

# **CRE Series** 10mm DIP Coded Rotary Switches

### Features/Benefits

- Process sealed withstands soldering and cleaning
- Thru-hole and surface mount models
- New designs with different actuators
- RoHS compatible and compliant
- New generation price competitive
- IP65

### Typical Applications

- Address switching applications
- Data storage devices
- Computer and peripherals
- Instrumentation







### **Specifications**

CONTACT RATING: 42 V DC 150mA (switching), 200mA (non-switching) COVER:

MECHANICAL & ELECTRICAL LIFE: 10,000 cycles INITIAL CONTACT RESISTANCE: 200 mΩ max. INSULATION RESISTANCE: 100 M $\Omega$  min. OPERATING TEMPERATURE: -20°C to 85°C. STORAGE TEMPERATURE: -40°C to 85°C.

OPERATING FORCE: 700 gf max.

### SOLDER CONDITIONS:

- Straight and right-angle types: Iron soldering 2s/340°C, wave soldering 5s/280°C
- Through-hole and SMT types: Iron soldering 2s/340°C, wave soldering: 5s/280°C, reflow soldering 10s/260°C

SOLDERABILITY: Dip and look solderability testing per C&K spec #448 PACKAGING: Switches are supplied in rigid dispensing tubes in full-tube quantities only, this may affect order quantities. Number of switches per tube varies with model. Tape and reel packing also available with exception for the right-angle "A" type terminations.

### **Materials**

- Straight and right-angle types: Nylon#66 (G45%)
- Through-hole and SMT types: LCP (G30%)

### BASE:

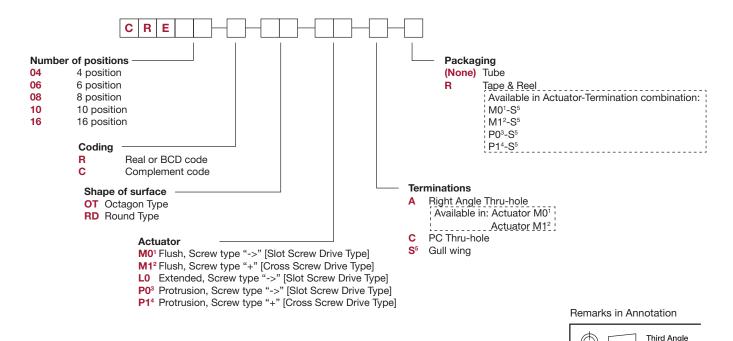
- Straight and right-angle types: Nylon#66 (G45%)
- Through-hole and SMT types: LCP (G30%)

- Straight and right-angle types: Poly Acetal
- Through-hole and SMT types: Nylon#66 (G45%)

CONTACTS: Brass with Gold nickel plating TERMINALS: Brass with Gold nickel plating

### **How To Order**

The Build-A Switch concept allows you to mix and match options to create the switch you need. Below is a complete listing of options shown in catalog. To order, simply select desired option from each category and place in the appropriate box.





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

Projection

# **CRE Series** 10mm DIP Coded Rotary Switches







### R Real Code

04 POSITION

| _        |   |   |                    |   |   |   |
|----------|---|---|--------------------|---|---|---|
|          |   |   | Real Code  C 1 2 4 |   |   |   |
|          |   | С | 1                  | 5 | 4 | 8 |
| 8        | 0 |   |                    |   |   |   |
| POSITION | 1 |   |                    |   |   |   |
|          | 5 |   |                    |   |   |   |
| 8        | 3 |   |                    |   |   |   |
|          |   |   |                    |   |   |   |

| 01 | 5 P | 051 | IIUI    | ۷  |
|----|-----|-----|---------|----|
|    |     | Re  | eal Cod | le |
|    | _   |     | _       |    |



08 POSITION

CODING

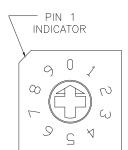
|          |   |   | Re | eal Coo | de |   |
|----------|---|---|----|---------|----|---|
|          |   | С | 1  | 5       | 4  | 8 |
|          | 0 |   |    |         |    |   |
|          | 1 |   |    |         |    |   |
| z        | 5 |   |    |         |    |   |
| POSITION | 3 |   |    |         |    |   |
| 8        | 4 |   |    |         |    |   |
| 8        | 5 |   |    |         |    |   |
|          | 6 | * |    | *       |    |   |
|          | 7 |   |    |         |    |   |

10 POSITION

| Real Code   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|
|             |   | C | 1 | 2 | 4 | 8 |
|             | 0 | * |   |   |   |   |
|             | 1 |   | * |   |   |   |
| z           | 2 | * |   | * |   |   |
| OIL         | 3 |   | * | * |   |   |
| SOS         | 4 | * |   |   |   |   |
| 10 POSITION | 5 |   | * |   |   |   |
|             | 6 | * |   | * | * |   |
|             | 7 |   |   |   |   |   |
|             | 8 | * |   |   |   | * |
|             | 9 |   |   |   |   |   |

16 POSITION

|             |   |   | N4 | edi Cod | 1e |   |
|-------------|---|---|----|---------|----|---|
|             |   | С | 1  | 2       | 4  | 8 |
|             | 0 | * |    |         |    |   |
|             | 1 |   |    |         |    |   |
|             | 2 |   |    |         |    |   |
|             | 3 |   |    |         |    |   |
| _           | 4 |   |    |         |    |   |
| 16 POSITION | 5 |   |    |         | *  |   |
| S S         | 6 |   |    |         |    |   |
| 9           | 7 |   |    |         |    |   |
| -           | 8 |   |    |         |    |   |
|             | 9 |   |    |         |    |   |
|             | Α |   |    |         |    |   |
|             | В | * | *  | *       |    | * |
|             | С |   |    |         |    |   |
|             | D |   |    |         |    |   |
|             | Ε |   |    |         |    |   |
|             | F | * | *  | *       | *  | * |
|             |   |   |    |         |    |   |



### **C** Complement Code

04 POSITION

|     |   | C | ompler | nent C | ode |   |
|-----|---|---|--------|--------|-----|---|
|     |   | С | 1      | 2      | 4   | 8 |
| NO  | 0 | * | *      | *      | *   |   |
| E   | 1 |   |        |        |     | * |
| Pos | 5 | * | *      |        | *   |   |
| 9   | 3 |   |        |        |     |   |

| 06 | POSITION       |
|----|----------------|
|    | Complement Cod |

|             | 00 1 00111011 |   |        |        |     |   |  |  |  |
|-------------|---------------|---|--------|--------|-----|---|--|--|--|
|             |               | С | ompler | nent C | ode |   |  |  |  |
|             |               | C | 1      | 5      | 4   | 8 |  |  |  |
|             | 0             | * | *      | *      | *   | * |  |  |  |
| õ           | 1             |   |        |        |     | * |  |  |  |
| 06 POSITION | 2             | * |        |        |     | * |  |  |  |
| Р.          | 3             |   |        |        |     | * |  |  |  |
| õ           | 4             |   |        |        |     |   |  |  |  |
|             | 5             |   |        |        |     |   |  |  |  |

08 POSITION

|            | Complement Code |   |   |   |   |   |  |  |  |  |  |
|------------|-----------------|---|---|---|---|---|--|--|--|--|--|
|            |                 | С | 1 | 5 | 4 | ٤ |  |  |  |  |  |
|            | 0               | * | * | * | * | 4 |  |  |  |  |  |
|            | 1               |   |   |   |   | 1 |  |  |  |  |  |
| õ          | 5               | * | * |   | * | 1 |  |  |  |  |  |
| JISC       | 3               |   |   |   |   | 1 |  |  |  |  |  |
| NOTISON 80 | 4               |   |   |   |   |   |  |  |  |  |  |
| 8          | 5               |   |   |   |   | 1 |  |  |  |  |  |
|            | 6               |   |   |   |   | - |  |  |  |  |  |
|            | 7               |   |   |   |   | 4 |  |  |  |  |  |

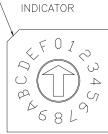
10 POSITION

|   |             | 11 | <i>J</i> I | VJI    | ПОІ    | V   |   |
|---|-------------|----|------------|--------|--------|-----|---|
| Γ |             |    | С          | ompler | nent C | ode |   |
|   |             |    | С          | 1      | 2      | 4   | 8 |
| Γ |             | 0  | *          | *      | *      | *   | * |
|   |             | 1  |            |        |        | *   |   |
| 1 | ξ           | 2  | *          |        |        | *   | * |
| Ì | NO POSITION | 3  |            |        |        |     |   |
| 8 | 5           | 4  |            |        |        |     |   |
| 1 | 2           | 5  | *          |        |        |     |   |
|   |             | 6  |            |        |        |     |   |
|   |             | 7  |            |        |        |     |   |
|   |             | 8  |            |        |        |     |   |
|   |             | 9  |            |        |        |     |   |

16 POSITION

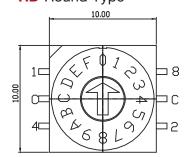
|          |   | С | 1 | 5 | 4 | - |
|----------|---|---|---|---|---|---|
|          | 0 | * | * | * | * | 4 |
|          | 1 |   |   |   |   | 1 |
|          | 2 |   | * |   | * | 1 |
|          | 3 |   |   |   |   | 1 |
|          | 4 |   |   |   |   | 1 |
|          | 5 |   |   |   |   | 4 |
| õ        | 6 |   |   |   |   | 1 |
| POSITION | 7 |   |   |   |   | 3 |
| 9<br>9   | 8 |   |   |   |   |   |
| ř        | 9 |   |   |   |   | Г |
|          | Α | * |   |   |   | Г |
|          | В |   |   |   | * | Г |
|          | С |   |   |   |   | Г |
|          | D |   |   | * |   | Г |
|          | Ε |   |   |   |   | Г |
|          | F |   |   |   |   |   |





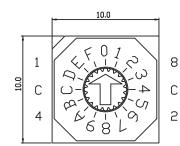
### **SHAPE OF SURFACE**

**RD** Round Type





**OT** Octagon Type







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

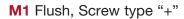




# CRE Series 10mm DIP Coded Rotary Switches

### **ACTUATOR**







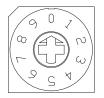






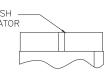




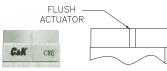












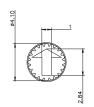


L0 Extended, Screw type "->"

P0 Protrusion, Screw type "->"

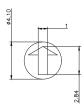




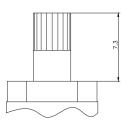


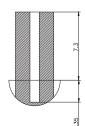




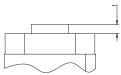








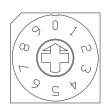


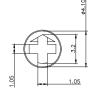




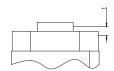
P1 Protrusion, Screw type "+"

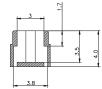




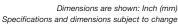














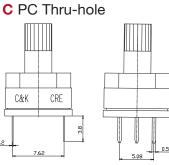


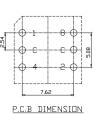






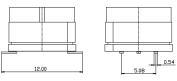
### **TERMINATIONS**

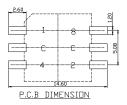




S Gull wing

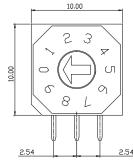




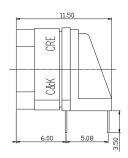


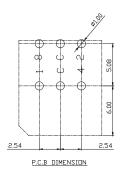
## A Right Angle Thru-hole



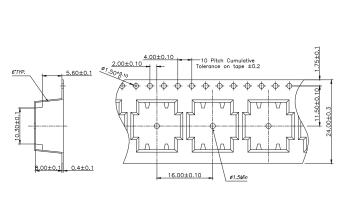


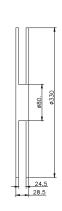


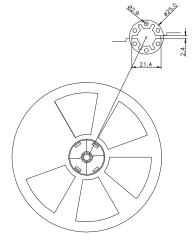




### **TAPE & REEL**







TAPE & REEL: 600 pcs



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

