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:

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	100,000
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 and IP69K
Operating Temp Range:	-30°C to +85°C

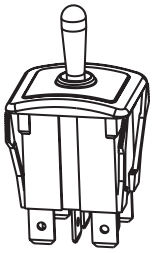
MATERIALS:

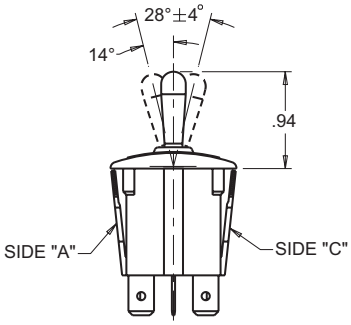
Case:	Thermoplastic
Toggle:	Stainless steel
Terminals/Contact:	Brass, silver alloy with silver plate, gold plate for low level
Terminal Hardware:	Screws and lockwashers provided when applicable K4 series recommended Quick Connect terminals: AMP 60253-2 for 12-16 AWG AMP 42100-2 for 14-18 AWG
Mounting Hardware:	None provided

Specifications Subject To Change Without Notice

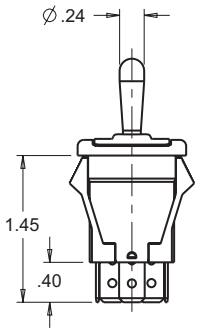
SEALED, ILLUMINATED SNAP-IN TOGGLE

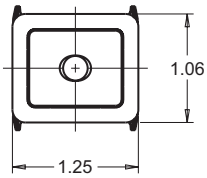
LOW COST, SNAP-IN TOGGLE FOR WET & DUSTY ENVIRONMENTS, 1 & 2 POLES

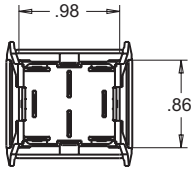




SWITCH SHOWN IN "B" POSITION



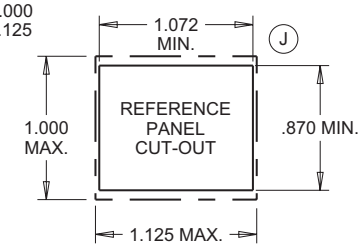




TERMINAL STYLES (.032 THICK)		
SCREW	QUICK CONNECT	SOLDER
#6-32 THD, .25	Ø .08, .25	Ø .11, .25

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

K4 X X X X X X X

Terminal Style/ Switch Rating
- **A.** Quick Connect/ Standard
- **B.** Screw/Standard
- **C.** Solder/Standard
- **D.** Quick Connect/ Low Level
- **E.** Screw/Low Level
- **F.** Solder/Low Level

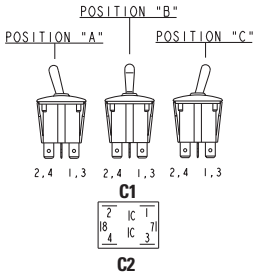
NOTE: Contact factory for panel recommendations on switches with potting cups.

Actuator Style
- **A.** Bat Handle

Switch Action/Circuit

	Position "A"	Position "B"	Position "C"	Circuit
A.	1-C1	NONE	OFF	SPST
B.	1-C1	NONE	2-C1	SPDT
C.	(1-C1)	NONE	OFF	SPST
D.	(1-C1)	NONE	2-C1	SPDT
E.	(1-C1)	OFF	(2-C1)	SPDT
F.	1-C1	OFF	2-C1	SPDT
G.	(1-C1)	OFF	2-C1	SPDT
H.	1-C1/3-C2	NONE	OFF	DPST
J.	1-C1/3-C2	NONE	2-C1/4-C2	DPDT
K.	(1-C1)/(3-C2)	NONE	OFF	DPST
L.	(1-C1)/(3-C2)	NONE	2-C1/4-C2	DPDT
M.	(1-C1)/(3-C2)	OFF	(2-C1)/(4-C2)	DPDT
N.	1-C1/3-C2	OFF	2-C1/4-C2	DPDT
P.	(1-C1)/(3-C2)	OFF	2-C1/4-C2	DPDT

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

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

Lens Color

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

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.

Light/Circuit Location

A. No Light

B. Dependent Light ON in position "A" Wired to terms **1** & 7

C. Dependent Light ON in position "C" Wired to terms **2** & 8

D. Independent Light at position "A" Wired to terms **7** & **8**

E. Independent Light at position "C" Wired to terms 7 & **8**

F. Dependent Light ON in position "A" Wired to terms **1** & 7
Dependent Light ON in position "C" Wired to terms **2** & 8

G. Dependent Light ON in position "A" Wired to terms **1** & 7
Independent Light at position "C" Wired to terms 7 & **8**

H. Independent Light at position "A" Wired to terms **7** & 8
Dependent Light ON in position "C" Wired to terms **2** & 8

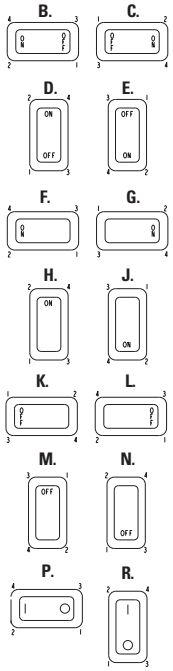
J. Independent Light at position "A" Wired to terms 3 & **7**
Independent Light at position "C" Wired to terms 4 & **8**
Not available in DP

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

D = Dependent Light
I = Independent Light

Legend & Orientation ①

A. No Legend



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

ORDERING INFORMATION

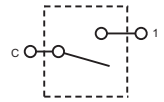
Example: K4AAKEEABA specifies Q.C. terminals, standard rating; bat handle; DPST two position momentary ON, maintained OFF; 125VAC neon light; clear lens in positions "A", no lens in position "C"; dependent light ON in position "A", wired to terminals 1 & 7; no legend.

• **K4 panel plugs available as shown on page 167.**

SEALED, ILLUMINATED SNAP-IN TOGGLE

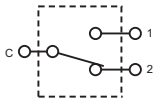
K4 SCHEMATICS

K4__A___A_



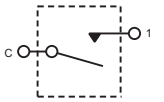
SPST - ON-NONE-OFF SCHEMATIC

K4__B___A_



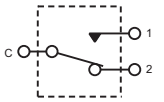
SPST - ON-NONE-ON SCHEMATIC

K4__C___A_



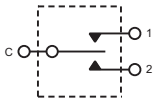
SPST - (ON)-NONE-OFF SCHEMATIC

K4__D___A_



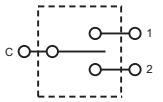
SPDT - (ON)-NONE-ON SCHEMATIC

K4__E___A_



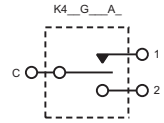
SPDT - (ON)-OFF-(ON) SCHEMATIC

K4__F___A_



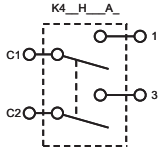
SPDT - ON-OFF-ON SCHEMATIC

K4__G___A_



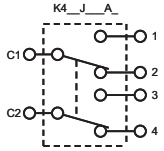
SPDT - (ON)-OFF-ON SCHEMATIC

K4__H___A_



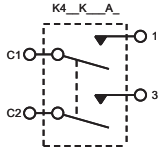
DPST - ON-NONE-OFF SCHEMATIC

K4__J___A_



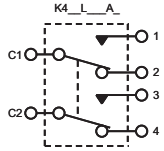
DPDT - ON-NONE-ON SCHEMATIC

K4__K___A_



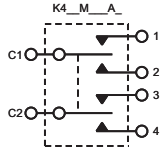
DPST - (ON)-NONE-OFF SCHEMATIC

K4__L___A_



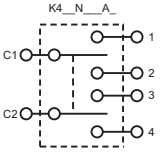
DPDT - (ON)-NONE-ON SCHEMATIC

K4__M___A_



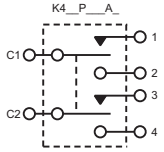
DPDT - (ON)-OFF-(ON) SCHEMATIC

K4__N___A_



DPDT - ON-OFF-ON SCHEMATIC

K4__P___A_



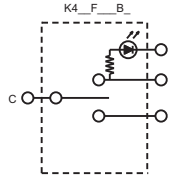
DPDT - (ON)-OFF-ON SCHEMATIC

GENERAL SCHEMATIC INFORMATION

INDICATES MAINTAIN ACTION
(FIXED POSITION)

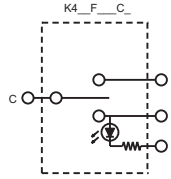
INDICATES MOMENTARY ACTION
(AUTOMATIC RETURN POSITION)

K4__F___B_



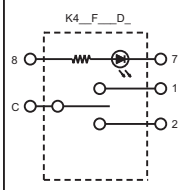
SPDT - ON-OFF-ON SCHEMATIC
W/DEP LED IN "A"

K4__F___C_



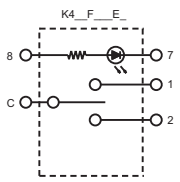
SPDT - ON-OFF-ON SCHEMATIC
W/DEP LED IN "C"

K4__F___D_



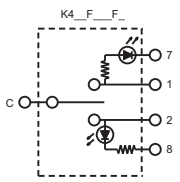
SPDT - ON-OFF-ON SCHEMATIC
W/IND LED IN "A"

K4__F___E_



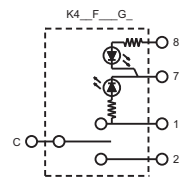
SPDT - ON-OFF-ON SCHEMATIC
W/IND LED IN "C"

K4__F___F_



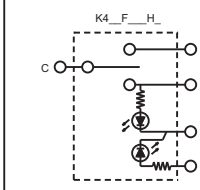
SPDT - ON-OFF-ON SCHEMATIC
W/DEP LED IN "A" "C"

K4__F___G_



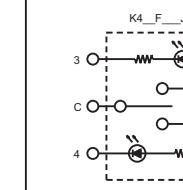
SPDT - ON-OFF-ON SCHEMATIC
W/DEP LED IN "A" IND LED IN "C"

K4__F___H_



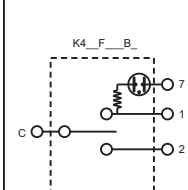
SPDT - ON-OFF-ON SCHEMATIC
W/IND LED IN "A" DEP LED IN "C"

K4__F___J_



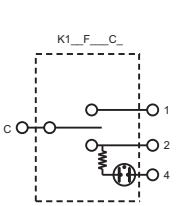
SPDT - ON-OFF-ON SCHEMATIC
W/IND LED IN "A" IND LED IN "C"

K4__F___B_



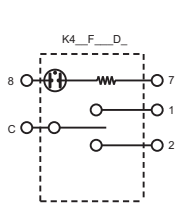
SPDT - ON-OFF-ON SCHEMATIC
W/DEP NEON BULB IN "A"

K1__F___C_



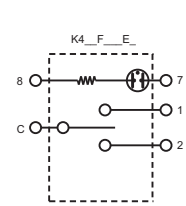
SPDT - ON-OFF-ON SCHEMATIC
W/DEP NEON BULB IN "C"

K4__F___D_



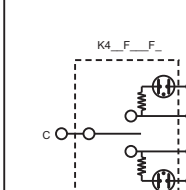
SPDT - ON-OFF-ON SCHEMATIC
W/IND NEON BULB IN "A"

K4__F___E_



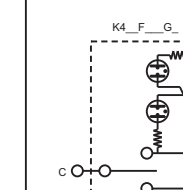
SPDT - ON-OFF-ON SCHEMATIC
W/IND NEON BULB IN "C"

K4__F___F_



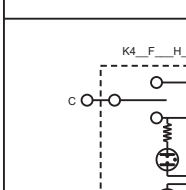
SPDT - ON-OFF-ON SCHEMATIC
W/DEP NEON BULB IN "A" "C"

K4__F___G_



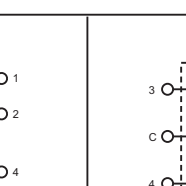
SPDT - ON-OFF-ON SCHEMATIC
W/DEP NEON IN "A" IND NEON IN "C"

K4__F___H_



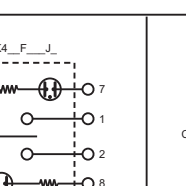
SPDT - ON-OFF-ON SCHEMATIC
W/IND NEON IN "A" DEP NEON IN "C"

K4__F___J_



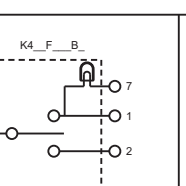
SPDT - ON-OFF-ON SCHEMATIC
W/IND NEON IN "A" & IND NEON IN "C"

K4__F___B_



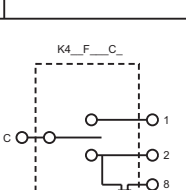
SPDT - ON-OFF-ON SCHEMATIC
W/DEP BULB IN "A"

K4__F___C_



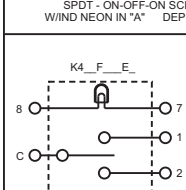
SPDT - ON-OFF-ON SCHEMATIC
W/DEP BULB IN "C"

K4__F___D_



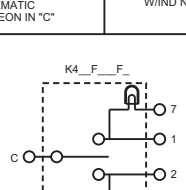
SPDT - ON-OFF-ON SCHEMATIC
W/IND BULB IN "A"

K4__F___E_



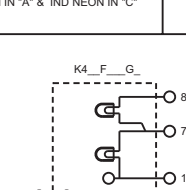
SPDT - ON-OFF-ON SCHEMATIC
W/IND BULB IN "C"

K4__F___F_



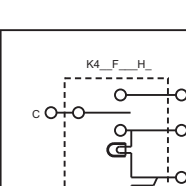
SPDT - ON-OFF-ON SCHEMATIC
W/DEP BULB IN "A" & "C"

K4__F___G_



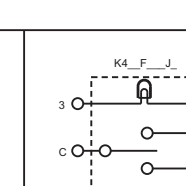
SPDT - ON-OFF-ON SCHEMATIC
W/DEP BULB IN "A" & IND BULB IN "C"

K4__F___H_



SPDT - ON-OFF-ON SCHEMATIC
W/IND BULB IN "A" & DEP BULB IN "C"

K4__F___J_



SPDT - ON-OFF-ON SCHEMATIC
W/IND BULB IN "A" & IND BULB IN "C"

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES.
TOLERANCES ARE AS LISTED.
MUST BE FREE FROM BURRS
AND SHARP EDGES

TOLERANCES

.XX	±.03
.XXX	±.010
ANGLES	±2°

DO NOT SCALE DRAWING

Specifications Subject To Change Without Notice

Общество с ограниченной ответственностью «МосЧип» ИНН 7719860671 / КПП 771901001
Адрес: 105318, г.Москва, ул.Щербаковская д.3, офис 1107

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

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