# O/E/N OM
# ROTARY WAFER SWITCHES

- Patented Unidex indexing
- Flexible Switch package
- Miliary & Commercial Version
- Variety of Switching configurations
- BCD & Hexa Decimal coded outputs
- Optional water sealing

## CRISP, UNIFORM DETENTING

A patented Unidex™detent, using one or two balls operating on a starwheel, gives Multidex switches a crisp, uniform feel. Unidex detents last a lifetime and are designed to meet JSS 51207 requirements.

Unidex indexing is available in $10^0$ ,$15^0$,$20^0$ and $30^0$ throw as standard.($11.25^0$, $12.85^0$, $18^0$, $22.5^0$ and $25.7^0$ throws available as specials.)

## BEST OF INSULATION

Both rotor and stator are moulded diallylphthalate: meeting MIL- M-14 requirements.

Thousands of variations - available in a single switch - will eliminate much tedious design work for the engineer and help him do the job faster.

## CONTACTS

The OAK pioneered double wiping contacts are self - cleaning. The terminals are designed for easy insertion of wire and fast soldering.

Two types of Contacts - shorting (Make before break)

Non Shorting - (Break before make) Silver plated brass contacts are rated for 0.5 Amps (resistive) at 28 VDC . and 0.25 Amps (resistive) at 110VAC. Silver alloy contacts are rated for 1.0 Amp(resistive) at 28 VDC. and 0.5Amps (resistive) at 110 VAC.

Gold flashing or gold plating can be provided over silver alloy when specified to improve storage characteristics, dry circuit switching, increase reliability when used infrequently or in corrosive atmospheres or limit contact resistance variation:(See under Military specifications for rating of switches to JSS).

## FINISHES

All component parts requiring plating are cadmium or zinc plated and passivated as per our standards.

## OPTIONS AVAILABLE

### Stops

Fixed stops at total number of positions specified are standard. If OFF position is required, please indicate whether it is to be the first or last switch position.

### Clip Terminals

Standard is $60^0$ bend on terminals. Flat and reverse clips are also available on request. Electrostatic shields, mounting brackets, etc.are available as standard and can besupplied when specified.

## RESIST ADVERSE ENVIRONMENTS

Commercial types rated from - $25^0$ to +$85C^0$, military types from - $65^0$ to + $85^0$C. Both types are made of materials and finishes to withstand the 50-hour salt spray test.

## MILITARY SPECIFICATIONS

The Multidex switch is designed to meet the US MIL-S-3786/R-05 requirements and is Type Approved in India to JSS 51207. To meet JSS 51207 requirements, switches should incorporate silver alloy (plain, gold flashed or gold plated) contacts, water sealing (both shaft and index'O' ring seals) and Stainless Steel shafts.

Contact rating requirement for resistive loads as per SR W05 of JSS51207:

200 mA at 28 VDC.

50 mA at 230 VAC.

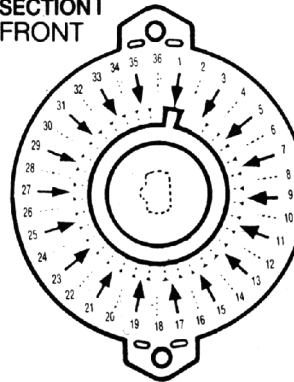## STANDARD SECTIONS FOR
## 18 AND 36 POSITION SWITCHING

### $10^0$

1. For 1 pole, 35 active position operation, circuitry will be as shown on section I.

2. As number of required positions decreases, a corresponding number of short clips will be deleted from the clockwise end of rotation.
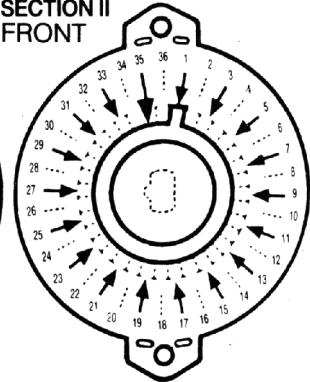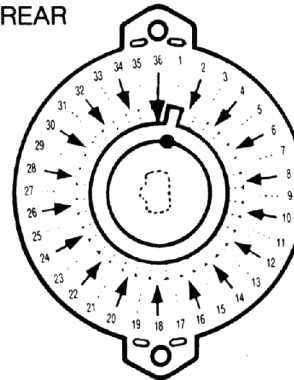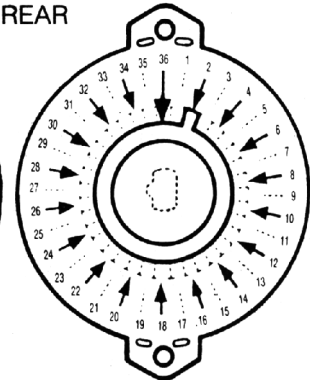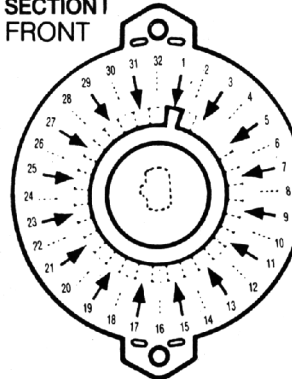
### $20^0$

1. For 2 pole, 17 active position operation, circuitry will be as shown on section II.

2. As number of required positions decreases, a corresponding number of short clips will be deleted from the clockwise end of rotation.



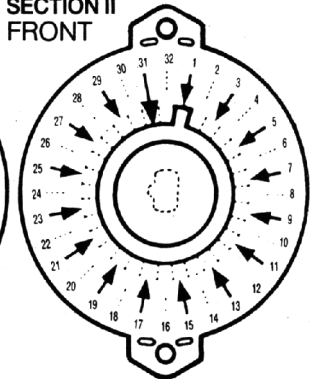## STANDARD SECTIONS FOR
## 16 AND 32 POSITION SWITCHING

### $11.25^0$

1. For 1 pole, 31 active position operation, circuitry will be as shown on section I.

2. As number of required positions decreases, a corresponding number of short clips will be deleted from the clockwise end of rotation.

## STOPS AT ODD NUMBERED
## POSITIONS NOT AVAILABLE

### $22.5^0$

1. For 2 pole, 15 active position operation, circuitry will be as shown on section II.

2. As number of required positions decreases, a corresponding number of short clips will be deleted from the clockwise end of rotation.
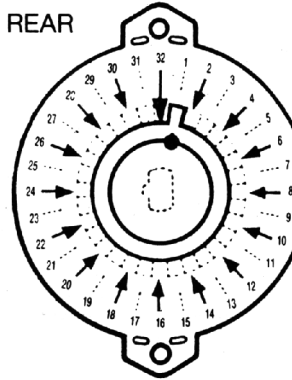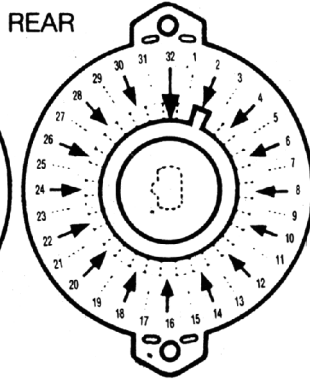
## STANDARD SECTIONS FOR
## 24 POSITION SWITCHING

### 15⁰

1. For 2 pole, 23 active position operation, circuitry will be as shown on section I.

2. As number of required positions decreases, a corresponding number of short clips will be deleted from the clockwise end of rotation.

3. For 4 pole, 11 active position operation, circuitry will be as shown on section II.

4. As number of required positions decreases, a corresponding number of short clips will be deleted from the clockwise end of rotation.

This stator does not permit cilps on front and rear to be tied with common eyelet. Only odd or even positions can be used on either side of stator. If odd position are used on one side, even position must be used on the other.



SECTION I FRONT    SECTION II FRONT

REAR    REAR

## STANDARD SECTIONS FOR
## 16 AND 32 POSITION SWITCHING

### 30⁰

1. For 2 pole, 11 active position operation, circuitry will be as shown on section I.

2. For 4 pole, 5 active position operation, circuitry will be as shown on section II.

3. As number of required positions decreases, a corresponding number of short clips will be deleted from the clockwise end of rotation.
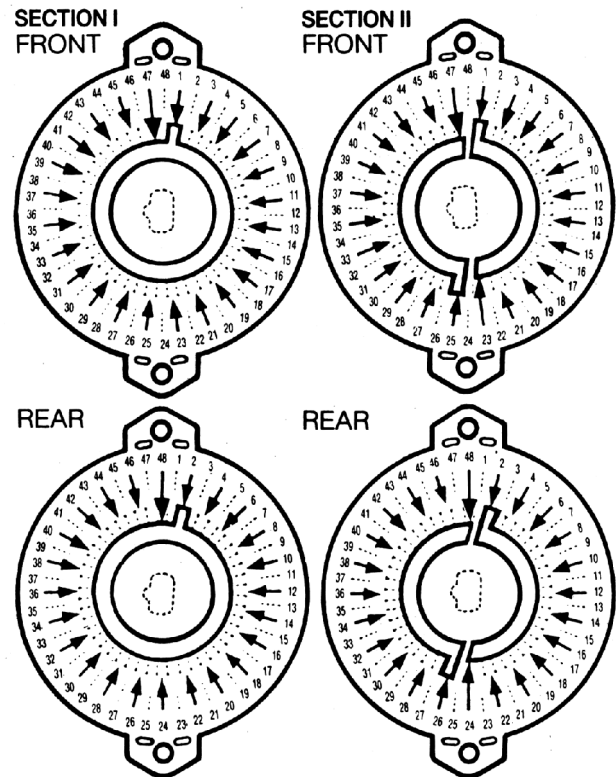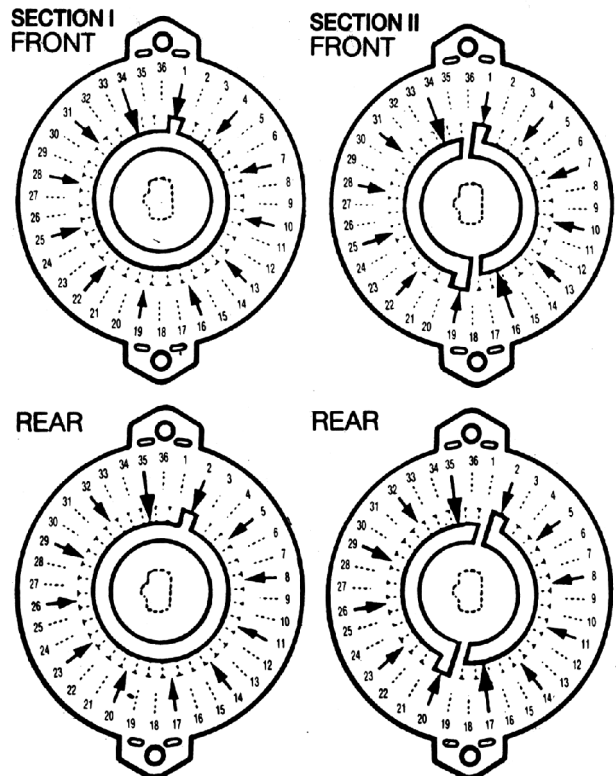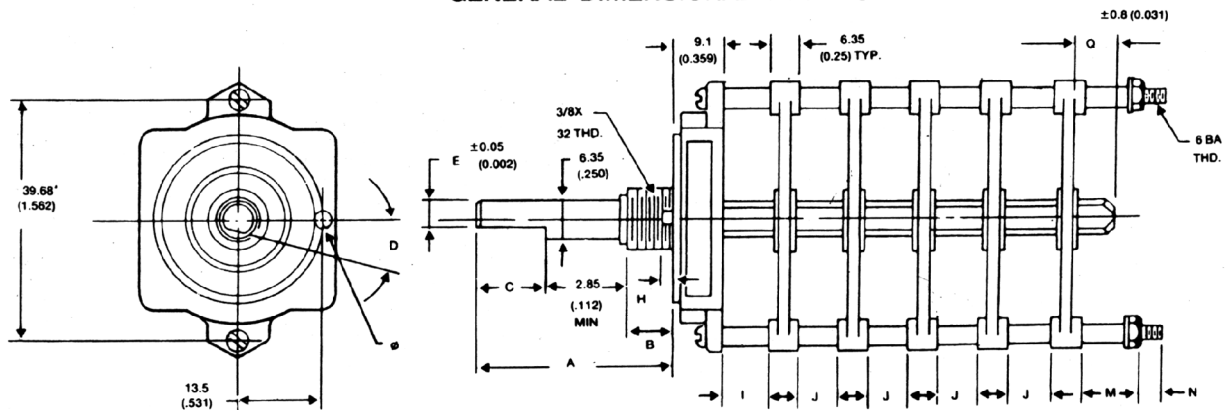


SECTION I FRONT    SECTION II FRONT

REAR    REAR

**Switches with 12.85⁰, 25.7⁰ & 18⁰ angle of throw are available with higher lead time**

O/E/N India Limited

## GENERAL DIMENSIONAL DETAILS



| STANDARD DIMENSIONS IN MM BRACKETED DIMENSIONS IN INCHES TOLERANCE ±0.25 (0.010) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| A | •B | C | •D | E | H | ∅ | M | N | Q |
| 34.5 (1.359) | 9.53 (.375) | 12.0 (.472) | MULTIPLES OF 15 ±3° | 5.50 (.217) | 1.573 (.062) | 3.05 (.120) | 2.37 (.093) | 1.5 TO 5 mm TO SUIT STD SCREW AVAILABLE | 4.9 TO 6 MM TO SUIT STD SHAFT AVAILABLE |

* 6.35 (1/4) AVAILABLE ON REQUEST
* D TO BE SPECIFIED IF FLAT REQUIRED

| SPACING | WITHOUT CLIP OR WITH FLAT CLIP | WITH STD. CLIPS | WHEN STD CLIP FACE NO CLIP OR FLAT CLIP |
|---|---|---|---|
| I | 2.05 (.080) | 7.8 (.307) | — |
| J | 3.8 (.149) | 10.2 (.400) | 6.8 (.267) |
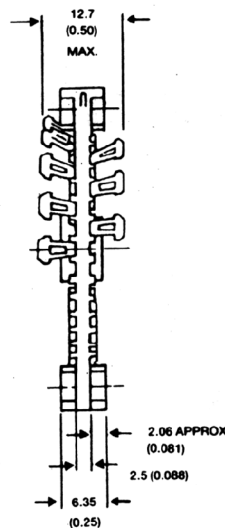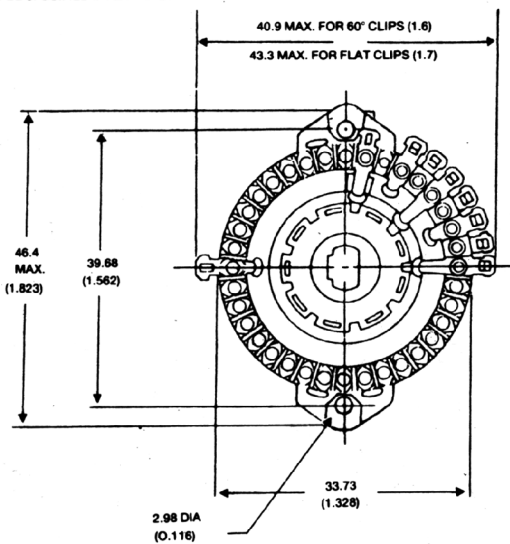


### P.C. LUG DETAIL
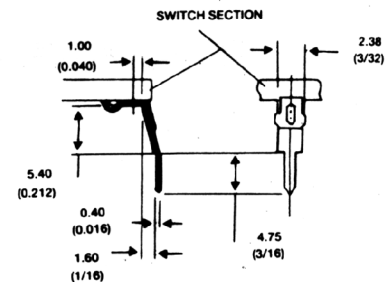


P.C. LAYOUT WILL BE GIVEN ON REQUEST

## NOTE : CLIPS CAN'T BE PROVIDED AT ADJACENT POSITIONS