

**Rotary DIP Switches, Unsealed, Through Hole, Straight and Right-Angle**

**FEATURES:**

- High pressure contacts (140K PSD) provide 20,000 Steps.
- Unique design utilizes high pressure pin-point sliding contacts to penetrate contaminants on contact surface.
- Terminals insert molded into base.

- Screwdriver, knob and shaft (plastic and steel) type actuators available in both upright and right angle versions.

- 10 And 16 position versions with both real and complement codes.

Note: Common terminals connected internally.

**MATERIAL SPECIFICATIONS:**

Contacts .....Gold flashed copper alloy

Terminals .....Tin Lead Plated

Base, Rotor, Case .....Polyester

**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....0.4 VA @ 20 VDC

Initial Contact Resistance .....50 Milliohms max. @ 2 VDC

Insulation Resistance .....1,000 Megohms min. @ 100 VDC

Dielectric Strength .....300 VAC RMS @ sea level

**ENVIRONMENTAL SPECIFICATIONS:**

Operating Temperature.....-22°F to +185°F (-30°C to +85°C)

Storage Temperature.....-49°F to +212°F (-45°C to + 100°C)

Vibration Resistance.....Subjected to vibration of 10-55hz per second with a total amplitude of .06 in. in 3 mutually perpendicular directions for 2 hours each

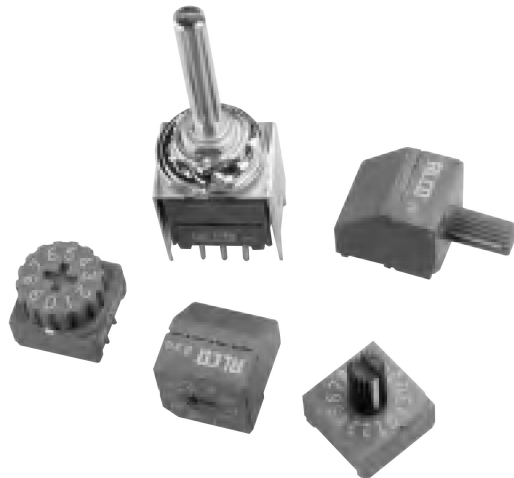
Shock Resistance .....Will withstand 50G acceleration in 3 different planes for a period of 11 milliseconds

Salt Spray Test .....Withstands an atmosphere of 5% salt water at temperature of 50°C

Hydrogen Sulfide Test .....Withstands an atmosphere of 15-20 PPM hydrogen sulfide gas at temperature of 40°C for 240 hours

Atmosphere Test.....Withstands an atmosphere of 30-50 PPM sulfide gas at a temperature of 40°C for 240 hours

Solder Heat Resistance .....Withstands 5 sec. flow solder bath of 260°C when mounted on a .06" thick PC board per MIL-STD 202, Method 210



**Example: DRW 10RA** = Rotary Dip with Wheel actuator BDC -10 position Right angle PC terminations

**Series**  
Rotary Dips (blue case)

**Actuator Style**

- \*D = Flush
- M = Mini plastic shaft
- W = Wheel
- S = Metal shaft

**Circuit Type**

- 10 = BCD
- 10C = BCD complement
- 16 = Hexadecimal
- 16C = Hexadecimal complement

**HOW TO ORDER**

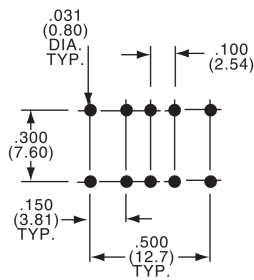
**Terminations**

- Blank = PC
- RA = Right angle for DRM, DRW, DRS only
- RAE = Right angle, Auto Assembly Compatible for DRD type only

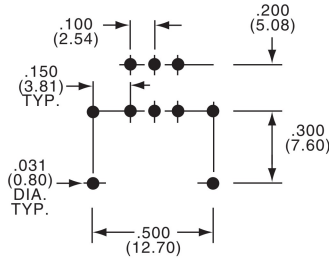
\*DRD Available in RAE version only. For PC or SMT versions, see Pg. A24 DRD "E" Process Sealed Product.

**Rotary DIP Switches, Unsealed, Through Hole, Straight and Right-Angle**

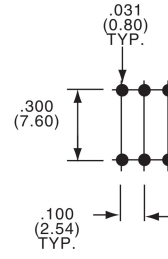
FOOTPRINTS



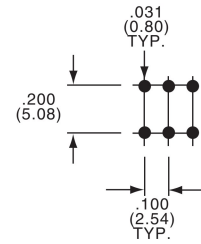
S STYLE VERTICAL  
(METAL SHAFT)



S STYLE RA  
(METAL SHAFT)



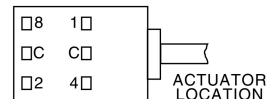
PC



PC  
RIGHT ANGLE

TRUTH TABLES

Terminal Identification  
(view from bottom of the switch)



10-Position, BCD (red actuator)										
Pos.	0	1	2	3	4	5	6	7	8	9
C	X	X	X	X	X	X	X	X	X	X
1		X		X		X		X		X
2			X	X			X	X		
4					X	X	X	X		
8									X	X

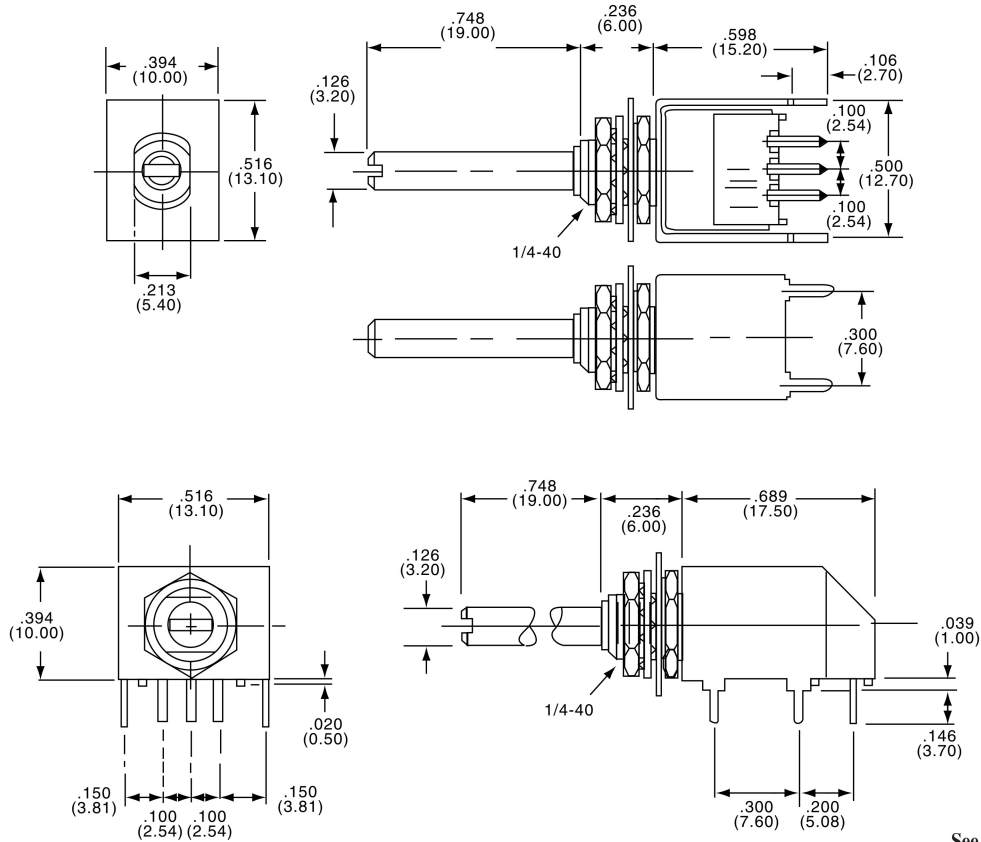
16-Position, Hexadecimal (black actuator)																
Pos.	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
C	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1		X		X		X		X		X		X		X		X
2			X	X			X	X			X	X			X	X
4					X	X	X	X					X	X	X	X
8									X	X	X	X	X	X	X	X

10-Position, BCD Complement (orange actuator)										
Pos.	0	1	2	3	4	5	6	7	8	9
$\bar{C}$	X	X	X	X	X	X	X	X	X	X
$\bar{1}$	X		X		X		X		X	
$\bar{2}$	X	X			X	X			X	X
$\bar{4}$	X	X	X	X					X	X
$\bar{8}$	X	X	X	X	X	X	X	X		

16-Position Hexadecimal Complement (white actuator)																
Pos.	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
$\bar{C}$	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
$\bar{1}$	X		X		X		X		X		X		X		X	
$\bar{2}$	X	X			X	X			X	X			X	X		
$\bar{4}$	X	X	X	X					X	X	X	X				
$\bar{8}$	X	X	X	X	X	X	X	X								

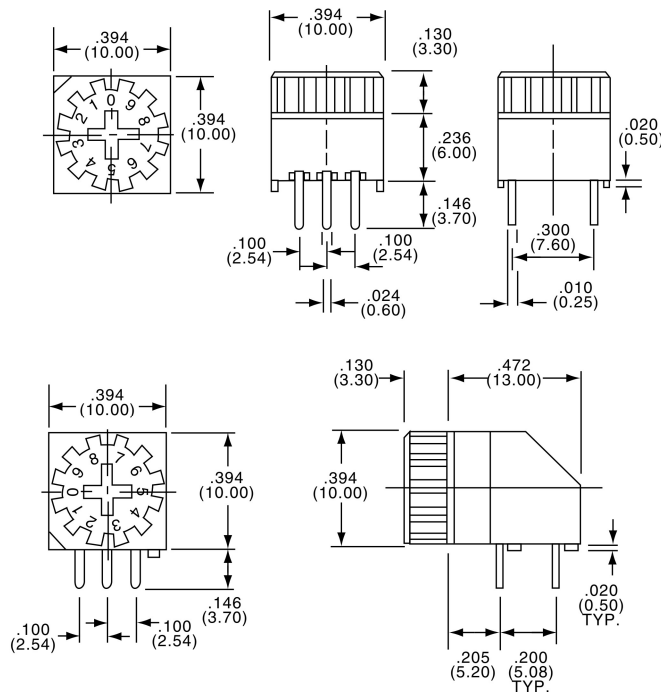
**Rotary DIP Switches, Unsealed, Through Hole, Metal Shaft or Wheel Actuator**

“S” METAL SHAFT ACTUATOR



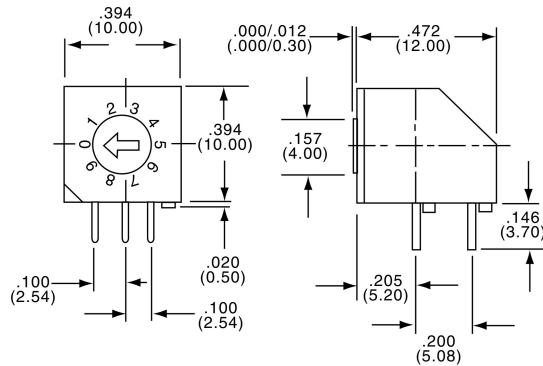
See Section K for knob selection

“W” WHEEL ACTUATOR



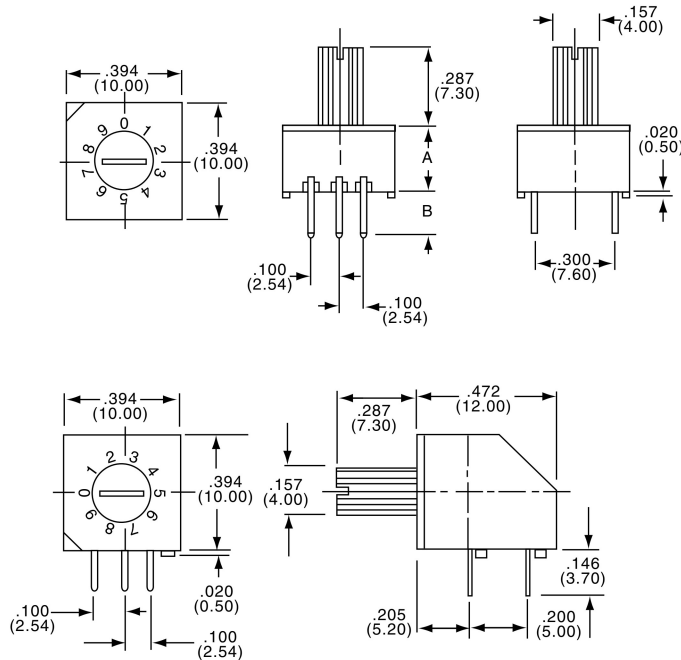
**Rotary DIP Switches, Unsealed, Through-Hole, Flush and Mini Shaft Actuator**

“D” FLUSH ACTUATOR



DIM.	DR	RC, *RA, RR
A	.236 (6.00)	.256 (6.50)
B	.146 (3.70)	.126 (3.20)

“M” MINI-SHAFT ACTUATOR



DIM.	DR	RR
A	.236 (6.00)	.256 (6.50)
B	.146 (3.70)	.126 (3.20)