

## SN1 Series Compact Precision Limit Switches

### Features:

- Robust metal enclosure design
- Compact, space-saving and tightly gang mounting possible
- High sealability, oil-resistant/immersion-proof type
- Long mechanical life of 20 million operations
- High sensitivity. (M.D. =0.1mm)
- Gold plated contact available for low current applications
- M12 connector type available

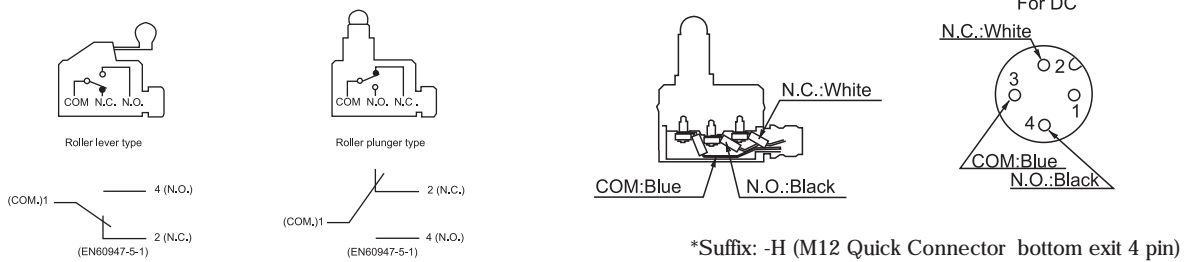
### Definitions of Operating Characteristics

OF	Operating Force	PT	Pretravel
RF	Releasing Force	MD	Movement Differential
OT	Overtravel	OP	Operating Position
TT	Total Travel		

### Specifications

Operating Speed	0.02mm-0.5m/sec		
Operating Frequency	120 ops/min		
Insulation Resistance	>100MΩ@500V DC		
Contact Resistance	<25mΩ (initial value)		
Electrical Rating	Standard Load Type (Silver contacts)	5A/250VAC or 5A/30VDC	
	Low Current Type (Gold Plated Contacts)	0.1A/250VAC or 0.1A/30VDC	
Dielectric Strength	1000VAC for 1 min between current carrying parts 2500VAC for 1 min between non-current carrying parts		
Service Life	Mechanically	2 x 10 <sup>7</sup> (operations)	
	Electrically	5 x 10 <sup>5</sup> (operations)	
Operating Temperature	-30~+80°C (-22~176°F)		
Humidity	< 98%RH		
Degree of Protection	IP67		

### Wiring Diagram



### Dimensions Unit: mm

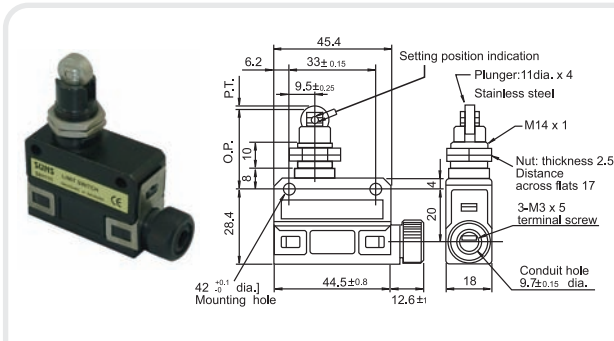
**SN1110**  
Operating Characteristics

- OF<sub>max</sub> 11.8N
- RF<sub>min</sub> 4.9N
- PT<sub>max</sub> 1.5mm
- OT<sub>min</sub> 3mm
- MD<sub>max</sub> 0.1mm
- OP 25.4±0.8mm

**SN1141**  
Operating Characteristics

- OF<sub>max</sub> 4.0 N
- RF<sub>min</sub> 0.78 N
- PT<sub>max</sub> 2 mm
- OT<sub>min</sub> 4 mm
- MD<sub>max</sub> 0.3 mm
- OP 23.1±0.8mm

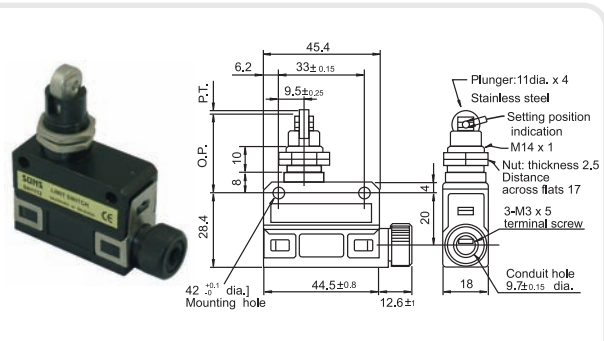
## SN1 Series Compact Precision Limit Switches



### SN1111

#### Operating Characteristics

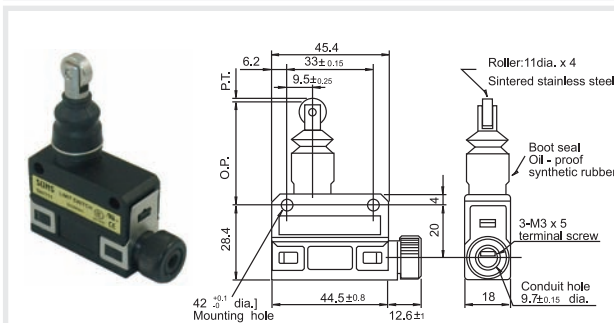
- OF<sub>max</sub> 11.8N
- RF<sub>min</sub> 4.9N
- PT<sub>max</sub> 1.5mm
- OT<sub>min</sub> 3 mm
- MD<sub>max</sub> 0.1mm
- OP 31.4±0.8mm



### SN1112

#### Operating Characteristics

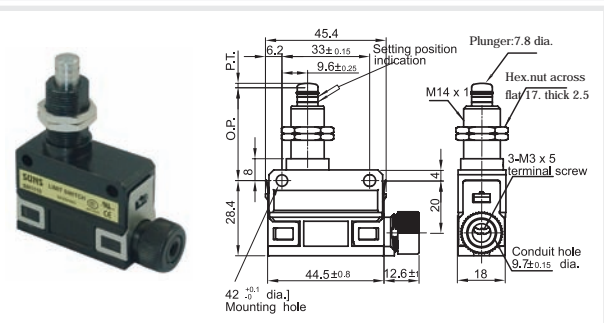
- OF<sub>max</sub> 11.8N
- RF<sub>min</sub> 4.9N
- PT<sub>max</sub> 1.5mm
- OT<sub>min</sub> 3 mm
- MD<sub>max</sub> 0.1mm
- OP 31.4±0.8mm



### SN1121

#### Operating Characteristics

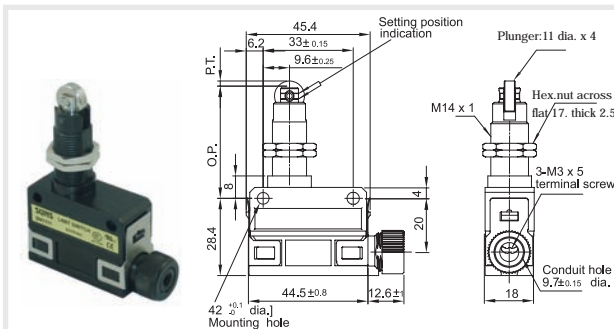
- OF<sub>max</sub> 11.8N
- RF<sub>min</sub> 4.9N
- PT<sub>max</sub> 1.5mm
- OT<sub>min</sub> 3 mm
- MD<sub>max</sub> 0.1mm
- OP 41.4±0.8mm



### SN1110-E

#### Operating Characteristics

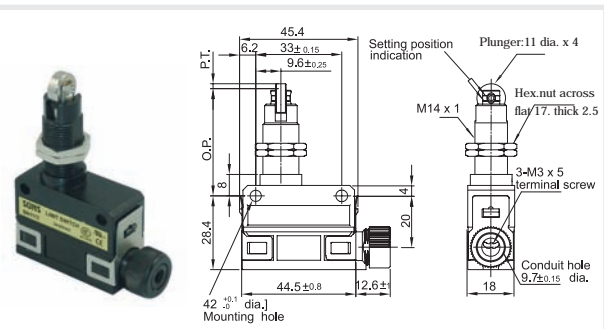
- OF<sub>max</sub> 11.8N
- RF<sub>min</sub> 4.9N
- PT<sub>max</sub> 1.5mm
- OT<sub>min</sub> 3 mm
- MD<sub>max</sub> 0.1mm
- OP 35.4±0.8mm



### SN1111-E

#### Operating Characteristics

- OF<sub>max</sub> 11.8N
- RF<sub>min</sub> 4.9N
- PT<sub>max</sub> 1.5mm
- OT<sub>min</sub> 3 mm
- MD<sub>max</sub> 0.1mm
- OP 41.4±0.8mm



### SN1112-E

#### Operating Characteristics

- OF<sub>max</sub> 11.8N
- RF<sub>min</sub> 4.9N
- PT<sub>max</sub> 1.5mm
- OT<sub>min</sub> 3 mm
- MD<sub>max</sub> 0.1mm
- OP 41.4±0.8mm