

# 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:		
<b>ELECTRICAL RATINGS:</b>		
<b>Load</b>	<b>Sea Level @ 28VDC</b>	<b>Sea Level @ 125VAC, 60/400Hz</b>
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)	
<b>Electrical Life:</b>	25,000 cycles	
<b>LIGHTING:</b>		
<b>Light Source</b>	<b>Rating</b>	
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>	-40°C to +85°C	
<b>MATERIALS:</b>		
<b>Case:</b>	Thermoplastic	
<b>Button:</b>	Thermoplastic	
<b>Terminals/Contact:</b>	Brass, silver alloy with silver plate, gold flash for logic level	
<b>Terminal Hardware:</b>	K5 series recommended Quick Connect terminals: AMP 60253-2 for 12-16 AWG AMP 42100-2 for 14-18 AWG	
<b>Mounting Hardware:</b>	None provided	

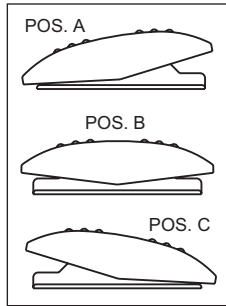
# SEALED, ILLUMINATED ROCKER SWITCHES

## SNAP-IN PANEL MOUNTING

### K5 SERIES PART NUMBER CODE

Part Number Code Continued Below

<b>K5</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>XX</b>	<b>X</b>	<b>X</b>		
<b>Base Options</b>	<b>Rocker Color*/Style</b>	<b>Rocker Features</b>		<b>Switch Action/Circuit</b>			<b>Light Source Type*</b>	<b>Light Circuit</b>	
<b>A.</b> With Keying Pin Only Standard Rating Silver Plate	<b>A.</b> Black Plastic Rocker	<b>Position "A"</b>	<b>Position "C"</b>	<b>Position "A"</b>	<b>Position "B"</b>	<b>Position "C"</b>	<b>Circuit</b>	<b>Circuit</b>	<b>Terminal Connections</b>
<b>B.</b> Without Barriers or Pin Standard Rating Silver Plate	<b>B.</b> Black "Soft Touch" Rocker	<b>1.</b> No Feature	<b>1.</b> No Feature	<b>1A.</b> 3-4	NONE	OFF	SPST	<b>A.</b> NONE	NONE
<b>C.</b> With Terminal Barriers Only Standard Rating Silver Plate	<b>C.</b> Red Plastic Rocker	<b>2.</b> Lens	<b>2.</b> Lens	<b>2A.</b> 3-4/8-9	NONE	OFF	DPST	<b>B.</b> Dep. in "A"	1(-) & 4(+)
<b>D.</b> With Keying Pin Only Logic Level Rating Gold Plate	<b>D.</b> Red "Soft Touch" Rocker	<b>3.</b> Raised Bars	<b>3.</b> Raised Bars	<b>1B.</b> 3-4	NONE	3-2	SPDT	<b>C.</b> Dep. in "C"	2(+) & 5(-)
<b>E.</b> Without Barriers or Pin Logic Level Rating Gold Plate	<b>E.</b> White Plastic Rocker	<b>4.</b> Raised Lit Bars	<b>4.</b> Raised Lit Bars	<b>2B.</b> 3-4/8-9	NONE	3-2/8-7	DPDT	<b>D.</b> Ind. in "A"	1(-) & 6(+)
<b>F.</b> With Terminal Barriers Only Logic Level Rating Gold Plate	<b>F.</b> 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.		<b>1C.</b> (3-4)	NONE	OFF	SPST	<b>E.</b> Ind. in "C"	5(-) & 10(+)
<b>G.</b> With Keying Pin Only Standard Rating No Plate	<b>H.</b> Green Plastic Rocker			<b>2C.</b> (3-4)/(8-9)	NONE	OFF	DPST	<b>H.</b> 2V Green LED	1(-) & 4(+)
<b>H.</b> Without Barrier or Pin Standard Rating No Plate	<b>J.</b> Orange Plastic Rocker			<b>1D.</b> (3-4)	NONE	3-2	SPDT	<b>J.</b> 2V Amber LED	2(+) & 5(-)
<b>J.</b> With Terminal Barriers Only Standard Rating No Plate	<b>K.</b> Blue Plastic Rocker			<b>2D.</b> (3-4)/(8-9)	NONE	3-2/8-7	DPDT	<b>K.</b> 6V Red LED	1(-) & 4(+)
	<b>L.</b> Gray "Soft Touch" Rocker			<b>1E.</b> (3-4)	OFF	(3-2)	SPDT	<b>L.</b> 6V Green LED	5(-) & 10(+)
	<b>M.</b> Gray Plastic Rocker			<b>2E.</b> (3-4)/(8-9)	OFF	(3-2)/(8-7)	DPDT	<b>M.</b> 6V Amber LED	1(-) & 6(+)
				<b>1F.</b> 3-4	OFF	3-2	SPDT	<b>N.</b> 12V Red LED	2(+) & 5(-)
				<b>2F.</b> 3-4/8-9	OFF	3-2/8-7	DPDT	<b>P.</b> 12V Green LED	1(-) & 6(+)
				<b>1G.</b> (3-4)	OFF	3-2	SPDT	<b>Q.</b> 12V Amber LED	1(-) & 10(+)
				<b>2G.</b> (3-4)/(8-9)	OFF	3-2/8-7	DPDT	<b>R.</b> 24V Red LED	
								<b>S.</b> 24V Green LED	
								<b>T.</b> 24V Amber LED	



NOTE: All code combinations are not feasible. Consult factory for product availability.

NOTE: ( ) denotes momentary action.

\*See appendix for complete voltage/ratings table

### K5 PART NUMBER CODE - CONTINUED FROM ABOVE

<b>X</b>	<b>X</b>	<b>XX</b>	<b>XX</b>	<b>X</b>	<b>X</b>	<b>X</b>					
<b>Lens Color</b>	<b>Legend Style</b>	<b>Legend Color</b>		<b>Legend Orientation</b>							
<b>Position "A"</b>	<b>Position "C"</b>	<b>Position "A"</b>	<b>Position "C"</b>	<b>Position "A"</b>	<b>Position "C"</b>	<b>Position "A"</b>	<b>Position "C"</b>				
1. Transparent Red	1. Transparent Red	<b>ZZ.</b> No Legend	<b>ZZ.</b> No Legend	1. Red	1. Red	1. Std.	A	C			
2. Transparent Green	2. Transparent Green			2. Black	2. Black				2. 90°	A	C
3. Transparent Amber ①	3. Transparent Amber ①			9. White	9. White						
4. Clear ①	4. Clear ①			<b>B.</b> Backlight/Daylight White ③	<b>B.</b> Backlight/Daylight White ③				4. 270°	A	C
5. Translucent White ②	5. Translucent White ②			<b>D.</b> Backlight/Deadfront ③	<b>D.</b> Backlight/Deadfront ③						
<b>Z.</b> No Lens	<b>Z.</b> No Lens			<b>Z.</b> No Legend	<b>Z.</b> No Legend						

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 lenses.

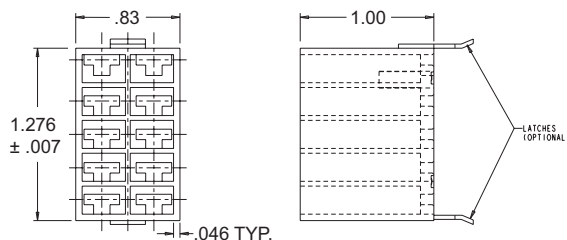
**STOP HERE** for lighted switches without legends.

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 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

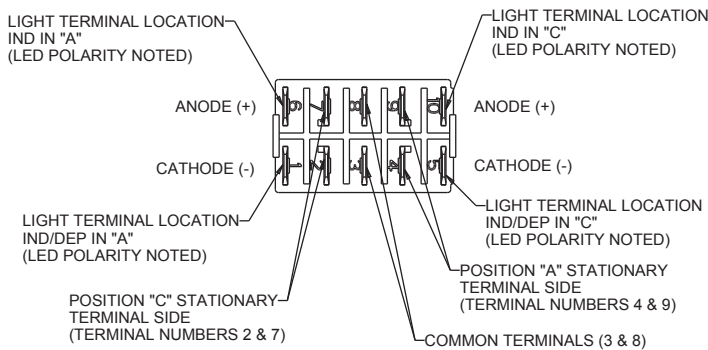
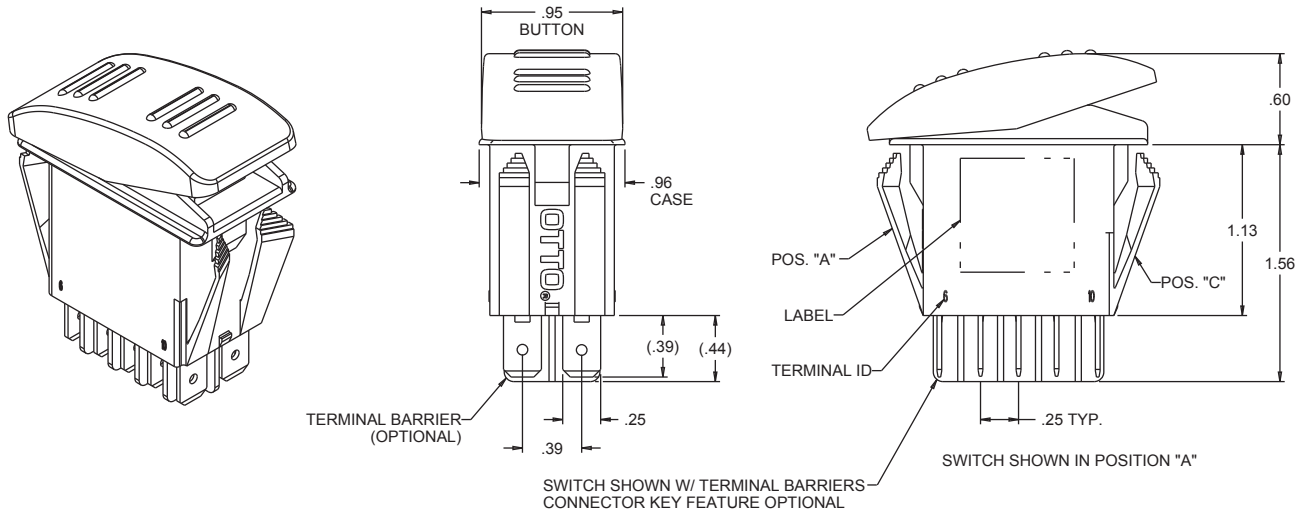
**Panel Seal Gasket**  
Silicone: P/N C807109-25-1  
Buna-N: P/N C807618-25-1

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

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**K5**  
SEALED  
ROCKERS

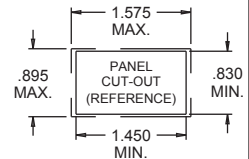
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TERMINAL LOCATIONS AS VIEWED FROM BOTTOM OF SWITCH  
(CASE REMOVED FOR CLARITY)  
CONTACT MADE IN OPPOSITE DIRECTION OF ROCKER TRAVEL

**MOUNTING OPENING:**  
 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	.830	.863	.895
LENGTH	1.450	1.513	1.575



<p>POS "A"</p> <p>POS "B"</p> <p>POS "C"</p> <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>DPST - (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 &amp; 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....2BNB-Z</p> <p>DPDT - ON - NONE - ON SCHEMATIC W/DEPENDENT LED IN "A"</p>
<p>K5....2BNC-Z</p> <p>DPDT - ON - NONE - ON SCHEMATIC W/DEPENDENT LED IN "C"</p>	<p>K5....2BND-Z</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 "C"</p>	<p>K5....2BNF....</p> <p>DPDT - ON - NONE - ON SCHEMATIC W/DEPENDENT LED IN "A" &amp; "C"</p>	<p>K5....2BNG....</p> <p>DPDT - ON - NONE - ON SCHEMATIC W/DEPENDENT LED IN "A" &amp; INDEPENDENT LED IN "C"</p>
<p>K5....2BNH....</p> <p>DPDT - ON - NONE - ON SCHEMATIC W/INDEPENDENT LED IN "A" &amp; DEPENDENT LED IN "C"</p>	<p>K5....2BNJ....</p> <p>DPDT - ON - NONE - ON SCHEMATIC W/INDEPENDENT LED IN "A" &amp; "C"</p>			