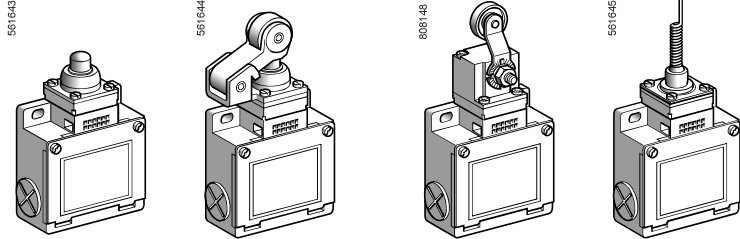


1

■ **XCKM,**  
with 3 cable entries

□ With head for linear movement (plunger)

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

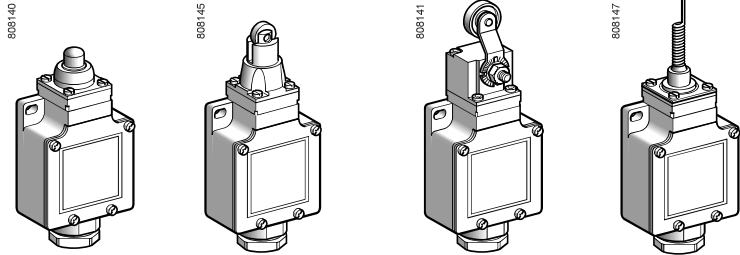


Page 1/76

■ **XCKL,**  
with 1 cable entry

□ With head for linear movement (plunger)

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

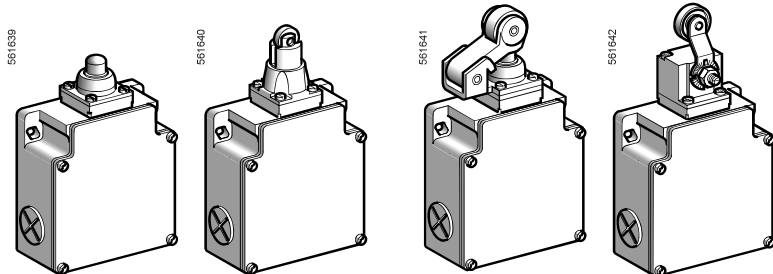


Page 1/78

■ **XCKML,**  
with 3 cable entries and 2 x 2-pole contacts

□ With head for linear movement (plunger)

□ With head for rotary movement (lever)



Page 1/80

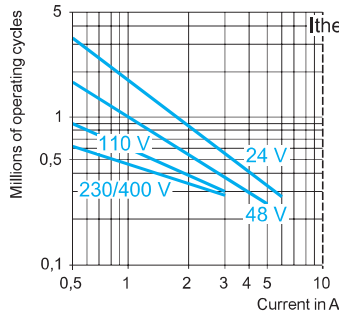
Environment characteristics		
Conformity to standards	Products	IEC 60947-5-1, EN 60947-5-1, UL 508, CSA C22-2 n° 14
	Machine assemblies	IEC 60204-1, EN 60204-1
Product certifications		UL, CSA CCC (only for XCKM) BV (only for XCKM and XCKL)
Protective treatment	Version	Standard: "TC". Special: "TH"
Ambient air temperature	For operation	- 25...+ 70°C
	For storage	- 40...+ 70°C
Vibration resistance	Conforming to IEC 60068-2-6	25 gn (10...500 Hz)
Shock resistance	Conforming to IEC 60068-2-27	50 gn (11 ms)
Electric shock protection		Class I conforming to IEC 61140 and NF C 20-030
Degree of protection		IP 66 conforming to IEC 60529; IK 05 conforming to EN 50102
Repeat accuracy		XCKML 0.1 mm; XCKM and XCKL 0.05 mm on the tripping points, with 1 million operating cycles for head with end plunger
Cable entry or connector	Depending on model	XCKM: 3 tapped entries for Pg 11 cable gland or tapped ISO M20, or with 1/2" NPT adaptor XCKL: 1 tapped entry incorporating Pg 13.5 cable gland or 1 entry tapped 1/2" NPT XCKML: 3 tapped entries for Pg 13.5 cable gland or tapped ISO M20
Materials		Bodies: Zamak. Rotary heads: Zamak or plastic, depending on product reference. Other heads: plastic



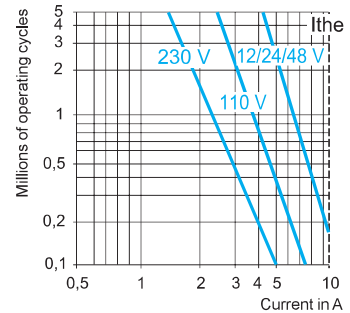
Contact block characteristics		
Rated operational characteristics	XE2●P	~ AC-15; A300 (Ue = 240 V, Ie = 3 A); Ithe = 10 A --- DC-13; Q300 (Ue = 250 V, Ie = 0.27 A), conforming to IEC 60947-5-1 Appendix A, EN 60947-5-1
	XE3●P	~ AC-15; B300 (Ue = 240 V, Ie = 1.5 A); Ithe = 6 A --- DC-13; R300 (Ue = 250 V, Ie = 0.1 A), conforming to IEC 60947-5-1 Appendix A, EN 60947-5-1
Rated insulation voltage	XE2●P	Ui = 500 V degree of pollution 3 conforming to IEC 60947-1 Ui = 300 V conforming to UL 508, CSA C22-2 n° 14
	XE3●P	Ui = 400 V degree of pollution 3 conforming to IEC 60947-1 Ui = 300 V conforming to UL 508, CSA C22-2 n° 14
Rated impulse withstand voltage	XE2●P	U imp = 6 kV conforming to IEC 60947-1, IEC 60664
	XE3●P	U imp = 4 kV conforming to IEC 60947-1, IEC 60664
Positive operation (depending on model)		NC contacts with positive opening operation conforming to IEC 60947-5-1 Appendix K, EN 60947-5-1
Resistance across terminals		≤ 25 mΩ conforming to IEC 60255-7 category 3
Short-circuit protection	XE2●P	10 A cartridge fuse type gG (gl)
	XE3●P	6 A cartridge fuse type gG (gl)
Connection (screw clamp terminals)	XE2SP21●1	Clamping capacity, min: 1 x 0.34 mm <sup>2</sup> , max: 2 x 1.5 mm <sup>2</sup>
	XE2NP21●1	Clamping capacity, min: 1 x 0.5 mm <sup>2</sup> , max: 2 x 2.5 mm <sup>2</sup>
	XESP2151L and XENP2151L	Clamping capacity, min: 1 x 0.34 mm <sup>2</sup> , max: 2 x 1.5 mm <sup>2</sup> or 1 x 2.5 mm <sup>2</sup>
	XE3NP and XE3SP	Clamping capacity, min: 1 x 0.34 mm <sup>2</sup> , max: 1 x 1 mm <sup>2</sup> or 2 x 0.75 mm <sup>2</sup>
Minimum actuation speed		<b>XE2SP21●1, XESP2151L and XE3SP:</b> 0.01 m/minute <b>XE2NP21●1, XENP2151L and XE3NP:</b> 6 m/minute
Electrical durability		<ul style="list-style-type: none"> <li>■ Conforming to IEC 60947-5-1 Appendix C</li> <li>■ Utilisation categories AC-15 and DC-13</li> <li>■ Maximum operating rate: 3600 operating cycles/hour</li> <li>■ Load factor: 0.5</li> </ul>

AC supply  
50/60 Hz ~  
mm inductive circuit

**XE2SP21●1, XE2SP2141, XESP2151L**



**XE2NP21●1, XENP2151L**



DC supply ---

Power broken in W for 5 million operating cycles.

Voltage	V	24	48	120
mm	W	10	7	4

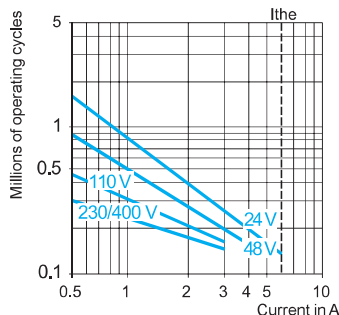
Power broken in W for 5 million operating cycles.

Voltage	V	24	48	120
mm	W	13	9	7

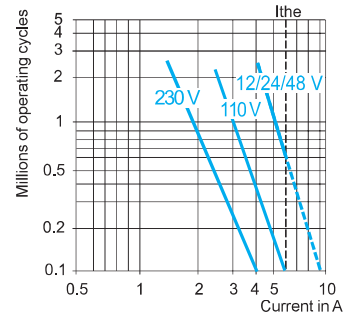
For XE2SP●151 on ~ or ---, NC and NO contacts simultaneously loaded to the values shown with reverse polarity.

AC supply  
50/60 Hz ~  
mm inductive circuit

**XE3SP●●●●**



**XE3NP●●●●**



DC supply ---

Power broken in W for 5 million operating cycles.

Voltage	V	24	48	120
mm	W	3	2	1

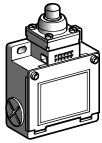
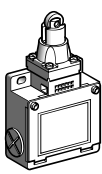
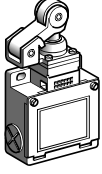
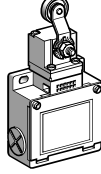
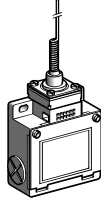
Power broken in W for 5 million operating cycles.

Voltage	V	24	48	120
mm	W	4	3	2

# Limit switches

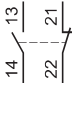




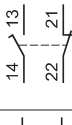




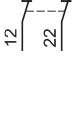




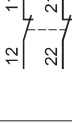




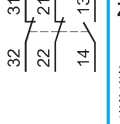




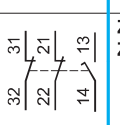







OsiSense XC Standard, Classic format  
Metal, type XCKM  
Complete switches with 3 cable entries

1

Type of head	Plunger (fixing by the body)	Rotary (fixing by the body)	Multi-directional, (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 (1)	"Cat's whisker" (2)
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### References of complete switches with 3 ISO M20 x 1.5 cable entries (3)

2-pole NC + NO snap action (XE2SP2151)		<b>XCKM110H29</b> 	<b>XCKM102H29</b> 	<b>XCKM121H29</b> 	<b>XCKM115H29</b> 	<b>XCKM106H29</b>
2-pole NC + NO break before make, slow break (XE2NP2151)		<b>XCKM510H29</b> 	<b>XCKM502H29</b> 	<b>XCKM521H29</b> 	<b>XCKM515H29</b> 	<b>XCKM506H29</b>
2-pole NC + NC snap action (XE2SP2141)		<b>ZCKM9H29 + ZCKD10</b> 	<b>ZCKM9H29 + ZCKD02</b> 	<b>ZCKM9H29 + ZCKD21</b> 	<b>ZCKM9H29 + ZCKD15</b> 	<b>ZCKM9H29 + ZCKD06</b>
2-pole NC + NC simultaneous, slow break (XE2NP2141)		<b>ZCKM7H29 + ZCKD10</b> 	<b>ZCKM7H29 + ZCKD02</b> 	<b>ZCKM7H29 + ZCKD21</b> 	<b>ZCKM7H29 + ZCKD15</b> 	<b>ZCKM7H29 + ZCKD06</b>
3-pole NC + NC + NO snap action (XE3SP2141)		<b>ZCKMD39H29 + ZCKD10</b> 	<b>ZCKMD39H29 + ZCKD02</b> 	<b>ZCKMD39H29 + ZCKD21</b> 	<b>ZCKMD39H29 + ZCKD15</b> 	<b>ZCKMD39H29 + ZCKD06</b>
3-pole NC + NC + NO break before make, slow break (XE3NP2141)		<b>ZCKMD37H29 + ZCKD10</b> 	<b>ZCKMD37H29 + ZCKD02</b> 	<b>ZCKMD37H29 + ZCKD21</b> 	<b>ZCKMD37H29 + ZCKD15</b> 	<b>ZCKMD37H29 + ZCKD06</b>
Weight (kg)	0,250	0,255	0,300	0,280	0,250	
Contact operation	 closed  open	(A) = cam displacement (P) = positive opening point		 NC contact with positive opening operation		

### References of complete switches with 3 Pg 11 cable entries

For complete switches with 3 Pg 11 cable entries, delete H29 from the end of the reference. Example: XCKM110H29 becomes XCKM110.

Characteristics	On end	By 30° cam		By any moving part
Switch actuation				
Type of actuation				
Maximum actuation speed	0.5 m/s		1.5 m/s	
Mechanical durability (4) (in millions of operating cycles)	20			15
Minimum force or torque	For tripping: 15 N For positive opening: 45 N	12 N 36 N	8 N 24 N	0.1 N.m 0.25 N.m
Cable entry	3 entries tapped M20 x 1.5 mm for ISO cable gland, clamping capacity 7 to 13 mm			

(1) Adjustable throughout 360° in 5° steps, or in 90° steps by reversing the notched washer.

(2) Value taken with actuation by moving part at 100 mm from the fixing.

(3) Switches with gold contacts or eyelet type connections: please consult our Customer Care Centre.

(4) Limited to 15 million operating cycles for switches with contacts XE3P.

## Limit switches

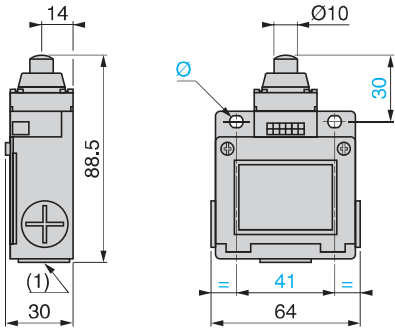
OsiSense XC Standard, Classic format

Metal, type XCKM

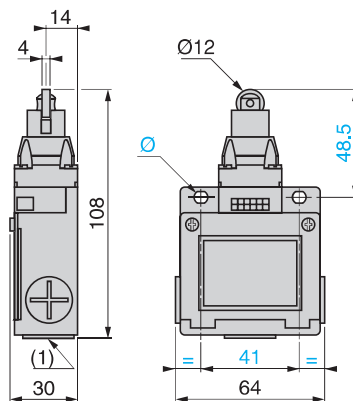
Complete switches with 3 cable entries



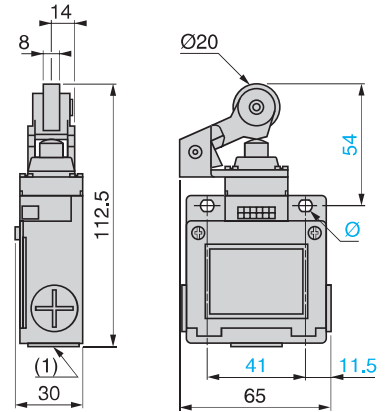
**XCKM●10**  
ZCKMD3● + ZCKD10



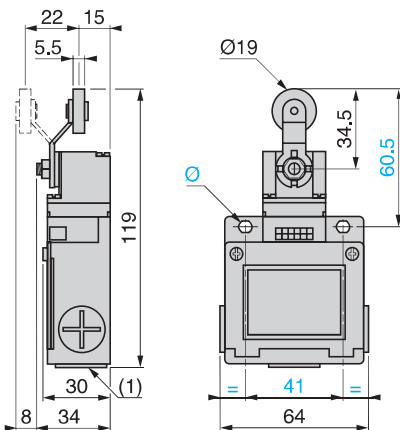
**XCKM●02**  
ZCKMD3● + ZCKD02



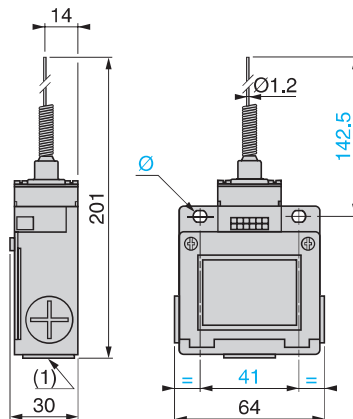
**XCKM●21**  
ZCKMD3● + ZCKD21



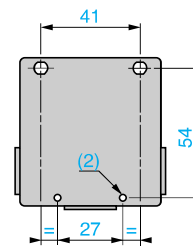
**XCKM●15**  
ZCKMD3● + ZCKD15



**XCKM●06**  
ZCKMD3● + ZCKD06

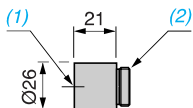


**Rear view XCKM●●●, ZCKM●, ZCKMD3●**



(1) 3 tapped entries for ISO M20 x 1.5 or Pg 11 cable gland or with 1/2" NPT conduit adaptor DE9RA1012.  
 (2) 2 x Ø 4 H 11, depth 10.  
 Ø: 2 elongated holes Ø 5.2 x 6.2

**Adaptor for 1/2" NPT conduit**  
DE9RA1012



(1) Tapped entry for 1/2" NPT conduit.  
 (2) Pg 11 threaded sleeve.

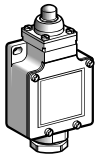
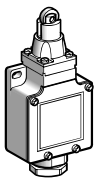
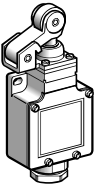
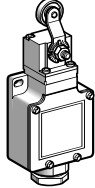
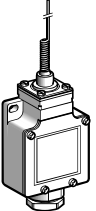
# Limit switches

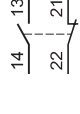



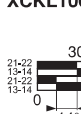
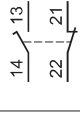

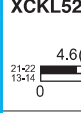
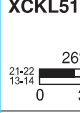
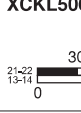
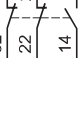

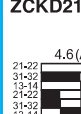

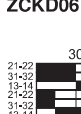
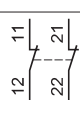

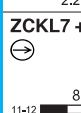

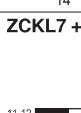
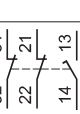
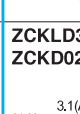





OsiSense XC Standard, Classic format






Metal, type XCKL

Complete switches incorporating Pg 13.5 cable gland

1

Type of head	Plunger (fixing by the body)	Rotary (fixing by the body)	Multi-directional, (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 (1)	"Cat's whisker" (2)

References (3)					
2-pole NC + NO snap action (XE2SP2151)	 XCKL110 ⊕ 1.8 4.5(P) 0.9 5.5mm	 XCKL102 ⊕ 3.1(A) 7.8(P) 1.5 mm	 XCKL121 ⊕ 4.6(A) 11.1(P) 2.2 mm	 XCKL115 ⊕ 26° 58°(P) 11° 70°	 XCKL106 30° 14°
2-pole NC + NO break before make, slow break (XE2NP2151)	 XCKL510 ⊕ 1.8 3.2(P) 0 3 5.5mm	 XCKL502 ⊕ 3.1(A) 5.6(P) 0 5.2 mm	 XCKL521 ⊕ 4.6(A) 8(P) 0 7.6 mm	 XCKL515 ⊕ 26° 42°(P) 0 36° 70°	 XCKL506 30° 0 40°
3-pole NC + NC + NO snap action (XE3SP2141)	 ZCKLD39 + ZCKD10 ⊕ 1.8 4.5(P) mm 0.9 5.5	 ZCKLD39 + ZCKD02 ⊕ 3.1(A) 7.8(P) mm 1.5	 ZCKLD39 + ZCKD21 ⊕ 4.6(A) 11.1(P) mm 2.2	 ZCKLD39 + ZCKD15 ⊕ 26° 58°(P) 11° 70°	 ZCKLD39 + ZCKD06 30° 14°
2-pole NC + NC simultaneous, slow break (XE2NP2141)	 ZCKL7 + ZCKD10 ⊕ 3.2(P) 1.8 5.5mm	 ZCKL7 + ZCKD02 ⊕ 5.6(P) 3.1(A) 9mm	 ZCKL7 + ZCKD21 ⊕ 8(P) 4.6(A) mm	 ZCKL7 + ZCKD15 ⊕ 42°(P) 23° 70°	 ZCKL7 + ZCKD06 30°
3-pole NC + NC + NO break before make, slow break (XE3NP2141)	 ZCKLD37 + ZCKD10 ⊕ 1.8 3.2(P) mm 0 3 5.5	 ZCKLD37 + ZCKD02 ⊕ 3.1(A) 3.2(P) mm 0 5.2 5.5	 ZCKLD37 + ZCKD21 ⊕ 4.6(A) 8(P) mm 0 7.6	 ZCKLD37 + ZCKD15 ⊕ 26° 42°(P) 0 36° 70°	 ZCKLD37 + ZCKD06 30° 0 40°
Weight (kg)	0.255	0.260	0.305	0.285	0.255
Contact operation	 closed  open	(A) = cam displacement (P) = positive opening point		⊕ NC 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 direction)
Mechanical durability (4) (in millions of operating cycles)	20	15			10
Minimum force or torque	For tripping For positive opening	15 N 45 N	12 N 36 N	8 N 24 N	0.1 N.m 0.25 N.m
Cable entry	1 entry incorporating metal cable gland. Clamping capacity 6 to 13.5 mm.				

(1) Adjustable throughout 360° in 5° steps, or in 90° steps by reversing the notched washer.  
 (2) Value taken with actuation by moving part at 100 mm from the fixing.  
 (3) Switches with gold contacts or eyelet type connections: please consult our Customer Care Centre.  
 (4) Limited to 15 million operating cycles for switches with contacts XE3●P.

## Limit switches

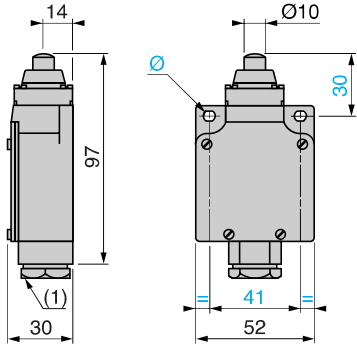
OsiSense XC Standard, Classic format

Metal, type XCKL

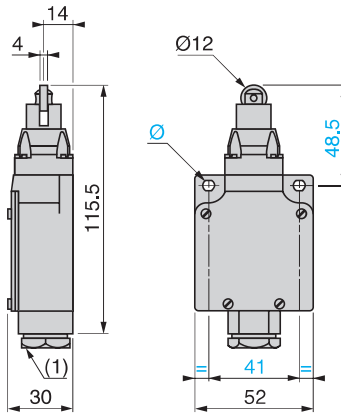
Complete switches incorporating Pg 13.5 cable gland



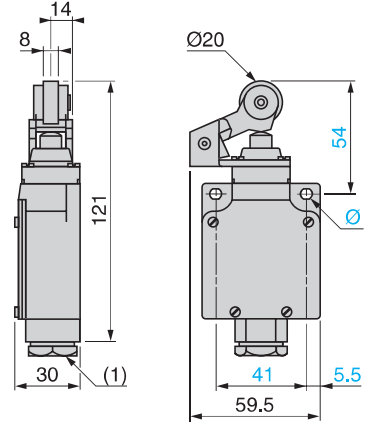
**XCKL●10**  
ZCKL● + ZCKD10  
ZCKLD3● + ZCKD10



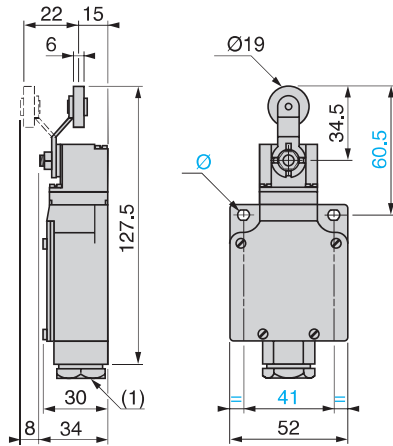
**XCKL●02**  
ZCKL3● + ZCKD02  
ZCKLD3● + ZCKD02



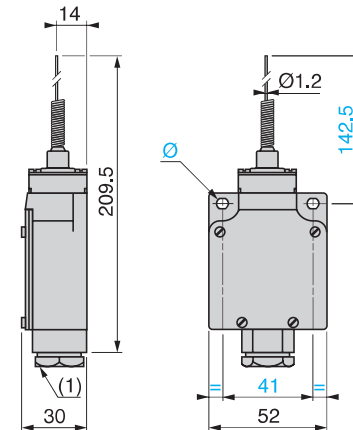
**XCKL●21**  
ZCKL● + ZCKD21  
ZCKLD3● + ZCKD21



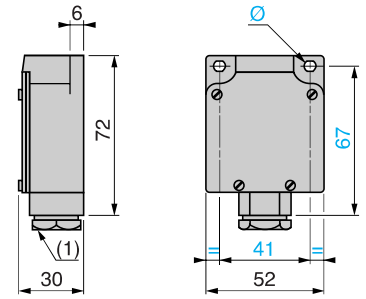
**XCKL●15**  
ZCKL● + ZCKD15  
ZCKLD3● + ZCKD15



**XCKL●06**  
ZCKL● + ZCKD06  
ZCKLD3● + ZCKD06



**Body fixings**

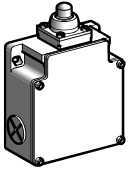
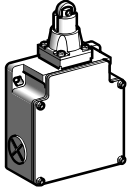
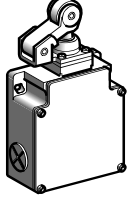
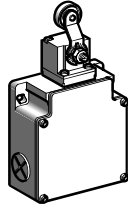


(1) Incorporated Pg 13.5 cable gland  
Ø: 2 elongated holes Ø 5.2 x 6.2

# Limit switches

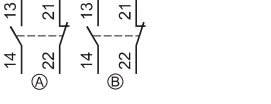
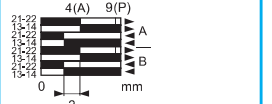
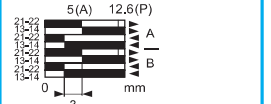
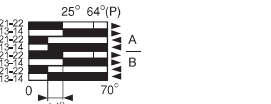
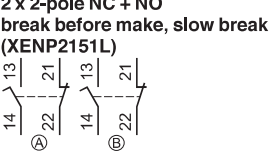
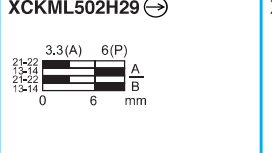
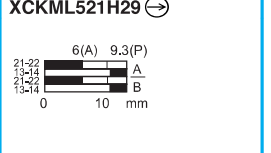
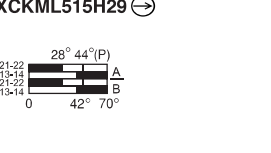
OsiSense XC Standard, Classic format  
Metal, 2 x 2-pole contacts, type XCKML  
Complete switches with 3 cable entries

1

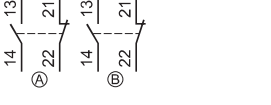
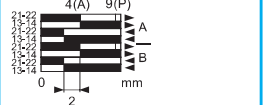
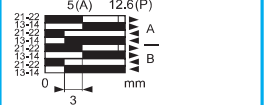
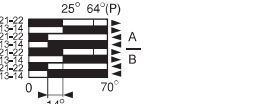
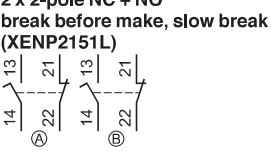
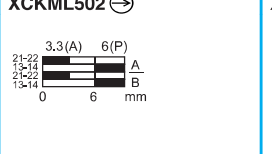
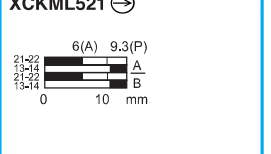
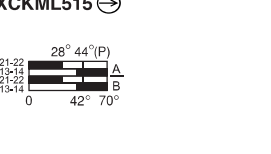
Type of head	Plunger (fixing by the body)			Rotary (fixing by the body)
				



Type of operator	Metal end plunger	Steel roller plunger	Thermoplastic roller lever plunger, horizontal actuation in 1 direction	Thermoplastic roller lever (1)
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**References of complete switches with 3 ISO M20 x 1.5 cable entries (2)**




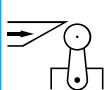
2 x 2-pole NC + NO snap action (XESP2151L)	XCKML110H29 ⊕ 	XCKML102H29 ⊕ 	XCKML121H29 ⊕ 	XCKML115H29 ⊕ 
2 x 2-pole NC + NO break before make, slow break (XENP2151L)	XCKML510H29 ⊕ 	XCKML502H29 ⊕ 	XCKML521H29 ⊕ 	XCKML515H29 ⊕ 

**References of complete switches with 3 entries tapped for n° 13 cable gland (2)**

2 x 2-pole NC + NO snap action (XESP2151L)	XCKML110 ⊕ 	XCKML102 ⊕ 	XCKML121 ⊕ 	XCKML115 ⊕ 
2 x 2-pole NC + NO break before make, slow break (XENP2151L)	XCKML510 ⊕ 	XCKML502 ⊕ 	XCKML521 ⊕ 	XCKML515 ⊕ 

Weight (kg)	0.400	0.405	0.450	0.430
Contact operation	 closed  open	(A) = cam displacement (P) = positive opening point	⊕ NC contact with positive opening operation	

**Characteristics**

Switch actuation	On end	By 30° cam		
Type of actuation				
Maximum actuation speed	0.5 m/s	1.5 m/s		
Mechanical durability	3 million operating cycles			
Minimum force	For tripping: 15 N For positive opening: 60 N	12 N 50 N	8 N 50 N	0.2 N.m 0.5 N.m
Cable entry	3 entries tapped ISO M20 x 1.5, clamping capacity 7 to 13 mm, or 3 entries tapped for n° 13 cable gland conforming to NF C 68-300 (DIN Pg 13.5), clamping capacity 9 to 12 mm.			

(1) Adjustable throughout 360° in 5° steps, or in 90° steps by reversing the notched washer.  
 (2) Switches available with other 2-pole slow break contact blocks: NO + NC make before break, NC + NC simultaneous (with positive opening operation), NO + NO simultaneous. Please consult our Customer Care Centre.

**Note: replacement parts**  
 The heads of limit switches type XCKML are the same as those for types XCKM and XCKL (see heads ZCKD10, ZCKD02, ZCKD21 and ZCKD15 on page 1/82).

# Limit switches

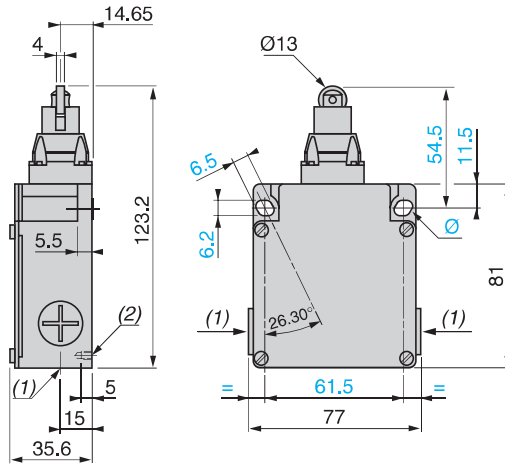
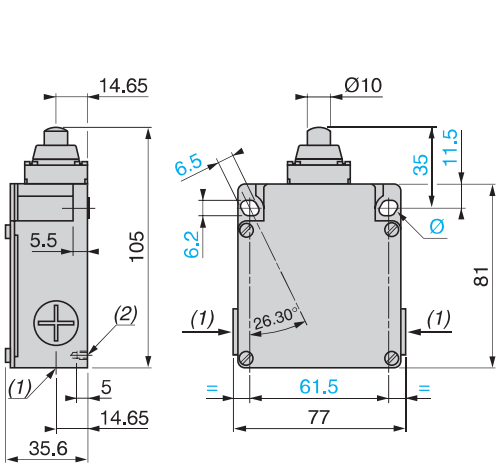
OsiSense XC Standard, Classic format

Metal, 2 x 2-pole contacts, type XCKML

Complete switches with 3 cable entries

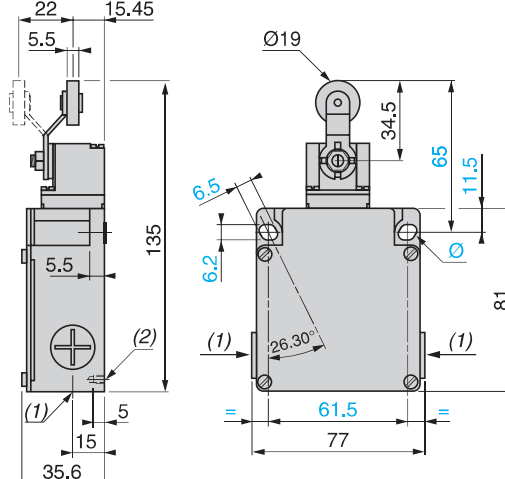
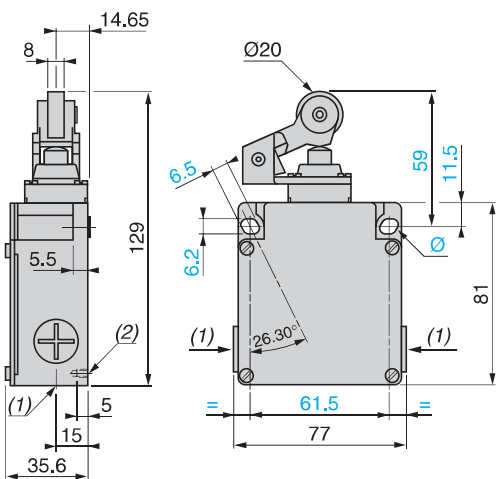
XCKML110H29, XCKML510H29, XCKML110, XCKML510

XCKML102H29, XCKML502H29, XCKML102, XCKML502



XCKML121H29, XCKML521H29, XCKML121, XCKML521

XCKML115H29, XCKML515H29, XCKML115, XCKML515



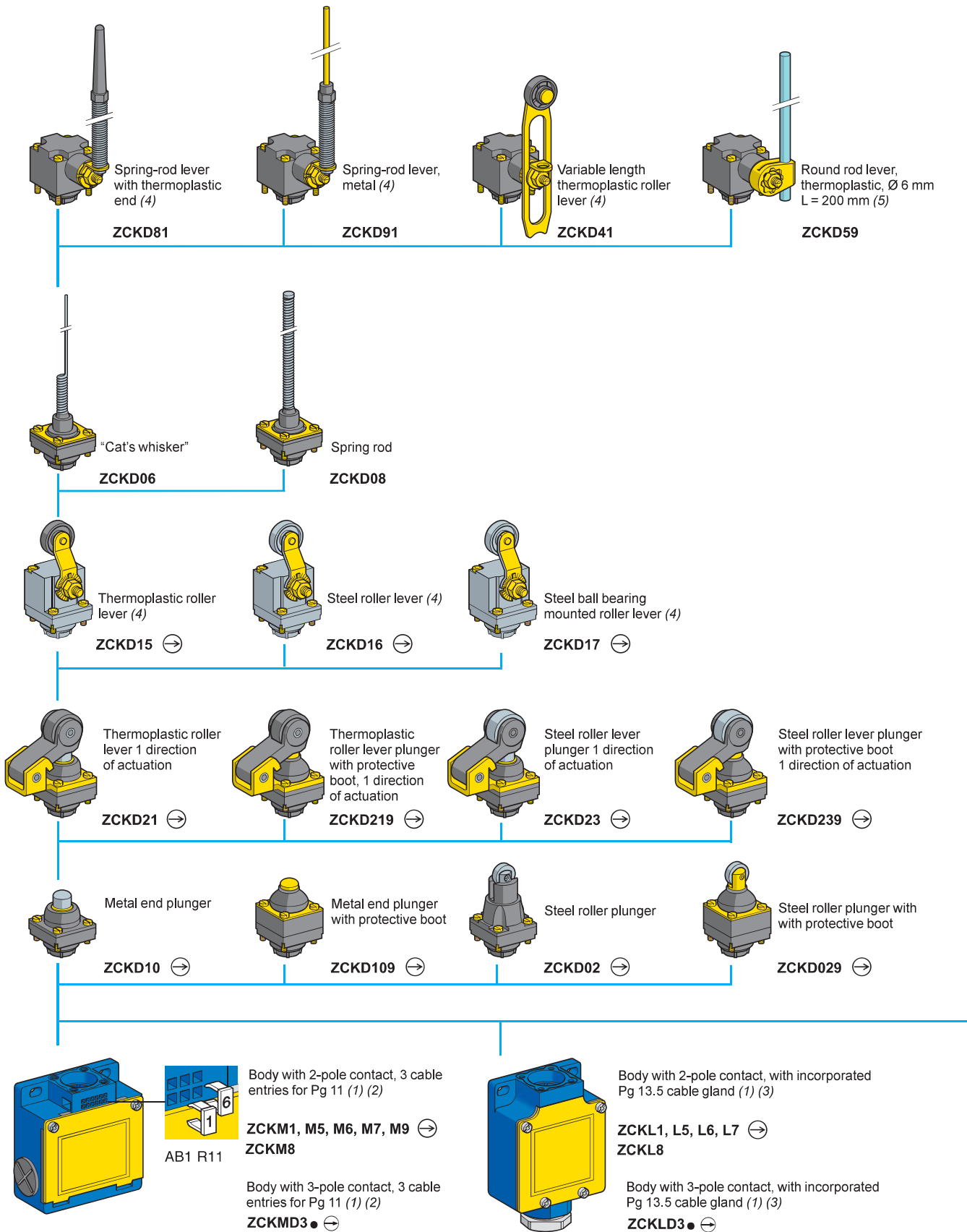
(1) XCKML●●●H29: 3 entries tapped M20 x 1.5. XCKML●●●: 3 tapped entries for n° 13 cable gland.  
 (2) 2 centring holes Ø 3.9 ± 0.2, for cover fixing holes alignment.  
 Ø 2 elongated holes 6.2 x 6.5, inclined at 26° 30' to the vertical axis, for M5 screws.



# Limit switches

OsiSense XC Standard, Classic format  
Metal, types XCKM and XCKL  
Variable composition

1



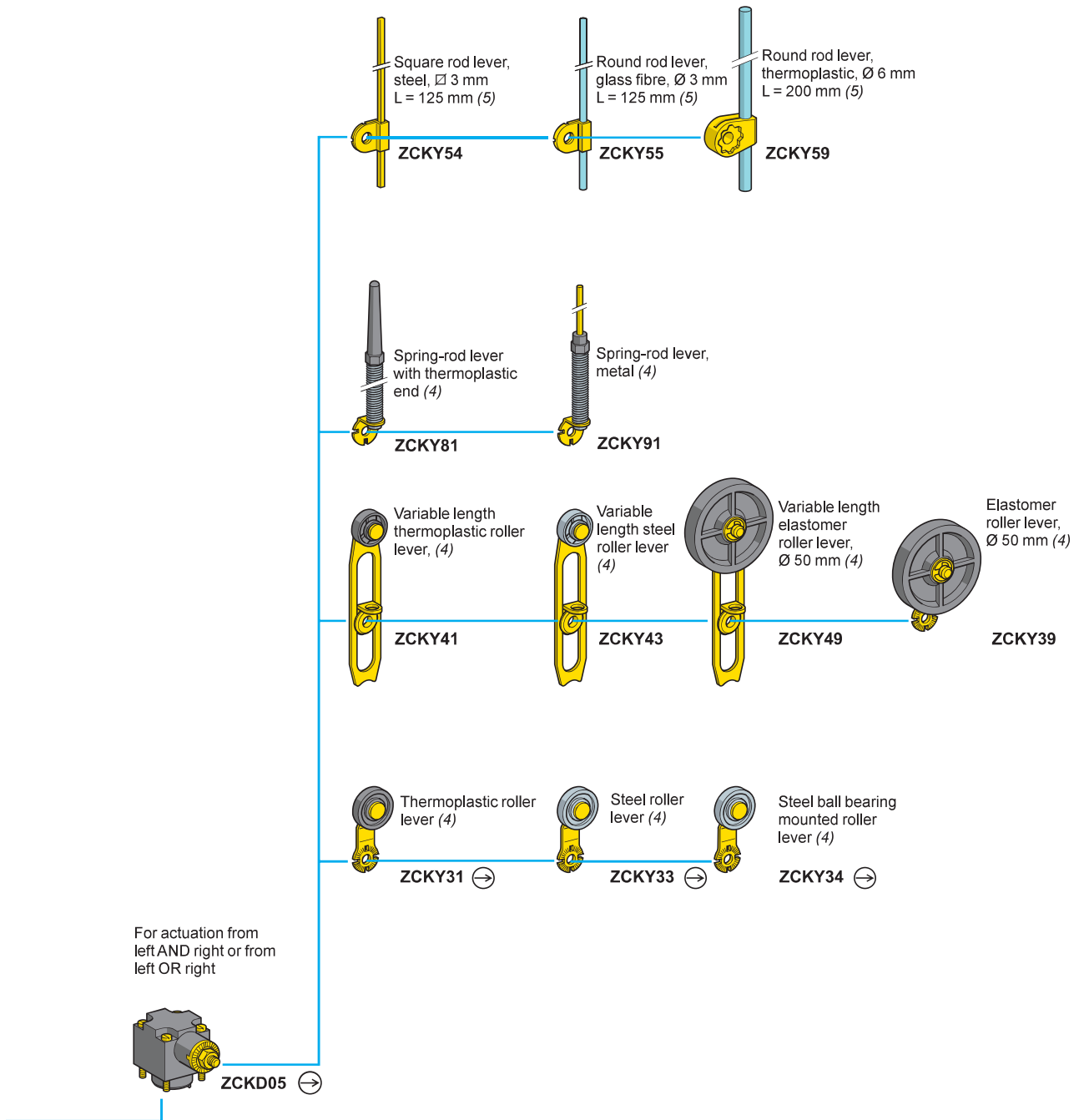
(1) For further information, see page 1/84.  
 (2) For 3 cable entries tapped ISO M20 x 1.5, add **H29** to the reference. Example: ZCKM1 becomes **ZCKM1H29**.  
 For one cable entry with 1/2" NPT adaptor, add **H7** to the reference. Example: ZCKM1 becomes **ZCKM1H7**.  
 (3) For one cable entry tapped 1/2" NPT, add **H7** to the reference. Example: ZCKL1 becomes **ZCKL1H7**.

# Limit switches

OsiSense XC Standard, Classic format

Metal, types XCKM and XCKL

Variable composition



⊖: head assuring positive opening operation.

(4) Adjustable throughout 360° in 5° steps, or in 90° steps by reversing the notched washer.

(5) Adjustable throughout 360° in 5° steps, or in 45° steps by reversing the lever mounting.

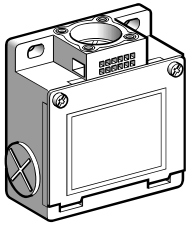
## Limit switches

OsiSense XC Standard, Classic format

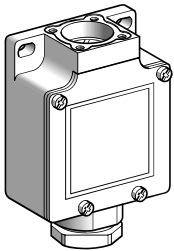
Metal, types XCKM and XCKL

Adaptable sub-assemblies

1



ZCKM●



ZCKL●

## Bodies with 2-pole contact

With contact block	Scheme	Positive operation (1)	Cable entry	Reference	Weight kg
<b>For limit switches type XCKM</b>					
NC + NO snap action (XE2SP2151)		⊙	Pg 11	ZCKM1	0.210
			ISO M20 x 1.5	ZCKM1H29	0.210
			1/2" NPT (2)	ZCKM1H7	0.210
NC + NO break before make, slow break (XE2NP2151)		⊙	Pg 11	ZCKM5	0.210
			ISO M20 x 1.5	ZCKM5H29	0.210
			1/2" NPT (2)	ZCKM5H7	0.210
NO + NC make before break, slow break (XE2NP2161)		⊙	Pg 11	ZCKM6	0.210
			ISO M20 x 1.5	ZCKM6H29	0.210
			1/2" NPT (2)	ZCKM6H7	0.210
NC + NC simultaneous, slow break (XE2NP2141)		⊙	Pg 11	ZCKM7	0.210
			ISO M20 x 1.5	ZCKM7H29	0.210
			1/2" NPT (2)	ZCKM7H7	0.210
NO + NO simultaneous, slow break (XE2NP2131)		-	Pg 11	ZCKM8	0.210
			ISO M20 x 1.5	ZCKM8H29	0.210
			1/2" NPT (2)	ZCKM8H7	0.210
NC + NC snap action (XE2SP2141)		⊙	Pg 11	ZCKM9	0.210
			ISO M20 x 1.5	ZCKM9H29	0.210
<b>For limit switches type XCKL</b>					
NC + NO snap action (XE2SP2151)		⊙	Pg 13.5	ZCKL1 (3)	0.210
			1/2" NPT	ZCKL1H7	0.210
NC + NO break before make, slow break (XE2NP2151)		⊙	Pg 13.5	ZCKL5 (3)	0.210
			1/2" NPT	ZCKL5H7	0.210
NO + NC make before break, slow break (XE2NP2161)		⊙	Pg 13.5	ZCKL6 (3)	0.210
			1/2" NPT	ZCKL6H7	0.210
NC + NC simultaneous, slow break (XE2NP2141)		⊙	Pg 13.5	ZCKL7 (3)	0.210
			1/2" NPT	ZCKL7H7	0.210
NO + NO simultaneous, slow break (XE2NP2131)		-	Pg 13.5	ZCKL8 (3)	0.210
			1/2" NPT	ZCKL8H7	0.210

(1) ⊙: NC contact with positive opening operation.

(2) 3 tapped entries, one with metal adaptor for 1/2" NPT (USASB2-1) conduit.

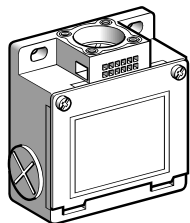
(3) Pg 13.5 cable gland included with switch.

## Limit switches

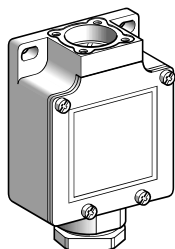
OsiSense XC Standard, Classic format

Metal, types XCKM and XCKL

Adaptable sub-assemblies



ZCKMD3●



ZCKLD3●

Bodies with 3-pole contact					
With contact block	Scheme	Positive operation (1)	Cable entry	Reference	Weight kg
<b>For limit switches type XCKM</b>					
NC + NO + NO snap action (XE3SP2151)		⊖	Pg 11	ZCKMD31	0.210
			ISO M20 x 1.5	ZCKMD31H29	0.210
			1/2" NPT (2)	ZCKMD31H7	0.210
NC + NC + NO snap action (XE3SP2141)		⊖	Pg 11	ZCKMD39	0.210
			ISO M20 x 1.5	ZCKMD39H29	0.210
			1/2" NPT (2)	ZCKMD39H7	0.210
NC + NC + NO break before make, slow break (XE3NP2141)		⊖	Pg 11	ZCKMD37	0.210
			ISO M20 x 1.5	ZCKMD37H29	0.210
			1/2" NPT (2)	ZCKMD37H7	0.210
NC + NO + NO break before make, slow break (XE3NP2151)		⊖	Pg 11	ZCKMD35	0.210
			ISO M20 x 1.5	ZCKMD35H29	0.210
			1/2" NPT (2)	ZCKMD35H7	0.210
<b>For limit switches type XCKL</b>					
NC + NO + NO snap action (XE3SP2151)		⊖	Pg 13.5	ZCKLD31 (3)	0.210
			1/2" NPT	ZCKLD31H7	0.210
NC + NC + NO snap action (XE3SP2141)		⊖	Pg 13.5	ZCKLD39 (3)	0.210
			1/2" NPT	ZCKLD39H7	0.210
NC + NC + NO break before make, slow break (XE3NP2141)		⊖	Pg 13.5	ZCKLD37 (3)	0.210
			1/2" NPT	ZCKLD37H7	0.210
NC + NO + NO break before make, slow break (XE3NP2151)		⊖	Pg 13.5	ZCKLD35 (3)	0.210
			1/2" NPT	ZCKLD35H7	0.210

(1) ⊖ : NC contact with positive opening operation.

(2) 3 tapped entries, one with metal adaptor for 1/2" NPT (USASB2-1) conduit.

(3) Pg 13.5 cable gland included with switch.

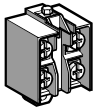
# Limit switches

OsiSense XC Standard, Classic format  
Metal, types XCKM and XCKL  
Adaptable sub-assemblies

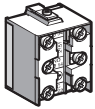
1



XE2SP21●1



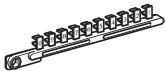
XE2NP21●1



XE3●P21●●



XCKZ09



AB1R11

Contact blocks					
Type of contact	Scheme	For bodies	Positive operation (1)	Reference	Weight kg
<b>2-pole contact</b>					
NC + NO snap action		ZCKM1 ZCKL1	⊕	XE2SP2151	0.020
NC + NO break before make, slow break		ZCKM5 ZCKL5	⊕	XE2NP2151	0.020
NO + NC make before break, slow break		ZCKM6 ZCKL6	⊕	XE2NP2161	0.020
NC + NC simultaneous, slow break		ZCKM7 ZCKL7	⊕	XE2NP2141	0.020
NO + NO simultaneous, slow break		ZCKM8 ZCKL8	-	XE2NP2131	0.020
NC + NC snap action		ZCKM9	⊕	XE2SP2141	0.020
<b>3-pole contact</b>					
NC + NO + NO snap action		ZCKMD31 ZCKLD31	⊕	XE3SP2151	0.035
NC + NC + NO snap action		ZCKMD39 ZCKLD39	⊕	XE3SP2141	0.035
NC + NC + NO break before make, slow break		ZCKMD37 ZCKLD37	⊕	XE3NP2141	0.035
NC + NO + NO break before make, slow break		ZCKMD35 ZCKLD35	⊕	XE3NP2151	0.035

(1) ⊕: NC contact with positive opening operation or sub-assembly assuring positive opening operation.

Accessories for limit switches type XCKM			
Description	Sold in lots of	Unit reference	Weight kg
Tap-off terminal for cabling continuity	1	XCKZ09	0.010
Clip-in markers (strips of 10 numbers: 0 to 9) Other markers, please consult our Customer Care Centre.	25	AB1R11	0.002

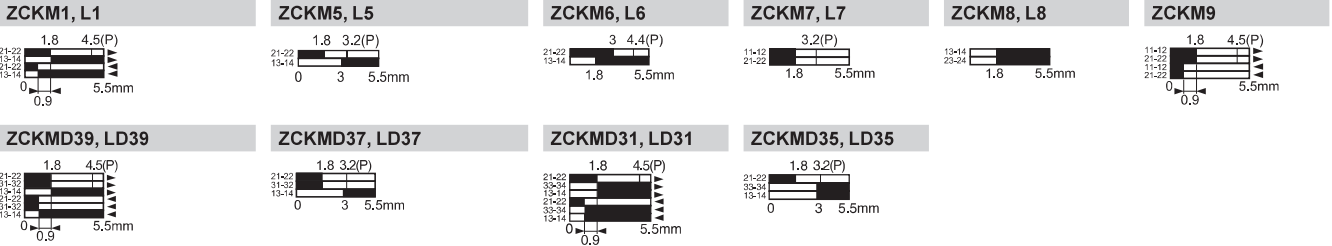
**Other versions** Gold flashed contacts.  
Please consult our Customer Care Centre.

# Limit switches

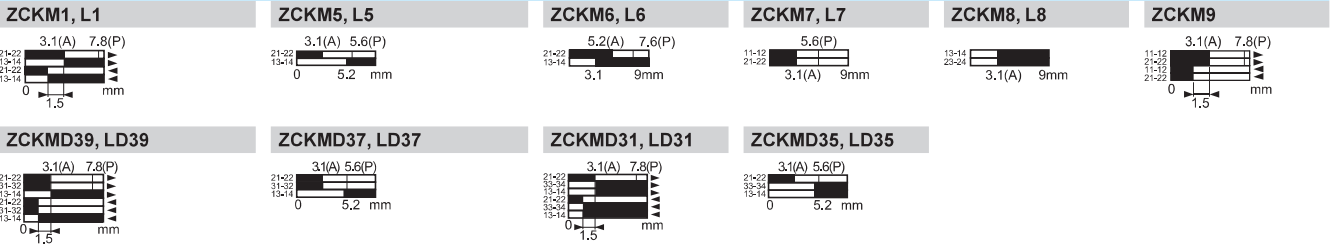
OsiSense XC Standard, Classic format  
Metal, types XCKM and XCKL  
Adaptable sub-assemblies



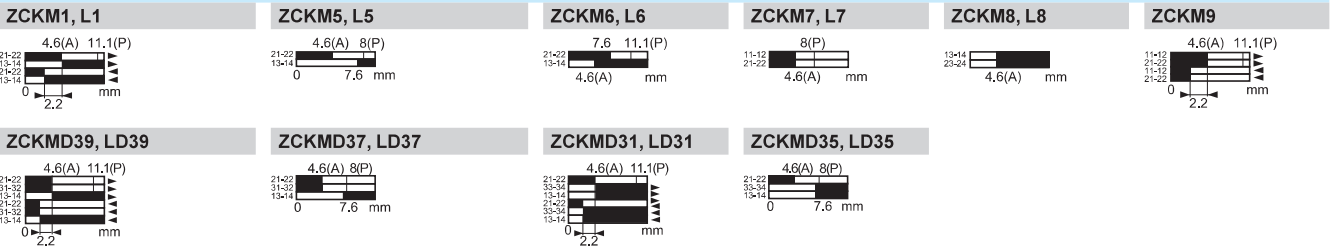
### Heads ZCKD10, D109 with body



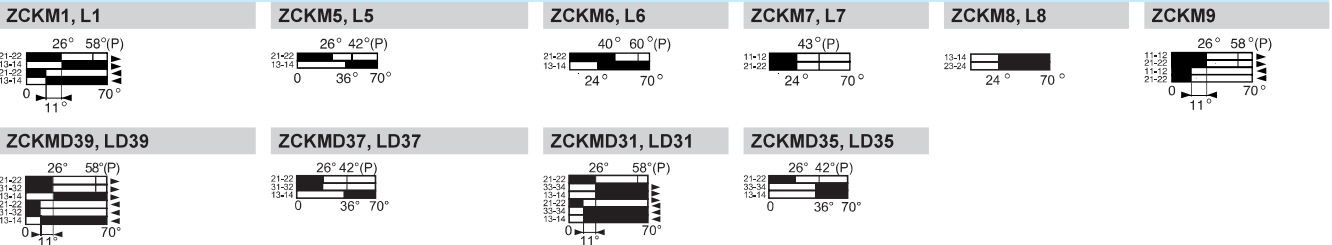
### Heads ZCKD02, D029 with body



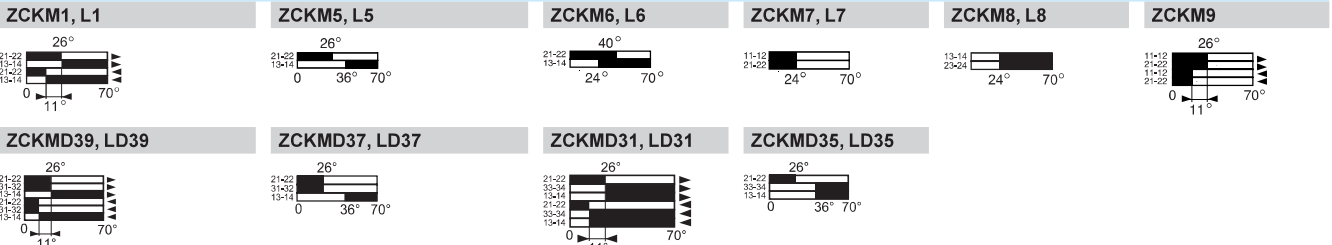
### Heads ZCKD21, D23, D219, D239 with body



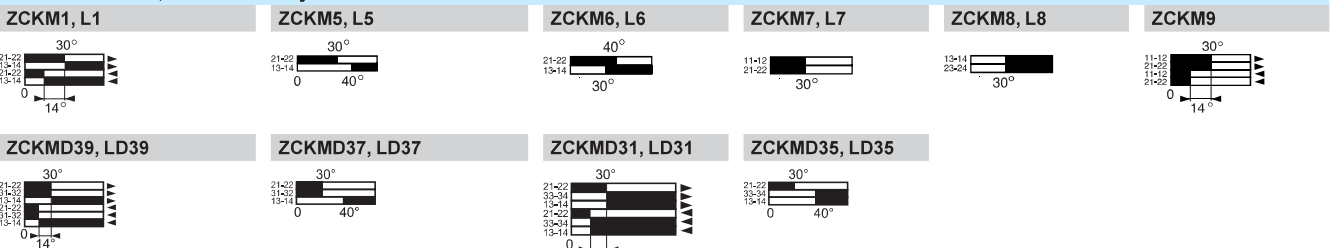
### Heads ZCKD15, D16, D17 with body



### Heads ZCKD41, D59, D81, D91 with body



### Heads ZCKD06, D08 with body



Contact operation closed open (A) = cam displacement (P) = positive opening point

# Limit switches

OsiSense XC Standard, Classic format

Metal, types XCKM and XCKL

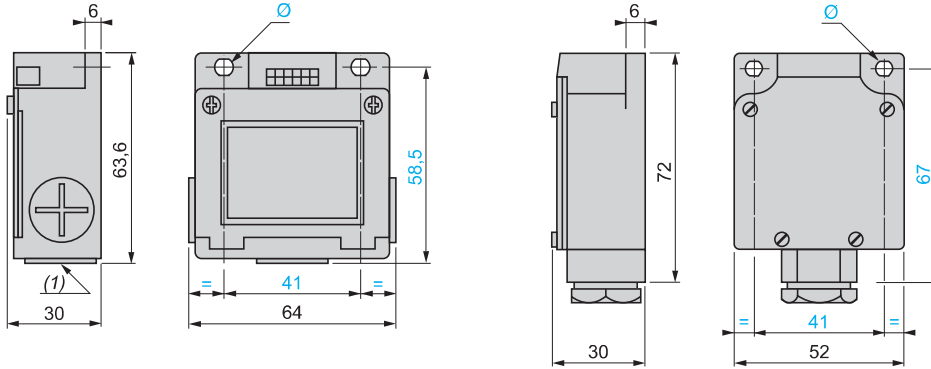
Adaptable sub-assemblies

1

### Bodies with contacts

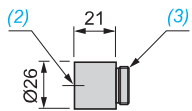
ZCKM1, M5, M6, M7, M8, M9, MD3●, MD3H●29, MD3●H7  
 ZCKM1H29, M5H29, M6H29, M7H29, M8H29, M9H29  
 ZCKM1H7, M5H7, M6H7, M7H7, M8H7

ZCKL1, L5, L6, L7, L8, LD3● (with incorporated Pg 13.5 cable gland)  
 ZCKL1H7, L5H7, L6H7, L7H7, L8H7, LD3●H7 (with 1/2" NPT cable entry)



### Adaptor for 1/2" NPT conduit

DE9RA1012



(1) 3 tapped entries for ISO M20 x 1.5 or Pg 11 cable gland.

Ø: 2 elongated holes Ø 5.2 x 6.2

(2) Tapped entry for 1/2" NPT conduit.

(3) Pg 11 threaded sleeve.

# Limit switches

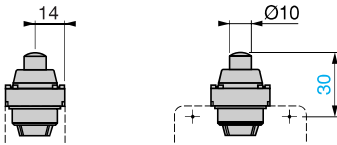
OsiSense XC Standard, Classic format

Metal, types XCKM and XCKL

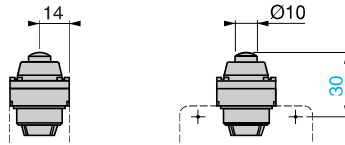
Adaptable sub-assemblies

## Plunger heads

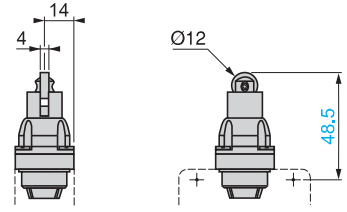
ZCKD10



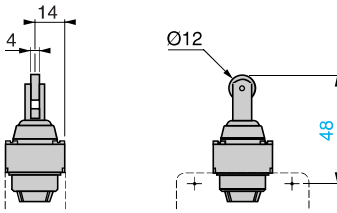
ZCKD109



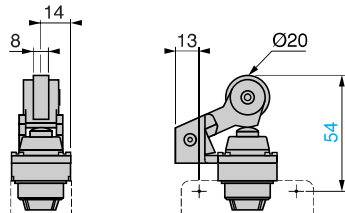
ZCKD02



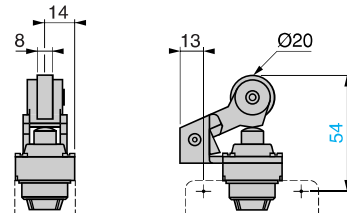
ZCKD029



ZCKD21, D23

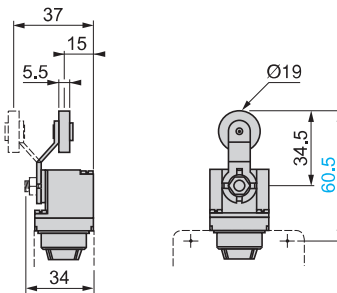


ZCKD219, D239

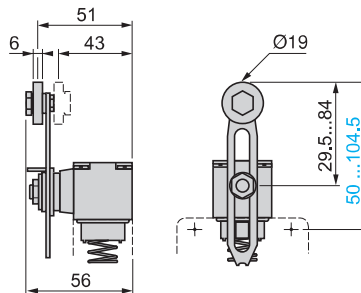


## Rotary heads

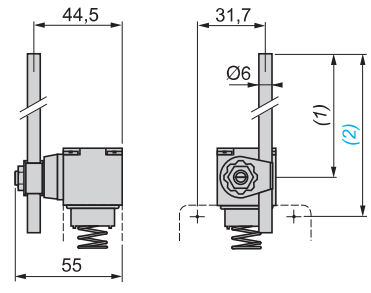
ZCKD15, D16, D17



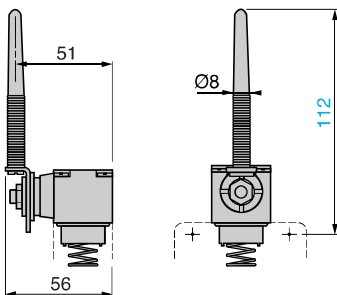
ZCKD41



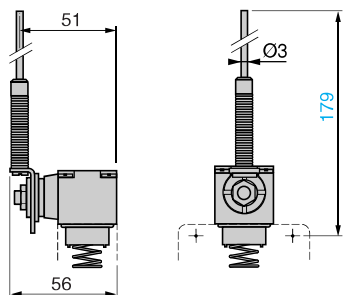
ZCKD59



ZCKD81

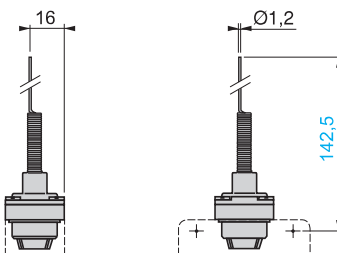


ZCKD91

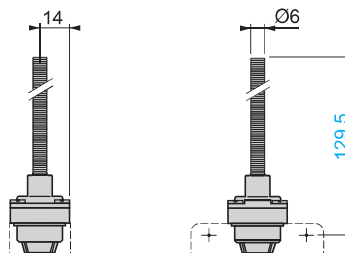


## Multi-directional heads

ZCKD06



ZCKD08



(1) 190 max.  
(2) 215.5 max.

Note: operating lever spindle threaded M6.