

Header Technologies

DCS Distribution Channel





Meeting USCAR Standards

Delphi's standard 064 series unsealed header connectors are USCAR* compliant. These products:

- meet USCAR design guidelines (per SAE/USCAR-12 Revision 2, December 2001)
- meet the published USCAR interface footprints
- are validated to USCAR specifications (per SAE/USCAR-2 Revision 3, April 2001)

*USCAR is the United States Council for Automotive Research.

CMC Series

CMC (Connecteur Modulaire pour Calculateur) is one of the most popular interfaces for Engine Management Electronic Control Units.

Very compact size, high density connectors.

Sealed connectors for Electronic Control Units application and suitable for harsh environment.

SICMA Series

Headers for sealed applications in harsh environment with robust design with 1,5 mm signal terminals and 2,8 mm power terminal.

Proven field experience for more than 10 years.

Typical Applications

Delphi's header products can be used in the automotive and transportation markets. They are suitable for device, in-line and board-to-wire applications in the following:

- Satellite radios
- Infotainment devices
- Automotive body modules and systems
- HVAC systems
- Electronic Control Unit
- Harsh environment

Mating Connectors

Delphi also offers a complete line of :

- 064 series female mating connectors
- SICMA series female mating connectors
- CMC series female mating connectors

Tooling

All components in this catalog can be supplied from low volume tooling, many of which are available from high volume production tooling as well. PPAP certification can be supplied for low volume production intent tooling if requested.

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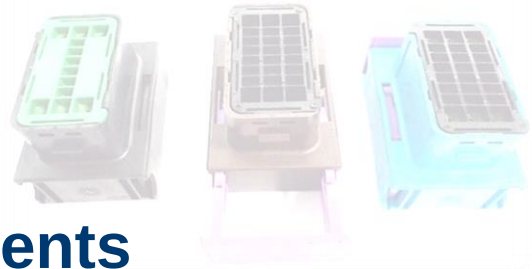
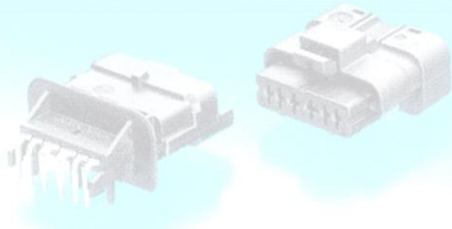


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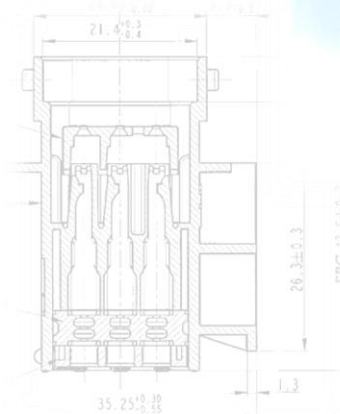
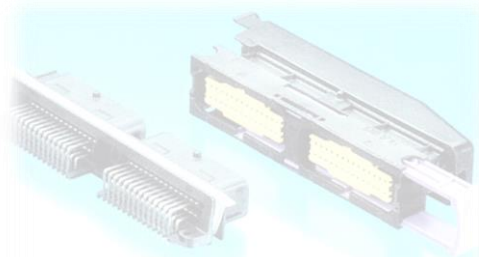
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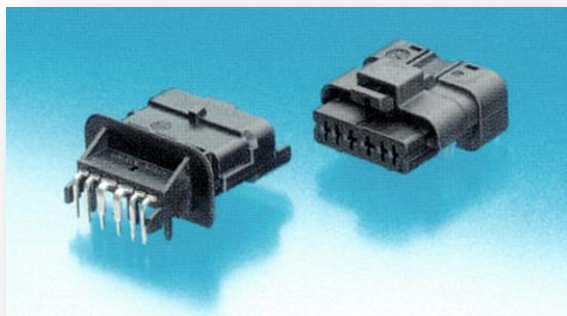
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Sicma Series – Sealed harsh environment

One-Row

6w Header



HEADER:

Product name: 6w Header
 N. Of row 1
 Pitch between rows -
 Terminals 1.5mm & 2.8mm Sicma
 Sealing protection IP68
 Temperature range -40°C to +105°C

Part number:

DPN	Type of connector	Polarization	Configuration
F159000	6w	BLACK	Right angled male housing

MATING CONNECTOR:

Part #: 211PC069S0049
 Description: 6 Way Female sealed SICMA
 Connector black Generation 1
 Product Type: Connector
 Status: Active
 Family: Mixed
 Series: Sicma 1.5 / 2.8
 Cavities: 6
 Sealed: Sealed
 Gender: Female
 Temperature range [°C]: -40 to +125
 Material: PBT
 Weight [g]: 12.072
 Color: Black
 Application: Inline (Wire to Wire)

Terminals:

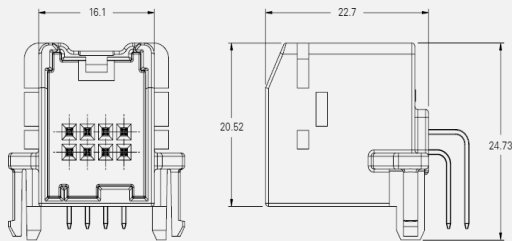
211CC3S1160 Terminal Sicma-3 Female 2.8 mm Terminal
 211CC2S2460P Terminal Sicma-3Plus Female 1.5 mm Terminal
 211CC2S1190P Terminal Sicma -3Plus Female 1.5 mm Terminal
 211CC2S1460P Terminal Sicma-3Plus Female 1.5 mm Terminal
 211CC2S4190P Terminal Sicma -3PlusFemale 1.5 mm Terminal
 211CC3S2460 Terminal Sicma-3 Female 2.8 mm Terminal
 211CC3S1460 Terminal Sicma-3 Female 2.8 mm Terminal
 211CC2S1160P Terminal Sicma-3Plus Female 1.5 mm Terminal
 211CC2S2190P Terminal Sicma -3PlusFemale 1.5 mm Terminal
 211CC3S2160 Terminal Sicma-3 Female 2.8 mm Terminal
 211CC2S2160P Terminal Sicma-3Plus Female 1.5 mm Terminal
 European Made

064 Series Header

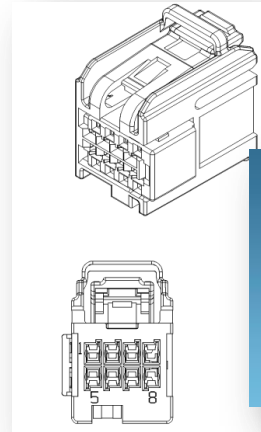
Two-Row – Single Module

8-way Unsealed - Right Angle

Shown: Index 8A



Dimensions shown in millimeters.



HEADER:

Part #: 15420151

Description: 8 Way Gray Micro
Unsealed Connector Assembly

Max Current 7 amps

Product Type: Connector

Status: Active

Family: Micro

Cavities: 8

Terminal(s) blade size [mm]: 0.64

Sealed: Unsealed

Gender: Male + Male

Temperature range [°C]: -40 to 125

Material: High Temperature Nylon

Weight [g]: 4.77

Color: Gray

Remarks: USCAR spec. Number 064-U-008-2-B02

Application: Infotainment and BCM

MATING CONNECTOR:

Part #: 13782038

Description: 8 Way Light Gray Unsealed Female
Connector Assembly

Product Type: Connector

Status: Active

Family: OCS

Series: 0.64 Index Up Rear

Cavities: 8

Terminal(s) blade size [mm]: 0.64

Sealed: Unsealed

Gender: Female

Material: Various (Assembly)

Weight [g]: 3.5

ELV compliant: Yes

RoHs compliant: Yes

Application: Module - Parking Sensors, Switch -
Window

TERMINALS:

- 13767046 Terminal OCS 0.64 IUR Female Unsealed Tin Plating Terminal, Cable Range 0.80 - 0.80 mm2
- 13767047 Terminal OCS 0.64 IUR Female Unsealed Tin Plating Terminal, Cable Range 0.35 - 0.50 mm2
- 13767048 Terminal OCS 0.64 IUR Female Unsealed Tin Plating Terminal, Cable Range 0.13 - 0.22 mm2

Sicma Series – ECU & DTB

24w Header



HEADER:

Product name:	DTB 24 Way Male Family
Sealing Level	S2 / S1
Meating Force	≤ 70N
Temp. range	T2 (- 40°C + 100°C)
Vibration class	V1
Tpa (yes/Not)	Yes
Cpa (yes/Not)	No

Male housing Sealed:

DPN	Type of connector	Note	Polarization
211PL249S0033	24w PBT	-	Black
211PL249S1033	24w PBT	-	Brown
211PL249S6033	24w PBT	-	Blue
211PL249S8033	24w PBT	-	Grey

Male housing Unsealed:

DPN	Type of connector	Note	Polarization
211PL249S0023	24w PBT	-	Black
211PL249S8020	24w PBT	-	Grey
HCCMHPE24BKAF	24w PBT	REAR DTB	Black

Pin Header Male housing :

DPN	Type of connector	Polarization
HCCMHPE24BKA00F	24w PBT	Black
HCCMHPE24BKA90F	24w Pin-Header	Black
HCCMHPE24GYB90F	24w Pin-Header	Gray
HCCMHPE24BNC90F	24w Pin-Header	Brown



MATING CONNECTOR:

Product name:	DTB24 Way Female Family
Sealing Level	S2 / S1
Meating Force	≤ 70N
Temp. range	T2 (- 40°C + 100°C)
Vibration class	V1
Tpa (yes/Not)	Yes
Cpa (yes/Not)	No

Female housing Sealed:

DPN	Type of connector	Note	Polarization
211PC249S1033	24W PBT	No Slide	Brown
211PC249S8033	24W PBT	No Slide	Grey
211PC249S0033	24W PBT	No Slide	Black
211PC249S6033	24W PBT	No Slide	Blue

Locking cam:

DPN	Description
211A247020	Locking cam

Female housing Unsealed:

DPN	Type of connector	Note	Polarization
211PC249S0020	24W PBT	No Slide	Black
211PC249S1020	24W PBT	No Slide	Brown
211PC249S8020	24W PBT	No Slide	Grey

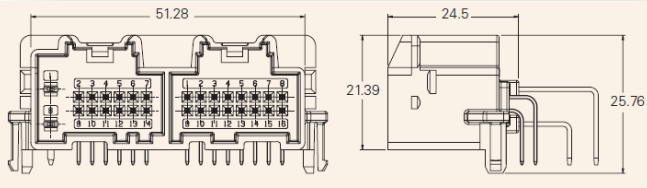
Terminals:

211CC3S1160 Terminal Sicma-3 Female 2.8 mm Terminal
 211CC2S2460P Terminal Sicma-3Plus Female 1.5 mm Terminal
 211CC2S1190P Terminal Sicma -3Plus Female 1.5 mm Terminal
 211CC2S1460P Terminal Sicma-3Plus Female 1.5 mm Terminal
 211CC2S4190P Terminal Sicma -3PlusFemale 1.5 mm Terminal
 211CC3S2460 Terminal Sicma-3 Female 2.8 mm Terminal
 211CC3S1460 Terminal Sicma-3 Female 2.8 mm Terminal
 211CC2S1160P Terminal Sicma-3Plus Female 1.5 mm Terminal
 211CC2S2190P Terminal Sicma -3PlusFemale 1.5 mm Terminal
 211CC3S2160 Terminal Sicma-3 Female 2.8 mm Terminal
 211CC2S2160P Terminal Sicma-3Plus Female 1.5 mm Terminal

Mixed Series – Radio Header

Two-Rows – Combination Module

30-way Unsealed - Right Angle



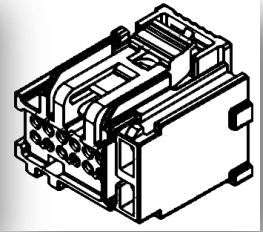
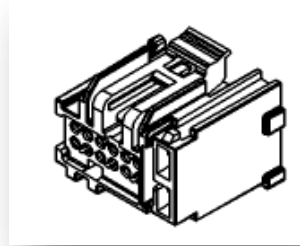
Dimensions shown in millimeters.

HEADER:

Part #: 09402549
 Description: 30 Way Black Micro 64 USCAR 120 Unsealed Male Connector Assembly
 Product Type: Connector
 Status: Active
 Family: Mixed
 Series: Mixed
 Cavities: 30
 Terminal(s) blade size [mm]: 0.64, 1.2
 Sealed: Unsealed
 Gender: Male
 Material: PBT
 Weight [g]: 13.21
 Color: Black
 Application: Inline (Wire to Wire) - Infotainment and BCM

TERMINALS FOR DPN 15464951:

12191134 Terminal Female GT 280 Series Tin Plating Unsealed Terminal, Cable Range 0.50 - 0.50 mm², Cable Insulation Range 1.40 - 1.85 mm
 15356826 Terminal Female Micro 0.64 Gold Plating Unsealed Terminal, Cable Range 0.35 - 0.35 mm², Cable Insulation Range 1.47 - 1.63 mm
 15304710 Terminal Female GT 280 Series Tin Plating Unsealed Terminal, Cable Range 0.35 - 0.50 mm², Cable Insulation Range 1.20 - 1.85 mm
 15304711 Terminal Female GT 280 Series Tin Plating Unsealed Terminal, Cable Range 0.75 - 1.00 mm², Cable Insulation Range 1.70 - 2.25 mm
 15427675 Terminal Female GT 280 Series Tin Plating Unsealed Terminal, Cable Range 0.35 - 0.50 mm², Cable Insulation Range 1.10 - 1.30 mm
 12191133 Terminal Female GT 280 Series Tin Plating Unsealed Terminal, Cable Range 0.35 - 0.35 mm², Cable Insulation Range 1.20 - 1.65 mm
 15359541 Terminal Female Micro 0.64 Gold Plating Unsealed Terminal, Cable Range 0.50 - 0.80 mm², Cable Insulation Range 1.64 - 1.90 mm
 15401440 Terminal Female Micro 0.64 Tin Plating Unsealed Terminal, Cable Range 0.50 - 0.80 mm², Cable Insulation Range 1.64 - 1.90 mm
 15394147 Terminal Female Micro 0.64 Tin Plating Unsealed Terminal, Cable Range 0.35 - 0.35 mm², Cable Insulation Range 1.47 - 1.63 mm
 12191135 Terminal Female GT 280 Series Tin Plating Unsealed Terminal, Cable Range 0.80 - 0.80 mm², Cable Insulation Range 1.70 - 2.05 mm
 15356827 Terminal Female Micro 0.64 Gold Plating Unsealed Terminal, Cable Range 0.50 - 0.80 mm², Cable Insulation Range 1.64 - 1.90 mm
 15304713 Terminal Female GT 280 Series Tin Plating Unsealed Terminal, Cable Range 4.00 - 5.00 mm², Cable Insulation Range 3.40 - 3.90 mm
 15304712 Terminal Female GT 280 Series Tin Plating Unsealed Terminal, Cable Range 1.50 - 3.00 mm², Cable Insulation Range 2.20 - 3.20 mm



MATING CONNECTORS:

Part #: 15486792
 Description: 16 Way Black Micro HVT Unsealed Female Connector
 Product Type: Connector
 Status: Active
 Family: Micro HVT
 Cavities: 16
 Terminal(s) blade size [mm]: 1.2
 Sealed: Unsealed
 Gender: Female
 Material: PBT
 Weight [g]: 4.67
 Color: Black
 ELV compliant: Yes
 RoHs compliant: Yes
 Application: Radio, Mirror, Amplifier, Module - A/C, Switch - Headlamp, Display - Multimedia

Part #: 15464951

Description: 14 Way Black GT 150 Micro 64 Unsealed Female Connector
 Product Type: Connector
 Status: Active
 Family: Mixed
 Series: Mixed
 Cavities: 14
 Terminal(s) blade size [mm]: 0.64, 2.8
 Sealed: Unsealed
 Gender: Female
 Material: PBT
 Weight [g]: 4.82
 Color: Black

TERMINALS FOR DPN 15486792:

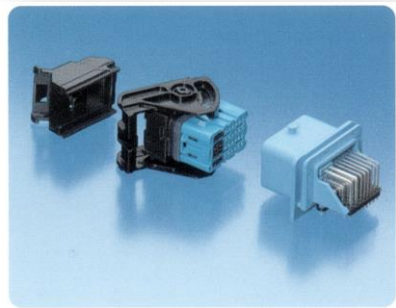
15445905 Terminal Female Micro HVT Tin Plating Unsealed Terminal, Cable Range 0.75 - 0.75 mm², Cable Insulation Range 1.70 - 1.90 mm
 15445904 Terminal Female Micro HVT Tin Plating Unsealed Terminal, Cable Range 0.35 - 0.50 mm², Cable Insulation Range 1.47 - 1.83 mm
 15477038 Lock LOCK CPA MICRO 64 RED
 13733783 Terminal Female Micro HVT Tin Plating Unsealed Terminal, Cable Range 0.13 - 0.22 mm², Cable Insulation Range 0.88 - 1.01 mm

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CMC Series – ECU

32w Header



HEADER:

Product name:	32w Header
Sealing protection	IPx9K/IP68
Terminals	24x 0,64mm & 8x 1,50mm
Temperature range	-40°C to +125°C
Terminal retention force	> 100N
Terminal insertion force	< 10N
Connector mating force	< 60N
N. of mechanical coding	4

Part number:

DPN	Type of connector	Polarization
F670000	32w	BLUE
F270000	32w	BLACK

COVER:

Part #: PPI0001522
 Description: CMC 32 Way Wire dress cover for Housing
 Product Type: Cap Cover
 Status: Active

Terminals:

DPN	Type of terminal	tab size (mm²)	Plating	note
PPI0001619	0,64	0,22 - 0,35	pre tinned	for sleeve see table
PPI0000489	0,64	0,5	pre tinned	for sleeve see table
PPI0001483	1,5	1	pre tinned	for sleeve see table
PPI0001484	1,5	1,5	pre tinned	for sleeve see table

MATING CONNECTOR:

Part #: PPI0001493
 Description: 32 Way CMC female sealed blue keyway right lever
 Product Type: Connector
 Status: Active
 Family: GTS
 Series: Mixed
 Cavities: 32
 Sealed: Sealed
 Gender: Female
 Temperature range [°C]: -40 to +125
 Material: PBT
 Color: Black

Part #: PPI0001487
 Description: 32 Way CMC female Housing black keyWay left lever
 Product Type: Connector
 Status: Active
 Family: GTS
 Series: Mixed
 Cavities: 32
 Terminal(s) blade size [mm]: 0.64, 1.5
 Sealed: Sealed
 Gender: Female
 Temperature range [°C]: -40 to +125
 Material: PBT
 Color: Black

Part #: PPI0001488
 Description: 32 Way CMC female Housing black keyWay right lever
 Product Type: Connector
 Status: Active
 Family: GTS
 Series: Mixed
 Cavities: 32
 Terminal(s) blade size [mm]: 0.64, 1.5
 Sealed: Sealed
 Gender: Female
 Temperature range [°C]: -40 to +125
 Material: PBT
 Color: Black

CMC Series - ECU

48w & 64w PinHeader



HEADER:

Product name: 48w & 64w PinHeader
 Sealing Level S2 - S3
 Mating Force $\leq 75\text{N}$
 Temp. range T3 (-40 / +125°C)
 Vibration class V2
 Tpa (yes/Not) yes
 Cpa (yes/Not) --

Note: BODY SOLDERING REFLOW
 VERSION

Part number:

DPN	Type	Polar.	Configuration
17464807	48w	BLACK	tab: N° 8 pin da 1,5 + 40 pin da 0,64
F015300	64w	BLACK	tab: N° 8 pin da 1,5 + 56 pin da 0,64

MATING CONNECTOR:

Product name: 48w & 64w Female Sealed Connector
 Sealing Level S2 - S3
 Mating Force $\leq 75\text{N}$
 Temp. range T3 (-40 / +125°C)
 Vibration class V2
 Tpa (yes/Not) yes
 Cpa (yes/Not) --

Part Number:

DPN	Type	Polar.	LEVER	Configuration
PPI00001494	48w	BLACK	Black left	Body + TPA + Lever + Mating seal + Peripher. seal
PPI00001495	48w	BLACK	Black right	Body + TPA + Lever + Mating seal + Peripher. seal
PPI0001500	64w	BLACK	Black left	Body + TPA + Lever + Mating seal + Peripher. seal
PPI0001501	64w	BLACK	Black right	Body + TPA + Lever + Mating seal + Peripher. seal
PPI0001485	Plug	--	--	White dummy for 0,64 cavity
PPI0001486	Plug	--	--	Blue dummy for 1,5 cavity
F418400	Tube sleeve	--	--	See Sleeve table

Cover:

DPN	Type	Polarization	Configuration
F965000	48w	BLACK	wiring out straight
PPI0001538	48w	BLACK	wiring out 45°
PPI0001526	64w	BLACK	wiring out straight

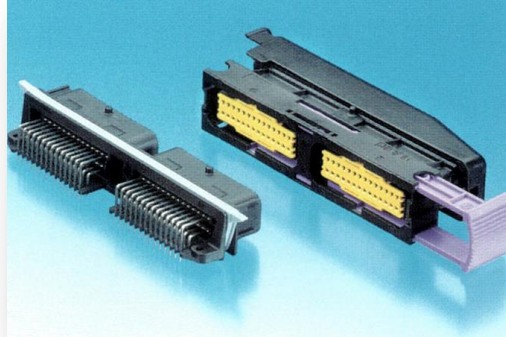
Terminals:

DPN	Type of terminal	tab size (mm ²)	Plating
PPI0001619	0,64	0,22 - 0,35	pre tinned
PPI0000489	0,64	0,5	pre tinned
PPI0001483	1,5	1	pre tinned
PPI0001484	1,5	1,5	pre tinned

Sicma Series – Sealed harsh environment

Two-Rows

56w Header



HEADER:

Product name: 56w Header
 N. Of row 2
 Pitch between rows 6mm
 Terminals 1.5mm Sicma
 Sealing protection IP68
 Temperature range -40°C to +125°C

MATING CONNECTOR:

Part #: PPI0001258
 Description: 56 Way 1.5 mm SICMA sealed Female Housing
 Product Type: Connector
 Status: Active
 Family: Sicma
 Series: 1.5
 Cavities: 56
 Sealed: Sealed
 Gender: Female
 Temperature range [°C]: -40 to +125
 Material: PBT
 Weight [g]: 88.28
 Color: Black

Part number:

DPN	Type	Polar.	Configuration
F135200	56w	BLACK	Right angled male housing

Terminals:

211CC2S2160P Terminal Sicma-3Plus Female 1.5 mm Terminal
 211CC2S1160P Terminal Sicma-3Plus Female 1.5 mm Terminal
 211CC2S4190P Terminal Sicma -3PlusFemale 1.5 mm Terminal
 211CC2S1190P Terminal Sicma -3PlusFemale 1.5 mm Terminal
 211CC2S1460P Terminal Sicma-3Plus Female 1.5 mm Terminal
 211CC2S2460P Terminal Sicma-3Plus Female 1.5 mm Terminal
 211CC2S2190P Terminal Sicma -3PlusFemale 1.5 mm Terminal

CMC Series – ECU

112w Header



HEADER:

Product name:	112w Header
Sealing protection	IPx9K/IP68
Terminals	88x 0,64mm & 24x 1,50mm
Temperature range	-40°C to +125°C
Terminal retention force	> 100N
Terminal insertion force	< 10N
Connector mating force	< 60N
N. of mechanical coding	1

MATING CONNECTOR:

Part #:	PPI0001487
Description:	32 Way CMC female Housing black keyWay left lever
Product Type:	Connector
Status:	Active
Family:	GTS
Series:	Mixed
Cavities:	32
Sealed:	Sealed
Gender:	Female
Temperature range [°C]:	-40 to +125
Material:	PBT
Color:	Black

Part number:

DPN	Type of connector	Polarization
1746B207M	112w	BLACK

COVER:

Part #:	PPI0001522
Description:	CMC 32 Way Wire dress cover for Housing
Product Type:	Cap Cover
Status:	Active

Part #:	F765000
Description:	48 Way CMC sealed brown left
Product Type:	Connector
Status:	Active
Family:	GTS
Series:	Mixed
Cavities:	48
Sealed:	Sealed
Gender:	Female
Temperature range [°C]:	-40 to +125
Material:	PBT
Color:	Black

Terminals:

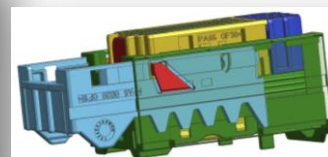
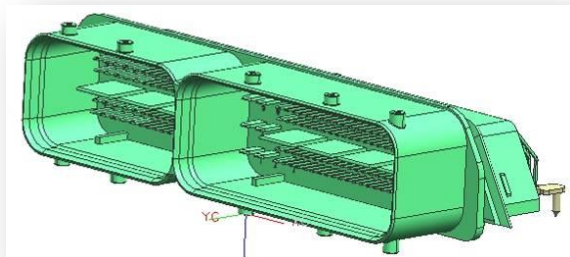
DPN	Type	tab size (mm²)	Plating	note
PPI0001619	0,64	0,22 - 0,35	pre tinned	for sleeve see table
PPI0000489	0,64	0,5	pre tinned	for sleeve see table
PPI0001483	1,5	1	pre tinned	for sleeve see table
PPI0001484	1,5	1,5	pre tinned	for sleeve see table

Part #:	PPI0001489
Description:	32 Way CMC female Housing grey keyWay right lever
Product Type:	Connector
Status:	Active
Family:	GTS
Series:	Mixed
Cavities:	32
Sealed:	Sealed
Gender:	Female
Temperature range [°C]:	-40 to +125
Material:	PBT
Color:	Black

Mixed Series – ECU

Five-Rows – Combination Module

154 Way Black 1.2 2.8 Sealed Male



HEADER:

Part #: 13830808

Description: 154 Way Black 1.2 2.8 Sealed Male
Connector Assembly

Product Type: Connector

Status: Active

Family: Mixed

Series: Mixed

Cavities: 154

Sealed: Sealed

Gender: Male

Weight [g]: 124.2

Color: Black

ELV compliant: Yes

RoHs compliant: Yes

Application: Engine Control Unit,
major for diesel application

MATING CONNECTOR:

Part #: **13535331**

Description: 58 Way Gray 1.2 BTS 2.8 Sealed Female
Connector Assembly

Product Type: Connector

Status: Active

Family: Mixed

Series: Mixed

Cavities: 58

Sealed: Sealed

Gender: Female

Weight [g]: 40.05

Color: Gray

ELV compliant: Yes

RoHs compliant: Yes

Cover:

Part#: 15494581

Locking comb:

Part#: 15494573

PLR cover:

Part#: 15494575



TERMINALS :

13543114 – OCS 1.2 clean body Tin/Silver 0,35 – 0,50

13543115 – OCS 1.2 clean body 1.2 Tin/Silver 0,75 – 0,80

13543116 – OCS 1.2 clean body 1.2 Tin/Silver 0,80 – 1,00

15494338 (2pcs terminal) BTS sws 2.8 Sn 0,35 – 0,50

15494339 (2pcs terminal) BTS sws 2.8 Sn 0,60 – 1,00

15494340 (2pcs terminal) BTS sws 2.8 Sn 1,40 – 2,50

211CC3S1161 (1pc terminal) Sicma3 sws 2.8 Sn 0,35 – 0,50

211CC3S2161 (1pc terminal) Sicma3 sws 2.8 Sn 1,00 – 2,50

Part #: **13535335**

Description: ASM CONN 96 F 1.2 MCP GRA
SLD

Product Type: Connector

Status: Active

Family: 1.2

Series: MCP

Cavities: 96

Sealed: Sealed

Gender: Female

Weight [g]: 52.96

Color: Gray

ELV compliant: Yes

RoHs compliant: Yes

Cover:

Part#: 15494614

Locking comb:

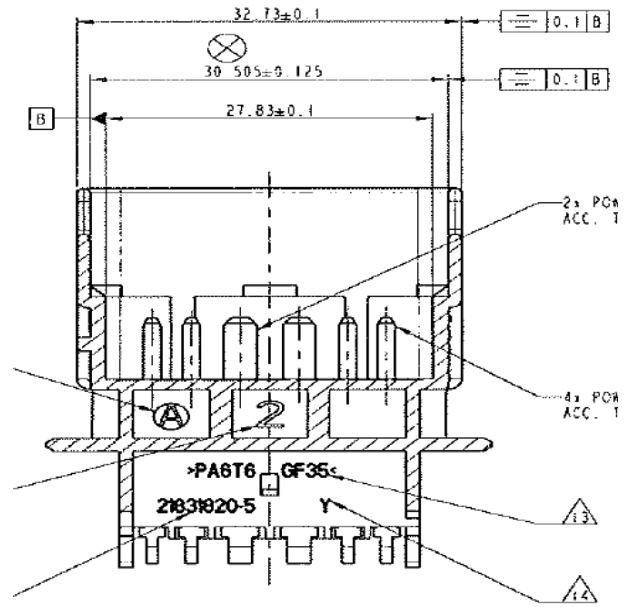
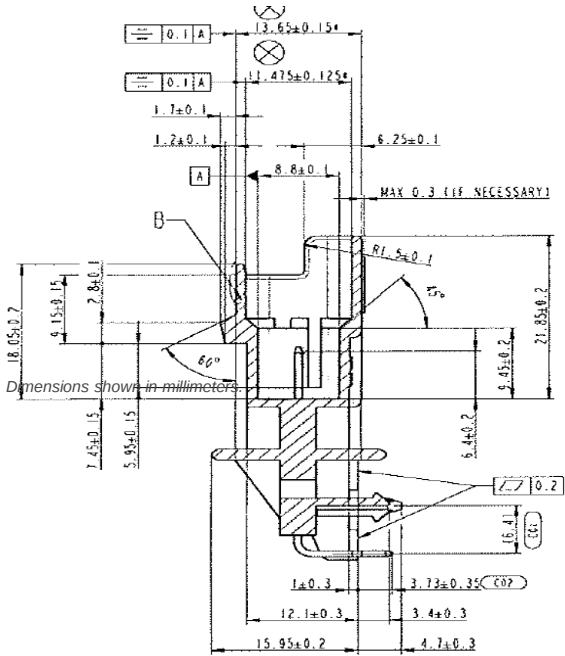
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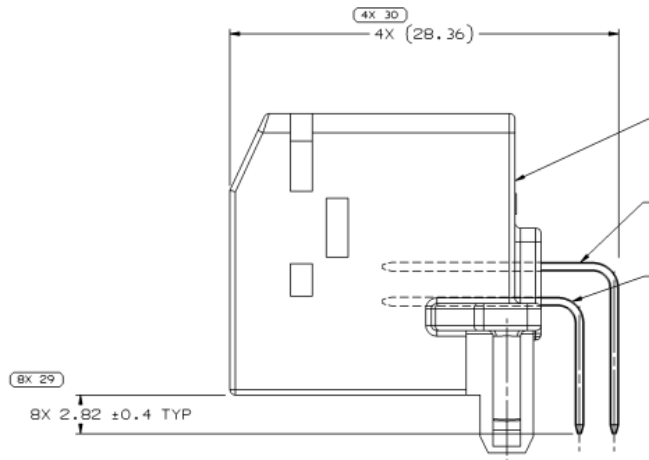
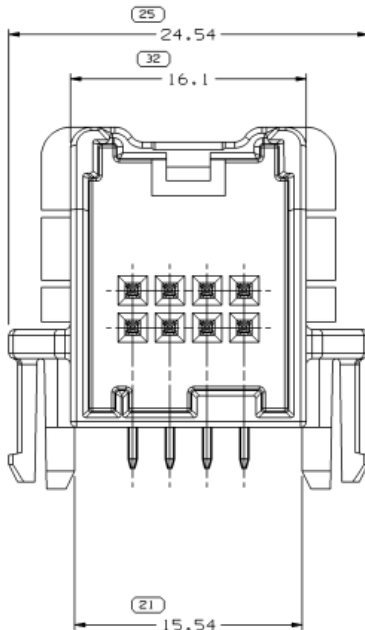
DIMENSIONS

Dimensions shown in millimeters.

6w Header



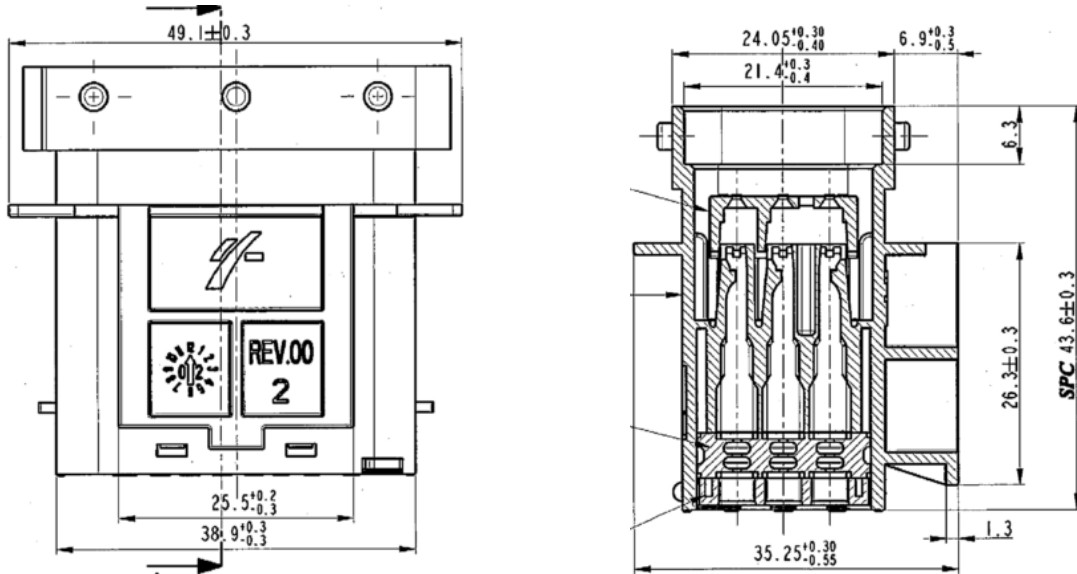
8-way Unsealed - Right Angle



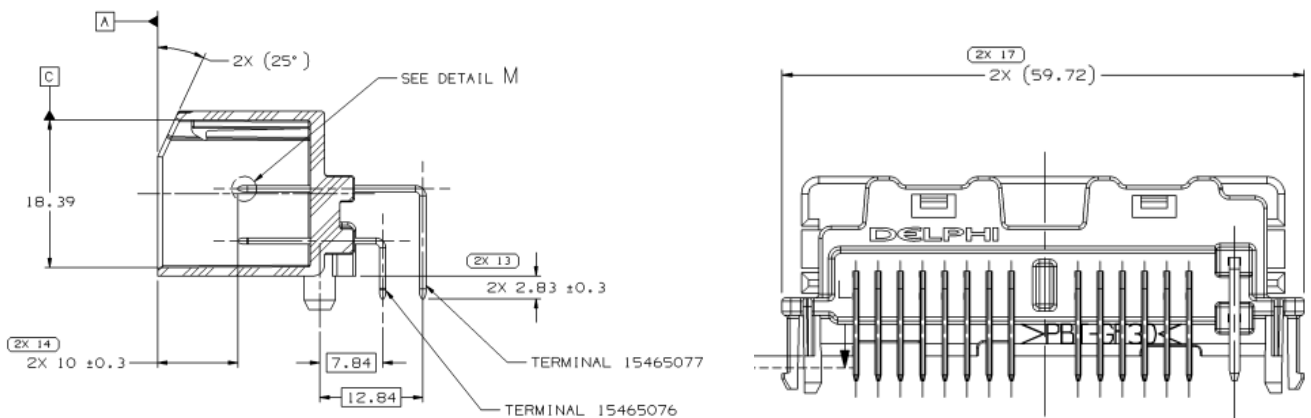
DIMENSIONS

Dimensions shown in millimeters.

24w Header



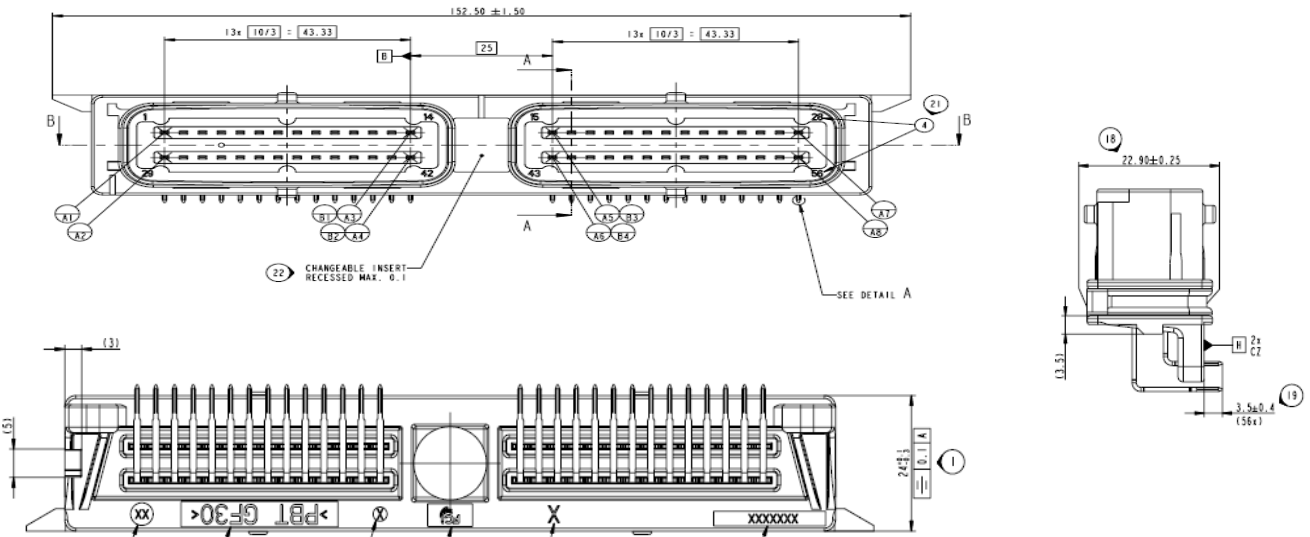
30-way Unsealed - Right Angle



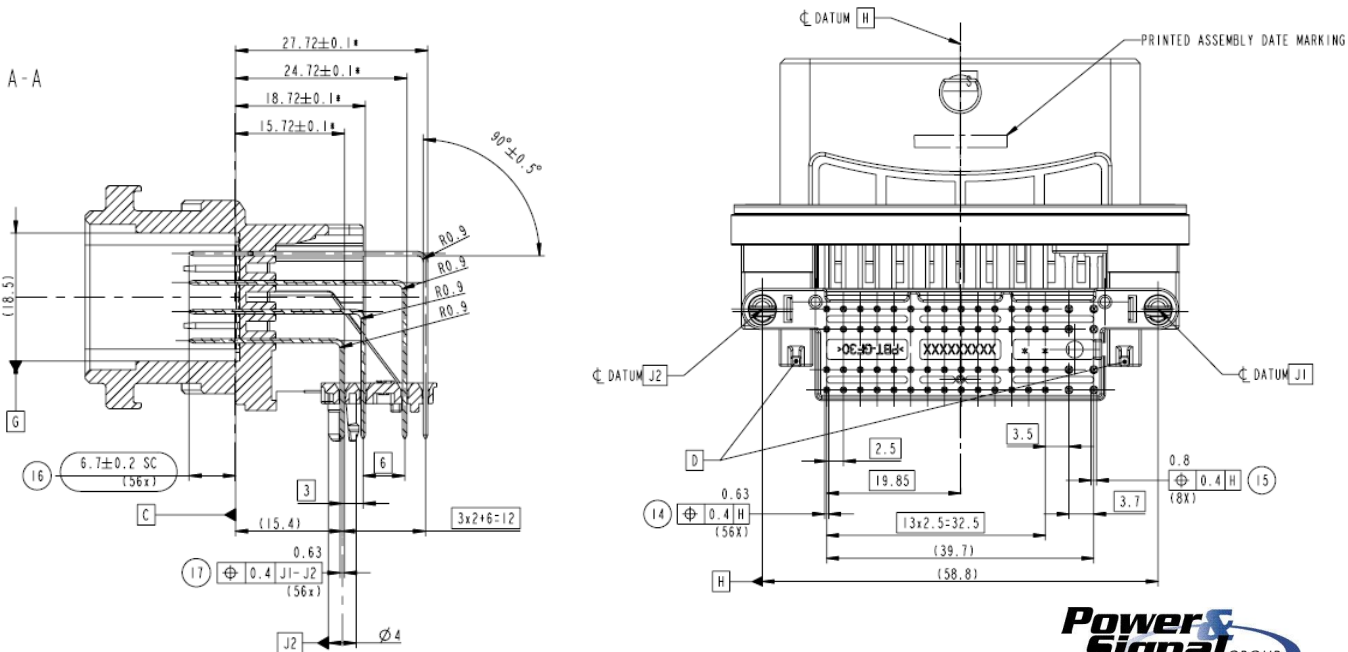
DIMENSIONS

Dimensions shown in millimeters.

56w Header



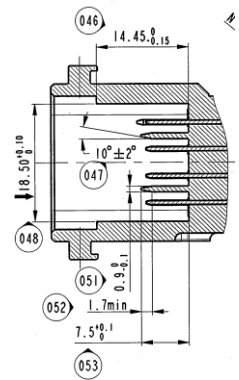
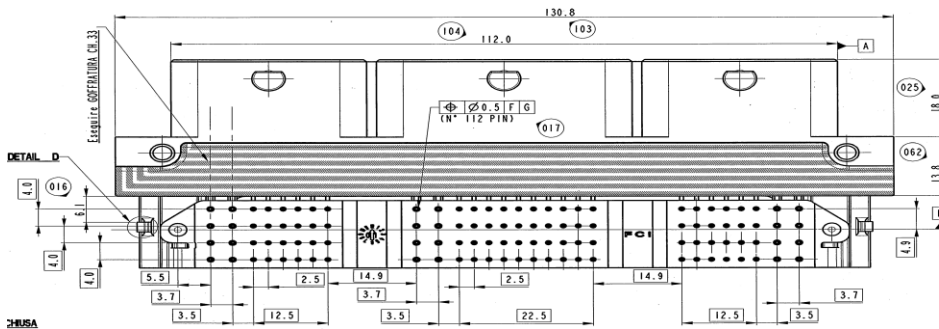
64w PinHeader



DIMENSIONS

Dimensions shown in millimeters.

112w PinHeader



Dimensions shown in millimeters.

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