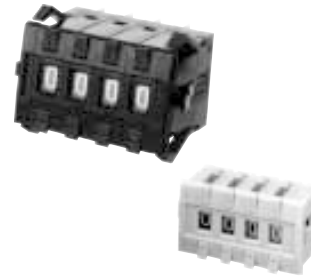


Reliable Thumbwheel Switch with Dustproof Construction and Easy Front Mounting

- Locking switches cut down operating errors in control panels
- Internal contacts boost reliability

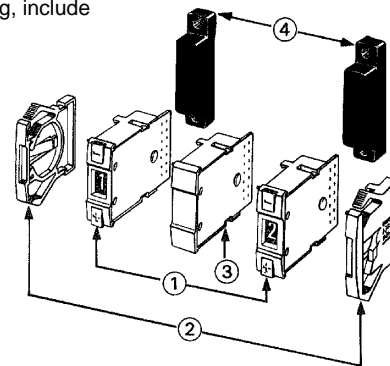


Ordering Information

Note: A7BL switch units can be ordered with limited setting ranges. When ordering, include the range in the model number as shown in the following examples:

A7BL-206-S06 (Light gray A7BL with a range of 0 to 6)
A7BL-206-S18-1 (Black A7BL with a range of 1 to 8)

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



SWITCH UNITS

| Output code | Type | Part number | |
|------------------------------------|---------|-----------------|-------------------|
| | | Solder terminal | |
| 06 (binary code) | Locking | Light gray case | Black case |
| | | A7BL-206 | A7BL-206-1 |
| 07 (binary code w/diode provision) | Locking | A7BL-207 | A7BL-207-1 |

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 |
| End cap | A7B-M | A7B-M-1 |
| Spacer | A7B-PA | A7B-PA-1 |
| Connector | Solder terminal | A7B-C |
| | PCB terminal | A7B-CP |

- 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: A7B-PK (light gray spacer with °C mark for A7BL)

| 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 | °C | PCS | x10 SEC | 0 | • |

Specifications

CHARACTERISTICS

| | | |
|-----------------------|---|--------------------|
| Switching capacity | 50 VAC/28 VDC, 1 mA to 0.1A (resistive load) | |
| Carry current | 1 A max. | |
| Contact resistance | 200 mΩ max. | |
| Insulation resistance | 10 MΩ min. (at 500 VDC) between nonconnected terminals | |
| | 1,000 MΩ min. (at 500 VDC) between each terminal and noncurrent carrying part | |
| Dielectric strength | 600 VAC, 50/60 Hz for 1 minute between nonconnected terminals | |
| | 1,000 VAC, 50/60 Hz for 1 minute between each terminal and noncurrent carrying part | |
| Operating force | 550 g max. | |
| Vibration resistance | 10 to 55 Hz, 1.5 mm double amplitude | |
| Shock resistance | 500 m/s ² (approx. 50 G) min. | |
| Ambient temperature | -10° to 65°C (no condensation) | |
| Storage temperature | -20° to 80°C | |
| Humidity | 45% to 85% | |
| Service life | Mechanical | 100,000 steps min. |
| | Electrical | 50,000 steps min. |
| Weight (per unit) | Approx. 4.1 g | |

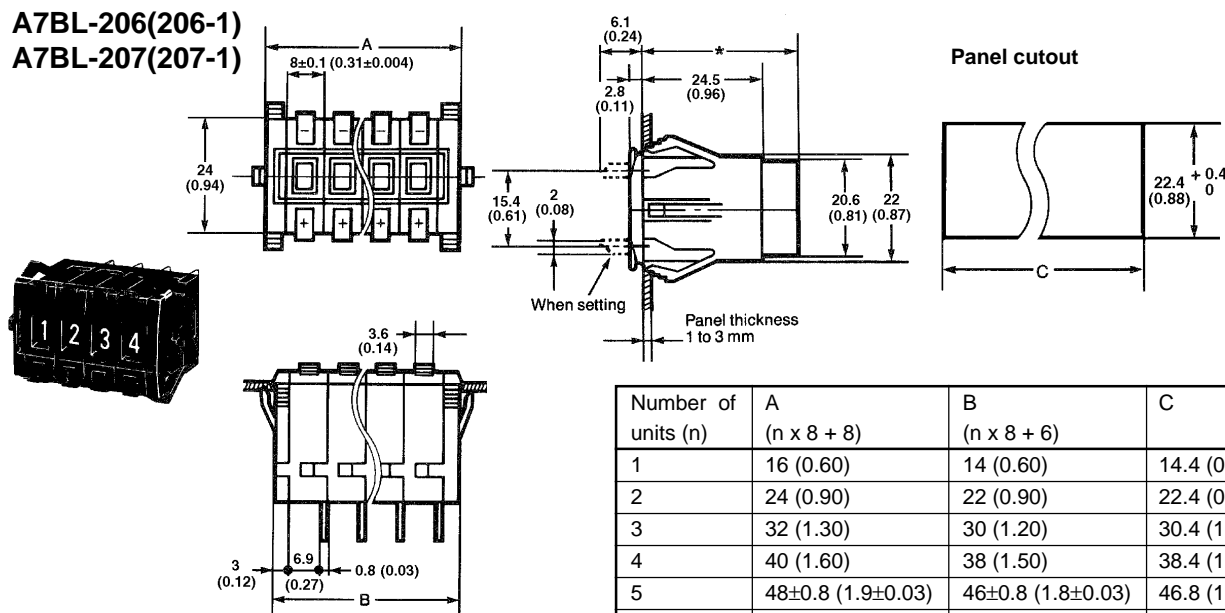
Note: Data shown are of initial value

Dimensions

Unit: mm (inch)

LOCKING SWITCHES

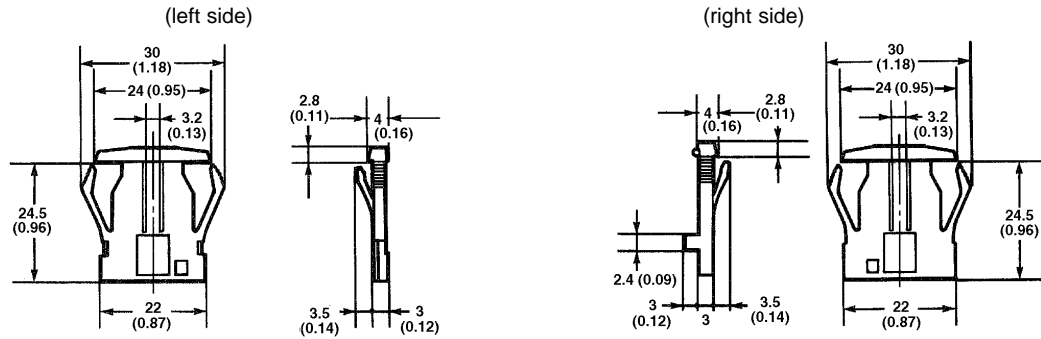
A7BL-206(206-1)
A7BL-207(207-1)



| Number of units (n) | A (n x 8 + 8) | B (n x 8 + 6) | C |
|---------------------|-------------------|-------------------|-------------|
| 1 | 16 (0.60) | 14 (0.60) | 14.4 (0.57) |
| 2 | 24 (0.90) | 22 (0.90) | 22.4 (0.88) |
| 3 | 32 (1.30) | 30 (1.20) | 30.4 (1.20) |
| 4 | 40 (1.60) | 38 (1.50) | 38.4 (1.50) |
| 5 | 48±0.8 (1.9±0.03) | 46±0.8 (1.8±0.03) | 46.8 (1.80) |
| 6 | 56±0.8 (2.2±0.03) | 54±0.8 (2.1±0.03) | 54.8 (2.20) |
| 7 | 64±0.8 (2.5±0.03) | 62±0.8 (2.4±0.03) | 62.8 (2.50) |
| 8 | 72±0.8 (2.8±0.03) | 70±0.8 (2.7±0.03) | 70.8 (2.80) |
| 9 | 80±0.8 (3.1±0.03) | 78±0.8 (3.0±0.03) | 78.8 (3.10) |
| 10 | 88±0.8 (3.5±0.03) | 86±0.8 (3.4±0.03) | 86.8 (3.40) |

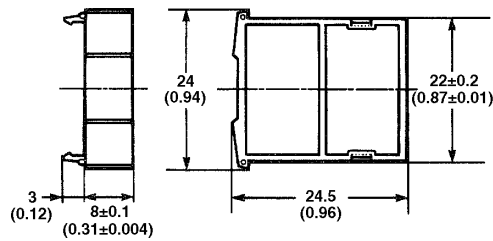
- Note:
- Unless otherwise specified, a tolerance of ±0.4 mm applies to all dimensions.
 - Each model number applies to a single switch unit and not to the switch assembly as shown in the drawings.
 - Common terminal "C" is at the bottom when the switch is viewed from the front.
 - The asterisk "*" indicates a dimension of 32.5 mm for a switch unit with an output code pf 06 and 43.5 mm for one with an output code of 07.

■ END CAPS
A7B-M(-M-1)

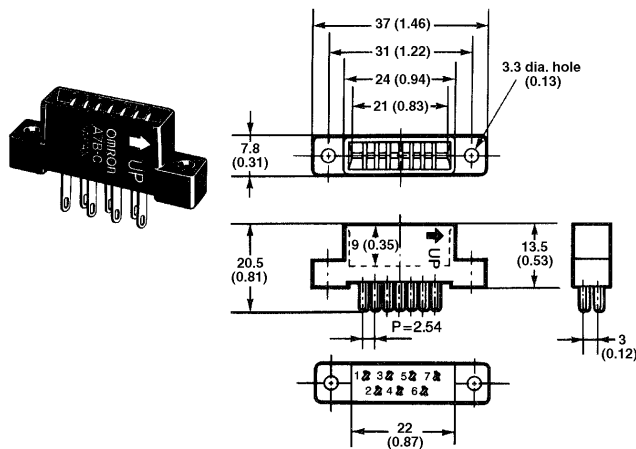


Note: Unless otherwise specified, a tolerance of ± 0.4 mm applies to all dimensions

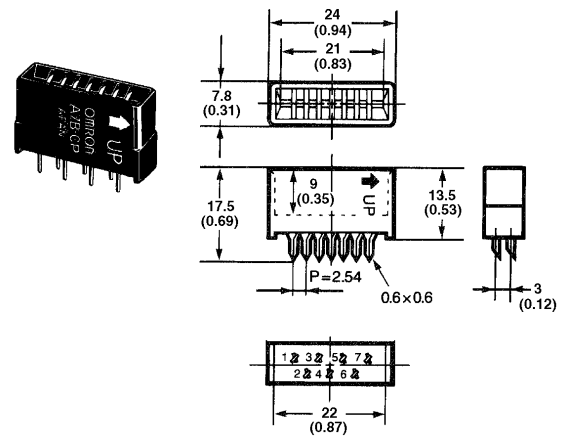
■ SPACERS
A7B-PA(-PA-1)



■ CONNECTORS
A7B-C (for solder terminals)



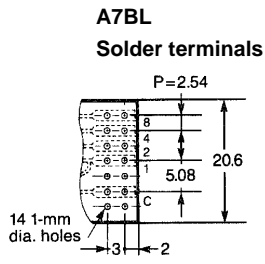
A7B-C (for PCB terminals)



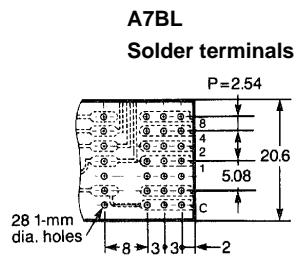
Note: Unless otherwise specified, a tolerance of ± 0.4 mm applies to all dimensions

■ TERMINALS

06 Output code



07 Output code



Hints on Correct Use

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

NOTE: DIMENSIONS ARE SHOWN IN MILLIMETERS. To convert millimeters to inches divide by 25.4.

OMRON

OMRON ELECTRONICS LLC.

One East Commerce Drive
Schaumburg, IL 60173
1-800-55-OMRON

OMRON ON-LINE

Global - <http://www.omron.com>
USA - <http://www.omron.com/oei>
Canada - <http://www.omron.com/oci>

OMRON CANADA, INC.

885 Milner Avenue
Scarborough, Ontario M1B 5V8
416-286-6465