

RBP12 Series

1-6 Pole Miniature Rotary Switches



Features/Benefits

- Rotary switch for low current
- Shaft perpendicular to PCB
- Index mechanism included in thickness of switch
- Several actuation modes
- Low profile
- RoHS Compliant

Typical Applications

- Medical
- Instrumentation
- Appliances

Electrical Data

| | Silver (S) | Gold (G) |
|--|--|---|
| Switching mode | MBB-BBM Make Before Break, Break Before Make | MBB-BBM Make Before Break, Break Before Make |
| Max. switching power | 5 VA (resistive) | 0.5 VA (resistive) |
| Max. switching current | 130 mA | 20 mA |
| Max. carrying current | 3 A | 3 A |
| Contact resistance | < 15 m ohms | < 25 m ohms |
| Dielectric strength at 50 Hz | between contacts 1000 V or contacts and ground 1000 V | 1000 V 1000 V |
| Nominal voltage | 150 V rms | 150 V rms |
| Number of operations | 15,000 | 20,000 |
| Insulation resistance between contacts and contacts and frame (500 Vcc) | > 5 x 10 ⁹ ohms | > 5 x 10 ⁹ ohms |

Mechanical Data

| | |
|----------------------|------------------------|
| Max. number of banks | 1 |
| Operating torque | 2.5 Ncm ± 25% (1 pole) |
| Stop strength | > 40 Ncm |
| End stop | With/without or mobile |
| Contact material | Silver, Gold |
| Insulating material | Thermoplastic |

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

Environmental data

| | | |
|---------------------|----------------|----------------|
| Storage temperature | -25°C to +70°C | -25°C to +85°C |
| Salt spray | NA | 48 H |

Further data

| | | |
|---------------|--------------------------------|-------------------------|
| Solderability | Hand: 350°C/5 s | Wave: 260°C/5 s max. |
| Cleaning | Cleaning of modules prohibited | |

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-19 thru L-21. For additional options not shown in catalog, consult Customer Service Center.



Designation

RBP12

Switch Function

- 112S** SP, 30° Index, 12 pos. no stop
- 103B03** SP, 30° Index, 3 pos.
- 105B05** SP, 30° Index, 5 pos.
- 107B07** SP, 30° Index, 7 pos.
- 108B08** SP, 30° Index, 8 pos.
- 110B10** SP, 30° Index, 10 pos.
- 112B12** SP, 30° Index, 12 pos.
- 206S** DP, 30° Index, 6 pos. no stop
- 202B02** DP, 30° Index, 2 pos.
- 203B03** DP, 30° Index, 3 pos.
- 205B05** DP, 30° Index, 5 pos.
- 304B04** 3P, 30° Index, 4 pos.
- 403B03** 4P, 30° Index, 3 pos.
- 602B02** 6P, 30° Index, 2 pos.

Switching Mode

- N** Non-shorting BBM (break-before-make)
- C** Shorting, MBB (make-before-break)

Actuator

- F** Screwdriver slot*
- AD** Plastic shaft, <20mm (.787)*
- S** Plastic shaft, 6mm (.236)*
- M** Thumbwheel

Option

- (NONE)**
- P** Lateral PCB adaptation

Contact Material

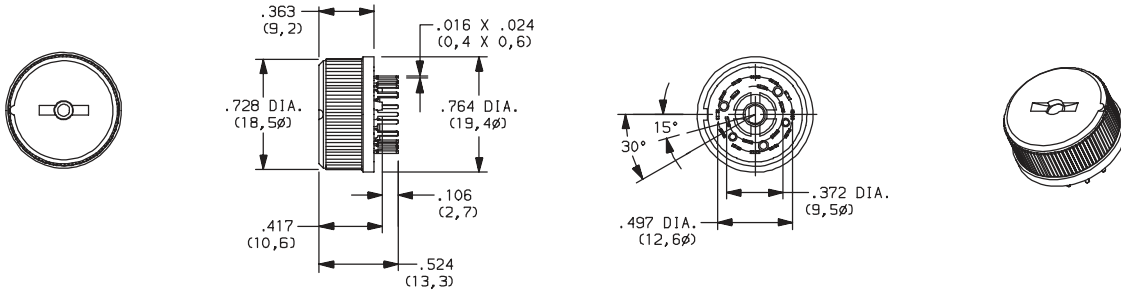
- S** Silver
- G** Gold

*Option: Metallic shaft available by request

RBP12 Series 1-6 Pole Miniature Rotary Switches

DESIGNATION

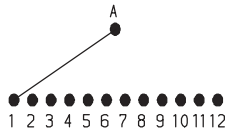
RBP12



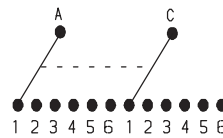
SWITCH FUNCTION

| 30° INDEXING | | |
|--------------|---------------|----------------------|
| NO. POLES | MODEL NO. | SWITCH FUNCTION |
| SP | 112S | 12 Position No Stops |
| | 103B03 | 3 Positions |
| | 105B05 | 5 Positions |
| | 107B07 | 7 Positions |
| | 108B08 | 8 Positions |
| | 110B10 | 10 Positions |
| | 112B12 | 12 Positions |
| DP | 206S | 6 Positions No Stop |
| | 202B02 | 3 Positions |
| | 203B03 | 3 Positions |
| | 205B05 | 5 Positions |

SP MODELS SCHEMATIC

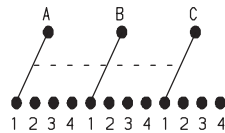


DP MODELS SCHEMATIC

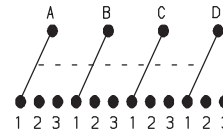


| 30° INDEXING | | |
|--------------|---------------|-----------------|
| NO. POLES | MODEL NO. | SWITCH FUNCTION |
| 3P | 304B04 | 4 Positions |
| 4P | 403B03 | 3 Positions |
| 6P | 602B02 | 2 Positions |

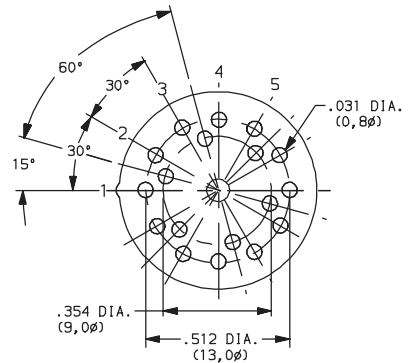
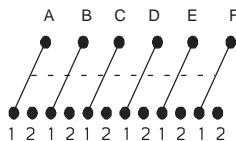
3P MODELS SCHEMATIC



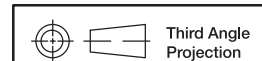
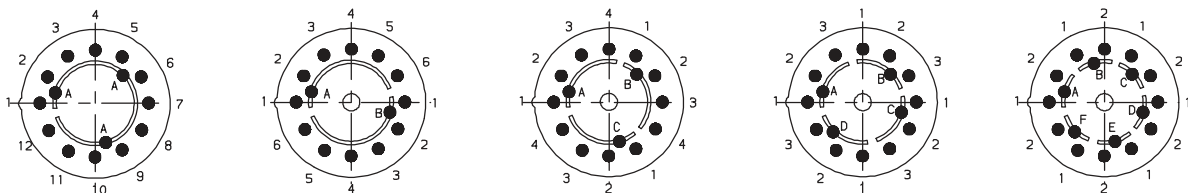
4P MODELS SCHEMATIC



6P MODELS SCHEMATIC



PC LAYOUTS



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



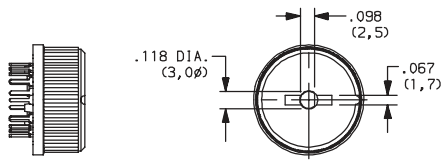
RBP12 Series 1-6 Pole Miniature Rotary Switches

SWITCHING MODE

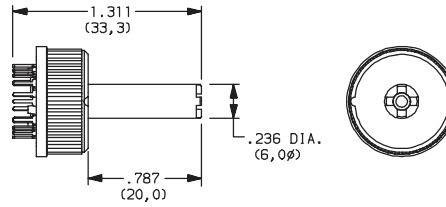
- N** NON-SHORTING, BBM (break-before-make)
- C** SHORTING, MBB (make-before-break)

ACTUATOR

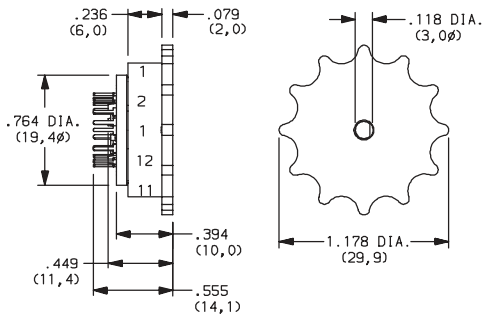
F SCREWDRIVER SLOT



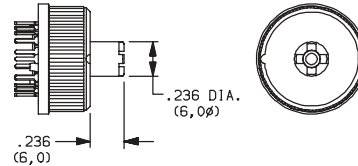
AD PLASTIC SHAFT, <20 mm (.787)



M THUMBWHEEL



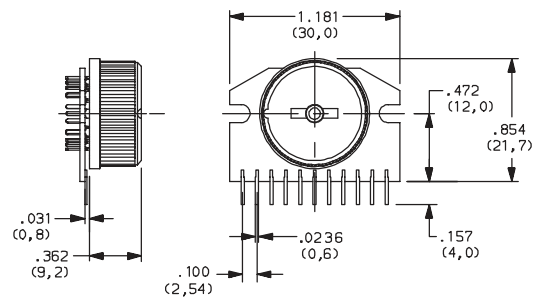
S PLASTIC SHAFT, 6 mm (.236)



OPTION

(NONE)

P LATERAL PCB ADAPTATION



Third Angle
Projection

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



Rotary

RBP12 Series 1-6 Pole Miniature Rotary Switches

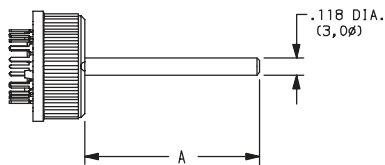
CONTACT MATERIAL

| OPTION CODE | CONTACT AND TERMINAL MATERIAL | RATING | |
|-------------|-------------------------------|--------------------------------|--|
| S | SILVER | LOW LEVEL/DRY CIRCUIT | SWITCH: 130 mA, POWER: 5 VA MAXIMUM. CARRY: 3 AMPS |
| G | GOLD | LOW LEVEL/DRY CIRCUIT OR POWER | SWITCH: 20 mA, POWER: 0.5 VA MAXIMUM. CARRY: 3 AMPS |

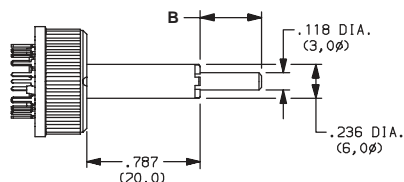
* Note: See Technical Data section of this catalog for RoHS compliant and compatible definition and specifications.

AVAILABLE HARDWARE

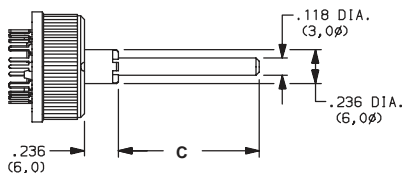
F + FA SHAFT



AD + FA SHAFT

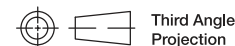


S + FA SHAFT

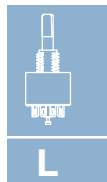


| PART NUMBER | "A" |
|-------------|--------------|
| Y460P0067FP | .394 (10,0) |
| Y460P0060FP | .590 (15,0) |
| Y460P0090FP | .787 (20,0) |
| Y460320100P | .984 (25,0) |
| Y460P0018FP | 1.969 (50,0) |
| Y460P0022FP | 2.756 (70,0) |

NOTE: FA metallic shaft, consult customer service for available lengths.



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



Rotary