SL-MA Rotary Wafer Switch

General Specifications:

These versatile miniature switches have 25.4mm diameter moulded wafers and are available in 2 versions, 36° indexing - having 18 clip positions and 30° indexing - having 22 such positions. Optional features include concentric shafts, printed circuit terminations and momentary contact models.

- **Proof Voltage:** 1000 Vrms at sea level
- **Maximum Working Voltage:** 300 Vdc / ac (rms)
- **Contact Rating - Current Carrying:** 2 amp continuous
- **Current Breaking with a Resistive / Non-reactive load:** 150mA at 250 Vac (rms)
- **Contact Resistance (initial):** 10 milliohms maximum at 100 mV (rms) 100mA max
- **Insulation Resistance:** Not less than 500 megohms at 500 Vdc (between any 2 parts requiring electrical insulation)
- **Mechanical and Electrical Endurance:** 10,000 cycles

Maximum Switching Per Wafer		
No of Poles	**30° SL-MA**	**36° SL-MA**
1 Pole	2 to 12 ways	2 to 10 ways
2 Pole	2 to 7 ways	2 to 5 ways
3 Pole	2 to 5 ways	2 to 4 ways
4 Pole	2 to 4 ways	2 or 3 ways
5 Pole	2 to 3 ways	-
6 Pole	2 ways only	-
7 Pole	2 ways only	-

Index Mechanism: The type 'SL' mechanism provides indexing angles of 30°& 36°
The low friction moulded cam followers in the assembly ensures a smooth indexing action.
Balance pressure spring provide consistent and readily reproducible total switch torque value of **16oz.ins.**
Maximum number of wafers per switch: **3** (depending on total number of poles switching)
Maximum number of poles per switch: **8**

Contacts: Standard - Silver plated brass
Alternatives - Hard gold plated or silver contacts are available at extra cost as are contacts with gold flash

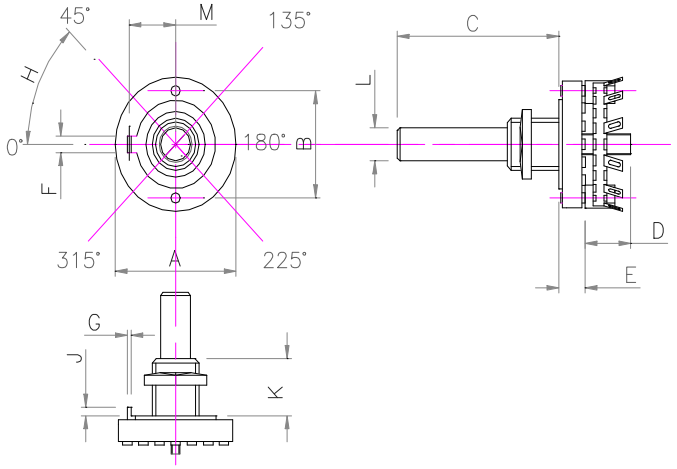
Terminations: Forward, standard: Straight, alternative

Rotor Blades: Standard - Shorting (make before break MBB)
Alternative - Non-shorting (break before make BBM)

Insulation: Stator - Moulded glass fibre loaded Diallyl Phthalate (DAP)
Rotor - Polycarbonate

Finish: Index springs stainless steel, other metal parts passivated zinc plated. Finishes to order.

Mounting Details: Metric M10 x 0.75, 6 mm dia, 14 mm A/F



Key To Details

A	Diameter of mechanism: 25.4mm
B	Strut centres: 20.6mm
C	Front Shaft: 50.0mm
D	Rear shaft: 30.0mm
E	Mounting face to first wafer: 6.3mm minimum
F	Locating lug width 3.2mm
G	Locating lug depth: 1.5mm
H	Angle of locating lug: Standard 0° and 180° - To order 45°,135°,225° and 315°
J	2.4mm. Locating lug protrudes 1.7mm from mounting face.
K	Bushing thread length: 10.0mm. Thread M10 x 0.75
L	Shaft diameter: 6.0mm
M	Distance of locating lug from centre line through shaft: 9.5mm

Caution: Our range of rotary wafer switches use polycarbonate rotors, the rotor blade/moving contact is secured to the rotor using a staking process to deform moulded locating pips. Please be aware that the use of some solvents and excessive heat as may be present from a heat gun could cause the following issues and should be avoided. In the case of solvent abuse the retaining pips may become brittle and break off resulting in the blades becoming detached and similarly the application of heat >140ºC can cause the deformed moulding to reassert itself again causing failure of the blade retention.

Please Note: In line with continued development we reserve the right to amend specification without prior notice (Rev 07/19)

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SL-MA Rotary Wafer Switch

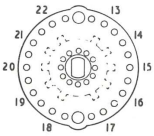
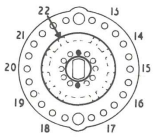
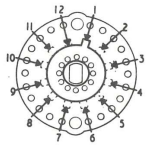
Standard contact arrangement for 30° indexing

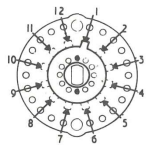
Innovative solutions for a changing world

Front view →

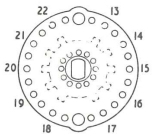
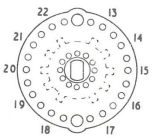
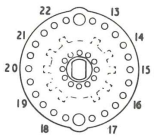
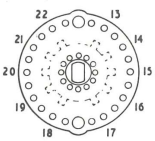
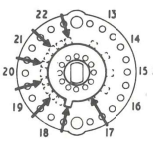
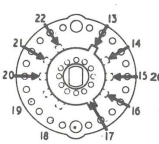
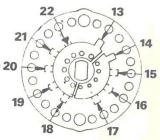
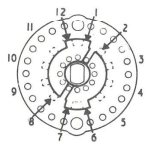
Rear view →

1 Pole




2 - 11 Position


12 Position

2 Pole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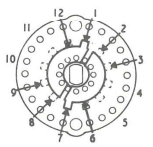
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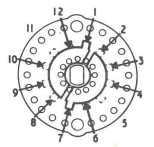
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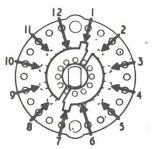
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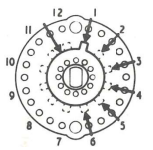
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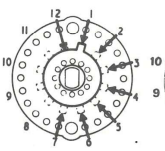
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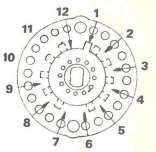
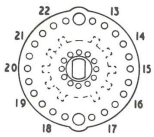
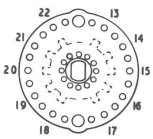
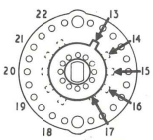
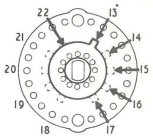
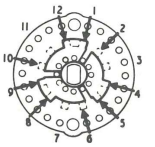

9 Position

3 Pole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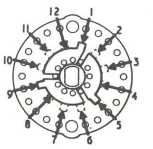
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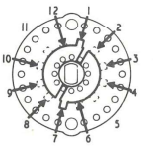
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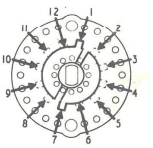
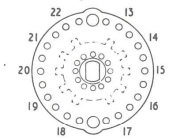
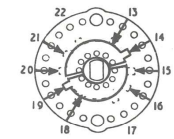
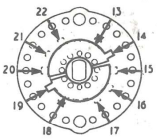
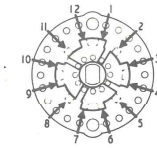

5 Position

4 Pole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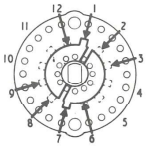
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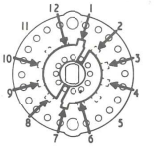
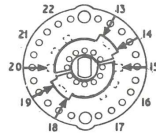
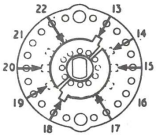
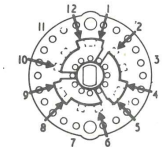

4 Position

5 Pole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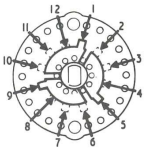
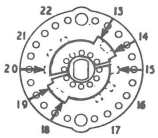
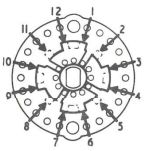
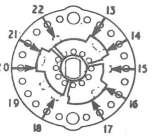
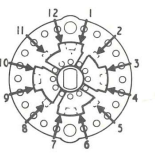

3 Position

6 Pole



2 Position

7 Pole

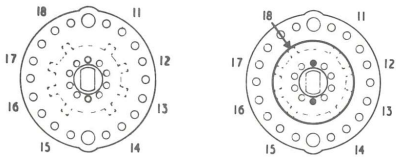


2 Position

SL-MA Rotary Wafer Switch

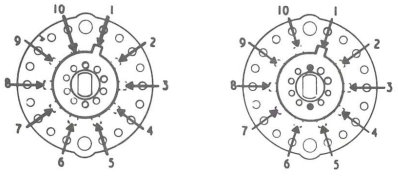
Standard contact arrangement for 36° indexing

1 Pole

Front view →



Rear view →

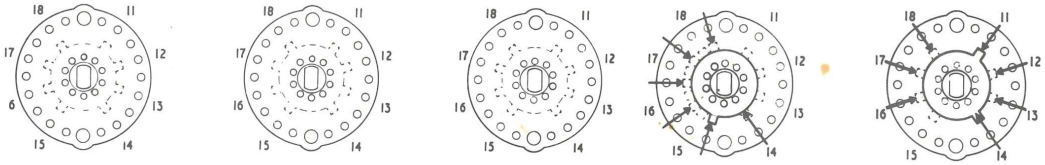


2 - 9 Position

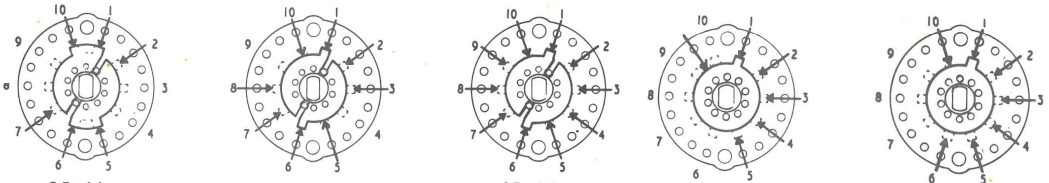
10 Position

2 Pole

Front view →



Rear view →



2 Position

3 Position

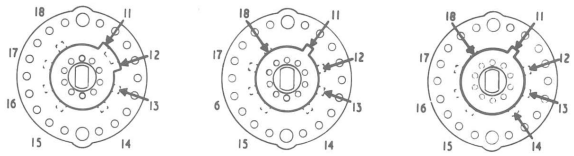
4 Position

5 Position

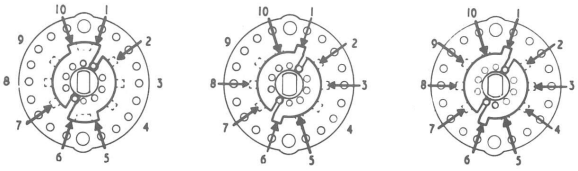
6 Position

3 Pole

Front view →



Rear view →



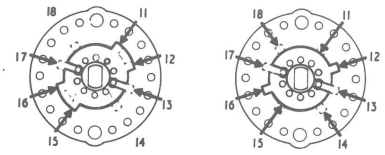
2 Position

3 Position

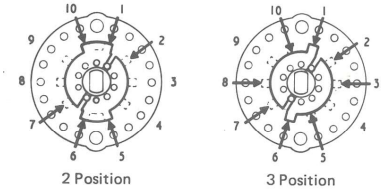
4 Position

4 Pole

Front view →



Rear view →



2 Position

3 Position

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