

Distinctive Characteristics

Antijamming design protects against mechanism damage from downward force on the actuator.

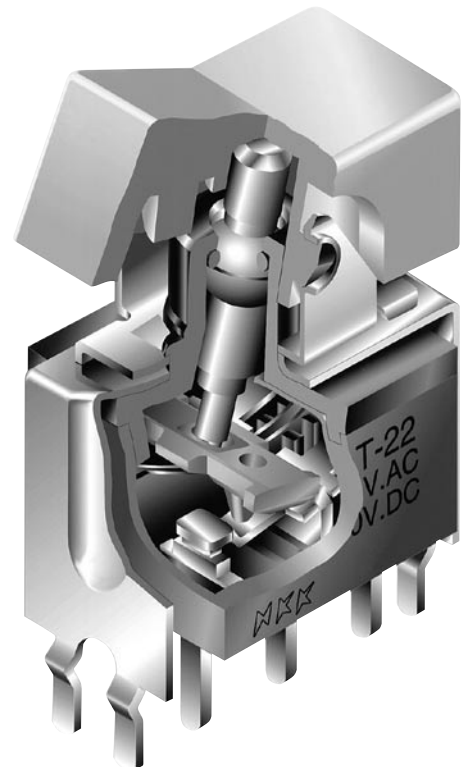
O-ring surrounding top of lever prevents liquids from reaching switch mechanism.

Ultrasonic welding of upper and lower housing seals out contaminants and allows automated soldering and cleaning.

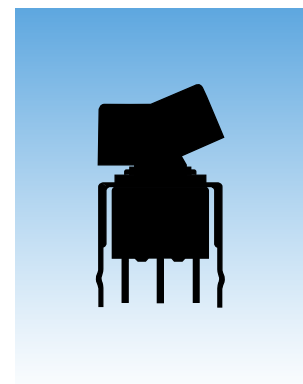
Terminals are epoxy sealed to prevent entry of flux, solvents, and other contaminants.

Bracketed models have crimped bracket legs to ensure secure PC mounting and prevent dislodging during automated soldering.

Logic level and power capabilities are available to suit varying applications.



Actual Size



General Specifications

Electrical Capacity (Resistive Load)

Power Level (code W):	6A @ 125V AC or 3A @ 250V AC; 4A @ 30V DC (On-On circuit) & 3A @ 30V DC (all other circuits)
Logic Level (code G):	0.4VA maximum @ 28V AC/DC maximum (Applicable Range 0.1mA ~ 0.1A @ 20mV ~ 28V)
Logic/Power Level (code A):	Combines W & G ratings Note: Find additional explanation of dual rating & operating range in Supplement section.

Other Ratings

Contact Resistance:	10 milliohms maximum for silver; 20 milliohms maximum for gold
Insulation Resistance:	1,000 megohms minimum @ 500V DC
Dielectric Strength:	1,000V AC minimum between contacts for 1 minute minimum; 1,500V AC minimum between contacts & case for 1 minute minimum
Mechanical Life:	50,000 operations minimum
Electrical Life:	25,000 operations minimum for silver; 50,000 operations minimum for gold
Contact Timing:	Nonshorting (break-before-make)
Angle of Throw:	26°

Materials & Finishes

Lever:	Brass with chrome plating
Actuator Clip:	Polyacetal
Support Bracket:	Brass with tin plating
Bushing/Housing:	Glass fiber reinforced polyamide (UL94V-0)
Sealing Ring:	Nitrile butadiene rubber
Base:	Glass fiber reinforced polyamide (UL94V-0)
Movable Contacts:	Silver alloy with silver plating (code W); copper or phosphor bronze with gold plating (code G); or silver alloy with gold plating (code A)
Stationary Contacts:	Silver alloy with silver plating (code W); copper or brass with gold plating (code G); or silver alloy with gold plating (code A)
Terminals:	Copper or brass with silver or gold plating




Environmental Data

Operating Temp Range:	-30°C through +85°C (-22°F through +185°F)
Humidity:	90 ~ 95% humidity for 96 hours @ 40°C (104°F)
Vibration:	10 ~ 55Hz with peak-to-peak amplitude of 1.5mm traversing the frequency range & returning in 1 minute; 3 right angled directions for 2 hours
Shock:	50G (490m/s ²) acceleration (tested in 6 right angled directions, with 5 shocks in each direction)

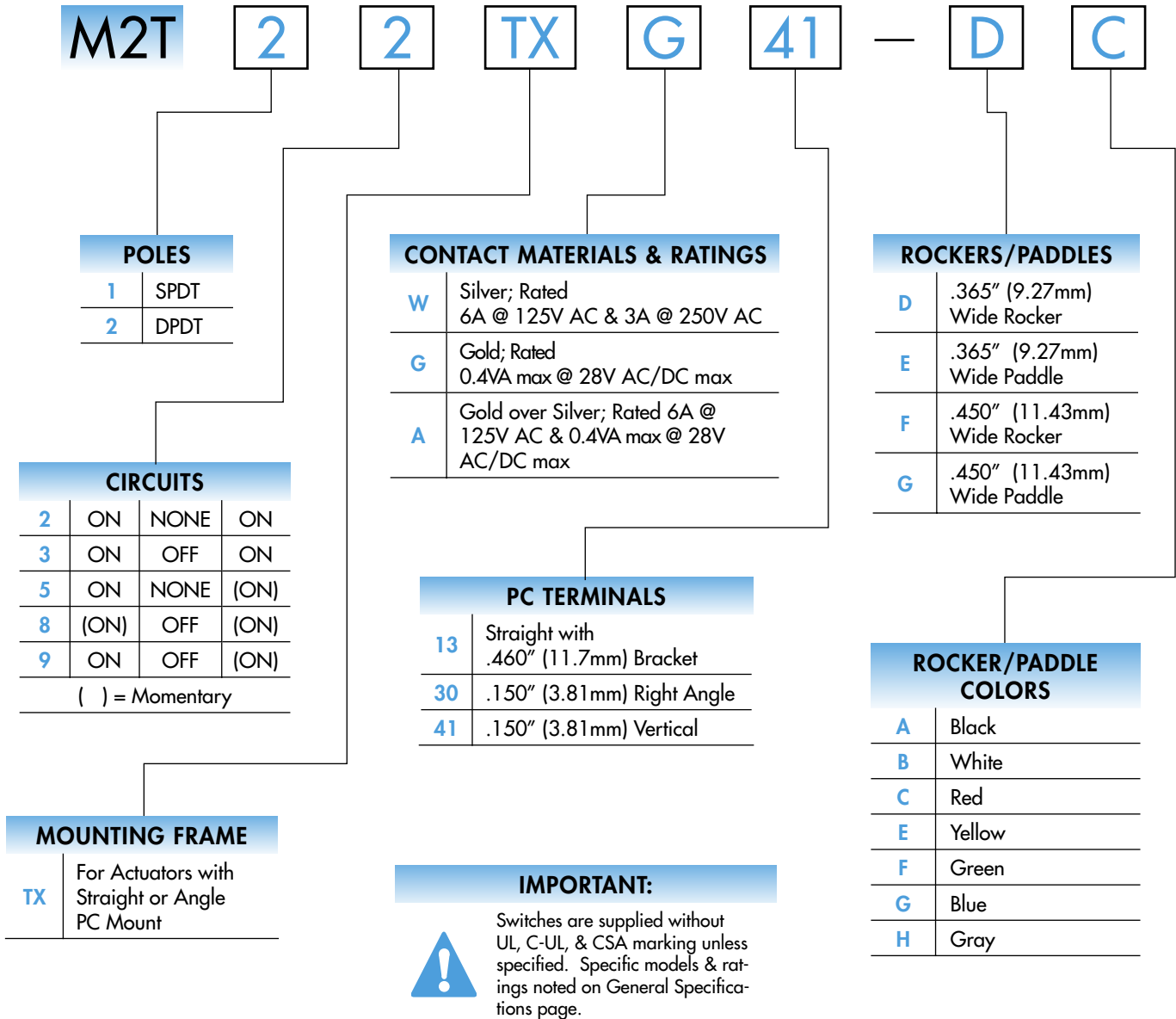
PCB Processing

Soldering:	Wave Soldering Recommended: See Profile B in Supplement section. Manual Soldering: See Profile B in Supplement section.
Cleaning:	Automated cleaning. See Cleaning specifications in Supplement section.

Standards & Certifications

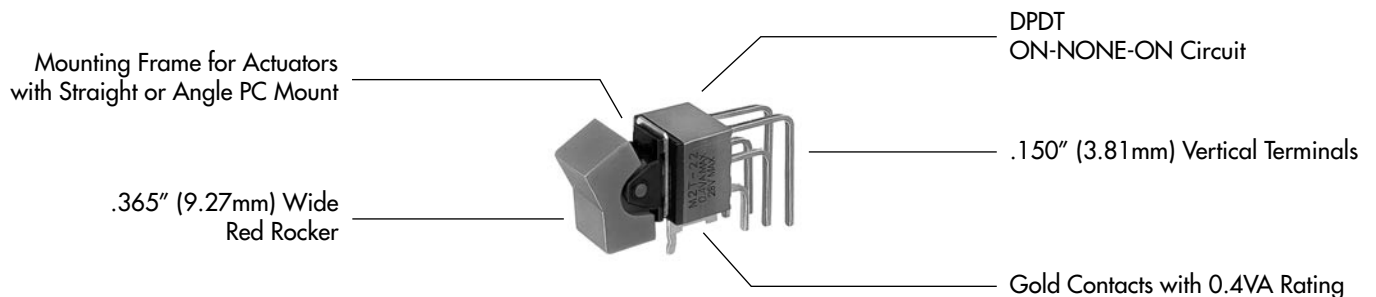
Flammability Standards:	UL94V-0 rated bushing/housing & base
 UL Recognized:	All models recognized at 6A @ 125V AC, 3A @ 250V AC, & 4A @ 30V DC or 0.4A @ 28V DC; UL File No. WOYR2.E44145; add "/U" to end of part number to order UL mark on switch.
 C-UL Recognized:	All models recognized at 6A @ 125V AC, 3A @ 250V AC, & 4A @ 30V DC or 0.4A @ 28V DC; C-UL File No. WOYR8.E44145; add "/C-UL" to end of part number to order C-UL mark on switch.
 CSA Certified:	All models certified at 6A @ 125V AC, 3A @ 250V AC, & 4A @ 30V DC; CSA File No. 023535-0-000; add "/C" to end of part number to order CSA mark on switch.

TYPICAL SWITCH ORDERING EXAMPLE


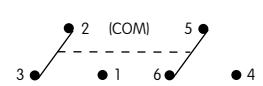


DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

M2T22TXG41-DC



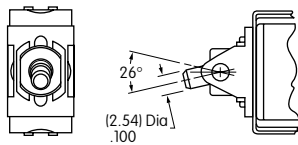
POLES & CIRCUITS

Pole	Model	Rocker Position () = Momentary			Connected Terminals			Throw & Schematics
		Down	Center	Up	Down	Center	Up	
SP	M2T12	ON	NONE	ON	2-3	OPEN	2-1	SPDT 
	M2T13	ON	OFF	ON				
	M2T15	ON	NONE	(ON)				
	M2T18	(ON)	OFF	(ON)				
	M2T19	ON	OFF	(ON)				
DP	M2T22	ON	NONE	ON	2-3 5-6	OPEN	2-1 5-4	DPDT 
	M2T23	ON	OFF	ON				
	M2T25	ON	NONE	(ON)				
	M2T28	(ON)	OFF	(ON)				
	M2T29	ON	OFF	(ON)				

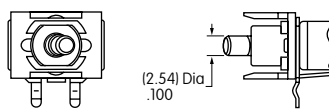
MOUNTING FRAME

TX Mounting Frame for Rockers or Paddles with Straight or Angle PC Terminals

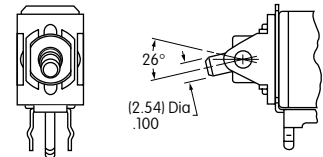
Straight PC Mounting



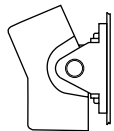
Right Angle PC Mounting



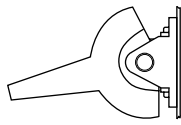
Vertical PC Mounting



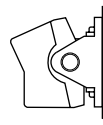
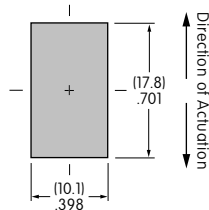
Actuators & Panel Cutouts



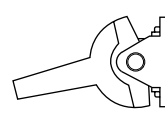
AT4148



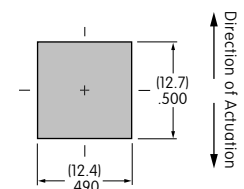
AT4149



AT4150



AT4151



CONTACT MATERIALS & RATINGS

W Silver over Silver Power Level 6A @ 125V AC & 3A @ 250V AC

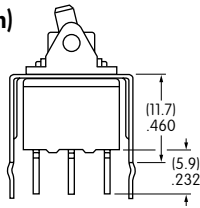
G Gold over Brass or Copper Logic Level 0.4VA maximum @ 28V AC/DC maximum
Complete explanation of operating range in Supplement section.

A Gold over Silver Power Level or Logic Level 6A @ 125V AC or 0.4VA maximum @ 28V AC/DC maximum

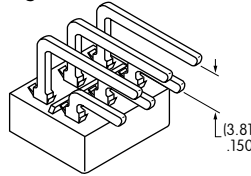
Note: This dual rated option is suitable when two or more identical switches are used in logic and in power circuits within the same application. See Supplement section for complete explanation of dual rating and operating range.

PC TERMINALS

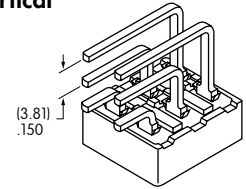
13 Straight with
.460" (11.7mm)
Bracket



30 .150" (3.81mm)
Right Angle



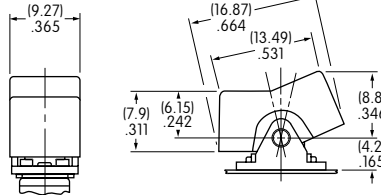
41 .150" (3.81mm)
Vertical



ROCKERS & PADDLES

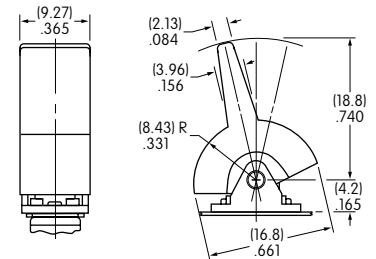
D AT4148
.365" (9.27mm) Wide Rocker

Material: Polyamide
Finish: Matte



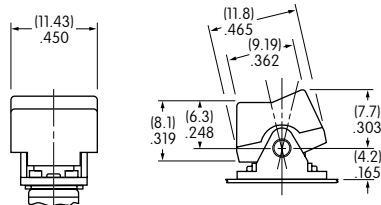
E AT4149
.365" (9.27mm) Wide Paddle

Material: Polyamide
Finish: Matte



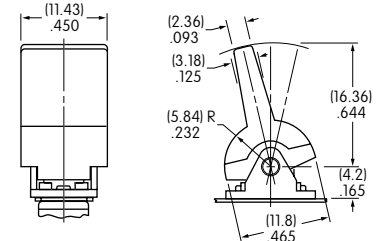
F AT4150
.450" (11.43mm) Wide Rocker

Material: Polyamide
Finish: Matte



G AT4151
.450" (11.43mm) Wide Paddle

Material: Polyamide
Finish: Matte



Cap Colors Available:



Black



White



Red



Yellow



Green



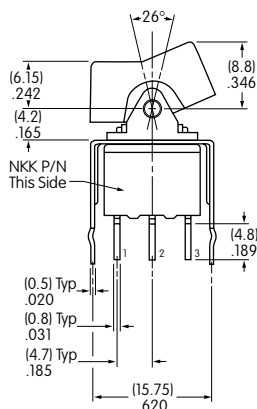
Blue



Gray

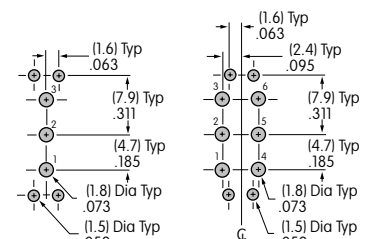
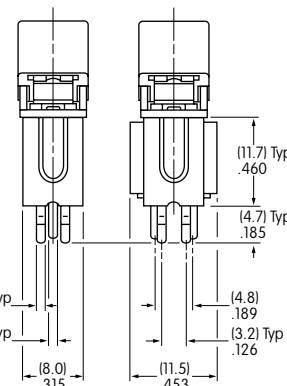
TYPICAL SWITCH DIMENSIONS

Straight PC • Bracket



Single Pole

Double Pole



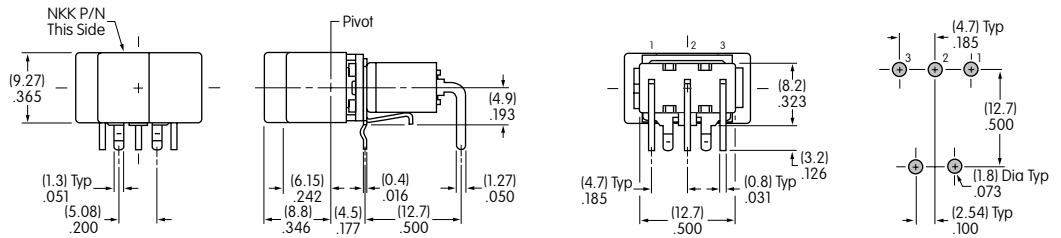
M2T12TXG13-DC

TYPICAL SWITCH DIMENSIONS

Right Angle PC



Single Pole

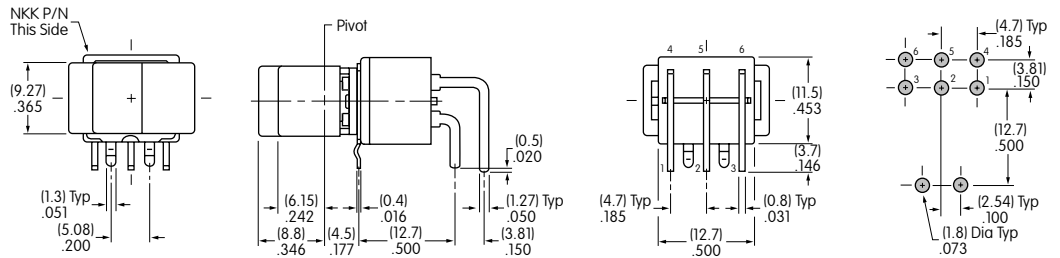


M2T12TXG30-DC

Right Angle PC



Double Pole

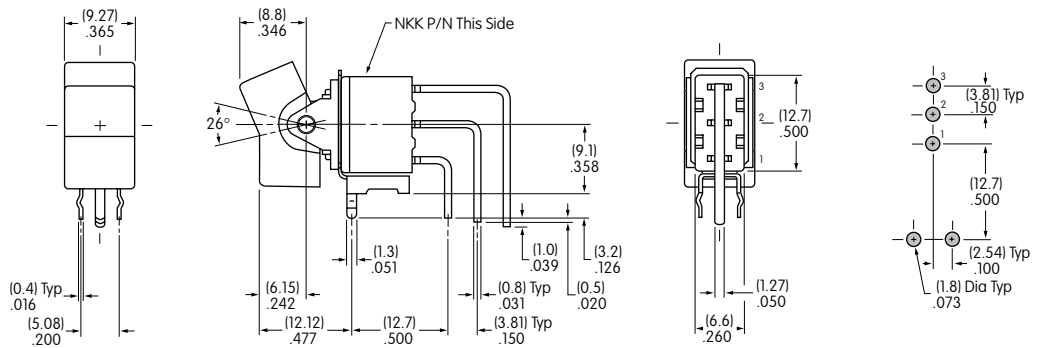


M2T22TXG30-DC

Vertical PC



Single Pole

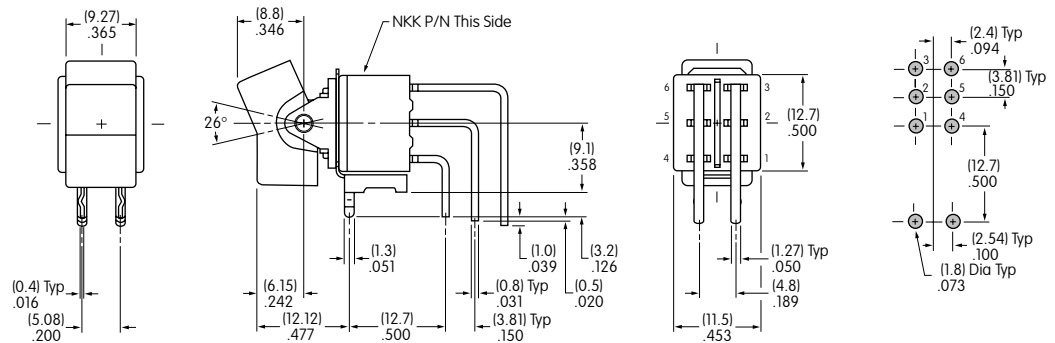


M2T12TXG41-DC

Vertical PC



Double Pole



M2T22TXG41-DC