

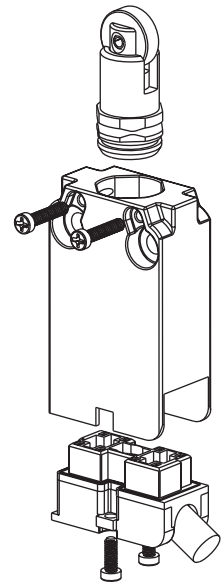
## Compact Safety Limit Switches (Modular Design, Metal body, IP67) SM31 SERIES (20mm) and SM32 SERIES (25mm)

### Selection Guide:

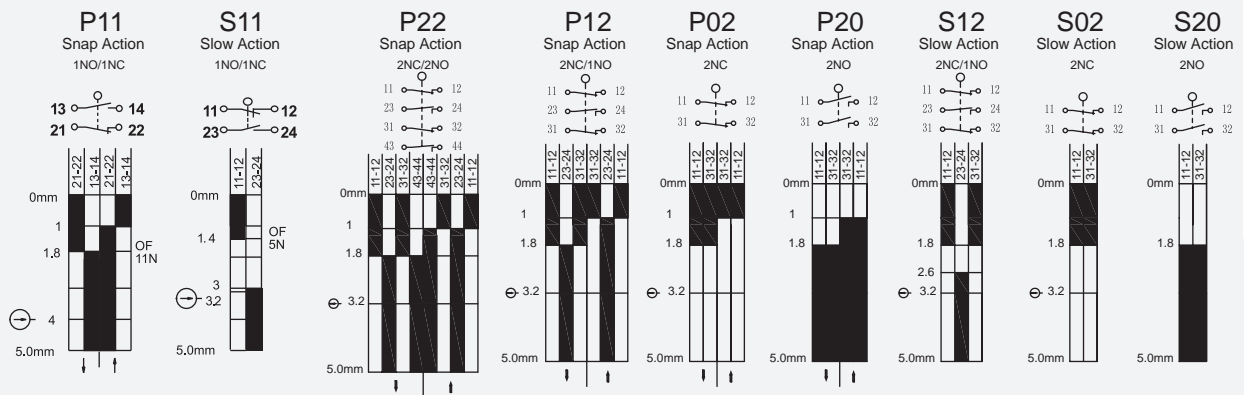
<b>SM3</b>	<b>1</b>	-	<b>P</b>	-	<b>11</b>	-	<b>12</b>	-	<b>H</b>	-	<b>A</b>	-	<b>2</b>
Housing							Head Style						
20mm mounting	<b>1</b>		<b>P</b> Snap Action		<b>11</b> 1NO/1NC		<b>Blank</b> Standard head		<b>A</b> Side exit cable				<b>2</b> 2 meters cable
25mm mounting	<b>2</b>		<b>S</b> Slow Action		<b>12</b> 1NO/2NC		<b>H</b> Horizontal head						
					<b>20</b> 2NO								
					<b>21</b> 2NO/1NC								
					<b>22</b> 2NO/2NC								
					<b>02</b> 2NC								

### Specification

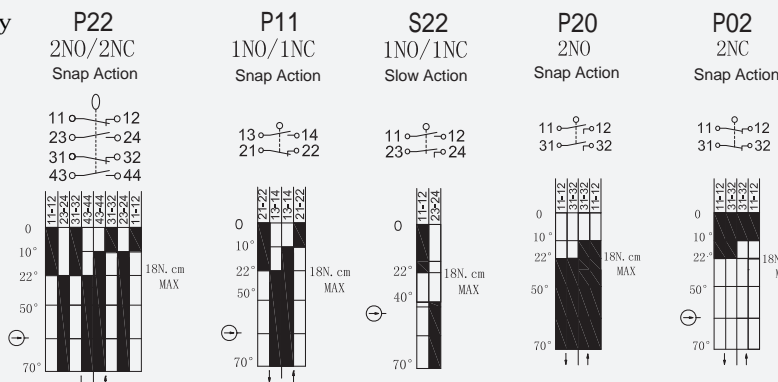
Operating Speed	0.05mm-2m/sec		
Operating Frequency	Mechanical: 120ops/min Electrical: 30 ops/min		
Insulation Resistance	>100MΩ@500V DC		
Contact Resistance	<25mΩ (initial value)		
Rated Voltage	300V AC (EN60947-5-1)		
Rated Thermal Current	5A		
Electrical Rating	AC15 B300 DC13 R300		
Dielectric Strength	1000VAC for 1 min between current carrying parts 2500VAC for 1 min between non-current carrying parts		
Service Life	Mechanically 1 x10 <sup>7</sup> (operations) Electrically 2 x10 <sup>6</sup> (operations)		
Operating Temperature	-25~+85°C without formation of ice		
Humidity	< 95%RH		
Cable	5 core, 0.75mm <sup>2</sup>	7 core, 0.5mm <sup>2</sup>	9 core, 0.34mm <sup>2</sup>
Degree of Protection	IP67		



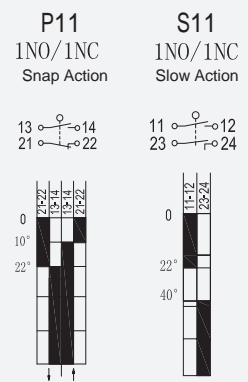
### Plunger Style:



### Rotary Style:



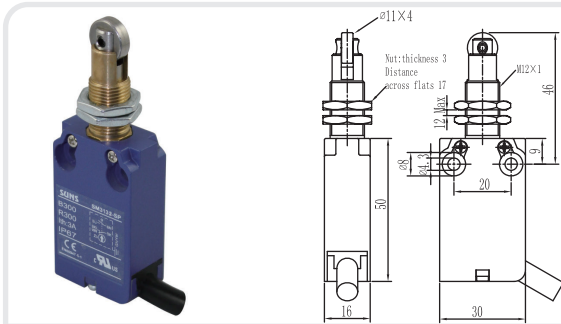
### Spring Coil Style:



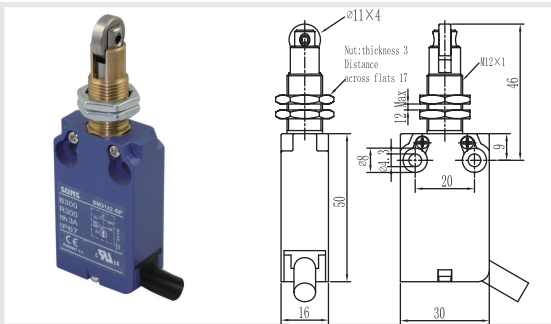
## Compact Safety Limit Switches (Modular Design, IP67, 20mm) SM31 SERIES (20mm)

<p><b>Order Code</b>      <b>Contact block</b></p> <p><b>SM31P11-01</b>    SP  snap action    1NO+1NC</p> <p><b>SM31S11-01</b>    SL  slow action    1NO+1NC BBM</p>	<p><b>Order Code</b>      <b>Contact block</b></p> <p><b>SM31P11-12</b>    SP  snap action    1NO+1NC</p> <p><b>SM31S11-12</b>    SL  slow action    1NO+1NC BBM</p>
<p><b>Order Code</b>      <b>Contact block</b></p> <p><b>SM31P11-11</b>    SP  snap action    1NO+1NC</p> <p><b>SM31S11-11</b>    SL  slow action    1NO+1NC BBM</p>	<p><b>Order Code</b>      <b>Contact block</b></p> <p><b>SM31P11-22</b>    SP  snap action    1NO+1NC</p> <p><b>SM31S11-22</b>    SL  slow action    1NO+1NC BBM</p>
<p><b>Order Code</b>      <b>Contact block</b></p> <p><b>SM31P11-21</b>    SP  snap action    1NO+1NC</p> <p><b>SM31S11-21</b>    SL  slow action    1NO+1NC BBM</p>	<p><b>Order Code</b>      <b>Contact block</b></p> <p><b>SM31P11-02</b>    SP  snap action    1NO+1NC</p> <p><b>SM31S11-02</b>    SL  slow action    1NO+1NC BBM</p>
<p><b>Order Code</b>      <b>Contact block</b></p> <p><b>SM31P11-31</b>    SP  snap action    1NO+1NC</p> <p><b>SM31S11-31</b>    SL  slow action    1NO+1NC BBM</p>	<p><b>Order Code</b>      <b>Contact block</b></p> <p><b>SM31P11-03</b>    SP  snap action    1NO+1NC</p> <p><b>SM31S11-03</b>    SL  slow action    1NO+1NC BBM</p>

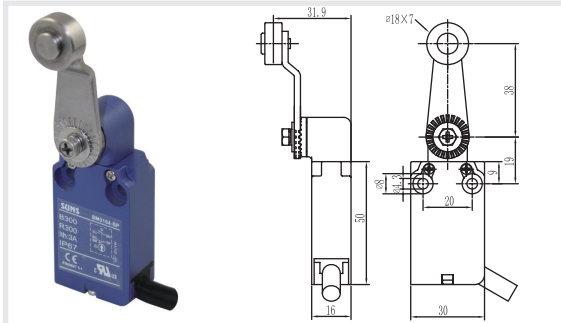
## Compact Safety Limit Switches (Modular Design, IP67, 20mm) SM31 SERIES (20mm)



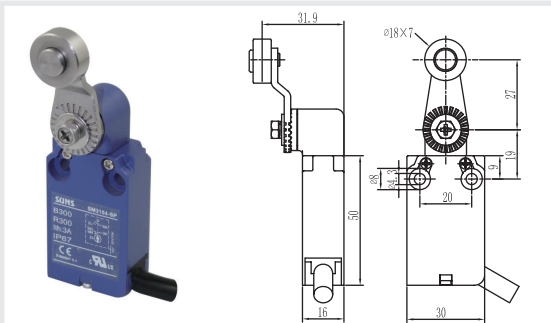
Order Code	Contact block			
SM31P11-32	SP	→	snap action	1NO+1NC
SM31S11-32	SL	→	slow action	1NO+1NC BBM



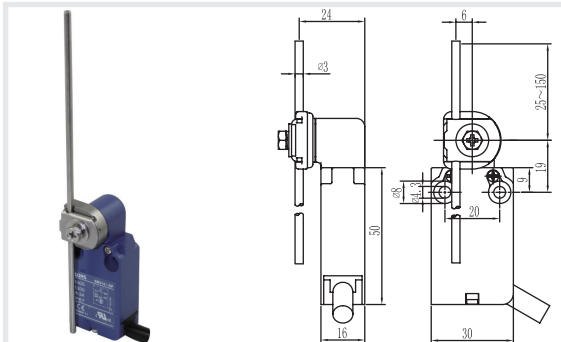
Order Code	Contact block			
SM31P11-42	SP	→	snap action	1NO+1NC
SM31S11-42	SL	→	slow action	1NO+1NC BBM



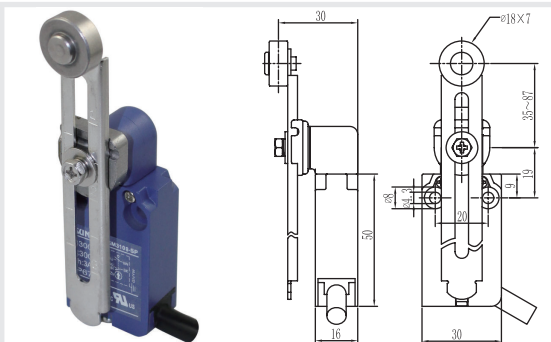
Order Code	Contact block			
SM31P11-04	SP	→	snap action	1NO+1NC
SM31S11-04	SL	→	slow action	1NO+1NC BBM



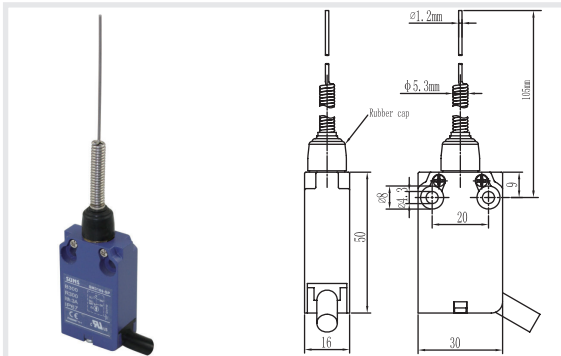
Order Code	Contact block			
SM31P11-04S	SP	→	snap action	1NO+1NC
SM31S11-04S	SL	→	slow action	1NO+1NC BBM



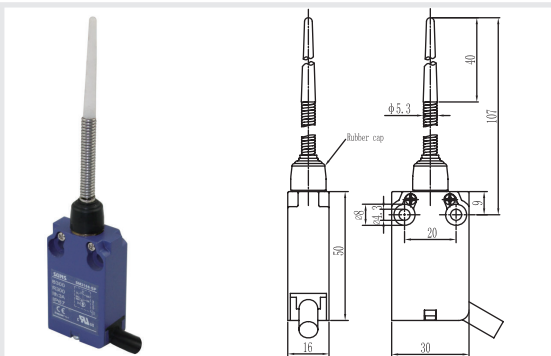
Order Code	Contact block			
SM31P11-07	SP	→	snap action	1NO+1NC
SM31S11-07	SL	→	slow action	1NO+1NC BBM



Order Code	Contact block			
SM31P11-08	SP	→	snap action	1NO+1NC
SM31S11-08	SL	→	slow action	1NO+1NC BBM



Order Code	Contact block			
SM31P11-69	SP	→	snap action	1NO+1NC
SM31S11-69	SL	→	slow action	1NO+1NC BBM

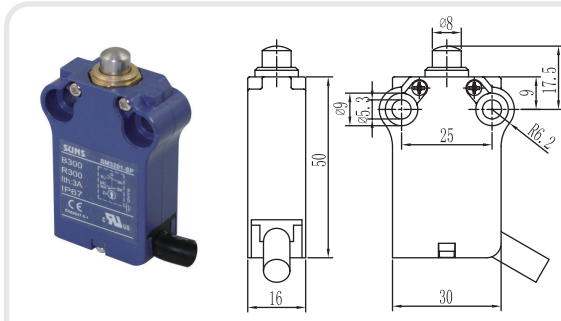


Order Code	Contact block			
SM31P11-66	SP	→	snap action	1NO+1NC
SM31S11-66	SL	→	slow action	1NO+1NC BBM

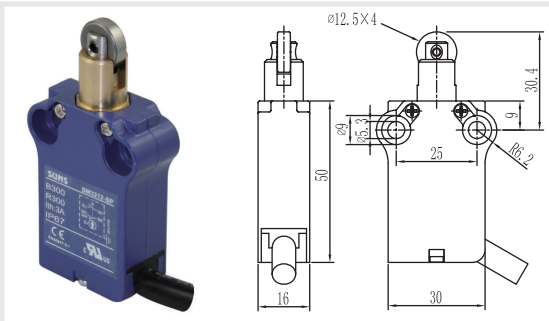
## Compact Safety Limit Switches (Modular Design, IP67, 20mm) SM31 SERIES (20mm)

<p><b>Order Code</b>      <b>Contact block</b></p> <p><b>SM31P11-62</b>    SP    ↻ snap action      1NO+1NC</p> <p><b>SM31S11-62</b>    SL    ↻ slow action      1NO+1NC BBM</p>	<p><b>Order Code</b>      <b>Contact block</b></p> <p><b>SM31P11-63</b>    SP    ↻ snap action      1NO+1NC</p> <p><b>SM31S11-63</b>    SL    ↻ slow action      1NO+1NC BBM</p>
<p><b>Order Code</b>      <b>Contact block</b></p> <p><b>SM31P11-72</b>    SP    ↻ snap action      1NO+1NC</p> <p><b>SM31S11-72</b>    SL    ↻ slow action      1NO+1NC BBM</p>	<p><b>Order Code</b>      <b>Contact block</b></p> <p><b>SM31P11-73</b>    SP    ↻ snap action      1NO+1NC</p> <p><b>SM31S11-73</b>    SL    ↻ slow action      1NO+1NC BBM</p>
<p><b>Order Code</b>      <b>Contact block</b></p> <p><b>SM31P11-11 G</b>    SP    ↻ snap action      1NO+1NC</p> <p><b>SM31S11-11 G</b>    SL    ↻ slow action      1NO+1NC BBM</p>	

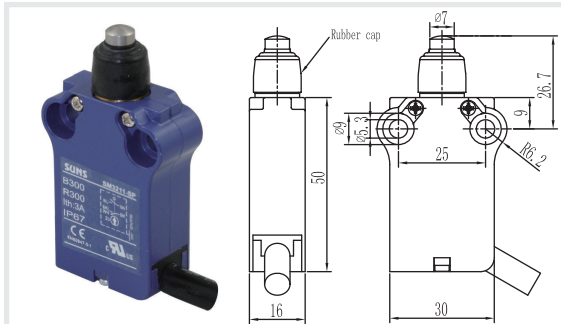
## Compact Safety Limit Switches (Modular Design, IP67, 25mm) SM32 SERIES (25mm)



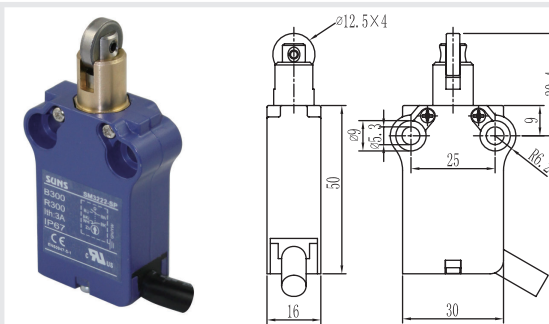
Order Code	Contact block
SM32P11-01	SP  snap action 1NO+1NC
SM32S11-01	SL  slow action 1NO+1NC BBM



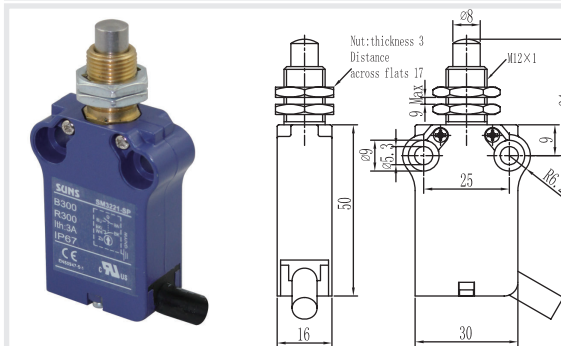
Order Code	Contact block
SM32P11-12	SP  snap action 1NO+1NC
SM32S11-12	SL  slow action 1NO+1NC BBM



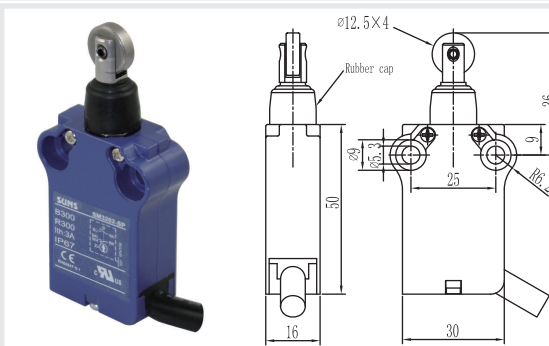
Order Code	Contact block
SM32P11-11	SP  snap action 1NO+1NC
SM32S11-11	SL  slow action 1NO+1NC BBM



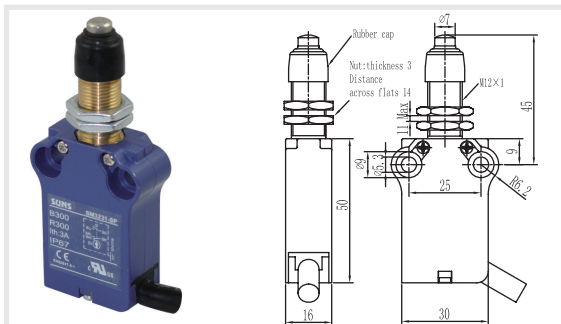
Order Code	Contact block
SM32P11-22	SP  snap action 1NO+1NC
SM32S11-22	SL  slow action 1NO+1NC BBM



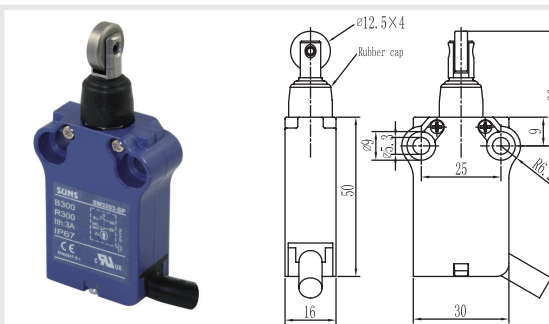
Order Code	Contact block
SM32P11-21	SP  snap action 1NO+1NC
SM32S11-21	SL  slow action 1NO+1NC BBM



Order Code	Contact block
SM32P11-02	SP  snap action 1NO+1NC
SM32S11-02	SL  slow action 1NO+1NC BBM



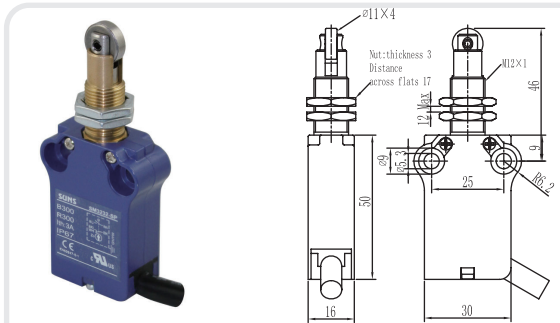
Order Code	Contact block
SM32P11-31	SP  snap action 1NO+1NC
SM32S11-31	SL  slow action 1NO+1NC BBM



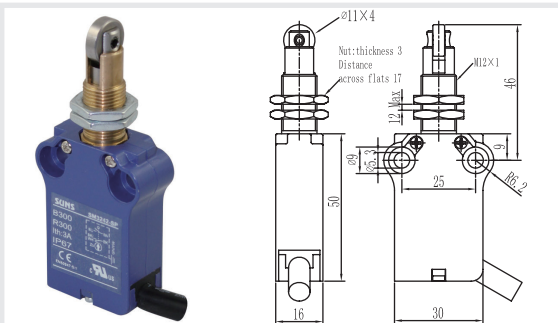
Order Code	Contact block
SM32P11-03	SP  snap action 1NO+1NC
SM32S11-03	SL  slow action 1NO+1NC BBM

## Compact Safety Limit Switches (Modular Design, IP67, 25mm)

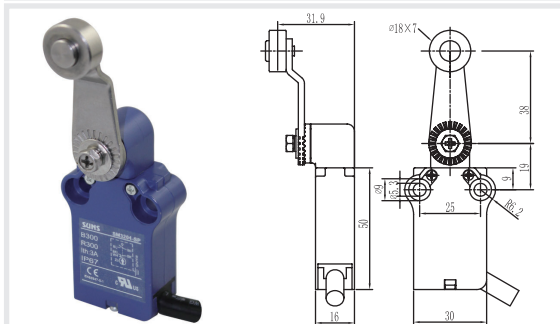
### SM32 SERIES (25mm)



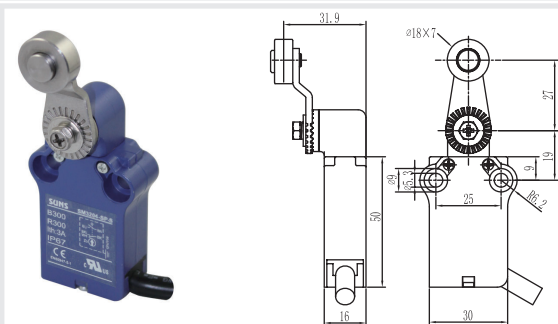
Order Code	Contact block	SP	SL	SN	SN
SM32P11-32	SP	→	→	→	→
		snap action			
				1NO+1NC	
SM32S11-32	SL	→	→	→	→
		slow action			
				1NO+1NC	BBM



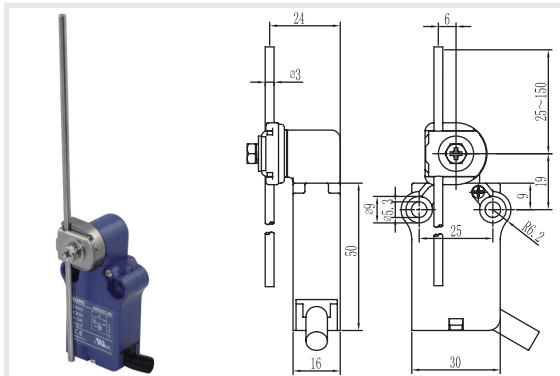
Order Code	Contact block	SP	SL	SN	SN
SM32P11-42	SP	→	→	→	→
		snap action			
				1NO+1NC	
SM32S11-42	SL	→	→	→	→
		slow action			
				1NO+1NC	BBM



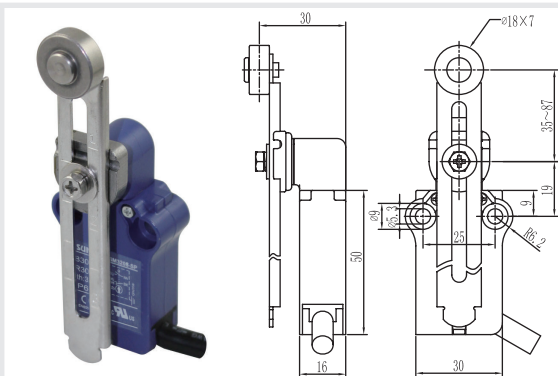
Order Code	Contact block	SP	SL	SN	SN
SM32P11-04	SP	→	→	→	→
		snap action			
				1NO+1NC	
SM32S11-04	SL	→	→	→	→
		slow action			
				1NO+1NC	BBM



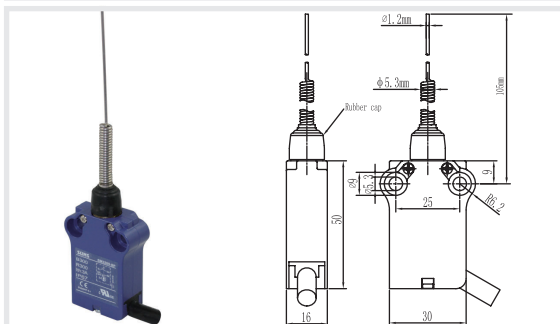
Order Code	Contact block	SP	SL	SN	SN
SM32P11-04S	SP	→	→	→	→
		snap action			
				1NO+1NC	
SM32S11-04S	SL	→	→	→	→
		slow action			
				1NO+1NC	BBM



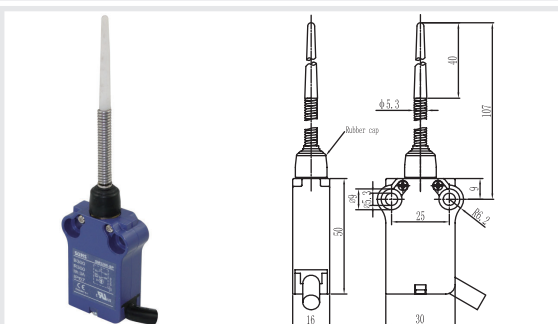
Order Code	Contact block	SP	SL	SN	SN
SM32P11-07	SP	→	→	→	→
		snap action			
				1NO+1NC	
SM32S11-07	SL	→	→	→	→
		slow action			
				1NO+1NC	BBM



Order Code	Contact block	SP	SL	SN	SN
SM32P11-08	SP	→	→	→	→
		snap action			
				1NO+1NC	
SM32S11-08	SL	→	→	→	→
		slow action			
				1NO+1NC	BBM



Order Code	Contact block	SP	SL	SN	SN
SM32P11-69	SP	→	→	→	→
		snap action			
				1NO+1NC	
SM32S11-69	SL	→	→	→	→
		slow action			
				1NO+1NC	BBM



Order Code	Contact block	SP	SL	SN	SN
SM32P11-66	SP	→	→	→	→
		snap action			
				1NO+1NC	
SM32S11-66	SL	→	→	→	→
		slow action			
				1NO+1NC	BBM

## Compact Safety Limit Switches (Modular Design, IP67, 25mm) SM32 SERIES (25mm)

<p><b>Order Code</b>      <b>Contact block</b></p> <p><b>SM32P11-62</b>    SP    ↻ snap action      1NO+1NC</p> <p><b>SM32S11-62</b>    SL    ↻ slow action      1NO+1NC BBM</p>	<p><b>Order Code</b>      <b>Contact block</b></p> <p><b>SM32P11-63</b>    SP    ↻ snap action      1NO+1NC</p> <p><b>SM32S11-63</b>    SL    ↻ slow action      1NO+1NC BBM</p>
<p><b>Order Code</b>      <b>Contact block</b></p> <p><b>SM32P11-72</b>    SP    ↻ snap action      1NO+1NC</p> <p><b>SM32S11-72</b>    SL    ↻ slow action      1NO+1NC BBM</p>	<p><b>Order Code</b>      <b>Contact block</b></p> <p><b>SM32P11-73</b>    SP    ↻ snap action      1NO+1NC</p> <p><b>SM32S11-73</b>    SL    ↻ slow action      1NO+1NC BBM</p>
<p><b>Order Code</b>      <b>Contact block</b></p> <p><b>SM32P11-11 G</b> SP    ↻ snap action      1NO+1NC</p> <p><b>SM32S11-11 G</b> SL    ↻ slow action      1NO+1NC BBM</p>	

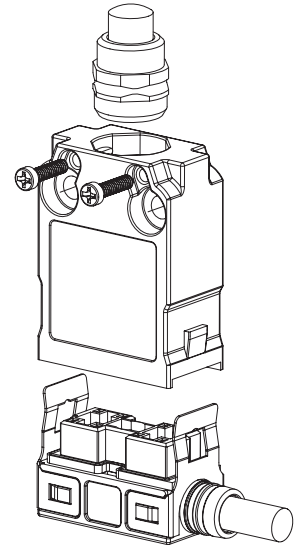
## Compact Safety Limit Switches (Modular Design, Plastic Body, IP67) SM31N SERIES (20mm) and SM32N SERIES (25mm)

### Selection Guide:

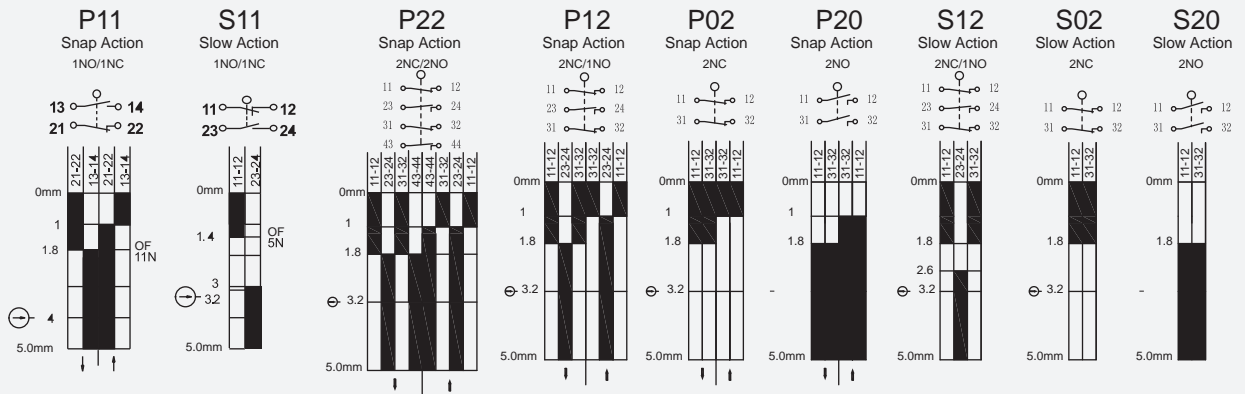
<b>SM3</b>	<b>1</b>	-	<b>N</b>	-	<b>P</b>	-	<b>11</b>	-	<b>12</b>	-	<b>H</b>	-	<b>A</b>	-	<b>2</b>
Housing															
20mm mounting	<b>1</b>				<b>P</b> Snap Action		<b>11</b> 1NO/1NC		Head Style		<b>Blank</b>		<b>A</b> side exit cable		<b>2</b> 2 meters cable
25mm mounting	<b>2</b>				<b>S</b> Slow Action		<b>12</b> 1NO/2NC				<b>H</b> Horizontal head		<b>B</b> bottom exit cable		
							<b>20</b> 2NO								
							<b>21</b> 2NO/1NC								
							<b>22</b> 2NO/2NC								
							<b>02</b> 2NC								

### Specification

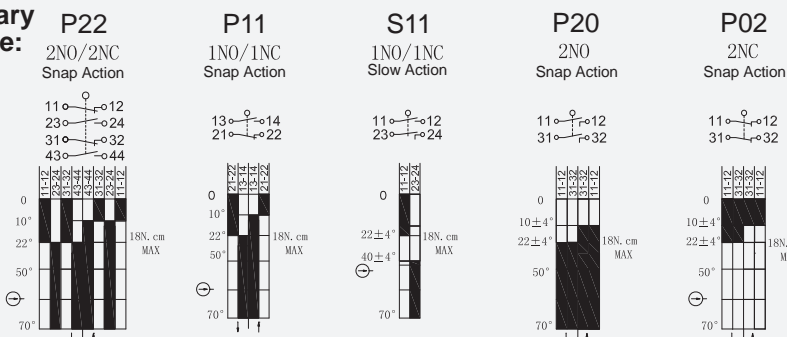
Operating Speed	0.05mm-2m/sec
Operating Frequency	Mechanical: 120ops/min Electrical: 30 ops/min
Insulation Resistance	>100MΩ@500V DC
Contact Resistance	<25mΩ (initial value)
Rated Voltage	300V AC (EN60947-5-1)
Rated Thermal Current	5A
Electrical Rating	AC15 B300 DC13 R300
Dielectric Strength	1000VAC for 1 min between current carrying parts 2500VAC for 1 min between non-current carrying parts
Service Life	Mechanically 1 x10 <sup>7</sup> (operations) Electrically 2 x10 <sup>6</sup> (operations)
Operating Temperature	-25~+85°C without formation of ice
Humidity	< 95%
Cable	4 core, 0.5mm <sup>2</sup> ; 6 core, 0.5mm <sup>2</sup> ; 8 core, 0.34mm <sup>2</sup>
Degree of Protection	IP67



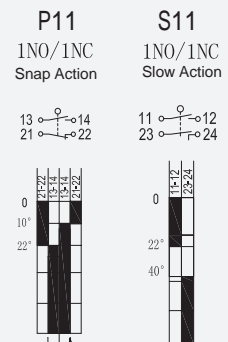
### Plunger Style:



### Rotary Style:



### Spring Coil Style:



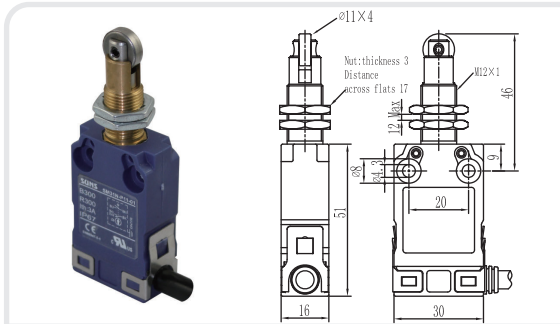


## Compact Safety Limit Switches (Fiber Reinforced Plastic, IP67, 20mm) SM31N SERIES (20mm)

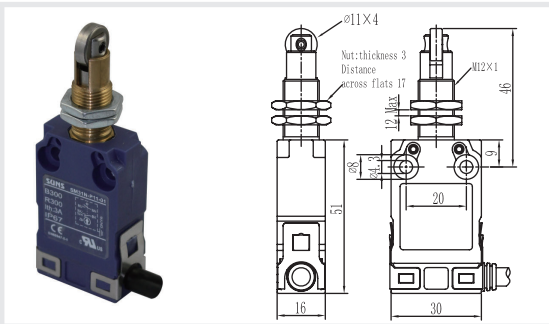
<p><b>Order Code</b>      <b>Contact block</b></p> <p>SM31NP11-01      SP <math>\ominus</math> snap action      1NO+1NC</p> <p>SM31NS11-01      SL <math>\ominus</math> slow action      1NO+1NC BBM</p>	<p><b>Order Code</b>      <b>Contact block</b></p> <p>SM31NP11-12      SP <math>\ominus</math> snap action      1NO+1NC</p> <p>SM31NS11-12      SL <math>\ominus</math> slow action      1NO+1NC BBM</p>
<p><b>Order Code</b>      <b>Contact block</b></p> <p>SM31NP11-11      SP <math>\ominus</math> snap action      1NO+1NC</p> <p>SM31NS11-11      SL <math>\ominus</math> slow action      1NO+1NC BBM</p>	<p><b>Order Code</b>      <b>Contact block</b></p> <p>SM31NP11-22      SP <math>\ominus</math> snap action      1NO+1NC</p> <p>SM31NS11-22      SL <math>\ominus</math> slow action      1NO+1NC BBM</p>
<p><b>Order Code</b>      <b>Contact block</b></p> <p>SM31NP11-21      SP <math>\ominus</math> snap action      1NO+1NC</p> <p>SM31NS11-21      SL <math>\ominus</math> slow action      1NO+1NC BBM</p>	<p><b>Order Code</b>      <b>Contact block</b></p> <p>SM31NP11-02      SP <math>\ominus</math> snap action      1NO+1NC</p> <p>SM31NS11-02      SL <math>\ominus</math> slow action      1NO+1NC BBM</p>
<p><b>Order Code</b>      <b>Contact block</b></p> <p>SM31NP11-31      SP <math>\ominus</math> snap action      1NO+1NC</p> <p>SM31NS11-31      SL <math>\ominus</math> slow action      1NO+1NC BBM</p>	<p><b>Order Code</b>      <b>Contact block</b></p> <p>SM31NP11-03      SP <math>\ominus</math> snap action      1NO+1NC</p> <p>SM31NS11-03      SL <math>\ominus</math> slow action      1NO+1NC BBM</p>

\* suffix: -A for side exit, -B for Bottom exit and one-digit number for length of the wire (meter). Eg :-A2

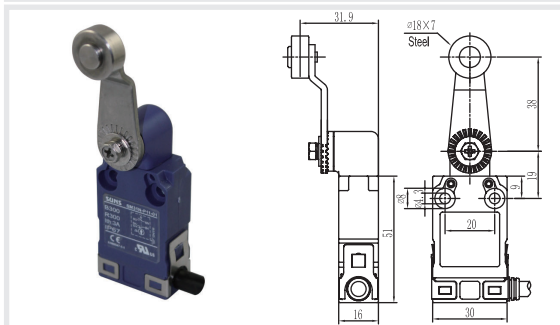
## Compact Safety Limit Switches (Fiber Reinforced Plastic, IP67, 20mm) SM31N SERIES (20mm)



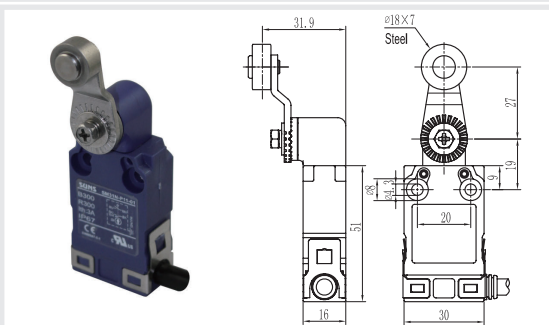
Order Code	Contact block			
SM31NP11-32	SP	↻	snap action	1NO+1NC
SM31NS11-32	SL	↻	slow action	1NO+1NC BBM



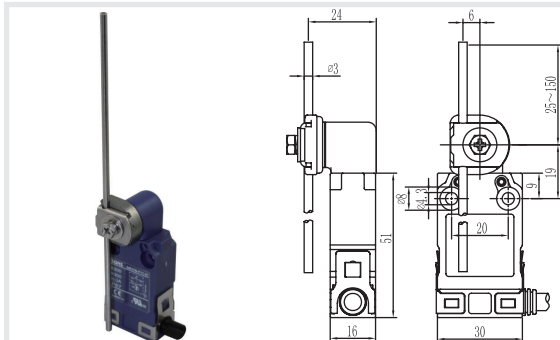
Order Code	Contact block			
SM31NP11-42	SP	↻	snap action	1NO+1NC
SM31NS11-42	SL	↻	slow action	1NO+1NC BBM



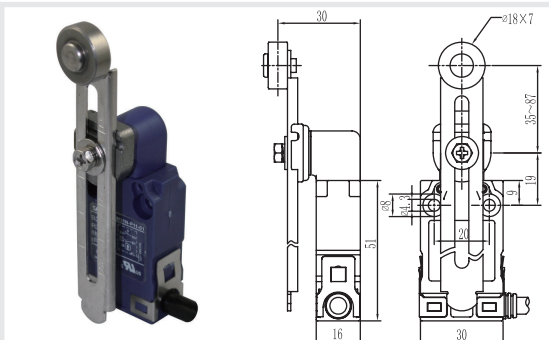
Order Code	Contact block			
SM31NP11-04	SP	↻	snap action	1NO+1NC
SM31NS11-04	SL	↻	slow action	1NO+1NC BBM



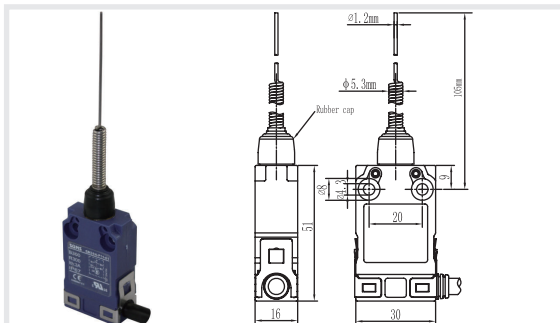
Order Code	Contact block			
SM31NP11-04-S	SP	↻	snap action	1NO+1NC
SM31NS11-04-S	SL	↻	slow action	1NO+1NC BBM



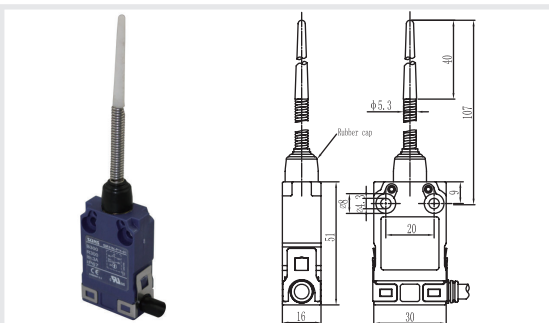
Order Code	Contact block			
SM31NP11-07	SP	↻	snap action	1NO+1NC
SM31NS11-07	SL	↻	slow action	1NO+1NC BBM



Order Code	Contact block			
SM31NP11-08	SP	↻	snap action	1NO+1NC
SM31NS11-08	SL	↻	slow action	1NO+1NC BBM



Order Code				
SM31NP11-69	SP		snap action	1NO+1NC
SM31NS11-69	SL		slow action	1NO+1NC BBM



Order Code				
SM31NP11-66	SP		snap action	1NO+1NC
SM31NS11-66	SL		slow action	1NO+1NC BBM

\* suffix:-A for side exit,-B for Bottom exit and one-digit number for length of the wire (meter). Eg :-A2





## Compact Safety Limit Switches (Fiber Reinforced Plastic, IP67, 25mm) SM32N SERIES (25mm)

<p><b>Order Code</b></p> <p><b>SM32NP11-32</b> SP snap action 1NO+1NC</p> <p><b>SM32NS11-32</b> SL slow action 1NO+1NC BBM</p>	<p><b>Order Code</b></p> <p><b>SM32NP11-42</b> SP snap action 1NO+1NC</p> <p><b>SM32NS11-42</b> SL slow action 1NO+1NC BBM</p>
<p><b>Order Code</b></p> <p><b>SM32NP11-04</b> SP snap action 1NO+1NC</p> <p><b>SM32NS11-04</b> SL slow action 1NO+1NC BBM</p>	<p><b>Order Code</b></p> <p><b>SM32NP11-04S</b> SP snap action 1NO+1NC</p> <p><b>SM32NS11-04S</b> SL slow action 1NO+1NC BBM</p>
<p><b>Order Code</b></p> <p><b>SM32NP11-07</b> SP snap action 1NO+1NC</p> <p><b>SM32NS11-07</b> SL slow action 1NO+1NC BBM</p>	<p><b>Order Code</b></p> <p><b>SM32NP11-08</b> SP snap action 1NO+1NC</p> <p><b>SM32NS11-08</b> SL slow action 1NO+1NC BBM</p>
<p><b>Order Code</b></p> <p><b>SM32NP11-69</b> SP snap action 1NO+1NC</p> <p><b>SM32NS11-69</b> SL slow action 1NO+1NC BBM</p>	<p><b>Order Code</b></p> <p><b>SM32NP11-66</b> SP snap action 1NO+1NC</p> <p><b>SM32NS11-66</b> SL slow action 1NO+1NC BBM</p>

\* suffix:-A for side exit,-B for Bottom exit and one-digit number for length of the wire (meter). Eg :-B2

## Compact Safety Limit Switches (Fiber Reinforced Plastic, IP67, 25mm) SM32N SERIES (25mm)

<p><b>Order Code</b></p> <p>SM32NP11-62 SP</p> <p>SM32NS11-62 SL</p>	<p><b>Order Code</b></p> <p>SM32NP11-63 SP</p> <p>SM32NS11-63 SL</p>
<p><b>Contact block</b></p> <p>→ snap action</p> <p>→ slow action</p> <p>1NO+1NC</p> <p>1NO+1NC BBM</p>	<p><b>Contact block</b></p> <p>→ snap action</p> <p>→ slow action</p> <p>1NO+1NC</p> <p>1NO+1NC BBM</p>
<p><b>Order Code</b></p> <p>SM32NP11-72 SP</p> <p>SM32NS11-72 SL</p>	<p><b>Order Code</b></p> <p>SM32NP11-73 SP</p> <p>SM32NS11-73 SL</p>
<p><b>Contact block</b></p> <p>→ snap action</p> <p>→ slow action</p> <p>1NO+1NC</p> <p>1NO+1NC BBM</p>	<p><b>Contact block</b></p> <p>→ snap action</p> <p>→ slow action</p> <p>1NO+1NC</p> <p>1NO+1NC BBM</p>
	<p>Also available in side cable exit</p>
<p><b>Order Code</b></p> <p>SM32NP11-11 G SP</p> <p>SM32NS11-11 G SL</p>	<p><b>Order Code</b></p> <p>SP</p> <p>SL</p>
<p><b>Contact block</b></p> <p>→ snap action</p> <p>→ slow action</p> <p>1NO+1NC</p> <p>1NO+1NC BBM</p>	<p><b>Contact block</b></p> <p>→ snap action</p> <p>→ slow action</p> <p>1NO+1NC</p> <p>1NO+1NC BBM</p>

\* suffix:-A for side exit,-B for Bottom exit and one-digit number for length of the wire (meter).Eg :-B2