

## CP-7 SERIES CABLE PULL SAFETY SWITCHES

## Features

- Max span 80 meter (262ft)
  - Compatible to EN418 required with emergency stop button on the surface cover
  - Works in two direction:tripped when the wire is pulled or breaking.
  - Optional indicator light to show the state.
  - Positive Opening of NC contacts
  - Conform to EN60947-5-5,  
ISO13850, ISOTR 12100, IEC 60947-5-1, EN 418

## Specifications

Operating Frequency	Mechanical: 120ops/min Electrical: 30 ops/min
Insulation Resistance	>100MΩ@500V DC
Contact Resistance	<25mΩ (initial value)
Rated Current/Voltage	Ith:10A 600V AC (EN60947-5-1)  AC15 A600 / DC13 Q300
Dielectric Strength	1000VAC for 1 min between current carrying parts 2500VAC for 1 min between non-current carrying parts
Service Life	Mechanical: $1.0 \times 10^6$ (operations) Electrical: $5 \times 10^5$ (operations)
Operating Temperature	-25~+80°C (-13~176°F)
Humidity	< 95%RH
Degree of Protection	IP67

## **Selection Guide:**

CP-7170

SL22

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Contact Block

— SL13: 1NO/3NC

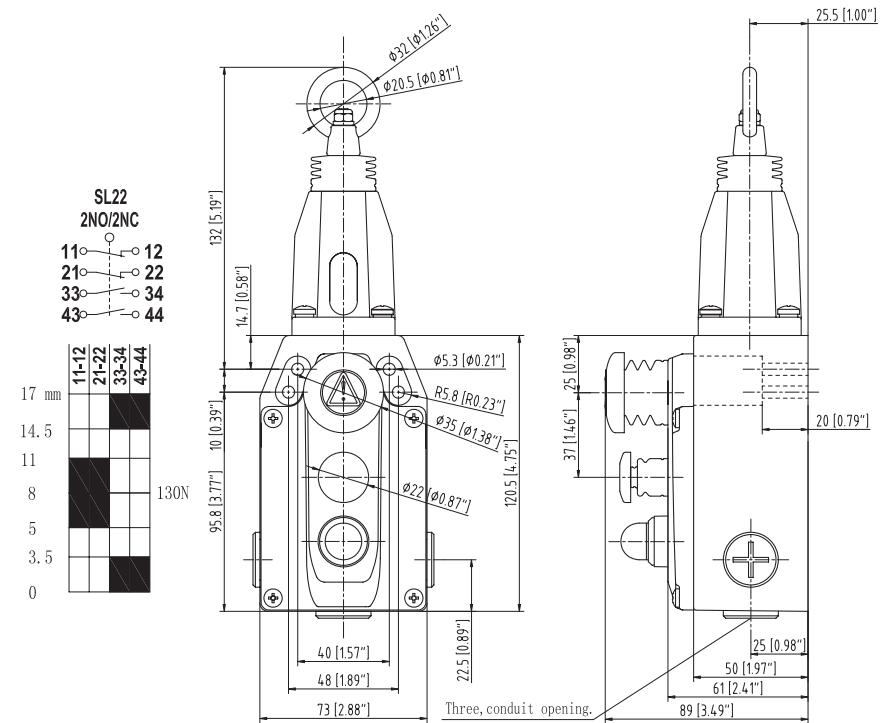
— SL22: 2NO/2NC

<b>A</b>	-	<b>R</b>	-	<b>24</b>	-	<b>E</b>
Conduits				LED		Emergency
A: 1/2NPT				Blank		stop button
C: M20				24: 24VDC		
				120: 120VAC		Blank
				240: 240VAC		E: Eme

Emergency  
stop button

Please contact us for other contact block configurations

CP-7170



## CP-8 SERIES CABLE PULL SAFETY SWITCHES

### Features

- Max span 160m (524ft) for CP8171, 80m(262ft) for CP8171R and CP8171L
- Compatible to EN418 required with emergency stop button on the surface cover
- Works in two direction: tripped when the wire is pulled or breaking.
- Optional indicator light to show the state.
- Positive Opening of NC contacts
- Conform to EN60947-5-5,  
ISO13850, ISOTR 12100, IEC 60947-5-1, EN 418

### Specifications

Insulation Resistance	>100MΩ@500V DC
Contact Resistance	<25mΩ (initial value)
Rated Current/Voltage	Ith: 10A 600V AC (EN60947-5-1) AC15 A600 / DC13 Q300
Dielectric Strength	1000VAC for 1 min between current carrying parts 2500VAC for 1 min between non-current carrying parts
Service Life	Mechanical: 1.0 x10 <sup>6</sup> (operations) Electrical: 5 x10 <sup>5</sup> (operations)
Operating Temperature	-25~+80°C (-13~176°F)
Humidity	< 95%RH
Degree of Protection	IP67

### Selection Guide:

CP-81 - 71 - SL6

Pull direction  
— 71L: Left  
— 71R: Right  
— 71: Left and right

A

Conduits  
— A: 1/2NPT  
— C: M20

R

—

24

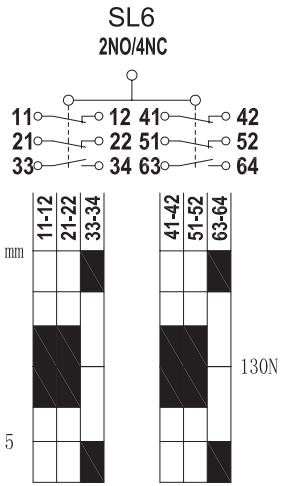
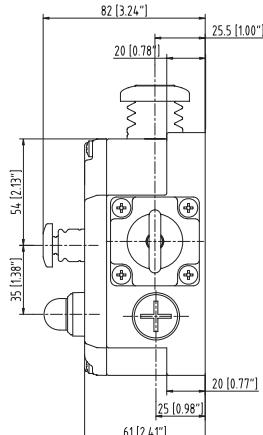
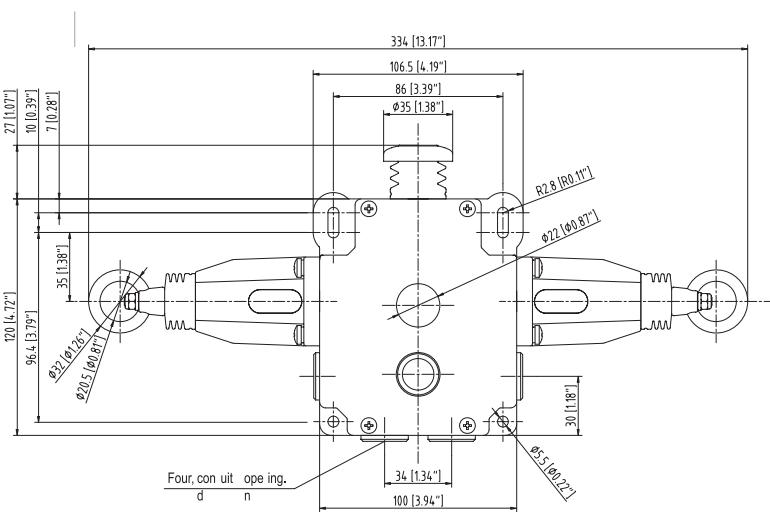
LED  
— Blank  
— 24: 24VDC  
— 120: 120VAC  
— 240: 240VAC

E

Emergency  
stop button  
— Blank  
— E: Emergency stop button

**CP-8171**

**CP-8171L**



## CABLE PULL SAFETY SWITCHES (One - Way Actuation)

### Features

- Galvanically separated contacts
- Screw terminals with self-lifting clamps for easy wiring
- Positive Opening of NC contacts

### Definitions of Operating Characteristics

OF Operating Force

RF Releasing Force

OT Overtravel

TT Total Travel

PT Pretravel

MD Movement Differential

OP Operating Position

PO Travel to Positive Opening



### Specifications

Operating Speed	0.05mm-0.5m/sec
Operating Frequency	Mechanical: 120ops/min Electrical: 30 ops/min
Insulation Resistance	>100MΩ@500V DC
Contact Resistance	<25mΩ (initial value)
Rated Current/Voltage	10A/600V AC (EN60947-5-1) AC15 A600 / DC13 Q300
Dielectric Strength	1000VAC for 1 min between current carrying parts 2500VAC for 1 min between non-current carrying parts
Service Life	Mechanically 1.0 x10 <sup>7</sup> (operations) Electrically 5 x10 <sup>5</sup> (operations)
Operating Temperature	-25~+80°C (-13~176°F)
Humidity	< 95%RH
Degree of Protection	IP65/IP67

### Selection Guide:

SN6170

- Body Style
  - SND4170 Small plastic, 1 conduit
  - SND2170 plastic, 2 conduits
  - SND6170 Large plastic, 1 conduit
  - SN4170 Small metal, 1 conduit
  - SN2170 Metal, 2 conduits
  - SN6170 Large metal, 1 conduit

SL

- Contact Block
  - SL: 1NO/1NC Slow Action changeover
  - SL1: 1NO/1NC Slow Action Overlapping
  - SL2: 2NC Slow Action
  - SL7: 2NC/1NO Slow Action Overlapping

C

- Conduits
  - A: 1/2"NPT
  - B: PG13.5
  - C: M20
  - D: M16
  - B1: PG11

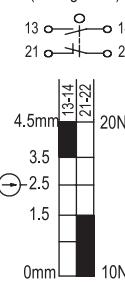
R

- Lock/Reset Function
  - Blank
  - R:with Reset Function

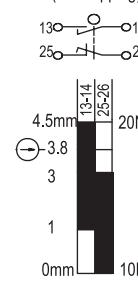
**SND4170**



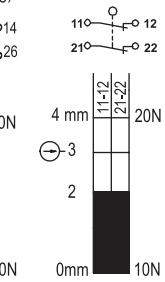
SND4170-SL  
Slow Action  
(Changeover)



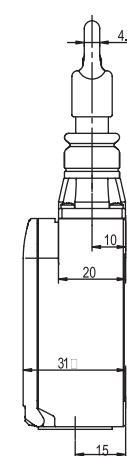
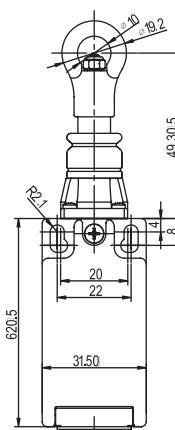
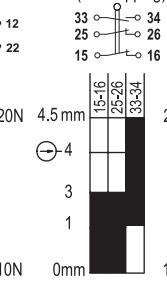
SND4170-SL1  
Slow Action  
(Overlapping)



SND4170-SL2  
Slow Action



SND4170-SL7  
Slow Action  
(Overlapping)



Order Code

Contact block

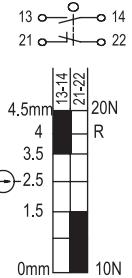
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SND4170-SL1- _	SL1	⊕ slow action	1NO+1NC MBB
SND4170-SL2- _	SL2	⊕ slow action	2NC
SND4170-SL7- _	SL7	⊕ slow action	2NC+1NO

### CABLE PULL SAFETY SWITCHES (One - Way Actuation)

#### SND4170-R



SND4170-SL-R  
Slow Action  
(Changeover)



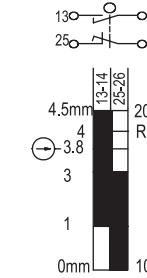
Order Code

Contact block

SND4170-SL-\_R SL slow action 1NO+1NC BBM

SND4170-SL1-R  
Slow Action  
(Overlapping)

SND4170-SL1-R  
Slow Action  
(Overlapping)



Order Code

Contact block

SND4170-SL1-\_R SL1 slow action 1NO+1NC MBB

SND4170-SL2-R  
Slow Action  
(Overlapping)

SND4170-SL2-R  
Slow Action  
(Overlapping)



Order Code

Contact block

SND4170-SL2-\_R SL2 slow action 2NC

SND4170-SL7-R  
Slow Action  
(Overlapping)

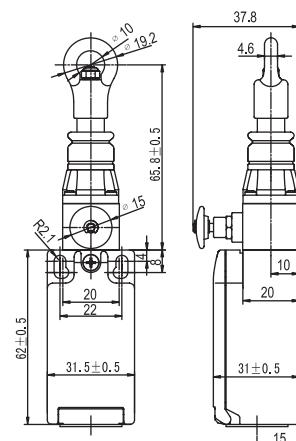
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Slow Action  
(Overlapping)



Order Code

Contact block

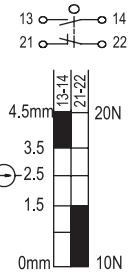
SND4170-SL7-\_R SL7 slow action 2NC+1NO



#### SND2170



SND2170-SL-R  
Slow Action  
(Changeover)



Order Code

Contact block

SND2170-SL-\_R SL slow action 1NO+1NC BBM

SND2170-SL1-R  
Slow Action  
(Overlapping)

SND2170-SL1-R  
Slow Action  
(Overlapping)



Order Code

Contact block

SND2170-SL1-\_R SL1 slow action 1NO+1NC MBB

SND2170-SL2-R  
Slow Action  
(Overlapping)

SND2170-SL2-R  
Slow Action  
(Overlapping)



Order Code

Contact block

SND2170-SL2-\_R SL2 slow action 2NC

SND2170-SL7-R  
Slow Action  
(Overlapping)

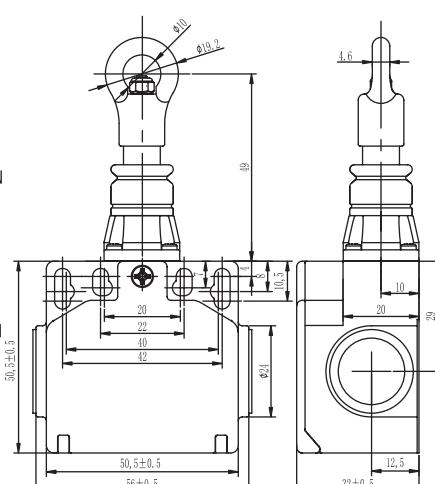
SND2170-SL7-R  
Slow Action  
(Overlapping)



Order Code

Contact block

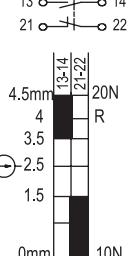
SND2170-SL7-\_R SL7 slow action 2NC+1NO



#### SND2170-R



SND2170-SL-R  
Slow Action  
(Changeover)



Order Code

Contact block

SND2170-SL-\_R SL slow action 1NO+1NC BBM

SND2170-SL1-R  
Slow Action  
(Overlapping)

SND2170-SL1-R  
Slow Action  
(Overlapping)



Order Code

Contact block

SND2170-SL1-\_R SL1 slow action 1NO+1NC MBB

SND2170-SL2-R  
Slow Action  
(Overlapping)

SND2170-SL2-R  
Slow Action  
(Overlapping)



Order Code

Contact block

SND2170-SL2-\_R SL2 slow action 2NC

SND2170-SL7-R  
Slow Action  
(Overlapping)

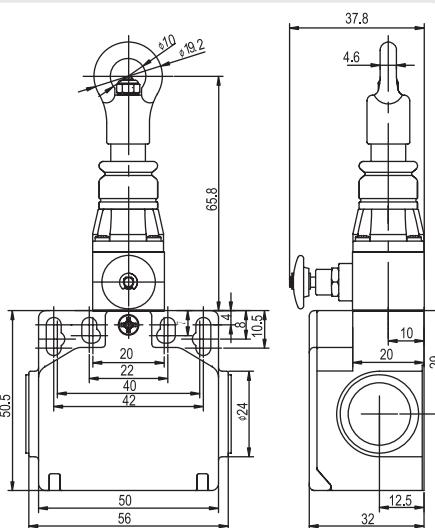
SND2170-SL7-R  
Slow Action  
(Overlapping)



Order Code

Contact block

SND2170-SL7-\_R SL7 slow action 2NC+1NO



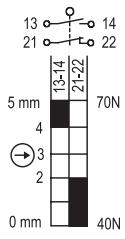
### CABLE PULL SAFETY SWITCHES

(One - Way Actuation)

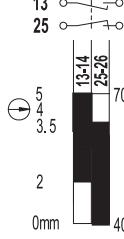
#### SND6170



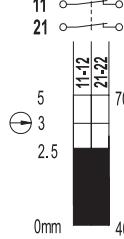
SND6170-SL  
Slow Action  
(Changeover)



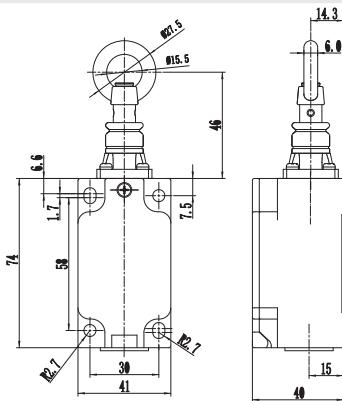
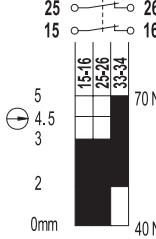
SND6170-SL1  
Slow Action  
(Overlapping)



SND6170-SL2  
Slow Action



SND6170-SL7  
Slow Action  
(Overlapping)



#### Order Code

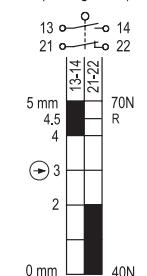
#### Contact block

SND6170-SL-	SL	slow action	1NO+1NC BBM
SND6170-SL1-	SL1	slow action	1NO+1NC MBB
SND6170-SL2-	SL2	slow action	2NC
SND6170-SL7-	SL7	slow action	2NC+1NO

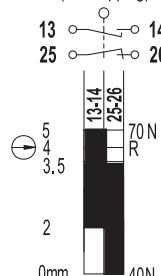
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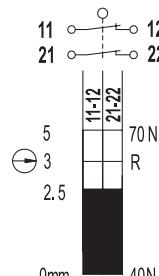
SND6170-SL-R  
Slow Action  
(Changeover)



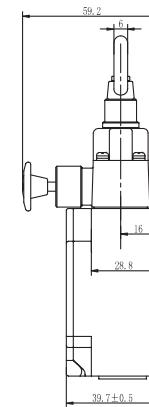
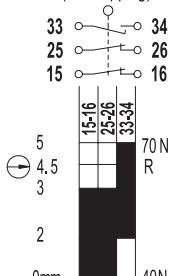
SND6170-SL1-R  
Slow Action  
(Overlapping)



SND6170-SL2-R  
Slow Action



SND6170-SL7-R  
Slow Action  
(Overlapping)



#### Order Code

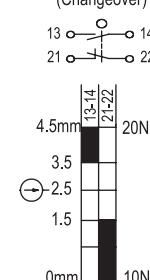
#### Contact block

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SND6170-SL1-_R	SL1	slow action	1NO+1NC MBB
SND6170-SL2-_R	SL2	slow action	2NC
SND6170-SL7-_R	SL7	slow action	2NC+1NO

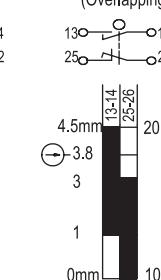
#### SN4170



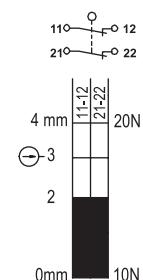
SN4170-SL  
Slow Action  
(Changeover)



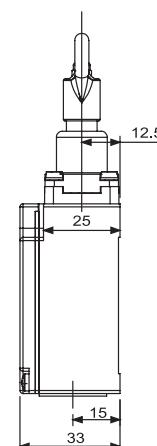
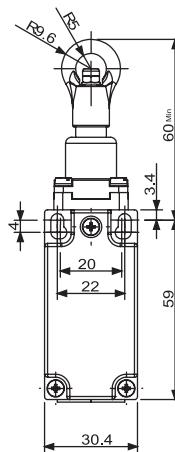
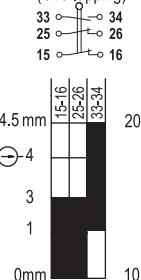
SN4170-SL1  
Slow Action  
(Overlapping)



SN4170-SL2  
Slow Action



SN4170-SL7  
Slow Action  
(Overlapping)



#### Order Code

#### Contact block

SN4170-SL-	SL	slow action	1NO+1NC BBM
SN4170-SL1-	SL1	slow action	1NO+1NC MBB
SN4170-SL2-	SL2	slow action	2NC
SN4170-SL7-	SL7	slow action	2NC+1NO

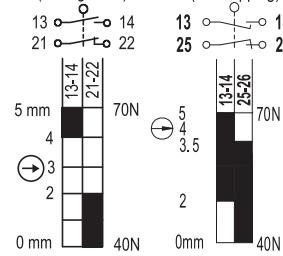


### CABLE PULL SAFETY SWITCHES (One - Way Actuation)

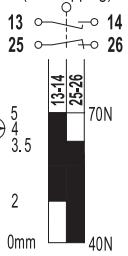
#### SN6170



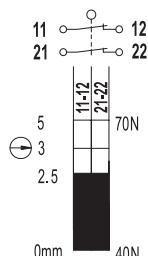
SN6170-SL  
Slow Action  
(Changeover)



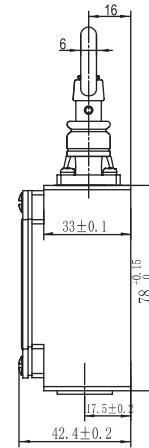
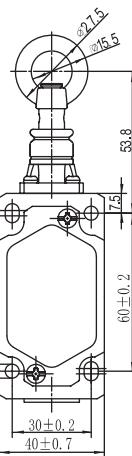
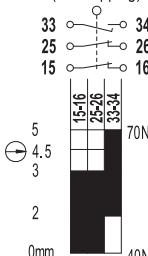
SN6170-SL1  
Slow Action  
(Overlapping)



SN6170-SL2  
Slow Action



SN6170-SL7  
Slow Action  
(Overlapping)



Order Code

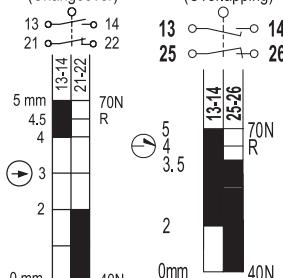
Contact block

SN6170-SL-_	SL		slow action	1NO+1NC BBM
SN6170-SL1-_	SL1		slow action	1NO+1NC MBB
SN6170-SL2-_	SL2		slow action	2NC
SN6170-SL7-_	SL7		slow action	2NC+1NO

#### SN6170-R



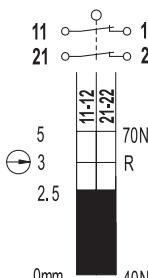
SN6170-SL-R  
Slow Action  
(Changeover)



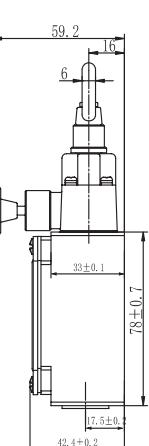
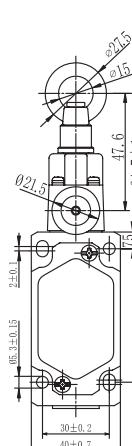
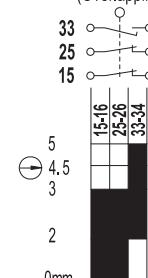
SN6170-SL1-R  
Slow Action  
(Overlapping)



SN6170-SL2-R  
Slow Action



SN6170-SL7-R  
Slow Action  
(Overlapping)

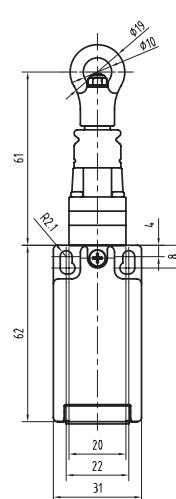
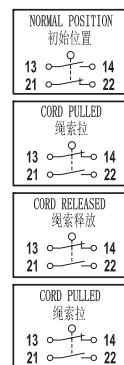


Order Code

Contact block

SN6170-SL-_R	SL		slow action	1NO+1NC BBM
SN6170-SL1-_R	SL1		slow action	1NO+1NC MBB
SN6170-SL2-_R	SL2		slow action	2NC
SN6170-SL7-_R	SL7		slow action	2NC+1NO

#### SND4170 M

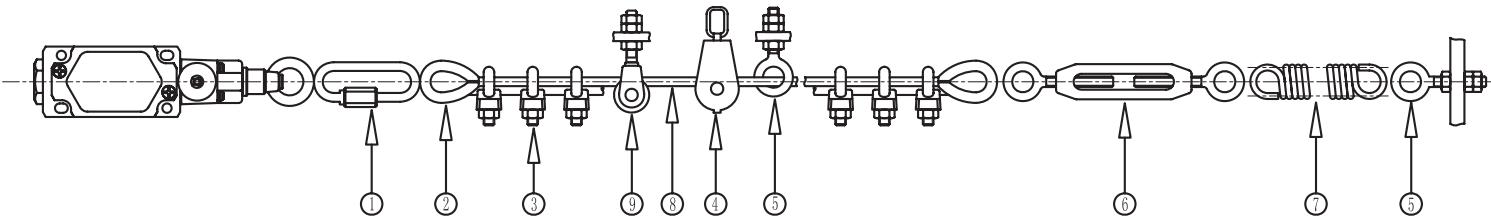


Order Code

Contact block

SND4170-SL-C M	SL		slow action	1NO+1NC BBM
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## CABLE PULL SAFETY SWITCHES Accessories



① CPA-01



② CPA-02

Wire rope thimble (rope eye)



③ CPA-03  
Cable/rope clamp



④ CPA-04 Pulley



⑤ CPA-05 Stay bolt



⑥ CPA-06

Turnbuckle for adjusting cable tension

⑦ CPA-07 Spring



⑧ CPA-08

Φ 5mm Zinc-plated steel rope coated with PVC

**CPA-08-010 (10 m rope)  
CPA-08-020 (20 m rope)  
CPA-08-035 (35 m rope)  
CPA-08-100 (100 m rope)**

