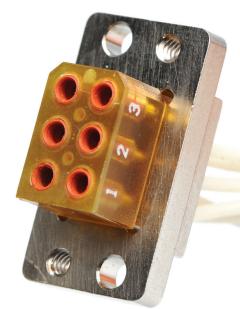
JR SERIES

SUBMINIATURE, HIGH RELIABILITY CONNECTOR

6 kVDC • -55°C to 125°C • 70,000 ft. Rated • 4 & 6 Pin





INTRODUCTION

JR is a series of subminiature high voltage cable assemblies. The series consists of 4 pin and 6 pin cable assemblies rated at 6 kVDC designed to operate up to 70,000 feet altitude over a temperature range of -55°C to 125°C.

The series is ideally designed to interconnect low power mini-TWTs to a power supply in a Radar or ECM system. Since their introduction, these high contact density assemblies have found applications in laser systems, photo-multiplier detection systems, night vision systems and other applications where small size and a flexible cable harness are requirements.

JR Series are only available as plug or receptacle cable assemblies. Each assembly is wired with our Ready-to-Bond™ etched FEP or silicone coated cable. A braided shield or NOMEX® woven jacket is optional. The insulator is a thermoplastic on both the plug and receptacle, but the Advanced Interface Seals contained in the receptacle are silicone. The receptacle and plug bodies are nickel plated aluminum.

The completed cable assemblies are high potential tested at 70,000 feet simulated altitude at room ambient temperature. Excellent bond joints can be achieved in silicone encapsulation processes when the Ready-to-Bond™, silicone coated FEP cable is used. The Etched Ready-to-Bond™ FEP cable will yield good results when encapsulated into most epoxies and other rigid or semi-rigid potting materials.

FEATURES

Small size for applications with tight space contraints

Rated for operation @ 70,000 feet

Custom designs available

GENERAL SPECIFICATIONS

Voltage Rating (Mated)	6 kVDC	
Altitude Rating	Up to 70,000 ft.	
Operating Temp. Range	-55° to 125°C	
Insulator Material	Thermoplastic (unless otherwise noted)	
Body/Shell Material	Nickel Plated Aluminum	
Wire Type*	Silicone Coated or Etched FEP Wire	
Contact Size	24 AWG (.020" Dia.)	
Test Voltage @ 70,000 ft. (Simulated) and Ambient Temperature: 9 kVDC		
	Plug	Receptacle
Contact Type	Female	Male
Contact Material/Finish	BeCu/Gold Plate	Brass/Gold Plate

^{*} A braided shield or NOMEX® woven jacket is optional

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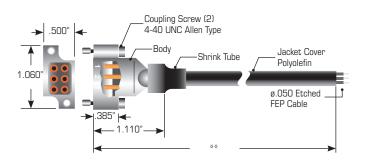
6 kVDC • -54°C to 125°C • 70,000 ft. Rated • 4 & 6 Pin

PLUG CABLE ASSEMBLY - 4 PIN

P/N 178-9718 (Mates P/N 178-9719 shown below)

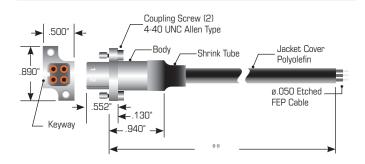
PLUG CABLE ASSEMBLY - 6 PIN

P/N 178-8363 (Mates P/N 178-8362 shown below)



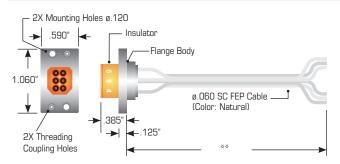
RECEPTACLE CABLE ASSEMBLY - 4 PIN BULKHEAD MOUNTED

P/N 178-9719 (Mates P/N 178-9718 shown above)



RECEPTACLE CABLE ASSEMBLY - 6 PIN

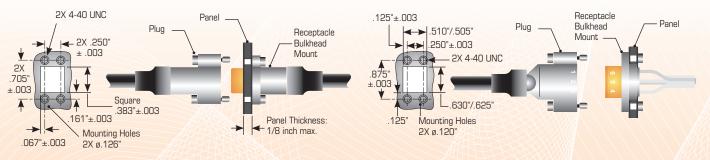
P/N 178-8362 (Mates P/N 178-8363 shown above)



PANEL CUTOUT DIMENSIONS AND MOUNTING EXAMPLE - 4 PIN

PIN

PANEL CUTOUT DIMENSIONS AND MOUNTING EXAMPLE - 6 PIN



TELEDYNE REYNOLDS' PRODUCTS INCLUDE:

- High voltage connectors and cable assemblies from 5 kVDC to 130 kVDC Specialty high voltage wire and cable
- Hybrid multi-pin connectors with fiber optic, video signal and high voltage compatibility
- Ceramic-to-metal brazed connectors and high current vacuum switches High voltage capacitors and voltage multipliers
- EMP and transient protection systems (high voltage spark gaps) EBW and EFI explosive initiators and firing systems
- R.F. and microwave cable assemblies
- Instrumentation and control cable assemblies for nuclear reactors

**Cable Assembly Ordering Information: Use "F" for feet, "N" for inches. Example: Assembly 178-6027 10 feet 8 inches in length is ordered as P/N 178-6027-10F-8N

Note: Product part numbers, dimensions and specifications are subject to change without notice. Products listed represent only a small selection of Teledyne Reynolds' products. Please visit www.teledynereynolds.co.uk for the most up to date product line. Contact Teledyne Reynolds Engineering to discuss custom designs. WARNING: Connectors should NEVER be handled mated or unmated when voltage is applied.

