

# GCK GRAY CODED ROTARY SWITCH

## GENERAL ELECTRICAL & MECHANICAL SPECIFICATION

|                            |                             |
|----------------------------|-----------------------------|
| Switch Rating:             | 150mA @ 50Vac/dc            |
| Life:                      | >10,000 Cycles              |
| Operating Temperature:     | -30°C to +85 °C             |
| Proof Voltage:             | 250Vac (Initial)            |
| Insulation Resistance:     | >999 MΩ at 500Vdc (Initial) |
| Contact Resistance:        | <50 mΩ (Initial)            |
| Operating Torque (nominal) | Standard 4.7 ± 0.5 cNm      |
| End Stop Torque (nominal): | 0.8 Nm                      |
| Moulding Material:         | Polyamide 6.6 G.F.          |
| Contact/Terminal Material: | Brass CZ108 Ag Plated       |

## RoHS COMPLIANT



## GENERAL FEATURES

- Made in UK
- Gray code Standard and complementary versions.
- Moulded 27.5mm diameter single wafer switch.
- Standard 22.5° indexing 4-Bit
- Standard 45° indexing 3-Bit
- Printed Circuit Terminals.
- Special options include UL-V0 rated material, gold flashed or gold plated (2.5 microns gold over 2 microns nickel) contacts, spindles with special flats or slots.

## STANDARD PART NUMBER

| 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 32TPI  | 30mm                | 90°                   | 5.5mm                  |
| METRIC      | 6.00mm           | 50mm                              | M10 x 0.75    | No Flat             | ---                   | ---                    |

|                                    | STANDARD METRIC |          | STANDARD IMPERIAL |         |
|------------------------------------|-----------------|----------|-------------------|---------|
|                                    | Stop            | No Stop  | Stop              | No Stop |
| 4-Bit Gray – Standard Spindle      | GCK 1016        | GCK 1017 | GCK1018           | GCK1019 |
| 4-Bit Gray Comp – Standard Spindle | GCK 1020        | GCK1021  | GCK1022           | GCK1023 |
| 3-Bit Gray – Standard Spindle      | GCK 1024        | GCK1025  | GCK1026           | GCK1027 |
| 3-Bit Gray Comp – Standard Spindle | GCK 1028        | GCK1029  | GCK1030           | GCK1031 |

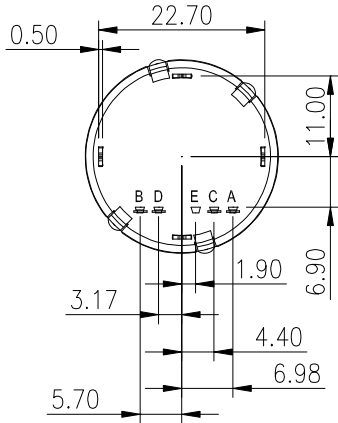
| DIAL | COMMON E Connection to Terminals |   |   |   |
|------|----------------------------------|---|---|---|
|      | A                                | B | C | D |
| 0    |                                  |   |   |   |
| 1    |                                  |   |   | • |
| 2    |                                  |   |   | • |
| 3    |                                  |   | • | • |
| 4    |                                  | • | • |   |
| 5    |                                  | • | • | • |
| 6    |                                  | • |   | • |
| 7    |                                  | • |   |   |
| 8    | •                                | • |   |   |
| 9    | •                                | • |   | • |
| A    | •                                | • | • | • |
| B    | •                                | • | • |   |
| C    | •                                |   | • |   |
| D    | •                                |   | • | • |
| E    | •                                |   |   | • |
| F    | •                                |   |   |   |

LORLIN GRAY CODED COMMON –4-BIT

| DIAL | COMMON E Connection |   |   |
|------|---------------------|---|---|
|      | A                   | B | C |
| 1    |                     |   |   |
| 2    |                     |   | • |
| 3    |                     | • | • |
| 4    |                     | • |   |
| 5    | •                   | • |   |
| 6    | •                   | • | • |
| 7    | •                   |   | • |
| 8    | •                   |   |   |

LORLIN GRAY CODED COMMON –3-BIT

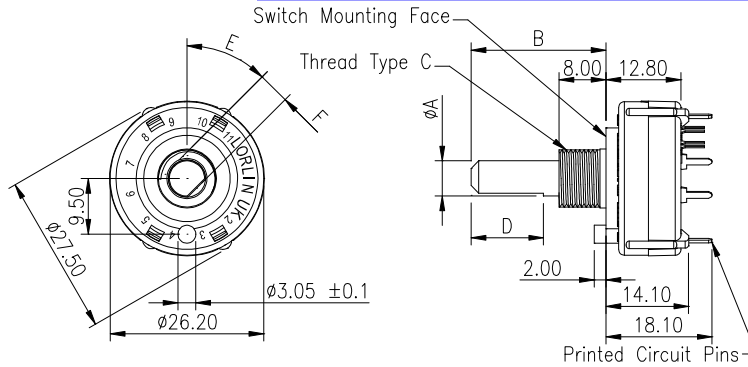
# GCK GRAY CODED ROTARY SWITCH



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   |   |   |   |



## STANDARD SPINDLE DETAILS

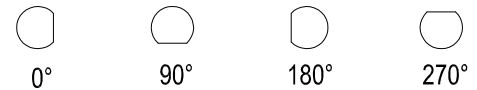
|             | A                | B                                 | C             | D                   | E                     | F                  |
|-------------|------------------|-----------------------------------|---------------|---------------------|-----------------------|--------------------|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

## STANDARD ANGLES OF SCREWDRIVER SLOTS

Standard screwdriver slots are 1.2mm wide and 1.5mm deep.



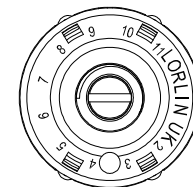
## TYPICAL SPINDLE DETAILS



Orientation with location lug in position shown.

## TO ORDER PLEASE SPECIFY:

1. Switching Code
2. Imperial or Metric Spindle Diameter
3. Dimension (B) Spindle length from Mounting Face
4. Thread Required (C)
5. Spindle Flat length if required (D)
6. Angle of Flat (E)
7. Spindle Flat Depth (F)
8. 8 Position or No Stop Version
9. Contact Plating: Silver/Gold Flash/2.5 microns Gold Plate



### EXAMPLE

Screwdriver slot level with top of threaded fixing bush 1.2mm wide x 1.5mm deep (standard) at 90° (standard)