

**ROTARY SWITCH**



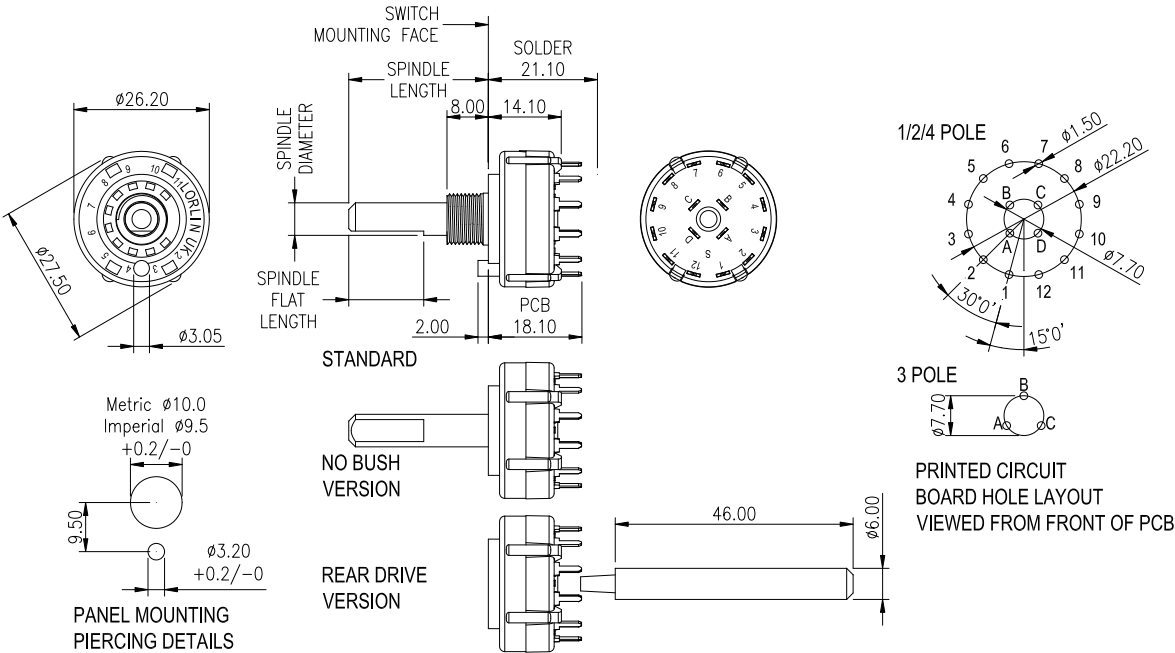
**CK ROTARY SWITCH**

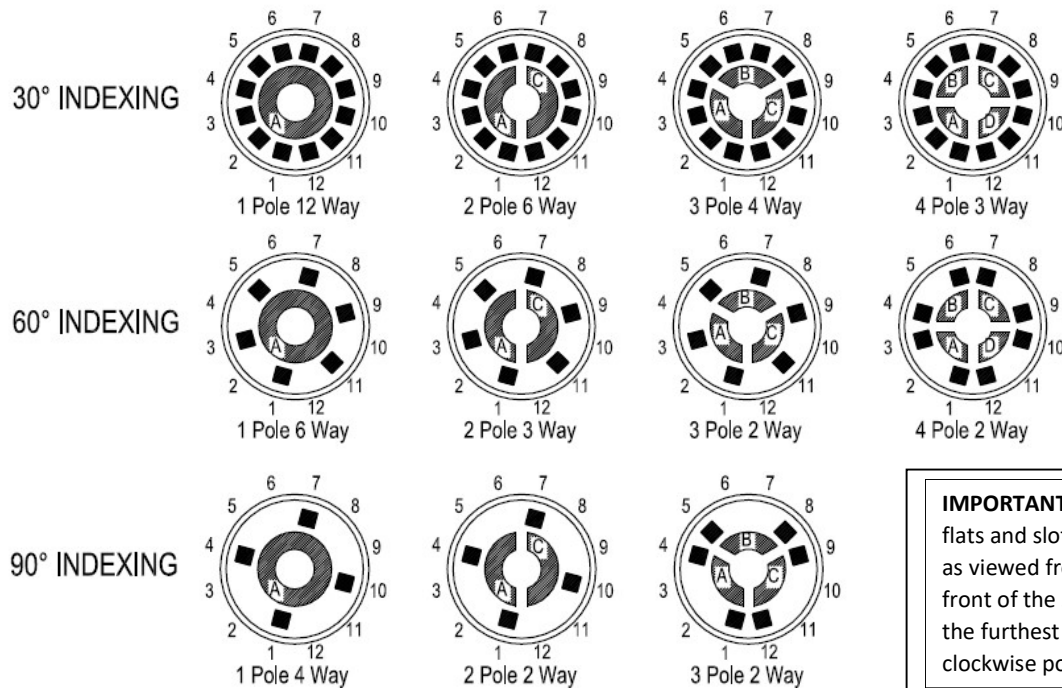
**ELECTRICAL & MECHANICAL SPECIFICATION**

|                            |                              |                             |                            |
|----------------------------|------------------------------|-----------------------------|----------------------------|
| Switch Rating:             | 1A @ 24V ac/dc               | Life:                       | >10,000 Cycles             |
| Proof Voltage:             | 1,500V ac (Initial)          | Operating Torque (nominal): | Standard 8.6 ±1 cNm        |
| Insulation Resistance:     | >999 MΩ at 500V dc (Initial) |                             | Light Action 3.5 ± 0.5 cNm |
| Contact Resistance         | <20 mΩ (Initial)             | End Stop Torque (nominal):  | 0.80 Nm                    |
| Contact/Terminal Material: | Brass CZ108 Ag Plated        | Moulding Material:          | Polyamide 6.6 G.F          |
| Operating Temperature:     | -30°C to +85°C               |                             |                            |

**FEATURES**

- Single wafer switch
- Maximum 12 positions
- Up to 4 poles per switch
- Standard 30° indexing, 60° and 90° available
- Moulded 27.5mm diameter
- Shorting (make before break 30° indexing only) or non-shorting (break before make)
- Moulded stop or adjustable stops to restrict number of positions
- Continuous rotation also available
- Made in UK
- UL-V0 rated material available
- Solder or PCB terminals
- Gold flashed or gold plated terminals/contacts available
- Spindles with special flats, slots or knurls
- Rear drive versions
- No bush versions





SPINDLE FLAT ANGLE - AVAILABLE IN 15° INCREMENTS

SCREWDRIVER SLOT - AVAILABLE IN 45° INCREMENTS



## ORDERING CODE FOR NON-STANDARD SWITCHES

| C K [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] |                        |            |              |                 |               |                    |            |                        |                   |
|---------------------------------------------|------------------------|------------|--------------|-----------------|---------------|--------------------|------------|------------------------|-------------------|
| SPINDLE LENGTH FMF IN FULL MM               |                        |            |              |                 |               |                    |            |                        |                   |
| Index Angles & NO. OF POLES                 | NO OF WAYS (POSITIONS) | MBB or BBM | Contact Type | Contact Plating | SPINDLE DIAM. | SPINDLE FLAT DEPTH | BUSH DIAM. | LENGTH OF SPINDLE FLAT | ANGLE OF FLAT (°) |
| A 30° 1 Pole                                | A 2                    | A BBM      | Solder       | SILVER          | A 6mm         | Nil                | M10        | A 2 N 15               | A 0 N 195         |
| B 2                                         | B 3                    | B MBB*     | Solder       |                 | B 6mm         | 5mm                | M10        | B 3 O No Flat          | B 15 O            |
| C 3                                         | C 4                    | C BBM      | PCB          |                 | C 6.35mm      | Nil                | 9.52 mm    | C 4 P 16               | C 30 P 230        |
| D 4                                         | D 5                    | D MBB*     | PCB          |                 | D 6.35mm      | 5.5mm              | 9.52 mm    | D 5 Q 17               | D 45 Q 225        |
| E 60° 1 Pole                                | E 6                    | E BBM      | Solder       | GOLD PLATE      |               |                    |            | E 6 R 18               | E 60 R 240        |
| F 2                                         | F 7                    | F MBB*     | Solder       |                 |               |                    |            | F 7 S 19               | F 75 S 255        |
| G 3                                         | G 8                    | G BBM      | PCB          |                 |               |                    |            | G 8 T 20               | G 90 T 270        |
| H 4                                         | H 9                    | H MBB*     | PCB          |                 |               |                    |            | H 9 U 21               | H 105 U 285       |
| I 90° 1 Pole                                | I 10                   | I BBM      | Solder       | GOLD FLASH      |               |                    |            | I 10 V 22              | I 120 V 300       |
| J 2                                         | J 11                   | J MBB*     | Solder       |                 |               |                    |            | J 11 W 23              | J 135 W 315       |
| K 3                                         | K 12                   | K BBM      | PCB          |                 |               |                    |            | K 12 X 24              | K 150 X 330       |
| Z No Stop                                   | L MBB*                 | L MBB*     | PCB          |                 |               |                    |            | L 13 Y 25              | L 165 Y 345       |
|                                             |                        |            |              |                 |               |                    |            | M 14 Z Full            | M 180             |

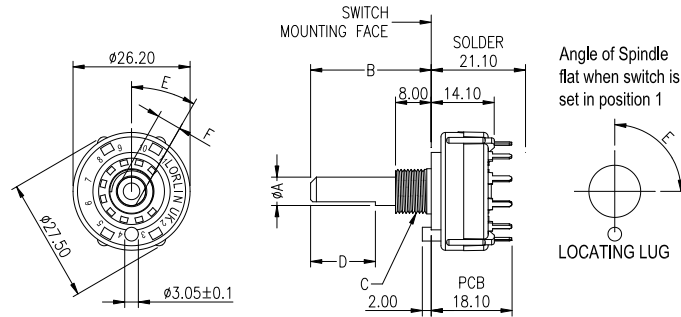
\*30° INDEX ANGLE ONLY

## STANDARD PART NUMBERS

| BASIC TYPES | SPINDLE DIAMETER | SPINDLE LENGTH FROM MOUNTING FACE | 8mm LONG BUSH | SPINDLE FLAT LENGTH | ANGLE OF SPINDLE FLAT | SPINDLE FLAT THICKNESS |
|-------------|------------------|-----------------------------------|---------------|---------------------|-----------------------|------------------------|
| IMPERIAL    | 6.35mm           | 38mm                              | 9.52 x 32 TPI | 30mm                | 90°                   | 5.5mm                  |
| METRIC      | 6.00mm           | 50mm                              | M10 x 0.75    | No Flat             | -                     | -                      |

| CIRCUITRY AT 30° INDEXING | STANDARD METRIC            |                |                     | STANDARD IMPERIAL |                     |
|---------------------------|----------------------------|----------------|---------------------|-------------------|---------------------|
|                           | PLATING FINISH             | Shorting (MBB) | Non- Shorting (BBM) | Shorting (MBB)    | Non- Shorting (BBM) |
| <b>1 POLE 12 POSITION</b> | <b>STOP INCLUDED</b>       |                |                     |                   |                     |
| Solder Tag                | Silver                     | CK1039         | CK1029              | CK1034            | CK1024              |
|                           | Gold Flash                 | CK1508         | CK1503              | CK1516            | CK1520              |
|                           | Gold Plate                 | CK2444         | CK1672              | CK2458            | CK2459              |
| Printed Circuit Board     | Silver                     | CK1059         | CK1049              | CK1054            | CK1044              |
|                           | Gold Flash                 | CK1512         | CK1506              | CK1524            | CK1528              |
|                           | Gold Plate                 | CK1475         | CK1312              | CK2460            | CK2461              |
| <b>1 POLE 12 POSITION</b> | <b>CONTINUOUS ROTATION</b> |                |                     |                   |                     |
| Solder Tag                | Silver                     | CK1038         | CK1028              | CK1033            | CK1023              |
|                           | Gold Flash                 | CK1533         | CK1537              | CK1541            | CK1545              |
|                           | Gold Plate                 | CK2445         | CK2446              | CK2462            | CK2463              |
| Printed Circuit Board     | Silver                     | CK1058         | CK1048              | CK1053            | CK1043              |
|                           | Gold Flash                 | CK1534         | CK1538              | CK1542            | CK1546              |
|                           | Gold Plate                 | CK2447         | CK2448              | CK2464            | CK2465              |
| <b>2 POLE 6 POSITION</b>  | <b>STOP INCLUDED</b>       |                |                     |                   |                     |
| Solder Tag                | Silver                     | CK1040         | CK1030              | CK1035            | CK1025              |
|                           | Gold Flash                 | CK1509         | CK1496              | CK1517            | CK1521              |
|                           | Gold Plate                 | CK2449         | CK1726              | CK2466            | CK2467              |
| Printed Circuit Board     | Silver                     | CK1060         | CK1050              | CK1055            | CK1045              |
|                           | Gold Flash                 | CK1513         | CK1473              | CK1525            | CK1529              |
|                           | Gold Plate                 | CK2450         | CK1850              | CK2468            | CK2469              |
| <b>2 POLE 6 POSITION</b>  | <b>CONTINUOUS ROTATION</b> |                |                     |                   |                     |
| Solder Tag                | Silver                     | CK1114         | CK1118              | CK1120            | CK1121              |
|                           | Gold Flash                 | CK1535         | CK1539              | CK1543            | CK1547              |
|                           | Gold Plate                 | CK2451         | CK2452              | CK2470            | CK2471              |
| Printed Circuit Board     | Silver                     | CK1119         | CK1113              | CK1122            | CK1089              |
|                           | Gold Flash                 | CK1536         | CK1540              | CK1544            | CK1548              |
|                           | Gold Plate                 | CK2453         | CK2454              | CK2472            | CK2473              |
| <b>3 POLE 4 POSITION</b>  | <b>STOP INCLUDED</b>       |                |                     |                   |                     |
| Solder Tag                | Silver                     | CK1041         | CK1031              | CK1036            | CK1026              |
|                           | Gold Flash                 | CK1510         | CK1504              | CK1518            | CK1522              |
|                           | Gold Plate                 | CK2455         | CK1577              | CK2474            | CK2475              |
| Printed Circuit Board     | Silver                     | CK1061         | CK1051              | CK1056            | CK1046              |
|                           | Gold Flash                 | CK1514         | CK1500              | CK1526            | CK1530              |
|                           | Gold Plate                 | CK2456         | CK1952              | CK2476            | CK2477              |
| <b>4 POLE 3 POSITION</b>  | <b>STOP INCLUDED</b>       |                |                     |                   |                     |
| Solder Tag                | Silver                     | CK1042         | CK1032              | CK1037            | CK1027              |
|                           | Gold Flash                 | CK1511         | CK1505              | CK1519            | CK1523              |
|                           | Gold Plate                 | CK1673         | CK1822              | CK2478            | CK2479              |
| Printed Circuit Board     | Silver                     | CK1062         | CK1052              | CK1057            | CK1047              |
|                           | Gold Flash                 | CK1515         | CK1507              | CK1527            | CK1531              |
|                           | Gold Plate                 | CK2457         | CK1953              | CK2480            | CK2481              |

CUSTOMER TO COMPLETE OR DELETE AS REQUIRED



|          | A     | B | C             |
|----------|-------|---|---------------|
| IMPERIAL | Ø6.35 |   | Ø9.52 x 32TPI |
| METRIC   | Ø6.00 |   | M10 x 0.75    |

|          | D | E | F |
|----------|---|---|---|
| IMPERIAL |   |   |   |
| METRIC   |   |   |   |

| INDEXING                                                                                                              |     |     |     | INDEXING                                                                                                                                                                                                                  |     |     |     | INDEXING                   |     |     |     | INDEXING      |     |     |     |
|-----------------------------------------------------------------------------------------------------------------------|-----|-----|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|-----|----------------------------|-----|-----|-----|---------------|-----|-----|-----|
| <p>1 POLE</p>                                                                                                         |     |     |     | <p>2 POLE</p>                                                                                                                                                                                                             |     |     |     | <p>3 POLE</p>              |     |     |     | <p>4 POLE</p> |     |     |     |
| POSITIONS                                                                                                             |     |     |     | POSITIONS                                                                                                                                                                                                                 |     |     |     | POSITIONS                  |     |     |     | POSITIONS     |     |     |     |
| MBB                                                                                                                   | BBM | SOL | PCB | MBB                                                                                                                                                                                                                       | BBM | SOL | PCB | MBB                        | BBM | SOL | PCB | MBB           | BBM | SOL | PCB |
| <b>IMPORTANT!</b> WAFERS FLATS & SLOTS VIEWED FROM THE FRONT OF SWITCH IN EXTREME ANTICLOCKWISE POSITION (POSITION 1) |     |     |     |                                                                                                                                                                                                                           |     |     |     |                            |     |     |     |               |     |     |     |
| SPECIAL REQUIREMENTS                                                                                                  |     |     |     |                                                                                                                                                                                                                           |     |     |     |                            |     |     |     |               |     |     |     |
|                                                                                                                       |     |     |     |                                                                                                                                                                                                                           |     |     |     |                            |     |     |     |               |     |     |     |
|                                                                                                                       |     |     |     |                                                                                                                                                                                                                           |     |     |     |                            |     |     |     |               |     |     |     |
|                                                                                                                       |     |     |     | <b>OPTIONS</b> Stops are adjustable 2-12 positions. Continuous rotation (No Stops) available. Make before break (MBB) or Break before Make (BBM) rotors available. Solder Tag (SOL) or PCB pin (PCB) – indicate on wafer. |     |     |     |                            |     |     |     |               |     |     |     |
| CUSTOMER:                                                                                                             |     |     |     | DATE:                                                                                                                                                                                                                     |     |     |     | CUSTOMER REFERENCE NUMBER: |     |     |     |               |     |     |     |