

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 30 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. For information on specific and custom switches, 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 30.1 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 30.1 AMPS.
TERMINALS: Brass alloy for 1 AMP up to 15 AMPS.
Copper alloy for 30.1 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.

Series		Actuator		Terminations	
A General Purpose Snap-acting Switches		P0 Pin plunger		4A .250" quick connect	
No. Poles		T0 Lever		Circuitry	
S SP		A0 Lever roller		C DT	
D DP		A2 Lever roller, high force		W ST N.C.	
Operating Force		BB Large red button		Y ST N.O.	
KH* 20 oz./567 grams		B1 Large black button			
PD** 30 oz./850 grams		J0 High overtravel plunger			
GG* 5 oz./142 grams		L0 Leaf			
PF** 40 oz./1134 grams		Q0 High operating position plunger			
Electrical Rating		W0 Leaf roller			
C2 15 A, 125, 250 V AC;					
3/4 HP, 125 V AC; 1 1/2 HP, 250 V AC					
F3 25 A, 125, 250 V AC; 1 HP, 125 V AC;					
2 HP, 250 V AC; 2 A, 24 V DC					
F5 1 A, 125 V AC, 30 V DC					

* Single Pole
** Double Pole



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



Snap-acting

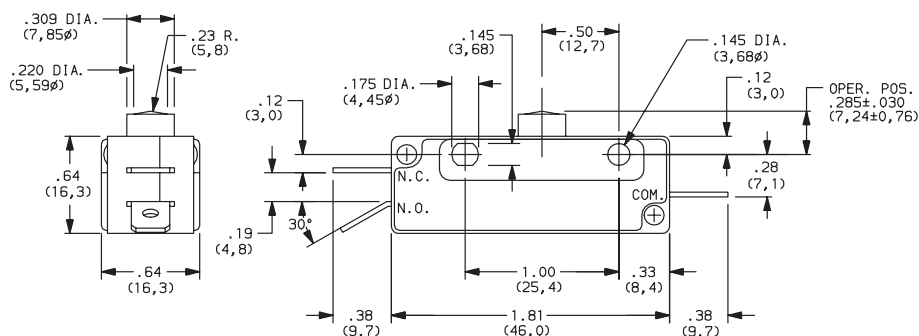
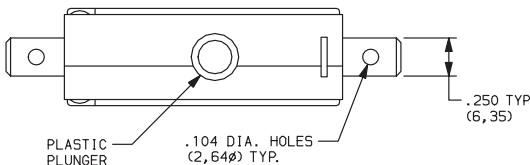
A Series General Purpose Snap-acting Switches

SERIES ■ ■ ■ ■ ■ ■ ■ ■

A GENERAL PURPOSE SNAP-ACTING SWITCHES

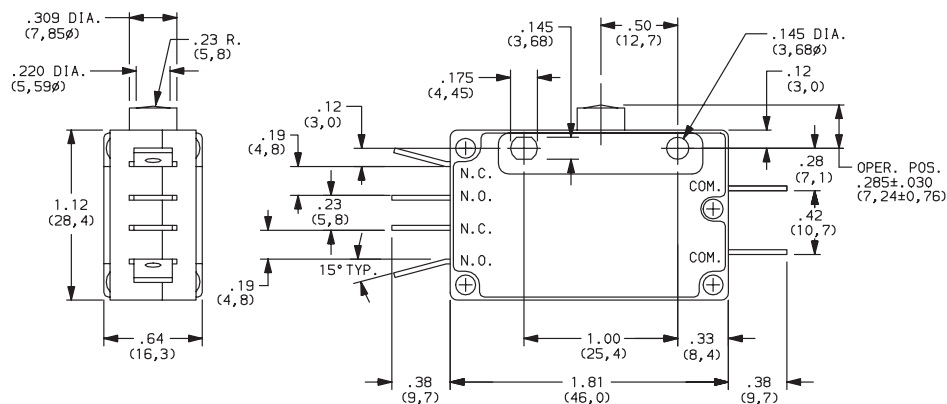
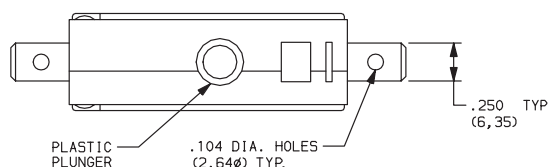
NO. POLES ■ ■ ■ ■ ■ ■ ■ ■

S SINGLE POLE SWITCH



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

D DOUBLE POLE SWITCH



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.

C&K



Third Angle
Projection

Dimensions are shown: Inches (mm)
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)
KH	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.

ELECTRICAL RATING

OPTION CODE	CONTACT MATERIAL		ELECTRICAL RATING
	MOVABLE CONTACT	STATIONARY CONTACT	
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.

All models  with all options.

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

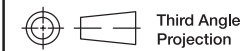
* Low Level=conditions where no arcing occurs during switching,
i.e., 0.4 VA max. @ 20 V AC or DC max.

* Note: See Technical Data section of this catalog for RoHS compliant and compatible definition and specifications.

AVAILABLE COMBINATIONS

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

• AVAILABLE
x NOT AVAILABLE



Dimensions are shown: Inch (mm)

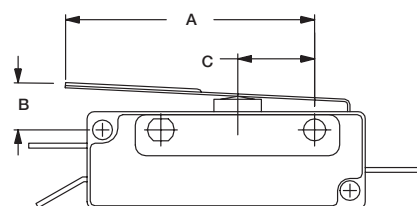
Specifications and dimensions subject to change

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ACTUATOR

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

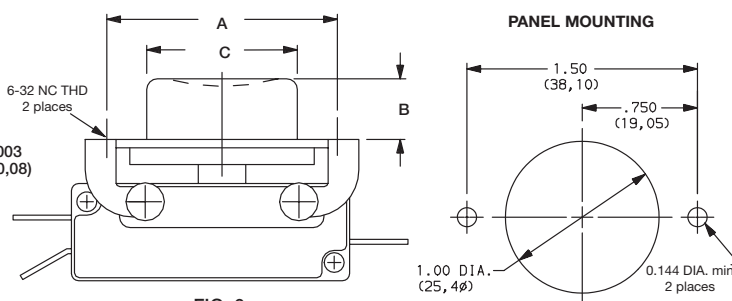


Technical drawing of a mechanical assembly. The drawing shows a side view of a component with a central rectangular feature. Dimensions are indicated by arrows and labels: A is the width of the central feature, C is the height of the central feature, D is the distance from the left edge to the center of the central feature, and E is the distance from the right edge to the center of the central feature. The drawing includes a cross-section view of the central feature, showing a circular hole with a central dot. The component has a base with four mounting holes, each marked with a crosshair symbol.

Technical drawing of a mechanical part. The main view shows a cross-section of a component with dimensions E, F, and D. Dimension E is the total width, F is the width of the left flange, and D is the distance from the center of the flange to the center of the main body. A detail view on the right shows a cross-section of a circular feature with a central hole, labeled A and C. The detail view also shows a dimension of 10 mm for the radius of the circular feature.

[illegible]

Torque 20 in/lbs max. (Nut)



Technical drawing of a mechanical part showing dimensions A, B, C, and D. The drawing includes a cross-section view and a side view. Dimension A is the total length of the part. Dimension B is the height of the part. Dimension C is the length of the top flange. Dimension D is the distance from the left edge to the center of the top flange.

A technical drawing of a mechanical assembly. It shows a side view of a component with a circular feature on the left and a rectangular base. Dimension A is the horizontal distance from the center of the circular feature to the right edge of the base. Dimension B is the vertical distance from the bottom of the base to the center of the circular feature. Dimension C is the radius of the circular feature. Dimension D is the horizontal distance from the center of the circular feature to the center of a small rectangular feature on the base.



Third Angle Projection

Specifications and dimensions subject to change

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ACTUATOR

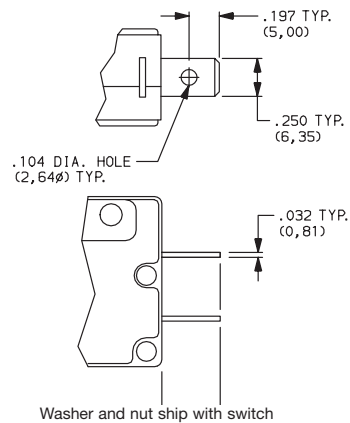
SWITCH CHARACTERISTICS

OPTION CODE	MAXIMUM OPERATING FORCE (OZ./GRAMS)				MINIMUM RELEASE FORCE (OZ./GRAMS)				MAXIMUM PRETRAVEL				MINIMUM OVERTRAVEL				OPERATING POSITION			
	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 28		.312 (7,92)				.312 (7,92)	.187 (4,75)			.718 (18,24)			
A2	1.5 42.5	4 113	6 170	10 283	0.4 11	0.5 14	1 28		.25 (6,4)				.14 (5,6)				.718 (18,24)			
B1	8 227	20 567	30 850	40 1134	1 28	3 85	6 170		.050 (1,27)				.050 (1,27)				—			
BB	8 227	20 567	30 850	40 1134	1 28	3 85	6 170		.050 (1,27)				.050 (1,27)				—			
J0	5 142	20 567	30 850	40 1134	1 28	3 85	6 170		.050 (1,27)				.187 (4,75)				—			
L0	3 85	12 340	18 510	22 624	0.5 14	1 28	2 56.7		.281 (7,14)				.062 (1,57)				.312 (7,92)			
P0	8 227	20 567	30 850	40 1134	1 28	3 85	6 170		.050 (1,27)				.050 (1,27)				—			
Q0	5 142	20 567	30 850	40 1134	1 28	3 85	6 170		.050 (1,27)				.050 (1,27)				—			
T0	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)			
W0	3 85	12 340	18 510	22 624	0.5 14	1 28	2 56.7		.281 (7,14)				.062 (1,57)				.718 (18,24)			

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)
- W** 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