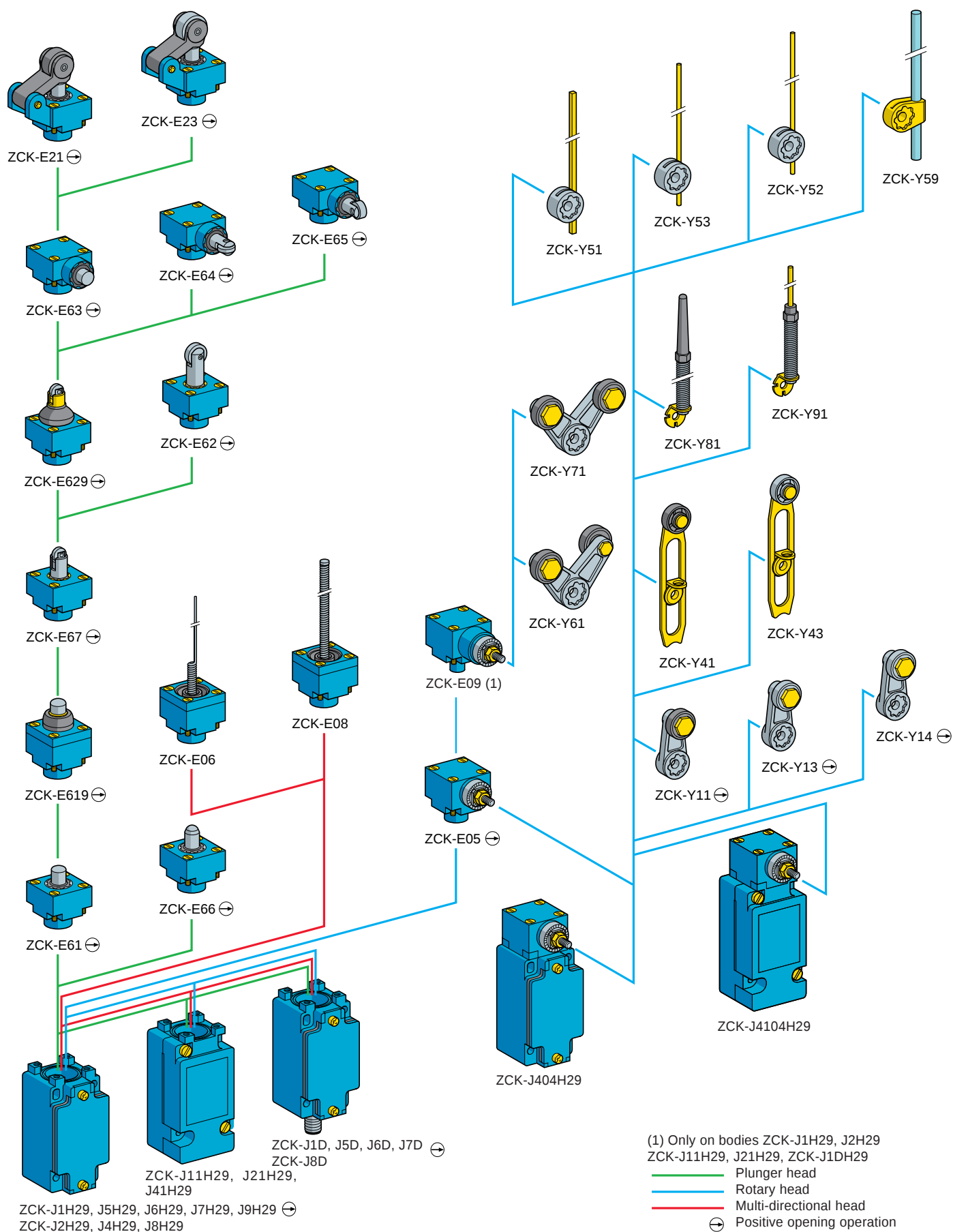




Limit switches

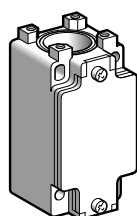
Metal, conforming to CENELEC EN 50041, type XCK-J

Fixed or plug-in body

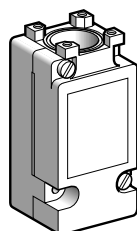
Adaptable sub-assemblies : standard body/contact assemblies

Setting-up :
pages 78 and 79
Dimensions :
pages 80 and 81

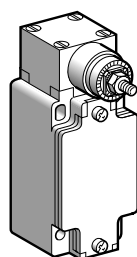
References



ZCK-J01



ZCK-J01



ZCK-J404

Fixed body/contact assemblies for plunger or rotary head

Type	Contact block	Scheme	Positive operation (1)	Reference	Weight kg
1 step	2-pole 1 N/C + 1 N/O snap action (XES-P2151)		⊕	<u>ZCK-J1H29</u>	0.310
	Double-pole 2 C/O simultaneous snap action (XES-P2021)		-	<u>ZCK-J2H29</u>	0.310
	2-pole 1 N/C + 1 N/O break before make slow break (XEN-P2151)		⊖	<u>ZCK-J5H29</u>	0.310
	2-pole 1 N/O + 1 N/C make before break slow break (XEN-P2161)		⊖	<u>ZCK-J6H29</u>	0.310
	2-pole 1 N/C + 1 N/C simultaneous slow break (XEN-P2141)		⊕	<u>ZCK-J7H29</u>	0.310
	2-pole 1 N/O + 1 N/O simultaneous slow break (XEN-P2131)		-	<u>ZCK-J8H29</u>	0.310
	2-pole 1 N/C + 1 N/C snap action (XES-P2141)		⊕	<u>ZCK-J9H29</u>	0.310
2 step	Double-pole 2 C/O staggered snap action (XES-P2031)		-	<u>ZCK-J4H29</u>	0.310

Plug-in body/contact assemblies for plunger or rotary head

Type	Contact block	Scheme	Positive operation (1)	Reference	Weight kg
1 step	Single-pole 1 C/O snap action		-	<u>ZCK-J11H29</u>	0.300
	Double-pole 2 C/O simultaneous snap action		-	<u>ZCK-J21H29</u>	0.300
2 step	Double-pole 2 C/O staggered snap action		-	<u>ZCK-J41H29</u>	0.300

Body/contact assemblies with spring return rotary head (without operating lever)

Type	Contact block	Scheme	Positive operation (1)	Reference	Weight kg
Fixed body					
2 step 1 from the left and 1 from the right	Double-pole 2 C/O staggered snap action		-	<u>ZCK-J404H29</u>	0.455
Plug-in body					
2 step 1 from the left and 1 from the right	Double-pole 2 C/O staggered snap action		-	<u>ZCK-J4104H29</u>	0.465

(1) ⊕ : N/C contact with positive opening operation.

Limit switches

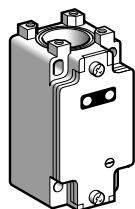
Metal, conforming to CENELEC EN 50041, type XCK-J

Fixed or plug-in body

Adaptable sub-assemblies : body/contact assemblies with indicator light module

Setting-up :
pages 78 and 79
Dimensions :
pages 80 and 81

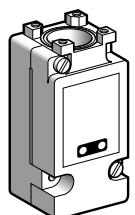
References



ZCK-J1000

Fixed body/contact assemblies for plunger or rotary head

Type	Contact block	Scheme	Positive operation (1)	Reference	Weight kg
With module comprising 1 LED, $\equiv$ 24 V					
1 step	2-pole 1 N/C + 1 N/O snap action (XES-P2151)		$\oplus$	ZCK-J120H29	0.320
	2-pole 1 N/C + 1 N/O break before make slow break (XEN-P2151)		$\oplus$	ZCK-J520H29	0.320
With module comprising 2 LEDs, $\equiv$ 24 V					
1 step	2-pole 1 N/C + 1 N/O snap action (XES-P2151)		$\oplus$	ZCK-J121H29	0.320
	2-pole 1 N/C + 1 N/O break before make slow break (XEN-P2151)		$\oplus$	ZCK-J521H29	0.320
With module comprising 2 neon indicator lights, $\sim$ 110/120 V					
1 step	2-pole 1 N/C + 1 N/O snap action (XES-P2151)		$\oplus$	ZCK-J133H29	0.320
	2-pole 1 N/C + 1 N/O break before make slow break (XEN-P2151)		$\oplus$	ZCK-J533H29	0.320
With module comprising 2 neon indicator lights, $\sim$ 220/240 V					
1 step	2-pole 1 N/C + 1 N/O snap action (XES-P2151)		$\oplus$	ZCK-J134H29	0.320
	2-pole 1 N/C + 1 N/O break before make slow break (XEN-P2151)		$\oplus$	ZCK-J534H29	0.320



ZCK-J1000

Plug-in body/contact assemblies for plunger or rotary head

With module comprising 2 LEDs, $\equiv$ 24 V					
1 step	Single-pole 1 C/O snap action		-	ZCK-J1121H29	0.340
With module comprising 2 neon indicator lights, $\sim$ 110/120 V					
1 step	Single-pole 1 C/O snap action		-	ZCK-J1133H29	0.340
With module comprising 2 neon indicator lights, $\sim$ 220/240 V					
1 step	Single-pole 1 C/O snap action		-	ZCK-J1134H29	0.340

(1) $\oplus$: N/C contact with positive opening operation

Indicator light module characteristics

Type	1 LED or 2 LEDs	2 neon indicator lights	
Rated insulation voltage	$\equiv$ 50 V conforming to IEC 947-1	$\sim$ 250 V to IEC 947-1	$\sim$ 250 V to IEC 947-1
Current consumption	7 mA per LED	2.5 mA per neon	5 mA per neon
Rated operational voltage	$\equiv$ 24 V	$\sim$ 110/120 V	$\sim$ 220/240 V
Voltage limits	$\equiv$ 20...30 V (including ripple)	$\sim$ 95...130 V	$\sim$ 190...260 V
Service life	100,000 hours	20,000 hours	20,000 hours
Reverse polarity protection	yes	-	-

Limit switches

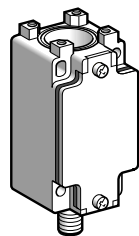
Metal, conforming to CENELEC EN 50041, type XCK-J

Fixed or plug-in body

Adaptable sub-assemblies : body/contact assemblies with M12 connector

Setting-up :
pages 78 and 79
Dimensions :
pages 80 and 81

References



ZCK-J5D

Fixed body/contact assemblies for plunger or rotary head

Type	Contact block	Scheme	Positive operation (1)	Reference	Weight kg
1 step	2-pole 1 N/C + 1 N/O snap action (XES-P2151)			ZCK-J1D	0.320
	2-pole 1 N/C + 1 N/O break before make slow break (XEN-P2151)			ZCK-J5D	0.320
	2-pole 1 N/O + 1 N/C make before break slow break (XEN-P2161)			ZCK-J6D	0.320
	2-pole 1 N/C + 1 N/C simultaneous slow break (XEN-P2141)			ZCK-J7D	0.320
	2-pole 1 N/O + 1 N/O simultaneous slow break (XEN-P2131)		-	ZCK-J8D	0.320

(1) : N/C contact with positive opening operation.

Limit switches

Metal, conforming to CENELEC EN 50041, type XCK-J

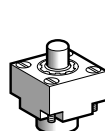
Fixed or plug-in body

Adaptable sub-assemblies : operating heads

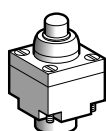
Setting-up :
pages 78 and 79
Dimensions :
pages 80 and 81

References

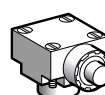
Plunger heads



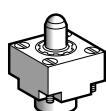
ZCK-E61



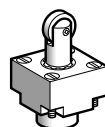
ZCK-E619



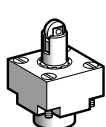
ZCK-E63



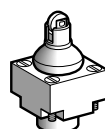
ZCK-E66



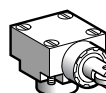
ZCK-E62



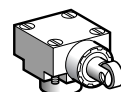
ZCK-E67



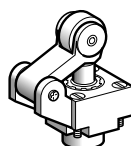
ZCK-E629



ZCK-E64



ZCK-E65



ZCK-E21, E23

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●●, ZCK-J●D	0.5 m/s	⊖	ZCK-E61	0.140
End plunger metal, with protective boot	ZCK-J●, ZCK-J●●, ZCK-J●D	0.5 m/s	⊖	ZCK-E619	0.140
Side plunger metal	ZCK-J●, ZCK-J●●, ZCK-J●D except ZCK-J4 and ZCK-J41	0.5 m/s	⊖	ZCK-E63	0.200
For actuation by 30° cam					
End ball bearing plunger steel	ZCK-J●, ZCK-J●●, ZCK-J●D	0.1 m/s	⊖	ZCK-E66	0.150
End roller plunger steel	ZCK-J●, ZCK-J●●, ZCK-J●D	1 m/s	⊖	ZCK-E62	0.155
End reinforced roller plunger steel	ZCK-J●, ZCK-J●●, ZCK-J●D	1 m/s	⊖	ZCK-E67	0.155
End roller plunger, steel with protective boot	ZCK-J●, ZCK-J●●, ZCK-J●D	1 m/s	⊖	ZCK-E629	0.140
Side roller plunger steel	horizontal	ZCK-J●, ZCK-J●●, ZCK-J●D except ZCK-J4 and ZCK-J41	⊖	ZCK-E64	0.205
	vertical	ZCK-J●, ZCK-J●●, ZCK-J●D except ZCK-J4 and ZCK-J41	⊖	ZCK-E65	0.205
Roller lever plunger (1 direction of actuation)	thermo-plastic	ZCK-J●, ZCK-J●●, ZCK-J●D	⊖	ZCK-E21	0.185
	steel	ZCK-J●, ZCK-J●●, ZCK-J●D	⊖	ZCK-E23	0.195

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

Limit switches

Metal, conforming to CENELEC EN 50041, type XCK-J

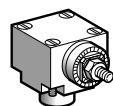
Fixed or plug-in body

Adaptable sub-assemblies : operating heads

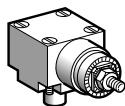
Setting-up:
pages 78 and 79
Dimensions :
pages 80 and 81

References

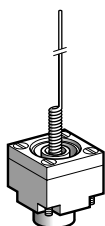
Rotary heads (without operating lever)



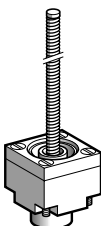
ZCK-E05



ZCK-E09



ZCK-E06



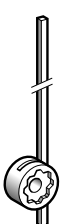
ZCK-E08



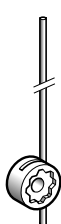
ZCK-Y1●



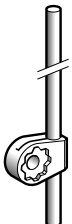
ZCK-Y4●



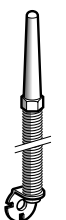
ZCK-Y51



ZCK-Y5●



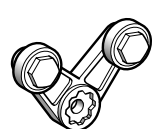
ZCK-Y59



ZCK-Y81



ZCK-Y91



ZCK-Y71



ZCK-Y61

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 10)	ZCK-J●, ZCK-J●●, ZCK-J●D	1.5 m/s by 30° cam	⊖	ZCK-E05	0.165
Stay put , actuation from left AND right (see page 10)	ZCK-J1, J2 ZCK-J11, J21 ZCK-J1D	0.5 m/s	—	ZCK-E09	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●● ZCK-J●D expt ZCK-J4 and J41	1 m/s in any direction	—	ZCK-E06	0.115
Spring rod lever	ZCK-J●, ZCK-J●● ZCK-J●D expt ZCK-J4 and J41	0.5 m/s in any direction	—	ZCK-E08	0.125

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-E09 head only, see page 10)				
Forked arm (2) and rollers	1 track	—	ZCK-Y71	0.035
	thermoplastic 2 track	—	ZCK-Y61	0.035

(1) ⊖ : operating head or lever able to guarantee 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.

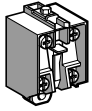
Limit switches

Metal, conforming to CENELEC EN 50041, type XCK-J
Fixed or plug-in body
Adaptable sub-assemblies

Setting-up :
pages 78 and 79
Dimensions :
pages 80 and 81

References

Contact blocks



XES-P21●1

Type	Scheme	For body type	Positive operation (1)	Reference	Weight kg
2-pole 1 N/C + 1 N/O snap action		ZCK-J1H29 ZCK-J1D	⊕	XES-P2151	0.020
2-pole 1 N/C + 1 N/O break before make slow break		ZCK-J5H29 ZCK-J5D	⊕	XEN-P2151	0.020
Double-pole 2 C/O simultaneous snap action		ZCK-J2H29	—	XES-P2021	0.045
Double-pole 2 C/O staggered snap action		ZCK-J4H29	—	XES-P2031	0.045
2-pole 1 N/O + 1 N/C make before break slow break		ZCK-J6H29 ZCK-J6D	⊕	XEN-P2161	0.020
2-pole 1 N/C + 1 N/C simultaneous slow break		ZCK-J7H29 ZCK-J7D	⊕	XEN-P2141	0.020
2-pole 1 N/O + 1 N/O simultaneous slow break		ZCK-J8H29 ZCK-J8D	—	XEN-P2131	0.020
2-pole 1 N/C + 1 N/C snap action		ZCK-J9H29	⊕	XES-P2141	0.020

(1) ⊕ : N/C contact with positive opening operation.

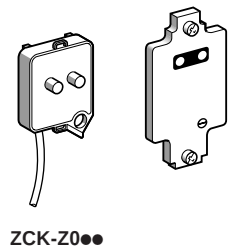
Limit switches

Metal, conforming to CENELEC EN 50041, type XCK-J
Fixed or plug-in body
Adaptable sub-assemblies

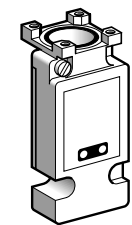
Setting-up :
pages 78 and 79
Dimensions :
pages 80 and 81

References

Covers + indicator light module



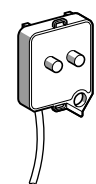
ZCK-Z000



ZCK-J0100

Application	Number and type of indicators	Voltage	Reference	Weight kg
Fixed body	1 LED	— 24 V	<u>ZCK-Z020</u>	0.060
	2 LEDs	— 24 V	<u>ZCK-Z021</u>	0.060
	2 neon indicators	~ 110/120 V	<u>ZCK-Z033</u>	0.060
		~ 220/240 V	<u>ZCK-Z034</u>	0.060
Plug-in body	2 LEDs	— 24 V	<u>ZCK-J0121</u>	0.200
	2 neon indicators	~ 110/120 V	<u>ZCK-J0133</u>	0.200
		~ 220/240 V	<u>ZCK-J0134</u>	0.200

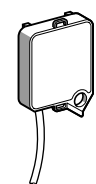
Indicator light modules



ZCK-J900

Application	Number and type of indicators	Voltage	Reference	Weight kg
Fixed body	1 LED	— 24 V	<u>ZCK-J902</u>	0.030
	2 LEDs	— 24 V	<u>ZCK-J906</u>	0.030
	2 neon indicators	~ 110/120 V	<u>ZCK-J903</u>	0.030
		~ 220/240 V	<u>ZCK-J904</u>	0.030

Module with resistor for machine diagnostics



ZCK-J82A

Application	Resistor value	Reference	Weight kg
Fixed body (ZCK-J1 only)	15 kΩ, 1/4 W	<u>ZCK-J82A</u>	0.030

Other versions

Covers + indicator light module for other supply voltages.
Please consult your local Customer support centre.

Limit switches

Metal, conforming to CENELEC EN 50041, type XCK-J
Fixed or plug-in body
Adaptable sub-assemblies

References :
pages 71 to 77
Dimensions :
pages 80 and 81

Setting-up

Function diagrams (positive operation only ensured with $\ominus$ type operators)

Heads ZCK-E61, E619, E66 with body

ZCK-J1●H29

ZCK-J2●H29

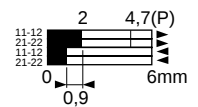
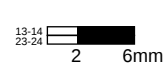
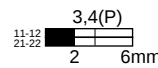
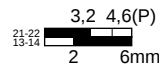
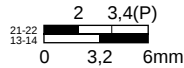
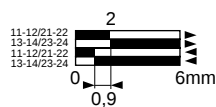
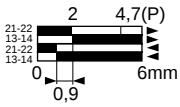
ZCK-J5●H29

ZCK-J6●H29

ZCK-J7●H29

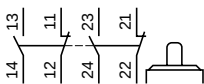
ZCK-J8●H29

ZCK-J9H29

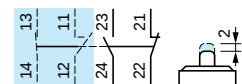


ZCK-J4●H29

Unactuated



1st step



2nd step



Head ZCK-E63 with body

ZCK-J1●H29

ZCK-J2●H29

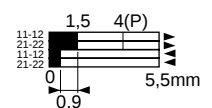
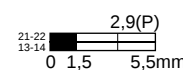
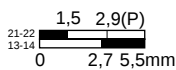
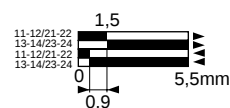
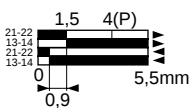
ZCK-J5●H29

ZCK-J6H29

ZCK-J7H29

ZCK-J8H29

ZCK-J9H29



Heads ZCK-E64, E65 with body

ZCK-J1●H29

ZCK-J2●H29

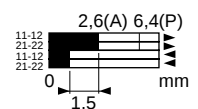
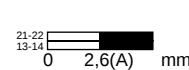
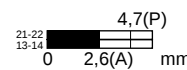
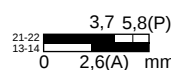
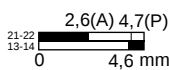
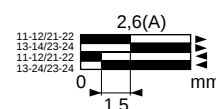
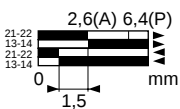
ZCK-J5●H29

ZCK-J6H29

ZCK-J7H29

ZCK-J8H29

ZCK-J9H29



Heads ZCK-E67, E629 with body

ZCK-J1●H29

ZCK-J2●H29

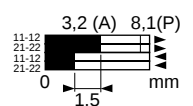
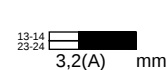
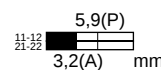
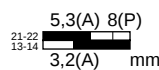
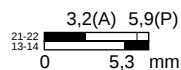
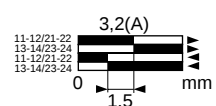
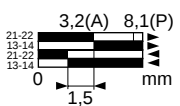
ZCK-J5●H29

ZCK-J6H29

ZCK-J7H29

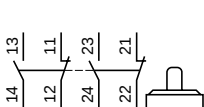
ZCK-J8H29

ZCK-J9H29

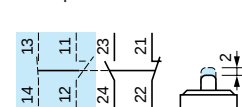


ZCK-J4●H29

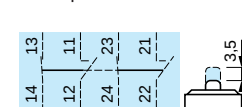
Unactuated



1st step



2nd step



Heads ZCK-E21, E23 with body

ZCK-J1●H29

ZCK-J2●H29

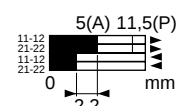
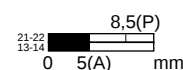
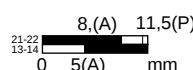
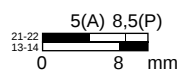
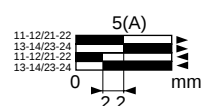
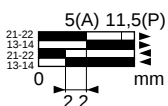
ZCK-J5●H29

ZCK-J6H29

ZCK-J7H29

ZCK-J8H29

ZCK-J9H29



Heads ZCK-E06, E08 with body

ZCK-J1●H29

ZCK-J2●H29

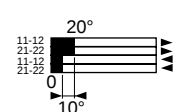
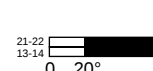
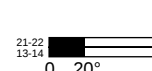
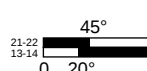
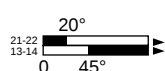
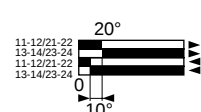
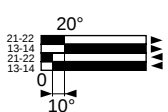
ZCK-J5●H29

ZCK-J6H29

ZCK-J7H29

ZCK-J8H29

ZCK-J9H29



Contact operation
■ contact closed
□ contact open

(A) = cam displacement
(P) = positive opening point

Limit switches

Metal, conforming to CENELEC EN 50041, type XCK-J
Fixed or plug-in body
Adaptable sub-assemblies

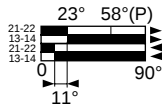
References :
pages 71 to 77
Dimensions :
pages 80 and 81

Setting-up, schemes

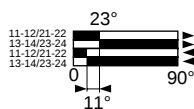
Function diagrams (positive operation assured only with $\ominus$ type operators)

Head ZCK-E05 with body

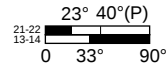
ZCK-J1●H29



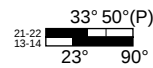
ZCK-J2●H29



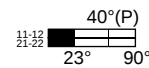
ZCK-J5●H29



ZCK-J6H29



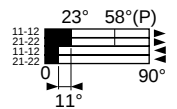
ZCK-J7H29



ZCK-J8H29

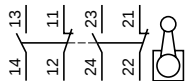


ZCK-J9H29

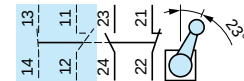


ZCK-J4●H29

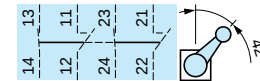
Unactuated



1st step, actuated from the left or the right

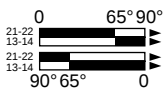


2nd step, actuated from the left or the right

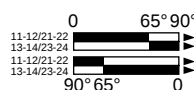


Head ZCK-E09 with body

ZCK-J1●H29

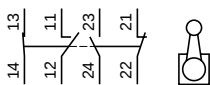


ZCK-J2●H29

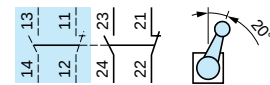


ZCK-J404H29, J4104H29 (body with head)

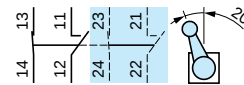
Unactuated



Actuated from the left



Actuated from the right



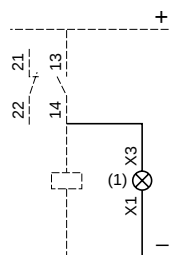
Contact operation
■ contact closed
□ contact open

(P) = positive opening point

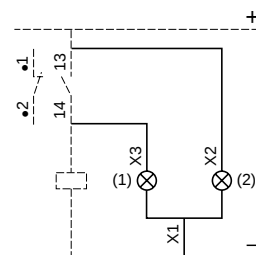
Wiring schemes

Indicator light modules

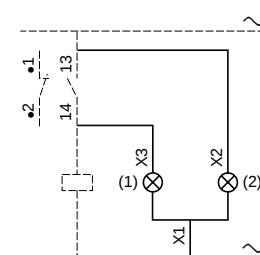
1 LED $\equiv$ 24 V



2 LEDs $\equiv$ 24 V

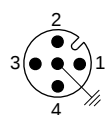
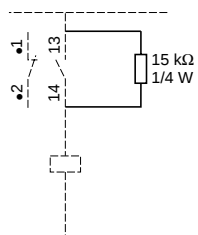


2 neon indicators $\sim$ 110/120 or 220/240 V



(1) Orange indicator
(2) Green indicator

Module with resistor ZCK-J●D



1 - 2 = N/C
3 - 4 = N/O
5 = $\perp$
4 A / 24 V max.



Limit switches

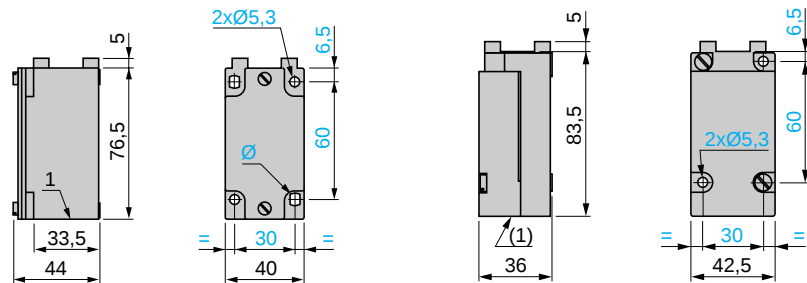
Metal, conforming to CENELEC EN 50041, type XCK-J
Fixed or plug-in body
Adaptable sub-assemblies

References :
pages 71 to 77
Setting-up :
pages 78 and 79

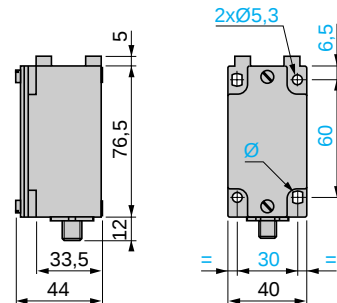
Dimensions

Bodies

ZCK-J1, J2, J5, J4, J●2●, J●3●, J6, J7, J8, J9H29 ZCK-J11, J21, J41, J11●●H29



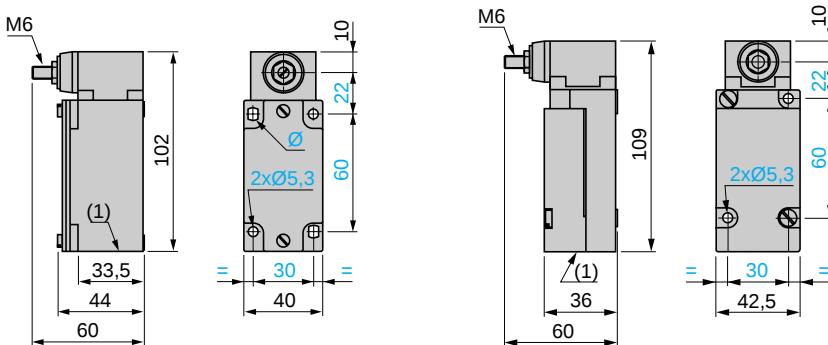
ZCK-J1D, J5D, J6D, J7D, J8D



(1) 1 cable entry, tapped for n° 13 cable gland
Ø : 2 elongated holes Ø 5.3 x 7.3

Body/contact assemblies with rotary head mounted

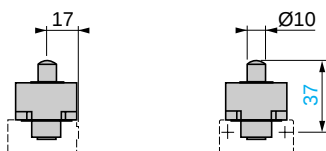
ZCK-J404H29 ZCK-J4104H29



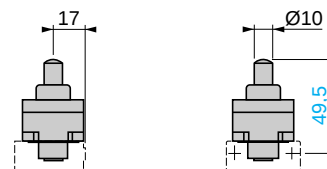
(1) 1 cable entry, tapped for ISO M20 x 1.5 cable gland
Ø : 2 elongated holes Ø 5.3 x 7.3

Plunger heads

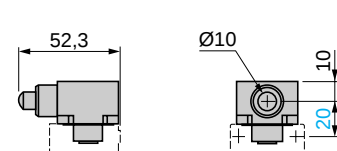
ZCK-E61



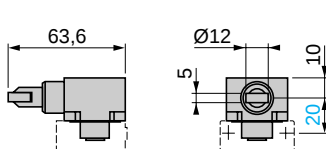
ZCK-E619



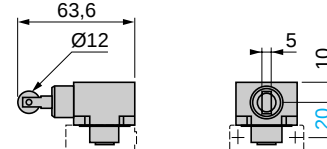
ZCK-E63



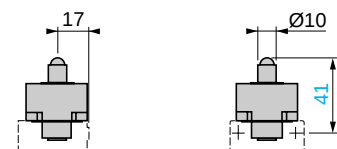
ZCK-E64



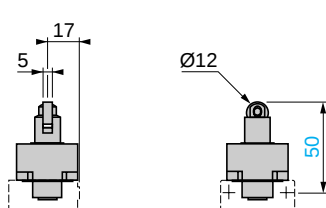
ZCK-E65



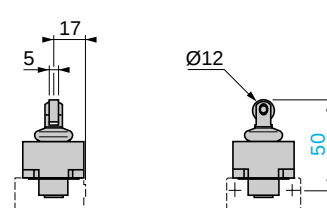
ZCK-E66



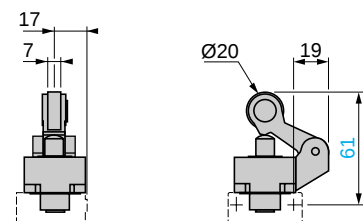
ZCK-E62, ZCK-E67



ZCK-E629



ZCK-E21, E23



Limit switches

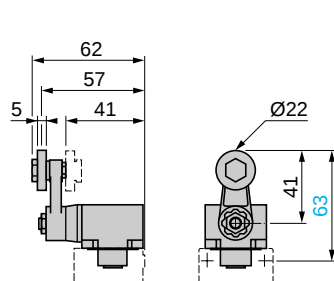
Metal, conforming to CENELEC EN 50041, type XCK-J
Fixed or plug-in body
Adaptable sub-assemblies

References :
pages 71 to 77
Setting-up :
pages 78 and 79

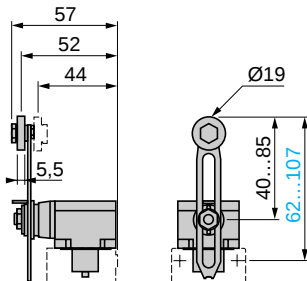
Dimensions

Rotary head ZCK-E05 with operating lever

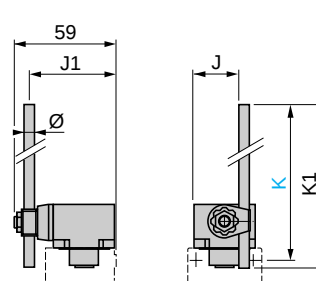
ZCK-Y11, Y13, Y14



ZCK-Y41, Y43

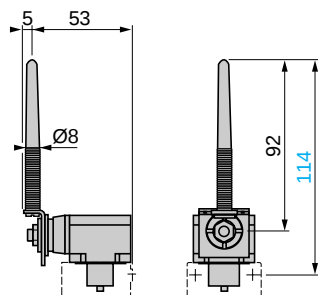


ZCK-Y51, Y52, Y53, Y59

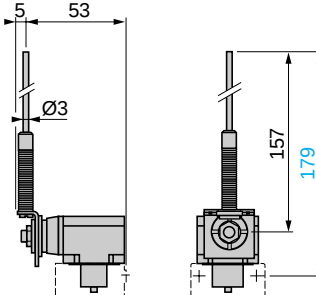


	J	J1	K	K1	Ø
			max.		
ZCK-Y51	20	49	137	123	Ø3
ZCK-Y52	20	49	137	125	Ø3
ZCK-Y53	20	49	137	125	Ø3
ZCK-Y59	26.2	48	212	200	Ø6

ZCK-Y81



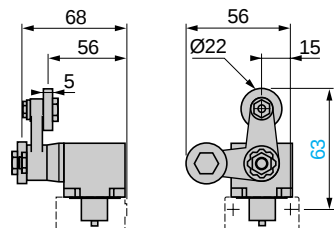
ZCK-Y91



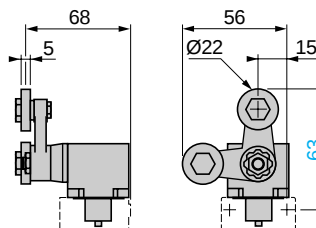
Note : operating lever spindle threaded M6

Rotary head ZCK-E09 with operating lever

ZCK-Y61



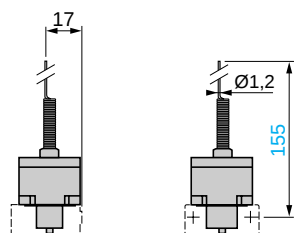
ZCK-Y71



Note : operating lever spindle threaded M6

Multi-directional heads

ZCK-E06



ZCK-E08

