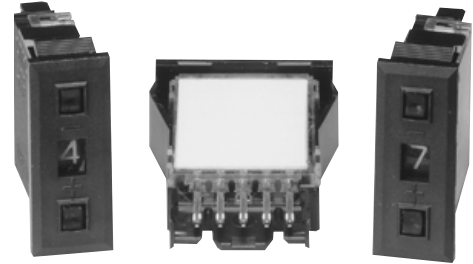


## SCSI Thumbwheel Switch

## A7F

### Compact Thumbwheel Switch with Pen-push Operation

- Available in both vertical and horizontal models
- Compact, thin, and space-saving
- Pen-push type operation prevents mishandling
- No panel mounting plates required
- Built-in connector terminal connects to any device with ease



### Ordering Information

Output code	Type	Enclosure Rating	Part Number	
			Horizontal	Vertical
			Black case	Black case
BCD (with 8 positions)	Pen-push	IP50	<b>A7F-241-1</b>	<b>A7F-241-1-1</b>

#### ■ ACCESSORIES

Accessory	Contact	Color	Part Number
AMP MT connector (Insulation displacement type)	—	White	<b>173977-5</b>
	—	Light blue	<b>2-173977-5</b>
	—	Cream yellow	<b>4-173977-5</b>
	—	Black	<b>6-173977-5</b>
AMP CT (Crimp type)	175102-1 or 175161-1	—	<b>175778-5</b>

### Characteristics

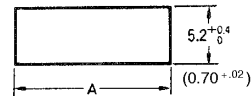
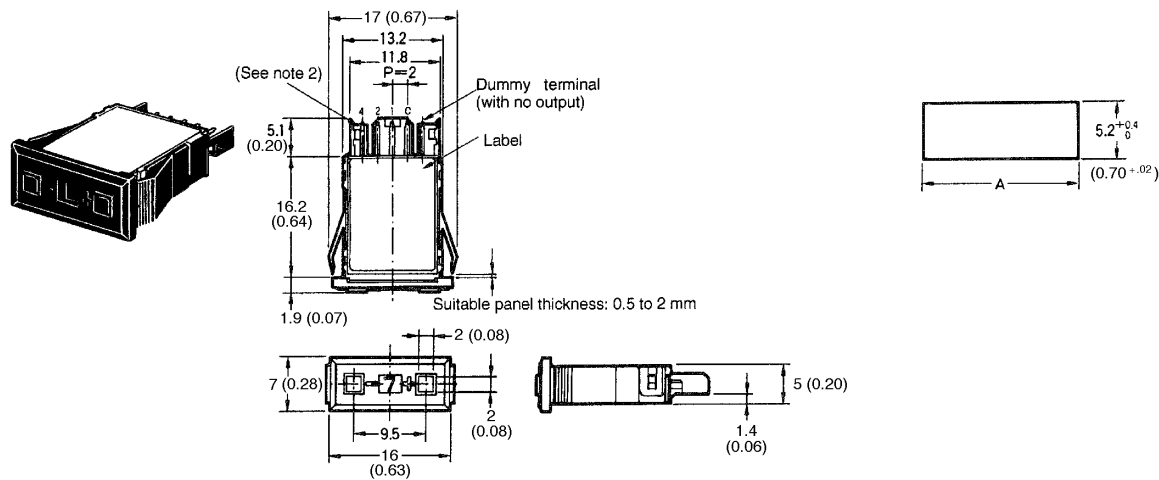
Switching capacity		1 mA to 0.1 A at 5 VDC
Carry current		1 A max.
Contact resistance		1 Ω max.
Insulation resistance		10 MΩ min. (at 250 VAC) between terminals of same polarity 100 MΩ min. (at 500 VDC) between each terminal and ground
Dielectric strength		250 VAC, 50/60 Hz for 0.2 s between terminals of same polarity 1,000 VAC, 50/60 Hz for 0.2 s between each terminal and ground
Vibration resistance		10 to 55 Hz, 1.5 mm double amplitude
Shock resistance		500 m/s <sup>2</sup> (approx. 50 g) min.
Life expectancy	Mechanical	2,000 steps min.
	Electrical	2,000 steps min.
Ambient temperature	Operating	-10°C to 70°C (with no icing)
	Storage	-20°C to 80°C (with no icing)
Ambient humidity	Operating	85% max. (with no icing or condensation)
Operating force		350 g max.

# Dimensions

Unit: mm (inch)

## A7F-241-1

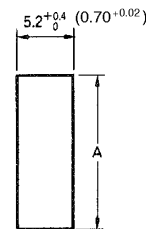
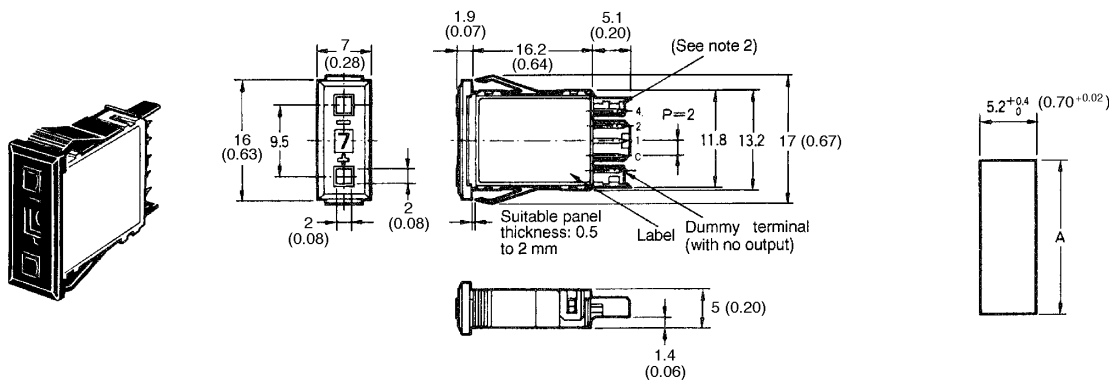
### Panel Cutout



Panel thickness	A
0.5 to 1.5 mm (0.02 to 0.06)	14.7±0.1 (0.58±0.004)
1.5 to 2.0 mm (0.06 to 0.08)	14.9±0.1 (0.59±0.004)

## A7F-241-1

### Panel Cutout



Panel thickness	A
0.5 to 1.5 mm (0.02 to 0.06)	14.7±0.1 (0.58±0.004)
1.5 to 2.0 mm (0.06 to 0.08)	14.9±0.1 (0.59±0.004)

Note: 1. When engaging the mounting hooks of the A7F with any panel mounting hole, the clearance of the panel mounting hole must not be 0.2 mm or more, otherwise the mounting hooks will not engage with the panel mounting hole. Make sure that the mounting hooks have engaged with the panel mounting hole securely before using the A7F.  
 2. Connect to AMP's 5-pole CT Connector.

## Precautions

### ■ ENVIRONMENT

Do not use the A7F in places where there is ammonia gas, chlorine, or sulfur dioxide.

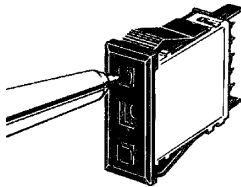
Do not put wet, oily, or dirty fingers on the operation switches of the A7F.

### ■ HANDLING

The molded components of the A7F use polyacetal resin and ABS resin. Carefully use alcohol to clean the molded components so that alcohol will not penetrate into the interior of the A7F. Do not use paint thinner to clean the molded components.

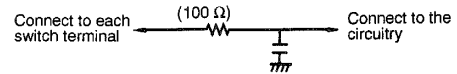
Do not press the + and – push buttons of the A7F simultaneously.

Press the setting switch with the tip of a ball-point pen. Do not use pencil point or mechanical pencil point to press the setting switch, otherwise the lead of the pencil or mechanical pencil may be broken and A7F malfunctions may result due to fragments of the broken lead.



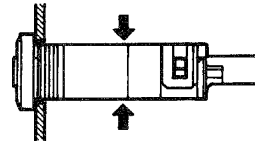
Static electricity while touching the operating switch may damage the circuitry of the A7F. To protect the circuitry from static electricity, a protection circuit is required.

### ■ CIRCUIT EXAMPLE



Do not impose any force on the switch label side and the cover of the A7F, otherwise the A7F will need an operation force that is greater than normal or the push buttons of the A7F will be locked.

Do not impose external force on the top and bottom of the A7F (as shown in the following illustration) when mounting.



# OMRON

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