

SEALED, ILLUMINATED ROCKER SWITCHES

ATTRACTIVE & RUGGED FOR WET & DUSTY ENVIRONMENTS

The OTTO K5 series is a quality, precision switch designed to comply with standards established for appliance, marine (ignition protection) and off-road vehicles along with other demanding applications where rugged rocker switches are required.

K5 series sealed rocker switches snap into industry-standard panel cutouts. Choose illuminated and printed legends, thru-panel drain option and switching compatibility from logic level up to 20 amps.

The K5 series offers a choice of LED, incandescent and neon illumination. Legends can be stamped onto a non-illuminated button, stamped onto an illuminated lens or laser etched into the lens and backlit.

Available in standard and logic level contact ratings, the K5 rockers will fit a wide range of applications. Expect a minimum of 25,000 cycles at a full rated load of 20 amps resistive or 15 amps inductive. 100,000 cycles mechanical. A full complement of switch operation is available including momentary and maintained action in 2 or 3-position switches in SPST, SPDT, SPTT, DPST and DPDT circuit arrangements.

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

Features:

- **Sealed watertight per IP68S and IP69K**
- **Snap-in panel mounting into industry standard panel cutout**
- **Optional panel seal gasket**
- **LED, neon & incandescent lighting**
- **0.250" Quick Connect terminals**
- **Optional one-piece connector**
- **Optional terminal barriers**
- **Logic level up to 20 amp switch**
- **Configurable Single Pole Triple Throw (SPTT) with external jumpers**
- **Soft Touch button available**
- **RoHS compliant**



Raised Bars Shown

Standard Characteristics/Ratings:

ELECTRICAL RATINGS:

| Load | Sea Level @ 28VDC | Sea Level @ 125VAC, 60/400Hz |
|------------------|---|---------------------------------|
| Resistive | 20A | 16A |
| Inductive | 15A | 15A |
| Lamp | 5A | 5A |
| Motor | 0.5HP @ 110VAC | |
| DWV | 1000Vrms except across light terminals | |
| Logic Level | 10mA @ 5VDC, max D.C. logic level ratings (void if logic level load(s) exceeded at any time) | |
| Electrical Life: | 25,000 cycles | |

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 and IP69K

Operating Temp Range: -40°C to +85°C

MATERIALS:

| | |
|---------------------------|--|
| Case: | Thermoplastic |
| Button: | Thermoplastic |
| Terminals/Contact: | Brass, silver alloy with silver plate, gold flash for logic level |
| Terminal Hardware: | K5 series recommended Quick Connect terminals: AMP 60253-2 for 12-16 AWG AMP 42100-2 for 14-18 AWG |
| Mounting Hardware: | None provided |

Your official representative



ALDERS
Indicate. Control. Connect.

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SNAP-IN PANEL MOUNTING

K5 SERIES PART NUMBER CODE

Part Number Code Continued Below

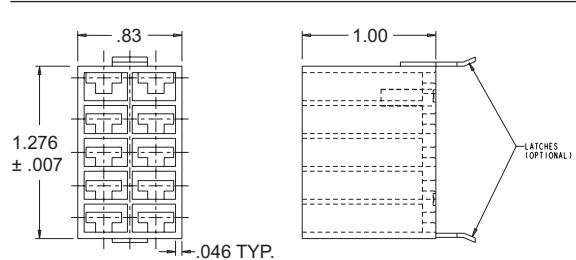
| K5 | X | X | X | X | XX | X | X | | | | | | | |
|--|--|--|--------------------|--------------|------------------------------|---------------------------|----------------------|-----------------|--|--|--|--|--|--|
| Base Options | Rocker Color* /Style | Rocker Features | | | Switch Action/Circuit | Light Source Type* | Light Circuit | | | | | | | |
| A. With Keying Pin Only | A. Black Plastic Rocker | Position "A" | Position "C" | Position "A" | Position "B" | Position "C" | Circuit | | | | | | | |
| Standard Rating | B. Black "Soft Touch" Rocker | 1. No Feature | 1. No Feature | 1A. 3-4 | NONE | OFF | A. No Illumination | | | | | | | |
| Silver Plate | C. Red Plastic Rocker | 2. Lens | 2. Lens | 2A. 3-4/8-9 | NONE | OFF | B. 6V Incandescent | | | | | | | |
| B. Without Barriers or Pin | D. Red "Soft Touch" Rocker | 3. Raised Bars | 3. Raised Bars | 1B. 3-4 | NONE | 3-2 | C. 12V Incandescent | | | | | | | |
| Standard Rating | E. White Plastic Rocker | 4. Raised Lit Bars | 4. Raised Lit Bars | 2B. 3-4/8-9 | NONE | 3-2/8-7 | D. 24V Incandescent | | | | | | | |
| Silver Plate | F. White "Soft Touch" Rocker | NOTE: Raised Lit Bars are available with the Soft Touch rocker styles. Soft Touch rockers require same color lenses/lit bars for both positions. | | | 1C. (3-4) | NONE | OFF | E. 125VAC Neon | | | | | | |
| C. With Terminal | G. Green Plastic Rocker | | | | 2C. (3-4)/(8-9) | NONE | OFF | F. 250VAC Neon | | | | | | |
| Barriers Only | H. Orange Plastic Rocker | | | | 1D. (3-4) | NONE | 3-2 | G. 2V Red LED | | | | | | |
| Standard Rating | I. Blue Plastic Rocker | | | | 2D. (3-4)/(8-9) | NONE | 3-2/8-7 | H. 2V Green LED | | | | | | |
| Silver Plate | J. Gray "Soft Touch" Rocker | | | | 1E. (3-4) | OFF | (3-2) | I. 2V Amber LED | | | | | | |
| D. With Keying Pin Only | K. Gray Plastic Rocker | | | | 2E. (3-4)/(8-9) | OFF | (3-2)/(8-7) | J. 6V Red LED | | | | | | |
| Logic Level Rating | L. Gray "Soft Touch" Rocker | | | | 1F. (3-4) | OFF | 3-2 | K. 6V Green LED | | | | | | |
| Gold Plate | M. Gray Plastic Rocker | | | | 2F. (3-4/8-9) | OFF | 3-2/8-7 | L. 6V Green LED | | | | | | |
| E. Without Barriers or Pin | *Additional colors available. Contact factory. | | 1G. (3-4) | OFF | 3-2 | SPDT | M. 6V Amber LED | | | | | | | |
| Logic Level Rating | | | 2G. (3-4/8-9) | OFF | 3-2/8-7 | DPDT | N. 12V Red LED | | | | | | | |
| Gold Plate | | | | | | | | | | | | | | |
| F. With Terminal | | | | | | | | | | | | | | |
| Barriers Only | | | | | | | | | | | | | | |
| Logic Level Rating | | | | | | | | | | | | | | |
| Gold Plate | | | | | | | | | | | | | | |
| G. With Keying Pin Only | | | | | | | | | | | | | | |
| Standard Rating | | | | | | | | | | | | | | |
| No Plate | | | | | | | | | | | | | | |
| H. Without Barrier or Pin | | | | | | | | | | | | | | |
| Standard Rating | | | | | | | | | | | | | | |
| No Plate | | | | | | | | | | | | | | |
| J. With Terminal | | | | | | | | | | | | | | |
| Barriers Only | | | | | | | | | | | | | | |
| Standard Rating | | | | | | | | | | | | | | |
| No Plate | | | | | | | | | | | | | | |
| NOTE: All code combinations are not feasible. | | | | | | | | | | | | | | |
| Consult factory for product availability. | | | | | | | | | | | | | | |
| *See appendix for complete voltage/ratings table | | | | | | | | | | | | | | |
| NOTE: () denotes momentary action. | | | | | | | | | | | | | | |

K5 PART NUMBER CODE - CONTINUED FROM ABOVE

| X | X | XX | XX | X | X | Legend Orientation | | |
|--|------------------------|---------------------|---------------------|--------------------------------|--------------------------------|--|---|---|
| Lens Color | | Legend Style | | Legend Color | | Position "A" Position "C" | | |
| Position "A" | Position "C" | Position "A" | Position "C" | Position "A" | Position "C" | 1. Std. | | |
| 1. Transparent Red | 1. Transparent Red | ZZ. No Legend | ZZ. No Legend | 1. Red | 1. Red | <table border="1" style="display: inline-table;"><tr><td>A</td><td>C</td></tr></table> | A | C |
| A | C | | | | | | | |
| 2. Transparent Green | 2. Transparent Green | | | 2. Black | 2. Black | <table border="1" style="display: inline-table;"><tr><td>A</td><td>C</td></tr></table> | A | C |
| A | C | | | | | | | |
| 3. Transparent Amber ① | 3. Transparent Amber ① | | | 9. White | 9. White | <table border="1" style="display: inline-table;"><tr><td>A</td><td>C</td></tr></table> | A | C |
| A | C | | | | | | | |
| 4. Clear ① | 4. Clear ① | | | B. Backlight/ Daylight White ③ | B. Backlight/ Daylight White ③ | <table border="1" style="display: inline-table;"><tr><td>A</td><td>C</td></tr></table> | A | C |
| A | C | | | | | | | |
| 5. Translucent White ② | 5. Translucent White ② | | | D. Backlight/ Deadfront ③ | D. Backlight/ Deadfront ③ | <table border="1" style="display: inline-table;"><tr><td>A</td><td>C</td></tr></table> | A | C |
| A | C | | | | | | | |
| Z. No Lens | Z. No Lens | | | Z. No Legend | Z. No Legend | <table border="1" style="display: inline-table;"><tr><td>A</td><td>C</td></tr></table> | A | C |
| A | C | | | | | | | |
| NOTE: It is not recommended to use green LEDs with translucent white lenses. This will reduce light intensity. Use clear lenses with green LEDs for maximum light intensity. | | | | | | | | |
| ① Recommended for neon lamps. | | | | | | | | |
| ② Special Order: Ultra bright green LEDs to be used with translucent white lens. | | | | | | | | |
| STOP HERE for unlighted switches without legends. | | | | | | | | |
| Example: K5AA331FNH-44 | | | | | | | | |
| ③ Only available on Rocker Style "A" & Rocker Features "1" and lens color "Z" for each position. | | | | | | | | |

STOP HERE for unlighted switches without legends.

Example: K5AA331BAA



• K5 panel plugs available as shown in Panel Plugs (PP) section.

K5 Connector
P/N C801775-2A Without Latches
P/N C801775-2B With Latches

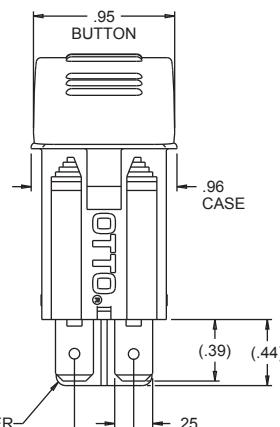
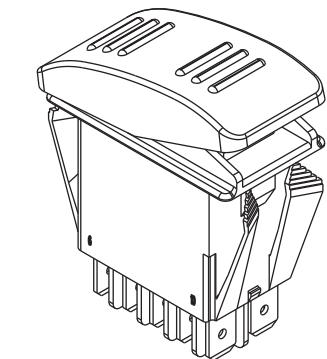
Recommended Quick Connect Terminals
AMP 60253-2 for 12-16 AWG
AMP 42100-2 for 14-18 AWG

Panel Seal Gasket
Silicone: P/N C807109-25-1
Buna-N: P/N C807618-25-1

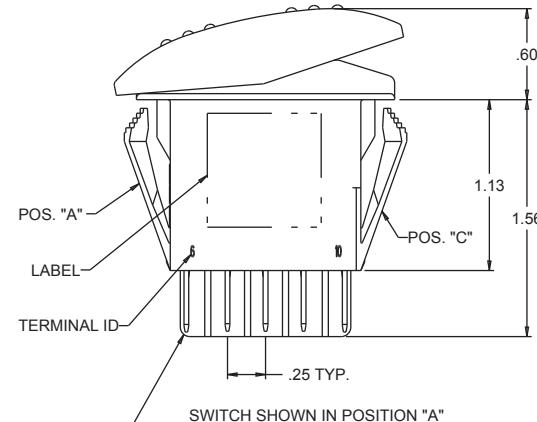
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K5
SEALED
ROCKERS

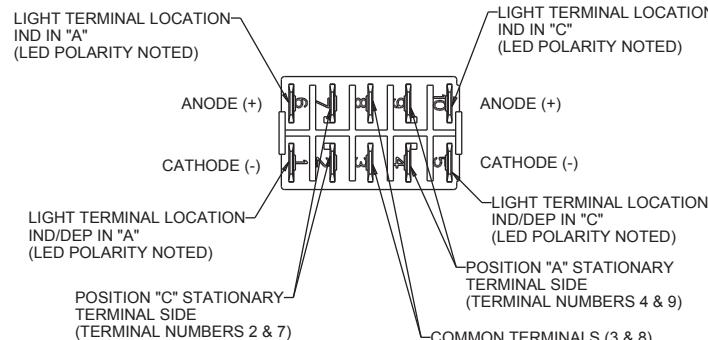
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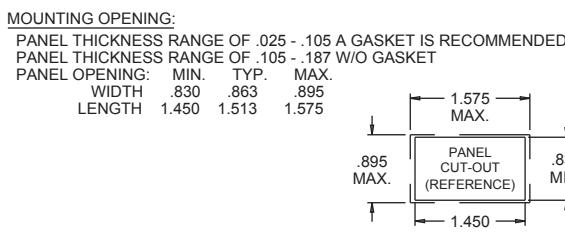
TERMINAL BARRIER (OPTIONAL)
SWITCH SHOWN W/ TERMINAL BARRIERS
CONNECTOR KEY FEATURE OPTIONAL



SWITCH SHOWN IN POSITION "A"



TERMINAL LOCATIONS AS VIEWED FROM BOTTOM OF SWITCH
(CASE REMOVED FOR CLARITY)
CONTACT MADE IN OPPOSITE DIRECTION OF ROCKER TRAVEL



| | | | | | |
|---|--|--|--|---|---|
| <p>SPECIAL CIRCUIT - ON-ON-ON SCHEMATIC</p> | | <p>K5-2A</p> <p>DPST - ON - NONE - OFF SCHEMATIC</p> | <p>K5-2B</p> <p>DPDT - ON - NONE - ON SCHEMATIC</p> | <p>K5-2C</p> <p>DPDT - (ON) - NONE - OFF SCHEMATIC</p> | <p>K5-2D</p> <p>DPDT - (ON) - NONE - ON SCHEMATIC</p> |
| <p>GENERAL SCHEMATIC INFORMATION</p> <p>—○— INDICATES MAINTAIN ACTION (FIXED POSITION)</p> <p>▼—○— INDICATES MOMENTARY ACTION (AUTOMATIC RETURN POSITION)</p> <p>FOR OTHER LIGHTING SCHEMATICS REPLACE FOLLOWING SYMBOLS:</p> <p>Ⓐ INCANDESCENT (REPLACE RESISTOR & LED)</p> <p>Ⓑ NEON (REPLACE LED)</p> | | <p>K5-2E</p> <p>DPDT - (ON) - OFF - (ON) SCHEMATIC</p> | <p>K5-2F</p> <p>DPDT - ON - OFF - ON SCHEMATIC</p> | <p>K5-2G</p> <p>DPDT - (ON) - OFF - ON SCHEMATIC</p> | <p>K5-2H</p> <p>DPDT - ON - NONE - ON SCHEMATIC W/ INDEPENDENT LED IN "A"</p> |
| <p>K5-2BNE-Z</p> <p>DPDT - ON - NONE - ON SCHEMATIC W/ INDEPENDENT LED IN "A"</p> | | <p>K5-2BNF-Z</p> <p>DPDT - ON - NONE - ON SCHEMATIC W/ INDEPENDENT LED IN "C"</p> | <p>K5-2BNG-Z</p> <p>DPDT - ON - NONE - ON SCHEMATIC W/ INDEPENDENT LED IN "A" & "C"</p> | <p>K5-2BNH-Z</p> <p>DPDT - ON - NONE - ON SCHEMATIC W/ INDEPENDENT LED IN "A" & INDEPENDENT LED IN "C"</p> | <p>K5-2BNJ-Z</p> <p>DPDT - ON - NONE - ON SCHEMATIC W/ INDEPENDENT LED IN "A" & INDEPENDENT LED IN "C"</p> |