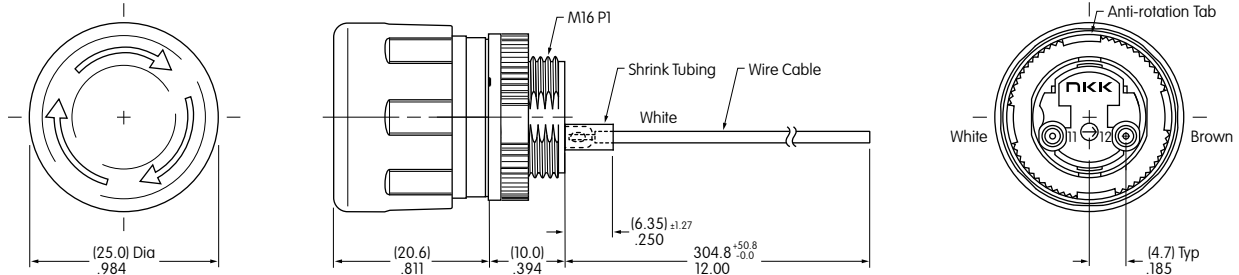


# E-Stop Switch with IP65 Rating, Legend & Wire Leads

# Series FF01

## FF0116BACAEA01-WL

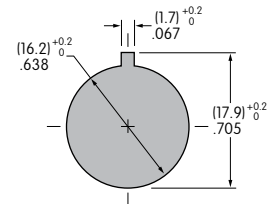
Dimensions in mm/inch



### SINGLE POLE SOLDER LUG

Base Switch	Pole & Throw	Plunger Position		Connected Terminals		Throw & Switch Schematics
		Normal	Down	Normal	Down	
FF0116BACAEA01	SPST	ON	OFF	11-12	OPEN	SPST NC

### PANEL CUTOUT



Recommended Panel Thickness: .031" ~ .177" (0.8mm ~ 4.5mm)

### WIRING

Number of Wires	Terminal 11	Terminal 12
2	White	Brown

### WIRE SPECIFICATIONS

UL1007/UL1569 PVC	Temperature: +80°C and +105°C (+176°F and +221°F)
Voltage: 300V	
22 AWG Stranded	Stripped Wire Ends .142" (3.6mm)

## Base Switch Specifications

### Electrical Capacity

Resistive Load: 0.5A @ 24V DC

### Other Ratings

Rated Insulation Voltage: 36V DC

Impulse Withstand Voltage: 2.5kV

Contact Resistance: 50 milliohms maximum

Insulation Resistance: 100 megohms minimum @ 500V DC

Mechanical Life: 100,000 operations minimum

Electrical Life: 100,000 operations minimum

Operating Force: Push to lock 10.8N; Pull to reset 8.5N; Turn to reset 0.13N·m

Minimum Direct Operating Force: 15N

Short Circuit Protection: gG10A

Conditional Short Circuit Current: 1000A

Minimum Positive Opening Travel: .118" (3.0mm)

Total Travel: .177" (4.5mm)

Operation Frequency: 10 times per minute

Overvoltage Category: II

### Materials & Finishes

Actuator: Glass fiber reinforced polyester (PBT)

Housing: Glass fiber reinforced polyamide

Movable Contacts: Silver alloy copper with gold plating

Stationary Contacts: Silver alloy copper with gold plating

Terminals: Brass with tin plating

### Environmental Data

Operating Temperature Range: -25°C ~ +60°C (-13°F ~ +140°F)

Storage Temperature Range: -45°C ~ +80°C (-49°F ~ +176°F)

Humidity: 90 ~ 95% humidity for 240 hours @ +40°C (+104°F)

Vibration: 10 ~ 500Hz, amplitude 0.35mm. Acceleration 50m/s<sup>2</sup>

Shock: Durability: 1,000m/s<sup>2</sup>; Malfunction: 150m/s<sup>2</sup>

Pollution Degree: 3

Sealing: Meets IP65 of IEC 60529 Standards at front panel

### Installation

Mounting Torque: 785mN·m

Soldering Time & Temperature: Manual Soldering: 390°C max for 4 seconds max, 2 cycles

RoHS Compliant:

### Standards & Certifications



UL, C-UL (UL508)



EN 60947-5-1, EN 60947-5-5



Emergency Stop Switches



Characteristics

Low profile body and impressively short behind panel depth of only 13.6mm offer advantages to high density panel layouts. Switches are IP65 rated at the front panel per IEC 60529 Standards (dust tight and protected against water jets from any direction). Outstanding safety and reliability factors are benefits of unique sliding latch mechanism that maintains the OFF state of the contacts. Protection against rugged vibration and chattering credited to internal construction featuring superior shock resistant properties.

All models have solder lug terminals and an actuator in 25 or 30mm diameters, with directional arrow legend or blank surface. Resetting methods include both twisting or pull release for enhanced safety.

The FF01 Series has various accessories, including a protective guard and nameplates with *EMERGENCY STOP* legend or blank. The nameplates and switch guard are all interchangeable for both actuator sizes.

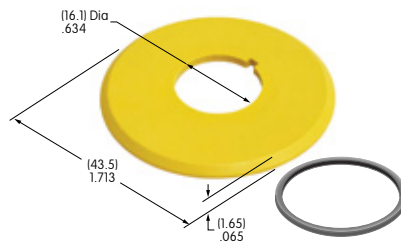
Optional Accessories

**AT221**  
Nameplate  
without Legend

One o-ring is provided with each nameplate

**Materials & Colors:**

Nameplate: Glass fiber reinforced polyamide  
O-ring: Chloroprene rubber  
Nameplate: Yellow  
O-ring: Black

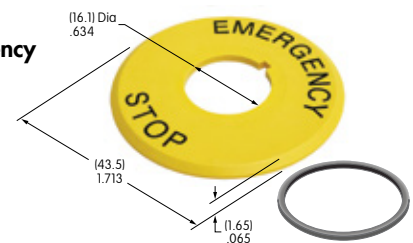


**AT222**  
Nameplate with Emergency  
Stop Legend

One o-ring is provided with each nameplate

**Materials & Colors:**

Nameplate: Glass fiber reinforced polyamide  
O-ring: Chloroprene rubber  
Nameplate: Yellow with black letters  
O-ring: Black

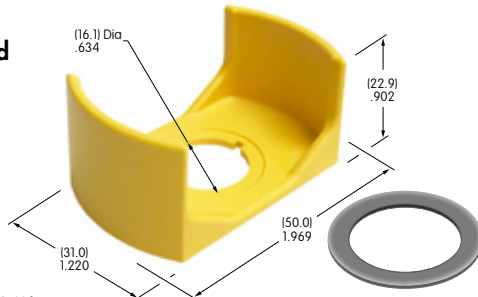


**AT220**  
Protective Guard

One o-ring is provided with each protective guard

**Materials & Colors:**

Guard: Glass fiber reinforced polyamide  
O-ring: Chloroprene rubber  
Guard: Yellow  
O-ring: Black



**AT119**  
Socket Wrench

**Material:**

Brass with nickel plating

Use to tighten switch nut in installation

