

# RTA Series

## 1-4 Poles Coded Rotary Switches



### Features/Benefits

- PCB or hand soldering versions
- Bushing mounting
- Multiple poles
- Decimal and hexadecimal codes
- Screwdriver slot or extended actuator
- RoHS Compliant

### Typical Applications

- Appliances
- Electronic alarm systems
- Medical
- Building automation
- HVAC air conditioning

### Electrical Data

	Silver	Gold
SWITCHING MODE:	BBM	BBM
MAX. SWITCHING POWER	5 VA	0.5 VA
MAX. SWITCHING CURRENT:	150 mA	20 mA
MAX. CARRYING CURRENT:	5 A	1 A
NOMINAL VOLTAGE AT 50 Hz	60 V	25 V
CONTACT RESISTANCE:	< 150 mΩ	< 150 mΩ
DIELECTRIC STRENGTH AT 50 Hz BETWEEN CONTACTS AND GROUND TERMINALS:	500 V r	500 V r
INSULATION RESISTANCE BETWEEN CONTACTS OR CONTACTS AND FRAME (500 V ⇒):	10 <sup>9</sup> Ω	10 <sup>9</sup> Ω
NO. OF OPERATIONS:	10,000	10,000
BOUNCE:	< 5 ms	< 5 ms

### Mechanical Data

MAX. NO. OF BANKS: 1.  
 OPERATING TORQUE: 5 Ncm±20%.  
 END STOP TORQUE: 50 Ncm. minimum  
 STOP: With/without or adjustable  
 MOUNTING: By fixed index 9.5 mm (0.374) of center, for bushing mount only

### Materials

BUSHING/HOUSING: PETP Thermoplastic  
 STATIONARY CONTACTS & TERMINALS: Nickel Plated Brass with additional plating of Gold or Silver.  
 ROTOR: Gold or Silver plated Brass or PCB.  
 CODING PLATE: PA thermoplastic  
 ACTUATOR: Polysulfon thermoplastic  
 HARDWARE: Stop pin: Aluminum. Ball & Spring: Stainless steel. Washer: PA. Nut: Brass.

### Environmental Data

OPERATING TEMPERATURE: -20°C to + 70°C    -20°C to + 70°C  
 STORAGE TEMPERATURE: -40°C to + 85°C    -40°C to + 85°C

**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-9 thru K-12. For additional options not shown in catalog, consult Customer Service Center.



#### Designation

**RTA**

#### Indexing

- 2** 22.5 index (coded only)
- 3** 30° index (12 positions max.)
- 4** 36° index (10 positions max.)

#### Termination

- P** With PC Thru-hole
- H** Horizontal with PC Thru-hole

#### Switch Function

- 1W12** SP, 30° Index, 12 pos. no stop
- 1W10** SP, 36° Index, 10 pos. no stop
- 1S02** SP, 30° /36° Index, 2 pos.
- 1S03** SP, 30° /36° Index, 3 pos.
- 1S04** SP, 30° /36° Index, 4 pos.
- 1S05** SP, 30° /36° Index, 5 pos.
- 1S06** SP, 30° /36° Index, 6 pos.
- 1S07** SP, 30° /36° Index, 7 pos.
- 1S08** SP, 30° /36° Index, 8 pos.
- 1S09** SP, 30° /36° Index, 9 pos.
- 1S10** SP, 30° /36° Index, 10 pos.
- 1S11** SP, 30° Index, 11 pos.
- 1S12** SP, 30° Index, 12 pos.
- 2S02** DP, 30° /36° Index, 2 pos.
- 2S03** DP, 30° /36° Index, 3 pos.
- 2S04** DP, 30° /36° Index, 4 pos.
- 2S05** DP, 30° /36° Index, 5 pos.
- 2S06** DP, 30° Index, 6 pos.

**4S02** 4P, 30° /36° Index, 2 pos.

**EW10** Direct + complement, 36° Index, no stop

**EW12** Direct + complement, 30° Index, no stop

**ES\_\_** Direct + complement, 30°/36° Index, with stop (specify stop position)

#### Mounting Style

- W** Without bushing
- R** 3/8-32 Threaded Bushing
- M** M10x.75 Metric Threaded Bushing
- A** 3/8-32 Threaded Bushing with Offset Bracket
- B** M10x.75 Metric Threaded Bushing with Offset Bracket

#### Contact Material

- S** Silver plated, matte-tin terminal
- P** Gold plated, matte-tin terminal

#### Actuator (max.)

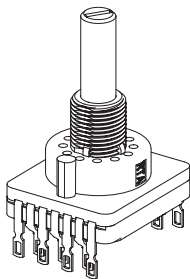
- 25N** .984 (25,0) with screwdriver slot
- 50N** 1.97 (50,0) with screwdriver slot
- FLS** Flush shaft with screwdriver slot and position indicator
- 25F** .984 (25,0) Shaft with flat
- 06F** .236 (6,0) Shaft with flat

# RTA Series 1-4 Poles Coded Rotary Switches

## DESIGNATION



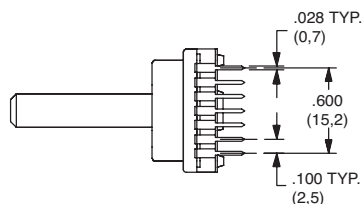
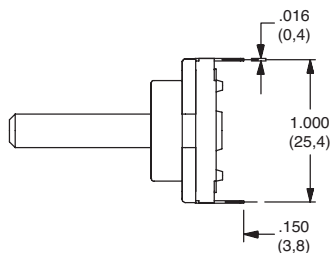
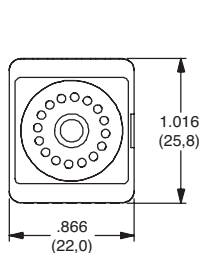
### RTA



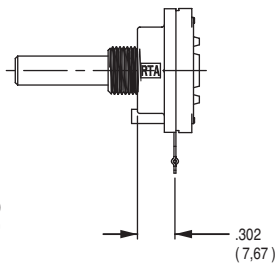
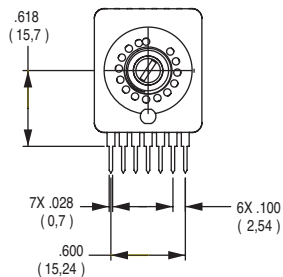
## TERMINATION



### P WITH PC PINS



### H Horizontal with PC Thru-hole



Note: "H" termination only available with the following options:  
 1. With A or B mounting styles  
 2. 36° degree indexing  
 3. Up to 5 positions max

## INDEXING



**2** 22.5 index, 16 positions max.

**3** 30 index, 12 positions max.

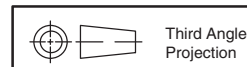
**4** 36 index, 10 positions max.

Both commons must be connected by user to ground.



K

Rotary



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

# RTA Series 1-4 Poles Coded Rotary Switches

## SWITCH FUNCTION

NO. POLES	MODEL NO.	SWITCH FUNCTION	INDEX
SP	<b>1W12</b>	12 Positions No Stop	30°
	<b>1W10</b>	10 Positions No Stop	36°
	<b>1S02</b>	2 Positions	30°/36°
	<b>1S03</b>	3 Positions	30°/36°
	<b>1S05</b>	5 Positions	30°/36°
	<b>1S06</b>	6 Positions	30°/36°
	<b>1S08</b>	8 Positions	30°/36°
	<b>1S09</b>	9 Positions	30°/36°
	<b>1S10</b>	10 Positions	30°/36°
	<b>1S11</b>	11 Positions	30°
	<b>1S12</b>	12 Positions	30°



MODEL NO.	SWITCH FUNCTION	INDEX
<b>EW10</b>	Direct + complement, No stop	36°
<b>EW12</b>	Direct + complement, No stop	30°
<b>ES__</b>	Direct + complement, with stop (specify stop position)	30° & 36°

NO. POLES	MODEL NO.	SWITCH FUNCTION	INDEX
DP	<b>2W05</b>	5 Positions No Stop	30°/36°
	<b>2W06</b>	6 Positions No Stop	30°
	<b>2S02</b>	2 Positions	30°/36°
	<b>2S03</b>	3 Positions	30°/36°
	<b>2S04</b>	4 Positions	30°/36°
	<b>2S05</b>	5 Positions	30°/36°
4P	<b>4S02</b>	2 Positions	30°/36°

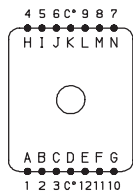
22.5°	30°	36°	Pos.																
Term.	Term.	Term.		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
E,J	M,N	L,N	C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
F,I	H	D	1		•		•		•		•		•		•		•		•
D,K	D	B	2			•	•			•	•			•	•			•	•
A,N	A	I	4					•	•			•	•			•	•		
B	J	J	8										•	•		•	•		
—	C	K	1	•		•		•		•		•		•		•		•	
—	K	H	2	•	•			•	•			•	•			•	•		
—	B	A	4	•	•	•	•					•	•	•	•				
—	I	C	8	•	•	•	•	•	•	•	•								

### Indexing Option Code 2, 22.5 INDEXING ANGLE PCB LAYOUT

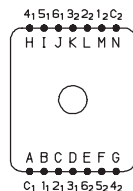


BCD ONLY

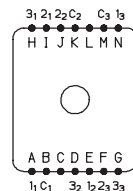
### Indexing Option Code 3, 30 INDEXING ANGLE PCB LAYOUT



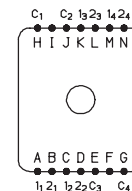
1 POLE



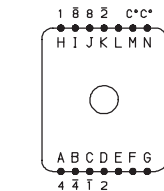
2 POLES



3 POLES



4 POLES



BCD + COMPLEMENTS

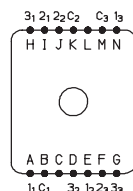
### Indexing Option Code 4, 36 INDEXING ANGLE PCB LAYOUT



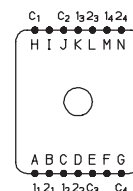
1 POLE



2 POLES



3 POLES



4 POLES



BCD + COMPLEMENTS

**NOTE:** Layout view from component side.

Common terminals that are in locations A-G are not connected to common terminals that are in locations H-N. For 7-12 position output customer must tie these commons together.



Third Angle Projection

Dimensions are shown: Inch (mm)

Specifications and dimensions subject to change



3 dec 18

# RTA Series 1-4 Poles Coded Rotary Switches

## MOUNTING STYLE

### W WITHOUT BUSHING



Note: W mounting style not available with H termination.

### M M10 x .75 MERTIC THREADED BUSHING



Note: M mounting style not available with H termination.

### R 3/8-32 THREADED BUSHING



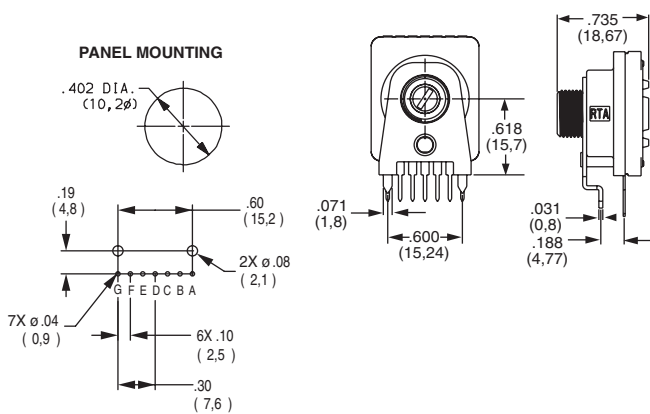
Note: R mounting style not available with H termination.

### A 3/8-32 THREADED BUSHING WITH BRACKET



Note: A mounting style only available with H termination.

### B M10 x .75 METRIC THREADED BUSHING WITH BRACKET



Note: B mounting style only available with H termination.

### C 3/8-32 THREADED BUSHING WITH STRAIGHT BRACKET



### D M10 x .75 METRIC THREADED BUSHING WITH STRAIGHT BRACKET



Third Angle  
Projection

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



K

Rotary

# RTA Series 1-4 Poles Coded Rotary Switches

## ACTUATOR

**25N** .984 (25,0) WITH SCREWDRIVER SLOT



**50N** 1.97 (50,0) WITH SCREWDRIVER SLOT



**FLS** FLUSH SHAFT WITH SCREWDRIVER SLOT AND POSITION INDICATOR



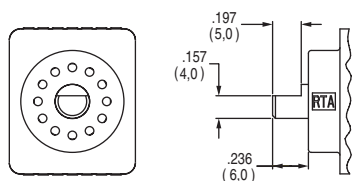
Note: only available with "W" Mounting Style

**25F** .984 (25,0) SHAFT WITH FLAT



Note: only available with "W" Mounting Style

**06F** .236 (6,0) SHAFT WITH FLAT



Note: only available with "W" Mounting Style

## CONTACT MATERIAL

OPTION CODE	CONTACT AND TERMINAL MATERIAL	RATING	
<b>S</b>	SILVER	LOW LEVEL/DRY CIRCUIT	SWITCH: 150 mA MAXIMUM, 60 V NOMINAL. POWER: 5 VA MAXIMUM. CARRY-5 AMPS MAXIMUM.
<b>P</b>	GOLD	LOW LEVEL/DRY CIRCUIT OR POWER	SWITCH: 20 mA MAXIMUM, 25 V NOMINAL. POWER: 0.5 VA MAXIMUM. CARRY: 1 AMP MAXIMUM.

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

## AVAILABLE HARDWARE

### Mounting Nuts



**PART NO.**  
**472706201**  
Standard



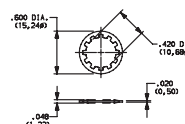
**PART NO.**  
**495100201**  
Metric

### Stop pins



**PART NO.**  
**Y200300200PCH**

### Lockwasher



**PART NO.**  
**472800202**

NOTE: Additional nuts and lockwashers available separately, see section "Technical Data and Additional Hardware".



Third Angle  
Projection



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

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