

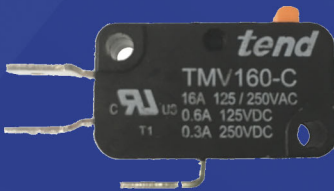
tend



ELECTRICAL COMPONENTS

Micro Switches

- Wide variety of actuators
- Completely sealed body
- 40mm and 50mm sizes
 - 10A to 21A @ 250 Vac
 - DC versions available



The TM and TMV series of high precision micro switches features a wide variety of actuators to suit most high-speed switching applications.

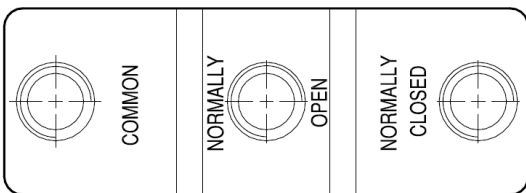
Available from stock at ITC, the TM and TMV series switches have a high switching capacity - 10A to 21A at 250Vac in a reliable thermoplastic housing. These switches may be installed in a wide range of applications from simple or precision on/off limits, presence/absence sensing, or embedded in pressure or temperature assemblies.

Features and Specifications

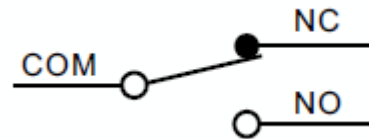
| | | TMV Series | TM Series (General Purpose & Sealed) |
|------------------------------|----------------------------------|---------------------------------------|---|
| Operating speed | | 0.01mm to 1m/s (push button type) | |
| Operating frequency | Mechanical | 240 operations/minute | |
| | Electrical | 20 operations/minute | |
| Insulation resistance | | 100mΩ minimum (at 500Vdc) | |
| Contact resistance | | 15mΩ maximum | |
| Connection (NO, NC & Common) | | .250x.032" quick connect tabs | Screw connection |
| Rated voltage/current | | 10A / 16A / 21A (see page 5) | 15A |
| Dielectric strength | Non-contiguous terminals | 1,000Vac, 50/60Hz for 1 minute | |
| | Between non-contiguous terminals | 2,000Vac, 50/60Hz for 1 minute | |
| Shock | Mechanical durability | 10m/sec ² (approx. 100G's) | |
| | Malfunction | 3m/sec ² (approx. 30G's) | |
| Expected life | Mechanical | 20,000,000 operations minimum | |
| | Electrical (1.7A, 110V) | 100,000 operations minimum | 500,000 operations minimum |
| Ambient temperature | | -25 to 65° C | -25 to 80° C; Sealed -15 to 80° |
| Ambient humidity | | 85% RH maximum | 85% RH max; Sealed 95% RH max |
| Weight | | ~8g | ~22 to 58g |
| Approvals | | cURus (UL 508 and CSA 22.2 NO. 14-13) | |

Information subject to change without notice

Screw terminals diagram (TM series):



Contact Configuration:



TM Micro Switch 1300 Series

| | |
|--|--|
| <p>TM-1300 Pin head plunger</p> | <p>TM-1301 Pin head with lever</p> |
| <p>TM-1303 Pin Head with roller</p> | <p>TM-1305 Slim plunger</p> |
| <p>TM-1306 Short button plunger</p> | <p>TM-1307 Long button plunger</p> |
| <p>TM-1308 Button plunger with roller</p> | <p>TM-1309 Cross roller plunger</p> |

Information subject to change without notification

TM Micro Switch 1700 Series

| | |
|---|--|
| <p>TM-1701 Flex lever (63mm)</p> | <p>TM-1702 Flex lever (23mm)</p> |
| <p>TM-1703 Medium lever (48.5) with roller</p> | <p>TM-1704 Short lever (26.6) with roller</p> |
| <p>TM-1705 155mm whisker</p> | <p>TM-1707 Short lever (26.6) with cross roller</p> |
| <p>TM-1709 Medium lever (50mm) with large roller</p> | <p>TM-1743 Double hinged roller lever</p> |

Information subject to change without notification

- Completely sealed versions of the TM-1700 series are available with the addition of '-1' at the end of the part number i.e. TM-1701 becomes TM-1701-1.

TMV Compact Micro Switches

| | |
|---|--|
| <p>TMV-160-C Pushbutton</p> | <p>TMV-161-C Long lever</p> |
| <p>TMV-162-C Short lever</p> | <p>TMV-163-C Long lever with roller</p> |
| <p>TMV-164-C Short lever with roller</p> | <p>TMV-165-C Extra long lever</p> |
| <p>TMV-166-C Crank lever</p> | |

Information subject to change without notification

- 10A and 21A versions of the TMV series are available (TMV-10x-C & TMV-21x-C).



TMD Direct Current Micro Switches

Features and Specifications

| TMD Series | |
|---------------------|--------------------------------|
| Dielectric strength | 1,500Vac, 50/60Hz for 1 minute |
| Ambient temperature | -25 to 80° C |
| Weight | Approximately 27 - 36g |

(the same as on page 2, except where listed above)

| | |
|------------------------|------------------------|
| <p>TMD-1701</p> | <p>TMD-1702</p> |
| <p>TMD-1703</p> | <p>TMD-1704</p> |

Information subject to change without notification

Accessories for TM Series[^]

| | |
|--------------------------------------|--|
| <p>TAP-X Plastic boot</p> | <p>TAP-Y Plastic boot</p> |
| <p>TAP-Z Plastic boot</p> | <p>TM-C015 Replacement contact screws</p> |

[^] for TM and TMD series, not suitable for TMV series; Information subject to change without notification



ELECTRICAL COMPONENTS

416.663.7223
 www.itcproducts.com
 50 Mural St Unit 8
 Richmond Hill, ON L4B 1E4



DIN Rail



DIN Rail Accessories



Non-Metallic Enclosures



Hinged Enclosures



Thermal Management



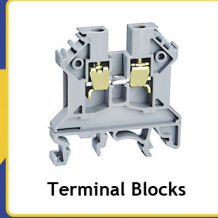
PANEL Lighting



Multipole Connectors



Compact IP68 Connectors



Terminal Blocks



Terminal Strips



22.5mm Pushbuttons



LED Indicators



Control Stations



Limit Switches



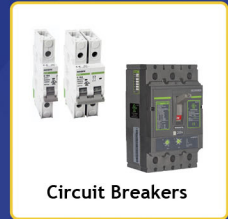
Micro Limit Switches



Safety Switches



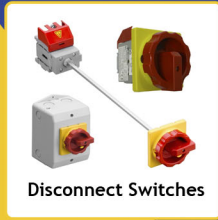
Foot Switches



Circuit Breakers



IEC Contactors



Disconnect Switches



Midget and CC Fuse Holders



Tower Lights



Power Continuity



Ferrules



Colour Coded Lugs



Crimp Terminals



Termination Kits



Cable Glands



Thread Adapters



Cable Entry Systems



Wire Management



DIN Rail Cutters



Assembly Tables



Cutting & Stripping



Crimping Tools



Hole Cutting & Punching Tools

SOME OF OUR MANUFACTURING PARTNERS

