HV Supplies-to-MuID Panels

- LeCroy 1471P hardware-limited to 5000 V.
- BNL stock A30304 red RG-59 cable with Kings 1705-1 connector on supply end.
  - 45,000 feet total.
- 9C22SHV 9-conductor cable with AMP 861647-7 connector on panel end.
  - Cable:
    - 200 feet total.
    - Passes VW-1 flame test, rated for 5kV.
    - Approved for PHENIX Drift Chamber.
  - Connectors:
    - 100 total.
    - Rated for 27 kV.

Associated Data Sheets

PRODUCT SPECIFICATIONS
Multiple conductor-5KV shielded test cable

Part Number: 9C22SHV (9 conductor), 13C22SHV (13 conductor)
Product Description: 22 awg, 9 or 13 conductor, overall braid shield
Conductors: 22 AWG (7/30 Stranded tinned copper)
Insulation: primary: conductive polyethylene, secondary: PVC
Number of Conductors/Pair: 9 or 13 conductors
Jacket Material: Flame Retardant PVC- jacket material passes VW-1 flame test
Outer Diameter (nom): 9 cond: .585" 13 cond: .650"
Shielding: overall nom 96% tinned copper braid

Electrical Specifications
Suggested working voltage: 5KV
Hipot test: 14.3KV for 1 minute

Conductor Color Code:
All conductors gray

THIS PRODUCT DOES NOT CARRY A UL LISTING

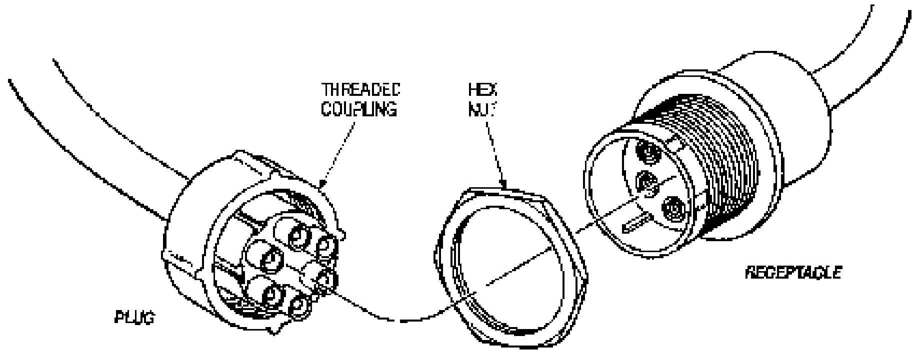
Rev. A 01/99
Specifications subject to change
Put-ups: 500 Ft +/-10%

Figure 10.1: Multi-conductor HV cable data sheet.

AMP

AMP* LGH* Circular High Voltage Connector with 2, 3, 4, 6, or 7 Contacts

Instruction Sheet
408–9169
29 JUN 94 Rev B



TYPICAL, 6-CONTACT CONNECTOR SHOWN

NUMBER OF CONTACTS	WIRE SIZE (AWG)	RECEPTACLE KIT	PLUG KIT	PLUG KIT WITH STRAIN RELIEF	PLUG KIT AND RECEPTACLE KIT	PLUG (with strain relief) AND RECEPTACLE KIT
2	24 through 14	859529–[ ]	860261–[ ]	863020–[ ]	860286–[ ]	863015–[ ]
3		859526–[ ]	860263–[ ]	863021–[ ]	860287–[ ]	863016–[ ]
4		859526–[ ]	860265–[ ]	863022–[ ]	860288–[ ]	863017–[ ]
6		859527–[ ] 863031–[ ]	860267–[ ] —	863023–[ ] —	860229–[ ] —	863018–[ ] —
7		861647–[ ]	861648–[ ]	863024–[ ]	860625–[ ]	863019–[ ]

Figure 1

1. INTRODUCTION

This instruction sheet covers the assembly procedure for the AMP circular connectors listed in Figure 1. Notice that only base numbers are shown; for more specific information about a particular connector, contact AMP Product Information Center at 1–800–522–6752, or order AMP Catalog 82024. Read this sheet, and applicable referenced material, before assembling connectors or installing hardware.

NOTE *All dimensions on this document are in metric units [with U. S. customary units in brackets].*

See Paragraph 7, REVISION SUMMARY, for revision information.

2. DESCRIPTION

Each connector kit features a plug or receptacle shell, TYPE II Pin or Socket Contacts of a specified wire size, a retaining ring or strain relief (plug kits only), and a hex nut (receptacle kits only).

The connectors are equipped with threaded caps for quick connect/disconnect capability and can be panel or bulkhead–mounted, or used for free hanging applications.

When crimping the contacts and assembling the connectors, the connectors must be sealed with a suitable potting material. Refer to Section 4, ASSEMBLY AND POTTING, for specific instructions.

3. WIRE PREPARATION (Figure 2)

Refer to Figure 2 for proper stripping dimensions, and proceed as follows:

1. Strip the insulation according to the dimensions shown in Figure 2.

2. Crimp the contact to the wire using the appropriate tooling. Refer to Figure 3 and to the instruction sheet packaged with the tool.

Figure 10.2: AMP 861647-7 data sheet.