

2.1

Limit Switches

E47 Precision Switches

E47 Precision Switches

2



E47 Precision Switches

Product Description

E47 Precision Switches from Eaton's electrical sector provide high accuracy switching at an affordable price. A variety of standard features, such as current capacity, operating force, travel characteristics and actuators, lets you custom fit the switch to your application.

The switches are available in their compact basic form, or enclosed in a rugged, metal housing.

Features

- Compact housings are ideal for use where space is restricted
- Precision, snap-action operators provide accurate repeatability of electrical and mechanical operating characteristics
- High current capacity (up to 20A) allows power load switching and motor handling capability
- Enclosed booted versions shield actuators from debris

Contents

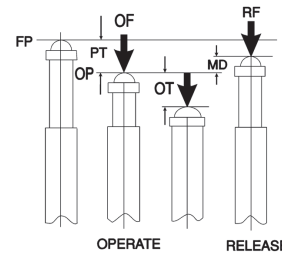
Description

| | <i>Page</i> |
|---|-----------------|
| E47 Precision Switches | |
| Product Selection | |
| Basic Switches | V8-T2-7 |
| Enclosed Switches | V8-T2-8 |
| Accessories | V8-T2-9 |
| Technical Data and Specifications | V8-T2-9 |
| Dimensions | V8-T2-13 |

 Drawings
Online

Operating Characteristics

Definitions



- OF—Operating Force
- RF—Return Force
- PT—Pre-Travel
- OT—Over-Travel
- MD—Movement Differential
- FP—Free Position
- OP—Operating Position

Standards and Certifications

- UL Recognized, E117028
- UL tested to Canadian safety standards
- RoHS Compliant



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

Basic Switches

E47 Precision Switches—Basic

| | Type | 15A Catalog Number | 20A Catalog Number |
|---|----------------------------------|--------------------------|--------------------------|
| Pin Plunger  | Pin Plunger | | |
| | Screw terminal | E47BMS01 | E47CMS01 |
| | Solder terminal | E47BML01 | E47CML01 ① |
| Extended Plunger  | Extended Plunger | | |
| | Screw terminal | E47BMS03 | — |
| | Solder terminal | E47BML03 | — |
| Straight Plunger  | Straight Plunger | | |
| | Screw terminal | E47BMS02 | E47CMS02 |
| | Solder terminal | E47BML02 | E47CML02 |
| Reversed Lever  | Reversed Lever | | |
| | Screw terminal | E47BMS21 | — |
| | Solder terminal | E47BML21 | — |
| | Spade terminal | E47BMT21 | — |
| Straight Lever  | Straight Lever | | |
| | Screw terminal | E47BMS22 | E47CMS22 |
| | Solder terminal | E47BML22 | — |
| Standard Lever  | Standard Lever | | |
| | Screw terminal | E47BMS20 | — |
| | Solder terminal | E47BML20 | — |
| Extended Straight Plunger  | Extended Straight Plunger | | |
| | Screw terminal | E47BMS04 | E47CMS04 |
| | Screw terminal (with space lugs) | E47BMT04 | — |
| | Solder terminal | E47BML04 | E47CML04 |

| | Type | 15A Catalog Number | 20A Catalog Number |
|--|-----------------------|--------------------------|--------------------------|
| Roller Plunger  | Roller Plunger | | |
| | Screw terminal | E47BMS10 | E47CMS10 |
| | Solder terminal | E47BML10 | — |
| Cross Roller Plunger  | Cross Roller Plunger | | |
| | Screw terminal | E47BMS11 | E47CMS11 |
| | Solder terminal | E47BML11 | — |
| Reversed Roller Lever  | Reversed Roller Lever | | |
| | Screw terminal | E47BMS41 | — |
| | Solder terminal | E47BML41 | — |
| Extended Roller Lever  | Extended Roller Lever | | |
| | Screw terminal | E47BMS42 | E47CMS42 |
| | Solder terminal | E47BML42 | — |
| Roller Lever  | Roller Lever | | |
| | Screw terminal | E47BMS30 | E47CMS30 |
| | Solder terminal | E47BML30 | — |
| | Spade terminal | E47BMT30 | E47CMT30 |
| One-Way Roller  | One-Way Roller | | |
| | Screw terminal | E47BMS31 | — |
| | Solder terminal | E47BML31 | — |
| Integral Leaf  | Integral Leaf | | |
| | Screw terminal | E47BMS23 | E47CMS23 |
| | Solder terminal | E47BML23 | — |

Note

① Contact Eaton's Sensor Applications Department at 1-800-426-9184 for approval status.



2.1

Limit Switches

E47 Precision Switches




2

E47 Precision Switches—Basic, continued







| Type | 15A Catalog Number | 20A Catalog Number |
|---|-----------------------------------|--------------------|
| Adjustable Roller | Adjustable Roller | |
| Screw terminal | E47BMS40 | — |
| Solder terminal | E47BML40 | — |
|  | | |
| Extended Adjustable Roller | Extended Adjustable Roller | |
| Screw terminal | E47BMS43 | — |
| Solder terminal | E47BML43 | — |
|  | | |

Enclosed Switches

E47 Precision Switches—Enclosed

| | Catalog Number |
|---|-------------------------|
| Plunger Actuator | Plunger Actuator |
|  | E47BLS05 |
| | E47CLS05 ①② |
| Booted Plunger | Booted Plunger |
|  | E47BLS06 |
| | E47CLS06 ①② |
| Roller Lever | Roller Lever |
|  | E47BLS32 |
| | E47CLS32 ①② |

E47 Precision Switches—Enclosed, continued



| | Catalog Number |
|---|------------------------------|
| Booted Roller Lever | Booted Roller Lever |
|  | E47BLS33 |
| Roller Plunger | Roller Plunger |
|  | E47BLS07 |
| | E47BLS11 ③ |
| Booted Roller Plunger | Booted Roller Plunger |
|  | E47BLS08 |
| | E47BLS12 ③ |
| One-Way Roller | One-Way Roller |
|  | E47BLS34 |
| Booted One-Way Roller | Booted One-Way Roller |
|  | E47BLS35 |
| Booted Wobble | Booted Wobble |
|  | E47BLS14 |

Notes

- ① Contact Eaton's Sensor Applications Department at 1-800-426-9184 for approval status.
- ② 20 ampere version.
- ③ Cross roller unit.

Accessories

Terminal Wire Covers for Basic Switches

| | Description | Catalog Number |
|--|--|----------------|
| 45°  | Terminal wire cover with 45° conduit interface | E47PA1 |
| 90°  | Terminal wire cover with 90° conduit interface | E47PA2 |

Technical Data and Specifications

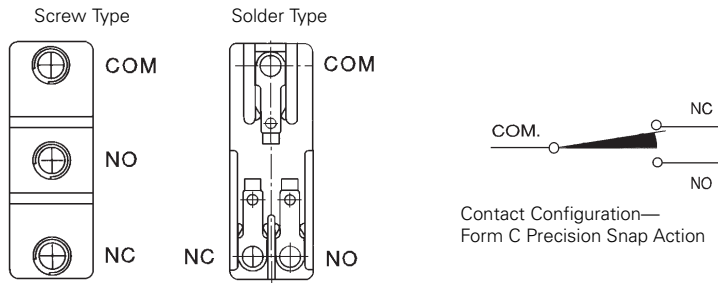
E47 Precision Switches

| Description | Specification |
|---|--|
| Operating speed | 0.01m/second to 1m/second |
| Operating Frequency | |
| Mechanical | 120 operations/minute |
| Electrical | 20 operations/minute |
| Mechanical life | 3,000,000 operations minimum |
| Electrical life | 500,000 operations minimum |
| Contact resistance | 15M ohms maximum, initial |
| Insulation resistance | 100M ohms minimum at 500 Vdc |
| Dielectric Strength | |
| Between non-current carrying parts | 1000 Vac, 50/60 Hz for 1 minute |
| Between current carrying parts and ground | 2000 Vac, 50/60 Hz for 1 minute |
| Ambient Operating Temperature | |
| Basic | -13° to 176°F (-25° to 80°C) |
| Enclosed | 5° to 176°F (-15° to 80°C) |
| Environmental rating enclosed, booted | NEMA 1 |
| Mounting centers | 1.0 in (25.4 mm), #8 screw size |
| Terminal screws | Bottom facing M4 x 0.7 Screws with cup washers will accept 22–12 AWG (2.5 sq. mm maximum) Maximum torque: 10 in-lbs. |
| Threaded bushing | 15/32 in |
| Material of construction | Mineral filled phenolic |
| Enclosure rating | Aluminum die casting (ADC-3/A380); Seal boot: nitrile, butyl rubber (NBR) |
| Conduit fitting on enclosed type | 1/2 in NPT |

Maximum Ampere Ratings ^{①②}

| Model | Rated Voltage | Non-Inductive Load (A) | | | Inductive Load (A) | | | Inrush Current (A) | |
|-------|---------------|-----------------------------|-----------------|------|-----------------------------|------------------|------|--------------------|---------|
| | | Resistive Load NC and NO | Lamp Load NC | NO | Inductive Load NC and NO | Motor Load NC | NO | NC | NO |
| 15A | 125 Vac | 15 | 3 | 1.5 | 15 | 5 | 2.5 | 30 max. | 15 max. |
| | 250 Vac | 15 | 2.5 | 1.25 | 15 | 3 | 1.5 | | |
| | 500 Vac | 3 | 1.5 | 0.75 | 2.5 | 1.5 | 0.75 | | |
| | 8 Vdc | 15 | 3 | 1.5 | 15 | 5 | 2.5 | | |
| | 14 Vdc | 15 | 3 | 1.5 | 10 | 5 | 2.5 | | |
| | 30 Vdc | 6 (2) | 3 | 1.5 | 5 | 5 | 2.5 | | |
| | 125 Vdc | 0.4 | 0.4 | 0.4 | 0.05 | 0.05 | 0.05 | | |
| | 250 Vdc | 0.2 | 0.2 | 0.2 | 0.03 | 0.03 | 0.03 | | |
| 20A | 125 Vac | 20 | 7.5 | 7.5 | 20 | 12.5 | 12.5 | 60 max. | 30 max. |
| | 250 Vac | 20 | 7.5 | 7.5 | 20 | 8.3 | 8.3 | | |
| | 500 Vac | 6 | 4 | 4 | 5 | 2 | 2 | | |
| | 8 Vdc | 20 | 3 | 1.5 | 20 | 12.5 | 12.5 | | |
| | 14 Vdc | 20 | 3 | 1.5 | 15 | 12.5 | 12.5 | | |
| | 30 Vdc | 6 | 3 | 1.5 | 5 | 5 | 5 | | |
| | 125 Vdc | 0.5 | 0.5 | 0.5 | 0.05 | 0.05 | 0.05 | | |
| | 250 Vdc | 0.25 | 0.25 | 0.25 | 0.03 | 0.03 | 0.03 | | |

Terminal Configurations



(Spade type not shown, available on some models)

Notes

- ① Inductive load has a power factor of 0.04 minimum (AC) and a time constant of 7 m/second (DC).
- ② Lamp load has an inrush current of six times steady-state current.

E47 Precision Switch Specifications—15 A

| Catalog Number | E47B...01-V | E47B...02-V | E47B...03-V | E47B...04-V | E47B...05-V | E47B...06-V | E47B...07-V |
|------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------------|--------------------|--------------------------|
| Operating force (max.) | 12.35 oz (350 g) | 12.35 oz (350 g) | 12.35 oz (350 g) | 12.35 oz (350 g) | 8.82–12.3 oz (250–350 g) | 28.22 oz (800 g) | 8.82–12.3 oz (250–350 g) |
| Return force (min.) | — | — | — | — | 4.02 oz (114 g) | 8.47 oz (240 g) | 4.02 oz (114 g) |
| Return force (max.) | 4.02 oz (114 g) | 4.02 oz (114 g) | 4.02 oz (114 g) | 4.02 oz (114 g) | — | — | — |
| Pre-travel (max.) | 0.016 in (0.4 mm) | 0.016 in (0.4 mm) | 0.016 in (0.4 mm) | 0.016 in (0.4 mm) | 0.016 in (0.4 mm) | 0.079 in (2 mm) | 0.02 in (0.5 mm) |
| Overtravel (max.) | 0.005 in (0.13 mm) | 0.063 in (1.6 mm) | 0.063 in (1.6 mm) | 0.217 in (5.5 mm) | 0.217 in (5.5 mm) | 0.197 in (5 mm) | 0.142 in (3.6 mm) |
| Movement differential (max.) | 0.002 in (0.05 mm) | 0.002 in (0.05 mm) | 0.002 in (0.05 mm) | 0.002 in (0.05 mm) | 0.002 in (0.05 mm) | 0.004 in (0.1 mm) | 0.002 in (0.05 mm) |
| Free position (max.) | — | — | — | — | — | — | — |
| Operating position (max.) | 0.626 in (15.9 mm) | 0.846 in (21.5 mm) | 1.11 in (28.2 mm) | 0.858 in (21.8 mm) | 1.504 in (38.2 mm) | 1.803 in (45.8 mm) | 1.957 in (49.7 mm) |

| Catalog Number | E47B...08-V | E47B...10-V | E47B...11-V | E47B...11-V Cross Roller Unit | E47B...12-V Cross Roller Unit | E47B...14-V | E47B...20-V |
|------------------------------|--------------------|--------------------|--------------------|----------------------------------|----------------------------------|-------------------|--------------------|
| Operating force (max.) | 17.64 oz (500 g) | 12.35 oz (350 g) | 12.35 oz (350 g) | 8.82–12.3 oz (250–350 g) | 17.64 oz (500 g) | 2.12 oz (60 g) | 3.53 oz (100 g) |
| Return force (min.) | 3.53 oz (100 g) | — | — | 4.02 oz (114 g) | 3.53 oz (100 g) | 0.88 oz (25 g) | 0.99 oz (28 g) |
| Return force (max.) | — | 4.02 oz (114 g) | 4.02 oz (114 g) | — | — | — | — |
| Pre-travel (max.) | 0.039 in (1 mm) | 0.016 in (0.4 mm) | 0.016 in (0.4 mm) | 0.02 in (0.5 mm) | 0.039 in (1 mm) | 0.52 in (13.2 mm) | 0.197 in (5 mm) |
| Overtravel (max.) | 0.138 in (3.5 mm) | 0.141 in (3.58 mm) | 0.141 in (3.58 mm) | 0.142 in (3.6 mm) | 0.138 in (3.5 mm) | 0.315 in (8 mm) | 0.079 in (2 mm) |
| Movement differential (max.) | 0.005 in (0.12 mm) | 0.002 in (0.05 mm) | 0.002 in (0.05 mm) | 0.002 in (0.05 mm) | 0.005 in (0.12 mm) | 0.039 in (1 mm) | 0.039 in (1 mm) |
| Free position (max.) | — | — | — | — | — | — | 0.976 in (24.8 mm) |
| Operating position (max.) | 1.957 in (49.7 mm) | 1.315 in (33.4 mm) | 1.315 in (33.4 mm) | 1.957 in (49.7 mm) | 1.957 in (49.7 mm) | — | 0.748 in (19 mm) |

| Catalog Number | E47B...21-V | E47B...22-V | E47B...23-V | E47B...30-V | E47B...31-V | E47B...32-V | E47B...33-V |
|------------------------------|--------------------|-------------------|------------------|--------------------|--------------------|-------------------|-------------------|
| Operating force (max.) | 5.29 oz (150 g) | 2.47 oz (70 g) | 0.35 oz (10 g) | 5.64 oz (160 g) | 5.64 oz (160 g) | 20.11 oz (570 g) | 22.58 oz (640 g) |
| Return force (min.) | — | 0.49 oz (14 g) | 0.11 oz (3 g) | 1.48 oz (42 g) | 1.48 oz (42 g) | 6 oz (170 g) | 8.11 oz (230 g) |
| Return force (max.) | 0.49 oz (14 g) | — | — | — | — | — | — |
| Pre-travel (max.) | 0.157 in (4 mm) | 0.394 in (10 mm) | 0.787 in (20 mm) | 0.106 in (2.7 mm) | 0.106 in (2.7 mm) | 0.157 in (4 mm) | 0.197 in (5 mm) |
| Overtravel (max.) | 0.063 in (1.6 mm) | 0.22 in (5.6 mm) | 0.22 in (5.6 mm) | 0.094 in (2.4 mm) | 0.094 in (2.4 mm) | 0.236 in (6 mm) | 0.236 in (6 mm) |
| Movement differential (max.) | 0.051 in (1.3 mm) | 0.051 in (1.3 mm) | 0.118 in (3 mm) | 0.02 in (0.5 mm) | 0.02 in (0.5 mm) | 0.016 in (0.4 mm) | 0.016 in (0.4 mm) |
| Free position (max.) | 0.811 in (20.6 mm) | 1.11 in (28.2 mm) | — | 1.28 in (32.5 mm) | 1.717 in (43.6 mm) | — | — |
| Operating position (max.) | 0.685 in (17.4 mm) | 0.748 in (19 mm) | 0.748 in (19 mm) | 1.189 in (30.2 mm) | 1.697 in (43.1 mm) | — | — |

| Catalog Number | E47B...34-V | E47B...35-V | E47B...40-V | E47B...41-V | E47B...42-V | E47B...43-V |
|------------------------------|-------------------|-------------------|--------------------|--------------------|--------------------|--------------------|
| Operating force (max.) | 20.11 oz (570 g) | 22.58 oz (640 g) | 17.64 oz (500 g) | 5.29 oz (150 g) | 5.64 oz (160 g) | 21.16 oz (600 g) |
| Return force (min.) | 6 oz (170 g) | 8.11 oz (230 g) | 6 oz (170 g) | — | 0.78 oz (22 g) | 10.58 oz (300 g) |
| Return force (max.) | — | — | — | 0.49 oz (14 g) | — | — |
| Pre-travel (max.) | 0.157 in (4 mm) | 0.197 in (5 mm) | 0.197 in (5 mm) | 0.157 in (4 mm) | 0.28 in (7.1 mm) | 0.118 in (3 mm) |
| Overtravel (max.) | 0.236 in (6 mm) | 0.236 in (6 mm) | 0.5 in (12.7 mm) | 0.063 in (1.6 mm) | 0.157 in (4 mm) | 0.236 in (6 mm) |
| Movement differential (max.) | 0.016 in (0.4 mm) | 0.016 in (0.4 mm) | 0.087 in (2.2 mm) | 0.051 in (1.3 mm) | 0.04 in (1.02 mm) | 0.079 in (2 mm) |
| Free position (max.) | — | — | 1.752 in (44.5 mm) | 1.252 in (31.8 mm) | 1.437 in (36.5 mm) | 1.614 in (41 mm) |
| Operating position (max.) | — | — | 1.591 in (40.4 mm) | 1.126 in (28.6 mm) | 1.189 in (30.2 mm) | 1.591 in (40.4 mm) |

2.1

Limit Switches

E47 Precision Switches

2

E47 Precision Switch Specifications—20 A

| Catalog Number | E47C...01-V | E47C...02-V | E47C...03-V | E47C...04-V | E47C...05-V | E47C...06-V | E47C...07-V |
|------------------------------|--------------------|-------------------|--------------------|-------------------|--------------------------|--------------------|--------------------------|
| Operating force (max.) | 22.93 oz (650 g) | 22.93 oz (650 g) | 22.93 oz (650 g) | 22.93 oz (650 g) | 8.82–12.3 oz (250–350 g) | 28.22 oz (800 g) | 8.82–12.3 oz (250–350 g) |
| Return force (min.) | 7.05 oz (200 g) | 7.05 oz (200 g) | 7.05 oz (200 g) | 7.05 oz (200 g) | 4.02 oz (114 g) | 8.47 oz (240 g) | 4.02 oz (114 g) |
| Return force (max.) | — | — | — | — | — | — | — |
| Pre-travel (max.) | 0.028 in (0.7 mm) | 0.028 in (0.7 mm) | 0.028 in (0.7 mm) | 0.028 in (0.7 mm) | 0.016 in (0.4 mm) | 0.079 in (2 mm) | 0.02 in (0.5 mm) |
| Overtravel (max.) | 0.005 in (0.13 mm) | 0.063 in (1.6 mm) | 0.063 in (1.6 mm) | 0.217 in (5.5 mm) | 0.217 in (5.5 mm) | 0.197 in (5 mm) | 0.142 in (3.6 mm) |
| Movement differential (max.) | 0.008 in (0.2 mm) | 0.008 in (0.2 mm) | 0.002 in (0.05 mm) | 0.008 in (0.2 mm) | 0.002 in (0.05 mm) | 0.004 in (0.1 mm) | 0.002 in (0.05 mm) |
| Free position (max.) | — | — | — | — | — | — | — |
| Operating position (max.) | 0.642 in (16.3 mm) | 0.866 in (22 mm) | 1.13 in (28.7 mm) | 0.89 in (22.6 mm) | 1.504 in (38.2 mm) | 1.803 in (45.8 mm) | 1.957 in (49.7 mm) |

| Catalog Number | E47C...08-V | E47C...10-V | E47C...11-V | E47C...11-V Cross Roller Unit | E47C...12-V Cross Roller Unit | E47C...14-V | E47C...20-V |
|------------------------------|--------------------|--------------------|--------------------|----------------------------------|----------------------------------|-------------------|-------------------|
| Operating force (max.) | 17.64 oz (500 g) | 22.93 oz (650 g) | 22.93 oz (650 g) | 8.82–12.3 oz (250–350 g) | 17.64 oz (500 g) | 2.12 oz (60 g) | 5.64 oz (160 g) |
| Return force (min.) | 3.53 oz (100 g) | 7.05 oz (200 g) | 7.05 oz (200 g) | 4.02 oz (114 g) | 3.53 oz (100 g) | 0.88 oz (25 g) | 1.48 oz (42 g) |
| Return force (max.) | — | — | — | — | — | — | — |
| Pre-travel (max.) | 0.039 in (1 mm) | 0.028 in (0.7 mm) | 0.028 in (0.7 mm) | 0.02 in (0.5 mm) | 0.039 in (1 mm) | 0.52 in (13.2 mm) | 0.256 in (6.5 mm) |
| Overtravel (max.) | 0.138 in (3.5 mm) | 0.141 in (3.58 mm) | 0.141 in (3.58 mm) | 0.142 in (3.6 mm) | 0.138 in (3.5 mm) | 0.315 in (8 mm) | 0.047 in (1.2 mm) |
| Movement differential (max.) | 0.005 in (0.12 mm) | 0.008 in (0.2 mm) | 0.008 in (0.2 mm) | 0.002 in (0.05 mm) | 0.005 in (0.12 mm) | 0.039 in (1 mm) | 0.047 in (1.2 mm) |
| Free position (max.) | — | — | — | — | — | — | — |
| Operating position (max.) | 1.957 in (49.7 mm) | 1.362 in (34.6 mm) | 1.362 in (34.6 mm) | 1.957 in (49.7 mm) | 1.957 in (49.7 mm) | — | 0.78 in (19.8 mm) |

| Catalog Number | E47C...21-V | E47C...22-V | E47C...23-V | E47C...30-V | E47C...31-V | E47C...32-V | E47C...33-V |
|------------------------------|--------------------|-------------------|------------------|--------------------|--------------------|-------------------|-------------------|
| Operating force (max.) | 12.35 oz (350 g) | 2.82 oz (80 g) | 0.35 oz (10 g) | 6.35 oz (180 g) | 5.64 oz (160 g) | 20.11 oz (570 g) | 22.58 oz (640 g) |
| Return force (min.) | 1.76 oz (50 g) | 0.49 oz (14 g) | 0.11 oz (3 g) | 1.48 oz (42 g) | 1.48 oz (42 g) | 6 oz (170 g) | 8.11 oz (230 g) |
| Return force (max.) | — | — | — | — | — | — | — |
| Pre-travel (max.) | 0.157 in (4 mm) | 0.394 in (10 mm) | 0.787 in (20 mm) | 0.106 in (2.7 mm) | 0.106 in (2.7 mm) | 0.157 in (4 mm) | 0.197 in (5 mm) |
| Overtravel (max.) | 0.063 in (1.6 mm) | 0.22 in (5.6 mm) | 0.22 in (5.6 mm) | 0.094 in (2.4 mm) | 0.094 in (2.4 mm) | 0.236 in (6 mm) | 0.236 in (6 mm) |
| Movement differential (max.) | 0.051 in (1.3 mm) | 0.05 in (1.27 mm) | 0.118 in (3 mm) | 0.02 in (0.5 mm) | 0.02 in (0.5 mm) | 0.016 in (0.4 mm) | 0.016 in (0.4 mm) |
| Free position (max.) | 0.811 in (20.6 mm) | 1.11 in (28.2 mm) | — | 1.28 in (32.5 mm) | 1.717 in (43.6 mm) | — | — |
| Operating position (max.) | 0.717 in (18.2 mm) | 0.78 in (19.8 mm) | 0.748 in (19 mm) | 1.205 in (30.6 mm) | 1.697 in (43.1 mm) | — | — |

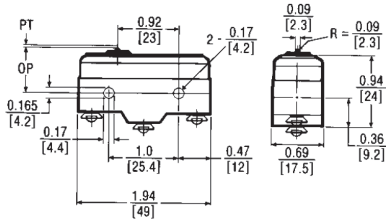
| Catalog Number | E47C...34-V | E47C...35-V | E47C...40-V | E47C...41-V | E47C...42-V | E47C...43-V |
|------------------------------|-------------------|-------------------|--------------------|--------------------|--------------------|--------------------|
| Operating force (max.) | 20.11 oz (570 g) | 22.58 oz (640 g) | 17.64 oz (500 g) | 12.35 oz (350 g) | 4.23 oz (120 g) | 21.16 oz (600 g) |
| Return force (min.) | 6 oz (170 g) | 8.11 oz (230 g) | 6 oz (170 g) | 1.76 oz (50 g) | 0.78 oz (22 g) | 10.58 oz (300 g) |
| Return force (max.) | — | — | — | — | — | — |
| Pre-travel (max.) | 0.157 in (4 mm) | 0.197 in (5 mm) | 0.197 in (5 mm) | 0.157 in (4 mm) | 0.28 in (7.1 mm) | 0.118 in (3 mm) |
| Overtravel (max.) | 0.236 in (6 mm) | 0.236 in (6 mm) | 0.5 in (12.7 mm) | 0.063 in (1.6 mm) | 0.157 in (4 mm) | 0.236 in (6 mm) |
| Movement differential (max.) | 0.016 in (0.4 mm) | 0.016 in (0.4 mm) | 0.087 in (2.2 mm) | 0.051 in (1.3 mm) | 0.04 in (1.02 mm) | 0.079 in (2 mm) |
| Free position (max.) | — | — | 1.752 in (44.5 mm) | 1.252 in (31.8 mm) | 1.437 in (36.5 mm) | 1.614 in (41 mm) |
| Operating position (max.) | — | — | 1.591 in (40.4 mm) | 1.157 in (29.4 mm) | 1.575 in (40 mm) | 1.591 in (40.4 mm) |

Dimensions

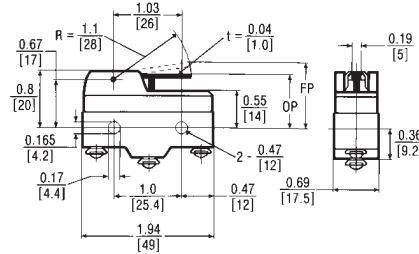
Approximate Dimensions in Inches [mm]

Basic Switches

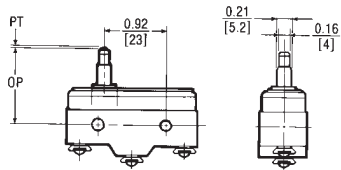
Pin Plunger



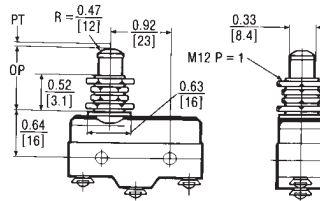
Standard Lever



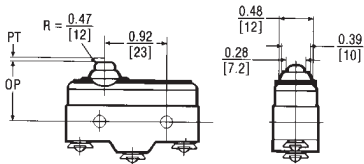
Extended Plunger



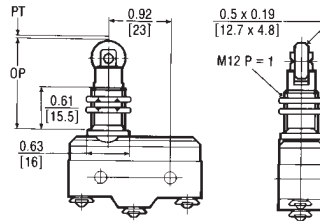
Extended Straight Plunger



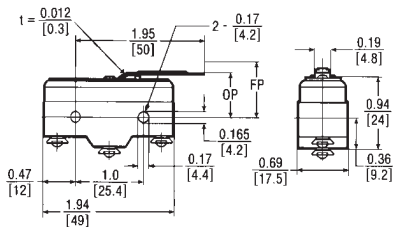
Straight Plunger



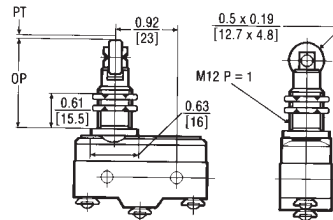
Roller Plunger



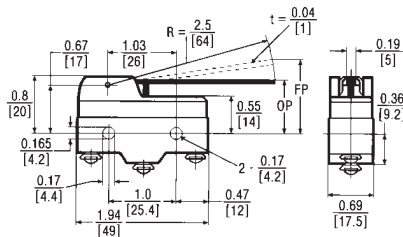
Reversed Lever



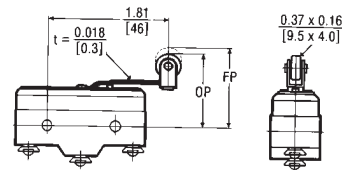
Cross Roller Plunger



Straight Lever



Reversed Roller Lever



2.1

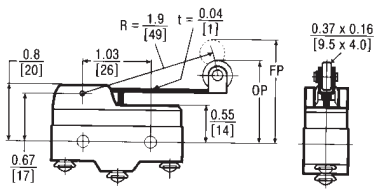
Limit Switches

E47 Precision Switches

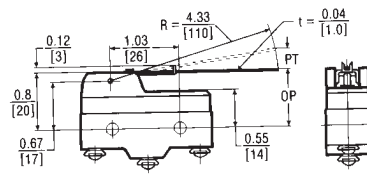
Approximate Dimensions in Inches [mm]

2

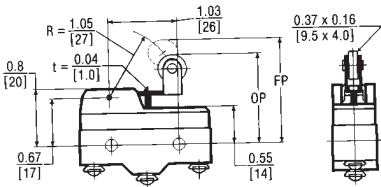
Extended Roller Lever



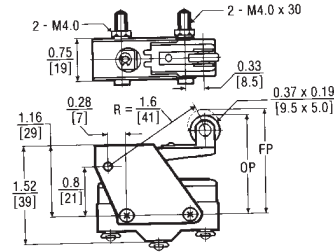
Integral Leaf



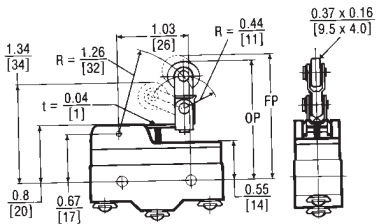
Roller Lever



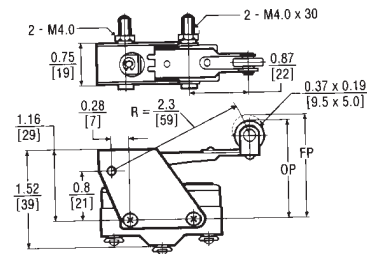
Adjustable Roller



One-Way Roller

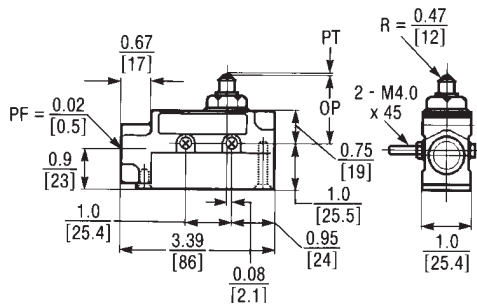


Extended Adjustable Roller

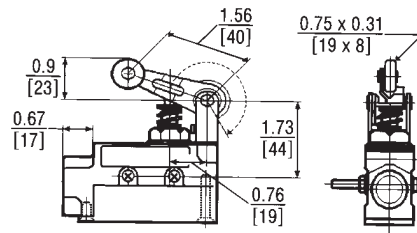


Enclosed Switches

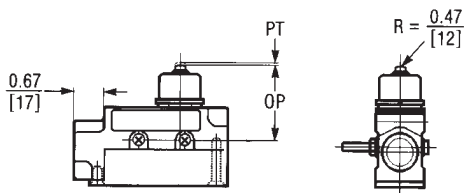
Plunger Actuator



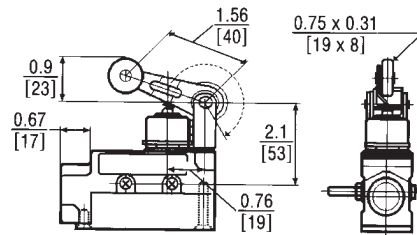
Roller Lever



Booted Plunger

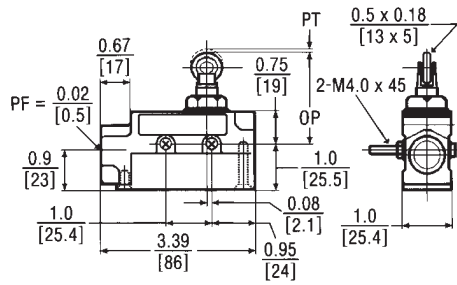


Booted Roller Lever

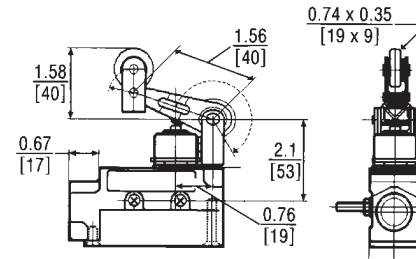


Approximate Dimensions in Inches [mm]

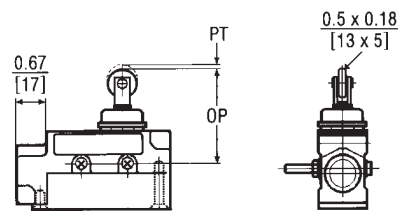
Roller Plunger



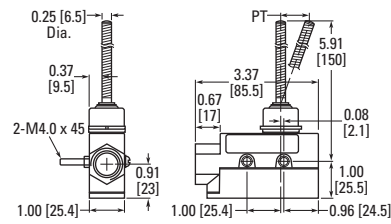
Booted One-Way Roller



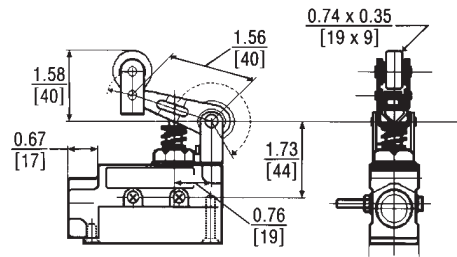
Booted Roller Plunger



Booted Wobble



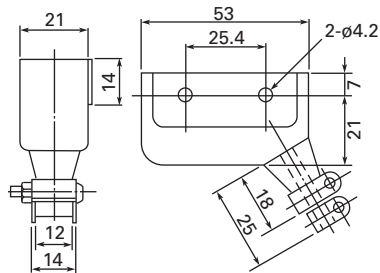
One-Way Roller



Accessories

Approximate Dimensions in mm

Terminal Wire Cover with 45° Conduit Interface



Terminal Wire Cover with 90° Conduit Interface

