

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: 15,000 operations minimum for 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: 4 seconds maximum @ 410°C maximum

SINGLE POLE WITH SOLDER LUG

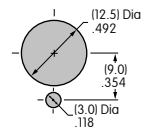
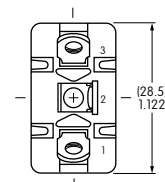
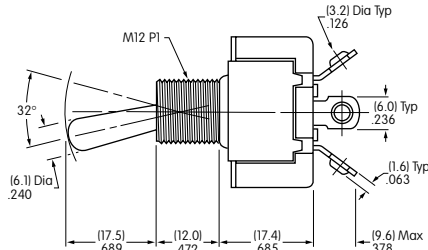
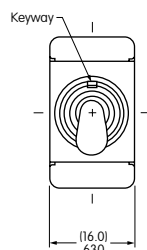
Model	Approvals	Pole & Throw	Toggle Position/Connected Terminals				Electrical Capacity				Angle of Throw
			Down <small>Keyway</small>	Center	Up	Resistive			Inductive AC 125V PF 0.6		
						AC 125V	AC 250V	DC 30V			
S301		SPST	ON 1-3	NONE	OFF —	15A	6A	20A	10A	32°	
S302		SPDT	ON 2-3	NONE	ON 2-1	15A	6A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

Throw & Schematics:



Note: Terminal numbers are actually on the switch.

- Standard Hardware: AT503 Face Hex Nut, AT506 Locking Ring, AT508 Lockwasher, AT527M Backup Hex Nut. See Accessories & Hardware section.
- Solder lug terminal hole accommodates one 10-gauge solid or stranded wire.
















Max. Panel Thickness:
.185" (4.7mm)

S301

S301 does not have terminal 2.

DOUBLE POLE WITH SOLDER LUG

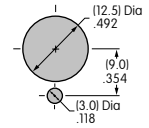
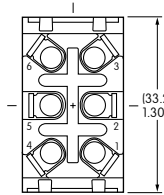
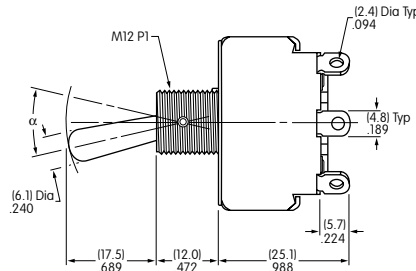
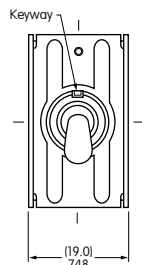
Model	Approvals	Pole & Throw	Toggle Position/Connected Terminals					Electrical Capacity				$\alpha =$ Angle of Throw
			Down 	Center 	Up 	Resistive			Inductive AC 125V PF 0.6			
						AC 125V	AC 250V	DC 30V				
S331	 	DPST	ON	1-3 4-6	NONE	OFF	—	25A	25A	25A	10A	25°
S332	 	DPDT	ON	2-3 5-6	NONE	ON	2-1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

Throw & Schematics:



Note: Terminal numbers are actually on the switch.

- Standard Hardware: AT503 Face Hex Nut, AT506 Locking Ring, AT508 Lockwasher, AT527M Backup Hex Nut. See Accessories & Hardware section.
- Solder lug terminal hole accommodates one 12-gauge solid or stranded wire.











Max. Panel Thickness:
.185" (4.7mm)

S331

S331 does not have terminals 2 & 5.

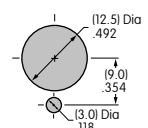
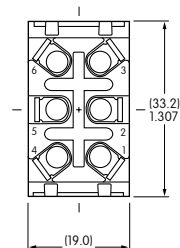
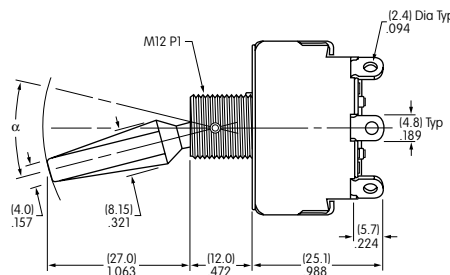
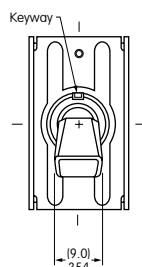
DOUBLE POLE WITH SOLDER LUG & FLATTED LEVER

Model	Approvals	Pole & Throw	Toggle Position/Connected Terminals					Electrical Capacity				$\alpha =$ Angle of Throw
			Down 	Center 	Up 	Resistive			Inductive AC 125V PF 0.6			
						AC 125V	AC 250V	DC 30V				
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	MOM	2-3 5-6	OFF	MOM	2-1 5-4	15A	6A	20A	8A	25°
S339R	 —	DPDT	ON	2-3 5-6	OFF	MOM	2-1 5-4	15A	6A	20A	8A	25°

Throw & Schematics:



Note: Terminal numbers are actually on the switch.















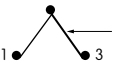

Max. Panel Thickness:
.220" (5.6mm)

S331R

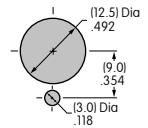
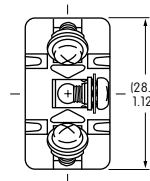
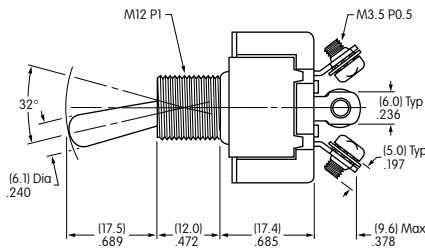
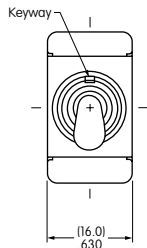
S331R does not have terminals 2 & 5.

SINGLE POLE WITH SCREW LUG

Model	Approvals	Pole & Throw	Toggle Position/Connected Terminals					Electrical Capacity				Angle of Throw
			Down 	Center 	Up 	Resistive			Inductive AC 125V PF 0.6			
						AC 125V	AC 250V	DC 30V				
S301T	 	SPST	ON 1-3	NONE	OFF —	15A	6A	20A	10A	32°		
S302T	 	SPDT	ON 2-3	NONE	ON 2-1	15A	6A	20A	10A	32°		
S303T	 	SPDT	ON 2-3	OFF	ON 2-1	15A	6A	20A	10A	32°		
S305T	— 	SPDT	ON 2-3	NONE	MOM 2-1	15A	6A	20A	8A	32°		
S308T	— 	SPDT	MOM 2-3	OFF	MOM 2-1	15A	6A	20A	8A	32°		
S309T	— 	SPDT	ON 2-3	OFF	MOM 2-1	15A	6A	20A	8A	32°		

Throw & Schematics: SPST  INTERNAL CONNECTION  Note: Terminal numbers are actually on the switch.

• Standard Hardware: AT503 Face Hex Nut, AT506 Locking Ring, AT508 Lockwasher, AT527M Backup Hex Nut. See Accessories & Hardware section.












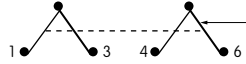
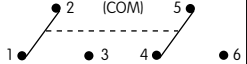
Max. Panel Thickness: .185" (4.7mm)

S301T

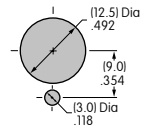
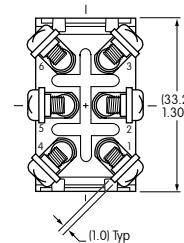
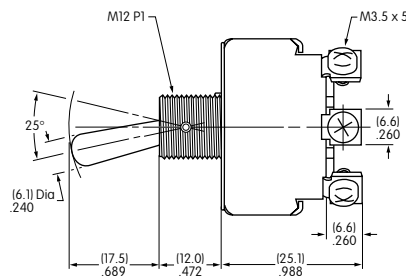
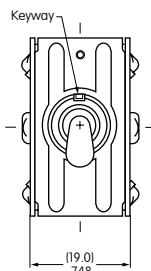
S301T does not have terminal 2.

DOUBLE POLE WITH SCREW LUG

Model	Approvals	Pole & Throw	Toggle Position/Connected Terminals					Electrical Capacity				α = Angle of Throw
			Down 	Center 	Up 	Resistive			Inductive AC 125V PF 0.6			
						AC 125V	AC 250V	DC 30V				
S331T	 —	DPST	ON 1-3 4-6	NONE	OFF —	15A	15A	15A	10A	25°		
S332T	 —	DPDT	ON 2-3 5-6	NONE	ON 2-1 5-4	15A	15A	15A	10A	25°		
S333T	 —	DPDT	ON 2-3 5-6	OFF	ON 2-1 5-4	15A	15A	15A	10A	30°		
S335T	 —	DPDT	ON 2-3 5-6	NONE	MOM 2-1 5-4	15A	6A	20A	8A	25°		
S338T	 —	DPDT	MOM 2-3 5-6	OFF	MOM 2-1 5-4	15A	6A	20A	8A	25°		
S339T	 —	DPDT	ON 2-3 5-6	OFF	MOM 2-1 5-4	15A	6A	20A	8A	25°		

Throw & Schematics: DPST  INTERNAL CONNECTION  Note: Terminal numbers are actually on the switch.

• Standard Hardware: AT503 Face Hex Nut, AT506 Locking Ring, AT508 Lockwasher, AT527M Backup Hex Nut. See Accessories & Hardware section.









Max. Panel Thickness: .185" (4.7mm)

S331T

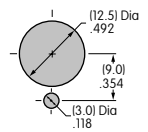
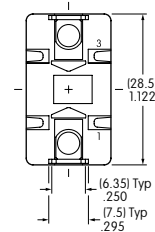
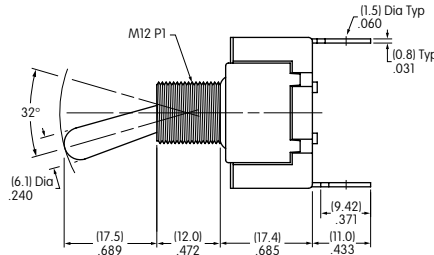
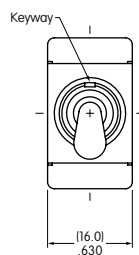
S331T does not have terminals 2 & 5.

SINGLE POLE WITH QUICK CONNECT

Model	Approvals	Pole & Throw	Toggle Position/Connected Terminals			Electrical Capacity				Angle of Throw
			Down 	Center 	Up 	Resistive			Inductive	
						AC 125V	AC 250V	DC 30V	AC 125V PF 0.6	
S301F	— 	SPST	ON 1-3	NONE	OFF —	15A	6A	20A	10A	32°

Throw & Schematics: SPST  INTERNAL CONNECTION  Note: Terminal numbers are actually on the switch.








• Standard Hardware: AT503 Face Hex Nut, AT506 Locking Ring, AT508 Lockwasher, AT527M Backup Hex Nut. See Accessories & Hardware section.

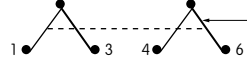
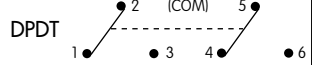


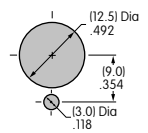
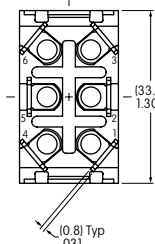
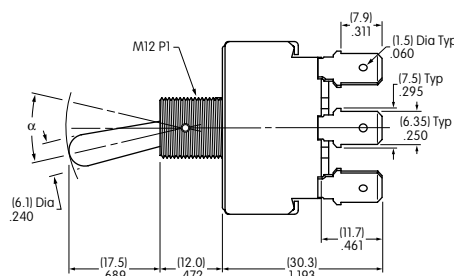
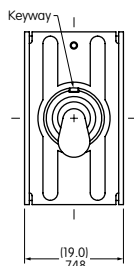
Max. Panel Thickness: .185" (4.7mm)

S301F

DOUBLE POLE WITH QUICK CONNECT

Model	Approvals	Pole & Throw	Toggle Position/Connected Terminals			Electrical Capacity				α = Angle of Throw
			Down 	Center 	Up 	Resistive			Inductive	
						AC 125V	AC 250V	DC 30V	AC 125V PF 0.6	
S331F		DPST	ON 1-3 4-6	NONE	OFF —	25A	15A	25A	10A	25°
S332F		DPDT	ON 2-3 5-6	NONE	ON 2-1 5-4	25A	15A	25A	10A	25°
S333F		DPDT	ON 2-3 5-6	OFF	ON 2-1 5-4	25A	15A	25A	10A	30°
S335F		DPDT	ON 2-3 5-6	NONE	MOM 2-1 5-4	15A	6A	20A	8A	25°

Throw & Schematics: DPST  INTERNAL CONNECTION  Note: Terminal numbers are actually on the switch.



Max. Panel Thickness: .185" (4.7mm)

S332F

S331F does not have terminals 2 & 5.