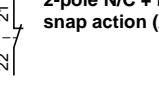
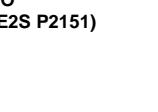
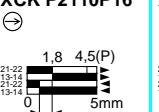
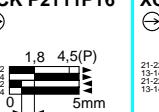
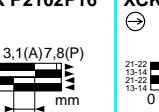
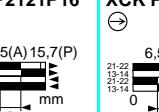
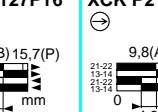
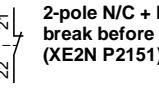
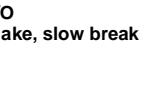
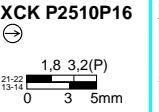
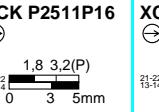
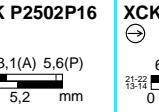
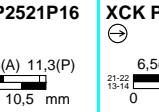
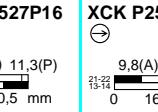
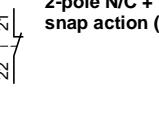
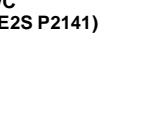
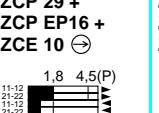
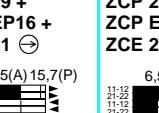
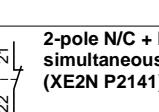
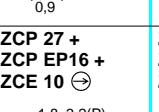
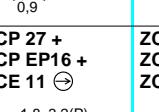
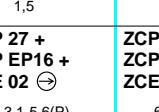
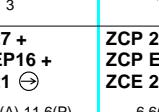
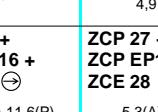
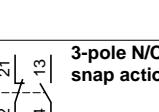
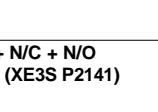
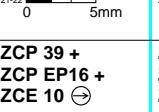
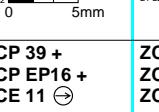
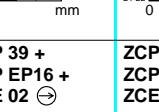
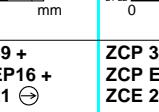
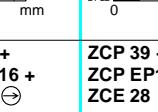
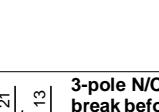
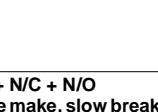
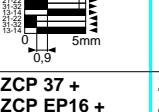
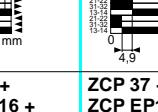
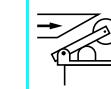


Type of head	Plunger (fixing by the body)						
	Form B (1)	Form C (1)	Form E (1)				
Type of operator	Metal end plunger	Metal end plunger with elastomer boot	Steel roller plunger	Thermoplastic roller lever plunger, horizontal actuation in 1 direction	Thermoplastic roller lever plunger, vertical actuation in 1 direction	Thermoplastic roller lever plunger, horiz. or vert. actuation in 1 direction	
<b>References (2)</b>							
13   13 14   21 22	2-pole N/C + N/O snap action (XE2S P2151) 	XCK P2110P16 ⊕ 	XCK P2111P16 ⊕ 	XCK P2102P16 ⊕ 	XCK P2121P16 ⊕ 	XCK P2127P16 ⊕ 	XCK P2128P16 ⊕ 
13   13 14   21 22	2-pole N/C + N/O break before make, slow break (XE2N P2151) 	XCK P2510P16 ⊕ 	XCK P2511P16 ⊕ 	XCK P2502P16 ⊕ 	XCK P2521P16 ⊕ 	XCK P2527P16 ⊕ 	XCK P2528P16 ⊕ 
11   11 12   21 22	2-pole N/C + N/C snap action (XE2S P2141) 	ZCP 29 + ZCP EP16 + ZCE 10 ⊕ 	ZCP 29 + ZCP EP16 + ZCE 11 ⊕ 	ZCP 29 + ZCP EP16 + ZCE 02 ⊕ 	ZCP 29 + ZCP EP16 + ZCE 21 ⊕ 	ZCP 29 + ZCP EP16 + ZCE 27 ⊕ 	ZCP 29 + ZCP EP16 + ZCE 28 ⊕ 
11   11 12   21 22	2-pole N/C + N/C simultaneous, slow break (XE2N P2141) 	ZCP 27 + ZCP EP16 + ZCE 10 ⊕ 	ZCP 27 + ZCP EP16 + ZCE 11 ⊕ 	ZCP 27 + ZCP EP16 + ZCE 02 ⊕ 	ZCP 27 + ZCP EP16 + ZCE 21 ⊕ 	ZCP 27 + ZCP EP16 + ZCE 27 ⊕ 	ZCP 27 + ZCP EP16 + ZCE 28 ⊕ 
31   21 32   21 22   13 14	3-pole N/C + N/C + N/O snap action (XE3S P2141) 	ZCP 39 + ZCP EP16 + ZCE 10 ⊕ 	ZCP 39 + ZCP EP16 + ZCE 11 ⊕ 	ZCP 39 + ZCP EP16 + ZCE 02 ⊕ 	ZCP 39 + ZCP EP16 + ZCE 21 ⊕ 	ZCP 39 + ZCP EP16 + ZCE 27 ⊕ 	ZCP 39 + ZCP EP16 + ZCE 28 ⊕ 
31   21 32   21 22   13 14	3-pole N/C + N/C + N/O break before make, slow break (XE3N P2141) 	ZCP 37 + ZCP EP16 + ZCE 10 ⊕ 	ZCP 37 + ZCP EP16 + ZCE 11 ⊕ 	ZCP 37 + ZCP EP16 + ZCE 02 ⊕ 	ZCP 37 + ZCP EP16 + ZCE 21 ⊕ 	ZCP 37 + ZCP EP16 + ZCE 27 ⊕ 	ZCP 37 + ZCP EP16 + ZCE 28 ⊕ 
Weight (kg)	0.090	0.090	0.095	0.105	0.100	0.105	
Contact operation	 contact closed  contact open	(A)(B) = cam displacement (P) = positive opening point				⊕ N/C contact with positive opening operation	

### Characteristics

Switch actuation	On end	By 30° cam		
Type of actuation				
Maximum actuation speed	0.5 m/s	1 m/s		
Mechanical durability (in millions of operating cycles)	15	10	15	
Minimum force or torque	For tripping For positive opening	15 N 45 N	12 N 36 N	6 N 18 N
Cable entry (3)	1 entry tapped M16 x 1.5 mm for ISO cable gland, clamping capacity 4 to 8 mm			

(1) Form conforming to EN 50047, see page 31900.

(2) Switches with gold contacts or ring type connections: please consult our Regional Sales Office.

(3) For an entry tapped for a n° 11 cable gland, replace P16 in the reference by G11. Examples: XCK P2110P16 becomes XCK P2110G11, ZCP EP16 becomes ZCP EG11.

## References, characteristics

## Limit switches

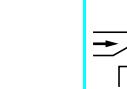
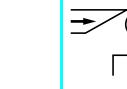
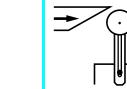
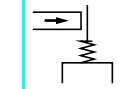
Osiswitch® Universal, Osiconcept®

Compact design, plastic, type XCK P

Complete units with 1 ISO M16 x 1.5 cable entry

Type of head	Plunger (fixing by the head)	Rotary (fixing by the body)	Multidirectional				
Form A (1)							
Type of operator	M18 with metal end plunger	M18 with steel roller plunger	Thermoplastic roller lever				
Variable length thermoplastic roller lever							
Thermoplastic roller lever, Ø 50 mm							
Variable length thermoplastic roller lever, Ø 50 mm							
"Cat's whisker" (4)							
<b>References (2)</b>							
13   14 21   22 2-pole N/C + N/O snap action (XE2S P2151)	XCK P21H0P16 ⊖ 1.8 4.5(P) 21-22 0 5mm 13-14 0,9	XCK P21H2P16 ⊖ 3,1(A) 7,8(P) 21-22 0 1,5 mm 13-14 12°	XCK P2118P16 ⊖ 25° 70°(P) 21-22 0 90° 13-14 12°	XCK P2145P16 ⊖ 25° 70°(P) 21-22 0 90° 13-14 12°	XCK P2139P16 ⊖ 25° 70°(P) 21-22 0 90° 13-14 12°	XCK P2149P16 ⊖ 25° 70°(P) 21-22 0 90° 13-14 12°	XCK P2106P16 ⊖ 20° 21-22 0 15° 13-14
13   14 21   22 2-pole N/C + N/O break before make, slow break (XE2N P2151)	XCK P25H0P16 ⊖ 1.8 3,2(P) 21-22 0 5mm 13-14	XCK P25H2P16 ⊖ 3,1(A) 5,6(P) 21-22 0 5,2 mm 13-14	XCK P2518P16 ⊖ 25° 70°(P) 21-22 0 90° 13-14 42°	XCK P2545P16 ⊖ 25° 70°(P) 21-22 0 90° 13-14 42°	XCK P2539P16 ⊖ 25° 70°(P) 21-22 0 90° 13-14 42°	XCK P2549P16 ⊖ 25° 70°(P) 21-22 0 90° 13-14 42°	XCK P2506P16 ⊖ 20° 21-22 0 45° 13-14
11   12 21   22 2-pole N/C + N/C snap action (XE2S P2141)	ZCP 29 + ZCP EP16 + ZCE H0 ⊖ 1.8 4,5(P) 21-22 0 5mm 11-12 0,9	ZCP 29 + ZCP EP16 + ZCE H2 ⊖ 3,1(A) 7,8(P) 21-22 0 1,5 mm 11-12 12°	ZCP 29 + ZCP EP16 + ZCE 01 + ZCY 18 ⊖ 25° 70°(P) 21-22 0 90° 11-12 12°	ZCP 29 + ZCP EP16 + ZCE 01 + ZCE 01 + ZCY 45 ⊖ 25° 70°(P) 21-22 0 90° 11-12 12°	ZCP 29 + ZCP EP16 + ZCE 01 + ZCY 39 ⊖ 25° 70°(P) 21-22 0 90° 11-12 12°	ZCP 29 + ZCP EP16 + ZCE 01 + ZCY 49 ⊖ 25° 70°(P) 21-22 0 90° 11-12 12°	ZCP 29 + ZCP EP16 + ZCE 06 20° 21-22 0 15° 11-12
11   12 21   22 2-pole N/C + N/C simultaneous, slow break (XE2N P2141)	ZCP 27 + ZCP EP16 + ZCE H0 ⊖ 1.8 3,2(P) 21-22 0 5mm 11-12	ZCP 27 + ZCP EP16 + ZCE H2 ⊖ 3,1 5,6(P) 21-22 0 mm 11-12	ZCP 27 + ZCP EP16 + ZCE 01 + ZCY 18 ⊖ 25° 70°(P) 21-22 0 90° 11-12	ZCP 27 + ZCP EP16 + ZCE 01 + ZCY 45 ⊖ 25° 70°(P) 21-22 0 90° 11-12	ZCP 27 + ZCP EP16 + ZCE 01 + ZCY 39 ⊖ 25° 70°(P) 21-22 0 90° 11-12	ZCP 27 + ZCP EP16 + ZCE 01 + ZCY 49 ⊖ 25° 70°(P) 21-22 0 90° 11-12	ZCP 27 + ZCP EP16 + ZCE 06 20° 21-22 0 11-12
31   32   33   34 21   22   23   24 3-pole N/C+N/C+N/O snap action (XE3S P2141)	ZCP 39 + ZCP EP16 + ZCE H0 ⊖ 1.8 4,5(P) 21-32 0 5mm 31-32 0,9	ZCP 39 + ZCP EP16 + ZCE H2 ⊖ 3,1(A) 7,8(P) 21-32 0 1,5 mm 31-32 12°	ZCP 39 + ZCP EP16 + ZCE 01 + ZCY 18 ⊖ 25° 70°(P) 21-32 0 90° 31-32 12°	ZCP 39 + ZCP EP16 + ZCE 01 + ZCY 45 ⊖ 25° 70°(P) 21-32 0 90° 31-32 12°	ZCP 39 + ZCP EP16 + ZCE 01 + ZCY 39 ⊖ 25° 70°(P) 21-32 0 90° 31-32 12°	ZCP 39 + ZCP EP16 + ZCE 01 + ZCY 49 ⊖ 25° 70°(P) 21-32 0 90° 31-32 12°	ZCP 39 + ZCP EP16 + ZCE 06 20° 21-32 0 15° 31-32
31   32   33   34 21   22   23   24 3-pole N/C+N/C+N/O break before make, slow break (XE3N P2141)	ZCP 37 + ZCP EP16 + ZCE H0 ⊖ 1.8 3,2(P) 21-32 0 5mm 31-32	ZCP 37 + ZCP EP16 + ZCE H2 ⊖ 3,1(A) 5,6(P) 21-32 0 5,2 mm 31-32	ZCP 37 + ZCP EP16 + ZCE 01 + ZCY 18 ⊖ 25° 70°(P) 21-32 0 90° 31-32 42°	ZCP 37 + ZCP EP16 + ZCE 01 + ZCY 45 ⊖ 25° 70°(P) 21-32 0 90° 31-32 42°	ZCP 37 + ZCP EP16 + ZCE 01 + ZCY 39 ⊖ 25° 70°(P) 21-32 0 90° 31-32 42°	ZCP 37 + ZCP EP16 + ZCE 01 + ZCY 49 ⊖ 25° 70°(P) 21-32 0 90° 31-32 42°	ZCP 37 + ZCP EP16 + ZCE 06 20° 21-32 0 45° 31-32
<b>Weight (kg)</b>	0.130	0.130	0.135	0.145	0.145	0.155	0.085
Contact operation	 contact closed  contact open	(A) = cam displacement (P) = positive opening point			⊖ N/C contact with positive opening operation		

## Characteristics

Switch actuation	On end	By 30° cam	By any moving part
Type of actuation	 	 	
Maximum actuation speed	0.5 m/s	1.5 m/s	1 m/s (any direct.)
Mechanical durability	10 million operating cycles		5 million op. cycles
Minimum force or torque	For tripping 15 N For positive opening 45 N	10 N 36 N	0.1 N.m 0.25 N.m
Cable entry (3)	1 entry tapped M16 x 1.5 mm for ISO cable gland, clamping capacity 4 to 8 mm		

(1) Form conforming to EN 50047, see page 31900/8.

(2) Switches with gold contacts or ring type connections: please consult our Regional Sales Office.

(3) For an entry tapped for a n° 11 cable gland, replace P16 in the ref. by G11. Examples: XCK P21H0P16 becomes XCK P21H0G11, ZCP EP16 becomes ZCP EG11.

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

## Dimensions

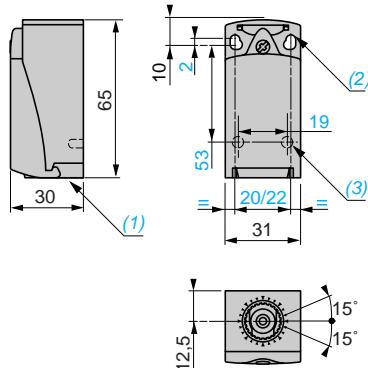
# Limit switches

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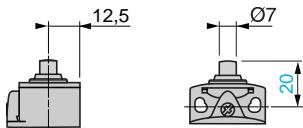
Compact design, plastic, type XCK P

Complete units with 1 ISO M16 x 1.5 cable entry

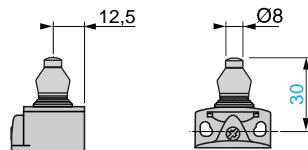
ZCP 2● + ZCP EP16 / ZCP 3● + ZCP EP16



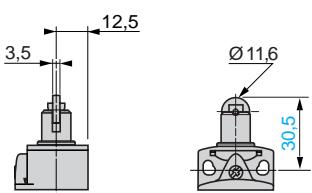
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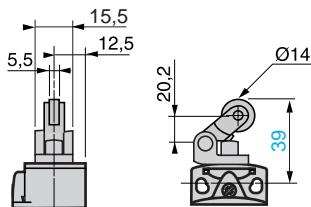
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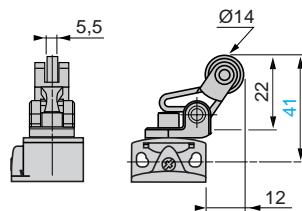
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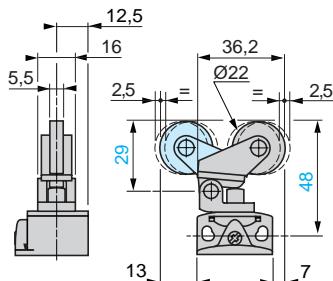
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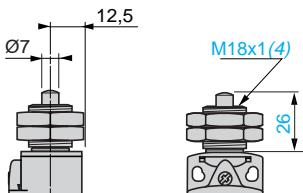
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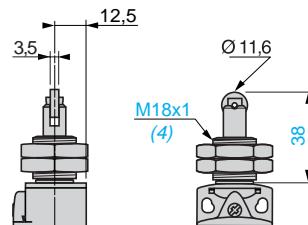
ZCE 28



ZCE H0



ZCE H2



(1) Tapped entry for ISO M16 x 1.5 or Pg 11 cable gland.

(2) 2 elongated holes Ø 4.3 x 6.3 mm on 22 mm centres, 2 holes Ø 4.3 on 20 mm centres.

(3) 2 x Ø 3 holes for support studs, depth 4 mm.

(4) Fixing nut thickness 3.5 mm.

## Dimensions

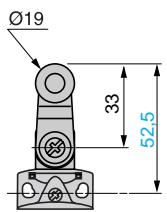
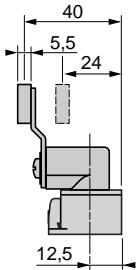
# Limit switches

Osiswitch® Universal, Osiconcept®

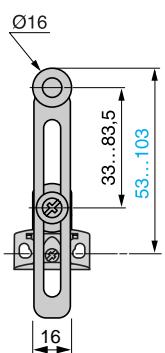
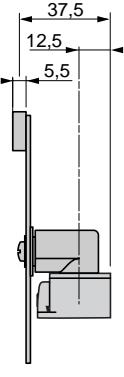
Compact design, plastic, type XCK P

Complete units with 1 ISO M16 x 1.5 cable entry

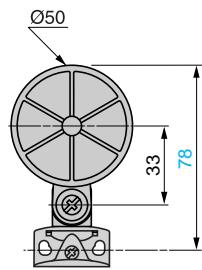
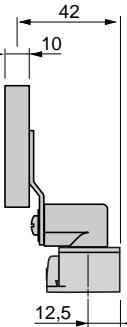
ZCE 01 + ZCY 18



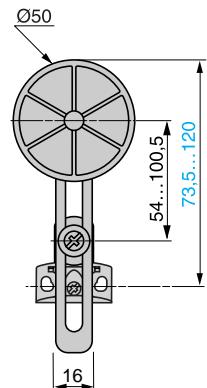
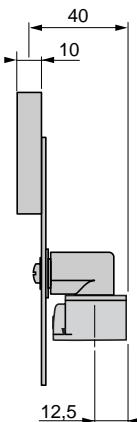
ZCE 01 + ZCY 45



ZCE 01 + ZCY 39



ZCE 01 + ZCY 49



ZCE 06

