

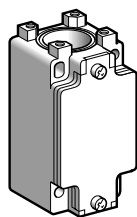
Limit switches

Osiswitch® Classic

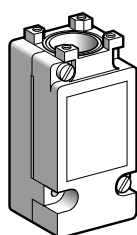
Metal, conforming to CENELEC EN 50041, type XCK J

Fixed or plug-in body

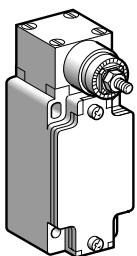
Adaptable sub-assemblies for low temperature applications (- 40 °C)



ZCK J1



ZCK J11



ZCK J4046

Body with contacts For plunger or rotary head

Type	Contact block	Scheme	Positive operation (1)	Cable entry	Reference	Weight kg
Fixed body						
1 step	2-pole 1 N/C + 1 N/O snap action (XE2S P2151)		⊕	Pg 13	ZCK J1	0.310
				ISO M20 x 1.5	ZCK J1H29	0.310
				1/2" NPT	ZCK J1H7	0.310
	Double-pole 2 C/O simultaneous snap action (XES P2021)		-	Pg 13	ZCK J2	0.310
				ISO M20 x 1.5	ZCK J2H29	0.310
				1/2" NPT	ZCK J2H7	0.310
	2-pole 1 N/C + 1 N/O break before make slow break (XE2N P2151)		⊕	Pg 13	ZCK J5	0.310
ISO M20 x 1.5				ZCK J5H29	0.310	
1/2" NPT				ZCK J5H7	0.310	
2-pole 1 N/O + 1 N/C make before break slow break (XE2N P2161)		⊕	Pg 13	ZCK J6	0.310	
			ISO M20 x 1.5	ZCK J6H29	0.310	
			1/2" NPT	ZCK J6H7	0.310	
2-pole 1 N/C + 1 N/C simultaneous slow break (XE2N P2141)		⊕	Pg 13	ZCK J7	0.310	
			ISO M20 x 1.5	ZCK J7H29	0.310	
			1/2" NPT	ZCK J7H7	0.310	
2-pole 1 N/O + 1 N/O simultaneous slow break (XE2N P2131)		-	Pg 13	ZCK J8	0.310	
			ISO M20 x 1.5	ZCK J8H29	0.310	
			1/2" NPT	ZCK J8H7	0.310	
2-pole 1 N/C + 1 N/C snap action (XE2S P2141)		⊕	Pg 13	ZCK J9	0.310	
			ISO M20 x 1.5	ZCK J9H29	0.310	
			1/2" NPT	ZCK J9H7	0.310	
2 step	Double-pole 2 C/O staggered snap action (XES P2031)		-	Pg 13	ZCK J4	0.310
				ISO M20 x 1.5	ZCK J4H29	0.310
				1/2" NPT	ZCK J4H7	0.310
Plug-in body						
1 step	Single-pole 1 C/O snap action		-	Pg 13	ZCK J11	0.300
				ISO M20 x 1.5	ZCK J11H29	0.300
				1/2" NPT	ZCK J11H7	0.300
Double-pole 2 C/O simultaneous snap action		-	Pg 13	ZCK J21	0.300	
			ISO M20 x 1.5	ZCK J21H29	0.300	
			1/2" NPT	ZCK J21H7	0.300	
2 step	Double-pole 2 C/O staggered snap action		-	Pg 13	ZCK J41	0.300
				ISO M20 x 1.5	ZCK J41H29	0.300
				1/2" NPT	ZCK J41H7	0.300

Body with contacts With spring return rotary head (without operating lever)

Type	Contact block	Scheme	Positive operation (1)	Cable entry	Reference	Weight kg
Fixed body						
2 step 1 from the left and 1 from the right	Double-pole 2 C/O staggered snap action		-	Pg 13	ZCK J4046	0.455
				ISO M20 x 1.5	ZCK J4046H29	0.455
				1/2" NPT	ZCK J4046H7	0.455
Plug-in body						
2 step 1 from the left and 1 from the right	Double-pole 2 C/O staggered snap action		-	Pg 13	ZCK J41046	0.465
				ISO M20 x 1.5	ZCK J41046H29	0.465
				1/2" NPT	ZCK J41046H7	0.465

(1) ⊕ : operating head able to guarantee positive opening operation.

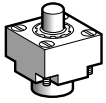
Limit switches

Osiswitch® Classic

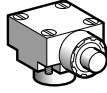
Metal, conforming to CENELEC EN 50041, type XCK J

Fixed or plug-in body

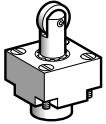
Adaptable sub-assemblies for low temperature applications (-40 °C)



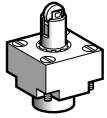
ZCK E616



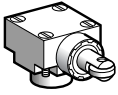
ZCK E636



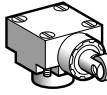
ZCK E626



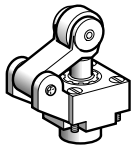
ZCK E676



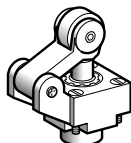
ZCK E646



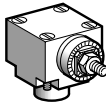
ZCK E656



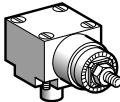
ZCK E216



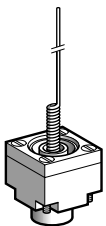
ZCK E236



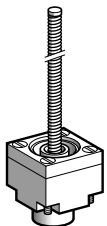
ZCK E056



ZCK E096



ZCK E066



ZCK E086

Plunger heads

Type of operator	Compatible bodies	Max. actuation speed	Positive operation (1)	Reference	Weight kg	
For actuation on end						
End plunger metal	ZCK J●, ZCK J●●	0.5 m/s	⊕	ZCK E616	0.140	
Side plunger metal	ZCK J●, ZCK J●●, except ZCK J4 and J41	0.5 m/s	⊕	ZCK E636	0.200	
For actuation by 30° cam						
End roller plunger steel	ZCK J●, ZCK J●●	1 m/s	⊕	ZCK E626	0.155	
End reinforced roller plunger steel	ZCK J●, ZCK J●●	1 m/s	⊕	ZCK E676	0.155	
Side roller plunger steel	Horizontal	ZCK J●, ZCK J●●, except ZCK J4 and J41	0.6 m/s	⊕	ZCK E646	0.205
	Vertical	ZCK J●, ZCK J●●, except ZCK J4 and J41	0.6 m/s	⊕	ZCK E656	0.205
Roller lever plunger (1 direction of actuation)	Thermoplastic	ZCK J●, ZCK J●●	1.5 m/s	⊕	ZCK E216	0.185
	Steel	ZCK J●, ZCK J●●	1.5 m/s	⊕	ZCK E236	0.195

Rotary heads (without operating lever)

Type	Compatible bodies	Max. actuation speed	Positive operation (1)	Reference	Weight kg
Spring return, actuation from left AND right or from left OR right (see page 31900/8)	ZCK J●, ZCK J●●	1.5 m/s by 30° cam	⊕	ZCK E056	0.165
Stay put, actuation from left AND right (see page 31900/8)	ZCK J1, J11 ZCK J2, J21	1.5 m/s	–	ZCK E096	0.190

Multi-directional heads

Type of operator	Compatible bodies	Max. actuation speed	Positive operation (1)	Reference	Weight kg
For actuation by any moving part					
“Cat’s whisker”	ZCK J●, ZCK J●●, except ZCK J4 and ZCK J41	1 m/s in any direction	–	ZCK E066	0.115
Spring rod lever	ZCK J●, ZCK J●●, except ZCK J4 and ZCK J41	0.5 m/s in any direction	–	ZCK E086	0.125

(1) ⊕ : operating head able to guarantee positive opening operation.

Limit switches

Osiswitch® Classic

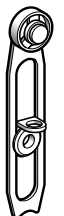
Metal, conforming to CENELEC EN 50041, type XCK J

Fixed or plug-in body

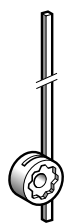
Adaptable sub-assemblies for low temperature applications (-40 °C)



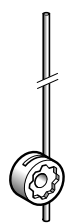
ZCK Y1●



ZCK Y4●



ZCK Y51



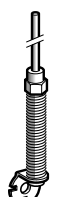
ZCK Y5●



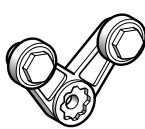
ZCK Y59



ZCK Y81



ZCK Y91



ZCK Y71



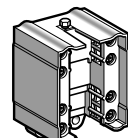
ZCK Y61



XE2S P21●1



XE2N P21●1



XES P20●1

Operating levers for rotary heads

Description		Positive operation (1)	Reference	Weight kg
For actuation by 30° cam				
Roller lever (2)	Thermoplastic	⊕	ZCK Y11	0.025
	Steel	⊕	ZCK Y13	0.035
	Steel, ball bearing mounted	⊕	ZCK Y14	0.030
Variable length roller lever (3)	Thermoplastic	–	ZCK Y41	0.030
	Steel	–	ZCK Y43	0.040

For actuation by any moving part

Square rod (2)	∅ 3 mm steel, L = 125 mm	–	ZCK Y51	0.025
Round rod (2)	∅ 3 mm steel, L = 125 mm	–	ZCK Y53	0.025
	∅ 3 mm glass fibre, L = 125 mm	–	ZCK Y52	0.020
	∅ 6 mm thermoplastic, L = 200 mm	–	ZCK Y59	0.030
Spring lever (3)		–	ZCK Y81	0.020
Spring metal rod lever (3)		–	ZCK Y91	0.025

For actuation by specific cam (for operation with ZCK-E096 head)

Forked arm and rollers (2) thermoplastic	1 track	–	ZCK Y71	0.035
	2 track	–	ZCK Y61	0.035

2- or double-pole contact blocks

Type	Scheme	For body type	Positive operation (1)	Reference	Weight kg
1 N/C + 1 N/O snap action		ZCK J1	⊕	XE2S P2151	0.020
1 N/C + 1 N/O break before make slow break		ZCK J5	⊕	XE2N P2151	0.020
2 C/O simultaneous snap action		ZCK J2	–	XES P2021	0.045
2 C/O staggered snap action		ZCK J4	–	XES P2031	0.045
1 N/O + 1 N/C make before break slow break		ZCK J6	⊕	XE2N P2161	0.020
1 N/C + 1 N/C simultaneous slow break		ZCK J7	⊕	XE2N P2141	0.020
1 N/O + 1 N/O simultaneous slow break		ZCK J8	–	XE2N P2131	0.020
1 N/C + 1 N/C snap action		ZCK J9	⊕	XE2S P2141	0.020

(1) ⊕ : operating lever able to guarantee positive opening operation or N/C contact with positive opening operation.

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

(3) Adjustable throughout 360° in 5° steps.

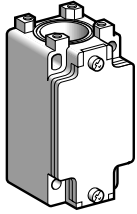
Limit switches

Osiswitch® Classic

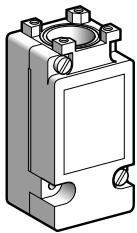
Metal, conforming to CENELEC EN 50041, type XCK J

Fixed or plug-in body

Adaptable sub-assemblies for high temperature applications (+ 120 °C)



ZCK J6



ZCK J15

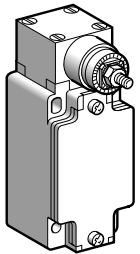
Body with contacts For plunger or rotary head

Type	Contact block	Scheme	Positive operation (1)	Cable entry	Reference	Weight kg
Fixed body						
1 step	2-pole 1 N/C + 1 N/O snap action (XE2S P2151)		⊕	Pg 13	ZCK J1	0.310
				ISO M20 x 1.5	ZCK J1H29	0.310
				1/2" NPT	ZCK J1H7	0.310
	Double-pole 2 C/O simultaneous snap action (XES P20215)		-	Pg 13	ZCK J2	0.310
				ISO M20 x 1.5	ZCK J2H29	0.310
				1/2" NPT	ZCK J2H7	0.310
	2-pole 1 N/C + 1 N/O break before make slow break (XE2N P2151)		⊕	Pg 13	ZCK J5	0.310
ISO M20 x 1.5				ZCK J5H29	0.310	
1/2" NPT				ZCK J5H7	0.310	
2-pole 1 N/O + 1 N/C make before break slow break (XE2N P2161)		⊕	Pg 13	ZCK J6	0.310	
			ISO M20 x 1.5	ZCK J6H29	0.310	
			1/2" NPT	ZCK J6H7	0.310	
2-pole 1 N/C + 1 N/C simultaneous slow break (XE2N P2141)		⊕	Pg 13	ZCK J7	0.310	
			ISO M20 x 1.5	ZCK J7H29	0.310	
			1/2" NPT	ZCK J7H7	0.310	
2-pole 1 N/O + 1 N/O simultaneous slow break (XE2N P2131)		-	Pg 13	ZCK J8	0.310	
			ISO M20 x 1.5	ZCK J8H29	0.310	
			1/2" NPT	ZCK J8H7	0.310	
2-pole 1 N/C + 1 N/C snap action (XE2S P2141)		⊕	Pg 13	ZCK J9	0.310	
			ISO M20 x 1.5	ZCK J9H29	0.310	
			1/2" NPT	ZCK J9H7	0.310	
2 step	Double-pole 2 C/O break before make snap action (XES P20315)		-	Pg 13	ZCK J4	0.310
				ISO M20 x 1.5	ZCK J4H29	0.310
				1/2" NPT	ZCK J4H7	0.310
Plug-in body						
1 step	Single-pole 1 C/O snap action		-	Pg 13	ZCK J115	0.300
				ISO M20 x 1.5	ZCK J115H29	0.300
				1/2" NPT	ZCK J115H7	0.300
Double-pole 2 C/O simultaneous snap action		-	Pg 13	ZCK J215	0.300	
			ISO M20 x 1.5	ZCK J215H29	0.300	
			1/2" NPT	ZCK J215H7	0.300	
2 step	Double-pole 2 C/O break before make snap action		-	Pg 13	ZCK J415	0.300
				ISO M20 x 1.5	ZCK J415H29	0.300
				1/2" NPT	ZCK J415H7	0.300

Body with contacts With spring return rotary head (without operating lever)

Type	Contact block	Scheme	Positive operation (1)	Cable entry	Reference	Weight kg
Fixed body						
2 step 1 from the left AND 1 from the right	Double-pole 2 C/O break before make snap action		-	Pg 13	ZCK J4045	0.455
				ISO M20 x 1.5	ZCK J4045H29	0.455
				1/2" NPT	ZCK J4045H7	0.455
Plug-in body						
2 step 1 from the left AND 1 from the right	Double-pole 2 C/O break before make snap action		-	Pg 13	ZCK J41045	0.465
				ISO M20 x 1.5	ZCK J41045H29	0.465
				1/2" NPT	ZCK J41045H7	0.465

(1) ⊕ : operating head able to guarantee positive opening operation.



ZCK J4045

Limit switches

Osiswitch® Classic

Metal, conforming to CENELEC EN 50041, type XCK J

Fixed or plug-in body

Adaptable sub-assemblies for high temperature applications (+ 120 °C)

Plunger heads

Type of operator	Compatible bodies	Max. actuation speed	Positive operation (1)	Reference	Weight kg	
For actuation on end						
End plunger	Metal	ZCK J1, J2, J4, ZCK J115, J215, J415, ZCK J5, J6, J7, J8, J9	0.5 m/s	⊖	ZCK E615	0.140
Side plunger	Metal	ZCK J1, J2, ZCK J115, J215, ZCK J5, J6, J7, J8, J9	0.5 m/s	⊖	ZCK E635	0.200
For actuation by 30° cam						
End ball bearing plunger	Steel	ZCK J1, J2, J4, ZCK J115, J215, J415, ZCK J5, J6, J7, J8, J9	0.1 m/s	⊖	ZCK E665	0.150
End roller plunger	Steel	ZCK J1, J2, J4, ZCK J115, J215, J415, ZCK J5, J6, J7, J8, J9	1 m/s	⊖	ZCK E625	0.155
End reinforced roller plunger	Steel	ZCK J1, J2, J4, ZCK J115, J215, J415, ZCK J5, J6, J7, J8, J9	1 m/s	⊖	ZCK E675	0.155
Side roller plunger	Steel Horizontal	ZCK J1, J2, ZCK J115, J215, ZCK J5, J6, J7, J8, J9	0.6 m/s	⊖	ZCK E645	0.205
	Steel Vertical	ZCK J1, J2, ZCK J115, J215, ZCK J5, J6, J7, J8, J9	0.6 m/s	⊖	ZCK E655	0.205
Roller lever plunger (1 direction of actuation)	Steel	ZCK J1, J2, J4, ZCK J115, J215, J415, ZCK J5, J6, J7, J8, J9	1.5 m/s	⊖	ZCK E235	0.195
	Thermoplastic	ZCK J1, J2, J4, ZCK J115, J215, J415, ZCK J5, J6, J7, J8, J9	1.5 m/s	⊖	ZCK E215	0.185

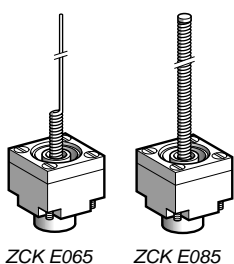
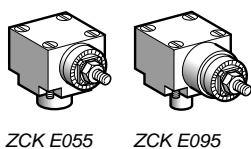
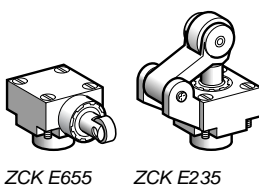
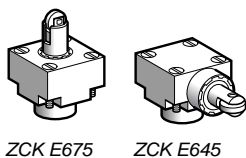
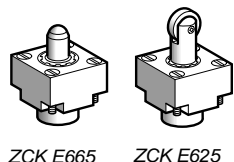
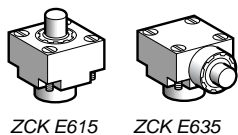
Rotary heads (without operating lever)

Type	Compatible bodies	Max. actuation speed	Positive operation (1)	Reference	Weight kg
Spring return, actuation from left AND right or from left OR right (see page 31900/8)	ZCK J1, J2, J4, ZCK J115, J215, ZCK J415, ZCK J5, J6, J7, J8, J9	1.5 m/s by 30° cam	⊖	ZCK E055	0.165
Stay put, actuation from left AND right (see page 31900/8)	ZCK J1, J2, ZCK J115, J215	0.5 m/s	–	ZCK E095	0.190

Multi-directional heads

Type of operator	Compatible bodies	Max. actuation speed	Positive operation (1)	Reference	Weight kg
For actuation by any moving part					
"Cat's whisker"	ZCK J1, J2, ZCK J115, J215, ZCK J5, J6, J7, J8, J9	1 m/s in any direction	–	ZCK E065	0.115
Spring rod lever	ZCK J1, J2, ZCK J115, J215, ZCK J5, J6, J7, J8, J9	0.5 m/s in any direction	–	ZCK E085	0.125

(1) ⊖ : operating head able to guarantee positive opening operation.



Limit switches

Osiswitch® Classic

Metal, conforming to CENELEC EN 50041, type XCK J

Fixed or plug-in body

Adaptable sub-assemblies for high temperature applications (+ 120 °C)



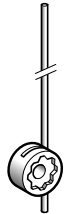
ZCK Y1●



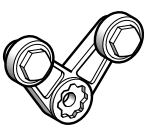
ZCK Y43



ZCK Y51



ZCK Y5●



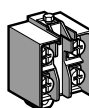
ZCK Y715



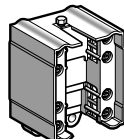
ZCK Y615



XE2S P21●1



XE2N P21●1



XES P20●15

Operating levers for rotary heads

Description		Positive operation (1)	Reference	Weight kg
For actuation by 30° cam				
Roller lever (2)	Thermoplastic	⊕	ZCK Y115	0.025
	Steel	⊕	ZCK Y13	0.035
	Steel, ball bearing mounted	⊕	ZCK Y14	0.030
Variable length roller lever (3)	Thermoplastic	–	ZCK Y415	0.030
	Steel	–	ZCK Y43	0.040
For actuation by any moving part				
Square rod (2)	∅ 3 mm Steel, L = 125 mm	–	ZCK Y51	0.025
Round rod (2)	∅ 3 mm steel, L = 125 mm	–	ZCK Y53	0.025
	∅ 3 mm glass fibre, L = 125 mm	–	ZCK Y52	0.020

For actuation by specific cam (for operation with ZCK-E095 head only)

Forked arm and rollers (2) thermoplastic	1 track	–	ZCK Y715	0.035
	2 track	–	ZCK Y615	0.035

2- or double-pole contact blocks

Type of operator	Scheme	For body type	Positive operation (1)	Reference	Weight kg
1 N/C + 1 N/O snap action		ZCK J1	⊕	XE2S P2151	0.020
1 N/C + 1 N/O break before make slow break		ZCK J5	⊕	XE2N P2151	0.020
2 C/O simultaneous snap action		ZCK J25	–	XES P20215	0.045
2 C/O staggered snap action		ZCK J45	–	XES P20315	0.045
1 N/O + 1 N/C make before break slow break		ZCK J6	⊕	XE2N P2161	0.020
1 N/C + 1 N/C simultaneous slow break		ZCK J7	⊕	XE2N P2141	0.020
1 N/O + 1 N/O simultaneous slow break		ZCK J8	–	XE2N P2131	0.020
1 N/C + 1 N/C snap action		ZCK J9	⊕	XE2S P2141	0.020

(1) ⊕ : operating lever able to guarantee positive opening operation or N/C contact with positive opening operation.

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

(3) Adjustable throughout 360° in 5° steps.