

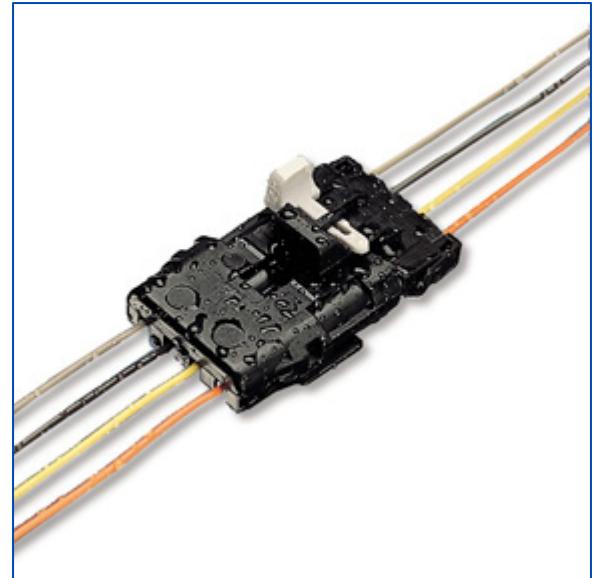
Delphi Weather Pack Connectors

Delphi Weather Pack Connectors are environmentally sealed electrical connections 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.

Both in-line and panel-mount connections are available:

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.



Delphi Weather Pack Connectors

► Benefits

- Sealed system specifically designed to withstand exposure to extreme temperatures, chemicals and fluids
- Pin and sleeve configuration to alleviate stress relaxation
- Secondary lock and Connector Position Assurance (CPA) for improved system design
- Dual-locking tangs on terminals help prevent backing out
- Terminal plugging requires no orientation
- Positive locking indexing prevents mismatching of connectors
- Low energy, low voltage capability for vehicle electronics

► Typical Applications

Weather Pack proven harsh environmentally sealed 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 like with commercial vehicle and marine applications.

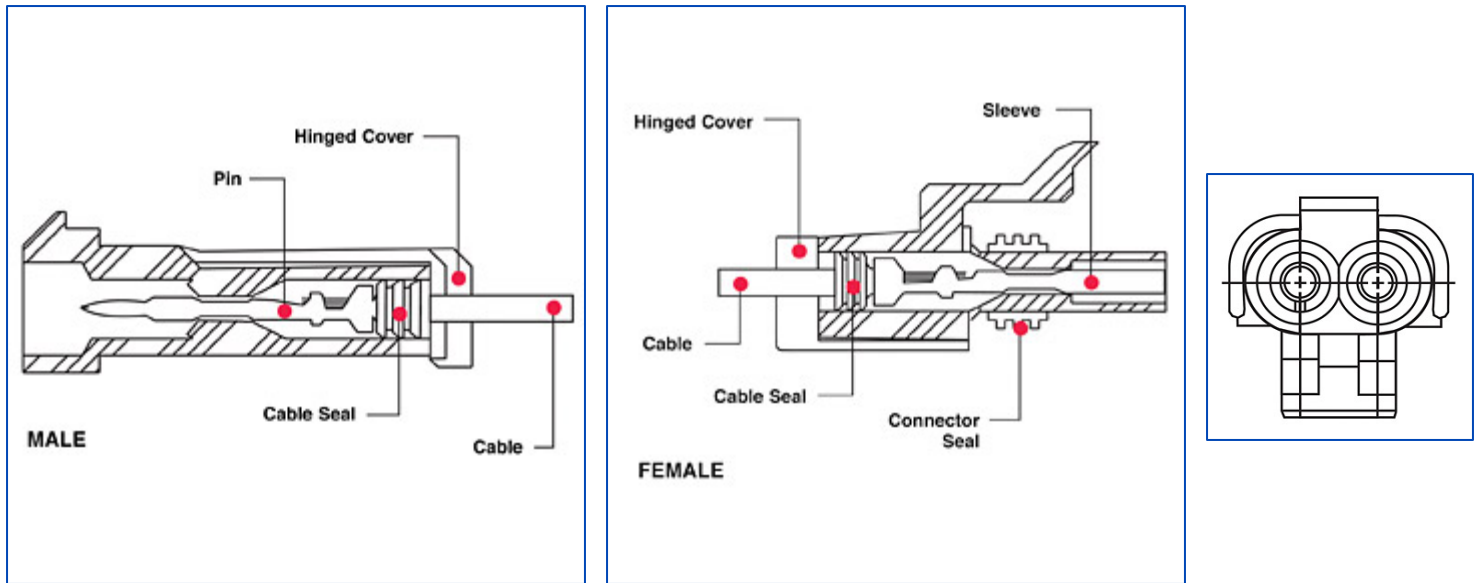
► Sealed System Application Guidelines

| | |
|--------------------|----------------------------|
| Cable Range | 0.35 – 3.0 mm ² |
| 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 |

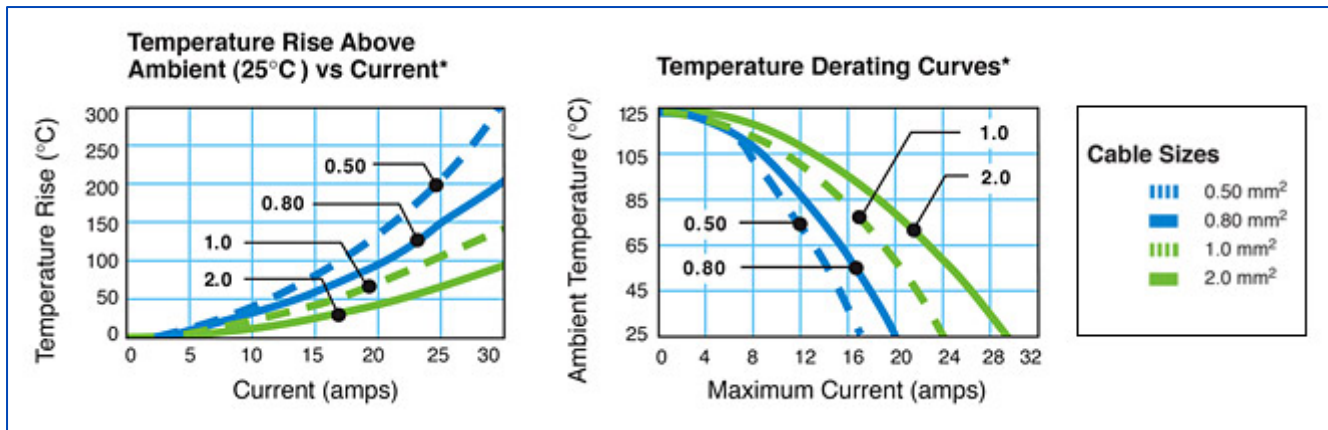
The general application guidelines above are for reference only and may not account for all the variables that would be present in an actual application. For additional detailed product performance information, contact Delphi.

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.

► **Cross Sectional Views and Mating End View**



► **Weather Pack Terminals—Tin Plated**



* 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, visit our website at delphi.com/connect or call [1] 248.813.2330.

► **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.