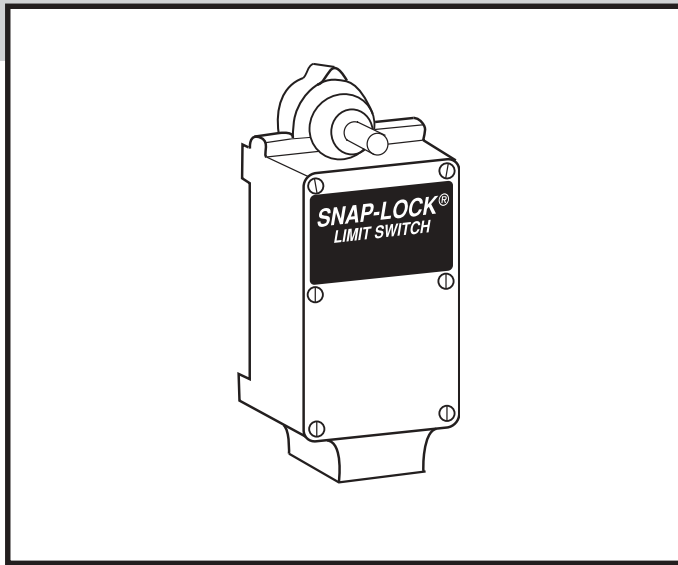


## Nuclear Qualified Products



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

### Features:

- Qualified to IEEE Standards 344-1975, 323-1974, and 382-1972.
- Manufactured to a quality assurance program designed to meet the requirements of 10CFR50, Appendix B, and ANSI N45.2, as applicable.
- Die-cast bronze housing.
- Stainless steel top cover and fasteners.
- Gold-plated contacts.
- High temperature components throughout.
- High temperature lubricants.
- Seismic and vibration resistant.
- Resists chemical spray.
- Three mounting styles.
- EA 180 has a positive lever latching mechanism.

### 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.
- Short term exposure to 175°C.
- EA 180-302/402 has 10° or 6½ ° pre-travel, maximum travel 37°.
- Weight EA 180-302: 4.5 lbs.; EA 180-402: 5.5 lbs.
- DBE maximum test parameters — temperature 340°F, pressure 70 PSIG, radiation 204 megarads gamma.

### 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

### 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 INSIDE CONTAINMENT AREAS SWITCHES SHOULD BE SPECIFIED AS FOLLOWS:

EA180 Series\*

Series	Operation	Standard	Wide	Long
		EA180-		
EA180 Standard	CW	11302	21302	31302
	CCW	12302	22302	32302
	Maint.	13302	23302	33302
EA180 Short Travel	CW	14302	24302	34302
	CCW	15302	25302	35302
	Maint.	16302	26302	36302

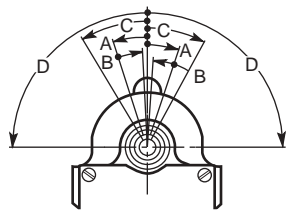
\* For inside containment — see catalog EA170-XX302.

EA180 Series with Receptacle\*\*

Series	Operation	Standard	Wide	Long
		EA180-		
EA180 Standard	CW	11402	21402	31402
	CCW	12402	22402	32402
	Maint.	13402	23402	33402
EA180 Short Travel	CW	14402	24402	34402
	CCW	15402	25402	35402
	Maint.	16402	26402	36402

\*\* For outside containment — see catalog EA170-XX402. Male Receptacle Assemblies may be ordered separately. Please order part number EC290-19001.

Operational Data



Series EA180 - 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.) ..... 21

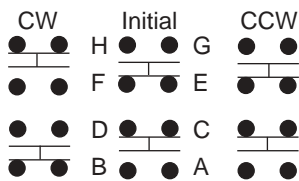
Series EA180 - Short Travel

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

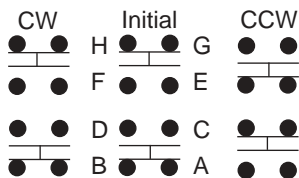
RETURN SPRING MOUNTED ON THIS SIDE OF SWITCH FOR "CCW" OPERATION. RETURN SPRING MOUNTED ON THIS SIDE OF SWITCH FOR "CW" OPERATION.

Contact Configuration:

For CW Switch



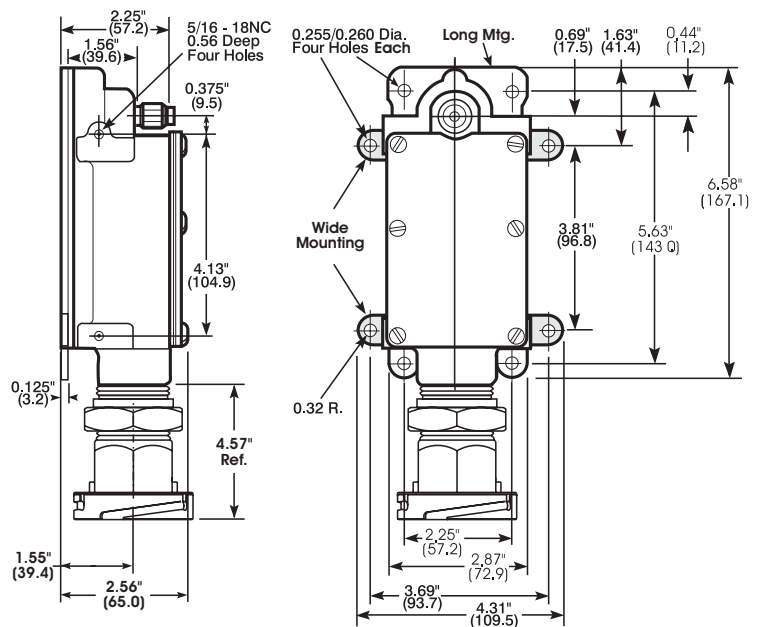
For CCW Switch



**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.

