

# F Series

## Miniature ROTA-SLIDE® Rotary Switches

### Features/Benefits

- Multi-pole and multi-position
- Panel and PCB mounting
- Positive detent
- Value added capability
- RoHS Compliant

### Typical Applications

- Small appliances
- Testing fixtures
- Safety equipment



Models Available

### Specifications

CONTACT RATING: Q contact material: 4 AMPS @ 125 V AC or 28 V DC; 2 AMPS @ 250 V AC (UL/CSA). See page K-24 for additional ratings.

ELECTRICAL LIFE: 10,000 make-and-break cycles at full load.

CONTACT RESISTANCE: Below 10 m  $\Omega$  typ. initial @ 2-4 V DC, 100 mA, for both silver and gold plated contacts.

INSULATION RESISTANCE: 10<sup>9</sup>  $\Omega$  min.

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

INDEXING: 45° or 90° -one contact models; two contact models, 4 pos. max. Models with common terminal -90°, 4 pos. max.

OPERATING & STORAGE TEMPERATURE: -30°C to 65°C

### Materials

HOUSING & BUSHING: 6/6 Nylon (UL 94V-2).

ACTUATOR: 6/6 nylon (UL 94V-2).

CONTACTS: Q contact material: Copper, silver plated. See page K-24 for additional contact materials.

TERMINALS: Q contact material: Copper, silver plated. See page K-24 for additional contact materials.

CONTACT SPRING: Music wire or stainless steel.

MOUNTING NUT: Brass, nickel plated.

TERMINAL SEAL: Epoxy.

**NOTE:** Any models supplied with Q or B 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 Center.

### 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 K-22 thru K-24. For additional options not shown in catalog, consult Customer Service Center.

|   |   |   |  |   |   |
|---|---|---|--|---|---|
| <div>Switch Function</div> <div>FA05 SP, 90° Index, 3 pos.</div> <div>F103 SP, 45° Index, 3 pos.</div> <div>F203 DP, 45° Index, 3 pos.</div> <div>FA01 SPDT, 90° Index</div> <div>FC03 SP, W/Common 90° Index, 3 pos.</div> | <div>Actuator</div> <div>15 Screwdriver slot without bushing</div> <div>08 .585" high with .156" flat</div> | <div>Mounting Style</div> <div>RN PC</div> <div>RS 5/16-32 threaded bushing</div> | <div>Terminations</div> <div>02 PC Thru-hole</div> <div>WC Wire lead</div> | <div>Contact Material</div> <div>Q Silver</div> <div>B Gold</div> | <div>Seal</div> <div>NONE No seal</div> <div>E Epoxy seal</div> |
|---|---|---|--|---|---|

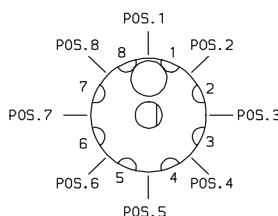
# F Series Miniature ROTA-SLIDE® Rotary Switches

## SWITCH FUNCTION

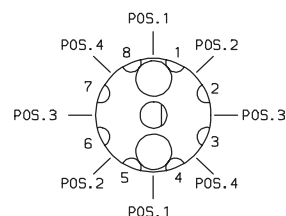


| 45° INDEXING |             |                 |               |
|--------------|-------------|-----------------|---------------|
| NO. POLES    | MODEL NO.   | SWITCH FUNCTION | TERMINALS     |
| SP           | <b>F103</b> | 3 Position      | 8-1-2-3*      |
| DP           | <b>F203</b> | 3 Position      | All Terminals |

### 45° INDEXING SCHEMATICS



F1XX MODELS



F2XX MODELS

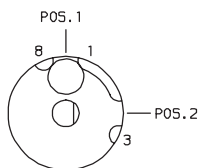
Break-before-make contacts. Terminal numbers are molded on bottom of housing. Actuators are shown in position 1.

**NOTE:** \*Switches with '02' PC terminations have additional terminal no. 5 as switch support only. This terminal is not connected electrically inside switch.

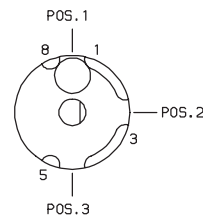
F1XX, F2XX models: No common terminal is present. Switching function is provided by movable contacts shorting adjacent pairs of stationary contacts.

| 90° INDEXING   |             |                 |             |
|----------------|-------------|-----------------|-------------|
| NO. POLES      | MODEL NO.   | SWITCH FUNCTION | TERMINALS   |
| SP             | <b>FA01</b> | SPDT            | 8-1-3       |
|                | <b>FA05</b> | 3 Position      | 8-1-3-5     |
| SP WITH COMMON | <b>FC03</b> | 3 Position      | C-1,C-2,C-3 |

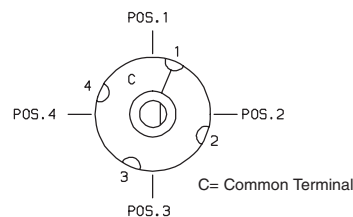
### 90° INDEXING SCHEMATICS



FA01 MODEL



FA05 MODEL



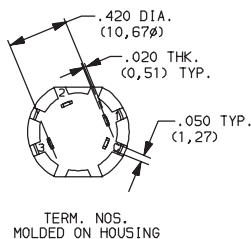
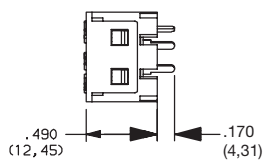
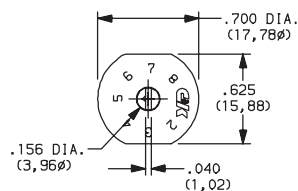
FCXX MODEL

Break-before-make contacts. Terminal numbers are molded on bottom of housing. Actuators are shown in position 1.

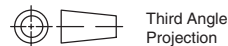
FCXX models: Common terminal is present.

FAXX models: No common terminal is present. Switching function is provided by movable contacts shorting adjacent pairs of stationary contacts.

**NOTE:** \*Switches with '02' PC terminations have additional terminal no. 5 as switch support only. This terminal is not connected electrically inside switch.



Part number show: FC0315RN02Q



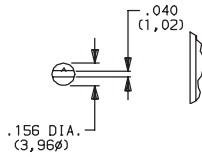
Third Angle  
Projection

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

# F Series Miniature ROTA-SLIDE® Rotary Switches

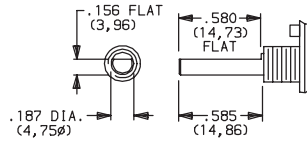
## ACTUATOR

**15** SCREWDRIVER SLOT WITHOUT BUSHING



Shown with 'RN' mounting style; not available with 'RS' mounting style or FCXX models.

**08** .585" HIGH WITH .156" FLA



Must be ordered with 'RS' mounting style.

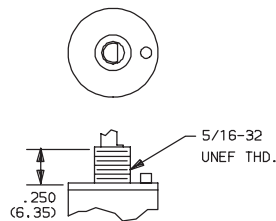
## MOUNTING STYLE

**RN** PC



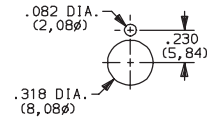
PC mount, no bushing, position numbers molded standard. Shown with '15' actuator; not available with '08' actuator or FCXX models.

**RS** 5/16-32 THREADED BUSHING



Panel mount, with 5/16 in.-32 threaded bushing. Mounting nut (P/N 175020201) included. Must be ordered with '08' actuator option.

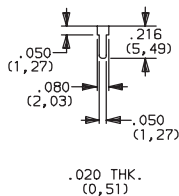
**PANEL MOUNTING**



5/16 IN. BUSHING

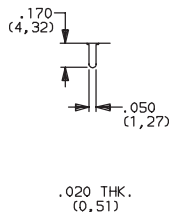
## TERMINATIONS

**02** PC THRU-HOLE



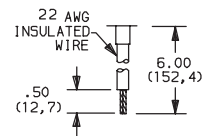
**F1XX, F2XX & FAXX Models**

**02** PC THRU-HOLE



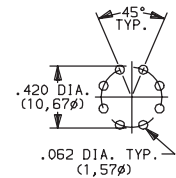
**FCXX Models**

**WC** WIRE LEAD



Black wire standard, other colors and lengths available, consult Customer Service Center. UL style 1015.

**PC MOUNTING**



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

# F Series

## Miniature ROTA-SLIDE® Rotary Switches

**CONTACT MATERIAL** 

| OPTION CODE | CONTACT AND TERMINAL MATERIAL | RATING                |   |
|-------------|-------------------------------|-----------------------|---|
| <b>Q</b>    | SILVER <sup>2</sup>           | POWER                 | 4 AMPS @ 125 V AC or 28 V DC; 2 AMPS @ 250 V AC (UL/CSA). |
| <b>B</b>    | GOLD <sup>1</sup>             | LOW LEVEL/DRY CIRCUIT | 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.

<sup>1</sup> CONTACTS & TERMINALS: Copper, with gold plate over nickel plate.

<sup>2</sup> CONTACTS & TERMINALS: Copper, silver plated (standard with all termination options).

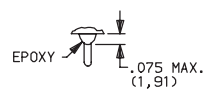
**NOTE:** Any models supplied with Q or B contact material are RoHS compliant.

All models  with all options when ordered with 'Q' contact material.

SEAL 

**NONE** NO SEAL

## E EPOXY SEAL



Not available on FCXX models.



K

# Rotary



### Third Angle Projection

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

# Mouser Electronics

Authorized Distributor

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## C&K Switches:

[FA0108RS02Q](#) [FA0108RSWCQ](#) [FA0115RN02B](#) [FA0515RN02B](#) [FA0108RSWCQE](#) [FA0115RN02Q](#) [FA0508RS02Q](#)  
[FA0515RN02Q](#) [FA0115RN02QE](#) [F10308RSWCQ](#) [F10315RN02BE](#) [F20315RN02BE](#) [F10315RN02QE](#)  
[F10315RN02Q](#) [F20315RN02QE](#) [F20315RN02Q](#) [F20308RS02Q](#) [FA101BKGN](#) [FA200BKYE](#) [FA201BK0G](#)