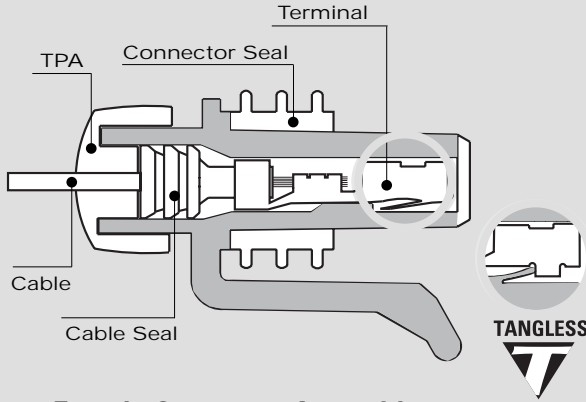




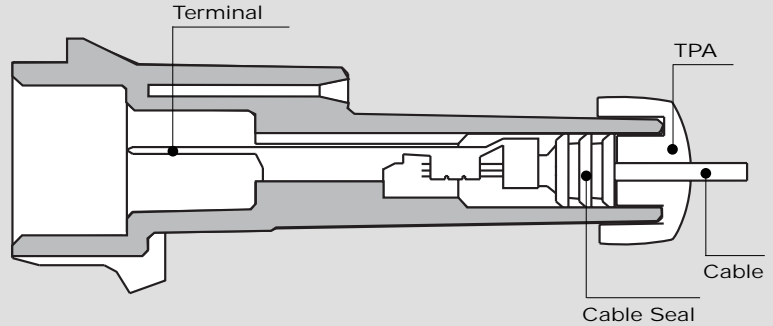
280

Metri-Pack Series

Cross Sectional View



Female Connector Assembly



Male Connector



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.



280 Flexlock Female Connector Assemblies Sealed

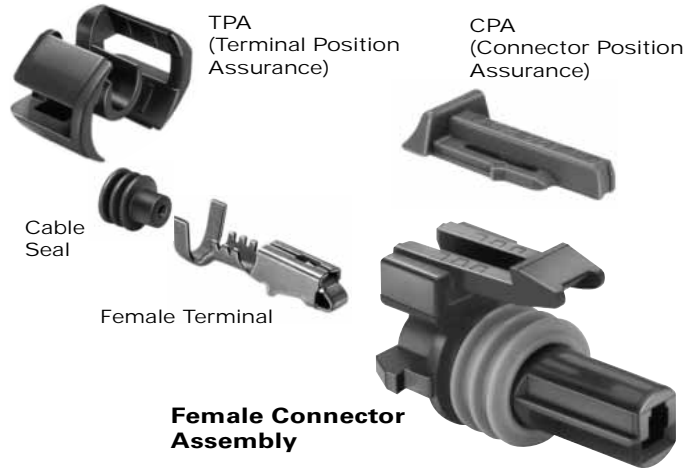
# Cavities	Conn. Asm.	Color	Material	TPA
7	12110751	Black	PA66 HS IM	12110754
15	12161186	Black	PA66 HS IM	12110782

280 Female Terminals Sealed

Part #	Cable Range (mm <sup>2</sup> )	Material	Plating
12077413	3.0	Tin Brass	Tin
12129493	3.0-2.0	Tin Brass	Tin
12077411	1.0-0.80-0.50	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

280.1 Female Pull-to-Seat Terminals Sealed

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



Female Connector Assembly

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	15324857

280 Metri-Pack Cable Seals

Reel Part #	Loose Part #	Cable Dia.	Material	Color
12015360	15324981	4.30-3.45	Silicone	Blue
12015359	15324980	3.49-2.81	Silicone	Gray
12015284	15324982	2.85-2.03	Silicone	Green
12041352	15324984	2.42-2.03	Silicone	Tan
12089444	15324985	2.15-1.60	Silicone	Purple
12034365	15324983	1.70-1.29	Silicone	Dk. Red

NOTE: Specifications in this catalog are for general reference only and are subject to change without notice. To verify product information, please contact a Delphi representative.

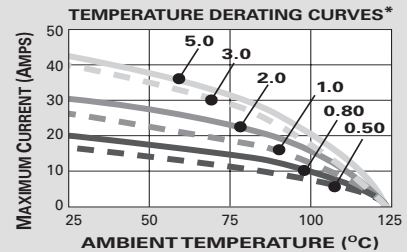
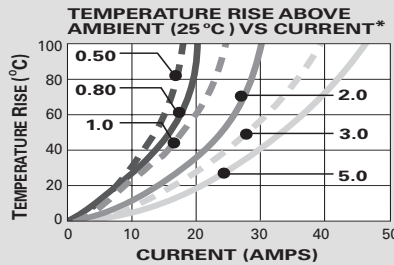


# 280

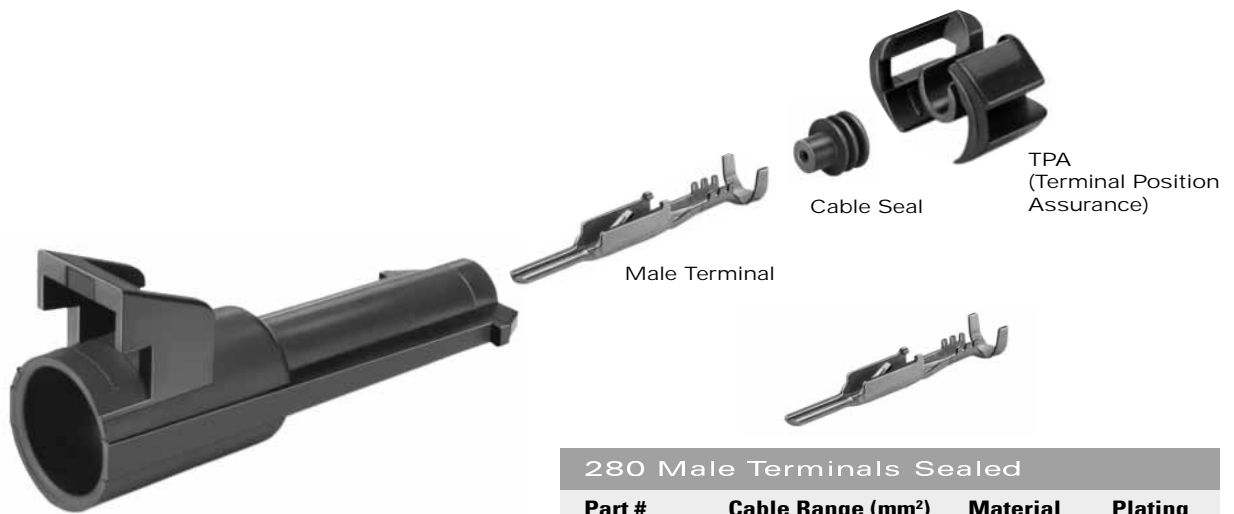
## Sealed System Application Information

### 280 Series Terminals – Tin Plated

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



\*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.



Male Connector

280 Male Terminals Sealed			
Part #	Cable Range (mm <sup>2</sup> )	Material	Plating
12048254	3.0	Tin Brass	Tin
12129497	3.0-2.0	Tin Brass	Tin
12048159	0.80-0.50	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	15324063
5	12186400	Gray	PBT 30% GF	12084673
7	12110753	Black	PA66 HS IM	12110754
15	12161187	Black	PA66 HS IM 14% GF	12176865

280 Metri-Pack Cavity Plug*			
Part #	Cavity Inside Diameter	Material	Color
12010300	6.7mm	Silicone	Green

\*Cavity plugs seal unused female and male cavities.

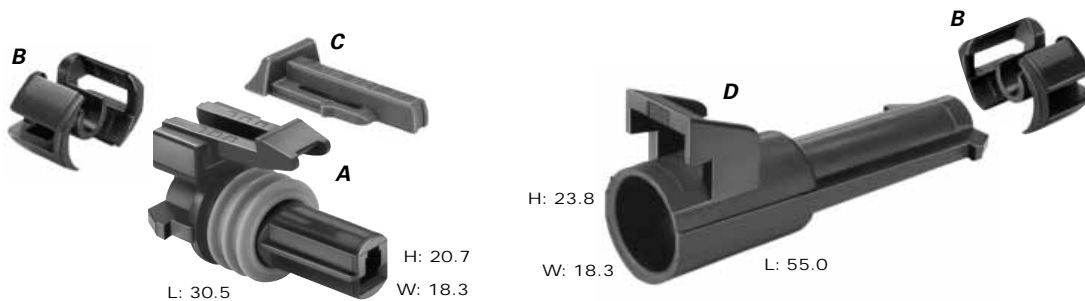
**SECTION NOTES:**

- Due to rigid tolerances of connector cavities, it is critical to meet all crimp dimensions as specified.
- Female Connections for device applications, see page 2.38.

NOTE: Specifications in this catalog are for general reference only and are subject to change without notice. To verify product information, please contact a Delphi representative.



# 280



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 2.30
Seals/Plugs:	See Page 2.30, 2.31

**D. Part No: 12065171**

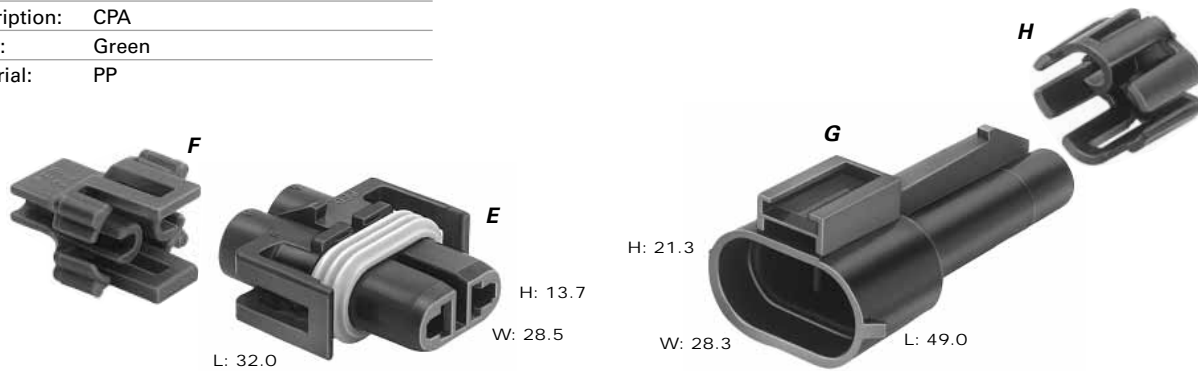
Description:	Connector 1M
Size:	55.0L x 23.8H x 18.3W
Color:	Black
Material:	PA66 HS IM
Terminals:	See Page 2.31
Seals/Plugs:	See Page 2.30, 2.31

**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 2.30
Seals/Plugs:	See Page 2.30, 2.31

**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 2.31
Seals/Plugs:	See Page 2.30, 2.31

**F. Part No: 12020807**

Description:	TPA
Color:	Md. Gray
Material:	PA66 HS IM

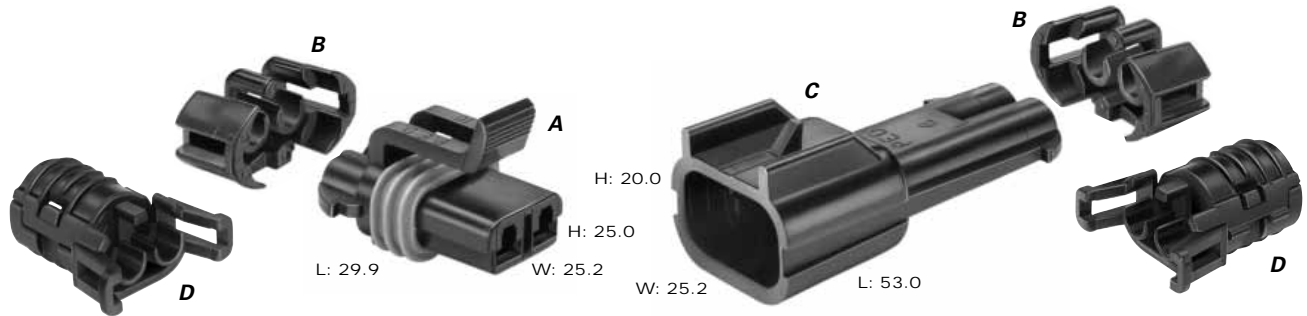
**H. Part No: 12065279**

Description:	TPA
Color:	Black
Material:	PA6

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280



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 2.30
Seals/Plugs:	See Page 2.30, 2.31

**C. Part No: 15300002**

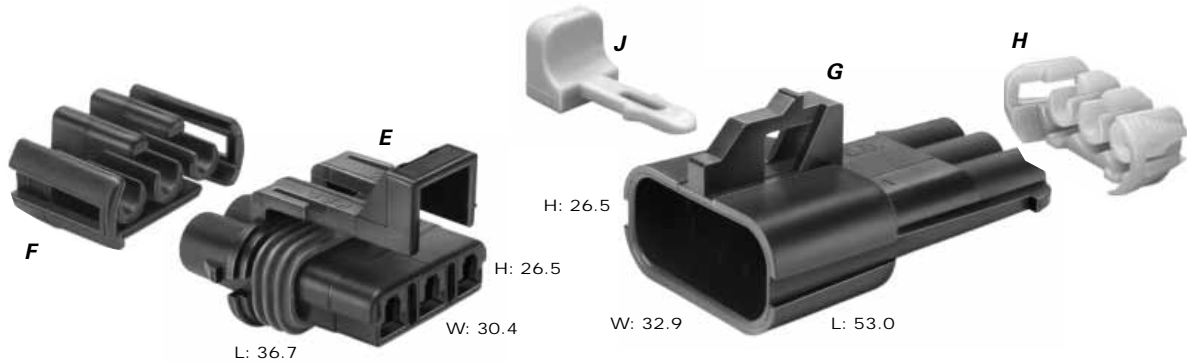
Description:	Connector 2M
Size:	53.0L x 20.0H x 25.2W
Color:	Black
Material:	PA66 HS IM
Terminals:	See Page 2.31
Seals/Plugs:	See Page 2.30, 2.31

**B. Part No: 15300014**

Description:	TPA
Number Req.:	2
Color:	Blue
Material:	PA66 HS IM

**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 2.30
Seals/Plugs:	See Page 2.30, 2.31

**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 2.31
Seals/Plugs:	See Page 2.30, 2.31

**F. Part No: 12034145**

Description:	TPA
Color:	Black
Material:	PA66 HS IM

**H. Part No: 15300015**

Description:	TPA
Color:	Cream
Material:	PA66 HS IM

**J. Part No: 12020833**

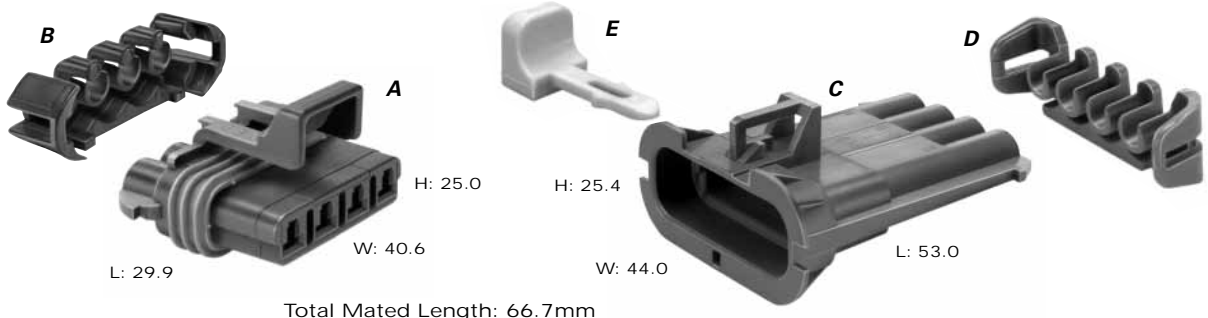
Description:	CPA
Color:	Gray
Material:	PBT

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280

Metri-Pack Series



**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 2.30
Seals/Plugs:	See Page 2.30, 2.31

**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 2.31
Seals/Plugs:	See Page 2.30, 2.31

**B. Part No: 15300016**

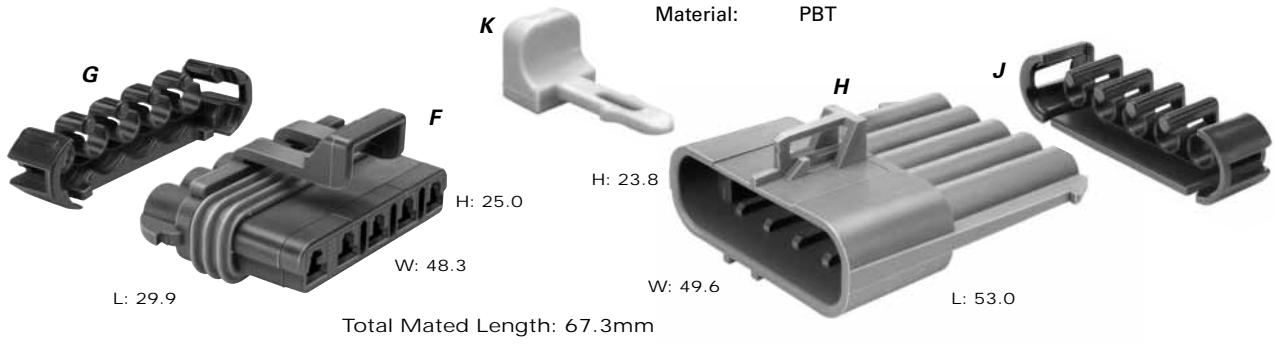
Description:	TPA
Color:	Black
Material:	PA66 HS IM

**D. Part No: 15324063**

Description:	TPA
Color:	Blue
Material:	PA66 HS IM

**E. Part No: 12020833**

Description:	CPA
Color:	Gray
Material:	PBT



**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 2.30
Seals/Plugs:	See Page 2.30, 2.31

**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 2.31
Seals/Plugs:	See Page 2.30, 2.31

**G. Part No: 15324857**

Description:	TPA
Color:	Black
Material:	PA66 HS IM

**J. Part No: 12084673**

Description:	TPA
Color:	Black
Material:	PA66 HS IM

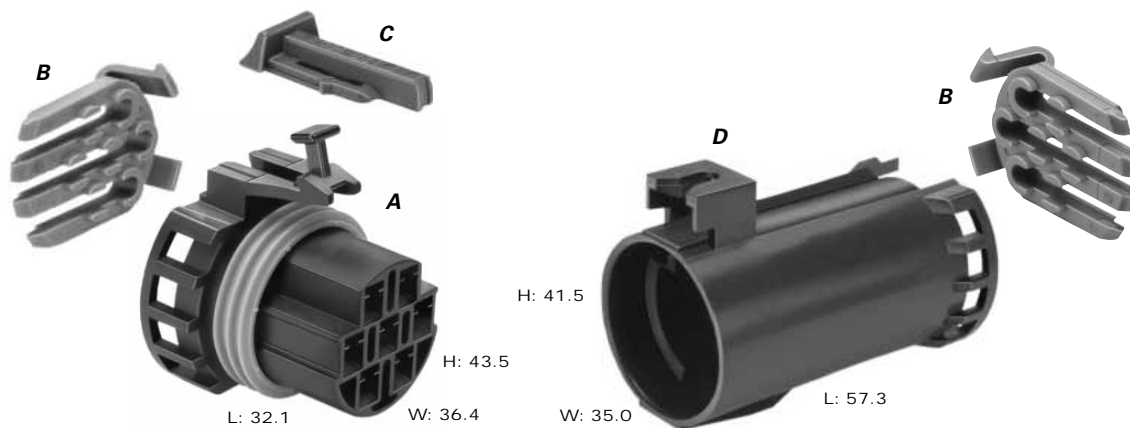
**K. Part No: 12020833**

Description:	CPA
Color:	Gray
Material:	PBT

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280



Total Mated Length: 77.3mm



**A. Part No: 12110751 (Black)  
12129613 (Md. Gray)  
12146841 (Cream)**

Description:	Connector Assembly 7F
Size:	32.1L x 43.5H x 36.4W
Material:	PA66 HS IM
Terminals:	See Page 2.30
Seals/Plugs:	See Page 2.30, 2.31

**B. Part No: 12110754**

Description:	TPA
Number Req:	2
Color:	Lt. Gray
Material:	PA66 HS IM

**C. Part No: 12052834**

Description:	CPA
Color:	Green
Material:	PP

**D. Part No: 12110753 (Black)  
12129614 (Md. Gray)  
12146840 (Cream)**

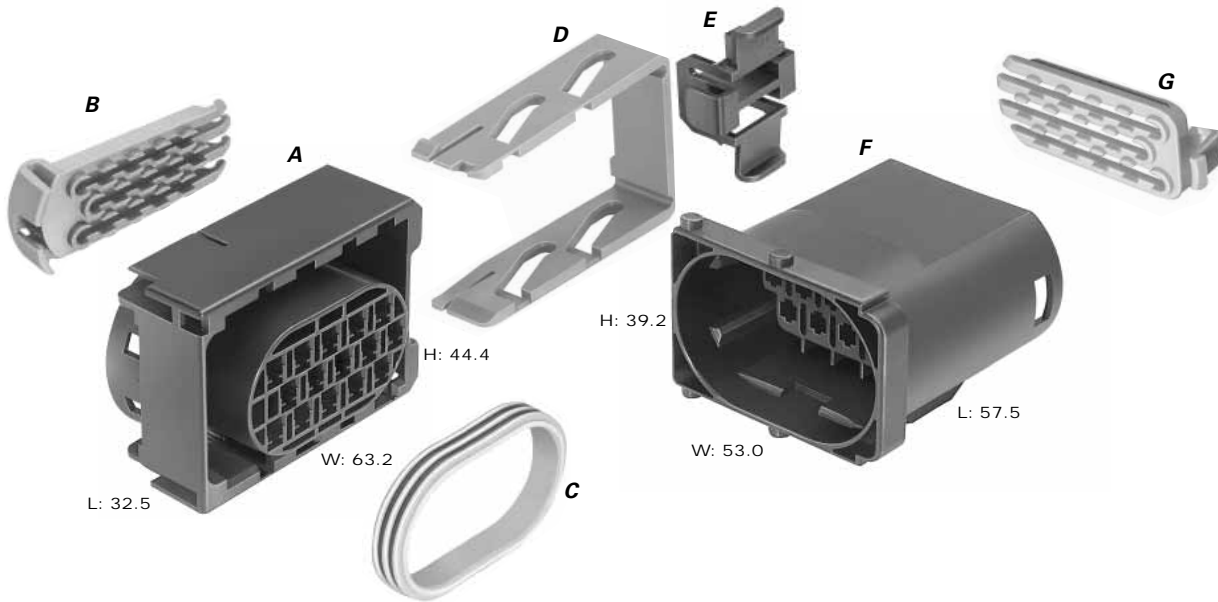
Description:	Connector 7M (Clip Slot-Self Locking)
Size:	57.3L x 41.5H x 35.0W
Material:	PA66 HS IM
Terminals:	See Page 2.31
Seals/Plugs:	See Page 2.30, 2.31

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Metri-Pack Series



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 2.30
Seals/Plugs:	See Page 2.30, 2.31

**B. Part No: 12110782**

Description:	TPA
Color:	Md. Gray
Material:	PA66 HS IM

**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

**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 14% GF
Terminals:	See Page 2.31
Seals/Plugs:	See Page 2.30, 2.31

**G. Part No: 12176865**

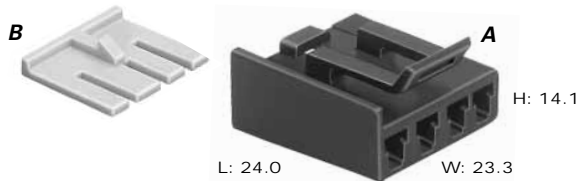
Description:	TPA
Color:	Lt. Gray
Material:	PA66 HS IM

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# 280 Device Connections



**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 2.24
Typical App:	Dimmer Switch

**B. Part No: 15324456**

Description:	TPA
Color:	Dk. Green
Material:	PA66 HS IM

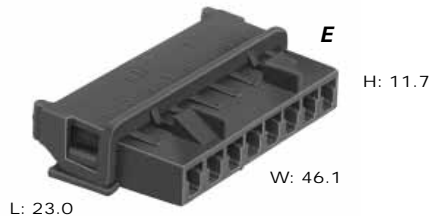


**C. Part No: 12084890**

Description:	Connector 5F
Size:	29.9L x 24.2H x 48.3W
Color:	Md. Gray
Material:	PA66 HS IM
Terminals:	See Page 2.24
Typical App:	Tail Lamp Module

**D. Part No: 15324857**

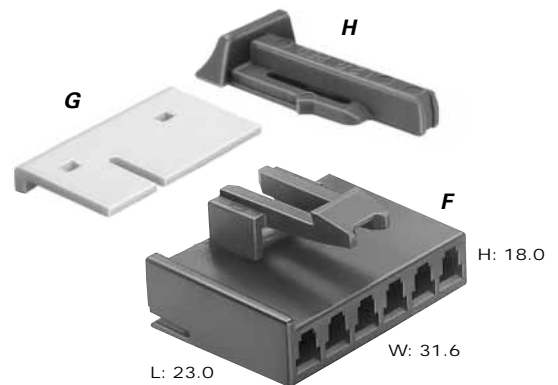
Description:	TPA
Color:	Black
Material:	PA66 HS IM



**E. Part No: 12041301\***

Description:	Connector 8F
Size:	23.0L x 11.7H x 46.1W
Color:	Black
Material:	PP
Terminals:	See Page 2.24
Typical App:	Various

\*Hinged secondary lock.



**F. Part No: 12092254**

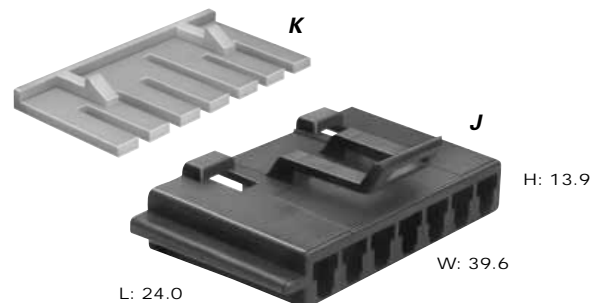
Description:	Connector 6F
Size:	23.0L x 18.0H x 31.6W
Color:	Black
Material:	PA66 HS IM
Terminals:	See Page 2.24
Typical App:	Wiper Switch

**G. Part No: 12092252**

Description:	TPA
Color:	Cream
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 2.24
Typical App:	Wiper Switch

**K. Part No: 12124811**

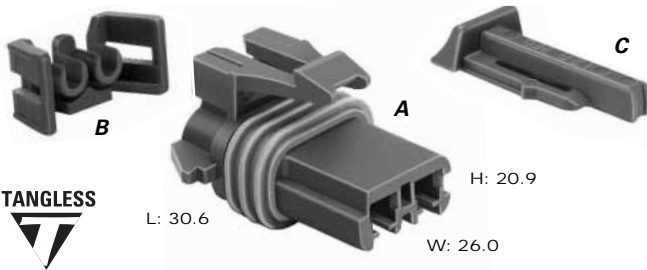
Description:	TPA
Color:	Cream
Material:	PA66 HS IM

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# 280 Device Connections



**A. Part No: 12129487**

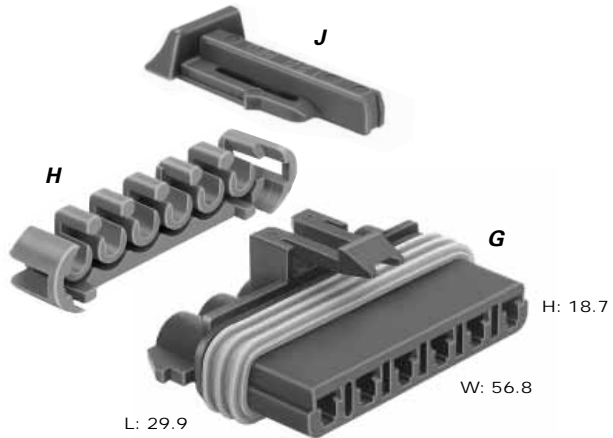
Description:	Connector Assembly 2F
Size:	30.6L x 20.9H x 26.0W
Color:	Md. Gray
Material:	PA66 HS IM
Terminals:	See Page 2.30
Seals/Plugs:	See Page 2.30, 2.31
Typical App:	Window Lift Motor

**B. Part No: 12077904**

Description:	TPA
Color:	Blue
Material:	PA66 HS IM

**C. Part No: 12052834**

Description:	CPA
Color:	Green
Material:	PP



**G. Part No: 12059573**

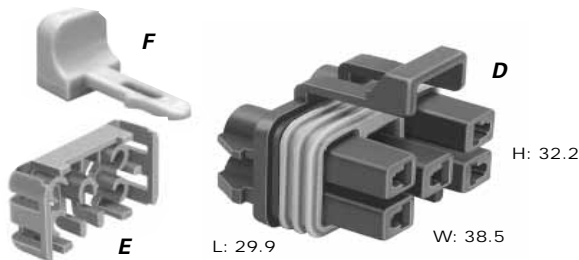
Description:	Connector Assembly 6F
Size:	29.9L x 18.7H x 56.8W
Color:	Black
Material:	PA66
Terminals:	See Page 2.30
Seals/Plugs:	See Page 2.30, 2.31
Typical App:	Various

**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 2.30
Seals/Plugs:	See Page 2.30, 2.31
Typical App:	Wiper Switch

**E. Part No: 12052816**

Description:	TPA
Color:	Md. Gray
Material:	PA66 HS IM

**F. Part No: 12020833**

Description:	CPA
Color:	Gray
Material:	PBT

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