1. Enclosure is water, oil and dust tight.
2. Enclosure meets NEMA Type 1, 4 and 13 requirements.
3. Contacts made of silver alloy. Contact shifting mechanism is locked in position by the latches until switch lever is actuated.
4. Standard Temperature Range: $-20^{\circ} \mathrm{C}$ to $+90^{\circ} \mathrm{C}$
5. Operating lever is adjustable to any required position.
6. Operating Lever Angles (travel either clockwise or counterclockwise) maximum degrees of trip travel, reset travel, as well as total lever travel, are determined by the cam selected.
7. Operating Torques - Trip Torque varies from 15 to 33 in. lbs. depending on switch size and cam selected.
8. Current Ratings:

Voltage

| 125V-A.C. | $20.0 \mathrm{Amps}^{\star}$ | $10.0 \mathrm{Amps}^{\star}$ |
| :--- | ---: | ---: |
| 250V-A.C. | $15.0 \mathrm{Amps}^{\star}$ | $7.5 \mathrm{Amps}^{\star}$ |
| 480V-A.C. | $10.0 \mathrm{Amps}^{\star}$ | $5.0 \mathrm{Amps}^{*}$ |
| 600V-A.C. | $5.0 \mathrm{Amps}^{\star}$ | $2.5 \mathrm{Amps}^{\star}$ |
| 125V-D.C. | $5.0 \mathrm{Amps}^{\star}$ | $2.5 \mathrm{Amps}^{*}$ |
| 250V-D.C. | $1.5 \mathrm{Amps}^{\star}$ | $.75 \mathrm{Amps}^{\star}$ |

*75-100\% Power Factor

Series EA700 Snap-Lock Limit Switches are specifically designed for flexibility in mounting arrangements. Basic design permits mounting for either side or back. Shown here are the (1) STANDARD for side mounting; (2) WIDE for back mounting; (3) LONG for back mounting.


All dimensions given in US \& Metric: Inches (mm)

| CONTACT SEQUENCE | STANDARD SWITCH |  |  |  | MOUNTING STYLE |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | PIPE TAP SIZE | A | B | C | WIDE |  | LONG |  |
|  |  |  |  |  | D | E | F | G |
| 1 N.O. - 1 N.C. | 1/2-14 NPT | 4.94 | 3 | 0.62 | 2.44 | 3 | 4.22 | 4.84 |

## CW OPERATION ONLY (Combination B-1/B-2 Cam)

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

| CATALOG NUMBERS |  |  | OPERATIONAL DATA |
| :---: | :---: | :---: | :---: |
| MOUNTING (see opposite page) |  |  | -o |
| STANDARD | WIDE | LONG |  |
| EA700-10000 | EA700-40000 | EA700-70000 | (@) |
| CONTACTS | CIRCUITS |  | A. Trip Travel ................................ 18 |
| $\begin{aligned} & 1 \text { N.O. } \\ & 1 \text { N.C. } \end{aligned}$ |  |  | B. Reset Travel ................................. $14^{\circ}$ C. Recommended Travel ............... $30^{\circ}$ D. Total Travel Available.................. $90^{\circ}$ Torque (Inch Lbs.) 1 N.O. 1 N.C. .... 15 |

CCW OPERATION ONLY (Combination B-1/B-2 Cam)
Contacts transfer when lever is operated CCW. Lever can be operated CW but contacts will not transfer.

| CATALOG NUMBERS |  |  | OPERATIONAL DATA |
| :---: | :---: | :---: | :---: |
| MOUNTING (see opposite page) |  |  | ip Travel |
| STANDARD | WIDE | LONG |  |
| EA700-10001 | EA700-40001 | EA700-70001 |  |
| CONTACTS | CIRCUITS |  |  |
| $\begin{aligned} & 1 \text { N.O. } \\ & 1 \text { N.C. } \end{aligned}$ |  |  | B. Reset Travel .............................. $14^{\circ}$ C. Recommended Travel ................ $30^{\circ}$ D. Tota Iravel Available.............. $90^{\circ}$ Torque (Inch Lbs.) 1 N.O. -1 N.C. .... 15 |

CW \& CCW OPERATION ONLY (Combination B-1/B-2 Cam)
Contacts transfer when lever is operated CW or CCW.

| CATALOG NUMBERS |  |  | OPERATIONAL DATA |
| :---: | :---: | :---: | :---: |
| MOUNTING (see opposite page) |  |  |  |
| STANDARD | WIDE | LONG |  |
| EA700-10100 | EA700-40100 | EA700-70100 |  |
| CONTACTS | CIRCUITS |  |  |
| $\begin{aligned} & 1 \text { N.O. } \\ & 1 \text { N.C. } \end{aligned}$ | $\frac{e^{c w}}{\square}$ | $\frac{\text { Ccw }}{\square} \stackrel{\bullet}{\square}$ | B. Reset Travel ............................... $14^{\circ}$ C. Recommended Travel ................ $30^{\circ}$ D. Total Travel Availabbe............... $90^{\circ}$ Torque (Inch Lbs.) 1 N.O. -1 N.C. ..... 15 |

## Typical Cams



Normally open to make (normally closed to break) IN ONE DIRECTION ONLY. Lever and cam are spring returned to staring 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.

## 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 clockwise. The lever can be operated counterclockwise but the contacts will not operate.
2. The contacts function when the lever is operated counterclockwise. The lever can be operated clockwise but the contacts will not operate.
3. The contacts function when the lever is operated clockwise or counterclockwise.

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.


## 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.

| CATALOG NUMBERS |  |  |
| :---: | :---: | :---: |
| MOUNTING (see page 44) |  |  |
| STANDARD | Wide | Long |
| EA700-16700 | EA700-46700 | EA700-76700 |
| CONTACTS | CIRCUITS |  |
|  | POSITION 1 | POSITION 2 |
| $\begin{aligned} & 1 \text { N.O. } \\ & 1 \text { N.C. } \end{aligned}$ |  |  |



## Maintained Position Cam

Maintained Switches 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 the starting position and until the lever is moved counterclockwise when the normally open contacts open and the normally closed contacts close.

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

*Available in short travel version with $13^{\circ}$ trip - Consult Factory.

## N1 - 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 C W from starting position upper contacts close. As lever is spring returned to starting position upper contacts open

| CATALOG NUMBERS |  |  |
| :---: | :---: | :---: |
| MOUNTING (see page 40) |  |  |
| STANDARD | Wide | Long |
| EA700-15700 | EA700-45700 | EA700-75700 |
| CONTACTS | CIRCUITS |  |
| 2 N.O. |  |  |

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


| CATALOG NUMBERS |  |  |
| :---: | :---: | :---: |
| MOUNTING (see page 40) |  |  |
| STANDARD | Wide | Long |
| EA700-15800 | EA700-45800 | EA700-75800 |
| CONTACTS | CIRCUITS |  |
| 2 N.C. |  |  |


| Direction of Rotation |  | CW | CCW |
| :---: | :---: | :---: | :---: |
| A. Trip Travel . |  | .... $31^{\circ}$ | $31^{\circ}$ |
| B. Reset Trav |  | ..... $22^{\circ}$ | $12^{\circ}$ |
| C. Recommended T |  | ...... $45^{\circ}$ | $45^{\circ}$ |
| D. Total Travel |  | .... $90^{\circ}$ | $90^{\circ}$ |
| TorqueN1 CAM |  |  | (Inch Lbs.) |
|  | $\begin{aligned} & 2 \text { N.O. } \\ & 2 \text { N.O. } \end{aligned}$ | CW CCW | $\begin{aligned} & 15 \\ & 19.5 \end{aligned}$ |
| N1 CAM | $\begin{aligned} & 4 \text { N.O. } \\ & 4 \text { N.O. } \end{aligned}$ | $\begin{aligned} & \text { CW } \\ & \text { CCW } \end{aligned}$ | $\begin{aligned} & 16.5 \\ & 20.5 \end{aligned}$ |
| N1 CAM | $\begin{aligned} & 2 \text { N.C. } \\ & 2 \text { N.C. } \end{aligned}$ | $\begin{aligned} & \text { CW } \\ & \text { CCW } \end{aligned}$ | $\begin{aligned} & 15 \\ & 19.5 \end{aligned}$ |
|  | $\begin{aligned} & 4 \text { N.C } \\ & 4 \text { N.C. } \end{aligned}$ | $\begin{aligned} & \mathrm{CW} \\ & \mathrm{CCW} \end{aligned}$ | $\begin{aligned} & 16.5 \\ & 20.5 \end{aligned}$ |

## Neutral Position Cam

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

See Page 40 for Mounting Dimensions


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.

