Updated 2012

# Packard Electrical/Electronic Architecture Hybrid & Electric Vehicle Portfolio

Connection Systems, Electrical Centers, Wiring Assemblies and Charging Solutions



**DELPHI** 

Innovation for the Real World

# Delphi's extensive HEV/EV product portfolio

Hybrid and electric vehicles present unique challenges when it comes to electrical/electronic (E/E) architecture. They demand performance requirements including shielding to protect against electromagnetic interference, sealing to prevent short circuits and arcing, and the incorporation of a hazardous voltage interlock loop, or HVIL. To help keep drivers and service technicians safe in high-voltage environments, a number of complex factors in the electrical system must be addressed and engineered for reliability and peak performance.

Delphi's extensive HEV/EV product portfolio offers a complete range of E/E architecture systems and components for every high-power, high-voltage application, whether off-the-shelf or customized. Delphi has E/E architecture technologies specific for battery-powered transportation, including harness protection systems such as bent aluminum tubes or molded channels, battery monitoring devices, plug-in charging, and a new series of connection systems that incorporate the shielding, sealing, and high-voltage safety interconnects required for high-voltage/high-power applications.

Delphi's vast systems knowledge, innovative automotive component design and integration skills helps reduce costs, provide peak performance and offer a robust portfolio of hybrid and electric vehicle components and systems.

# We are where you need us to be

Delphi has a strong global engineering team with Global Hybrid Development Centers dedicated to Electrical/Electronic Architecture in Champion, Ohio USA, Wuppertal, Germany and Shanghai, China. Our exclusive Velocity Tool Suite  $^{\text{TM}}$  of proprietary analysis, design and simulation tools allow us to look at all the options, seamlessly import customer data, and speed development through virtual testing and validation, wherever we are around the globe.

We have custom, optimized E/E architecture solutions that offer significant benefits for today's hybrid and electric vehicles, including:

- Greater functionality
- Reduced mass and packaging space
- Cost savings
- Improved reliability
- Environmental friendliness



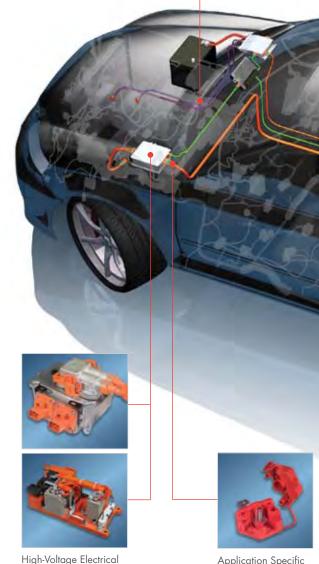




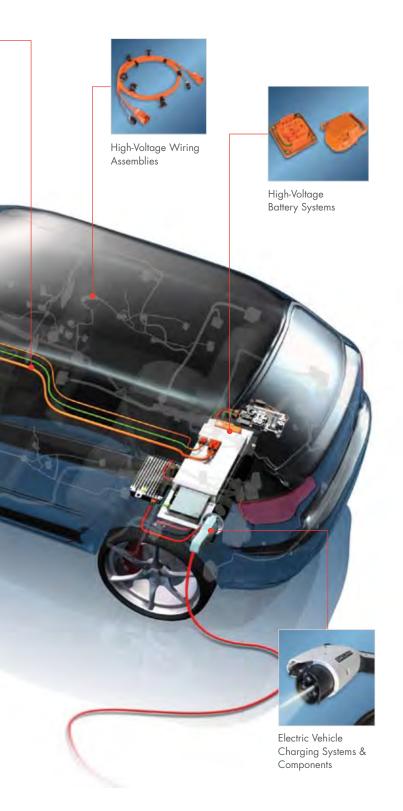
Shield-Pack™ High-Power Connection Systems



Power Pack Unshielded High-Current Connection Systems



Application Specific High-Power Products



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At Delphi, we recognize the importance of vehicle manufacturers offering more comfort, more efficiency, more fuel economy and more environmentally friendly cars and trucks accessible to more consumers. We believe in working together to create the most value for our customers. Our systems knowledge, innovative automotive component design and integration skills extend through our entire organization. This helps us reduce costs, provide peak performance and offer a robust portfolio of hybrid and electric vehicle components and systems including:

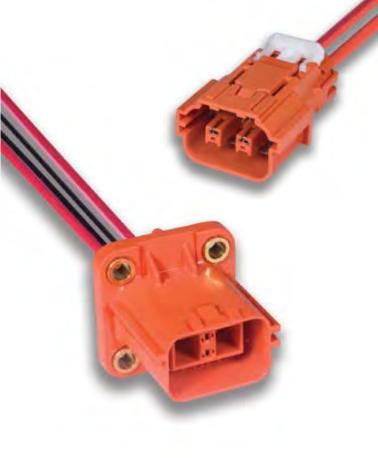
- Charging Systems
- Connection Systems
- Electrical Centers
- Energy Storage Systems
- Power Electronics
- Powertrain Systems
- Service Solutions
- Thermal Systems
- Wiring Assemblies

For more information, visit www.delphi.com/hybrid

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# Delphi Shield-Pack™ Application Guideline

Device	I/O Detail	General Specification	Delphi Portfolio	
Accessories	Electric Air Conditioning			
	Electric Coolant Control	2W < 40A; 600 VDC Shielded	Shield-Pack™ HV280	
	Electric Heater			
	Electric Power Steering			
Battery Pack	Charger Input	2W < 40A; 600 VDC Shielded	CITIE TIMENOOO	
ruck	DC/DC Converter Output	2W < 40A; 600 VDC Shielded	- Shield-Pack™ HV280	
	High-Current Charge Input	2W < 200A; 600 VDC Shielded	SL:-1-1 P1-1M HIV2000	
	Main Power Output	2W < 250A; 600 VDC Shielded	Shield-Pack™ HV2000	
	HV Contactor Center	Customer Specific	Delphi Contactor Center	
	Manual Service Disconnect	< 225A; 600 VDC	Delphi MSD	
DC/DC Converter	DC Input	2W < 40A; 600 VDC Shielded	Shield-Pack™ HV280	
Converier	14V Output	1W Filtered/1W Unfiltered 200A	Delphi 14V Filtered Output	
Electric Motor	AC Input	3W < 145A; 600 VAC Shielded	Shield-Pack™ HV1000	
MOIOI	AC IIIpui	< 250A; 600 VAC Shielded	High-Voltage Pass-Through	
Inverter	AC Outside	3W < 145A; 600 VAC Shielded	Shield-Pack™ HV1000	
	AC Output	< 250A; 600 VAC Shielded	High-Voltage Pass-Through	
	DC Input	2W <250A; 600 VDC Shielded	Shield-Pack™ HV2000	
On-Board	AC Input	3W <40A; 240 VAC Unshielded	HV150; On-Board Charger	
Charger	DC Output	2W <40A; 600 VDC Shielded	Shield-Pack™ HV280	
Vehicle Charging	Level 1, Level 2 Mode 1, 2, 3	< 30A; 120 VAC, 240 VAC up to 32A	Delphi Charging Cordset, Inlets (SAE J1772, IEC 62196-2 Type II)	



# Delphi Shield-Pack™ High-Power Connection Systems

Delphi Shield-Pack™ connection systems have been specifically designed for high-voltage applications used on hybrid and electric vehicles. They provide power terminal isolation for 600V applications, finger proof/touch safe protection, and HVIL circuit integration into the connection system design. The Shield-Pack™ family comes in three series to cover high-voltage applications up to 250 amps. The HV280 series is suitable for applications up to 40 amps, HV1000 up to 145 amps, and HV2000 up to 250 amps. The Delphi Shield-Pack™ family provides customers with one of the largest globally available connection systems portfolios for HEV/EV system optimization.





# Shield-Pack<sup>™</sup> HV280 With Internal HVIL Header





High-voltage accessories connection system

# Description

- Sealed connection system
- Panel mount to device with face seal
- Internal HVIL (shunt on harness connector)
- Two-stage locking system for HVIL time delay
- Two HV power circuits (2.8mm terminal)
- Flange size: 39mm x 39mm
- Finger proof/touch safe
- $\bullet$  Cable range:  $2 mm^2$  to  $5 mm^2$  power circuit;  $0.5 mm^2$  HVIL circuit
- Three keys/indexes

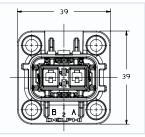
# **Performance**

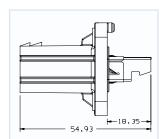
- Current capacity: 40A continuous at 85°C
- Voltage: 600V

Temperature range: -40°C to +125°C
Sealing protection: IP67, IP6K9K
Electrical protection: IP2XB

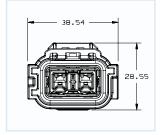
# Part Number Information

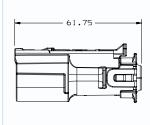






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# Shield-Pack™ HV280

# HVIL Shunt in Header, Face Seal to Device





High-voltage accessories connection system

# **Description**

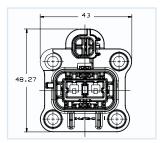
- Sealed connection system
- Panel mount to device with face seal
- Two HV power circuits (2.8mm terminal)
- HVIL shunted-in header with five-second time delay
- Flange size: 43mm x 49mm
- Finger proof/touch safe
- $\bullet$  Cable range:  $2\text{mm}^2$  to  $5\text{mm}^2$  power circuit;  $0.5\text{mm}^2$  HVIL circuit
- Three keys/indexes

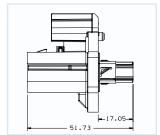
# **Performance**

• Current capacity: 40A continuous at 85°C

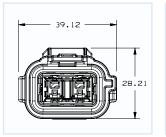
• Voltage: 600V

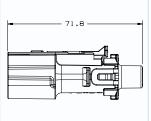
Temperature range: -40°C to +125°C
Sealing protection: IP67, IP6K9K
Electrical protection: IP2XB



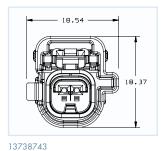


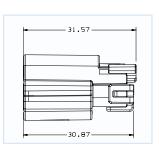
13829178





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**Part Number Information** 

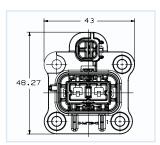
Key/		Mating Information		
Index	Header Connector	Mating Device Detail	HV Connector	HVIL Connector
101	13829178		13861584	13738743
102	13829179	13834720	13861585	13738744
103	13829180		13861586	13766241

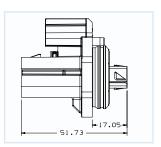
# **DELPHI**

# Shield-Pack™ HV280

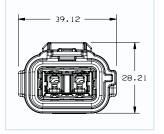
# HVIL Shunt in Header, Bore Seal to Device

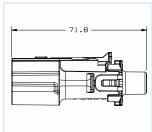




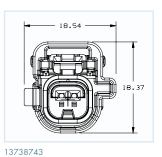


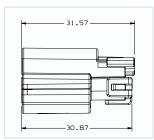
13830674





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# **Application**

High-voltage accessories connection system

### **Description**

- Sealed connection system
- Sealed to device case through bore seal
- Two HV power circuits (2.8mm terminal)
- HVIL shunted-in header with five-second time delay
- Flange size: 43mm x 49mm
- Finger proof/touch safe
- Cable range: 2mm² to 5mm² power circuit; 0.5mm² HVIL circuit
- Three keys/indexes

### Performance

• Current capacity: 40A continuous at 85°C

• Voltage: 600V

Temperature range: -40°C to +125°C
Sealing protection: IP67, IP6K9K
Electrical protection: IP2XB

## **Part Number Information**

Key/		Mating Information		
Index	Header Connector	Mating Device Detail	HV Connector	HVIL Connector
101	13830674		13861584	13738743
102	13830675	13831228	13861585	13738744
103	13830676		13861586	13766241

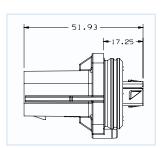


# Shield-Pack™ HV280

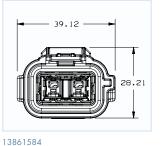
# 2 Way Connection System Without HVIL

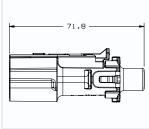


# 35 35 35



13743443





### **Application**

High-voltage accessories connection system when no HVIL is required

# **Description**

- Sealed to device case
- Two HV power circuits (2.8mm terminal)
- Finger proof/touch safe
- Cable range: 2mm² to 5mm² power circuit
- One key/index

# Performance

• Current capacity: 40A continuous at 85°C

• Voltage: 600V

Temperature range: -40°C to +125°C
Sealing protection: IP67, IP6K9K
Electrical protection: IP2XB

# **Part Number Information**

Key/		Mating Information			
Index	Header Connector	Mating Device Detail HV Connector			
101	13743443	13849778	13861584		



# Shield-Pack™ HV280 2 Way Connection System With Multiple HVIL Options





• High-voltage accessories connection system

### **Description**

- Sealed to device case
- Two HV power circuits (2.8mm terminal)
- HVIL available in two configurations: pass-through header, shunted-in header
- HVIL with five-second time delay
- Finger proof/touch safe
- $\bullet$  Cable range:  $2\text{mm}^2$  to  $5\text{mm}^2$  power circuit;  $0.5\text{mm}^2$  HVIL circuit
- Three keys/indexes

# **Performance**

• Current capacity: 40A continuous at 85°C

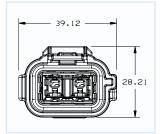
• Voltage: 600V

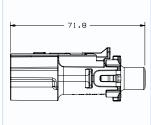
Temperature range: -40°C to +125°C
Sealing protection: IP67, IP6K9K
Electrical protection: IP2XB

# 56

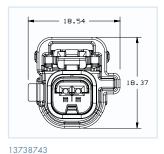
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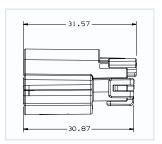
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13861584





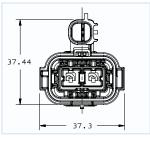
**Part Number Information** 

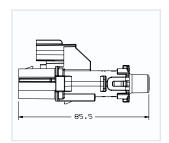
Key/	Header with	eader with Header with HVIL Mating Information			
Index	HVIL Shunted	Pass-Through to Module	Mating Device Detail	HV Connector	HVIL Connector
101	13756860	13737767		13861584	13738743
102	13757523	13737768	13739582	13861585	13738744
103	13766024	13766022		13861586	13766241



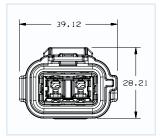
# Shield-Pack™ HV280 2 Way Inline Connection System With HVIL Shunt

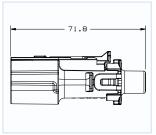






13737736





Application

• Inline connection system for high-voltage accessories

# Description

- Sealed connection system
- Two HV power circuits (2.8mm terminal)
- HVIL with five-second time delay
- Finger proof/touch safe
- Cable range: 2mm² to 5mm² power circuit; 0.5mm² HVIL circuit
- Two keys/indexes

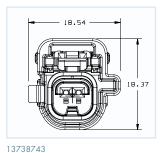
### **Performance**

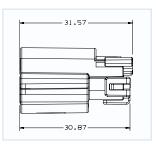
• Current capacity: 40A continuous at 85°C

• Voltage: 600V

Temperature range: -40°C to +125°C
Sealing protection: IP67, IP6K9K
Electrical protection: IP2XB

13861584





**Part Number Information** 

Key/		Mating Information		
Index	Male Connector	Female Connector	HVIL Connector	
101	13737736	13861584	13738743	
102	13737737	13861585	13738744	



# Shield-Pack<sup>™</sup> HV1000 3 Way Panel Mount





• High-voltage/high-current devices (inverters)

### **Description**

- High-voltage panel mount connection system
- Three high-voltage power circuits (Power Pack 1000 terminal)
- HVIL with five-second time delay
- Cable range: 16mm² to 25mm² power circuit; 0.5mm² HVIL circuit
- Two keys/indexes

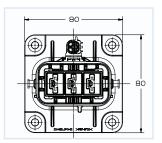
# **Performance**

• Current capacity: 145A continuous at 85°C

• Voltage: 600V

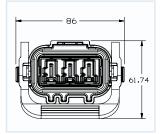
Temperature range: -40°C to +125°C
Sealing protection: IP67, IP6K9K

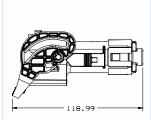
• Electrical protection: IP2XB female connector only



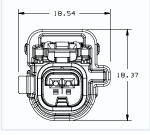


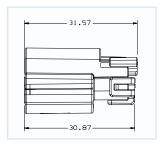
13879064





13879062





13738743

# **Part Number Information**

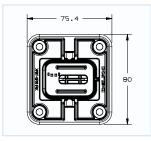
Key/		Mating Information		
Index	Header Connector	Mating Device Detail	Female Connector	HVIL Connector
101	13879064	13879066	13879062	13738743
102	13879065	13879067	13879063	13738743

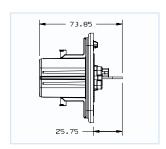


# Shield-Pack™ HV2000

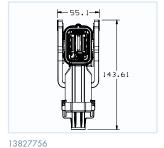
# 1 Way Right Angle Connection System With Internal or External HVIL

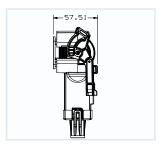






13827768





**Application** 

• High-voltage/high-current modules: inverter, battery

### **Description**

- Panel mount to device with face seal to module
- Terminal provided as part of header
- Lever arm for mechanical advantage
- Internal HVIL shunts in harness connector
- Two-stage lever for HVIL time delay
- External HVIL blocks lever from moving
- Cable range: 25mm² to 50mm²
- One key/index

### Performance

• Current capacity: 250A continuous at 85°C

• Voltage: 600V

Temperature range: -40°C to +125°C
Sealing protection: IP67, IP6K9K

• Electrical protection: IP2XB harness connector only

# **Part Number Information**

Key/		Mating Information			
Index	Header with Terminal	Mating Device Detail HV Connector			
101	13928223	See print for information	13928376		

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# Shield-Pack™ HV2000

# 2 Way Right Angle Connection System With Internal HVIL; IP2XB Harness Connector Only





• High-voltage/high-current modules: inverter, battery

### Description

- Panel mount to device with face seal to module
- Header available with or without terminals
- Internal HVIL
- Harness connector mates in right angle direction
- Finger proof/touch safe harness connector only
- Cable range: 25mm² to 50mm²
- One key/index

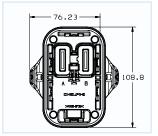
# **Performance**

• Current capacity: 250A continuous at 85°C

• Voltage: 600V

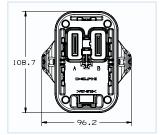
Temperature range: -40°C to +125°C
Sealing protection: IP67, IP6K9K

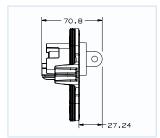
• Electrical protection: IP2XB harness connector only



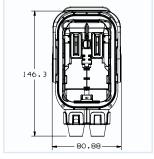
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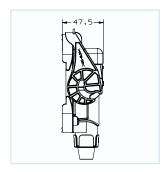
13832577





13832578





13832576

# **Part Number Information**

Key/	Header without	Header with		Mating Information	
Index	Terminal	Terminal	Mating Device Detail	HV Connector	HVIL Connector
101	13832577	13832578	See print for information	13832576	13848934

# Power Pack Unshielded High-Current Connection Systems

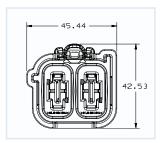
Power Pack Connection Systems meet the increasing demand for high-current/ high-power, hand-pluggable connections. The patented Power Pack portfolio offers two product sizes— the Power Pack 1000 for current demand to 145 amps, and the Power Pack 2000 for current demands to 250 amps. The highlight of the Power Pack family is the terminal system, which allows Power Pack connectors to mate in either inline or right-angle direction, which enables easy routing of large cables typical in high-current applications.

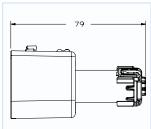


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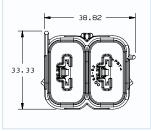
# Power Pack 1000 2 Way Inline Connectors

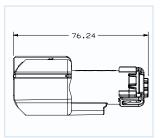






13849756





13849747

# **Application**

• High-current wiring harness inline

# Description

- Sealed connection system
- Silver-plated, multi-contact terminal system
- Cable range: 6mm² to 25mm²
- Two keys/indexes

### **Performance**

• Current capacity: 145A continuous at 85°C

• Voltage: 12V

Temperature range: -40°C to +125°C
Sealing protection: IP67, IP6K9K

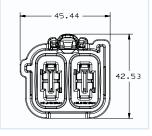
### **Part Number Information**

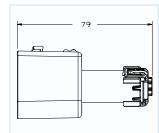
Key/ Index	Female 2 Way	Mating Information  Male 2 Way
Index Right	13849756	13849747
Index Left	13849757	13849748



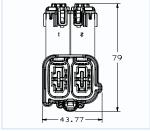
# Power Pack 1000 2 Way Device Connectors

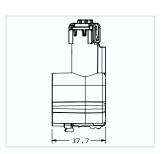






13849756





High-current device applications
 13849758

### **Description**

**Application** 

- Sealed connection system
- Silver-plated, multi-contact terminal system
- Cable range: 6mm² to 25mm²
- Two keys/indexes

### **Performance**

• Current capacity: 145A continuous at 85°C

• Voltage: 12V

Temperature range: -40°C to +125°C
Sealing protection: IP67, IP6K9K

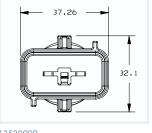
# Sealing protection: IPO/, IPORYK

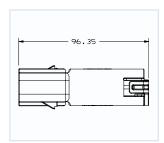
### **Part Number Information**

Key/	Female	Female	Mating In	formation
Index	Straight	Right Angle	Mating Device Detail - Straight	Mating Device Detail - Right Angle
Index Right	13849756	13849758	13790784	13790786
Index Left	13849757	13849759	13790785	13790787

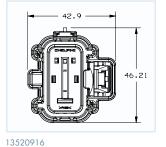
# Power Pack 2000 1 Way Inline Connectors

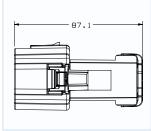






13520909





# **Application**

• Inline connections up to 250A

# **Description**

- Sealed system
- Silver-plated, multi-contact terminal system
- Cable range: 19mm² to 62mm²
- One key/index

### **Performance**

• Current capacity: 250A continuous at 85°C

• Voltage: 12V

 $\bullet$  Temperature range: -40°C to +125°C • Sealing protection: IP67, IP6K9K

# **Part Number Information**

Key/		Mating Information
Index	Male 1 Way	Female 1 Way
Index 0	13520909	13520916



# Power Pack 2000 1 Way Device and Pass-Through Connectors





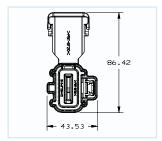
- Device connections up to 250A
- Sealed pass-through header

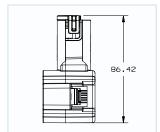
### **Description**

- Sealed system
- Silver-plated, multi-contact terminal system
- Cable range: 19mm² to 62mm²
- One key/index

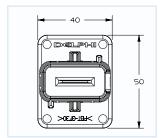
# **Performance**

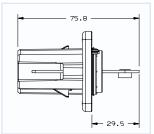
- Current capacity: 250A continuous at 85°C
- Voltage: 12V
- Temperature range: -40°C to +125°C
  Sealing protection: IP67, IP6K9K



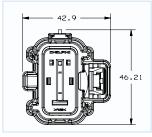


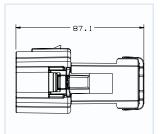
13878926



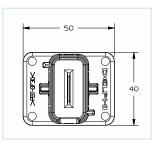


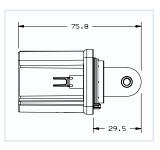
13520386





13520916





13878930

# **Part Number Information**

	Key/			Mating Information	
	Index	Female Right Angle	Female Straight	Header Right Angle	Header Straight
Ī	Index 0	13878926	13520916	13878930	13520386

# Application Specific High-Power Products

Delphi Application Specific Connection Systems are uniquely designed for the Input/Output (I/O) needs of various power electronic modules. Delphi's Application Specific Connection Systems include on-board charger connections to address the high-voltage/unshielded circuit isolation, 14V high-current, filtered headers to protect other vehicle systems from interference, shielded pass-through systems to motors or other devices. Delphi also provides custom design solutions to specific system requirements. Contact Delphi to discuss your specific system needs.



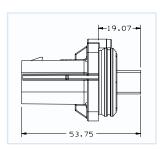


# HV150 On-Board Charger Connectors

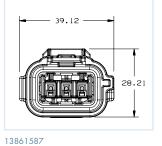
# 3 Way High-Voltage Unshielded Connection System

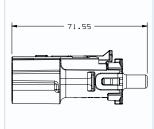


# 35



13863040





# **Application**

 High-voltage unshielded system for on-board charger applications (Level 1)

### **Description**

- Sealed connection system
- 1.5mm terminal
- Unshielded with terminal spacing for HV applications
- Finger proof/touch safe
- Cable range: 2mm²
- One key/index

### **Performance**

• Current capacity: 16A continuous at 85°C

• Voltage: 600V

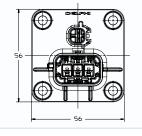
Temperature range: -40°C to + 125°C
Sealing protection: IP67, IP6K9K
Electrical protection: IP2XB

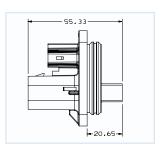
# **Part Number Information**

Key/		Mating Information		
Index	Header Connector	Mating Device Detail	HV Connector	
101	13863040	See print for information	13861587	

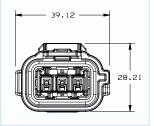
# HV150 On-Board Charger Connectors 3 Way Unshielded With HVIL

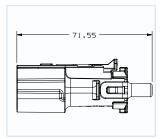






13737769





13861587

# **Application**

 High-voltage unshielded system for on-board charger applications (Level 1)

# **Description**

- Sealed connection system
- 1.5mm terminal
- Unshielded with terminal spacing for HV applications
- Finger proof/touch safe
- Cable range: 2mm²
- Two keys/indexes

### **Performance**

• Current capacity: 16A continuous at 85°C

• Voltage: 600V

Temperature range: -40°C to +125°C
Sealing protection: IP67, IP6K9K
Electrical protection: IP2XB

# **Part Number Information**

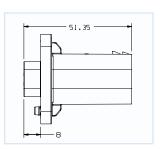
Key/		Mating Information		
Index	Header Connector	Mating Device Detail	HV Connector	Signal Connector
101	13737769	13739582	13861587	13738743
102	13757521		13861588	13738744



# On-Board Charger Connectors Level 1/Level 2 6 Way Device Connection System

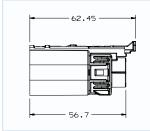


# 37.66



13879038





# **Application**

• High-voltage unshielded system for on-board charger applications (Level 1 and 2)

### **Description**

- Sealed connection system
- Capability for four power circuits and two signal circuits
- Unshielded with terminal spacing for HV applications
- Two-stage locking system for electrical protection
- Finger proof/touch safe
- Cable range: 2mm² to 5mm²
- Capable of multiple keys/indexes

# Performance

• Current capacity: 30A continuous at 85°C

• Voltage: 600V

Temperature range: -40°C to +125°C
 Sealing protection: IP67, IP6K9K

• Electrical protection: IP2XB

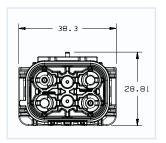
### **Part Number Information**

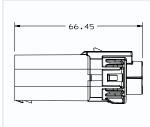
Key/		Mating Information	
Index	Header Connection	Level 1 Connection	Level 2 Connection
	13879038	13879051 (2+2)	13879048 (2+2)
101		13879050 (3+2)	13879047 (3+2)
		13879049 (4+2)	13879046 (4+2)

# On-Board Charger Connectors Level 1/Level 2

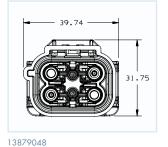
# 6 Way Inline Connection System

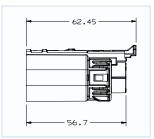






13879042





# **Application**

• Inline between inlet and on-board charger for cable routing (Level 1 and 2)

# **Description**

- Sealed connection system
- Capability for four power circuits and two signal circuits
- Unshielded with terminal spacing for HV applications
- Two-stage locking system for electrical protection
- Finger proof/touch safe
- Cable range: 2mm² to 5mm²
- Capable of multiple keys/indexes

# Performance

• Current capacity: 30A continuous at 85°C

• Voltage: 600V

Temperature range: -40°C to +125°C
Sealing protection: IP67, IP6K9K

• Electrical protection: IP2XB

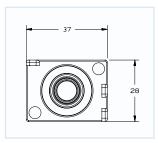
## **Part Number Information**

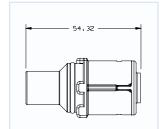
		Mating Information	
Male Connection Level 1	Male Connection Level 2	Female Connection Level 1	Female Connection Level 2
13879045 (2+2)	13879042 (2+2)	13879051 (2+2)	13879048 (2+2)
13879044 (3+2)	13879041 (3+2)	13879050 (3+2)	13879047 (3+2)
13879043 (4+2)	13879040 (4+2)	13879049 (4+2)	13879046 (4+2)



# High-Voltage Pass-Through Bolted Pass-Through Connections







13888008

# **Application**

• High-voltage/High vibration connections for motors or power electronics

### **Description**

- 1 Way sealed and shielded
- Ring terminal bolted to device
- Shield bolted to device case
- Cable range: 25mm² to 35mm²
- Three keys/indexes

# Performance

• Continuous current: 250A continuous at 85°C

• Voltage: 600V

Temperature range: -40°C to +125°C
Sealing protection: IP67, IP6K9K

### **Part Number Information**

Key/ Index	25mm² Cable Size	35mm² Cable Size
1	13888000	13888008
2	13888001	13888009
3	13888002	13888010

# Hybrid & Electric Vehicle Charging Systems & Components

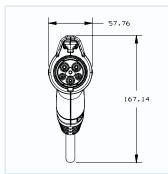
Delphi believes that in order for hybrid and electric vehicles to become mainstream, they need to be made accessible and practical for the average consumer. That's why we are investing in technology to help facilitate a global charging infrastructure. From the Delphi Charge Coupler Connector with Cable for integration into Electric Vehicle Supply Equipment (EVSE), to the UL recognized Portable Electric Vehicle Charger and SAE J1772 Charge Inlets, hybrid and electric vehicles can be powered safely and efficiently at home or away. We're developing a Delphi Wireless Charging System for EVs to offer the utmost in comfortable, convenient charging. We can help you deliver the fast, safe, reliable charge today's EV drivers are looking for.



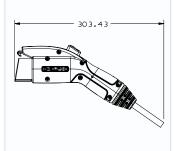


# Charge Coupler Connector Level 1 & Level 2 Charging Cable Assembly





13859796



### **Application**

 SAE J1772 cable assembly for integration into charging stations or portable cordsets per customer requirements

# **Description**

- SAE J1772 compliant connection
- Flashlight for easy mate in dark conditions
- Available with or without flashlight
- Wiring crimps sealed from environment
- Rubber grip on handle for ergonomics
- Available with or without flashlight
- UL recognized
- AC Level 1 (15A @ 120V) and Level 2 (30A @ 240V)

# Performance

Current capacity: 15A and 30A
Voltage range: 120V and 240V
Temperature: -40°C to +60°C

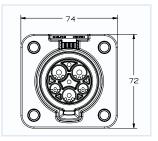
• Validation: UL 2251

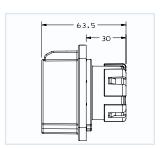
# **Available Options**

• Call for additional configurations

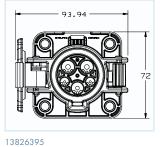
# Charge Inlet Level 1 & 2 Vehicle Charging Inlet

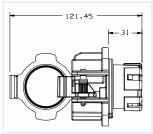






13829165





### **Application**

• Plug-in hybrid and electric vehicle charge inlet

### Description

- Interface complies with SAE J1772 and IEC 62196-2 Type I standard
- Panel mounts to vehicle
- Protective grommet/wire dress mounts to inlet
- Available with latching cover or without cover
- Cover mounting features allow latch to open left or right

# **Performance**

- Supports: AC Level 1 (15A, 120V) and AC Level 2 (30A, 240V)
- Voltage: 600V maximum rating
  Temperature: -40°C to +85°C
- Validation: UL recognized, Delphi GTP
- Electrical protection: IP2XB
- Design life: 10,000 mating cycles

# **Part Number Information**

Configuration	Assembly Part Number	Mating Information  Vehicle Mounting Detail	
No cover	13829165	13827259	
With latching cover, opens left	13826395	1302/237	

Delphi has made every effort to ensure that the information contained in this document is accurate. We recommend that you use this catalog as a guide only.





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