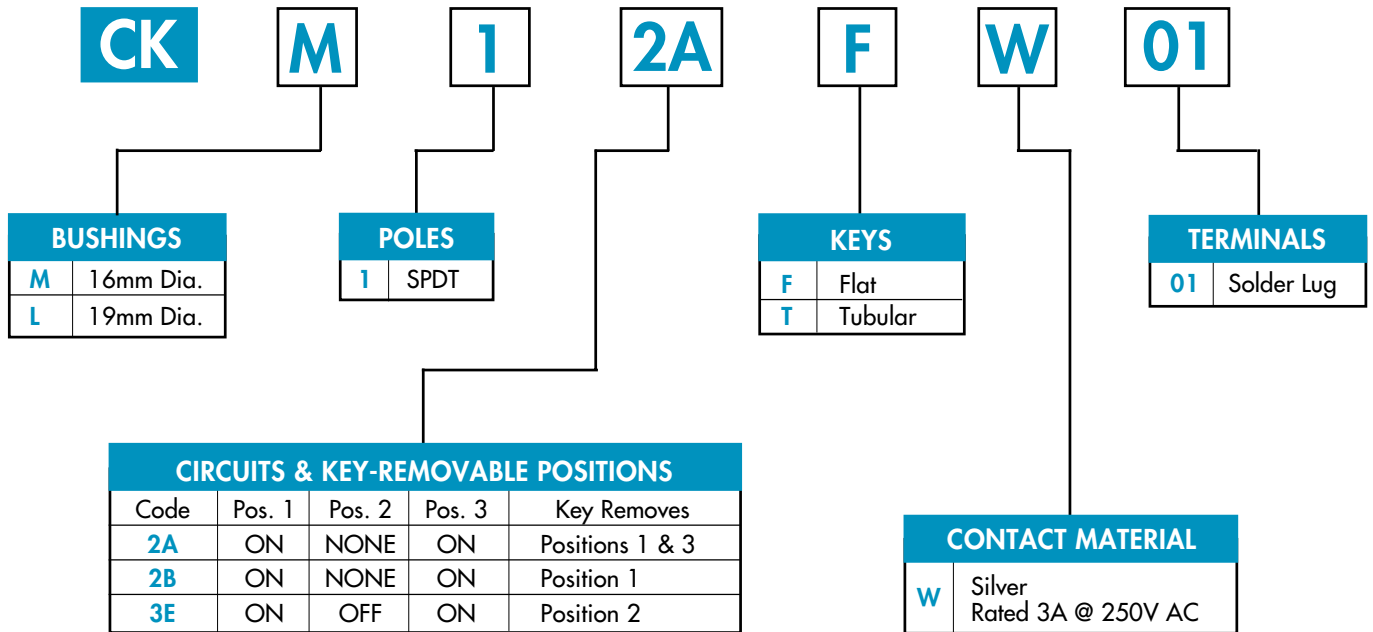


TYPICAL SWITCH ORDERING EXAMPLE



DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

CKM12AFW01



GENERAL SPECIFICATIONS

Electrical Capacity (Resistive Load)

Power Level: 3A @ 250V AC

Other Ratings

Contact Resistance: 20 milliohms maximum
Insulation Resistance: 1,000 megohms minimum @ 500V DC
Dielectric Strength: 1,000V AC minimum between contacts; 1,500V AC minimum between contacts & case
Mechanical Life: 30,000 cycles minimum
Electrical Life: 10,000 cycles minimum
Static Capability: Withstands 15 kilovolts ESD (for CKM models only)
Nominal Operating Torque: 16mm Bushing (CKM models):
 .04 milliNewton/meter (5.67 ounce-in) for Flat Key
 .08 milliNewton/meter (11.33 ounce-in) for Tubular Key
 19mm Bushing (CKL models):
 .05 milliNewton/meter (7.08 ounce-in) for Flat Key
 .07 milliNewton/meter (9.91 ounce-in) for Tubular Key
Contact Timing: Break before make
Angle of Throw: 90° for 2-position & 45° for 3-position

Materials & Finishes

Keys for CKM: Brass with nickel plating with PBT handle
Keys for CKL: Brass with nickel plating for tubular key;
 brass with chrome plating for flat key
Housing/Bushing: Fiberglass reinforced PBT for CKM models;
 zinc alloy with chrome plating for CKL
Base: LCP (Liquid Crystal Polymer)
Common & Contact Terminals: Copper with silver plating
Movable Contactor: Silver & copper alloy

Environmental Data

Operating Temp Range: -25°C through +70°C (-13°F through +158°F)
Humidity: 90 ~ 95% for 96 hours @ 40°C (104°F)
Vibration: 10 ~ 55 Hz with peak-to-peak amplitude of 0.7mm traversing the frequency range
 & returning in 1 minute; 3 right angled directions for 2 hours
Shock: 30g acceleration (tested in 6 right angled directions, with 5 shocks in each direction)

Installation

Mounting Torque: 1.5 Newtons/meter (13.28lb/in)
Soldering Time & Temperature: 3 seconds @ 350°C
Process Seal: Not available

POLES, CIRCUITS, & KEY-REMOVABLE POSITIONS

Pole & Throw	Model	Key Positions			Connected Terminals (Terminal numbers are on switch)			Schematic	⊙ = Key Removable • = Not Removable ✓ = Maximum Arc
		Pos 1	Pos 2	Pos 3	Pos 1	Pos 2	Pos 3		
SPDT	CKM12A CKL12A	ON	NONE	ON	COM-1	-----	COM-2		
SPDT	CKM12B CKL12B	ON	NONE	ON	COM-1	-----	COM-2		
SPDT	CKM13E CKL13E	ON	OFF	ON	COM-1	OPEN	COM-2		

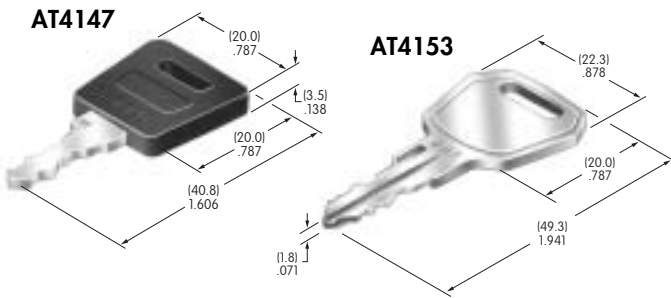
KEYS & LOCK MECHANISMS

F Flat Key

AT4147 for CKM 16mm:
 Brass with Nickel Plating key base & PBT key handle;
 AT4153 for CKL 19mm:
 Brass with Chrome Plating (crosshatch texture on handle)
 1 key provided with each switch (no master key available).
 For ordering additional keys indicate the same key number that is engraved on the face of your switch.

Randomly assigned key number (001 through 010 for CKM models & 001 through 025 for CKL models).

Typical Key Ordering Example: AT4153-001



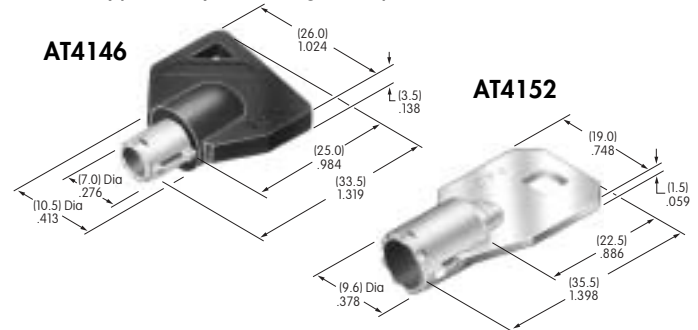
Locking Mechanism for CKM includes 5 tumblers (disks).

T Tubular Key (must be pressed inward to actuate)

AT4146 for CKM 16mm:
 Brass with Nickel Plating key base & PBT key handle;
 AT4152 for CKL 19mm:
 Brass with Nickel Plating (smooth)
 1 key provided with each switch (no master key available).
 For ordering additional keys indicate the same key number that is engraved on the face of your switch.

Randomly assigned key number (001 through 025 for CKM models & 001 through 050 for CKL models).

Typical Key Ordering Example: AT4146-001



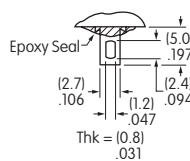
Locking Mechanism for CKL includes 4 tumblers (disks).

CONTACT MATERIALS, RATINGS, & TERMINALS

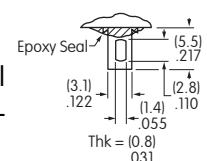
W Silver over Silver
 Power Level 3A @ 250V AC

01 Solder Lug Terminals

Solder Lug Terminal for CKM



Solder Lug Terminal for CKL



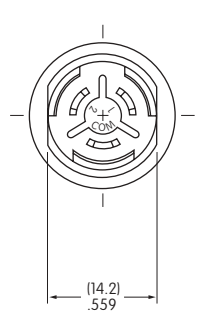
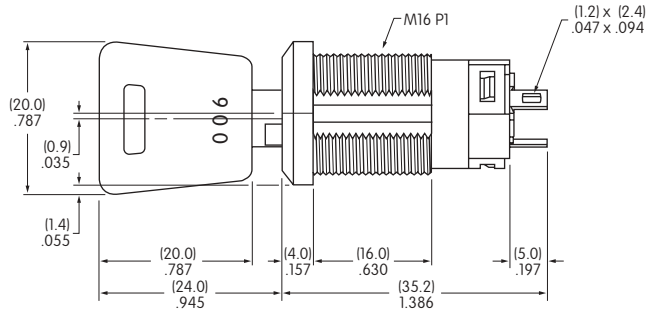
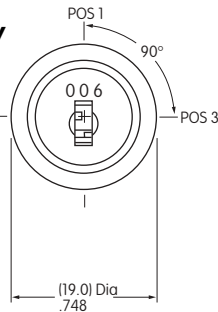
Hole for solder lug terminals on CKM is .047" X .094" and for CKL is .055" X .110".
 These terminal holes accommodate 1 solid 18-gauge wire or 2 solid or stranded 20-gauge wires.

TYPICAL SWITCH DIMENSIONS

16mm Bushing • Flat Key

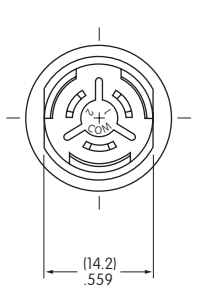
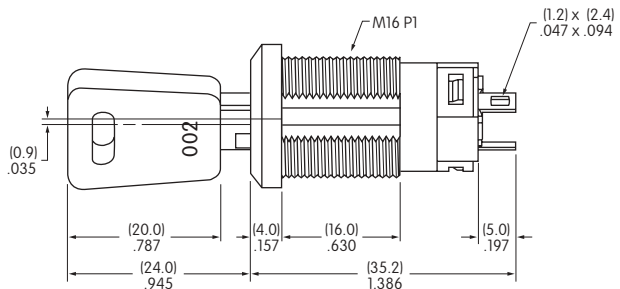
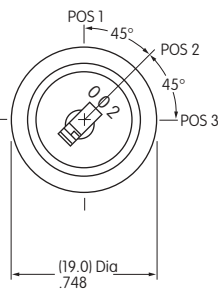


**90°
Angular
Throw**



CKM12AFW01

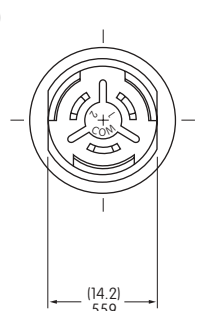
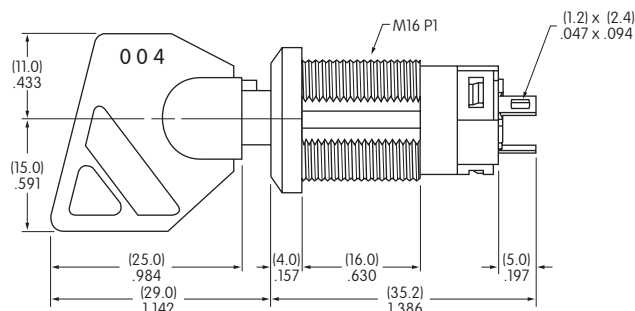
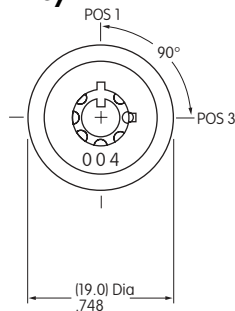
**45°
Angular
Throw**



16mm Bushing • Tubular Key

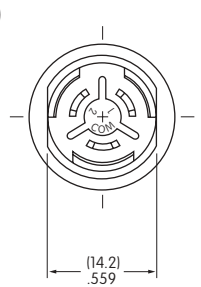
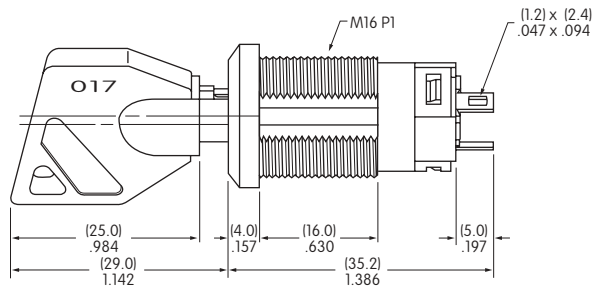
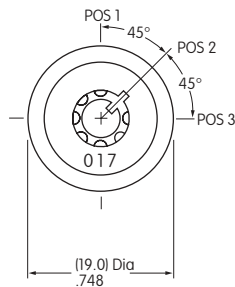


**90°
Angular
Throw**



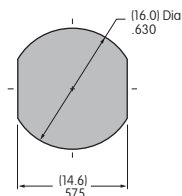
CKM13ETW01

**45°
Angular
Throw**



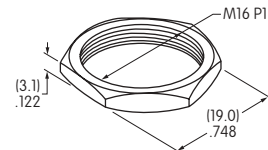
PANEL CUTOUT & STANDARD HARDWARE FOR 16MM BUSHING

Maximum Effective Panel
Thickness: 11.9mm (.469")



**AT016
16mm Hex Mounting Nut
for CKM**

1 included with each switch
Brass, nickel plating

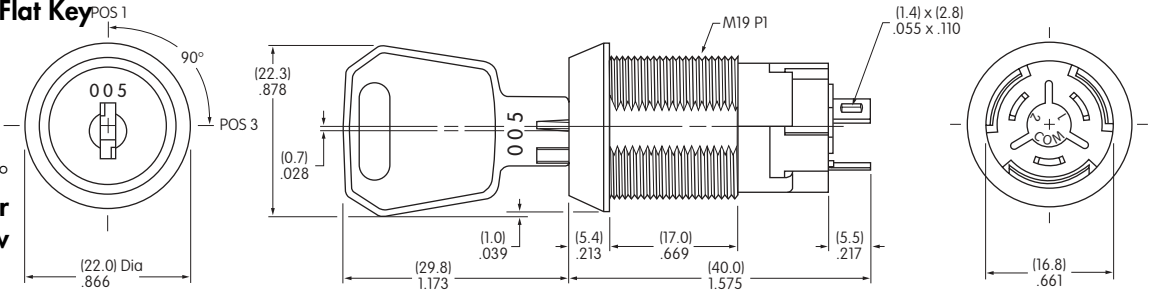


TYPICAL SWITCH DIMENSIONS

19mm Bushing • Flat Key

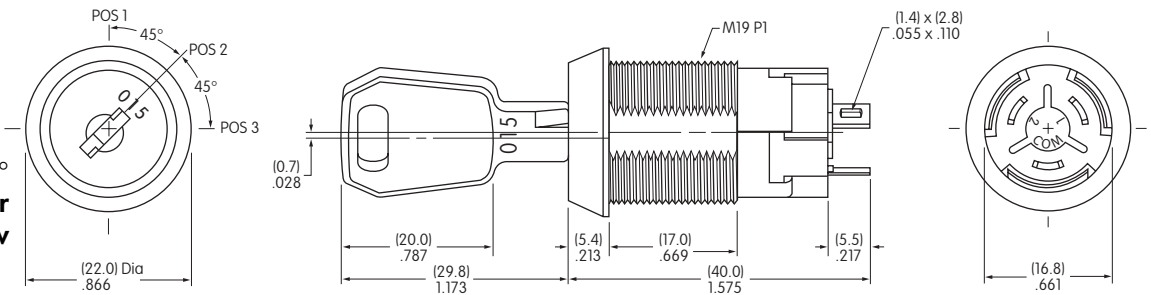


90°
Angular
Throw



CKL12AFW01

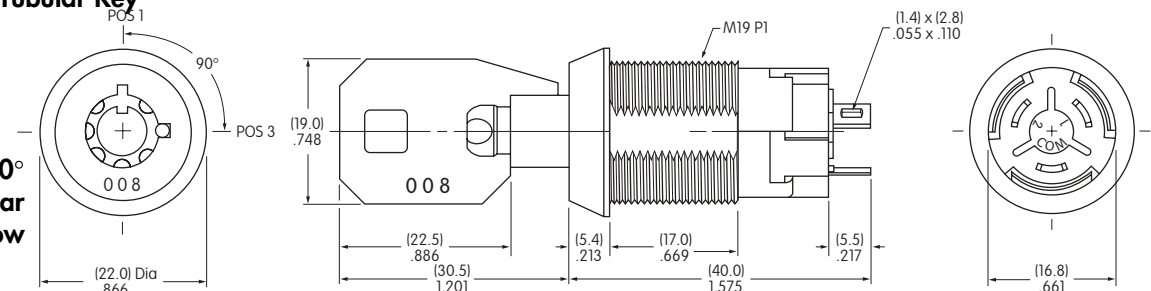
45°
Angular
Throw



19mm Bushing • Tubular Key

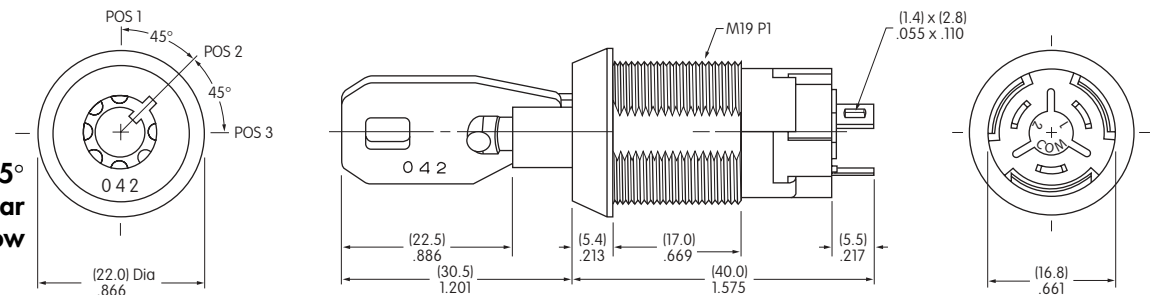


90°
Angular
Throw



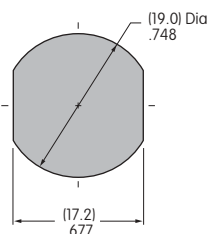
CKL13ETW01

45°
Angular
Throw



PANEL CUTOUT & STANDARD HARDWARE FOR 19MM BUSHING

Maximum Effective Panel
Thickness: 12.6mm (.496")



AT019
19mm Hex Mounting Nut
for CKL

1 included with each switch
Brass, nickel plating

