

Compact Prewired Switches



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Compact Prewired Switches

Product Description

The E47 Compact Prewired Limit Switch by Eaton’s electrical sector 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 [14° to 158°F]), 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.

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, or micro-connector version also available
- Stackable ridge for ganged operation

Standards and Certifications

- cULus (cable versions only)
- UL (cable versions only)
- NEMA 4, 6 and 13
- IEC IP67, IP69K
- RoHS



⚠ DANGER

THIS SENSOR IS NOT A SAFETY DEVICE AND IS NOT INTENDED TO BE USED AS A SAFETY DEVICE. This sensor is designed only to detect and read certain data in an electronic manner and perform no use apart from that, specifically no safety-related use. This sensor product does not include self-checking redundant circuitry, and the failure of this sensor product could cause either an energized or de-energized output condition, which could result in death, serious bodily injury, or property damage.

For the most current information on this product, visit our Web site: www.eaton.com

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.





Product Selection

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Compact Prewired Switches

Actuator Type	Operating Force (Maximum)	Reset Force (Minimum)	Over-Travel (Maximum)	Pre-Travel	Movement Differential (Maximum)	Operating Position	Standard Version Catalog Number	Connector Version Catalog Number
Pin Plunger 	Pin Plunger							
	42.3 oz (1.2 kg)	15.9 oz (450g)	0.118 in (3 mm)	0.07 in (1.8 mm)	0.008 in (0.2 mm)	0.62 ± 0.04 in (15.7 ± 1 mm)	E47BCC05	E47BCC05P4
Sealed Plunger 	Sealed Plunger							
	63.5 oz (1.8 kg)	15.9 oz (450g)	0.118 in (3 mm)	0.07 in (1.8 mm)	0.008 in (0.2 mm)	0.99 ± 0.04 in (24.9 ± 1 mm)	E47BCC06	E47BCC06P4
Roller Plunger 	Roller Plunger							
	42.3 oz (1.2 kg)	15.9 oz (450g)	0.118 in (3 mm)	0.07 in (1.8 mm)	0.008 in (0.2 mm)	1.12 ± 0.04 in (28.5 ± 1 mm)	E47BCC07	E47BCC07P4
Sealed Roller Plunger 	Sealed Roller Plunger							
	63.5 oz (1.8 kg)	15.9 oz (450g)	0.118 in (3 mm)	0.07 in (1.8 mm)	0.008 in (0.2 mm)	1.35 ± 0.04 in (34.3 ± 1 mm)	E47BCC08	E47BCC08P4
Cross Roller Plunger 	Cross Roller Plunger							
	42.3 oz (1.2 kg)	15.9 oz (450g)	0.118 in (3 mm)	0.07 in (1.8 mm)	0.008 in (0.2 mm)	1.12 ± 0.04 in (28.5 ± 1 mm)	E47BCC11	E47BCC11P4
Sealed Cross Roller Plunger 	Sealed Cross Roller Plunger							
	63.5 oz (1.8 kg)	15.9 oz (450g)	0.118 in (3 mm)	0.07 in (1.8 mm)	0.008 in (0.2 mm)	1.35 ± 0.04 in (34.3 ± 1 mm)	E47BCC12	E47BCC12P4
Bevel Plunger 	Bevel Plunger							
	42.3 oz (1.2 kg)	15.9 oz (450g)	0.118 in (3 mm)	0.07 in (1.8 mm)	0.008 in (0.2 mm)	1.12 ± 0.04 in (28.5 ± 1 mm)	E47BCC13	E47BCC13P4

Compact Prewired Switches, continued

Actuator Type	Operating Force (Maximum)	Reset Force (Minimum)	Over-Travel (Maximum)	Pre-Travel	Movement Differential (Maximum)	Operating Position	Standard Version Catalog Number	Connector Version Catalog Number
Roller Lever 	Roller Lever							
	20.5 oz (580g)	5.3 oz (150g)	40°	25° max.	3°	—	E47BCC15	E47BCC15P4
Wobble Stick 	Wobble Stick							
	5.3 oz (150g)	—	—	15° max.	—	—	E47BCC20	E47BCC20P4
Rod Lever 	Rod Lever							
	20.5 oz (580g)	5.3 oz (150g)	40°	25° max.	3°	—	—	E47BCC21P4
Adjustable Level Arm 	Adjustable Level Arm							
	20.5 oz (580g)	5.3 oz (150g)	40°	25° max.	3°	—	E47BCC22	E47BCC22P4

Technical Data and Specifications

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Compact Prewired Switches

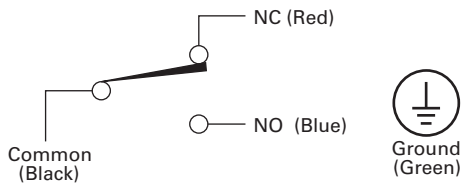
Description	Specification
Contacts	1-SPDT (Form C)
Mechanical life	10,000,000 operations
Electrical life	200,000 operations, 30 operation/min. at rated load
Operating speed	30 operations per minute maximum
Operating temperature range	-10° to 70°C (14° to 158°F)
Storage temperature range	-10° to 70°C (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

Maximum Ampere Ratings ^①

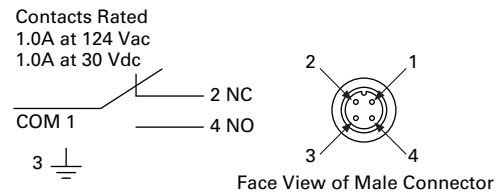
Rated Voltage	Non-Inductive Load (A) Resistive Load		Inductive Load (A) Inductive Load		Motor Load		Inrush Current (A)	
	NC	NO	NC	NO	NC	NO	NC	NO
125 Vac	5	5	3	3	2.5	1.3	20 max.	10 max.
250 Vac	5	5	2	2	1.5	0.8		
8 Vdc	5	5	5	4	1.5	1.5		
14 Vdc	5	5	4	4	1.5	1.5		
30 Vdc	4	4	3	3	1.5	1.5		
125 Vdc	0.4	0.4	0.4	0.4	0.05	0.05		
250 Vdc	0.2	0.2	0.2	0.2	0.03	0.03		

Wiring Diagram

Compact Prewired Switches



Micro-Connector Switches



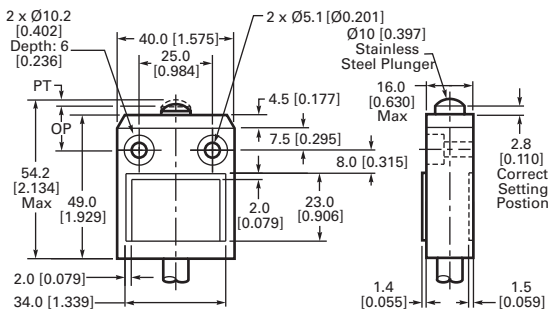
Note

^① 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 six times the steady state current.

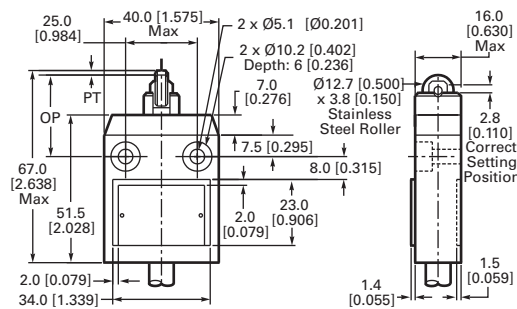
Dimensions

Approximate Dimensions in mm [in]

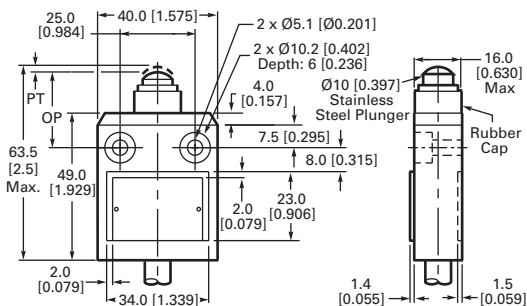
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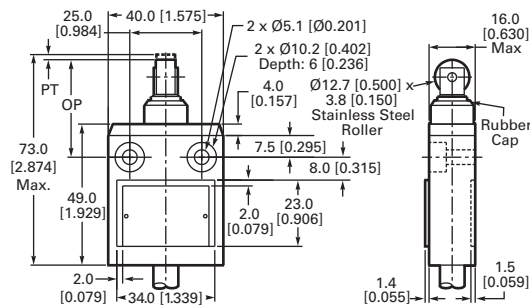
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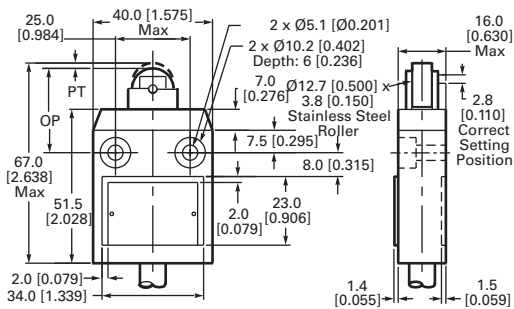
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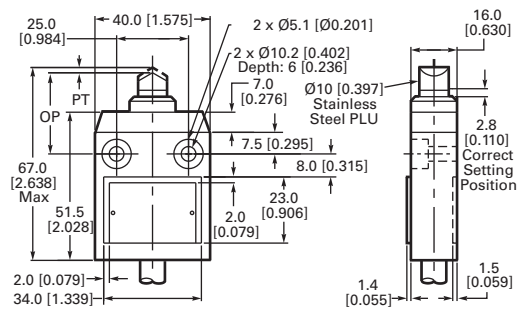
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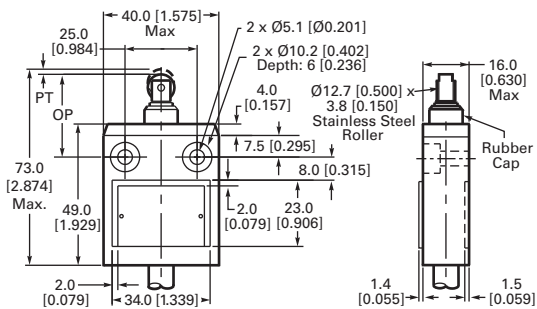
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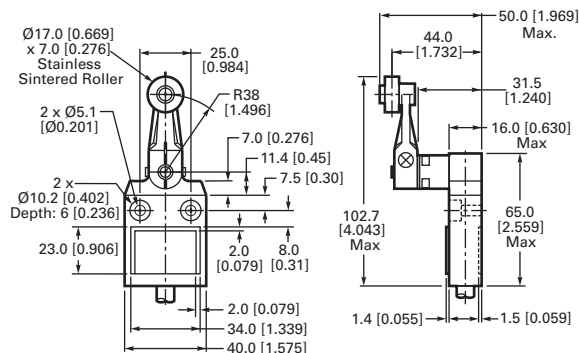
E47BCC13



E47BCC08



E47BCC15



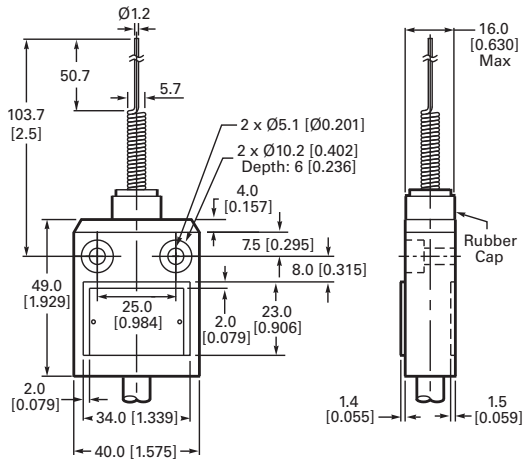
2.2

Limit Switches

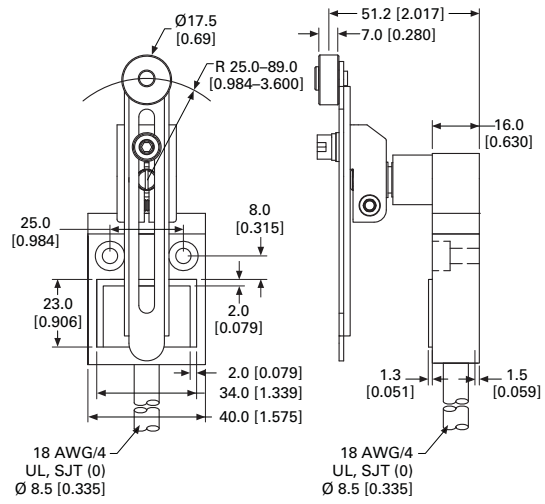
Compact Prewired Switches

Approximate Dimensions in mm [in]

E47BCC20



E47BCC22



E47BCC21

