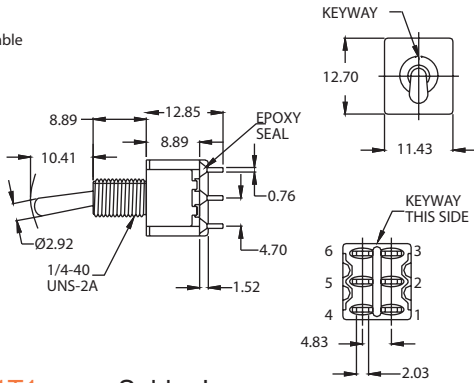


# Toggle Switches

## Miniature DPDT Toggle Switches

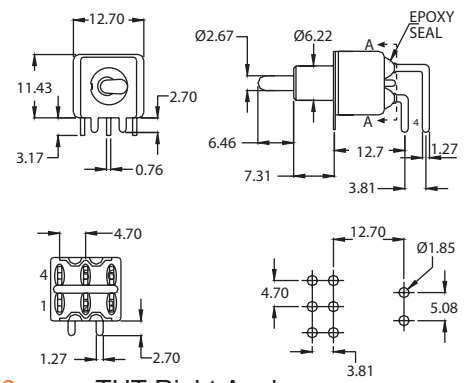
## TK12 Series

UL version available by request



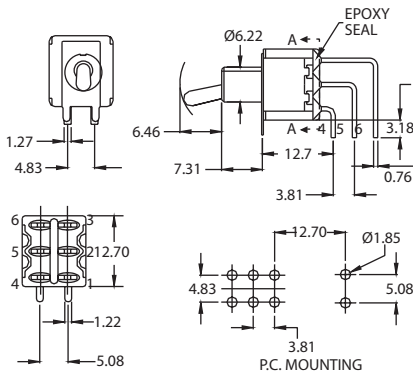
TK12D\_A1B1T1 Solder Lug

UL version available by request



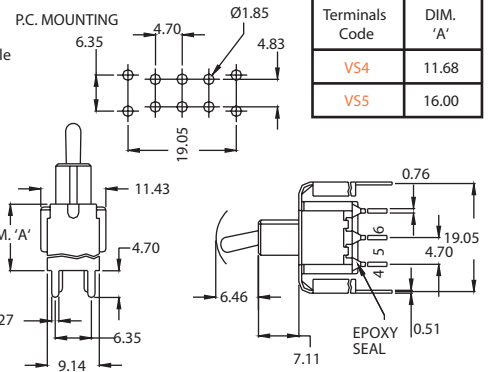
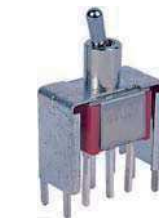
TK12D\_A2B4T6 THT Right Angle P.C. MOUNTING

UL version available by request



TK12D\_A2B4T7 THT Vertical Right Angle

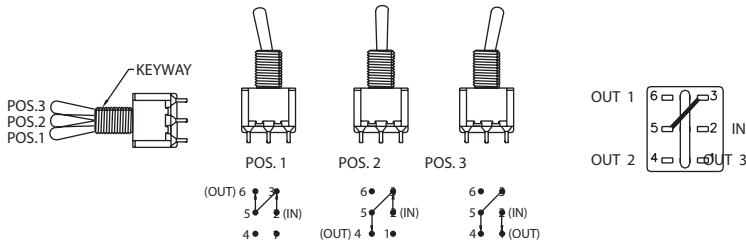
UL version available by request



TK12D\_A2B4VS with V-Bracket

Terminals Code	DIM. 'A'
VS4	11.68
VS5	16.00

### Example Model Double Poles 3 Positions: 3-Way Wiring Diagram Schematics



Model No.	Position 1	Position 2	Position 3
TK12D1-TK12D2		N/A	
TK12D3-TK12D5		OPEN	
TK12D6-TK12D8			

### How to order:

TK12 1 2 3 4 5 6 7

**1 POLES & SWITCH FUNCTION:**  
 D1 DP ON-NONE-ON  
 D2 DP ON-NONE-MOM  
 D3 DP ON-OFF-ON  
 D4 DP MOM-OFF-MOM  
 D5 DP ON-OFF-MOM  
 D6 DP ON-ON-ON  
 D7 DP MOM-ON-MOM  
 D8 DP ON-ON-MOM

**2 ACTUATOR (Details see page A04):**  
 A1 Height = 10.41 mm  
 A2 Height = 5.08 mm  
 A3 Height = 13.97 mm  
 A4 Height = 16.26 mm  
 A5 Height = 21.34 mm  
 A6 Height = 12.30 mm, flattened, anti-rotation  
 A61 Height = 21.00 mm, flattened, anti-rotation  
 A62 Height = 13.49 mm, lever with cap, anti-rotation  
 A63 Height = 6.35mm, flattened, anti-rotation  
 A7 Height = 12.37 mm, 15/32 bushing  
 A8 Height = 17.56 mm, 15/32 bushing  
 A88 Height = 17.5 mm, only with B52 bushing  
 A9 Height = 21.3 mm, plastic  
 AL1 Height = 16.00 mm, locking lever  
 AL2 Height = 16.26 mm, locking lever  
 AL3 Height = 17.28 mm, locking lever

**3 BUSHING (Details see page A04):**  
 B1 Height = 8.89 mm, keyway (thd standard)  
 B2 Height = 8.89 mm, keyway (non-thd)  
 B3 Height = 7.10 mm, keyway (thd)  
 B4 Height = 7.10 mm, keyway (non-thd)  
 B5 Height = 7.52 mm, flat (high torque)  
 B6 Height = 8.00 mm, keyway (high torque)  
 B7 Height = 8.89 mm, flat (thd standard)  
 B8 Height = 8.89 mm, keyway (metric thd)  
 B9 Height = 7.52 mm, flat (splash proof)  
 B11 Height = 7.55 mm, keyway (thd standard)  
 B12 Height = 7.55 mm, keyway (non-thd)  
 B13 Height = 11.38 mm, keyway (15/32 bushing)

**4 TERMINALS (Details see page A04):**  
 T1 Solder Lug  
 T2 PC Thru Hole  
 T3 Quick Connect  
 T51 Wire W rap, Length = 18.70 mm  
 T52 Wire Wrap, Length = 24.20 mm  
 T53 Wire Wrap, Length = 10.55 mm  
 T54 Wire Wrap, Length = 26.97 mm  
 T6 PC Thru Hole, Right Angle  
 T6N PC Thru Hole, Right Angle, Snap-in  
 T7 PC Thru Hole, Vertical Right Angle  
 V-Bracket, Height = 11.68 mm  
 Snap-in V-Bracket, Height = 11.68 mm  
 V-Bracket, Height = 16.00 mm  
 V-Bracket, Height = 11.68 mm  
 V-Bracket, Height = 16.00 mm

**5 CONTACT MATERIAL:**  
 AG Silver  
 AU Gold  
 UT Gold, Tin-Lead  
 GT Silver, Tin-Lead  
 UG Gold over Silver  
 UGT Gold over Silver, Tin-Lead

**6 SEAL:**  
 E Epoxy (Standard)  
 N No Epoxy

**7 ROHS & LEAD FREE:**  
 V RoHS Compliant & Lead Free

**B14** Height = 11.9 mm, flat (15/32 bushing, splash proof)  
**B15** Height = 7.55 mm, flat (thd standard)  
**B16** Height = 7.55 mm, flat (non-thd)  
**B17** Height = 3.50 mm, keyway  
**B18** Height = 11.38 mm, keyway (15/32 bushing, POM insert)  
**B20** Height = 11.38 mm, keyway (15/32 bushing)  
**B25** Height = 8.00 mm, keyway, locking lever (thd)  
**B26** Height = 8.00 mm, keyway, locking lever (non-thd)  
**B52** Height = 11.7 mm, flat (15/32 bushing, only with A88)

### General Specifications:

#### MATERIALS

» Movable Contact & Fixed Terminals:

AG, GT, UG & UGT: Silver plated over copper alloy

AU & UT: Gold over nickel plated over copper alloy

#### MECHANICAL

» Operating Temperature: -40°C to +85°C

» Mechanical Life: 40,000 cycles

#### CONTACT RATING

» AG, GT, UG & UGT : 5A120VAC/28VDC

2A250VAC

» AU & UT :

0.4VA max. 20V max. (AC/DC)

#### ELECTRICAL

» Contact Resistance: 10mΩ max. initial @ 2-4VDC

100mA for silver & gold plated contacts

» Insulation Resistance: >100MΩ min.



# Toggle Switches

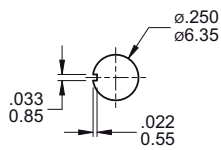
## Additional Informations for TK11, 12 & 13 Series

### TERMINAL OPTIONS

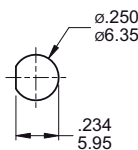
T1 Solder Lug	T2 THT	T3 Quick Connect	T5_ Wire Wrap	T6N Right Angle, Snap-in, THT	V2N Snap-in, V-Bracket

### PANEL MOUNTING

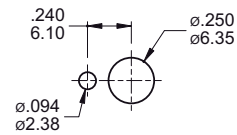
#### 1/4 IN BUSHING



Without locking ring (Keyway)



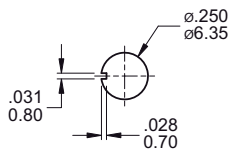
Without locking ring (Flat)



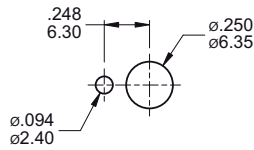
With standard locking ring.

#### METRIC BUSHING

Note: For B8 bushing.

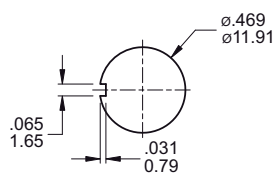


Without locking ring (Keyway)

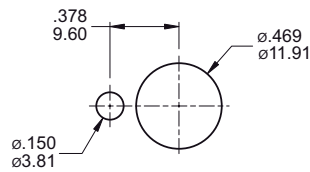


With standard locking ring.

#### 15/32 IN BUSHING



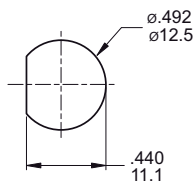
Without locking ring (Keyway).



With standard locking ring.

#### SPLASH PROOF BUSHING

Note: For B14 bushing.



Without locking ring (Flat).