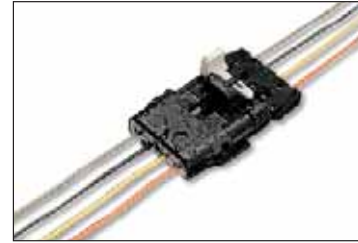
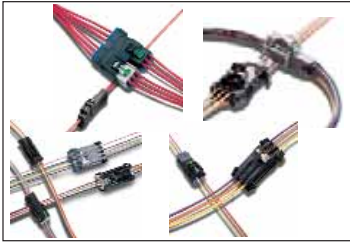


Commercial Vehicle Connection Systems



DELPHI



Connector Family

Metri-Pack

GT

Ducon

Weather Pack

Connector Type

- 150 Series
- 280 Series
- 480 Series
- 630 Series
- 800 Series
- Headers
- Junction
- Mixed

- 150
- 280
- Headers
- Lever Lock
- Mixed
- SlimLine

- 0.8
- 1.5
- 2.8
- 4.8
- 6.3
- 9.5
- Door
- Mixed

- Pin and Sleeve

Benefits/Features

- Extended product range offers significant design and application versatility
- Used in high current to low energy circuits for electrical versatility
- Strength and stability of terminals helps assure correct alignment
- Utilizes internationally standard male blade sizes for design flexibility
- Connector Position Assist (CPA) and Terminal Position Assist (TPA) for superior connection reliability
- Sealed version for excellent resistance to temperature, chemicals and abrasion
- Testing to SAEJ2030

- Tangless terminals for durable design
- Low engage force for improved reliability and ergonomics
- Pump-handle primary lock for lower engage and easy disassembly
- Secondary lock, Connector Position Assist (CPA) and Terminal Position Assist (TPA) capabilities for improved system design
- Mates to ISO, SAE blades for compatibility
- Conforms to USCAR design footprint for broad application flexibility
- Cam lever/mechanical assist for hand engage/disengage
- Optimized content packaging for electrical performance equal to less space efficient terminations
- Pre-staged male blade stabilizer for superior male blade protection
- Mixed terminal capability for design flexibility
- Protected seal interface for superior connection reliability

- Rugged two-piece terminals offer exceptional electrical stability in high vibration applications
- High current performance
- Multiple contact points
- Small overall dimensions
- Low energy, low voltage capability
- Sealed version for excellent resistance to temperature, chemicals and abrasion
- Terminal Position Assist (TPA) for superior connection reliability

- 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 Assist (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 Markets

- Commercial Vehicles
- Marine

- Commercial Vehicles
- Marine

- Commercial Vehicles

- Commercial Vehicles
- Marine

Typical Applications

- Flat blade connections for electronic through high current applications

- Ergonomic connections for in-line, device, header and bulkhead applications

- High performance connections incorporating rugged two-piece terminals

- Proven harsh environmentally sealed connections

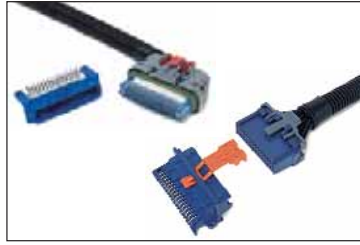


Commercial Vehicle



Connector Family

064



Micro-Pack



Heavy Duty



Power Pack

Connector Type

- | | | | |
|--|--|--|---|
| <ul style="list-style-type: none"> ■ Headers ■ Micro64 ■ MicroHVT ■ MTS ■ MTS-B | <ul style="list-style-type: none"> ■ 100 Series (unsealed) ■ 100W Series (sealed) ■ Headers | <ul style="list-style-type: none"> ■ Circular ■ High Density ■ Pin and Sleeve | <ul style="list-style-type: none"> ■ 2000 Series (sealed) <ul style="list-style-type: none"> • In-line • Right Angle • Panel Mount Headers • Pass-through |
|--|--|--|---|

Benefits/Features

- | | | | |
|--|--|--|--|
| <ul style="list-style-type: none"> ■ Unlimited number of rows and columns with 2.54 mm centerline spacing to accommodate more terminals in less space ■ Pin and box tangleless female terminal for reliable sealing and easy repair ■ Robust terminal interface design for continuous 7 amp current capability with either a square or round pin ■ Non-oriented female terminal to simplify insertion ■ Sealed and unsealed versions ■ Industry standard design for flexibility ■ Validated for high density commercial vehicle electronics ■ Cam lever/mechanical assist, Connector Position Assist (CPA), secondary lock and wire dress available for improved system design ■ 360° orientation available ■ Conforms to USCAR design footprint for broad application flexibility | <ul style="list-style-type: none"> ■ Low energy (<5 amps), high density capabilities allow many electronic signals to be accommodated in one space saving connector ■ Filtered or shielded systems protect against Electromagnetic Interference (EMI) ■ 3.0 mm to 3.5 mm centerlines accommodate applications where space is limited ■ Mechanical assist and bolt-together designs enable ergonomic assembly/disassembly ■ Improved one-piece (vs. two-piece) female terminal for sealed applications ■ Sealed version for excellent resistance to temperature, chemicals and abrasion (100W) ■ Connector Position Assist (CPA) and Terminal Position Assist (TPA) for superior connection reliability | <ul style="list-style-type: none"> ■ Designed to be both backward and forward compatible with existing systems for easy integration ■ Multiple connector indexes enable the same connector to be used in multiple harness designs ■ Connector inserts fit both plug and receptacle shells for gender reversibility ■ Adaptable cable seal cavity flashing to minimize cavity plug usage and tooling cost ■ Snap-in retaining ring for easy repairs ■ Interchangeable terminals ■ Uses same repair tools as existing components ■ Validated to SAEJ2030 | <ul style="list-style-type: none"> ■ Current carrying capability up to 200 amps at 105°C ■ Hand engage/disengage for one-way connectors to eliminate tools and save space and cost ■ Mates with both a single blade style terminal and itself for easy application to device connections ■ Individually sealed terminal cavities for environmental protection to the terminal contact areas and arcing protection ■ Silver plating to withstand 155°C ■ Connector Position Assist (CPA) and Terminal Position Assist (TPA) for superior connection reliability ■ Conforms to USCAR design footprint for broad application flexibility |
|--|--|--|--|

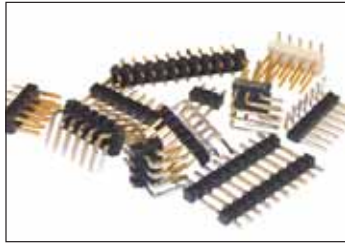
Typical Markets

- | | | | |
|--|---|---|---|
| <ul style="list-style-type: none"> ■ Commercial Vehicles ■ Marine ■ Motorcycles | <ul style="list-style-type: none"> ■ Commercial Vehicles ■ Marine | <ul style="list-style-type: none"> ■ Agriculture ■ Commercial Vehicles ■ Construction ■ Industrial Applications | <ul style="list-style-type: none"> ■ Commercial Vehicles ■ Hybrid Vehicles ■ Industrial Applications |
|--|---|---|---|

Typical Applications

- | | | | |
|--|---|--|---|
| <ul style="list-style-type: none"> ■ High density connections for commercial vehicle and transportation electronics | <ul style="list-style-type: none"> ■ 1 mm pin connections for low power and electronic devices | <ul style="list-style-type: none"> ■ Robust connections with small terminal centerline spacing with current capability up to 100 amps | <ul style="list-style-type: none"> ■ High power connections for 0-600 volt AC/DC power systems for commercial on-road and off-road vehicles, hybrid vehicles and industrial applications |
|--|---|--|---|





Connector Family

Fiber Optics

Board-to-Board Interconnects

Additional Connectors

Additional Components

Connector Type

- | | | | |
|--|--|---|--|
| <ul style="list-style-type: none"> ■ IDB 1394 ■ MOST | <ul style="list-style-type: none"> ■ Compact Battery Devices <ul style="list-style-type: none"> • Connectors and Holders ■ FPC/ZIF ■ I/O Connections ■ LIF ■ PCB Interconnects <ul style="list-style-type: none"> • SMT • Through Hole | <ul style="list-style-type: none"> ■ 56, 58 and 59 Series Connections ■ Coax Connections and Cable Assemblies ■ Compatible Industry Replacements ■ Dock & Lock and Doors-off ■ Flat Wire Connections ■ Smart Connectors | <ul style="list-style-type: none"> ■ Assembly Coverings and Channels ■ Brackets, Clamps and Clips ■ Cable Seals ■ Fuse Holders and Lamp Sockets ■ Ring and Battery Terminals ■ Splice Savers |
|--|--|---|--|

Benefits/Features

- | | | | |
|--|--|---|---|
| <ul style="list-style-type: none"> ■ Meets IDB 1394 and MOST standards ■ Integrated or loose ferrule designs ■ Design capable of accepting a wide range of FOT sizes ■ Can incorporate electrical terminals into a mixed connection system ■ Cost effective for high speed data networks ■ Robust connector construction and locking features ■ Supports development and production of POF devices (tier 1) | <ul style="list-style-type: none"> ■ Compact design for high density applications ■ Competitive industry standard designs ■ Various sizes incorporating single and multiple rows ■ Variety of plating materials available for improved reliability ■ Compact hermaphroditic designs available | <ul style="list-style-type: none"> ■ Cost effective solutions ■ Durable and proven designs ■ Proven power supply products ■ Competitive industry standard designs ■ Ergonomic and assembly efficient designs | <ul style="list-style-type: none"> ■ Durable and proven designs ■ Harness attachment devices designed for automotive and transportation products ■ Ergonomic and assembly efficient designs including orientation features ■ Custom designed solutions for customer specific applications |
|--|--|---|---|

Typical Markets

- | | | | |
|---|--|---|---|
| <ul style="list-style-type: none"> ■ Commercial Vehicles ■ Marine | <ul style="list-style-type: none"> ■ Agriculture ■ Commercial Vehicles ■ Construction ■ Marine | <ul style="list-style-type: none"> ■ Commercial Vehicles ■ Marine | <ul style="list-style-type: none"> ■ Commercial Vehicles ■ Marine |
|---|--|---|---|

Typical Applications

- | | | | |
|--|--|---|--|
| <ul style="list-style-type: none"> ■ Infotainment and telematics applications requiring high speed networks | <ul style="list-style-type: none"> ■ High density connections providing interconnectivity for stacked or perpendicular printed circuit boards | <ul style="list-style-type: none"> ■ Custom designs for customer specific applications | <ul style="list-style-type: none"> ■ General commercial vehicle and transportation electrical distribution attachment needs |
|--|--|---|--|



Photo courtesy John Deere

Commercial Vehicle Connection Systems

Delphi Connection Systems has a global reputation for producing high quality electrical/electronic connectors and connection systems that meet and exceed customer requirements around the world. The technology and processes developed for our connection system products are the result of extensive customer focus and drive for innovation. It is our commitment to continue to work with customers to develop and deliver connection products that meet the ever-increasing standards of quality and performance for the commercial vehicle markets.

Delphi employs leading edge manufacturing technologies and a comprehensive range of design services to produce high performance, cost-effective connection systems available either off-the-shelf or custom designed. We design, manufacture, assemble, validate, and deliver electrical/electronic connection products to meet customers' stringent manufacturing and performance requirements.

The Delphi Advantages:

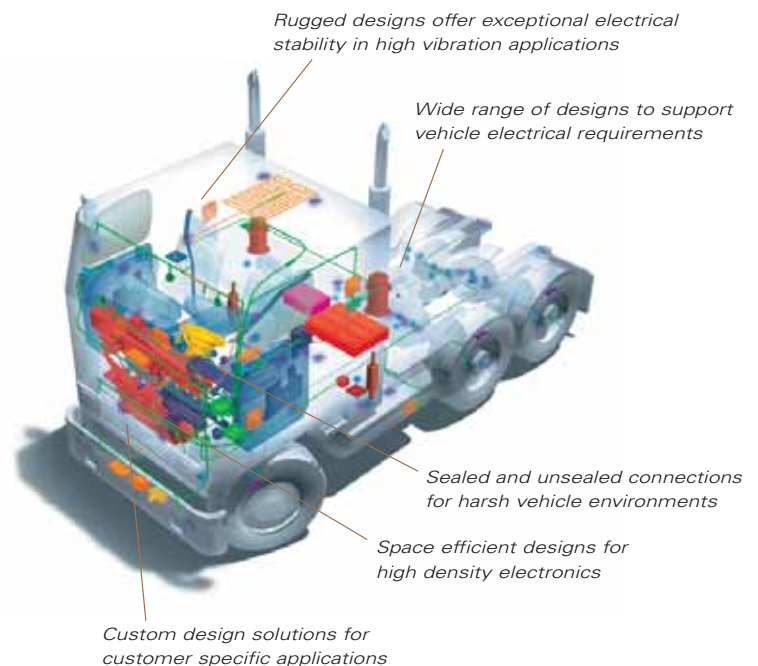
- Extensive product portfolio
- Full service supplier
- Leading edge interconnect technologies
- Expertise in multi-industry connector applications
- Integrated systems approach
- Development of customer focused solutions
- Service that exceeds customers' expectations
- Strong global presence

Delphi offers an extensive portfolio of product solutions for our global customers. Our comprehensive product line ranges from signal-level through high-power connection systems. These include both unsealed and sealed, ergonomically designed connections for in-line, device, and header applications. This varied product portfolio positions us to be a single-source provider.

Typical Applications:

Delphi Connection Systems' commercial vehicle connectors are designed for a wide range of product applications including:

- Medium and heavy duty trucks
- Farm and agriculture
- Construction and industrial
- Marine
- Mass transit
- Recreation
- Motorcycles



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