DELPHI

Connection Systems

Weather Pack Connection Systems

Description

Weather Pack is an environmentally sealed electrical connection system designed to withstand exposure to extreme temperatures and moisture. Terminals are tin plated and have special core wings which allow crimp-only connections, eliminating the need for solder. The connector and cavity seals are triple-ribbed and made of self-lubricating silicone. Cavity plugs are available to fill unused cavities.

Typical Applications

Weather Pack components can be utilized in both in-line and panel-mount applications. They are ideally suited for use in harsh environments where resistance to temperature extremes, chemicals and fluids are a must.

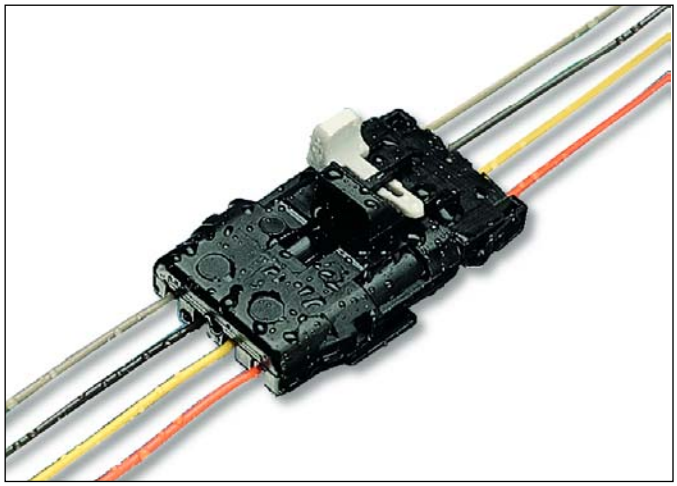
- **In-Line Connections**

  An in-line connection consists of a shroud connector housing male terminals mated to a tower connector assembly housing female terminals.

- **Panel-Mount Connections**

  A panel-mount connection consists of a tower connector assembly housing male terminals mated to a device housing female terminals.

Note: When designing a part to mate with a Weather Pack connector, consult Delphi print 12020084. Always request the latest copy from Delphi before releasing a new design. It is recommended that the above connector/terminal gender guidelines be followed to ensure optimum alignment and assembly ease.



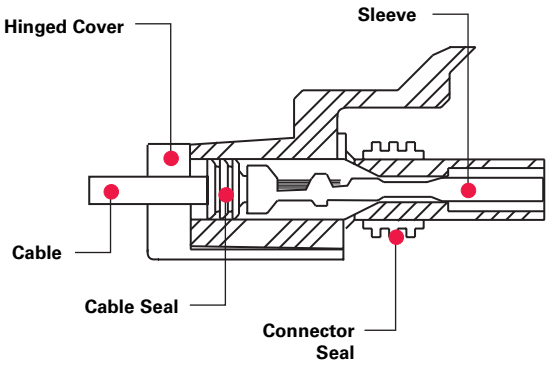
Performance Advantages

Weather Pack terminals utilize a flex-pin and lap-lock design to alleviate the problem of stress relaxation. They also have dual-locking tangs which lock into the connector cavity and help prevent backing out. Terminal plugging requires no orientation and positive indexing prevents mis-mating of connectors. Because Weather Pack provides exceptional sealing performance, it is extensively used in tough applications including construction, off-road and farm equipment.

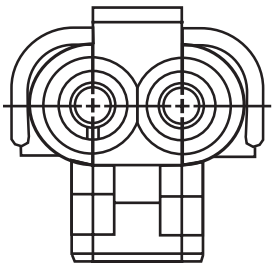
Features
• Connector Position Assurance (CPA) available
• Secondary Lock (Cover)
• 20 amps continuous maximum current rating
• Sealed system
• Pin and sleeve configuration
• Dual-locking tangs on terminals
• Low energy, low voltage capability
• -40°C to 125°C temperature range

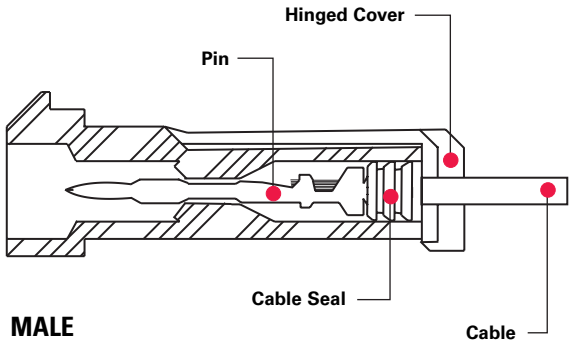
Weather Pack Connection Systems

Cross Sectional Views



FEMALE





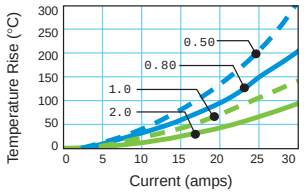
MALE

Sealed System Application Guidelines

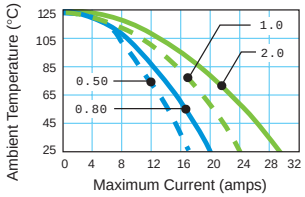
Cable Range	0.35 – 3.0 mm²
Current Range	0 – 20 amps
Temperature Range	-40°C to 125°C
Resistance	<10mΩ @ 50mV
Voltage Drop	<3.0mV/amp
Centerline Spacing	7.7 mm
Blade Width	Pin and Sleeve

Weather Pack Terminals – Tin Plated

Temperature Rise Above Ambient (25°C) vs Current*



Temperature Derating Curves*



*The test data is based on single circuits in free space and was generated using a "Lumped Resistance" model. The data presented here does not account for all variables that would be present in an actual application. Delphi Engineering can model customers' specific applications upon request. For additional detailed product performance, contact 1-800-722-5273 or visit our website at www.delphi.com.

Cable Sizes

- 0.50 mm²
- 0.80 mm²
- 1.0 mm²
- 2.0 mm²

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