

## Compact Prewired Limit Switches

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The Cutler-Hammer® E47 Compact Prewired Limit Switch by Eaton's electrical business is designed to be a versatile, slim device for hard to fit applications where sealing integrity is required. The rugged die cast aluminum alloy housing, cable connection and switch mechanism are encapsulated for protection against extreme temperature (-10° to 70°C), contaminants, moisture, shock and vibration. This factory wired (3m) device has NEMA enclosure ratings of 4, 6 and 13, making it suitable for applications such as machine tool, food processing and packaging.

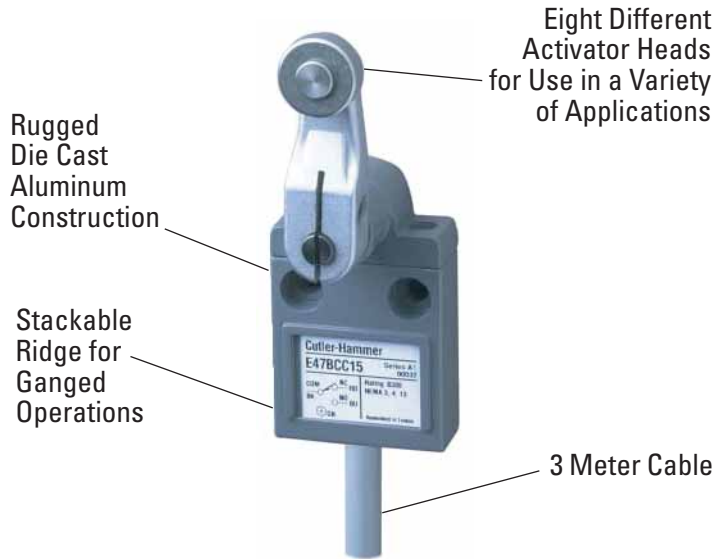
### Ratings and Approvals

- cULus
- NEMA 4, 6 and 13
- IEC IP67



**⚠ Unless otherwise noted, the products contained in this document are not designed or intended for use in human safety applications.**

## Rugged and Dependable Compact Limit Switch



### Product Features

- Rugged aluminum alloy die cast housing
- Sealed construction with enclosure ratings of NEMA 4, 6 and 13
- Prewired with 3m of 18 AWG, AWM 2517, 300V cable
- Stackable ridge for ganged operation

### Specifications — Maximum Ampere Rating

Voltage	Non-inductive Load (A)		Inductive Load (A)				Inrush Current (A)	
	Resistive		Inductive		Motor		N.C.	N.O.
	N.C.	N.O.	N.C.	N.O.	N.C.	N.O.		
125V AC	5	5	3	3	2.5	1.3	20 Max.	10 Max.
250V AC	5	5	2	2	1.5	0.8		
8V DC	5	5	5	4	1.5	1.5		
14V DC	5	5	4	4	1.5	1.5		
30V DC	4	4	3	3	1.5	1.5		
125V DC	0.4	0.4	0.4	0.4	0.05	0.05		
250V DC	0.2	0.2	0.2	0.2	0.03	0.03		

**NOTES:** Inductive load ratings are tested at a power factor 0.4 min. for AC power and a time constant of 7 mS max. for DC power. Inrush current for motor load is 6 times the steady state current.

### Specifications


Description	Specification
Contacts	1-SPDT (Form C)
Mechanical Life	10,000,000 operations
Electrical Life	200,000 operations, 30 operation/min. at rated load
Operating Speed	30 operations per minute maximum
Operating Temperature Range	-10° to +70°C (14° to 158°F)
Storage Temperature Range	-10° to 70°C (14° to 158°F)
Humidity	95% maximum non-condensing
Vibration	Malfunction durability, 10 to 55 Hz 1.5 mm double amplitude
Shock	Malfunction durability, approximately 50G
Enclosure Ratings	NEMA 4, 6 and 13; IEC IP67

For Customer Service in the U.S. call **1-877-ETN CARE (386-2273)**,  
in Canada call **1-800-268-3578**.  
For Application Assistance in the U.S. and Canada  
call **1-800-426-9184**.

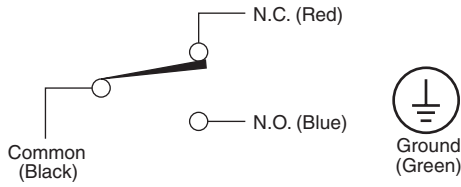
February 2008

## Model Selection

Actuator Type	Operating Force (Maximum)	Reset Force (Minimum)	Overtravel (Minimum)	Pre-travel	Movement Differential (Maximum)	Operating Position	Catalog Number
 Pin Plunger	42.3 oz (1.2 kg)	15.9 oz (450g)	0.118 inch (3 mm)	0.07 inch (1.8 mm)	0.008 inch (0.2 mm)	0.62 ± 0.04 inch (15.7 ± 1 mm)	E47BCC05
 Sealed Plunger	63.5 oz (1.8 kg)	15.9 oz (450g)	0.118 inch (3 mm)	0.07 inch (1.8 mm)	0.008 inch (0.2 mm)	0.99 ± 0.04 inch (24.9 ± 1 mm)	E47BCC06
 Roller Plunger	42.3 oz (1.2 kg)	15.9 oz (450g)	0.118 inch (3 mm)	0.07 inch (1.8 mm)	0.008 inch (0.2 mm)	1.12 ± 0.04 inch (28.5 ± 1 mm)	E47BCC07
 Sealed Roller Plunger	63.5 oz (1.8 kg)	15.9 oz (450g)	0.118 inch (3 mm)	0.07 inch (1.8 mm)	0.008 inch (0.2 mm)	1.35 ± 0.04 inch (34.3 ± 1 mm)	E47BCC08
 Cross Roller Plunger	42.3 oz (1.2 kg)	15.9 oz (450g)	0.118 inch (3 mm)	0.07 inch (1.8 mm)	0.008 inch (0.2 mm)	1.12 ± 0.04 inch (28.5 ± 1 mm)	E47BCC11
 Sealed Cross Roller Plunger	63.5 oz (1.8 kg)	15.9 oz (450g)	0.118 inch (3 mm)	0.07 inch (1.8 mm)	0.008 inch (0.2 mm)	1.35 ± 0.04 inch (34.3 ± 1 mm)	E47BCC12
 Bevel Plunger	42.3 oz (1.2 kg)	15.9 oz (450g)	0.118 inch (3 mm)	0.07 inch (1.8 mm)	0.008 inch (0.2 mm)	1.12 ± 0.04 inch (28.5 ± 1 mm)	E47BCC13
 Roller Lever	20.5 oz (580g)	5.3 oz (150g)	40°	25° max.	3°	—	E47BCC15
 Wobble Stick	5.3 oz (150g)	—	—	15° max.	—	—	E47BCC20

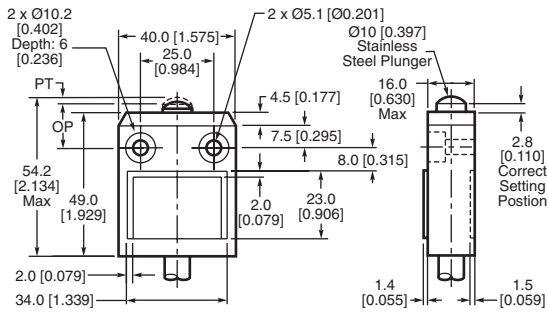
 Stocked product, typical order quantities guaranteed in stock.

Wiring Diagram

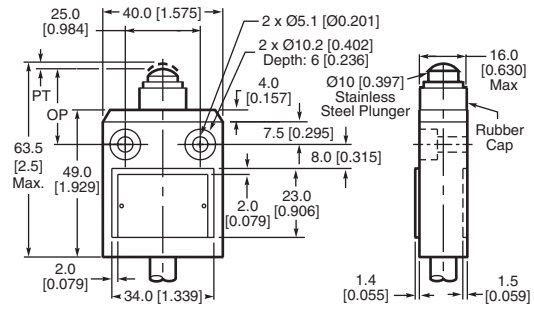


Approximate Dimensions in mm [Inches]

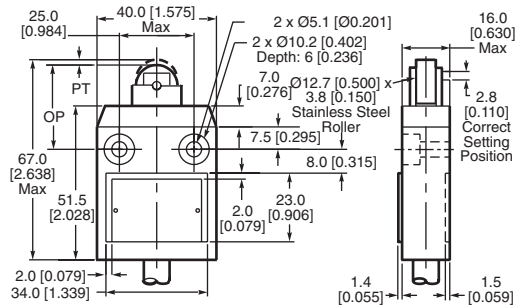
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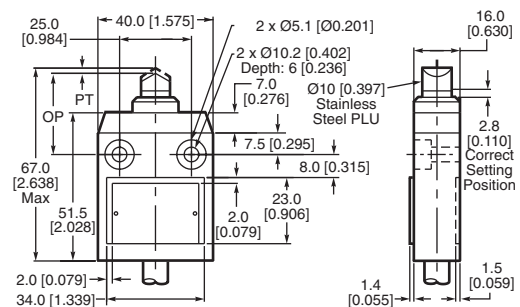
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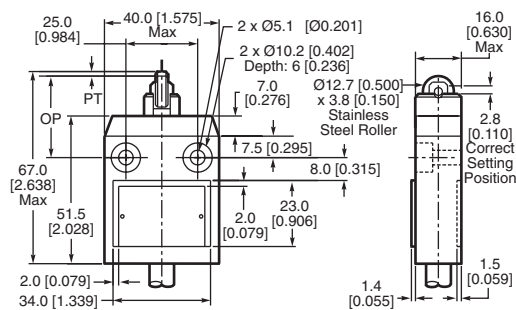
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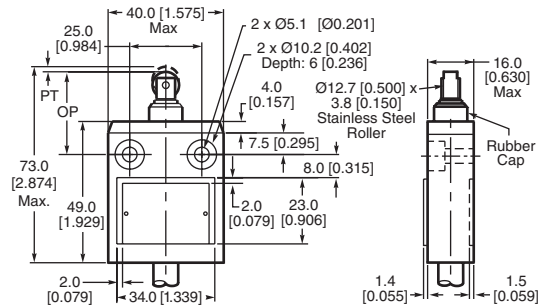
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E47BCC11

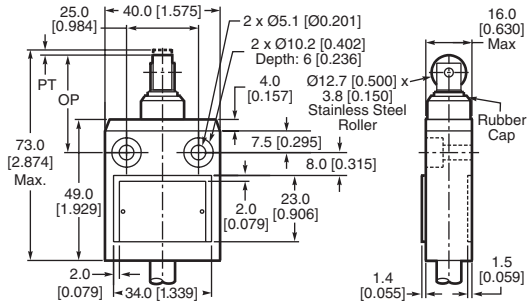


E47BCC08

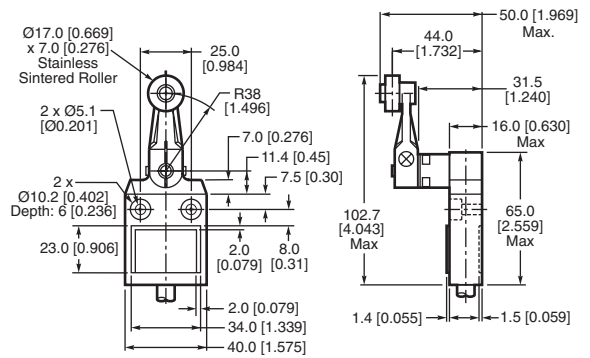


**Approximate Dimensions in mm [Inches] (Continued)**

**E47BCC12**



**E47BCC15**



**E47BCC20**

