

CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY E970193-00-W

DRWG NO. REV. GID

COMPONENT SPECIFICATION

sheet 1 of

TITLE

Portable 1	Power	Cable -	- NEC Ty	pe W	

APPROVALS:	DATE	REV	DCN NO	BY	СНК	DCC	DATE
DRAWN: W. Althouse	12/31/97			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	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							
Required Lengths:	All lengths ±1 foot:							
	Designation	Length/reel ft	No. of reels	Total length ft				
	Return A	1,922	4	7,688				
	Return B	1,781	4	7,124				
	Return C	1,870	4	7,480				
	Return D	2,011	4	8,044				
	PS1*	105	8	840				
	PS2*	235	8	1,880				
	Spare	1,000	1	1,000				
	Total length (approx.)			34,056				
	* at suppliers option, PS1 cable may be supplied as 8 parallel cables on one reel provided reel size does not exceed return cable reel size. PS2 may be similarly delivered.							
Reels:	Provide on non-returnable reels, one cable per reel. LIGO must pre-approval standard reels sizes.							