# SEALED, ILLUMINATED ROCKER SWITCHES



LOW COST, SNAP-IN ROCKER FOR WET & DUSTY ENVIRONMENTS

The K series rockers are rugged, high performance sealed switches designed for use under severe conditions found in marine, appliance, heavy equipment and industrial control applications. Sealed to IP68S with an optional panel gasket available.

The K1 series is offered in single pole configuration while the K2 series is available in single and double pole configurations. Both series offer illuminated models. Illumination can be independent or dependent of the switch position or a combination of both. A choice of red, green, clear or amber colored lenses are offered in illuminated models. Illumination options include incandescent, LED or neon light sources.

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.

A choice of models are offered to handle power levels to 16 amps, 1/2 HP and low level electronic switching applications.

OTTO can provide custom colors upon request. Value-added assemblies with wire leads are also available. Please consult the factory for assistance.

K1 Series
Single Pole

K2 Series
Single & Double Pole

## Features:

- **Withstands direct water spray**
- **Watertight to IP68S**
- **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**
- **Custom legends available**
- **2 & 3-position, momentary & maintained action**
- **Incandescent, LED & neon illumination with independent & dependent light source options**
- **UL recognized & CSA certified**
- **Ignition protected**
- **RoHS/WEEE/Reach compliant**

**Standard Characteristics/Ratings:**

**ELECTRICAL RATINGS:**

| Load | Sea Level @ 28VDC 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 |
| DWV | 1050Vrms except across light terminals | |
| Low Level | 10mA @ 30mV | |
| **Electrical Life:** | See Rating Chart | |

**LIGHTING:**

| Light Source | Rating |
|---|---|
| Incandescent | (VDC) 6V, 12V, 24V |
| Neon | (VAC) 125V, 250V |
| LED | (VDC) 2V, 6V, 12V, 24V |
| **Mechanical Life:** | 100,000 cycles |
| **Seal:** | IP68S |
| **Operating Temp Range:** | -30°C to +85°C |

**MATERIALS:**

| | |
|---|---|
| **Case:** | Thermoplastic |
| **Button:** | Thermoplastic |
| **Base:** | Thermoplastic |
| **Terminals/Contact:** | Brass, silver alloy with silver plate, gold flash for low level |
| **Terminal Hardware:** | Screws and lockwashers provided when applicable<br>K1/K2 series recommended Quick Connect terminals:<br>AMP 60253-2 for 12-16 AWG<br>AMP 42100-2 for 14-18 AWG |
| **Mounting Hardware:** | None provided |

# SEALED, ILLUMINATED ROCKER SWITCHES

LOW COST, SNAP-IN ROCKER FOR WET & DUSTY ENVIRONMENTS

## K1 PART NUMBER CODE

**K1 - X X X X**

Part Number Code Continued Below

### Terminal Style/ Switch Rating

**A.** Q.C./Std.
**B.** Screw/Std.
**C.** Solder/Std.
**D.** Q.C./Low Level
**E.** Screw/Low Level
**F.** Solder/Low Level
**G.** PC Pin/Std.
**H.** PC Pin/Low Level

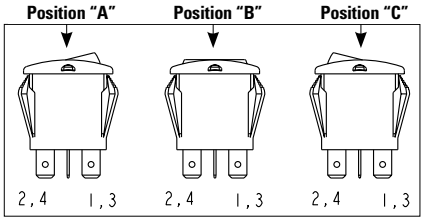
### Actuator Color/Style

**A.** Red/Rocker
**B.** Black/Rocker
**C.** White/Rocker
**D.** Red/Paddle
**E.** Black/Paddle
**F.** White/Paddle
**G.** Red/Rocker Pinned
**H.** Black/Rocker Pinned
**J.** White/Rocker Pinned
**K.** Red/Short Paddle Pinned
**L.** Black/Short Paddle Pinned
**M.** White/Short Paddle Pinned
**N.** Red/Standard Paddle Pinned
**P.** Black/Standard Paddle Pinned
**R.** White/Standard Paddle Pinned
**T.** Red/Short Paddle
**U.** Black/Short Paddle
**V.** White/Short Paddle

### Switch Action/Circuit

| | Position "A" | Position "B" | Position "C" | Circuit |
|---|---|---|---|---|
| **A.** | 1-C | NONE | OFF | SPST |
| **B.** | 1-C | NONE | 2-C | SPDT |
| **C.** | (1-C) | NONE | OFF | SPST |
| **D.** | (1-C) | NONE | 2-C | SPDT |
| **E.** | (1-C) | OFF | (2-C) | SPDT |
| **F.** | 1-C | OFF | 2-C | SPDT |
| **G.** | (1-C) | OFF | 2-C | SPDT |
| **H.** | OFF | NONE | 2-C | SPST |

NOTE: ( ) denotes momentary action.




### Light Type

**A.** No Light
**B.** 6V Incandescent
**C.** 12V Incandescent
**D.** 24V Incandescent
**E.** 125VAC Neon
**F.** 250VAC Neon
**G.** 2V Red LED
**H.** 2V Green LED
**J.** 2V Amber LED
**K.** 6V Red LED
**L.** 6V Green LED
**M.** 6V Amber LED
**N.** 12V Red LED
**P.** 12V Green LED
**Q.** 12V Amber LED
**R.** 24V Red LED
**S.** 24V Green LED
**T.** 24V Amber LED

## K1 PART NUMBER CODE CONTINUED FROM ABOVE

**K1 Continued X X X X**

### Lens Color

| Position "A" | Position "C" |
|---|---|
| **A.** No Lens | **A.** No Lens |
| **B.** Red | **B.** Red |
| **C.** Green | **C.** Green |
| **D.** Amber | **D.** Amber |
| **E.** Clear | **E.** Clear |

### Light/Circuit Location

**A.** No Light

**B.**
Dependent Light
ON in position "A"
Wired to terms **1** & 3

**C.**
Independent Light
ON in position "C"
Wired to terms **2** & 4

**D.**
Independent Light
at position "A"
Wired to terms 3 & **4**

**E.**
Independent Light
at position "C"
Wired to terms 3 & **4**

**F.**
Dependent Light
ON in position "A"
Wired to terms **1** & 3
Dependent Light
ON in position "C"
Wired to terms **2** & 4

**G.**
Dependent Light
ON in position "A"
Wired to terms **1** & 3
Independent Light
ON in position "C"
Wired to terms 3 & **4**

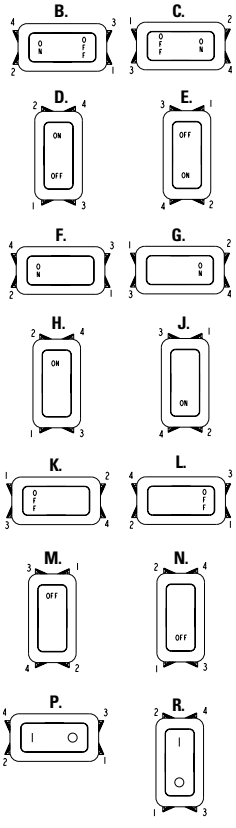
**H.**
Independent Light
at position "A"
Wired to terms **3** & 4
Dependent Light
ON in position "C"
Wired to terms **2** & 4

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

NOTES:
- LED anode (+) terminal number shown in **bold.**
- Light on OFF side must be independent.
- Contact factory for multiple light types in the same switch.

### Legend & Orientation

**A.** None



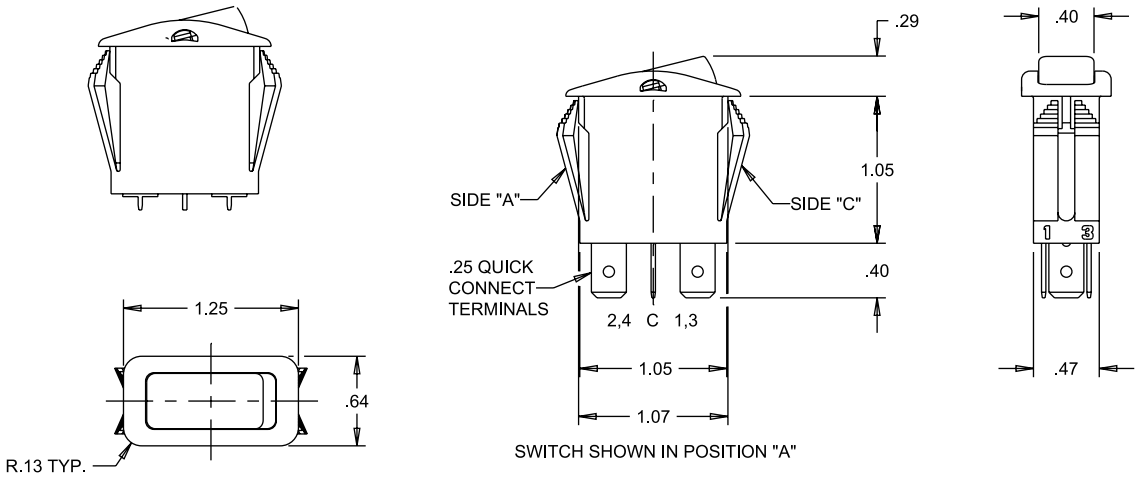

NOTES:
- No momentary switches with dependent lights.
- Neon lamps only to be coded with clear or amber lenses.
- LED lenses must be clear or same color as LED.
- No dependent light in OFF position.
- All legends printed on actuators without lens(es) will be white except actuator codes C, F, J, M & R.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

• **K1 panel plugs available as shown on page 160.**



Specifications Subject To Change Without Notice

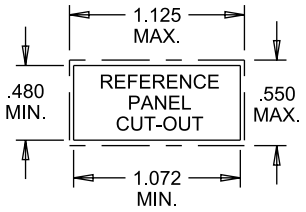
## LOW COST, SNAP-IN ROCKER FOR WET & DUSTY ENVIRONMENTS



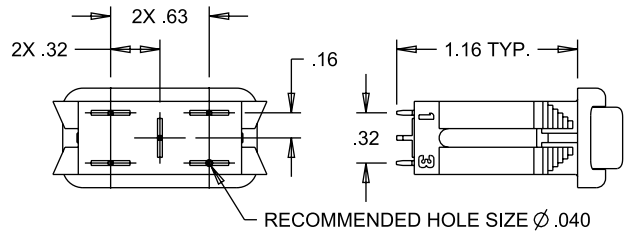

MOUNTING HOLE:
PANEL THICKNESS RANGE OF .025 - .105 A GASKET IS RECOMMENDED,
0.031" THICKNESS = GASKET P/N 807039-2
0.062" THICKNESS = GASKET P/N 807039-1

PANEL THICKNESS RANGE OF .105 - .187 W/O GASKET

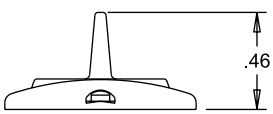
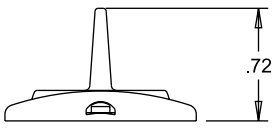
| PANEL OPENING: | MIN. | TYP. | MAX. |
|---|---|---|---|
| WIDTH | .480 | .515 | .550 |
| LENGTH | 1.072 | 1.099 | 1.125 |




### P.C. PIN LAYOUT

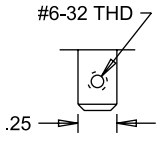
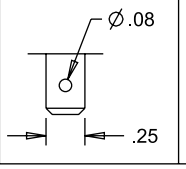
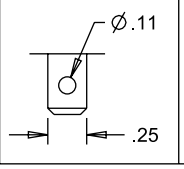
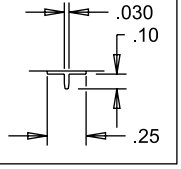



### PADDLE STYLES

| SHORT PADDLE ROCKER | STANDARD PADDLE ROCKER |
|---|---|
|  |  |



### TERMINAL STYLES (.032 THICK)

| SCREW | QUICK CONNECT | SOLDER | P.C. PIN |
|---|---|---|---|
|  |  |  |  |

# STANDARD LEGENDS PER SAE

SNAP-IN PANEL MOUNTING

## Standard Legends Per SAE Specifications

| STANDARD LEGENDS PER SAE SPECIFICATIONS | | |
|---|---|---|
| A1 ANCHOR | K2 UNLOCK | P5 BILGE BLOWER |
| B1 BATTERY | L1 LIGHT | R1 LIFT |
| B2 ELECTRIC POWER | L2 MASTER LIGHTING SWITCH | R2 LOWER |
| C1 AC/COOLING SYSTEMS | L3 HEADLIGHTS | R3 UP |
| C2 DEHUMIDIFIER | L4 HEADLIGHTS-LOW / DIPPED BEAM | R4 DOWN |
| C3 HEATER/INTERIOR HEATING | L5 HEADLIGHTS-HIGH / UPPER BEAM | R5 RIGHT |
| D1 WINDSHIELD DEFROSTER | L6 PARKING LIGHT | R6 LEFT |
| D2 REAR WINDOW DEFROSTER | L7 WORK LAMP | R7 FWD FORWARD |
| D3 MIRROR DEFROSTER | L8 WORK LAMP | R8 REV REVERSE |
| E1 ENGINE/START | L9 INTERIOR DOME LIGHT | S1 RADIO |
| E2 ENGINE/STOP | M1 BEACON | S2 MUTE |
| E3 ON/START | M2 HAZARD/POSITION LIGHTS | T1 FAST |
| E4 OFF/STOP | M3 CLEARANCE LIGHTS | T2 SLOW |
| E5 ON ON | M4 SIDE MARKER LIGHT | T3 TRIM TAB / TRIMMING OPERATION |
| E6 OFF OFF | M5 RUNNING LIGHTS (UNDER POWER) | T4 TRANSMISSION |
| E7 ENGINE ELECTRIC PREHEAT | M6 ANCHOR LIGHT | V1 VENTILATING / AC FAN |
| E8 ENGINE-GAS INJECTION | M7 RUNNING/ANCHOR LIGHTS | W1 WINDSHIELD WIPER |
| F1 FRONT FOG LIGHTS | M8 SEARCH LIGHT | W2 WINDSHIELD-WASHER |
| F2 REAR FOG LIGHTS | M9 LEFT TURN SIGNAL | W3 WINDSHIELD-WASHER/WIPER |
| G1 FUEL | MA RIGHT TURN SIGNAL | W4 REAR WINDOW WIPER |
| H1 HORN | P1 BILGE PUMP #1 | W5 REAR WINDOW-WASHER |
| H2 HORN REAR | P2 BILGE PUMP #2 | W6 REAR WINDOW-WASHER/WIPER |
| K1 LOCK | P3 BILGE PUMP #3 | ZZ NO LEGEND |
| | P4 BILGE PUMP | |

**For legends not shown, please consult an OTTO representative.**



Specifications Subject To Change Without Notice

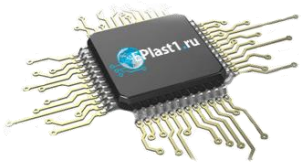
Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits,General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.




**Как с нами связаться**

**Телефон:** 8 (812) 309 58 32 (многоканальный)
**Факс:** 8 (812) 320-02-42
**Электронная почта:** org@eplast1.ru
**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.