

# KEY SWITCHES

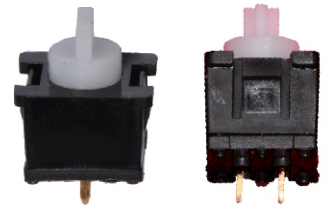


## Series IK 9

### DESCRIPTION :

**Integral Key Switch Type IK-9** satisfies the user requirement for a low profile, high quality switch with a smooth tactile feel. The gold plated contact travels and makes contact with 2 more gold plated Stator Contacts.

No special materials are used and regular compression spring is used. The contact is highly reliable and has long life. Mounting is done by clicking the switch in to a rectangular slot 12.0x13.2 mm or directly mounting on a PCB.



### SPECIFICATIONS

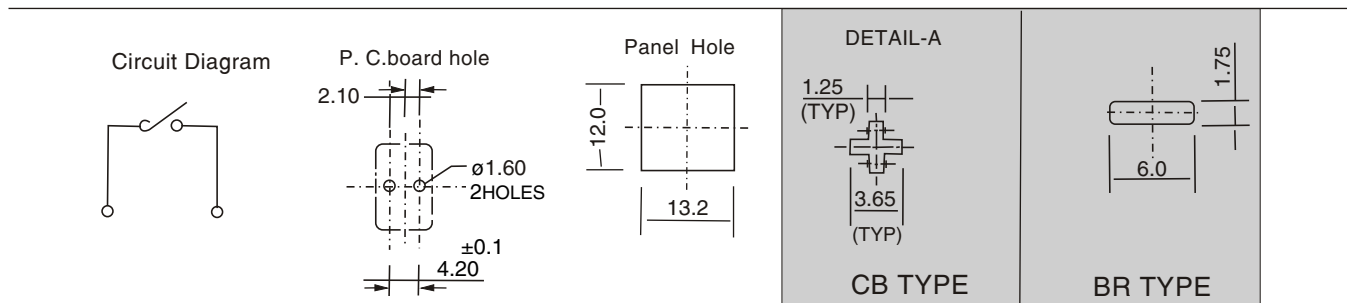
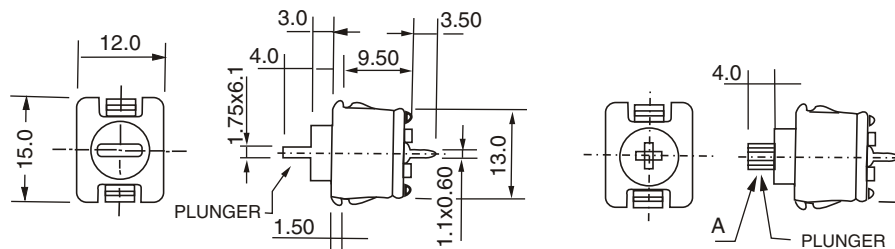
CONTACT RATING	: 0.1 amp @ 30 Volts DC
CONTACT RESISTANCE	: < 30 milli ohms
INSULATION RESISTANCE	: > 100 mega ohms (DC 500 V megger) initial
VOLTAGE PROOF	: 250 V AC (applied for 1 minute)
BOUNCE TIME	: With resistance load of DC 15 V X 30 Kilo ohms 5 ms or less in ON : 10 ms or less in OFF
OPERATION LIFE	: 300,000 Cycles
TOTAL TRAVEL	: 3.0 max.
PRE TRAVEL	: 1.3 ± 0.3
ACTUATING FORCE	: 70 gms ± 30 gms



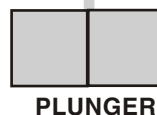
### MATERIALS & FINISHES

BODY & PLUNGER	: PC / Acetal as required
BASE	: Thermoset material
STATOR & MOVING CONTACTS	: Copper alloy hard Gold Plate Over Nickel barrier
SPRING	: Stainless Steel Wire

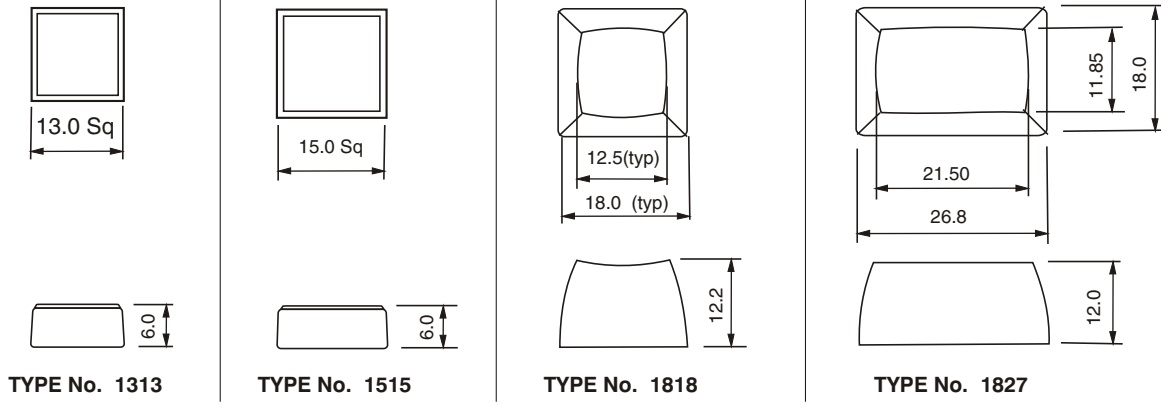
### DIMENSIONAL DETAILS



ORDERING CODE **IK 9**

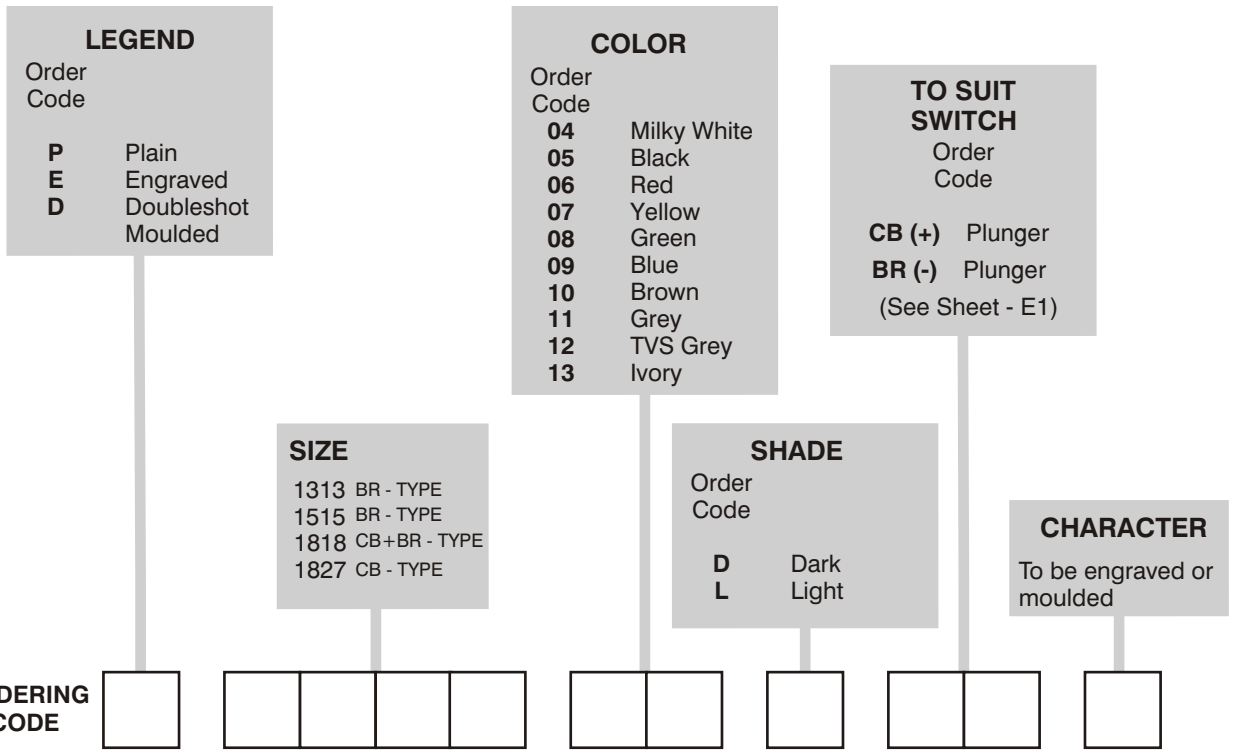


All Dimensions in mm.



**C DOT APPROVED TYPE :**

Description	Size	C. DOT Part No	Integral Part No.
I) 0 to 9 Double Shot Moulded	18 x 18	RCI-KTNDAA000 - 401 TO RCI-KTNDAA009 - 401	D-1818-11-D-CB-0 TO D-1818-11-D-CB-9
II) Plain - 1	18 x 18	RCI-KTNPA000 - 401	P-1818-11-D-CB
III) Plain - 2	18 x 27	RCI-KTNPB000 - 401	P-1827-11-D-CB



**NOTE :**

- At Present Double Shot Moulding is Only available in size 1818
- Dark Colour Key Tops will have White Character and vice Versa.
- The Engraved /Double shot Character will have to be spelled out in a box at the end.
- Shade (Light) available in GREY & BLUE colours only.
- Standard Colour - Black, Red, Grey & Blue. Other Colours also made available on request

**FOR EXAMPLE :** D - 1818 - 11 - D - CB - 9

Means It is a key Top of 18mm of Double Shot Dark Grey colour Moulded with Character "9" to suit CB (+) type plunger.

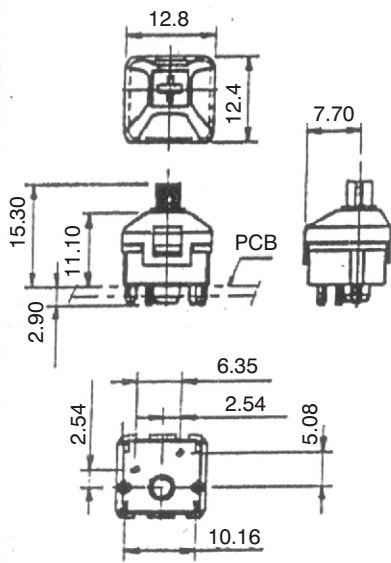
# KEY BOARD SWITCHES



## Series 13

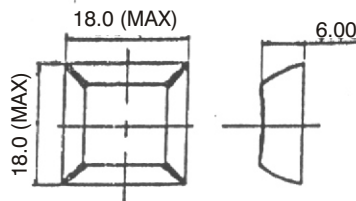
### DESCRIPTION

Integral Key Switch Series 13, satisfies the user requirement for a low profile, high quality switch with a smooth tactile feel. The design of the contacts using special copper alloy, ensure a very high force per unit area and reduced susceptibility to contact closure interference from foreign particles.



### DIMENSIONAL DETAILS

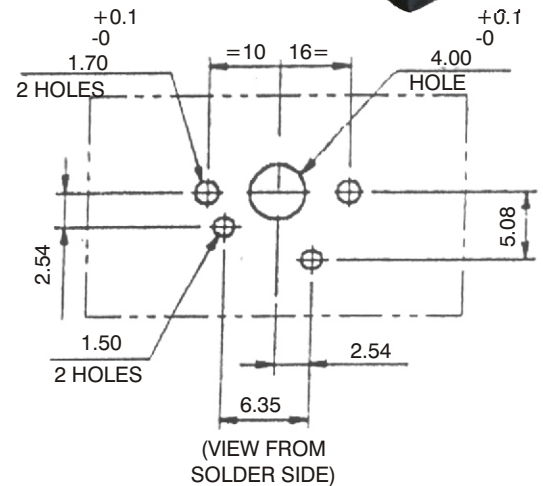
#### KEY TOP



#### KEY TOP COLOURS

1. WHITE
2. BLACK
3. RED
4. GREY

Available only in 18 mm



### PCB DRILLING DETAILS

All Dimensions in mm.

### SPECIFICATIONS :

CONTACT RATING	: 0.1 AMP @ 30 Volts AC/DC
CONTACT RESISTANCE	: <30 milli ohms initial at 2-6 V DC
INSULATION RESISTANCE	: >100 M ohms
INSULATION DIELECTRIC	: 250 V AC (applied for 1 minute)
BOUNCE TIME	: 5 ms or less.
ACTUATING FORCE	: 70 grms.
OPERATING TEMP. RANGE	: -25°C to +85°C
TOTAL TRAVEL	: 4.00
PRETRAVEL	: 2.00 ± 0.60
LIFE	: 20 million cycles @ 12V DC / 1 mA.

### MATERIALS & FINISHES

COVER / BASE	: Glass filled PBT (UL approved)
PLUNGER	: Acetal (Delrin)
KEY TOP	: ABS
STATOR & MOVING CONTACTS	: Copper Alloy Hard Silver Plated
SPRING	: Stainless Steel Wire
MOUNTING	: On PCB only

# KEY SWITCHES



## Series 18

### DESCRIPTION

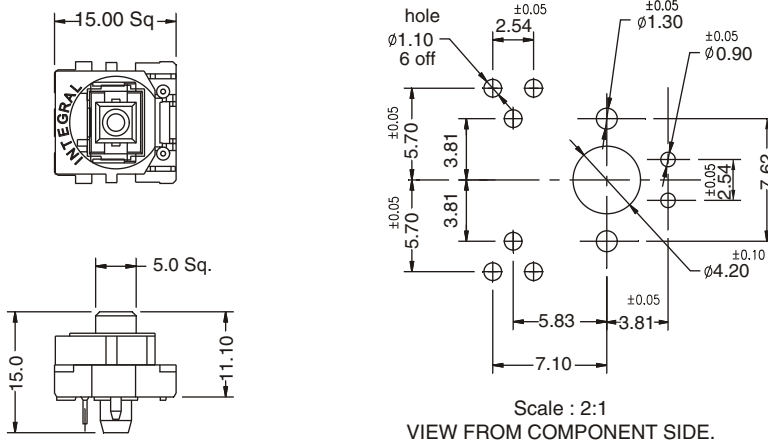
**Integral Series 18 Key Switches** are ideal for data-transfer use in Machine Tool Controls and other Industrial Equipments where long life is required. Self aligning plastic pins ensure that the insertion into the PCB is easier and does not damage the contact pins.

Use of Beryllium Copper Spring Contact with Gold plating on Stator Pins also ensures a working life of more than a million cycles.

The Switches can be hand-soldered or wave soldered. **Insert-moulded** terminals prevent the penetration of flux and solder. However immersion in cleaning solution should not be above the PCB level.



### DIMENSIONAL DETAILS



Position of the LED anode is marked on the housing base with +

### SPECIFICATIONS

CONTACT RATING	: 50mA @ 12 V DC
CONTACT RESISTANCE	: < 100 milliohms initial at 2-6 V DC
INSULATION RESISTANCE	: > 1000 Megaohms
VOLTAGE PROOF	: 1000 V AC
TEMP. RANGE	: -25 °C to +85 °C
TOTAL TRAVEL	: 2.5 mm
PRE TRAVEL	: 1.6 ± 0.40 mm
ACTUATING FORCE	: 70 Gms. ± 30 Gms.
LIFE	: >10 <sup>6</sup> Cycles at 5V DC 2 mA
CONTACT BOUNCE	: < 5 millisec.

### MATERIALS & FINISHES

HOUSING & COVER	: PBT (GF) UL approved
PLUNGER	: Acetal
CONTACT PINS	: Brass, plated Gold over Nickel
CONTACT MOVING	: Beryllium Copper Plated Gold over Nickel
COMPRESSION SPRING	: Stainless Steel

All Dimensions in mm.