



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: | | | | | | | |
| 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 foot:

| 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.