

Sealed to IP68S and IP69K, the OTTO K3 rocker switch 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.

K3 sealed rocker switches snap into industry-standard panel cutouts. Choose illuminated and printed legends, thru-panel drain option and switching compatibility from logic level to 20 amps.

The K3 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 K3 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**
- **Thru-panel drain option**
- **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**
- **RoHS compliant**



Standard Characteristics/Ratings:

ELECTRICAL RATINGS:

Load	Sea Level @ 12/28VDC	Sea Level @ 125VAC, 60Hz
Resistive	20A	16A
Inductive	15A	15A
Lamp	5A	5A
Motor	0.5HP @ 110VAC	
DVVV	1050Vrms 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 (see appendix for complete voltage/current ratings table)
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, black

Button: Thermoplastic

Terminals/Contact: Brass, silver alloy with silver plate, gold flash for logic level

Terminal Hardware: K3 series recommended Quick Connect terminals:
AMP 60253-2 for 12-16 AWG
AMP 42100-2 for 14-18 AWG

Mounting Hardware: None provided

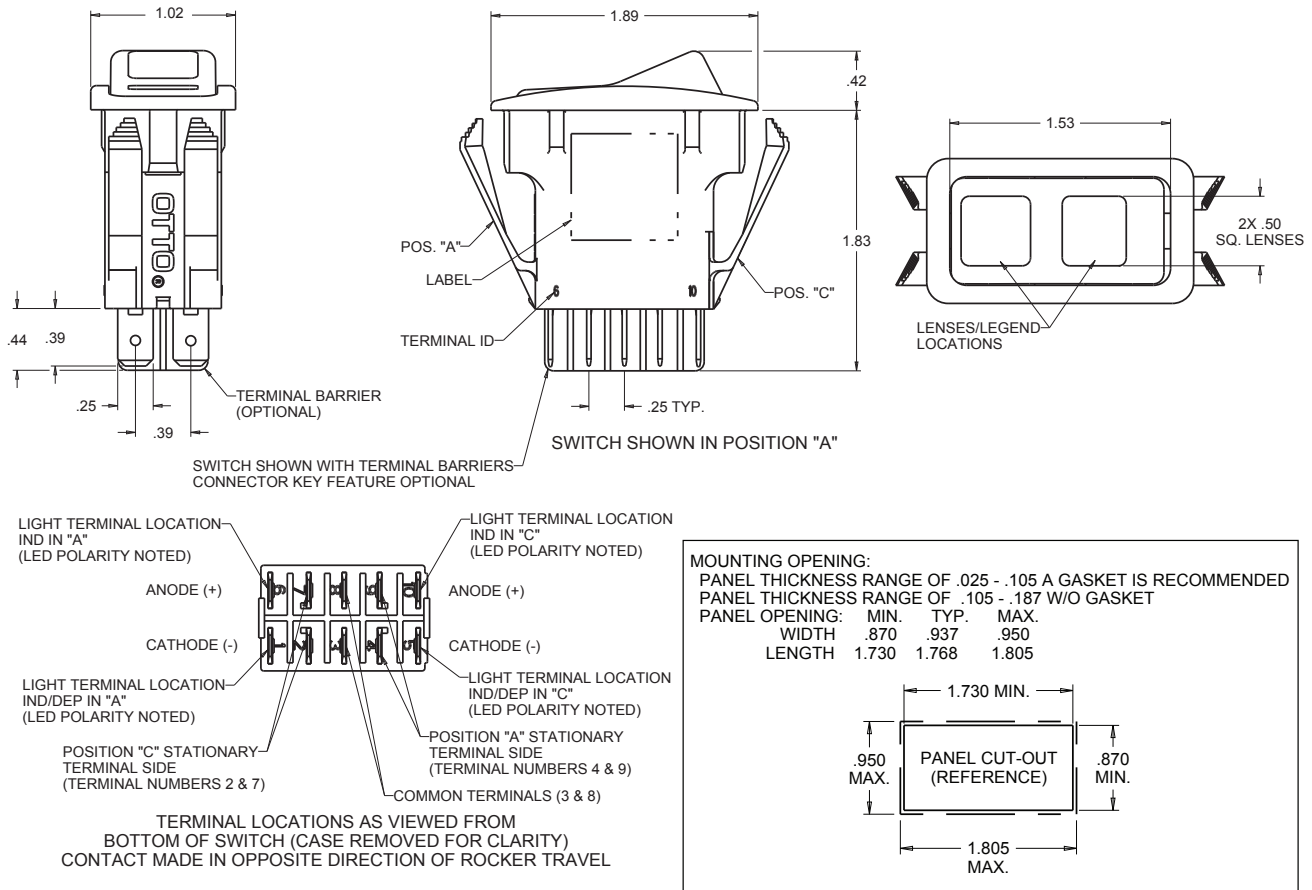
SEALED, ILLUMINATED ROCKER SWITCHES

K3 SERIES PART NUMBER CODE

Part Number Code Continued Below

K3		X		XX		X		X		
Base Options		Case Style/Button Color		Switch Action/Circuit		Light Source Type*		Light Circuit		
A. With Keying Pin Only Standard Rating Silver Plate		A. Case With Drain Holes Button Color: Black		Position "A"	Position "B"	Position "C"	Circuit	A. No Illumination	Circuit	Terminal Connections
B. Without Barriers or Pin Standard Rating Silver Plate		B. Case Without Drain Holes Button Color: Black		1A. 3-4	NONE	OFF	SPST	B. 6V Incandescent	B. Dep. in "A"	1(-) & 4(+)
C. With Terminal Barriers Only Standard Rating Silver Plate		C. Case With Drain Holes Button Color: Red		2A. 3-4/8-9	NONE	OFF	DPST	C. 12V Incandescent	C. Dep. in "C"	2(+) & 5(-)
D. With Keying Pin Only Logic Level Rating Gold Plate		D. Case Without Drain Holes Button Color: Red		1B. 3-4	NONE	3-2	SPDT	D. 24V Incandescent	D. Ind. in "A"	1(-) & 6(+)
E. Without Barriers or Pin Logic Level Rating Gold Plate		E. Case With Drain Holes Button Color: White		2B. 3-4/8-9	NONE	3-2/8-7	DPDT	E. 125VAC Neon	E. Ind. in "C"	5(-) & 10(+)
F. With Terminal Barriers Only Logic Level Rating Gold Plate		F. Case Without Drain Holes Button Color: White		1C. (3-4)	NONE	OFF	SPST	G. 2V Red LED	F. Dep. in "A"	1(-) & 4(+)
G. With Keying Pin Only Standard Rating No Plate		NOTE: Switch case is black for all options below:		2C. (3-4)/(8-9)	NONE	OFF	DPST	H. 2V Green LED	D. Dep. in "C"	2(+) & 5(-)
H. Without Barriers or Pin Standard Rating No Plate		1. Case With Drain Holes Button Not Included		1D. (3-4)	NONE	3-2	SPDT	J. 2V Amber LED	G. Dep. in "A"	1(-) & 4(+)
J. With Terminal Barriers Only Standard Rating No Plate		2. Case Without Drain Holes Button Not Included		2D. (3-4)/(8-9)	NONE	3-2/8-7	DPDT	K. 6V Red LED	I. Ind. in "C"	5(-) & 10(+)
				1E. (3-4)	OFF	(3-2)	SPDT	L. 6V Green LED	H. Ind. in "A"	1(-) & 6(+)
				2E. (3-4)/(8-9)	OFF	(3-2)/(8-7)	DPDT	M. 6V Amber LED	J. Dep. in "C"	2(+) & 5(-)
				1F. 3-4	OFF	3-2	SPDT	N. 12V Red LED	I. Ind. in "A"	1(-) & 6(+)
				2F. 3-4/8-9	OFF	3-2/8-7	DPDT	P. 12V Green LED	J. Ind. in "A"	1(-) & 6(+)
				1G. (3-4)	OFF	3-2	SPDT	Q. 12V Amber LED	I. Ind. in "C"	5(-) & 10(+)
				2G. (3-4)/(8-9)	OFF	3-2/8-7	DPDT	R. 24V Red LED	NOTE: Polarity only applies to LED circuits.	
								S. 24V Green LED		
								T. 24V Amber LED		

SNAP-IN PANEL MOUNTING, ATTRACTIVE & RUGGED FOR WET & DUSTY ENVIRONMENTS



<p>K3...1M...</p> <p>POS "A" POS "B" POS "C"</p> <p>SPECIAL CIRCUIT - ON-ON-ON SCHEMATIC</p>		<p>K3...2A...</p> <p>DPST-ON-NONE-OFF SCHEMATIC</p>	<p>K3...2B...</p> <p>DPDT-ON-NONE-ON SCHEMATIC</p>	<p>K3...2C...</p> <p>DPST-(ON)-NONE-OFF SCHEMATIC</p>	<p>K3...2D...</p> <p>DPDT-(ON)-NONE-ON SCHEMATIC</p>
<p>GENERAL SCHEMATIC INFORMATION</p> <p>○ INDICATES MAINTAIN ACTION (FIXED POSITION) ▼ INDICATES MOMENTARY ACTION (AUTOMATIC RETURN POSITION)</p> <p>FOR OTHER LIGHTING SCHEMATICS REPLACE FOLLOWING SYMBOLS:</p> <p>⬤ INCANDESCENT (REPLACE RESISTOR & LED) ⊕ NEON (REPLACE LED)</p>		<p>K3...2E...</p> <p>DPDT-(ON)-OFF-(ON) SCHEMATIC</p>	<p>K3...2F...</p> <p>DPDT-ON-OFF-ON SCHEMATIC</p>	<p>K3...2G...</p> <p>DPDT-(ON)-OFF-ON SCHEMATIC</p>	<p>K3...2BNC-Z</p> <p>DPDT-ON-NONE-ON SCHEMATIC W/DEPENDENT LED IN "A"</p>
<p>K3...2BND-Z</p> <p>DPDT-ON-NONE-ON SCHEMATIC W/INDEPENDENT LED IN "A"</p>	<p>K3...2BNC-Z</p> <p>DPDT-ON-NONE-ON SCHEMATIC W/INDEPENDENT LED IN "C"</p>	<p>K3...2BNF...</p> <p>DPDT-ON-NONE-ON SCHEMATIC W/DEPENDENT LED IN "A" & "C"</p>	<p>K3...2BNG...</p> <p>DPDT-ON-NONE-ON SCHEMATIC W/DEPENDENT LED IN "A" & INDEPENDENT LED IN "C"</p>	<p>K3...2BNH...</p> <p>DPDT-ON-NONE-ON SCHEMATIC W/INDEPENDENT LED IN "A" & DEPENDENT LED IN "C"</p>	<p>K3...2BNJ...</p> <p>DPDT-ON-NONE-ON SCHEMATIC W/INDEPENDENT LED IN "A" & "C"</p>

K1 THROUGH K5 & R2 PANEL PLUGS

K1-PA Panel Plug One Piece Molded

OPTIONAL PANEL GASKET:

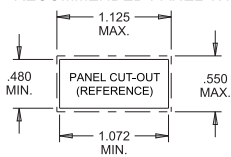
0.062" THICKNESS =
P/N 807039-1

0.031" THICKNESS =
P/N 807039-2

MOUNTING HOLE

RECOMMENDED PANEL THICKNESS:

RANGE 0.025 - 0.105 OPTIONAL PANEL
GASKET RECOMMENDED
RANGE 0.105 - 0.187 WITHOUT GASKET



Panel Opening:	Min.	Typ.	Max.
Width	0.480	0.515	0.550
Length	1.072	1.099	1.125

K2-PB Panel Plug Assembled Plug

OPTIONAL PANEL GASKET:

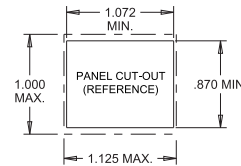
0.062" THICKNESS =
P/N 807038-1

0.031" THICKNESS =
P/N 807038-2

MOUNTING HOLE

RECOMMENDED PANEL THICKNESS:

RANGE 0.025 - 0.105 OPTIONAL PANEL
GASKET RECOMMENDED
RANGE 0.105 - 0.187 WITHOUT GASKET



Panel Opening:	Min.	Typ.	Max.
Width	0.870	0.937	1.00
Length	1.072	1.099	1.125

K4-PB Panel Plug Assembled Plug

OPTIONAL PANEL GASKET:

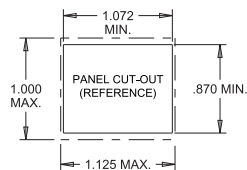
0.062" THICKNESS =
P/N 807038-1

0.031" THICKNESS =
P/N 807038-2

MOUNTING HOLE

RECOMMENDED PANEL THICKNESS:

RANGE 0.025 - 0.105 OPTIONAL PANEL
GASKET RECOMMENDED
RANGE 0.105 - 0.187 WITHOUT GASKET



Panel Opening:	Min.	Typ.	Max.
Width	0.870	0.937	1.00
Length	1.072	1.099	1.125

K3-PB Panel Plug Assembled Plug

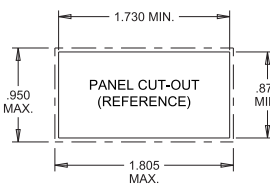
OPTIONAL PANEL GASKET:

P/N C807037

MOUNTING HOLE

RECOMMENDED PANEL THICKNESS:

RANGE 0.025 - 0.105 OPTIONAL PANEL
GASKET RECOMMENDED
RANGE 0.102 - 0.187 WITHOUT GASKET



Panel Opening:	Min.	Typ.	Max.
Width	0.870	0.937	0.950
Length	1.730	1.768	1.805

K5-PA / R2-PA Panel Plug One Piece Molded

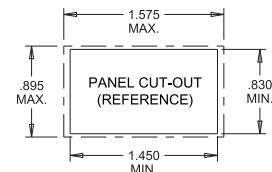
OPTIONAL PANEL GASKET:

P/N C807109

MOUNTING HOLE

RECOMMENDED PANEL THICKNESS:

RANGE 0.025 - 0.105 OPTIONAL PANEL
GASKET RECOMMENDED
RANGE 0.105 - 0.187 WITHOUT GASKET



Panel Opening:	Min.	Typ.	Max.
Width	0.830	0.863	0.895
Length	1.450	1.513	1.575

PANEL PLUG PART NUMBER CODE

Series	Plug	Style	Plug Color ③	Button Insert ③
K1 ①	P	A. One Piece Molded	1. Red	1. Red*
K2 ②		B. Assembled Plug	2. Black	2. Black*
K3 ②			9. White	9. White*
K4 ②				Z. NONE**
K5 ①				
R2 ①				

*K3 series only.

**Molded plug only.

① Available in Style A only.

② Available in Style B only.

③ Additional colors available. Contact factory.

LED VOLTAGE/CURRENT RATINGS TABLE

ROCKER AND ROTARY SWITCH VOLTAGE/CURRENT RATINGS TABLES

K1, K2, K3P and K4 LIGHTING VOLTAGE/CURRENT COMPONENTS RATINGS

LIGHT SOURCE VOLTAGE CATEGORY	LIGHT SOURCE COLOR	FORWARD CURRENT	TYPICAL FORWARD/ NOMINAL VOLTAGE	MAX. FORWARD VOLTAGE
6 VDC INCANDESCENT	WHITE	.2 AMPS	6 VDC	8 VDC
12 VDC INCANDESCENT	WHITE	.08 AMPS	12 VDC	14 VDC
24 VDC INCANDESCENT	WHITE	.04 AMPS	24 VDC	28 VDC
125 VAC NEON	AMBER	1.9 mA	125 VAC	125 VAC
250 VAC NEON	AMBER	1.9 mA	250 VAC	250 VAC
2 V LED PRODUCTS*	RED	20 mA	1.9 VDC	2.5 VDC
	GREEN	20 mA	2.15 VDC	2.5 VDC
	AMBER	20 mA	1.95 VDC	2.5 VDC
	BLUE	20 mA	3.5 VDC	4.0 VDC
6 V LED PRODUCTS	SEE CHART	20 mA	6 VDC	8 VDC
12 V LED PRODUCTS	SEE CHART	20 mA	12 VDC	14 VDC
24 V LED PRODUCTS	SEE CHART	20 mA	24 VDC	28 VDC

K3/K5 LIGHTING VOLTAGE/CURRENT COMPONENTS RATINGS

LIGHT SOURCE VOLTAGE CATEGORY	LIGHT SOURCE COLOR	FORWARD CURRENT	TYPICAL FORWARD/ NOMINAL VOLTAGE	MAX. FORWARD VOLTAGE
6 VDC INCANDESCENT	WHITE	.2 AMPS	6 VDC	8 VDC
12 VDC INCANDESCENT	WHITE	.08 AMPS	12 VDC	14 VDC
24 VDC INCANDESCENT	WHITE	.04 AMPS	24 VDC	28 VDC
125 VAC NEON	AMBER	1.9 mA	125 VAC	125 VAC
250 VAC NEON	AMBER	1.9 mA	250 VAC	250 VAC
2 V LED PRODUCTS*	RED	20 mA	2.0 VDC	2.5 VDC
	GREEN	20 mA	2.2 VDC	2.6 VDC
	AMBER	20 mA	2.1 VDC	2.5 VDC
6 V LED PRODUCTS	SEE CHART	20 mA	6 VDC	8 VDC
12 V LED PRODUCTS	SEE CHART	20 mA	12 VDC	14 VDC
24 V LED PRODUCTS	SEE CHART	20 mA	24 VDC	28 VDC

R2 LIGHTING VOLTAGE/CURRENT COMPONENTS RATINGS

LIGHT SOURCE VOLTAGE CATEGORY	LIGHT SOURCE COLOR	FORWARD CURRENT	TYPICAL FORWARD/ NOMINAL VOLTAGE	MAX. FORWARD VOLTAGE
2 V LED PRODUCTS*	RED	20 mA	2.0 VDC	2.5 VDC
	GREEN	20 mA	2.2 VDC	2.6 VDC
	AMBER	20 mA	2.1 VDC	2.5 VDC
6 V LED PRODUCTS	SEE CHART	20 mA	6 VDC	8 VDC
12 V LED PRODUCTS	SEE CHART	20 mA	12 VDC	14 VDC
24 V LED PRODUCTS	SEE CHART	20 mA	24 VDC	28 VDC

*Intended for use with external resistor. The "2 volt" switches are intended to have a resistor added in series into the lighting circuit by the customer. To determine the approximate value of the resistor, use the equation below:

$$\text{RESISTOR SIZE} = \frac{\text{POWER SUPPLY VOLTAGE} - \text{LED FORWARD VOLTAGE}}{\text{LED FORWARD CURRENT}}$$

LED VOLTAGE/CURRENT RATINGS TABLE

ILLUMINATED PUSHBUTTON SWITCH & INDICATOR LIGHTS VOLTAGE/CURRENT RATINGS TABLES

LP3, LP5 AND LPL SERIES

LIGHTING VOLTAGE/CURRENT COMPONENTS RATINGS

LIGHT SOURCE VOLTAGE CATEGORY	LED COLOR	FORWARD CURRENT	TYP. FORWARD VOLTAGE (DC)	MAX. FORWARD VOLTAGE DC
2V* PRODUCTS	RED	20 mA	1.9V	2.5V
	GREEN	20 mA	2.2V	2.6V
	AMBER			
	BLUE	20 mA	3.3V	4V
	DEEP GREEN			
6V PRODUCTS	ALL COLORS	20 mA	6V	8V
12V PRODUCTS	ALL COLORS	20 mA	12V	14.5V
24V PRODUCTS	ALL COLORS	20 mA	24 V	28.6 V

LP3S

LIGHTING VOLTAGE/CURRENT COMPONENTS RATINGS

LIGHT SOURCE VOLTAGE CATEGORY	LED COLOR	FORWARD CURRENT	TYP. FORWARD VOLTAGE	MAX. FORWARD VOLTAGE
2V* PRODUCTS	RED	20 mA	2 V	2.5 V
	GREEN			
	AMBER			
	BLUE	20 mA	3.2 V	4 V
	DEEP GREEN			
12V PRODUCTS	ALL COLORS	20 mA	12V	14V
24V PRODUCTS	ALL COLORS	20 mA	24 V	28.6 V

LP7-D and LP9 SERIES

LIGHTING VOLTAGE/CURRENT COMPONENTS RATINGS

LIGHT SOURCE VOLTAGE CATEGORY	LED COLOR, WAVELENGTH (nm)	FORWARD CURRENT	TYP. FORWARD VOLTAGE	MAX. FORWARD VOLTAGE
2V LIGHTPIPE STYLE	RED (631)	20 mA	2V	2.4V
	GREEN (525)	20 mA	3.2V	3.6V
	AMBER (591)	20 mA	2.1V	2.4V
	BLUE (470)	20 mA	3.3V	3.8V
	WHITE	5 mA	2.9V	3.15V
2V, TRANSLUCENT FULLY ILLUMINATED STYLE	RED (630)	20 mA	1.95V	2.5V
	GREEN (525)	20 mA	3.3V	4.1V
	AMBER (601)	20 mA	2.1V	2.5V
	BLUE (465)	20 mA	3.3V	4V
	WHITE	5 mA	2.85V	3.1V
12V ALL PRODUCTS	ALL COLORS, SAME AS 2V	(20 mA)	12.0V	14.0V

LP9L SERIES

LIGHTING VOLTAGE/CURRENT COMPONENTS RATINGS

LIGHT SOURCE VOLTAGE CATEGORY	LED COLOR, WAVELENGTH (nm)	FORWARD CURRENT	TYP. FORWARD VOLTAGE	MAX. FORWARD VOLTAGE
2V PRODUCTS	RED (631)	20 mA	2V	2.4V
	GREEN (525)	20 mA	3.2V	3.6V
	AMBER (591)	20 mA	2.1V	2.4V
	BLUE (470)	20 mA	3.3V	3.8V
	WHITE	5 mA	2.9V	3.15V
12V PRODUCTS	ALL COLORS, SAME AS 2V	(20 mA)	12.0V	14.0V

*Intended for use with external resistor. The "2 volt" switches are intended to have a resistor added in series into the lighting circuit by the customer. To determine the approximate value of the resistor, use the equation below:

$$\text{RESISTOR SIZE} = \frac{\text{POWER SUPPLY VOLTAGE} - \text{LED FORWARD VOLTAGE}}{\text{LED FORWARD CURRENT}}$$

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

OTTO:

[C801775-2A](#) [K3AB2AAA-00E3E4994](#) [K3AA1AAA-00E5E6994](#) [K300000041](#) [K300000055](#) [K300000058](#)
[K300000059](#) [K300000060](#) [K300000061](#) [K300000064](#) [K300000065](#) [K300000071](#) [K3AA1ACB-44](#) [K3AA1ACB-4Z](#)
[K3AA1ADB-44](#) [K3AA1ADB-4Z](#) [K3AA2ACB-5ZL5ZZ2Z1](#) [K3AA2BAA-ZZW1ZZ9Z2](#) [K3AA2BAA-ZZW4ZZ9Z2](#)
[K3AA2BNB-1Z](#) [K3AA2BNJ-44](#) [K3AA2FAA-ZZL9L8992](#) [K3AA2FPJ-ZZL5L4BB4](#) [K3AA2FPJ-ZZL9L2BB4](#) [K3AA2FPJ-](#)
[ZZM3M2BB4](#) [K3AB1BPD-4Z](#) [K3AB1FAA-ZZB2B1991](#) [K3AB1FAA-ZZB2B1994](#) [K3AB1FAA-ZZR4R3992](#) [K3AB2AAA-](#)
[ZZE3E4994](#) [K3AD1APB-2Z](#) [K3BA1ACF-21](#) [K3BA1ACG-21](#) [K3BA1ADE-Z5](#) [K3BA1BRE-Z1](#) [K3BA1FAA-ZZR4R3992](#)
[K3BA2FPF-ZZR7R8BB4](#) [K3BB1PND-1Z](#) [K3BB2EAA](#) [K3BC1APB-2Z](#) [K3CA2ABJ-21E3B1991](#) [K3CA2AMJ-](#)
[33E3B1991](#) [K3DB1CLD-4Z](#) [K3DB1ELJ-ZZR3R4BB4](#) [K3HA1EAA-ZZR5R6991](#) [K300000062](#) [K3AA1EAA-ZZR3R4994](#)
[K3AB1APD-4Z](#) [K3AB1ASB-2ZE5E6994](#) [K3AB1EAA-ZZR7R8991](#) [K3BB2DPD-2Z](#) [K3BF2EAA](#) [K3CB2FPJ-](#)
[ZZR7R8BB4](#) [K3AA1AAA-ZZL4ZZ9Z3](#) [K3AA1AAA-ZZM1ZZ9Z3](#) [K3AA1AAA-ZZR6R5991](#) [K3AA1AAA-ZZT1T2993](#)
[K3AA1EAA-ZZR6R5991](#) [K3AF1AAA](#) [K3AF2AAA](#) [K3AF2FAA](#) [K3BB1ASD-4Z](#) [K3BB1MSJ-44](#) [K3BB2ESJ-44](#)