MINIATURE BASIC SWITCHES
V SERIES

Definitions of Operating Characteristics
- OF Operating Force
- RF Releasing Force
- OT Overtravel
- TT Total Travel
- PT Pretravel
- MD Movement Differential
- OP Operating Position
- PO Travel to Positive Opening

Specifications
- Operating Speed: 0.01mm to 1m/sec (Plunger models without levers)
- Operating Frequency:
  - Mechanical: 600 ops/min
  - Electrical: 60 ops/min
- Service Life:
  - Mechanical: 10^8 (operations)
  - Electrical: V-10G 10^10, V-15G 10^10
- Rated Current/Voltage:
  - V-10 series: 10A, 1/2HP, 125/250VAC
  - V-15 series: 15A, 1/2HP, 125/250VAC
- Dielectric Strength:
  - 1,000 VAC, 50/60 Hz for 1 min between terminals of the same polarity
  - 2,000 VAC, 50/60 Hz for 1 min between current-carrying metal parts and ground, and between each terminal and non-current-carrying metal parts
- Insulation Resistance: >100MΩ @ 500VDC
- Contact Resistance: <30mΩ (initial value)
- Degree of Protection:
  - Standard: IP00
  - High temperature: -40°C to +150°C

Selection Guide:

V-15G

Actuator
- none
- Pin plunger
- Short hinge lever
- Hinge lever
- Long hinge lever
- Simulated roller lever
- Short hinge roller lever
- Hinge roller lever

Max. Operating Force
- none
- 70g
- 50g
- 100g
- 125g
- 200g
- 300g
- 400g

Hinge Position
- none
- Internal/far from plunger
- Internal/near plunger
- External/far from plunger
- External/near plunger

Mounting Hole
- none
- 3.1mm
- 2.9mm

V-10G/V-15G Operating Characteristics
- Suffix: A B C D E F
- OF (Max): 75/50/100/125/200/300/400g
- RF (Min): 24/16/33/42/66/100/133g
- PT (Max): 1.19 mm
- OP (Min): 1.27 mm
- MD (Max): 0.25 mm
- OT (Min): 14.7 ± 0.4 mm

V-10G1/V-15G1 Operating Characteristics
- Suffix: A B C D E F
- OF (Max): 25/50/100/125/200/300/400g
- RF (Min): 8.4/16/33/42/66/100/133g
- PT (Max): 1.57 mm
- OP (Min): 1.27 mm
- MD (Max): 1.41 mm
- OT (Min): 15.2 ± 0.5 mm

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**V-10G2/V-15G2**
- **OF (Max)**: 37/25/50/65/100/150/200g
- **RF (Min)**: 12/8/16/22/33/50/67g
- **PT (Max)**: 3.2 mm
- **OT (Min)**: 2.2 mm
- **MD (Max)**: 0.8 mm
- **OP**: 15.2 ± 1.2 mm

**Suffix** - A B C D E F

**V-10G3/V-15G3**
- **OF (Max)**: 22/14/28/36/57/86/115g
- **RF (Min)**: 6.8/4.5/9.5/12/19/28/38g
- **PT (Max)**: 3 mm
- **OT (Min)**: 2.3 mm
- **MD (Max)**: 0.8 mm
- **OP**: 18.7 ± 1.2 mm

**Suffix** - A B C D E F

**V-10G4/V-15G4**
- **OF (Max)**: 75/50/100/125/200/300/400g
- **RF (Min)**: 24/16/33/42/66/100/133g
- **PT (Max)**: 1.5 mm
- **OT (Min)**: 1.0 mm
- **MD (Max)**: 0.5 mm
- **OP**: 20.7 ± 0.6 mm

**Suffix** - A B C D E F

**V-10G5/V-15G5**
- **OF (Max)**: 30/20/38/50/77/115/154g
- **RF (Min)**: 9/6/12/16/25/38/50g
- **PT (Max)**: 5.08 mm
- **OT (Min)**: 0.5 mm
- **MD (Max)**: 1.02 mm
- **OP**: 20.7 ± 2.0 mm

**Suffix** - A B C D E F

**V-10G6/V-15G6_T**
- **OF (Max)**: 30/20/38/50/77/115/154g
- **RF (Min)**: 9/6/12/16/25/38/50g
- **PT (Max)**: 5.08 mm
- **OT (Min)**: 0.5 mm
- **MD (Max)**: 1.02 mm
- **OP**: 20.7 ± 2.0 mm

**Suffix** - A B C D E F

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