



R75

R75 Series

40 to 75 KVDC
Cable Assemblies
and Receptacles

GENERAL SPECIFICATIONS

R75 Cable Assemblies and Receptacles for Ground Level Applications

Designed for pulse and DC applications, the R75 series is the vital interconnecting link in many electronic systems. The use of exclusive design techniques assures corona resistant performance up to 75 KVDC.

The R75 series achieves its rugged dependability through factory molding and assembly procedures where cable ends or wire leads become an integral part of the connector

The molded coaxial connector concept with an air reducing interface seal, semiconducting rubber corona shields and special mating threads combine to provide connectors with low corona characteristics and a robustness suitable for operating under adverse environmental conditions.

Applications (limited to ground level)

R75 series assemblies are used in:

- Radar systems • X-ray systems • Electron beam equipment
- Accelerators • Electron microscopes • Pulse applications
- Pulsed and direct current high voltage power supplies

Interface cleaning

High voltage connectors must always be cleaned prior to mating. The proper cleaning method is to wipe or spray the interface area with isopropyl alcohol and immediately blow an inert gas such as dry nitrogen over the interface area until dry. No other cleaning method should be attempted.

WARNING: These connectors should **NEVER** be handled, mated or unmated when voltage is applied.



Female Plug



Male Receptacle

GENERAL SPECIFICATION

Voltage rating (mated)

Altitude rating

Operating temperature range

Insulator material

Coupling

Male contact material/finish

Female contact material/finish

Uses coaxial cable

Plug Cable Assemblies

Up to 75 KVDC

To 15,000 ft.

-40°C to + 85°C

Rubber

Threaded

N/A

Be Cu/Gold

Yes

Receptacles

Up to 75 KVDC

To 15,000 ft.

-40°C to +85°C

Rubber

Threaded

Brass/Gold plate

N/A

No

Cable Assembly
Length vs Manufacturing
Tolerance Chart

| Length: feet/M |
|----------------------|
| 7.5/2.28 or less |
| 7.5/2.2 to 12.5/3.8 |
| 12.5/3.8 to 22.5/6.8 |
| 22.5/6.8 to 35/10.6 |
| 35/10.6 to 50/15.2 |
| 50/15.2 to 70/21.3 |
| 70/21.3 to 100/30.4 |

| Tolerance: inches/mm |
|----------------------|
| 0.25/6.3 |
| 1.0/25.4 |
| 1.50/38.1 |
| 2.0/50.8 |
| 3.0/76.2 |
| 4.0/101.6 |
| 5.0/127 |

Note: Reynolds Industries, Inc. acquired the R75 product line from Rowe Industries, Inc. in 1997.