

General Information These versatile miniature switches have 25.4 mm diameter moulded wafers and are available in 2 versions, 36° indexing - having 18 clip positions and 30° indexing - having 22 such positions. 15°, 45° and 60° indexing are variations of the latter. Optional features include concentric shafts, panel and spindle seals, printed circuit termination's and momentary contact models.

Characteristics.

| | |
|--|---|
| Electrical, Maximum working voltage, | 300Vdc/ac (rms). |
| Contact rating, Current carrying | 2amp continuous. |
| Current breaking with a resistive/non-reactive load. | 150mA at 250Vac (rms).. |
| Proof Voltage. | 1000Vrms at sea level. |
| Insulation resistance. | Not less than 500 megohms at 500Vdc. (between any 2 parts requiring electrical insulation) |
| Contact resistance (initial). | 10 milliohms maximum at 100mV (rms). 100mA.max. |
| Mechanical. | |
| End stop strength. | 0,8 ± 0,1 Nm (114oz.in.) |
| | Temperature range. -40°C. to +100°C. |

Maximum Switching Per Wafer

| No. of Poles. | 36° MU-MA (b) | 30° MU-MA (a) | 45° MU-MA (c) | 60° MU-MA (d) | 15° MU-MG |
|---------------|---------------|---------------|-----------------|---------------|------------------|
| | 10 Positions. | 12 Positions. | | | 2 wafers |
| 1 Pole. | 2 to 10 ways | 2 to 12 ways | 2 to 8 ways | 2 to 6 ways | providing 1 pole |
| 2 Pole. | 2 to 5 ways | 2 to 7 ways | (fixed stop at | 2 to 6 ways | 24 way |
| 3 Pole. | 2 to 4 ways | 2 to 5 ways | positions 3, 5, | 2 or 3 ways | switching. |
| 4 Pole. | 2 or 3 ways | 2 to 4 ways | and 7 ways) | 2 or 3 ways | |
| 5 Pole. | - | 2 to 3 ways | | 2 ways only | |
| 6 Pole. | - | 2 ways only | | on-off | |
| 7 Pole. | - | 2 ways only | | - | |

Index Mechanism.

The Type MU mechanism provides indexing angles of 30°, 36°, 45° and 60°, (see Bulletin RW36 for full technical details).

The low friction moulded cam followers in the assembly ensures a smooth indexing action.

Balance pressure springs provide consistent and readily reproducible total switch torque values within the following ranges.

| | | | |
|-------|--|--------|--|
| Light | 7 to 18 x 10 ⁻² Nm (10 to 26 oz, ins,) | Medium | 14 to 32 x 10 ⁻² Nm (20 to 46 oz, ins,) |
| High | 28 to 56 x 10 ⁻² Nm (40 to 80 oz, ins,) | | |

Type A indexing mechanism may also be used as an alternative where a simpler, space saving mechanism is required. The switch then becomes model A-MA. 30° indexing only.

Contacts & Termination's.

Standard. Silver plated brass.
 Alternatives. - Hard gold plated or silver contacts are available at extra cost as are contacts with gold flash.
 Termination's. - 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 diallylphthalate (DAP)
 Rotor. - Polycarbonate.

Finish.

Index Springs, Stainless steel: other metal parts, passivated zinc plated. Finishes to order.

Mounting Details.

| | |
|---------------------------|----------------------|
| Imperial (standard). | Metric (alternative) |
| Bush 3/8" x 32TPI (Whit.) | M10 x 0.75. |
| Shaft 0.25" dia. | 6mm, dia. |
| Nut 0.525" A/F. | 14mm A/F. |

General Information

These slim indexing mechanisms provide a reduced dimension behind the panel compared with the standard mechanisms.

- Features,
- Lower noise from the indexing with energy absorbing moulded components.
 - Exceptional electrical insulation.
 - Low capacitance.
 - Quiet operation with low friction factor.
 - Hygienic and corrosion resistance.
 - High strength moulded bush.
 - No additional lubrication from enclosed indexing mechanism.

New feature,

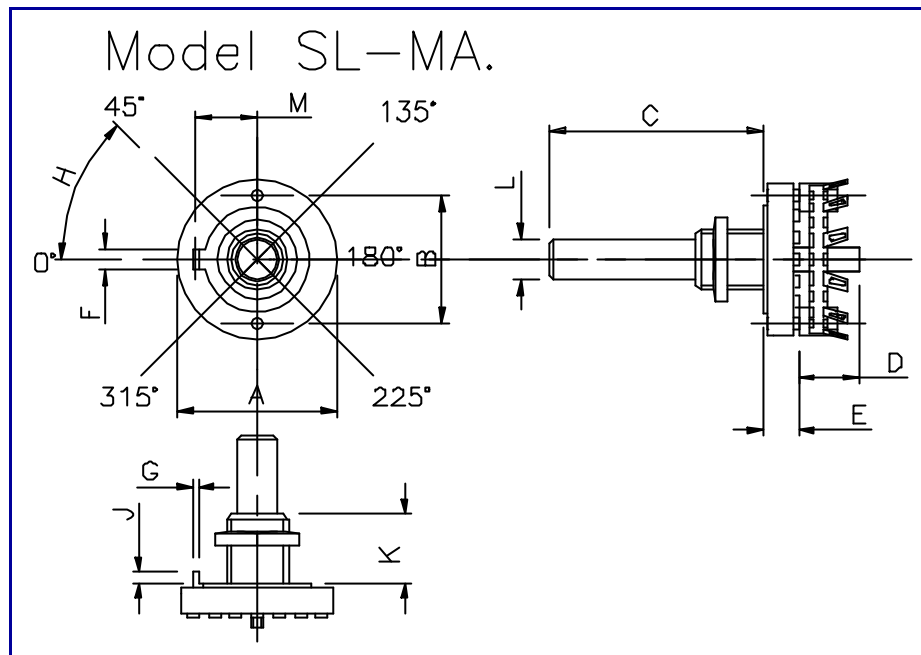
A recent improvement to the action on the 30° mechanism has improved the **positive action** or feel of the switch providing a more precise indexing which is almost impossible to tease indexed positions. To order this option please specify positive action version.

Specification. Materials :-

- Shaft and index wheel, Adjustable stop plate and Index housing :- Glass Filled Nylon.
- Plunger :- Polyacetal.
- Index springs :- Spring Music Wire
- Torque :- Standard, 13 oz.ins.
- Life :- 20,000 cycles.
- Stops :- One fixed stop in the housing with a rear adjustable stop plate.
- Struts :- Standard 2mm. dia. maximum length 54mm.
- Shaft :- Round, standard :- flats, to order.
- Maximum number of wafers per switch :- 3 (depending on total number of poles perswitch).
- Maximum number of poles per switch :- 8
- Special switching requirements will be considered on request.
- Sealing :- Not available.

Maximum Switching.

| No. of Poles. | 30° Index.MA | 30° Index.PCA | 30° Index. A | 36° Index.MA |
|---------------|---------------|---------------|---------------|---------------|
| | 12 Positions. | 12 Positions. | 12 Positions. | 10 Positions. |
| 1 Pole. | 2 to 12 ways | 2 to 12 ways | 2 to 12 ways | 2 to 10 ways |
| 2 Pole. | 2 to 7 ways | 2 to 6 ways | 2 to 6 ways | 2 to 5 ways |
| 3 Pole. | 2 to 5 ways | 2 to 3 ways | 2 to 5 ways | 2 to 4 ways |
| 4 Pole. | 2 to 4 ways | 2 ways only | 2 to 4 ways | 2 or 3 ways |
| 5 Pole. | 2 to 3 ways | - | 2 ways only | - |
| 6 Pole. | 2 ways only | - | 2 ways only | - |
| 7 Pole. | 2 ways only | - | - | - |



Dimensions Are In Millimetres

Key To Details

- A. Diameter of mechanism ; - 25,4mm
- B. Strut centres ; - 20,6mm
- C. Front shaft ; - 48,6mm maximum
- D. Rear shaft ; - 28,9mm
- E. Mounting face to first wafer ; -
MA model 6,3mm
PCA model and A models 9,5mm
- F. Locating lug width ; - 3,2mm
- G. Location lug thickness ; - 1,5mm
- H. Angle of locating lug ; - standard, 0 and 180 degrees ;
to order, 45°, 135°, 225° and 315°
- J. Locating lug depth ; 2,4mm.
Protrudes 1,7mm from mounting face.
- K. Bushing thread length ; 10mm thread M10 x 0,75.
- L. Shaft diameter ; 6mm
- M. Distance of locating lug from centre line through
shaft ; 9,5mm.