

# SEALED, ILLUMINATED SNAP-IN TOGGLE

LOW COST, SNAP-IN TOGGLE FOR WET & DUSTY ENVIRONMENTS, 1 & 2 POLES

The K4 series snap-in toggle switches are rugged, high performance sealed switches designed for use under severe conditions found in marine, appliance, heavy equipment and industrial control applications. They are totally sealed so the switch can withstand direct water spray and submersion, even during operation. Sealed to IP68S with an optional panel seal available, the K4 is also sealed to IP69K.

The K4 series is offered in single and double pole configurations. Toggle action includes 2 and 3-position, momentary and maintained operation in a combination of 13 variations.

Mounting is simple and quick; snaps into panel from the front. The OTTO snap-in design supports a variety of panel thicknesses with just one cutout size specified.

Existing unsealed applications are easily upgraded to sealed functionality because the K series drops into existing panel cutouts.

A choice of models are offered to handle current from 16 amps to low level electronic switching levels.



Single & Double Pole

LED, Neon or  
Incandescent Illumination

## Features:

- Withstands direct water spray
- Sealed to IP68S and IP69K
- Fits industry standard panel openings for drop-in replacement of panel sealed & unsealed switches
- Snap-in feature accommodates a wide range of panel cutouts
- Switches up to 16 amps
- UV & solvent resistant
- Withstands extreme shock & vibration
- Legends & illuminated function indicators available
- 2 & 3-position, momentary, maintained action & center OFF
- RoHS/WEEE/Reach compliant

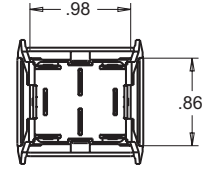
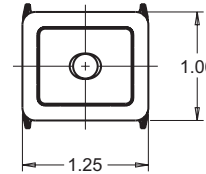
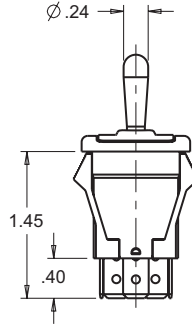
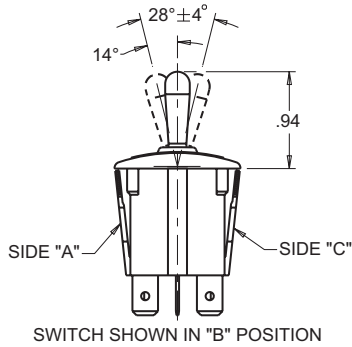
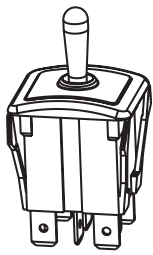
| Standard Characteristics/Ratings: |   |         |
|-----------------------------------|---|---------|
| <b>ELECTRICAL RATINGS:</b>        |   |         |
| Load                              | Sea Level @ 28VDC<br>or 125/250VAC, 60Hz  | Cycles  |
| Resistive                         | 16A   | 25,000  |
| Resistive                         | 10A   | 50,000  |
| Inductive                         | 10A   | 25,000  |
| Lamp                              | 5A  | 25,000  |
| Motor                             | 0.5HP   | 25,000  |
| DVV                               | 1050Vrms except across light terminals  |         |
| Low Level                         | 10mA @ 30mV   | 100,000 |
| <b>Electrical Life:</b>           | See Rating Chart  |         |
| <b>LIGHTING:</b>                  |   |         |
| Light Source                      | Rating  |         |
| Incandescent                      | (VDC) 6V, 12V, 24V  |         |
| Neon                              | (VAC) 125V, 250V  |         |
| LED                               | (VDC) 2V, 6V, 12V, 24V  |         |
| <b>Mechanical Life:</b>           | 100,000 cycles  |         |
| <b>Seal:</b>                      | IP68S and IP69K   |         |
| <b>Operating Temp Range:</b>      | -30°C to +85°C  |         |
| <b>MATERIALS:</b>                 |   |         |
| <b>Case:</b>                      | Thermoplastic   |         |
| <b>Toggle:</b>                    | Stainless steel   |         |
| <b>Terminals/Contact:</b>         | Brass, silver alloy with silver plate, gold plate for low level   |         |
| <b>Terminal Hardware:</b>         | Screws and lockwashers provided when applicable<br>K4 series recommended Quick Connect terminals:<br>AMP 60253-2 for 12-16 AWG<br>AMP 42100-2 for 14-18 AWG |         |
| <b>Mounting Hardware:</b>         | None provided   |         |

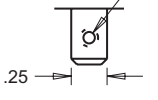
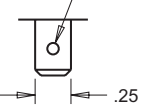
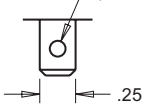
# SEALED, ILLUMINATED SNAP-IN TOGGLE

**K4**  
SNAP-IN  
TOGGLES

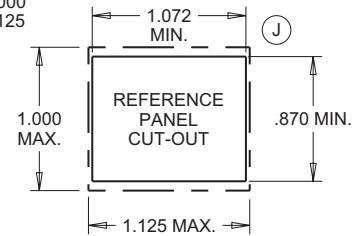
LOW COST, SNAP-IN TOGGLE FOR WET & DUSTY ENVIRONMENTS, 1 & 2 POLES

ROCKER SWITCHES



| TERMINAL STYLES (.032 THICK)  |  |  |
|---|--|--|
| SCREW   | QUICK CONNECT  | SOLDER   |
| <br>#6-32 THD<br>.25 | <br>∅.08<br>.25 | <br>∅.11<br>.25 |

**MOUNTING OPENING:** (J)  
PANEL THICKNESS RANGE OF .025 - .105 A GASKET IS RECOMMENDED  
PANEL THICKNESS RANGE OF .105 - .187 W/O GASKET  
PANEL OPENING: MIN. TYP. MAX.  
WIDTH .870 .937 1.000  
LENGTH 1.072 1.099 1.125

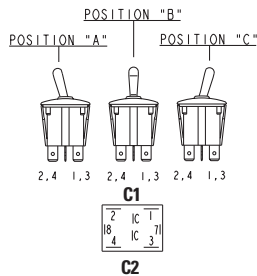


## K4 SERIES PART NUMBER CODE

|   |                           |                              |                         |                         |                |                         |                         |   |   |
|---|---------------------------|------------------------------|-------------------------|-------------------------|----------------|-------------------------|-------------------------|---|---|
| <b>K4</b>                               | <b>X</b>                  | <b>X</b>                     | <b>X</b>                | <b>X</b>                | <b>X</b>       | <b>X</b>                | <b>X</b>                |   |   |
| <b>Terminal Style/<br/>Switch Style</b> | <b>Actuator<br/>Style</b> | <b>Switch Action/Circuit</b> |                         |                         | <b>Circuit</b> | <b>Light Type</b>       |                         | <b>Light/Circuit Location</b>   | <b>Legend &amp; Orientation</b> □                                       |
| <b>A.</b> Quick Connect/<br>Standard    | <b>A.</b> Bat<br>Handle   | <b>Position<br/>"A"</b>      | <b>Position<br/>"B"</b> | <b>Position<br/>"C"</b> |                | <b>Position<br/>"A"</b> | <b>Position<br/>"B"</b> | <b>A.</b> No Light  | <b>A.</b> No Legend   |
| <b>B.</b> Screw/Standard                |                           | <b>A.</b> 1-C1               | <b>NONE</b>             | <b>OFF</b>              | <b>SPST</b>    | <b>A.</b> No Lens       | <b>A.</b> No Lens       | <b>B.</b> Dependent Light<br>ON in position "A"<br>Wired to terms 1 & 7 | <b>B.</b> Dependent Light<br>ON in position "A"<br>Wired to terms 1 & 7 |
| <b>C.</b> Solder/Standard               |                           | <b>B.</b> 1-C1               | <b>NONE</b>             | <b>2-C1</b>             | <b>SPDT</b>    | <b>B.</b> Red           | <b>B.</b> Red           | <b>C.</b> Dependent Light<br>ON in position "C"<br>Wired to terms 2 & 8 | <b>C.</b> Dependent Light<br>ON in position "C"<br>Wired to terms 2 & 8 |
| <b>D.</b> Quick Connect/<br>Low Level   |                           | <b>C.</b> (1-C1)             | <b>NONE</b>             | <b>OFF</b>              | <b>SPST</b>    | <b>C.</b> Green         | <b>C.</b> Green         | <b>D.</b> Independent Light<br>at position "A"<br>Wired to terms 7 & 8  | <b>D.</b> Independent Light<br>at position "A"<br>Wired to terms 7 & 8  |
| <b>E.</b> Screw/Low Level               |                           | <b>D.</b> (1-C1)             | <b>NONE</b>             | <b>2-C1</b>             | <b>SPDT</b>    | <b>D.</b> Amber         | <b>D.</b> Amber         | <b>E.</b> Independent Light<br>at position "C"<br>Wired to terms 7 & 8  | <b>E.</b> Independent Light<br>at position "C"<br>Wired to terms 7 & 8  |
| <b>F.</b> Solder/Low Level              |                           | <b>E.</b> (1-C1)             | <b>OFF</b>              | <b>2-C1</b>             | <b>SPDT</b>    | <b>E.</b> Clear         | <b>E.</b> Clear         | <b>F.</b> Independent Light<br>at position "A"<br>Wired to terms 7 & 8  | <b>F.</b> Independent Light<br>at position "A"<br>Wired to terms 7 & 8  |
|   |                           | <b>F.</b> (1-C1)             | <b>OFF</b>              | <b>2-C1</b>             | <b>SPDT</b>    |                         |                         | <b>G.</b> Independent Light<br>at position "C"<br>Wired to terms 7 & 8  | <b>G.</b> Independent Light<br>at position "C"<br>Wired to terms 7 & 8  |
|   |                           | <b>G.</b> (1-C1)             | <b>OFF</b>              | <b>2-C1</b>             | <b>SPDT</b>    |                         |                         | <b>H.</b> Independent Light<br>at position "A"<br>Wired to terms 7 & 8  | <b>H.</b> Independent Light<br>at position "A"<br>Wired to terms 7 & 8  |
|   |                           | <b>H.</b> 1-C1/3-C2          | <b>NONE</b>             | <b>OFF</b>              | <b>DPST</b>    |                         |                         | <b>I.</b> Independent Light<br>at position "A"<br>Wired to terms 7 & 8  | <b>I.</b> Independent Light<br>at position "A"<br>Wired to terms 7 & 8  |
|   |                           | <b>J.</b> 1-C1/3-C2          | <b>NONE</b>             | <b>2-C1/4-C2</b>        | <b>DPDT</b>    |                         |                         | <b>J.</b> Independent Light<br>at position "C"<br>Wired to terms 7 & 8  | <b>J.</b> Independent Light<br>at position "C"<br>Wired to terms 7 & 8  |
|   |                           | <b>K.</b> (1-C1)/(3-C2)      | <b>NONE</b>             | <b>OFF</b>              | <b>DPST</b>    |                         |                         | <b>K.</b> Independent Light<br>at position "A"<br>Wired to terms 3 & 7  | <b>K.</b> Independent Light<br>at position "A"<br>Wired to terms 3 & 7  |
|   |                           | <b>L.</b> (1-C1)/(3-C2)      | <b>NONE</b>             | <b>2-C1/4-C2</b>        | <b>DPDT</b>    |                         |                         | <b>L.</b> Independent Light<br>at position "C"<br>Wired to terms 4 & 8  | <b>L.</b> Independent Light<br>at position "C"<br>Wired to terms 4 & 8  |
|   |                           | <b>M.</b> (1-C1)/(3-C2)      | <b>OFF</b>              | <b>(2-C1)/(4-C2)</b>    | <b>DPDT</b>    |                         |                         | <b>M.</b> Independent Light<br>at position "A"<br>Wired to terms 7 & 8  | <b>M.</b> Independent Light<br>at position "A"<br>Wired to terms 7 & 8  |
|   |                           | <b>N.</b> 1-C1/3-C2          | <b>OFF</b>              | <b>2-C1/4-C2</b>        | <b>DPDT</b>    |                         |                         | <b>N.</b> Independent Light<br>at position "C"<br>Wired to terms 7 & 8  | <b>N.</b> Independent Light<br>at position "C"<br>Wired to terms 7 & 8  |
|   |                           | <b>P.</b> (1-C1)/(3-C2)      | <b>OFF</b>              | <b>2-C1/4-C2</b>        | <b>DPDT</b>    |                         |                         | <b>O.</b> Independent Light<br>at position "A"<br>Wired to terms 7 & 8  | <b>O.</b> Independent Light<br>at position "A"<br>Wired to terms 7 & 8  |
|   |                           |                              |                         |                         |                |                         |                         | <b>P.</b> Independent Light<br>at position "C"<br>Wired to terms 7 & 8  | <b>P.</b> Independent Light<br>at position "C"<br>Wired to terms 7 & 8  |
|   |                           |                              |                         |                         |                |                         |                         | <b>Q.</b> Independent Light<br>at position "A"<br>Wired to terms 7 & 8  | <b>Q.</b> Independent Light<br>at position "A"<br>Wired to terms 7 & 8  |
|   |                           |                              |                         |                         |                |                         |                         | <b>R.</b> Independent Light<br>at position "C"<br>Wired to terms 7 & 8  | <b>R.</b> Independent Light<br>at position "C"<br>Wired to terms 7 & 8  |
|   |                           |                              |                         |                         |                |                         |                         | <b>S.</b> Independent Light<br>at position "A"<br>Wired to terms 7 & 8  | <b>S.</b> Independent Light<br>at position "A"<br>Wired to terms 7 & 8  |
|   |                           |                              |                         |                         |                |                         |                         | <b>T.</b> Independent Light<br>at position "C"<br>Wired to terms 7 & 8  | <b>T.</b> Independent Light<br>at position "C"<br>Wired to terms 7 & 8  |

NOTE: Contact factory for panel recommendations on switches with potting cups.

NOTE: ( ) denotes momentary action.



**Optional Panel Gasket:**  
P/N 807038-1 0.062" thickness  
P/N 807038-2 0.031" thickness

K4 Connector P/N C801765

## ORDERING INFORMATION

**Example:** K4AAKEEABA specifies Q.C. terminals, standard rating; bat handle; DPST two position momentary ON, maintained OFF; 125VAC neon light; clear lens in positions "A", no lens in position "C"; dependent light ON in position "A", wired to terminals 1 & 7; no legend.

• K4 panel plugs available as shown on page 167.

### NOTES:

- No momentary switches with dependent lights.
- Neon lamps only to be coded with clear or amber lenses.
- LED lenses must be clear or same color as LED.
- No legends on lamp side of switch.
- No dependent light in OFF positions.
- All legends printed on actuators without lens(es) will be white except actuator codes C, F, J, M & R.
- All legends printed on lenses will be white except on clear lens(es) will be black.

NOTE: LED anode (+) terminal number shown in **bold**.

**D** = Dependent Light  
**I** = Independent Light

① All legends are white. Legend cannot be on the same side as the lens.

## K4 SCHEMATICS

|  |  |  |  |  |  |
|--|--|--|--|--|--|
| <p>K4_A_A_<br/>SPST - ON-NONE-OFF SCHEMATIC</p>                                | <p>K4_B_A_<br/>SPST - ON-NONE-ON SCHEMATIC</p>                                 | <p>K4_C_A_<br/>SPST - (ON)-NONE-OFF SCHEMATIC</p>  | <p>K4_D_A_<br/>SPDT - (ON)-NONE-ON SCHEMATIC</p>                               | <p>K4_E_A_<br/>SPDT - (ON)-OFF-(ON) SCHEMATIC</p>                              | <p>K4_F_A_<br/>SPDT - ON-OFF-ON SCHEMATIC</p>  |
| <p>K4_G_A_<br/>SPDT - (ON)-OFF-ON SCHEMATIC</p>                                | <p>K4_H_A_<br/>DPST - ON-NONE-OFF SCHEMATIC</p>                                | <p>K4_J_A_<br/>DPDT - ON-NONE-ON SCHEMATIC</p>   | <p>K4_K_A_<br/>DPST - (ON)-NONE-OFF SCHEMATIC</p>                              | <p>K4_L_A_<br/>DPDT - (ON)-NONE-ON SCHEMATIC</p>                               | <p>K4_M_A_<br/>DPDT - (ON)-OFF-(ON) SCHEMATIC</p>  |
| <p>K4_N_A_<br/>DPDT - ON-OFF-ON SCHEMATIC</p>                                  | <p>K4_P_A_<br/>DPDT - (ON)-OFF-ON SCHEMATIC</p>                                | <p>GENERAL SCHEMATIC INFORMATION</p> <p>○ INDICATES MAINTAIN ACTION (FIXED POSITION)</p> <p>◀ INDICATES MOMENTARY ACTION (AUTOMATIC RETURN POSITION)</p> |  | <p>K4_F_B_<br/>SPDT - ON-OFF-ON SCHEMATIC WIDE LED IN "A"</p>                  | <p>K4_F_C_<br/>SPDT - ON-OFF-ON SCHEMATIC WIDE LED IN "C"</p>  |
| <p>K4_F_D_<br/>SPDT - ON-OFF-ON SCHEMATIC WIND LED IN "A"</p>                  | <p>K4_F_E_<br/>SPDT - ON-OFF-ON SCHEMATIC WIND LED IN "C"</p>                  | <p>K4_F_F_<br/>SPDT - ON-OFF-ON SCHEMATIC WIDE LED IN "A" "C"</p>  | <p>K4_F_G_<br/>SPDT - ON-OFF-ON SCHEMATIC WIDE LED IN "A" IND LED IN "C"</p>   | <p>K4_F_H_<br/>SPDT - ON-OFF-ON SCHEMATIC WIND LED IN "A" DEP LED IN "C"</p>   | <p>K4_F_J_<br/>SPDT - ON-OFF-ON SCHEMATIC WIND LED IN "A" IND LED IN "C"</p>   |
| <p>K4_F_B_<br/>SPDT - ON-OFF-ON SCHEMATIC WIDE NEON BULB IN "A"</p>            | <p>K4_F_C_<br/>SPDT - ON-OFF-ON SCHEMATIC WIDE NEON BULB IN "C"</p>            | <p>K4_F_D_<br/>SPDT - ON-OFF-ON SCHEMATIC WIND NEON BULB IN "A"</p>  | <p>K4_F_E_<br/>SPDT - ON-OFF-ON SCHEMATIC WIND NEON BULB IN "C"</p>            | <p>K4_F_F_<br/>SPDT - ON-OFF-ON SCHEMATIC WIDE NEON BULB IN "A" "C"</p>        | <p>K4_F_G_<br/>SPDT - ON-OFF-ON SCHEMATIC WIDE NEON IN "A" IND NEON IN "C"</p>   |
| <p>K4_F_H_<br/>SPDT - ON-OFF-ON SCHEMATIC WIND NEON IN "A" DEP NEON IN "C"</p> | <p>K4_F_J_<br/>SPDT - ON-OFF-ON SCHEMATIC WIND NEON IN "A" IND NEON IN "C"</p> | <p>K4_F_B_<br/>SPDT - ON-OFF-ON SCHEMATIC WIDE BULB IN "A"</p>   | <p>K4_F_C_<br/>SPDT - ON-OFF-ON SCHEMATIC WIDE BULB IN "C"</p>                 | <p>K4_F_D_<br/>SPDT - ON-OFF-ON SCHEMATIC WIND BULB IN "A"</p>                 | <p>UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ARE AS LISTED. MUST BE FREE FROM BURRS AND SHARP EDGES</p> <p>TOLERANCES<br/>XX ±.03<br/>.XXX ±.010<br/>ANGLES ±2°<br/>DO NOT SCALE DRAWING</p> |
| <p>K4_F_E_<br/>SPDT - ON-OFF-ON SCHEMATIC WIND BULB IN "C"</p>                 | <p>K4_F_F_<br/>SPDT - ON-OFF-ON SCHEMATIC WIDE BULB IN "A" "C"</p>             | <p>K4_F_G_<br/>SPDT - ON-OFF-ON SCHEMATIC WIDE BULB IN "A" IND BULB IN "C"</p>   | <p>K4_F_H_<br/>SPDT - ON-OFF-ON SCHEMATIC WIND BULB IN "A" DEP BULB IN "C"</p> | <p>K4_F_J_<br/>SPDT - ON-OFF-ON SCHEMATIC WIND BULB IN "A" IND BULB IN "C"</p> |  |

## Данный компонент на территории Российской Федерации

### Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

### Офис по работе с юридическими лицами:

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