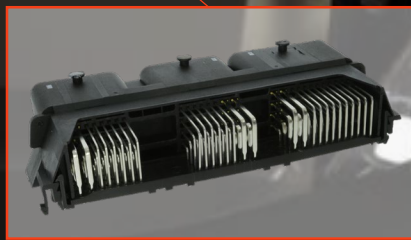
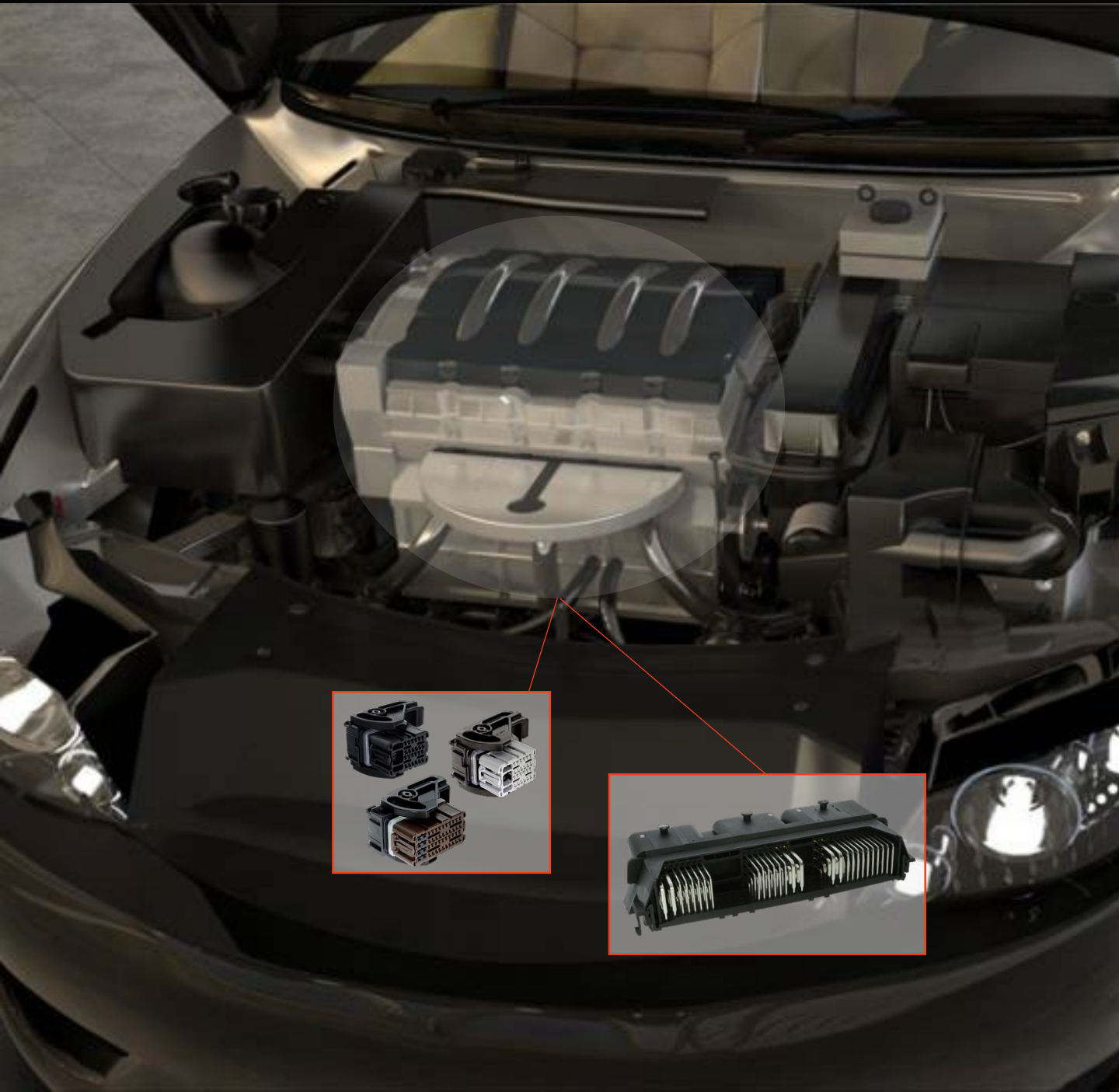


# CMC : PRODUCT **SELECTOR** GUIDE



# CMC Series: A **wide** product range to **fit** your needs!

CMC is one of the most popular interfaces for Engine Management **and** Electronic Control Units because of its compact size, high density connectors, sealed **connection systems** for Electronic Control Units application and lastly it is suitable for harsh environment.



Headers, Connectors, Cover Parts, Terminals,  
Cavity Plugs & Tooling

32 / 48 / 64 / 86 / 112 / 154 Ways

# CMC System



## AVAILABLE CONFIGURATIONS

Blade Configurations	0.64, 1.5, Mixed
Cavity Configurations	32, 48, 64, 86 way
Genders	Male (Wire-to-board) Female (Cable Housing)
Connector Sealing	Sealed
Terminal Type	Clean Body
Terminal Sealing	Mat Seal
Terminal Plating	Tin (Zn)*
Cable Size	0.22 - 2.5mm <sup>2</sup> on copper aluminum dR™ (differential ratio)

## APPLICATIONS

- Chassis
- Engine compartment
- ECU

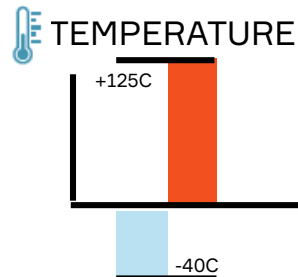
## KEY FEATURES

- TPA front holder latch for lock & unlock
- Smooth guided terminal insertion
- Polarized Terminals
- Clean body terminals friendly to block/mat seal

## KEY BENEFITS

- High Terminal Retention Force
- Standard footprint interface interchangeable with multiple suppliers
- A wide product range
- Mat seal is pre-closed by means of a membrane on the 0.64 mm cavities (no need for the cavity plug)
- Easy cable assembly

## VIBRATION TEMPERATURE



## SEALING VOLTAGE

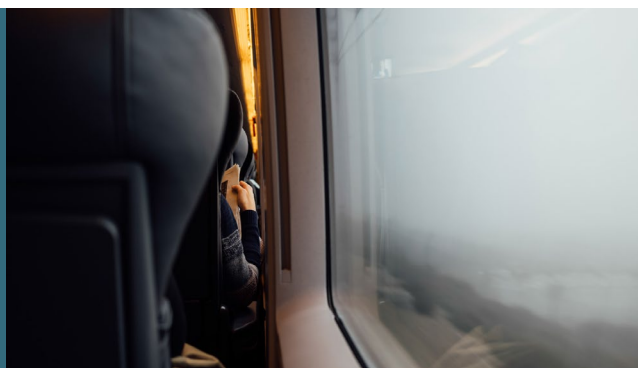


Water Proof Class –  
Immersion plus  
IPx9K

### About Aptiv

Aptiv is a global technology company that develops safer, greener and more connected solutions, which enable the future of mobility. Headquartered in Gillingham, England, Aptiv has 147,000 employees and operates 14 technical centers, as well as manufacturing sites and customer support centers, in 45 countries.

Visit [aptiv.com](http://aptiv.com)



\* Alternative plating available

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Image	Page #	Description	Wire dress cover orientation
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# CMC Series

## 32W Header



Description: 32w Header  
Sealing protection: IPx9K/IP68  
Terminal blade: 24x 0,64mm  
8x 1,50mm  
Temperature range: -40°C to + 125°C  
Connector mating force: < 60N  
N. of mechanical coding: 4

Part Number	Connector Type	Color Coding (mates same key housing)
33503152	32W Header	Blue
33503150	32W Header	Brown
33503149	32W Header	Grey
33503151	32W Header	Black

### COMPATIBLE WITH 32W MATING CONNECTORS



Family: GTS Terminal(s) size (mm<sup>2</sup>): 0.64, 1.5  
Series: Mixed Temperature range: -40°C to +125°C  
Cavities: 32 Terminal retention force: 80N > 100N  
Material: PBT

Part Number	Connector Type	Color/Wire Direction
13851306	32W Female Sealed	Black/Right
13741940	32W Female Sealed	Black/Left
33500498	32W Female Sealed	Blue/Right
33500497	32W Female Sealed	Blue/Left
33500496	32W Female Sealed	Brown/Right
33500495	32W Female Sealed	Brown/Left
33500494	32W Female Sealed	Grey/Right
33500507	32W Female Sealed	Grey/Left

# COMPATIBLE WITH 32W DRESS COVER



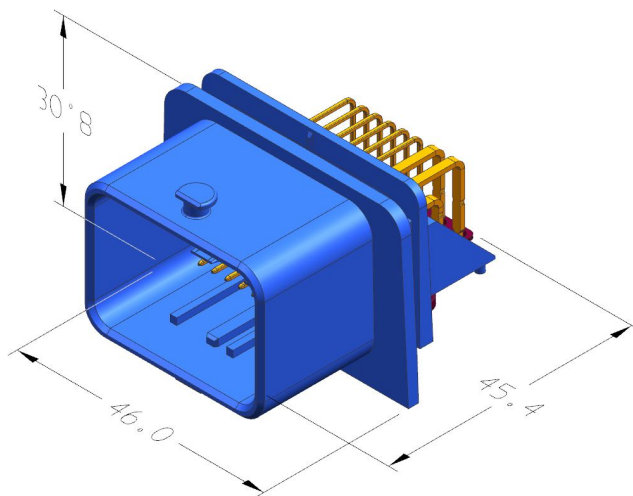
Part Number	Description	Color Coding	Orientation
13851307	32W Housing Dress Cover	Black	90°

## 0.64MM AND 1.5MM TERMINALS



Part Number	Terminal Type	Wire Size (mm <sup>2</sup> )	Plating
13955989	0.64 GTS	0.35	Tinned
13648598	0.64 GTS	0.50	Tinned
13712871	1.5 GTS	0.50 - 0.85	Tinned
13741954	1.5 GTS	1.0 - 1.30	Tinned
13749482	1.5 GTS	1.4 - 2.0	Tinned

## 32W HEADER 3D DRAWING





# CMC Series

## 48W Header



Description: 48w Header  
Sealing protection: IPx9K/IP68  
Terminal blade: 40x 0,64mm  
8x 1,50mm  
Temperature range: -40°C to +125°C  
Connector mating force: < 60N  
N. of mechanical coding: 1

Part Number	Connector Type	Color Coding
33503457	48W Header	Black (mates black key housing)

## COMPATIBLE WITH 48W MATING CONNECTORS



Family: GTS Terminal(s) size (mm<sup>2</sup>): 0.64, 1.5  
Series: Mixed Temperature range: -40°C to +125°C  
Cavities: 48 Terminal retention force: 80N > 100N  
Material: PBT

Part Number	Connector Type	Color/ Wire Direction
13956255	48W Female Sealed	Black/Right
13956021	48W Female Sealed	Black/Left

## OTHER 48W CONNECTOR CODINGS\*

33500420	48W Female Sealed	Brown/Right
33500419	48W Female Sealed	Brown/Left
33500500	48W Female Sealed	Grey/Right
33500499	48W Female Sealed	Grey/Left

\*Compatible with Aptiv 112 & 154w headers and/or other suppliers

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# COMPATIBLE WITH

## 48W DRESS COVERS



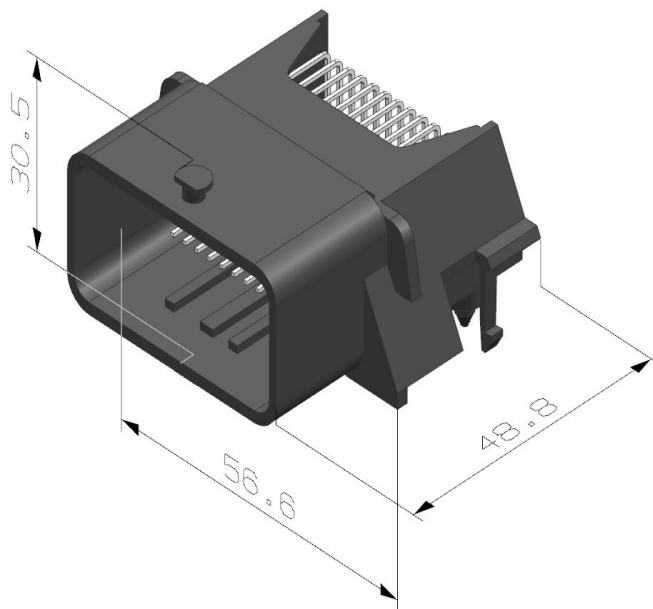
Part Number	Description	Color Coding	Wire Output
13956254	48W Housing dress cover	Black	90°
33517228	48W Housing dress cover	Black	45°

## 0.64MM AND 1.5MM TERMINALS



Part Number	Terminal Type	Wire Size (mm <sup>2</sup> )	Plating
13955989	0.64 GTS	0.35	Tinned
13648598	0.64 GTS	0.50	Tinned
13712871	1.5 GTS	0.50 - 0.85	Tinned
13741954	1.5 GTS	1.0 - 1.30	Tinned
13749482	1.5 GTS	1.4 - 2.0	Tinned

## 48W HEADER 3D DRAWING





# CMC Series

## 64W Header



Description: 64w Header  
Sealing protection: IPx9K/IP68  
Terminal blade: 56x 0,64mm  
8x 1,50mm  
Temperature range: -40°C to +125°C  
Connector mating force: < 60N  
N. of mechanical coding: 1

Part Number	Connector Type	Color Coding
33504510	64W Header	Black
35110623	64W Header	Grey

## COMPATIBLE WITH 64W MATING CONNECTORS



Family: GTS      Terminal(s) size (mm<sup>2</sup>): 0.64, 1.5  
Series: Mixed      Temperature range: -40°C to +125°C  
Cavities: 64      Terminal retention force: 80N > 100N  
Material: PBT

Part Number	Connector Type	Color/Wire Direction
13648596	64W Female Sealed	Black/Right
13722628	64W Female Sealed	Black/Left
33500504	64W Female Sealed	Grey/Right
33500503	64W Female Sealed	Grey/Left

# COMPATIBLE WITH

## 64W DRESS COVER



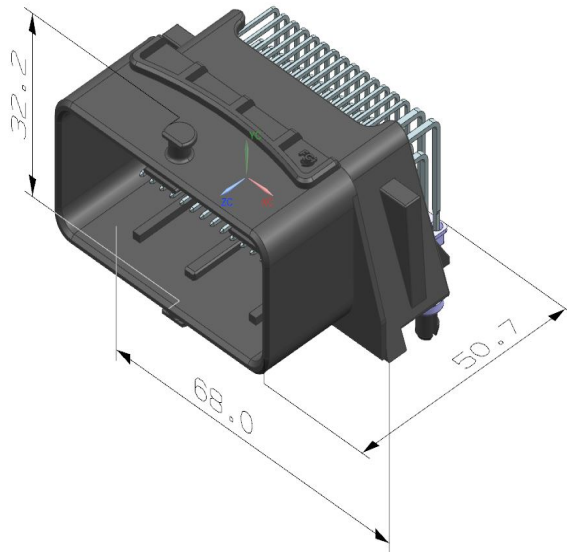
Part Number	Description	Color Coding	Wire Output
13648597	64W Housing Dress Cover	Black	90°

## 0.64MM AND 1.5MM TERMINALS



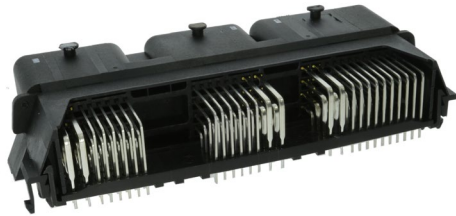
Part Number	Terminal Type	Wire Size (mm <sup>2</sup> )	Plating
13955989	0.64 GTS	0.35	Tinned
13648598	0.64 GTS	0.50	Tinned
13712871	1.5 GTS	0.50 - 0.85	Tinned
13741954	1.5 GTS	1.0 - 1.30	Tinned
13749482	1.5 GTS	1.4 - 2.0	Tinned

## 64W HEADER 3D DRAWING



# CMC Series

## 112W Header (32 + 32 + 48)



Description: 112w Header  
Sealing protection: IPx9K/IP68  
Terminal blade: 24x 0,64mm  
8x 1,50mm  
Temperature range: -40°C to +125°C  
Connector mating force: < 60N  
N. of mechanical coding: 1

Part Number	Connector Type	Color Coding
33504045	112W Header	Black/Grey/Brown

### COMPATIBLE WITH 112W MATING CONNECTORS



Family: GTS  
Series: Mixed  
Cavities: 112  
Terminal(s) size (mm<sup>2</sup>): 0.64, 1.5  
Temperature range: -40°C to +125°C  
Terminal retention force: 80N > 100N  
Material: PBT

Part Number	Connector Type	Color/ Wire Direction
13741940	32W Female Sealed	Black/Left
33500494	32W Female Sealed	Grey/Right
33500419	48W Female Sealed	Brown/Left

# COMPATIBLE WITH

## 112W DRESS COVERS



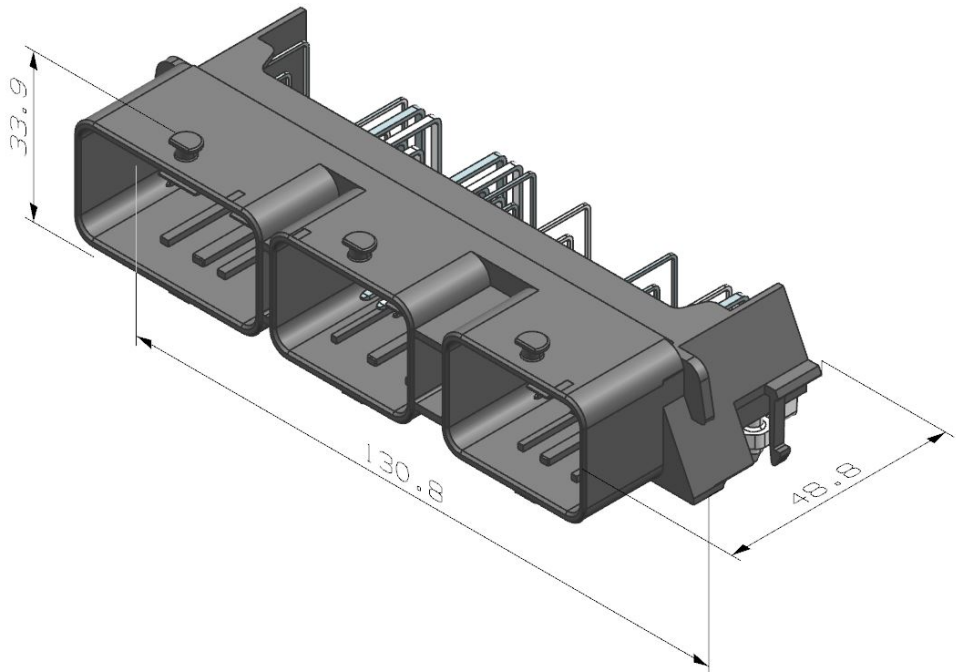
Part Number	Description	Color Coding	Orientation
13851307	32W Housing Dress Cover	Black	90°
13956254	48W Housing dress cover	Black	90°
33517228	48W Housing dress cover	Black	45°

## 0.64MM AND 1.5MM TERMINALS



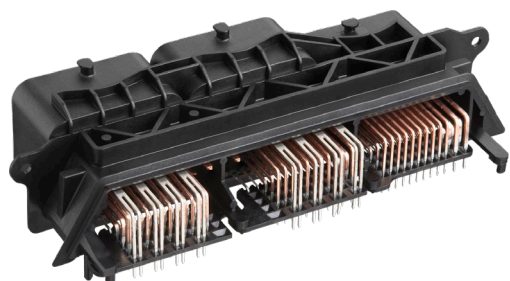
Part Number	Terminal Type	Wire Size (mm <sup>2</sup> )	Plating
13955989	0.64 GTS	0.35	Tinned
13648598	0.64 GTS	0.50	Tinned
13712871	1.5 GTS	0.50 - 0.85	Tinned
13741954	1.5 GTS	1.0 - 1.30	Tinned
13749482	1.5 GTS	1.4 - 2.0	Tinned

## 112W HEADER 3D DRAWING



# CMC Series

## 154W Header (53 + 53 + 48)



Description: 154w Header  
Sealing protection: IPx9K/IP68  
Terminals blade: 24x 0,64mm  
8x 1,50mm  
Temperature range: -40°C to +125°C  
Connector mating force: < 60N  
N. of mechanical coding: 1

Part Number	Connector Type	Color Coding
33513909	154W	(48W Grey+ 53W Brown + 53W Black)

## COMPATIBLE WITH 154W MATING CONNECTORS\*



\*2x 53Way

Family: GTS  
Series: Mixed  
Cavities: 154  
Terminal(s) size (mm<sup>2</sup>): 0.64, 1.5, 2.8 (53Way)  
Temperature range: -40°C to +125°C  
Terminal retention force: 80N > 100N  
Material: PBT GF30

Part Number	Connector Type	Color/Wire Direction
13956255	48W Female Sealed	Grey/Right
13956021	48W Female Sealed	Grey/Left

\*53W pocket compatible with generic connectors on market

# COMPATIBLE WITH

## 154W DRESS COVERS



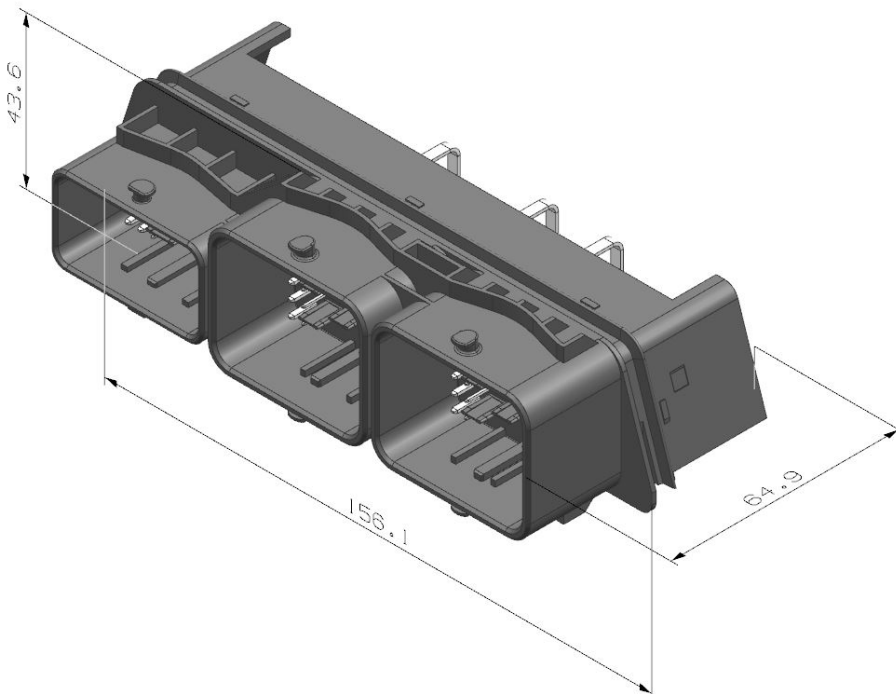
Part Number	Description	Color Coding	Wire Output
13956254	48W Housing dress cover	Black	90°
33517228	48W Housing dress cover	Black	45°

## 0.64MM AND 1.5MM TERMINALS



Part Number	Terminal Type	Wire Size (mm <sup>2</sup> )	Plating
13955989	0.64 GTS	0.35	Tinned
13648598	0.64 GTS	0.50	Tinned
13712871	1.5 GTS	0.50 - 0.85	Tinned
13741954	1.5 GTS	1.0 - 1.30	Tinned
13749482	1.5 GTS	1.4 - 2.0	Tinned

## 154W HEADER 3D DRAWING



# CMC Series

## Product Focus – 86W Connector\*

### 86W MATING CONNECTORS



Family: RH, GTS, APEX Terminal(s) size (mm<sup>2</sup>): 0.64, 1.5 , 2.8  
Series: Mixed Temperature range: -40°C to +125°C  
Cavities: 86 Terminal retention force: 80N > 100N  
Material: PBT

Part Number	Connector Type	Color/Wire Direction
33156001	86W Female Sealed	Brown/Right
33155995	86W Female Sealed	Brown/Left
33156000	86W Female Sealed	Grey/Right
33155993	86W Female Sealed	Grey/Left

### CORRESPONDING TERMINAL MODULES

33121921	38W Female B Module (for 86w)	-
33121920	38W Female A Module (for 86w)	-

\*For more information on compatible Headers available on the market, please contact your local sales representative.



## COMPATIBLE WITH 86W DRESS COVERS



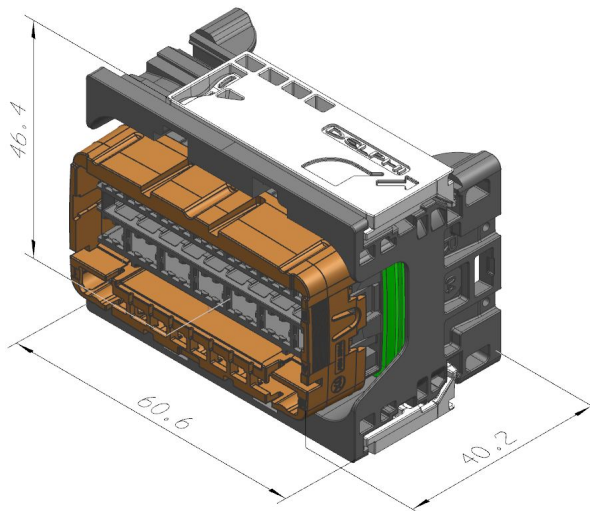
Part Number	Description	Color/Coding	Orientation
33121915	86W Dress Cover	Black	90°
33121914	86W Lever	Grey	90°

## GTS 0.64MM AND GTS2 1.5MM AND APEX 2.8 TERMINALS



Part Number	Terminal Type	Wire Size (mm <sup>2</sup> )	Plating
13955989	0.64 GTS	0.35	Tinned
13648598	0.64 GTS	0.50	Tinned
13737770	1.5 GTS	0.5 - 0.85	Tinned
13860784	1.5 GTS	1.0 - 1.3	Tinned
13737773	1.5 GTS	1.4 - 2	Tinned
10810375	2.8 APEX	0,5 - 1,25	Tinned
13627267	2.8 APEX	1.5 - 2.5	Tinned

## 86W CONNECTOR 3D DRAWING



# Associated Parts - 32, 48, 64 & 86 Ways

## 0.64MM AND 1.5MM CAVITY PLUG

Part Number	Terminal Type	Color	Case of Use
13768626	0.64	White	Insertion of a wrong cavity – repairing purpose
13826722	1.50	Blue	Unloaded 1.5 mm cavity



## TOOLING

Part Number	Description
10915564	0.64mm Terminal Extraction tool
10915565	1.5mm Terminal Extraction tool
10915566	Cover removal tool
33105886	0.64mm Dummy Plug insertion tool
33105887	1.5 Dummy Plug insertion tool
-	2.8 mm Female Terminal Extraction tool
33513040	TPA removal tool
33514306	Crimper 1.5 GTS
33514360	Crimper 0.64 GTS
-	2.8 Plug insertion tool
M3479106	Terminal Positioning Assurance (TPA) opening tool



# Associated Parts

## 86 Ways

### 0.64MM AND 1.5MM SEALS & CAVITY PLUG

Part Number	Terminal Type	Color	Case of Use
10736278	0.5 - 0.85	Yellow	Single wire seal
10736279	1.0 - 2.0	Green	Single wire seal
10779162	0.5 - 1.0	Blue	Single wire seal
13578695	1.25	Brown	Single wire seal
10779159	1.5 - 2.0	Red	Single wire seal
10779161	2.5	Yellow	Single wire seal
10787316	1.5	White	Single wire seal
10779160	2.8	Green	Single wire seal
13629105	0.64	White	Cavity plug



## Connector Part numbers

Part Number	Connector Type	Color / Wire Direction	Orientation
33503152	32W Header	Blue	-
33503150	32W Header	Brown	-
33503149	32W Header	Grey	-
33503151	32W Header	Black	-
13851306	32W Female Sealed	Black/Right	-
13741940	32W Female Sealed	Black/Left	-
33500498	32W Female Sealed	Blue/Right	-
33500497	32W Female Sealed	Blue/Left	-
33500496	32W Female Sealed	Brown/Right	-
33500495	32W Female Sealed	Brown/Left	-
33500494	32W Female Sealed	Grey/Right	-
33500507	32W Female Sealed	Grey/Left	-
13851307	32W Housing Dress Cover	Black	90°
33503457	48W Header	Black (mates black key housing)	-
13956255	48W Female Sealed	Black/Right	-
13956021	48W Female Sealed	Black/Left	-
33500420	48W Female Sealed	Brown/Right	-
33500419	48W Female Sealed	Brown/Left	-
33500500	48W Female Sealed	Grey/Right	-
33500499	48W Female Sealed	Grey/Left	-
13956254	48W Housing dress cover	Black	90°
33517228	48W Housing dress cover	Black	45°
33504510	64W Header	Black	-
35110623	64W Header	Grey	-
13648596	64W Female Sealed	Black/Right	-
13722628	64W Female Sealed	Black/Left	-
33500504	64W Female Sealed	Grey/Right	-
33500503	64W Female Sealed	Grey/Left	-
13648597	64W Housing Dress Cover	Black	90°
33504045	112W Header	Black/Grey/Brown	-
33513909	154W	(48W Grey+ 53W Brown + 53W Black)	-
33121921	38W Female B Module (for 86w)	-	-
33121920	38W Female A Module (for 86w)	-	-
33156001	86W Female Sealed	Brown/Right	-
33155995	86W Female Sealed	Brown/Left	-
33156000	86W Female Sealed	Grey/Right	-
33155993	86W Female Sealed	Grey/Left	-
33121915	86W Dress Cover	Black	90°
33121914	86W Lever	Grey	90°

Part numbers, specifications, dimensions and performance data in this document are for general references only and are subject to change without notice. To verify product information, please contact a Aptiv representative.

## Terminal Part numbers

Part Number	Terminal Type	Wire Size	Orientation	Associated With
13955989	0.64 GTS	0.35	Tinned	32, 48, 64, 86, 112, & 154 Ways
13648598	0.64 GTS	0.50	Tinned	32, 48, 64, 86, 112, & 154 Ways
13712871	1.5 GTS	0.50 - 0.85	Tinned	32, 48, 64, 112, & 154 Ways
13741954	1.5 GTS	1.0 - 1.30	Tinned	32, 48, 64, 112, & 154 Ways
13749482	1.5 GTS	1.4 - 2.0	Tinned	32, 48, 64, 112, & 154 Ways
13774269	1.5	0.5 - 0.85	Tinned	86 Ways
13860784	1.5	1.0 - 1.3	Tinned	86 Ways
13737773	1.5	1.4 - 2	Tinned	86 Ways
10810375	2.8	0.5 - 1.25	Tinned	86 Ways
13627267	2.8	1.5 - 2.5	Tinned	86 Ways

## Cavity Plug Part numbers

Part Number	Terminal Type	Color	Case of Use	Associated With
13768626	0.64	White	Insertion of a wrong cavity – repairing purpose	32, 48 & 64 Ways
13826722	1.50	Blue	Unloaded 1.5 mm cavity	32, 48 & 64 Ways
10736278	0.5 - 0.85	Yellow	Single wire seal	86 Ways
10736279	1.0 - 2.0	Green	Single wire Seal	86 Ways
10779162	0.5 - 1.0	Blue	Single wire Seal	86 Ways
13578695	1.25	Brown	Single wire Seal	86 Ways
10779159	1.5 - 2.0	Red	Single wire Seal	86 Ways
10779161	2.5	Yellow	Single wire Seal	86 Ways
10787316	1.5	White	Single wire Seal	86 Ways
10779160	2.8	Green	Single wire Seal	86 Ways
13629105	0.64	White	Cavity Plug	86 Ways

Part numbers, specifications, dimensions and performance data in this document are for general references only and are subject to change without notice. To verify product information, please contact a Aptiv representative.

## Tooling Part numbers

<b>Part Number</b>	<b>Description</b>	<b>Associated With</b>
10915564	0.64mm Terminal Extraction tool	32, 48, 64 & 86 Ways
10915565	1.5mm Terminal Extraction tool	32, 48, 64 & 86 Ways
10915566	Cover removal tool	32, 48 & 64 Ways
33105886	0.64mm Dummy Plug insertion tool	32, 48 & 64 Ways
33105887	1.5 Dummy Plug insertion tool	32, 48 & 64 Ways
TBC*	2.8 mm Female Terminal Extraction tool	86 Ways
33513040	TPA removal tool	32, 48 & 64 Ways
33514306	Crimper 1.5 GTS	32, 48 & 64 Ways
33514360	Crimper 0.64 GTS	32, 48 & 64 Ways
TBC*	2.8 Plug insertion tool	86 Ways

\*Part numbers TBC (to be confirmed) at a later date



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Browse our E-catalog: <http://ecat.aptiv.com/>

Contact your local Distributor

