# A Series General Purpose Snap-acting Switches

#### Features/Benefits

- Low cost—high performance
- Long electrical life
- Single and double pole
- Sealed actuator option available

#### **Typical Applications**

- Enclosure equipment
- Garage door openers
- Vending machines





#### **Specifications**

CONTACT RATING: From low level\* to 25 AMPS @ 277 V AC. ELECTRICAL LIFE: 75,000 cycles at 25 AMPS @ 250 V AC, 200,000 cycles at 15 AMPS @ 250 V AC.

INSULATION RESISTANCE: 1,000 M ohm min.

DIELECTRIC STRENGTH: 1,000 Vrms min. @ sea level.

OPERATING TEMPERATURE: -67°F to 185°F (-55°C to 85°C).

OPERATING FORCE: 20 oz. (567 grams) max. SP models. 40 oz. (1134 grams) max. DP models at actuator button.

MOUNTING: Torque screws 3 in/lbs max. MOUNTING NUT: 20 in/lbs max. torque

\* Low Level=conditions where no arcing occurs during switching, i.e., 0.4 VA max. @ 20 V AC or DC max.

NOTE: Specifications and materials listed above are for switches with standard options. C&K does provide specific and custom switches at 30 AMPS @ 277 VAC. Please consult Customer Service Center.

#### **Materials**

SWITCH HOUSING: Heat resistant phenolic (UL 94V-0). ACTUATOR BUTTON: Heat resistant phenolic (UL 94V-0).

SPRING: Copper alloy.

PIVOT: Brass alloy for models up to 15 AMPS.

Copper for 25 AMP models.

MOVABLE CONTACTS: Gold alloy for ratings 1 AMP or less. Fine silver for ratings up to 15 AMPS. Silver alloy

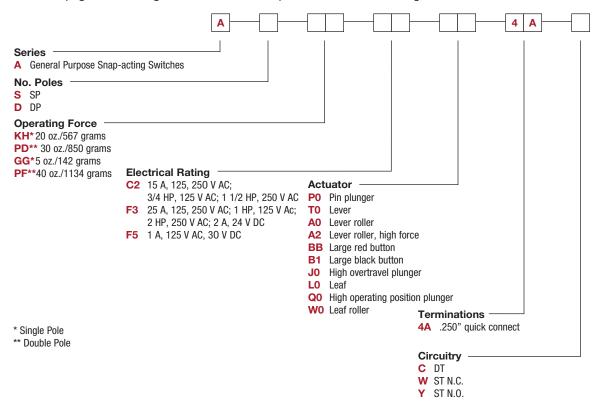
for ratings of 25 AMPS.

STATIONARY CONTACTS: Gold alloy on brass base alloy for ratings 1 AMP or less. Fine silver welded on brass base alloy for ratings greater than 1 AMP up to 15 AMPS. Fine silver welded on copper alloy for ratings 25 AMPS.

TERMINALS: Brass alloy for 1 AMP up to 15 AMPS. Copper alloy for 25 AMPS.

#### **Build-A-Switch**

To order, simply select desired option from each category and place in the appropriate box. Available options are shown and described on pages J-78 through J-81. For additional options not shown in catalog, consult Customer Service Center.

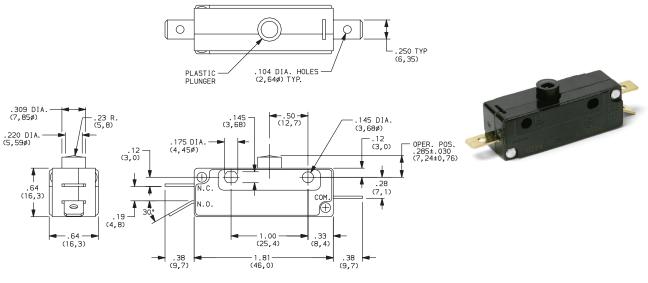




Dimensions are shown: Inch (mm) Specifications and dimensions subject to change

#### **NO. POLES**

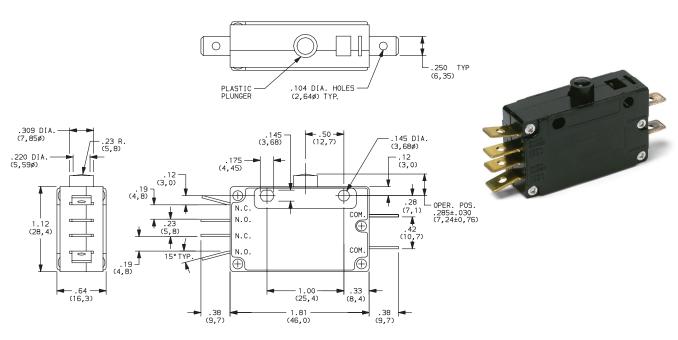
S SINGLE POLE SWITCH



Mounting holes will accept pins or screws of .139 dia. (3,53) max., on 1.000 (25,40) centers.

DOUBLE POLE SWITCH

Snap-acting



Mounting holes will accept pins or screws of .139 dia. (3,53) max., on 1.000 (25,40) centers.

NOTE: To select switching function, see CIRCUITRY section, page J-81.



Specifications and dimensions subject to change



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# **A Series General Purpose Snap-acting Switches**

#### **OPERATING FORCE**

OPTION CODE	NO. POLES	BASIC SWITCH OPERATING FORCE (OZ./GRAMS)
КН	SP	20 567
PD	DP	30 850
GG	SP	5 142
PF	DP	40 1134

NOTE: Operating force varies with actuator, see ACTUATOR option section.





	CONTACT	MATERIAL	
OPTION CODE	MOVABLE CONTACT	STATIONARY CONTACT	ELECTRICAL RATING
C2	Fine silver.	Fine silver welded on brass base alloy.	15 AMPS @ 125 & 250 V AC; 3/4 HP @ 125 V AC; 1-1/2 HP @ 250 V AC.
F3	Silver alloy.	Silver welded on copper base alloy.	25 AMPS @ 125 & 250 V AC; 1 HP @ 125 V AC; 2 HP @ 250 V AC; 2 AMPS @ 24 V DC.
F5	Gold alloy.	Gold alloy on brass base alloy.	From low level* to 1 AMP @ 125 V AC, 30 V DC.



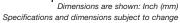
Contact Customer Service Center for availability and delivery of nonstandard ratings.

#### **AVAILABLE COMBINATIONS**

	OPERATING FORCE (OZ./GRAMS)										
ELECTRICAL RATING	<b>GG</b> 5 142	KH 20 567	PD 30 850	PF 40 1134							
C2	•	•	•	•							
F3	х	•	•	•							
F5	•	•	•	•							

- AVAILABLE
- X NOT AVAILABLE







 $<sup>^{\</sup>star}$  Low Level=conditions where no arcing occurs during switching,

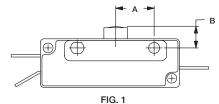
i.e., 0.4 VA max. @ 20 V AC or DC max.

 $<sup>^{\</sup>star}$  Note: See Technical Data section of this catalog for RoHS compliant and compatible definition and specifications.

### **ACTUATOR**



OPTION CODE	FIG.	DIM. A	DIM. B	DIM. C	DIM. D	DIM. E	DIM. F	
P0	1	.50 (12,7)	.285 ± .030 (7,24 ± 0,76)	_	_	-	_	
A0	3	1.38 (35,1)	.718 ± .062 (18,24 ± 1,57)	.375 dia. (9,53Ø)	.50 (12,7)	.50 (12,7)	_	
A2	4	1.25 (31,8)	.718 ± .062 (18,24 ± 1,57)	.375 dia. (9,53Ø)	.50 (12,7)	-	_	
B1	6	1.50 (38,1)	.40 ± 0.1 (10,2 ± 2.54)	.98 dia. (24,9Ø)	-	-	_	
ВВ	6	1.50 (38,1)	.40 ± 0.1 (10,2 ± 2.54)	.98 dia. (24,9Ø)	-	-	_	
J0	5	.50 (12,7)	.810 ± .030 (20,6 ± 0,8)	.38 (9,7)	.25 dia. (6,4Ø)	-	_	
LO	2	1.62 (41,1)	.312 ± .062 (17,92 ± 1,57)	.50 (12,7)	_	_	_	
Q0	5	.50 (12,7)	.670 ± .030 (17,02 ± 0,76)	.38 (9,6)	.25 dia. (6,4Ø)	-	_	
то	7 1.50 (38,1)		.318 ± .062 (8,08 ± 1,57)	.50 (12,7)	.50 (12,7)	_	_	
W0	<b>W0</b> 8		.801 ± .062 (20,34 ± 1,57)	.375 dia. (9,53ø)	.50 (12,7)	_	_	



High Overtravel Plunger

**NOTE:** The "H0" high overtravel plunger option provides .100 (2,54) min. overtravel and longer mechanical life (1,000,000 operations typical).

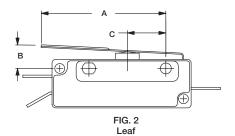


FIG. 3

Lever Roller

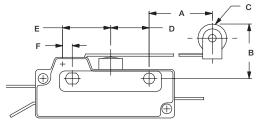
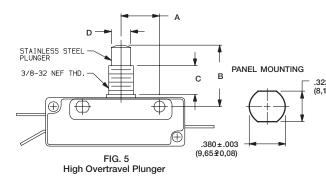
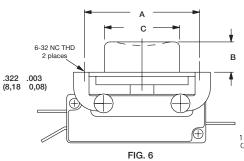


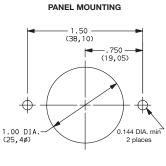
FIG. 4 Lever roller (High Force)



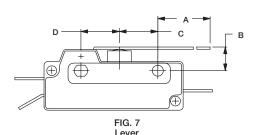
Torque 20 in/lbs max. (Nut)



B1 – Black Button BB – Red Button



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Dimensions are shown: Inch (mm) Specifications and dimensions subject to change

FIG. 8 Leaf Roller

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# **A Series General Purpose Snap-acting Switches**

#### **ACTUATOR**

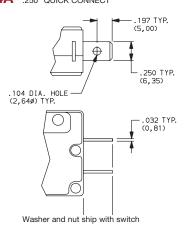
#### **SWITCH CHARACTERISTICS**

			OPERA Z./GRA				RELEA Z./GRA		MAXIMUM MINIMUM PRETRAVEL OVERTRAVEL						OPERATING POSITION					
OPTION CODE	GG S.P.	KH S.P.	PD D.P	PF D.P.	GG S.P.	KH S.P.	PD D.P	PF D.P.	GG S.P.	KH S.P.	PD D.P	PF D.P.	GG S.P.	KH S.P.	PD D.P	PF D.P.	GG S.P.	KH S.P.	PD D.P	PF D.P.
A0	1.5 42.5	4 113	6 170	10 283	0.3 8.5	0.5 14	1 .312 28 (7,92)				312 .187 (7,92) (4,75)				.718 (18,24)					
A2	1.5 42.5	4 113	6 170	10 283	0.4 11	0.5 14		1 .25 28 (6,4)			.14 (5,6)				.718 (18,24)					
B1	8 227	20 567	30 850	40 1134	1 28	3 85		6 70		.05 (1,2			050 (1,27)				_			
BB	8 227	20 567	30 850	40 1134	1 28	3 85		6 170		.050 (1,27)			.050 (1,27)			_				
JO	5 142	20 567	30 850	40 1134	1 28	3 85	6 170		.050 (1,27)			.187 (4,75)				_				
LO	3 85	12 340	18 510	22 624	0.5 14	1 28		2 .281 56.7 (7,14)			. 062 (1,57)				.312 (7,92)					
P0	8 227	20 567	30 850	40 1134	1 28	3 85		6 70	.050 (1,27)							-				
Q0	5 142	20 567	30 850	40 1134	1 28	3 85		6 70	.050 (1,27)				.050 (1,27)		_					
ТО	1.5 42.5	4 113	6 170	10 283	0.3 8.5	0.5 14		1 28	.312 (7,92)				.187 (4,75)			312 (7,92)			2)	
W0	3 85	12 340	18 510	22 624	0.5 14	1 28		2 6.7		.28 (7,					)62 ,57)			.7	18 (18,2	4)

NOTE: For basic switch operating forces, see page J-77.

### TERMINATIONS ----

**4A** .250" QUICK CONNECT



**NOTE:** Terminals can be supplied at various angles. Other terminal styles can be supplied for special applications. Consult Customer Service Center for special requirements.

## **CIRCUITRY**

C DT (Double Throw, Normally Open & Normally Closed)

ST N.C. (Single Throw, Normally Closed)

Y ST N.O. (Single Throw, Normally Open)

NOTE: To select number of poles, see NO. POLES section, page J-56



Dimensions are shown: Inches (mm) Specifications and dimensions subject to change



# **Mouser Electronics**

**Authorized Distributor** 

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### **C&K Switches:**

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ASKHC2B14AC ADPDC2T04AC ASKHC2J04AC ASKHC2A04AC ASKHC2B4AC ASKHC2P04AC

ASKHC2T04AY ADPDC2W04AC ASKHC2W04AC ASKHF3B14AC ASKHC2T04AC ADPDC2L04AC

ASGGC2P04AC ADPDC2J04AC ADPDC2P04AC ADPDC2A04AC ADPDC2A24AC ADPDC2B84AC

ADPDC2J04AY ADPDC2P04AY ADPDC2T04AY ADPFF3J04AC ADPFF3J04AW ADPFF3J04AY ADPFF3P04AC

ADPFF3P04AY ADPFF3T04AC ASGGF5A04AC ASGGF5BB4AY ASGGF5J04AC ASGGF5J04AY ASGGF5L04AC

ASGGF5P04AC ASGGF5Q04AC ASKHC2B14AY ASKHC2B84AY ASKHC2J04AW ASKHC2J04AY

ASKHC2L04AC ASKHC2L04AW ASKHC2Q04AC ASKHF3A04AC ASKHF3A04AY ASKHF3B14AY ASKHF3B84AC

ASKHF3J04AC ASKHF3J04AW ASKHF3J04AY ASKHF3P04AC ASKHF3P04AY ASKHF3T04AC ASKHF3T04AY

ASKHF3W04AC ADPFF3BB4AC ASKHF3B84AY ADPFF3B14AC ASKHF3L04AC ASKHF3L04AY

ADPFF3P04AW ADPFF3Q04AC ASKHF3L04AW ASKHC2A24AY ADPFC2W04AC ASKHF3Q04AY

ASKHF3Q04AC ADPFC2W04AW ADPC2B14AC ASKHF3Q04AW ASKHF3A24AC ASKHF3Q04AY

ASKHF5T04AC ASKHF5T04AW ADPDC2B14AC ASKHF3Q04AW ASKHF3A24AY ASKHC2D04AY

ASKHF5T04AC ASKHF5T04AW ADPDC5W04AC ASKHF3Q04AW ASKHC2L04AY ADPDF3J04AC ASKHC2D04AY

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