

ZCK-M1, M5, M6, M7, M9 ⊖  
 ZCK-M8

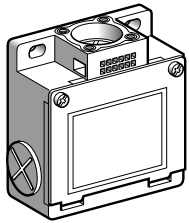
- Plunger head
- Rotary head
- Multi-directional head
- ⊖ Positive opening operation

# Limit switches

Metal, types XCK-M and XCK-L  
Adaptable sub-assemblies

Setting-up :  
page 32103/6  
Dimensions :  
pages 32103/6 and 32103/7

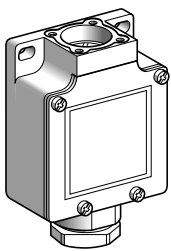
## References



ZCK-M●

### Body/contact assemblies for plunger or rotary head

Contact block	Scheme	Positive operation (1)	Reference	Weight kg
<b>For limit switches type XCK-M</b>				
2-pole 1 N/C + 1 N/O snap action (XES-P2151)		⊕	<b>ZCK-M1</b>	0.210
2-pole 1 N/C + 1 N/O break before make slow break (XEN-P2151)		⊕	<b>ZCK-M5</b>	0.210
2-pole 1 N/O + 1 N/C make before break slow break (XEN-P2161)		⊕	<b>ZCK-M6</b>	0.210
2-pole 1 N/C + 1 N/C simultaneous slow break (XEN-P2141)		⊕	<b>ZCK-M7</b>	0.210
2-pole 1 N/O + 1 N/O simultaneous slow break (XEN-P2131)		-	<b>ZCK-M8</b>	0.210
2-pole 1 N/C + 1 N/C snap action (XES-P2141)		⊕	<b>ZCK-M9</b>	0.210
<b>For limit switches type XCK-L</b>				
2-pole 1 N/C + 1 N/O snap action (XES-P2151)		⊕	<b>ZCK-L1</b>	0.210
2-pole 1 N/C + 1 N/O break before make slow break (XEN-P2151)		⊕	<b>ZCK-L5</b>	0.210
2-pole 1 N/O + 1 N/C make before break slow break (XEN-P2161)		⊕	<b>ZCK-L6</b>	0.210
2-pole 1 N/C + 1 N/C simultaneous slow break (XEN-P2141)		⊕	<b>ZCK-L7</b>	0.210
2-pole 1 N/O + 1 N/O simultaneous slow break (XEN-P2131)		-	<b>ZCK-L8</b>	0.210



ZCK-L●

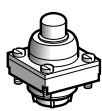
(1) ⊕ : N/C contact with positive opening operation.

# Limit switches

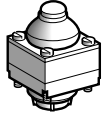
Metal, types XCK-M and XCK-L  
Adaptable sub-assemblies

Setting-up :  
page 32103/6  
Dimensions :  
pages 32103/6 and 32103/7

## References



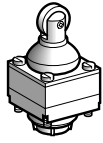
ZCK-D10



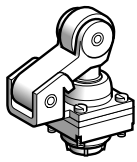
ZCK-D109



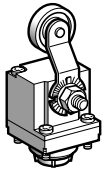
ZCK-D02



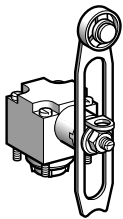
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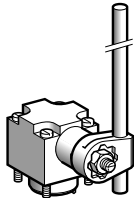
ZCK-D2●



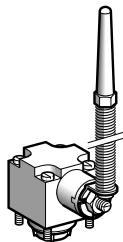
ZCK-D1●



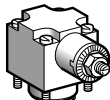
ZCK-D41



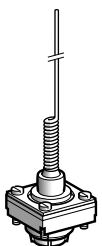
ZCK-D59



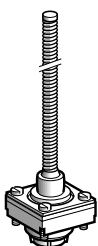
ZCK-D81



ZCK-D05



ZCK-D06



ZCK-D08

## Plunger heads

Type of operator		Max. actuation speed	Positive operation (1)	Reference	Weight kg
<b>For actuation on end</b>					
<b>End plunger steel</b>	standard	0.5 m/s	⊕	<b>ZCK-D10</b>	0.035
	with protective boot	0.5 m/s	⊕	<b>ZCK-D109</b>	0.035
<b>For actuation by 30° cam</b>					
<b>Roller plunger steel</b>	standard	0.5 m/s	⊕	<b>ZCK-D02</b>	0.040
	with protective boot	0.5 m/s	⊕	<b>ZCK-D029</b>	0.040
<b>Roller lever plunger thermoplastic (1 dir. of actuation)</b>	standard	1.5 m/s	⊕	<b>ZCK-D21</b>	0.080
	with protective boot	1.5 m/s	⊕	<b>ZCK-D219</b>	0.080
<b>Roller lever plunger steel (1 dir. of actuation)</b>	standard	1.5 m/s	⊕	<b>ZCK-D23</b>	0.090
	with protective boot	1.5 m/s	⊕	<b>ZCK-D239</b>	0.090

## Rotary heads (with operating lever)

Type of operator		Max. actuation speed	Positive operation (1)	Reference	Weight kg
<b>For actuation by 30° cam</b>					
<b>Roller lever (2)</b>	thermoplastic	1.5 m/s	⊕	<b>ZCK-D15</b>	0.065
	steel	1.5 m/s	⊕	<b>ZCK-D16</b>	0.075
	steel, ball bearing mounted	1.5 m/s	⊕	<b>ZCK-D17</b>	0.070
<b>Variable length roller lever (2)</b>	thermoplastic	1.5 m/s	–	<b>ZCK-D41</b>	0.090
<b>For actuation by any moving part</b>					
<b>Rod lever thermoplastic Ø 6 mm, L = 200 mm (3)</b>		1 m/s	–	<b>ZCK-D59</b>	0.085
<b>Spring lever (2)</b>		1 m/s	–	<b>ZCK-D81</b>	0.085
<b>Spring metal rod lever (2)</b>		1 m/s	–	<b>ZCK-D91</b>	0.090

## Rotary head (without operating lever)

Type	Positive operation (1)	Reference	Weight kg
<b>For actuation from left and right OR from left or right (see page 31900/8)</b>	⊕	<b>ZCK-D05</b>	0.065

## Multi-directional heads

Type of operator	Max. actuation speed	Positive operation (1)	Reference	Weight kg
<b>For actuation by any moving part</b>				
<b>“Cat’s whisker”</b>	1 m/s in any direction	–	<b>ZCK-D06</b>	0.030
<b>Spring rod lever</b>	0.5 m/s in any direction	–	<b>ZCK-D08</b>	0.035

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

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

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

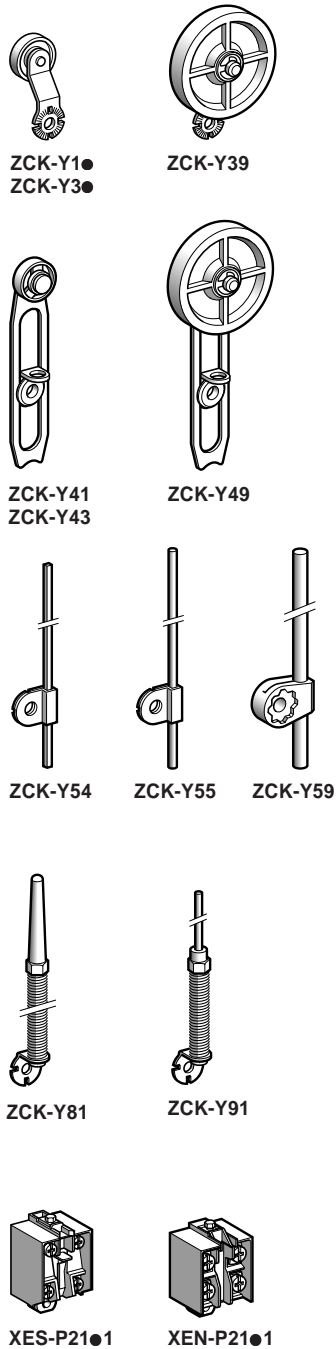
# Limit switches

Metal, types XCK-M and XCK-L  
Adaptable sub-assemblies

Setting-up :  
page 32103/6  
Dimensions :  
pages 32103/6 and 32103/7

## References

### Operating levers for rotary heads



Description		Positive operation (1)	Reference	Weight kg	
<b>For actuation by 30° cam</b>					
<b>Roller lever (2)</b> for heads ZCK-D1●	thermoplastic	⊖	ZCK-Y15	0.015	
	steel	⊖	ZCK-Y16	0.025	
	steel, ball bearing mounted	⊖	ZCK-Y17	0.020	
<b>Roller lever (2)</b> for head ZCK-D05	thermoplastic	⊖	ZCK-Y31	0.015	
	steel	⊖	ZCK-Y33	0.025	
	steel, ball bearing mounted	⊖	ZCK-Y34	0.020	
	elastomer Ø 50 mm roller	-	ZCK-Y39	0.020	
<b>Variable length roller lever (2)</b>	thermoplastic	-	ZCK-Y41	0.025	
	steel	-	ZCK-Y43	0.035	
	elastomer Ø 50 mm roller	-	ZCK-Y49	0.030	
<b>For actuation by any moving part</b>					
<b>Square rod (2)</b>	∅ 3 mm steel, L = 125 mm	-	ZCK-Y54	0.020	
<b>Round rod</b>	∅ 3 mm glass fibre, L = 125 mm (2)	-	ZCK-Y55	0.010	
	∅ 6 mm thermoplastic, L = 200 mm (3)	-	ZCK-Y59	0.020	
<b>Spring lever (2)</b>		-	ZCK-Y81	0.020	
<b>Spring metal rod lever (2)</b>		-	ZCK-Y91	0.025	
<b>Contact blocks</b>					
Type of contact	Scheme	For body type	Positive operation (1)	Reference	Weight kg
2-pole 1 N/C + 1 N/O snap action		ZCK-M1 ZCK-L1	⊖	XES-P2151	0.020
2-pole 1 N/C + 1 N/O break before make slow break		ZCK-M5 ZCK-L5	⊖	XEN-P2151	0.020
2-pole 1 N/O + 1 N/C make before break slow break		ZCK-M6 ZCK-L6	⊖	XEN-P2161	0.020
2-pole 1 N/C + 1 N/C simultaneous slow break		ZCK-M7 ZCK-L7	⊖	XEN-P2141	0.020
2-pole 1 N/O + 1 N/O simultaneous slow break		ZCK-M8 ZCK-L8	-	XEN-P2131	0.020
2-pole 1 N/C + 1 N/C snap action		ZCK-M9	⊖	XES-P2141	0.020

### Accessories for limit switches type XCK-M

Description	Sold in lots of	Unit reference	Weight kg
<b>Tap off terminal</b> for cabling continuity	1	XCK-Z09	0.010
<b>Clip-in markers</b> (strips of 10 markers : 0 to 9) For markers with other markings please consult your Regional Sales Office	25	AB1-R11	0.002

(1) ⊖ : N/C contact with positive opening operation or sub-assembly for positive opening operation.  
(2) Adjustable throughout 360° in 5° steps, or in 90° steps by reversing the notched washer.  
(3) Adjustable throughout 360° in 5° steps, or in 45° steps by reversing the lever mounting.

**Other versions** Contact blocks with gold flashed contacts.  
Please consult your Regional Sales Office.

# Limit switches

Metal, types XCK-M and XCK-L  
Adaptable sub-assemblies

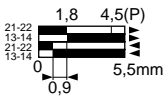
References :  
pages 32103/3 to 32103/5  
Dimensions :  
pages 32103/6 and 32103/7

Setting-up, dimensions

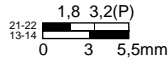
## Function diagrams

Heads ZCK-D10, D109 with body

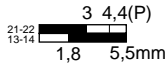
ZCK-M1, L1



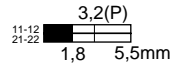
ZCK-M5, L5



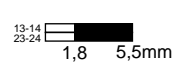
ZCK-M6, L6



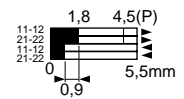
ZCK-M7, L7



ZCK-M8, L8

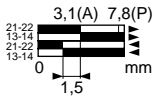


ZCK-M9

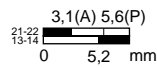


Heads ZCK-D02, D029 with body

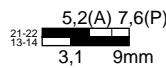
ZCK-M1, L1



ZCK-M5, L5



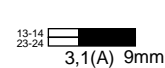
ZCK-M6, L6



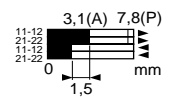
ZCK-M7, L7



ZCK-M8, L8

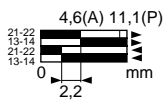


ZCK-M9

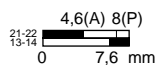


Heads ZCK-D21, D23, D219, D239 with body

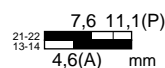
ZCK-M1, L1



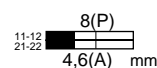
ZCK-M5, L5



ZCK-M6, L6



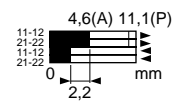
ZCK-M7, L7



ZCK-M8, L8

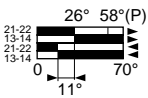


ZCK-M9

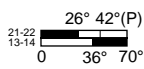


Heads ZCK-D15, D16, D17, D41, D59, D81, D91 with body

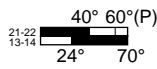
ZCK-M1, L1



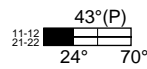
ZCK-M5, L5



ZCK-M6, L6



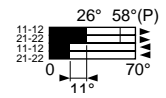
ZCK-M7, L7



ZCK-M8, L8

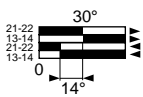


ZCK-M9

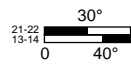


Heads ZCK-D06, D08 with body

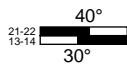
ZCK-M1, L1



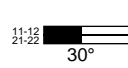
ZCK-M5, L5



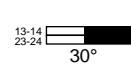
ZCK-M6, L6



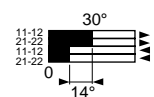
ZCK-M7, L7





ZCK-M8, L8



ZCK-M9



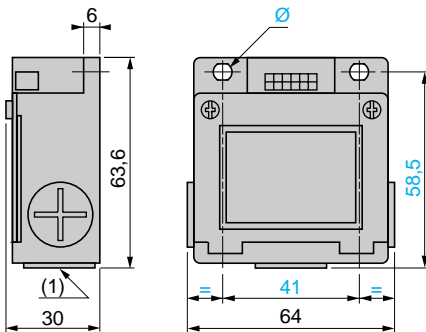
Contact operation  
 contact closed  
 contact open

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

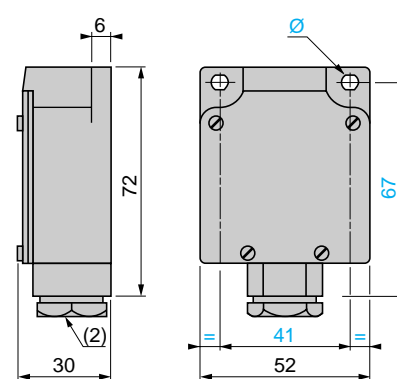
## Dimensions

Body/contact assemblies

ZCK-M1, M5, M6, M7, M8, M9



ZCK-L1, L5, L6, L7, L8



(1) 3 cable entries, tapped for n° 11 cable gland  
(2) Incorporated cable gland  
∅ : 2 elongated holes ∅ 5.2 x 6.2

# Limit switches

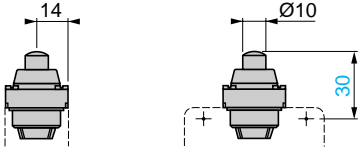
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Adaptable sub-assemblies

References :  
pages 32103/3 to 32103/5  
Setting-up :  
page 32103/6

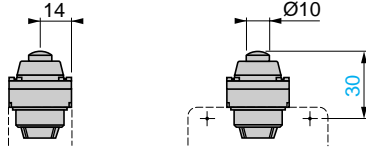
## Dimensions

### Plunger heads

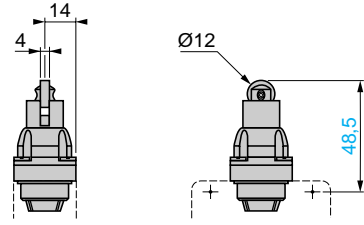
ZCK-D10



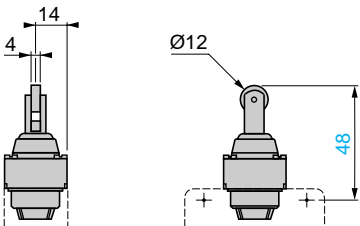
ZCK-D109



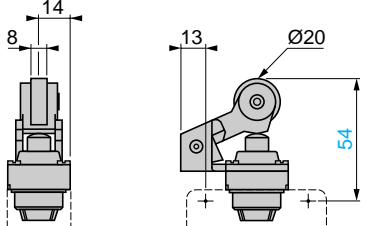
ZCK-D02



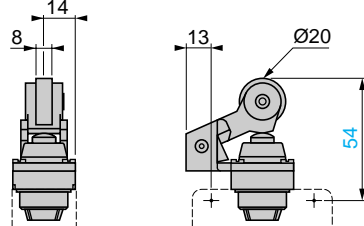
ZCK-D029



ZCK-D21, D23

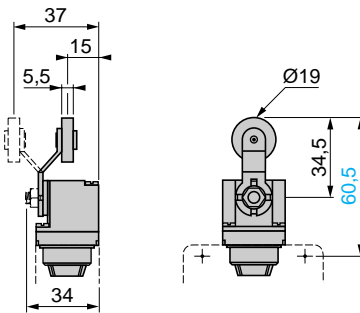


ZCK-D219, D239

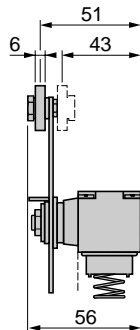


### Rotary heads

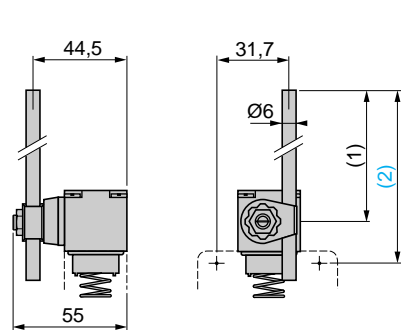
ZCK-D15, D16, D17



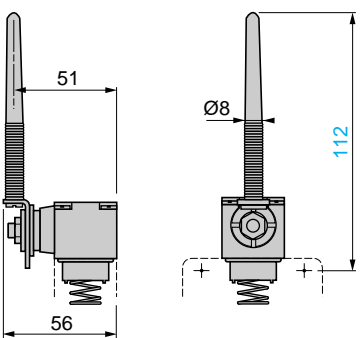
ZCK-D41



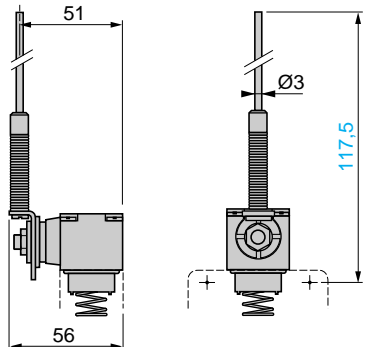
ZCK-D59



ZCK-D81



ZCK-D91



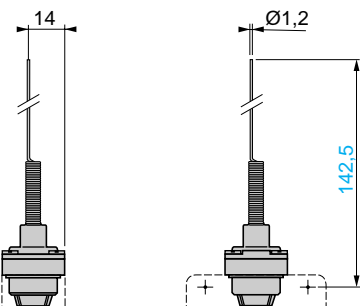
(1) 190 max.

(2) 210.5 max.

Note : operating lever spindle threaded M6

### Multi-directional heads

ZCK-D06



ZCK-D08

