







# Limit switches

OsiSense XC Standard


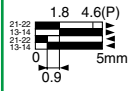
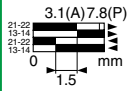
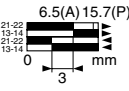
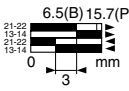
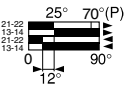
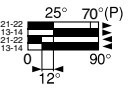

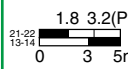
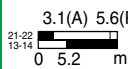
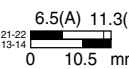
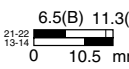
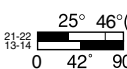







Compact design, plastic, with reset, type XCPR

Complete switches with 1 cable entry

1

Type of head	Plunger (fixing by the body)				Rotary (fixing by the body)	
						
Type of operator	Metal end plunger	Steel roller plunger	Thermoplastic roller lever plunger, horizontal actuation in 1 direction	Thermoplastic roller lever plunger, vertical actuation in 1 direction	Thermoplastic roller lever	Steel roller lever

### References of complete switches with 1 ISO M20 x 1.5 cable entry

	<b>2-pole NC + NO snap action (XE2S P2151)</b>	<b>XCPR 2110P20</b> 1.8 4.6(P) 	<b>XCPR 2102P20</b> 3.1(A) 7.8(P) 	<b>XCPR 2121P20</b> 6.5(A) 15.7(P) 	<b>XCPR 2127P20</b> 6.5(B) 15.7(P) 	<b>XCPR 2118P20</b> 25° 70°(P) 	<b>XCPR 2119P20</b> 25° 70°(P) 
	<b>2-pole NC + NO break before make, slow break (XE2N P2151)</b>	<b>XCPR 2510P20</b> 1.8 3.2(P) 	<b>XCPR 2502P20</b> 3.1(A) 5.6(P) 	<b>XCPR 2521P20</b> 6.5(A) 11.3(P) 	<b>XCPR 2527P20</b> 6.5(B) 11.3(P) 	<b>XCPR 2518P20</b> 25° 46°(P) 	<b>XCPR 2519P20</b> 25° 46°(P) 
	<b>2-pole NC + NC snap action (XE2S P2141)</b>	<b>XCPR 2910P20</b> 1.8 4.6(P) 	<b>XCPR 2902P20</b> 3.1(A) 7.8(P) 	<b>XCPR 2921P20</b> 6.5(A) 15.7(P) 	<b>XCPR 2927P20</b> 6.5(B) 15.7(P) 	<b>XCPR 2918P20</b> 25° 70°(P) 	–
<b>Weight (kg)</b>		0.115	0.115	0.125	0.120	0.155	–

### References of complete switches with 1 Pg 13.5 cable entry

For complete switches with 1 Pg 13.5 cable entry replace P20 by G13.

Example: XCPR 2110P20 becomes **XCPR 2110G13**.






### References of complete switches with 1 entry for 1/2" NPT conduit

For complete switches with 1 entry for 1/2" NPT conduit replace P20 by N12.

Example: XCPR 2110P20 becomes **XCPR 2110N12**.

<b>Contact operation</b>	 closed  open	(A) (B) = cam displacement (P) = positive opening point	 NC contact with positive opening operation
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### Characteristics

<b>Switch actuation</b>	On end	By 30° cam			
<b>Type of actuation</b>					
<b>Maximum actuation speed</b>	0.5 m/s	1 m/s			1.5 m/s
<b>Minimum force or torque</b>	For tripping	15 N	12 N	6 N	0.1 N.m
	For positive opening	45 N	36 N	18 N	0.25 N.m
<b>Cable entry</b>	1 entry tapped M20 x 1.5 mm for ISO cable gland, clamping capacity 7 to 13 mm 1 entry tapped Pg 13.5 for cable gland, clamping capacity 9 to 12 mm 1 entry tapped for 1/2" NPT (USAS B2-1) conduit				

### Other versions

Complete switches with cable entries other than those listed above. please consult our Customer Care Centre.

## Limit switches

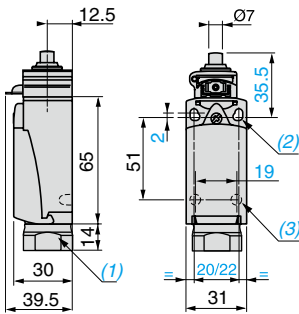
OsiSense XC Standard

Compact design, plastic, with reset, type XCPR

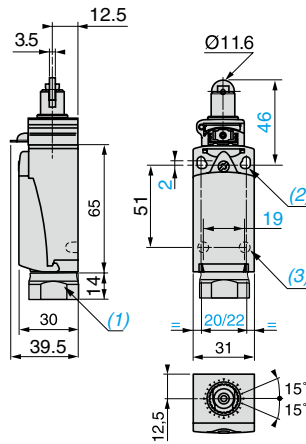
Complete switches with 1 cable entry

### Dimensions

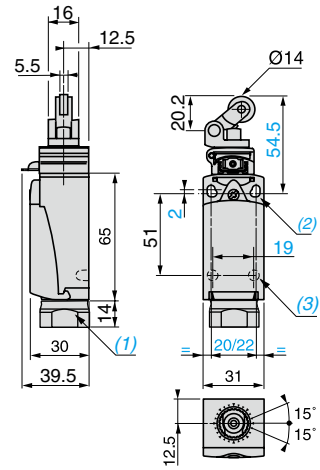
**XCPR 2•10•••**



**XCPR 2•02•••**



**XCPR 2•21•••**



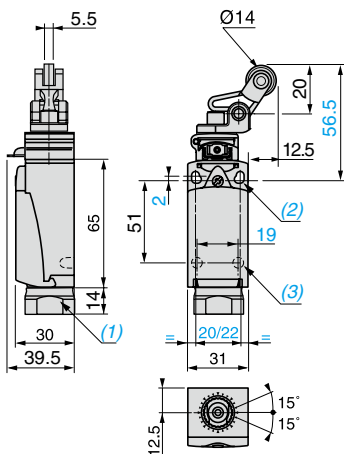
(1) Tapped entry for ISO M20 x 1.5 or Pg 13.5 cable gland or tapped 1/2" NPT.

(2) 2 elongated holes  $\varnothing 4.3 \times 6.3$  mm on 22 mm centres, 2 holes  $\varnothing 4.3$  on 20 mm centres.

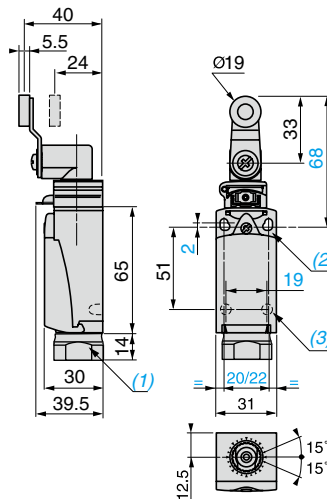
(3) 2 x  $\varnothing 3$  holes for support studs, depth 4 mm.

### Dimensions

**XCPR 2•27•••**



**XCPR 2•18•••, XCPR 2•19•••**



(1) Tapped entry for ISO M20 x 1.5 or Pg 13.5 cable gland or tapped 1/2" NPT.

(2) 2 elongated holes  $\varnothing 4.3 \times 6.3$  mm on 22 mm centres, 2 holes  $\varnothing 4.3$  on 20 mm centres.

(3) 2 x  $\varnothing 3$  holes for support studs, depth 4 mm.

# Limit switches

OsiSense XC Standard

Compact design, plastic, with reset,  
types XCP R and XCT R

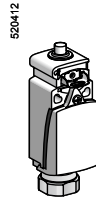
Compact design, metal, with reset, type XCD R

1

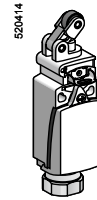
■ XCP R, XCD R  
with 1 cable entry

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

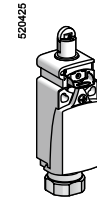
XCD R



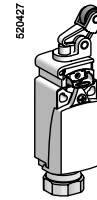
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XCP R

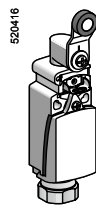


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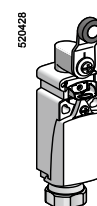
□ With head for rotary movement (lever) or multi-directional. Fixing by the body

XCD R



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XCP R

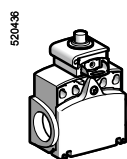


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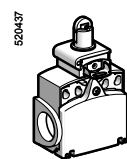
■ XCT R  
with 2 cable entries  
Tripping/resetting points and fixing centres  
conform to CENELEC 50047

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

XCT R

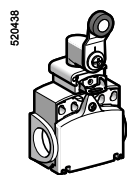


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□ With head for rotary movement (lever) or multi-directional. Fixing by the body

XCT R



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# Limit switches

## OsiSense XC Standard

Compact design, plastic, with reset,  
types XCP R and XCT R

Compact design, metal, with reset, type XCD R

Compact design, metal, with reset, type XCD R

Environment characteristics		
<b>Conformity to standards</b>	Products	EN/IEC 60947-5-1, UL 508, CSA C22-2 n° 14
	Machine assemblies	EN/IEC 60204-1
<b>Product certifications</b>		UL, CSA
<b>Protective treatment</b>	Standard version	"TC"
<b>Ambient air temperature</b>	For operation	- 25...+ 70 °C
	For storage	- 40...+ 70 °C
<b>Vibration resistance</b>	Conforming to IEC 60068-2-6	25 gn (10...500 Hz)
<b>Shock resistance</b>	Conforming to IEC 60068-2-27	50 gn (11 ms)
<b>Electric shock protection</b>		Class II conforming to IEC 61140 and NF C 20-030 for <b>XCP R</b> and <b>XCT R</b>
		Class I conforming to IEC 61140 and NF C 20-030 for <b>XCD R</b>
<b>Degree of protection</b>		<b>IP 66 and IP 67 conforming to IEC 60529; IK 04 conforming to EN 50102</b>
<b>Repeat accuracy</b>		0.1 mm on the tripping points, with 1 million operating cycles for head with end plunger
<b>Cable entry</b>	Depending on model	Either: tapped entry for n° 13 cable gland, tapped ISO M20 x 1.5 or tapped 1/2" NPT
<b>Materials</b>		<b>XCD R</b> : zamak bodies and heads, <b>XCP R</b> and <b>XCT R</b> : plastic bodies, zamak heads
Contact block characteristics		
<b>Rated operational characteristics</b>		~ AC-15; A300 (Ue = 240 V, Ie = 3 A); Ithe = 10 A --- DC-13; Q300 (Ue = 250 V, Ie = 0.27 A), conforming to EN/IEC 60947-1 Appendix A
<b>Rated insulation voltage</b>		Ui = 500 V degree of pollution 3 conforming to IEN/IEC 60947-1 Ui = 300 V conforming to UL 508, CSA C22-2 n° 14
<b>Rated impulse withstand voltage</b>		U imp = 6 kV conforming to EN/IEC 60947-1, IEC 60664
<b>Positive operation</b> (depending on model)		NC contacts with positive opening operation conforming to EN/IEC 60947-5-1 Appendix K
<b>Resistance across terminals</b>		≤ 25 mΩ conforming to IEC 60255-7 category 3
<b>Short-circuit protection</b>		10 A cartridge fuse type gG (gl)
<b>Connection</b> (screw clamp terminals)	XE2S P2151	Clamping capacity, min: 1 x 0.34 mm <sup>2</sup> , max: 2 x 1.5 mm <sup>2</sup>
	XE2N P2151	Clamping capacity, min: 1 x 0.5 mm <sup>2</sup> , max: 2 x 2.5 mm <sup>2</sup>
<b>Minimum actuation speed</b> (for head with end plunger)		<b>XE2S P2151</b> : 0.01 m/minute
		<b>XE2N P2151</b> : 6 m/minute