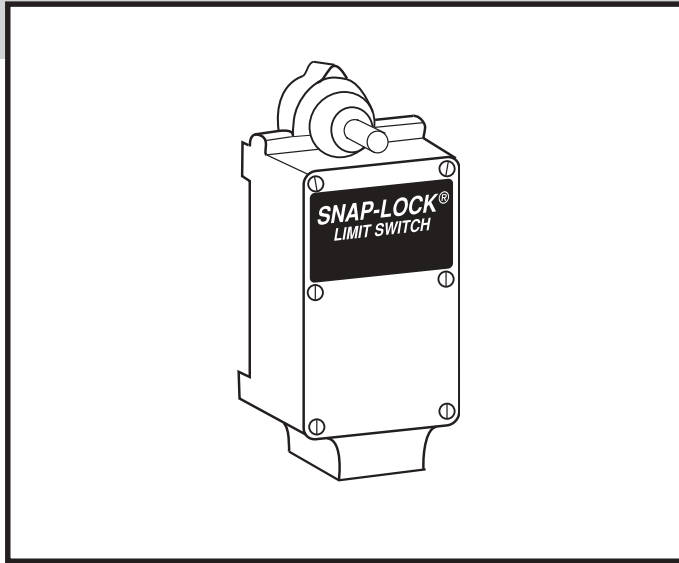


# EA170-302/402 Series

Outside Containment Areas

## Nuclear Qualified Products



# Limit Switches/ Receptacle Assembly... For Nuclear Environments

### Features:

- Qualified to IEEE Standards 344-1975, 323-1974, and 382-1972. For outside containment use only (mild environment).
- Manufactured to a quality assurance program designed to meet the requirements of 10CFR50, Appendix B, and ANSI N45.2, as applicable.
- Die-cast zinc housing.
- Stainless steel top cover and fasteners.
- Gold-plated contacts.
- High temperature components throughout.
- High temperature lubricants.
- Radiation resistant.
- Seismic and vibration resistant.
- Hose down, water resistant.
- Available with reverse shaft extension.
- Three mounting styles.
- EA 170 has a positive lever latching mechanism.

### Continuous Current Rating 75-100% Power Factor\*

125 VAC	20 AMPS*
250 VAC	15 AMPS*
480 VAC	10 AMPS*
600 VAC	5 AMPS*
125 VDC	5 AMPS
250 VDC	1.5 AMPS

### Technical Data:

- Two normally open and two normally closed, NEMA form Z contact arrangement.
- Enclosure meets NEMA 1, 4 and 13 requirements for dust-tight, water-tight and oil-tight applications.
- Operating lever is adjustable in 7°/30' increments through 173°.
- Adequate wiring space for nine conductors.
- Operating temperature 0° to 90°C.
- EA 170-302/402 has 10° or 6½° pre-travel, maximum travel 37°.
- Weight EA 170-302: 3.5 lbs.; EA 170-402: 4.5 lbs.
- Maximum radiation-204 megarads gamma.
- 8-32 SEMS terminal screws.

### Receptacle Data

- Qualified receptacle sealed in place.
- Qualified ring tongue terminal applied to leads.
- Every assembly tested before shipment.
- Qualified lead wires.
- Receptacle keyed for proper alignment of connector.
- All circuits wired.
- Circuits of receptacle identified the same as limit switch A, B, C, D, etc.

FOR OUTSIDE CONTAINMENT AREAS SWITCHES SHOULD BE SPECIFIED AS FOLLOWS:

EA170 Series\*

Series	Operation	Standard	Wide	Long
		EA170-		
EA170 Standard	CW	11302	21302	31302
	CCW	12302	22302	32302
	Maint.	13302	23302	33302
EA170 Short Travel	CW	14302	24302	34302
	CCW	15302	25302	35302
	Maint.	16302	26302	36302
EA170 Standard Reverse Shaft	CW	41302	51302	61302
	CCW	42302	53302	62302
	Maint.	43302	53302	63302
EA170 Short Travel Reverse Shaft	CW	44302	54302	64302
	CCW	45302	55302	65302
	Maint.	46302	56302	66302

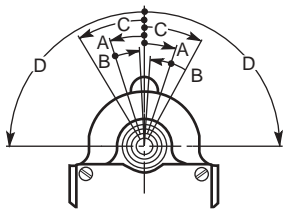
\* For inside containment — see catalog EA180-XX302.

EA170 Series with Receptacle\*\*

Series	Operation	Standard	Wide	Long
		EA170-		
EA170 Standard	CW	11402	21402	31402
	CCW	12402	22402	32402
	Maint.	13402	23402	33402
EA170 Short Travel	CW	14402	24402	34402
	CCW	15402	25402	35402
	Maint.	16402	26402	36402
EA170 Standard Reverse Shaft	CW	41402	51402	61402
	CCW	42402	53402	62402
	Maint.	43402	53402	63402
EA170 Short Travel Reverse Shaft	CW	44402	54402	64402
	CCW	45402	55402	65402
	Maint.	46402	56402	66402

\*\* For inside containment — see catalog EA180-XX402. Male Receptacle Assemblies may be ordered separately. Please order part number EC290-19001.

Operational Data



Series EA170NUC - Standard  
Direction of Rotation

- A. Trip Travel ..... 10°
- B. Reset Travel ..... 8°
- C. Recommended Travel ..... 13°
- D. Total Travel ..... 37°
- E. Torque to Trip (inch Lbs.) ..... 23
- F. Weight ..... Approx. 3.5 Lbs.

Series EA170NUC - Short Travel

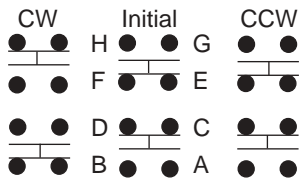
- A. Trip Travel ..... 6°30'
- B. Reset Travel ..... 4°
- C. Recommended Travel ..... 7°
- D. Total Travel ..... 36°
- E. Torque to Trip (Inch Lbs.) ..... 32
- F. Weight ..... Approx. 3.5 Lbs.

Series EA170NUC - Reverse Shaft  
(CW OPERATION SHOWN)  
VIEWED FROM TOP COVER  
Direction of Rotation

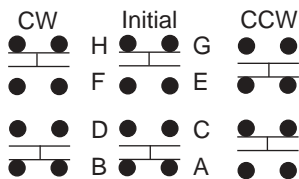
- A. Trip Travel ..... 10°
- B. Reset Travel ..... 8°
- C. Recommended Travel ..... 13°
- D. Total Travel ..... 38°
- E. Torque to Trip (Inch Lbs.) ..... 23
- F. Weight ..... Approx. 3.5 Lbs.

Contact Configuration:

For CW Switch



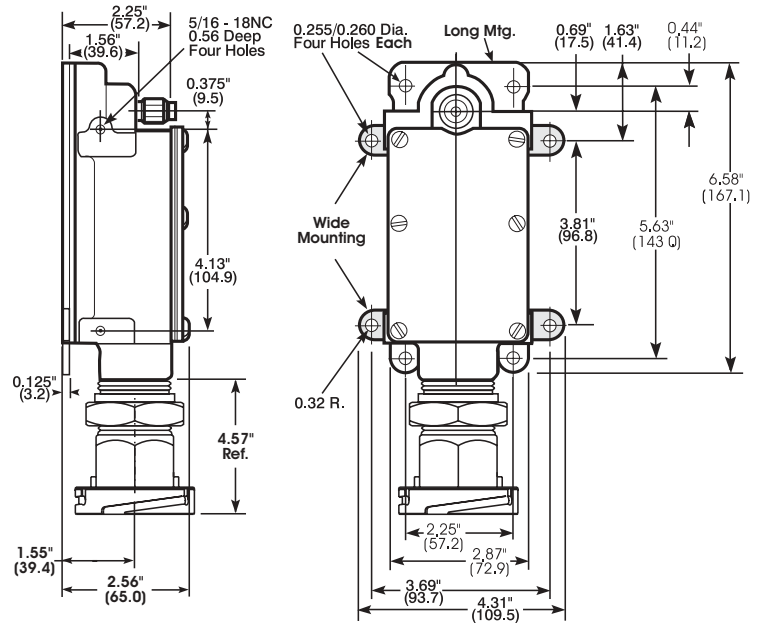
For CCW Switch



**PLUG-IN CABLES:** Cable lengths for the above Switch/ Receptacle Assemblies should be ordered with specific cable lengths as follows . . .

Plug-In Cables	
Length	EC290-
20 Ft.	29020
25 Ft.	29025
30 Ft.	29030
35 Ft.	29035
50 Ft.	29050
100 Ft.	29100

Dimensions



**LEVERS:** For use inside containment area, levers with bronze arms and beryllium copper rollers are recommended.

**Note:** Levers must be ordered as separate item. For information request Lever Bulletin EL.

**ADAPTORS:** Straight and elbow adaptors are available for direct mounting into limit switches. See CD/EH700 Series Bulletin.

