

# A02 series

## Keylock & selector switches

Distinctive features and specifications

A028\_AX1607US



- ❑ Panel Sealed to IP65
- ❑ Single pole to four pole
- ❑ Custom engraving & overmould key
- ❑ Captive screw & push on tab terminals
- ❑ 12A 250VAC

### ELECTRICAL SPECIFICATIONS

- **Current/Voltage Rating** : 25mA 5VAC Min, 12A 250VAC, 16A 250VAC max  
12A 12VDC max
- **Initial Contact Resistance** : 10mΩ max at 1A 4VDC
- **Insulation Resistance** : 50MΩ min
- **Dielectric Strength** : 2KV between open contacts, 4KV live to accessible
- **Electrical Life** : 50,000 cycles min
- **Contact Gap** : Double break 2 x 1,5mm (0.059)
- **Insulation** : Class 2

### MECHANICAL SPECIFICATIONS

- **Mechanical Life (operator)** : Momentary, 1 million cycles, maintained 100,000 cycles
- **Lamp** : Midget grove T1 ¾ filament, neon or LED
- **Terminals** : M3 captive screw and push on tab terminal

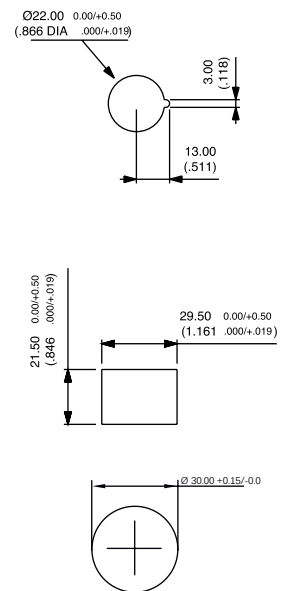
### GENERAL SPECIFICATIONS

- **Operating Temperature** : -20°C to +85°C
- **Sealing** : Panel sealed to IP65, rear of panel IP40

### AGENCY APPROVALS



### PANEL CUT OUT



### MATERIALS

- **Key** : Nickel plated steel
- **Key Barrel** : Chrome plated alloy
- **Optional Metal Bezel** : Nickel plated brass
- **Operator** : PBT
- **Nut** : ABS
- **Camtrack Momentary** : PPE
- **Camtrack Maintained** : PPSU
- **Switch Block 1 & 2 Pole** : PBT
- **Switch Block 3 & 4 Pole** : PEI
- **Contacts** : Gold plated silver



Dimensions : first dimensions are in mm while inches are shown in brackets.  
Refer to the following pages for further information.



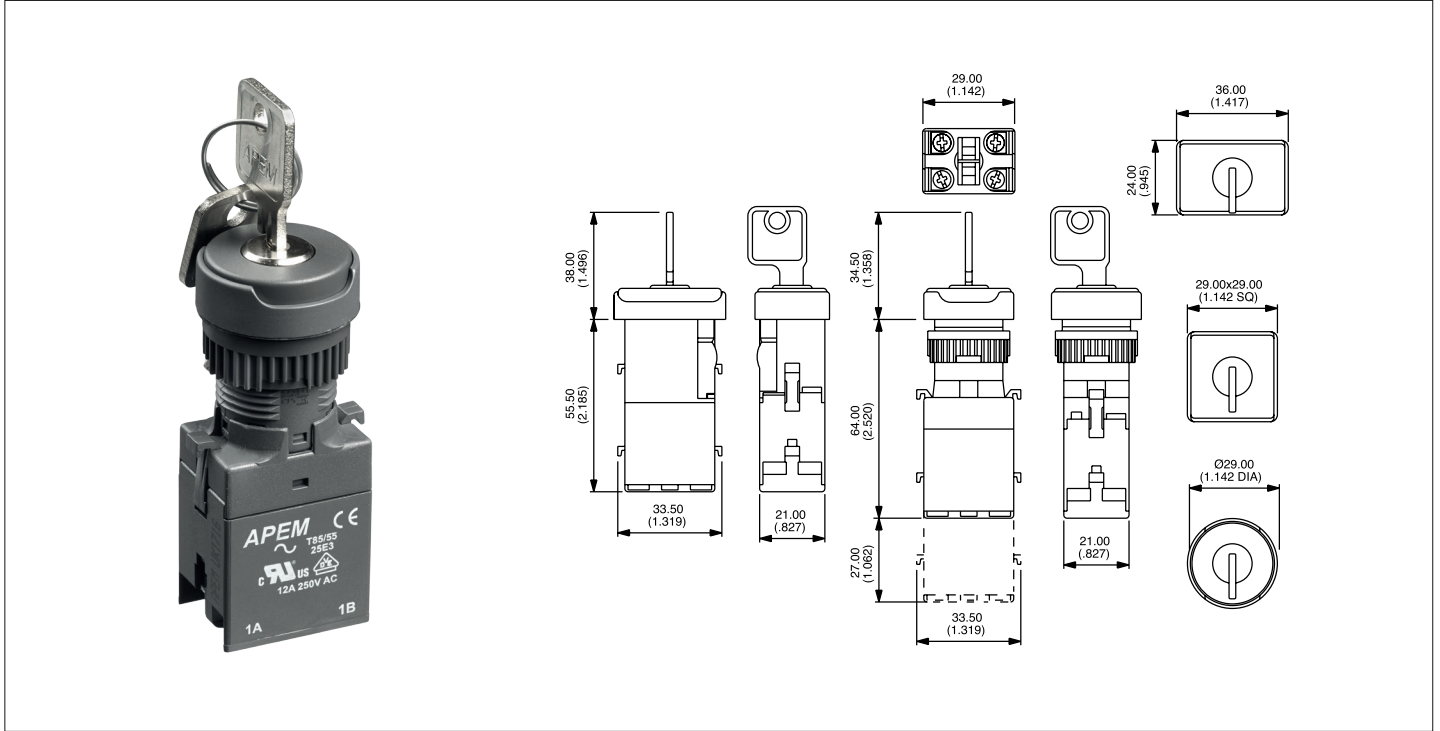
Mounting accessories : standard hardware 1 nut and 1 sealing washer.

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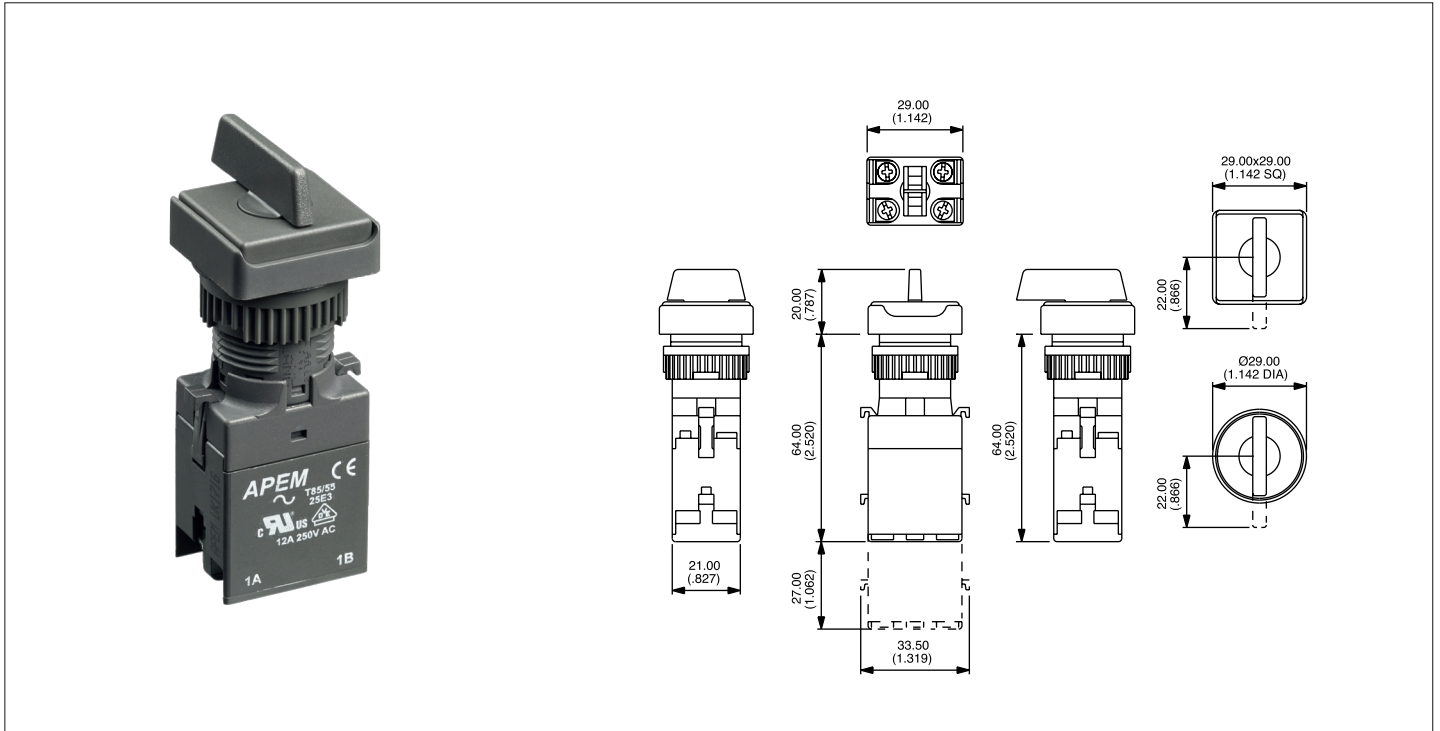
## Keylock & selector switches

Panel cut-out  $\text{Ø}22\text{mm}$  (0.866) or 29.5 (1.161) x 21.5(0.846)mm

### Keylock



### Selector



# A02 series

## Keylock & selector switches

Overview

### Keylock

| Operator                 |                    | + Switch block |                            |               |         |
|--------------------------|--------------------|----------------|----------------------------|---------------|---------|
| Bezel                    | Description        | Part No.       | Key removable in positions | Contacts      | Part No |
| <input type="checkbox"/> | 2 pos. maintained  | A028101        | A-C                        | 1 N.O.        | A02501  |
| <input type="checkbox"/> | 2 pos. momentary   | A028102        | A                          | 1 N.C.        | A02502  |
| <input type="checkbox"/> | 3 pos. maintained  | A028105        | A-B-C                      | 2 N.O.        | A02503  |
| <input type="checkbox"/> | 3 pos. momentary   | A028106        | A                          | 2 N.C.        | A02504  |
| <input type="checkbox"/> | 3 pos. mainL, momR | A028107        | A                          | 1 N.O./1 N.C. | A02505  |
| <input type="checkbox"/> | 3 pos. momL, mainR | A028108        | A-C                        |               |         |
| <input type="checkbox"/> | 2 pos. maintained  | A028201        | A-C                        |               |         |
| <input type="checkbox"/> | 2 pos. momentary   | A028202        | A                          |               |         |
| <input type="checkbox"/> | 3 pos. maintained  | A028205        | A-B-C                      |               |         |
| <input type="checkbox"/> | 3 pos. momentary   | A028206        | A                          |               |         |
| <input type="checkbox"/> | 3 pos. mainL, momR | A028207        | A-B                        |               |         |
| <input type="checkbox"/> | 3 pos. momL, mainR | A028208        | A-C                        |               |         |
| <input type="checkbox"/> | 2 pos. maintained  | A028301        | A-C                        | 1 N.O.        | A02506  |
| <input type="checkbox"/> | 2 pos. momentary   | A028302        | A                          | 1 N.C.        | A02507  |
| <input type="checkbox"/> | 3 pos. maintained  | A028305        | A-B-C                      | 2 N.O.        | A02508  |
| <input type="checkbox"/> | 3 pos. momentary   | A028306        | A                          | 2 N.C.        | A02509  |
| <input type="checkbox"/> | 3 pos. mainL, momR | A028307        | A-B                        | 1 N.O./1 N.C. | A02510  |
| <input type="checkbox"/> | 3 pos. momL, mainR | A028308        | A-C                        |               |         |

| Second switch block |         |
|---------------------|---------|
| Contacts            | Part No |
| 1 N.O.              | A02506  |
| 1 N.C.              | A02507  |
| 2 N.O.              | A02508  |
| 2 N.C.              | A02509  |
| 1 N.O./1 N.C.       | A02510  |

To achieve 3 or 4 pole switching, add second switch block from above table.

**Key Rotation – 2 position switches**

The model numbers shown are for switches with anticlockwise lever rotation.

For clockwise rotation, replace:

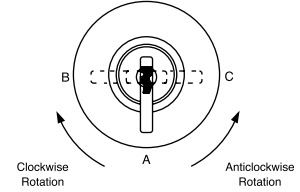
01 with 20  
02 with 19

at the end of the model number

- 2 standard keys are supplied
- 20 key barrel types available from stock
- Non-removable key positions: contact APEM components

Bezel:  rectangular  square  round. 'pos' - position, 'mainL' - maintained left 'momR' - momentary right, etc



### Selector

| Operator                 |                    | + Switch block |            |               |         |
|--------------------------|--------------------|----------------|------------|---------------|---------|
| Bezel                    | Description        | Short lever    | Long lever | Contacts      | Part No |
| <input type="checkbox"/> | 2 pos. maintained  | A029201        | A029101    | 1 N.O.        | A02501  |
| <input type="checkbox"/> | 2 pos. momentary   | A029202        | A029102    | 1 N.C.        | A02502  |
| <input type="checkbox"/> | 3 pos. maintained  | A029203        | A029103    | 2 N.O.        | A02503  |
| <input type="checkbox"/> | 3 pos. momentary   | A029204        | A029104    | 2 N.C.        | A02504  |
| <input type="checkbox"/> | 3 pos. mainL, momR | A029205        | A029105    | 1 N.O./1 N.C. | A02505  |
| <input type="checkbox"/> | 3 pos. momL, mainR | A029206        | A029106    |               |         |
| <input type="checkbox"/> | 2 pos. maintained  | A029401        | A029301    |               |         |
| <input type="checkbox"/> | 2 pos. momentary   | A029402        | A029302    |               |         |
| <input type="checkbox"/> | 3 pos. maintained  | A029403        | A029303    |               |         |
| <input type="checkbox"/> | 3 pos. momentary   | A029404        | A029304    |               |         |
| <input type="checkbox"/> | 3 pos. mainL, momR | A029405        | A029305    |               |         |
| <input type="checkbox"/> | 3 pos. momL, mainR | A029406        | A029306    |               |         |

| Second switch block |         |
|---------------------|---------|
| Contacts            | Part No |
| 1 N.O.              | A02506  |
| 1 N.C.              | A02507  |
| 2 N.O.              | A02508  |
| 2 N.C.              | A02509  |
| 1 N.O./1 N.C.       | A02510  |

To achieve 3 or 4 pole switching, add second switch block from above table.

**Lever Rotation – 2 position switches**

The model numbers shown are for switches with anticlockwise lever rotation.

For clockwise rotation, replace:

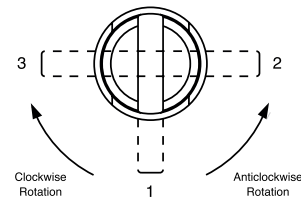
01 with 07  
02 with 08

at the end of the model number

Optional engraving on lever end add "WL" to the end of the part number.

Bezel:  square  round



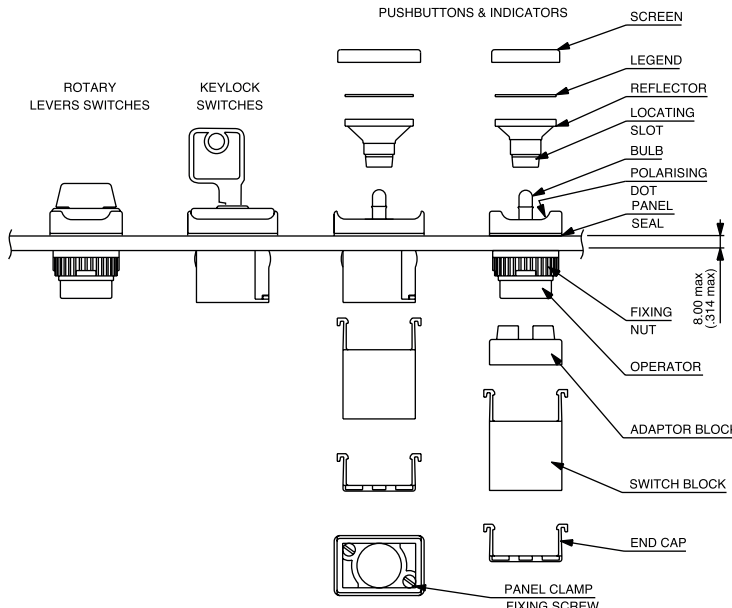
Unsealed switches & indicators (IP40) suffix 01 to the end of the part number.  
Screen engraving insertable legends, & bi-color LED's please contact APEM  
For 6.35mm push on tab terminals suffix the switch block part number with SP

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## Keylock & selector switches

Installation & tools

### Installation guide



#### PANEL MOUNTING ASSEMBLY

- Drill/punch hole shaped as shown on page one.
- Assemble front operator through hole and
  - a) Round & square types, tighten nut to a maximum torque of 0.8Nm using tool no. 30-0001. Snap on the adaptor block fit fixing nut and tighten to a maximum
  - b) Rectangular types, tighten the two panel fixing screws in the front to a maximum torque of 6cNm
- Wire chosen switch block as required and snap onto back of operator with optional end cap
- Fit bulb if required using tool No. 30-0002.
- Snap screen onto reflector assembly with legend in between if required and snap onto front operator, take care to line up the locating slot with the polarising dot and not to damage the internal seal
- To place/remove the bulb use the bulb extractor 30-0002.

#### SWITCH BLOCK ASSEMBLY

The switch block snaps onto the adaptor block, to remove, lever out the latches using a small screwdriver taking care not to overbend, pull off the block from the adaptor block.

### Tools



### Accessories

