

PRODUCTS

Series S

Low Capacity Toggles



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Medium Capacity Toggles



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Medium/High Capacity Toggles

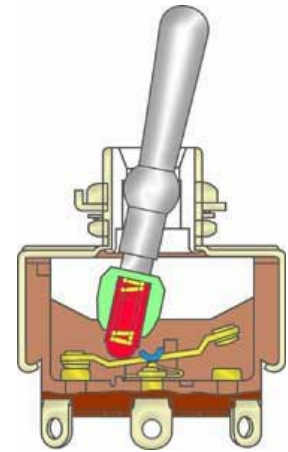


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High Capacity Toggles



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Standard Size Toggle Switches

These standard size toggles come in low, medium, and high capacity models with ratings ranging from 5A to 30A @ 125V AC. Sturdy construction with high torque bushings and zinc plated steel covers. The 12mm bushing is designed for panel mount applications; mounting hardware is included with each switch. 1 through 4 poles with 6 circuits available. Case of heat resistant resin meets UL 94V-0 flammability standard and provides high arc and insulation resistance. Varied design of contact mechanisms in these models assures long life. Solder lug, screw lug, and quick connect terminals are available.

GENERAL SPECIFICATIONS FOR S301 ~ S339

Electrical Capacity (Resistive & Inductive Load)

Power Level: Shown in the following tables

Other Ratings

Contact Resistance:	10 milliohms maximum
Insulation Resistance:	1,000 megohms minimum @ 500V DC
Dielectric Strength:	2,000V AC minimum for 1 minute minimum
Mechanical Life:	50,000 operations minimum
Electrical Life:	6,000 operations minimum for S331F; 15,000 operations minimum for all other S331s; 25,000 operations minimum for all others
Angle of Throw (α):	Shown on following tables

Materials & Finishes

Toggle:	PBT for flatted lever; brass with chrome plating for all others
Bushing:	Brass with chrome plating
Case:	Melamine phenol
Case Cover:	Steel with zinc plating
Movable Contact:	Copper with silver plating
Movable & Stationary Contacts:	Silver alloy capped on copper with silver plating
Terminals:	Brass with silver plating

Installation

Mounting Torque:	2.94Nm (26 lb•in) for double nut; 1.47Nm (13 lb•in) for single nut
Soldering Time & Temperature:	Manual Soldering: See Profile A in Supplement section.

Standards & Certifications

UL Recognized:	Designated with UL recognized symbol beside part numbers on following pages UL File No. WOYR2.E44145. Add "/U" to end of part number to order UL mark on switch.
C-UL Recognized:	Designated with C-UL recognized symbol beside part numbers on following pages C-UL File No. WOYR8.E44145. Add "/C-UL" to end of part number to order C-UL mark on switch.
CSA Certified:	Designated with CSA certified symbol beside part numbers on following pages File No. 023535-0-000. Add "/C" to end of part number to order CSA mark on switch.

SINGLE POLE WITH SOLDER LUG

Model	Approvals	Pole & Throw	Toggle Position/Connected Terminals () = Momentary						Electrical Capacity				Angle of Throw
			Down		Center	Up		Resistive			Inductive		
			Keyway	Keyway	Keyway	Keyway	Keyway	Keyway	AC 125V	AC 250V	DC 30V	AC 125V PF 0.6	
S301		SPST	ON	1-3	NONE	OFF	—	15A	6A	20A	10A	32°	
S302		SPDT	ON	2-3	NONE	ON	2-1	15A	6A	20A	10A	32°	
S303		SPDT	ON	2-3	OFF	ON	2-1	15A	6A	20A	10A	32°	
S305	— —	SPDT	ON	2-3	NONE	(ON)	2-1	15A	6A	20A	8A	32°	
S308	— —	SPDT	(ON)	2-3	OFF	(ON)	2-1	15A	6A	20A	8A	32°	
S309	— —	SPDT	ON	2-3	OFF	(ON)	2-1	15A	6A	20A	8A	32°	

Throw & Schematics:

SPST

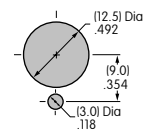
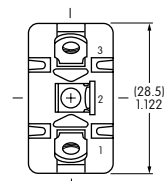
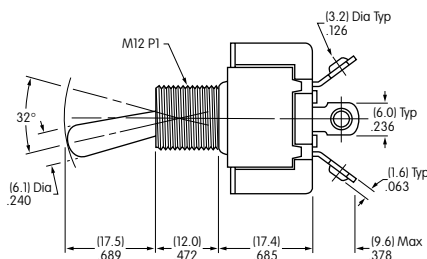
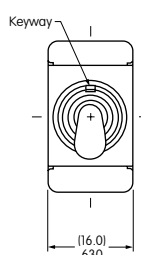
SPDT

Note: Terminal numbers are actually on the switch

- Standard Hardware: AT503M Face Hex Nut, AT506 Locking Ring, AT508 Lockwasher, AT527M Backup Hex Nut. See Accessories & Hardware section.






















S301



Maximum Panel Thickness: .185" (4.7mm)

S301 does not have terminal 2

DOUBLE POLE WITH SOLDER LUG

Model	Approvals	Pole & Throw	Toggle Position/Connected Terminals () = Momentary			Electrical Capacity				α = Angle of Throw
			Down 	Center 	Up 	Resistive			Inductive	
						AC 125V	AC 250V	DC 30V	AC 125V PF 0.6	
S331	  	DPST	ON 1-3 4-6	NONE	OFF —	25A	25A	25A	10A	25°
S332	  	DPDT	ON 2-3 5-6	NONE	ON 2-1 5-4	25A	15A	25A	10A	25°
S333	  	DPDT	ON 2-3 5-6	OFF	ON 2-1 5-4	25A	15A	25A	10A	30°
S335	  	DPDT	ON 2-3 5-6	NONE	(ON) 2-1 5-4	15A	6A	20A	8A	25°
S338	  —	DPDT	(ON) 2-3 5-6	OFF	(ON) 2-1 5-4	15A	6A	20A	8A	25°
S339	  —	DPDT	ON 2-3 5-6	OFF	(ON) 2-1 5-4	15A	6A	20A	8A	25°

Throw & Schematics:

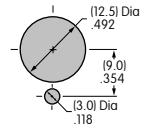
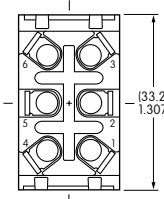
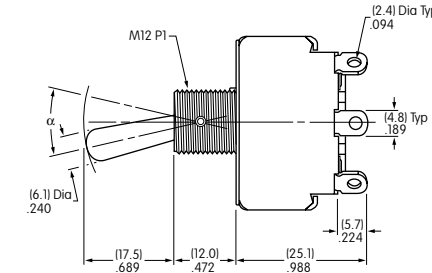
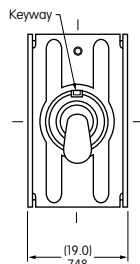


Note: Terminal numbers are actually on the switch

- Standard Hardware: AT503M Face Hex Nut, AT506 Locking Ring, AT508 Lockwasher, AT527M Backup Hex Nut. See Accessories & Hardware section.
















S331



Maximum Panel Thickness: .185" (4.7mm)

S331 does not have terminals 2 & 5

DOUBLE POLE WITH SOLDER LUG & FLATTED LEVER

Model	Approvals	Pole & Throw	Toggle Position/Connected Terminals () = Momentary			Electrical Capacity				α = Angle of Throw
			Down 	Center 	Up 	Resistive			Inductive	
						AC 125V	AC 250V	DC 30V	AC 125V PF 0.6	
S331R	  —	DPST	ON 1-3 4-6	NONE	OFF —	25A	25A	25A	10A	25°
S332R	  —	DPDT	ON 2-3 5-6	NONE	ON 2-1 5-4	25A	15A	25A	10A	25°
S333R	  —	DPDT	ON 2-3 5-6	OFF	ON 2-1 5-4	25A	15A	25A	10A	30°
S338R	  —	DPDT	(ON) 2-3 5-6	OFF	(ON) 2-1 5-4	15A	6A	20A	8A	25°
S339R	  —	DPDT	ON 2-3 5-6	OFF	(ON) 2-1 5-4	15A	6A	20A	8A	25°

Throw & Schematics:

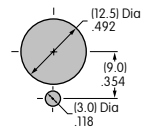
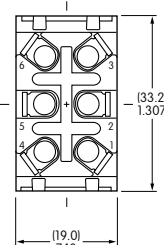
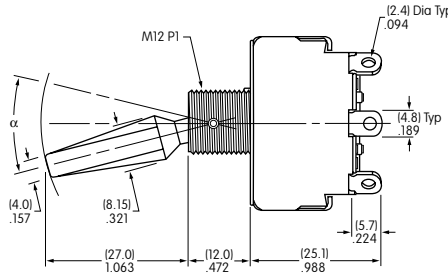
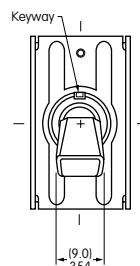


Note: Terminal numbers are actually on the switch

- Standard Hardware: AT504M Knurled Nut, AT508 Lockwasher, AT527M Backup Hex Nut. See Accessories & Hardware section.



S331R



Maximum Panel Thickness: .220" (5.6mm)

S331R does not have terminals 2 & 5