

Metri-Pack Series

150



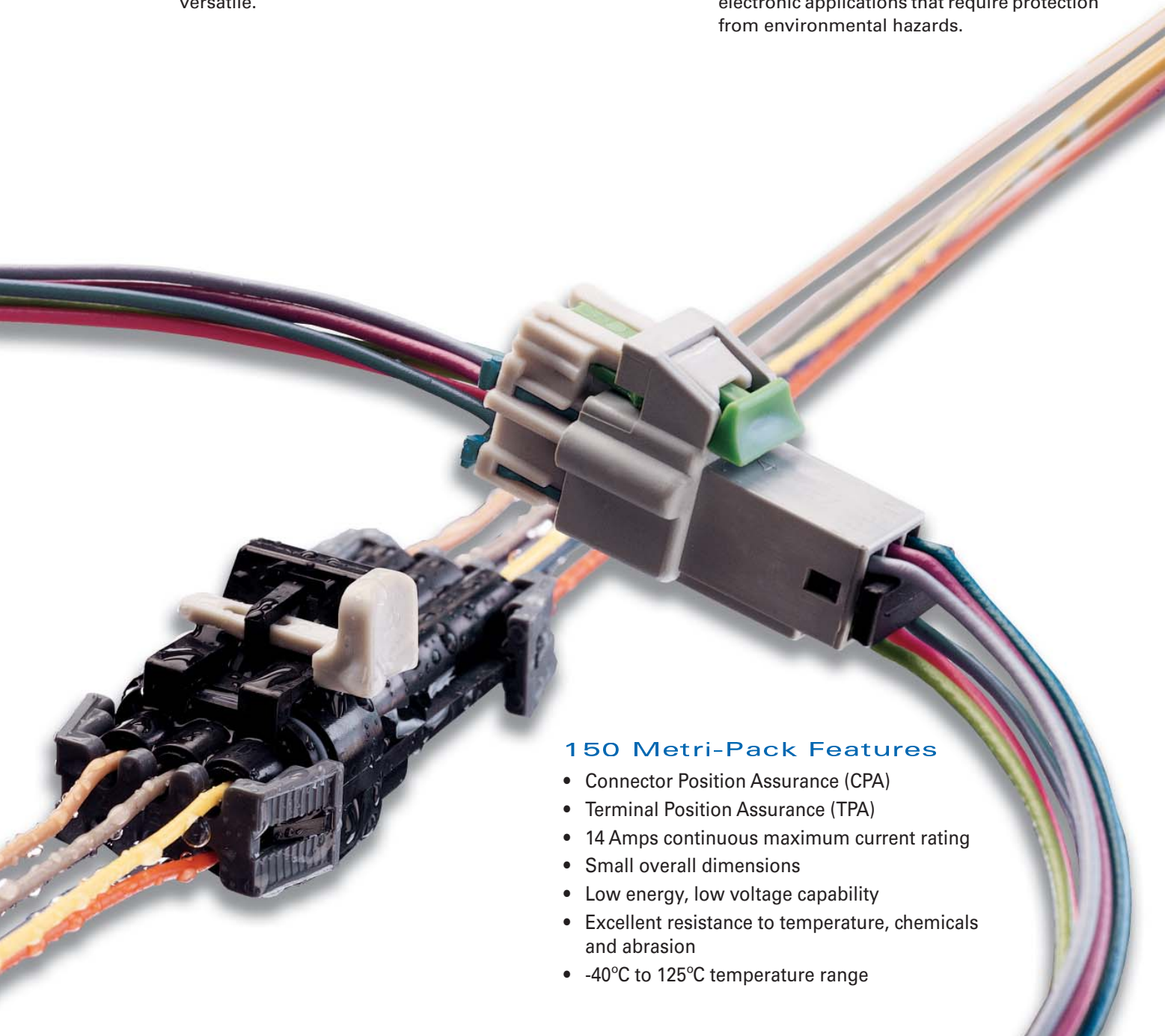
Available in device and in-line connections for vehicle applications, Metri-Pack 150 Series connectors can meet or exceed the requirements for most marine, appliance, and industrial control applications.

Ideally suited for limited space applications that do not require environmental protection, Metri-Pack 150 Series products are extremely versatile.



Available in device and in-line connections for underhood vehicle applications, Metri-Pack 150 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 150 Series sealed systems are ideally suited for critical, low-energy electronic applications that require protection from environmental hazards.



150 Metri-Pack Features

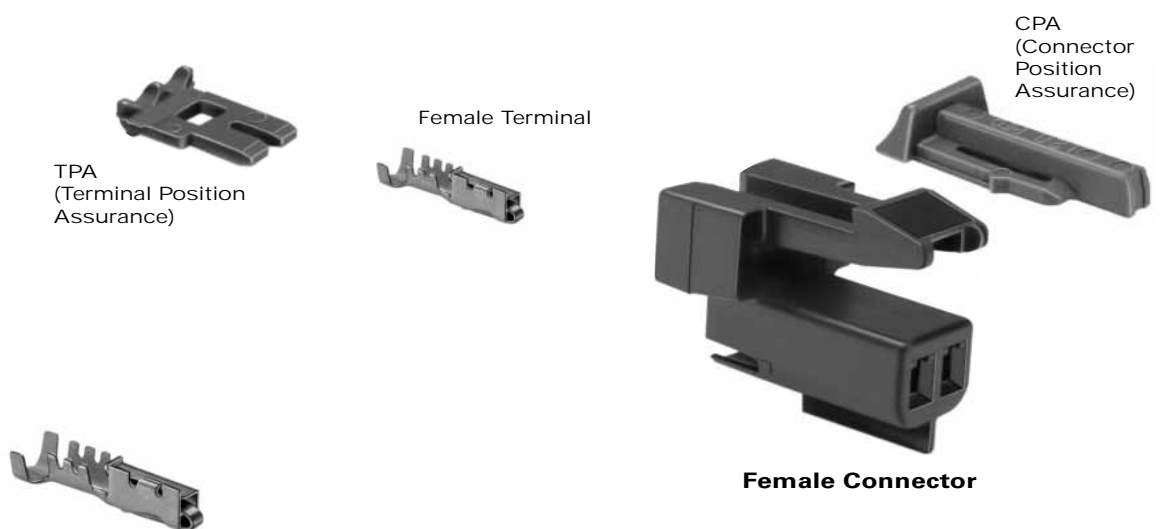
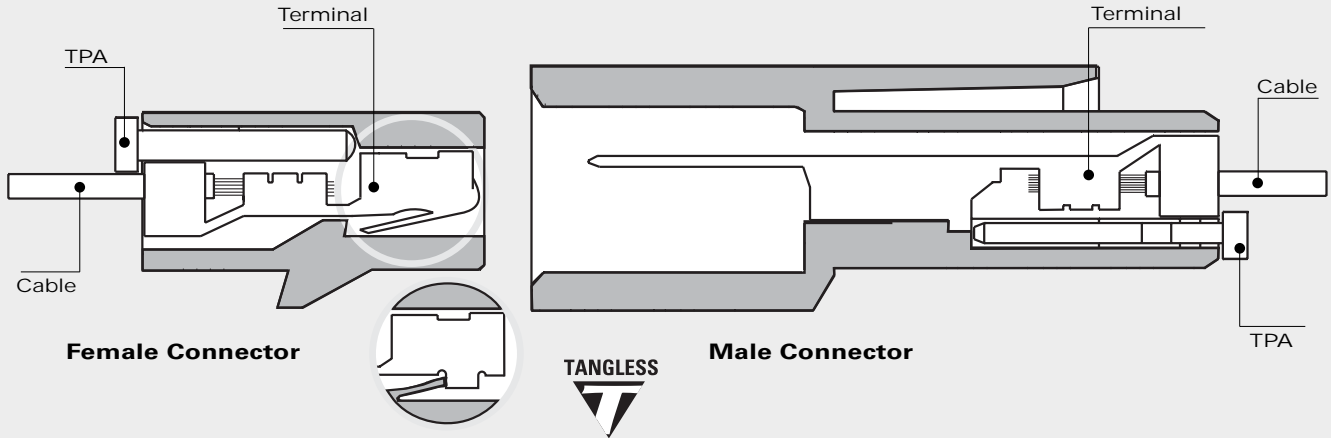
- Connector Position Assurance (CPA)
- Terminal Position Assurance (TPA)
- 14 Amps continuous maximum current rating
- Small overall dimensions
- Low energy, low voltage capability
- Excellent resistance to temperature, chemicals and abrasion
- -40°C to 125°C temperature range



150

Metri-Pack Series

Cross Sectional View



150 Female Terminals Unsealed			
Part #	Cable Range (mm ²)	Material	Plating
12047767	1.0-0.80	Silicon Bronze	Tin
12064971	0.50-0.35	Silicon Bronze	Tin

150 Female Connectors Unsealed				
# Cavities	Connector	Color	Material	TPA
1	12047682	Black	PA66 HS IM	—
2	12047662	Black	PA66 HS IM	15324070
2	12052832	Black	PA66 HS IM	15324070
3	12047781	Black	PA66 HS IM	12047783
3	12064758	Black	PA66 HS IM	12047783
4	12047785	Black	PA66 HS IM	15324070
4	12064760	Black	PA66 HS IM	15324070
4	12092162	Black	PA66 HS IM	12092164
6	12064762	Lt. Gray	PA66 HS IM	12064764
8	12047886	Black	PA66 HS IM	12045689
8	12064766	Blue	PBT	12064768
10	12064769	Cream	PA66 HS IM	12064771

TANGLESS

150 Tangless Female Terminals Unsealed			
Part #	Cable Range (mm ²)	Material	Plating
12129484	1.0-0.80	Silicon Bronze	Tin
12129373	0.5-0.35	Silicon Bronze	Tin

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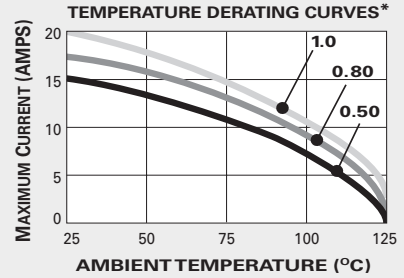
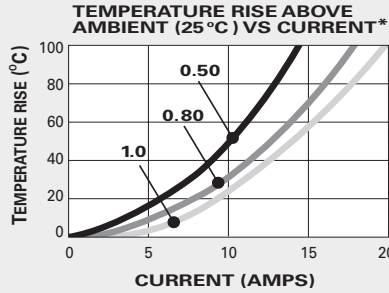


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Unsealed System Application Information

150 Series Terminals – Tin Plated

CABLE RANGE (mm²): 0.35-1.0
 CURRENT RANGE (AMPS): 0-14
 TEMP RANGE °C: -40 to 125
 RESISTANCE: <10mΩ@20mV
 VOLTAGE DROP: <10.0 mV/amp
 CENTERLINE SPACING (mm): 3.5
 BLADE WIDTH (mm): 1.5



*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)



150 Male Connectors Unsealed

# Cavities	Connector	Color	Material	TPA
1	12047683	Black	PA66 HS IM	–
2	12047663	Black	PA66 HS IM	12047665
2	12052833	Black	PA66 HS IM	12047665
3	12047782	Black	PA66 HS IM	12047784
3	12064759	Black	PBT	12047784
4	12047786	Black	PA66 HS IM	12047787
4	12064761	Black	PBT	12047787
4	12092163	Black	PA66 HS IM	12092164
6	12064763	Gray	PBT	12064765
8	12045688	Black	PA66 HS IM	12045690
8	12064767	Blue	PBT	12045690
10	12064770	Cream	PA66 HS IM	12064772

150 Male Terminals Unsealed

Part #	Cable Range (mm ²)	Material	Plating
12047581	0.80-0.50	Tin Brass	Tin
12059894	0.50-0.35	Tin Brass	Tin

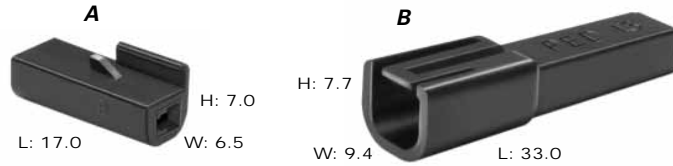
SECTION NOTES:

- Due to rigid tolerances of connector cavities, it is critical to meet all crimp dimensions as specified.
- Female connections for device applications, see page 2.20.

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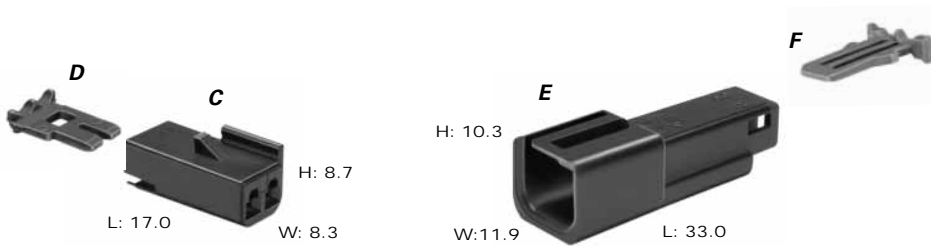
Total Mated Length: 38.1mm

A. Part No: 12047682

Description:	Connector 1F
Size:	17.0L x 7.0H x 6.5W
Color:	Black
Material:	PA66 HS IM
Terminals:	See Page 2.2

B. Part No: 12047683

Description:	Connector 1M
Size:	33.0L x 7.7H x 9.4W
Color:	Black
Material:	PA66 HS IM
Terminals:	See Page 2.3



Total Mated Length: 41.0mm

**C. Part No: 12047662 (Black)
12059249 (Cream)**

Description:	Connector 2F
Size:	17.0L x 8.7H x 8.3W
Material:	PA66 HS IM
Terminals:	See Page 2.2

**E. Part No: 12047663 (Black)
12059250 (Cream)**

Description:	Connector 2M (Clip Slot)
Size:	33.0L x 10.3H x 11.9W
Material:	PA66 HS IM
Terminals:	See Page 2.3

D. Part No: 15324070

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

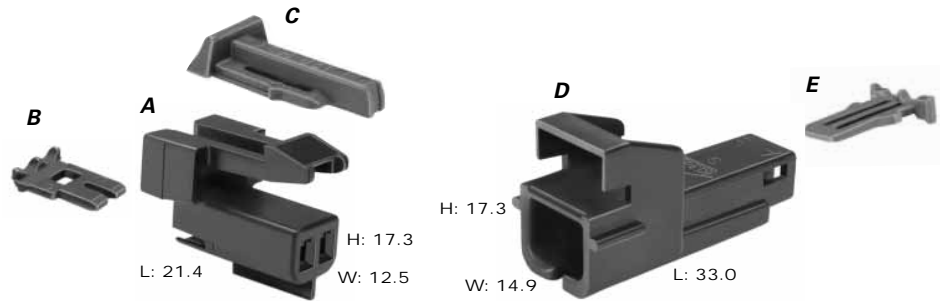
F. Part No: 12047665

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

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Total Mated Length: 43.1mm

A. Part No: 12052832

Description:	Connector 2F
Size:	21.4L x 17.3H x 12.5W
Color:	Black
Material:	PA66 HS IM
Terminals:	See Page 2.2

B. Part No: 15324070

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

C. Part No: 12052834

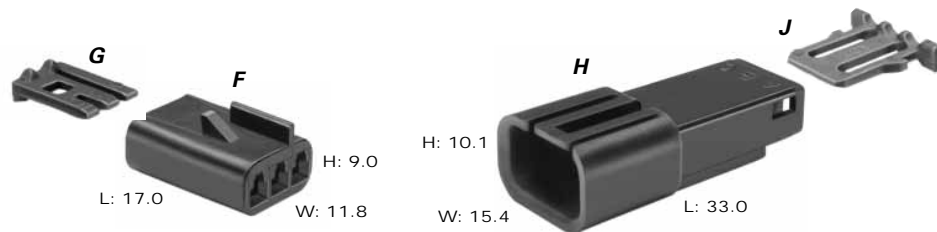
Description:	CPA
Color:	Green
Material:	PP

D. Part No: 12052833

Description:	Connector 2M (Clip Slot)
Size:	33.0L x 17.3H x 14.9W
Color:	Black
Material:	PA66 HS IM
Terminals:	See Page 2.3

E. Part No: 12047665

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



Total Mated Length: 41.3mm

**F. Part No: 12065422 (Cream)
12047781 (Black)**

Description:	Connector 3F
Size:	17.0L x 9.0H x 11.8W
Material:	PA66 HS IM
Terminals:	See Page 2.2

G. Part No: 12047783

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

**H. Part No: 12065423 (Cream)
12047782 (Black)**

Description:	Connector 3M (Clip Slot)
Size:	33.0L x 10.1H x 15.4W
Material:	PA66 HS IM
Terminals:	See Page 2.3

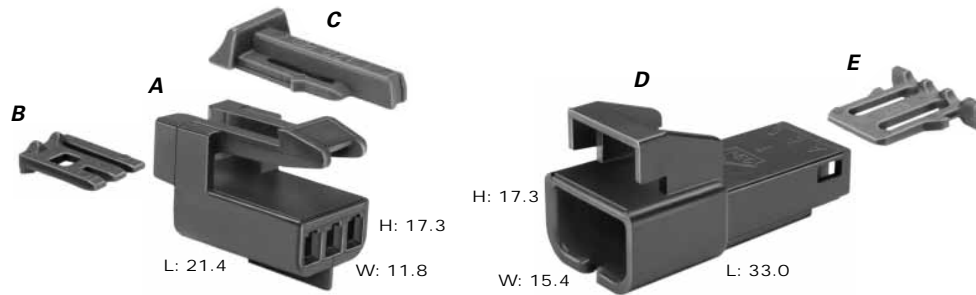
J. Part No: 12047784

Description:	TPA
Color:	Gray
Material:	PBT

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Total Mated Length: 47.1mm

A. Part No: 12064758

Description:	Connector 3F
Size:	21.4L x 17.3H x 11.8W
Color:	Black
Material:	PA66 HS IM
Terminals:	See Page 2.2

D. Part No: 12064759

Description:	Connector 3M (Clip Slot)
Size:	33.0L x 17.3H x 15.4W
Color:	Black
Material:	PBT
Terminals:	See Page 2.3

B. Part No: 12047783

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

E. Part No: 12047784

Description:	TPA
Color:	Gray
Material:	PBT

C. Part No: 12052834

Description:	CPA
Color:	Green
Material:	PP



Total Mated Length: 42.2mm

F. Part No: 12089248 (Cream) 12047785 (Black)

Description:	Connector 4F
Size:	17.0L x 10.4H x 12.4W
Material:	PA66 HS IM
Terminals:	See Page 2.2

H. Part No: 12089247 (Cream) 12047786 (Black)

Description:	Connector 4M (Clip Slot)
Size:	33.0L x 11.9H x 16.0W
Material:	PA66 HS IM
Terminals:	See Page 2.3

G. Part No: 15324070

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

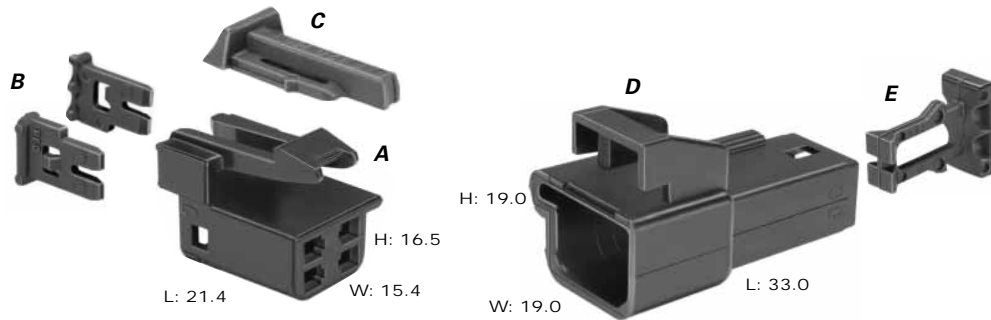
J. Part no: 12047787

Description:	TPA
Color:	Blue
Material:	PBT

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Total Mated Length: 47.9mm

A. Part No: 12064760

Description: Connector 4F
 Size: 21.4L x 16.5H x 15.4W
 Color: Black
 Material: PA66 HS IM
 Terminals: See Page 2.2

D. Part No: 12064761

Description: Connector 4M (Clip Slot)
 Size: 33.0L x 19.0H x 19.0W
 Color: Black
 Material: PBT
 Terminals: See Page 2.3

B. Part No: 15324070

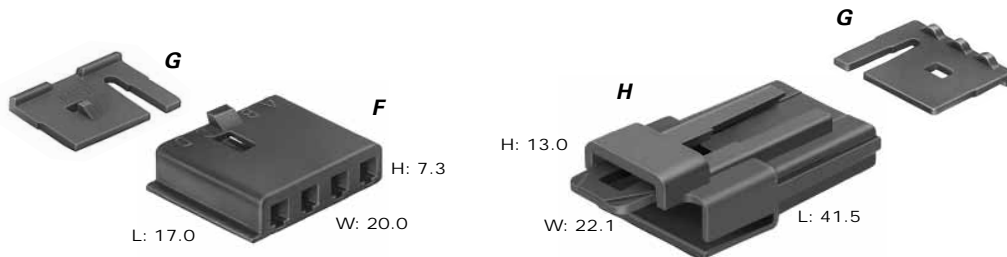
Description: TPA
 Number Req: 2
 Color: Lt. Gray
 Material: PA66 HS IM

E. Part No: 12047787

Description: TPA
 Color: Blue
 Material: PBT

C. Part No: 12052834

Description: CPA
 Color: Green
 Material: PP



Total Mated Length: 43.3mm

F. Part No: 12092162

Description: Connector 4F
 Size: 17.0L x 7.3H x 20.0W
 Color: Black
 Material: PA66 HS IM
 Terminals: See Page 2.2

H. Part No: 12092163

Description: Connector 4M (Clip Slot)
 Size: 41.5L x 13.0H x 22.1W
 Color: Black
 Material: PA66 HS IM
 Terminals: See Page 2.3

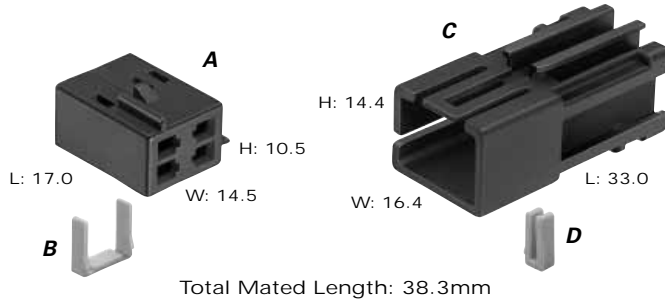
G. Part No: 12092164

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

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A. Part No: 12131283

Description:	Connector 4F
Size:	17.0L x 10.5H x 14.5W
Color:	Black
Material:	PA6
Terminals:	See Page 2.2

C. Part No: 12131285

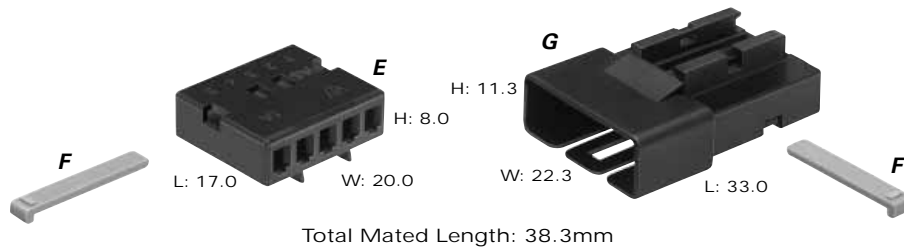
Description:	Connector 4M (Clip Slot)
Size:	33.0L x 14.4H x 16.4W
Color:	Black
Material:	PA66
Terminals:	See Page 2.3

B. Part No: 12131361

Description:	Secondary Lock
Color:	Yellow
Material:	PA66 25% GF

D. Part No: 12131372

Description:	Secondary Lock
Color:	Yellow
Material:	PA66 25% GF
Note:	M Clip-on Connector also available



E. Part No: 12147054

Description:	Connector 5F
Size:	17.0L x 8.0H x 20.0W
Color:	Black
Material:	PA6
Terminals:	See Page 2.2

G. Part No: 12185636

Description:	Connector 5M (Clip Slot)
Size:	33.0L x 11.3H x 22.3W
Color:	Black
Material:	PA66
Terminals:	See Page 2.3
Note:	Clip Version available

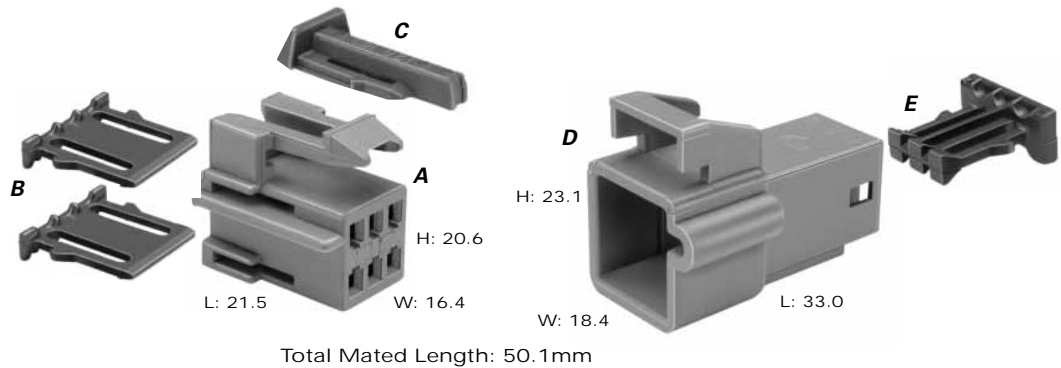
F. Part No: 12147055

Description:	Secondary Lock
Number Req:	2
Color:	Yellow
Material:	PA66 25% GF

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.



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A. Part No: 12064762

Description:	Connector 6F
Size:	21.5L x 20.6H x 16.4W
Color:	Lt. Gray
Material:	PA66 HS IM
Terminals:	See Page 2.2

B. Part No: 12064764

Description:	TPA
Number Req:	2
Color:	Blue
Material:	PBT

C. Part No: 12052834

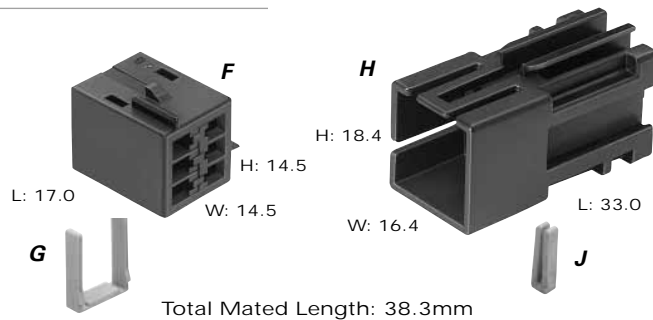
Description:	CPA
Color:	Green
Material:	PP

D. Part No: 12064763

Description:	Connector 6M (Clip Slot)
Size:	33.0L x 23.1H x 18.4W
Color:	Gray
Material:	PBT
Terminals:	See Page 2.3

E. Part No: 12064765

Description:	TPA
Color:	Black
Material:	PBT



F. Part No: 15396848

Description:	Connector 6F
Size:	17.0L x 14.5H x 14.5W
Color:	Black
Material:	PA6
Terminals:	See Page 2.2

G. Part No: 12131358

Description:	Secondary Lock
Color:	Yellow
Material:	PA66 25% GF

H. Part No: 15396849

Description:	Connector 6M
Size:	33.0L x 18.4H x 16.4W
Color:	Black
Material:	PA66
Terminals:	See Page 2.3

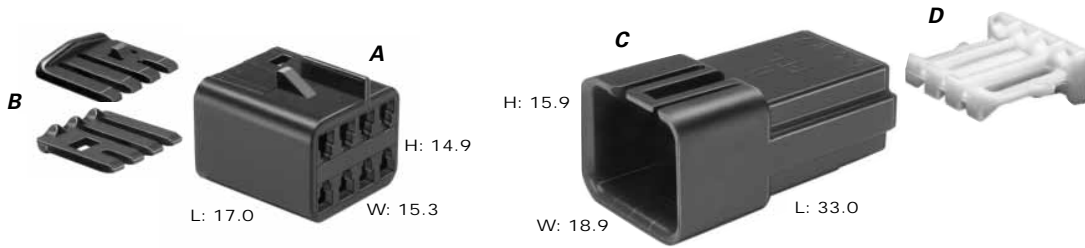
J. Part No: 12131370

Description:	Secondary Lock
Color:	Yellow
Material:	PA66 25% GF

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Total Mated Length: 41.2mm

A. Part No: 12047886

Description:	Connector 8F
Size:	17.0L x 14.9H x 15.3W
Color:	Black
Material:	PA66 HS IM
Terminals:	See Page 2.2

C. Part No: 12045688

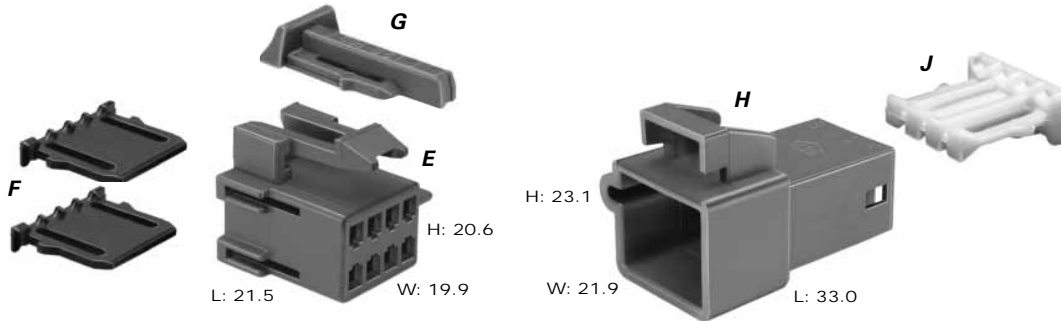
Description:	Connector 8M (Clip Slot)
Size:	33.0L x 15.9H x 18.9W
Color:	Black
Material:	PA66 HS IM
Terminals:	See Page 2.3

B. Part No: 12045689

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

D. Part No: 12045690

Description:	TPA
Color:	Natural
Material:	PBT



Total Mated Length: 48.3mm

E. Part No: 12064766

Description:	Connector 8F
Size:	21.5L x 20.6H x 19.9W
Color:	Blue
Material:	PBT
Terminals:	See Page 2.2

H. Part No: 12064767

Description:	Connector 8M (Clip Slot)
Size:	33.0L x 23.1H x 21.9W
Color:	Blue
Material:	PBT
Terminals:	See Page 2.3

F. Part No: 12064768

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

J. Part No: 12045690

Description:	TPA
Color:	Natural
Material:	PBT

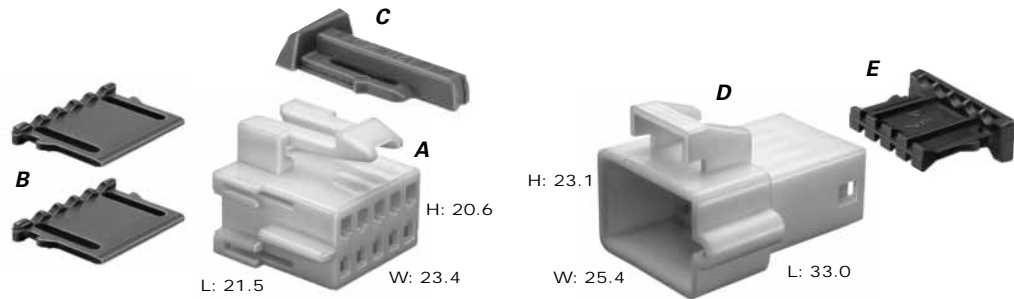
G. Part No: 12052834

Description:	CPA
Color:	Green
Material:	PP

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Total Mated Length: 48.3mm

A. Part No: 12064769

Description:	Connector 10F
Size:	21.5L x 20.6H x 23.4W
Color:	Cream
Material:	PA66 HS IM
Terminals:	See Page 2.2

B. Part No: 12064771

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

C. Part No: 12052834

Description:	CPA
Color:	Green
Material:	PP

D. Part No: 12064770

Description:	Connector 10M (Clip Slot)
Size:	33.0L x 23.1H x 25.4W
Color:	Cream
Material:	PA66 HS IM
Terminals:	See Page 2.3

E. Part No: 12064772

Description:	TPA
Color:	Black
Material:	PBT

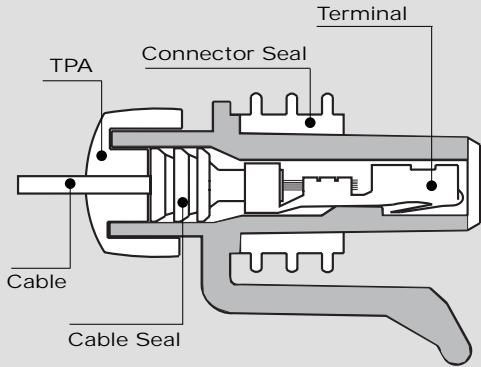
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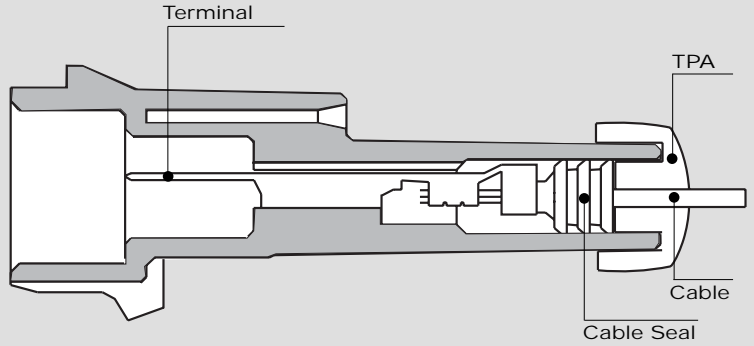
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Metri-Pack Series

Cross Sectional View



Female Connector Assembly



Male Connector



150 Female Terminals Sealed

Part #	Cable Range (mm ²)	Material	Plating
12048074	1.0-0.80-0.50	Silicon Bronze	Tin
12084200	0.50-0.35	Silicon Bronze	Tin
12160223	1.0-0.80	Beryllium Copper	Silver/Nickel
12160222	0.50-0.35	Beryllium Copper	Silver/Nickel



150.2 Pull-to-Seat Female Terminals *

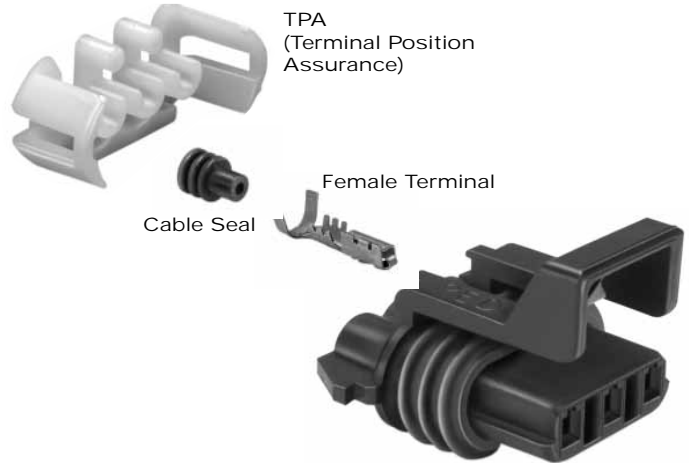
Part #	Cable Range (mm ²)	Material	Plating
12124075	1.0-0.80	Silicon Bronze	Tin
12124076	0.50-0.35	Silicon Bronze	Tin
12161184	1.0-0.80	Beryllium Copper	Tin

*To be used with female connections, see page 2.22



150 Metri-Pack Cable Seals

Reel Part #	Loose Part #	Cable Dia.	Material	Color
12052924	15324973	2.85-2.03	Silicone	Dk. Red
12089442	15324976	2.15-1.60	Silicone	White
12052925	15324974	1.70-1.29	Silicone	Blue
12124669	15324975	1.009-0.995	Silicone	Tan



Female Connector Assembly

150 Female Connector Assemblies Sealed

# Cavities	Conn. Asm.	Color	Material	TPA
2	12052641	Black	PA66 HS IM	12052634
3	12110293	Black	PA66 HS IM	12052845
4	12162144	Black	PA66 HS IM	12047948
5	12146045	Cream	PA66 HS IM	12092844
6	12052848	Black	PA66 HS IM	12052850
8	12047937	Black	PA66 HS IM	12066304
10	12065425	Black	PA66 HS IM	12177082

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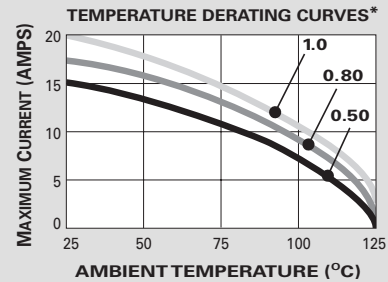
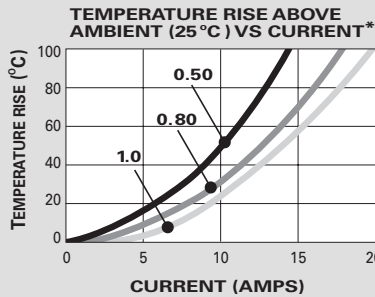


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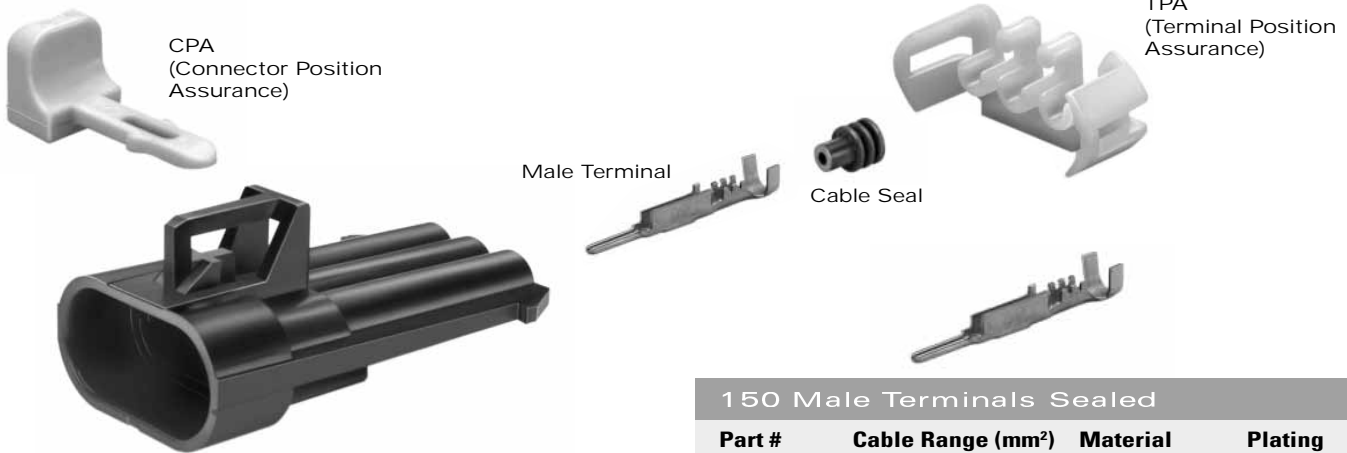
Sealed System Application Information

CABLE RANGE (mm²): 0.35-1.0
 CURRENT RANGE (AMPS): 0-14
 TEMP RANGE °C: -40 to 125
 RESISTANCE: <10mΩ@20mV
 VOLTAGE DROP: <10.0 mV/amp
 CENTERLINE SPACING (mm): 6.0
 BLADE WIDTH (mm): 1.5

150 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

150 Male Terminals Sealed			
Part #	Cable Range (mm ²)	Material	Plating
12045773	0.80-0.50	Tin Brass	Tin
12077628	0.50-0.35	Tin Brass	Tin



150 Male Connectors Sealed				
# Cavities	Connector	Color	Material	TPA
2	12162000	Black	PA66 HS IM	12052634
3	12129615	Black	PA66 HS IM	12052845
4	12162102	Black	PBT 30% GF	12047948
5	12103974	Natural	PBT 30% GF	12092844
6	12124107	Black	PA66 HS IM	12052850
8	12047931	Black	PBT 30% GF	15324525
10	12045808	Black	PBT 30% GF	12177082

150 Metri-Pack Cavity Plug *			
Part #	Cavity Inside Diameter	Material	Color
12059168	5.2mm	Silicone	Dk. Red

*Cavity plugs seal unused female and male cavities

SECTION NOTES:

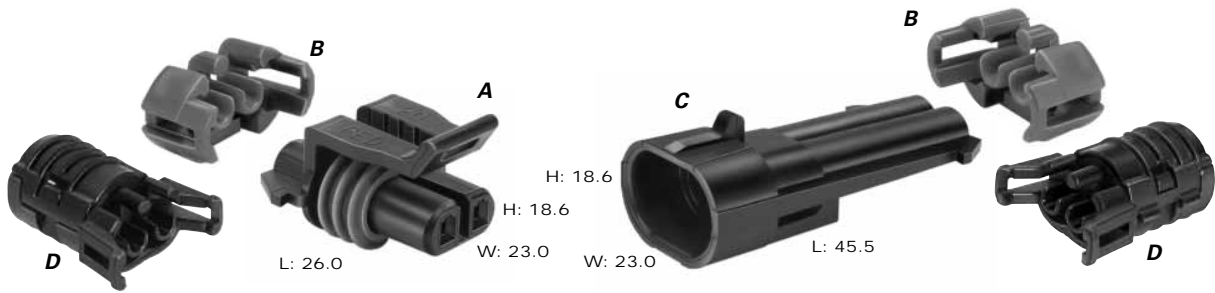
- Due to rigid tolerances of connector cavities, it is critical to meet all crimp dimensions as specified.
- Different color and connector indexing features are also available.
- Female connections for device applications, see page 2.21.

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.



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Metri-Pack Series



Total Mated Length: 58.5mm

A. Part No: 12052641 (Black) 12052644 (Lt. Gray)

Description:	Connector Assembly 2F
Size:	26.0L x 18.6H x 23.0W
Material:	PA66 HS IM
Terminals:	See Page 2.12
Seals/Plugs:	See Page 2.12, 2.13

C. Part No: 12162000 (Black) 12162343 (Lt. Gray)

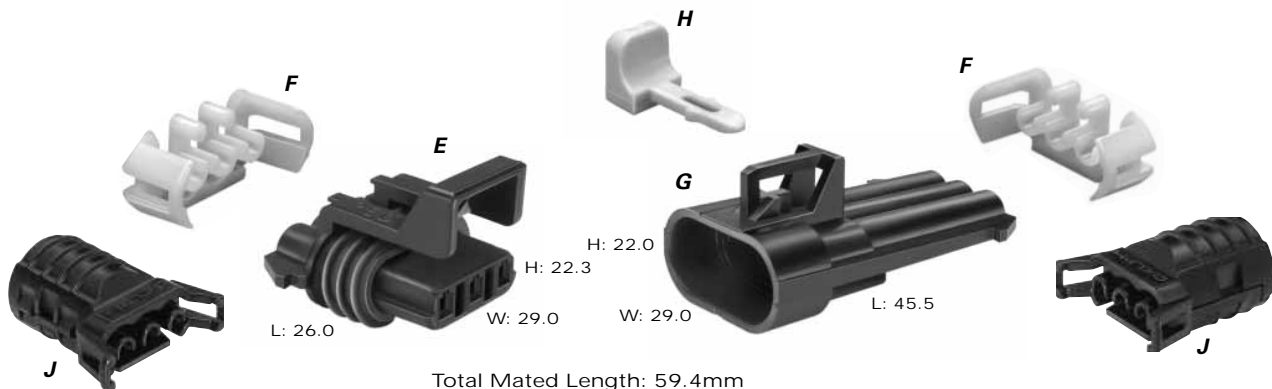
Description:	Connector 2M (Clip Slot-Self Locking)
Size:	45.5L x 18.6H x 23.0W
Material:	PA66 HS IM
Terminals:	See Page 2.13
Seals/Plugs:	See Page 2.12, 2.13

B. Part No: 12052634

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

D. Part No: 15327799 (Optional)

Description:	Conduit TPA
Number Req:	2
Color:	Black
Material:	PA6



Total Mated Length: 59.4mm

E. Part No: 12110293

Description:	Connector Assembly 3F
Size:	26.0L x 22.3H x 29.0W
Color:	Black
Material:	PA66 HS IM
Terminals:	See Page 2.12
Seals/Plugs:	See Page 2.12, 2.13

G. Part No: 12129615

Description:	Connector 3M (Clip Slot-Self Locking)
Size:	45.5L x 22.0H x 29.0W
Color:	Black
Material:	PA66 HS IM
Terminals:	See Page 2.13
Seals/Plugs:	See Page 2.12, 2.13

J. Part No: 10740397 (Optional)

Description:	Conduit TPA
Number Req:	2
Color:	Black
Material:	PA6

F. Part No: 12052845

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

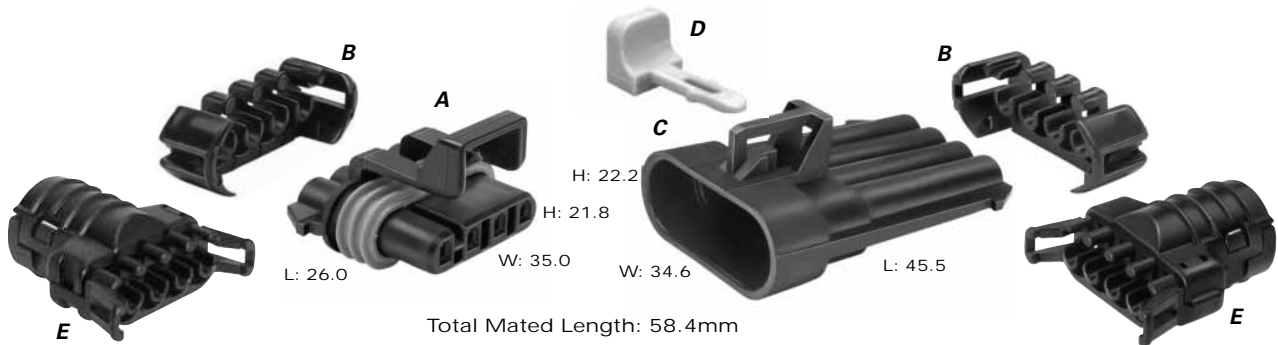
H. Part No: 12020833

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.



150



A. Part No: 12162144

Description:	Connector Assembly 4F
Size:	26.0L x 21.8H x 35.0W
Color:	Black
Material:	PA66 HS IM
Terminals:	See Page 2.12
Seals/Plugs:	See Page 2.12, 2.13

B. Part No: 12047948

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

C. Part No: 12162102

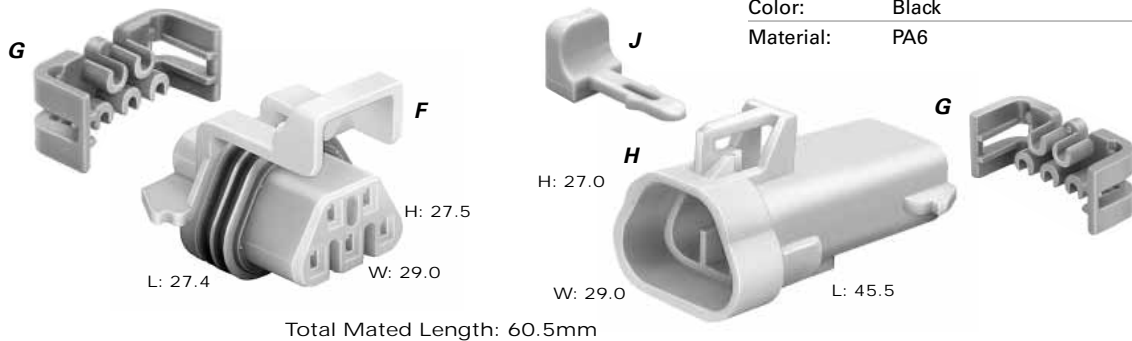
Description:	Connector 4M (Clip Slot-Self Locking)
Size:	45.5L x 22.2H x 34.6W
Color:	Black
Material:	PBT 30% GF
Terminals:	See Page 2.13
Seals/Plugs:	See Page 2.12, 2.13

D. Part No: 12020833

Description:	CPA
Color:	Gray
Material:	PBT

E. Part No: 10719337 (Optional)

Description:	Conduit TPA
Number Req:	2
Color:	Black
Material:	PA6



F. Part No: 12146045

Description:	Connector Assembly 5F
Size:	27.4L x 27.5H x 29.0W
Color:	Cream
Material:	PA66 HS IM
Terminals:	See Page 2.12
Seals/Plugs:	See Page 2.12, 2.13

G. Part No: 12092844

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

H. Part No: 12103974

Description:	Connector 5M
Size:	45.5L x 27.0H x 29.0W
Color:	Natural
Material:	PBT 30% GF
Terminals:	See Page 2.13
Seals/Plugs:	See Page 2.12, 2.13

J. Part No: 12020833

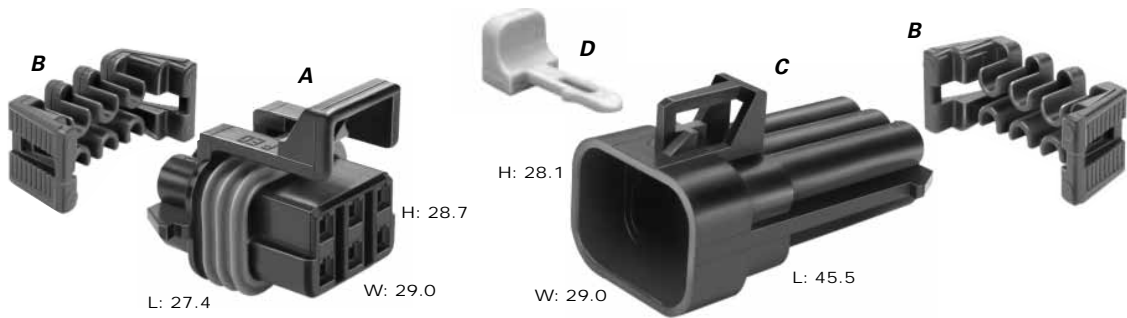
Description:	CPA
Color:	Gray
Material:	PBT

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.



150

Metri-Pack Series



Total Mated Length: 60.5mm

A. Part No: 12052848

Description:	Connector Assembly 6F
Size:	27.4L x 28.7H x 29.0W
Color:	Black
Material:	PA66 HS IM
Terminals:	See Page 2.12
Seals/Plugs:	See Page 2.12, 2.13

C. Part No: 12124107

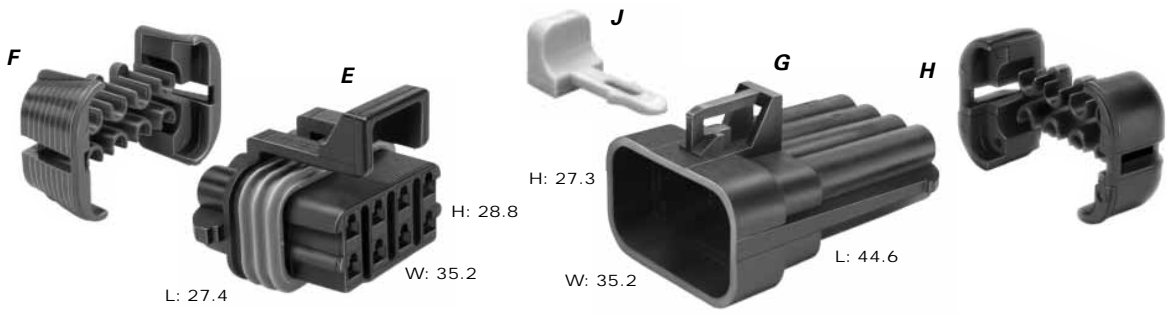
Description:	Connector 6M (Clip Slot-Self Locking)
Size:	45.5L x 28.1H x 29.0W
Color:	Black
Material:	PA66 HS IM
Terminals:	See Page 2.13
Seals/Plugs:	See Page 2.12, 2.13

B. Part No: 12052850

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

D. Part No: 12020833

Description:	CPA
Color:	Gray
Material:	PBT



Total Mated Length: 60.4mm

E. Part No: 12047937 (Black)

Description:	Connector Assembly 8F
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Part No: 12047938 (Lt. Gray)

Description:	Connector Assembly 7F
--------------	-----------------------

Part No: 12052600 (Md. Gray)

Description:	Connector Assembly 5F
Size:	27.4L x 28.8H x 35.2W
Material:	PA66 HS IM
Terminals:	See Page 2.12
Seals/Plugs:	See Page 2.12, 2.13

F. Part No: 12066304

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

G. Part No: 12047931 (Black)

Description:	Connector 8M (Clip Slot)
--------------	--------------------------

Part No: 12047933 (Gray)

Description:	Connector 7M (Clip Slot)
--------------	--------------------------

Part No: 12052480 (Dk. Gray)

Description:	Connector 5M (Clip Slot)
Size:	44.6L x 27.3H x 35.2W
Material:	PBT 30% GF
Terminals:	See Page 2.13
Seals/Plugs:	See Page 2.12, 2.13

H. Part No: 15324525

Description:	TPA
Color:	Black
Material:	PA66 HS IM

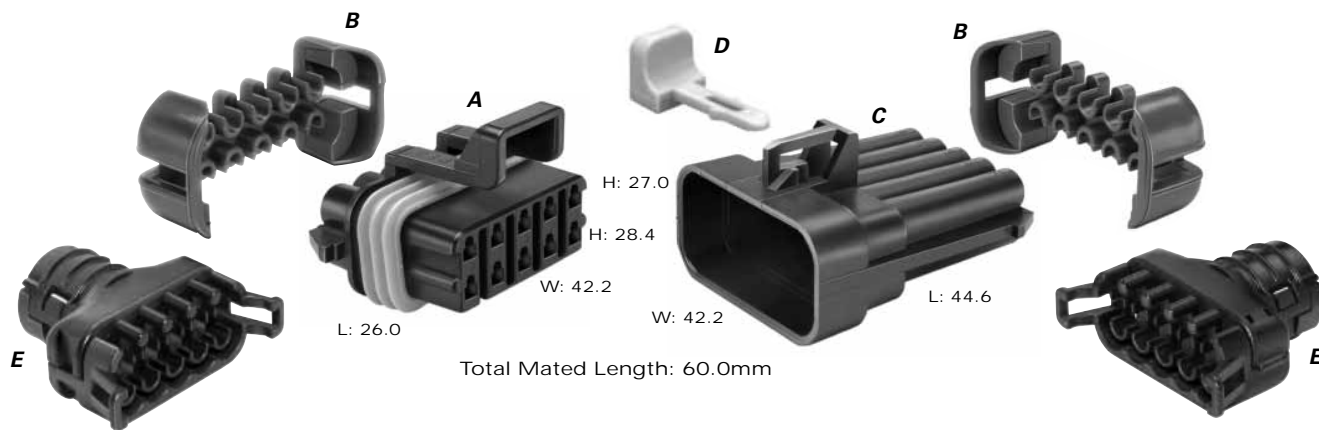
J. Part No: 12020833

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.



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**A. Part No: 12065425 (Black)
12065426 (Md. Gray)**

Description:	Connector Assembly 10F
Size:	26.0L x 28.4H x 42.2W
Material:	PA66 HS IM
Terminals:	See Page 2.12
Seals/Plugs:	See Page 2.12, 2.13

B. Part No: 12177082

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

**C. Part No: 12045808 (Black)
12052189 (Gray)**

Description:	Connector 10M (Clip Slot)
Size:	44.6L x 27.0H x 42.2W
Material:	PBT 30% GF
Terminals:	See Page 2.13
Seals/Plugs:	See Page 2.12, 2.13

D. Part No: 12020833

Description:	CPA
Color:	Gray
Material:	PBT

E. Part No: 10719339 (Optional)

Description:	Conduit TPA
Number Req:	2
Color:	Black
Material:	PA6

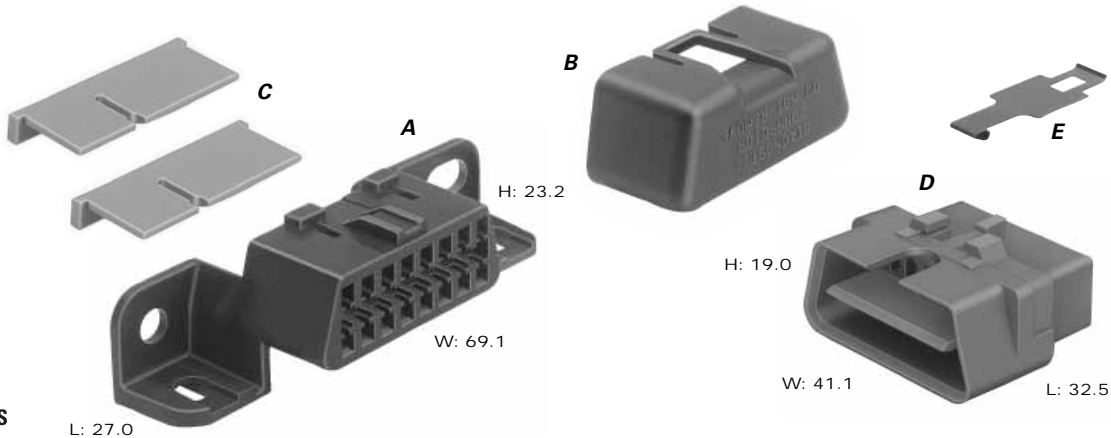
NOTE: Specifications in this catalog are for general reference only and are subject to change without notice. To verify product information, please contact a Delphi representative.



150 Device Connections

Metri-Pack OBD II — On-Board Diagnostic Connection System

The On-Board Diagnostic Connection System is designed to meet SAE J1962 specifications using ISO standard male terminals. The 16 Terminal Male Test Equipment Connector includes a nylon insulator with ISO standard copper alloy male terminals. The Female Vehicle Connector is designed for under dash application, and accepts 150 Series Metri-Pack tangless female terminals available in silicon bronze.



A. Part No: 12110250

Description: Connector 16F (Fastener Mounting)
Size: 27.0L x 23.2H x 69.1W

Part No: 15317575

Description: Connector 16F (Snap Mounting)
Size: 17.0L x 23.2H x 52.0W
Color: Black
Material: PA66 HS IM
Terminals: See Page 2.2

B. Part No: 12146933

Description: Cover
Color: Black
Material: PP IM

C. Part No: 12160437

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

F. Part No: 12185280

Description: Connector 16F
Size: 28.0L x 23.0H x 61.0W
Color: White
Material: PA66
Terminals: See Page 2.2



G. Part No: 12185279

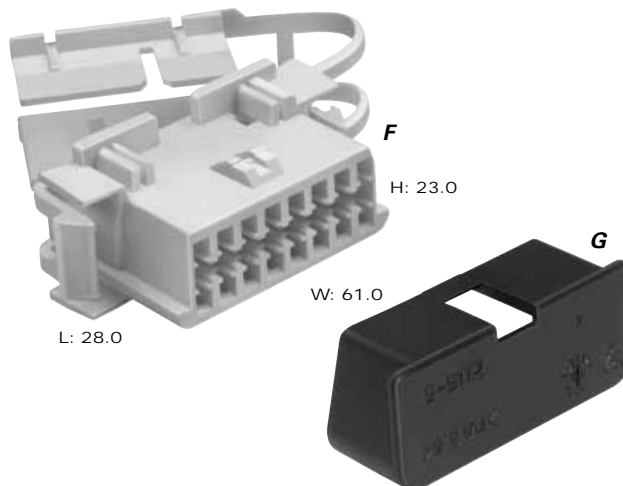
Description: Cover
Color: Black
Material: PA66

D. Part No: 12110252

Description: Connector 16M
Size: 32.5L x 19.0H x 41.1W
Color: Red
Material: PBT 30% GF
Terminals: See Page 2.3
Note: For molding details refer to drawing 12110256

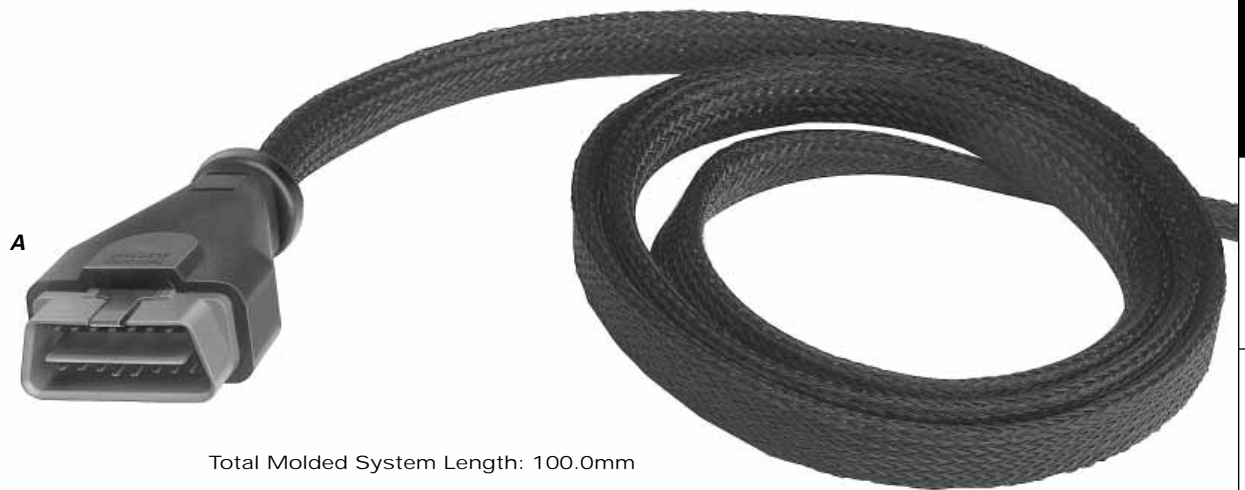
E. Part No: 12110254

Description: Clip
Material: Stainless Steel



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.

150 Device Connections



Total Molded System Length: 100.0mm

A.

Description: Connector Assembly 16M OBD II

Part No: 12143692

Length: 3 Feet (915mm)

Part No: 12143693

Length: 8 Feet (2440mm)

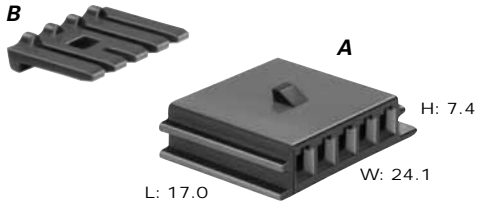
Part No: 12143694

Length: 12 Feet (3660mm)

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.



150 Device Connections

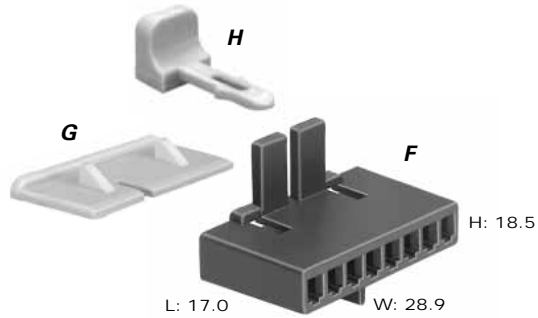


A. Part No: 12059800

Description:	Connector 5F
Size:	17.0L x 7.4H x 24.1W
Color:	Black
Material:	PA66 HS IM
Terminals:	See Page 2.2
Typical App:	Motor

B. Part No: 12059801

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



F. Part No: 12064862

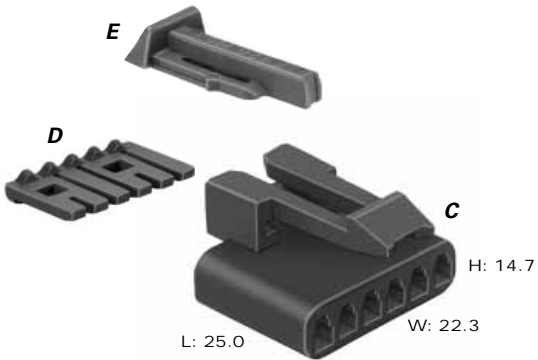
Description:	Connector 8F
Size:	17.0L x 18.5H x 28.9W
Color:	Black
Material:	PA66 HS IM
Terminals:	See Page 2.2
Typical App:	Mirror Switch

G. Part No: 12064863

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

H. Part No: 12020833

Description:	CPA
Color:	Gray
Material:	PBT



C. Part No: 12064860

Description:	Connector 6F
Size:	25.0L x 14.7H x 22.3W
Color:	Black
Material:	PBT
Terminals:	See Page 2.2
Typical App:	Switch

D. Part No: 12064861

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

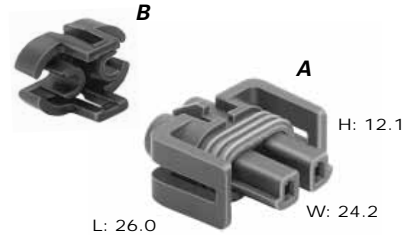
E. Part No: 12052834

Description:	CPA
Color:	Green
Material:	PP

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.



150 Device Connections

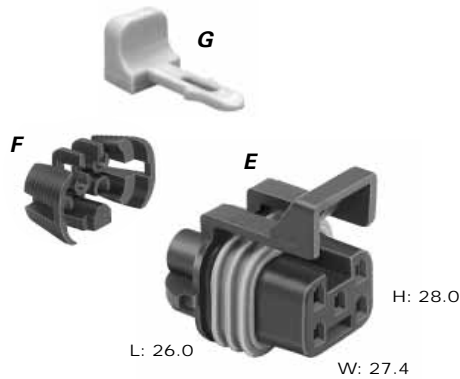


A. Part No: 12162017

Description:	Connector Assembly 2F
Size:	26.0L x 12.1H x 24.2W
Color:	Md. Gray
Material:	PA66 HS IM
Terminals:	See Page 2.12
Seals/Plugs:	See Page 2.12, 2.13
Typical App:	Compressor

B. Part No: 12124824

Description:	TPA
Color:	Black
Material:	PA66 HS IM



E. Part No: 12077591

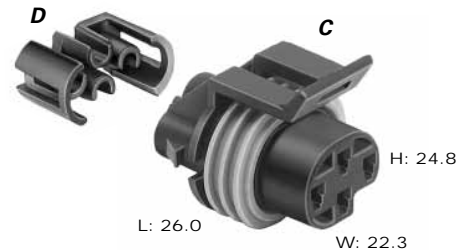
Description:	Connector Assembly 5F
Size:	26.0L x 28.0H x 27.4W
Color:	Black
Material:	PA66 HS IM
Terminals:	See Page 2.12
Seals/Plugs:	See Page 2.12, 2.13
Typical App:	EGR Valve

F. Part No: 12052898

Description:	TPA
Color:	Black
Material:	PA66 HS IM

G. Part No: 12020833

Description:	CPA
Color:	Gray
Material:	PBT



C. Part No: 12065298

Description:	Connector Assembly 4F
Size:	26.0L x 24.8H x 22.3W
Color:	Black
Material:	PA66 HS IM
Terminals:	See Page 2.12
Seals/Plugs:	See Page 2.12, 2.13
Typical App:	Switch

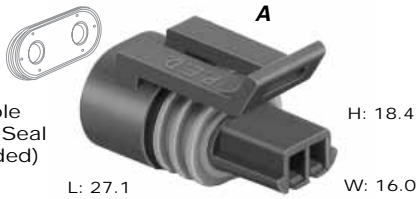
D. Part No: 12066176

Description:	TPA
Color:	Black
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.



150.2 Pull-to-Seat



A. Part No: 12162193 (Black/Green Seal)

2.66 -2.00 Cable O.D.

Part No: 12162197 (Md. Gray/Green Seal)

2.66 -2.00 Cable O.D.

Part No: 12162198 (Md. Gray/Tan Seal)

2.15 -1.65 Cable O.D.

Part No: 12162199 (Md. Gray/Orange Seal)

1.85 -1.47 Cable O.D.

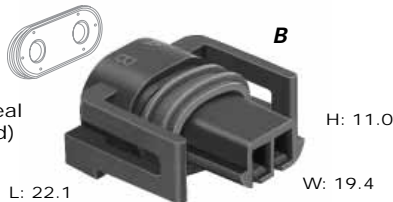
Description: Connector Assembly 2F

Size: 27.1L x 18.4H x 16.0W

Material: PA66 HS IM

Terminals: See Page 2.12

Typical App: Temperature Sensors



B. Part No: 12162215 (Black/Brown Seal)

2.66 -2.00 Cable O.D.

Part No: 12162216 (Black/Lt. Gray Seal)

2.66 -2.00 Cable O.D.

Part No: 12162217 (Black/Gray Seal)

2.15 -1.65 Cable O.D.

Part No: 12162218 (Black/Yellow Seal)

2.15 -1.65 Cable O.D.

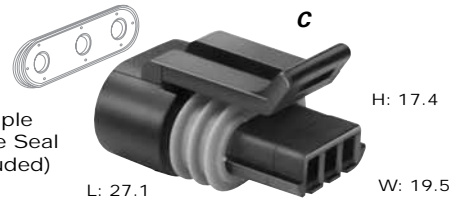
Description: Connector Assembly 2F

Size: 22.1L x 11.0H x 19.4W

Material: PA66 HS IM

Terminals: See Page 2.12

Typical App: Throttle Body Injector



C. Part No: 12162182 (Black/Green Seal)

2.66 -2.00 Cable O.D.

Part No: 12162280 (Md. Gray/Green Seal)

2.66 -2.00 Cable O.D.

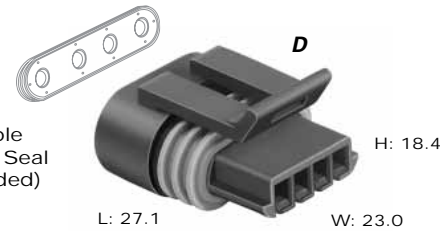
Description: Connector Assembly 3F

Size: 27.1L x 17.4H x 19.5W

Material: PA66 HS IM

Terminals: See Page 2.12

Typical App: Crankshaft Sensor



D. Part No: 12162188 (Black/Green Seal)

2.66 -2.00 Cable O.D.

Part No: 12162191 (Black/Blue Seal)

2.66 -2.00 Cable O.D.

Description: Connector Assembly 4F

Size: 27.1L x 18.4H x 23.0W

Material: PA66 HS IM

Terminals: See Page 2.12

Typical App: Distributor Module

E. Part No: 12162210 (Black/Green Seal)

2.66 -2.00 Cable O.D.

Part No: 12162260 (Black/Tan Seal)

2.15 -1.65 Cable O.D.

Part No: 12162261 (Black/Lt. Gray Seal)

1.85 -1.47 Cable O.D.

Description: Connector Assembly 6F

Size: 27.1L x 17.7H x 30.0W

Material: PA66 HS IM

Terminals: See Page 2.12

Typical App: Various

NOTE: GT series equivalents available for several Metri-Pack 150 Pull-to-Seat connector assemblies. Please refer to cross reference table on page 1.11 in the GT section.

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.

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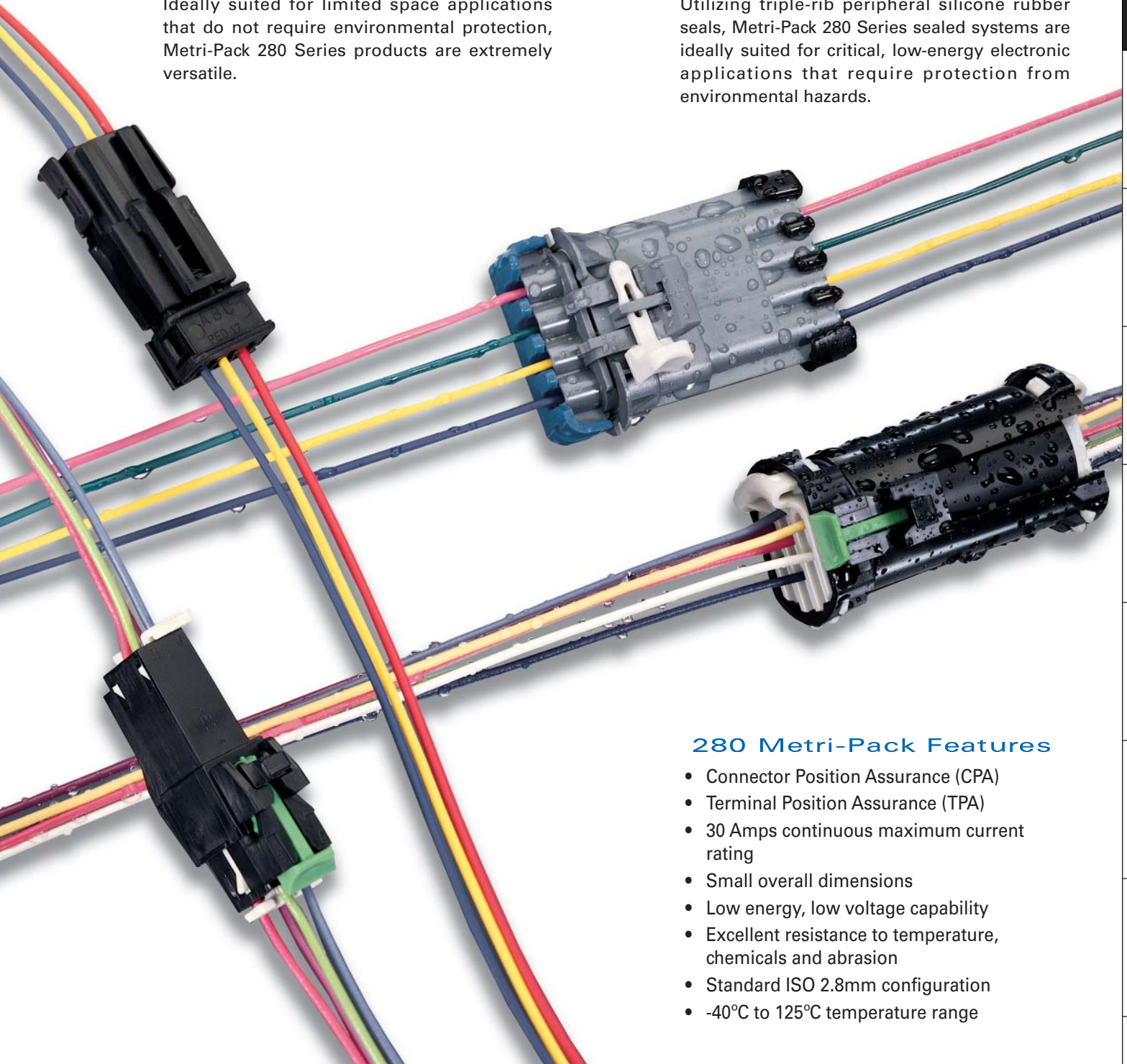
Available in device and in-line connections for vehicle applications, Metri-Pack 280 Series connectors can meet or exceed the requirements for most marine, appliance, and industrial control applications.

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

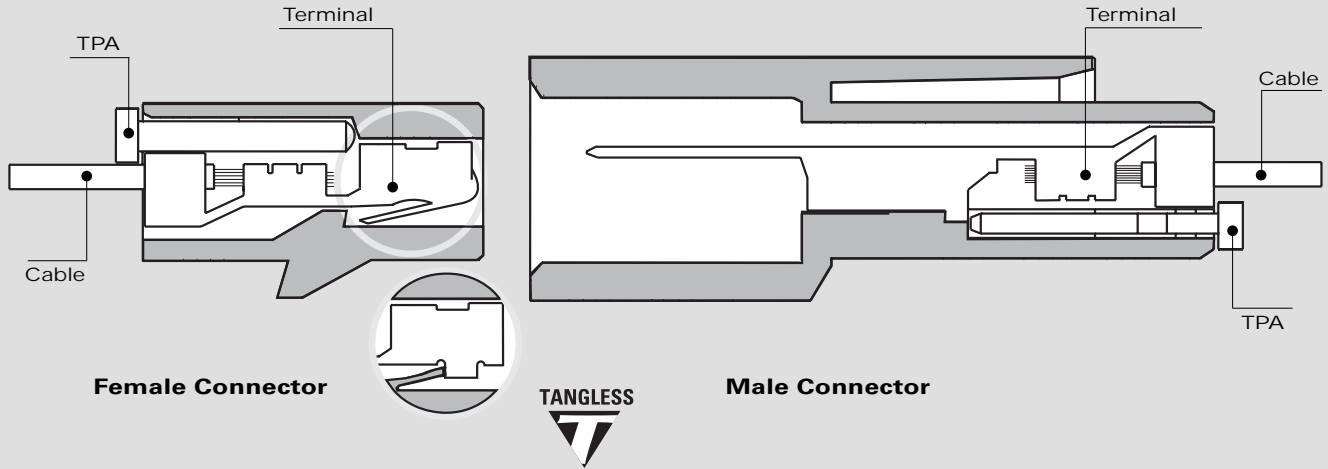
- Connector Position Assurance (CPA)
- Terminal Position Assurance (TPA)
- 30 Amps continuous maximum current rating
- Small overall dimensions
- Low energy, low voltage capability
- Excellent resistance to temperature, chemicals and abrasion
- Standard ISO 2.8mm configuration
- -40°C to 125°C temperature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



280

Metri-Pack Series

Cross Sectional View



280 Tangless Female Terminals Unsealed

Part #	Cable Range (mm ²)	Material	Plating
12129425	5.0-3.0	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*	2.0-0.35	Tin Brass	Tin

*Thin Stock—Electrical current restrictions apply.



280 Female Terminals Unsealed

Part #	Cable Range (mm ²)	Material	Plating
12015858	5.0-3.0	Tin Brass	Tin
12129494	3.0-2.0	Tin Brass	Tin
12066214	2.0-1.0	Tin Brass	Tin
12034046	0.80-0.50	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.

CPA
(Connector Position Assurance)



Female Connector



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	PA66 HS IM	12064999

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.

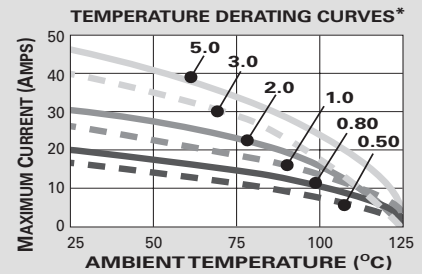
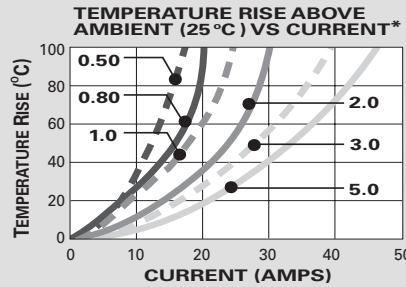


280

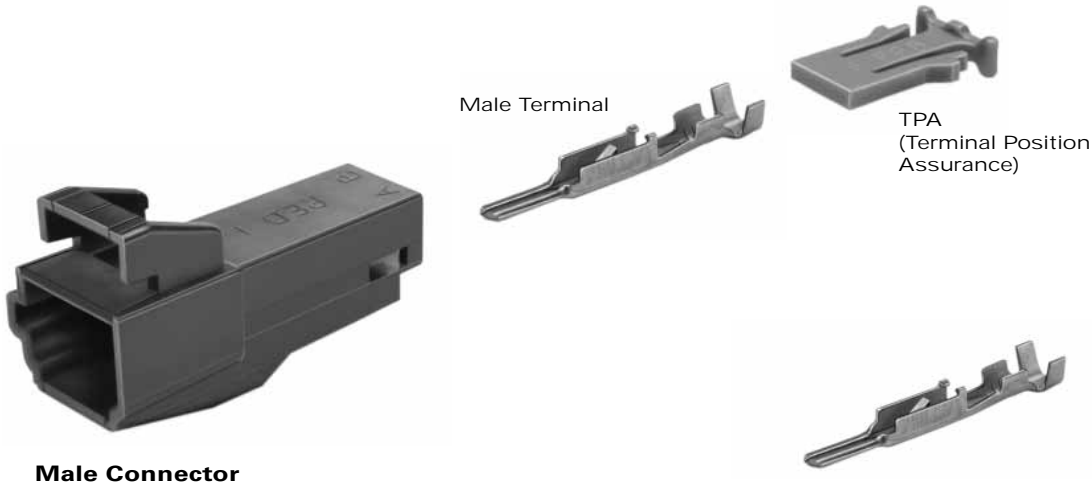
Unsealed System Application Information

280 Series Terminals – Tin Plated

CABLE RANGE (mm²): 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



*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)

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	PA66 HS IM	12065141

280 Male Terminals Unsealed

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

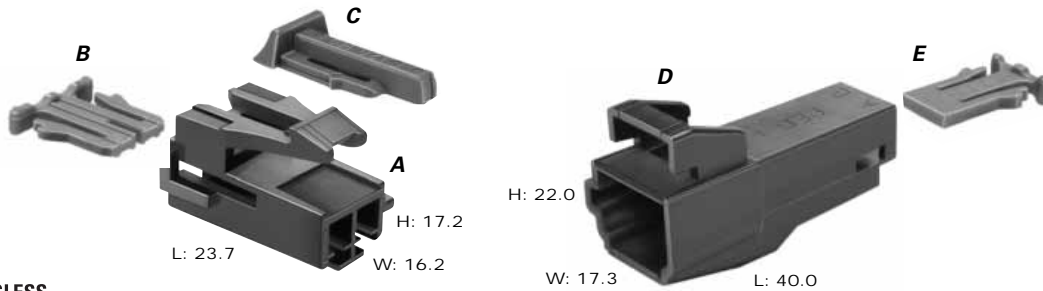
SECTION NOTES:

- 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 2.37.

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.



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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 2.24

B. Part No: 12129083

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

C. Part No: 12052834

Description:	CPA
Color:	Green
Material:	PP

**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 2.25

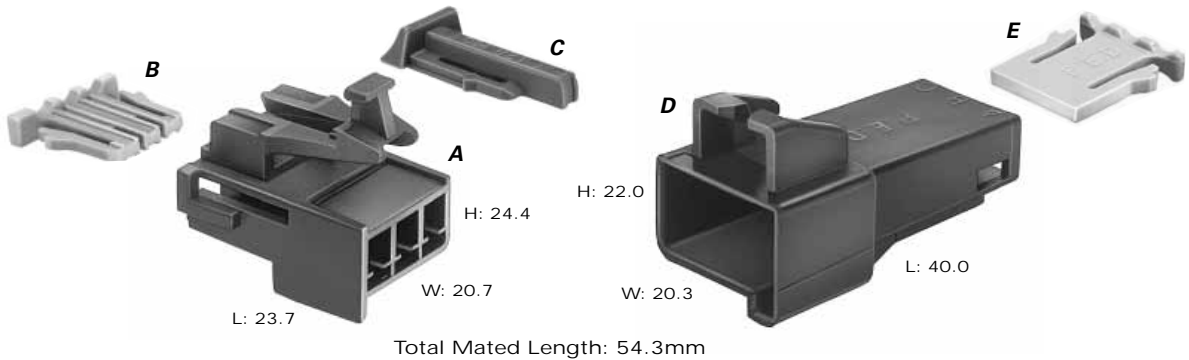
E. Part No: 12129157

Description:	TPA
Color:	Lt. Gray
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.



280



A. Part No: 12129489

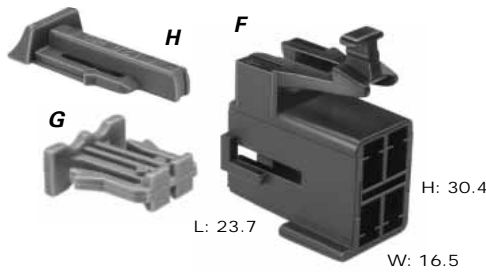
Description:	Connector 3F
Size:	23.7L x 24.4H x 20.7W
Color:	Black
Material:	PA66 HS IM
Terminals:	See Page 2.24

B. Part No: 12129491

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

C. Part No: 12052834

Description:	CPA
Color:	Green
Material:	PP



**F. Part No: 12129136 (Black)
15479020 (Cream)**

Description:	Connector 4F
Size:	23.7L x 30.4H x 16.5W
Material:	PA66 HS IM
Terminals:	See Page 2.24

G. Part No: 12129138

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

H. Part No: 12052834

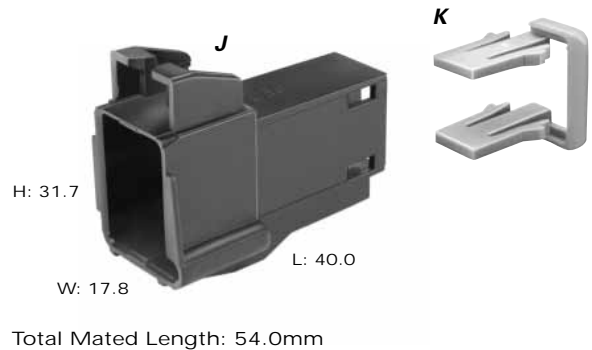
Description:	CPA
Color:	Green
Material:	PP

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 2.25

E. Part No: 12129492

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



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 2.25

K. Part No: 12129137

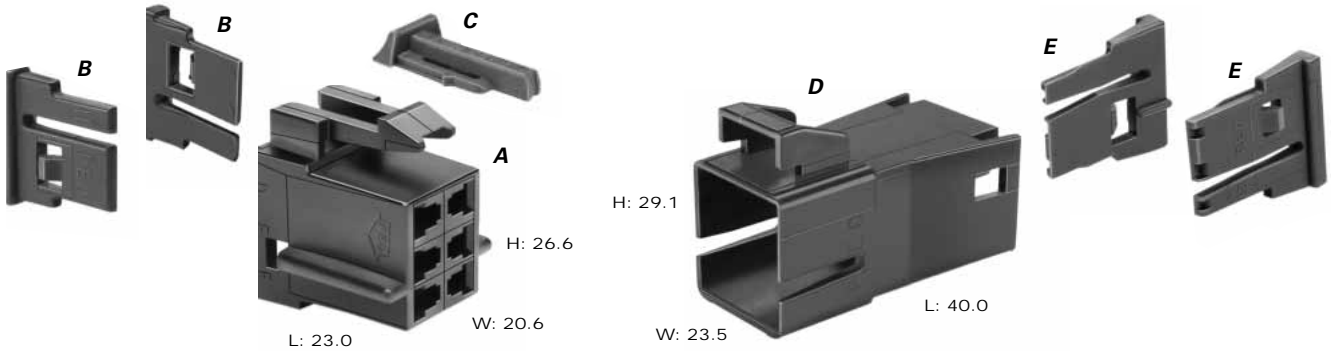
Description:	TPA
Color:	Lt. Gray
Material:	PA66 HS IM

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.



280

Metri-Pack Series



Total Mated Length: 57.0mm

**A. Part No: 12064752 (Black)
15479022 (Cream)**

Description:	Connector 6F
Size:	23.0L x 26.6H x 20.6W
Material:	PA66 HS IM
Terminals:	See Page 2.24

B. Part No: 12064753

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

C. Part No: 12052834

Description:	CPA
Color:	Green
Material:	PP

D. 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 2.25

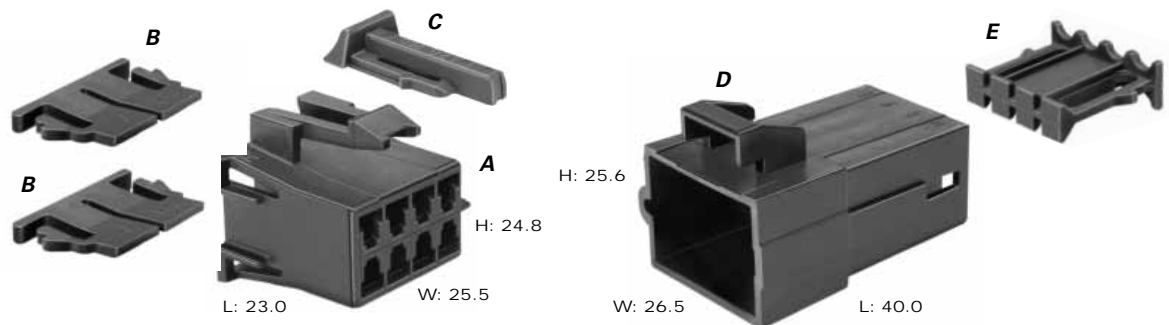
E. Part No: 12064755

Description:	TPA
Number Req:	2
Color:	Blue
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.



280



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 2.24

B. Part No: 12064999

Description:	TPA
Number Req:	2
Color:	Blue
Material:	PBT

C. Part No: 12052834

Description:	CPA
Color:	Green
Material:	PP

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 2.25

E. Part No: 12065141

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

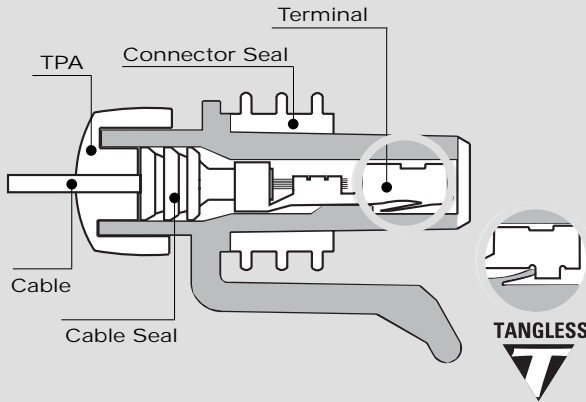
NOTE: Specifications in this catalog are for general reference only and are subject to change without notice. To verify product information, please contact a Delphi representative.



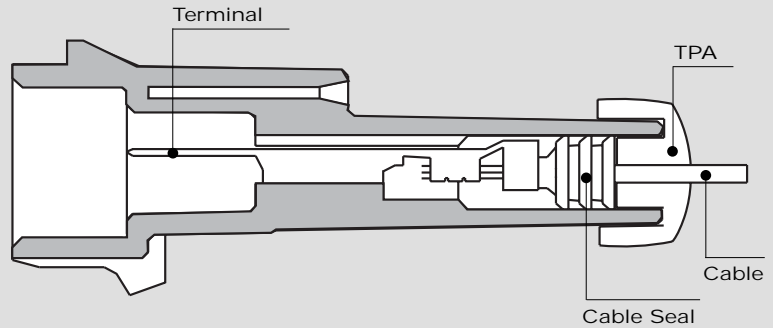
280

Metri-Pack Series

Cross Sectional View



Female Connector Assembly



Male Connector



280 Tangless Female Terminals Sealed

Part #	Cable Range (mm ²)	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

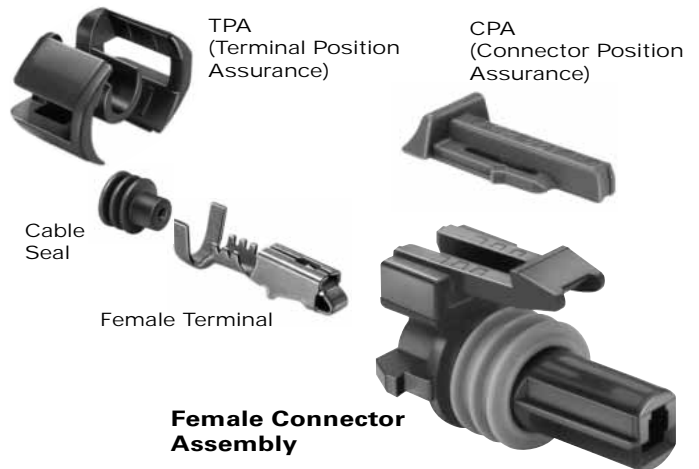
# Cavities	Conn. Asm.	Color	Material	TPA
7	12110751	Black	PA66 HS IM	12110754
15	12161186	Black	PA66 HS IM	12110782

280 Female Terminals Sealed

Part #	Cable Range (mm ²)	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 ²)	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

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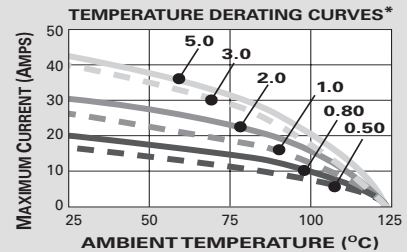
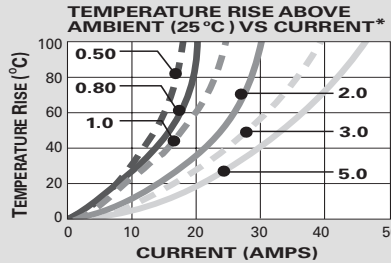


280

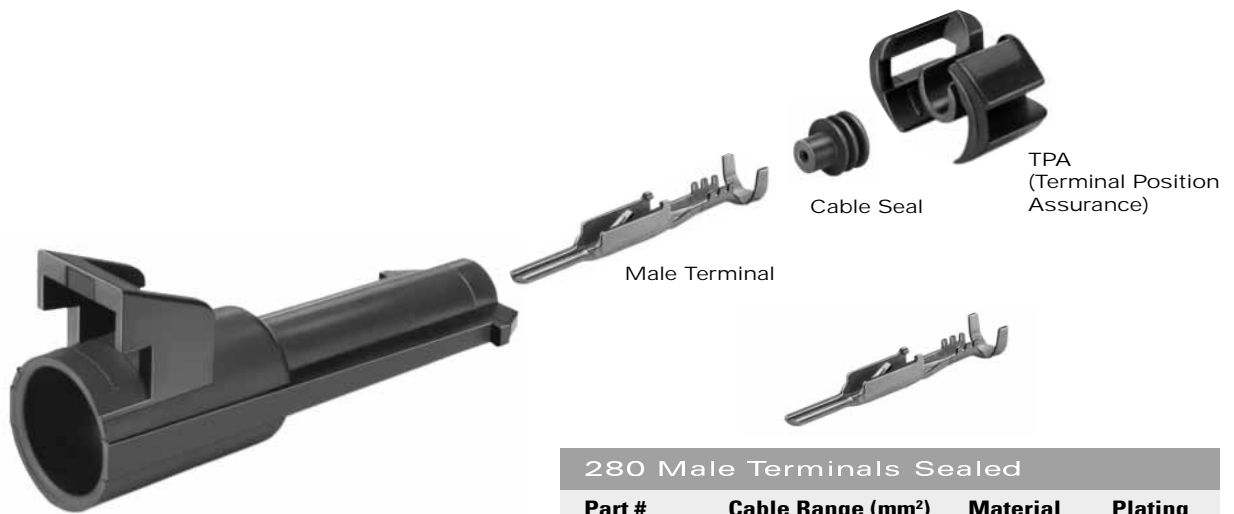
Sealed System Application Information

280 Series Terminals – Tin Plated

CABLE RANGE (mm²): 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 ²)	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.

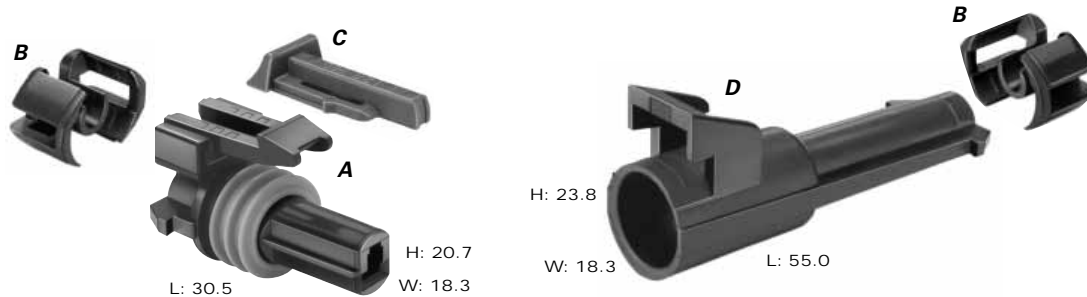
SECTION NOTES:

- 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

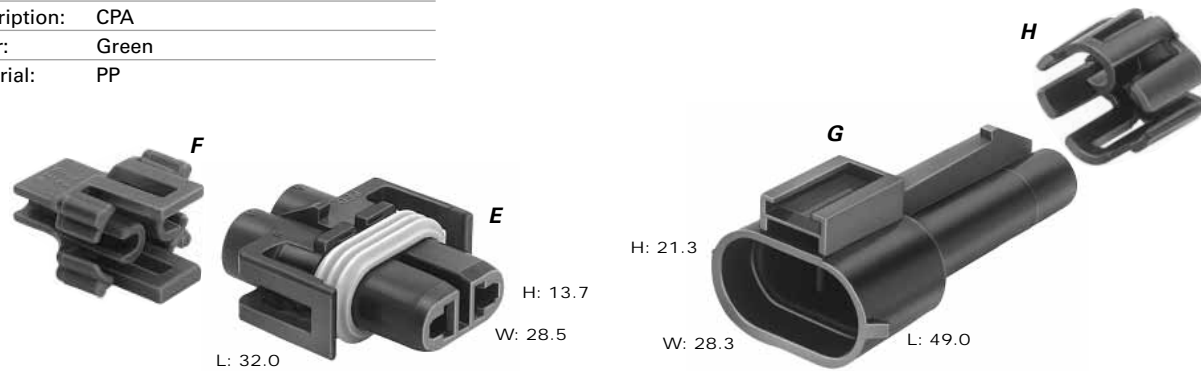
Description:	Connector 1M
Size:	55.0L x 23.8H x 18.3W
Color:	Black
Material:	PA66 HS IM
Terminals:	See Page 2.31
Seals/Plugs:	See Page 2.30, 2.31

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

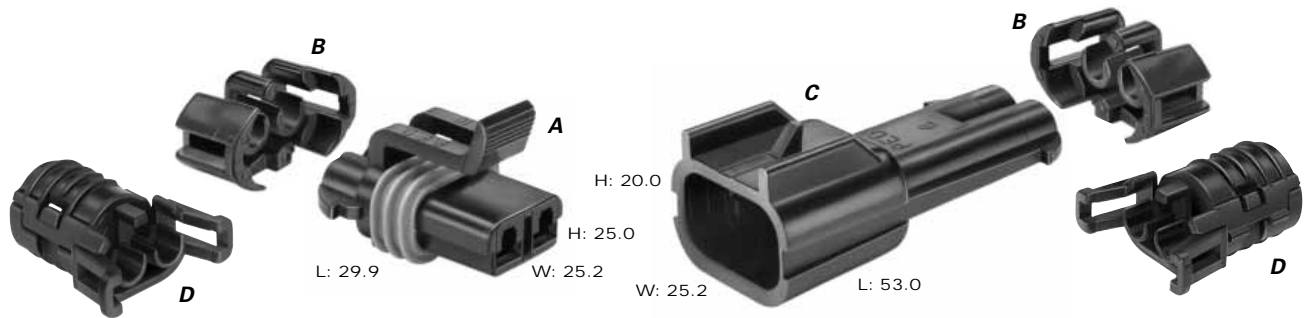
H. Part No: 12065279

Description:	TPA
Color:	Black
Material:	PA6

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: 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

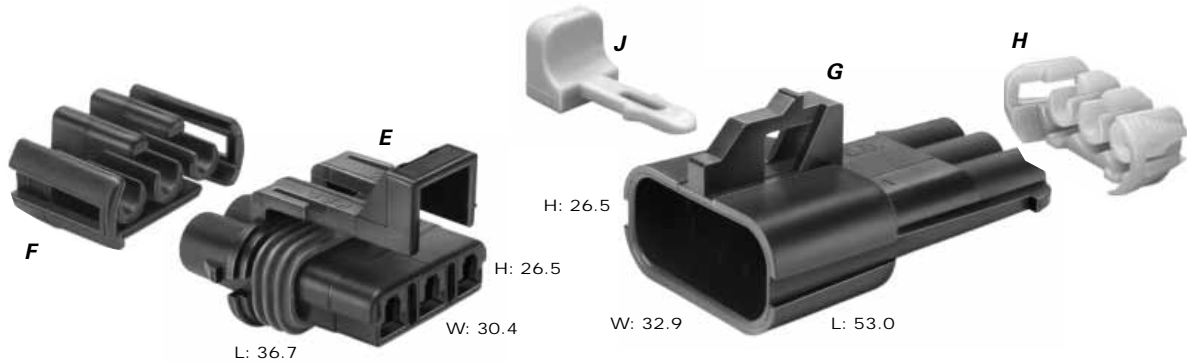
Description:	Connector 2M
Size:	53.0L x 20.0H x 25.2W
Color:	Black
Material:	PA66 HS IM
Terminals:	See Page 2.31
Seals/Plugs:	See Page 2.30, 2.31

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

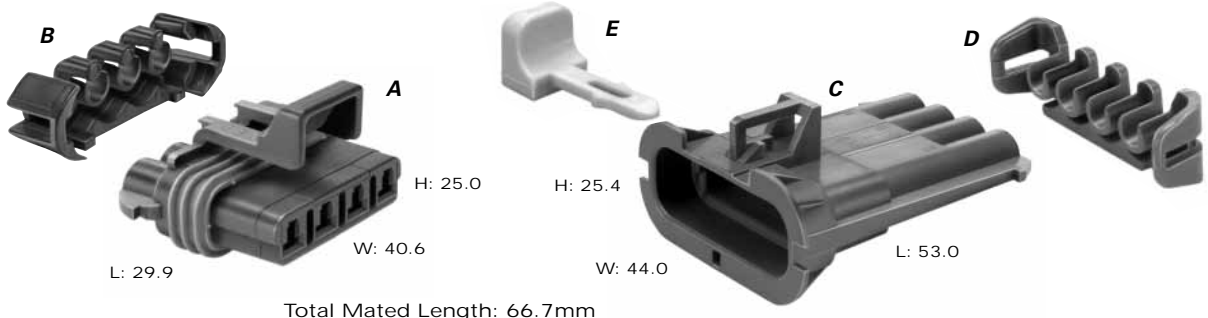
Description:	CPA
Color:	Gray
Material:	PBT

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

Metri-Pack Series



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 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

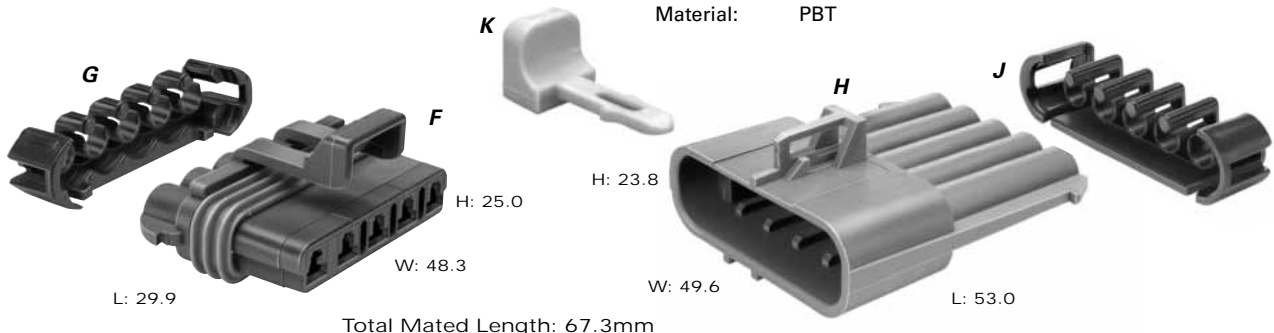
Description:	TPA
Color:	Black
Material:	PA66 HS IM

D. Part No: 15324063

Description:	TPA
Color:	Blue
Material:	PA66 HS IM

E. Part No: 12020833

Description:	CPA
Color:	Gray
Material:	PBT



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 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

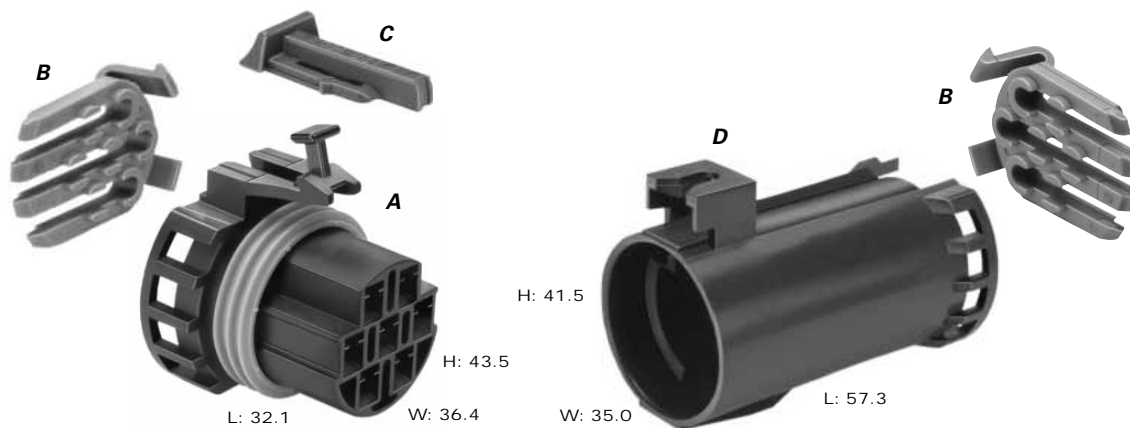
K. Part No: 12020833

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)**

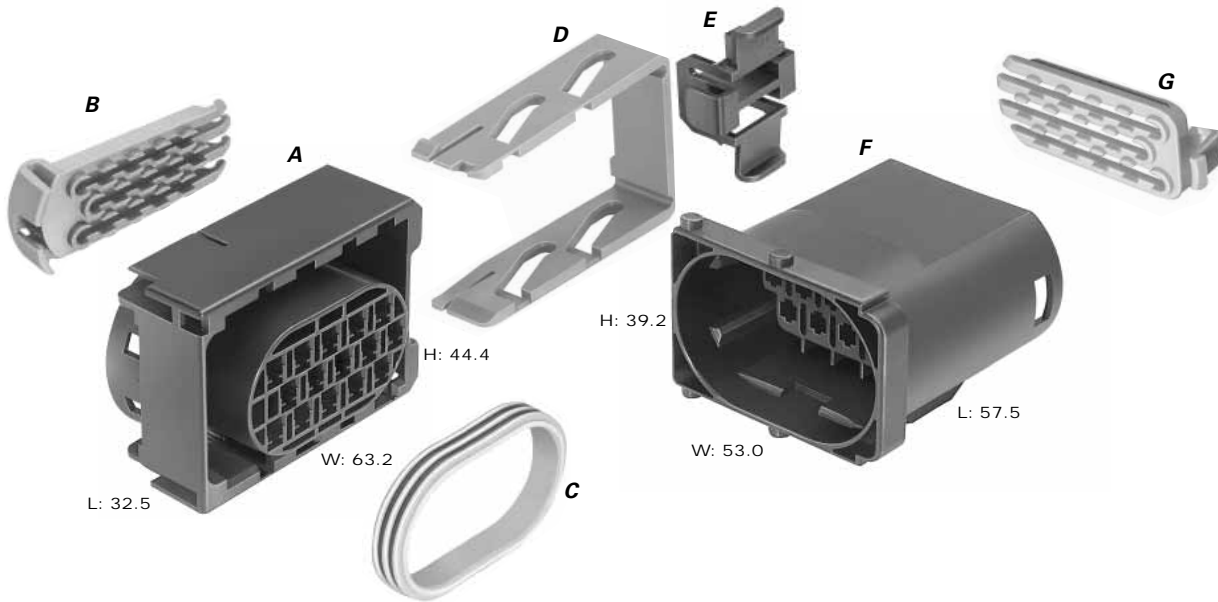
Description:	Connector 7M (Clip Slot-Self Locking)
Size:	57.3L x 41.5H x 35.0W
Material:	PA66 HS IM
Terminals:	See Page 2.31
Seals/Plugs:	See Page 2.30, 2.31

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.



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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

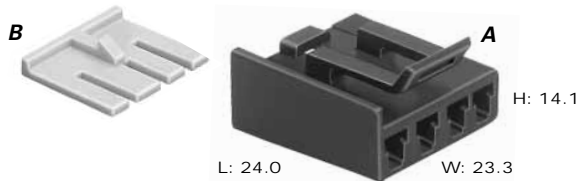
G. Part No: 12176865

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

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 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

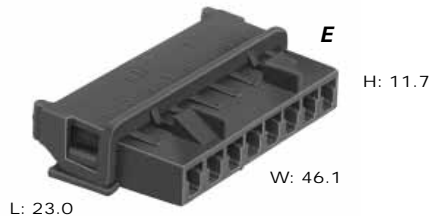


C. Part No: 12084890

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

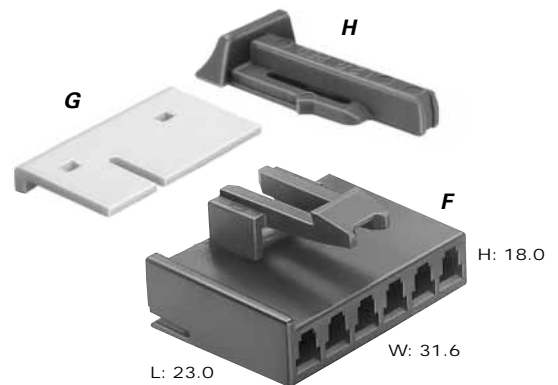
Description:	TPA
Color:	Black
Material:	PA66 HS IM



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

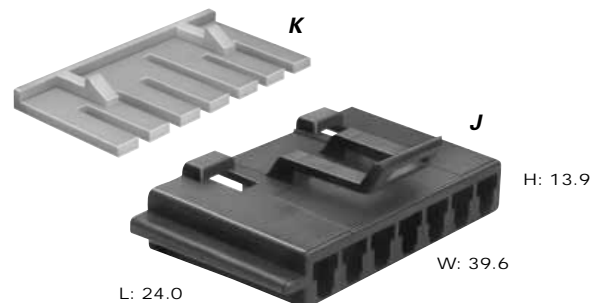
Description:	Connector 6F
Size:	23.0L x 18.0H x 31.6W
Color:	Black
Material:	PA66 HS IM
Terminals:	See Page 2.24
Typical App:	Wiper Switch

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

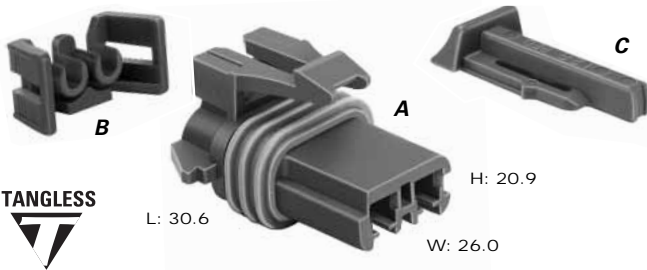
Description:	TPA
Color:	Cream
Material:	PA66 HS IM

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280 Device Connections

Metri-Pack Series



A. Part No: 12129487

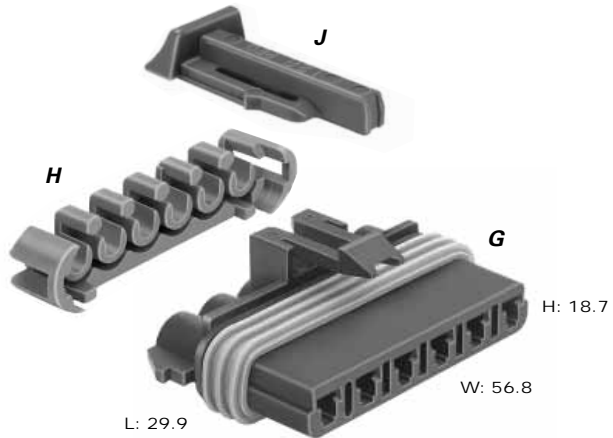
Description:	Connector Assembly 2F
Size:	30.6L x 20.9H x 26.0W
Color:	Md. Gray
Material:	PA66 HS IM
Terminals:	See Page 2.30
Seals/Plugs:	See Page 2.30, 2.31
Typical App:	Window Lift Motor

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

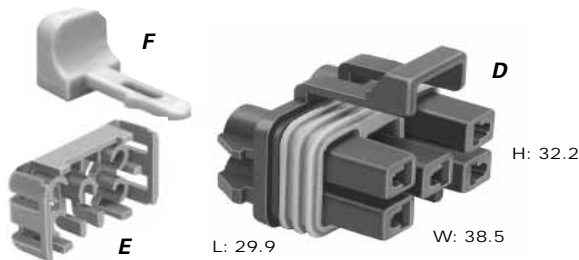
Description:	Connector Assembly 6F
Size:	29.9L x 18.7H x 56.8W
Color:	Black
Material:	PA66
Terminals:	See Page 2.30
Seals/Plugs:	See Page 2.30, 2.31
Typical App:	Various

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

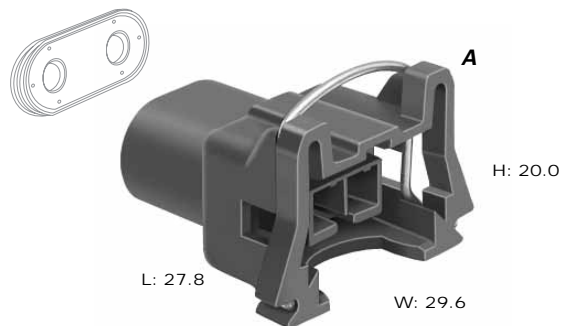
Description:	CPA
Color:	Gray
Material:	PBT

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.



280.1 Pull-to-Seat

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/Orange 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 2.30

Typical App: Fuel Injector

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.

Metri-Pack Series

480



Available in device and in-line connections for vehicle applications, Metri-Pack 480 Series connectors can meet or exceed the requirements for most marine, appliance, and industrial control applications.

Ideally suited for high current applications that do not require environmental protection, Metri-Pack 480 Series products are extremely rugged and versatile.



Available in device and in-line connections for underhood vehicle applications, Metri-Pack 480 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 480 Series sealed systems are ideally suited for high current applications that require protection from environmental hazards.



480 Metri-Pack Features

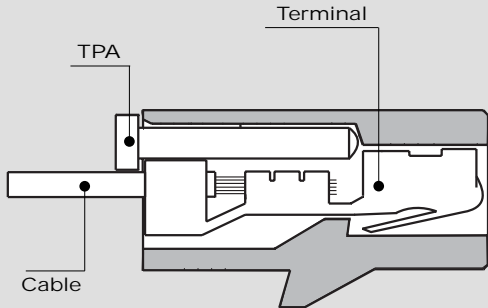
- Connector Position Assurance (CPA)
- Terminal Position Assurance (TPA)
- 42 Amps continuous maximum current rating
- Low energy, low voltage capability
- Excellent resistance to temperature, chemicals and abrasion
- -40°C to 125°C temperature range



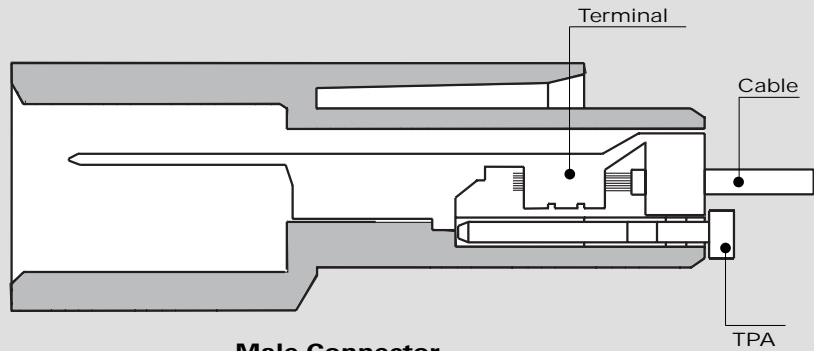
480

Metri-Pack Series

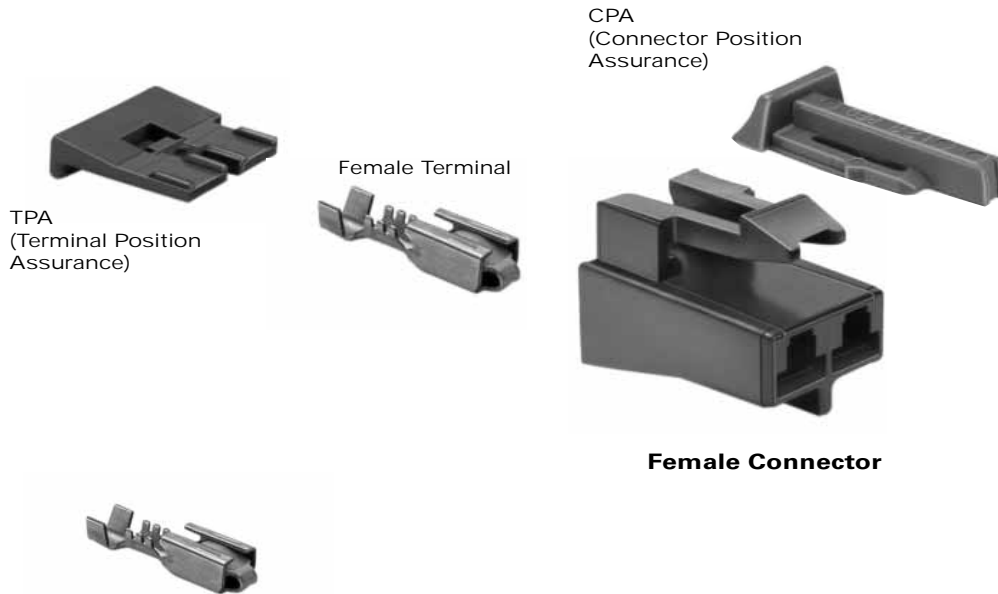
Cross Sectional View



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.

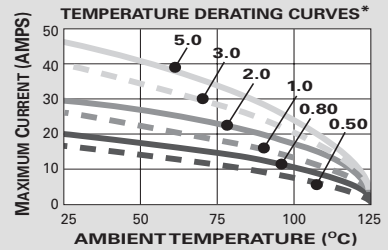
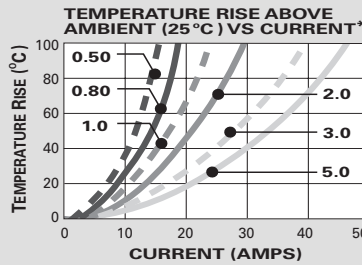


480

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

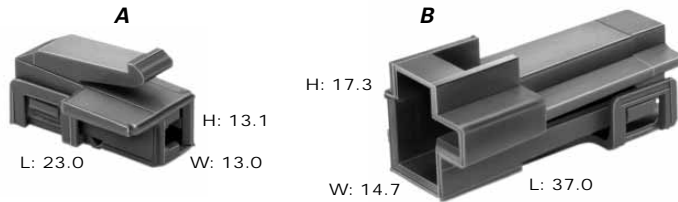
SECTION NOTES:

- 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.



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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*

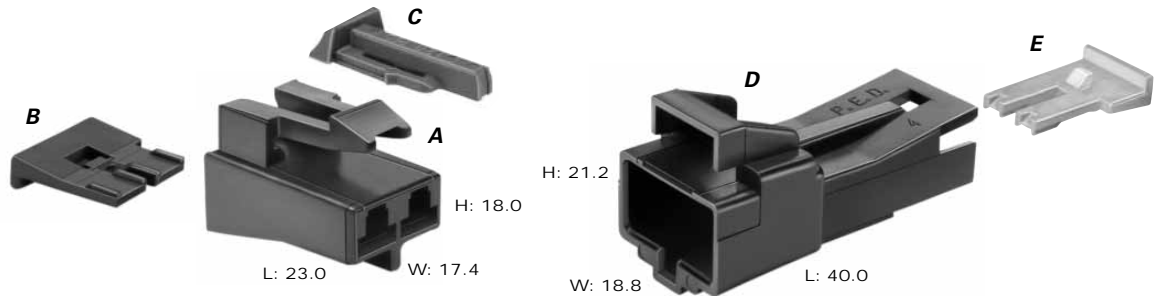
Description:	Connector 1M
Size:	37.0L x 17.3H x 14.7W
Color:	Md. Gray
Material:	PA66 HS IM
Terminals:	See Page 2.43

*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

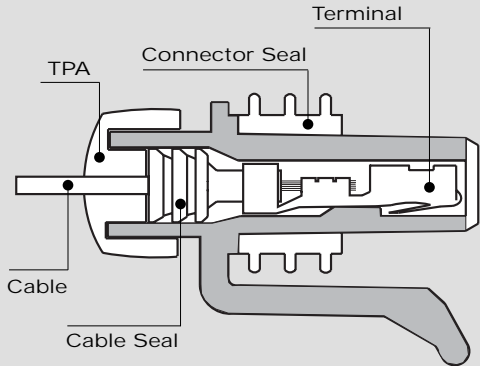
NOTE: Specifications in this catalog are for general reference only and are subject to change without notice. To verify product information, please contact a Delphi representative.



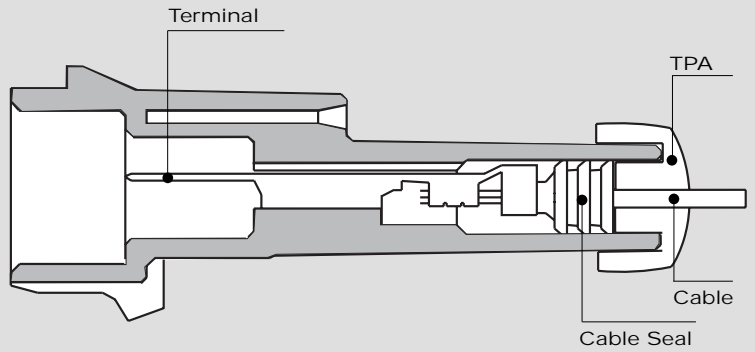
480

Metri-Pack Series

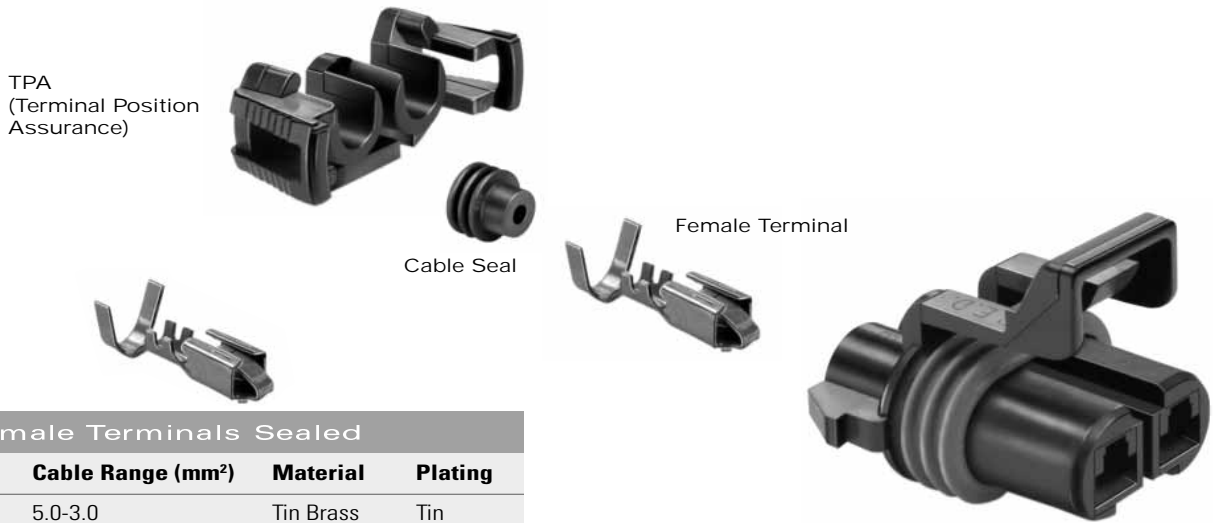
Cross Sectional View



Female Connector Assembly



Male Connector



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

Female Connector Assembly

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.

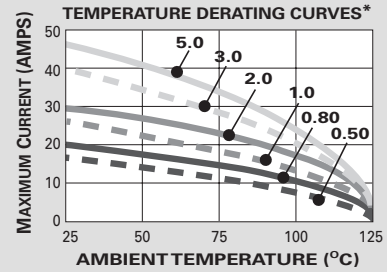
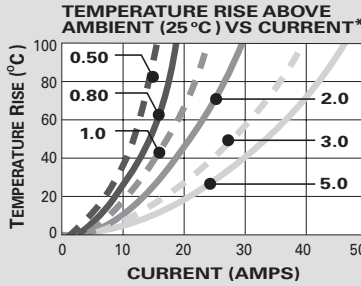


480

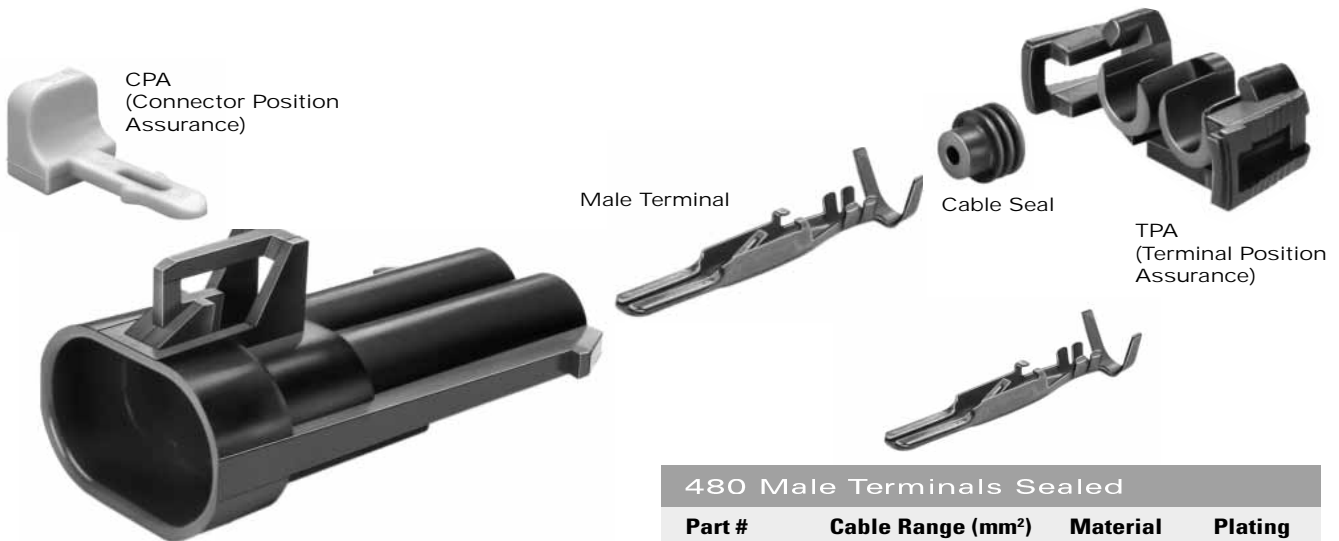
Sealed System Application Information

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

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

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:

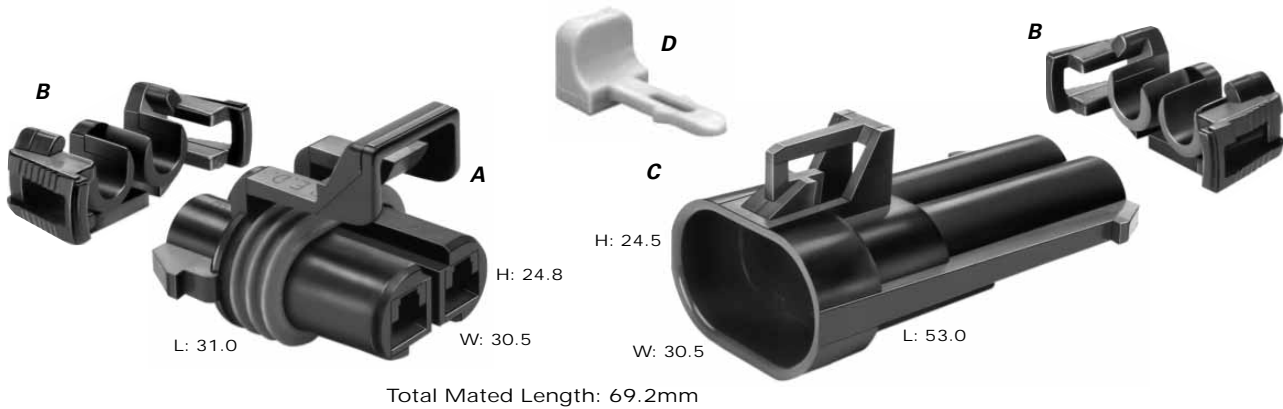
- Due to rigid tolerances of connector cavities, it is critical to meet all crimp dimensions as specified.
- Female connections for device applications, see page 2.50.

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

Metri-Pack Series



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

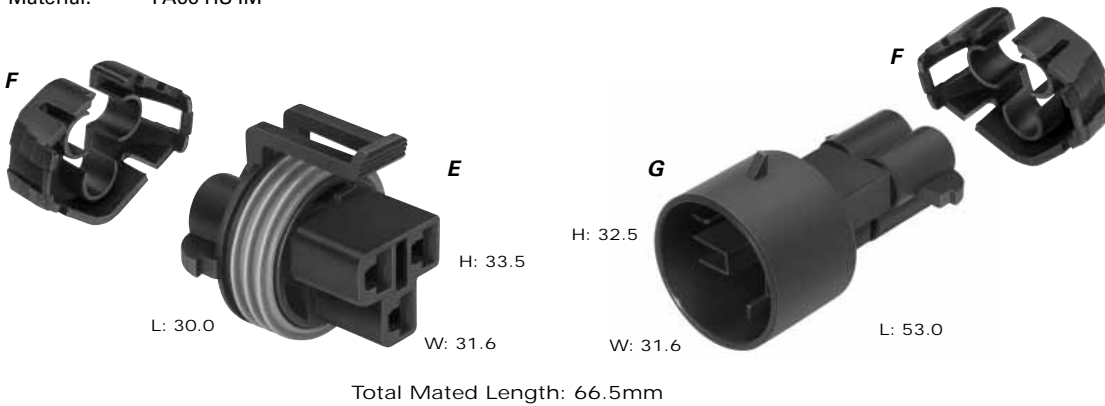
Description:	Connector 2M (Clip Slot)
Size:	53.0L x 24.5H x 30.5W
Color:	Black
Material:	PA66 HS IM
Terminals:	See Page 2.47
Seals/Plugs:	See Page 2.46, 2.47

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



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

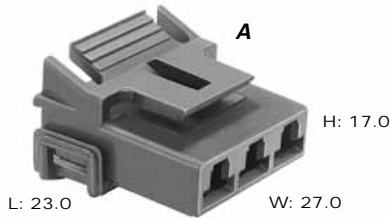
F. Part No: 12131543

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.

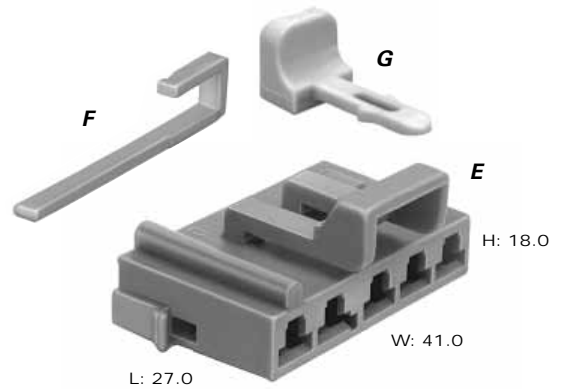


480 Device Connections



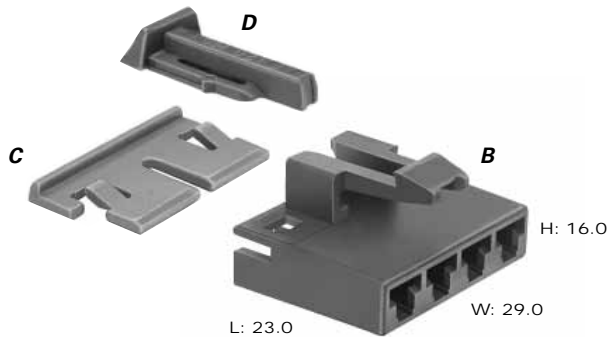
A. Part No: 12162512*

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	



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



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

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*

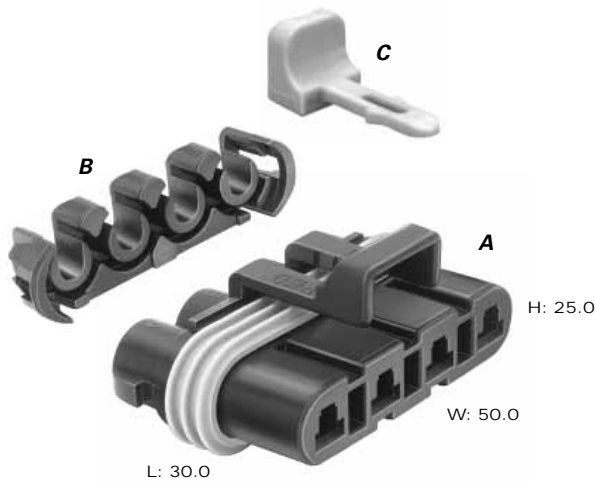
Description:	Connector 6F
Size:	28.0L x 18.0H x 51.0W
Color:	Cream
Material:	PA66 HS IM
Terminals:	See Page 2.42
Typical App:	Switch
*Hinged secondary lock	

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

Metri-Pack Series



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.

Metri-Pack Series

630



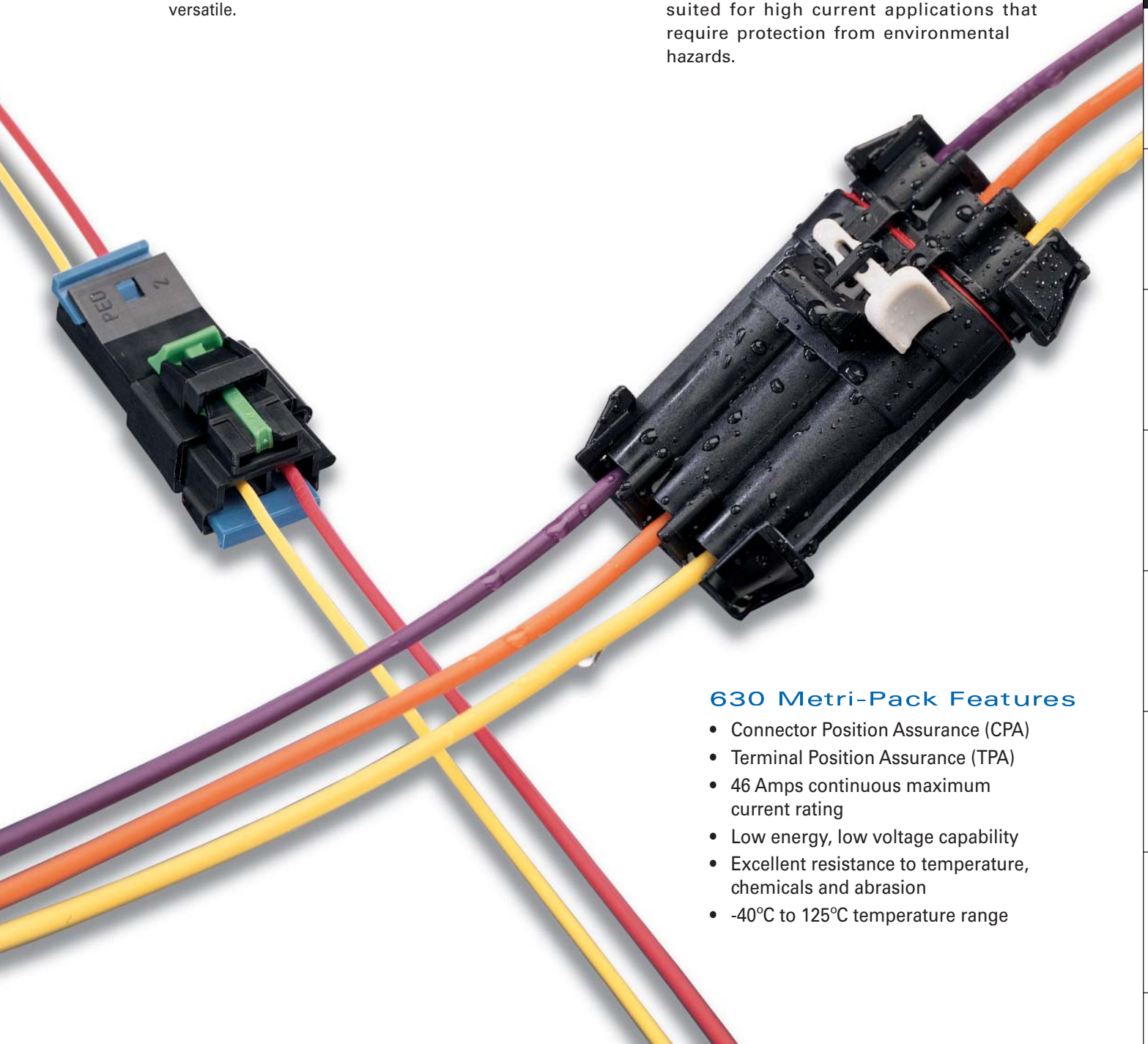
Available in device and in-line connections for vehicle applications, Metri-Pack 630 Series connectors can meet or exceed the requirements for most marine, appliance, and industrial control applications.

Ideally suited for high current applications that do not require environmental protection, Metri-Pack 630 Series products are extremely rugged and versatile.



Available in device and in-line connections for underhood vehicle applications, Metri-Pack 630 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 630 Series sealed systems are ideally suited for high current applications that require protection from environmental hazards.



630 Metri-Pack Features

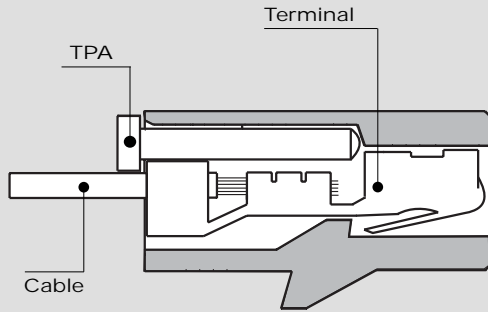
- Connector Position Assurance (CPA)
- Terminal Position Assurance (TPA)
- 46 Amps continuous maximum current rating
- Low energy, low voltage capability
- Excellent resistance to temperature, chemicals and abrasion
- -40°C to 125°C temperature range



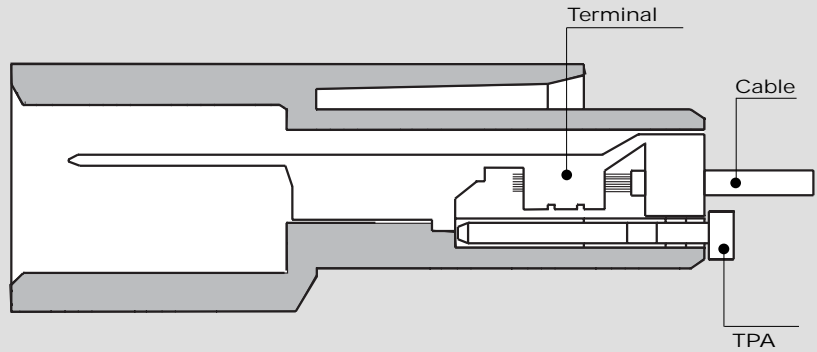
630

Metri-Pack Series

Cross Sectional View



Female Connector



Male Connector



TPA
(Terminal Position Assurance)

Female Terminal



CPA
(Connector Position Assurance)



Female Connector



630 Female Terminals Unsealed			
Part #	Cable Range (mm ²)	Material	Plating
12084590	5.0-3.0	Tin Brass	Tin
12052224	3.0	Tin Brass	Tin
12084596	5.0-3.0 (2 Req'd.)	Tin Brass	Tin
12015870	2.0-1.0	Tin Brass	Tin
12015869	0.80-0.50	Tin Brass	Tin
12020035	0.80-0.50 (2 Req'd.)	Tin Brass	Tin
12052222	0.50-0.35	Tin Brass	Tin

630 Female Connectors Unsealed				
# Cavities	Connector	Color	Material	TPA
2	12129939	Black	PA66 HS IM	12129940
4	12015664	Black	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.

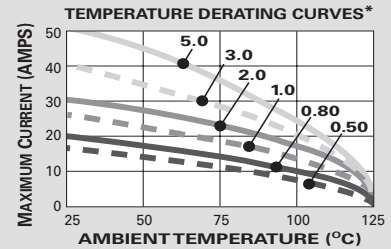
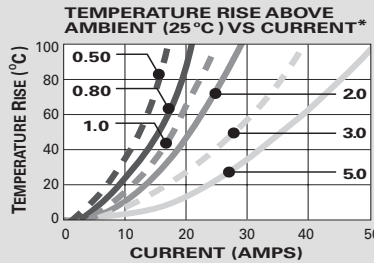


630

Unsealed System Application Information

CABLE RANGE (mm²): 0.35-5.0
CURRENT RANGE (AMPS): 0-46
TEMP RANGE °C: -40 to 125
RESISTANCE: <10mΩ@20mV
VOLTAGE DROP: <3.0mV/amp
CENTERLINE SPACING (mm): 8.5
BLADE WIDTH (mm): 6.3

630 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)



630 Male Connectors Unsealed

# Cavities	Connector	Color	Material	TPA
2	12129938	Black	PA66 HS IM	12129940
4	12052623	Black	PA66 HS IM	—

630 Male Terminals Unsealed

Part #	Cable Range (mm ²)	Material	Plating
12066493	5.0-3.0	Tin Brass	Tin over Copper
12052826	3.0	Tin Brass	Tin over Copper
12020365	3.0 (2 Req'd.)	Tin Brass	Tin over Copper
12020126	2.0-1.0	Tin Brass	Tin over Copper
12020125	0.80-0.50	Tin Brass	Tin over Copper
12033972	0.80-0.50 (2 Req'd.)	Tin Brass	Tin over Copper
12066454	0.50-0.35	Tin Brass	Tin over Copper

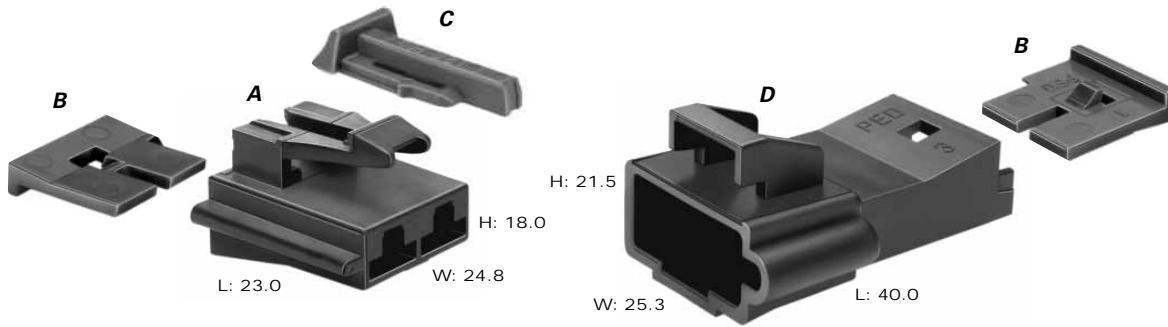
SECTION NOTES:

- Due to rigid to tolerances of connector cavities, it is critical to meet all crimp dimensions as specified.

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.



630



Total Mated Length: 53.0mm

A. Part No: 12129939

Description:	Connector 2F
Size:	23.0L x 18.0H x 24.8W
Color:	Black
Material:	PA66 HS IM
Terminals:	See Page 2.52

D. Part No: 12129938

Description:	Connector 2M (Clip Slot-Self Locking)
Size:	40.0L x 21.5H x 25.3W
Color:	Black
Material:	PA66 HS IM
Terminals:	See Page 2.53

B. Part No: 12129940

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

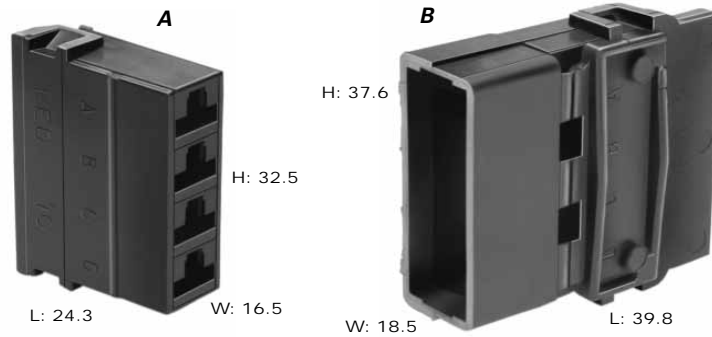
C. Part No: 12052834

Description:	CPA
Color:	Green
Material:	PP

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.



630



Total Mated Length: 53.1 mm

A. Part No: 12015664*

Description:	Connector 4F
Size:	24.3L x 32.5H x 16.5W
Color:	Black
Material:	PA66 HS IM
Terminals:	See Page 2.52

*Hinged secondary lock.

B. Part No: 12052623*

Description:	Connector 4M
Size:	39.8L x 37.6H x 18.5W
Color:	Black
Material:	PA66 HS IM
Terminals:	See Page 2.53

*Hinged secondary lock.

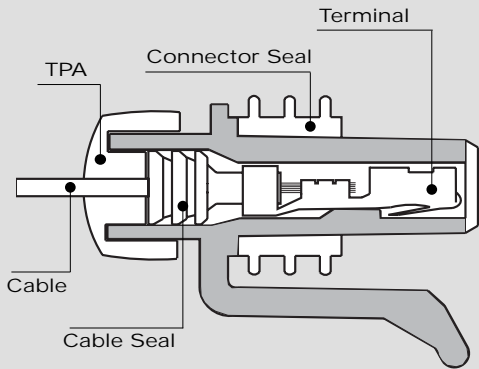
NOTE: Specifications in this catalog are for general reference only and are subject to change without notice. To verify product information, please contact a Delphi representative.



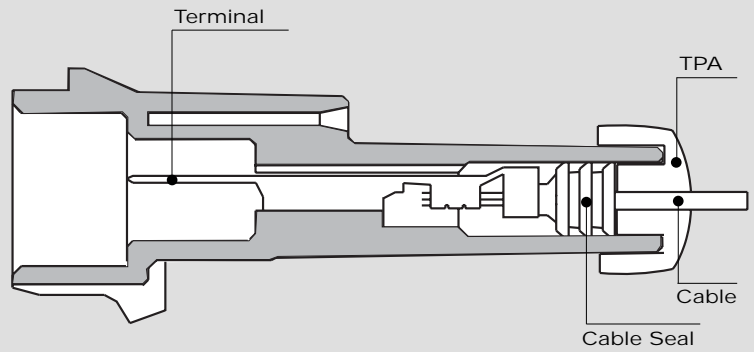
630

Metri-Pack Series

Cross Sectional View



Female Connector Assembly



Male Connector



TPA
(Terminal Position Assurance)



Cable Seal



Female Terminal



Female Connector Assembly

630 Female Terminals Sealed

Part #	Cable Range (mm ²)	Material	Plating
12052456	5.0-3.0	Tin Brass	Tin
12052455	2.0-1.0	Tin Brass	Tin
12052457	0.80-0.50	Tin Brass	Tin



630 Female Pull-to-Seat Terminals

Part #	Cable Range (mm ²)	Material	Plating
12033997	3.0	Tin Brass	Tin
12066614	2.0-1.0	Tin Brass	Tin
12020156	0.80-0.50	Tin Brass	Tin



630 Metri-Pack Cable Seals

Reel Part #	Loose Part #	Cable Dia.	Material	Color
12059257	15324993	5.15-4.40	Silicone	Green
12059260	15324996	4.50-3.61	Silicone	Blue
12059258	15324994	3.75-2.81	Silicone	Lt. Gray
12059259	15324995	2.85-2.01	Silicone	Dk. Red
12077760	15324997	2.40-1.65	Silicone	Tan

630 Female Connector Assembly Sealed

# Cavities	Conn. Asm.	Color	Material	TPA
3	12124685	Black	PBT 30% GF	12045699

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.

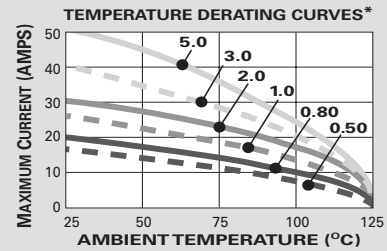
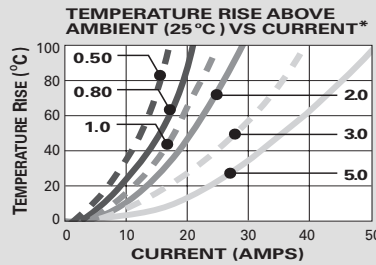


630

Sealed System Application Information

CABLE RANGE (mm²): 0.50-5.0
 CURRENT RANGE (AMPS): 0-46
 TEMP RANGE °C: -40 to 125
 RESISTANCE: <10mΩ@20mV
 VOLTAGE DROP: <3.0mV/amp
 CENTERLINE SPACING (mm): 10.8
 BLADE WIDTH (mm): 6.3

630 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.



CPA
(Connector Position Assurance)



Male Connector

Male Terminal



Cable Seal



TPA
(Terminal Position Assurance)



630 Male Terminals Sealed

Part #	Cable Range (mm ²)	Material	Plating
12064736	5.0	Tin Brass	Tin
12064737	3.0	Tin Brass	Tin
12064735	2.0-1.0	Tin Brass	Tin
12064734	0.80-0.50	Tin Brass	Tin



630 Metri-Pack Cavity Plug*

Part #	Cavity Inside Diameter	Material	Color
12059255	9.8mm	Silicone	Green

*Cavity plugs seal unused female and male cavities.

SECTION NOTES:

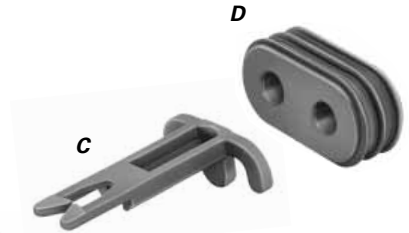
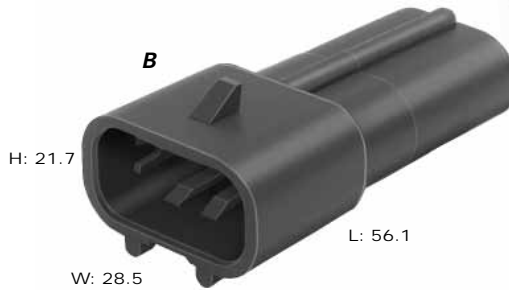
- Due to rigid tolerances of connector cavities, it is critical to meet all crimp dimensions as specified.

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.



630

Multiple Cable Seal
(Included)



Total Mated Length: 67.5mm

A. Part No: 12033769

Description:	Connector Assembly 2F
Size:	31.5L x 20.0H x 27.3W
Color:	Black
Material:	PA66 HS IM
Terminals:	See Page 2.56, Pull-To-Seat Terminals

B. Part No: 12034269

Description:	Connector 2M
Size:	56.1L x 21.7H x 28.5W
Color:	Black
Material:	PA66 HS IM
Terminals:	See Page 2.57

C. Part No: 12034363

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

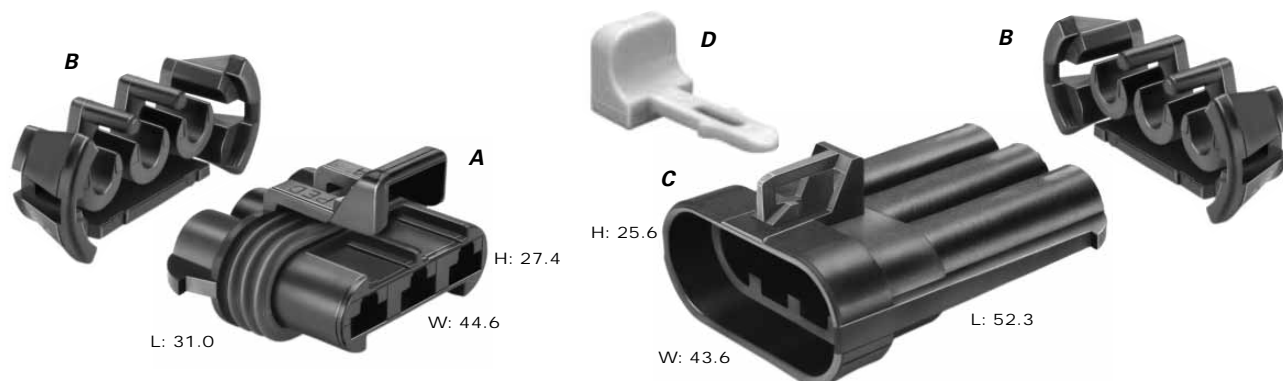
D. Part No: 12034364

Description:	Seal
Color:	Gray
Material:	Silicone

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.



630



Total Mated Length: 69.5mm

A. Part No: 12124685

Description:	Connector Assembly 3F
Size:	31.0L x 27.4H x 44.6W
Color:	Black
Material:	PBT 30% GF
Terminals:	See Page 2.56
Seals/Plugs:	See Page 2.56, 2.57

B. Part No: 12045699

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

C. Part No: 15358681

Description:	Connector 3M (Clip Slot)
Size:	52.3L x 25.6H x 43.6W
Color:	Black
Material:	PBT 30% GF
Terminals:	See Page 2.57
Seals/Plugs:	See Page 2.56, 2.57

D. Part No: 12020833

Description:	CPA
Color:	Gray
Material:	PBT

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Metri-Pack Series

800



Available in device and in-line connections for vehicle applications, Metri-Pack 800 Series connectors can meet or exceed the requirements for most marine, appliance, and industrial control applications.

Ideally suited for high current applications that do not require environmental protection, Metri-Pack 800 Series products are extremely rugged and versatile.

800 Metri-Pack Features

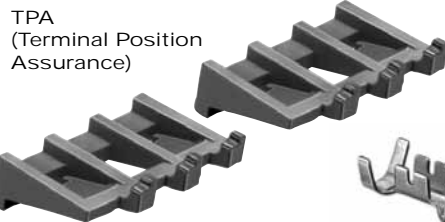
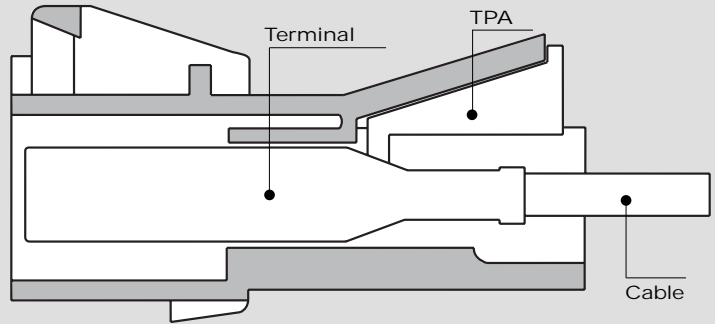
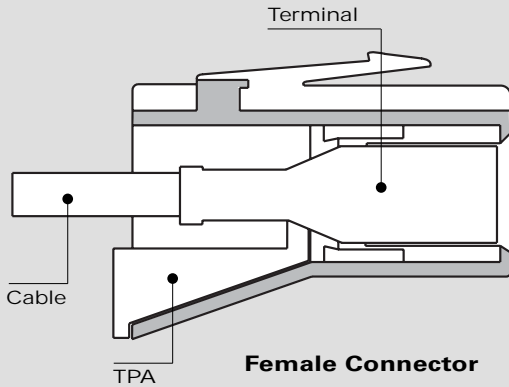
- Connector Position Assurance (CPA)
- Terminal Position Assurance (TPA)
- 60 Amps continuous maximum current rating
- Low energy, low voltage capability
- Excellent resistance to temperature, chemicals and abrasion
- -40°C to 125°C temperature range



800

Metri-Pack Series

Cross Sectional View



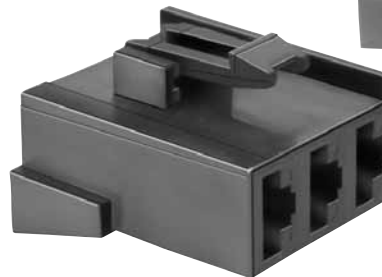
CPA
(Connector Position Assurance)



Female Terminal



Female Connectors



800 Female Terminals Unsealed			
Part #	Cable Range (mm ²)	Material	Plating
12110127	5.0	Tin Brass	Silver/Nickel
12092445	5.0 (2 Req'd.)	Tin Brass	Silver/Nickel
12092444	3.0 (2 Req'd.)	Tin Brass	Silver/Nickel
12065916	3.0-2.0	Tin Brass	Silver/Nickel

800 Female Connectors Unsealed				
# Cavities	Connector	Color	Material	TPA
1way: 1	12160893	Black	PA6	12160895
6way: 3	12092399	Lt. Gray	PA66 HS IM	12092401
6way: 3	12092400	Black	PA66 HS IM	12092401

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.

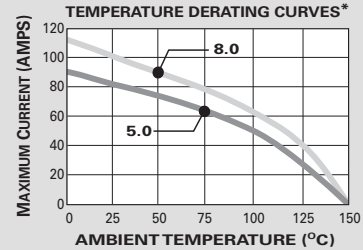
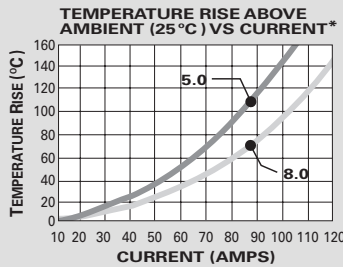


800

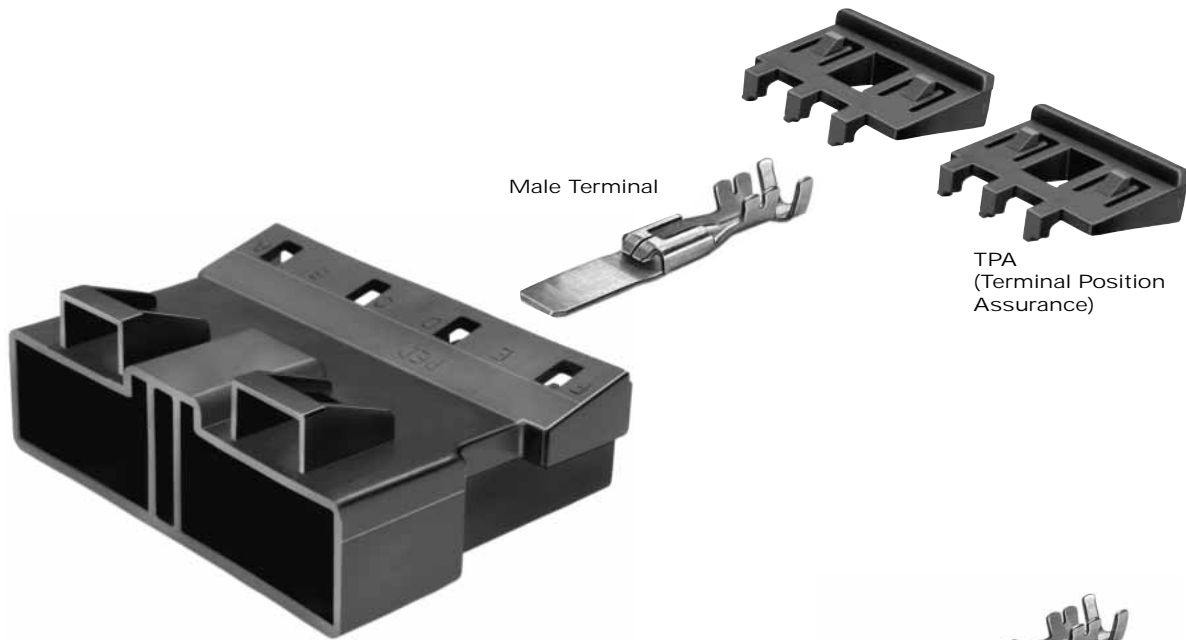
Unsealed System Application Information

CABLE RANGE (mm²): 2.0-5.0
CURRENT RANGE (AMPS): 0-60
TEMP RANGE °C: -40 to 125
RESISTANCE: <10mΩ@20mV
VOLTAGE DROP: <3.0mV/amp
CENTERLINE SPACING (mm): 10.3
BLADE WIDTH (mm): 8.0

800 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)



Male Connector



800 Male Connectors Unsealed				
# Cavities	Connector	Color	Material	TPA
1	12160894	Black	PA6	12160895
6	12110698	Black	PA66 HS IM	12092401

800 Male Tangless Terminals Unsealed			
Part #	Cable Range (mm ²)	Material	Plating
12110700	5.0	Tin Brass	Silver/Nickel

SECTION NOTES:

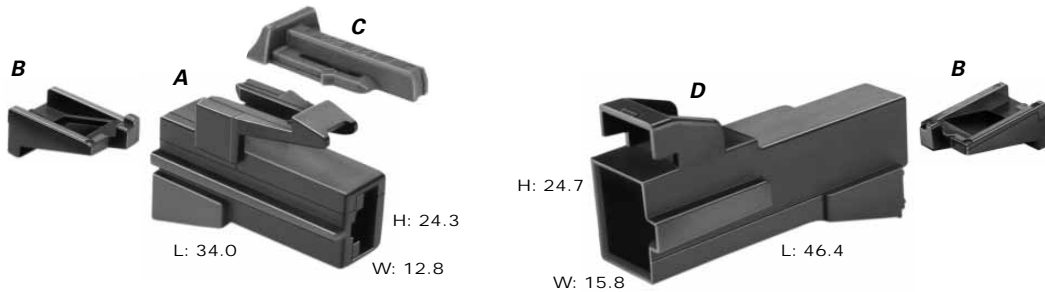
- Due to rigid tolerances of connector cavities, it is critical to meet all crimp dimensions as specified.

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.



800

Metri-Pack Series



Total Mated Length: 65.7mm

A. Part No: 12160893

Description:	Connector 1F
Size:	34.0L x 24.3H x 12.8W
Color:	Black
Material:	PA6
Terminals:	See Page 2.62

B. Part No: 12160895

Description:	TPA
Number Req:	2
Color:	Md. Gray
Material:	PA6

C. Part No: 12052834

Description:	CPA
Color:	Green
Material:	PP

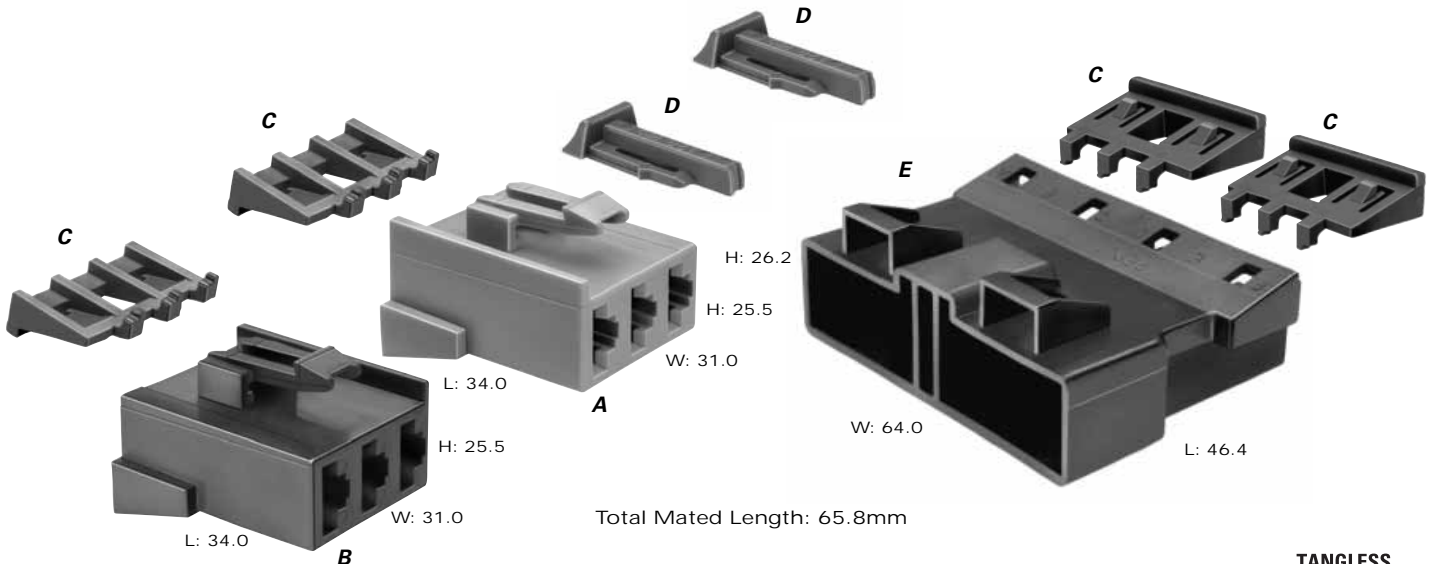
D. Part No: 12160894

Description:	Connector 1M (Clip Slot-Self Locking)
Size:	46.4L x 24.7H x 15.8W
Color:	Black
Material:	PA6
Terminals:	See Page 2.63

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.



800



A. Part No: 12092399

Description:	Connector 3F
Size:	34.0L x 25.5H x 31.0W
Color:	Lt. Gray
Material:	PA66 HS IM
Terminals:	See Page 2.62

B. Part No: 12092400

Description:	Connector 3F
Size:	34.0L x 25.5H x 31.0W
Color:	Black
Material:	PA66 HS IM
Terminals:	See Page 2.62

C. Part No: 12092401

Description:	TPA
Number Req:	4
Color:	Blue
Material:	PA66 HS IM

D. Part No: 12052834

Description:	CPA
Number Req:	2
Color:	Green
Material:	PP

E. Part No: 12110698

Description:	Connector 6M (Clip Slot-Self Locking)
Size:	46.4L x 26.2H x 64.0W
Color:	Black
Material:	PA66 HS IM
Terminals:	See Page 2.63

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.

Metri-Pack Series

Mixed



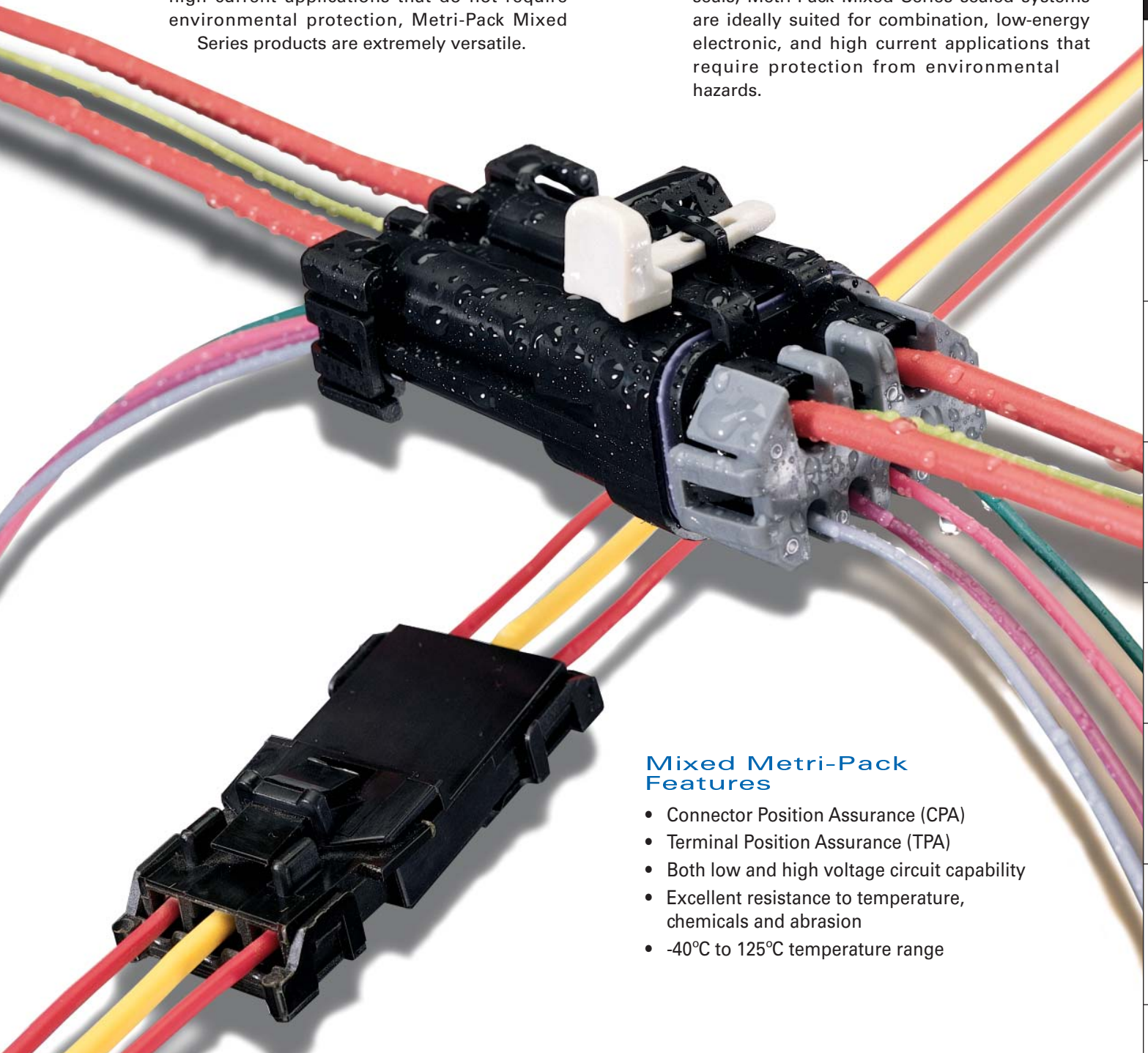
Available in device and in-line connections for vehicle applications, Metri-Pack Mixed Series connectors can meet or exceed the requirements for most marine, appliance, and industrial control applications.

Ideally suited for combination low energy and high current applications that do not require environmental protection, Metri-Pack Mixed Series products are extremely versatile.



Available in device and in-line connections for underhood vehicle applications, Metri-Pack Mixed 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 Mixed Series sealed systems are ideally suited for combination, low-energy electronic, and high current applications that require protection from environmental hazards.



Mixed Metri-Pack Features

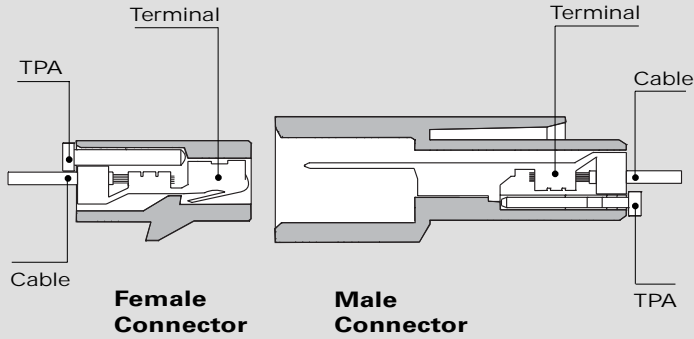
- Connector Position Assurance (CPA)
- Terminal Position Assurance (TPA)
- Both low and high voltage circuit capability
- Excellent resistance to temperature, chemicals and abrasion
- -40°C to 125°C temperature range



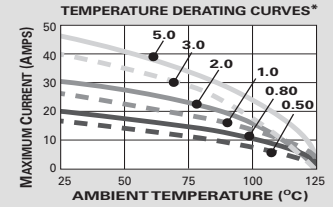
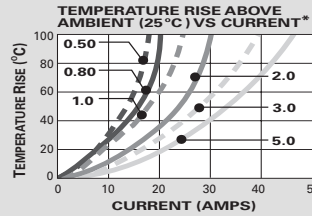
Mixed

Metri-Pack Series

Unsealed System Application Information



280 Series Terminals – Tin Plated



CABLE RANGE (mm²): 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):
 Connector Dependent
 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.

280 Female Terminals Unsealed

Part #	Cable Range (mm ²)	Material	Plating
12015858	5.0-3.0	Tin Brass	Tin
12129494	3.0-2.0	Tin Brass	Tin
12066214	2.0-1.0	Tin Brass	Tin
12034046	0.80-0.50	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 may apply.

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.)		

630 Female Terminals Unsealed

Part #	Cable Range (mm ²)	Material	Plating
12084590	5.0-3.0	Tin Brass	Tin
12052224	3.0	Tin Brass	Tin
12084596	5.0-3.0 (2 Req'd.)	Tin Brass	Tin
12015870	2.0-1.0	Tin Brass	Tin
12015869	0.80-0.50	Tin Brass	Tin
12020035	0.80-0.50 (2 Req'd.)	Tin Brass	Tin
12052222	0.50-0.35	Tin Brass	Tin

Female Terminals



Female Connector

Mixed Metri-Pack Female Connector Unsealed

# Cavities	Connector	Color	Material
3	12020014	Black	PA66 HS IM

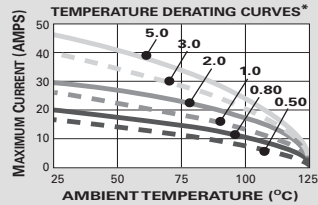
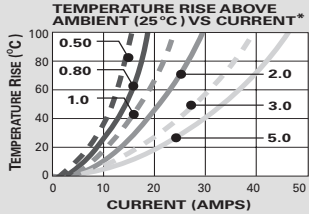
NOTE: Specifications in this catalog are for general reference only and are subject to change without notice. To verify product information, please contact a Delphi representative.



Mixed

Unsealed System Application Information

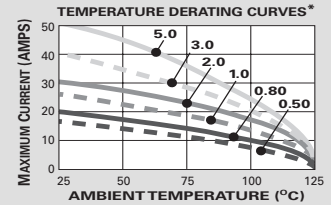
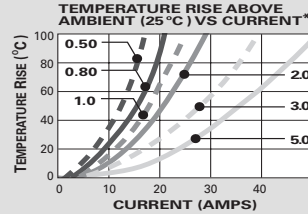
480 Series Terminals – Tin Plated



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):
 Connector Dependent
 BLADE WIDTH (mm): 4.8

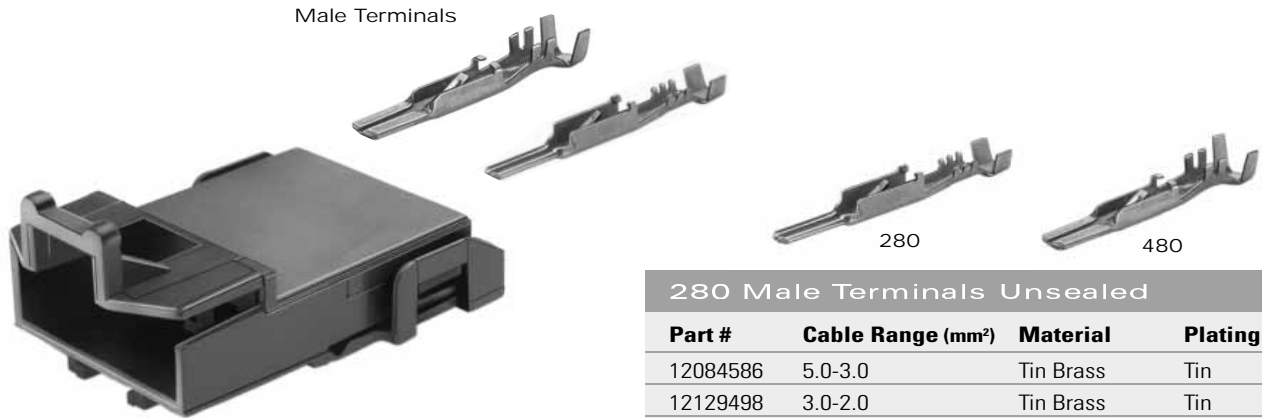
630 Series Terminals – Tin Plated



CABLE RANGE (mm²): 0.35-5.0
 CURRENT RANGE (AMPS): 0-46
 TEMP RANGE °C: -40 to 125
 RESISTANCE: <10mΩ@20mV

VOLTAGE DROP: <3.0mV/amp
 CENTERLINE SPACING (mm):
 Connector Dependent
 BLADE WIDTH (mm): 6.3

*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 Unsealed

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

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

Mixed Metri-Pack Male Connector Unsealed			
# Cavities	Connector	Color	Material
3	12045681	Black	PA66 HS IM

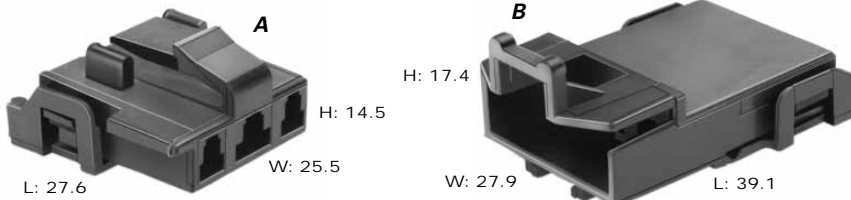
SECTION NOTES:

- Due to rigid tolerances of connector cavities, it is critical to meet all crimp dimensions as specified.
- Female connections for device applications, see page 2.76.

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.



Mixed



Total Mated Length: 55.6mm

A. Part No: 12020014*

Description:	Connector 3F
Size:	27.6L x 14.5H x 25.5W
Color:	Black
Material:	PA66 HS IM
Terminals:	See Page 2.68

*Hinged secondary lock.

B. Part No: 12045681*

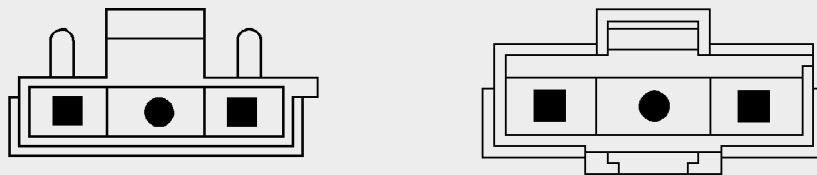
Description:	Connector 3M (Clip Slot)
Size:	39.1L x 17.4H x 27.9W
Color:	Black
Material:	PA66 HS IM
Terminals:	See Page 2.69

*Hinged lock.

KEY:

- 280 SERIES
- 480 SERIES

Mixed connectors feature a combination of different terminal cavities, as indicated by the key.



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.

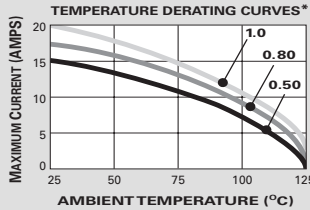
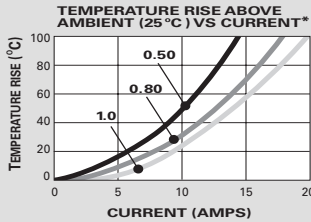


Mixed

Metri-Pack Series

Sealed System Application Information

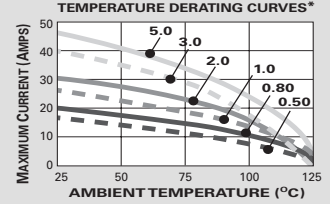
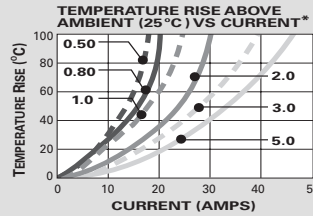
150 Series Terminals – Tin Plated



CABLE RANGE (mm²): 0.35-1.0
 CURRENT RANGE (AMPS): 0-14
 TEMP RANGE °C: -40 to 125
 RESISTANCE: <10mΩ@20mV

VOLTAGE DROP: ... <10.0mV/amp
 CENTERLINE SPACING (mm):
 Connector Dependent
 BLADE WIDTH (mm): 1.5

280 Series Terminals – Tin Plated



CABLE RANGE (mm²): 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):
 Connector Dependent
 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.



150 Female Terminals Sealed

Part #	Cable Range (mm ²)	Material	Plating
12048074	1.0-0.80-0.50	Silicon Bronze	Tin
12084200	0.50-0.35	Silicon Bronze	Tin
12160223	1.0-0.80	Beryllium Copper	Silver/Nickel
12160222	0.50-0.35	Beryllium Copper	Silver/Nickel

280 Female Terminals Sealed

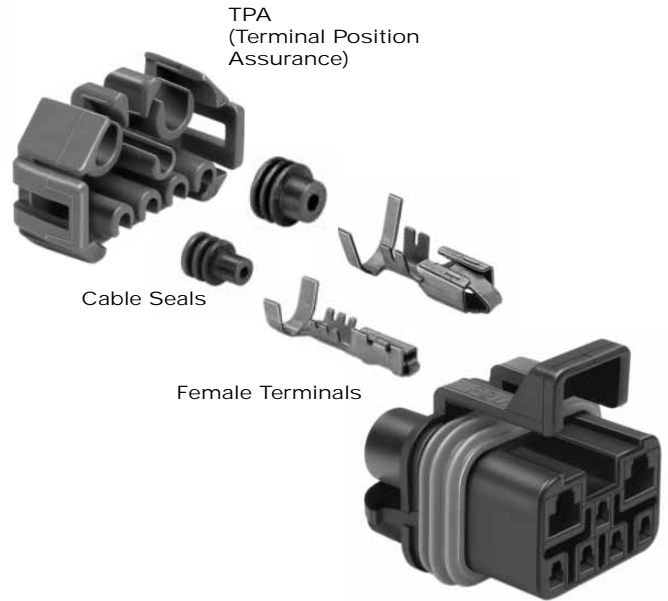
Part #	Cable Range (mm ²)	Material	Plating
12077413	3.0	Tin Brass	Tin
12129493	3.0-2.0	Tin Brass	Tin
12077411	1.0-0.80-0.50	Tin Brass	Tin
12084201	0.50-0.35	Tin Brass	Tin

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

630 Female Terminals Sealed

Part #	Cable Range (mm ²)	Material	Plating
12052456	5.0-3.0	Tin Brass	Tin
12052455	2.0-1.0	Tin Brass	Tin
12052457	0.80-0.50	Tin Brass	Tin



TPA
(Terminal Position Assurance)

Cable Seals

Female Terminals

Female Connector Assembly

Mixed Metri-Pack Female Connector Assembly Sealed

# Cavities	Conn. Asm.	Color	Material	TPA
7	12059472	Black	PA66 HS IM	12052486

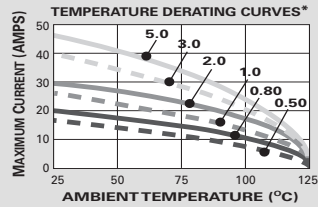
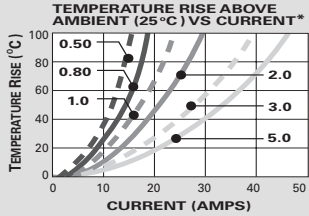
NOTE: Specifications in this catalog are for general reference only and are subject to change without notice. To verify product information, please contact a Delphi representative.



Mixed

Sealed System Application Information

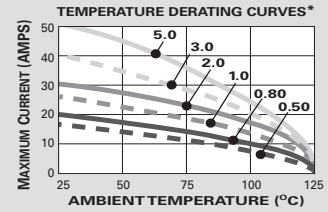
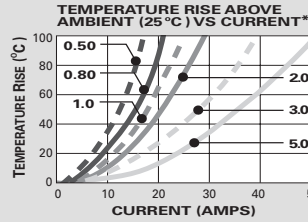
480 Series Terminals – Tin Plated



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):
 Connector Dependent
 BLADE WIDTH (mm): 4.8

630 Series Terminals – Tin Plated



CABLE RANGE (mm²): 0.35-5.0
 CURRENT RANGE (AMPS): 0-46
 TEMP RANGE °C: -40 to 125
 RESISTANCE: <10mΩ@20mV

VOLTAGE DROP: <3.0mV/amp
 CENTERLINE SPACING (mm):
 Connector Dependent
 BLADE WIDTH (mm): 6.3

*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 Terminals



Cable Seals



TPA
(Terminal Position Assurance)



150



480

150 Male Terminals Sealed

Part #	Cable Range (mm ²)	Material	Plating
12045773	0.80-0.50	Tin Brass	Tin
12077628	0.50-0.35	Tin Brass	Tin

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

Mixed Metri-Pack Male Connector Sealed

# Cavities	Connector	Color	Material	TPA
7	12052200	Black	PA66 HS IM	12052199

SECTION NOTES:

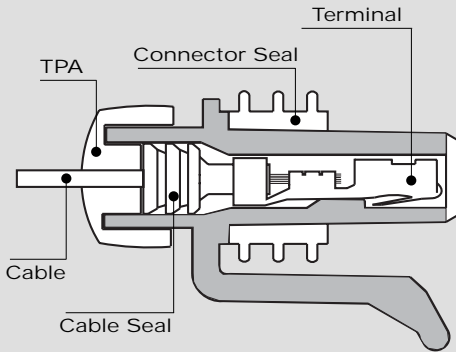
- Due to rigid tolerances of connector cavities, it is critical to meet all crimp dimensions as specified.
- Female connections for device applications, see pages 2.77 and 2.78.

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.

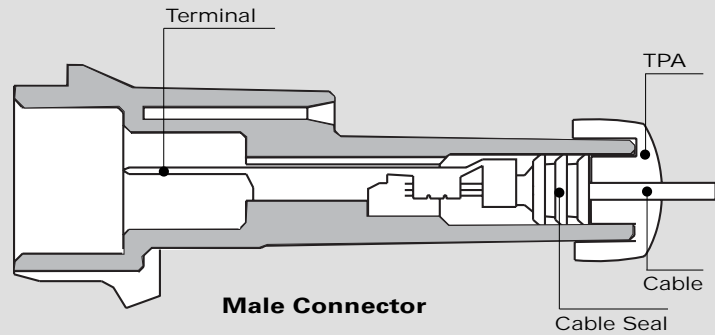


Mixed

Cross Sectional View



Female Connector Assembly




Male Connector

150 Metri-Pack Cable Seals				
Reel Part#	Loose Part#	Cable Dia.	Material	Color
12052924	15324973	2.85-2.03	Silicone	Dk. Red
12089442	15324976	2.15-1.60	Silicone	White
12052925	15324974	1.70-1.29	Silicone	Blue
12124669	15324975	1.009-0.995	Silicone	Tan

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

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

630 Metri-Pack Cable Seals				
Reel Part #	Loose Part #	Cable Dia.	Material	Color
12059257	15324993	5.15-4.40	Silicone	Green
12059260	15324996	4.50-3.61	Silicone	Blue
12059258	15324994	3.75-2.81	Silicone	Lt. Gray
12059259	15324995	2.85-2.01	Silicone	Dk. Red
12077760	15324997	2.40-1.65	Silicone	Tan



150 Metri-Pack Cavity Plug*			
Part #	Cavity Inside Diameter	Material	Color
12059168	5.2mm	Silicone	Dk. Red

*Cavity plugs seal unused female and male cavities.




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

*Cavity plugs seal unused female and male cavities.



480 Metri-Pack Cavity Plug*			
Part #	Cavity Inside Diameter	Material	Color
12066082	8.5mm	Silicone	Green

*Cavity plugs seal unused female and male cavities.



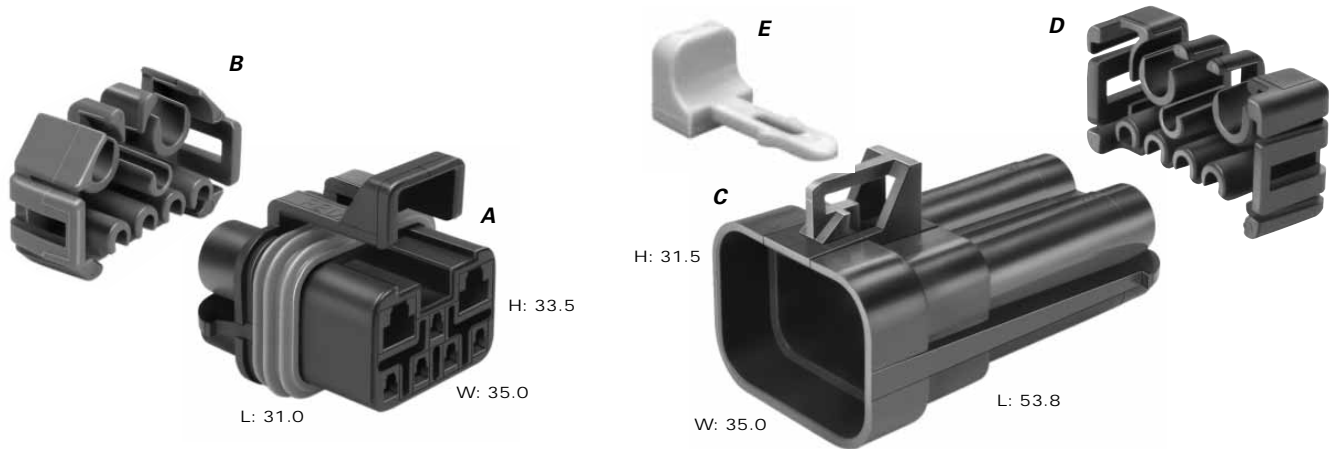
630 Metri-Pack Cavity Plug*			
Part #	Cavity Inside Diameter	Material	Color
12059255	9.8mm	Silicone	Green

*Cavity plugs seal unused female and male cavities.

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.



Mixed



Total Mated Length: 69.3mm

A. Part No: 12059472

Description:	Connector Assembly 7F
Size:	31.0L x 33.5H x 35.0W
Color:	Black
Material:	PA66 HS IM
Terminals:	See Page 2.72
Seals/Plugs:	See Page 2.74

B. Part No: 12052486

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

C. Part No: 12052200

Description:	Connector 7M (Clip Slot)
Size:	53.8L x 31.5H x 35.0W
Color:	Black
Material:	PA66 HS IM
Terminals:	See Page 2.73
Seals/Plugs:	See Page 2.74

D. Part No: 12052199

Description:	TPA
Color:	Black
Material:	PA6

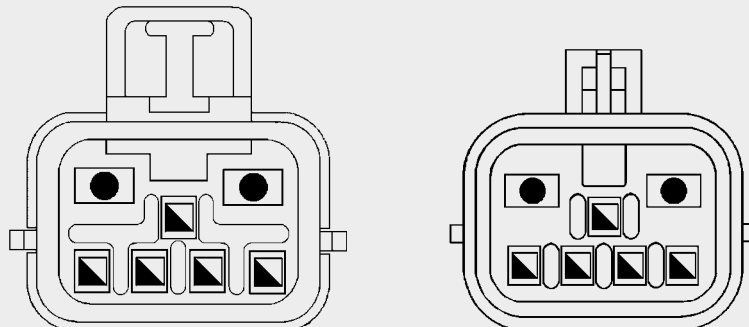
E. Part No: 12020833

Description:	CPA
Color:	Gray
Material:	PBT

KEY:

- ▣ 150 SERIES
- 480 SERIES

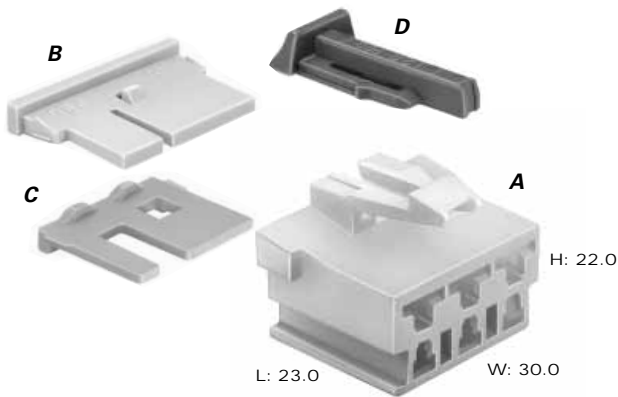
Mixed connectors feature a combination of different terminal cavities, as indicated by the key.



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.



Mixed Device Connections

**A. Part No: 12129842**

Description:	Connector 6F
Size:	23.0L x 22.0H x 30.0W
Color:	Natural
Material:	PA66 HS IM
Terminals:	See Page 2.68
Typical App:	Switch

B. Part No: 12162301

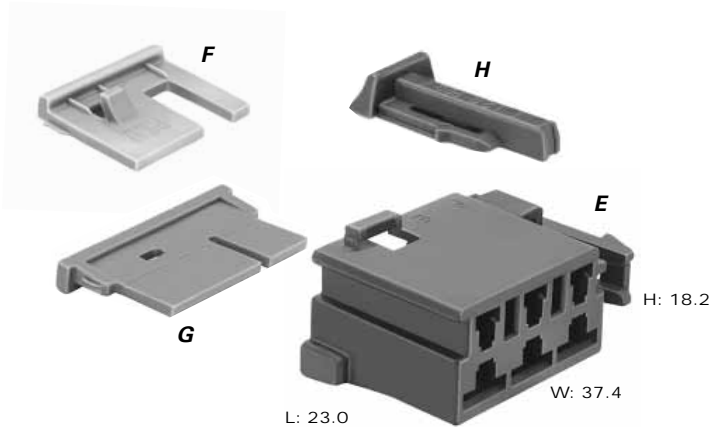
Description:	TPA
Color:	Lt. Gray
Material:	PA66 HS IM

C. Part No: 12162300

Description:	TPA
Color:	Blue
Material:	PA66 HS IM

D. Part No: 12052834

Description:	CPA
Color:	Green
Material:	PP

**E. Part No: 12162229 (Black)
12110075 (Cream)***

Description:	Connector 6F
Size:	23.0L x 18.2H x 37.4W
Material:	PA66 HS IM
Terminals:	See Page 2.68
Typical App:	Switch
*Reversed locking feature.	

F. Part No: 12162300

Description:	TPA
Color:	Blue
Material:	PA66 HS IM

G. Part No: 12162299

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

H. Part No: 12052834

Description:	CPA
Color:	Green
Material:	PP

KEY:
 ■ 280 SERIES
 ▲ 630 SERIES

Mixed connectors feature a combination of different terminal cavities, as indicated by the key.

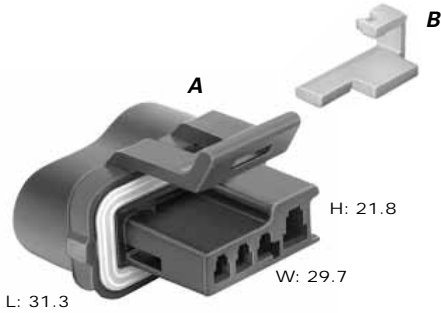
KEY:
 ■ 280 SERIES
 ▲ 630 SERIES

Mixed connectors feature a combination of different terminal cavities, as indicated by the key.

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Mixed Device Connections

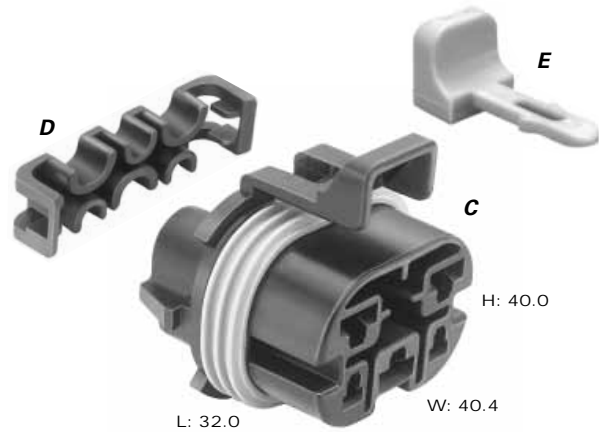


A. Part No: 12124898

Description:	Connector Assembly 4F
Size:	31.3L x 21.8H x 29.7W
Color:	Black
Material:	PBT
Terminals:	See Page 2.72
Seals/Plugs:	See Page 2.74
Typical App:	Alternator

B. Part No: 12045897

Description:	Secondary Lock
Color:	Natural
Material:	PBT



C. Part No: 12052287

Description:	Connector Assembly 5F
Size:	32.0L x 40.0H x 40.4W
Color:	Black
Material:	PA66 HS IM
Terminals:	See Page 2.72
Seals/Plugs:	See Page 2.74
Typical App:	Switch

D. Part No: 12052290

Description:	TPA
Color:	Black
Material:	PA66 HS IM

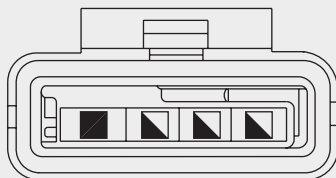
E. Part No: 12020833

Description:	CPA
Color:	Gray
Material:	PBT

KEY:

- ▣ 150 SERIES
- 280 SERIES

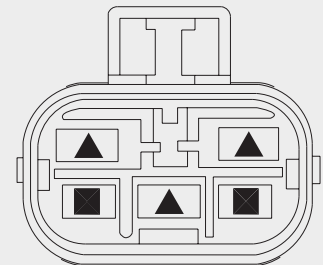
Mixed connectors feature a combination of different terminal cavities, as indicated by the key.



KEY:

- 280 SERIES
- ▲ 630 SERIES

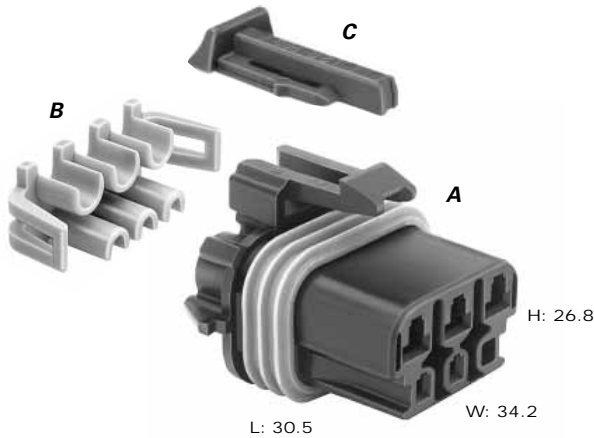
Mixed connectors feature a combination of different terminal cavities, as indicated by the key.



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.



Mixed Device Connections



A. Part No: 12186347

Description:	Connector Assembly 6F
Size:	30.5L x 26.8H x 34.2W
Color:	Md. Gray
Material:	PA66 HS IM
Terminals:	See Page 2.72
Seals/Plugs:	See Page 2.74
Typical App:	Wiper Motor

B. Part No: 12129124

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

C. Part No: 12052834

Description:	CPA
Color:	Green
Material:	PP

KEY:

- ▣ 150 SERIES
- 280 SERIES

Mixed connectors feature a combination of different terminal cavities, as indicated by the key.

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Junction Systems



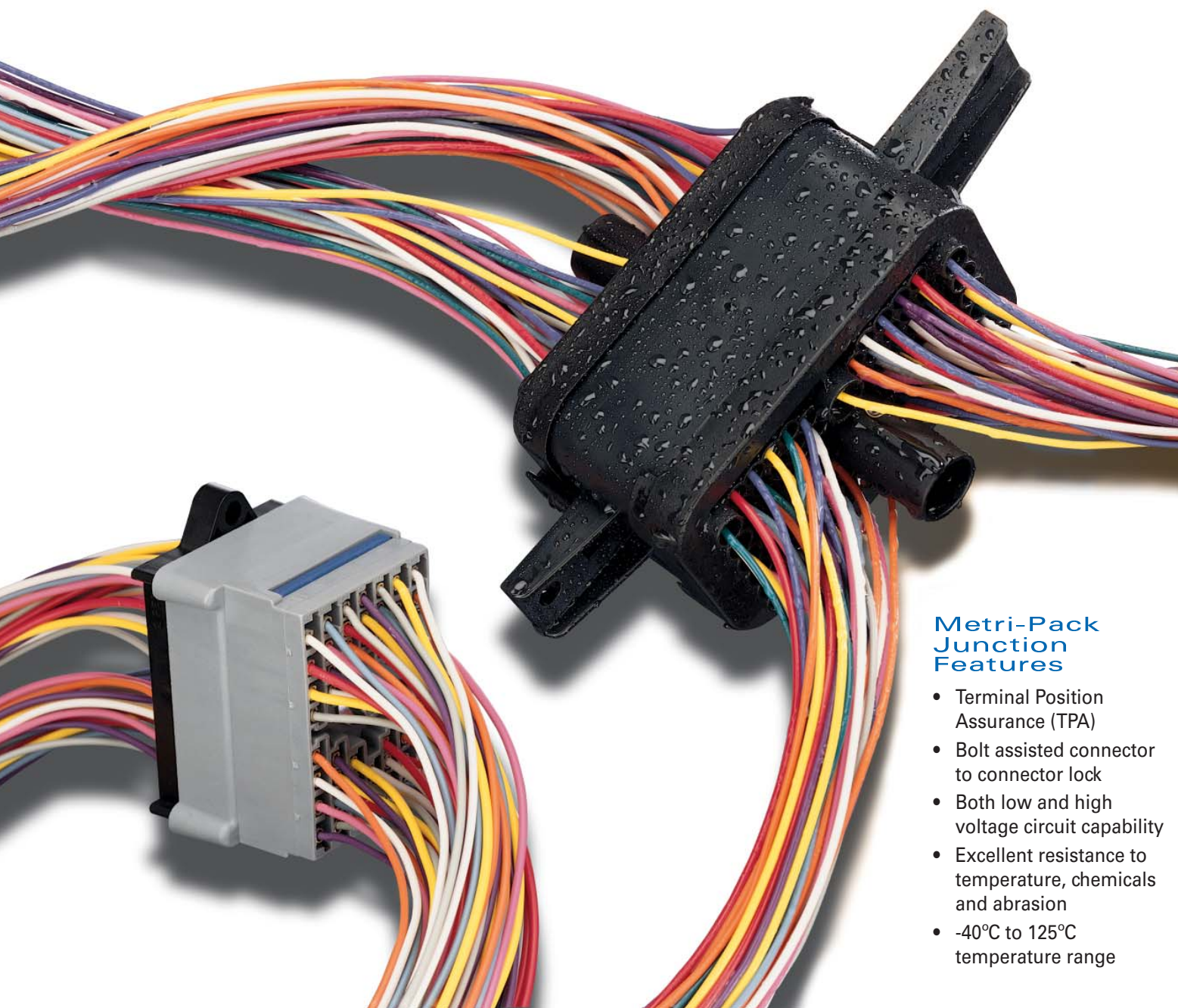
Available in pass-through and in-line connections, Metri-Pack Junction System Series connectors can meet or exceed the requirements for most marine, appliance, and industrial control applications.

Ideally suited for combination low energy and high current applications that do not require environmental protection, Metri-Pack Junction System Series products are extremely versatile.



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

Metri-Pack Junction Series sealed systems are ideally suited for combination, low-energy electronic, and high current applications that require protection from environmental hazards.



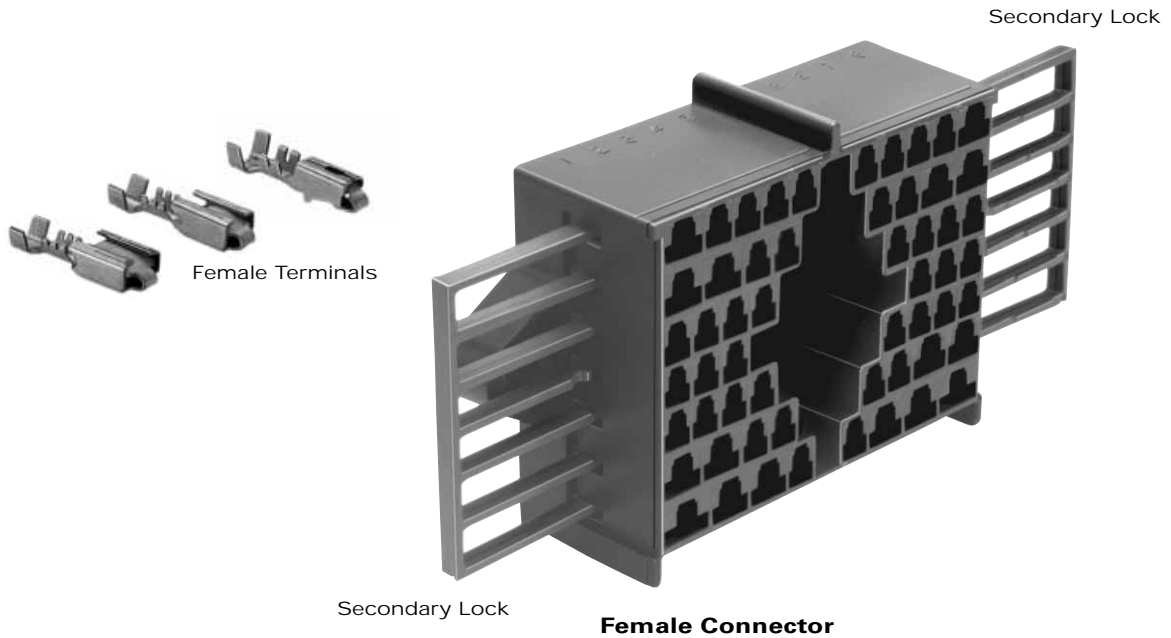
Metri-Pack Junction Features

- Terminal Position Assurance (TPA)
- Bolt assisted connector to connector lock
- Both low and high voltage circuit capability
- Excellent resistance to temperature, chemicals and abrasion
- -40°C to 125°C temperature range



Junction Systems

Female Unsealed System



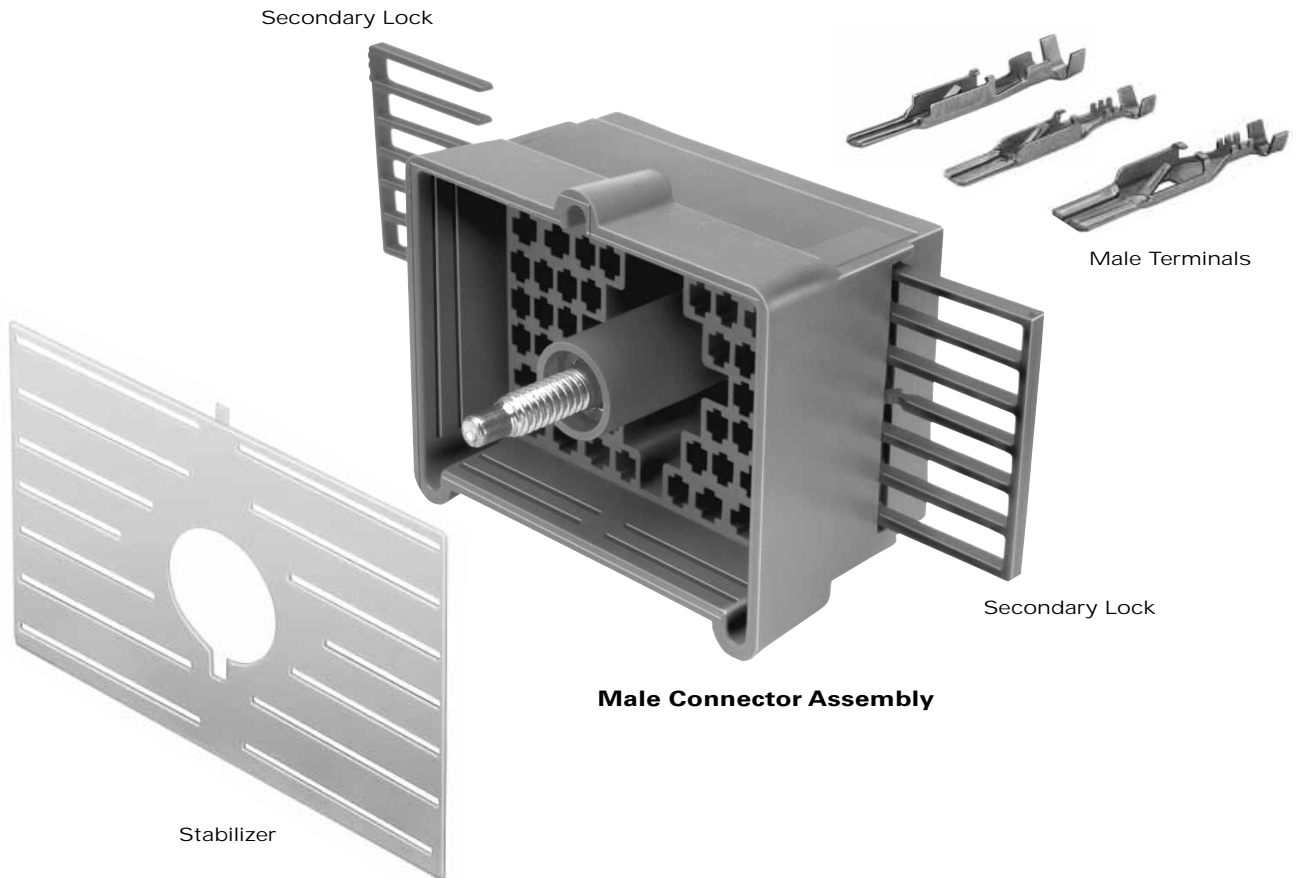
Junction Systems Female Connectors Unsealed				
# Cavities	Connector	Color	Material	Secondary Lock
42way: 42	15492518	Black	PA66 HS IM	12015510
				12015511
56way: 56	15492672	Black	PA66 HS IM	15324764
116way: 116	15492622	Black	PA66 HS IM 14% GF	12047751

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.



Junction Systems

Male Unsealed System



Male Connector Assembly

Junction Systems Male Connector Assemblies Unsealed					
# Cavities	Conn. Asm.	Color	Material	Secondary Lock	Stabilizer
42way: 25	15492519	Black	PA66 HS IM	12015510	12162412
: 17	12020629	Black	PA66 HS IM	12015511	12162413
56way: 56	15492558	Md. Gray	PA66 HS IM	15324764	12186869
116way: 116	15492657	Black	PPE	15402131	12124732

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.

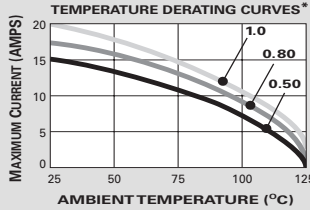
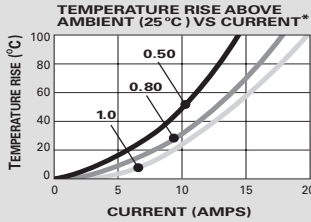


Junction Systems

Metri-Pack Series

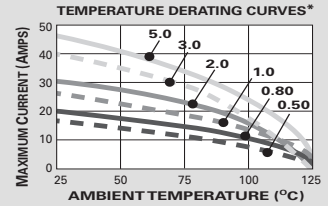
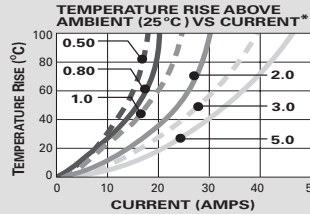
Unsealed System Application Information

150 Series Terminals – Tin Plated



CABLE RANGE (mm²): **0.35-1.0** VOLTAGE DROP: ... **<10.0mV/amp**
 CURRENT RANGE (AMPS): **0-14** CENTERLINE SPACING (mm):
 TEMP RANGE °C: **-40 to 125** **Connector Dependent**
 RESISTANCE: **<10mΩ@20mV** BLADE WIDTH (mm): **1.5**

280 Series Terminals – Tin Plated



CABLE RANGE (mm²): **0.35-5.0** VOLTAGE DROP: **<3.0mV/amp**
 CURRENT RANGE (AMPS): **0-30** CENTERLINE SPACING (mm):
 TEMP RANGE °C: **-40 to 125** **Connector Dependent**
 RESISTANCE: **<10mΩ@20mV** 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.



150 Series Female Terminals Unsealed

Part #	Cable Range (mm ²)	Material	Plating
12047767	1.0-0.80	Silicon Bronze	Tin
12064971	0.50-0.35	Silicon Bronze	Tin

480 Series 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.) 0.80-0.50 (1 Req'd.)	Tin Brass	Tin



280 Series Female Terminals Unsealed

Part #	Cable Range (mm ²)	Material	Plating
12015858	5.0-3.0	Tin Brass	Tin
12129494	3.0-2.0	Tin Brass	Tin
12034046	0.80-0.50	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

630 Series Female Terminals Unsealed

Part #	Cable Range (mm ²)	Material	Plating
12084590	5.0-3.0	Tin Brass	Tin
12052224	3.0	Tin Brass	Tin
12084596	5.0-3.0 (2 Req'd.)	Tin Brass	Tin
12015870	2.0-1.0	Tin Brass	Tin
12015869	0.80-0.50	Tin Brass	Tin
12020035	0.80-0.50 (2 Req'd.)	Tin Brass	Tin
12052222	0.50-0.35	Tin Brass	Tin

*Thin Stock—Electrical current restrictions may apply.

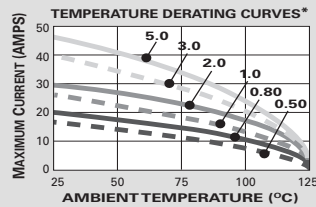
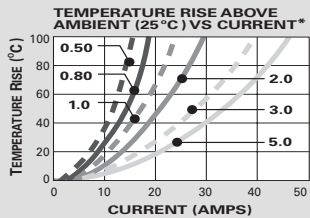
NOTE: Specifications in this catalog are for general reference only and are subject to change without notice. To verify product information, please contact a Delphi representative.



Junction Systems

Unsealed System Application Information

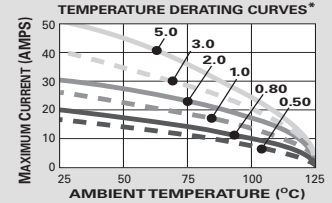
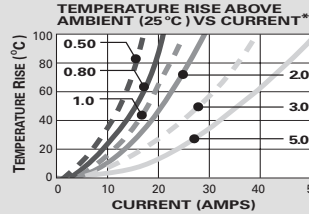
480 Series Terminals – Tin Plated



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):
 Connector Dependent
 BLADE WIDTH (mm): 4.8

630 Series Terminals – Tin Plated



CABLE RANGE (mm²): 0.35-5.0
 CURRENT RANGE (AMPS): 0-46
 TEMP RANGE °C: -40 to 125
 RESISTANCE: <10mΩ@20mV

VOLTAGE DROP: <3.0mV/amp
 CENTERLINE SPACING (mm):
 Connector Dependent
 BLADE WIDTH (mm): 6.3

*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.



150 Series Male Terminals Unsealed

Part #	Cable Range (mm ²)	Material	Plating
12047581	0.80-0.50	Tin Brass	Tin
12059894	0.50-0.35	Tin Brass	Tin

480 Series 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



280 Series Male Terminals Unsealed

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

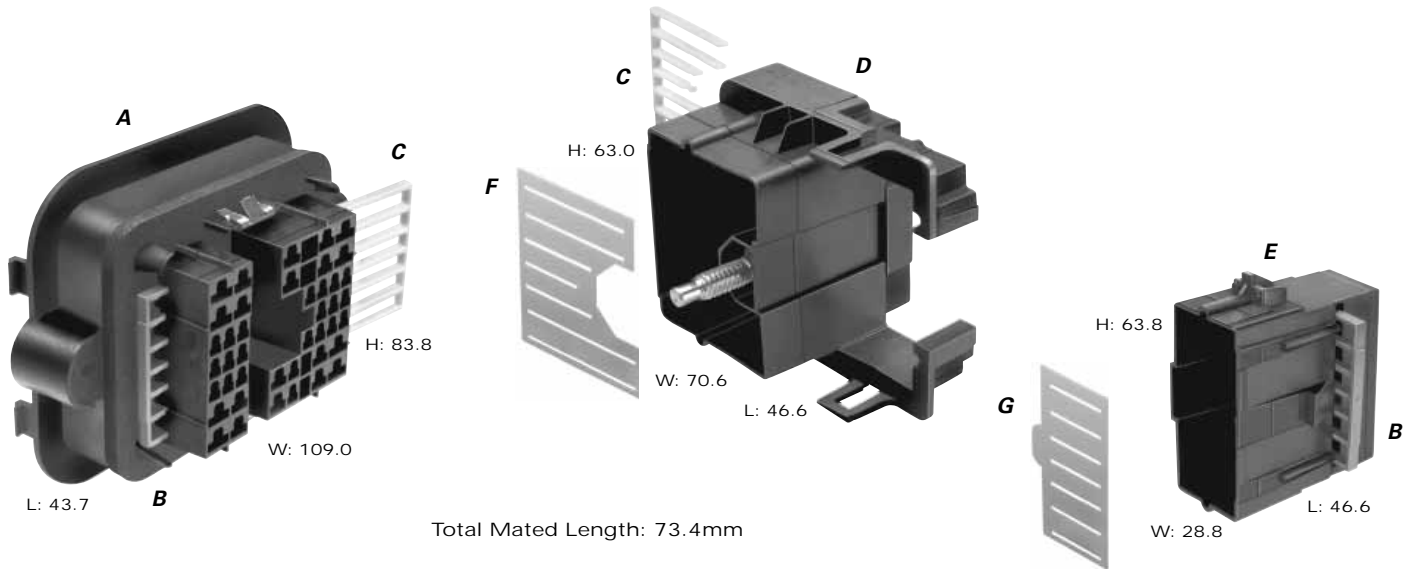
630 Series Male Terminals Unsealed

Part #	Cable Range (mm ²)	Material	Plating
12066493	5.0-3.0	Tin Brass	Tin over Copper
12052826	3.0	Tin Brass	Tin over Copper
12020365	3.0 (2 Req'd.)	Tin Brass	Tin over Copper
12020126	2.0-1.0	Tin Brass	Tin over Copper
12020125	0.80-0.50	Tin Brass	Tin over Copper
12033972	0.80-0.50 (2 Req'd.)	Tin Brass	Tin over Copper
12066454	0.50-0.35	Tin Brass	Tin over Copper

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.



Junction Systems

**A. Part No: 15492518**

Description:	Connector Assembly 42F
Size:	43.7L x 83.8H x 109.0W
Color:	Black
Material:	PA66 HS IM
Terminals:	See Page 2.82
Note:	Available with Grease Covers 12015513 and 12033602

B. Part No: 12015511

Description:	Secondary Lock
Number Req:	2
Color:	Blue
Material:	PBT

C. Part No: 12015510

Description:	Secondary Lock
Number Req:	2
Color:	Natural
Material:	PBT

D. Part No: 15492519

Description:	Connector Assembly 25M
Size:	46.6L x 63.0H x 70.6W
Color:	Black
Material:	PA66 HS IM
Terminals:	See Page 2.83

E. Part No: 12020629

Description:	Connector 17M
Size:	46.6L x 63.8H x 28.8W
Color:	Black
Material:	PA66 HS IM
Terminals:	See Page 2.83
Note:	Available with Grease Cover 12033601

F. Part No: 12162412

Description:	Stabilizer
Color:	Natural
Material:	Mylar

G. Part No: 12162413

Description:	Stabilizer
Color:	Natural
Material:	Mylar

KEY:

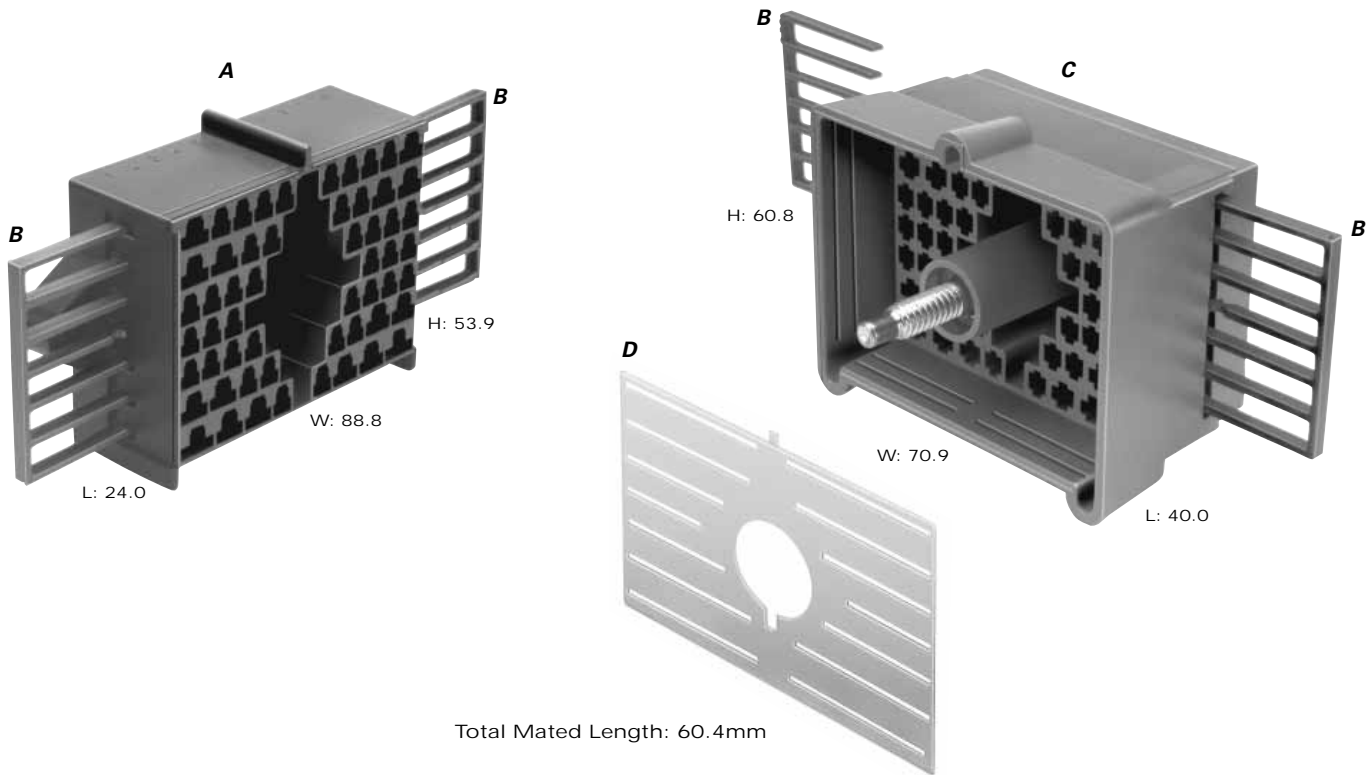
- 280 SERIES
- 480 SERIES
- ▲ 630 SERIES

Mixed connectors feature a combination of different terminal cavities, as indicated by the key.

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.



Junction Systems



A. Part No: 15492672

Description:	Connector Assembly 56F
Size:	24.0L x 53.9H x 88.8W
Color:	Black
Material:	PA66 HS IM
Terminals:	See Page 2.82

C. Part No: 15492558

Description:	Connector Assembly 56M
Size:	40.0L x 60.8H x 70.9W
Color:	Md. Gray
Material:	PA66 HS IM
Terminals:	See Page 2.83

B. Part No: 15324764

Description:	Secondary Lock
Number Req:	4
Color:	Blue
Material:	PBT

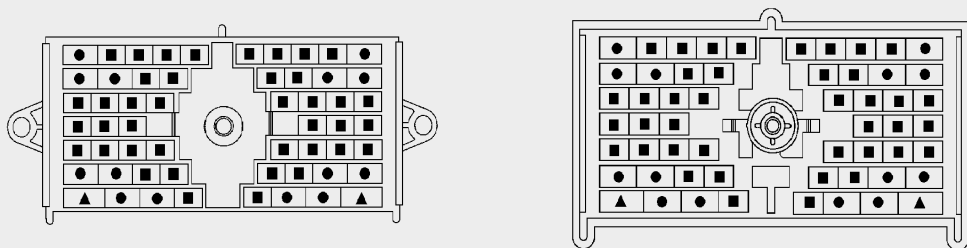
D. Part No: 12186869

Description:	Stabilizer
Color:	Natural
Material:	Mylar

KEY:

- 280 SERIES
- 480 SERIES
- ▲ 630 SERIES

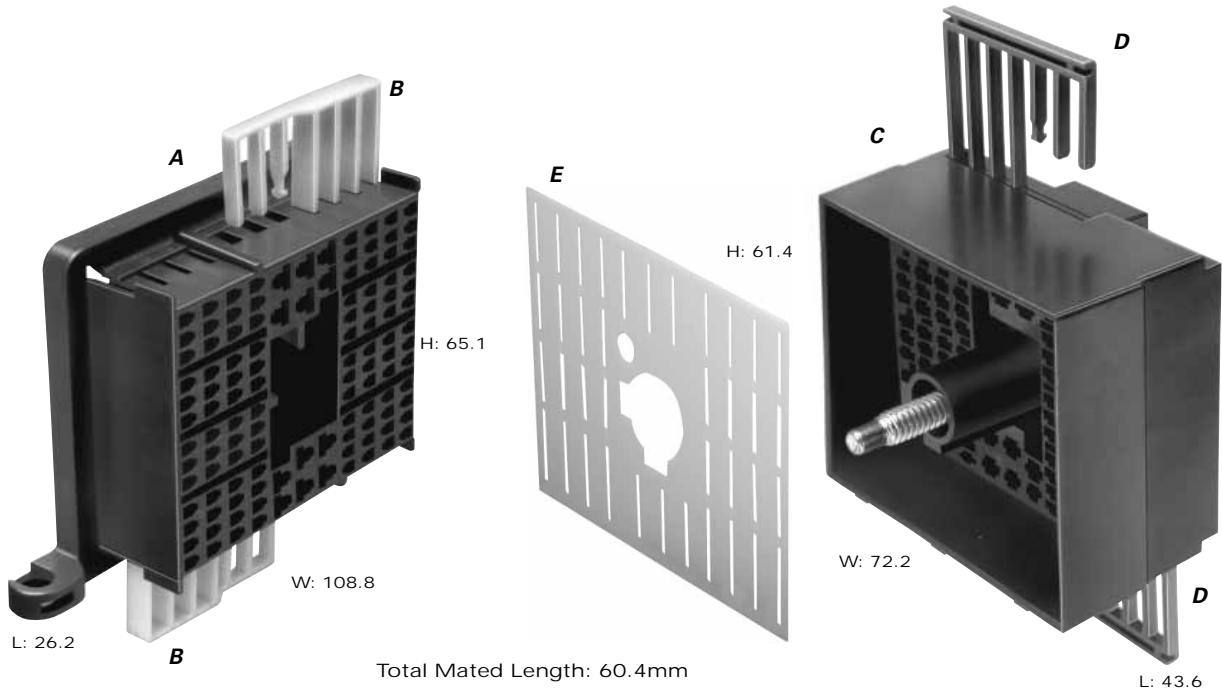
Mixed connectors feature a combination of different terminal cavities, as indicated by the key.



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.



Junction Systems

**A. Part No: 15492622**

Description:	Connector Assembly 116F
Size:	26.2L x 65.1H x 108.8W
Color:	Black
Material:	PA66 HS IM 14% GF
Terminals:	See Page 2.82

B. Part No: 12047751

Description:	Secondary Lock
Number Req:	2
Color:	Natural
Material:	PBT

C. Part No: 15492657

Description:	Connector Assembly 116M
Size:	43.6L x 61.4H x 72.2W
Color:	Black
Material:	PPE
Terminals:	See Page 2.83
Note:	See product print for assembly information

D. Part No: 15402131

Description:	Secondary Lock
Number Req:	2
Color:	Blue
Material:	PBT

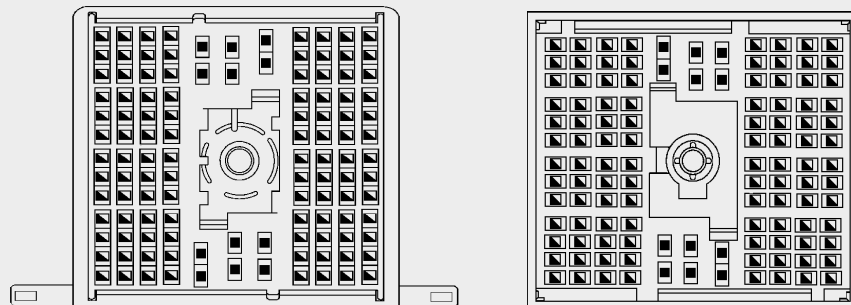
E. Part No: 12124732

Description:	Stabilizer
Color:	Natural
Material:	Mylar

KEY:

- ▣ 150 SERIES
- 280 SERIES

Mixed connectors feature a combination of different terminal cavities, as indicated by the key.

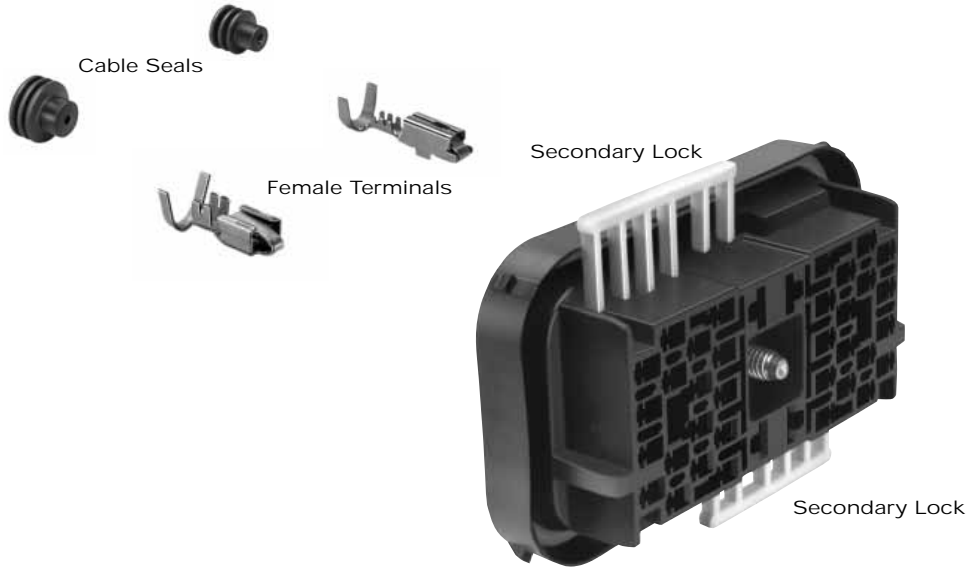


NOTE: Specifications in this catalog are for general reference only and are subject to change without notice. To verify product information, please contact a Delphi representative.



Junction Systems

Female Sealed System



Female Connector Assembly

Junction Systems Female Connector Assemblies Sealed

# Cavities	Conn. Asm.	Color	Material	Secondary Lock
30	15492567	Black	PBT	12066050
36	15492591 *	Black	PBT	12064835
38	15492642	Black	PA66 14% GF HS IM & PA66 15% GF + MD 25% HS	12129669
78	15492601	Black	PA66 HS 33% GF	12129214

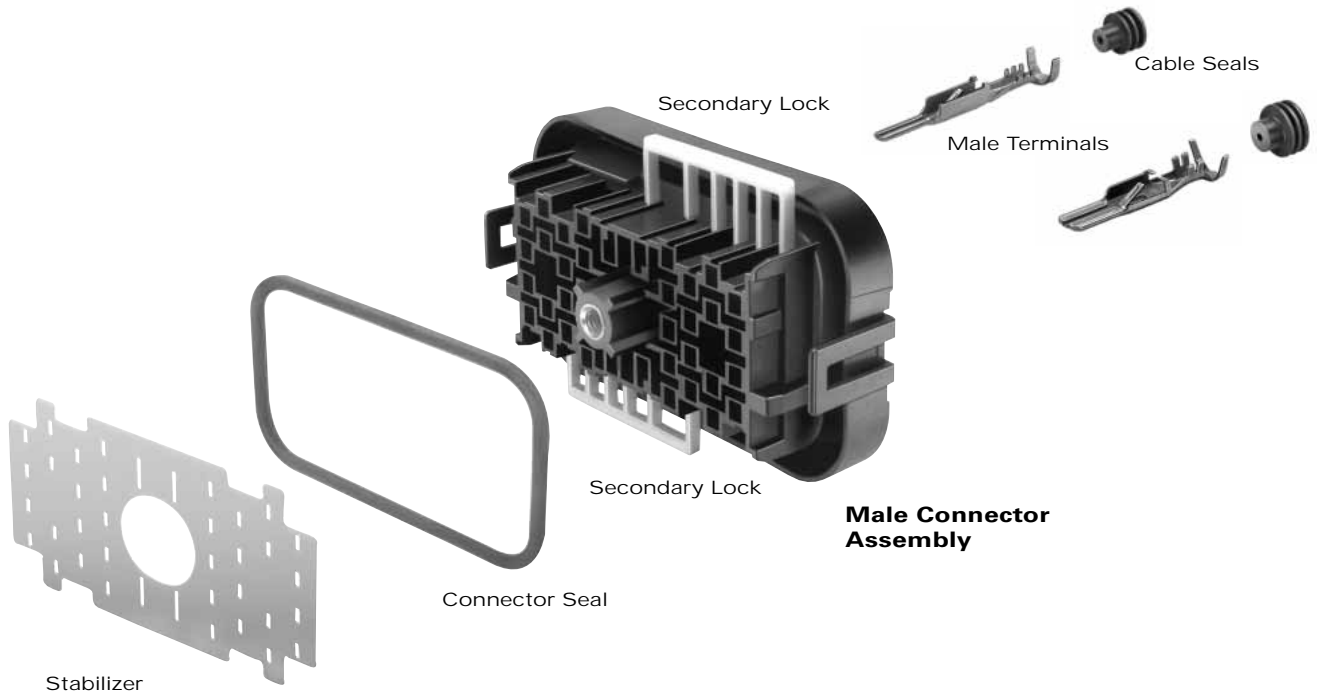
*Note: 15492591 (F) is unsealed for use in a protected environment.

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.



Junction Systems

Male Sealed System



Junction Systems Male Connector Assemblies Sealed							
# Cavities	Conn. Asm.	Color	Material	Secondary Lock	Stabilizer	Shroud	Connector Seal
30	12160959	Black	PBT	12065848	—	13577943	12065849
36	15492562	Black	PBT	12064834	—	12066590	12064837
38	12191487	Dk.Gray	PA66 HS IM 14% GF	12129670	15317352	12161191	12129672
78	15498985	Black	PA66 HS 33% GF	12129213	12162573	12162527	—



Shroud

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.

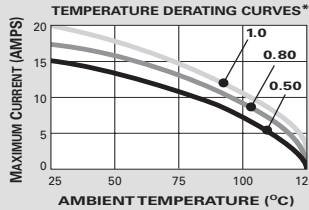
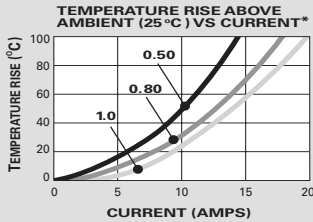


Junction Systems

Metri-Pack Series

Sealed System Application Information

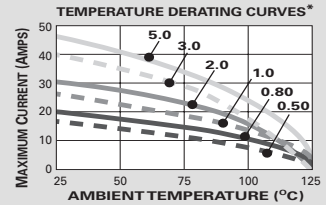
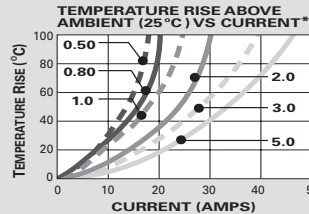
150 Series Terminals – Tin Plated



CABLE RANGE (mm²): 0.35-1.0
 CURRENT RANGE (AMPS): 0-14
 TEMP RANGE °C: -40 to 125
 RESISTANCE: <10mΩ@20mV

VOLTAGE DROP: <10.0mV/amp
 CENTERLINE SPACING (mm):
 Connector Dependent
 BLADE WIDTH (mm): 1.5

280 Series Terminals – Tin Plated



CABLE RANGE (mm²): 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):
 Connector Dependent
 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.

150 Series Female Terminals Sealed

Part #	Cable Range (mm ²)	Material	Plating
12048074	1.0-0.80-0.50	Silicon Bronze	Tin
12084200	0.50-0.35	Silicon Bronze	Tin
12160223	1.0-0.80	Beryllium Copper	Silver/Nickel
12160222	0.50-0.35	Beryllium Copper	Silver/Nickel



280 Series Female Terminals Sealed

Part #	Cable Range (mm ²)	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



480 Series 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

630 Series Female Terminals Sealed

Part #	Cable Range (mm ²)	Material	Plating
12052456	5.0-3.0	Tin Brass	Tin
12052455	2.0-1.0	Tin Brass	Tin
12052457	0.80-0.50	Tin Brass	Tin



280 Tangless Series Female Terminals Sealed

Part #	Cable Range (mm ²)	Material	Plating
12110853	5.0-3.0	Tin Brass	Tin
12129409	2.0	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

Use for Part No. 15492642 (Shown on Page 2.95)

*Thin Stock—Electrical current restrictions may apply.

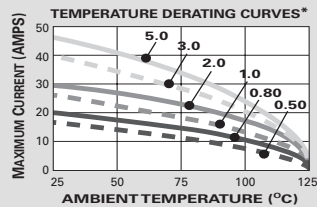
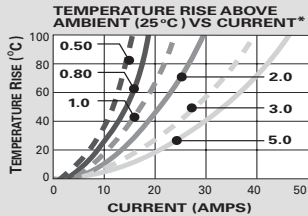
NOTE: Specifications in this catalog are for general reference only and are subject to change without notice. To verify product information, please contact a Delphi representative.



Junction Systems

Sealed System Application Information

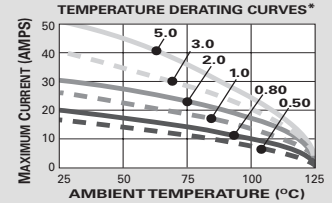
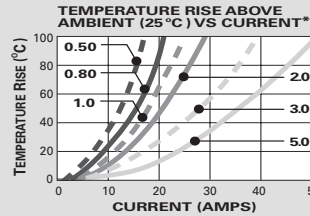
480 Series Terminals – Tin Plated



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):
 Connector Dependent
 BLADE WIDTH (mm): 4.8

630 Series Terminals – Tin Plated



CABLE RANGE (mm²): 0.35-5.0
 CURRENT RANGE (AMPS): 0-46
 TEMP RANGE °C: -40 to 125
 RESISTANCE: <10mΩ@20mV

VOLTAGE DROP: <3.0mV/amp
 CENTERLINE SPACING (mm):
 Connector Dependent
 BLADE WIDTH (mm): 6.3

*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.



150 Series Male Terminals Sealed

Part #	Cable Range (mm ²)	Material	Plating
12045773	0.80-0.50	Tin Brass	Tin
12077628	0.50-0.35	Tin Brass	Tin



280 Series Male Terminals Sealed

Part #	Cable Range (mm ²)	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



480 Series 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



630 Series Male Terminals Sealed

Part #	Cable Range (mm ²)	Material	Plating
12064736	5.0	Tin Brass	Tin
12064737	3.0	Tin Brass	Tin
12064735	2.0-1.0	Tin Brass	Tin
12064734	0.80-0.50	Tin Brass	Tin

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.



Junction Systems

Sealed System Cable Seals & Cavity Plugs



150 Metri-Pack Cable Seals				
Reel Part #	Loose Part #	Cable Dia.	Material	Color
12052924	15324973	2.85-2.03	Silicone	Dk. Red
12089442	15324976	2.15-1.60	Silicone	White
12052925	15324974	1.70-1.29	Silicone	Blue
12124669	15324975	1.009-0.995	Silicone	Tan



150 Metri-Pack Cavity Plug*			
Part #	Cavity Inside Diameter	Material	Color
12059168	5.2mm	Silicone	Dk. Red

*Cavity plugs seal unused female and male cavities.



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



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

*Cavity plugs seal unused female and male cavities.



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 Metri-Pack Cavity Plug*			
Part #	Cavity Inside Diameter	Material	Color
12066082	8.5mm	Silicone	Green

*Cavity plugs seal unused female and male cavities.



630 Metri-Pack Cable Seals				
Reel Part #	Loose Part #	Cable Dia.	Material	Color
12059257	15324993	5.15-4.40	Silicone	Green
12059260	15324996	4.50-3.61	Silicone	Blue
12059258	15324994	3.75-2.81	Silicone	Lt. Gray
12059259	15324995	2.85-2.01	Silicone	Dk. Red
12077760	15324997	2.40-1.65	Silicone	Tan



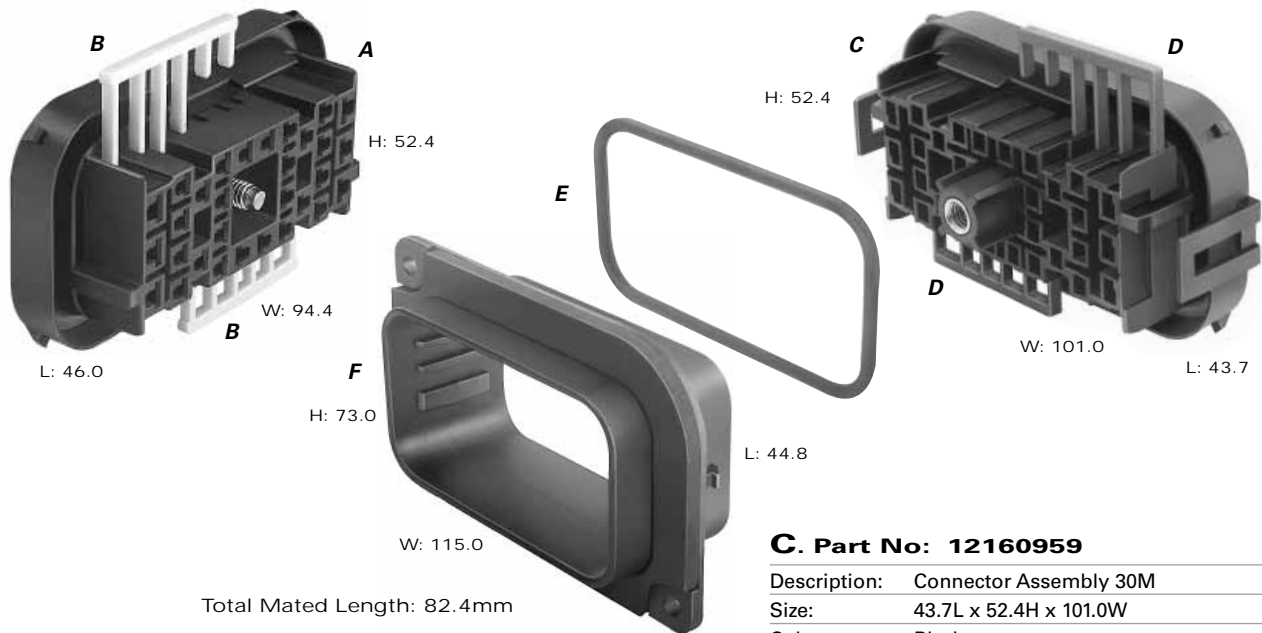
630 Metri-Pack Cavity Plug*			
Part #	Cavity Inside Diameter	Material	Color
12059255	9.8mm	Silicone	Green

*Cavity plugs seal unused female and male cavities.

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.



Junction Systems



A. Part No: 15492567

Description: Connector Assembly 30F
 Size: 46.0L x 52.4H x 94.4W
 Color: Black
 Material: PBT
 Terminals: See Page 2.90
 Seals/Plugs: See Page 2.92

B. Part No: 12066050

Description: Secondary Lock
 Number Req: 2
 Color: Natural
 Material: PBT

C. Part No: 12160959

Description: Connector Assembly 30M
 Size: 43.7L x 52.4H x 101.0W
 Color: Black
 Material: PBT
 Terminals: See Page 2.91
 Seals/Plugs: See Page 2.92
 Note: Wire dress cover 12066129 is available.

D. Part No: 12065848

Description: Secondary Lock
 Number Req: 2
 Color: Blue
 Material: PBT

E. Part No: 12065849

Description: Connector Seal
 Color: Green
 Material: Silicone

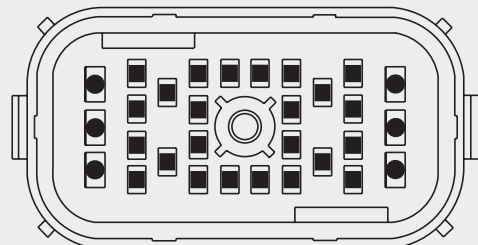
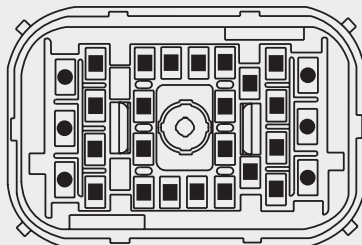
F. Part No: 13577943

Description: Pass-Through Shroud
 Size: 44.8L x 73.0H x 115.0W
 Color: Black
 Material: PBT 30% GF
 Note: Body mount shroud 12065847 is available.

KEY:

- 280 SERIES
- 480 SERIES

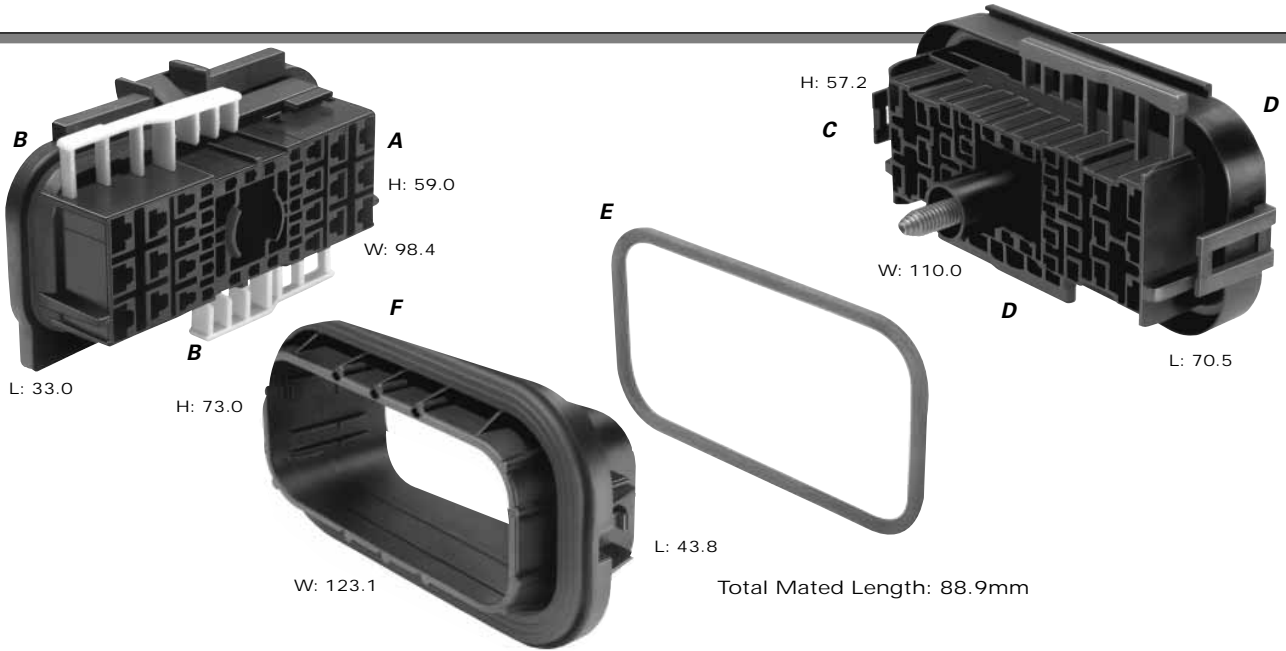
Mixed connectors feature a combination of different terminal cavities, as indicated by the key.



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.



Junction Systems

**A. Part No: 15492591**

Description:	Connector Assembly 36F (Unsealed)
Size:	33.0L x 59.0H x 98.4W
Color:	Black
Material:	PBT
Terminals:	See Page 2.82 for Unsealed terminals

B. Part No: 12064835

Description:	Secondary Lock
Number Req:	2
Color:	Natural
Material:	PBT

C. Part No: 15492562

Description:	Connector Assembly 36M
Size:	70.5L x 57.2H x 110.0W
Color:	Black
Material:	PBT
Terminals:	See Page 2.91
Seals/Plugs:	See Page 2.92

D. Part No: 12064834

Description:	Secondary Lock
Number Req:	2
Color:	Blue
Material:	PBT

E. Part No: 12064837

Description:	Connector Seal
Color:	Green
Material:	Silicone

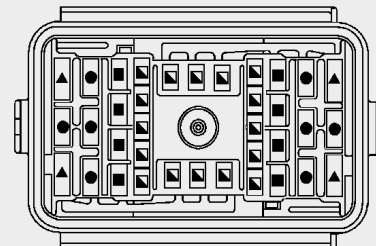
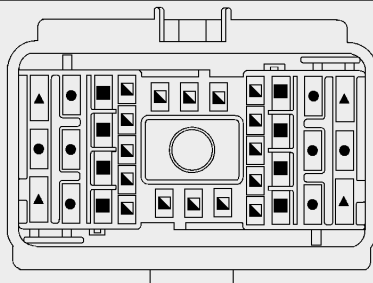
F. Part No: 12066590

Description:	Sliding Shroud
Size:	43.8L x 73.0H x 123.1W
Color:	Black
Material:	PBT 30% GF

KEY:

- ▣ 150 SERIES
- 280 SERIES
- 480 SERIES
- ▲ 630 SERIES

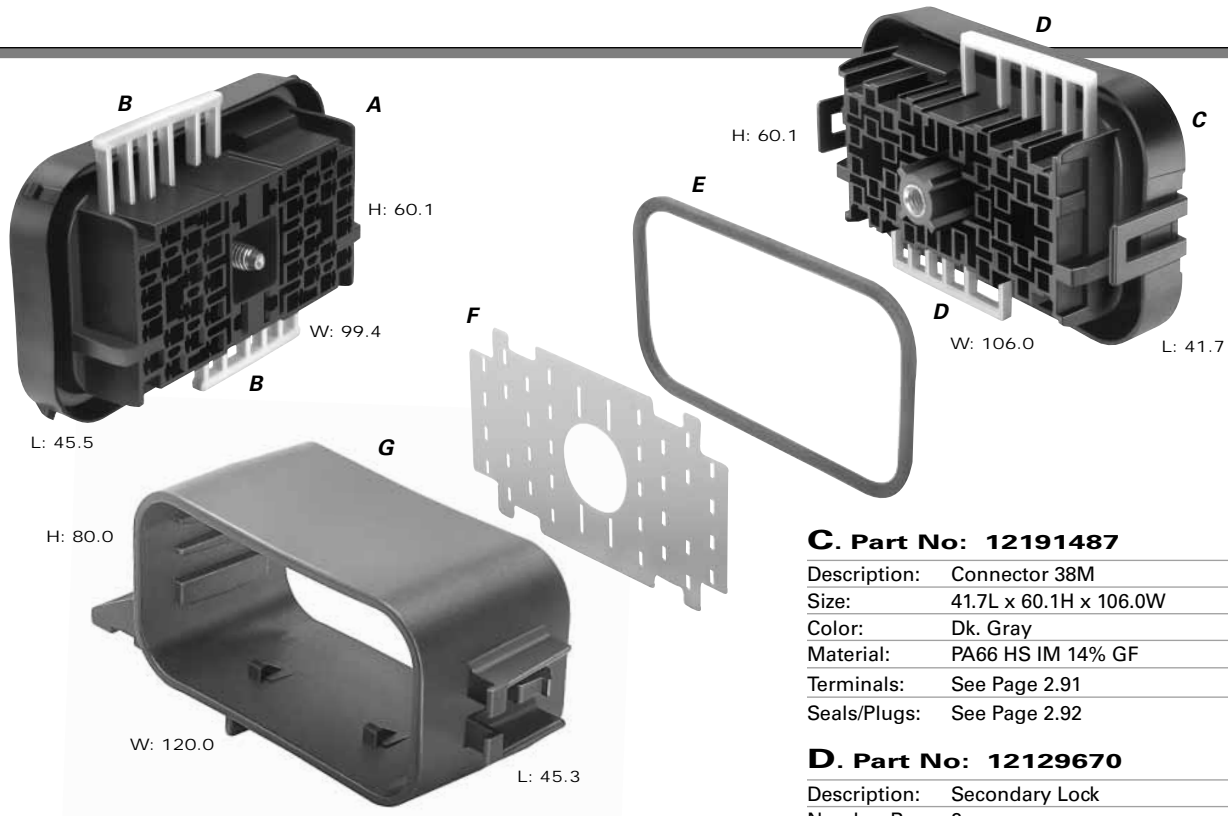
Mixed connectors feature a combination of different terminal cavities, as indicated by the key.



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.



Junction Systems



Total Mated Length: 85.3mm

A. Part No: 15492642

Description:	Connector Assembly 38F
Size:	45.5L x 60.1H x 99.4W
Color:	Black
Material:	PA66 14% GF HS IM & PA66 15% GF + MD 25% HS
Terminals:	See Page 2.90 - 280 Tangless See Page 2.90 - 630 Series
Seals/Plugs:	See Page 2.92

B. Part No: 12129669

Description:	Secondary Lock
Number Req:	2
Color:	Natural
Material:	PBT

C. Part No: 12191487

Description:	Connector 38M
Size:	41.7L x 60.1H x 106.0W
Color:	Dk. Gray
Material:	PA66 HS IM 14% GF
Terminals:	See Page 2.91
Seals/Plugs:	See Page 2.92

D. Part No: 12129670

Description:	Secondary Lock
Number Req:	2
Color:	Natural
Material:	PBT

E. Part No: 12129672

Description:	Connector Seal
Color:	Green
Material:	Silicone

F. Part No: 15317352

Description:	Stabilizer
Color:	Natural
Material:	Mylar

G. Part No: 12161191

Description:	Pass-Through Shroud
Size:	45.3L x 80.0H x 120.0W
Color:	Black
Material:	PBT 15% GF
Note:	Body mount shroud 12160809 is available.

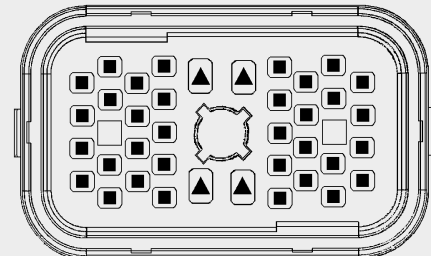
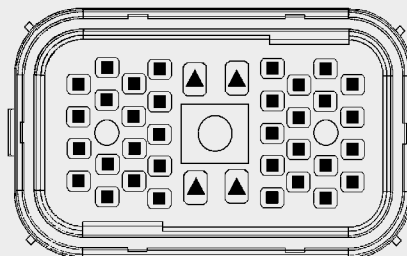
KEY:

TANGLISS



- 280 SERIES
- ▲ 630 SERIES

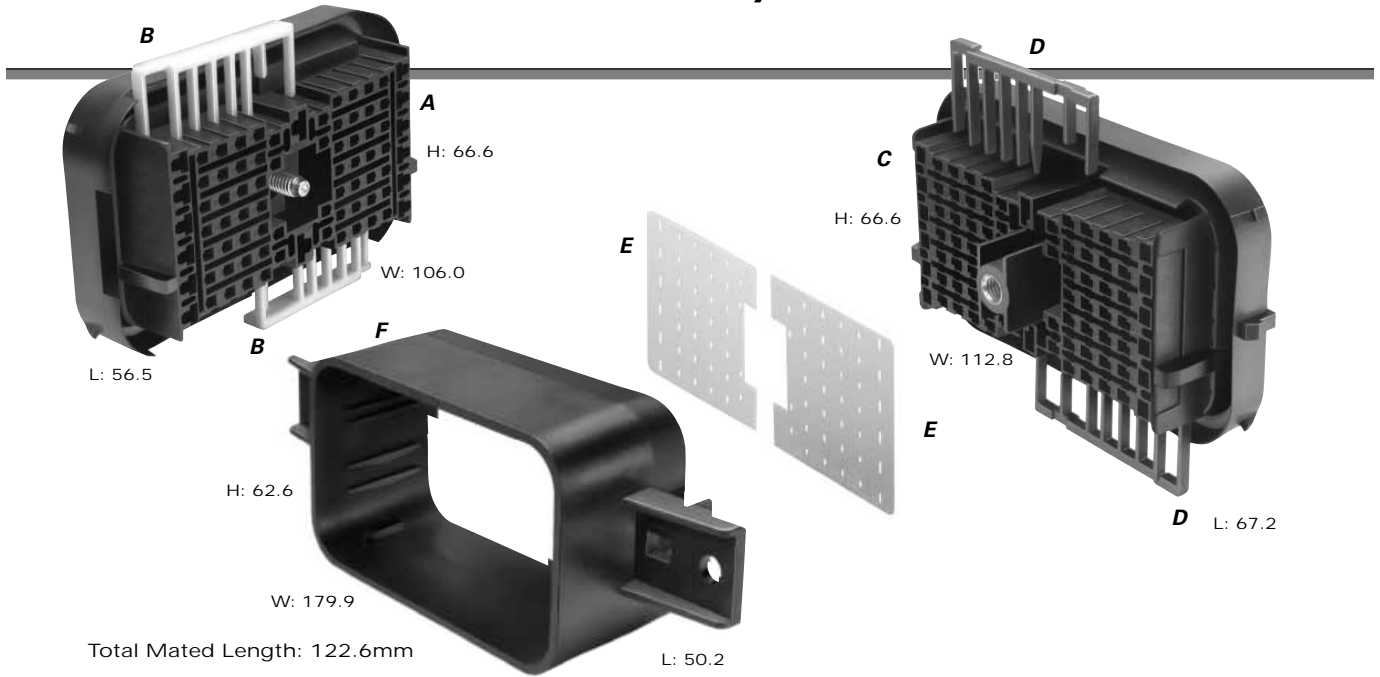
Mixed connectors feature a combination of different terminal cavities, as indicated by the key.



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.



Junction Systems



A. Part No: 15492601

Description:	Connector Assembly 78F
Size:	56.5L x 66.6H x 106.0W
Color:	Black
Material:	PA66 HS 33% GF
Terminals:	See Page 2.90
Seals/Plugs:	See Page 2.92

B. Part No: 12129214

Description:	Secondary Lock
Number Req:	2
Color:	Natural
Material:	PBT

C. Part No: 15498985

Description:	Connector Assembly 78M
Size:	67.2L x 66.6H x 112.8W
Color:	Black
Material:	PA66 HS 33% GF
Terminals:	See Page 2.91
Seals/Plugs:	See Page 2.92

D. Part No: 12129213

Description:	Secondary Lock
Number Req:	2
Color:	Blue
Material:	PBT

E. Part No: 12162573

Description:	Stabilizer
Number Req:	2
Color:	Natural
Material:	Mylar

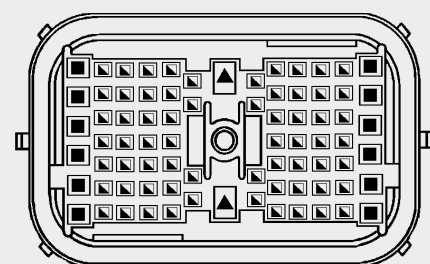
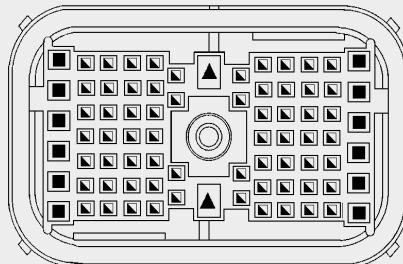
F. Part No: 12162527

Description:	Sliding Shroud
Size:	50.2L x 62.6H x 179.9W
Color:	Black
Material:	PBT

KEY:

- ▣ 150 SERIES
- 280 SERIES
- ▲ 630 SERIES

Mixed connectors feature a combination of different terminal cavities, as indicated by the key.



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.

Header



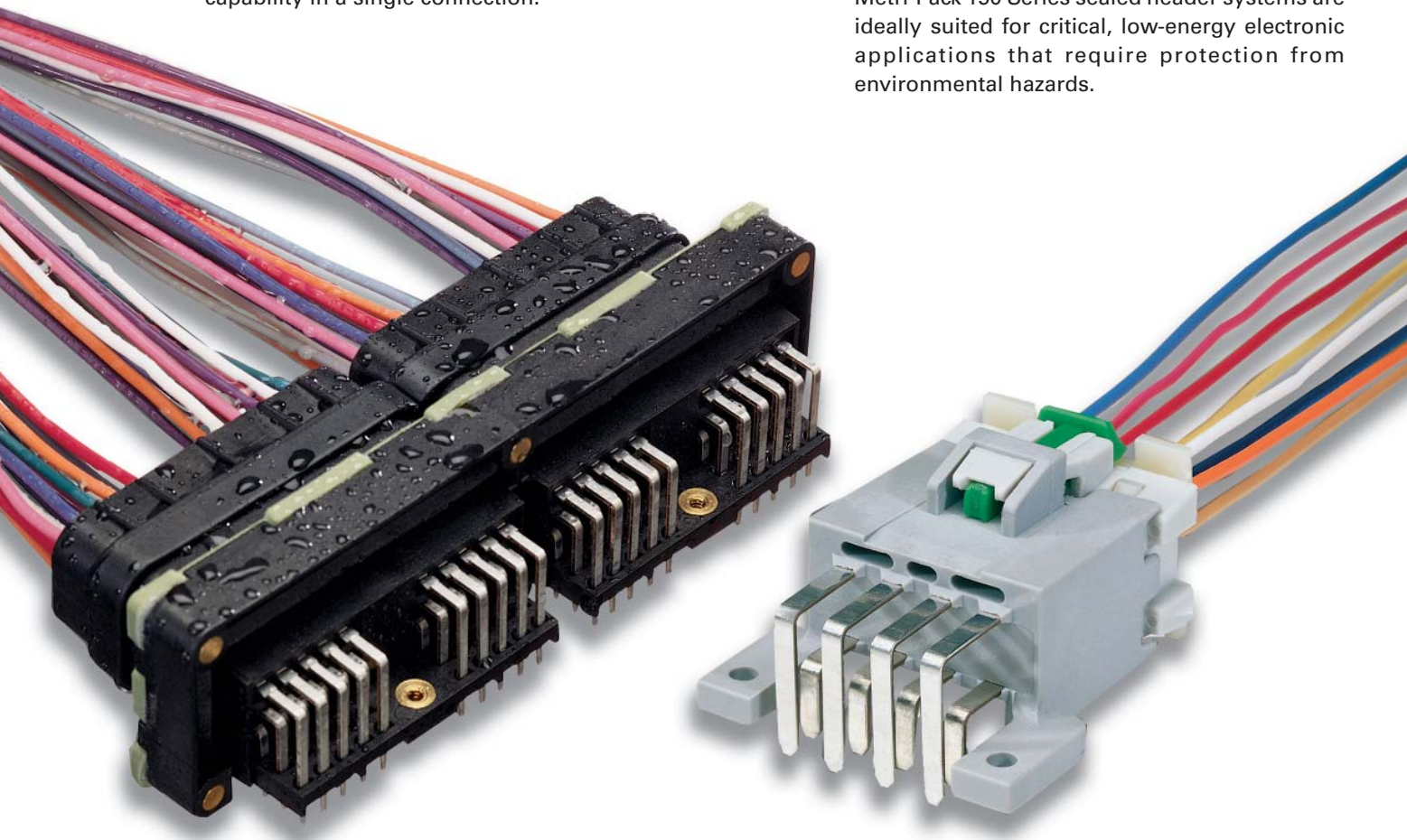
The Metri-Pack 280 Series unsealed electronic header is a versatile, and extremely rugged system designed to meet customer's power circuit needs.

This system offers the combination of excellent low energy electronic circuits and power circuit capability in a single connection.



The Metri-Pack 150 Series sealed electronic header is a rugged system designed for severe underhood environments. This system offers the combination of excellent low energy electronic circuits and power circuit capability in a single connection.

Metri-Pack 150 Series sealed header systems are ideally suited for critical, low-energy electronic applications that require protection from environmental hazards.



Metri-Pack Header Features

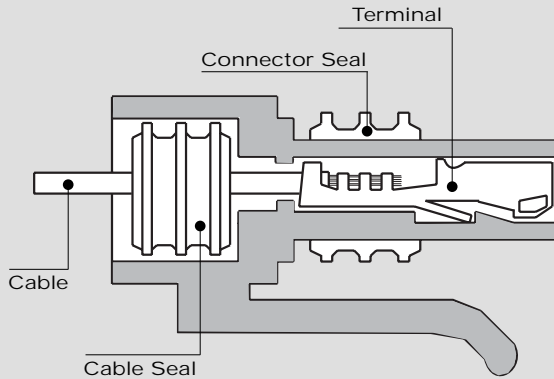
- Terminal Position Assurance (TPA)
- 14 Amps continuous maximum current rating for 150 Metri-Pack Series
- 30 Amps continuous maximum current rating for 280 Metri-Pack Series
- Low energy, low voltage capability
- Small overall dimensions
- Bolt assist connector to connector lock
- -40°C to 125°C temperature range



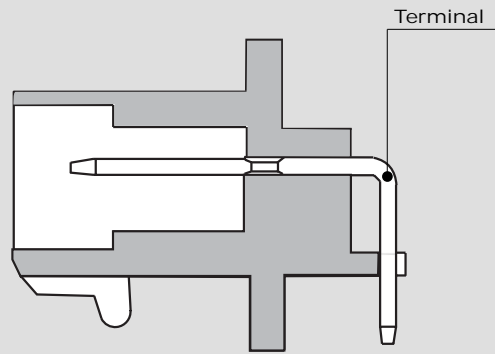
150 Header

Metri-Pack Series

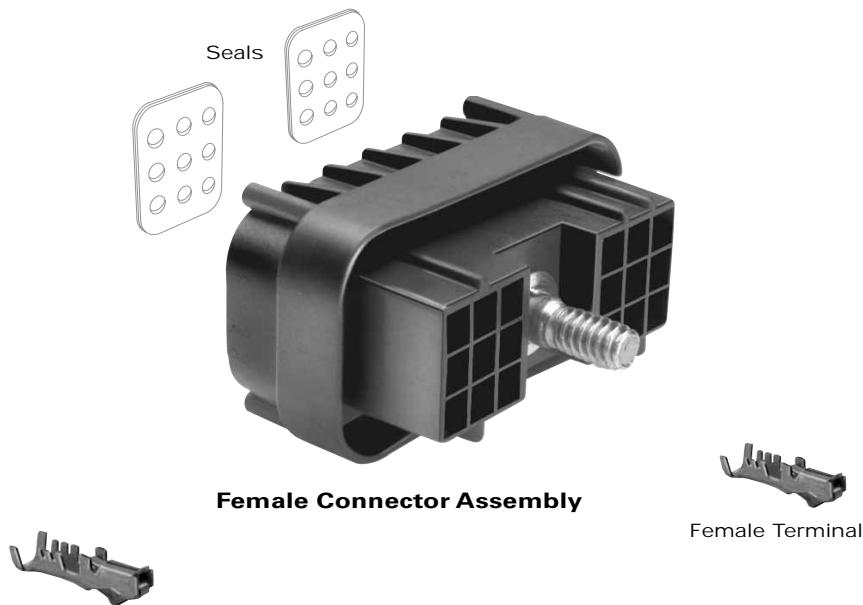
Cross Sectional View



Female Connector Assembly



Male Header Connector Assembly



Female Connector Assembly

Female Terminal

150 Pull-to-Seat Female Terminals Sealed			
Part #	Cable Range (mm ²)	Material	Plating
12089290	0.50-0.35	Silicon Bronze	Tin
12103881	1.0-0.80	Silicon Bronze	Tin
12110236	1.0-0.80-0.50	Beryllium Copper	Tin

150 Metri-Pack Female Connector Assemblies Sealed*			
# Cavities	Connector Assembly	Color	Material
18way: 18	15492546	Black	PBT 30% GF
30way: 30	15492553	Gray	PET 30% GF
48way: 18	15492546	Black	PBT 30% GF
: 30	15492542	Black	PET 30% GF
60way: 30	15492542	Black	PET 30% GF
: 30	15492543	Black	PET 30% GF

*Multiple cable seal is included in connector assembly.

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.

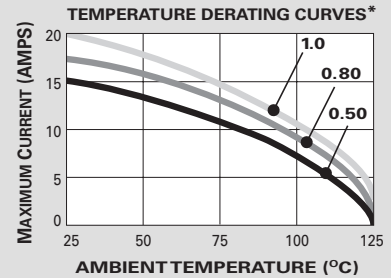
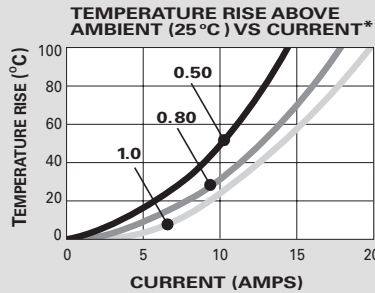


150 Header

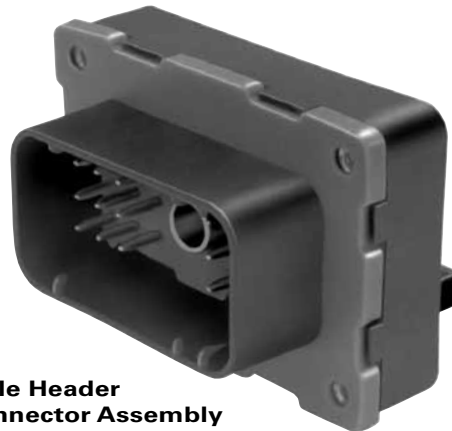
Sealed System Application Information

CABLE RANGE (mm²): 0.35-1.0
 CURRENT RANGE (AMPS): 0-14
 TEMP RANGE °C: -40 to 125
 RESISTANCE: <10mΩ@20mV
 VOLTAGE DROP: <10mV/amp
 CENTERLINE SPACING (mm):
 Connector Dependent
 BLADE WIDTH (mm): 1.5

150 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 Header Connector Assembly

12065266



12034413



150 Metri-Pack Male Header Connector Assemblies Sealed

Pins	Connector	Color	Material
18	12040923	Black	PET 30% GF
30	12048453	Gray	PET 30% GF
48	12052130	Black	PET 30% GF
60	12034396	Black	PET 30% GF

Terminals Included in Male Header.

Cable Seal Plugs

Part #	Cable Seal Hole Diameter (mm)	Material	Color	Type
12065266	1.85-1.65	PA6	Md. Gray	Machine Insertion
12034413	1.85-1.10	PA6	Black	Hand Insertion

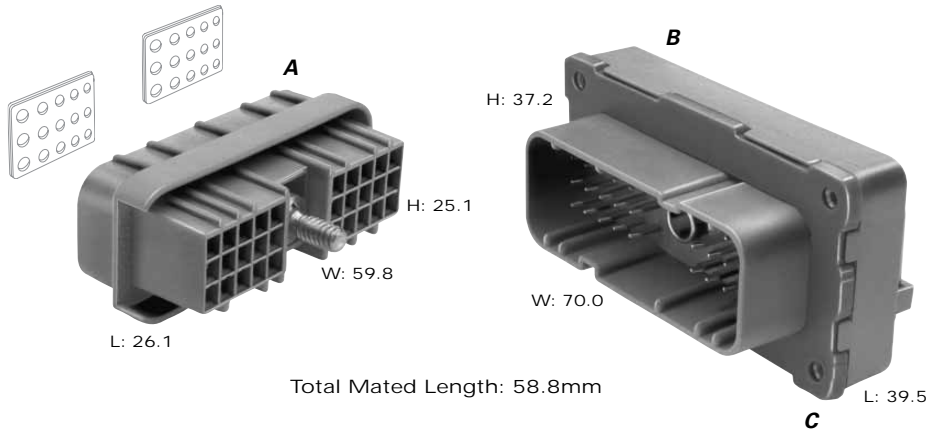
SECTION NOTES:

- Due to rigid tolerances of connector cavities, it is critical to meet all crimp dimensions as specified.
- Overall mated length varies with bolt measurement.
- Inner connector seal included in Male Header Connector Assemblies where applicable.

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.



150 Header



A. Part No: 15492553

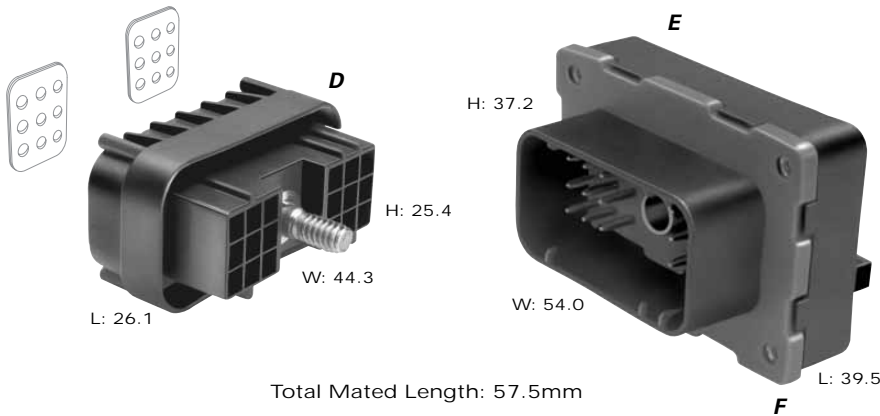
Description:	Connector Assembly 30F
Size:	26.1L x 25.1H x 59.8W
Color:	Gray
Material:	PET 30% GF
Terminals:	See Page 2.98, 150 Pull-To-Seat Female
Plugs:	See Page 2.99, Cable Seal Plugs

B. Part No: 12048453

Description:	Connector Assembly 30M
Size:	39.5L x 37.2H x 70.0W
Color:	Gray
Material:	PET 30% GF
Note:	Shipping cover 12040542 included.

C. Part No: 12048456

Description:	Flange Seal
Color:	Green
Material:	Silicone



D. Part No: 15492546

Description:	Connector Assembly 18F
Size:	26.1L x 25.4H x 44.3W
Color:	Black
Material:	PBT 30% GF
Terminals:	See Page 2.98, 150 Pull-To-Seat Female
Plugs:	See Page 2.99, Cable Seal Plugs

E. Part No: 12040923

Description:	Connector Assembly 18M
Size:	39.5L x 37.2H x 54.0W
Color:	Black
Material:	PET 30% GF
Note:	Shipping cover 12040940 included.

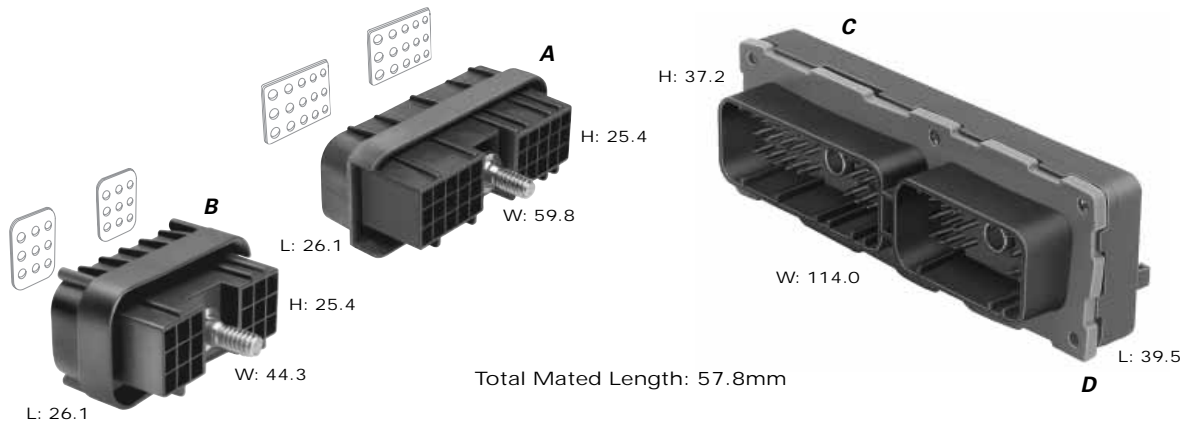
F. Part No: 12040938

Description:	Flange Seal
Color:	Green
Material:	Silicone

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.



150 Header



A. Part No: 15492542

Description:	Connector Assembly 30F
Size:	26.1L x 25.4H x 59.8W
Color:	Black
Material:	PET 30% GF
Terminals:	See Page 2.98, 150 Pull-To-Seat Female
Plugs:	See Page 2.99, Cable Seal Plugs

B. Part No: 15492546

Description:	Connector Assembly 18F
Size:	26.1L x 25.4H x 44.3W
Color:	Black
Material:	PBT 30% GF
Terminals:	See Page 2.98, 150 Pull-To-Seat Female
Plugs:	See Page 2.99, Cable Seal Plugs

C. Part No: 12052130

Description:	Connector Assembly 48M
Size:	39.5L x 37.2H x 114.0W
Color:	Black
Material:	PET 30% GF
Note:	Shipping covers 12040940 and 12040542 included.

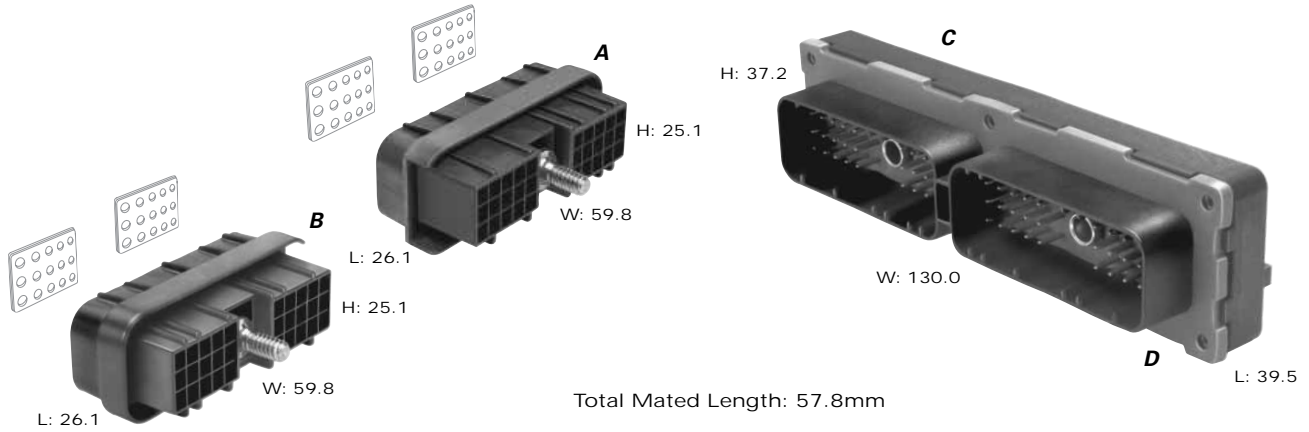
D. Part No: 12052131

Description:	Flange Seal
Color:	Green
Material:	Silicone

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.



150 Header



A. Part No: 15492542

Description:	Connector Assembly 30F
Size:	26.1L x 25.1H x 59.8W
Color:	Black
Material:	PET 30% GF
Terminals:	See Page 2.98, 150 Pull-To-Seat Female
Plugs:	See Page 2.99, Cable Seal Plugs

B. Part No: 15492543

Description:	Connector Assembly 30F
Size:	26.1L x 25.1H x 59.8W
Color:	Black
Material:	PET 30% GF
Terminals:	See Page 2.98, 150 Pull-To-Seat Female
Plugs:	See Page 2.99, Cable Seal Plugs

C. Part No: 12034396

Description:	Connector Assembly 60M
Size:	39.5L x 37.2H x 130.0W
Color:	Black
Material:	PET 30% GF
Note:	Shipping cover 12040542 (2 Req'd.) included

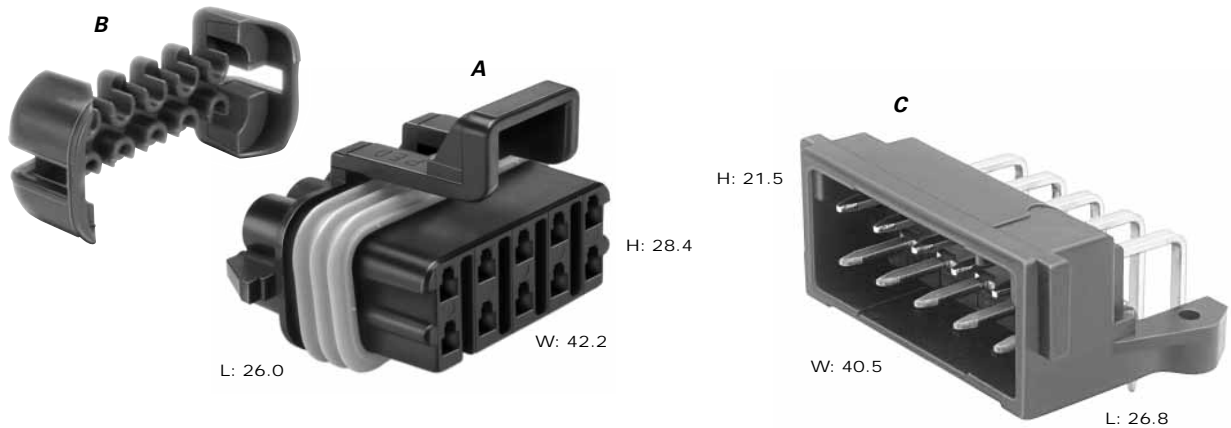
D. Part No: 12040780

Description:	Flange Seal
Color:	Green
Material:	Silicone

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.



150 Header



Total Mated Length: 46.7mm

A. Part No: 12065425

Description:	Connector Assembly 10F
Size:	26.0L x 28.4H x 42.2W
Color:	Black
Material:	PA66 HS IM
Terminals:	See below, 150 Female Push to Seat
Seals/Plugs:	See below, 150 Metri-Pack

C. Part No: 12160446

Description:	Connector Assembly 10M
Size:	26.8L x 21.5H x 40.5W
Color:	Black
Material:	PBT 30% GF
Note:	Sealing Shroud and Locking Feature for Connector Assembly must be designed into mating device housing.

B. Part No: 12177082

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



150 Female Terminals Sealed

Part #	Cable Range (mm ²)	Material	Plating
12048074	1.0-0.80-0.50	Silicon Bronze	Tin
12084200	0.50-0.35	Silicon Bronze	Tin
12160223	1.0-0.80	Beryllium Copper	Silver/Nickel
12160222	0.50-0.35	Beryllium Copper	Silver/Nickel



150 Metri-Pack Cavity Plug*

Part #	Cavity Inside Diameter	Material	Color
12059168	5.2mm	Silicone	Dk. Red

*Cavity plugs seal unused female and male cavities.



150 Metri-Pack Cable Seals

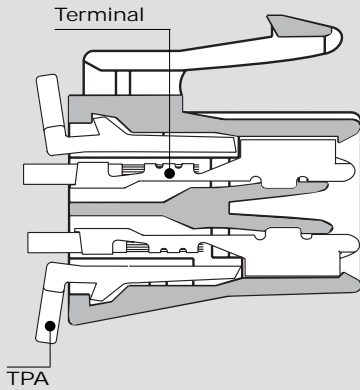
Reel Part #	Loose Part #	Cable Dia.	Material	Color
12052924	15324973	2.85-2.03	Silicone	Dk. Red
12089442	15324976	2.15-1.60	Silicone	White
12052925	15324974	1.70-1.29	Silicone	Blue
12124669	15324975	1.009-0.995	Silicone	Tan

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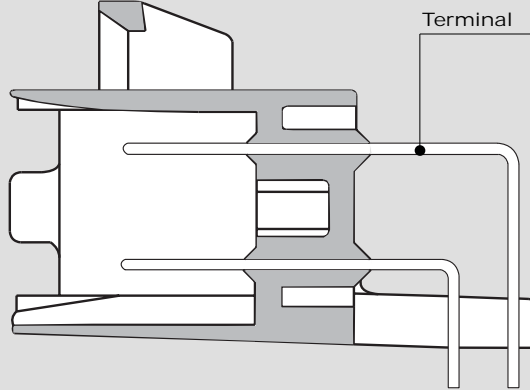


280 Header

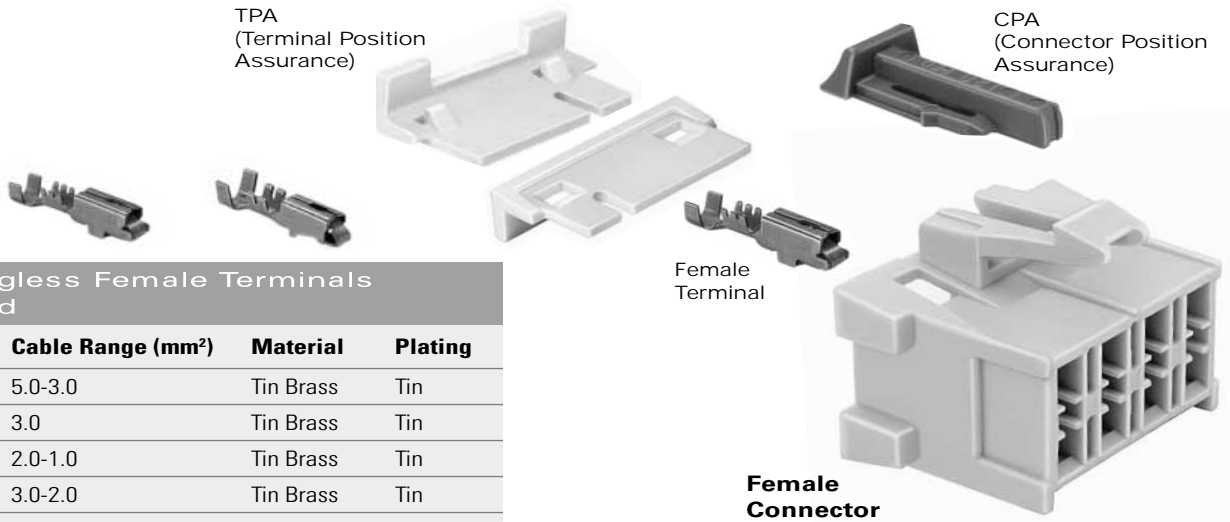
Cross Sectional View



Female Connector



Male Header Connector Assembly



280 Tangless Female Terminals Unsealed

Part #	Cable Range (mm ²)	Material	Plating
12129425	5.0-3.0	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*	2.0-0.35	Tin Brass	Tin

*Thin Stock—Electrical current restrictions apply.

280 Female Terminals Unsealed

Part #	Cable Range (mm ²)	Material	Plating
12015858	5.0-3.0	Tin Brass	Tin
12129494	3.0-2.0	Tin Brass	Tin
12034046	0.80-0.50	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.

280 Metri-Pack Female Connector Unsealed

# Cavities	Connector	Color	Material	TPA
4	12052856	Black	PA66 HS IM	15324456



280 Metri-Pack Flexlock Female Connector Unsealed

# Cavities	Connector	Color	Material	TPA
8	12110626†	Lt. Gray	PA66 HS IM	15324332

† Use p/n 15357040 to mate to audio amplifiers.

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.

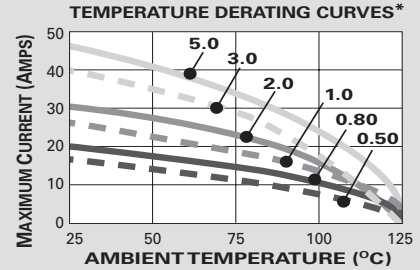
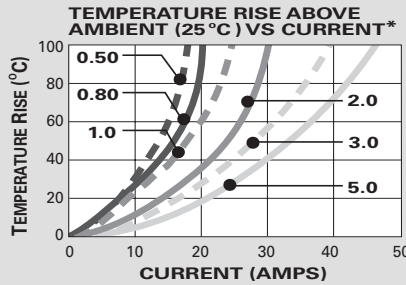


280 Header

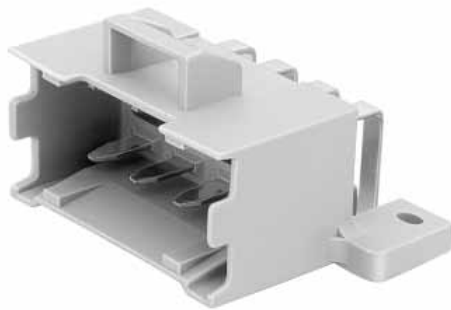
Unsealed System Application Information

CABLE RANGE (mm²): 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): 6.9
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.



**Male Header
Connector Assembly**

280 Metri-Pack Male Header Connector Assembly Unsealed

Pins	Connector	Color	Material
4	12110440	Black	PA66 HS IM



280 Metri-Pack Male Header Connector Assembly Unsealed

Pins	Connector	Color	Material
8	12146724	Gray	PBT 30% GF

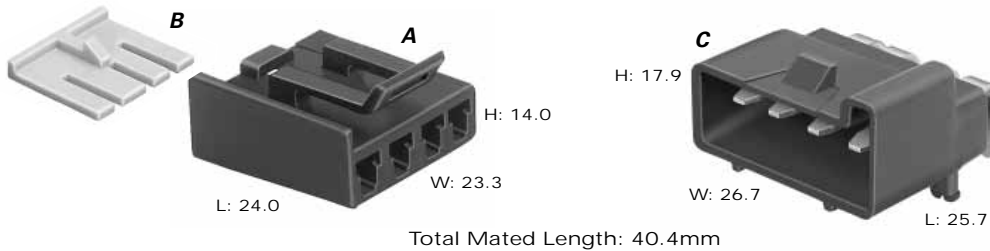
SECTION NOTES:

- Due to rigid tolerances of connector cavities, it is critical to meet all crimp dimensions as specified.

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 Header

**A. Part No: 12052856**

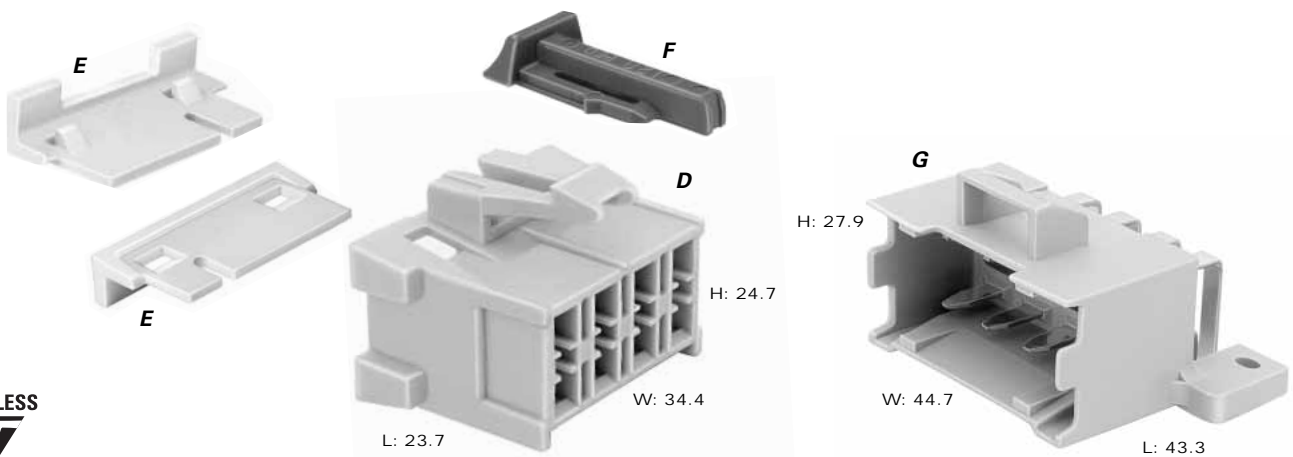
Description:	Connector 4F
Size:	24.0L x 14.0H x 23.3W
Color:	Black
Material:	PA66 HS IM
Terminals:	See Page 2.104, 280 Female

C. Part No: 12110440

Description:	Connector 4M
Size:	25.7L x 17.9H x 26.7W
Color:	Black
Material:	PA66 HS IM

B. Part No: 15324456

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

**D. Part No: 12110626† (Lt. Gray)
12129088 (Black)**

Description:	Connector 8F
Size:	23.7L x 24.7H x 34.4W
Material:	PA66 HS IM
Terminals:	See Page 2.104, 280Tangleless Female

**G. Part No: 12146724 (Gray)
12146735 (Black)**

Description:	Connector 8M
Size:	43.3L x 27.9H x 44.7W
Material:	PBT 30% GF

E. Part No: 15324332

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

F. Part No: 12052834

Description:	CPA
Color:	Green
Material:	PP

† Use p/n 15357040 to mate to audio amplifiers.

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.