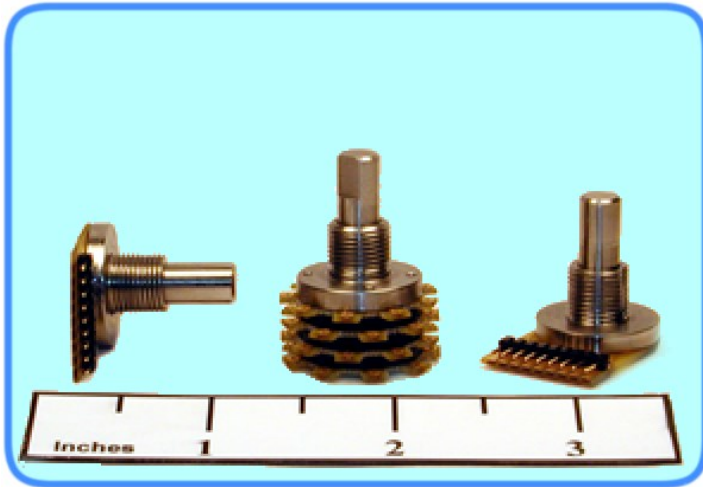




## VERY LOW PROFILE ROTARY SWITCHES MINIATURE LOW CURRENT SERIES

Unique Patent VLP<sup>®</sup> Designs Give The Designer The Most Functionality in The Least Space—Up to 83% Savings of Post Panel Depth Over Standard Rotary Switches!



- MIL-DTL-3786/13
- 0.750" Body Diameter
- 0.250" Shaft Diameter
- 75,000 Mechanical Life Minimum
- 15, 30°, 36°, 45° Indexing
- Multiple Pole Options
- Multiple Output Code Options
- Gold Plated Solder Pin Terminals
- Flux Sealed
- Mechanical Isolation Options
- Programmable Stops

### Mechanical Specifications:

- Post panel depth for 1 deck: .230" maximum
- Rotational life: 75,000 cycles minimum
- Rotational torque: 8-24 in-oz.
- Stop strength: 8.0 in-lbs. minimum
- Weight: 15 grams maximum

### Electrical Specifications:

- Switching current: 500 mA @ 28 VDC resistive  
250 mA @ 28 VDC inductive
- Non-switch (continuous): 3 A @ 28 VDC (20°C temperature rise)
- Contact style: Non-shorting or shorting
- Contact resistance: 10 mΩ max initial, 50 mΩ max after life
- Insulation resistance: 1000 Megaohms minimum IAW MIL-STD-202, Method 301 (Shaft and terminals)
- Dielectric strength: 750 VRMS IAW MIL-STD-202, Method 301 (Shaft and terminals)

### Environmental Specifications:

- Altitude: 70,000 feet
- Temperature: -60°C to +85°C (working), -65°C to +125°C (storage)
- Thermal shock: -55°C to +85°C per MIL-STD-202, Method 107, Test condition A
- Shock: 100 G's, 6 milliseconds IAW MIL-STD-202, Method 213, Test condition I
- Vibration: 15 G's at 70—2000 Hz; .06" double amplitude at 10—70 Hz MIL-STD-202, Method 204, Test condition B
- Explosion proof: IAW MIL-STD-202, Method 109 with test load 125 mA @ 28 VDC
- Salt spray: IAW MIL-STD-202, Method 101, Test condition B
- Sand and Dust: IAW MIL-STD-202, Method 110, Test condition B
- EMI/RFI Shielding: IAW MIL-DTL-3786 with 2 ohms shaft to ground

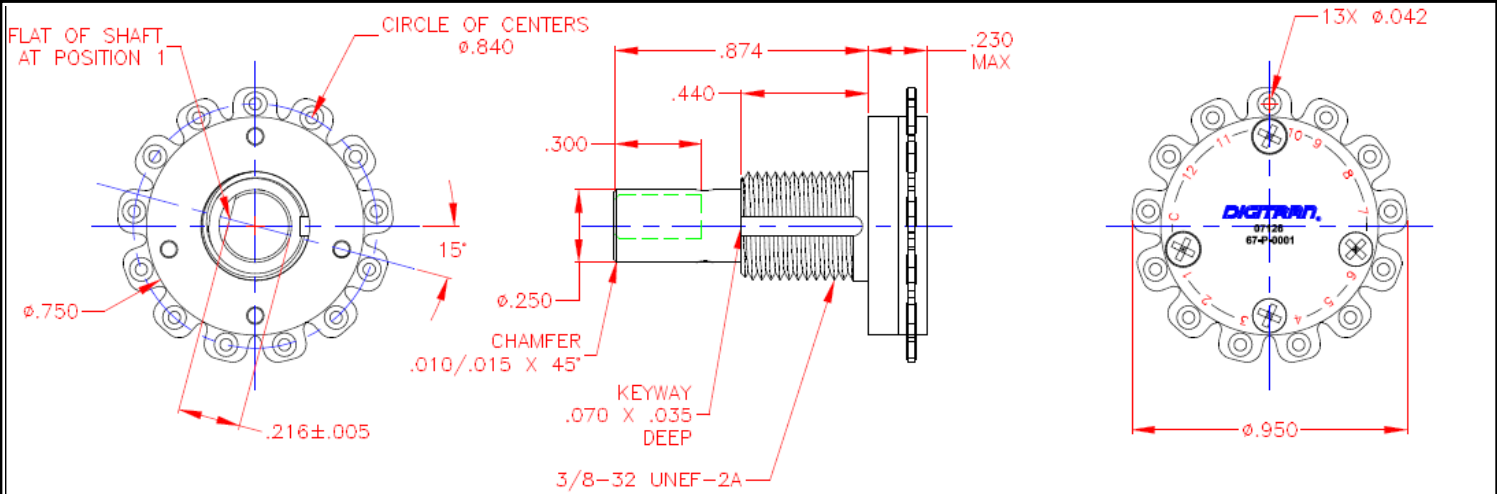
### Material Specifications:

- Molded parts: Thermoplastic
- Machine parts: Stainless steel and non-corrosive materials
- Printed circuit board: FR-4 laminate per MIL-PRF-55110
- Contact: Beryllium copper with gold plating
- Terminals: Gold plated pins
- Hardware: Cadmium plated brass (nut and washer)

## Applications

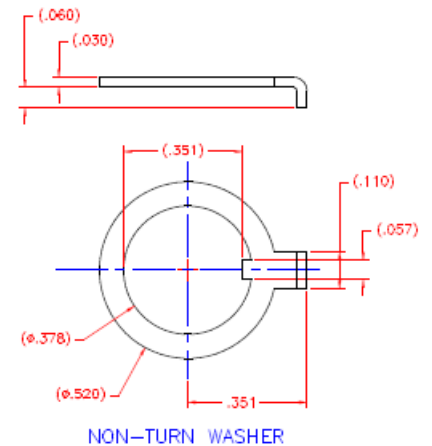
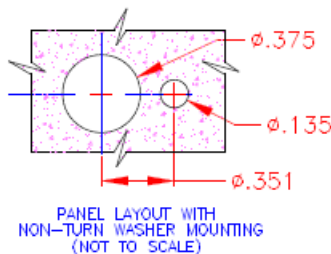
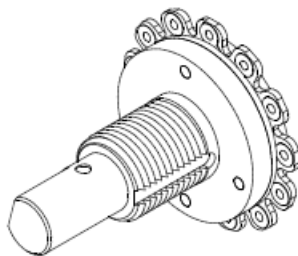
- Avionics Panels
- Display Systems
- Portable Equipment
- Flight Deck Instrumentation
- Medical Instrumentation
- Entertainment Equipment
- High Reliability Controllers
- Signal Processing Equipment
- Rugged Instrumentation
- Cockpit Displays
- Navigation Equipment
- Patient Monitors

# DIGITRAN SERIES 67 - VLP® (VERY LOW PROFILE) ROTARY SWITCHES



Note: Add 0.12" in length for each additional deck.

Specifications Subject To Change Without Notice



Notes:

1. Dimensions: Inches [mm]
2. Tolerances: in  $\pm.010$ , mm  $\pm.25$
3. Ea deck adds .109 in to depth
4. Shaft flat is opposite made position
5. Shaft flat: .250" L x .031" W
6. Decks numbered out from panel
7. All terminals gold plated
8. Hardware included with switch

## ORDERING GUIDE

**67X - XX X - X X X - X X XX**

- 671= 0.125" Dia Shaft, Stainless Steel Bushing
- 672= 0.25" Dia Shaft, Stainless Steel Bushing
- 673= 0.125" Dia Shaft, Aluminum Bushing
- 674= 0.25" Dia Shaft, Aluminum Bushing
- 675= 0.125" Dia Shaft, Composite Bushing
- 676= 0.25" Dia Shaft, Composite Bushing

INDEXING ANGLE (15°, 30°, 36°, 45°)

NUMBER OF DECKS (4 Decks Max)

POLES PER DECK (2 Max)

OUTPUT CODE

(1=Direct, 2=Binary, 3=Custom, 4=Mixed)

TERMINAL STYLE (1=Solder Tabs, 2= Header Pins, 3=PCB Pins)

### STOP FEATURES:

With S (stop feature): For this option, add number of active positions for switch. For example, S5 means stops between positions 1 and 5.

With C (continuous): Full turn without stops.

MIL SPEC (M\*=Full MIL-DTL-3786 Compliant, X=Non-Mil) All units, M or X, Have Shaft & Panel Seal.

CONTACT STYLE (N=Non-Shorting, S=Shorting)

§ Customer To Specify Requirements By Notes or Drawing

Questions? Contact Digitran Sales Department at extension 3223, or via e-mail at "sales@digitran-switches.com"

**DIGITRAN**  
ISO-9001:2000 Certified

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