

# Metri-Pack Series

# 280



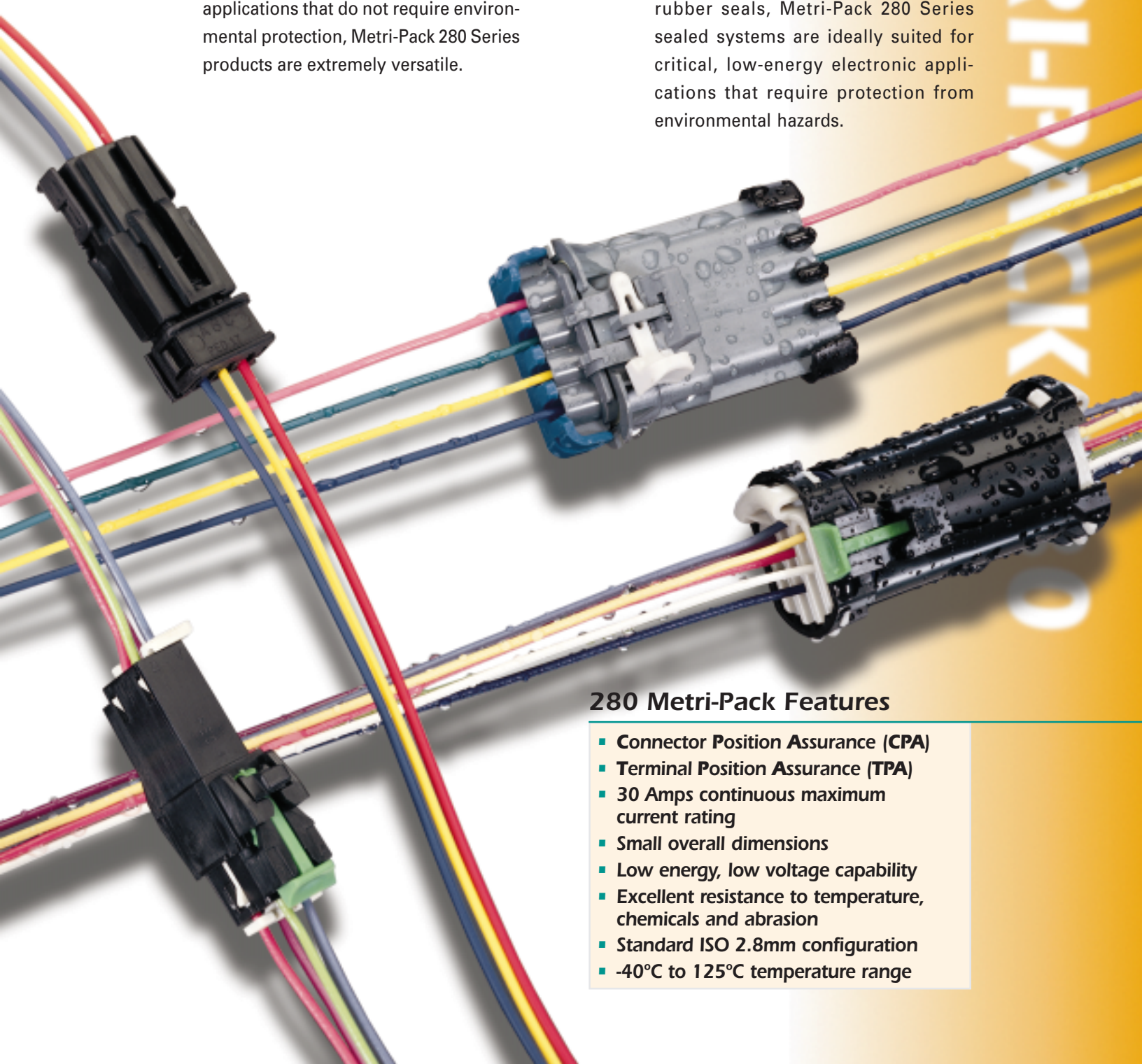
Available in device and in-line connections for vehicle applications, Metri-Pack 280 Series connectors can meet or exceed the requirements for most marine, appliance, and industrial control applications.

Ideally suited for limited space applications that do not require environmental protection, Metri-Pack 280 Series products are extremely versatile.



Available in device and in-line connections for underhood vehicle applications, Metri-Pack 280 Series sealed connectors can meet or exceed the requirements for most marine, appliance, and industrial control applications.

Utilizing triple-rib peripheral silicone rubber seals, Metri-Pack 280 Series sealed systems are ideally suited for critical, low-energy electronic applications that require protection from environmental hazards.

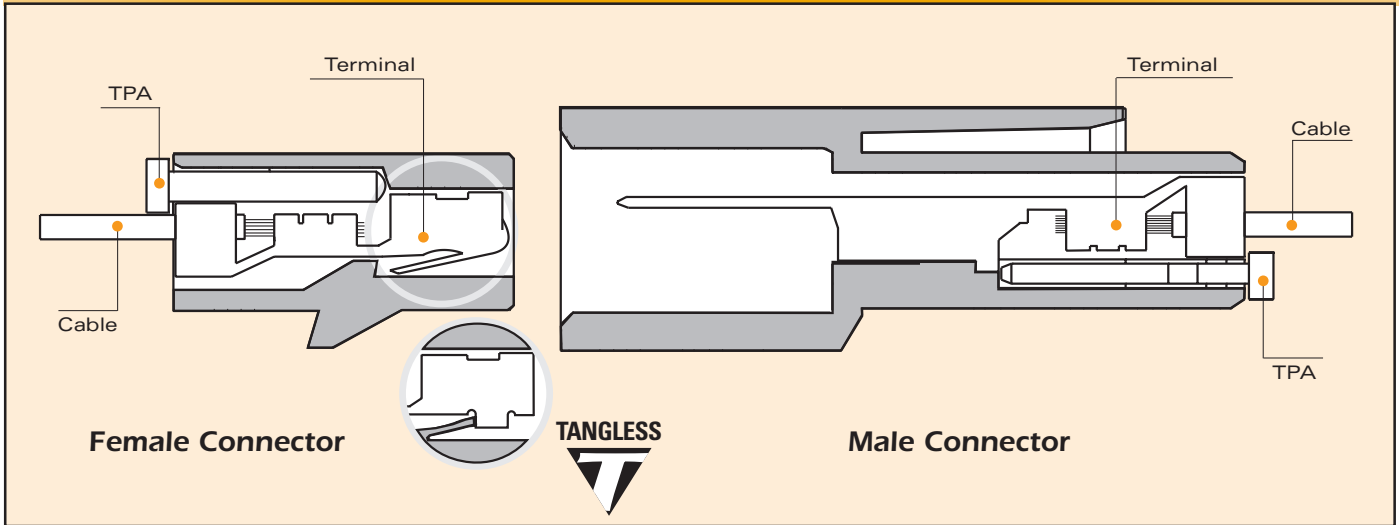


## 280 Metri-Pack Features

- Connector Position Assurance (CPA)
- Terminal Position Assurance (TPA)
- 30 Amps continuous maximum current rating
- Small overall dimensions
- Low energy, low voltage capability
- Excellent resistance to temperature, chemicals and abrasion
- Standard ISO 2.8mm configuration
- -40°C to 125°C temperature range



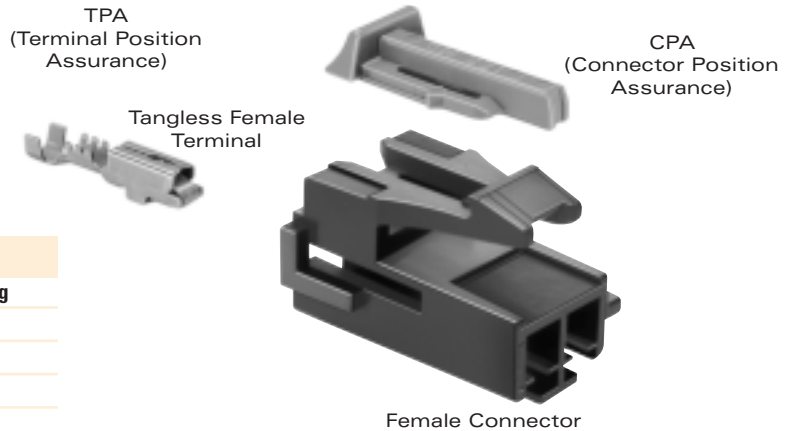
Cross Sectional View



280 TANGLESS FEMALE TERMINALS UNSEALED

Part #	Cable Range (mm <sup>2</sup> )	Material	Plating
12129425	5.0	Tin Brass	Tin
12129663	3.0	Tin Brass	Tin
12129424	2.0-1.0	Tin Brass	Tin
12110842*	3.0-2.0	Tin Brass	Tin
12110844*	1.0-0.80	Tin Brass	Tin
12110843*	0.50-0.35	Tin Brass	Tin
12129061*	0.35 (2 Req'd.)	Tin Brass	Tin

\*Thin Stock—Electrical current restrictions apply, contact your regional support representative at the number listed below.



Female Connector



280 FEMALE TERMINALS UNSEALED

Part #	Cable Range (mm <sup>2</sup> )	Material	Plating
12015858	5.0	Tin Brass	Tin
12129494	3.0-2.0	Tin Brass	Tin
12066214	2.0-1.0	Tin Brass	Tin
12034046	1.0-0.80	Tin Brass	Tin
12052217	0.50-0.35	Tin Brass	Tin
12162597*	3.0-2.0	Tin Brass	Tin
12162595*	1.0-0.80	Tin Brass	Tin
12162596*	0.50-0.35	Tin Brass	Tin

\*Thin Stock—Electrical current restrictions apply, contact your regional support representative at the number listed below.

<http://delphi.com/products/connect>

280 FLEXLOCK FEMALE CONNECTORS UNSEALED

# Cavities	Connector	Color	Material	TPA
2	12129081	Black	PA66 HS IM	12129083
3	12129489	Black	PA66 HS IM	12129491
4	12129136	Black	PA66 HS IM	12129138

280 FEMALE CONNECTORS UNSEALED

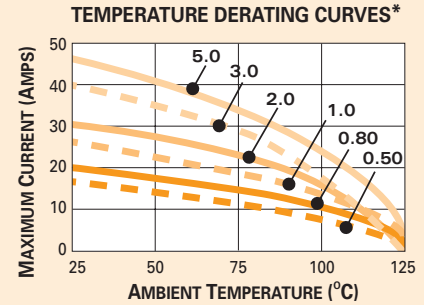
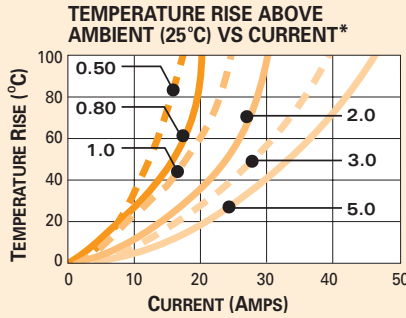
# Cavities	Connector	Color	Material	TPA
6	12064752	Black	PA66 HS IM	12064753
8	12064998	Black	PBT	12064999



## Unsealed System Application Information

**CABLE RANGE (mm<sup>2</sup>):** ..... 0.35-5.0  
**CURRENT RANGE (AMPS):** ..... 0-30  
**TEMP RANGE °C:** ..... -40 to 125  
**RESISTANCE:** ..... <10mΩ@20mV  
**VOLTAGE DROP:** ..... <3.0mV/amp  
**CENTERLINE SPACING (mm):** ..... 5.0  
**BLADE WIDTH (mm):** ..... 2.8

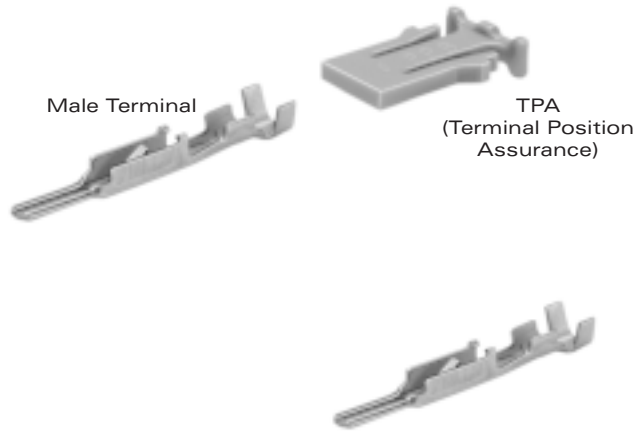
### 280 SERIES TERMINALS - Tin Plated



\*The test data are based on single circuits in free space and were generated using a "Lumped Resistance" model. This model does not account for all of the variables that would be present in an actual application. For actual product performance, contact your regional support representative at the number listed below.



Male Connector



Male Terminal

TPA  
(Terminal Position Assurance)

### 280 MALE TERMINALS UNSEALED

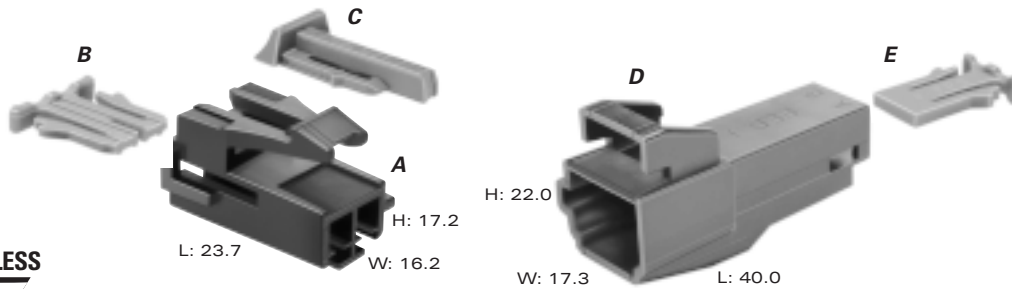
Part #	Cable Range (mm <sup>2</sup> )	Material	Plating
12084586	5.0	Tin Brass	Tin
12129498	3.0-2.0	Tin Brass	Tin
12020116	2.0-1.0	Tin Brass	Tin
12034047	1.0-0.80	Tin Brass	Tin
12066271	0.50-0.35	Tin Brass	Tin
12020782	0.35 (2 Req'd.)	Tin Brass	Tin

### 280 MALE CONNECTORS UNSEALED

# Cavities	Connector	Color	Material	TPA
2	12129155	Black	PA66 HS IM	12129157
3	12129490	Black	PA66 HS IM	12129492
4	12129135	Black	PA66 HS IM	12129137
6	12064754	Black	PA6	12064755
8	12066195	Black	PBT	12065141

### SECTION NOTES:

- Contact your regional support representative at the number listed below.
- Due to rigid tolerances of connector cavities, it is critical to meet all crimp dimensions as specified.
- Different color and connector indexing features are also available.
- Female connections for device applications, see page 91.



Total Mated Length: 54.3mm

**A PART NO: 12129081 (Black)  
12129082 (Md. Gray)**

DESCRIPTION: Connector 2F  
SIZE: 23.7L x 17.2H x 16.2W  
MATERIAL: PA66 HS IM  
TERMINALS: See Page 78

**D PART NO: 12129155 (Black)  
12129156 (Md. Gray)**

DESCRIPTION: Connector 2M (Clip Slot-Self Locking)  
SIZE: 40.0L x 22.0H x 17.3W  
MATERIAL: PA66 HS IM  
TERMINALS: See Page 79

**B PART NO: 12129083**

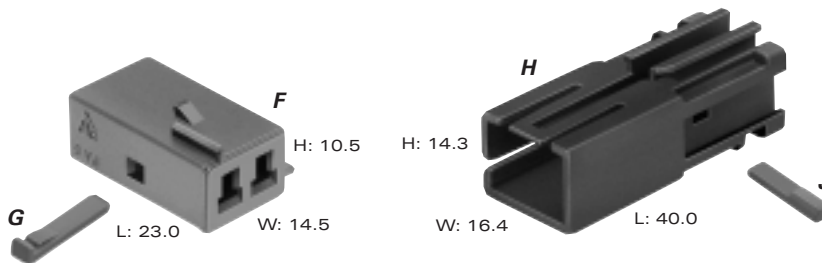
DESCRIPTION: TPA  
COLOR: Lt. Gray  
MATERIAL: PA66 HS IM

**E PART NO: 12129157**

DESCRIPTION: TPA  
COLOR: Lt. Gray  
MATERIAL: PA66 HS IM

**C PART NO: 12052834**

DESCRIPTION: CPA  
COLOR: Green  
MATERIAL: PP



Total Mated Length: 49.3mm

**F PART NO: 12147503 (Black)  
12111456 (Green)**

DESCRIPTION: Connector 2F  
SIZE: 23.0L x 10.5H x 14.5W  
MATERIAL: PA6  
TERMINALS: See Page 78

**H PART NO: 12147517 (Black)  
10717650 (Green)**

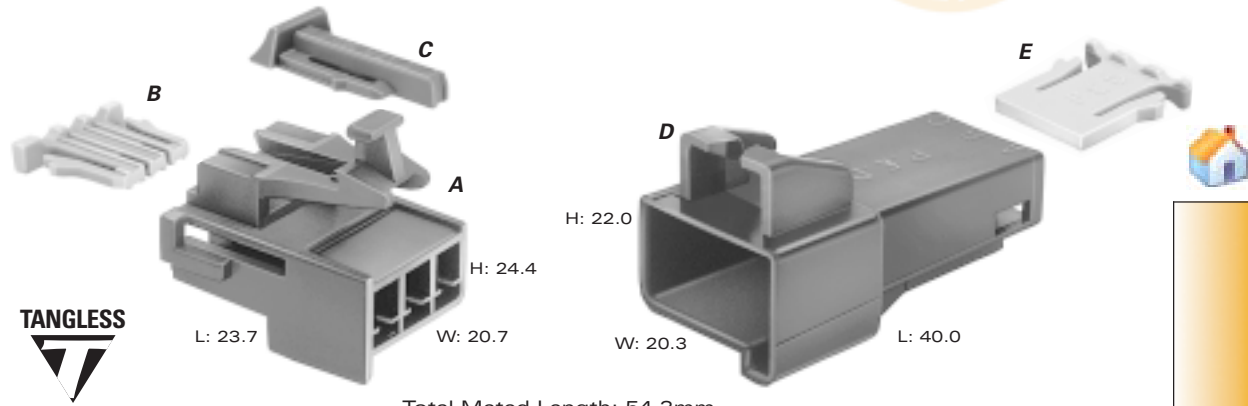
DESCRIPTION: Connector 2M  
SIZE: 40.0L x 14.3H x 16.4W  
MATERIAL: PA6  
TERMINALS: See Page 79

**G PART NO: 12147502**

DESCRIPTION: TPA  
COLOR: Gray  
MATERIAL: PA6 % GF

**J PART NO: 12147771**

DESCRIPTION: TPA  
COLOR: Gray  
MATERIAL: PA6 % GF



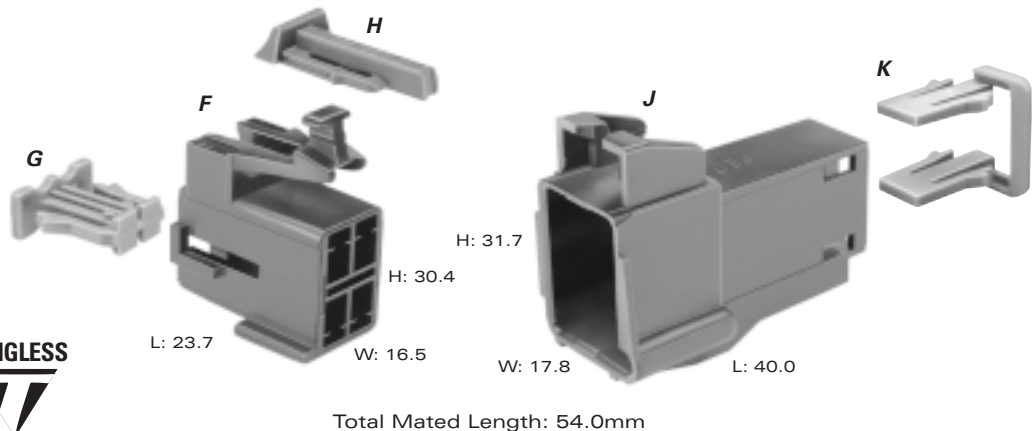
**A PART NO: 12129489**  
 DESCRIPTION: Connector 3F  
 SIZE: 23.7L x 24.4H x 20.7W  
 COLOR: Black  
 MATERIAL: PA66 HS IM  
 TERMINALS: See Page 78

**D PART NO: 12129490**  
 DESCRIPTION: Connector 3M  
 SIZE: 40.0L x 22.0H x 20.3W  
 COLOR: Black  
 MATERIAL: PA66 HS IM  
 TERMINALS: See Page 79

**B PART NO: 12129491**  
 DESCRIPTION: TPA  
 COLOR: Lt. Gray  
 MATERIAL: PA66 HS IM

**E PART NO: 12129492**  
 DESCRIPTION: TPA  
 COLOR: Lt. Gray  
 MATERIAL: PA66 HS IM

**C PART NO: 12052834**  
 DESCRIPTION: CPA  
 COLOR: Green  
 MATERIAL: PP



**F PART NO: 12129136**  
 DESCRIPTION: Connector 4F  
 SIZE: 23.7L x 30.4H x 16.5W  
 COLOR: Black  
 MATERIAL: PA66 HS IM  
 TERMINALS: See Page 78

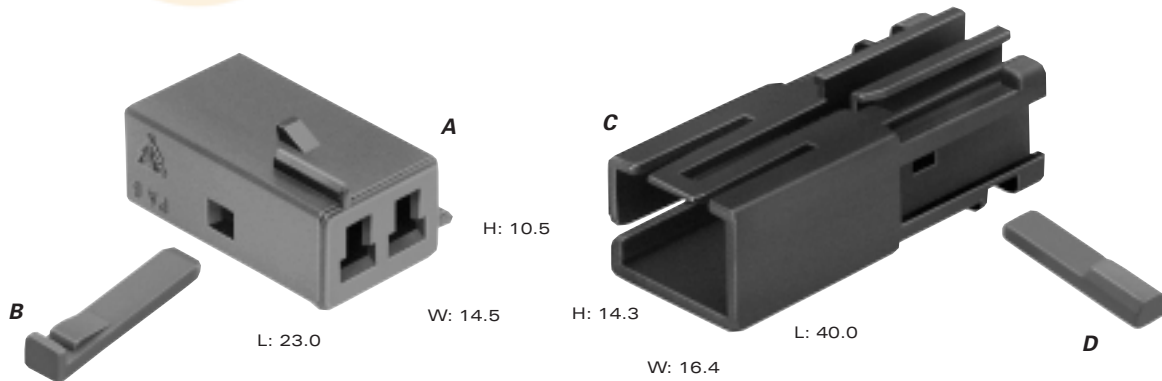
**J PART NO: 12129135**  
 DESCRIPTION: Connector 4M (Clip Slot-Self Locking)  
 SIZE: 40.0L x 31.7H x 17.8W  
 COLOR: Black  
 MATERIAL: PA66 HS IM  
 TERMINALS: See Page 79

**G PART NO: 12129138**  
 DESCRIPTION: TPA  
 COLOR: Lt. Gray  
 MATERIAL: PA66 HS IM

**K PART NO: 12129137**  
 DESCRIPTION: TPA  
 COLOR: Lt. Gray  
 MATERIAL: PA66 HS IM

**H PART NO: 12052834**  
 DESCRIPTION: CPA  
 COLOR: Green  
 MATERIAL: PP

<http://delphi.com/products/connect>



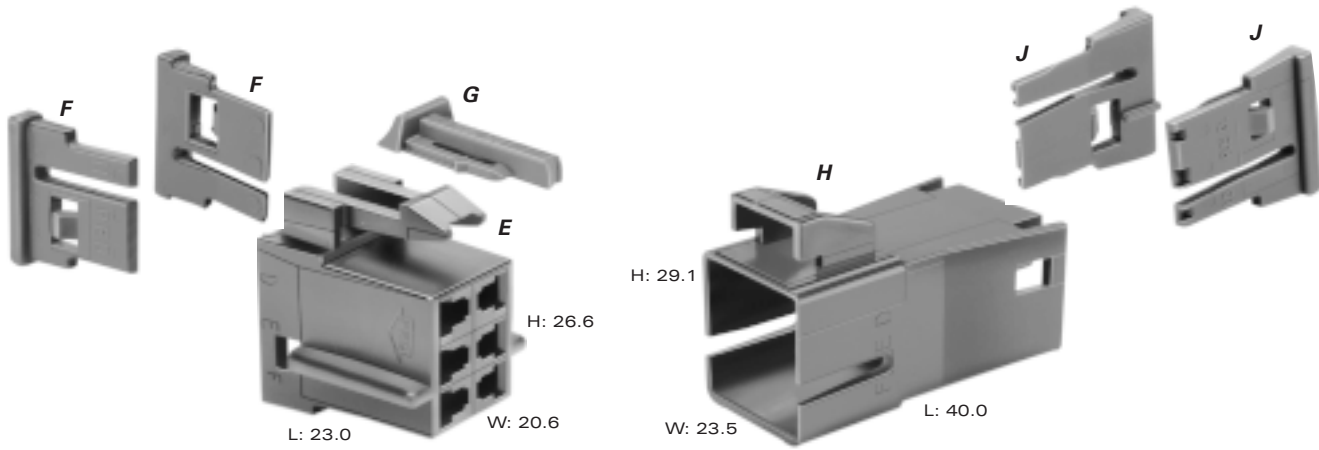
Total Mated Length: 50.0mm

**A PART NO: 15318080**  
 DESCRIPTION: Connector 2F  
 SIZE: 23.0L x 10.5H x 14.5W  
 COLOR: Black  
 MATERIAL: PA6  
 TERMINALS: See Page 78

**C PART NO: 12147517**  
 DESCRIPTION: Connector 2M  
 SIZE: 40.0L x 14.3H x 16.4W  
 COLOR: Black  
 MATERIAL: PA6  
 TERMINALS: See Page 79

**B PART NO: 12147502**  
 DESCRIPTION: Secondary Lock  
 SIZE.: 2.6L x 2.3H x 12.6W  
 COLOR: Gray  
 MATERIAL: PA6%GF

**D PART NO: 12147771**  
 DESCRIPTION: Secondary Lock  
 SIZE.: 2.7L x 2.2H x 11.8W  
 COLOR: Gray  
 MATERIAL: PA6%GF



Total Mated Length: 57.0mm

**E PART NO: 12064752**  
 DESCRIPTION: Connector 6F  
 SIZE: 23.0L x 26.6H x 20.6W  
 COLOR: Black  
 MATERIAL: PA66 HS IM  
 TERMINALS: See Page 78

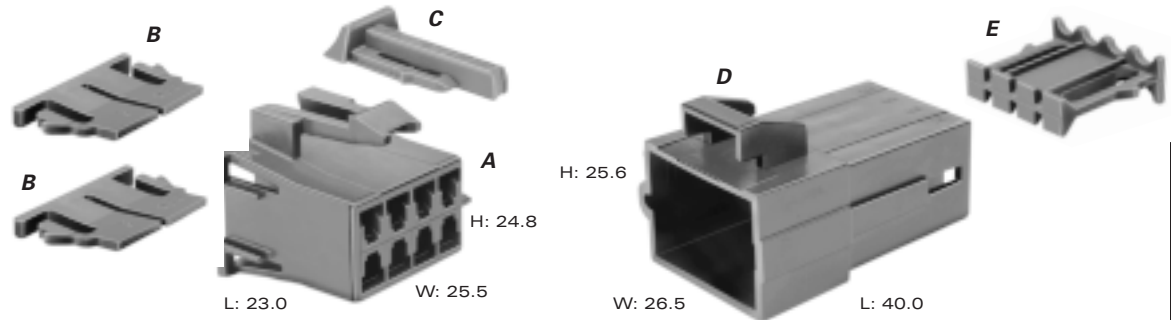
**H PART NO: 12064754**  
 DESCRIPTION: Connector 6M (Clip Slot-Self Locking)  
 SIZE: 40.0L x 29.1H x 23.5W  
 COLOR: Black  
 MATERIAL: PA6  
 TERMINALS: See Page 79

**F PART NO: 12064753**  
 DESCRIPTION: TPA  
 NUMBER REQ.: 2  
 COLOR: Md. Gray  
 MATERIAL: PA66 HS IM

**J PART NO: 12064755**  
 DESCRIPTION: TPA  
 NUMBER REQ.: 2  
 COLOR: Blue  
 MATERIAL: PA66 HS IM

**G PART NO: 12052834**  
 DESCRIPTION: CPA  
 COLOR: Green  
 MATERIAL: PP

<http://delphi.com/products/connect>



Total Mated Length: 54.0mm

**A PART NO: 12064998**  
 DESCRIPTION: Connector 8F  
 SIZE: 23.0L x 24.8H x 25.5W  
 COLOR: Black  
 MATERIAL: PA66 HS IM  
 TERMINALS: See Page 78

**D PART NO: 12066195**  
 DESCRIPTION: Connector 8M (Clip Slot)  
 SIZE: 40.0L x 25.6H x 26.5W  
 COLOR: Black  
 MATERIAL: PA66 HS IM  
 TERMINALS: See Page 79

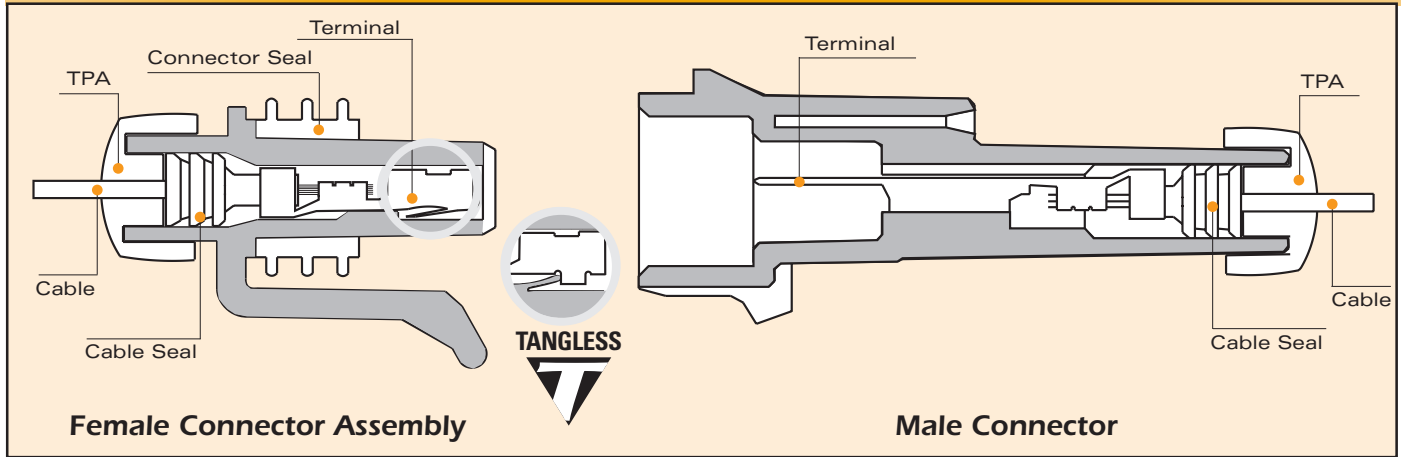
**B PART NO: 12064999**  
 DESCRIPTION: TPA  
 NUMBER REQ.: 2  
 COLOR: Blue  
 MATERIAL: PBT

**E PART NO: 12065141**  
 DESCRIPTION: TPA  
 COLOR: Md. Gray  
 MATERIAL: PA66 HS IM

**C PART NO: 12052834**  
 DESCRIPTION: CPA  
 COLOR: Green  
 MATERIAL: PP



Cross Sectional View



TANGLESS

280 TANGLESS FEMALE TERMINALS SEALED

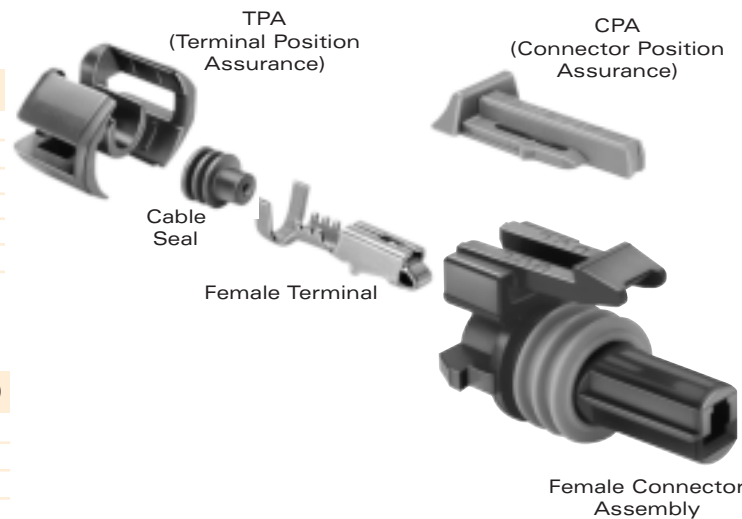
Part #	Cable Range (mm <sup>2</sup> )	Material	Plating
12110853	5.0-3.0	Tin Brass	Tin
12129409	2.0-1.0	Tin Brass	Tin
12110845*	3.0-2.0	Tin Brass	Tin
12110847*	1.0-0.80	Tin Brass	Tin
12110846*	0.50-0.35	Tin Brass	Tin

\*Thin Stock—Electrical current restrictions apply, contact your regional support representative at the number listed below.

TANGLESS

280 FLEXLOCK FEMALE CONNECTOR ASSEMBLIES SEALED

# Cavities	Conn. Asm.	Color	Material	TPA
7	12110751	Black	PA66 HS IM	12110754
15	12161186	Black	PA66 HS IM	12176865



280 FEMALE TERMINALS SEALED

Part #	Cable Range (mm <sup>2</sup> )	Material	Plating
12077413	5.0	Tin Brass	Tin
12129493	3.0-2.0	Tin Brass	Tin
12077411	1.0-0.80	Tin Brass	Tin
12084201	0.50-0.35	Tin Brass	Tin
12176387	5.0	Beryllium Copper	Silver/Nickel
12176388	3.0-2.0	Beryllium Copper	Silver/Nickel
12176389	1.0-0.80	Beryllium Copper	Silver/Nickel

280 FEMALE CONNECTOR ASSEMBLIES SEALED

# Cavities	Conn. Asm.	Color	Material	TPA
1	12065172	Black	PA66 HS IM	12065249
2	15300027	Black	PA66 HS IM	15300014
2	12124819	Black	PBT	12020807
3	12040977	Black	PA66 HS IM	12034145
4	12129565	Md. Gray	PA66 HS IM	15300016
5	12084891	Md. Gray	PA66 HS IM	15300017

280 METRI-PACK CABLE SEALS

Reel Part #	Loose Part #	Cable Diameter	Material	Color
12015360	12015193	4.30-3.45	Silicone	Blue
12015359	12010293	3.49-2.81	Silicone	Lt. Gray
12015284	12015323	2.85-2.03	Silicone	Green
12041352	12041351	2.42-2.03	Silicone	Tan
12089444	12089679	2.15-1.60	Silicone	Purple
12034365	12015899	1.70-1.29	Silicone	Dk. Red

280.1 FEMALE PULL-TO-SEAT TERMINALS SEALED

Part #	Cable Range (mm <sup>2</sup> )	Material	Plating
12077939	1.0-0.80	Silicon Bronze	Tin
12103360	0.50-0.35	Silicon Bronze	Tin

<http://delphi.com/products/connect>

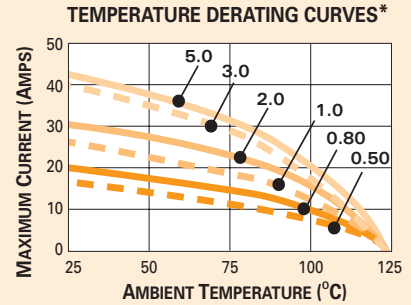
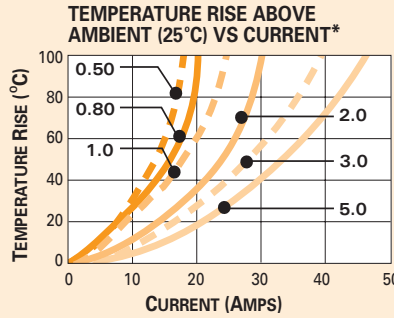




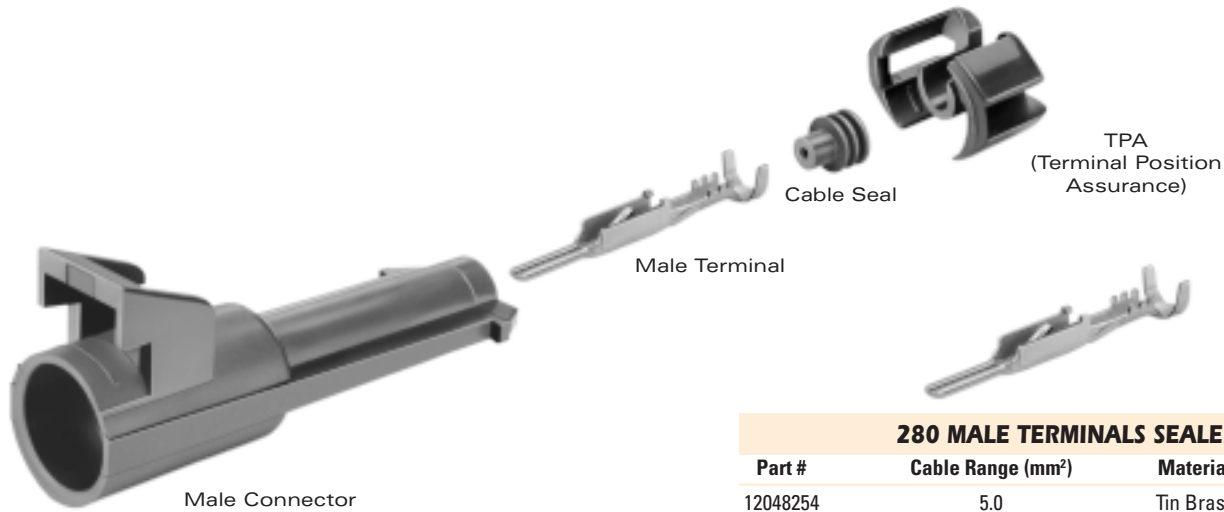
## Sealed System Application Information

**CABLE RANGE (mm<sup>2</sup>):** ..... 0.35-5.0  
**CURRENT RANGE (AMPS):** ..... 0-30  
**TEMP RANGE °C:** ..... -40 to 125  
**RESISTANCE:** ..... <10mΩ@20mV  
**VOLTAGE DROP:** ..... <3.0mV/amp  
**CENTERLINE SPACING (mm):** ..... 7.7  
**BLADE WIDTH (mm):** ..... 2.8

### 280 SERIES TERMINALS - Tin Plated



\*The test data are based on single circuits in free space and were generated using a "Lumped Resistance" model. This model does not account for all of the variables that would be present in an actual application. For actual product performance, contact your regional support representative at the number listed below.



280 MALE TERMINALS SEALED			
Part #	Cable Range (mm <sup>2</sup> )	Material	Plating
12048254	5.0	Tin Brass	Tin
12129497	3.0-2.0	Tin Brass	Tin
12048159	1.0-0.80	Tin Brass	Tin
12124977	0.50-0.35	Tin Brass	Tin

280 MALE CONNECTORS SEALED				
# Cavities	Connector	Color	Material	TPA
1	12065171	Black	PA66 HS IM	12065249
2	15300002	Black	PA66 HS IM	15300014
2	12059450	Black	PA66 HS IM	12065279
3	15300003	Black	PA66 HS IM	15300015
4	12129600	Dk. Gray	PBT 30% GF	12092733
5	12186400	Gray	PBT 30% GF	12084673
7	12110753	Black	PA66 HS IM	12110754
15	12161187	Black	PA66 HS IM	12110782

280 METRI-PACK CAVITY PLUG*			
Part #	Cavity Inside Diameter	Material	Color
12010300	6.7mm	Silicone	Green

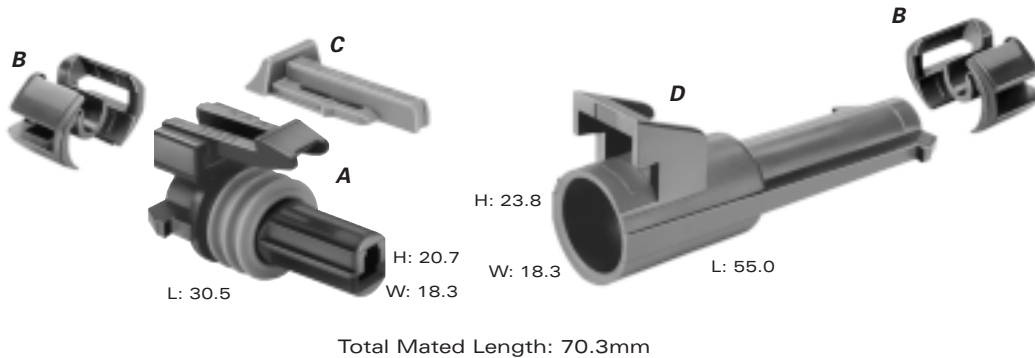
\*Cavity plugs seal unused female and male cavities.

**SECTION NOTES:**

Contact your regional support representative at the number listed below.

- Due to rigid tolerances of connector cavities, it is critical to meet all crimp dimensions as specified.
- Female Connections for device applications, see page 92.

<http://delphi.com/products/connect>



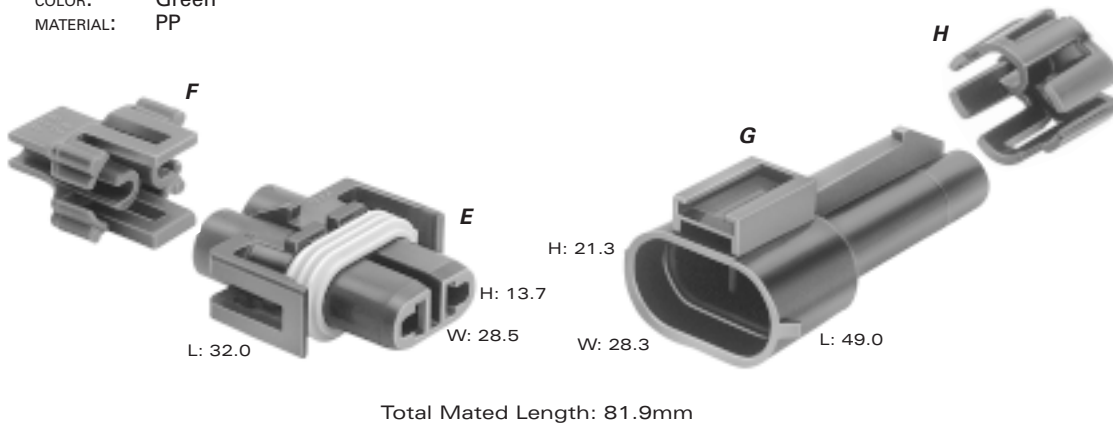
Total Mated Length: 70.3mm

**A PART NO: 12065172**  
 DESCRIPTION: Connector Assembly 1F  
 SIZE: 30.5L x 20.7H x 18.3W  
 COLOR: Black  
 MATERIAL: PA66 HS IM  
 TERMINALS: See Page 84  
 SEALS/PLUGS: See Page 84, 85

**D PART NO: 12065171**  
 DESCRIPTION: Connector 1M  
 SIZE: 55.0L x 23.8H x 18.3W  
 COLOR: Black  
 MATERIAL: PA66 HS IM  
 TERMINALS: See Page 85  
 SEALS/PLUGS: See Page 84, 85

**B PART NO: 12065249**  
 DESCRIPTION: TPA  
 NUMBER REQ.: 2  
 COLOR: Black  
 MATERIAL: PA66 HS IM

**C PART NO: 12052834**  
 DESCRIPTION: CPA  
 COLOR: Green  
 MATERIAL: PP



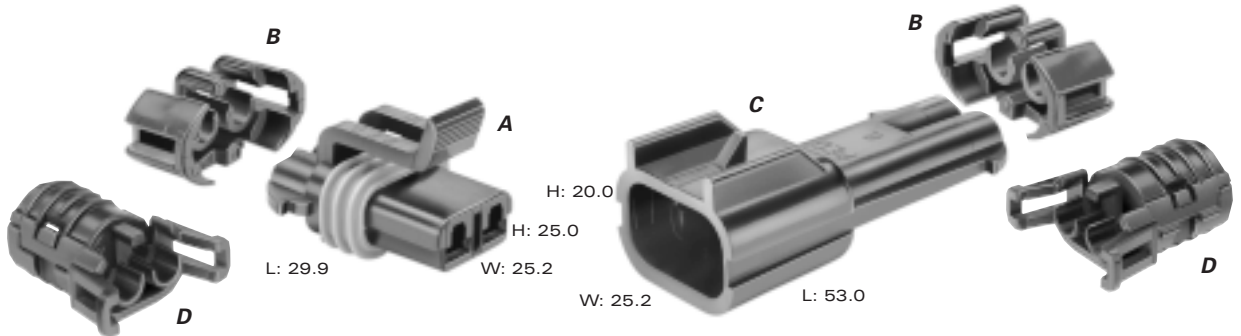
Total Mated Length: 81.9mm

**E PART NO: 12124819**  
 DESCRIPTION: Connector Assembly 2F  
 SIZE: 32.0L x 13.7H x 28.5W  
 COLOR: Black  
 MATERIAL: PBT  
 TERMINALS: See Page 84  
 SEALS/PLUGS: See Page 84, 85

**G PART NO: 12059450**  
 DESCRIPTION: Connector 2M (Clip Slot)  
 SIZE: 49.0L x 21.3H x 28.3W  
 COLOR: Black  
 MATERIAL: PA66 HS IM  
 TERMINALS: See Page 85  
 SEALS/PLUGS: See Page 84, 85

**F PART NO: 12020807**  
 DESCRIPTION: TPA  
 COLOR: Md. Gray  
 MATERIAL: PA6

**H PART NO: 12065279**  
 DESCRIPTION: TPA  
 COLOR: Black  
 MATERIAL: PA6



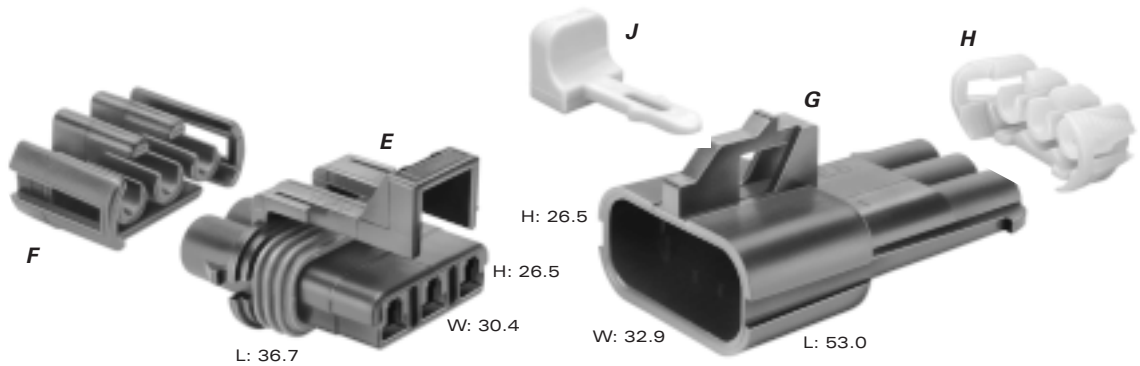
Total Mated Length: 66.8mm

**A PART NO: 15300027**  
 DESCRIPTION: Connector Assembly 2F  
 SIZE: 29.9L x 25.0H x 25.2W  
 COLOR: Black  
 MATERIAL: PA66 HS IM  
 TERMINALS: See Page 84  
 SEALS/PLUGS: See Page 84, 85

**C PART NO: 15300002**  
 DESCRIPTION: Connector 2M  
 SIZE: 53.0L x 20.0H x 25.2W  
 COLOR: Black  
 MATERIAL: PA66 HS IM  
 TERMINALS: See Page 85  
 SEALS/PLUGS: See Page 84, 85

**B PART NO: 15300014**  
 DESCRIPTION: TPA  
 NUMBER REQ.: 2  
 COLOR: Blue  
 MATERIAL: PA6

**D PART NO: 15327747 (Optional)**  
 DESCRIPTION: Conduit TPA  
 NUMBER REQ.: 2  
 COLOR: Black  
 MATERIAL: PA6



Total Mated Length: 76.1mm

**E PART NO: 12040977**  
 DESCRIPTION: Connector Assembly 3F  
 SIZE: 36.7L x 26.5H x 30.4W  
 COLOR: Black  
 MATERIAL: PA66 HS IM  
 TERMINALS: See Page 84  
 SEALS/PLUGS: See Page 84, 85

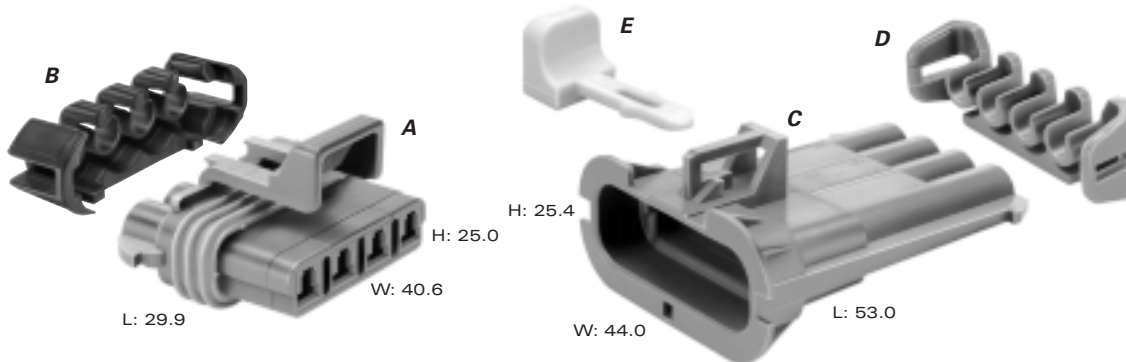
**G PART NO: 15300003**  
 DESCRIPTION: Connector 3M (Clip Slot)  
 SIZE: 53.0L x 26.5H x 32.9W  
 COLOR: Black  
 MATERIAL: PA66 HS IM  
 TERMINALS: See Page 85  
 SEALS/PLUGS: See Page 84, 85

**F PART NO: 12034145**  
 DESCRIPTION: TPA  
 COLOR: Black  
 MATERIAL: PA6

**H PART NO: 15300015**  
 DESCRIPTION: TPA  
 COLOR: Natural  
 MATERIAL: PA6

**J PART NO: 12020833**  
 DESCRIPTION: CPA  
 COLOR: Gray  
 MATERIAL: PBT

<http://delphi.com/products/connect>



Total Mated Length: 66.7mm

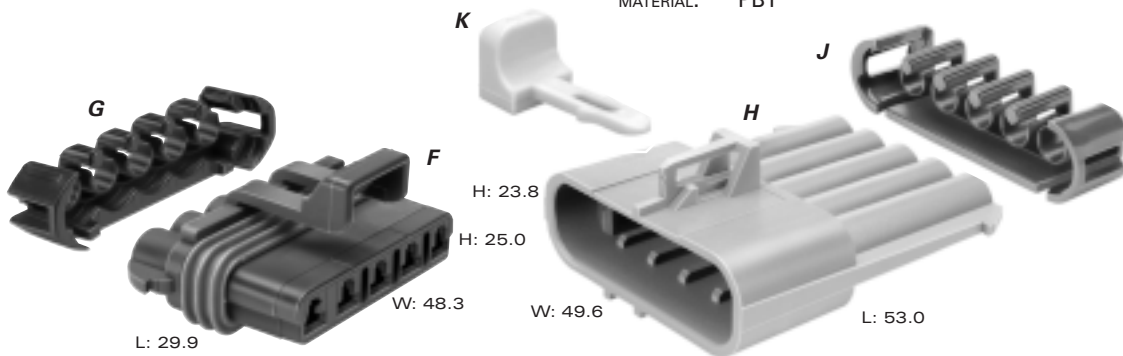
**A PART NO: 12129565**  
 DESCRIPTION: Connector Assembly 4F  
 SIZE: 29.9L x 25.0H x 40.6W  
 COLOR: Md. Gray  
 MATERIAL: PA66 HS IM  
 TERMINALS: See Page 84  
 SEALS/PLUGS: See Page 84, 85

**C PART NO: 12129600**  
 DESCRIPTION: Connector 4M (Clip Slot-Self Locking)  
 SIZE: 53.0L x 25.4H x 44.0W  
 COLOR: Dk. Gray  
 MATERIAL: PBT 30% GF  
 TERMINALS: See Page 85  
 SEALS/PLUGS: See Page 84, 85

**B PART NO: 15300016**  
 DESCRIPTION: TPA  
 COLOR: Black  
 MATERIAL: PA6

**D PART NO: 15324063**  
 DESCRIPTION: TPA  
 COLOR: Blue  
 MATERIAL: PA6

**E PART NO: 12020833**  
 DESCRIPTION: CPA  
 COLOR: Gray  
 MATERIAL: PBT



Total Mated Length: 67.3mm

**F PART NO: 12084891**  
 DESCRIPTION: Connector Assembly 5F  
 SIZE: 29.9L x 25.0H x 48.3W  
 COLOR: Md. Gray  
 MATERIAL: PA66 HS IM  
 TERMINALS: See Page 84  
 SEALS/PLUGS: See Page 84, 85

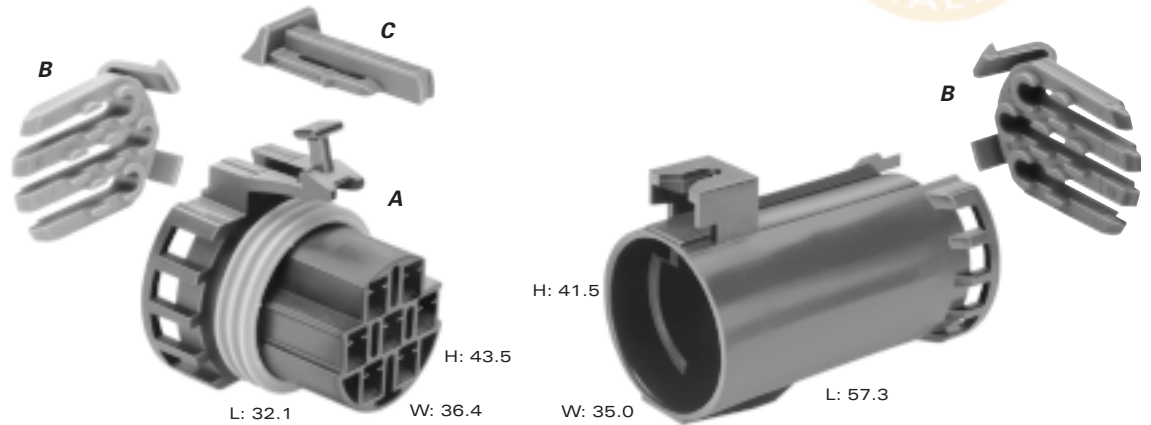
**H PART NO: 12186400**  
 DESCRIPTION: Connector 5M (Clip Slot-Self Locking)  
 SIZE: 53.0L x 23.8H x 49.6W  
 COLOR: Gray  
 MATERIAL: PBT 30% GF  
 TERMINALS: See Page 85  
 SEALS/PLUGS: See Page 84, 85

**G PART NO: 15324857**  
 DESCRIPTION: TPA  
 COLOR: Black  
 MATERIAL: PA6

**J PART NO: 12084673**  
 DESCRIPTION: TPA  
 COLOR: Black  
 MATERIAL: PA6

**K PART NO: 12020833**  
 DESCRIPTION: CPA  
 COLOR: Gray  
 MATERIAL: PBT

<http://delphi.com/products/connect>



Total Mated Length: 77.3mm



**A PART NO:** 12110751 (Black)  
12129613 (Md. Gray)  
12146841 (Natural)

DESCRIPTION: Connector Assembly 7F  
SIZE: 32.1L x 43.5H x 36.4W  
MATERIAL: PA66 HS IM  
TERMINALS: See Page 84  
SEALS/PLUGS: See Page 84, 85

**D PART NO:** 12110753 (Black)  
12129614 (Md. Gray)  
12146840 (Natural)

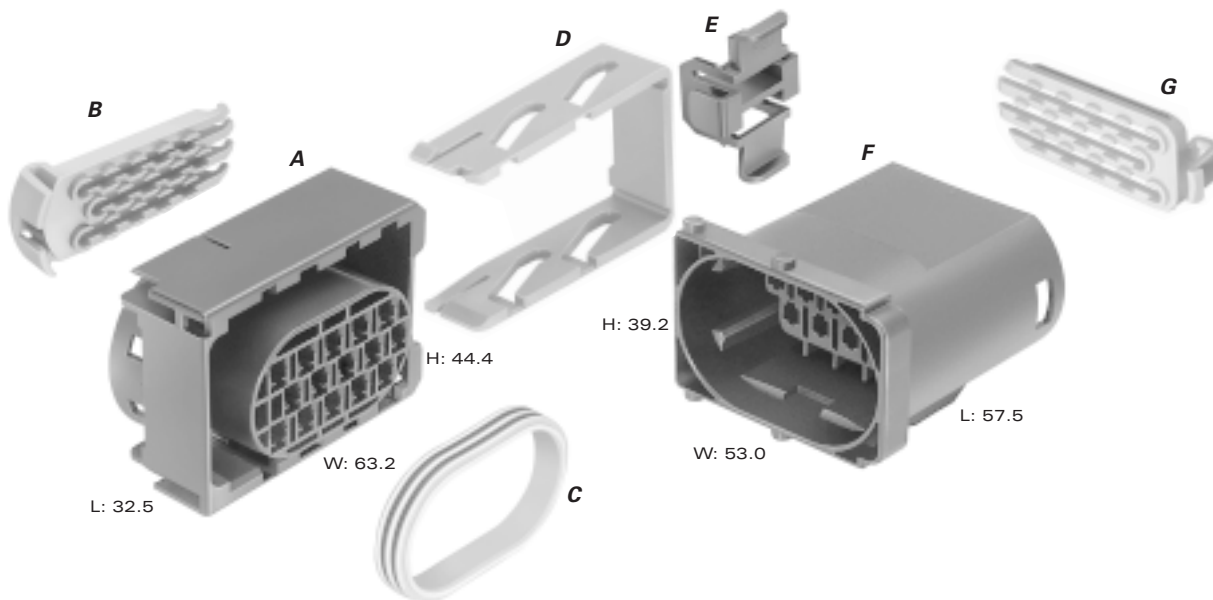
DESCRIPTION: Connector 7M (Clip Slot-Self Locking)  
SIZE: 57.3L x 41.5H x 35.0W  
MATERIAL: PA66 HS IM  
TERMINALS: See Page 85  
SEALS/PLUGS: See Page 84, 85

**B PART NO:** 12110754

DESCRIPTION: TPA  
NUMBER REQ.: 2  
COLOR: Lt. Gray  
MATERIAL: PA6

**C PART NO:** 12052834

DESCRIPTION: CPA  
COLOR: Green  
MATERIAL: PP



Total Mated Length: 76.6mm

**A PART NO: 12161186**  
 DESCRIPTION: Connector 15F  
 SIZE: 32.5L x 44.4H x 63.2W  
 COLOR: Black  
 MATERIAL: PA66 HS IM  
 TERMINALS: See Page 84  
 SEALS/PLUGS: See Page 84, 85

**F PART NO: 12161187**  
 DESCRIPTION: Connector 15M (Clip Slot-Self Locking)  
 SIZE: 57.5L x 39.2H x 53.0W  
 COLOR: Black  
 MATERIAL: PA66 HS IM  
 TERMINALS: See Page 85  
 SEALS/PLUGS: See Page 84, 85

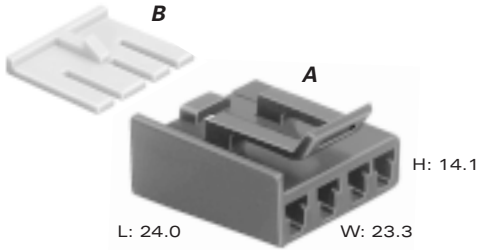
**B PART NO: 12110782**  
 DESCRIPTION: TPA  
 COLOR: Md. Gray  
 MATERIAL: PA6

**G PART NO: 12176865**  
 DESCRIPTION: TPA  
 COLOR: Lt. Gray  
 MATERIAL: PA6

**C PART NO: 12110822**  
 DESCRIPTION: Connector Seal  
 COLOR: Green  
 MATERIAL: Silicone

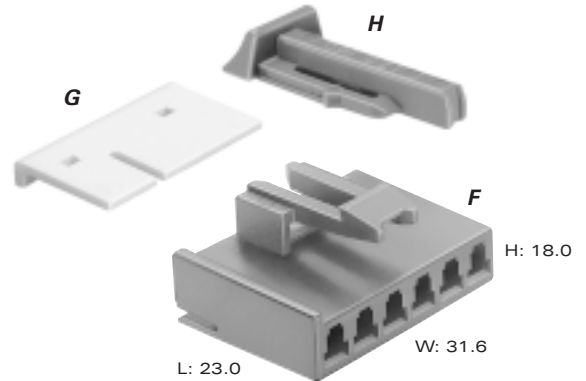
**D PART NO: 12161185**  
 DESCRIPTION: CPA Slide Lock Assist  
 COLOR: Dk. Gray  
 MATERIAL: PA66 HS IM 14% GF

**E PART NO: 12176640**  
 DESCRIPTION: Spacer Lock  
 COLOR: Black  
 MATERIAL: PP



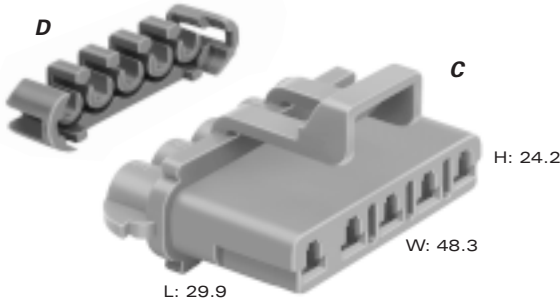
**A PART NO: 12052856**  
 DESCRIPTION: Connector 4F  
 SIZE: 24.0L x 14.1H x 23.3W  
 COLOR: Black  
 MATERIAL: PA66 HS IM  
 TERMINALS: See Page 78  
 TYPICAL APP: Dimmer Switch

**B PART NO: 15324456**  
 DESCRIPTION: TPA  
 COLOR: Lt. Gray  
 MATERIAL: PA6



**F PART NO: 12092254**  
 DESCRIPTION: Connector 6F  
 SIZE: 23.0L x 18.0H x 31.6W  
 COLOR: Black  
 MATERIAL: PA66 HS IM  
 TERMINALS: See Page 78  
 TYPICAL APP: Wiper Switch

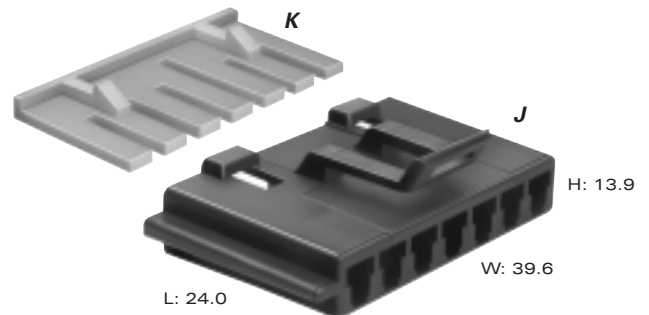
**G PART NO: 12162298**  
 DESCRIPTION: TPA  
 COLOR: Cream  
 MATERIAL: PA6



**C PART NO: 12084890**  
 DESCRIPTION: Connector 5F  
 SIZE: 29.9L x 24.2H x 48.3W  
 COLOR: Md. Gray  
 MATERIAL: PA66 HS IM  
 TERMINALS: See Page 78  
 TYPICAL APP: Tail Lamp Module

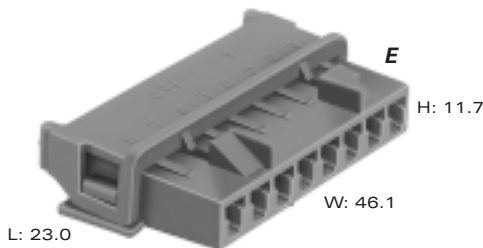
**D PART NO: 15324857**  
 DESCRIPTION: TPA  
 COLOR: Black  
 MATERIAL: PA6

**H PART NO: 12052834**  
 DESCRIPTION: CPA  
 COLOR: Green  
 MATERIAL: PP

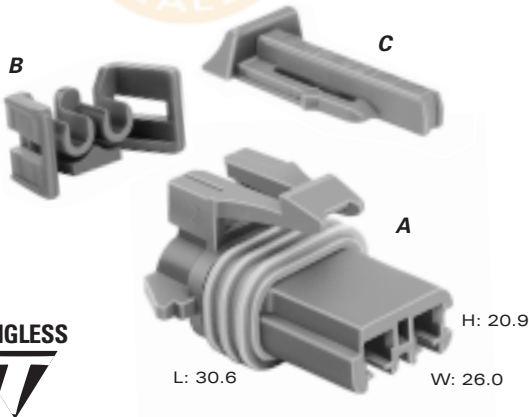


**J PART NO: 12052854**  
 DESCRIPTION: Connector 7F  
 SIZE: 24.0L x 13.9H x 39.6W  
 COLOR: Black  
 MATERIAL: PA66 HS IM  
 TERMINALS: See Page 78  
 TYPICAL APP: Wiper Switch

**K PART NO: 12124811**  
 DESCRIPTION: TPA  
 COLOR: Natural  
 MATERIAL: PA6



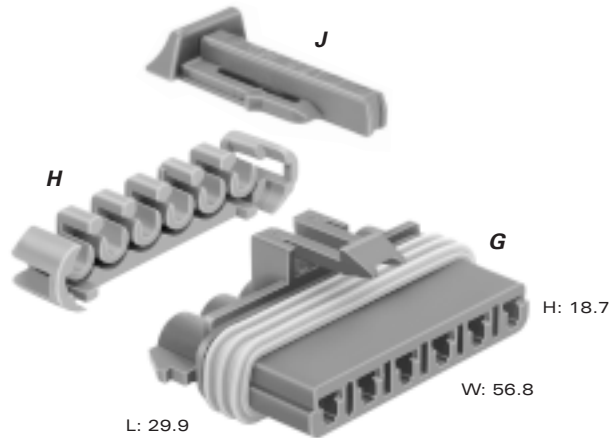
**E PART NO: 12041301\***  
 DESCRIPTION: Connector 8F  
 SIZE: 23.0L x 11.7H x 46.1W  
 COLOR: Black  
 MATERIAL: PP  
 TERMINALS: See Page 78  
 TYPICAL APP: Various  
 \*HINGED SECONDARY LOCK.



**A PART NO: 12129487**  
 DESCRIPTION: Connector Assembly 2F  
 SIZE: 30.6L x 20.9H x 26.0W  
 COLOR: Md. Gray  
 MATERIAL: PA66 HS IM  
 TERMINALS: See Page 84  
 SEALS/PLUGS: See Page 84, 85  
 TYPICAL APP: Window Lift Motor

**B PART NO: 12077904**  
 DESCRIPTION: TPA  
 COLOR: Blue  
 MATERIAL: PA6

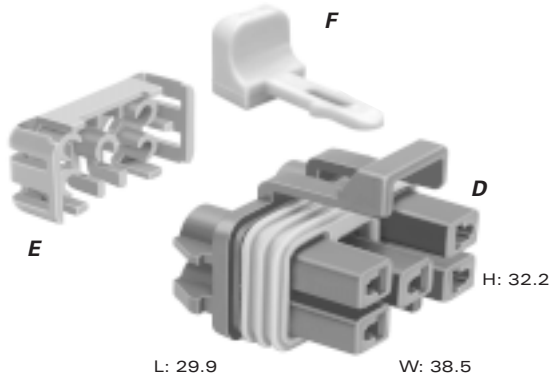
**C PART NO: 12052834**  
 DESCRIPTION: CPA  
 COLOR: Green  
 MATERIAL: PP



**G PART NO: 12059573**  
 DESCRIPTION: Connector Assembly 6F  
 SIZE: 29.9L x 18.7H x 56.8W  
 COLOR: Black  
 MATERIAL: PA66  
 TERMINALS: See Page 84  
 SEALS/PLUGS: See Page 84, 85  
 TYPICAL APP: Various

**H PART NO: 12059195**  
 DESCRIPTION: TPA  
 COLOR: Blue  
 MATERIAL: PA6

**J PART NO: 12052834**  
 DESCRIPTION: CPA  
 COLOR: Green  
 MATERIAL: PP



**D PART NO: 12124634**  
 DESCRIPTION: Connector Assembly 5F  
 SIZE: 29.9L x 32.2H x 38.5W  
 COLOR: Black  
 MATERIAL: PA6  
 TERMINALS: See Page 84  
 SEALS/PLUGS: See Page 84, 85  
 TYPICAL APP: Wiper Switch

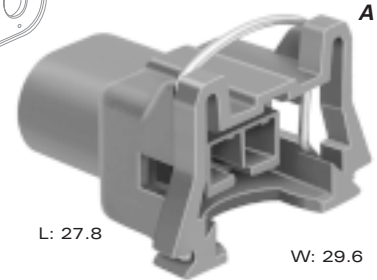
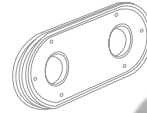
**E PART NO: 12052816**  
 DESCRIPTION: TPA  
 COLOR: Md. Gray  
 MATERIAL: PA6

**F PART NO: 12020833**  
 DESCRIPTION: CPA  
 COLOR: Gray  
 MATERIAL: PBT





Multiple Cable Seal  
(Included)



- A** PART NO: **12129142 (Black/Gray Seal)**  
2.66 - 2.0 Cable O.D.
- PART NO: **12129140 (Black/Purple Seal)**  
2.15 - 1.65 Cable O.D.
- PART NO: **12110179 (Black/Red Seal)**  
1.85 - 1.47 Cable O.D.
- DESCRIPTION: Connector Assembly 2F  
SIZE: 27.8L x 20.0H x 29.6W  
MATERIAL: PA66 HS 33% GF  
TERMINALS: See Page 84  
TYPICAL APP: Fuel Injector

