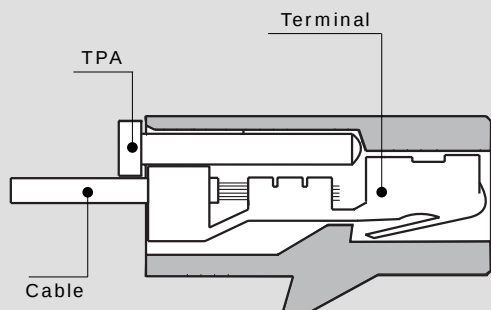


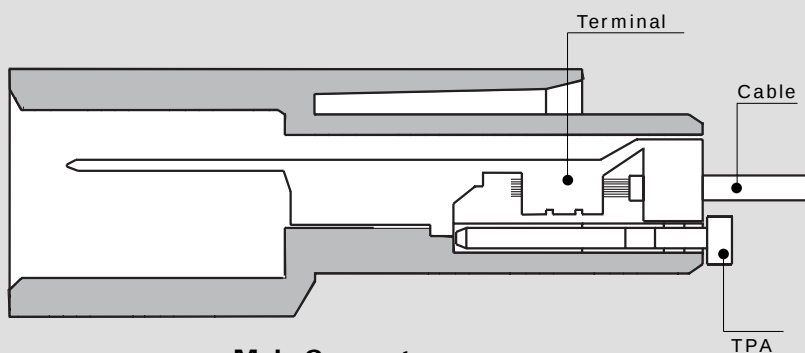


480

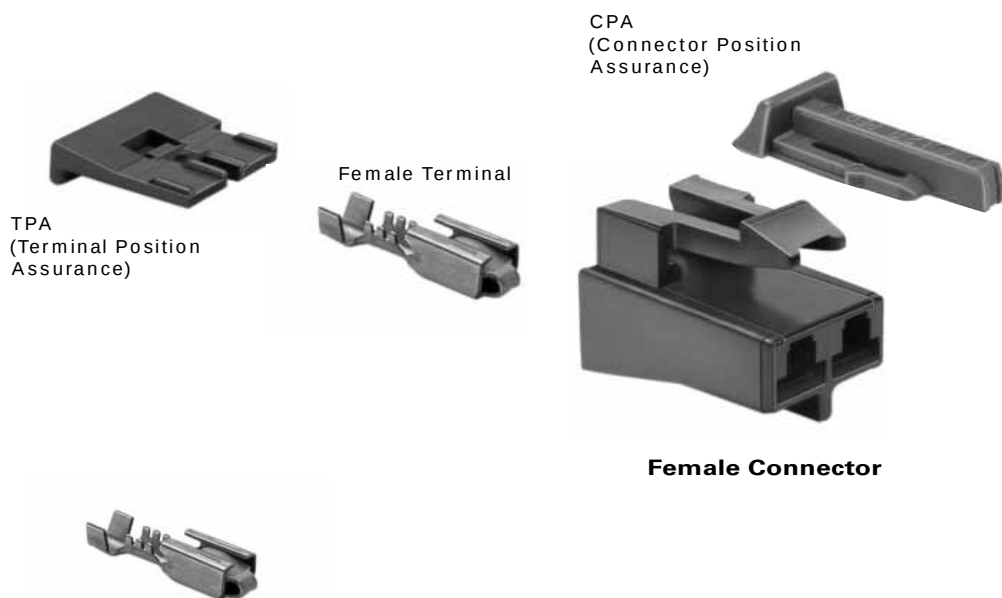
Cross Sectional View



Female Connector



Male Connector



480 Female Terminals Unsealed

Part #	Cable Range (mm ²)	Material	Plating
12084595	5.0-3.0	Tin Brass	Tin
12052221	3.0	Tin Brass	Tin
12124304	2.0-1.0	Tin Brass	Tin
12015860	0.80-0.50	Tin Brass	Tin
12052219	0.50-0.35	Tin Brass	Tin
12020366	2.0-1.0 (1 Req'd.)	Tin Brass	Tin
	0.80-0.50 (1 Req'd.)		

480 Female Connectors Unsealed

# Cavities	Connector	Color	Material	TPA
1	12015952	Md.Gray	PA66 HS IM	—
2	12064749	Black	PA66 HS IM	12059860

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.

480

Unsealed System Application Information

CABLE RANGE (mm²): 0.35-5.0

CURRENT RANGE (AMPS): 0-42

TEMP RANGE °C: -40 to 125

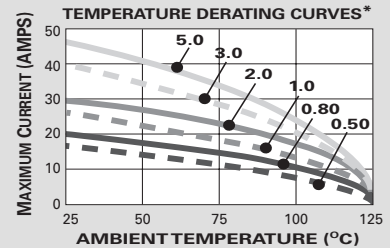
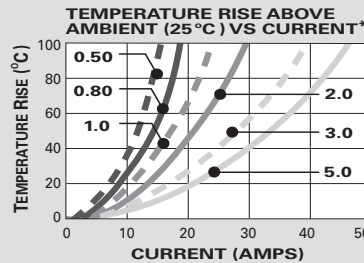
RESISTANCE: <10mΩ@20mV

VOLTAGE DROP: <3.0mV/amp

CENTERLINE SPACING (mm): 6.9

BLADE WIDTH (mm): 4.8

480 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.



Male Connector

Male Terminal

TPA
(Terminal Position Assurance)

480 Male Connectors Unsealed

# Cavities	Connector	Color	Material	TPA
1	12015987	Md. Gray	PA66 HS IM	—
2	12064750	Black	PA66 HS IM	12064751

480 Male Terminals Unsealed

Part #	Cable Range (mm ²)	Material	Plating
12033820	5.0-3.0	Tin Brass	Tin over Copper
12052827	3.0	Tin Brass	Tin over Copper
12020120	2.0-1.0	Tin Brass	Tin over Copper
12020119	0.80-0.50	Tin Brass	Tin over Copper
12066269	0.50-0.35	Tin Brass	Tin over Copper
12020784	0.35 (2 Req'd.)	Tin Brass	Tin over Copper

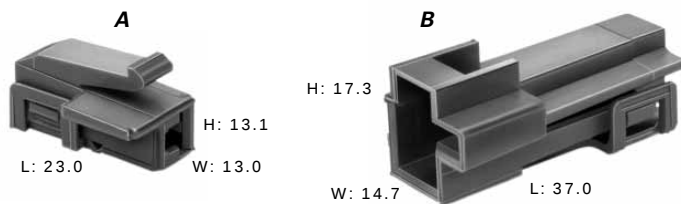
SECTION NOTES:

- Due to rigid tolerances of connector cavities, it is critical to meet all crimp dimensions as specified.
- Female connections for device applications, see page 2.49.

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.



480



Total Mated Length: 49.6mm

A. Part No: 12015952*

Description:	Connector 1F
Size:	23.0L x 13.1H x 13.0W
Color:	Md. Gray
Material:	PA66 HS IM
Terminals:	See Page 2.42

*Hinged secondary lock

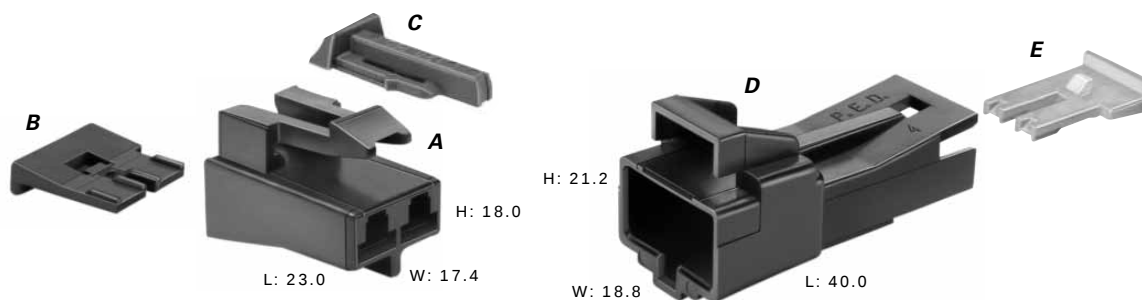
B. Part No: 12015987*

Description:	Connector 1M
Size:	37.0L x 17.3H x 14.7W
Color:	Md. Gray
Material:	PA66 HS IM
Terminals:	See Page 2.43

*Hinged secondary lock

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.

480



Total Mated Length: 53.9mm

A. Part No: 12064749

Description:	Connector 2F
Size:	23.0L x 18.0H x 17.4W
Color:	Black
Material:	PA66 HS IM
Terminals:	See Page 2.42

B. Part No: 12059860

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

C. Part No: 12052834

Description:	CPA
Color:	Green
Material:	PP

D. Part No: 12064750

Description:	Connector 2M (Clip Slot)
Size:	40.0L x 21.2H x 18.8W
Color:	Black
Material:	PA66 HS IM
Terminals:	See Page 2.43

E. Part No: 12064751

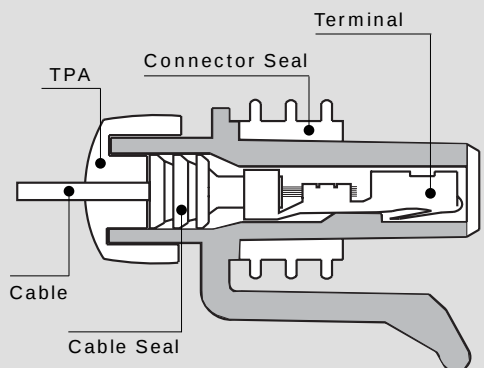
Description:	TPA
Color:	Cream
Material:	PA66 HS IM

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.

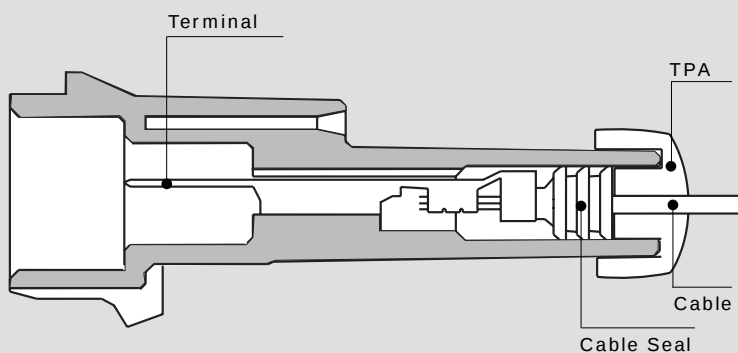


480

Cross Sectional View



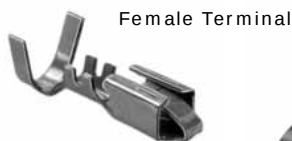
Female Connector Assembly



Male Connector

TPA
(Terminal Position
Assurance)

Cable Seal



Female Terminal

Female Connector
Assembly

480 Female Terminals Sealed

Part #	Cable Range (mm ²)	Material	Plating
12052139	5.0-3.0	Tin Brass	Tin
12048451	2.0-1.0	Tin Brass	Tin
12048450	0.80-0.50	Tin Brass	Tin



480 Metri-Pack Cable Seals

Reel Part #	Loose Part #	Cable Dia.	Material	Color
12065703	15324987	5.16-4.40	Silicone	Orange
12052453	15324990	4.50-3.61	Silicone	Purple
12052452	15324989	3.76-2.81	Silicone	Red
12048433	15324988	2.85-2.01	Silicone	White
12052931	15324991	2.15-1.60	Silicone	Yellow
12162068	15324992	1.70-1.29	Silicone	Pink

480 Female Connector Assembly
Sealed

# Cavities	Conn. Asm.	Color	Material	TPA
2	12052613	Black	PA66 HS IM	12059897

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.

480

Sealed System Application Information

480 Series Terminals – Tin Plated

CABLE RANGE (mm²): 0.50-5.0

CURRENT RANGE (AMPS): 0-42

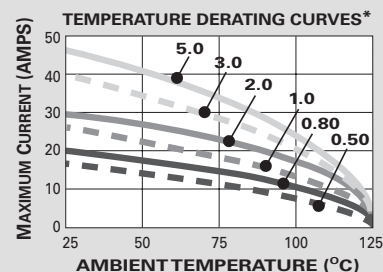
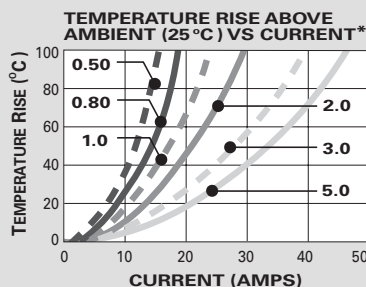
TEMP RANGE °C: -40 to 125

RESISTANCE: <10mΩ@20mV

VOLTAGE DROP: <3.0mV/amp

CENTERLINE SPACING (mm): 9.5

BLADE WIDTH (mm): 4.8



*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.



CPA
(Connector Position
Assurance)



Male Connector

Male Terminal



Cable Seal



TPA
(Terminal Position
Assurance)

480 Male Terminals Sealed

Part #	Cable Range (mm ²)	Material	Plating
12052172	5.0	Tin Brass	Tin
12065197	3.0	Tin Brass	Tin
12065196	2.0-1.0	Tin Brass	Tin



480 Male Connector Sealed

# Cavities	Connector	Color	Material	TPA
2	12065863	Black	PA66 HS IM	12059897

480 Metri-Pack Cavity Plug*

Part #	Cavity Inside Diameter	Material	Color
12066082	8.5mm	Silicone	Green

*Cavity plugs seal unused female and male cavities

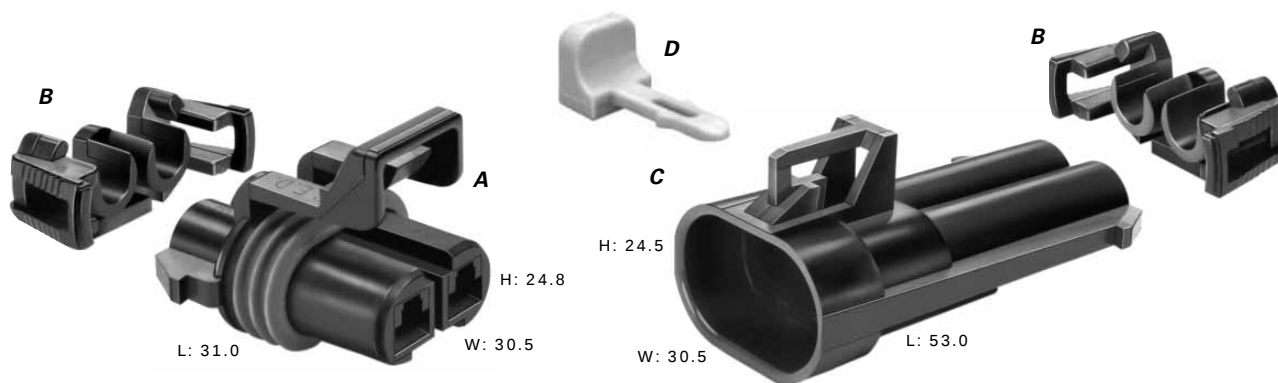
SECTION NOTES:

- Due to rigid tolerances of connector cavities, it is critical to meet all crimp dimensions as specified.
- Female connections for device applications, see page 2.50.

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.



480



Total Mated Length: 69.2 mm

A. Part No: 12052613

Description:	Connector Assembly 2F
Size:	31.0L x 24.8H x 30.5W
Color:	Black
Material:	PA66 HS IM
Terminals:	See Page 2.46
Seals/Plugs:	See Page 2.46, 2.47

C. Part No: 12065863

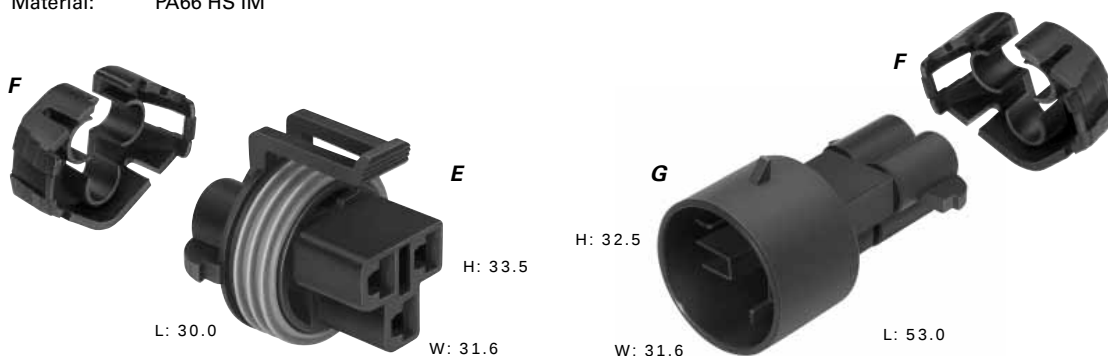
Description:	Connector 2M (Clip Slot)
Size:	53.0L x 24.5H x 30.5W
Color:	Black
Material:	PA66 HS IM
Terminals:	See Page 2.47
Seals/Plugs:	See Page 2.46, 2.47

B. Part No: 12059897

Description:	TPA
Number Req:	2
Color:	Black
Material:	PA66 HS IM

D. Part No: 12020833

Description:	CPA
Color:	Gray
Material:	PBT



Total Mated Length: 66.5 mm

E. Part No: 12131592

Description:	Connector Assembly 3F
Size:	30.0L x 33.5H x 31.6W
Color:	Black
Material:	PA66 25% GF
Terminals:	See Page 2.46
Seals/Plugs:	See Page 2.46, 2.47

G. Part No: 15344628

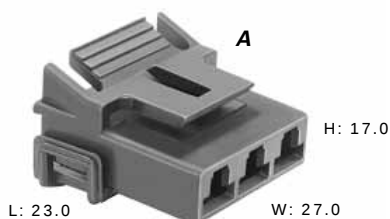
Description:	Connector 3M
Size:	53.0L x 32.5H x 31.6W
Color:	Black
Material:	PA6 25% GF
Terminals:	See Page 2.47
Seals/Plugs:	See Page 2.46, 2.47

F. Part No: 12131543

Description:	TPA
Number Req:	2
Color:	Black
Material:	PA66

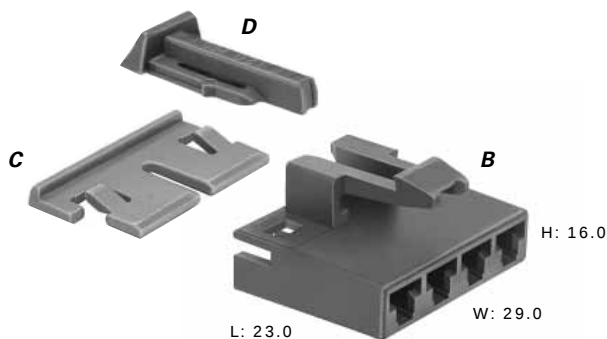
NOTE: Specifications in this catalog are for general reference only and are subject to change without notice. To verify product information, please contact a Delphi representative.

480 Device Connections



A. Part No: 12162512*

Description:	Connector 3F
Size:	23.0L x 17.0H x 27.0W
Color:	Black
Material:	PA66 HS IM
Terminals:	See Page 2.42
Typical App:	Switch
*Hinged secondary lock	



B. Part No: 12066571

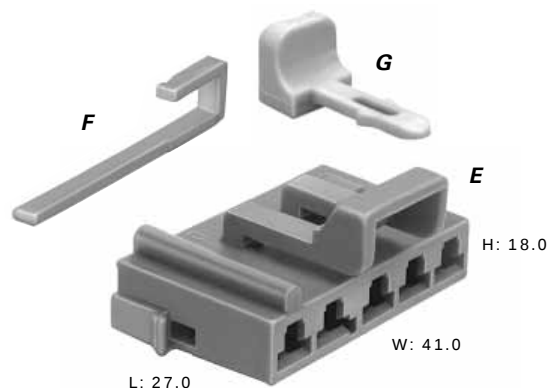
Description:	Connector 4F
Size:	23.0L x 16.0H x 29.0W
Color:	Black
Material:	PA66 HS IM
Terminals:	See Page 2.42
Typical App:	Various

C. Part No: 12066572

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

D. Part No: 12052834

Description:	CPA
Color:	Green
Material:	PP



E. Part No: 12059296

Description:	Connector 5F
Size:	27.0L x 18.0H x 41.0W
Color:	Red
Material:	PA6
Terminals:	See Page 2.42
Typical App:	Switch

F. Part No: 12059297

Description:	Secondary Lock
Color:	Natural
Material:	PBT

G. Part No: 12020833

Description:	CPA
Color:	Gray
Material:	PBT



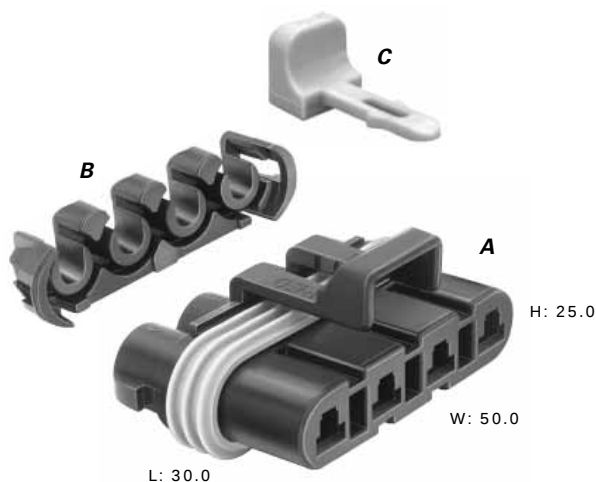
H. Part No: 12034061*

Description:	Connector 6F
Size:	28.0L x 18.0H x 51.0W
Color:	Cream
Material:	PA66 HS IM
Terminals:	See Page 2.42
Typical App:	Switch
*Hinged secondary lock	

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.



480 Device Connections

**A. Part No: 12048412**

Description: Connector Assembly 4F

Size: 30.0L x 25.0H x 50.0W

Color: Black

Material: PA66 HS IM

Terminals: See Page 2.46

Seals/Plugs: See Page 2.46, 2.47

Typical App: Resistor Pack

B. Part No: 12048413

Description: TPA

Color: Black

Material: PA66 HS IM

C. Part No: 12020833

Description: CPA

Color: Gray

Material: PBT

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.