



# COMPONENT SPECIFICATION

TITLE

## Portable Power Cable – NEC Type W

APPROVALS:	DATE	REV	DCN NO	BY	CHK	DCC	DATE
DRAWN: W. Althouse	1/5/98	A	E970194-00-W	n/a	n/a	n/a	n/a
CHECKED:		B	E980002-00-W	WEA			1/15/98
APPROVED:							
DCC RELEASE:							

**Description:** Portable power cable meeting the following specifications and supplied in the designated lengths. Cable is to be suitable for multiple use, in a portable outdoor temporary power installation. Oil, sunlight and moisture resistance are important.

**Requirements:**

**Applicable Standards:** NFPA 70 (National Electrical Code) portable cable type “W”  
 ICEA S-68-516  
 NEMA WC-3

**UL Listing:** The cable shall be UL listed.

**Conductor:** Single conductor, rope stranded copper, 500 kcmil, nominally 427 strands x 0.0342 in. diam.

**Insulation:** Ethylene Propylene Rubber rated for 90 °C

**Jacket:** Thermoset CV cured, oil, sunlight and moisture resistant, jute and rubber fillers if applicable.

**Ampacity:** Minimum 695 A at ambient temperature of 40 °C; resistance approximately 0.0227 ohms per 1000 ft. at 25 °C.

**Temperature Rating:** 90 °C

**Voltage Rating:** 600 V

**Reels:** Provide cables specified below on 19 each non-returnable reels, all of same size, with size pre-approved by LIGO.

**Required Lengths:** All lengths ±1.5%:

Designation	Cable length ft	No. of cables	No. cables per reel	No. of reels	Total length ft
Return A	1,922	4	1	4	7,688
Return B	1,781	4	1	4	7,124
Return C	1,870	4	1	4	7,480
Return D	2,011	4	1	4	8,044
PS1*	105	8	8	1	840
PS2*	235	8	8	1	1,880
Spare	1,000	1	1	1	1,000
Total length (approx.)					34,056

\*Eight PS1 cables wound in parallel on one reel. At supplier’s option, each PS1 cable may be furnished on one reel of smaller size, 8 reels total. PS2 to be similarly supplied.