

## Pushbutton Switches, 30mm, Round or Mushroom Buttons

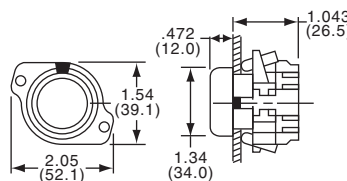
### FLUSH GUARD MOMENTARY

Metal Bushing

Contact blocks not supplied, order separately. (See page I8.)

| Model    | Special Details |
|----------|-----------------|
| M6010(*) | Momentary       |

(\*) Specify color by adding suffix number:  
(0) Black, (2) Red, (4) Yellow, (5) Green, (6) Blue, (9) White.



M6010(\*)

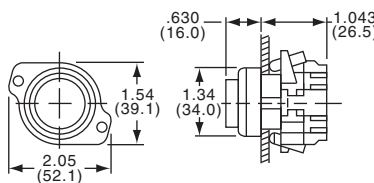
### EXTENDED BUTTON MOMENTARY

Metal Bushing

Contact blocks not supplied, order separately. (See page I8.)

| Model    | Special Details |
|----------|-----------------|
| M6020(*) | Momentary       |

(\*) Specify color by adding suffix number:  
(0) Black, (2) Red, (4) Yellow, (5) Green, (6) Blue, (9) White.



M6020(\*)

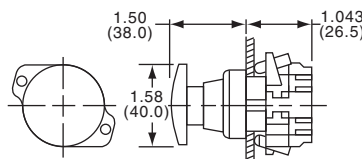
### MUSHROOM HEAD MOMENTARY PUSH MAINTAINED

Metal Bushing

Contact blocks not supplied, order separately. (See page I8.)

| Tyco Electronics | Alcoswitch | Special Details            | Color |
|------------------|------------|----------------------------|-------|
| —                | M6057(*)   | Momentary                  | (*)   |
| 1437610-6        | M60532     | Push-Pull                  | Red   |
| 1-1437610-3      | M60652     | Push-Lock/Twist To Release | Red   |

(\*) Specify color by adding suffix number:  
(0) Black, (2) Red, (3) Orange, (4) Yellow, (5) Green, (6) Blue, (9) White.



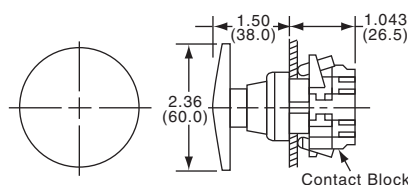
M6057(\*)

### LARGE MUSHROOM HEAD MOMENTARY PUSH

Metal Bushing

Contact blocks not supplied, order separately. (See page I8.)

| Tyco Electronics | Alcoswitch | Special Details | Color |
|------------------|------------|-----------------|-------|
| 1-1437610-2      | M60582     | Momentary       | Red   |



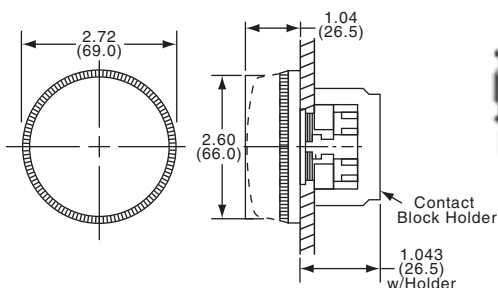
M60582

### LARGE GUARDED MUSHROOM HEAD MOMENTARY PUSH

Metal Bushing. Heavy duty metal bushing and guard.  
Contact blocks not supplied, order separately. (See page I8.)

| Model    | Special Details |
|----------|-----------------|
| M6080(*) | Momentary       |

(\*) Specify color by adding suffix number: (0) Black, (2) Red, (5) Green.

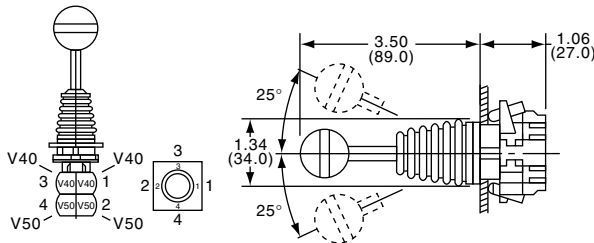


M6080(\*)

## Selector Switches or Joysticks, 30mm



M65510



### 5-POSITION JOYSTICK (4 Active & Center-Off)

#### Metal Bushing

Maintained or momentary model with or without mechanical latch. Inherent design requires use of N.O. and N.C. Contact blocks not supplied, order separately. (See page I8.) Supplied with legend plate (1-2-3-4), black knob.

#### CONTACT ARRANGEMENT

Contact blocks should be placed as shown. All contacts are held open in neutral position. Each number contact closed when activated. Model M65310 has only two active positions, requires one N.O. and one N.C. contact block.

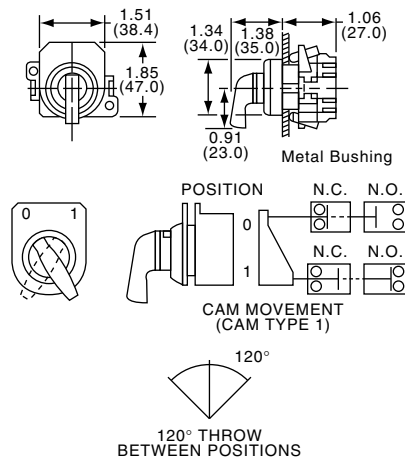
Note: All positions are mutually exclusive and action must pass through neutral for all changes of operator level.

| Tyco Electronics | Alcoswitch | Action               |      |      |      |      |      |
|------------------|------------|----------------------|------|------|------|------|------|
| 3-1437610-5      | M65310     | Momentary, No Latch  | (On) | Off  | (On) |      |      |
| —                | M65500     | Maintained, No Latch | On   | On   | Off  | On   | On   |
| 3-1437610-6      | M65510     | Momentary, No Latch  | (On) | (On) | Off  | (On) | (On) |
| 3-1437610-7      | M65810     | Momentary w/Latch    | (On) | (On) | Off  | (On) | (On) |

(On) indicates momentary position.



M6402(\*)



### 2-POSITION SELECTOR MAINTAINED

#### Metal Bushing

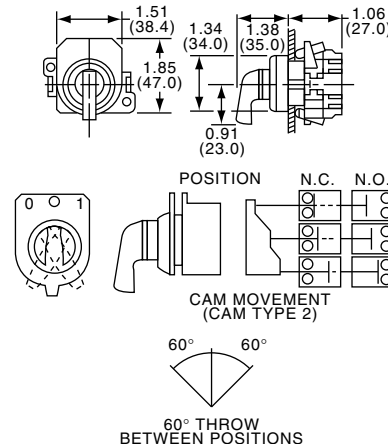
Contact blocks not supplied, order separately. (See page I8.) Legend plant included.

| Model    | Action     | Lever | Position Number |
|----------|------------|-------|-----------------|
| M6402(*) | Maintained | Long  | 0 1             |

(\*) Specify color by adding suffix number: (0) Black, (2) Red.



M6412(\*)



### 3-POSITION SELECTOR MAINTAINED OR MOMENTARY

#### Metal Bushing

Contact blocks not supplied, order separately. (See page I8.) Legend plate included.

| Model    | Action       | Lever | Cam | Position Number |
|----------|--------------|-------|-----|-----------------|
| M6410(*) | Maintained   | Long  | 2   | 2 0 1           |
| M6412(*) | Maintained   | Long  | 3   | 2 0 1           |
| M6470(*) | Mom. 1 Side  | Long  | 2   | 2 0 ← 1         |
| M6480(*) | Mom. 2 Sides | Long  | 2   | 2 → 0 ← 1       |

Indicates momentary return position

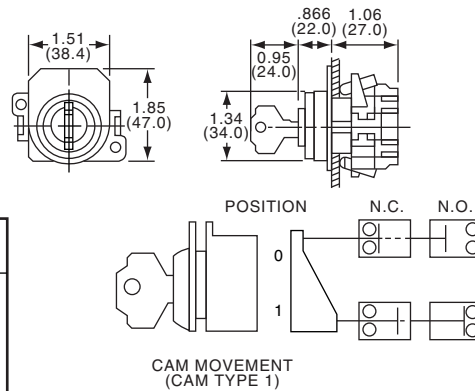
(\*) Specify color by adding suffix number: (0) Black, (2) Red.

## Keylock or Pushbutton Switches, 30mm

### 2 POSITION KEY SELECTOR MAINTAINED OR MOMENTARY

Metal Bushing  
Supplied with two keys and legend plate.  
Contact blocks not supplied, order separately.  
(See page I8)

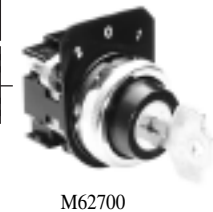
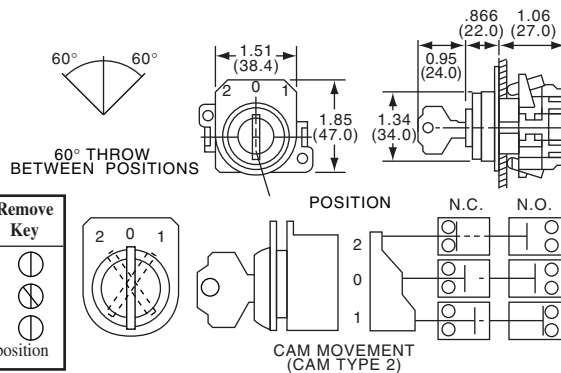
| Tyco Electronics                      | Alcoswitch | Action          | Cam | Position Number | Throw | Remove Key                                                                        |
|---------------------------------------|------------|-----------------|-----|-----------------|-------|-----------------------------------------------------------------------------------|
| 2-1437610-2                           | M6200      | Maintained      | 1   | 0 1             | 60°   |  |
| 2-1437610-3                           | M6201      | Maintained      | 1   | 0 1             | 60°   |  |
| 2-1437610-6                           | M6250      | Momentary       | 1   | 0 ← 1           | 60°   |  |
| 1437617-1                             | G001       | Additional Keys |     |                 |       |                                                                                   |
| ← Indicates momentary return position |            |                 |     |                 |       |                                                                                   |



### 3 POSITION KEY SELECTOR MAINTAINED OR MOMENTARY

Metal Bushing  
Supplied with two keys and legend plate.  
Contact blocks not supplied, order separately.  
(See page I8.)

| Tyco Electronics                      | Alcoswitch | Action          | Cam | Position Number | Remove Key                                                                        |
|---------------------------------------|------------|-----------------|-----|-----------------|-----------------------------------------------------------------------------------|
| 2-1437610-5                           | M6210      | Maintained      | 2   | 2 0 1           |  |
| 2-1437610-7                           | M6270      | Mom. 1 Side     | 2   | 2 0 ◀ 1         |  |
| 2-1437610-8                           | M6280      | Mom. 2 Sides    | 2   | 2 ▶ 0 ◀ 1       |  |
| 1437617-1                             | G001       | Additional Keys |     |                 |                                                                                   |
| ◀ Indicates momentary return position |            |                 |     |                 |                                                                                   |

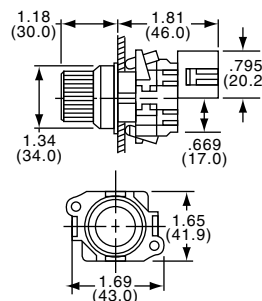


### ILLUMINATED EXTENDED BUTTON MOMENTARY

Metal Bushing  
Lamp not supplied, order separately. (See page I15.) Uses T31/4 miniature bayonet base lamps. Lamp circuit is isolated. Contact blocks not supplied, order separately. (See page I8)

| Model       | Special Details |
|-------------|-----------------|
| M6120(*)406 | Momentary       |

(\*) Specify color by adding suffix number: (2) Red, (4) Yellow, (5) Green, (9) White.



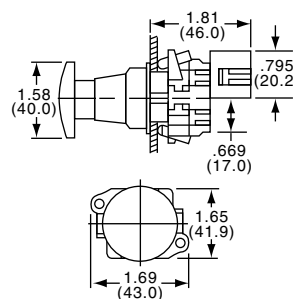
M6120(\*)406

### ILLUMINATED MUSHROOM MAINTAINED OR MOMENTARY

Metal Bushing  
Lamp not supplied, order separately. (See page I15.)  
Uses miniature bayonet base lamps. Lamp circuit is isolated.  
Contact block not supplied, order separately. (See page I8.)

| Model       | Special Details       |
|-------------|-----------------------|
| M6150(*)406 | Momentary             |
| M6153(*)406 | Maintained, Push-Pull |

(\*) Specify color by adding suffix number: (2) Red, (4) Yellow, (5) Green, (9) White.

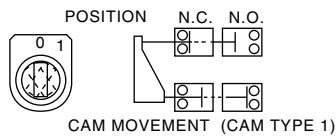
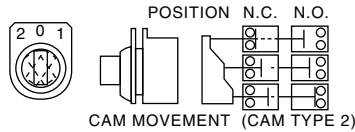
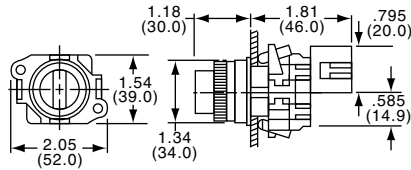


M6150(\*)406

## Selector Switches, 30mm, Illuminated



M6650(\*)06



### ILLUMINATED MAINTAINED SELECTOR

Metal Bushing

Lamp not supplied, order separately. (See page I15.)

G31/2 lamps. Lamp circuit is isolated. Contact blocks not supplied, order separately. (See page I8.)

| Model       | Number Position | Action     | Position Number |
|-------------|-----------------|------------|-----------------|
| M6653(*)406 | 3               | Maintained | 2 0 1           |
| M6650(*)406 | 2               | Maintained | 0 1             |

(\*) Specify color by adding suffix number: (2) Red, (4) Yellow, (5) Green.

| Model      | Action     | 2-Position Operator |   |  | 3-Position Operator |   |   |
|------------|------------|---------------------|---|--|---------------------|---|---|
| V40 or F40 | N.C.       | O                   | 1 |  | 1                   | O | 2 |
| V50 or F50 | N.O.       | X                   | O |  | X                   | O | O |
| VA0 or FA0 | N.O. Early | O                   | X |  | O                   | X | X |
| VR0 or FR0 | N.C. Make  | X                   | O |  | X                   | X | O |
|            | N.C. Break |                     |   |  |                     |   |   |

O=Open  
X = Closed

#### KEY TO SELECTION OF CONTACT BLOCKS

Contact closure variations depend on the contact block models chosen. For these operators listed use this table for guidance in selecting blocks.

## Lamps/Transformers

### LAMPS

The lamps with G31/2 bulbs fit all Reliant 22, Series 6000 illuminated operators and pilot lights. Lamps with T31/4 Bayonet Base fit all Reliant 22 and Series 6000 illuminated models (except QM120, QM122, and M6650, and M6655).

| Tyco Electronics | Alcoswitch | Bulb  | Rated Volts | Design Amps | MSCP | Average Rated Hours |
|------------------|------------|-------|-------------|-------------|------|---------------------|
| 1-1437620-5      | 755        | T31/4 | 6.3         | .15         | .33  | 20,000              |
| 1-1437620-6      | 757        | T31/4 | 28          | .08         | .62  | 7,500               |

\*Not recommended for use with green or blue lenses.



NE51HR

755

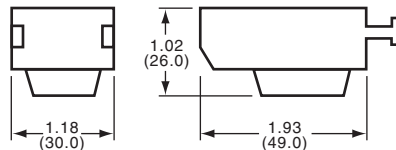
Application Note: For additional specifications, see page K10

### STEP-DOWN TRANSFORMERS

#### AC LINE TO 6V/6.3V

Snap mount on lighted operators and QM600, T6632 and RM600 pilot lights. Spade tipped leads connect to lamp terminals on operator. Screw terminals on primary. Use 6-6.3V lamps. 0-9 to 1.35 watts. Secondary winding is energy-limited.

| Tyco Electronics | Alcoswitch | Primary Voltage |
|------------------|------------|-----------------|
| 1437612-8        | 5B0        | 110-120 VAC     |
| 1437612-7        | 570        | 220-240 VAC     |



U.L.  
Recognized

5B0



## Panel Layouts

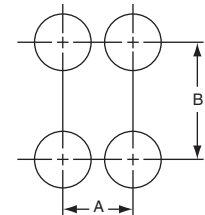
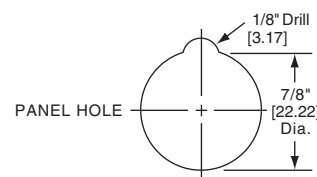
### RELIANT 22 MINIATURE MODELS

#### Recommended hole mounting dimensions\*

Minimum Center-To-Center Spacing  
Inches/(mm)

| Operator Type       | A         | B         |
|---------------------|-----------|-----------|
| Pushbuttons, Pilots | 1.19/30.2 | 1.66/42.2 |
| Mushroom, Selector  | 1.50/37.8 | 1.66/42.2 |
| Others              | 1.94/49.3 | 1.94/49.3 |

\*Check dimensions for layouts using legend plates.



### SERIES 6000 STANDARD MODELS

#### Recommended hole mounting dimensions\*

Minimum Center-To-Center Spacing  
Inches/(mm)

| Operator Type       | A         | B         |
|---------------------|-----------|-----------|
| Pushbuttons, Pilots | 1.88/47.8 | 1.97/50.0 |
| Mushroom, Selector  | 2.25/57.2 | 2.25/57.2 |
| Large Mushroom      | 3.00/76.2 | 3.00/76.2 |

\*Check dimensions for layouts using legend plates.

