Rotary Switches Product Selection Guide

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A	RTA	М	RBP12	RTBH	RTBV	R	F	Н	Р
Multi-pole/ Multi-position	Multi-pole/ Multi-position	Half-inch	Multi-pole/ Multi-position	Right-angle Sealed	Right-angle Sealed	Rota-slide	Rota-slide	Power Rota-slide	Key Switch
	•		•				•		
			•				•		•
•	•		•	•	•	•	•		
								•	
2.5 Amps	150 mA	6 Amps	130 nA			5 Amps	4 Amps	12 Amps	4 Amps
									•
1-4	1-4	1 & 2	1-6			1 & 2	1 & 2	1 & 2	1 & 2
30°, 45°, 90°		30° & 36°		15,22.5,36		36°	45° & 90°	45° & 90°	45° & 90°
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L-3	L-8	L-13	L-18	L-22	L-28	L-34	L-37	L-41	L-44
	Multi-pole/ Multi-position 2.5 Amps 1-4 30°, 45°, 90° • tions • - - - - - - - - - - - -	Multi-pole/ Multi-position Multi-position A A A A A A A A A A A A A A A A A A A	Multi-pole/ Multi-pole/ Multi-position	Multi-pole/ Multi-position Half-inch Multi-position	Multi-pole/ Multi-position Multi-pole/ Multi-position Multi-pole/ Multi-position Multi-pole/ Multi-position Right-angle Sealed • • • • • • • • 2.5 Amps 150 mA 6 Amps 130 nA • 1-4 1-4 1 & 2 1-6 • 30°, 45°, 90° 30° & 36° • 15,22.5,36 • • • • • tions • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • <t< td=""><td>Multi-pole/ Multi-position Multi-pole/ Multi-position Multi-pole/ Multi-position Right-angle Sealed Right-angle Sealed 2.5 Amps 150 mA 6 Amps 130 nA . . 1-4 1-4 1 & 2 1-6 . . 30°, 45°, 90° 30° & 36° </td><td>Multi-pole/ Multi-position Multi-pole/ Multi-position Multi-pole/ Multi-position Multi-pole/ Multi-position Right-angle Sealed Right-angle Sealed Rota-slide - - - - - - - - - - - - - - - - 2.5 Amps 150 mA 6 Amps 130 nA - - - - 1-4 1-4 1 & 2 1-6 -<td>Multi-policy Multi-position Multi-position Multi-position Half-inch Multi-position Multi-position Right-angle Sealed Right-angle Sealed Rota-slide Rota-slide <!--</td--><td> Multi-polity Mult</td></td></td></t<>	Multi-pole/ Multi-position Multi-pole/ Multi-position Multi-pole/ Multi-position Right-angle Sealed Right-angle Sealed 2.5 Amps 150 mA 6 Amps 130 nA . . 1-4 1-4 1 & 2 1-6 . . 30°, 45°, 90° 30° & 36° 	Multi-pole/ Multi-position Multi-pole/ Multi-position Multi-pole/ Multi-position Multi-pole/ Multi-position Right-angle Sealed Right-angle Sealed Rota-slide - - - - - - - - - - - - - - - - 2.5 Amps 150 mA 6 Amps 130 nA - - - - 1-4 1-4 1 & 2 1-6 - <td>Multi-policy Multi-position Multi-position Multi-position Half-inch Multi-position Multi-position Right-angle Sealed Right-angle Sealed Rota-slide Rota-slide <!--</td--><td> Multi-polity Mult</td></td>	Multi-policy Multi-position Multi-position Multi-position Half-inch Multi-position Multi-position Right-angle Sealed Right-angle Sealed Rota-slide Rota-slide </td <td> Multi-polity Mult</td>	Multi-polity Mult



Features/Benefits

- Multi-pole and multi-position
- Positive detent
- Shorting & non-shorting contacts
- Panel and PCB mounting
- RoHS Compliant



Typical Applications

- **Automotive**
- Major and small appliances
- Industrial equipment



Specifications

CONTACT RATING: Q contact material: Switch - 2.5 AMPS @ 125 V AC; 350 mA @ 125 V DC (UL/CSA). Carry - 5 AMPS continuous. See page L-6 for additional ratings.

ELECTRICAL LIFE: 15,000 make-and-break cycles at full load up to 300,000 detent operations.

CONTACT RESISTANCE: Below 20 m Ω typ. initial @ 2-4 V DC, 100 mA, for both silver and gold plated contacts. INSULATION RESISTANCE: 10 9 Ω min.

DIELECTRIC STRENGTH: 1,000 Vrms min. @ sea level. Operating and storage temp: -30° to 85°C

OPERATING & STORAGE TEMPERATURE: -30°C to 85°C

NOTE: Any models supplied with Q, B or G contact material are RoHS compliant

NOTE: Specifications and materials listed above are for switches with standard options For information on specific and custom switches, consult Customer Service Cer

Materials

HOUSING & BUSHING: Glass filled 6/6 nylon (UL 94V-0).

ACTUATOR: Glass filled 6/6 nylon (UL 94V-0)

MOVABLE CONTACTS: Q contact material: Coin silver, silver plated See page L-6 for additional contact materials.

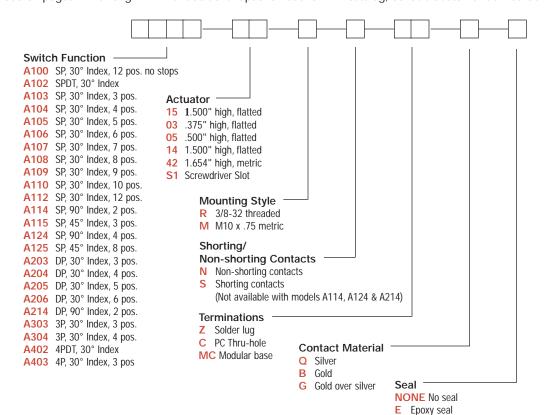
STATIONARY CONTACTS & TERMINALS: Q contact material: Brass, silver plated. See page L-6 for additional contact materials.

HARDWARE: Nut - zinc, nickel plated. Lockwasher — steel, bright zinc plated. Stop Ring - brass, nickel plated.

TERMINAL SEAL: Epoxy.

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 L-4 through L-7. For additional options not shown in catalog, consult Customer Service Center.



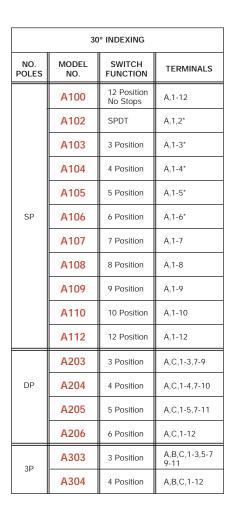


Splashproof bushing seal Epoxy & splashproof bushing seal

1-4 Pole Rotary Switches

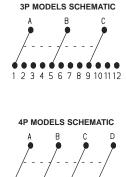
SWITCH FUNCTION





,	SP WIODELS SCHEWATIC										
	A										
•	6	•	•	•	•	•	•	•	•	•	•
1	2	3	4	5	6	7	8	9	10	11	12

	DP MODELS SCHEMATIC										
A						С					
•								1			
	1	-	-	-	-	-	-/	/			
6	•	•	•	•	•	6	•	•	•	•	•
1	2	3	4	5	6	7	8	9	10	11	12



30° INDEXING						
NO. POLES	MODEL NO.	SWITCH FUNCTION	TERMINALS			
4P	A402	4PDT	A,B,C,D,1,2,4,5,7, 8,10,11			
4P	A403	3 Position	All Terminals			

45° INDEXING						
NO. POLES	MODEL NO.	SWITCH FUNCTION	TERMINALS			
SP	A115	3 Position	A,1,2,4*			
58	A125	8 Position	A,1,2,4,5,7,8,10,11			

90° INDEXING							
NO. POLES	MODEL NO.	SWITCH FUNCTION	TERMINALS				
C.D.	A114	2 Position	A,1,4*				
SP	A124	4 Position	A,1,4,7,10				
DP	A214	2 Position	A,C,1,4,7,10				



NOTE: * These models with 'C' or 'MC' terminations have additional terminal no. 9 as switch support only. This terminal is not connected electrically inside switch.

All models with all options when ordered with 'G' or 'Q' contact material, see page L-6.

TERMINAL NUMBERS

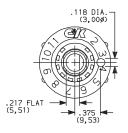


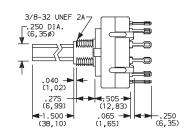
Terminal numbers molded on bottom of housing.

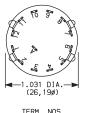


4P MODELS SP MODELS (omit terminals B, C & D)
DP MODELS (omit terminals B & D)

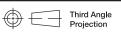
3P MODELS











|------ **ACTUATOR**

15 1.500" HIGH

03 .375" HIGH

05 .500" HIGH

14 1.500" HIGH

42 1.654" METRIC

\$1 SCREWDRIVER SLOT





















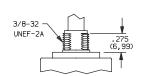


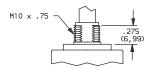


 $\label{eq:NOTE: Actuators shown in position 1, fully CCW.}$

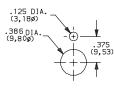
MOUNTING STYLE

R 3/8-32 THREAD M M10 x .75 METRIC



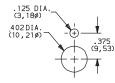






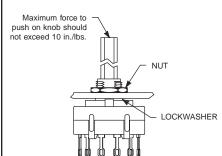
3/8 IN. BUSHING

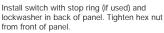
PANEL MOUNTING



METRIC BUSHING

TYPICAL INSTALLATION





On PC mounted switches, use hex nut and lockwasher to hold stop ring in place.

Actuation torque: 8-16 oz./in. Maximum torque: 30 oz./in.

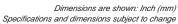
SHORTING/NON-SHORTING CONTACTS

NON-SHORTING CONTACTS (break-before-make)

S SHORTING CONTACTS (make-before-break)

NOTE: 'S' shorting contacts are not available with A114, A124 and A214 models.



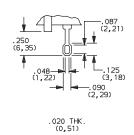


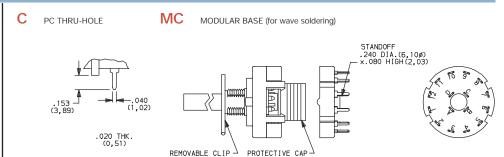
A Series

1-4 Pole Rotary Switches

TERMINATIONS ---

Z SOLDER LUG



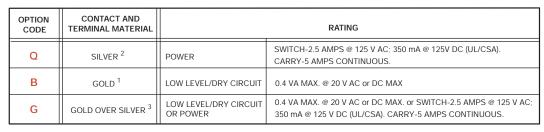


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NOTE: Switches with 'C' or 'MC' terminations have additional terminal no. 9 as switch support only. This terminal is not connected electrically inside switch. Solder and clean switch base on PC board with other components, then snap on housing/actuator assembly. See page L-7 for installation instructions.

PC MOUNTING PC MOUNTING OS9 DIA. TYP. OS9 DIA. T

CONTACT MATERIAL



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

¹ MOVABLE CONTACTS: Copper alloy, with gold plate over nickel plate. STATIONARY CONTACTS & TERMINALS: Brass, with gold plate over nickel plate.
² MOVABLE CONTACTS: Coin silver, silver plated.

2 MOVABLE CONTACTS: Coin silver, silver plated. STATIONARY CONTACTS & TERMINALS: Brass, silver plated (standard with all termination options).

³ MOVABLE CONTACTS: Coin silver, with gold plate over nickel plate over silver plate. STATIONARY CONTACTS & TERMINALS: Brass, with gold plate over nickel plate over silver plate. NOTE: Any models supplied with Q, B or G contact material are RoHS compliant.

All models ${}_{\otimes}$ ${}^{\otimes}$ with all options when ordered with 'G' or 'Q' contact material.

NOTE: 'G' contact material is equivalent to both 'B' and 'Q'' contact materials.



