## Reliable Thumbwheel Switch with Dustproof Construction and Easy Front Mounting

■ Pen-push switches are designed especially for use in portable equipment

- Internal contacts boost reliability



## Ordering Information

Note: A7DP switch units can be ordered with limited setting ranges. When ordering, include the range in the model number as shown in the following examples:

A7DP-206-S06 (Light gray A7DP with a range of 0 to 6)
A7DP-206-S18-1 (Black A7DP with a range of 1 to 8)

1. Switch units
2. End caps
3. Spacer
4. Connectors

## SWITCH UNITS



| Output code |  | Part number |  |
| :--- | :--- | :--- | :--- |
|  |  | PCB terminal |  |
|  |  | Light gray case | Black case |
| 06 (binary code) | Pen-push | A7DP-206 | A7DP-206-1 |

Note: Switch units, end caps, spacers, and connectors must be ordered separately and are not factory-assembled for shipment.

## ACCESSORIES

| Accessory | Part number |  |
| :--- | :--- | :--- |
|  | Light gray | Black |
|  | A7D-2M | A7D-2M-1 |
| Spacer | A7D-2PA | A7D-2PA-1 |

Note: 1. When placing your order, please specify the model numbers and quantities of required switch units, end caps, and spacers, respectively. (Note that switch units and accessories are not factory-assembled for shipment.)
2. End caps come as a set, left and right.

To order spacers marked with measurement units or symbols, select the unit or symbol from the table below and put its code letter in place of the final letter A in the model number.

Example: A7D-2PK (light gray spacer with ${ }^{\circ} \mathrm{C}$ mark for A7DP)

| Code letter | A | B | C | D | E | F | G | H | J | K | L | Q | T | U |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Marking | Blank | SEC | MIN | H | g | kg | mm | cm | m | ${ }^{\circ} \mathrm{C}$ | PCS | x 10 SEC | 0 | $\cdot$ |

## Specifications

$\qquad$

## CHARACTERISTICS

| Switching capacity | 1 mA to $0.1 \mathrm{~A}, 5$ to 30 VDC (resistive load) |
| :--- | :--- |
| Carry current | 100 mA |
| Contact resistance | $200 \mathrm{~m} \Omega$ max. |
| Insulation resistance | $10 \mathrm{M} \Omega \mathrm{min}$. (at 250 VDC ) between <br> nonconnected terminals |
|  | $100 \mathrm{M} \Omega$ min. (at 500 VDC ) between each <br> terminal and noncurrent carrying part |
|  | $250 \mathrm{VAC}, 50 / 60 \mathrm{~Hz}$ for 1 minute between <br> nonconnected terminals |
|  | $1,000 \mathrm{VAC}, 50 / 60 \mathrm{~Hz}$ for 1 minute between each terminal and noncurrent carrying part |
| Operating force | 350 g max. |
| Vibration resistance | 10 to $55 \mathrm{~Hz}, 1.5 \mathrm{~mm}$ double amplitude |
| Shock resistance | $500 \mathrm{~m} / \mathrm{s}^{2}($ approx. 50 G$)$ min.. |
| Ambient temperature | $-10^{\circ}$ to $70^{\circ} \mathrm{C}$ (no condensation) |
| Storage temperature | $-20^{\circ}$ to $80^{\circ} \mathrm{C}$ |
| Humidity | $35 \%$ to $85 \%$ |
| Service life | 30,000 steps min. |
| Weight (per unit) | 20,000 steps min. |

Note: Data shown are of initial value

## Dimensions

Unit: mm (inch)

## ■ PEN-PUSH SWITCHES A7DP-206(206-1)



Note: 1. Unless otherwise specified, a tolerance of $\pm 0.4 \mathrm{~mm}$ applies to all dimensions.
2. Each model number applies to a single switch unit and not to the switch assembly as shown in the drawings.
3. Common terminal " $C$ " is at the bottom when the switch is viewed from the fron.

| Number of <br> units $(\mathrm{n})$ | A <br> $(\mathrm{n} \times 5.1+5)$ | B <br> $(\mathrm{n} \times 5.1+3)$ | C |
| :--- | :--- | :--- | :--- |
| 1 | $10.1(0.40)$ | $8.1(0.32)$ | $8.4(0.33)$ |
| 2 | $15.2(0.60)$ | $13.2(0.52)$ | $13.5(0.53)$ |
| 3 | $20.3(0.80)$ | $18.30(.72)$ | $18.6(0.73)$ |
| 4 | $25.4(1.00)$ | $23.4(0.92)$ | $23.7(0.93)$ |
| 5 | $30.5(1.20)$ | $28.5(1.12)$ | $28.8(1.13)$ |
| 6 | $35.5(1.40)$ | $33.5(1.32)$ | $33.9(1.33)$ |
| 7 | $40.6(1.60)$ | $38.6(1.52)$ | $39.0(1.53)$ |
| 8 | $45.7(1.80)$ | $43.7(1.72)$ | $44.1(1.74)$ |
| 9 | $50.8(2.00)$ | $48.8(1.92)$ | $49.2(1.94)$ |
| 10 | $55.9(2.20)$ | $53.9(2.12)$ | $54.3(2.14)$ |

## END CAPS



SPACERS
A7D-2PA(-2PA-1)


## TERMINALS

06 Output code
A7DP
PCB terminals


## Hints on Correct Use

Refer to HINTS ON CORRECT USE under the General Information section.

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