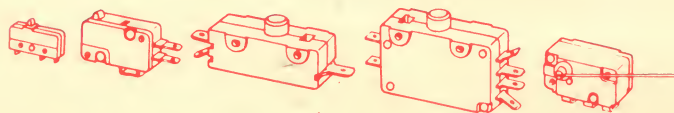




CHERRY **Precision** **Switches**

The complete snap-action switch line!



CHERRY ELECTRICAL
PRODUCTS CORP.

1650 OLD DEERFIELD ROAD • HIGHLAND PARK, ILLINOIS 60035

CATALOG
NUMBER **C-663**

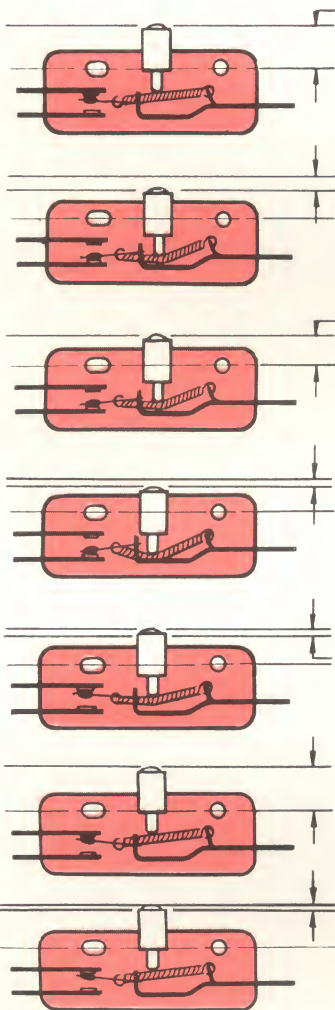


CHERRY **Precision** **Switches**

- A complete line of precision snap-action switches.
- Engineering service . . .
 - Application engineering.
 - Basic design.
 - Complete electrical and mechanical facility.
- Complete manufacturing facility . . .
 - Modern, totally air conditioned 30,000 square foot plant.
 - Punch press department equipped with automatic progressive dies.
 - Specially designed machines for efficient, reliable assembly of switches.
 - Quality control department supervision of inspection and testing throughout.
- Trained service group . . .
 - Factory trained technical representatives throughout country to provide prompt assistance with your switch design problems.
 - Over ten years experience specializing in design, manufacture and fabrication of millions of service-proven switches.

TECHNICAL TERMS DEFINED

Throughout this catalog various terms are used to describe each switch. Illustrated by a closed switch, the technical terms apply to all snap-action switches.



REST POSITION . . .

is the position the switch button (or actuator) assumes when no force is exerted against it. Rest position is dimensioned from the top of the switch button (or actuator) to the mounting hole centerline, top of switch panel or other specified reference.

PRETRAVEL . . .

is the distance of button (or actuator) movement from rest position to the point of operation. Pretravel is frequently specified as maximum.

OPERATING POINT . . .

is the position of the switch button (or actuator) at which initial switch contact transfer takes place. Operating point is dimensioned from the top of the switch button (or actuator) to mounting hole centerline, top of switch panel or other specified reference point.

OVERTRAVEL . . .

is the continued switch button (or actuator) movement possible after initial contact transfer, without bottoming or damage to the switch mechanism. Overtravel is frequently specified as a minimum.

MOVEMENT DIFFERENTIAL . . .

is the button (or actuator) movement required between operating point to reset point. This is frequently dimensioned as a maximum.

RESET POINT . . .

is the point of actuation at which the second, or return contact transfer takes place. At this point the contacts snap back to their original position. Reset point is dimensioned from top of switch button (or actuator) to mounting hole centerline, top of switch panel or other specified reference point.

RESET TRAVEL . . .

is the continued switch button (or actuator) movement back from reset point.

OPERATING FORCE . . .

is the force required to depress the switch button (or actuator) to trip (operating point). Operating force is always specified as maximum.

RELEASE FORCE . . .

is the force required to hold the switch button (or actuator) depressed at the reset point. Release force is always specified as minimum.

NOTES

UL & CSA LISTINGS

Most of the switches shown in this catalog have UL and CSA approvals. These are indicated under the operating characteristics in each section just above the ratings with a notation "Und. Lab. Inc. and CSA approved".

Underwriters Laboratory Incorporated listing:
Guide 380-W-19.19.19P File E23301

Canadian Standards Association listing:
Guide 380-W-19.19.19P File 16503

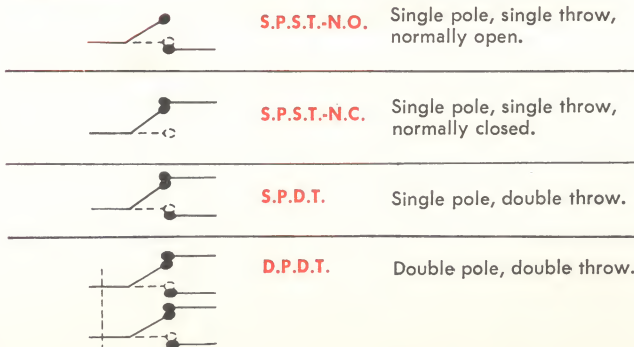
Class 6241

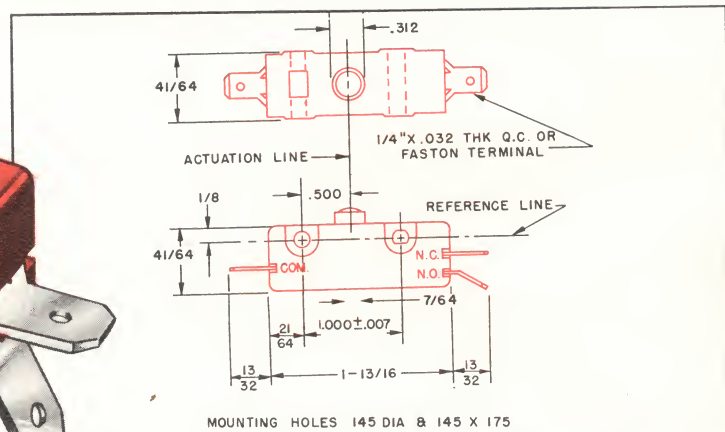
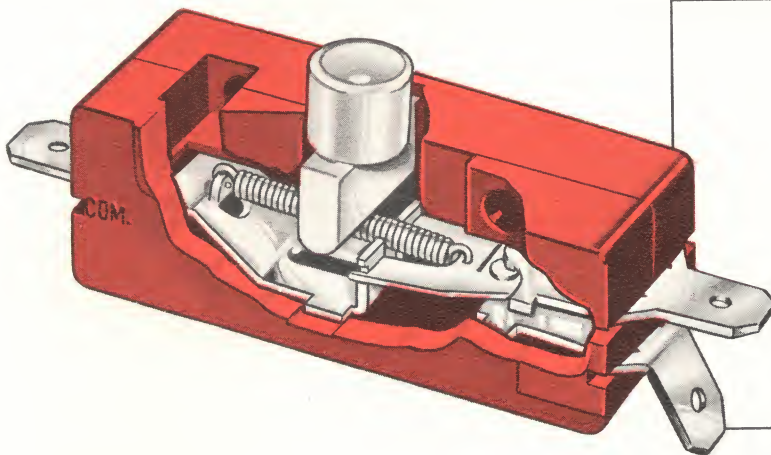
TOLERANCES

All dimensions shown carry the following tolerances unless otherwise specified:

Fractions: $\pm 1/64"$ — Decimals: $\pm .005$
Angles: $\pm 5^\circ$

CIRCUITRY



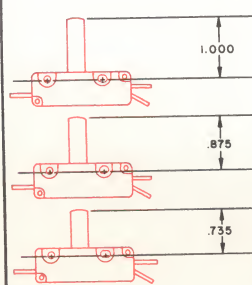


BASIC E13-00E

Features

- Large Overtravel
- Wear Resistant Nylon Button
- Integral Hinged Actuator Variations

BUTTON VARIATIONS



Length

The various button lengths shown at the left are available with no tooling charges applying. Intermediate lengths are available with a small tooling charge applying.

Color

Standard nylon colors are available with a setup charge applying on each order.

+ Operating Characteristics +

Rest*	Max. .370 in.
Pretravel	Max. .050 in.
Operating Point*	.285 ± .035
Overtravel	Min. .100 in.
Movement Differential	Max. .015 in.
Operating Force	Max. 20 oz.

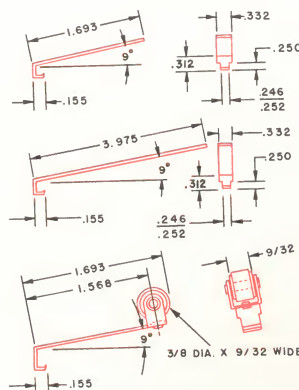
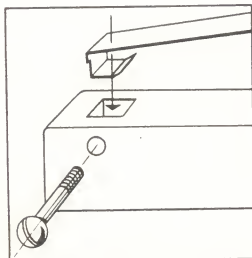
*Measured above reference line
Und. Lab. Inc. and CSA approved
RATING—15 Amp, 125-250 VAC
3/4 H.P., 125 VAC — 1 1/2 H.P., 250 VAC

Ordering Information

TERMINAL TYPES	S.P.D.T.	S.P.S.T.-N.O.	S.P.S.T.-N.C.
	E13-00E	E13-01E	E13-02E

"LOCK-IN" LEAF ACTUATOR

Secured in position by mounting screw. Shipped from factory loose for field installation.



TERMINAL VARIATIONS

	UP ↑				DOWN ↓			
Angle	0°	30°	45°	85°	0°	30°	45°	85°
Common	†	*	†	*	†	†	†	†
N.O. or N.C.	†	†	†	†	†	†	†	†

† Presently available.

* Can be provided on large volume at extra charge.

LEAF ACTUATOR ORDERING INFORMATION

Order basic switch type and specify leaf actuator part number.

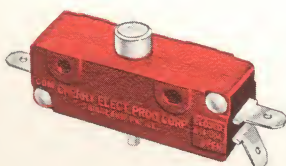
Example: E13-00E with 14-156 actuator

Example: E13-02E with A-176 actuator

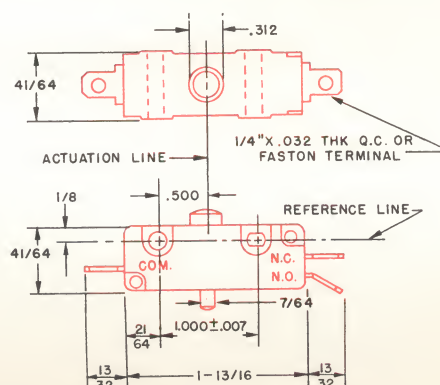
14-156 Leaf Actuator

14-157 Extended Leaf Actuator

A-176 Roller Actuator



RESET SWITCH E13-00R



MOUNTING HOLES .145 DIA & 145 X 175

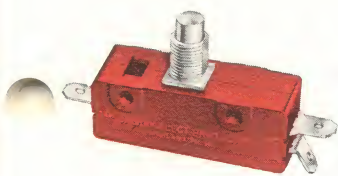
+ Operating Characteristics +

Rest*	Max. .380 in.
Operating Button Pretravel	Max. .080 in.
Operating Point*	.269 ± .030
Overtravel (either direction)	Min. .032 in.
Movement Differential	Max. 11 ozs.
Reset Button Rest	Max. .760 in.
Reset Button Pretravel	Max. .110 in.
Reset Button Operating Point	.670 ± .030

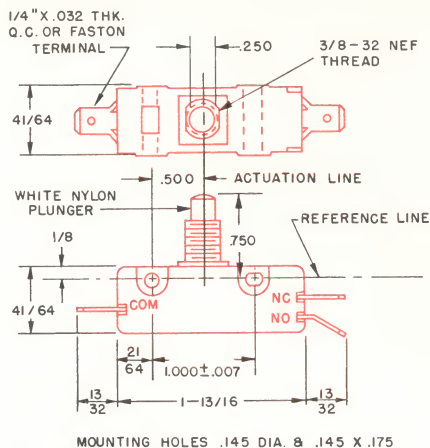
*Measured above reference line
Und. Lab. Inc. and CSA approved
RATING—15 Amps, 125-250 VAC
3/4 H.P., 125 VAC—1 1/2 H.P., 250 VAC

Ordering Information

TERMINAL TYPES	S.P.D.T.	S.P.S.T.-N.O.	S.P.S.T.-N.C.
	E13-00R	E13-01R	E13-02R



PUSH BUTTON
E13-00J



+ Operating Characteristics +

Rest*..... Max. .750 in.

Pretravel..... Max. .050 in.

Operating Point*..... .670 ± .030

Overtravel..... Min. .100 in.

Movement Differential..... Max. .015 in.

Operating Force..... Max. 20 oz.

*Measured above reference line

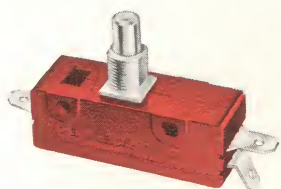
Und. Lab. Inc. and CSA approved

RATING—15 Amps, 125-250 VAC

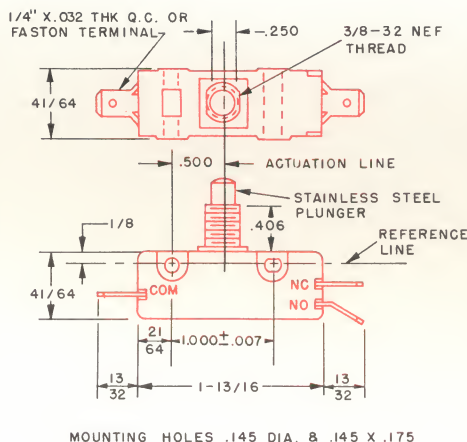
3/4 H.P., 125 VAC—1 1/2 H.P., 250 VAC

Ordering Information

TERMINAL TYPES	S.P.D.T.	S.P.S.T.-N.O.	S.P.S.T.-N.C.
E13-00J	E13-01J	E13-02J	



OVERTRAVEL PUSH BUTTON
E13-00M



+ Operating Characteristics +

Rest*..... Max. .875 in.

Pretravel..... Max. .050 in.

Operating Point*..... .812 ± .030

Overtravel..... Min. .218 in.

Movement Differential..... Max. .015 in.

Operating Force..... Max. 20 oz.

*Measured above reference line

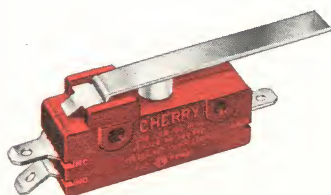
Und. Lab. Inc. and CSA approved

RATING—15 Amps, 125-250 VAC

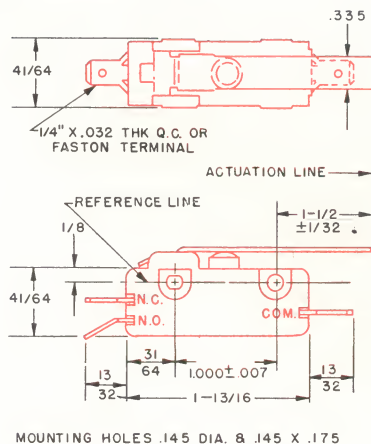
3/4 H.P., 125 VAC—1 1/2 H.P., 250 VAC

Ordering Information

TERMINAL TYPES	S.P.D.T.	S.P.S.T.-N.O.	S.P.S.T.-N.C.
E13-00M	E13-01M	E13-02M	



LEVER
E13-00H
STANDARD FORCE



+ Operating Characteristics +

Rest*..... Max. .600 in.

Pretravel..... Max. .250 in.

Operating Point*..... .312 ± .062

Overtravel..... Min. .187 in.

Movement Differential..... Max. .093 in.

Operating Force..... Max. 3 1/2 ozs.

*Measured above reference line

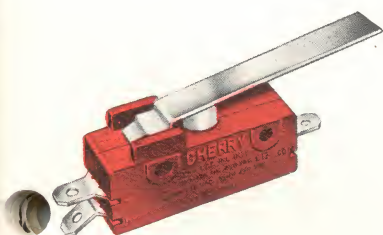
Und. Lab. Inc. and CSA approved

RATING—15 Amps, 125-250 VAC

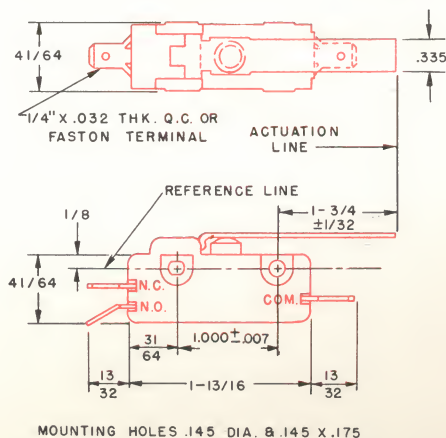
3/4 H.P., 125 VAC—1 1/2 H.P., 250 VAC

Ordering Information

TERMINAL TYPES	S.P.D.T.	S.P.S.T.-N.O.	S.P.S.T.-N.C.
E13-00H	E13-01H	E13-02H	



LEVER
E13-50H
LIGHT FORCE



+ Operating Characteristics +

Rest*..... Max. .735 in.

Pretravel..... Max. .343 in.

Operating Point*..... .281 ± .062

Overtravel..... Min. .187 in.

Movement Differential..... Max. .140 in.

Operating Force..... Max. 2 1/4 ozs.

*Measured above reference line

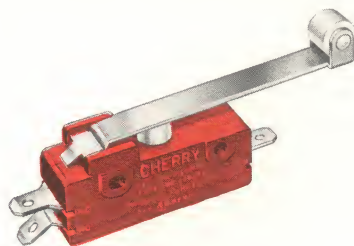
Und. Lab. Inc. and CSA approved

RATING—15 Amps, 125-250 VAC

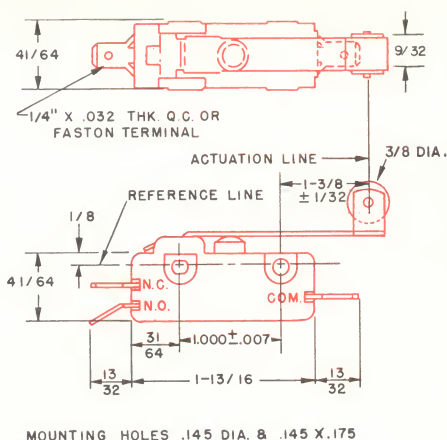
3/4 H.P., 125 VAC—1 1/2 H.P., 250 VAC

Ordering Information

TERMINAL TYPES	S.P.D.T.	S.P.S.T.-N.O.	S.P.S.T.-N.C.
E13-50H	E13-51H	E13-52H	



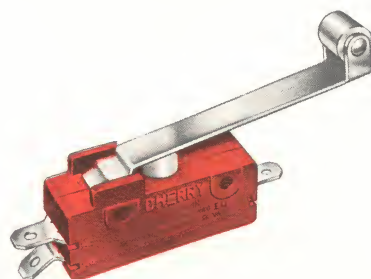
ROLLER
E13-00K
STANDARD FORCE



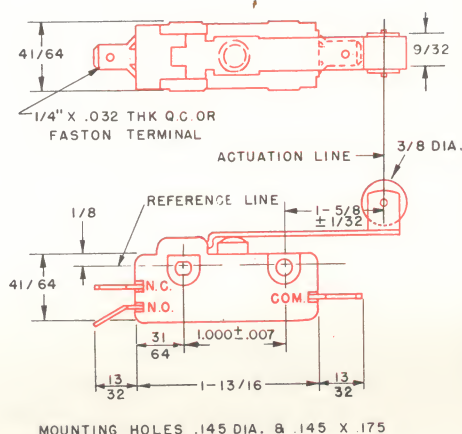
Operating Characteristics
Rest* Max. 1.010 in.
Pretravel Max. .250 in.
Operating Point*718 ± .062
Overtravel Min. .187 in.
Movement Differential Max. .093 in.
Operating Force Max. 3 1/2 ozs.
*Measured above reference line
Und. Lab. Inc. and CSA approved
RATING—15 Amps, 125-250 VAC
3/4 H.P., 125 VAC—1 1/2 H.P., 250 VAC

Ordering Information

TERMINAL TYPES	S.P.D.T.	S.P.S.T.-N.O.	S.P.S.T.-N.C.
	E13-00K	E13-01K	E13-02K



ROLLER
E13-50K
LIGHT FORCE



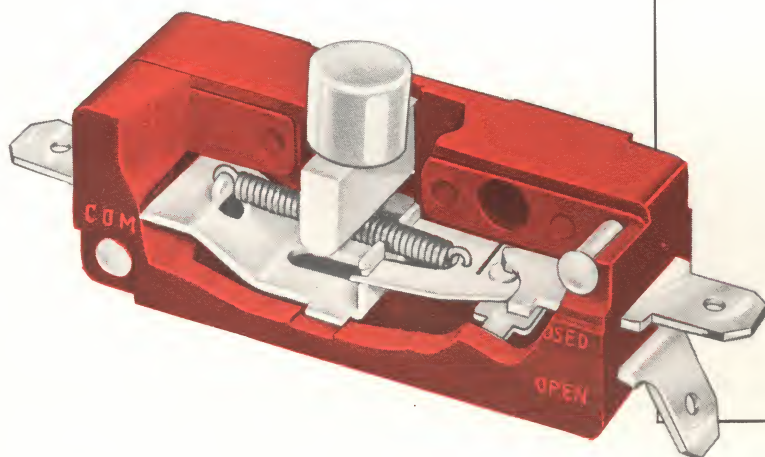
Operating Characteristics
Rest* Max. 1.145 in.
Pretravel Max. .343 in.
Operating Point*687 ± .062
Overtravel Min. .187 in.
Movement Differential Max. .140 in.
Operating Force Max. 2 1/4 ozs.
*Measured above reference line
Und. Lab. Inc. and CSA approved
RATING—15 Amps, 125-250 VAC
3/4 H.P., 125 VAC—1 1/2 H.P., 250 VAC

Ordering Information

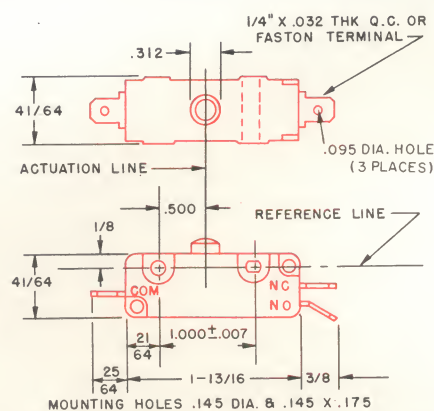
TERMINAL TYPES	S.P.D.T.	S.P.S.T.-N.O.	S.P.S.T.-N.C.
	E13-50K	E13-51K	E13-52K

E14 SERIES

HIGH CAPACITY General Purpose Switch



BASIC
E14-00A



Operating Characteristics
Rest* Max. .365 in.
Pretravel Max. .100 in.
Operating Point*248 ± .030
Overtravel Min. .050 in.
Movement Differential Max. .015 in.
Operating Force Max. 20 ozs.
*Measured above reference line
Und. Lab. Inc. and CSA approved
RATING—25 Amp, 125-250 VAC
1 H.P., 125 VAC—2 H.P., 250 VAC

Ordering Information

TERMINAL TYPES	S.P.D.T.	S.P.S.T.-N.O.	S.P.S.T.-N.C.
	COMBINATION QC & SOLDER E14-00A	E14-01A	E14-02A

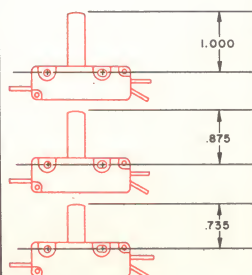
BUTTON VARIATIONS

Length

The various button lengths shown at the left are available with no tooling charges applying. Intermediate lengths are available with a small tooling charge applying.

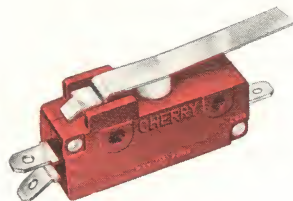
Color

Standard nylon colors are available with a setup charge applying on each order.

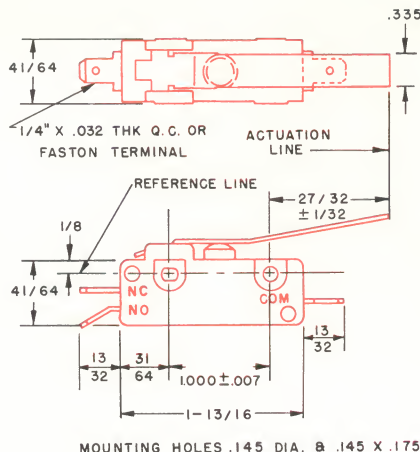


Features

- High Electrical Capacity
- Standard and Light Force Versions
- Large Overtravel



LEVER
E14-00H
STANDARD FORCE



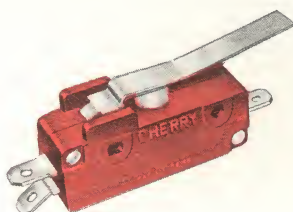
Operating Characteristics

Rest*	Max. .824 in.
Pretravel	Max. .312 in.
Operating Point*	.468 ± .062
Overtravel	Min. .150 in.
Movement Differential	Max. .050 in.
Operating Force	Max. 7 ozs.

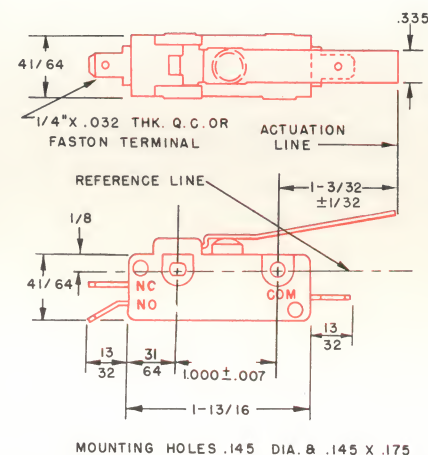
*Measured above reference line
Und. Lab. Inc. and CSA approved
RATING—25 Amp, 125-250 VAC
1 H.P., 125 VAC—2 H.P., 250 VAC

Ordering Information

TERMINAL TYPES	S.P.D.T.	S.P.S.T.-N.O.	S.P.S.T.-N.C.
COMBINATION QC & SOLDER	E14-00H	E14-01H	E14-02H



LEVER
E14-50H
LIGHT FORCE



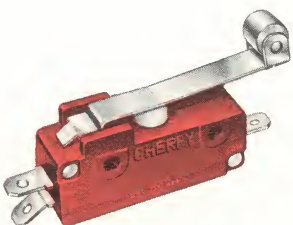
Operating Characteristics

Rest*	Max. 1.024 in.
Pretravel	Max. .525 in.
Operating Point*	.437 ± .062
Overtravel	Min. .234 in.
Movement Differential	Max. .080 in.
Operating Force	Max. 5 ozs.

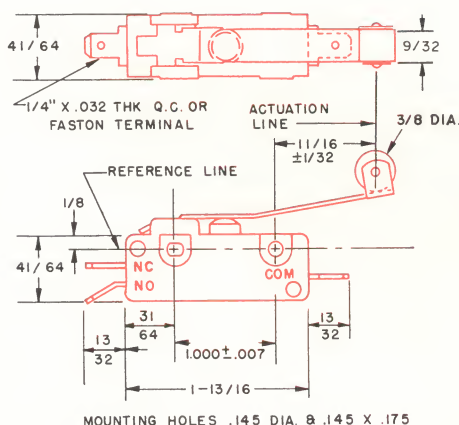
*Measured above reference line
Und. Lab. Inc. and CSA approved
RATING—25 Amp, 125-250 VAC
1 H.P., 125 VAC—2 H.P., 250 VAC

Ordering Information

TERMINAL TYPES	S.P.D.T.	S.P.S.T.-N.O.	S.P.S.T.-N.C.
COMBINATION QC & SOLDER	E14-50H	E14-51H	E14-52H



ROLLER LEVER
E14-00K
STANDARD FORCE



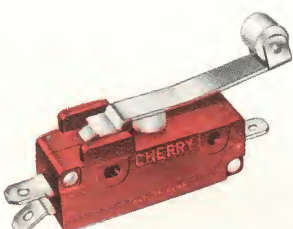
Operating Characteristics

Rest*	Max. 1.213 in.
Pretravel	Max. .291 in.
Operating Point*	.860 ± .062
Overtravel	Min. .130 in.
Movement Differential	Max. .045 in.
Operating Force	Max. 7.5 ozs.

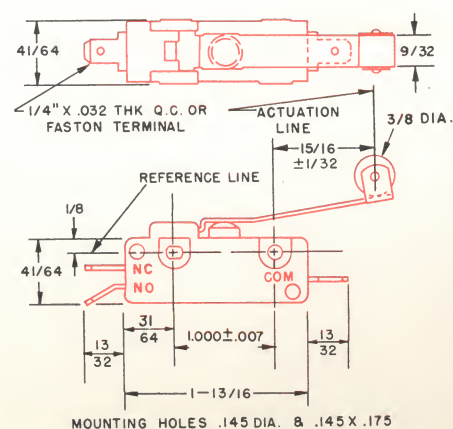
*Measured above reference line
Und. Lab. Inc. and CSA approved
RATING—25 Amp, 125-250 VAC
1 H.P., 125 VAC—2 H.P., 250 VAC

Ordering Information

TERMINAL TYPES	S.P.D.T.	S.P.S.T.-N.O.	S.P.S.T.-N.C.
COMBINATION QC & SOLDER	E14-00K	E14-01K	E14-02K



ROLLER LEVER
E14-50K
LIGHT FORCE



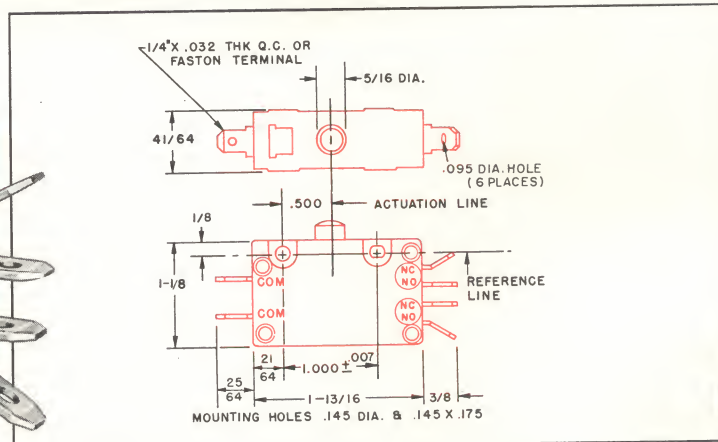
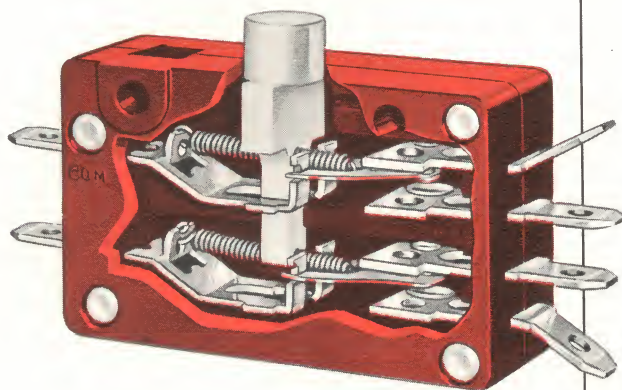
Operating Characteristics

Rest*	Max. 1.373 in.
Pretravel	Max. .483 in.
Operating Point*	.828 ± .062
Overtravel	Min. .218 in.
Movement Differential	Max. .073 in.
Operating Force	Max. 4.5 ozs.

*Measured above reference line
Und. Lab. Inc. and CSA approved
RATING—25 Amp, 125-250 VAC
1 H.P., 125 VAC—2 H.P., 250 VAC

Ordering Information

TERMINAL TYPES	S.P.D.T.	S.P.S.T.-N.O.	S.P.S.T.-N.C.
COMBINATION QC & SOLDER	E14-50K	E14-51K	E14-52K

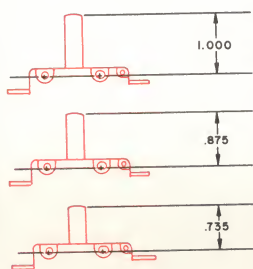


BASIC
E19-00A
DOUBLE POLE

Features

- Double Pole Electrical Control
- Wide Range of Actuator Variations
- Large Overtravel

VARIATIONS



Button Variation — Button length can be varied to meet specific application requirements up to one inch from centerline of mounting holes. Nominal tooling charges will apply.

+ Operating Characteristics +	
Rest*	Max. .380 in.
Pretravel	Max. .050 in.
Operating Point*	.285 ± .030
Overtravel	Min. .080 in.
Movement Differential	Max. .015 in.
Operating Force	Max. 30 ozs.

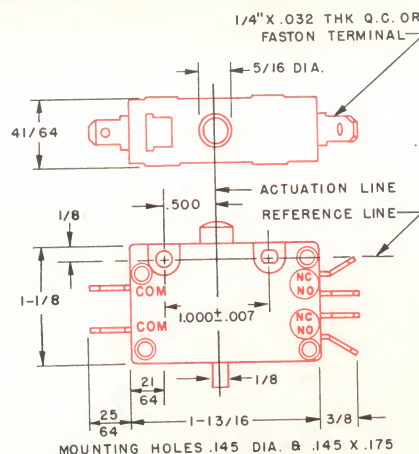
*Measured above reference line
Und. Lab. Inc. and CSA approved
RATING—15 Amps, 125-250 VAC
3/4 H.P., 125 VAC—1 1/2 H.P., 250 VAC

Ordering Information

TERMINAL TYPES	D.P.D.T.	D.P.S.T.-N.O.	D.P.S.T.-N.C.
	E19-00A	E19-01A	E19-02A



RESET
E19-00R
DOUBLE POLE

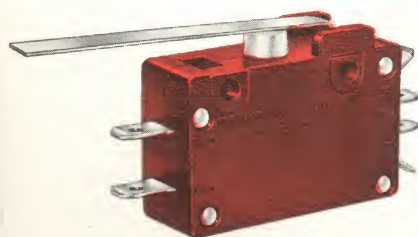


+ Operating Characteristics +	
Rest*	Max. .380 in.
Operating Button Pretravel	Max. .080 in.
Operating Point*	.269 ± .030
Overtravel (either direction)	Min. .032 in.
Movement Differential	Max. 22 ozs.
Reset Button Rest	Max. .1255 in.
Reset Button Pretravel	Max. .110 in.
Reset Button Operating Point	1.156 ± .030

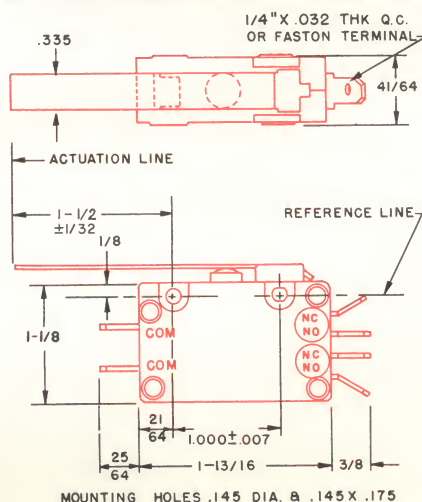
*Measured above reference line
Und. Lab. Inc. and CSA approved
RATING—15 Amps, 125-250 VAC
3/4 H.P., 125 VAC—1 1/2 H.P., 250 VAC

Ordering Information

TERMINAL TYPES	D.P.D.T.	D.P.S.T.-N.O.	D.P.S.T.-N.C.
	E19-00R	E19-01R	E19-02R



LEVER
E19-00H
STANDARD FORCE

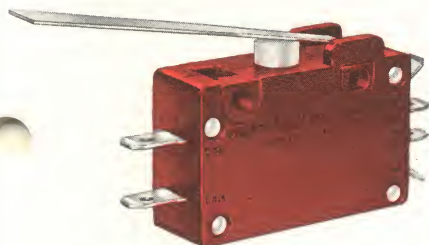


+ Operating Characteristics +	
Rest*	Max. .624 in.
Pretravel	Max. .250 in.
Operating Point*	.312 ± .062
Overtravel	Min. .187 in.
Movement Differential (each pole)	Max. .093 in.
Operating Force	Max. 7 ozs.

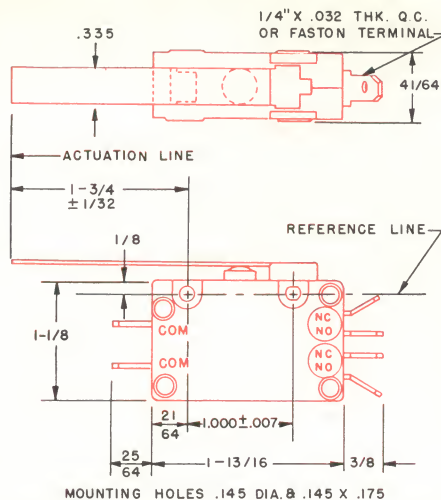
*Measured above reference line
Und. Lab. Inc. and CSA approved
RATING—15 Amps, 125-250 VAC
3/4 H.P., 125 VAC—1 1/2 H.P., 250 VAC

Ordering Information

TERMINAL TYPES	D.P.D.T.	D.P.S.T.-N.O.	D.P.S.T.-N.C.
	E19-00H	E19-01H	E19-02H



LEVER
E19-50H
LIGHT FORCE



Operating Characteristics

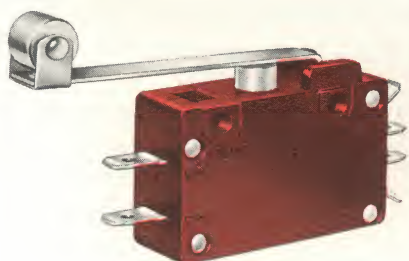
Rest*..... Max. .735 in.
 Pretravel..... Max. .250 in.
 Operating Point*..... .281 ± .062
 Overtravel..... Min. .187 in.
 Movement Differential (each pole)..... Max. .140 in.
 Operating Force..... Max. 4 1/2 ozs.

*Measured above reference line
 Und. Lab. Inc. and CSA approved
 RATING—15 Amps, 125-250 VAC
 3/4 H.P., 125 VAC—1 1/2 H.P., 250 VAC

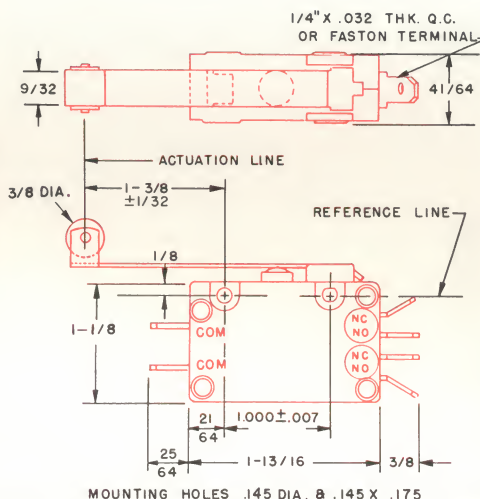
Ordering Information



TERMINAL TYPES	D.P.D.T.	D.P.S.T.-N.O.	D.P.S.T.-N.C.
	E19-50H	E19-51H	E19-52H



ROLLER
E19-00K
STANDARD FORCE



Operating Characteristics

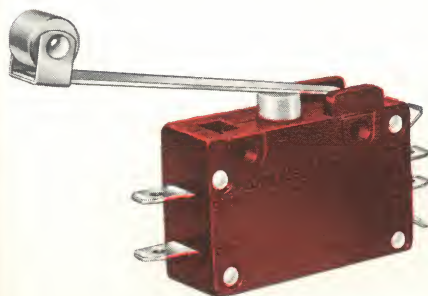
Rest*..... Max. 1.030 in.
 Pretravel..... Max. .250 in.
 Operating Point*..... .718 ± .062
 Overtravel..... Min. .187 in.
 Movement Differential (each pole)..... Max. .093
 Operating Force..... Max. 7 ozs.

*Measured above reference line
 Und. Lab. Inc. and CSA approved
 RATING—15 Amps, 125-250 VAC
 3/4 H.P., 125 VAC—1 1/2 H.P., 250 VAC

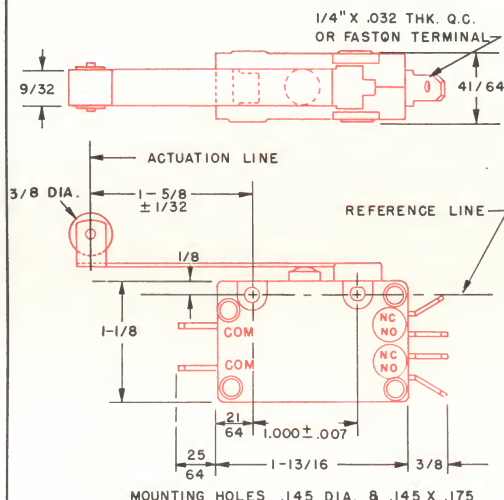
Ordering Information



TERMINAL TYPES	D.P.D.T.	D.P.S.T.-N.O.	D.P.S.T.-N.C.
	E19-00K	E19-01K	E19-02K



ROLLER
E19-50K
LIGHT FORCE



Operating Characteristics

Rest*..... Max. 1.145 in.
 Pretravel..... Max. .312 in.
 Operating Point*..... .687 ± .062
 Overtravel..... Min. .187 in.
 Movement Differential (each pole)..... Max. .140 in.
 Operating Force..... Max. 4 1/2 ozs.

*Measured above reference line
 Und. Lab. Inc. and CSA approved
 RATING—15 Amps, 125-250 VAC
 3/4 H.P., 125 VAC—1 1/2 H.P., 250 VAC

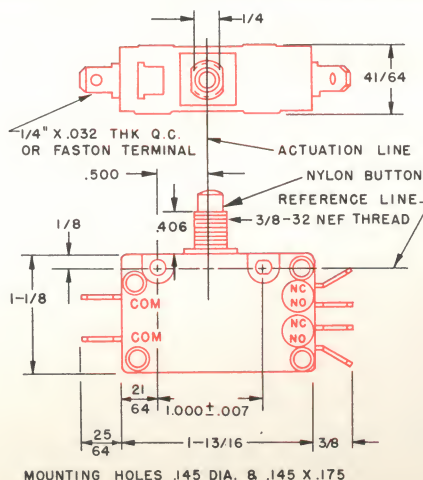
Ordering Information



TERMINAL TYPES	D.P.D.T.	D.P.S.T.-N.O.	D.P.S.T.-N.C.
	E19-50K	E19-51K	E19-52K



PUSH BUTTON
E19-00J



Operating Characteristics

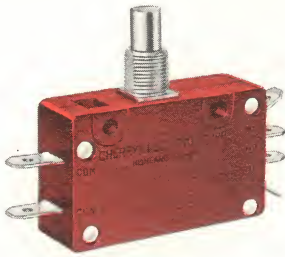
Rest*..... Max. .750 in.
 Pretravel..... Max. .050 in.
 Operating Point*..... .670 ± .030
 Overtravel..... Min. .080 in.
 Movement Differential (each pole)..... Max. .015 in.
 Operating Force..... Max. 30 ozs.

*Measured above reference line
 Und. Lab. Inc. and CSA approved
 RATING—15 Amps, 125-250 VAC
 3/4 H.P., 125 VAC—1 1/2 H.P., 250 VAC

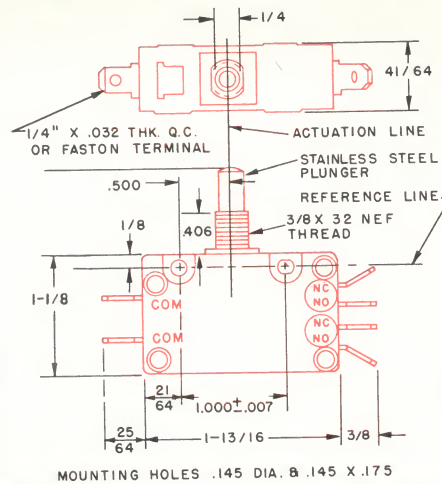
Ordering Information



TERMINAL TYPES	D.P.D.T.	D.P.S.T.-N.O.	D.P.S.T.-N.C.
	E19-00J	E19-01J	E19-02J



OVERTRAVEL PUSH BUTTON
E19-00M



Operating Characteristics

Rest*	Max. .875 in.
Pretravel	Max. .050 in.
Operating Point*	.812 ± .030
Overtravel	Min. .218 in.
Movement Differential (each pole)	Max. .015 in.
Operating Force	Max. 30 ozs.

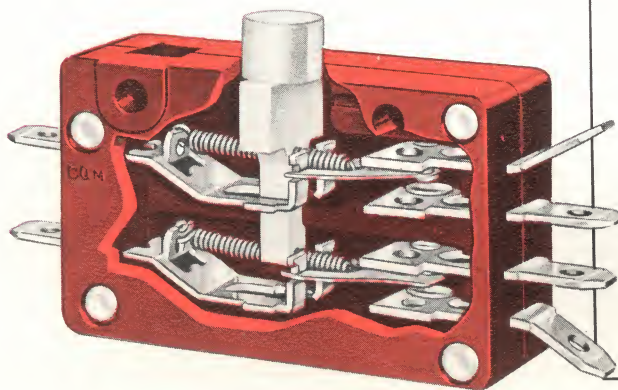
*Measured above reference line
Und. Lab. Inc. and CSA approved
RATING—15 Amps, 125-250 VAC
3/4 H.P., 125 VAC—1 1/2 H.P., 250 VAC

Ordering Information

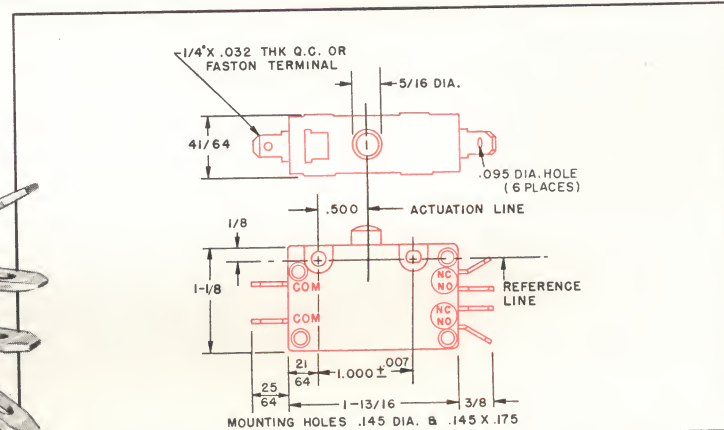
TERMINAL TYPES	D.P.D.T.	D.P.S.T.-N.O.	D.P.S.T.-N.C.
	E19-00M	E19-01M	E19-02M

E20 SERIES

HIGH CAPACITY DOUBLE POLE Switch



BASIC
E20-00A
DOUBLE POLE



Operating Characteristics

Rest*	Max. .380 in.
Pretravel	Max. .100 in.
Operating Point*	.248 ± .030
Overtravel	Min. .050 in.
Movement Differential (each pole)	Max. .015 in.
Operating Force	Max. 45 ozs.

Und. Lab. Inc. and CSA approved
RATING—20 Amps, 125-250 VAC
1 H.P., 125 VAC—2 H.P., 250 VAC

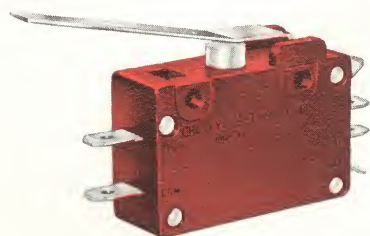
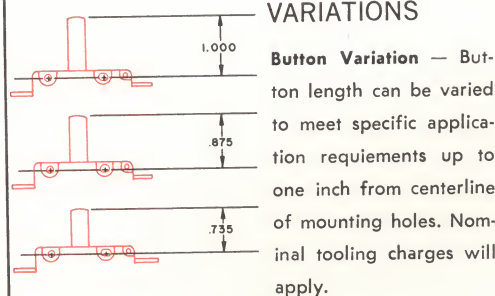
Ordering Information

TERMINAL TYPES	D.P.D.T.	D.P.S.T.-N.O.	D.P.S.T.-N.C.
	E20-00A	E20-01A	E20-02A

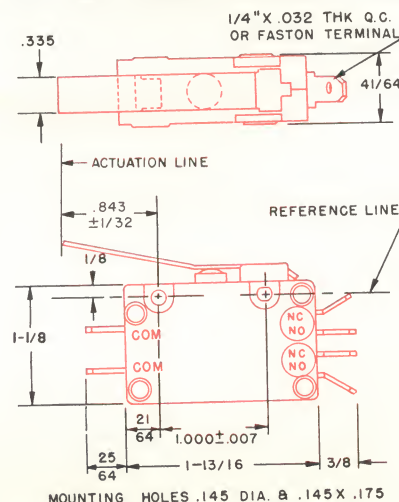
Features

- High Electrical Capacity
- Double Pole Control
- Integral Hinged Actuators

VARIATIONS



LEVER
E20-00H
STANDARD FORCE



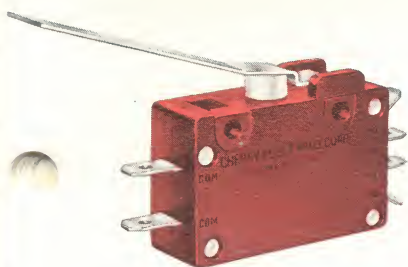
Operating Characteristics

Rest*	Max. .842 in.
Pretravel	Max. .312 in.
Operating Point*	.468 ± .062
Overtravel	Min. .156 in.
Movement Differential (each pole)	Max. .050 in.
Operating Force	Max. 15 ozs.

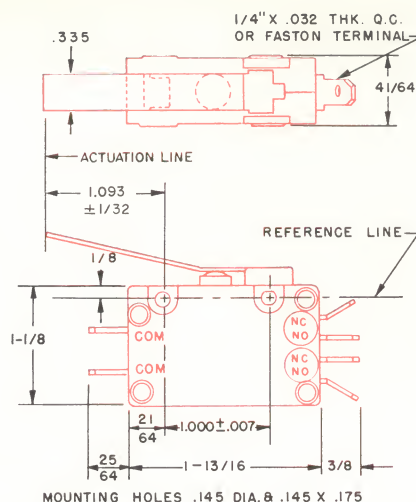
*Measured above reference line
Und. Lab. Inc. and CSA approved
RATING—20 Amps, 125-250 VAC
1 H.P., 125 VAC—2 H.P., 250 VAC

Ordering Information

TERMINAL TYPES	D.P.D.T.	D.P.S.T.-N.O.	D.P.S.T.-N.C.
	E20-00H	E20-01H	E20-02H



LEVER
E20-50H
LIGHT FORCE

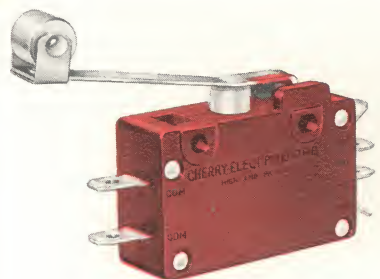


Operating Characteristics
Rest* Max. 1.024 in.
Pretravel Max. .525 in.
Operating Point*437 ± .062
Overtravel Min. .156 in.
Movement Differential (each pole). Max. .080 in.
Operating Force Max. 8 1/2 ozs.
*Measured above reference line
Und. Lab. Inc. and CSA approved
RATING—20 Amps, 125-250 VAC
1 H.P., 125 VAC—2 H.P., 250 VAC

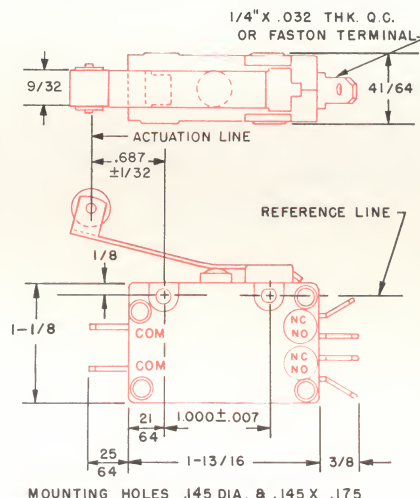
Ordering Information



TERMINAL TYPES	D.P.D.T.	D.P.S.T.-N.O.	D.P.S.T.-N.C.
	E20-50H	E20-51H	E20-52H



ROLLER
E20-00K
STANDARD FORCE

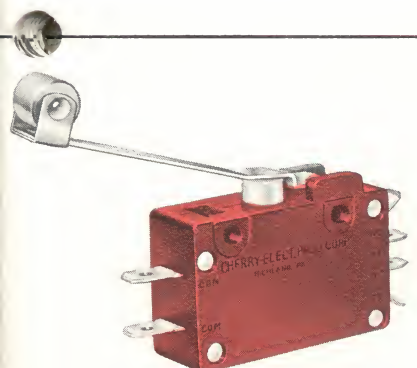


Operating Characteristics
Rest* Max. 1.213 in.
Pretravel Max. .291 in.
Operating Point*860 ± .062
Overtravel Min. .146 in.
Movement Differential (each pole). Max. .045 in.
Operating Force Max. 15 ozs.
*Measured above reference line
Und. Lab. Inc. and CSA approved
RATING—20 Amps, 125-250 VAC
1 H.P., 125 VAC—2 H.P., 250 VAC

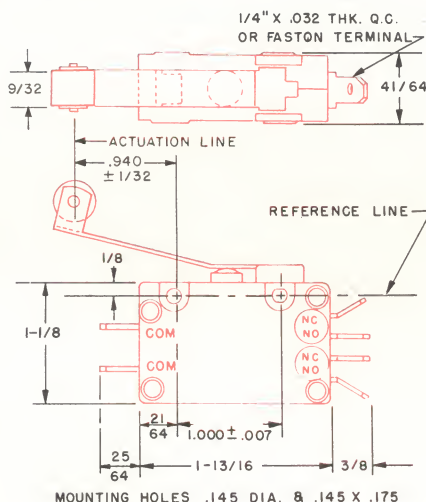
Ordering Information



TERMINAL TYPES	D.P.D.T.	D.P.S.T.-N.O.	D.P.S.T.-N.C.
	E20-00K	E20-01K	E20-02K



ROLLER
E20-50K
LIGHT FORCE

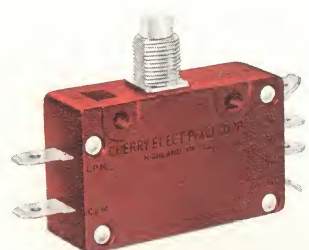


Operating Characteristics
Rest* Max. 1.373 in.
Pretravel Max. .483 in.
Operating Point*828 ± .062
Overtravel Min. .146 in.
Movement Differential (each pole). Max. .073 in.
Operating Force Max. 9 ozs.
*Measured above reference line
Und. Lab. Inc. and CSA approved
RATING—20 Amps, 125-250 VAC
1 H.P., 125 VAC—2 H.P., 250 VAC

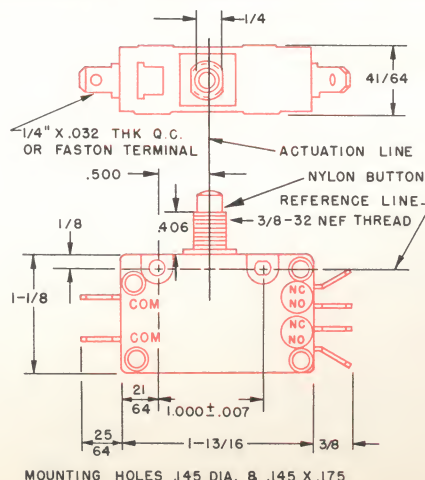
Ordering Information



TERMINAL TYPES	D.P.D.T.	D.P.S.T.-N.O.	D.P.S.T.-N.C.
	E20-50K	E20-51K	E20-52K



PUSH BUTTON
E20-00J

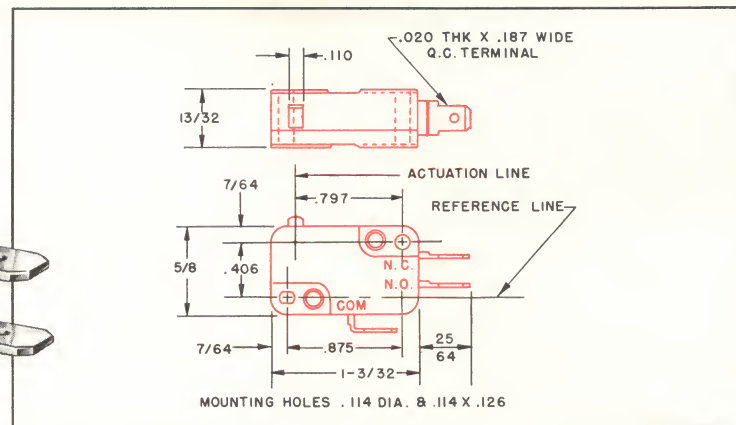
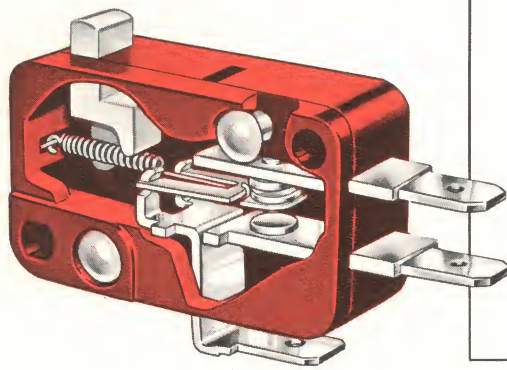


Operating Characteristics
Rest* Max. .750 in.
Pretravel Max. .100 in.
Operating Point*630 ± .030
Overtravel Min. .050 in.
Movement Differential (each pole). Max. .015 in.
Operating Force Max. 45 ozs.
*Measured above reference line
Und. Lab. Inc. and CSA approved
RATING—20 Amps, 125-250 VAC
1 H.P., 125 VAC—2 H.P., 250 VAC

Ordering Information



TERMINAL TYPES	D.P.D.T.	D.P.S.T.-N.O.	D.P.S.T.-N.C.
	E20-00J	E20-01J	E20-02J

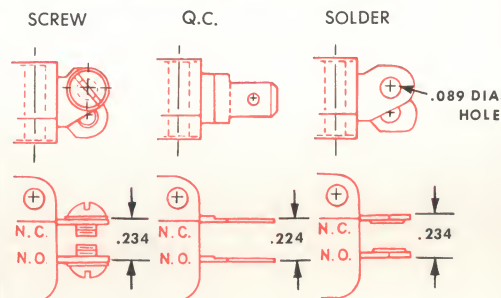


BASIC
E23-00A

Features

- Light Force
- Long Life Coil Spring
- Integral Hinged Actuators

TERMINAL VARIATIONS



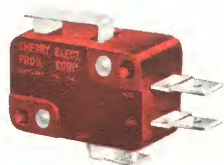
Operating Characteristics

Rest*	Max. .635 in.
Pretravel	Max. .047 in.
Operating Point*	.578 ± .020
Overtravel	Min. .050 in.
Movement Differential	Max. .016 in.
Operating Force	Max. 6 ozs.

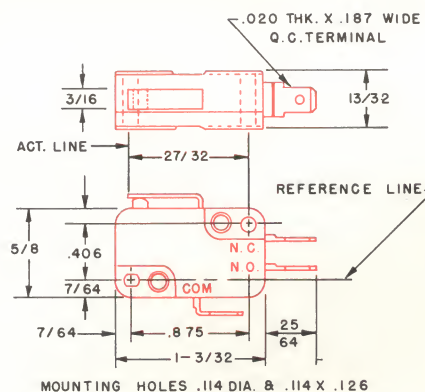
*Measured above reference line
Und. Lab. Inc. and CSA approved
RATING—5 Amp, 1/4 H.P., 125-250 VAC

Ordering Information

TERMINAL TYPES	S.P.D.T	S.P.S.T.-N.O.	S.P.S.T.-N.C.
Q.C.	E23-00A	E23-01A	E23-02A
SCREW	E23-10A	E23-11A	E23-12A
SOLDER	E23-20A	E23-21A	E23-22A



LEVER
E23-00H



Operating Characteristics

Rest*	Max. .660 in.
Pretravel	Max. .062 in.
Operating Point*	.600 ± .020
Overtravel	Min. .050 in.
Movement Differential	Max. .016 in.
Operating Force	Max. 6 ozs.

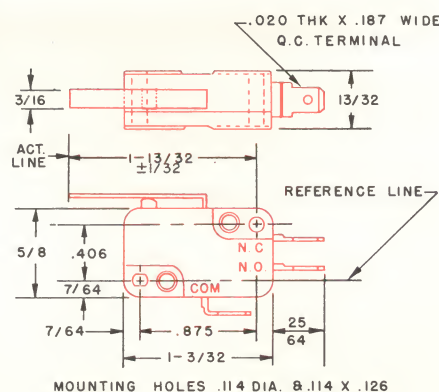
*Measured above reference line
Und. Lab. Inc. and CSA approved
RATING—5 Amp, 1/4 H.P., 125-250 VAC

Ordering Information

TERMINAL TYPES	S.P.D.T	S.P.S.T.-N.O.	S.P.S.T.-N.C.
Q.C.	E23-00H	E23-01H	E23-02H
SCREW	E23-10H	E23-11H	E23-12H
SOLDER	E23-20H	E23-21H	E23-22H



EXTENDED LEVER
E23-50H



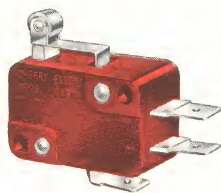
Operating Characteristics

Rest*	Max. .775 in.
Pretravel	Max. .187 in.
Operating Point*	.600 ± .045
Overtravel	Min. .062 in.
Movement Differential	Max. .078 in.
Operating Force	Max. 3 ozs.

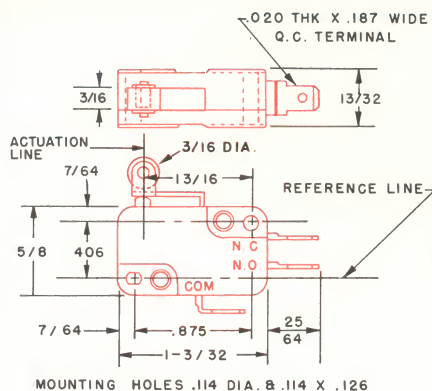
*Measured above reference line
Und. Lab. Inc. and CSA approved
RATING—5 Amp, 1/4 H.P., 125-250 VAC

Ordering Information

TERMINAL TYPES	S.P.D.T	S.P.S.T.-N.O.	S.P.S.T.-N.C.
Q.C.	E23-50H	E23-51H	E23-52H
SCREW	E23-60H	E23-61H	E23-62H
SOLDER	E23-70H	E23-71H	E23-72H



ROLLER
E23-00K



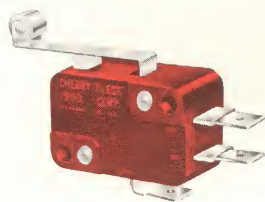
Operating Characteristics

Rest*	Max. .860 in.
Pretravel	Max. .062 in.
Operating Point*	.806 ± .045
Overtravel	Min. .050 in.
Movement Differential	Max. .016 in.
Operating Force	Max. 6 ozs.

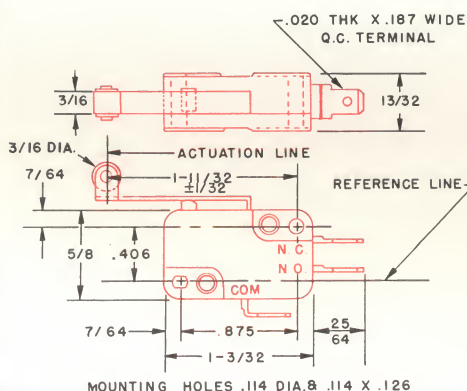
*Measured above reference line
Und. Lab. Inc. and CSA approved
RATING—5 Amp, 1/4 H.P., 125-250 VAC

Ordering Information

TERMINAL TYPES	S.P.D.T	S.P.S.T.-N.O.	S.P.S.T.-N.C.
Q.C.	E23-00K	E23-01K	E23-02K
SCREW	E23-10K	E23-11K	E23-12K
SOLDER	E23-20K	E23-21K	E23-22K



EXTENDED ROLLER
E23-50K



Operating Characteristics

Rest*	Max. .975 in.
Pretravel	Max. .187 in.
Operating Point*	.806 ± .045
Overtravel	Min. .062 in.
Movement Differential	Max. .078 in.
Operating Force	Max. 3 ozs.

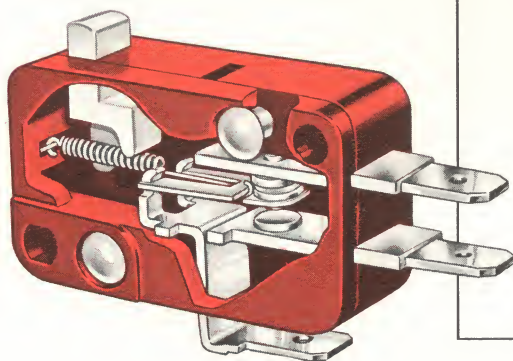
*Measured above reference line
Und. Lab. Inc. and CSA approved
RATING—5 Amp, 1/4 H.P., 125-250 VAC

Ordering Information

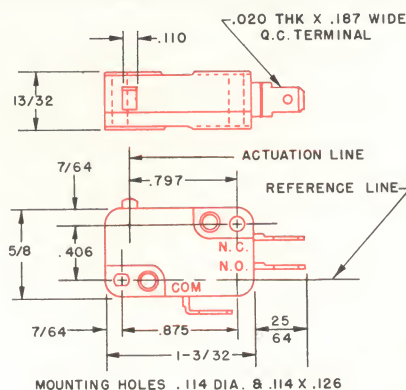
TERMINAL TYPES	S.P.D.T	S.P.S.T.-N.O.	S.P.S.T.-N.C.
Q.C.	E23-50K	E23-51K	E23-52K
SCREW	E23-60K	E23-61K	E23-62K
SOLDER	E23-70K	E23-71K	E23-72K

E33 SERIES

STANDARD FORCE Miniature Switch



BASIC
E33-00A



Operating Characteristics

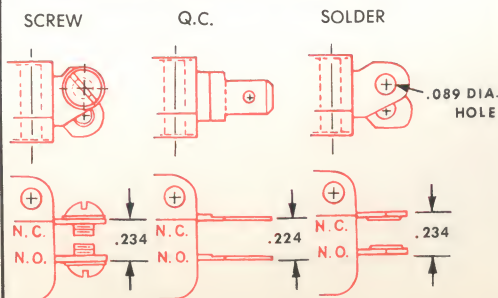
Rest*	Max. .635 in.
Pretravel	Max. .047 in.
Operating Point*	.578 ± .020
Overtravel	Min. .050 in.
Movement Differential	Max. .016 in.
Operating Force	Max. 14 ozs.

*Measured above reference line
Und. Lab. Inc. and CSA approved
RATING—10 Amps, 1/2 H.P., 125-250 VAC

Ordering Information

TERMINAL TYPES	S.P.D.T	S.P.S.T.-N.O.	S.P.S.T.-N.C.
Q.C.	E33-00A	E33-01A	E33-02A
SCREW	E33-10A	E33-11A	E33-12A
SOLDER	E33-20A	E33-21A	E33-22A

TERMINAL VARIATIONS

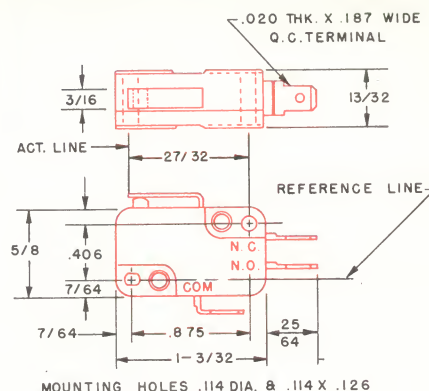


Features

- Compact Size
- Coil Spring Mechanism
- Integral Hinged Actuators



LEVER
E33-00H



Operating Characteristics

Rest*	Max. .660 in.
Pretravel	Max. .062 in.
Operating Point*	.600 ± .020
Overtravel	Min. .050 in.
Movement Differential	Max. .016 in.
Operating Force	Max. 14 ozs.

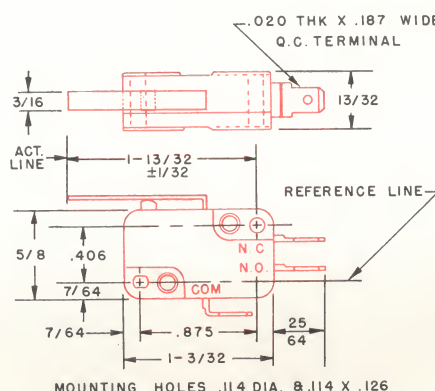
*Measured above reference line
Und. Lab. Inc. and CSA approved
RATING—10 Amps, 1/2 H.P., 125-250 VAC

Ordering Information

TERMINAL TYPES	S.P.D.T	S.P.S.T.-N.O.	S.P.S.T.-N.C.
Q.C.	E33-00H	E33-01H	E33-02H
SCREW	E33-10H	E33-11H	E33-12H
SOLDER	E33-20H	E33-21H	E33-22H



EXTENDED LEVER
E33-50H



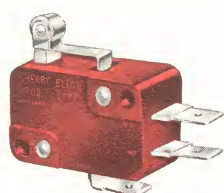
Operating Characteristics

Rest*	Max. .775 in.
Pretravel	Max. .187 in.
Operating Point*	.600 ± .045
Overtravel	Min. .062 in.
Movement Differential	Max. .078 in.
Operating Force	Max. 8 ozs.

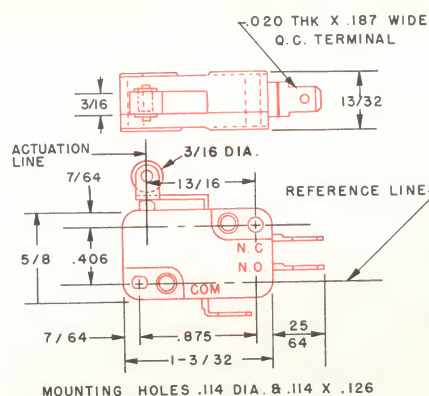
*Measured above reference line
Und. Lab. Inc. and CSA approved
RATING—10 Amps, 1/2 H.P., 125-250 VAC

Ordering Information

TERMINAL TYPES	S.P.D.T	S.P.S.T.-N.O.	S.P.S.T.-N.C.
Q.C.	E33-50H	E33-51H	E33-52H
SCREW	E33-60H	E33-61H	E33-62H
SOLDER	E33-70H	E33-71H	E33-72H



ROLLER
E33-00K



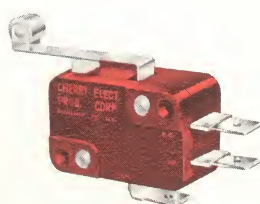
Operating Characteristics

Rest*	Max. .860 in.
Pretravel	Max. .062 in.
Operating Point*	.806 ± .045
Overtravel	Min. .050 in.
Movement Differential	Max. .016 in.
Operating Force	Max. 14 ozs.

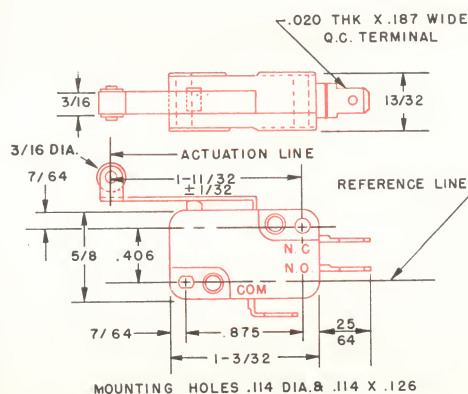
*Measured above reference line
Und. Lab. Inc. and CSA approved
RATING—10 Amps, 1/2 H.P., 125-250 VAC

Ordering Information

TERMINAL TYPES	S.P.D.T	S.P.S.T.-N.O.	S.P.S.T.-N.C.
Q.C.	E33-00K	E33-01K	E33-02K
SCREW	E33-10K	E33-11K	E33-12K
SOLDER	E33-20K	E33-21K	E33-22K



EXTENDED ROLLER
E33-50K



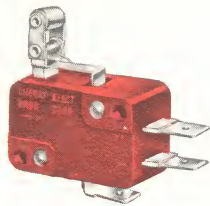
Operating Characteristics

Rest*	Max. .975 in.
Pretravel	Max. .187 in.
Operating Point*	.806 ± .045
Overtravel	Min. .062 in.
Movement Differential	Max. .078 in.
Operating Force	Max. 8 ozs.

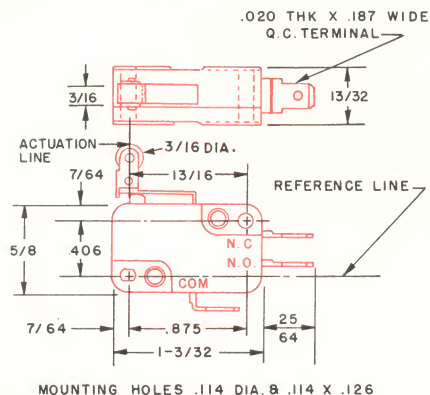
*Measured above reference line
Und. Lab. Inc. and CSA approved
RATING—10 Amps, 1/2 H.P., 125-250 VAC

Ordering Information

TERMINAL TYPES	S.P.D.T	S.P.S.T.-N.O.	S.P.S.T.-N.C.
Q.C.	E33-50K	E33-51K	E33-52K
SCREW	E33-60K	E33-61K	E33-62K
SOLDER	E33-70K	E33-71K	E33-72K



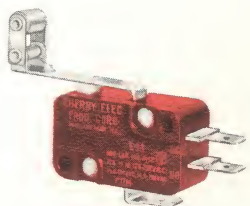
ROLLER
E33-00P
ONE WAY ACTION



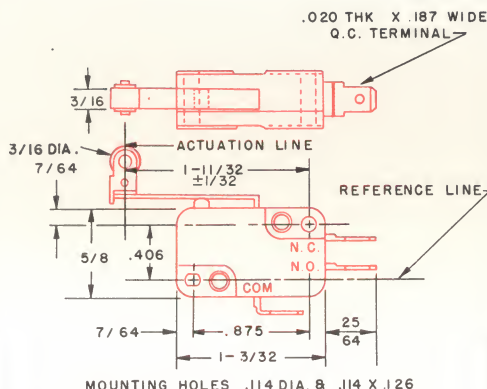
Operating Characteristics
 Rest*..... Max. 1.156 in.
 Pretravel..... Max. .062 in.
 Operating Point*..... 1.045 ± .045
 Overtravel..... Min. .062 in.
 Movement Differential..... Max. .016 in.
 Operating Force..... Max. 15 ozs.
 *Measured above reference line
 Und. Lab. Inc. and CSA approved
 RATING—10 Amps, 1/2 H.P., 125-250 VAC

Ordering Information

TERMINAL TYPES	S.P.D.T	S.P.S.T.-N.O.	S.P.S.T.-N.C.
Q.C.	E33-00P	E33-01P	E33-02P
SCREW	E33-10P	E33-11P	E33-12P
SOLDER	E33-20P	E33-21P	E33-22P



EXTENDED ROLLER
E33-50P
ONE WAY ACTION



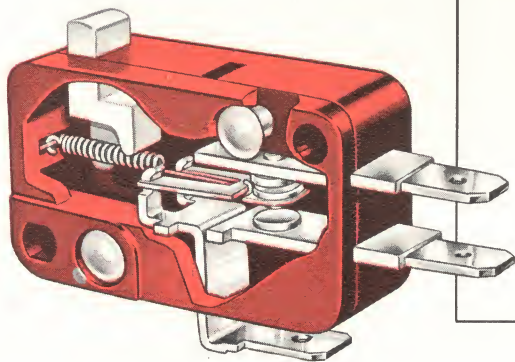
Operating Characteristics
 Rest*..... Max. 1.270 in.
 Pretravel..... Max. .187 in.
 Operating Point*..... 1.045 ± .045
 Overtravel..... Max. .062 in.
 Movement Differential..... Max. .078 in.
 Operating Force..... Max. 8 ozs.
 *Measured above reference line
 Und. Lab. Inc. and CSA approved
 RATING—10 Amps, 1/2 H.P., 125-250 VAC

Ordering Information

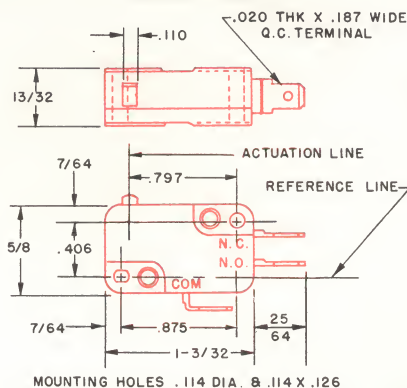
TERMINAL TYPES	S.P.D.T	S.P.S.T.-N.O.	S.P.S.T.-N.C.
Q.C.	E33-50P	E33-51P	E33-52P
SCREW	E33-60P	E33-61P	E33-62P
SOLDER	E33-70P	E33-71P	E33-72P

E34 SERIES

HIGH CAPACITY Miniature Switch



BASIC
E34-00A

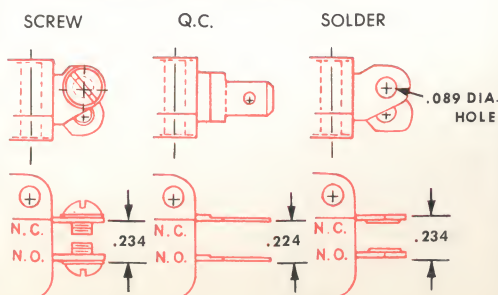


Operating Characteristics
 Rest*..... Max. .635 in.
 Pretravel..... Max. .047 in.
 Operating Point*..... .578 ± .020
 Overtravel..... Min. .050 in.
 Movement Differential..... Max. .016 in.
 Operating Force..... Max. 14 ozs.
 *Measured above reference line
 Und. Lab. Inc. and CSA approved
 RATING—15 Amps, 1/2 H.P., 125-250 VAC

Ordering Information

TERMINAL TYPES	S.P.D.T	S.P.S.T.-N.O.	S.P.S.T.-N.C.
Q.C.	E34-00A	E34-01A	E34-02A
SCREW	E34-10A	E34-11A	E34-12A
SOLDER	E34-20A	E34-21A	E34-22A

TERMINAL VARIATIONS

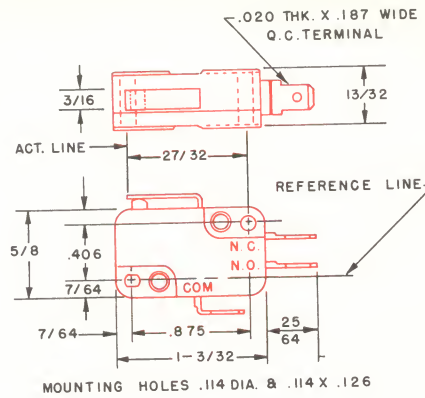


Features

- High Electrical Capacity
- Coil Spring Mechanism
- Choice of Three Terminals



LEVER
E34-00H



Operating Characteristics

Rest*	Max. .660 in.
Pretravel	Max. .062 in.
Operating Point*	.600 ± .020
Overtravel	Min. .050 in.
Movement Differential	Max. .016 in.
Operating Force	Max. 14 ozs.

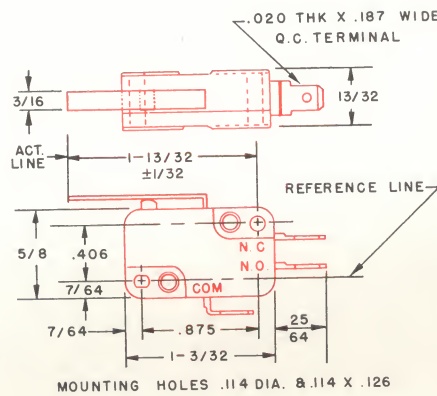
*Measured above reference line
Und. Lab. Inc. and CSA approved
RATING—15 Amps, 1/2 H.P., 125-250 VAC

Ordering Information

	Q.C.	E34-00H	E34-01H	E34-02H
TERMINAL TYPES				
SCREW		E34-10H	E34-11H	E34-12H
SOLDER		E34-20H	E34-21H	E34-22H



EXTENDED LEVER
E34-50H



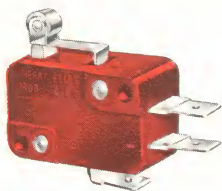
Operating Characteristics

Rest*	Max. .775 in.
Pretravel	Max. .187 in.
Operating Point*	.600 ± .045
Overtravel	Min. .062 in.
Movement Differential	Max. .078 in.
Operating Force	Max. 8 ozs.

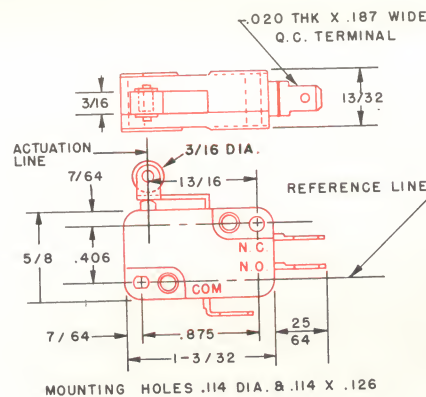
*Measured above reference line
Und. Lab. Inc. and CSA approved
RATING—15 Amps, 1/2 H.P., 125-250 VAC

Ordering Information

	Q.C.	E34-50H	E34-51H	E34-52H
TERMINAL TYPES				
SCREW		E34-60H	E34-61H	E34-62H
SOLDER		E34-70H	E34-71H	E34-72H



ROLLER
E34-00K



Operating Characteristics

Rest*	Max. .860 in.
Pretravel	Max. .062 in.
Operating Point*	.806 ± .045
Overtravel	Min. .050 in.
Movement Differential	Max. .016 in.
Operating Force	Max. 14 ozs.

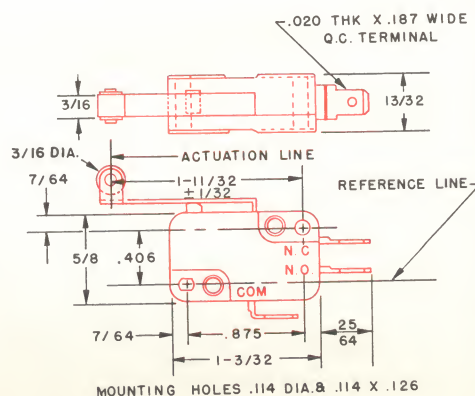
*Measured above reference line
Und. Lab. Inc. and CSA approved
RATING—15 Amps, 1/2 H.P., 125-250 VAC

Ordering Information

	Q.C.	E34-00K	E34-01K	E34-02K
TERMINAL TYPES				
SCREW		E34-10K	E34-11K	E34-12K
SOLDER		E34-20K	E34-21K	E34-22K



EXTENDED ROLLER
E34-50K



Operating Characteristics

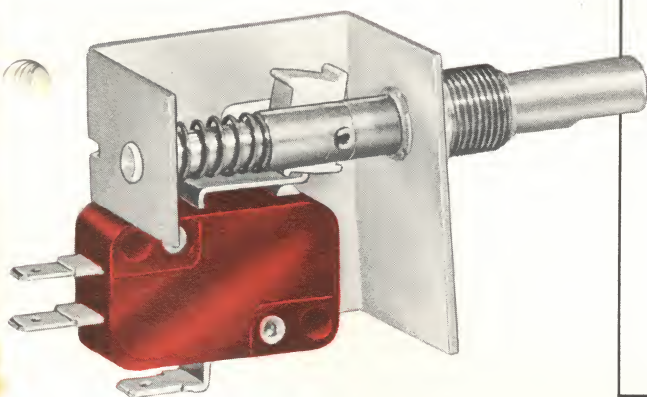
Rest*	Max. .975 in.
Pretravel	Max. .187 in.
Operating Point*	.806 ± .045
Overtravel	Min. .062 in.
Movement Differential	Max. .078 in.
Operating Force	Max. 8 ozs.

*Measured above reference line
Und. Lab. Inc. and CSA approved
RATING—15 Amps, 1/2 H.P., 125-250 VAC

Ordering Information

	Q.C.	E34-50K	E34-51K	E34-52K
TERMINAL TYPES				
SCREW		E34-60K	E34-61K	E34-62K
SOLDER		E34-70K	E34-71K	E34-72K

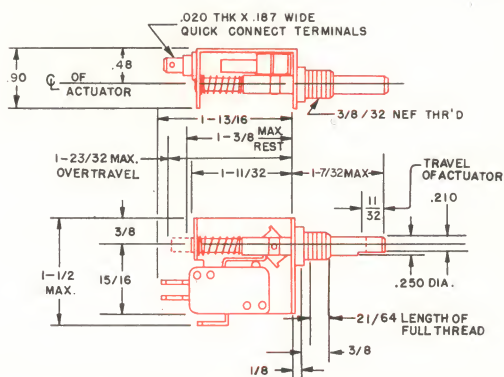
PUSH-PUSH E33 STANDARD FORCE Miniature Switch AND E34 HIGH CAPACITY Miniature Switch



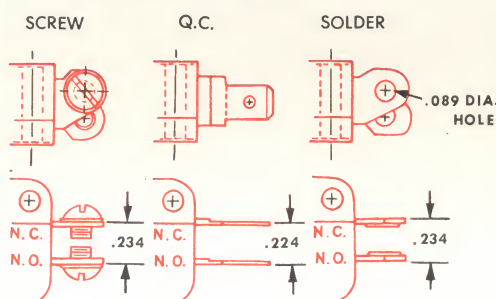
PUSH-PUSH
E33-00G

FEATURES:

- Maintained push-on-push off control
- Coil Spring basic switch
- Choice of 10 or 15 amp rating
- QC, Screw or Solder terminals
- Self-lubricating Delrin button



TERMINAL VARIATIONS



+ Operating Characteristics +

Operating Force 24 oz. Max.

Und. Lab. Inc. and CSA approved
RATING—10 Amps, 1/2 H.P., 125-250 VAC

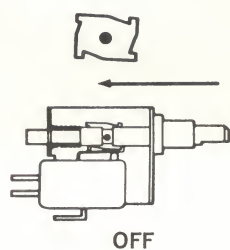
Ordering Information

TERMINAL TYPES	S.P.D.T.	S.P.S.T.-N.O.	S.P.S.T.-N.C.
Q.C.	E33-00G	E33-01G	E33-02G
SCREW	E33-10G	E33-11G	E33-12G
SOLDER	E33-20G	E33-21G	E33-22G

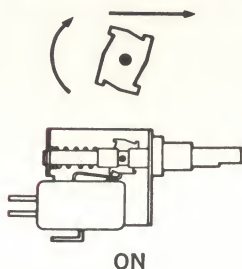
SWITCH OPERATION

PUSH-ON

PLUNGER DEPRESSED

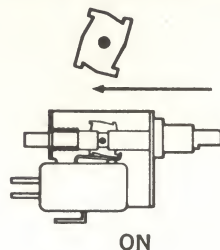


RETURN STROKE

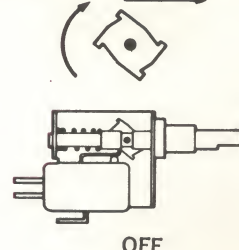


PUSH-OFF

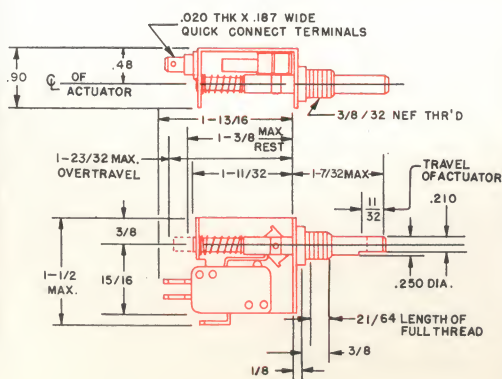
PLUNGER DEPRESSED



RETURN STROKE



PUSH-PUSH
E34-00G



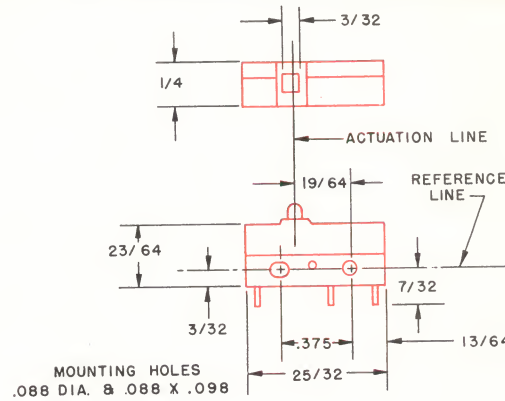
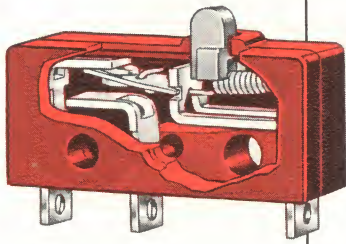
+ Operating Characteristics +

Operating Force 24 oz. max.

Und. Lab. Inc. and CSA approved
RATING—15 Amps, 1/2 H.P., 125-250 VAC

Ordering Information

TERMINAL TYPES	S.P.D.T.	S.P.S.T.-N.O.	S.P.S.T.-N.C.
Q.C.	E34-00G	E34-01G	E34-02G
SCREW	E34-10G	E34-11G	E34-12G
SOLDER	E34-20G	E34-21G	E34-22G

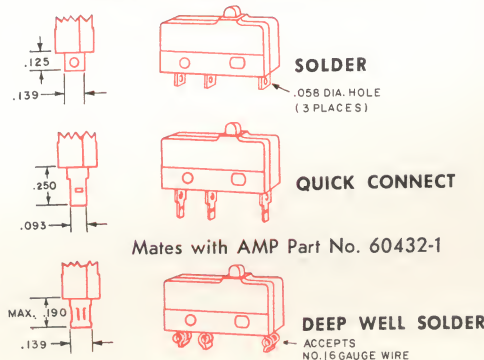


BASIC E61-10A LIGHT FORCE SUBMINIATURE

Features

- Light Force
- Large Overtravel
- Small Compact Size

TERMINAL VARIATIONS



The exclusive hinged lever versions of the E61 series switch may be obtained in either of two lever ratios.

STANDARD LEVER RATIO

Provides operating forces and travel considered standard for this type of switch.

HIGH LEVER RATIO

Provides operating forces approximately one third as great and pretravel approximately three times as great as the standard.

+ Operating Characteristics +	
Rest*	Max. .375 in.
Pretravel	Max. .030 in.
Operating Point*	.330 ± .015
Overtravel	Min. .035 in.
Movement Differential	Max. .004 in.
Operating Force	Max. 90 g.

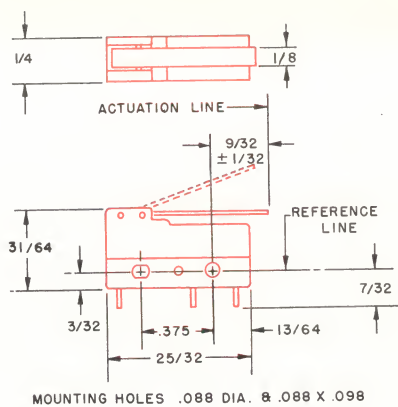
*Measured above reference line
Und. Lab. Inc. and CSA approved
RATING—5 Amps, 125-250 VAC

Ordering Information

TERMINAL TYPES	S.P.D.T	S.P.S.T.-N.O.	S.P.S.T.-N.C.
Q.C.	E61-00A	E61-01A	E61-02A
SOLDER	E61-10A	E61-11A	E61-12A
DEEP WELL	E61-20A	E61-21A	E61-22A



LEVER E61-10H STANDARD LEVER RATIO



+ Operating Characteristics +	
Rest*	Max. .500 in.
Pretravel	Max. 1/8 in.
Operating Point*	.350 ± .030
Overtravel	Min. .040 in.
Movement Differential	Max. .020 in.
Operating Force	Max. 24 g.

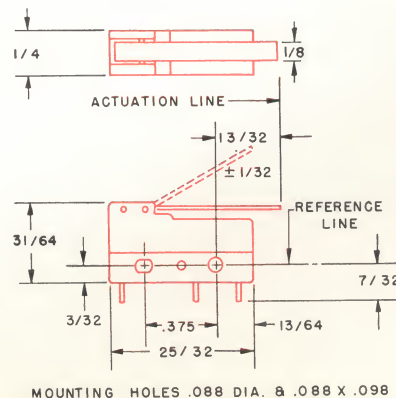
*Measured above reference line
Und. Lab. Inc. and CSA approved
RATING—5 Amps, 125-250 VAC

Ordering Information

TERMINAL TYPES	S.P.D.T	S.P.S.T.-N.O.	S.P.S.T.-N.C.
Q.C.	E61-00H	E61-01H	E61-02H
SOLDER	E61-10H	E61-11H	E61-12H
DEEP WELL	E61-20H	E61-21H	E61-22H



LEVER E61-60H HIGH LEVER RATIO

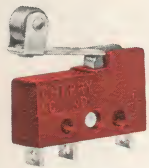


+ Operating Characteristics +	
Rest*	Max. .720 in.
Pretravel	Max. 7/16 in.
Operating Point*	.350 ± .030
Overtravel	Min. .050 in.
Movement Differential	Max. .050 in.
Operating Force	Max. 8 g.

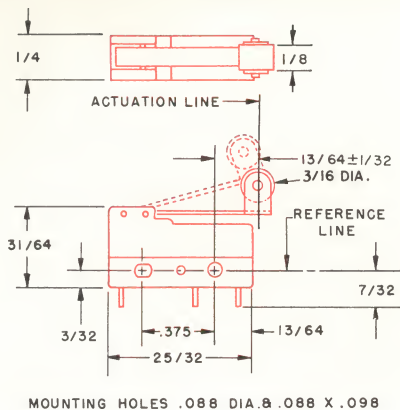
*Measured above reference line
Und. Lab. Inc. and CSA approved
RATING—5 Amps, 125-250 VAC

Ordering Information

TERMINAL TYPES	S.P.D.T	S.P.S.T.-N.O.	S.P.S.T.-N.C.
Q.C.	E61-50H	E61-51H	E61-52H
SOLDER	E61-60H	E61-61H	E61-62H
DEEP WELL	E61-70H	E61-71H	E61-72H



ROLLER
E61-10K
STANDARD LEVER RATIO



Operating Characteristics

Rest*	Max. .725 in.
Pretravel	Max. 7/64 in.
Operating Point*	.570 ± .030
Overtravel	Min. .030 in.
Movement Differential	Max. .020 in.
Operating Force	Max. 26 g.

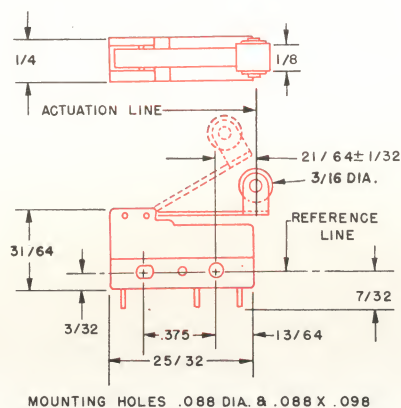
*Measured above reference line
Und. Lab. Inc. and CSA approved
RATING—5 Amps, 125-250 VAC

Ordering Information

TERMINAL TYPES	S.P.D.T	S.P.S.T.-N.O.	S.P.S.T.-N.C.
Q.C.	E61-00K	E61-01K	E61-02K
SOLDER	E61-10K	E61-11K	E61-12K
DEEP WELL	E61-20K	E61-21K	E61-22K



ROLLER
E61-60K
HIGH LEVER RATIO



Operating Characteristics

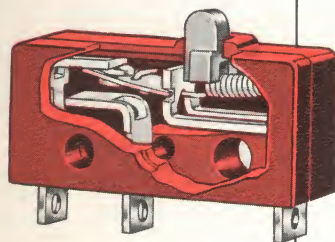
Rest*	Max. .950 in.
Pretravel	Max. 13/32 in.
Operating Point*	.570 ± .030
Overtravel	Min. .040 in.
Movement Differential	Max. .050 in.
Operating Force	Max. 9 g.

*Measured above reference line
Und. Lab. Inc. and CSA approved
RATING—5 Amps, 125-250 VAC

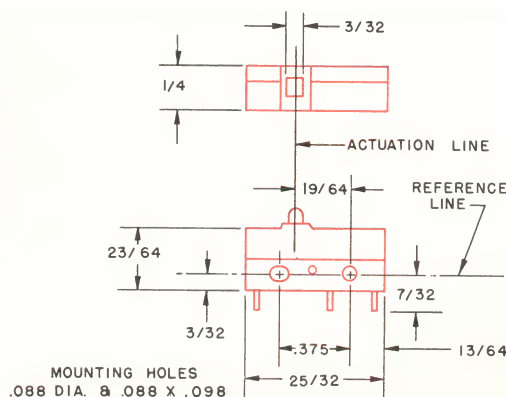
Ordering Information

TERMINAL TYPES	S.P.D.T	S.P.S.T.-N.O.	S.P.S.T.-N.C.
Q.C.	E61-50K	E61-51K	E61-52K
SOLDER	E61-60K	E61-61K	E61-62K
DEEP WELL	E61-70K	E61-71K	E61-72K

E62 SERIES



BASIC
E62-10A
SUBMINIATURE



STANDARD FORCE Subminiature Switch

The exclusive hinged lever versions of the E62 series switch may be obtained in either of two lever ratios.

STANDARD LEVER RATIO

Provides operating forces and travel considered standard for this type of switch.

HIGH LEVER RATIO

Provides operating forces one third as great and travel three times as great as the standard.

Operating Characteristics

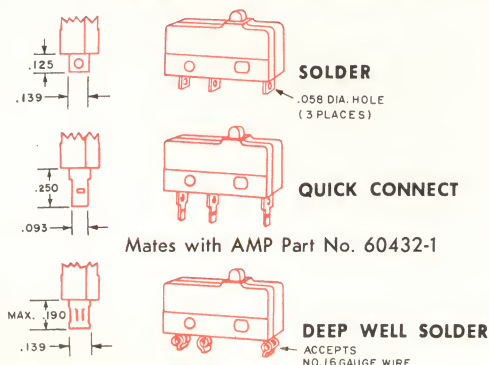
Rest*	Max. .375 in.
Pretravel	Max. .030 in.
Operating Point*	.330 ± .015
Overtravel	Min. .035 in.
Movement Differential	Max. .004 in.
Operating Force	Max. 212g

*Measured above reference line
Und. Lab. Inc. and CSA approved
RATING—10.1 Amps, 125-250 VAC.
1/4 H.P. 125 VAC

Ordering Information

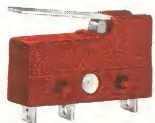
TERMINAL TYPES	S.P.D.T	S.P.S.T.-N.O.	S.P.S.T.-N.C.
Q.C.	E62-00A	E62-01A	E62-02A
SOLDER	E62-10A	E62-11A	E62-12A
DEEP WELL	E62-20A	E62-21A	E62-22A

TERMINAL VARIATIONS

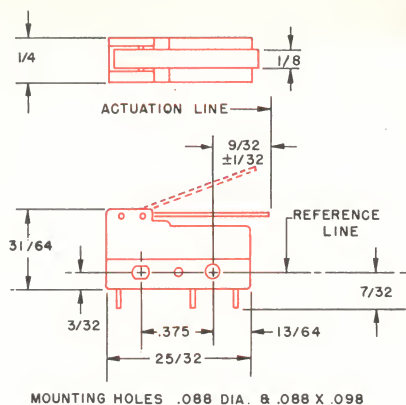


Features

- High Electrical Capacity
- Integral Hinged Actuators
- Large Overtravel



LEVER
E62-10H
STANDARD LEVER RATIO



Operating Characteristics

Rest* Max. .500 in.
 Pretravel Max. 1/8 in.
 Operating Point*350 ± .030
 Overtravel Min. .040 in.
 Movement Differential Max. .020 in.
 Operating Force Max. 56 g.

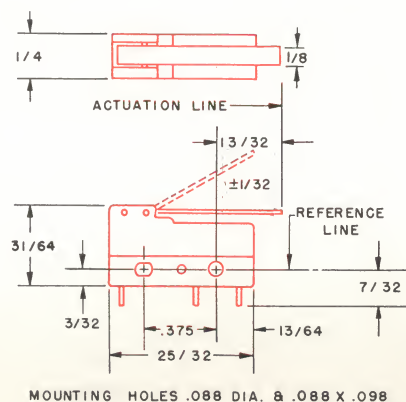
*Measured above reference line
 Und. Lab. Inc. and CSA approved
 RATING—10.1 Amps, 125-250 VAC. 1/4 H.P. 125 VAC

Ordering Information

	TERMINAL TYPES	S.P.D.T	S.P.S.T.-N.O.	S.P.S.T.-N.C.
	Q.C.	E62-00H	E62-01H	E62-02H
	SOLDER	E62-10H	E62-11H	E62-12H
	DEEP WELL	E62-20H	E62-21H	E62-22H



LEVER
E62-60H
HIGH LEVER RATIO



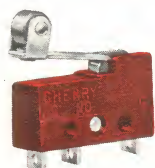
Operating Characteristics

Rest* Max. .720 in.
 Pretravel Max. 7/16 in.
 Operating Point*350 ± .030
 Overtravel Min. .050 in.
 Movement Differential Max. .050 in.
 Operating Force Max. 20 g.

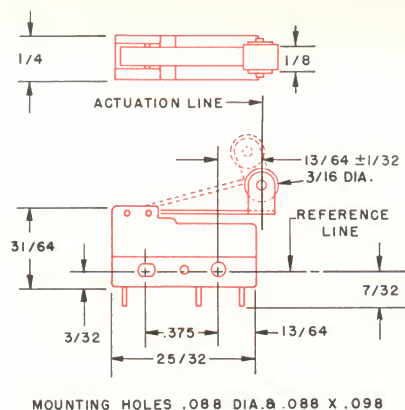
*Measured above reference line
 Und. Lab. Inc. and CSA approved
 RATING—10.1 Amps, 125-250 VAC.
 1/4 H.P. 125 VAC

Ordering Information

	TERMINAL TYPES	S.P.D.T	S.P.S.T.-N.O.	S.P.S.T.-N.C.
	Q.C.	E62-50H	E62-51H	E62-52H
	SOLDER	E62-60H	E62-61H	E62-62H
	DEEP WELL	E62-70H	E62-71H	E62-72H



ROLLER
E62-10K
STANDARD LEVER RATIO



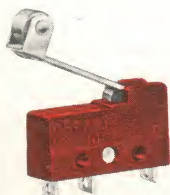
Operating Characteristics

Rest* Max. .725 in.
 Pretravel Max. 1/4 in.
 Operating Point*570 ± .030
 Overtravel Min. .030 in.
 Movement Differential Max. .020 in.
 Operating Force Max. 65 g.

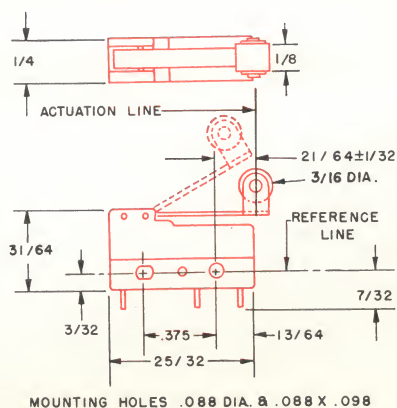
*Measured above reference line
 Und. Lab. Inc. and CSA approved
 RATING—10.1 Amps, 125-250 VAC.
 1/4 H.P. 125 VAC

Ordering Information

	TERMINAL TYPES	S.P.D.T	S.P.S.T.-N.O.	S.P.S.T.-N.C.
	Q.C.	E62-00K	E62-01K	E62-02K
	SOLDER	E62-10K	E62-11K	E62-12K
	DEEP WELL	E62-20K	E62-21K	E62-22K



ROLLER
E62-60K
HIGH LEVER RATIO



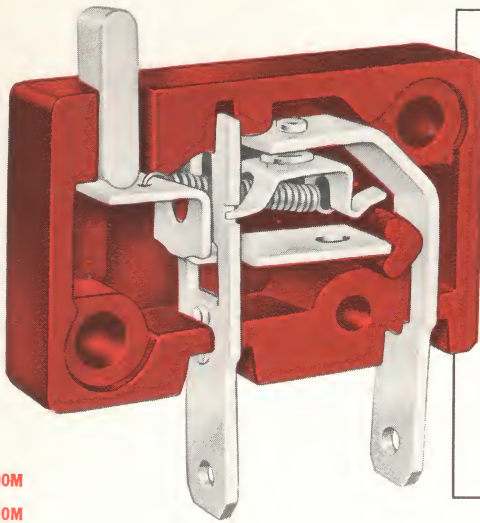
Operating Characteristics

Rest* Max. .950 in.
 Pretravel Max. 13/32 in.
 Operating Point*570 ± .030
 Overtravel Min. .040 in.
 Movement Differential Max. .050 in.
 Operating Force Max. 22 g.

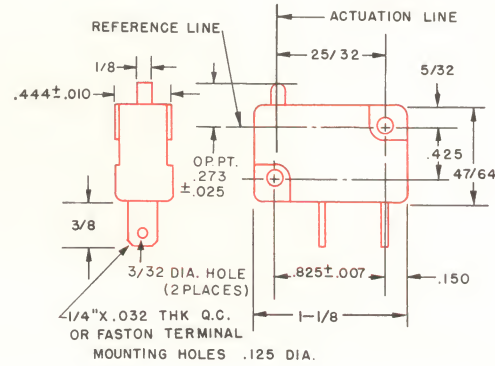
*Measured above reference line
 Und. Lab. Inc. and CSA approved
 RATING—10.1 Amps, 125-250 VAC.
 1/4 H.P. 125 VAC

Ordering Information

	TERMINAL TYPES	S.P.D.T	S.P.S.T.-N.O.	S.P.S.T.-N.C.
	Q.C.	E62-50K	E62-51K	E62-52K
	SOLDER	E62-60K	E62-61K	E62-62K
	DEEP WELL	E62-70K	E62-71K	E62-72K



E10-00M
E15-00M
E16-00M
E18-00M



Operating Characteristics and Ordering Information

Catalog Numbers	E10-00M	E15-00M	E16-00M	E18-00M
Circuitry—Single Pole	Norm. Closed	Norm. Closed	Norm. Open	Norm. Open
Operating Point	.273 ± .025	.273 ± .025	.273 ± .025	.273 ± .025
Movement Diff.	.040 Max.	.040 Max.	.040 Max.	.040 Max.
Overtravel	.090 Min.	.090 Min.	.090 Min.	.090 Min.
Operating Force	4½ ozs.	3 ozs.	2½ ozs.	7 ozs.
U.L. Listing	10 amp 125 VAC 5 amp 250 VAC ½ H.P. 125 VAC	6 amp 125 VAC 3 amp 250 VAC	2 amp 125 VAC 1 amp 250 VAC	3¼ amp 125 VAC

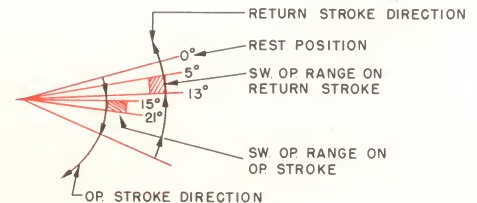
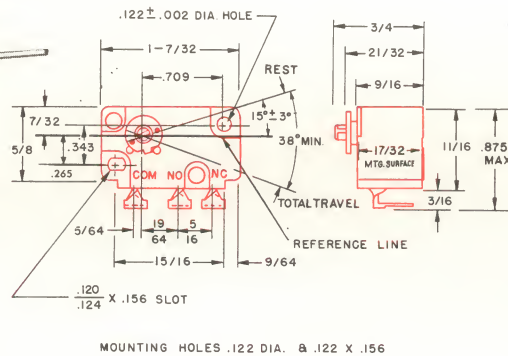
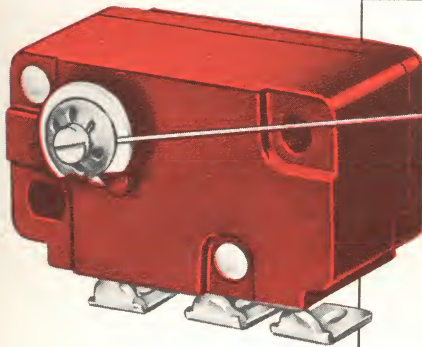
Features

- Large Overtravel
- Light Force
- Long Life Coil Spring

E51 SERIES

CLOCKWISE

FEATHER TOUCH
Coin Switch



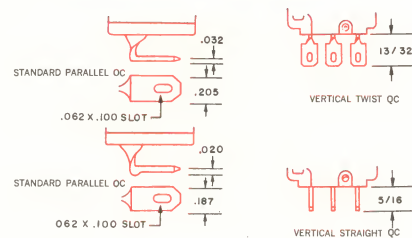
E51-00B

CLOCKWISE OPERATION
.205 x .032 QC TERMINALS

Features

- Feather Touch Operation
- Rotary Actuation
- Long Life

TERMINAL VARIATIONS

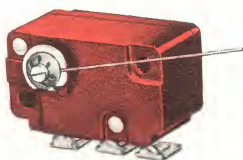


STANDARD PARALLEL QC used on E51-00B and E51-00E (.205 x .032)
STANDARD PARALLEL QC used on E51-00R and E51-00T (.187 x .020)
VERTICAL TWIST QC used on E51-50B and E51-50E (.205 x .032)
VERTICAL TWIST QC used on E51-50R and E51-50T (.187 x .020)
VERTICAL STRAIGHT QC used on E51-60B and E51-60E (.205 x .032)

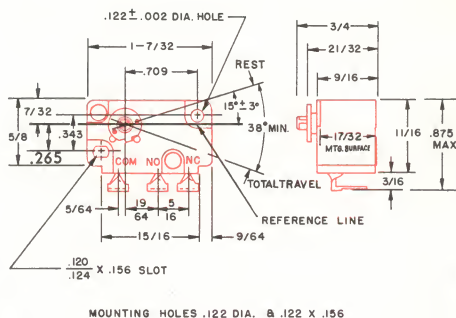
+ Operating Characteristics +
Rest*Max. 18°
Pretravel.....
Operating Point*Max. 21° from rest
Overtravel.....Min. 15°
Movement Differential.....Min. 3°
Operating TorqueMax. 4.0 in.-g.
*Measured above reference line
Und. Lab. Inc. and CSA approved
RATING—5 Amps, 125-250 VAC

Ordering Information

TERMINAL TYPES	S.P.D.T	S.P.S.T.-N.O.	S.P.S.T.-N.C.
COMBINATION QC & SOLDER	E51-00B	E51-01B	E51-02B



E51-00R
CLOCKWISE OPERATION
.187 x .020 QC TERMINALS



Operating Characteristics
Rest* Max. 18°
Pretravel
Operating Point* Max. 21° from rest
Overtravel Min. 15°
Movement Differential Min. 3°
Operating Torque Max. 4.0 in.-g.
*Measured above reference line
Und. Lab. Inc. and CSA approved
RATING—5 Amps, 125-250 VAC

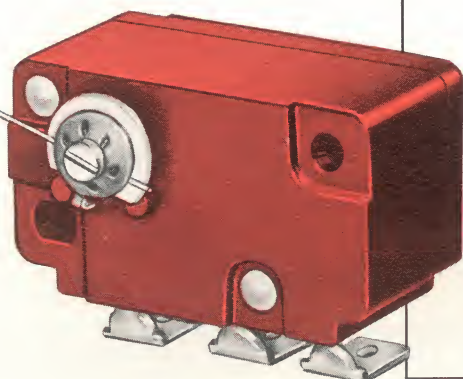
Ordering Information

TERMINALS	S.P.D.T	S.P.S.T.-N.O.	S.P.S.T.-N.C.
COMBINATION QC & SOLDER	E51-00R	E51-01R	E51-02R

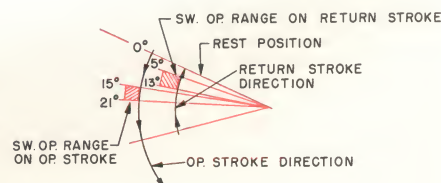
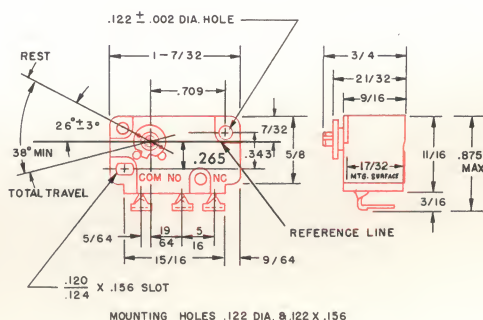
E51 SERIES

COUNTER CLOCKWISE

FEATHER TOUCH Coin Switch



E51-00E
COUNTER CLOCKWISE
OPERATION
.205 x .032 QC TERMINALS



Operating Characteristics
Rest* Max. 29°
Pretravel
Operating Point* Max. 21° from rest
Overtravel Min. 15°
Movement Differential Min. 3°
Operating Torque Max. 4.0 in.-g.
*Measured above reference line
Und. Lab. Inc. and CSA approved
RATING—5 Amps, 125-250 VAC

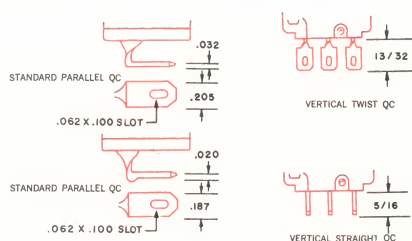
Ordering Information

TERMINALS	S.P.D.T	S.P.S.T.-N.O.	S.P.S.T.-N.C.
COMBINATION QC & SOLDER	E51-00E	E51-01E	E51-02E

Features

- Feather Touch Operation
- Rotary Actuation
- Long Life

TERMINAL VARIATIONS

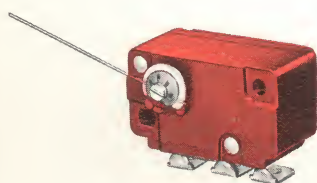


STANDARD PARALLEL QC used on E51-00B and E51-00E (.205 x .032)
STANDARD PARALLEL QC used on E51-00R and E51-00T (.187 x .020)
VERTICAL TWIST QC used on E51-50B and E51-50E (.205 x .032)
VERTICAL TWIST QC used on E51-50R and E51-50T (.187 x .020)
VERTICAL STRAIGHT QC used on E51-60B and E51-60E (.205 x .032)

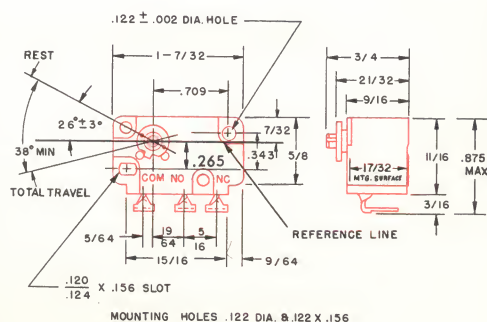
Operating Characteristics
Rest* Max. 29°
Pretravel
Operating Point* Max. 21° from rest
Overtravel Min. 15°
Movement Differential Min. 3°
Operating Torque Max. 4.0 in.-g.
*Measured above reference line
Und. Lab. Inc. and CSA approved
RATING—5 Amps, 125-250 VAC

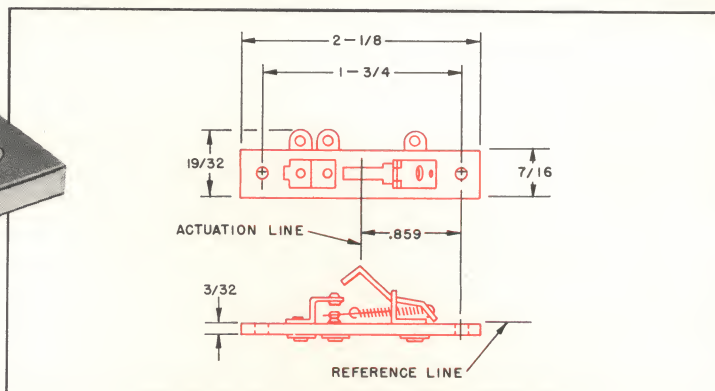
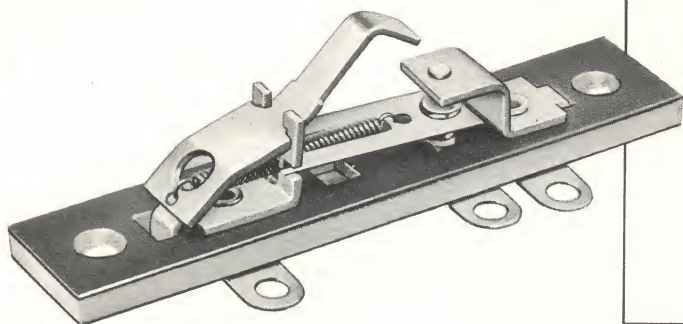
Ordering Information

TERMINALS	S.P.D.T	S.P.S.T.-N.O.	S.P.S.T.-N.C.
COMBINATION QC & SOLDER	E51-00T	E51-01T	E51-02T



E51-00T
COUNTER CLOCKWISE
OPERATION
.187 x .020 QC TERMINALS





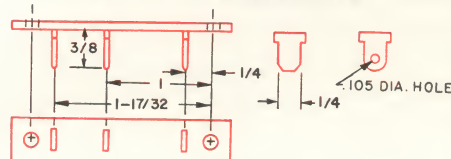
BASIC OPEN SWITCH

S23-00T
LIGHT FORCE

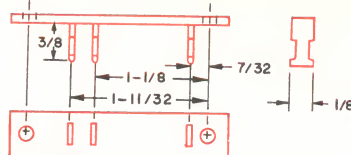
Features

- Light Force
- Long Life Coil Spring
- Unlimited Actuator Variations

TERMINAL VARIATIONS



QUICK CONNECT TERMINAL



INTEGRAL TERMINAL

Operating Characteristics

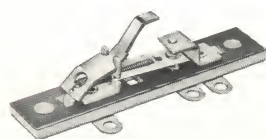
Rest*.....Max. .504
Pretravel.....
Operating Point*.....Min. .353
Overtravel.....Min. .045
Movement Differential.....Max. .070
Operating Force.....Max. 3 ozs.

*Measured above reference line
Und. Lab. Inc. and CSA approved
RATING—5 Amps, 1/6 H.P., 125 VAC

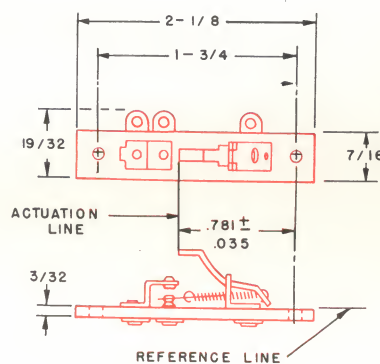
NOTE: Not CSA approved for 1/6 H.P.

Ordering Information

TERMINAL TYPES	S.P.D.T.	S.P.S.T.-N.O.	S.P.S.T.-N.C.
FLAT SOLDER	S23-00T	S23-01T	S23-02T
INTEGRAL SOLDER	S23-00W	S23-01W	S23-02W
Q.C.	S23-00Z	S23-01Z	S23-02Z



S23-20T
LIGHT FORCE



Operating Characteristics

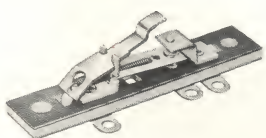
Rest*.....Max. .507
Pretravel.....
Operating Point*.....Min. .378
Overtravel.....Min. .040
Movement Differential.....Max. .070
Operating Force.....Max. 2 3/4 ozs.

*Measured above reference line
Und. Lab. Inc. and CSA approved
RATING—5 Amps, 1/6 H.P., 125 VAC

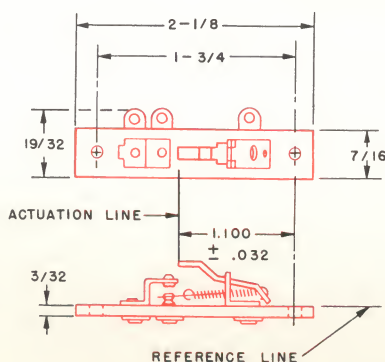
NOTE: Not CSA approved for 1/6 H.P.

Ordering Information

TERMINAL TYPES	S.P.D.T.	S.P.S.T.-N.O.	S.P.S.T.-N.C.
FLAT SOLDER	S23-20T	S23-21T	S23-22T
INTEGRAL SOLDER	S23-20W	S23-21W	S23-22W
Q.C.	S23-20Z	S23-21Z	S23-22Z



S23-30T
LIGHT FORCE



Operating Characteristics

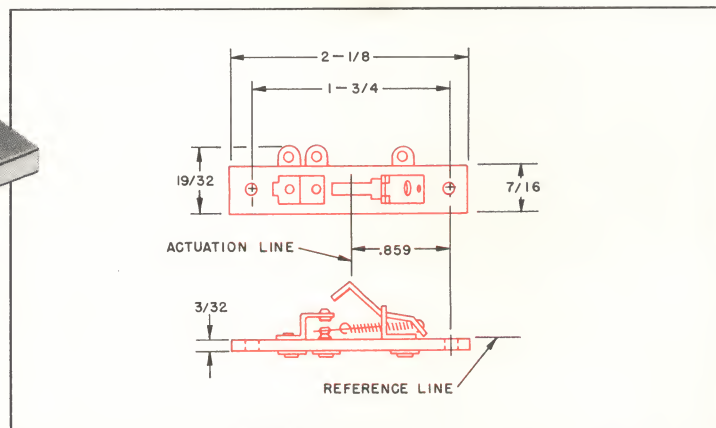
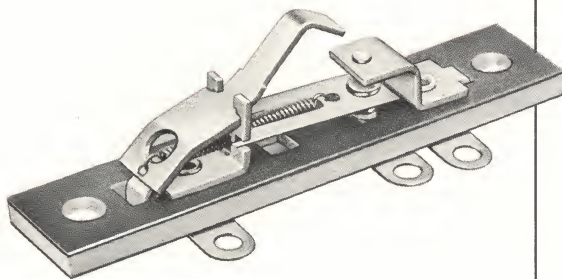
Rest*.....Max. .452
Pretravel.....
Operating Point*.....Min. .293
Overtravel.....Min. .040
Movement Differential.....Max. .070
Operating Force.....Max. 1 1/2 ozs.

*Measured above reference line
Und. Lab. Inc. and CSA approved
RATING—5 Amps, 1/6 H.P., 125 VAC

NOTE: Not CSA approved for 1/6 H.P.

Ordering Information

TERMINAL TYPES	S.P.D.T.	S.P.S.T.-N.O.	S.P.S.T.-N.C.
FLAT SOLDER	S23-30T	S23-31T	S23-32T
INTEGRAL SOLDER	S23-30W	S23-31W	S23-32W
Q.C.	S23-30Z	S23-31Z	S23-32Z

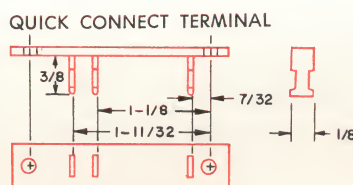
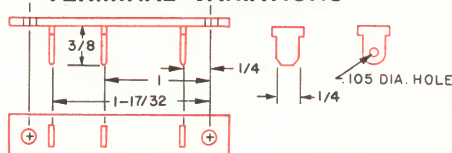


BASIC OPEN SWITCH
S25-00T
STANDARD FORCE

Features

- Panel Variations available
- Unlimited Actuator Variations
- Coil Spring Mechanism

TERMINAL VARIATIONS



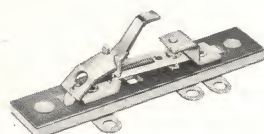
INTEGRAL TERMINAL

Operating Characteristics

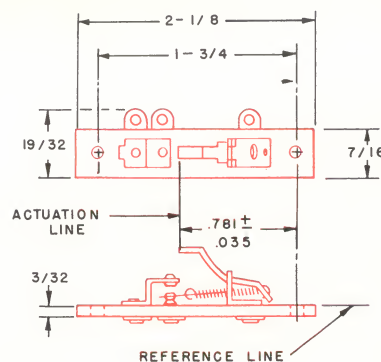
Rest*	Max. .504
Pre-travel	Min. .353
Operating Point*	Min. .045
Overtravel	Max. .070
Movement Differential	Max. 9 1/2 ozs.
Operating Force	
*Measured above reference line	
Und. Lab. Inc. and CSA approved	
RATING—10 Amps, 125 VAC—5 Amps, 250 VAC	
1/3 H.P. 125/250 VAC	

Ordering Information

TERMINAL TYPES	S.P.D.T.	S.P.S.T.-N.O.	S.P.S.T.-N.C.
FLAT SOLDER	S25-00T	S25-01T	S25-02T
INTEGRAL SOLDER	S25-00W	S25-01W	S25-02W
Q.C.	S25-00Z	S25-01Z	S25-02Z



S25-20T
STANDARD FORCE

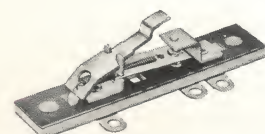


Operating Characteristics

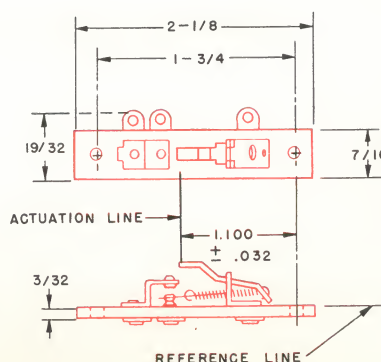
Rest*	Max. .507
Pretravel	Min. .378
Operating Point*	Min. .040
Overtravel	Max. .070
Movement Differential	Max. 10 ozs.
Operating Force	
*Measured above reference line	
Und. Lab. Inc. and CSA approved	
RATING—10 Amps, 125 VAC—5 Amps, 250 VAC	
1/3 H.P. 125/250 VAC	

Ordering Information

TERMINAL TYPES	S.P.D.T.	S.P.S.T.-N.O.	S.P.S.T.-N.C.
FLAT SOLDER	S25-20T	S25-21T	S25-22T
INTEGRAL SOLDER	S25-20W	S25-21W	S25-22W
Q.C.	S25-20Z	S25-21Z	S25-22Z



S25-30T
STANDARD FORCE

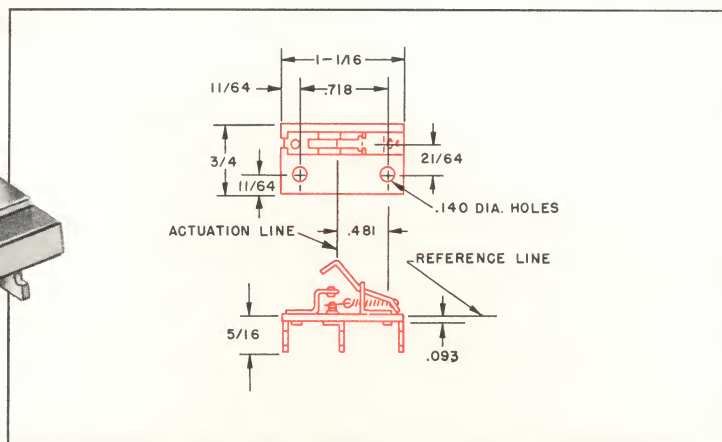
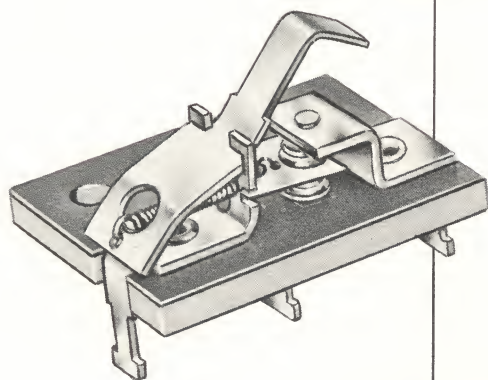


Operating Characteristics

Rest*	Max. .452
Pretravel	Min. .293
Operating Point*	Min. .040
Overtravel	Max. .070
Movement Differential	Max. 5 ozs.
Operating Force	
*Measured above reference line	
Und. Lab. Inc. and CSA approved	
RATING—10 Amps, 125 VAC—5 Amps, 250 VAC	
1/3 H.P. 125/250 VAC	

Ordering Information

TERMINAL TYPES	S.P.D.T.	S.P.S.T.-N.O.	S.P.S.T.-N.C.
FLAT SOLDER	S25-30T	S25-31T	S25-32T
INTEGRAL SOLDER	S25-30W	S25-31W	S25-32W
Q.C.	S25-30Z	S25-31Z	S25-32Z



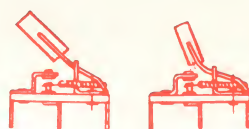
S30-00W

MINIATURE OPEN SWITCH

Features

- Compact Size
- Coil Spring Mechanism
- Line of Actuator Variations

Nylon
Insulators



Also available on series S23 and S25 switches

+ Operating Characteristics +

Rest*	Max. .533
Pretravel	Min. .378
Operating Point*	Min. .045
Overtravel	Max. .085
Movement Differential	Max. 7 1/2 ozs.
Operating Force	Max. 7 1/2 ozs.
*Measured above reference line	
Und. Lab. Inc. and CSA approved	
RATING—10 Amps, 125 VAC—5 Amps, 250 VAC	
1/3 H.P., 125/250 VAC	

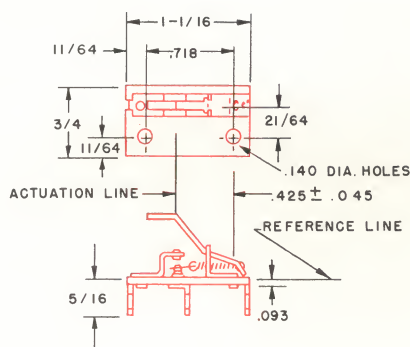
Ordering Information

TERMINAL TYPES	S.P.D.T.	S.P.S.T.-N.O.	S.P.S.T.-N.C.
FLAT SOLDER	S30-00T	S30-01T	S30-02T
INTEGRAL SOLDER	S30-00W	S30-01W	S30-02W
Q.C.	S30-00Z	S30-01Z	S30-02Z



S30-20W

MINIATURE OPEN SWITCH

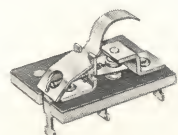


+ Operating Characteristics +

Rest*	Max. .526
Pretravel	Min. .382
Operating Point*	Min. .080
Overtravel	Max. .085
Movement Differential	Max. 7 1/2 ozs.
Operating Force	Max. 7 1/2 ozs.
*Measured above reference line	
Und. Lab. Inc. and CSA approved	
RATING—10 Amps, 125 VAC—5 Amps, 250 VAC	
1/3 H.P., 125/250 VAC	

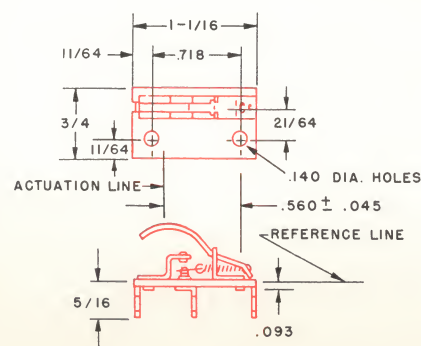
Ordering Information

TERMINAL TYPES	S.P.D.T.	S.P.S.T.-N.O.	S.P.S.T.-N.C.
FLAT SOLDER	S30-20T	S30-21T	S30-22T
INTEGRAL SOLDER	S30-20W	S30-21W	S30-22W
Q.C.	S30-20Z	S30-21Z	S30-22Z



S30-50W

MINIATURE OPEN SWITCH



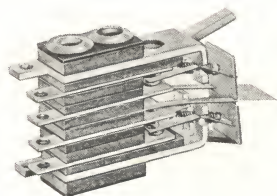
+ Operating Characteristics +

Rest*	Max. .520
Pre-travel	Min. .360
Operating Point*	Min. .100
Overtravel	Max. .085
Movement Differential	Max. 6 oz.
Operating Force	Max. 6 oz.
*Measured above reference line	
Und. Lab. Inc. and CSA approved	
RATING—10 Amps, 125 VAC—5 Amps, 250 VAC	
1/3 H.P., 125/250 VAC	

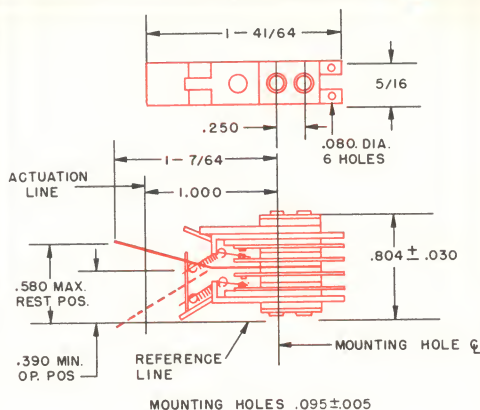
Ordering Information

TERMINAL TYPES	S.P.D.T.	S.P.S.T.-N.O.	S.P.S.T.-N.C.
FLAT SOLDER	S30-50T	S30-51T	S30-52T
INTEGRAL SOLDER	S30-50W	S30-51W	S30-52W
Q.C.	S30-50Z	S30-51Z	S30-52Z

S36 SERIES



DOUBLE POLE
S36-20E
RESET ACTION



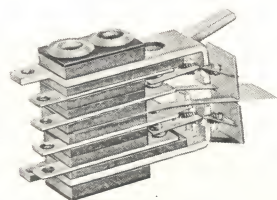
DOUBLE POLE Stack Switch

Operating Characteristics
 Rest* Max. .580 in.
 Pretravel
 Operating Position* Min. .390 in.
 Overtravel Min. .075 in.
 Movement Differential Max. .125 in.
 Operating Force Max. 3 oz.
 *Measured above reference line (either direction)
 Und. Lab. Inc. approved
 RATING—7½ Amps, 125 VAC
 5 Amps, 250 VAC—1/3 H.P., 125-250 VAC

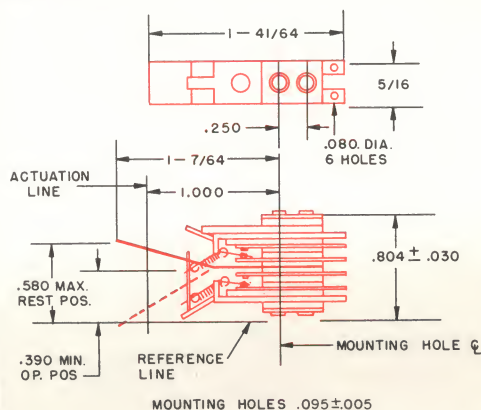
Ordering Information



TERMINAL TYPE	D.P.D.T.	D.P.S.T.-N.O.	D.P.S.T.-N.C.
	S36-20E	S36-21E	S36-22E



DOUBLE POLE
S36-40E
MOMENTARY ACTION



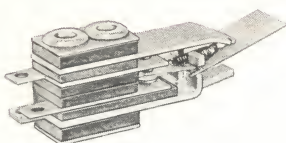
Operating Characteristics
 Rest* Max. .580 in.
 Pretravel
 Operating Position* Min. .390 in.
 Overtravel Min. .075 in.
 Movement Differential Max. .125 in.
 Operating Force Max. 6 oz.
 *Measured above reference line
 Und. Lab. Inc. approved
 RATING—7½ Amps, 125 VAC
 5 Amps, 250 VAC—1/3 H.P., 125-250 VAC

Ordering Information

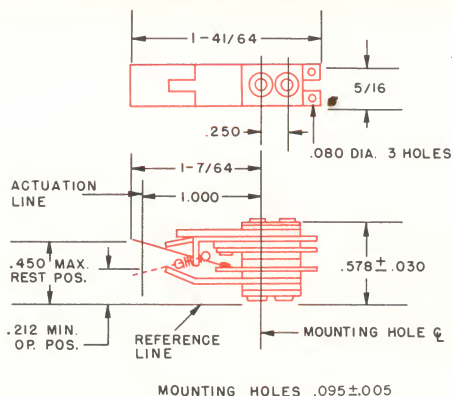


TERMINAL TYPE	D.P.D.T.	D.P.S.T.-N.O.	D.P.S.T.-N.C.
	S36-40E	S36-41E	S36-42E

S37 SERIES



SINGLE POLE
S37-10E
RESET ACTION



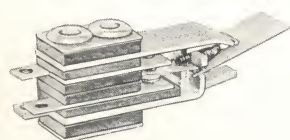
SINGLE POLE Stack Switch

Operating Characteristics
 Rest* Max. .450 in.
 Pretravel
 Operating Position* Min. .212 in.
 Overtravel Min. .060 in.
 Movement Differential Max. .140 in.
 Operating Force Max. 2 oz.
 *Measured above reference line (either direction)
 Und. Lab. Inc. approved
 RATING—7½ Amps, 125 VAC
 5 Amps, 250 VAC—1/3 H.P., 125-250 VAC

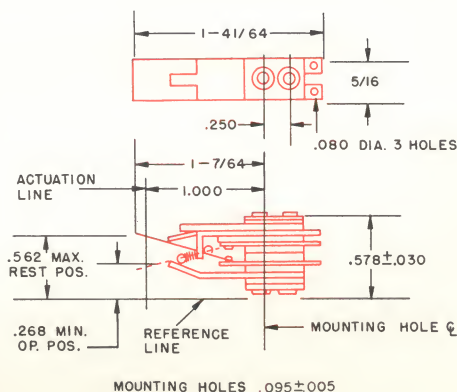
Ordering Information



TERMINAL TYPE	S.P.D.T.	S.P.S.T.-N.O.	S.P.S.T.-N.C.
	S37-10E	S37-11E	S37-12E



SINGLE POLE
S37-20E
MOMENTARY ACTION



Operating Characteristics
 Rest* Max. .562 in.
 Pretravel
 Operating Position* Max. .268 in.
 Overtravel Min. .060 in.
 Movement Differential Max. .140 in.
 Operating Force Max. 4 oz.
 *Measured above reference line
 Und. Lab. Inc. approved
 RATING—7½ Amps, 125 VAC
 5 Amps, 250 VAC—1/3 H.P., 125-250 VAC

Ordering Information



TERMINAL TYPE	S.P.D.T.	S.P.S.T.-N.O.	S.P.S.T.-N.C.
	S37-20E	S37-21E	S37-22E

Cherry Electrical Products Corporation

CABLE ADDRESS: "CHERRY HIGHLAND PARK"



1650 Old Deerfield Road • Highland Park, Illinois 60035



E.E.C.

CHERRY-MIKROSCHALTER GmbH.
8582 Bad Berneck
Bavaria, West Germany



E.F.T.A.

D. H. BONNELLA & SON LTD.
Hoddesdon, Hertfordshire,
England



AUSTRALASIA

G. W. ENGINEERING PTY. LTD.
Chippendale, NSW.,
Sydney, Australia

INCHES \times 25.4 = MILLIMETERS
MILLIMETERS \times .0394 = INCHES

SWITCH-SPECIFICATIONS SCHALTERBESCHREIBUNG

Rest Height }
Ruheposition }

Operating Point }
Betätigungspunkt }

Movement Diff. }
Umschaltweg }

Overtravel }
Nachlauf }

Operating Force }
Betätigungskraft }

Release Force }
Rückstellkraft }

Actuating Member }
Schaltglied }

Mechanical Life }
Mechanische Lebensdauer }

Pole/Throw Type }
Pol/Schalttype }

Amp/Volt-AC. DC. }
Amp/Volt Wechsel-/Gleichstrom }

Type of Load }
Art der Ladung }

Electrical Life }
Elektrische Lebensdauer }

Terminal Type }
Anschlussart }

Approval }
Prüfstelle }

U.L. ☐ V.D.E. ☐ }
B.S.A. ☐ Other ☐ }

Enclosure Req'd? }
Beilage benötigt? }

Unit Using Switch }
Wofür wird Schalter verwendet }

New Dev./Replace }
Neuentwicklung/Ersatz }

Design Date }
Datum des Entwurfes }

Production Date }
Produktionsdatum }

Sw. Quantity/Yr. }
Schalterquantität per Jahr }

Perm./Temp. Tools? }
Bleibende/temporäre Werkzeuge }

To }
An }

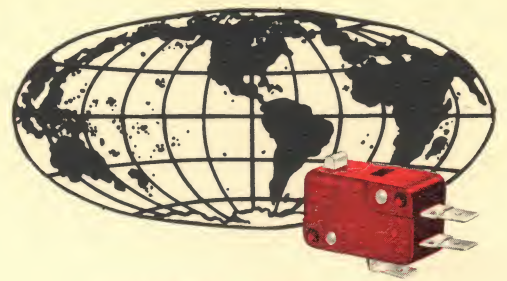
From }
Von }

Subject }
Betrifft: }

Switch No./Reference }
Schalter Nr./Referenz: }

Date }
Datum }

DRAW A SKETCH SHOWING SWITCH MOUNTING AND SPACE LIMITATIONS
ES WIRD EINE SKIZZE ERBETEN, DIE SCHALTERMONTAGE UND ABMESSUNGSBEGRENZUNG ANGIBT



CHERRY
*everywhere
in the world!*

OUR PRODUCTS ARE MANUFACTURED UNDER ONE OR MORE OF THE FOLLOWING PATENTS

UNITED STATES PATENTS

2,758,171	2,853,700	3,001,042	3,073,923
2,790,865	2,905,780	3,019,319	3,098,903
2,790,866	2,905,781	3,032,622	3,098,904
2,805,299	2,993,101	3,032,623	3,098,905
2,810,030	2,993,102	3,050,599	3,141,075
2,821,587	2,999,138	3,056,002	3,205,319

FOREIGN PATENTS

West Germany	.....1,154,546	1,195,849
France	.....1,334,642	
	.....1,341,144	
	.....1,361,230	
	.....1,400,057	
	.....1,403,205	
Great Britain	.....911,805	
	.....975,732	
Canada	.....619,855	
	.....670,011	
	.....676,861	
	.....702,372	
Italy	.....675,804	678,375
Belgium	.....667,103	
Japan	.....460,846	

OTHER PATENTS AND APPLICATIONS PENDING
THROUGHOUT THE WORLD

CANADA

BARRY ELECTRIC LTD.
8 Taber Road
Rexdale, Ontario, Canada

**AUSTRALIA AND
NEW ZEALAND**

G. W. ENGINEERING PTY. LTD.
1-15 Blackfriars Street
Sydney, N.S.W., Australia

E.F.T.A.

D. H. BONNELLA & SON, LTD.
West Hill, Hoddesdon
Hertfordshire, England

E.E.C.

CHERRY-MIKROSCHALTER GmbH.
8582 Bad Berneck
Bavaria, West Germany

**CHERRY ELECTRICAL
PRODUCTS CORP.**

1650 OLD DEERFIELD ROAD HIGHLAND PARK, ILLINOIS 60035
PHONE (312) 432-8182 CABLE ADDRESS: "CHERRY HIGHLAND PARK"

Cherry's trademark has been
registered throughout the world



FIRST CLASS
Permit No. 258
Highland Pk., Ill.

B U S I N E S S R E P L Y M A I L

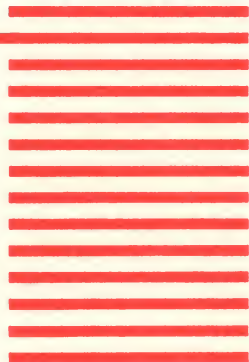
NO POSTAGE NECESSARY IF MAILED IN THE U.S.A.

Postage will be paid by:

Cherry Electrical Products Corporation

1650 OLD DEERFIELD ROAD

HIGHLAND PARK, ILLINOIS 60036



CHERRY **Precision** **Switches**

Over 20 offices in the U. S. and Canada provide immediate assistance in selection and application of Cherry precision switches.

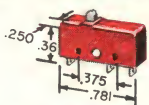
A complete engineering and manufacturing facility devoted entirely to switches is ready to provide additional application assistance.



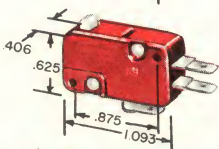
CHERRY ELECTRICAL PRODUCTS CORPORATION

Cherry Electrical Products Corp.

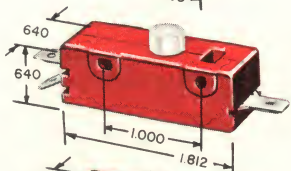
CHERRY Switches



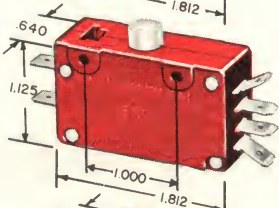
E62-10A
SUBMINIATURE
10.1 Amp 125 VAC
¼ H.P. 125 VAC



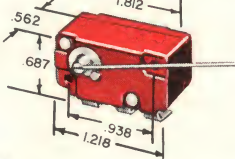
E33-00A
MINIATURE
10 Amp, ½ H.P.
125/250 VAC



E13-00E
GENERAL PURPOSE
15 Amp 125/250 VAC
¾ H.P. 125 VAC
1½ H.P. 250 VAC



E19-00A
DOUBLE POLE
15 Amp 125/250 VAC
¾ H.P. 125 VAC
1½ H.P. 250 VAC



E51-00B
FEATHER TOUCH
Coin Switch
5 Amp 250 VAC

CHERRY ELECTRICAL PRODUCTS CORPORATION
HIGHLAND PARK, ILLINOIS

My inquiry was for

- ☐ Specific Switch application
- ☐ General Interest
- ☐ Send sales engineer to discuss my application

☐ Send sample of Cherry Snap-Action Switch No.

☐ Our annual switch usage is

☐ Add my name to your mailing list.

Application:

My zip code No. is.....

T Nelson, Sys Con
Box 1546
Poughkeepsie, N Y 12603
E-17-5

THE COMPLETE SNAP-ACTION SWITCH LINE



Cherry Electrical Products Corp.