

# Push-type Detector Switches

## SW-110 Series

### Features

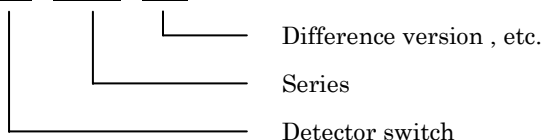
- ◇Miniaturized for space saving design.
- ◇Superior reliability at micro-current by employing a sliding contact.
- ◇Available in wide variety of mounting methods , operating methods etc.

### Applications

- ◇Mechatronic detection for audio and VCR CD-ROM DVD units.

### Products Number System

SW - [ ] [ ] [ ] - [ ] [ ]



Actual size

### Products Line

No	Products No	Pole	Position	Operating force	Notes
1	SW-110-6	1	1	1.0N max.	
2	SW-111	1	1	0.5N max.	
3	SW-114S	1	1	0.5N max.	
4	SW-115-1S3	1	1	0.65N max.	

### Typical Specifications

Item	Specification
Ratings (max.)	0.5 - 10mA 5V DC (Resistive load)
Contact resistance	1 ohm max.
Insulation resistance	100 megohm min. 100V DC
Withstanding voltage	100V AC for 1min.
Operating life with load	50,000 cycles

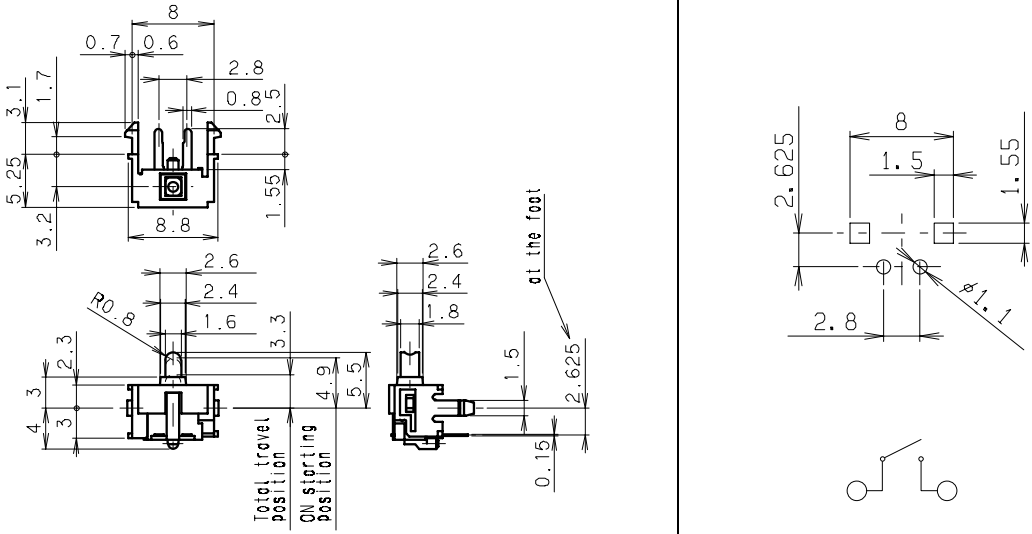
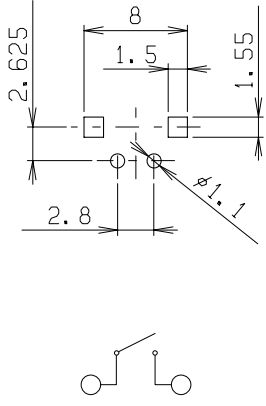
Dimensions

Unit : mm

No	Style	P.C.B reference mounting hole Dimensions , Circuit diagram (TOP VIEW)
1	<p>SW-110-6</p> <p>Technical drawings for SW-110-6 showing top view, side view, and cross-section. Dimensions include: top view (5.5, 3.5, 2.9, 3.7, 3, 2-φ1, 1, 1), side view (2.6, 2.4, 1.6, R0.8, 1.5, 3, 1.4, 1.6, 4, 0.8, 1.5, 3.4, 2-φ0.8), and cross-section (2.6, 2.4, 1.8, 6.8, 8.4, 9, 0.15, 1.65). Labels: Total travel position, ON starting position.</p>	<p>Circuit diagram for SW-110-6 showing a switch symbol.</p>
2	<p>SW-111</p> <p>Technical drawings for SW-111 showing top view, side view, and cross-section. Dimensions include: top view (8, 0.6, 0.5, 2.8, 0.8, 0.3, 1.1, 2.1, 0.5, 3, 0.5, φ1), side view (2.6, 2.4, 1.6, R0.8, 0.3, 1, 5, 0.5), and cross-section (2.6, 2.4, 1.8, 6.8, 8.4, 9, 0.15, 0.87, 3.5, 1.5). Labels: ON starting position, Total travel position.</p>	<p>Circuit diagram for SW-111 showing a switch symbol and PCB dimensions (8, 1.3, 1.8, 3.5, 0.87, 2.8).</p>
3	<p>SW-114S</p> <p>Technical drawings for SW-114S showing top view, side view, and cross-section. Dimensions include: top view (8, 0.6, 0.5, 2.8, 0.8, 0.3, 1.7, 2.7, 0.5, 3, 0.5, φ1), side view (2.6, 2.4, 1.6, R0.8, 0.3, 1, 5, 1.5), and cross-section (2.6, 2.4, 1.8, 7.8, 9.4, 10, 0.15, 1.87, 4.5, 1.5). Labels: ON starting position, Total travel position.</p>	<p>Circuit diagram for SW-114S showing a switch symbol and PCB dimensions (8, 1.3, 1.8, 4.5, 1.87, 1.1, 1.05, 2.8).</p>

## Dimensions

Unit : mm

No	Style	P.C.B reference mounting hole Dimensions , Circuit diagram (TOP VIEW)
4	SW-115-1S3 	

## Notes

- The appearance and specifications of the product may be modified to improve its performance without prior notice.
- This catalog shows only outline specifications. When using the product, please obtain formal specifications.
- Please see appendix [Cautions in Using Switches ].
- This switch is not washable.
- Soldering shall be done with actuator at free position and take care not to attach flux on plastic portion.
- Note that if the stress is applied to the terminals during soldering, they might cause deformation and defects in electrical performance.
- In manual soldering, consideration should be given to apply the soldering iron to the tip of the terminal so that unusual pressure is not applied to the terminal.
- In case circuit and software design consideration against chattering and bouncing shall be taken as below.
  - Read a few times. (Ex. 5ms for 5 times)
  - Set delay time.
  - Set integral circuit.
- As to threshold voltage, center setting is recommended.
- Care shall be taken not to apply stress to the body of switch as it may affect the performance.
- Please confirm the performance on actual operation by simulation with actual environment environments for high reliability.