

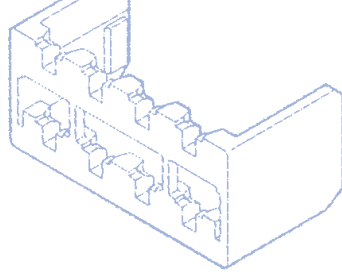
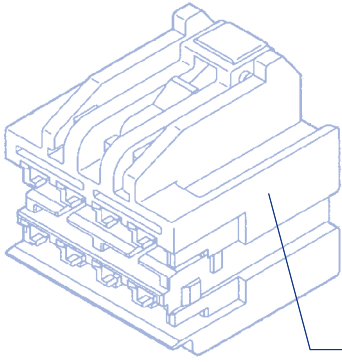
# **US SERIES CONNECTOR FOR AUTOMOBILES**

Connect with the Best

## Specifications of Terminals

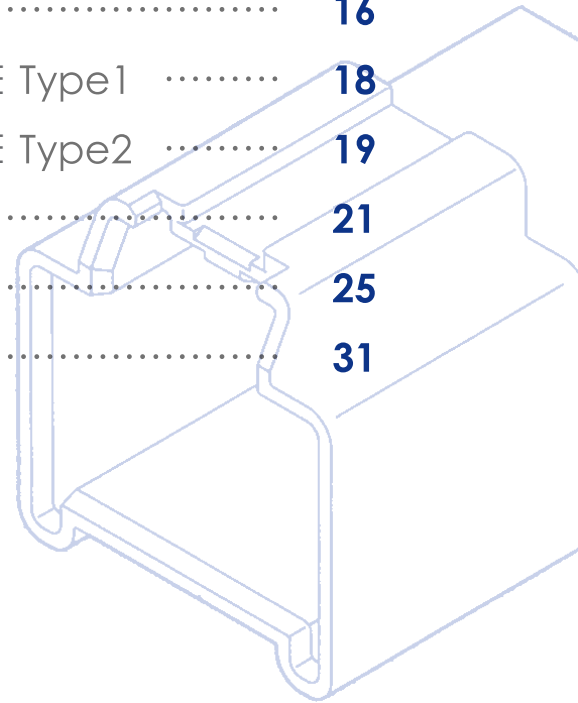
|          |        |                |                | Applicable wire size(mm <sup>2</sup> ) |             | Cable overall diameter(mm) | Applicable tab thickness(mm) | Contact resistance initial |
|----------|--------|----------------|----------------|--|-------------|----------------------------|------------------------------|----------------------------|
|          |        |                |                | mm <sup>2</sup>                        | AWG         |                            |                              |                            |
| unsealed | Type1  | 0.64           | Inline/ Device | 0.22 - 0.8                             | 24 - 18     | 1.5 - 2.2                  | 0.64                         | 20mΩmax                    |
|          |        | 1.5            | Inline         | 0.35 - 1.0                             | 22 - 16     | 1.7 - 2.4                  | 0.64                         | 10mΩmax                    |
|          |        |                | Device         | 0.35 - 1.0                             | 22 - 16     | 1.7 - 2.4                  | 0.8                          |                            |
|          |        | 2.8            | Inline         | 0.35 - 3.0                             | 22 - 12     | 1.7 - 3.3                  | 0.64                         | 5mΩmax                     |
|          | Device |                | 0.35 - 3.0     | 22 - 12                                | 1.7 - 3.3   | 0.8                        | 10mΩmax                      |                            |
|          | 6.3    | Inline/ Device | 0.5 - 5.0      | 20 - 10                                | 1.9 - 4.0   | 0.8                        | 1.5mΩmax                     |                            |
|          | Type2  | 0.64           | Inline         | 0.13 - 0.8                             | 26 - 18     | 1.3 - 2.2                  | 0.64                         | 20mΩmax                    |
|          |        | 2.8            | Inline/ Device | 0.35 - 5.0                             | 22 - 10     | 1.7 - 4.0                  | 0.8                          | 5mΩmax                     |
| sealed   | Type1  | 0.64           | Device         | (see the above unsealed Type1 0.64)    |             |                            |                              |                            |
|          |        | 1.5            | Inline         | 0.35 - 1.0                             | 22 - 16     | 1.7 - 2.4                  | 0.64                         | 10mΩmax                    |
|          |        |                | Device         | 0.35 - 1.0                             | 22 - 16     | 1.7 - 2.4                  | 0.8                          | 10mΩmax                    |
|          | 9.5    | Inline         | 5 - 20         | 10 - 4                                 | 10.3 - 11.5 | 1.2                        | 1.5mΩmax                     |                            |
|          | Type2  | 2.8            | Device         | 0.5 - 4.0                              | 20 - 12     | 1.9 - 4.0                  | 0.8                          | 5mΩmax                     |
| HFC      |        |                | inner          | RG174,316,62,58                        |             | -                          | -                            | 40mΩmax                    |
|          |        |                | outer          | RG174,316,62,58                        |             | -                          | -                            | 40mΩmax                    |





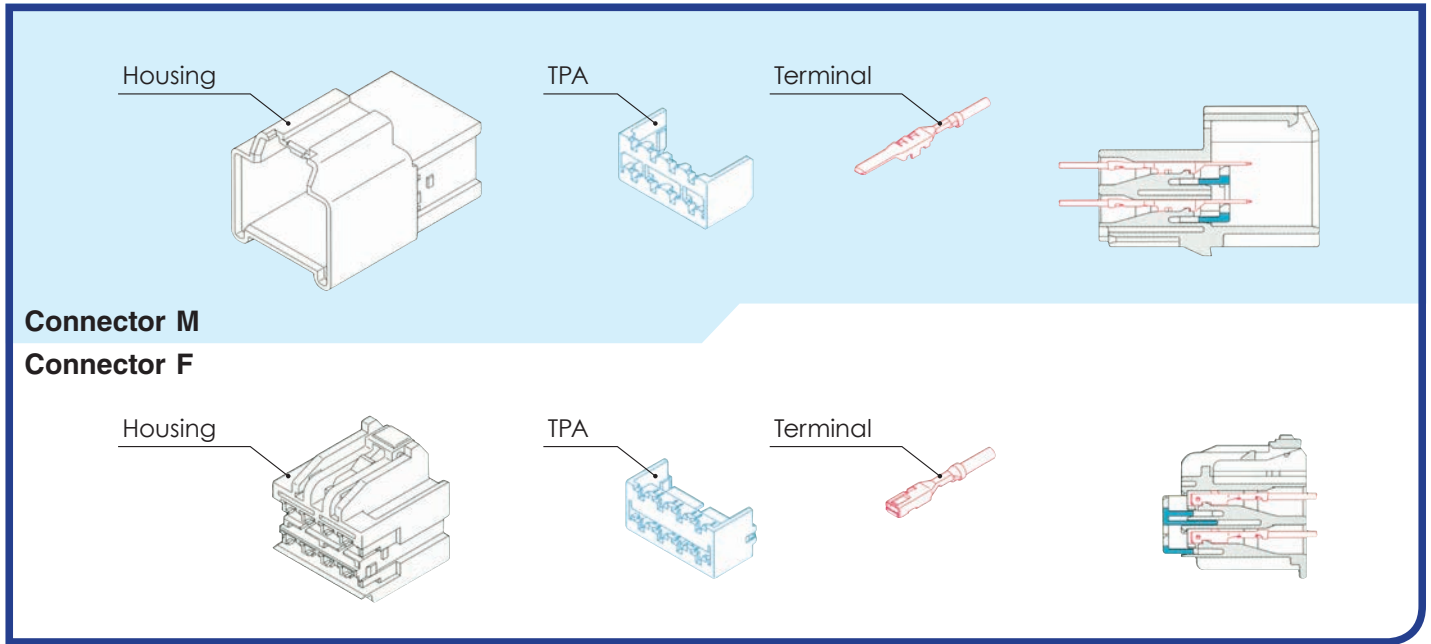
## CONTENTS

|  |           |
|--|-----------|
| <b>US UNSEALED SERIES</b> For INLINE Type1.....  | <b>3</b>  |
| <b>US UNSEALED SERIES</b> For DEVICE Type1 ..... | <b>7</b>  |
| <b>US UNSEALED SERIES</b> For INLINE Type2.....  | <b>11</b> |
| <b>US UNSEALED SERIES</b> For DEVICE Type2 ..... | <b>14</b> |
| <b>US SEALED SERIES</b> For INLINE .....         | <b>16</b> |
| <b>US SEALED SERIES</b> For DEVICE Type1 .....   | <b>18</b> |
| <b>US SEALED SERIES</b> For DEVICE Type2 .....   | <b>19</b> |
| <b>Door Connector</b> Type1 .....                | <b>21</b> |
| <b>Door Connector</b> Type2 .....                | <b>25</b> |
| <b>HFC SERIES</b> .....                          | <b>31</b> |



# US UNSEALED SERIES

## Structure



### Connector M

### Connector F

## Features

特点

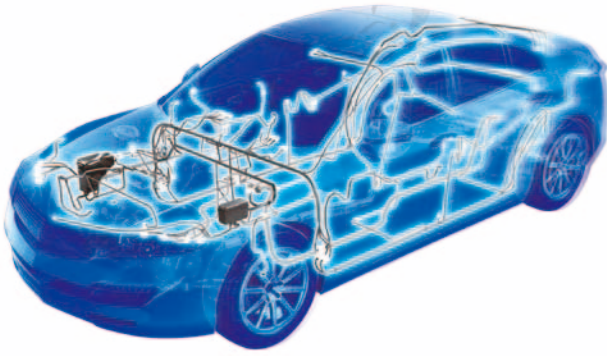
### US unsealed series comply with SAE/USCAR-2.

This series consists of 0.64mm, 1.5mm, 2.8mm, and 6.3mm types classified according to terminal size, covering an extensive array of applications from signal to power circuits.

US非防水系列达到了SAE/USCAR-2标准。

按照端子尺寸划分为0.64mm,1.5mm•2.8mm•6.3mm型,从信号回路到电源回路,能广泛应用。

- The connector mechanism only allows the TPA to be set when the terminal is completely inserted.
- TPAs are pre-mounted on housings, and are structured to enable setting by the same simple operation regardless of the number of ways, improving TPA operation.
- 具有当端子在半插入状态时,TPA无法组装到位的构造。
- TPA预先安装在接插件护套上,无论多少极数都能够通过简单的统一操作进行安装,可提高工作效率。



# US UNSEALED SERIES

For INLINE Type1

Terminal (UNIT : mm)

**0.64 (S)**



**F (8100-3619)**

|   |                             |
|---|-----------------------------|
| Applicable wire size (mm <sup>2</sup> ) | 0.22-0.35<br>AWG24-22       |
| Cable overall diameter (mm)             | 1.5-1.7                     |
| Material                                | Heat-resistant copper alloy |
| Surface treatment                       | Sn plated                   |
| Applicable Tab Thickness (mm)           | 0.64                        |

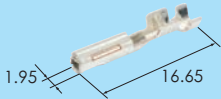
**0.64 (S) Au**



**F (8100-3426)**

|   |                             |
|---|-----------------------------|
| Applicable wire size (mm <sup>2</sup> ) | 0.22-0.35<br>AWG24-22       |
| Cable overall diameter (mm)             | 1.5-1.7                     |
| Material                                | Heat-resistant copper alloy |
| Surface treatment                       | Au plated                   |
| Applicable Tab Thickness (mm)           | 0.64                        |

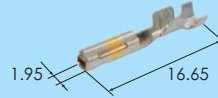
**0.64 (L)**



**F (8100-3618)**

|   |                             |
|---|-----------------------------|
| Applicable wire size (mm <sup>2</sup> ) | 0.5-0.8<br>AWG20-18         |
| Cable overall diameter (mm)             | 1.9-2.2                     |
| Material                                | Heat-resistant copper alloy |
| Surface treatment                       | Sn plated                   |
| Applicable Tab Thickness (mm)           | 0.64                        |

**0.64 (L) Au**



**F (8100-3427)**

|   |                             |
|---|-----------------------------|
| Applicable wire size (mm <sup>2</sup> ) | 0.5-0.8<br>AWG20-18         |
| Cable overall diameter (mm)             | 1.9-2.2                     |
| Material                                | Heat-resistant copper alloy |
| Surface treatment                       | Au plated                   |
| Applicable Tab Thickness (mm)           | 0.64                        |

**1.5 (S)**

|   |                      |
|---|----------------------|
| Applicable wire size (mm <sup>2</sup> ) | 0.35-0.5<br>AWG22-20 |
| Cable overall diameter (mm)             | 1.7-1.9              |
| Material                                | Brass                |
| Surface treatment                       | Sn plated            |
| Applicable Tab Thickness (mm)           | 0.64                 |

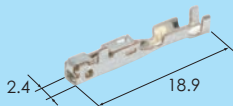


**1.5 (M)**

|   |                     |
|---|---------------------|
| Applicable wire size (mm <sup>2</sup> ) | 0.8-1.0<br>AWG18-16 |
| Cable overall diameter (mm)             | 2.2-2.4             |
| Material                                | Brass               |
| Surface treatment                       | Sn plated           |
| Applicable Tab Thickness (mm)           | 0.64                |



**M (8100-4405)**



|   |                             |
|---|-----------------------------|
| Applicable wire size (mm <sup>2</sup> ) | 0.35-0.5<br>AWG22-20        |
| Cable overall diameter (mm)             | 1.7-1.9                     |
| Material                                | Heat-resistant copper alloy |
| Surface treatment                       | Sn plated                   |
| Applicable Tab Thickness (mm)           | 0.64                        |

**F (8240-0123)**

**M (8100-4403)**



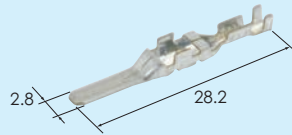
|   |                             |
|---|-----------------------------|
| Applicable wire size (mm <sup>2</sup> ) | 0.8-1.0<br>AWG18-16         |
| Cable overall diameter (mm)             | 2.2-2.4                     |
| Material                                | Heat-resistant copper alloy |
| Surface treatment                       | Sn plated                   |
| Applicable Tab Thickness (mm)           | 0.64                        |

**F (8240-0124)**



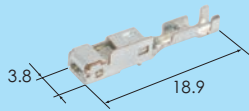
## 2.8 (S)

|   |                      |
|---|----------------------|
| Applicable wire size (mm <sup>2</sup> ) | 0.35-0.5<br>AWG22-20 |
| Cable overall diameter (mm)             | 1.7-1.9              |
| Material                                | Brass                |
| Surface treatment                       | Sn plated            |
| Applicable Tab Thickness (mm)           | 0.64                 |



**M (8100-4412)**

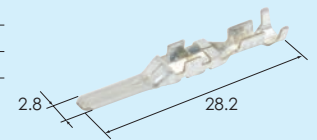
**F (8100-4407)**



|   |                             |
|---|-----------------------------|
| Applicable wire size (mm <sup>2</sup> ) | 0.35-0.5<br>AWG22-20        |
| Cable overall diameter (mm)             | 1.7-1.9                     |
| Material                                | Heat-resistant copper alloy |
| Surface treatment                       | Sn plated                   |
| Applicable Tab Thickness (mm)           | 0.64                        |

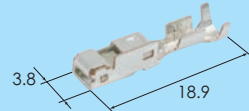
## 2.8 (M)

|   |                     |
|---|---------------------|
| Applicable wire size (mm <sup>2</sup> ) | 0.8-1.0<br>AWG18-16 |
| Cable overall diameter (mm)             | 2.2-2.4             |
| Material                                | Brass               |
| Surface treatment                       | Sn plated           |
| Applicable Tab Thickness (mm)           | 0.64                |



**M (8100-4413)**

**F (8100-4408)**



|   |                             |
|---|-----------------------------|
| Applicable wire size (mm <sup>2</sup> ) | 0.8-1.0<br>AWG18-16         |
| Cable overall diameter (mm)             | 2.2-2.4                     |
| Material                                | Heat-resistant copper alloy |
| Surface treatment                       | Sn plated                   |
| Applicable Tab Thickness (mm)           | 0.64                        |

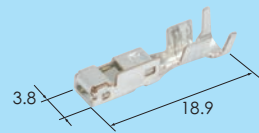
## 2.8 (L)

|   |                     |
|---|---------------------|
| Applicable wire size (mm <sup>2</sup> ) | 2.0-3.0<br>AWG14-12 |
| Cable overall diameter (mm)             | 2.7-3.3             |
| Material                                | Brass               |
| Surface treatment                       | Sn plated           |
| Applicable Tab Thickness (mm)           | 0.64                |



**M (8100-4414)**

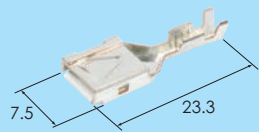
**F (8100-4409)**



|   |                             |
|---|-----------------------------|
| Applicable wire size (mm <sup>2</sup> ) | 2.0-3.0<br>AWG14-12         |
| Cable overall diameter (mm)             | 2.7-3.3                     |
| Material                                | Heat-resistant copper alloy |
| Surface treatment                       | Sn plated                   |
| Applicable Tab Thickness (mm)           | 0.64                        |

## 6.3 (S)

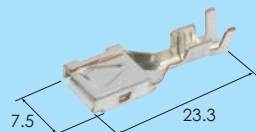
|   |                             |
|---|-----------------------------|
| Applicable wire size (mm <sup>2</sup> ) | 0.5-1.0<br>AWG20-16         |
| Cable overall diameter (mm)             | 1.9-2.4                     |
| Material                                | Heat-resistant copper alloy |
| Surface treatment                       | Sn plated                   |
| Applicable Tab Thickness (mm)           | 0.8                         |



**F (8100-4283)**

## 6.3 (M)

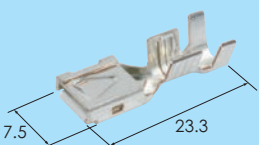
|   |                             |
|---|-----------------------------|
| Applicable wire size (mm <sup>2</sup> ) | 2.0<br>AWG14                |
| Cable overall diameter (mm)             | 2.7                         |
| Material                                | Heat-resistant copper alloy |
| Surface treatment                       | Sn plated                   |
| Applicable Tab Thickness (mm)           | 0.8                         |



**F (8100-4284)**

## 6.3 (L)

|   |                             |
|---|-----------------------------|
| Applicable wire size (mm <sup>2</sup> ) | 3.0-5.0<br>AWG12-10         |
| Cable overall diameter (mm)             | 3.3-4.0                     |
| Material                                | Heat-resistant copper alloy |
| Surface treatment                       | Sn plated                   |
| Applicable Tab Thickness (mm)           | 0.8                         |

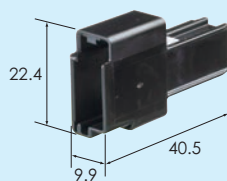


**F (8100-4285)**

## Housing (UNIT : mm)

### 1.5 2way

|                       |       |
|-----------------------|-------|
| Ref.Terminal part No. | P3    |
| Material              | PBT   |
| Color                 | Black |



**M (6098-5513)** key-A

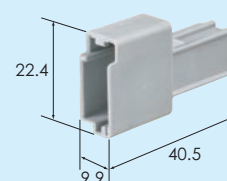
**F (6098-5510)** key-A



|                       |       |
|-----------------------|-------|
| Ref.Terminal part No. | P3    |
| Material              | PBT   |
| Color                 | Black |

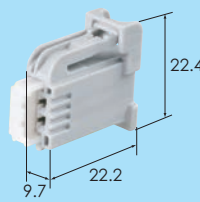
### 1.5 2way

|                       |      |
|-----------------------|------|
| Ref.Terminal part No. | P3   |
| Material              | PBT  |
| Color                 | Gray |



**M (6098-5529)** key-B

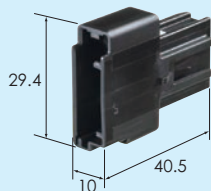
**F (6098-5527)** key-B



|                       |      |
|-----------------------|------|
| Ref.Terminal part No. | P3   |
| Material              | PBT  |
| Color                 | Gray |

### 1.5 4way

|                       |       |
|-----------------------|-------|
| Ref.Terminal part No. | P3    |
| Material              | PBT   |
| Color                 | Black |



**M (6098-5519)** key-A

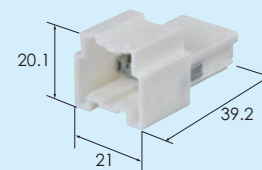
**F (6098-5516)** key-A



|                       |       |
|-----------------------|-------|
| Ref.Terminal part No. | P3    |
| Material              | PBT   |
| Color                 | Black |

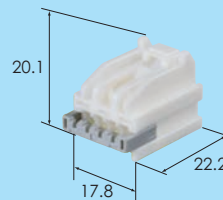
### 1.5 4way

|                       |         |
|-----------------------|---------|
| Ref.Terminal part No. | P3      |
| Material              | PBT     |
| Color                 | Natural |



**M (6098-4903)** note)

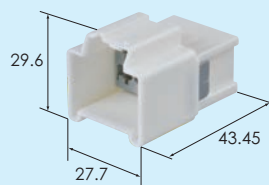
**F (6098-4793)** note)



|                       |         |
|-----------------------|---------|
| Ref.Terminal part No. | P3      |
| Material              | PBT     |
| Color                 | Natural |

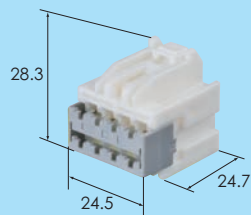
### 2.8 8way

|                       |         |
|-----------------------|---------|
| Ref.Terminal part No. | P3      |
| Material              | PBT     |
| Color                 | Natural |



**M (6098-4905)** note)

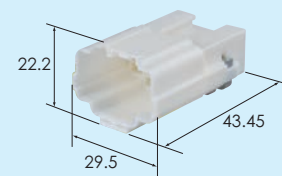
**F (6098-4787)** note)



|                       |         |
|-----------------------|---------|
| Ref.Terminal part No. | P3      |
| Material              | PBT     |
| Color                 | Natural |

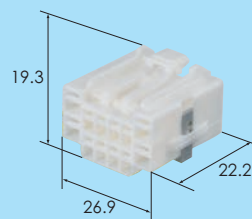
### 1.5(8) 2.8(4) 12way

|                       |                      |
|-----------------------|----------------------|
| Ref.Terminal part No. | [1.5] P3<br>[2.8] P3 |
| Material              | PBT                  |
| Color                 | Natural              |



**M (6098-4900)**

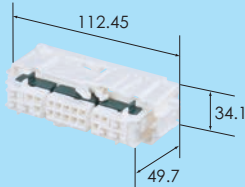
**F (6098-4789)**



|                       |                      |
|-----------------------|----------------------|
| Ref.Terminal part No. | [1.5] P3<br>[2.8] P3 |
| Material              | PBT                  |
| Color                 | Natural              |

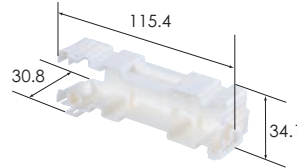
# SELF ALIGNING CONNECTOR

**2.8 (16) 6.3 (6) 22way**



**F (6098-4937)**

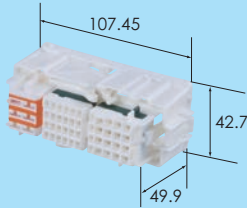
|                       |                      |
|-----------------------|----------------------|
| Ref:Terminal part No. | [2.8] P3<br>[6.3] P3 |
| Material              | PBT                  |
| Color                 | Natural              |



**F cover (6098-4941)**

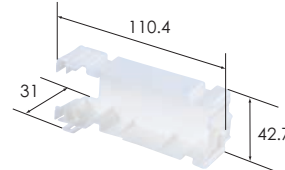
|          |         |
|----------|---------|
| Material | PBT     |
| Color    | Natural |

**1.5 (28) 2.8 (14) 6.3 (5) 47way**



**F (6098-5502) A**

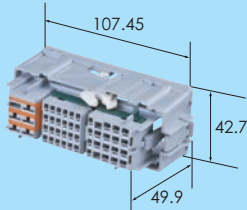
|                       |                                  |
|-----------------------|----------------------------------|
| Ref:Terminal part No. | [1.5] P3<br>[2.8] P3<br>[6.3] P3 |
| Material              | PBT                              |
| Color                 | Natural                          |



**F cover (6911-4320) A**

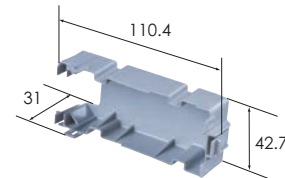
|          |         |
|----------|---------|
| Material | PBT     |
| Color    | Natural |

**1.5 (28) 2.8 (14) 6.3 (5) 47way**



**F (6098-5503) B**

|                       |                                  |
|-----------------------|----------------------------------|
| Ref:Terminal part No. | [1.5] P3<br>[2.8] P3<br>[6.3] P3 |
| Material              | PBT                              |
| Color                 | Gray                             |

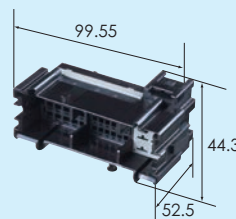


**F cover (6911-4321) B**

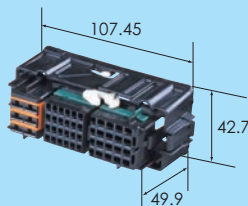
|          |      |
|----------|------|
| Material | PBT  |
| Color    | Gray |

**1.5 (28) 2.8 (16) 6.3 (6) 50way**

|                       |                                  |
|-----------------------|----------------------------------|
| Ref:Terminal part No. | [1.5] P3<br>[2.8] P3<br>[6.3] P3 |
| Material              | PBT                              |
| Color                 | Black                            |

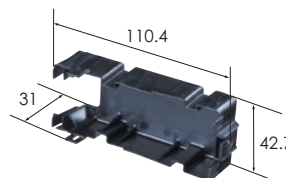


**M (6098-5587)**



**F (6098-5504)**

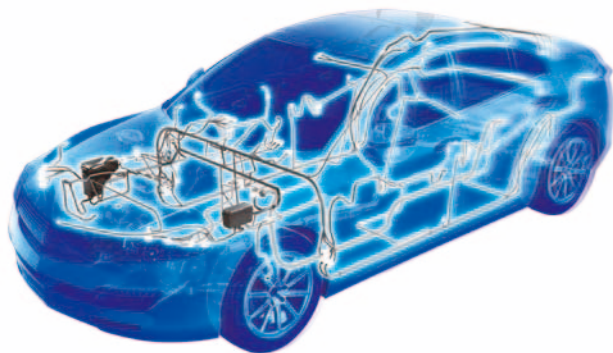
|                       |                                  |
|-----------------------|----------------------------------|
| Ref:Terminal part No. | [1.5] P3<br>[2.8] P3<br>[6.3] P3 |
| Material              | PBT                              |
| Color                 | Black                            |



**F cover (6911-4322)**

|          |       |
|----------|-------|
| Material | PBT   |
| Color    | Black |



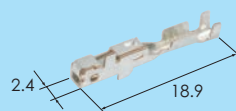


# US UNSEALED SERIES

For DEVICE Type 1

## Terminal (UNIT : mm)

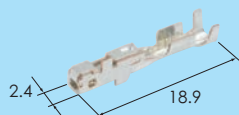
### 1.5 (S)



#### F (8240-0127)

|   |                             |
|---|-----------------------------|
| Applicable wire size (mm <sup>2</sup> ) | 0.35-0.5<br>AWG22-20        |
| Cable overall diameter (mm)             | 1.7-1.9                     |
| Material                                | Heat-resistant copper alloy |
| Surface treatment                       | Sn plated                   |
| Applicable Tab Thickness (mm)           | 0.8                         |

### 1.5 (M)



#### F (8240-0128)

|   |                             |
|---|-----------------------------|
| Applicable wire size (mm <sup>2</sup> ) | 0.8-1.0<br>AWG18-16         |
| Cable overall diameter (mm)             | 2.2-2.4                     |
| Material                                | Heat-resistant copper alloy |
| Surface treatment                       | Sn plated                   |
| Applicable Tab Thickness (mm)           | 0.8                         |

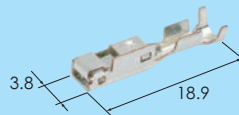
### 2.8 (S)



#### F (8100-4443)

|   |                             |
|---|-----------------------------|
| Applicable wire size (mm <sup>2</sup> ) | 0.35-0.5<br>AWG22-20        |
| Cable overall diameter (mm)             | 1.7-1.9                     |
| Material                                | Heat-resistant copper alloy |
| Surface treatment                       | Sn plated                   |
| Applicable Tab Thickness (mm)           | 0.8                         |

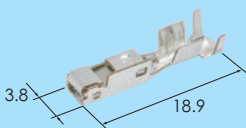
### 2.8 (M)



#### F (8100-4444)

|   |                             |
|---|-----------------------------|
| Applicable wire size (mm <sup>2</sup> ) | 0.8-1.0<br>AWG18-16         |
| Cable overall diameter (mm)             | 2.2-2.4                     |
| Material                                | Heat-resistant copper alloy |
| Surface treatment                       | Sn plated                   |
| Applicable Tab Thickness (mm)           | 0.8                         |

### 2.8 (L)

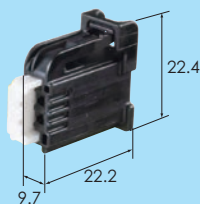


#### F (8100-4445)

|   |                             |
|---|-----------------------------|
| Applicable wire size (mm <sup>2</sup> ) | 2.0-3.0<br>AWG14-12         |
| Cable overall diameter (mm)             | 2.7-3.3                     |
| Material                                | Heat-resistant copper alloy |
| Surface treatment                       | Sn plated                   |
| Applicable Tab Thickness (mm)           | 0.8                         |

## Housing (UNIT : mm)

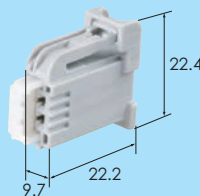
### 1.5 2way



#### F (6098-5510) key-A

|                       |       |
|-----------------------|-------|
| Ref:Terminal part No. | P7    |
| Material              | PBT   |
| Color                 | Black |

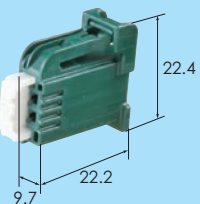
### 1.5 2way



#### F (6098-5527) key-B

|                       |         |
|-----------------------|---------|
| Ref:Terminal part No. | P7      |
| Material              | PBT     |
| Color                 | Natural |

### 1.5 2way



#### F (6098-6183) key-D

|                       |       |
|-----------------------|-------|
| Ref:Terminal part No. | P7    |
| Material              | PBT   |
| Color                 | Green |

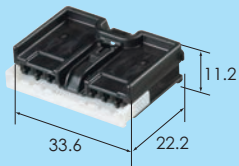
### 1.5 4way



#### F (6098-5516) key-A

|                       |       |
|-----------------------|-------|
| Ref:Terminal part No. | P7    |
| Material              | PBT   |
| Color                 | Black |

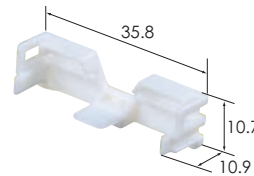
## 1.5 6way low profile



### F (6098-5985)

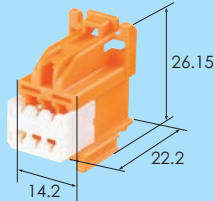
|                       |       |
|-----------------------|-------|
| Ref:Terminal part No. | P7    |
| Material              | PBT   |
| Color                 | Black |

### F cover (6911-4765)



|          |         |
|----------|---------|
| Material | PBT     |
| Color    | Natural |

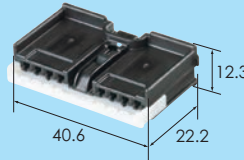
## 1.5 6way



### F (6098-4536) key-A note)

|                       |        |
|-----------------------|--------|
| Ref:Terminal part No. | P7     |
| Material              | PBT    |
| Color                 | Orange |

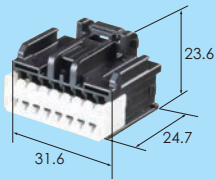
## 1.5 8way low profile



### F (6098-6708)

|                       |       |
|-----------------------|-------|
| Ref:Terminal part No. | P7    |
| Material              | PBT   |
| Color                 | Black |

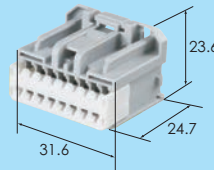
## 1.5 16way



### F (6098-4611) key-A note)

|                       |       |
|-----------------------|-------|
| Ref:Terminal part No. | P7    |
| Material              | PBT   |
| Color                 | Black |

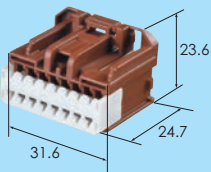
## 1.5 16way



### F (6098-5237) key-B note)

|                       |      |
|-----------------------|------|
| Ref:Terminal part No. | P7   |
| Material              | PBT  |
| Color                 | Gray |

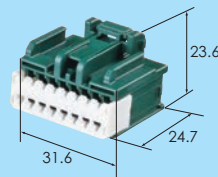
## 1.5 16way



### F (6098-5240) key-C note)

|                       |       |
|-----------------------|-------|
| Ref:Terminal part No. | P7    |
| Material              | PBT   |
| Color                 | Brown |

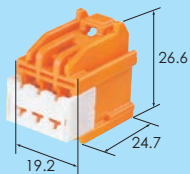
## 1.5 16way



### F (6098-4610) key-D note)

|                       |       |
|-----------------------|-------|
| Ref:Terminal part No. | P7    |
| Material              | PBT   |
| Color                 | Green |

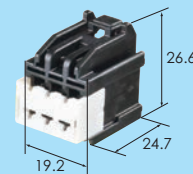
## 2.8 6way



### F (6098-4542) key-A note)

|                       |        |
|-----------------------|--------|
| Ref:Terminal part No. | P7     |
| Material              | PBT    |
| Color                 | Orange |

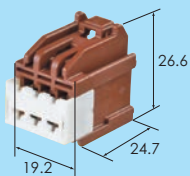
## 2.8 6way



### F (6098-4607) key-A note)

|                       |       |
|-----------------------|-------|
| Ref:Terminal part No. | P7    |
| Material              | PBT   |
| Color                 | Black |

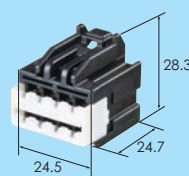
## 2.8 6way



### F (6098-4606) key-C note)

|                       |       |
|-----------------------|-------|
| Ref:Terminal part No. | P7    |
| Material              | PBT   |
| Color                 | Brown |

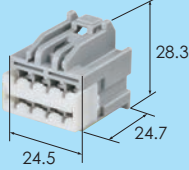
## 2.8 8way



### F (6098-4713) key-A note)

|                       |       |
|-----------------------|-------|
| Ref:Terminal part No. | P7    |
| Material              | PBT   |
| Color                 | Black |

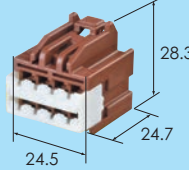
**2.8 8way**



**F (6098-4798)** (key-B note)

|                       |      |
|-----------------------|------|
| Ref:Terminal part No. | P7   |
| Material              | PBT  |
| Color                 | Gray |

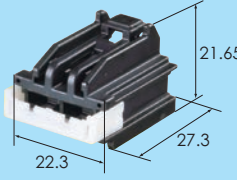
**2.8 8way**



**F (6098-5264)** (key-C note)

|                       |       |
|-----------------------|-------|
| Ref:Terminal part No. | P7    |
| Material              | PBT   |
| Color                 | Brown |

**6.3 2way**

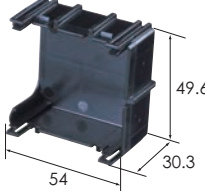


**F (6098-4539)** (note)

|                       |       |
|-----------------------|-------|
| Ref:Terminal part No. | P3    |
| Material              | PBT   |
| Color                 | Black |

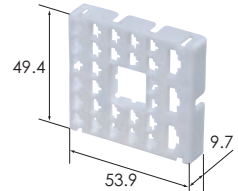
**2.8 (26) 6.3 (3) 29way Bolt Type**

**F cover (6911-4475)**

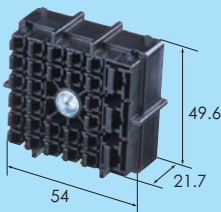


|          |       |
|----------|-------|
| Material | PBT   |
| Color    | Black |

**F TPA (6098-5474)**



|          |         |
|----------|---------|
| Material | PBT     |
| Color    | Natural |

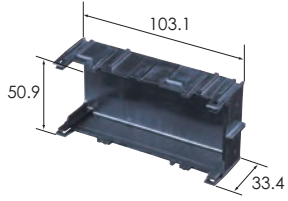


**F (6098-5473)**

|                       |                      |
|-----------------------|----------------------|
| Ref:Terminal part No. | [2.8] P7<br>[6.3] P3 |
| Material              | PBT                  |
| Color                 | Black                |

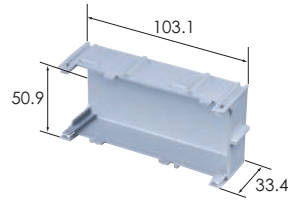
note) correspondence to USCAR Footprint

F cover (6911-5800)



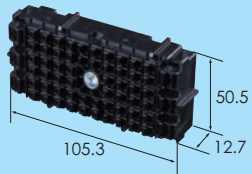
|                 |       |
|-----------------|-------|
| <b>Material</b> | PBT   |
| <b>Color</b>    | Black |

F cover (6911-5801)



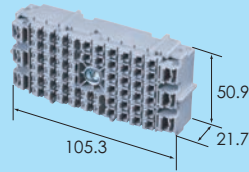
|                 |      |
|-----------------|------|
| <b>Material</b> | PBT  |
| <b>Color</b>    | Gray |

F (6098-5479)



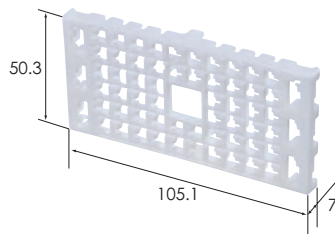
|                              |                      |
|------------------------------|----------------------|
| <b>Ref:Terminal part No.</b> | [2.8] P7<br>[6.3] P3 |
| <b>Material</b>              | PBT                  |
| <b>Color</b>                 | Black                |

F (6098-5480)

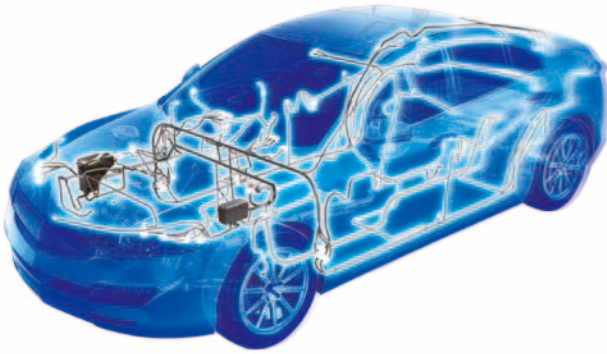


|                              |                      |
|------------------------------|----------------------|
| <b>Ref:Terminal part No.</b> | [2.8] P7<br>[6.3] P3 |
| <b>Material</b>              | PBT                  |
| <b>Color</b>                 | Gray                 |

F TPA (6098-5475)



|                 |         |
|-----------------|---------|
| <b>Material</b> | PBT     |
| <b>Color</b>    | Natural |

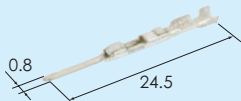


# US UNSEALED SERIES

For INLINE Type2

**Terminal (UNIT : mm)**

**0.64 (S)**



**M (8230-5221)**

|   |               |
|---|---------------|
| Applicable wire size (mm <sup>2</sup> ) | 0.13<br>AWG26 |
| Cable overall diameter (mm)             | 1.3           |
| Material                                | Brass         |
| Surface treatment                       | Sn plated     |
| Applicable Tab Thickness (mm)           | 0.64          |

**0.64 (M)**



**M (8230-5222)**

|   |                       |
|---|-----------------------|
| Applicable wire size (mm <sup>2</sup> ) | 0.22-0.35<br>AWG24-22 |
| Cable overall diameter (mm)             | 1.5-1.7               |
| Material                                | Brass                 |
| Surface treatment                       | Sn plated             |
| Applicable Tab Thickness (mm)           | 0.64                  |

**0.64 (L)**



**M (8230-5223)**

|   |                     |
|---|---------------------|
| Applicable wire size (mm <sup>2</sup> ) | 0.5-0.8<br>AWG20-18 |
| Cable overall diameter (mm)             | 1.9-2.2             |
| Material                                | Brass               |
| Surface treatment                       | Sn plated           |
| Applicable Tab Thickness (mm)           | 0.64                |

**2.8 (SS)**

|   |               |
|---|---------------|
| Applicable wire size (mm <sup>2</sup> ) | 0.35<br>AWG22 |
| Cable overall diameter (mm)             | 1.7           |
| Material                                | Brass         |
| Surface treatment                       | Sn plated     |
| Applicable Tab Thickness (mm)           | 0.8           |



**2.8 (S)**

|   |                     |
|---|---------------------|
| Applicable wire size (mm <sup>2</sup> ) | 0.5-1.0<br>AWG20-18 |
| Cable overall diameter (mm)             | 1.9-2.2             |
| Material                                | Brass               |
| Surface treatment                       | Sn plated           |
| Applicable Tab Thickness (mm)           | 0.8                 |



**M (8230-5303)**



**F (8240-0477)**

|   |                             |
|---|-----------------------------|
| Applicable wire size (mm <sup>2</sup> ) | 0.35<br>AWG22               |
| Cable overall diameter (mm)             | 1.7                         |
| Material                                | Heat-resistant copper alloy |
| Surface treatment                       | Sn plated                   |
| Applicable Tab Thickness (mm)           | 0.8                         |

**M (8230-5257)**



**F (8240-0423)**

|   |                             |
|---|-----------------------------|
| Applicable wire size (mm <sup>2</sup> ) | 0.5-1.0<br>AWG20-18         |
| Cable overall diameter (mm)             | 1.9-2.2                     |
| Material                                | Heat-resistant copper alloy |
| Surface treatment                       | Sn plated                   |
| Applicable Tab Thickness (mm)           | 0.8                         |



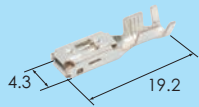
## 2.8 (M)

|   |                     |
|---|---------------------|
| Applicable wire size (mm <sup>2</sup> ) | 1.5-2.5<br>AWG16-14 |
| Cable overall diameter (mm)             | 2.4-2.7             |
| Material                                | Brass               |
| Surface treatment                       | Sn plated           |
| Applicable Tab Thickness (mm)           | 0.8                 |



M (8230-5258)

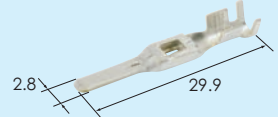
F (8240-0424)



|   |                             |
|---|-----------------------------|
| Applicable wire size (mm <sup>2</sup> ) | 1.5-2.5<br>AWG16-14         |
| Cable overall diameter (mm)             | 2.4-2.7                     |
| Material                                | Heat-resistant copper alloy |
| Surface treatment                       | Sn plated                   |
| Applicable Tab Thickness (mm)           | 0.8                         |

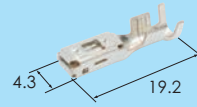
## 2.8 (L)

|   |              |
|---|--------------|
| Applicable wire size (mm <sup>2</sup> ) | 3.0<br>AWG12 |
| Cable overall diameter (mm)             | 3.3          |
| Material                                | Brass        |
| Surface treatment                       | Sn plated    |
| Applicable Tab Thickness (mm)           | 0.8          |



M (8230-5259)

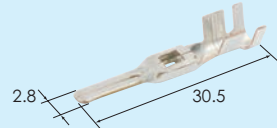
F (8240-0425)



|   |                             |
|---|-----------------------------|
| Applicable wire size (mm <sup>2</sup> ) | 3.0<br>AWG12                |
| Cable overall diameter (mm)             | 3.3                         |
| Material                                | Heat-resistant copper alloy |
| Surface treatment                       | Sn plated                   |
| Applicable Tab Thickness (mm)           | 0.8                         |

## 2.8 (LL)

|   |                             |
|---|-----------------------------|
| Applicable wire size (mm <sup>2</sup> ) | 4.0-5.0<br>AWG10            |
| Cable overall diameter (mm)             | 4.0                         |
| Material                                | Heat-resistant copper alloy |
| Surface treatment                       | Sn plated                   |
| Applicable Tab Thickness (mm)           | 0.8                         |



M (8230-5260)

F (8240-0426)



|   |                             |
|---|-----------------------------|
| Applicable wire size (mm <sup>2</sup> ) | 4.0-5.0<br>AWG10            |
| Cable overall diameter (mm)             | 4.0                         |
| Material                                | Heat-resistant copper alloy |
| Surface treatment                       | Sn plated                   |
| Applicable Tab Thickness (mm)           | 0.8                         |

## 2.8 double crimping

F (8240-0427)

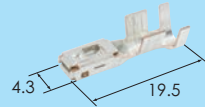
Applicable wire size (mm<sup>2</sup>)

Cable overall diameter (mm)

Material Heat-resistant copper alloy

Surface treatment Sn plated

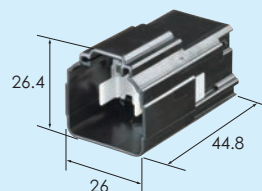
Applicable Tab Thickness (mm) 0.8



**Housing (UNIT : mm)** \* For terminal selection, please contact our sales staff.

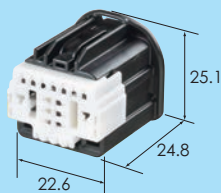
0.64 (17) 1.5 (2) 2.8 (2) 21way

|                       |                                  |
|-----------------------|----------------------------------|
| Ref.Terminal part No. | [0.64] *<br>[1.5] *<br>[2.8] P11 |
| Material              | PBT                              |
| Color                 | Black                            |



M (6098-7127) key-A

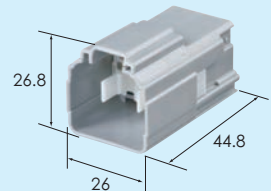
F (6098-7119) key-A



|                       |                                  |
|-----------------------|----------------------------------|
| Ref.Terminal part No. | [0.64] *<br>[1.5] *<br>[2.8] P11 |
| Material              | PBT                              |
| Color                 | Black                            |

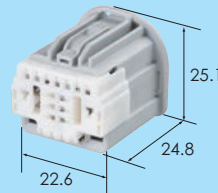
0.64 (17) 1.5 (2) 2.8 (2) 21way

|                       |                                  |
|-----------------------|----------------------------------|
| Ref.Terminal part No. | [0.64] *<br>[1.5] *<br>[2.8] P11 |
| Material              | PBT                              |
| Color                 | Gray                             |



M (6098-7129) key-B

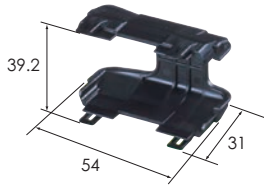
F (6098-7122) key-B



|                       |                                  |
|-----------------------|----------------------------------|
| Ref.Terminal part No. | [0.64] *<br>[1.5] *<br>[2.8] P11 |
| Material              | PBT                              |
| Color                 | Gray                             |

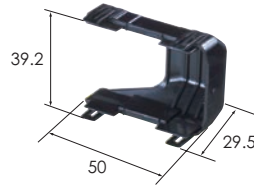
**0.64 (44) 2.8 (12) 6.3 (3) 59way**

**M cover1 (6911-4747)**



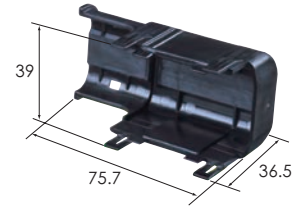
|          |       |
|----------|-------|
| Material | PBT   |
| Color    | Black |

**M cover2 (6911-4852)**



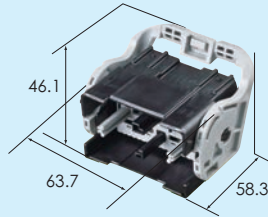
|          |       |
|----------|-------|
| Material | PBT   |
| Color    | Black |

**M cover3 (6911-5315)**

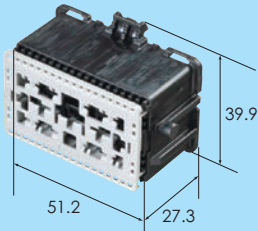


|          |       |
|----------|-------|
| Material | PBT   |
| Color    | Black |

|                       |                                  |
|-----------------------|----------------------------------|
| Ref:Terminal part No. | [0.64] P11<br>[2.8] *<br>[6.3] * |
| Material              | PBT                              |
| Color                 | Black                            |



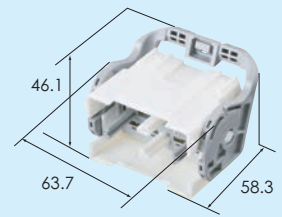
**M (6098-6044) key-A**



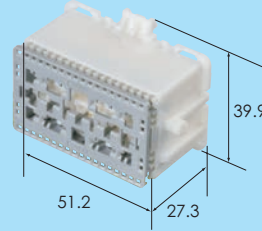
|                       |                                |
|-----------------------|--------------------------------|
| Ref:Terminal part No. | [0.64] *<br>[2.8] *<br>[6.3] * |
| Material              | PBT                            |
| Color                 | Black                          |

**F (6098-6047) key-A**

|                       |                                  |
|-----------------------|----------------------------------|
| Ref:Terminal part No. | [0.64] P11<br>[2.8] *<br>[6.3] * |
| Material              | PBT                              |
| Color                 | Natural                          |



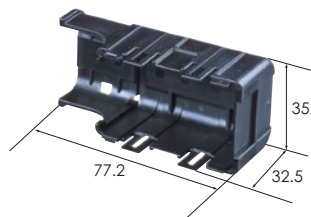
**M (6098-6045) key-B**



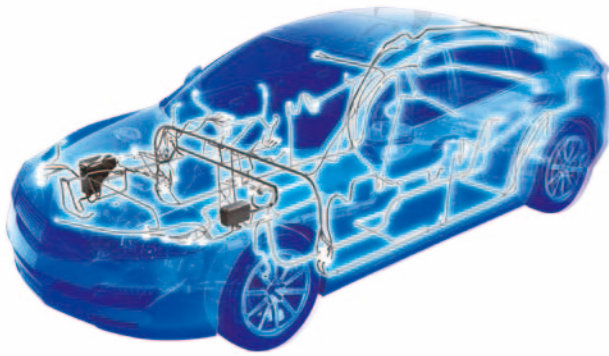
|                       |                                |
|-----------------------|--------------------------------|
| Ref:Terminal part No. | [0.64] *<br>[2.8] *<br>[6.3] * |
| Material              | PBT                            |
| Color                 | Natural                        |

**F (6098-6134) key-B**

**F cover (6911-4748)**



|          |       |
|----------|-------|
| Material | PBT   |
| Color    | Black |



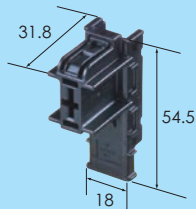
# US UNSEALED SERIES

For DEVICE Type2

\* For terminal selection, please contact our sales staff.

## Housing (UNIT : mm)

### 9.5 1way



**F (6098-6572)**

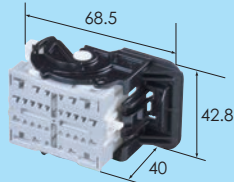
Material PBT  
Color Black



**F cover (6911-5010)**

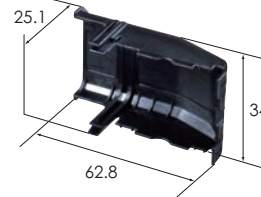
Material PBT  
Color Black

### 1.5 (20) 2.8 (8) 6.3 (4) 32way



**F (6098-6461)**

Material PBT  
Color Black

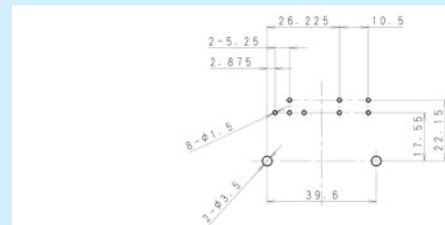
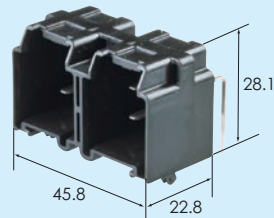


**F cover (6911-5636)**

Material PBT  
Color Black

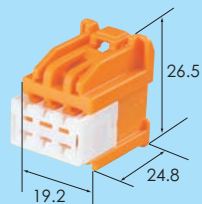
### 2.8 8way Header

Material PBTG30  
Color Black



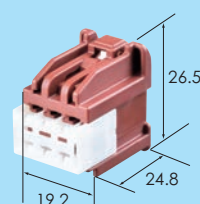
mounting drawing

**M (6098-6316)** note)



Material PBT  
Color Orange

**F (6098-6412)** note)

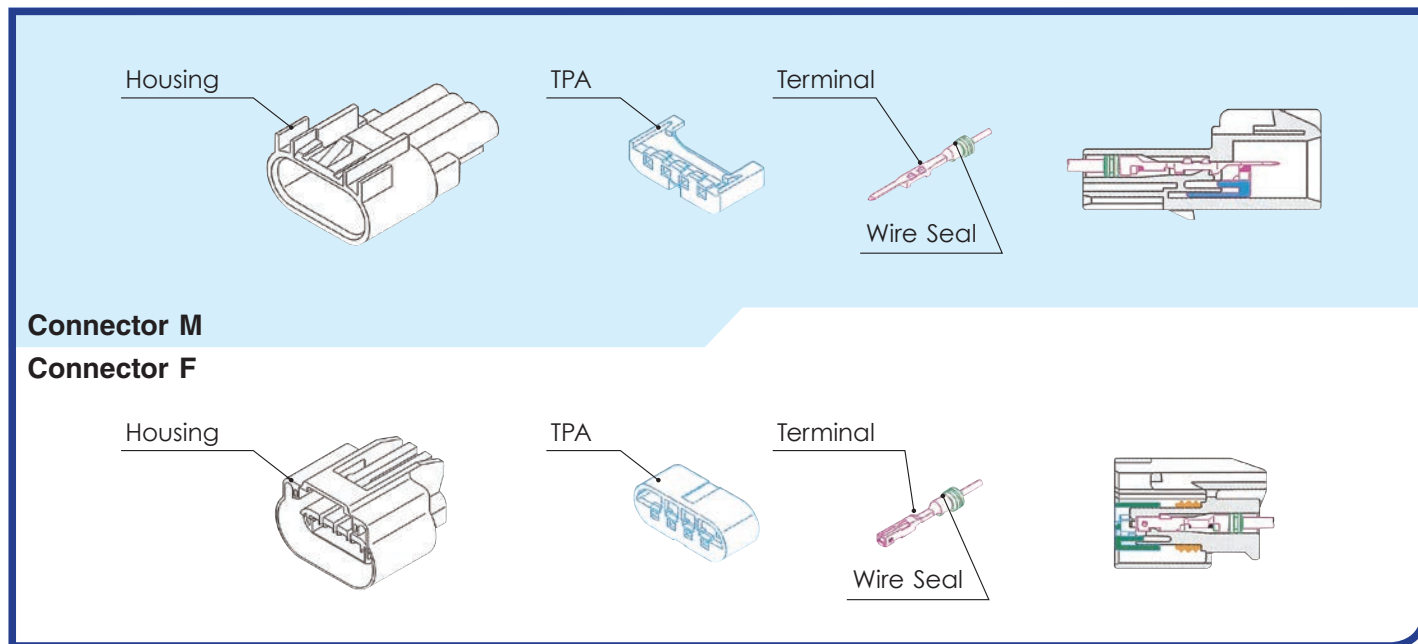


Material PBT  
Color Brown

**F (6098-6415)** note)

# US SEALED SERIES

## Structure



## Features

特点

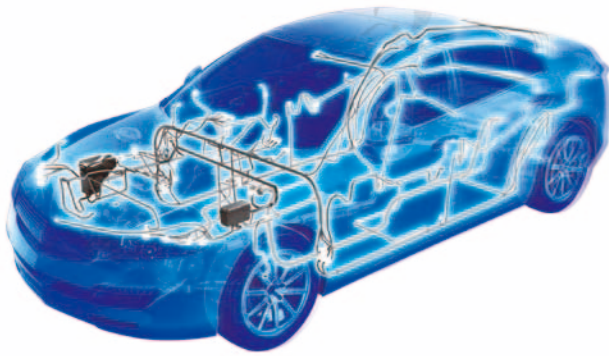
### US sealed series comply with SAE/USCAR-2.

This series consists of 0.64mm, 1.5mm, 2.8mm and 9.5mm types classified according to terminal size, covering an extensive array of applications from signal to power circuits.

US防水系列达到了SAE/USCAR-2标准。

按照端子尺寸划分为0.64mm•1.5mm•2.8mm•9.5mm型,从信号回路到电源回路,能广泛应用。

- The connector mechanism only allows the TPA to be set when the terminal completely inserted.
- TPAs are pre-mounted on housings, and are structured to enable setting by the same simple operation regardless of the number of ways, improving operation.
- 具有当端子在半插入状态时,TPA无法组装到位的构造。
- TPA预先安装在接插件护套上,无论多少极数都能够通过简单的统一操作进行安装,可提高工作效率。



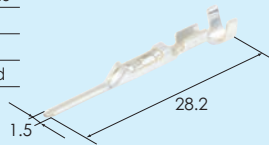
# US SEALED SERIES

For INLINE

## Terminal (UNIT : mm)

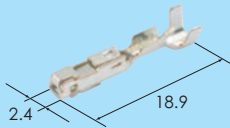
### 1.5 (S)

|   |                      |
|---|----------------------|
| Applicable wire size (mm <sup>2</sup> ) | 0.35-0.5<br>AWG22-20 |
| Cable overall diameter (mm)             | 1.7-1.9              |
| Material                                | Brass                |
| Surface treatment                       | Sn plated            |
| Applicable Tab Thickness (mm)           | 0.64                 |



### M (8100-4366)

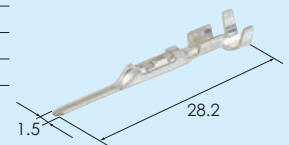
### F (8100-4375)



|   |                             |
|---|-----------------------------|
| Applicable wire size (mm <sup>2</sup> ) | 0.35-0.5<br>AWG22-20        |
| Cable overall diameter (mm)             | 1.7-1.9                     |
| Material                                | Heat-resistant copper alloy |
| Surface treatment                       | Sn plated                   |
| Applicable Tab Thickness (mm)           | 0.64                        |

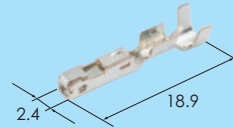
### 1.5 (M)

|   |                     |
|---|---------------------|
| Applicable wire size (mm <sup>2</sup> ) | 0.8-1.0<br>AWG18-16 |
| Cable overall diameter (mm)             | 2.2-2.4             |
| Material                                | Brass               |
| Surface treatment                       | Sn plated           |
| Applicable Tab Thickness (mm)           | 0.64                |



### M (8100-4373)

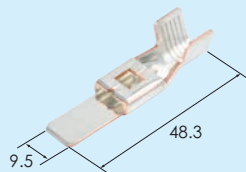
### F (8100-4381)



|   |                             |
|---|-----------------------------|
| Applicable wire size (mm <sup>2</sup> ) | 0.8-1.0<br>AWG18-16         |
| Cable overall diameter (mm)             | 2.2-2.4                     |
| Material                                | Heat-resistant copper alloy |
| Surface treatment                       | Sn plated                   |
| Applicable Tab Thickness (mm)           | 0.64                        |

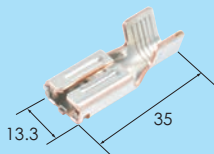
### 9.5

|   |                             |
|---|-----------------------------|
| Applicable wire size (mm <sup>2</sup> ) | 15-20<br>AWG6-4             |
| Cable overall diameter (mm)             | 10.3-11.5                   |
| Material                                | Heat-resistant copper alloy |
| Surface treatment                       | Sn plated                   |
| Applicable Tab Thickness (mm)           | 1.2                         |



### M (8100-3748)

### F (8100-3222)

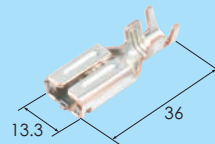


|   |                             |
|---|-----------------------------|
| Applicable wire size (mm <sup>2</sup> ) | 15-21<br>AWG6-5             |
| Cable overall diameter (mm)             | 10.3-11.5                   |
| Material                                | Heat-resistant copper alloy |
| Surface treatment                       | Sn plated                   |
| Applicable Tab Thickness (mm)           | 1.2                         |

### 9.5

### F (8240-0134)

|   |                             |
|---|-----------------------------|
| Applicable wire size (mm <sup>2</sup> ) | 5-8<br>AWG10-8              |
| Cable overall diameter (mm)             | 10.3-11.5                   |
| Material                                | Heat-resistant copper alloy |
| Surface treatment                       | Sn plated                   |
| Applicable Tab Thickness (mm)           | 1.2                         |

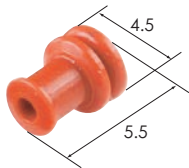




**Wire seals (UNIT : mm)** The wire seals are common to M and F.

**1.5 (S)**

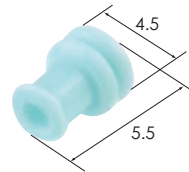
**(7165-1194)**



|                            |               |
|----------------------------|---------------|
| Cable overall diameter(mm) | 1.7-1.9       |
| Material                   | Silicon       |
| Color                      | Reddish Brown |

**1.5 (M)**

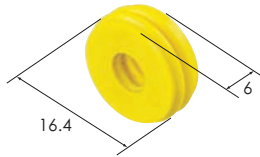
**(7165-1195)**



|                            |          |
|----------------------------|----------|
| Cable overall diameter(mm) | 2.2-2.4  |
| Material                   | Silicon  |
| Color                      | Sky blue |

**9.5 (S)**

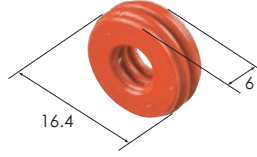
**(7165-1346)**



|                            |         |
|----------------------------|---------|
| Cable overall diameter(mm) | 5.5-5.8 |
| Material                   | Silicon |
| Color                      | Yellow  |

**9.5 (M)**

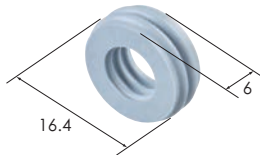
**(7165-0782)**



|                            |               |
|----------------------------|---------------|
| Cable overall diameter(mm) | 7.5-8.0       |
| Material                   | Silicon       |
| Color                      | Reddish Brown |

**9.5 (L)**

**(6185-4620)**

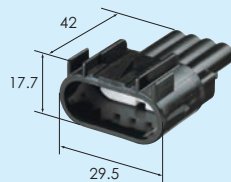


|                            |         |
|----------------------------|---------|
| Cable overall diameter(mm) | 8.7-9.0 |
| Material                   | Silicon |
| Color                      | Gray    |

**Housing (UNIT : mm)** \* For 2.8 terminal & wire seal selection, please contact our sales staff.

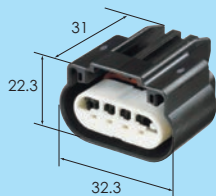
**1.5 4way**

|                       |       |
|-----------------------|-------|
| Ref:Terminal part No. | P16   |
| Ref:Wire seal No.     | P17   |
| Material              | PBT   |
| Color                 | Black |



**M (6188-0793)** (note)

**F (6189-6901)** (note)



|                       |       |
|-----------------------|-------|
| Ref:Terminal part No. | P16   |
| Ref:Wire seal No.     | P17   |
| Material              | PBT   |
| Color                 | Black |

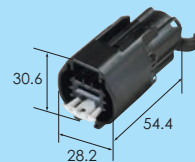
**9.5 1way**

|                       |       |
|-----------------------|-------|
| Ref:Terminal part No. | P16   |
| Ref:Wire seal No.     | P17   |
| Material              | PBT   |
| Color                 | Black |



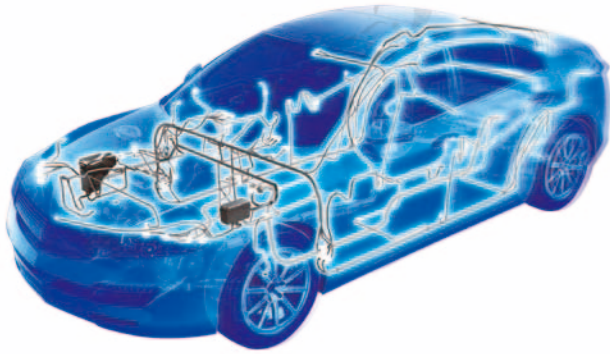
**M (6188-4702)**

**F (6189-6862)**



|                       |       |
|-----------------------|-------|
| Ref:Terminal part No. | P16   |
| Ref:Wire seal No.     | P17   |
| Material              | PBT   |
| Color                 | Black |

(note) correspondence to USCAR Footprint



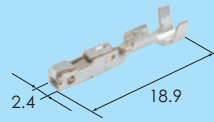
# US SEALED SERIES

For DEVICE Type 1

**Housing (UNIT : mm)** \* For terminal selection, please contact our sales staff.

## Terminal (UNIT : mm)

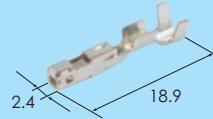
### 1.5 (S)



#### F (8100-4379)

|   |                             |
|---|-----------------------------|
| Applicable wire size (mm <sup>2</sup> ) | 0.35-0.5<br>AWG22-20        |
| Cable overall diameter (mm)             | 1.7-1.9                     |
| Material                                | Heat-resistant copper alloy |
| Surface treatment                       | Sn plated                   |
| Applicable Tab Thickness (mm)           | 0.8                         |

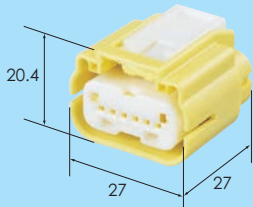
### 1.5 (M)



#### F (8100-4377)

|   |                             |
|---|-----------------------------|
| Applicable wire size (mm <sup>2</sup> ) | 0.8-1.0<br>AWG18-16         |
| Cable overall diameter (mm)             | 2.2-2.4                     |
| Material                                | Heat-resistant copper alloy |
| Surface treatment                       | Sn plated                   |
| Applicable Tab Thickness (mm)           | 0.8                         |

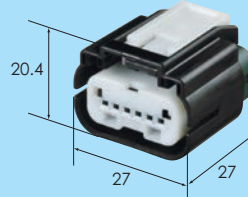
### 0.64 3way



#### F (6189-1024) key-K note)

|                       |        |
|-----------------------|--------|
| Ref:Terminal part No. | P3     |
| Material              | PBT    |
| Color                 | Yellow |

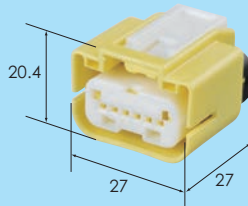
### 0.64 4way



#### F (6189-7011) key-A note)

|                       |       |
|-----------------------|-------|
| Ref:Terminal part No. | P3    |
| Material              | PBT   |
| Color                 | Black |

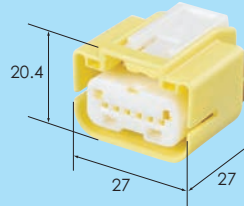
### 0.64 4way



#### F (6189-1019) key-E note)

|                       |        |
|-----------------------|--------|
| Ref:Terminal part No. | P3     |
| Material              | PBT    |
| Color                 | Yellow |

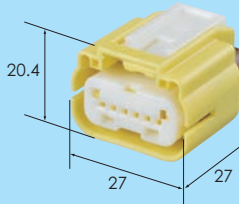
### 0.64 5way



#### F (6189-7001) key-E note)

|                       |        |
|-----------------------|--------|
| Ref:Terminal part No. | P3     |
| Material              | PBT    |
| Color                 | Yellow |

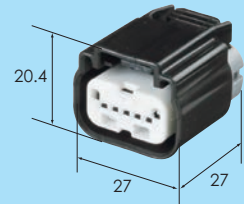
### 0.64 5way



#### F (6189-6936) key-K note)

|                       |        |
|-----------------------|--------|
| Ref:Terminal part No. | P3     |
| Material              | PBT    |
| Color                 | Yellow |

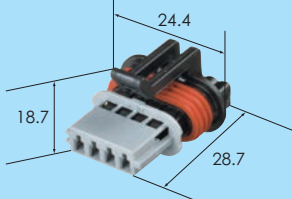
### 0.64 5way



#### F (6189-7199) key-B note)

|                       |       |
|-----------------------|-------|
| Ref:Terminal part No. | *     |
| Material              | PBT   |
| Color                 | Black |

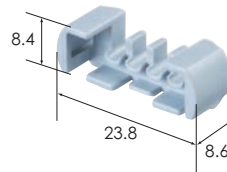
### 1.5 4way



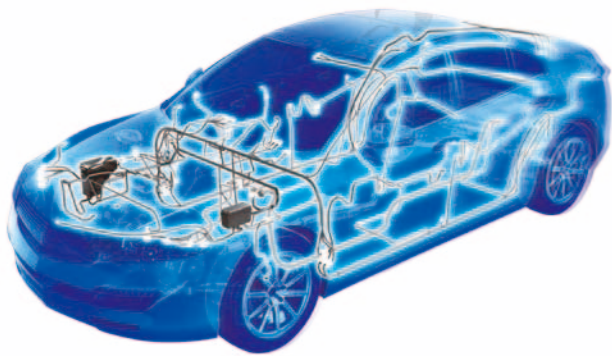
#### F (6189-6897) note)

|                       |       |
|-----------------------|-------|
| Ref:Terminal part No. | P18   |
| Ref:Wire seal No.     | P17   |
| Material              | PBT   |
| Color                 | Black |

#### F Back TPA (6185-4630)



|          |      |
|----------|------|
| Material | PBT  |
| Color    | Gray |

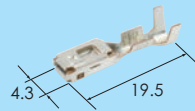


# US SEALED SERIES

For DEVICE Type2

## Terminal (UNIT : mm)

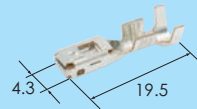
### 2.8 (S) Sn



#### F (8240-0428)

|   |                             |
|---|-----------------------------|
| Applicable wire size (mm <sup>2</sup> ) | 0.5-1.0<br>AWG20-18         |
| Cable overall diameter (mm)             | 1.9-2.2                     |
| Material                                | Heat-resistant copper alloy |
| Surface treatment                       | Sn plated                   |
| Applicable Tab Thickness (mm)           | 0.8                         |

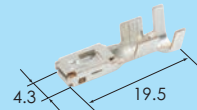
### 2.8 (M) Sn



#### F (8240-0429)

|   |                             |
|---|-----------------------------|
| Applicable wire size (mm <sup>2</sup> ) | 1.5-2.5<br>AWG16-14         |
| Cable overall diameter (mm)             | 2.4-2.7                     |
| Material                                | Heat-resistant copper alloy |
| Surface treatment                       | Sn plated                   |
| Applicable Tab Thickness (mm)           | 0.8                         |

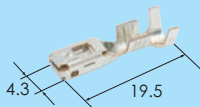
### 2.8 (L) Sn



#### F (8240-0430)

|   |                             |
|---|-----------------------------|
| Applicable wire size (mm <sup>2</sup> ) | 3.0-4.0<br>AWG12            |
| Cable overall diameter (mm)             | 3.3                         |
| Material                                | Heat-resistant copper alloy |
| Surface treatment                       | Sn plated                   |
| Applicable Tab Thickness (mm)           | 0.8                         |

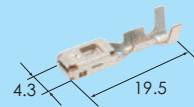
### 2.8 (S) Grease



#### F (8240-0431)

|   |                             |
|---|-----------------------------|
| Applicable wire size (mm <sup>2</sup> ) | 0.5-1.0<br>AWG20-18         |
| Cable overall diameter (mm)             | 1.9-2.2                     |
| Material                                | Heat-resistant copper alloy |
| Surface treatment                       | Sn plated                   |
| Applicable Tab Thickness (mm)           | 0.8                         |

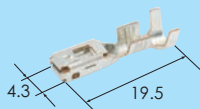
### 2.8 (S) Ag



#### F (8240-0434)

|   |                             |
|---|-----------------------------|
| Applicable wire size (mm <sup>2</sup> ) | 0.5-1.0<br>AWG20-18         |
| Cable overall diameter (mm)             | 1.9-2.2                     |
| Material                                | Heat-resistant copper alloy |
| Surface treatment                       | Ag plated                   |
| Applicable Tab Thickness (mm)           | 0.8                         |

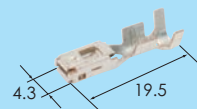
### 2.8 (M) Grease



#### F (8240-0432)

|   |                             |
|---|-----------------------------|
| Applicable wire size (mm <sup>2</sup> ) | 1.5-2.5<br>AWG16-14         |
| Cable overall diameter (mm)             | 2.4-2.7                     |
| Material                                | Heat-resistant copper alloy |
| Surface treatment                       | Sn plated                   |
| Applicable Tab Thickness (mm)           | 0.8                         |

### 2.8 (M) Ag



#### F (8240-0435)

|   |                             |
|---|-----------------------------|
| Applicable wire size (mm <sup>2</sup> ) | 1.5-2.5<br>AWG16-14         |
| Cable overall diameter (mm)             | 2.4-2.7                     |
| Material                                | Heat-resistant copper alloy |
| Surface treatment                       | Ag plated                   |
| Applicable Tab Thickness (mm)           | 0.8                         |

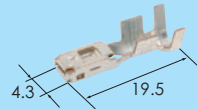
### 2.8 (L) Grease



#### F (8240-0433)

|   |                             |
|---|-----------------------------|
| Applicable wire size (mm <sup>2</sup> ) | 3.0-4.0<br>AWG12            |
| Cable overall diameter (mm)             | 3.3                         |
| Material                                | Heat-resistant copper alloy |
| Surface treatment                       | Sn plated                   |
| Applicable Tab Thickness (mm)           | 0.8                         |

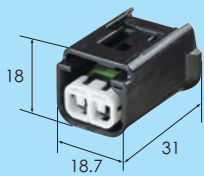
### 2.8 (L) Ag



#### F (8240-0436)

|   |                             |
|---|-----------------------------|
| Applicable wire size (mm <sup>2</sup> ) | 3.0-4.0<br>AWG12            |
| Cable overall diameter (mm)             | 3.3                         |
| Material                                | Heat-resistant copper alloy |
| Surface treatment                       | Ag plated                   |
| Applicable Tab Thickness (mm)           | 0.8                         |

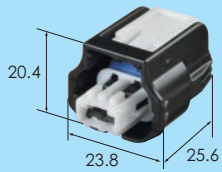
**1.5 2way**



**F (6189-7171)** key-A note)

|                       |       |
|-----------------------|-------|
| Ref:Terminal part No. | *     |
| Material              | PBT   |
| Color                 | Black |

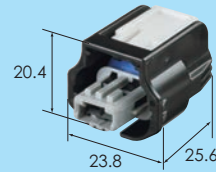
**2.8 2way**



**F (6189-7290)** key-A

|                       |       |
|-----------------------|-------|
| Ref:Terminal part No. | P19   |
| Material              | PBT   |
| Color                 | Black |

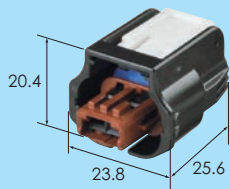
**2.8 2way**



**F (6189-7373)** key-B

|                       |       |
|-----------------------|-------|
| Ref:Terminal part No. | P19   |
| Material              | PBT   |
| Color                 | Black |

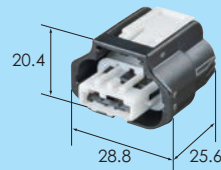
**2.8 2way**



**F (6189-7374)** key-C

|                       |       |
|-----------------------|-------|
| Ref:Terminal part No. | P19   |
| Material              | PBT   |
| Color                 | Black |

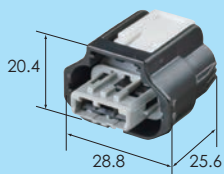
**2.8 3way**



**F (6189-7291)** key-A

|                       |       |
|-----------------------|-------|
| Ref:Terminal part No. | P19   |
| Material              | PBT   |
| Color                 | Black |

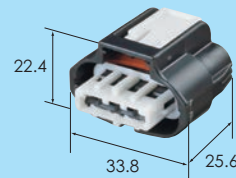
**2.8 3way**



**F (6189-7375)** key-B

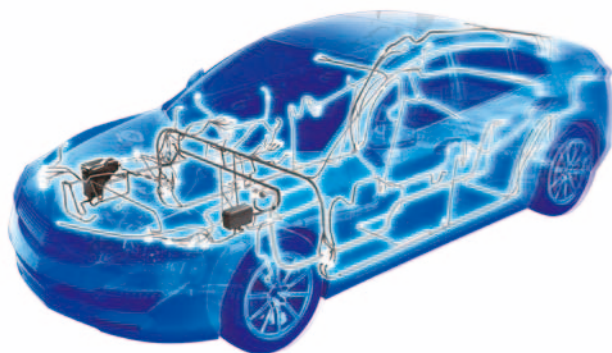
|                       |       |
|-----------------------|-------|
| Ref:Terminal part No. | P19   |
| Material              | PBT   |
| Color                 | Black |

**2.8 4way**



**F (6189-7292)** key-A

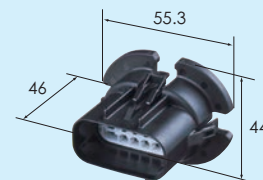
|                       |       |
|-----------------------|-------|
| Ref:Terminal part No. | P19   |
| Material              | PBT   |
| Color                 | Black |



(UNIT : mm)

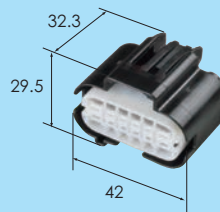
1.5 (8) 2.8 (4) 12way

|                       |                      |
|-----------------------|----------------------|
| Ref:Terminal part No. | [1.5] P16<br>[2.8] * |
| Ref:Wire seal No.     | [1.5] P17<br>[2.8] * |
| Material              | PBT                  |
| Color                 | Black                |



M (6188-4756)

F (6189-6900)



|                       |                      |
|-----------------------|----------------------|
| Ref:Terminal part No. | [1.5] P16<br>[2.8] * |
| Ref:Wire seal No.     | [1.5] P17<br>[2.8] * |
| Material              | PBT                  |
| Color                 | Black                |

# Door Connector

## Type1

\* For terminal and wire seal selection, please contact our sales staff.

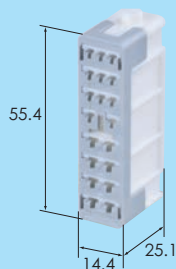
1.5 (11) 2.8 (8) 19way

|                       |       |
|-----------------------|-------|
| Ref:Terminal part No. | P3    |
| Material              | PBT   |
| Color                 | Black |



M (6098-5141)

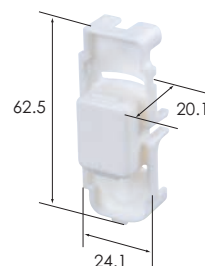
F (6098-5144)



|                       |         |
|-----------------------|---------|
| Ref:Terminal part No. | P3      |
| Material              | PBT     |
| Color                 | Natural |

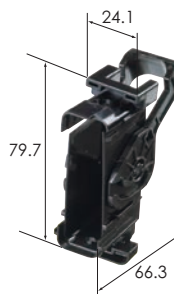
M Shipping Cap (6911-5294)

|          |         |
|----------|---------|
| Material | PBT     |
| Color    | Natural |



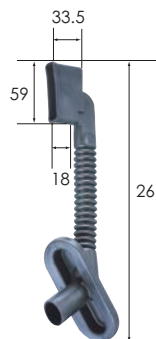
F Lever Cover Assy (6911-4230)

|          |           |
|----------|-----------|
| Material | PBT, PA6T |
| Color    | Black     |



F Grommet (7105-3781)

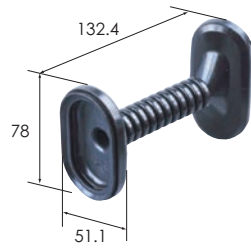
|          |       |
|----------|-------|
| Material | EPDM  |
| Color    | Black |





**1.5(16) 2.8(6) 22way**

**M Grommet (7105-3534)**



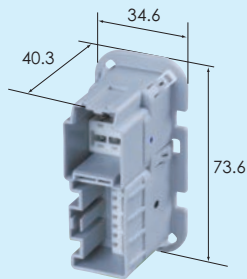
|          |       |
|----------|-------|
| Material | EPDM  |
| Color    | Black |

**M Grommet retainer (6920-2624)**



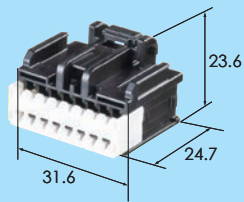
|          |       |
|----------|-------|
| Material | PBT   |
| Color    | Black |

|                       |                    |
|-----------------------|--------------------|
| Ref:Terminal part No. | [1.5] *<br>[2.8] * |
| Material              | PBT                |
| Color                 | Gray               |



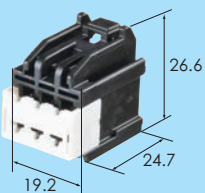
**M (6098-6279)**

**F (6098-4611) note)**



|                       |       |
|-----------------------|-------|
| Ref:Terminal part No. | P7    |
| Material              | PBT   |
| Color                 | Black |

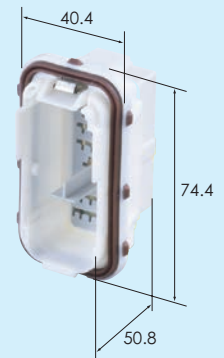
**F (6098-4607) note)**



|                       |       |
|-----------------------|-------|
| Ref:Terminal part No. | P7    |
| Material              | PBT   |
| Color                 | Black |

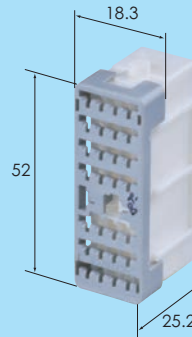
**1.5(28) 2.8(2) 30way**

|                       |         |
|-----------------------|---------|
| Ref:Terminal part No. | P3      |
| Material              | PBT     |
| Color                 | Natural |



**M (6098-4932)**

**F (6098-4626)**



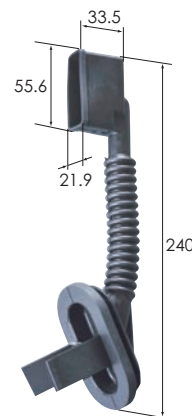
|                       |         |
|-----------------------|---------|
| Ref:Terminal part No. | P3      |
| Material              | PBT     |
| Color                 | Natural |

**F Lever Assy (6911-3969)**



|          |           |
|----------|-----------|
| Material | PBT, PA6T |
| Color    | Black     |

**F Grommet (7105-2781)**



|          |       |
|----------|-------|
| Material | EPDM  |
| Color    | Black |

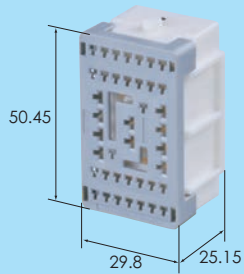
**1.5 (30) 2.8 (10) 40way**

|                       |       |
|-----------------------|-------|
| Ref:Terminal part No. | P3    |
| Material              | PBT   |
| Color                 | Black |



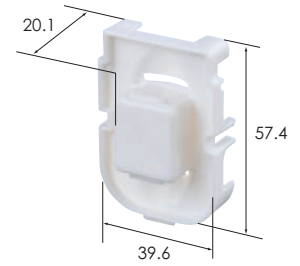
**M (6098-6553)**

**F (6098-5138)**



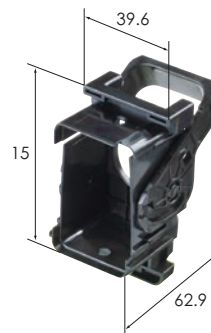
|                       |         |
|-----------------------|---------|
| Ref:Terminal part No. | P3      |
| Material              | PBT     |
| Color                 | Natural |

**M Shipping Cap (6911-5293)**



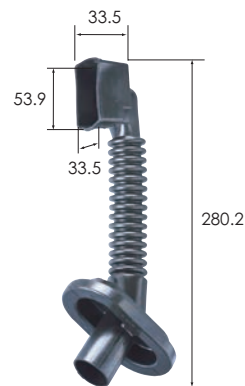
|          |         |
|----------|---------|
| Material | PBT     |
| Color    | Natural |

**F Lever Cover Assy (6911-4228)**



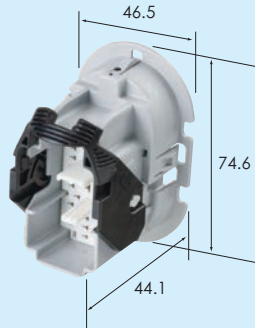
|          |           |
|----------|-----------|
| Material | PBT, PA6T |
| Color    | Black     |

**F Grommet (7105-3747)**

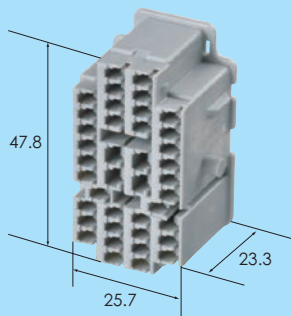


|          |       |
|----------|-------|
| Material | EPDM  |
| Color    | Black |

|                       |      |
|-----------------------|------|
| Ref:Terminal part No. | P3   |
| Material              | PBT  |
| Color                 | Gray |



**M (6098-6273)**



|                       |      |
|-----------------------|------|
| Ref:Terminal part No. | P3   |
| Material              | PBT  |
| Color                 | Gray |

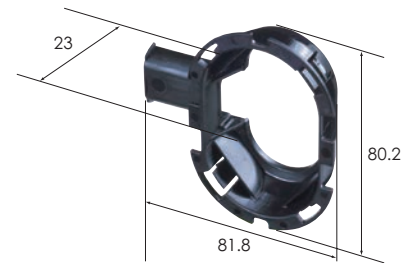
**F (6098-6277)**

**M Grommet (7105-3533)**



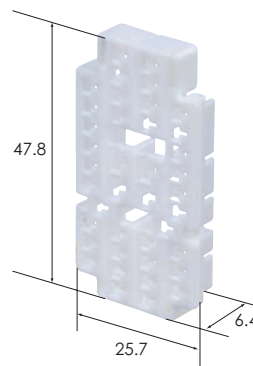
|          |       |
|----------|-------|
| Material | EPDM  |
| Color    | Black |

**M Grommet retainer (6920-2623)**

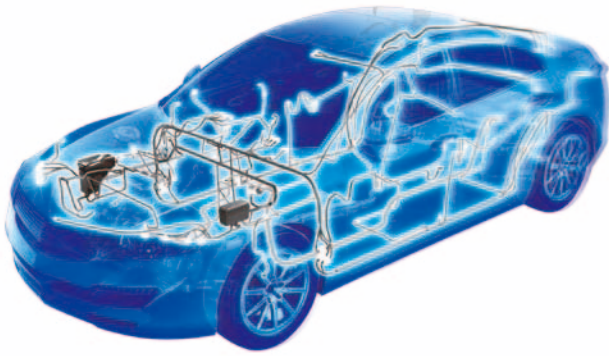


|          |       |
|----------|-------|
| Material | PBT   |
| Color    | Black |

**F TPA (6098-6278)**



|          |         |
|----------|---------|
| Material | PBT     |
| Color    | Natural |



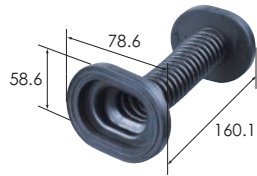
# Door Connector

## Type2

\* For terminal selection, please contact our sales staff.

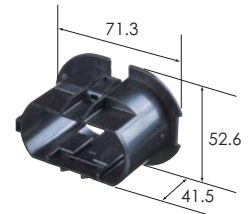
**0.64 (8) 2.8 (6) 14way**

**M Grommet (7105-2287)**



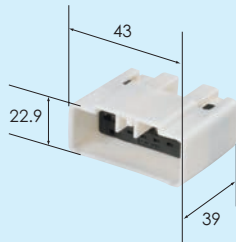
|          |       |
|----------|-------|
| Material | EPDM  |
| Color    | Black |

**M Holder (6910-5478)**



|          |       |
|----------|-------|
| Material | PPG   |
| Color    | Black |

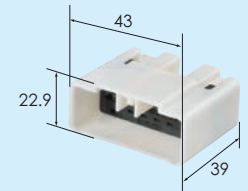
|                       |                     |
|-----------------------|---------------------|
| Ref.Terminal part No. | [0.64] *<br>[2.8] * |
| Material              | PBT                 |
| Color                 | Natural             |



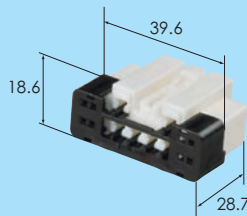
**M (6098-6486)**

**F (6098-3981)**

|                       |                     |
|-----------------------|---------------------|
| Ref.Terminal part No. | [0.64] *<br>[2.8] * |
| Material              | PBT                 |
| Color                 | Natural             |

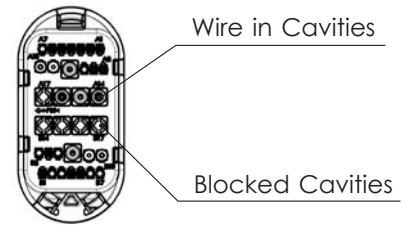
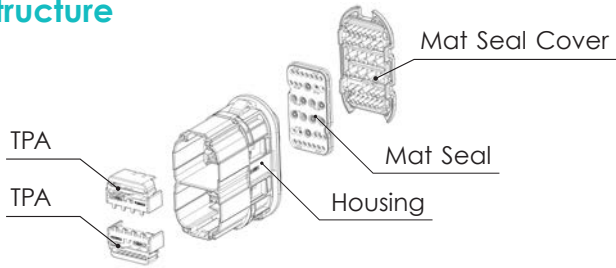


**M (6098-3979)**



|                       |                     |
|-----------------------|---------------------|
| Ref.Terminal part No. | [0.64] *<br>[2.8] * |
| Material              | PBT                 |
| Color                 | Natural             |

Structure



Mat Seal Cover

|                       |           |
|-----------------------|-----------|
| Ref:Terminal part No. | [0.64] *  |
|                       | [1.5] *   |
|                       | [2.8] P11 |
| Material              | PBT       |
| Color                 | Black     |



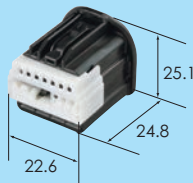
|                       |           |
|-----------------------|-----------|
| Ref:Terminal part No. | [0.64] *  |
|                       | [1.5] *   |
|                       | [2.8] P11 |
| Material              | PBT       |
| Color                 | Black     |



Please see right page regarding part number

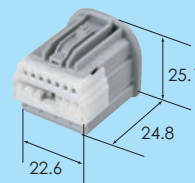
Sealed Type M

F (6098-6596) Key A



|                       |           |
|-----------------------|-----------|
| Ref:Terminal part No. | [0.64] *  |
|                       | [1.5] *   |
|                       | [2.8] P11 |
| Material              | PBT       |
| Color                 | Black     |

F (6098-6597) Key B



Unsealed Type M

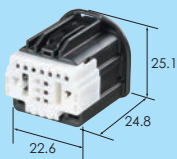
|                       |           |
|-----------------------|-----------|
| Ref:Terminal part No. | [0.64] *  |
|                       | [1.5] *   |
|                       | [2.8] P11 |
| Material              | PBT       |
| Color                 | Gray      |

|                       |           |
|-----------------------|-----------|
| Ref:Terminal part No. | [0.64] *  |
|                       | [1.5] *   |
|                       | [2.8] P11 |
| Material              | PBT       |
| Color                 | Black     |



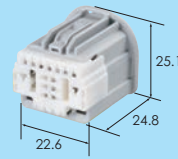
M (6098-7116)

F (6098-7119) Key A



|                       |           |
|-----------------------|-----------|
| Ref:Terminal part No. | [0.64] *  |
|                       | [1.5] *   |
|                       | [2.8] P11 |
| Material              | PBT       |
| Color                 | Black     |

F (6098-7122) Key B



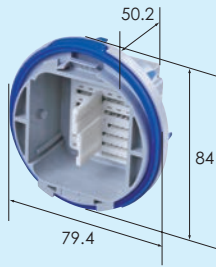
|                       |           |
|-----------------------|-----------|
| Ref:Terminal part No. | [0.64] *  |
|                       | [1.5] *   |
|                       | [2.8] P11 |
| Material              | PBT       |
| Color                 | Gray      |



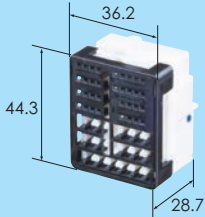


**0.64 (34) 2.8 (16) 50way**

Ref:Terminal part No. [0.64] \*  
[2.8] \*  
Material PBT  
Color Gray



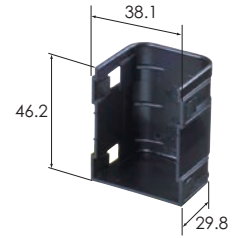
**M (6098-6130)**



Ref:Terminal part No. [0.64] \*  
[2.8] \*  
Material PBT  
Color Natural

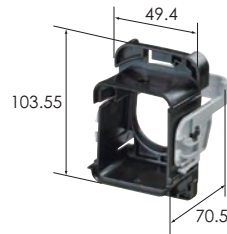
**F (6098-3977)**

**M cover (6911-4376)**



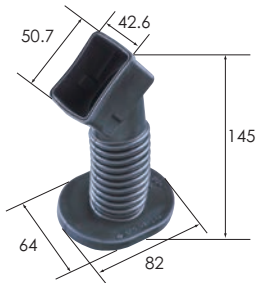
Material PBT  
Color Black

**F Lever Cover Assy (6911-4401)**



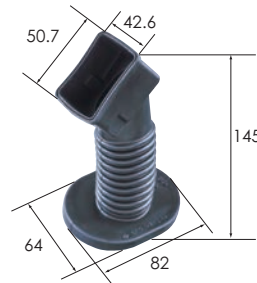
Material PBT, PA6T  
Color Black

**F Grommet (7105-3342)**



Material EPDM  
Color Black

**F Grommet (7105-3644)**



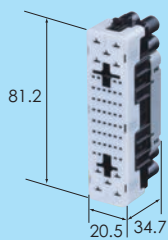
Material EPDM  
Color Black

**0.64 (44) 2.8 (10) 54way**

Ref:Terminal part No. [0.64] \*  
[2.8] \*  
Material PBT  
Color Black



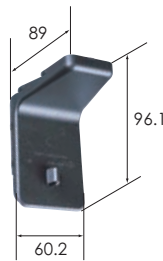
**M (6098-6150)**



Ref:Terminal part No. [0.64] \*  
[2.8] \*  
Material PBT  
Color Black

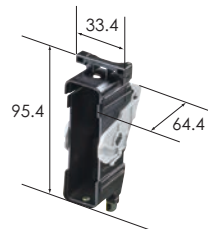
**F (6189-6956)**

**Protector Cover (6911-4888)**



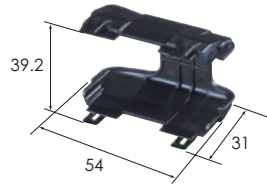
Material PP  
Color Black

**F Lever Cover Assy (6911-4312)**



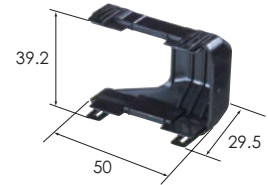
Material PBT, PA6T  
Color Black

M Cover1 (6911-4747)



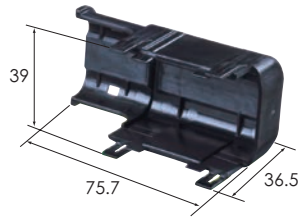
Material PBT  
Color Black

M Cover2 (6911-4852)



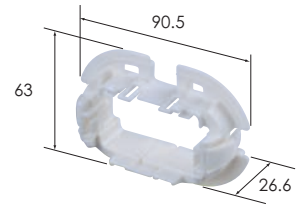
Material PBT  
Color Black

M Cover3 (6911-5315)



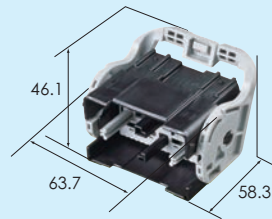
Material PBT  
Color Black

Metal Retainer (6911-5238)

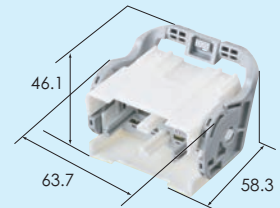


Material PBT  
Color Natural

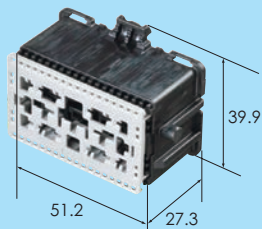
Ref:Terminal part No. [0.64] P11  
[2.8] \*  
[6.3] \*  
Material PBT  
Color Black



Ref:Terminal part No. [0.64] P11  
[2.8] \*  
[6.3] \*  
Material PBT  
Color Natural



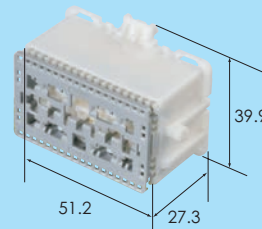
M (6098-6044) key-A



F (6098-6047) key-A

Ref:Terminal part No. [0.64] \*  
[2.8] \*  
[6.3] \*  
Material PBT  
Color Black

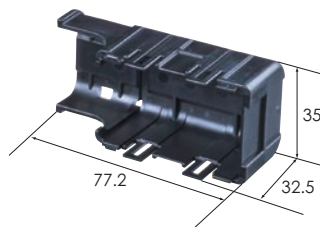
M (6098-6045) key-B



F (6098-6134) key-B

Ref:Terminal part No. [0.64] \*  
[2.8] \*  
[6.3] \*  
Material PBT  
Color Natural

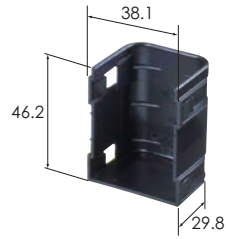
F Dress cover (6911-4748)



Material PBT  
Color Black

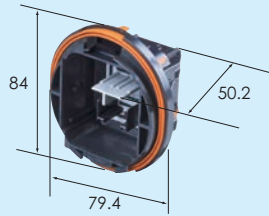
**0.64 (49) 1.5 (5) 2.8 (10) 64way**

**M Cover (6911-5137)**



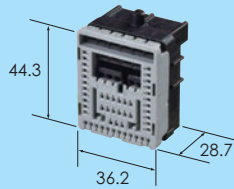
|          |       |
|----------|-------|
| Material | PBT   |
| Color    | Black |

|                       |          |
|-----------------------|----------|
| Ref.Terminal part No. | [0.64] * |
|                       | [1.5] *  |
|                       | [2.8] *  |
| Material              | PBT      |
| Color                 | Black    |



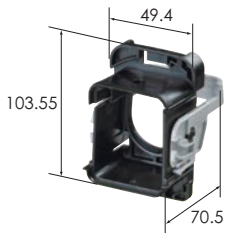
**M (6098-6528)**

**F (6098-6532)**



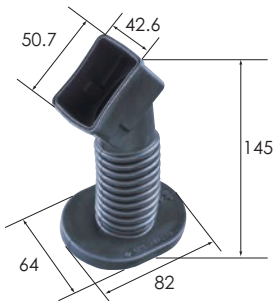
|                       |          |
|-----------------------|----------|
| Ref.Terminal part No. | [0.64] * |
|                       | [1.5] *  |
|                       | [2.8] *  |
| Material              | PBT      |
| Color                 | Black    |

**F Lever Cover Assy (6911-4401)**



|          |           |
|----------|-----------|
| Material | PBT, PA6T |
| Color    | Black     |

**F Grommet (7105-3342)**



|          |       |
|----------|-------|
| Material | EPDM  |
| Color    | Black |

**0.64 (56) 2.8 (14) 70way**

**M Right Grommet (7180-0188)**



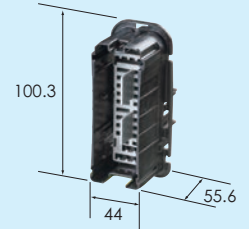
|          |          |
|----------|----------|
| Material | PP, EPDM |
| Color    | Black    |

**M Left Grommet (7180-0187)**



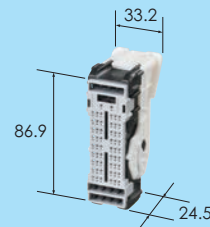
|          |          |
|----------|----------|
| Material | PP, EPDM |
| Color    | Black    |

|                       |          |
|-----------------------|----------|
| Ref.Terminal part No. | [0.64] * |
|                       | [2.8] *  |
| Material              | PBT      |
| Color                 | Black    |



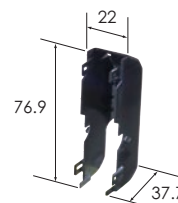
**M (6098-6535)**

**F (6098-6537)**



|                       |          |
|-----------------------|----------|
| Ref.Terminal part No. | [0.64] * |
|                       | [2.8] *  |
| Material              | PBT      |
| Color                 | Black    |

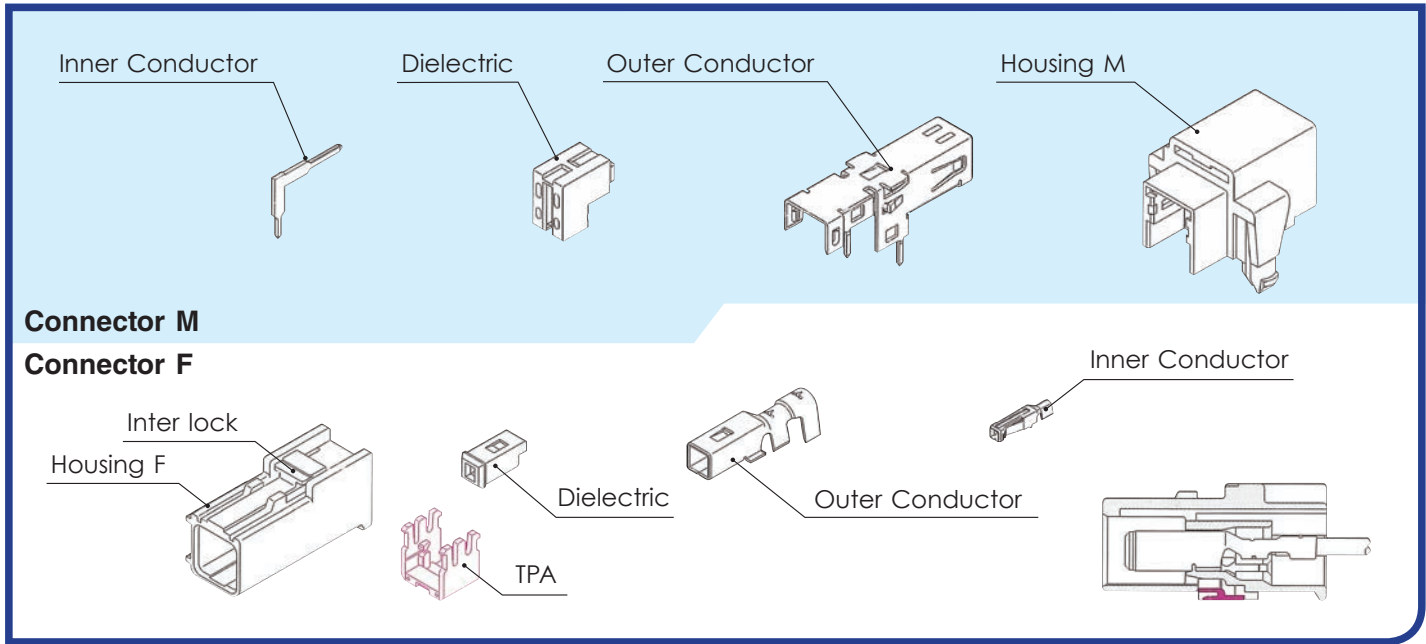
**F Cover (6911-5139)**



|          |       |
|----------|-------|
| Material | PBT   |
| Color    | Black |

# HFC SERIES

## Structure



## Features

### 特点

HFC (High Frequency Connector) comply with SAE/USCAR-2, 17, 19.  
HFC is connector that connect on-board multimedia devices, such as TPMS, GPS, TV, VICS and etc., and coaxial wires.  
These are also suitable for mobile telephone and sensor circuit.

HFC接插件(高频接插件)达到了SAE/USCAR-2、17、19标准。

HFC接插件是适用于与TPMS·GPS·TV·VICS等车载多媒体模块相同的同轴线连接用接插件,也适用于车载电话、传感器回路上。

- It reduces reflection/transmission loss and restrains noise radiation.
- TPA for secondary lock is assembled beforehand.
- Comply with USCAR-19 key-k footprint.

- 制止传送损失、反射、杂讯放射、实现了小型高性能化。
- 预先安装了双重锁定制TPA。
- 能够达到USCAR-19的Key-k接口。



## WARNING

### Which may result in overheating or fire.

可能造成发热、起火

- Do not exceed prescribed current to the connectors.
- Do not use a broken or cracked housing.
- Do not use a deformed or rusty terminal.
- 请不要使用超出规定的电流值。
- 请不要使用有破损的或裂缝的接插件护套。
- 请不要使用变形的或已生锈的端子。

## CAUTION

### Precautions for Selection and Use of Connectors

选定、使用接插件时的注意事项

- To select a suitable connector, please consult with our sales staff about operating environment, mounting conditions, and other information (e.g. unsealed type for indoor compartment use, sealed type for engine compartment use ).
- 选定接插件时, 针对使用环境、组装条件等问题, 请与敝公司销售负责人商量以便选择出适合用途的产品 (例如: 室内选择非防水性的、发动机舱内选择防水性的等)。
- The specifications, and performance of a connector may significantly vary depending on changes in variable elements in the operating environment, such as the number of ways, wire size, ambient temperature, etc. The specifications stated in this catalogue applies to a single terminal, and is not guaranteed when the terminal is inserted into a housing. For detailed electrical characteristics of each product, see the "Specifications" of the relevant series.
- 接插件的规格, 性能的数值受极数, 使用电线大小, 周围温度等各种使用环境因素的影响, 会产生很大的变化。该目录上记载的规格, 性能的数值是指端子单体的数值, 并不保证实际组装到接插件护套上使用时的性能。有关各产品的详细电流特性, 请确认各系列的「仕様书」。
- We have "Specifications" for connector performance and "Instruction Manuals" for connector usage, handling, and precautions, which are available for each connector series. Please be sure to read these in advance to select the appropriate connector and to use it correctly.
- 本公司备有各系列接插件性能相关的「仕様书」以及接插件使用方法、处理方法、注意点相关的「使用说明书」。选定、使用接插件时, 请务必阅读并正确使用。
- Some connector series require special attention during circuit checks, etc.
- 针对不同系列的接插件, 有需要注意导通检查的情况。
- Please consult with our sales staff when requesting applicable tools and jigs (crimping machines, crimping dies, terminal removal jigs etc.).
- 需要适用治工具 (压接机、压接模具、端子拔取治具等) 时, 请与敝公司销售负责人商洽
- Although some connector specifications include drawings showing mating support, these drawings are provided only for reference. The manufacture of mating parts is not possible without consideration to dimensional tolerances, etc.
- 在产品目录中虽然有一部分接插件固定用支架以及对接端的内容, 但仅作为参考图使用, 实际制造对接端产品时, 需要考虑尺寸公差。
- Product specifications may be subject to change without notice. Before using the product, please obtain a "customer drawing" "Specifications" "Instruction Manuals" from our sales staff. Please contact our sales staff for details.
- 产品式样可能会在没有另行通知的情况下发生变更。使用产品时, 请向敝公司销售负责人索取「客户用图纸」「仕様书」「使用说明书」。对上述相关详细内容, 请向敝公司销售负责人问讯。





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