

MINIATURE K Series

Features

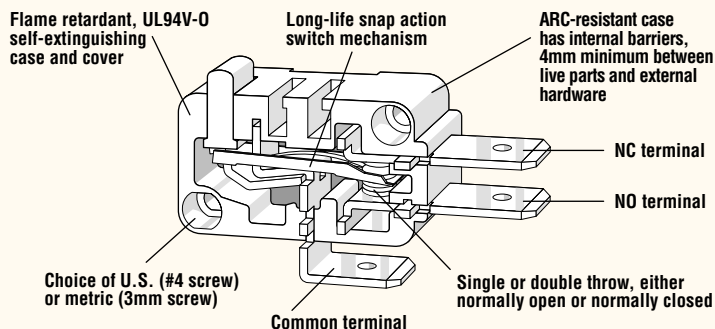
- Choice of current ratings up to 25 amps
- Choice of actuators
- Choice of terminals
- 3 contact arrangements
- Choice of operating force
- Long mechanical life
- Wiping contact action
- Snap over actuators
- Agency approved extended life versions

International Approved Versions

K Series switches, except 25A (KWS), are internationally approved. Switches with straight terminals may require insulated connectors for international approval.

Electrical Ratings

Switch Series	EN61058 Rating	UL1054 Rating	Electrical Life at Rated Load	
			According to VDE (Min. Operations)	According to UL (Min. Operations)
KWA/KWB	50mA, 28VDC	50mA, 28VDC	50,000	100,000
KWC/KWD	1(0.5)A, 250VAC	1.0A, 125/250VAC	50,000	100,000
KWE/KWF	3(1)A, 250VAC	3A, 1/10HP, 125/250VAC	50,000	100,000
KWG/KWH	6(2)A, 250VAC	5A, 1/4HP, 125/250VAC	50,000	100,000
KWJ/KWK	10(3)A, 250VAC	10A, 1/2HP, 125/250VAC	50,000	100,000
KWL	N/A	15.1A, 1/2HP, 125/250 VAC 5A, 125VAC Lamp Load (85°C only) 0.5A, 125VAC (85°C only) 0.25A, 250VAC (85°C only)	N/A	100,000
KWM	16(4)A, 250VAC	15.1A, 1/2HP, 125/250VAC 0.5A, 125VDC (85°C and 150°C only) 0.25A, 250VDC (85°C and 150°C only) 15.1A, 1/2HP, 125/250VAC (200°C only)	50,000	100,000
KWS	N/A	25A, 125/250VAC (85°C only) 1HP, 125VAC (85°C only) 2HP, 250VAC (85°C only)	N/A	100,000



Specifications

Electrical

Temperature Rating:	-40° to +85°C, 150°C or 200°C
Flammability Rating:	UL94V-0

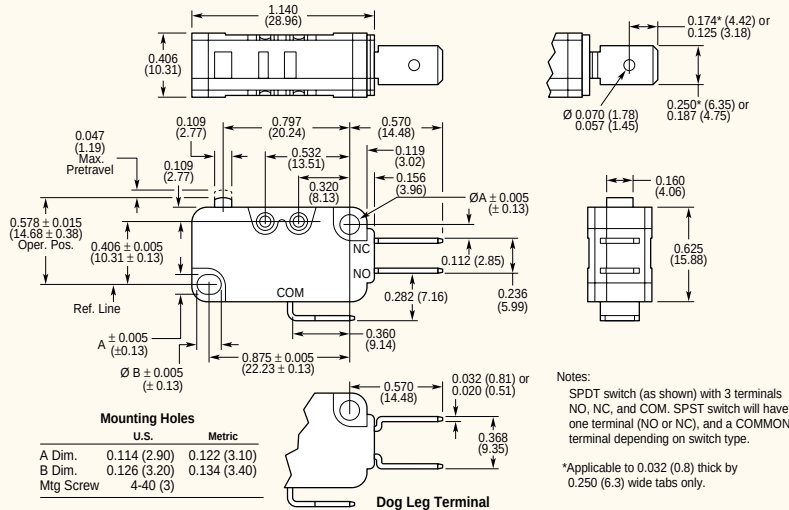
Materials

Case/Cover:	Thermoplastic Polyester (85°C or 150°C) Liquid Crystal Polymer (200°C)
Button:	Thermoplastic Acetal (85°C) Thermoplastic Polyester (150°C) Liquid Crystal Polymer (200°C)
Auxiliary Actuator:	Cold-Rolled Steel (Nickel-Plated)
Terminals:	Brass Copper (25 amp only)
Moving Blade:	Beryllium Copper
Contacts:	Silver Alloy (except KWA and KWB — Gold-Plated)





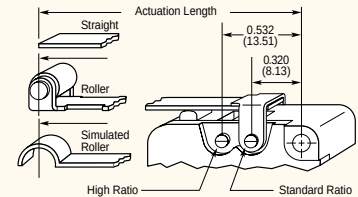
Dimensions inches (mm)



Actuators

Standard type snap over hinged lever and roller actuators are available in choice of two pivot positions. Lengths are dimensioned from centerline of switch upper mounting hole as shown here.

Auxiliary Actuator



Mounting

Recommended mounting screw size:
#4-40 Round head. Recommended torque
on screw: 3 inch lbs. max.

Actuator Specifications

Actuator Type	Switch Type	Maximum Operating Force (gms.)					Maximum Pre-Travel inches (mm)	Operating Point* inches (mm)	Minimum Over-Travel inches (mm)	Max. Movement Differential inches (mm)	Actuation Length** inches (mm)
		KWA, KWC, KWE	KWG	KWD, KWJ KWB, KWF	KWH, KWK, KWM	KWS					
A		25	50	75	150	225	0.047 (1.19)	0.563/0.593 (14.31/15.06)	0.050 (1.27)	0.010 (0.25)	— —
B		25	50	75	150	225	0.064 (1.63)	0.621/0.585 (15.78/14.85)	0.051 (1.29)	0.012 (0.31)	0.865 (21.97)
C		14	27	40	80	120	0.128 (3.26)	0.637/0.569 (16.18/14.45)	0.085 (2.16)	0.030 (0.76)	1.400 (35.56)
D		6	12	18	36	54	0.284 (7.22)	0.679/0.527 (17.25/13.38)	0.182 (4.62)	0.051 (1.30)	2.722 (69.14)
E		15	30	44	88	132	0.116 (2.95)	0.634/0.572 (16.11/14.52)	0.074 (1.88)	0.021 (0.54)	1.077 (27.36)
F		8	15	23	45	67	0.230 (5.85)	0.665/0.541 (16.90/13.74)	0.146 (3.71)	0.041 (1.05)	1.612 (40.94)
G		4	7	10	20	30	0.512 (13.01)	0.739/0.467 (18.78/11.86)	0.407 (10.33)	0.091 (2.32)	2.934 (74.52)
J		16	31	46	92	138	0.110 (2.80)	0.758/0.698 (19.26/17.72)	0.088 (2.23)	0.020 (0.51)	1.254 (31.85)
M		9	18	26	52	77	0.200 (5.08)	0.781/0.675 (19.84/17.14)	0.115 (2.92)	0.036 (0.92)	1.466 (37.24)
Q		15	29	43	85	127	0.120 (3.05)	0.852/0.786 (21.65/19.96)	0.096 (2.43)	0.022 (0.56)	1.340 (34.04)
T		8	16	24	47	71	0.218 (5.54)	0.877/0.761 (22.28/19.32)	0.173 (4.39)	0.039 (1.00)	1.552 (39.42)

*Measured above reference line. Refer to dimensional drawing above. **Actuator tolerance ± 0.031 inches (0.79mm).

Ordering Information

K Series/Prefix				A				D				Q				A C A			
Light				Standard				Code				Code				Snap Over Actuators			
Code	Force	Code	Force	Code	Force	Rating	Notes	Code	Temperature Rating	Code	Terminal Type	Code	Mounting Holes	Code	Configuration	Code	Type	Actuation Length	
A	25	B	75	50mA	1			A	85°C UL/CUL	P4	0.062 x 0.032 (1.57 x 0.81) PCB*	A	U.S.	A	Normally Open	B	Straight SR	0.865 (21.97)	
C	25	D	75	1A	1			B	150°C UL/CUL	Q	0.187 x 0.020 (4.75 x 0.51) Straight	B	Metric	B	Normally Closed	C	Straight SR	1.400 (35.56)	
E	25	F	75	3A	1			C	200°C UL/CUL	R	0.187 x 0.020 (4.75 x 0.51) Dog Leg			C	Double Throw	D	Straight SR	2.722 (69.14)	
G	50	H	150	5A	1			D	85°C UL/CUL/VDE	S	0.187 x 0.032 (4.75 x 0.81) Straight					E	Straight HR	1.077 (27.36)	
J	75	K	150	10A	1			E	150°C UL/CUL/VDE	T	0.187 x 0.032 (4.75 x 0.81) Dog Leg					F	Straight HR	1.612 (40.95)	
		L	150	15A	3					V	0.250 x 0.032 (6.35 x 0.81) Straight					G	Straight HR	2.934 (74.52)	
		M	150	15A	2					W	0.250 x 0.032 (6.35 x 0.81) Dog Leg					J	SIM Roller SR	1.254 (31.85)	
		S	225	25A	3, 5											M	SIM Roller HR	1.466 (37.24)	
																Y†	Roller SR	0.810 (20.57)	
																Q	Roller SR	1.340 (34.04)	
																W†	Roller HR	1.022 (25.96)	
																T	Roller HR	1.552 (39.42)	

Notes:

1. ± 0.031 inches (0.79mm) rated for 100,000 cycles at 85°C, 150°C, 200°C. VDE rated for 150°C only.
2. ± 0.031 inches (0.79mm) rated for 100,000 cycles at 85°C, 150°C, 200°C. VDE rated for 85°C only.
3. ± 0.031 inches (0.79mm) rated for 100,000 cycles at 85°C only.
4. Available in 10A and lower, ± 0.031 inches (0.79mm) rated for 100,000 cycles at 85°C and 150°C.
5. Available with 0.250 x 0.032" terminals only.

*PCB terminals are lateral to case only.

†Available as internal mounting only.