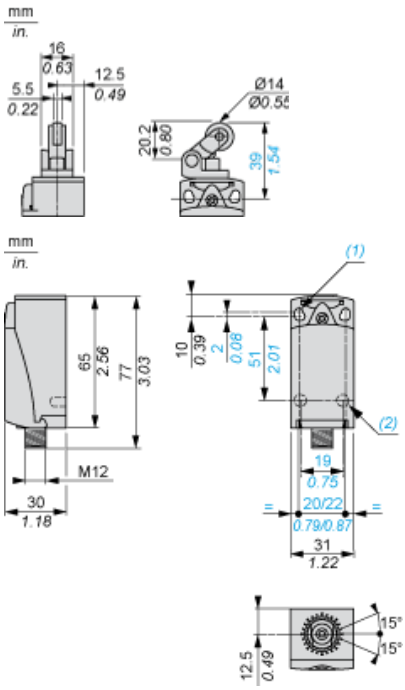
Offer Sustainability

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
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

Contractual warranty

Warranty	18 months

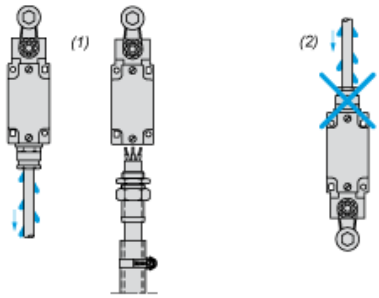
Dimensions



(1) 2 elongated holes Ø 4.3 x 6.3 mm on 22 mm centres, 2 holes Ø 4.3 on 20 mm centres.
(2) 2 x Ø 3 holes for support studs, depth 4 mm.

Mounting with Cable Entry

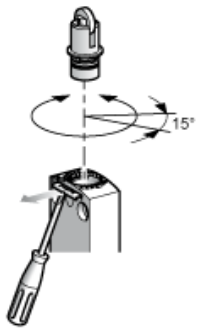
Position of Cable Gland



(1) Recommended
(2) To be avoided

Setting-up

Plunger or Multi-directional Heads



Wiring Diagram

2-pole NC + NO Snap Action

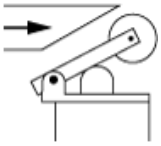
Connections

M12 Connector

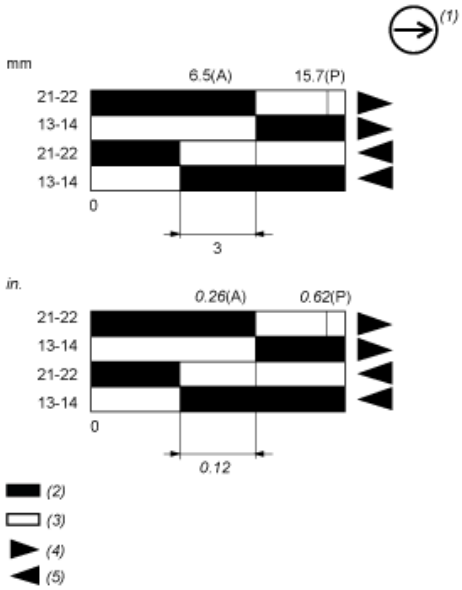
1-2 : NC
3-4 : NO
5 : Grounding

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