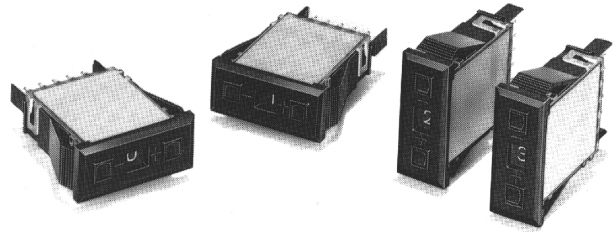


## SCSI Thumbwheel Switch



## A7F

**Conforms to SCSI (SCSI-2) and Ideal for ID Number Setting Use for External Hard Disks Connected to Computers**

- Conforms to SCSI (SCSI-2) with 0 to 7 indication.
- Vertical and horizontal models designed to the mounting restriction of the applications.
- Compact, thin, and space-saving.
- Pen-push type which prevents against mishandling.
- No panel mounting plates required.
- Built-in connector terminal connects to any device with ease.



### Ordering Information

Model	A7F-241-1	A7F-241-1-1
Direction	Horizontal	Vertical
Appearance		
Case color	Black	
Output code	BCD (with 8 positions)	
Operation method	Pen-push type	
Enclosure rating	IP50	

#### Connector

Use AMP's 5-pole CT Connector.

Name	Model	Contact
Press-fit MT connector	173977-5 (White)	---
	2-173977-5 (Light blue)	
	4-173977-5 (Cream yellow)	
	6-173977-5 (Black)	
Solderless connector	175778-5	175102-1 or 175161-1

## Specifications

### ■ Ratings/Characteristics

Switching capacity	1 mA to 0.1 A at 5 VDC
Carry current	1 A max.
Contact resistance	1 $\Omega$ max.
Insulation resistance	10 M $\Omega$ min. (at 250 VAC) between terminals of same polarity 100 M $\Omega$ 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. 50G) 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)
Max. operating force	3.43 N (350 gf)

## Operation

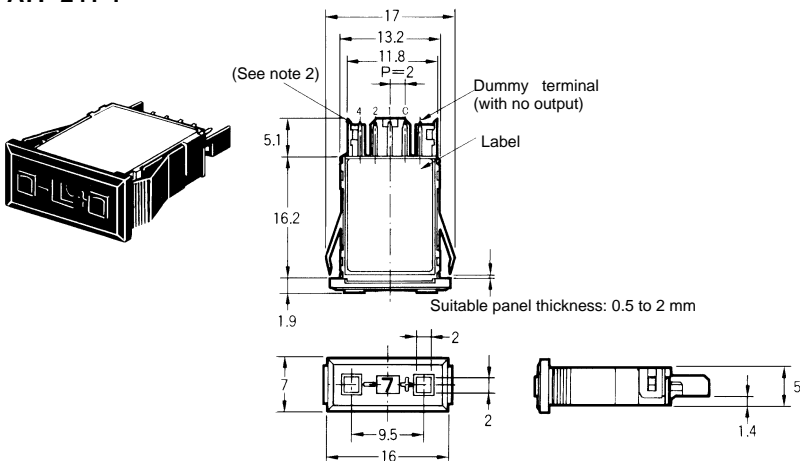
### ■ Output Code

Connector terminal no.	1	2	3	4	5
Switch terminal no.	—	C	1	2	4
Thumbwheel	Position	Indication	Connection to C (COM) terminal		
	0	0			
	1	1	ON		
	2	2		ON	
	3	3	ON	ON	
	4	4			ON
	5	5	ON		ON
	6	6		ON	ON
7	7	ON	ON	ON	

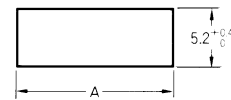
# Dimensions

**Note:** All units are in millimeters unless otherwise indicated.

## A7F-241-1



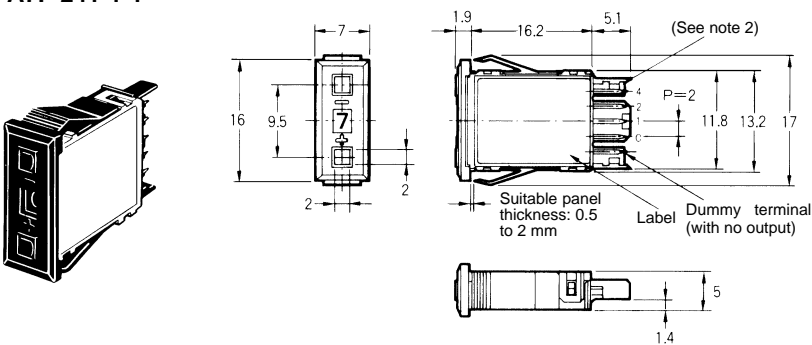
### Panel Cutout



Panel thickness	A
0.5 to 1.5 mm	14.7±0.1
1.5 to 2.0 mm	14.9±0.1

- 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.

## A7F-241-1-1



### Panel Cutout



Panel thickness	A
0.5 to 1.5 mm	14.7±0.1
1.5 to 2.0 mm	14.9±0.1

- 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.

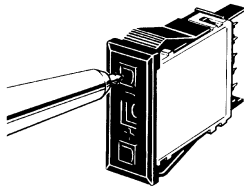
Do not put wet, oily, or dirty fingers on the operation switches of the A7F.

### Handling

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

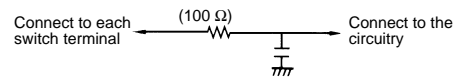
Do not press the + and – push-buttons of the A7F simultaneously.

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.



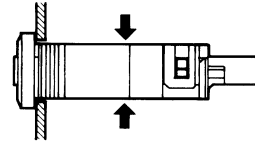
Static electricity while touching the operating switch may damage the circuitry of the A7F. To protect the circuitry from static electricity, a protection circuit is required.

### 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 the A7F.



**ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.**

To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.