



Quick Reference Guide AW Series Switches

The AW Series toggle switch features many circuit configurations, including SPST, SPDT, DPST, DPDT and 4PDT, with a choice of momentary or maintained circuits. The switch provides superior switching power through brass silver alloy contacts. This toggle is UL, CSA recognized for 20A at 30VDC and 20A at 250VAC. Electrical life is 20,000 cycles at full load. Other electrical parameters include contact resistance of 10 milliohms max., insulation resistance of 1,000 megohms and actuation force of 29.4 N max.

The AW Series switches have .250 quick connect terminals and all are panel mountable with 12 mm threaded bushing which is brass with chrome plating. The series mounting design conforms to standard panel cut outs, easing the task of installation.

Features

- IP67 panel mounting seal
- Sleeve and Frame perfect sealed
- Fixed contact molded-inserting construction
- Wide range switch functions available
- Meets requirements of industrial and outdoor environments

Applications

These devices are ideal for any design requiring human interface via toggle-style switch in harsh environments, including:

- Industrial equipment
- Heavy machinery
- Construction equipment
- Transportation vehicles
- Outdoor concert and lighting equipment
- Portable power tools

Typical Performance Characteristics

- Number of Poles** : 1, 2 and 4 pole
- Switch Functions** : ON-OFF, ON-ON, ON-(ON), ON-OFF-ON, ON-OFF-(ON), (ON)-OFF-(ON)
- Contact Rating** : 20 A @250 VAC, 20 A @125 VAC, 20 A @30 VDC
- Electrical Life** : 20,000 cycles
- Mechanical Life** : 40,000 cycles
- Contact Resistance** : Max. 10 mOhm
- Insulation Resistance** : Min. 1,000 MOhm
- Dielectric Strength** : 1,500 VAC for 1 min.
- Actuation Force** : Max. 29.4 N
- Panel Cut-out** : D-cut, 12.5 mm
- Standards and Specs** : UL, CSA

Environmental Specification

- Operating Temperature** : -20 to +70°C
- Storage Temperature** : -20 to +70°C
- Vibration Resistance** : 1.5 mm 10-55 Hz
- Shock Resistance** : 50 g for 11±1 msec
- Terminal Strength** : 24.5 N

Material Specifications

- Contacts** : Brass silver alloy finish
- Toggle** : Brass chromium plated
- Terminals** : Brass plate
- Case** : Phenol resin
- Cover** : Steel zinc plated
- Seal** : Rubber "o" ring panel seal, insert molded internal toggle seal

Other Characteristics

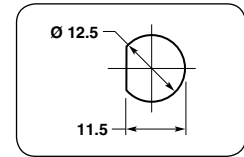
- Contact Timing** : Break before Make
- Right Angle Versions** : No
- Standard Number of Positions** : 2 or 3
- Terminals / Mounting Style** : Quick connect
- Actuator Style** : Standard toggle
- Dimensions Case (LxWxH)** : 33 x 19.5 ... 36.5 x 24.5 mm
- Packaging** : Bulk
- Choice of momentary or maintained circuits**



1 Pole



2 Pole



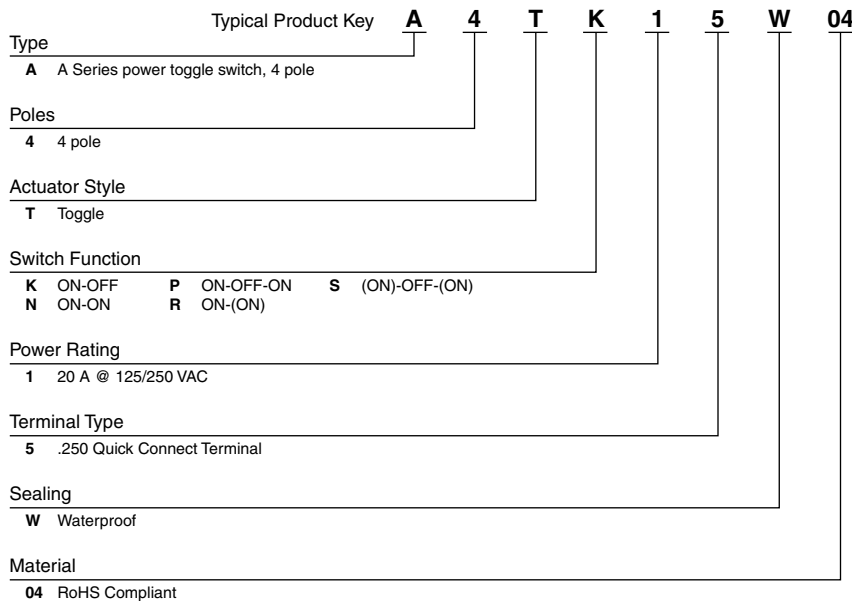
Panel Mounting Hole

Product Key



PART NUMBERS						
Product Key	Sealing	Poles	Switch Function	Terminal	Rating	Part Number
AWTA1504	Waterproof	1 pole	ON-OFF	0.250 Quick Connect Terminal	20 A at 125/250 VAC	7-6437630-3
AWTD1504	Waterproof	1 pole	ON-ON	0.250 Quick Connect Terminal	20 A at 125/250 VAC	7-6437630-0
AWTE1504	Waterproof	1 pole	ON-OFF-ON	0.250 Quick Connect Terminal	20 A at 125/250 VAC	7-6437630-1
AWTF1504	Waterproof	1 pole	ON-(ON)	0.250 Quick Connect Terminal	20 A at 125/250 VAC	7-6437630-4
AWTG1504	Waterproof	1 pole	(ON)-OFF-(ON)	0.250 Quick Connect Terminal	20 A at 125/250 VAC	7-6437630-5
AWTH1504	Waterproof	1 pole	ON-OFF-(ON)	0.250 Quick Connect Terminal	20 A at 125/250 VAC	7-6437630-6
AWTN1504	Waterproof	2 poles	ON-ON	0.250 Quick Connect Terminal	20 A at 125/250 VAC	7-6437630-2
AWTP1504	Waterproof	2 poles	ON-OFF-ON	0.250 Quick Connect Terminal	20 A at 125/250 VAC	3-6437592-9
AWTR1504	Waterproof	2 poles	ON-(ON)	0.250 Quick Connect Terminal	20 A at 125/250 VAC	5-6437630-0
AWTS1504	Waterproof	2 poles	(ON)-OFF-(ON)	0.250 Quick Connect Terminal	20 A at 125/250 VAC	1-6437630-1
AWTT1504	Waterproof	2 poles	ON-OFF-(ON)	0.250 Quick Connect Terminal	20 A at 125/250 VAC	1-6437630-0

Product Key



4 Pole

PART NUMBERS						
Product Key	Sealing	Poles	Switch Function	Terminal	Rating	Part Number
A4TK15W04	Waterproof	4 poles	ON-OFF	0.250 Quick Connect Terminal	20 A at 125/250 VAC	8-6437630-0
A4TN15W04	Waterproof	4 poles	ON-ON	0.250 Quick Connect Terminal	20 A at 125/250 VAC	8-6437630-1
A4TP15W04	Waterproof	4 poles	ON-OFF-ON	0.250 Quick Connect Terminal	20 A at 125/250 VAC	8-6437630-2
A4TR15W04	Waterproof	4 poles	ON-(ON)	0.250 Quick Connect Terminal	20 A at 125/250 VAC	8-6437630-3
A4TS15W04	Waterproof	4 poles	(ON)-OFF-(ON)	0.250 Quick Connect Terminal	20 A at 125/250 VAC	8-6437630-4

How to Specify in a Switch

Electrical Considerations

Voltage of Applications: _____ Current of Application: _____
Circuitry Configuration: Number of Poles: _____ Number of Throws: _____
Number of Operations anticipated: _____
Agency Approvals or Listings Desired: _____

Mechanical Considerations

Type of Switch (Actuator Type): _____ Toggle _____ Pushbutton _____ Rotary _____ Rocker _____ Other
Switch Function (On/Off/On): _____ On/Off: _____ Momentary: _____
Termination: _____ Thru-Hole (PC) _____ Surface Mount _____ Wire Lug _____ Quick Connect _____ Other
Sealing Contamination Requirements: _____

Product Processing Considerations

Anticipated Soldering Process: _____ Hand _____ Wave _____ SMT _____ Other

FOR MORE INFORMATION

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Part numbers in this brochure are RoHS Compliant*, unless marked otherwise.

*as defined www.tycoelectronics.com/leadfree

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