



- 1NO/1NC, 2NO/2NC, 3NO/3NC
- Single Pole, Double Throw (SPDT); Double Pole, Double Throw (DPDT); Triple Pole, Double Throw (TPDT)
- Cam-Type SNAP-LOCK® Technology
- Three Mounting Styles Available (Standard, Wide, Long)
- Die-cast Zinc Housing for Corrosion Resistance
- Generous Overtravel
- Heavy Duty Cam Operated. Fast Contact Action
- Flexibility of Motion, CW and CCW
- Light Operating Torque

### Technical Data

- Meets NEMA 1, 4 & 13 requirements. Enclosure is watertight, oil & dust tight
- Contacts made of silver alloy. Contact shifting mechanism is locked in position by the latches until switch lever is actuated.
- Temperature Range: -20°C to + 90°C.
- Operating Lever is adjustable to any required position. Operating Lever Angles (CW or CCW) maximum degrees of trip travel, reset travel, as well as total lever travel, are determined by the cam selected
- Wiring space is ample for up to size 12 wire with easily accessible terminal screws
- Form "Z" contact arrangement
- Options available
  - Precious metal contacts for optimal performance
  - High Temperature (0°C to + 150°C) components and lubricants
  - Low Temperature (-40°C to + 90°C) components and lubricants
- Weight - Approx. 3.5 lbs.

#### Continuous Current Rating - Amperes

Volts	AC	DC
125	20	5
250	15	1.5
480	10	
600	5	

75-100% Power Factor

#### Continuous Current Rating - Amperes (Neutral Position)

Volts	AC	DC
125	10	2.5
250	7.5	.75
480	5	
600	2.5	

## Typical Cams

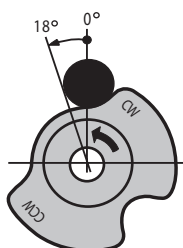
The versatility of the Snap-Lock mechanism is achieved with the use of a series of uniquely designed cams. A standard EA700 series switch, supplied with a combination B1/B2 cam.

### Combination B1/B2 CAM

The following three operating sequences are built into the combination cam used in the standard EA700 switches; B1 Single Action CW, B1 Single Action CCW and B2 Double Action CW & CCW.

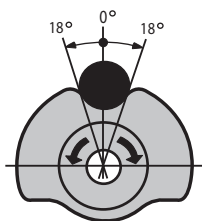
1. The contacts function when the lever is operated CW. The lever can be operated CCW but the contacts will not operate.
2. The contacts function when the lever is operated CCW. The lever can be operated CW but the contacts will not operate.
3. The contacts function when the lever is operated CW or CCW.

#### B1 Single Action



Normally open to make (normally closed to break) IN ONE DIRECTION ONLY. Lever and cam are spring returned to starting position. Used on Single Action Switches only.

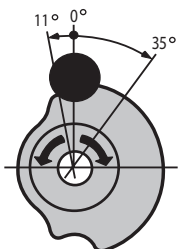
#### B2 Double Action



Normally open to make (normally closed to break) IN EITHER DIRECTION. Lever and cam are spring returned to starting position.

### Neutral Position N CAM

The neutral position cam is designed for applications requiring a neutral position in the contact arrangement. Both the operating lever and cam are spring returned to starting position. The maximum lever travel in either direction is 90°.

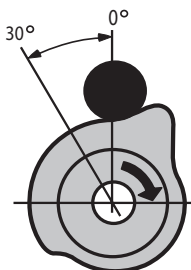


This is the contact action of neutral switches:

- As the lever is moved clockwise the lower contact transfers. As the lever is spring returned to starting position the lower contact is returned to its original position.
- As the lever is moved counterclockwise from starting position the upper contact transfers. As the lever is spring returned to starting position the upper contact returns.

### Maintained Position CAM

Maintained Switches are available for applications that require maintained contacts and are available with two contact operations:



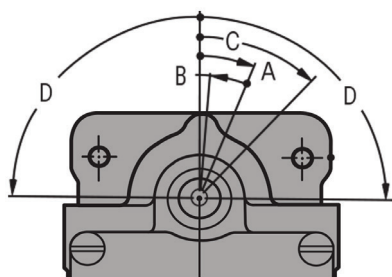
1. When the lever is moved clockwise the normally open contacts close and the normally closed contacts open. The lever is maintained in tripped position. As the lever is activated counterclockwise to starting position, normally open contacts open and normally closed contacts close.
2. When the lever is moved clockwise the normally open contacts close and the normally closed contacts open. This contact arrangement is maintained as the lever is spring returned to starting position and until the lever is moved counterclockwise when the normally open contacts open and the normally closed contacts close.

## Operational Data

### Standard - B1/B2 CAM Combination

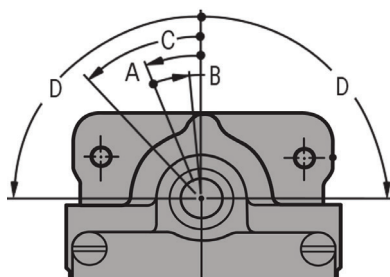
A. Trip Travel .....	18°
B. Reset Travel .....	14°
C. Recommended Travel .....	30°
D. Total Travel .....	90°

Torque	
1NO/1NC .....	15 lb-in.
2NO/2NC .....	27 lb-in.
3NO/3NC .....	33 lb-in.



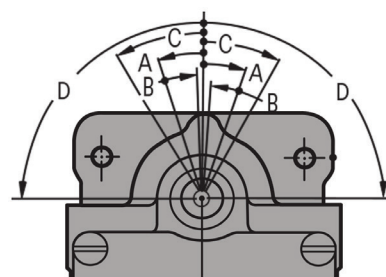
**CW Operation Only**

Contacts transfer when lever is operated CW. Lever can be operated CCW but contacts will not transfer.



**CCW Operation Only**

Contacts transfer when lever is operated CCW. Lever can be operated CW but contacts will not transfer.



**CW & CCW Operation Only**

Contacts transfer when lever is operated CW or CCW.

## Contact Configurations

### CW Operation Only

### CCW Operation Only

### CW & CCW Operation Only

	CW	INITIAL	CCW
1NO/1NC			

	CW	INITIAL	CCW
1NO/1NC			

	CW	INITIAL	CCW
1NO/1NC			

2NO/2NC			
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2NO/2NC			
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2NO/2NC			
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3NO/3NC			
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3NO/3NC			
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3NO/3NC			
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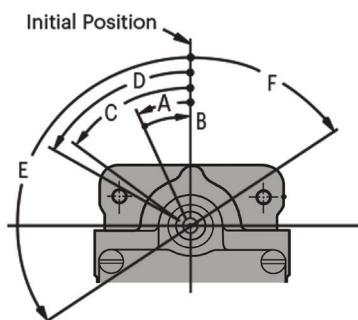
## Operational Data

### Maintained Contacts - M CAM..... CCW ..... CW

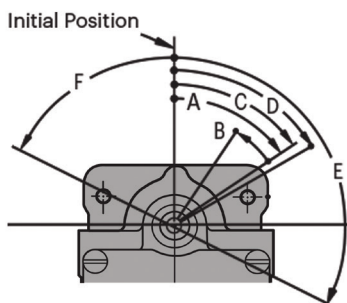
A. Trip Travel .....	25° .....	55°
B. Reset Travel .....	25° .....	22°
C. Min. Travel to Maintain.....	54° .....	55°
D. Recommended Travel .....	60° .....	60°
E. Total Travel.....	124° .....	116°
F. Overall Travel .....	56° .....	64°

### Torque

1NO.....	CW.....	6 lb-in.
1NC.....	CCW.....	9 lb-in.
2NO .....	CW.....	6 lb-in.
2NC .....	CCW.....	12 lb-in.



Position 1 - CCW



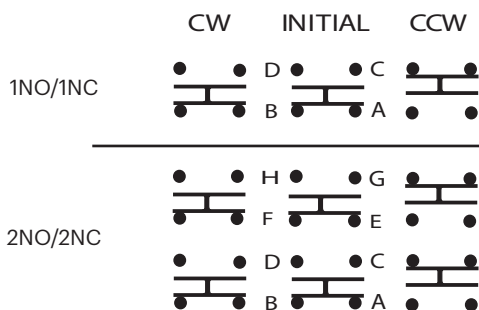
Position 2 - CW

### M CAM - Maintained Contacts & Lever Position

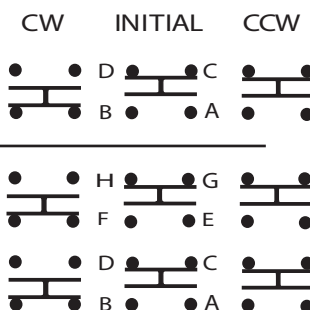
Lever and contacts are maintained in tripped position. When lever is moved CCW the N.C. contacts open and the N.O. contacts close. Starting at this position rotating the lever CW the N.O. contacts open and the N.C. close.

## Contact Configurations

### Position 1 - CCW



### Position 2 - CW

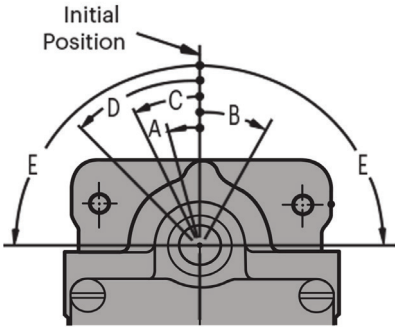


## Operational Data

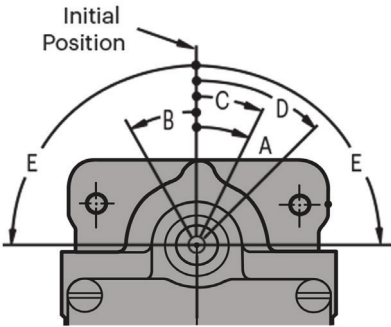
### Maintained Contacts - M7 CAM ..... CCW ..... CW

A. Trip Travel .....	16° .....	30°
B. Reset Travel .....	30° .....	26°
C. Min. Travel to Maintain .....	26° .....	30°
D. Recommended Travel .....	45° .....	45°
E. Total Travel .....	90° .....	90°

Torque	
1NO .....	CW ..... 12 lb-in.
1NC .....	CCW ..... 13.5 lb-in.
2NO .....	CW ..... 15 lb-in.
2NC .....	CCW ..... 16.5 lb-in.



Position 1 - CCW



Position 2 - CW

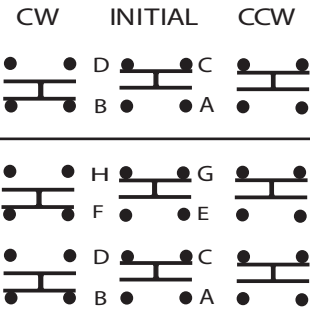
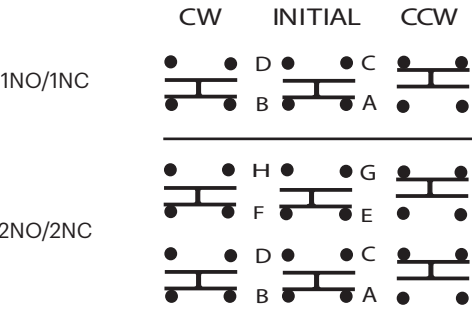
### M7 CAM - Maintained Contacts - Lever Returned

Contacts are maintained in tripped position, torsion spring will return lever to initial position when released. When lever is moved CCW the N.C. contacts open and the N.O. contacts close. The lever must then be returned to the initial position and be operated in the CW direction to reset the contacts.

## Contact Configurations

### Position 1 - CCW

### Position 2 - CW

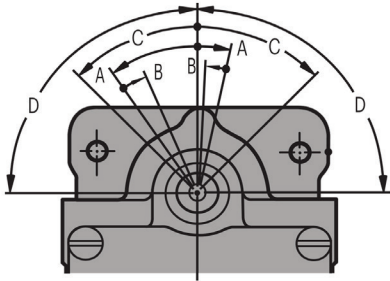


## Operational Data

### Neutral Contacts - N CAM.....CW .. CCW

A. Trip Travel .....	11° .....35°
B. Reset Travel .....	9° ..... 13°
C. Recommended Travel .....	45° .....45°
D. Total Travel.....	90° ..... 90°

Torque	
2NO .....	CW .....18 lb-in.
2NO .....	CCW .....13.5 lb-in.
4NO .....	CW ..... 9.5 lb-in.
4NC .....	CCW .....15 lb-in.
2NC .....	CW .....18 lb-in.
2NC .....	CCW .....13.5 lb-in.



### N CAM – Neutral Position - All Contacts Open

As lever is moved CW upper contacts close. As lever is spring returned to starting position upper contacts open. As lever is moved CCW from starting position lower contacts close. As lever is spring returned to starting position lower contacts open.

### N CAM – Neutral Position - All Contacts Closed

As lever is moved CW lower contacts open. As lever is spring returned to starting position lower contacts close. As lever is moved CCW from starting position upper contacts open. As lever is spring returned to starting position upper contacts close.

## Contact Configurations

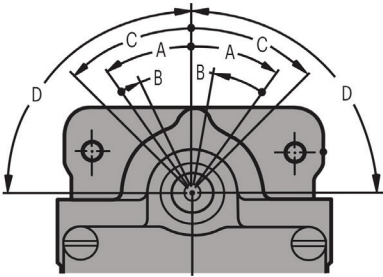
	CW	INITIAL	CCW
2NO			
4NO			
2NC			

## Operational Data

### Neutral Contacts - N1 CAM ..... CW .. CCW

A. Trip Travel .....	31° .....	31°
B. Reset Travel .....	22° .....	12°
C. Recommended Travel .....	45° .....	45°
D. Total Travel.....	90° .....	90°

Torque	
2NO .....	CW .....18 lb-in.
2NO .....	CCW .....13.5 lb-in.
4NO .....	CW ..... 9.5 lb-in.
4NC .....	CCW .....15 lb-in.
2NC .....	CW .....18 lb-in.
2NC .....	CCW .....13.5 lb-in.



### N1 CAM – Neutral Position – All Contacts Open

As lever is moved CW lower contacts close. As lever is spring returned to starting position lower contacts open. As lever is moved CCW from starting position upper contacts close. As lever is spring returned to starting position upper contacts open.

### N1 CAM – Neutral Position – All Contacts Closed

As lever is moved CW upper contacts open. As lever is spring returned to starting position upper contacts close. As lever is moved CCW from starting position lower contacts open. As lever is spring returned to starting position lower contacts close.

## Contact Configurations

	CW	INITIAL	CCW		CW	INITIAL	CCW
2NO				4NO			
2NC				4NC			



*All dimensions given in Inches (mm)*





# EA700 SERIES

## Ordering Information

### EA700 -

#### Operation

- 0000 B1/B2 CAM, CW Operation Only
- 0001 B1/B2 CAM, CCW Operation Only
- 0100 B1/B2 CAM, CW & CCW Operation
- 5000 N CAM, Neutral Position, All Contacts Open
- 5100 N CAM, Neutral Position, All Contacts Closed
- 5700 N1 CAM, Neutral Position, All Contacts Open
- 5800 N1 CAM, Neutral Position, 2NC
- 5108 N1 CAM, Neutral Position, 4NC
- 6000 M CAM, Maintained Contacts & Lever Position
- 6700 M CAM, Maintained Contacts, Lever Returned

#### Mounting, Contacts

- 1 - Standard, SPDT
- 2 - Standard, DPDT
- 3- Standard, TPDT
- 4 - Wide, SPDT
- 5 - Wide, DPDT
- 6- Wide, TPDT
- 7 - Long, SPDT
- 8 - Long, DPDT
- 9 - Long, TPDT

Special variations are available. Please consult factory.