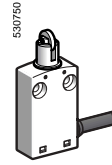
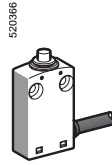


Limit switches

Osiswitch® Optimum
Miniature design, plastic, type XCM N

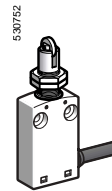
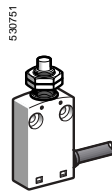
■ XCM N
pre-cabled

□ With head for linear movement (plunger). Fixing by the body.



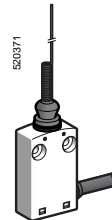
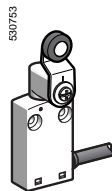
Page 37603/2

□ With head for linear movement (plunger). Fixing by the head.



Page 37603/2

□ With head for rotary movement (lever) or multi-directional.



Page 37603/3

Environment characteristics

Conforming to standards	Products	IEC 60947-5-1, EN 60947-5-1, UL 508, CSA C22-2 n° 14
	Machine assemblies	IEC 60204-1, EN 60204-1
Product certifications		UL, CSA
Protective treatment	Standard version	"TC"
Ambient air temperature	Operation	- 25...+ 70 °C
	Storage	- 40...+ 70 °C
Vibration resistance	Conforming to IEC 60068-2-6	5 gn (10...500 Hz)
Shock resistance	Conforming to IEC 60068-2-27	25 gn (18 ms)
Electric shock protection		Class II conforming to IEC 61140 and NF C 20030
Degree of protection		IP 65 conforming to IEC 60529; IK 04 conforming to EN 50102
Materials	Bodies	Plastic
	Heads	Zamak

Contact block characteristics

Rated operational characteristics	\sim AC-15; B300 (U _e = 240 V, I _e = 1.5 A); I _{the} = 6 A
	\equiv DC-13; R300 (U _e = 250 V, I _e = 0.1 A), conforming to IEC 60947-5-1 Appendix A, EN 60947-5-1
Rated insulation voltage	U _i = 400 V degree of pollution 3 conforming to IEC 60947-1 U _i = 300 V conforming to UL 508, CSA C22-2 n° 14
Rated impulse withstand voltage	U _{imp} = 4 kV conforming to IEC 60947-1, IEC 60664
Short-circuit protection	6 A cartridge fuse type gG (gl)

Limit switches

Osiswitch® Optimum

Miniature design, plastic, type XCM N

Pre-cabled

Type of head	Plunger (fixing by the body)				Plunger (fixing by the head)		
Type of operator	Metal end plunger	Steel roller plunger for lateral cam approach	Steel roller plunger for traverse cam approach	Thermoplastic roller lever plunger, 1 direction of actuation	M12 with metal end plunger	M12 with steel roller plunger for lateral cam approach	M12 with steel roller plunger for traverse cam approach

References

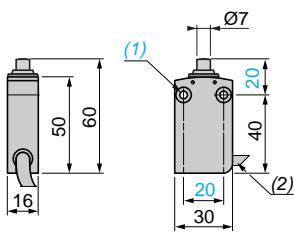
	XCM N2110L1	XCM N2102L1	XCM N2103L1	XCM N2121L1	XCM N21F0L1	XCM N21F2L1	XCM N21F3L1
<p>2-pole N/C + N/O snap action</p>	<p>1,8 4,2(P) 0,8 5mm</p>	<p>3,1(A) 7(P) 0 1,4</p>	<p>3,1(A) 7(P) 0 1,4</p>	<p>65(A) 14(P) 0 2,8</p>	<p>1,8 4,2(P) 0,8 5mm</p>	<p>3,1(A) 7(P) 0 1,4</p>	<p>3,1(A) 7(P) 0 1,4</p>
Weight (kg)	0.080	0.080	0.080	0.090	0.065	0.095	0.095
Contact operation				(A) = cam displacement			

Characteristics

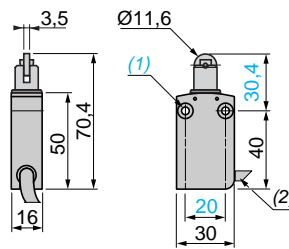
Switch actuation	On end	By 30° cam	On end	By 30° cam		
Type of actuation						
Maximum actuation speed	0.5 m/s	0.1 m/s	0.5 m/s	0.1 m/s		
Mechanical durability	5 millions operating cycles					
Minimum force or torque	For tripping	8.5 N	7 N	2.5 N	8.5 N	7 N
	For positive opening	42.5 N	35 N	12.5 N	42.5 N	35 N
Cabling	PvR cable, 4 x 0.75 mm ² , length 1 metre					

Dimensions

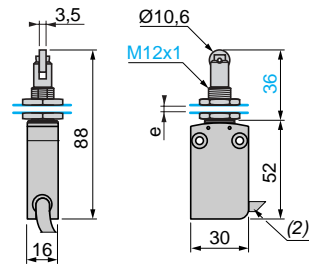
XCM N2110L1



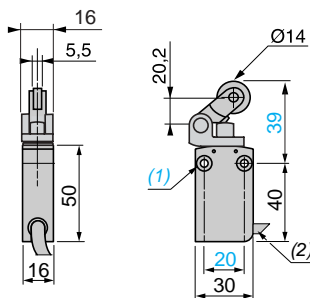
XCM N2102L1, XCM N2103L1



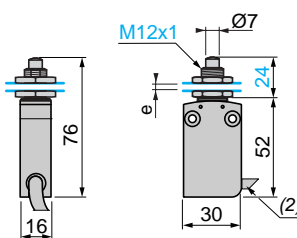
XCM N21F2L1, XCM N21F3L1



XCM N2121L1



XCM N21F0L1



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

(2) Overall diameter 7.5 mm.

e: 8 mm max, panel cut-out \varnothing 12.5 mm,

fixing nut thickness 3.5 mm.

Type of head	Rotary (fixing by the body)			Multi-directional	
Type of operator	Thermoplastic roller lever	Variable length thermoplastic roller lever	Round thermoplastic rod lever Ø 6 mm (1)	Spring lever with thermoplastic end (1)	"Cat's whisker" (1)

References	XCM N2115L1	XCM N2145L1	XCM N2159L1	XCM N2107L1	XCM N2106L1
<p>2-pole N/C + N/O snap action</p>					
Weight (kg)	0.100	0.105	0.080	0.085	0.080
Contact operation	contact closed contact open		(A) = cam displacement (P) = positive opening point	N/C contact with positive opening operation	

(1) Value taken with actuation by moving part at 100 mm from the fixings.

Characteristics	By 30° cam		By any moving part	
Switch actuation	By 30° cam		By any moving part	
Type of actuation				
Maximum actuation speed	1.5 m/s		1 m/s	1 m/s (any direction)
Mechanical durability	5 millions operating cycles			
Minimum force or torque	For tripping	0.1 N.m		
	For positive opening	0.5 N.m	-	-
Cabling	PvR cable, 4 x 0.75 mm ² , length 1 metre			

Dimensions

XCM N2115L1	XCM N2159L1	XCM N2107L1
XCM N2145L1	XCM N2106L1	

(1) 2 fixing holes Ø 4.2 mm, counterbored Ø 8 mm by 4 mm deep.
(2) Overall diameter 7.5 mm.