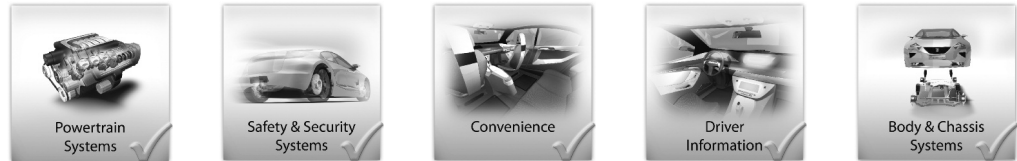
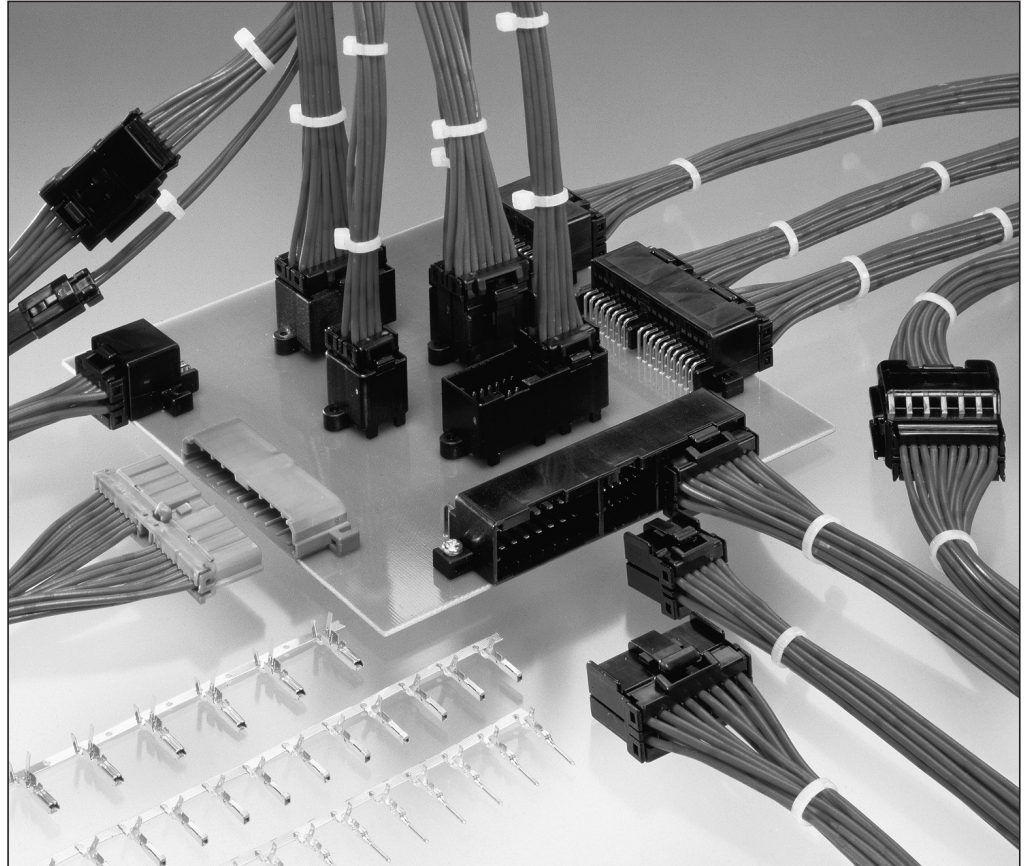


## Introduction



**.040 MULTILOCK Connectors are Wire-to-Wire and Wire-to-Board Connectors widely used for Automotive Applications.**



## Features

- Contacts are spaced at 2.5 mm centerline.
- Connectors are easy to handle.
- Connectors are consisted of plug housings, receptacle contacts for wire termination, and cap housing assemblies for horizontal and vertical mountings on PC boards.
- The contacting point of a receptacle contact is designed to be protected.
- The plug housings are provided with double-lock mechanism integrated into the body which ensures complete contact insertions into housings.
- The cap housing assemblies of 36, 48, 64 Positions of horizontal board mounting types are also available with hybrid styles to accept signal circuits with .040 series and power circuits with .070.

## Application Specifications:

114-5108 (.040 Tab Contact)  
114-5094 (.040 Rec. Contact)  
114-5162 (.040 Rec. Contact)  
114-5109 (.070 Rec. Contact)  
114-5156 (.070 Rec. Contact)

## Product Specifications:

108-5244 (Wire to Board)  
108-5352 (Wire to Wire)  
108-5471 (Wire to Wire, 14 Pos.)

## Instruction Sheet:

411-5883

Available No. of Positions for

## Wire-to-Wire Applications:

2, 4, 12, 14, 20

## Wire-to-Board Applications:

8, 12, 14, 16, 20, 28, 36, 48, 64

Receptacle Contacts (for Plug Housing)

**Technical Features**

**Contact Material:**

Copper Alloy

**Contact Finishes:**

Pre-tin plated

Selective gold plated

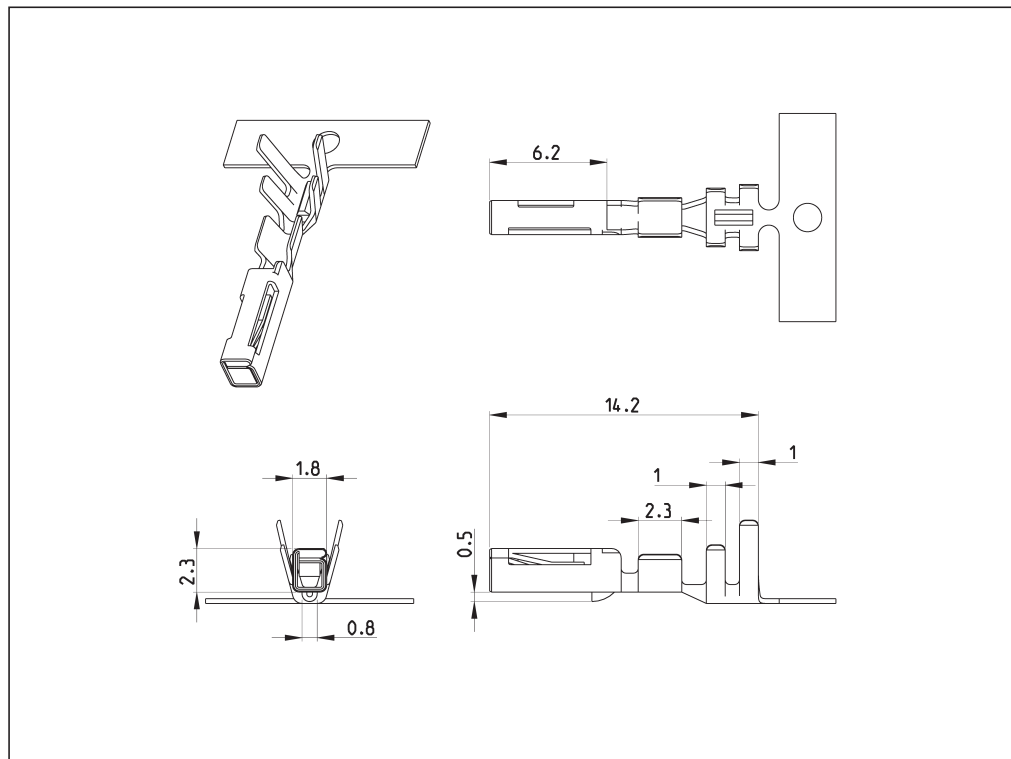
**Application Specifications:**

114-5094

114-5162

**Instruction Sheet:**

408-8547-1



| Wire Size Range    |        | Wire Insulation Diameter (mm) | Finish                       | Part Numbers |             |           |
|--------------------|--------|-------------------------------|------------------------------|--------------|-------------|-----------|
| (mm <sup>2</sup> ) | (AWG)  |                               |                              | Strip Form   | Loose-Piece | Hand Tool |
| 0.3–0.5            | 22–20* | 1.1–1.6                       | Copper Alloy, pre-tinned     | 175180-1     | –           | –         |
|                    |        |                               | Copper Alloy, selective gold | 175180-2     | –           |           |
|                    |        | 1.8–2.0                       | Copper Alloy, pre-tinned     | 173681-1     | 175062-1    | 91577-1   |
|                    |        |                               | Copper Alloy, selective gold | 173681-2     | 175062-2    |           |

\*) 040 Series for signal circuit. **(Extraction Tool:** Part No. 755430-1 (IS-288J)

**Note:** All Part Numbers are RoHS and ELV compliant.

Tab Contacts (for Cap Housing) Wire-to-Wire

**Technical Features**

**Contact Material:**

Brass

**Contact Finishes:**

Pre-tin plated

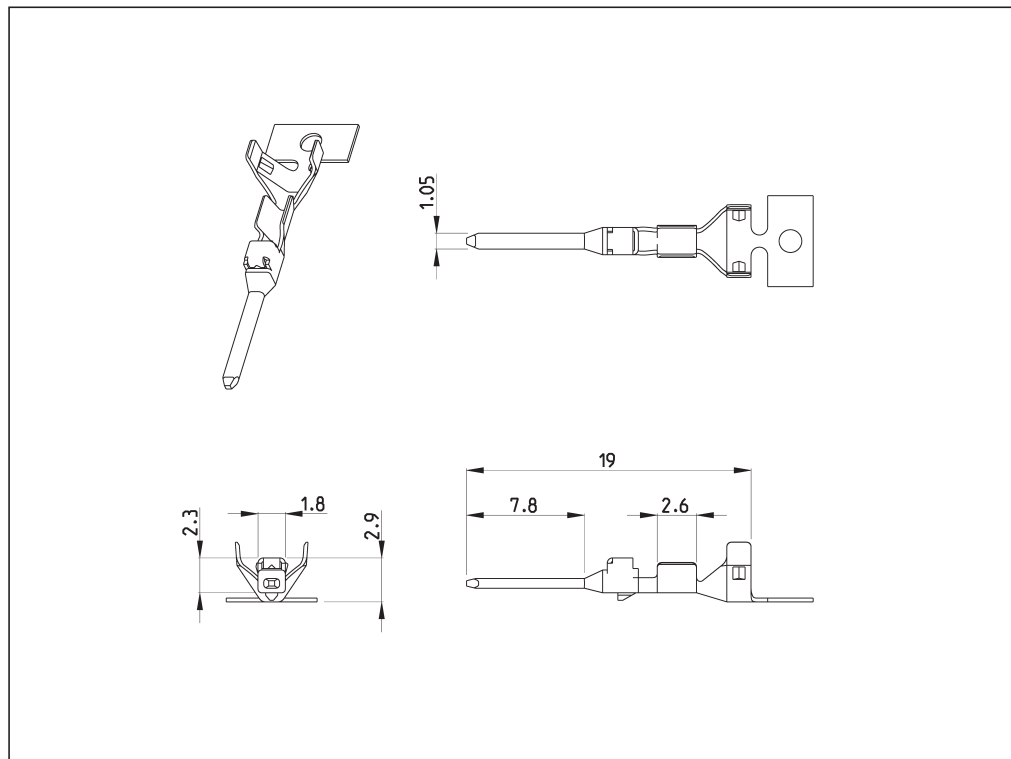
Selective gold plated

**Application Specification:**

114-5108

**Instruction Sheet:**

408-8547-1



| Wire Size Range    |       | Wire Insulation Diameter (mm) | Finish                | Part Numbers |             |           |
|--------------------|-------|-------------------------------|-----------------------|--------------|-------------|-----------|
| (mm <sup>2</sup> ) | (AWG) |                               |                       | Strip Form   | Loose-Piece | Hand Tool |
| 0.3–0.5            | 22–20 | 0.3–0.5                       | Pre-tin plated        | 173682-1     | 175063-1    | 91577-1   |
|                    |       |                               | Selective gold plated | 2098032-3    | 175063-1    |           |

**Note:** All Part Numbers are RoHS and ELV compliant.

.070 Receptacle Contacts (for 16 Position Plug, 174147-2)

**Technical Features**

**Contact Material:**

Copper Alloy

**Contact Finishes:**

Pre-tin plated

Selective gold plated

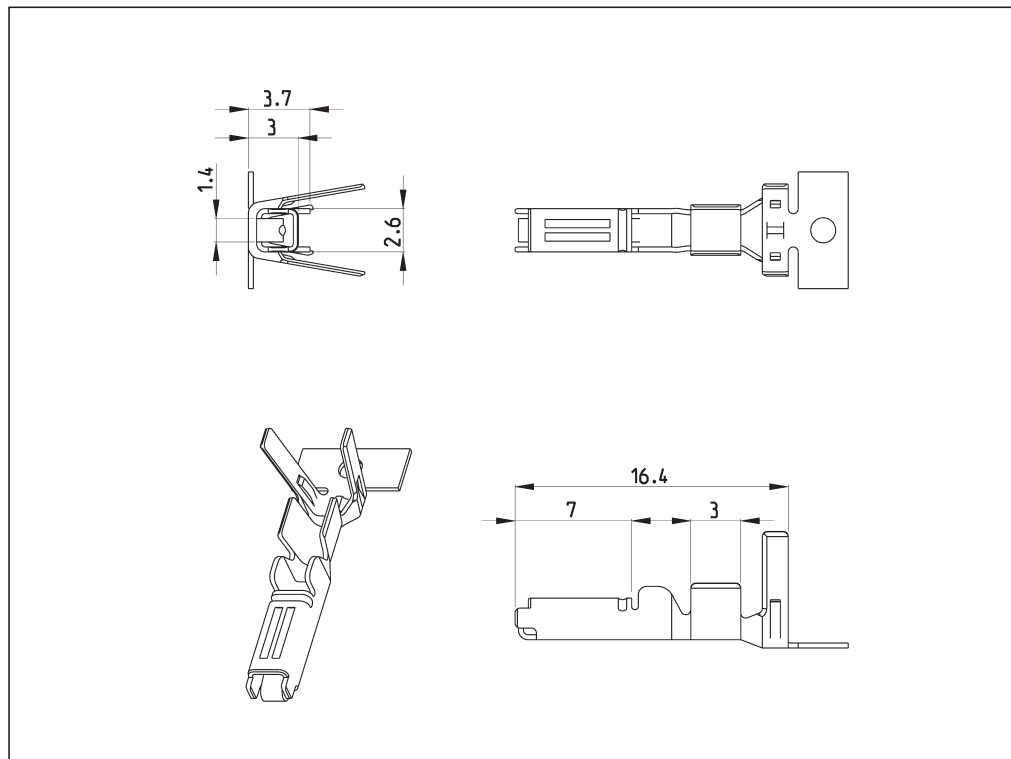
**Application Specifications:**

114-5109

114-5156

**Instruction Sheet:**

411-5422



| Wire Size Range    |       | Wire Insulation Diameter (mm) | Finish                       | Part Numbers |             |           |
|--------------------|-------|-------------------------------|------------------------------|--------------|-------------|-----------|
| (mm <sup>2</sup> ) | (AWG) |                               |                              | Strip Form   | Loose-Piece | Hand Tool |
| 0.5–2.0            | 20–14 | 2.2–2.9                       | Copper Alloy, pre-tinned     | 173708-1     | 175081-1    | 911771-1  |
|                    |       |                               | Copper Alloy, selective gold | 173708-2     | 175081-2    |           |
| 0.50–1.25          | 20–16 | 1.3–2.1                       | Copper Alloy, pre-tinned     | 175221-1     | –           |           |

**Note:** All Part Numbers are RoHS and ELV compliant.

Wire-to-Wire Applications

**Technical Features**

**No. of Positions:**

2 Positions

**Applicable Wires:**

- .040: 0.3–0.5 mm<sup>2</sup> (AWG 22–20)

**Raw Material:**

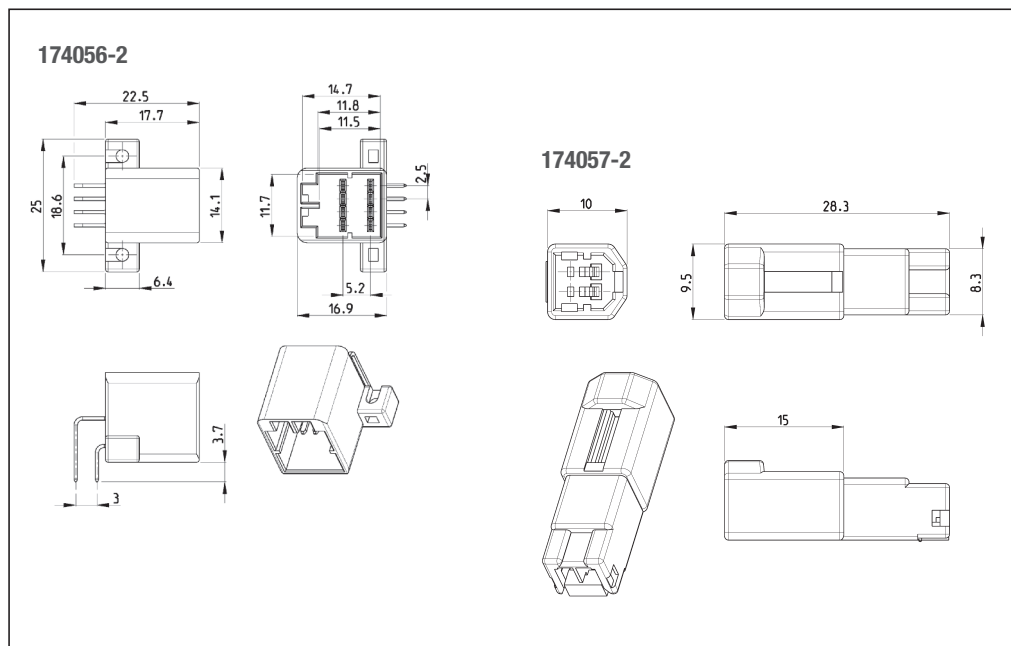
- Housing
- Cap: PBT
- Plug: PBT

**Product Specification:**

108-5352

**Application Specifications:**

- 114-5108 (040 tab contacts)
- 114-5094 (040 receptacle contacts)
- 114-5162 (040 receptacle contacts)



**Technical Features**

**No. of Positions:**

4 Positions

**Applicable Wires:**

- .040: 0.3–0.5 mm<sup>2</sup> (AWG 22–20)

**Raw Material:**

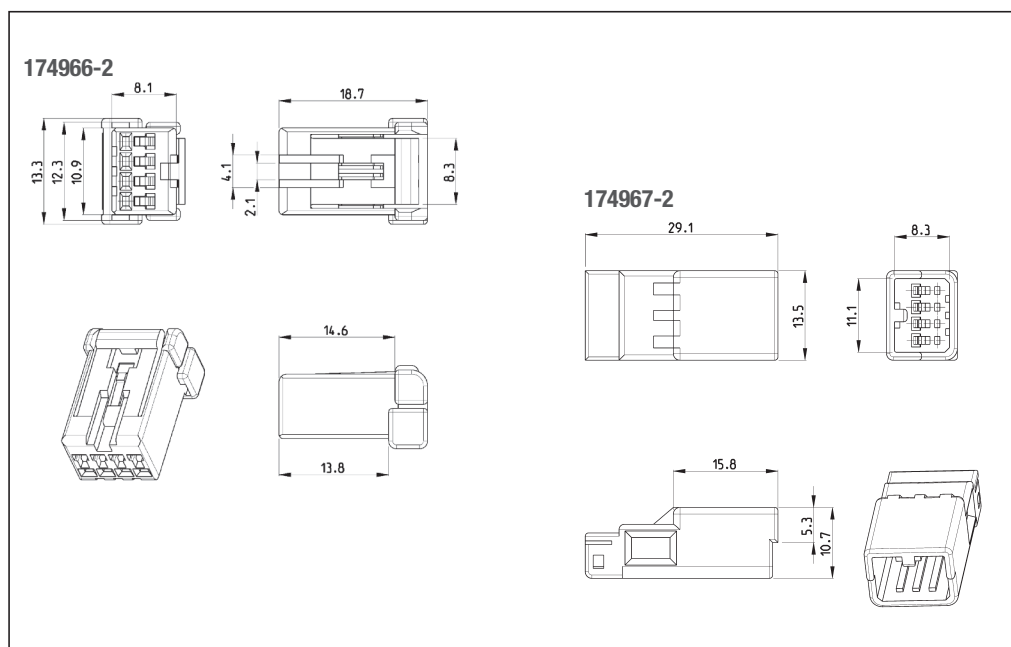
- Housing
- Cap: PBT
- Plug: PBT

**Product Specification:**

108-5352

**Application Specifications:**

- 114-5108 (040 tab contacts)
- 114-5094 (040 receptacle contacts)
- 114-5162 (040 receptacle contacts)



| No. of Positions | Terminate To | Plug Assembly | Cap Housing | Cap Housing Horizontal Mount | Cap Housing Vertical Mount | Mating Plug |
|------------------|--------------|---------------|-------------|------------------------------|----------------------------|-------------|
| 2                | Wire         | 174056-2      | 174057-2    |                              |                            |             |
| 4                | Wire         | 174966-2      | 174967-2    |                              |                            |             |

**Note:** All Part Numbers are RoHS and ELV compliant.

Wire-to-Wire Applications

**Technical Features**

**No. of Positions:**

6 Positions

**Applicable Wires:**

- .040: 0.3–0.5 mm<sup>2</sup> (AWG 22–20)

**Raw Material:**

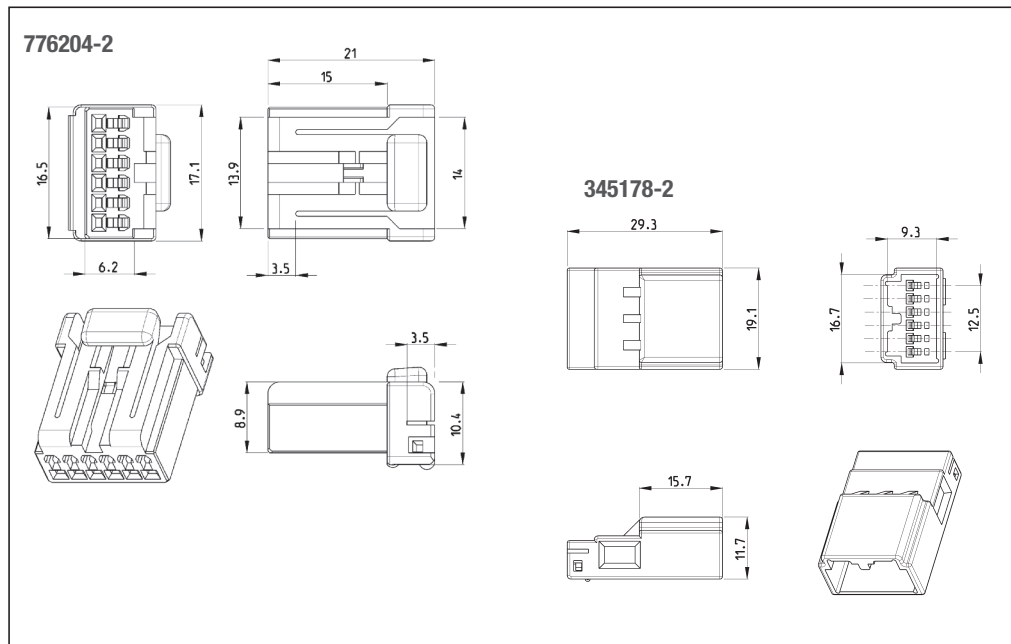
- Housing
- Cap: PBT
- Plug: PBT

**Product Specification:**

108-5352

**Application Specifications:**

- 114-5108 (040 tab contacts)
- 114-5094 (040 receptacle contacts)
- 114-5162 (040 receptacle contacts)



**Technical Features**

**No. of Positions:**

12 Positions

**Applicable Wires:**

- .040: 0.3–0.5 mm<sup>2</sup> (AWG 22–20)

**Raw Material:**

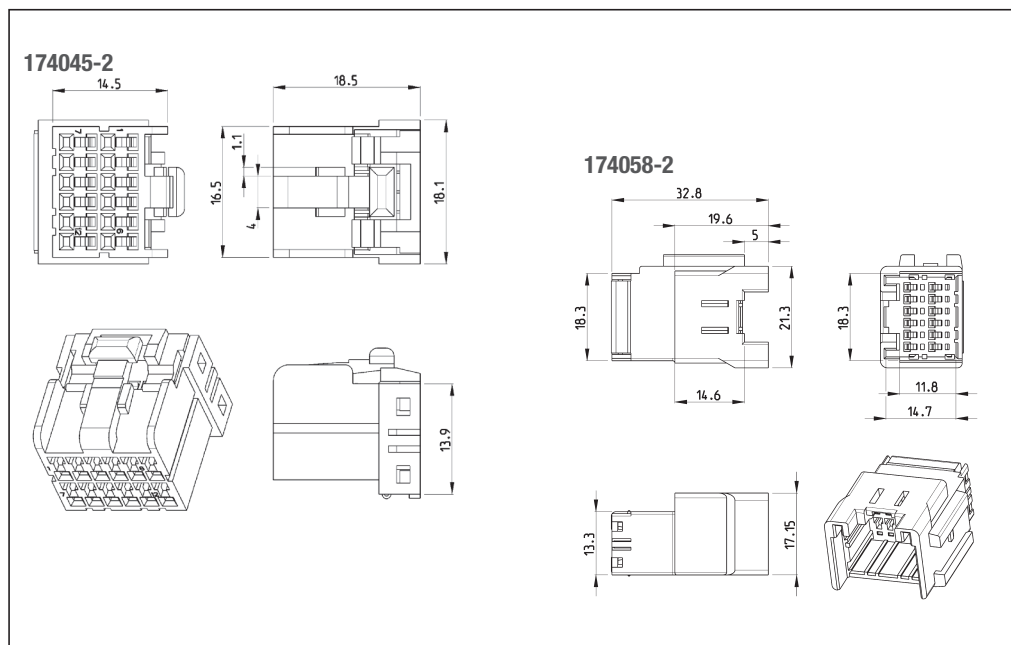
- Housing
- Cap: PBT
- Plug: PBT

**Product Specification:**

108-5352

**Application Specifications:**

- 114-5108 (040 tab contacts)
- 114-5094 (040 receptacle contacts)
- 114-5162 (040 receptacle contacts)



| No. of Positions | Terminate To | Plug Assembly | Cap Housing | Cap Housing Horizontal Mount | Cap Housing Vertical Mount | Mating Plug |
|------------------|--------------|---------------|-------------|------------------------------|----------------------------|-------------|
| 6                | Wire         | 776204-2      | 345178-2    |                              |                            |             |
| 12               | Wire         | 174045-2      | 174058-2    |                              |                            |             |

**Note:** All Part Numbers are RoHS and ELV compliant.

## Wire-to-Wire Applications

### Technical Features

#### No. of Positions:

14 Positions

#### Applicable Wires:

- .040: 0.3–0.5 mm<sup>2</sup> (AWG 22–20)

#### Raw Material:

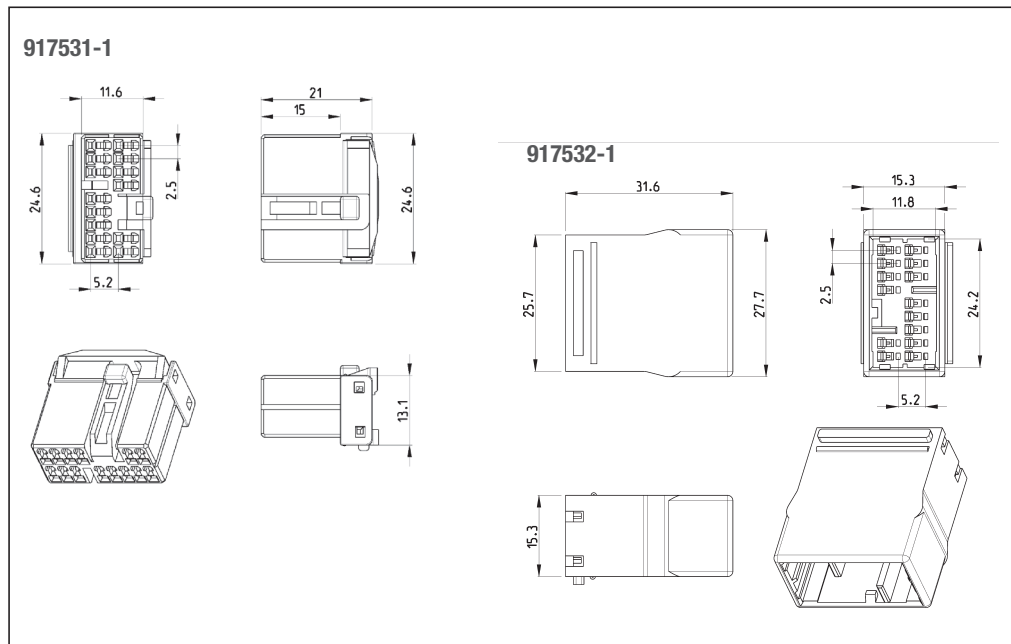
- Housing
- Cap: PBT
- Plug: PBT

#### Product Specification:

108-5352

#### Application Specifications:

- 114-5108 (040 tab contacts)
- 114-5094 (040 receptacle contacts)
- 114-5162 (040 receptacle contacts)



### Technical Features

#### No. of Positions:

16 Positions

#### Applicable Wires:

- .040: 0.3–0.5 mm<sup>2</sup> (AWG 22–20)

#### Raw Material:

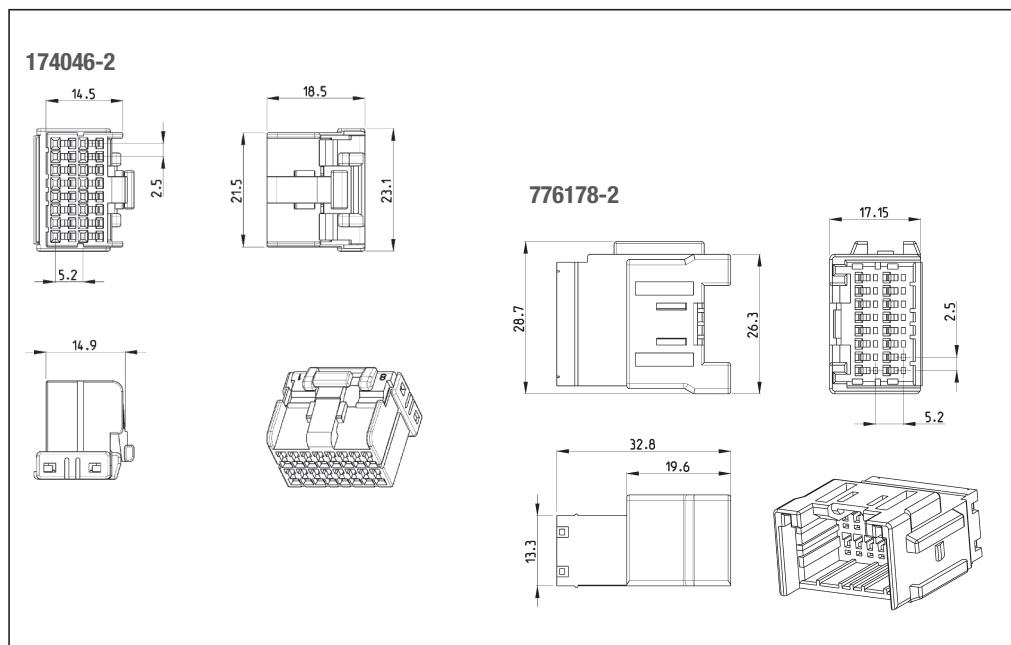
- Housing
- Cap: PBT
- Plug: PBT

#### Product Specification:

108-5352

#### Application Specifications:

- 114-5108 (040 tab contacts)
- 114-5094 (040 receptacle contacts)
- 114-5162 (040 receptacle contacts)



| No. of Positions | Terminate To | Plug Assembly | Cap Housing | Cap Housing Horizontal Mount | Cap Housing Vertical Mount | Mating Plug |
|------------------|--------------|---------------|-------------|------------------------------|----------------------------|-------------|
| 14               | Wire         | 917531-1      | 917532-1    |                              |                            |             |
| 16               | Wire         | 174046-2      | 776178-2    |                              |                            |             |

**Note:** All Part Numbers are RoHS and ELV compliant.

## Wire-to-Wire Applications

### Technical Features

#### No. of Positions:

20 Positions

#### Applicable Wires:

- .040: 0.3–0.5 mm<sup>2</sup> (AWG 22–20)

#### Raw Material:

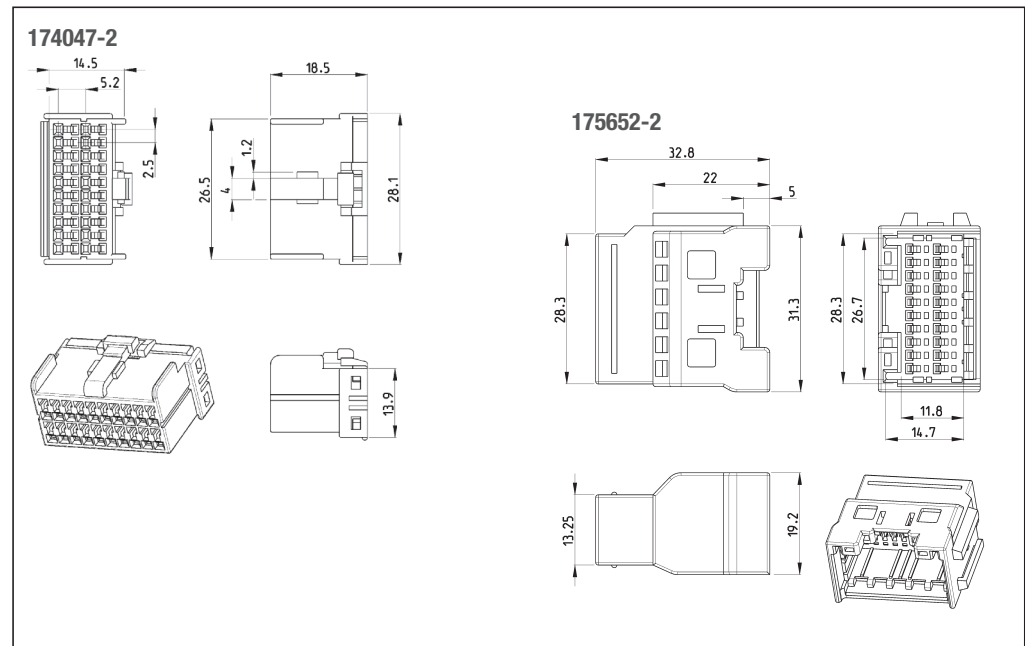
- Housing
- Cap: PBT
- Plug: PBT

#### Product Specification:

108-5352

#### Application Specifications:

114-5108 (040 tab contacts)  
114-5094 (040 receptacle contacts)  
114-5162 (040 receptacle contacts)



| No. of Positions | Terminate To | Plug Assembly | Cap Housing | Cap Housing Horizontal Mount | Cap Housing Vertical Mount | Mating Plug |
|------------------|--------------|---------------|-------------|------------------------------|----------------------------|-------------|
| 20               | Wire         | 174047-2      | 175652-2    |                              |                            |             |

**Note:** All Part Numbers are RoHS and ELV compliant.

Wire-to-Board Applications

**Technical Features**

**No. of Positions:**

6 Positions

**Applicable Wires:**

- .040: 0.3–0.5 mm<sup>2</sup> (AWG 22–20)

**Raw Material:**

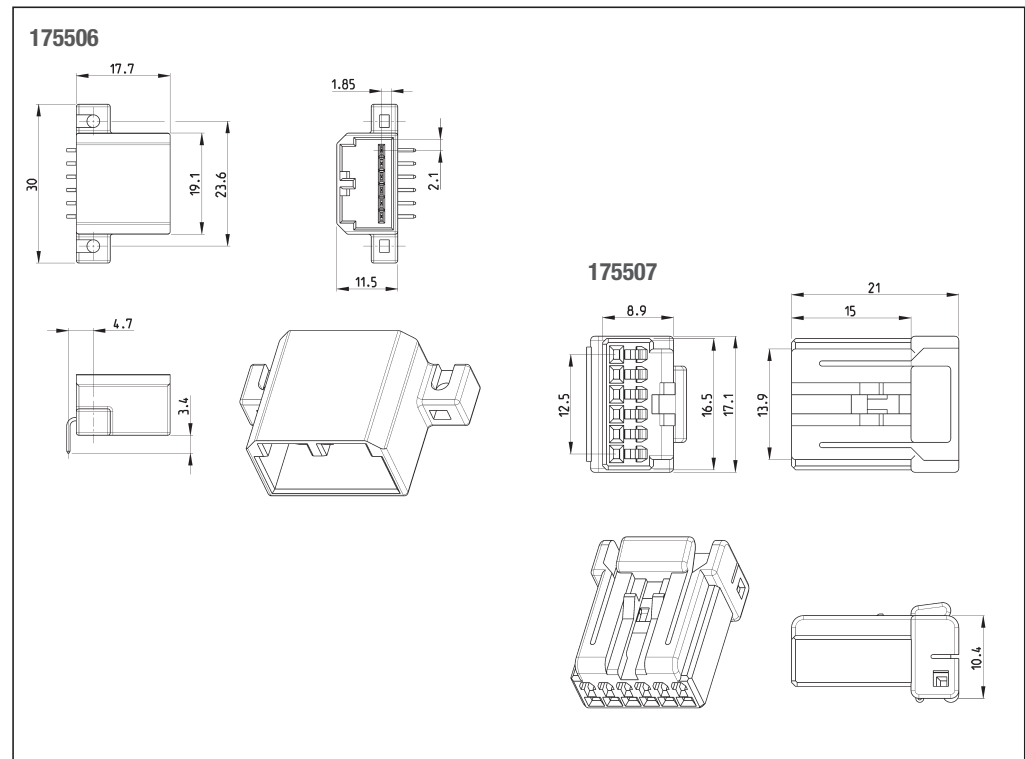
- Housing
- Cap: PBT
- Plug: PBT

**Product Specification:**

108-5244

**Application Specifications:**

114-5094 (040 receptacle contacts)  
114-5162 (040 receptacle contacts)



| No. of Positions | Terminate To | Plug Assembly | Cap Housing | Cap Housing Horizontal Mount | Cap Housing Vertical Mount | Mating Plug |
|------------------|--------------|---------------|-------------|------------------------------|----------------------------|-------------|
| 6                | Board        |               |             | 776203<br>(Board Lock)       | 175507<br>776204           |             |
|                  |              |               |             | 638102                       | 638100                     |             |
|                  |              |               |             | 175506                       | 175507                     |             |

**Note:** All Part Numbers are RoHS and ELV compliant.

Wire-to-Board Applications

**Technical Features**

**No. of Positions:**

8 Positions

**Applicable Wires:**

- .040: 0.3–0.5 mm<sup>2</sup> (AWG 22–20)

**Raw Material:**

- Housing  
Cap: PBT  
Plug: PBT

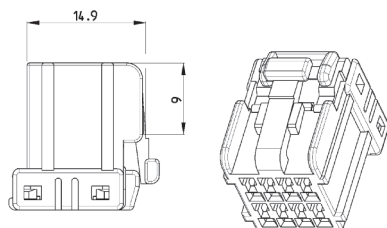
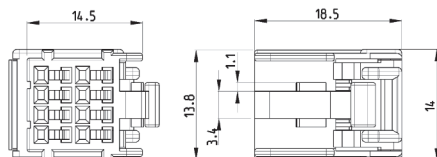
**Product Specification:**

108-5244

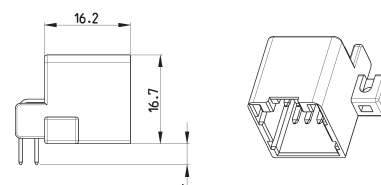
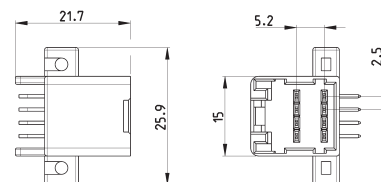
**Application Specifications:**

114-5094 (040 receptacle contacts)  
114-5162 (040 receptacle contacts)

**174044-2**



**174049-2**



**Technical Features**

**No. of Positions:**

12 Positions

**Applicable Wires:**

- .040: 0.3–0.5 mm<sup>2</sup> (AWG 22–20)

**Raw Material:**

- Housing  
Cap: PBT  
Plug: PBT

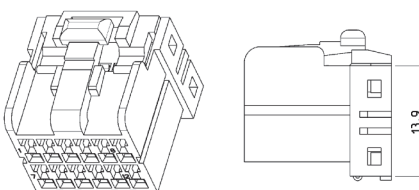
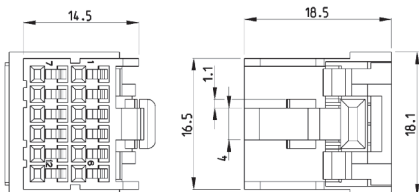
**Product Specification:**

108-5244

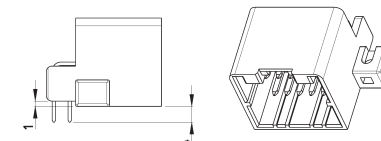
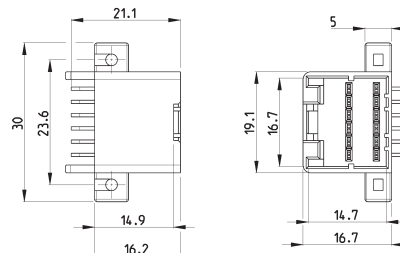
**Application Specifications:**

114-5094 (040 receptacle contacts)  
114-5162 (040 receptacle contacts)

**174045-2**



**174051-2**



| No. of Positions | Terminate To | Plug Assembly | Cap Housing            | Cap Housing Horizontal Mount | Cap Housing Vertical Mount | Mating Plug |
|------------------|--------------|---------------|------------------------|------------------------------|----------------------------|-------------|
| 8                | Board        | 174044-2      | 178455-1 (Panel Mount) | 174049-2                     | 174971-2                   |             |
| 12               | Board        | 174045-2      |                        | 174051-2                     | 174973-2                   |             |

**Note:** All Part Numbers are RoHS and ELV compliant.

Wire-to-Board Applications

**Technical Features**

**No. of Positions:**

14 Positions

**Applicable Wires:**

- .040: 0.3–0.5 mm<sup>2</sup> (AWG 22–20)

**Raw Material:**

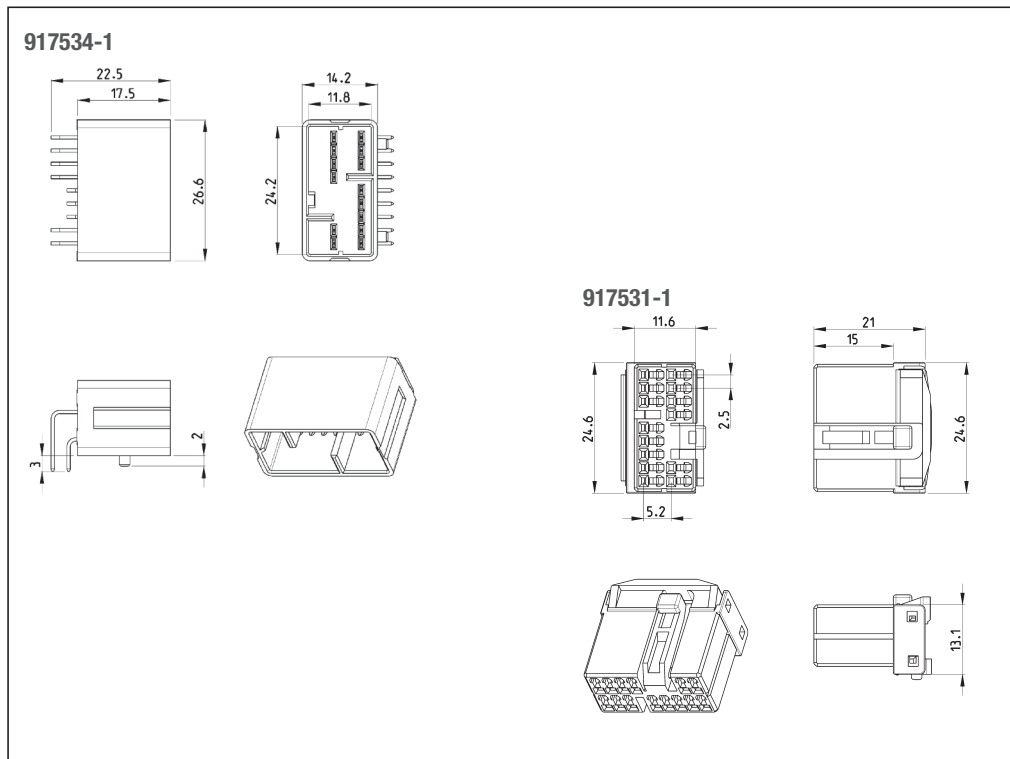
- Housing  
Cap: PBT  
Plug: PBT

**Product Specification:**

108-5244

**Application Specifications:**

114-5094 (040 receptacle contacts)  
114-5162 (040 receptacle contacts)



| No. of Positions | Terminate To | Plug Assembly | Cap Housing | Cap Housing Horizontal Mount | Cap Housing Vertical Mount | Mating Plug |
|------------------|--------------|---------------|-------------|------------------------------|----------------------------|-------------|
| 14               | Board        |               |             | 917534-1<br>917604-1         | 917535-1<br>917603-1       | 917531-1    |

**Note:** All Part Numbers are RoHS and ELV compliant.

Wire-to-Board Applications

**Technical Features**

**No. of Positions:**

16 Positions

**Applicable Wires:**

- .040: 0.3–0.5 mm<sup>2</sup> (AWG 22–20)

**Raw Material:**

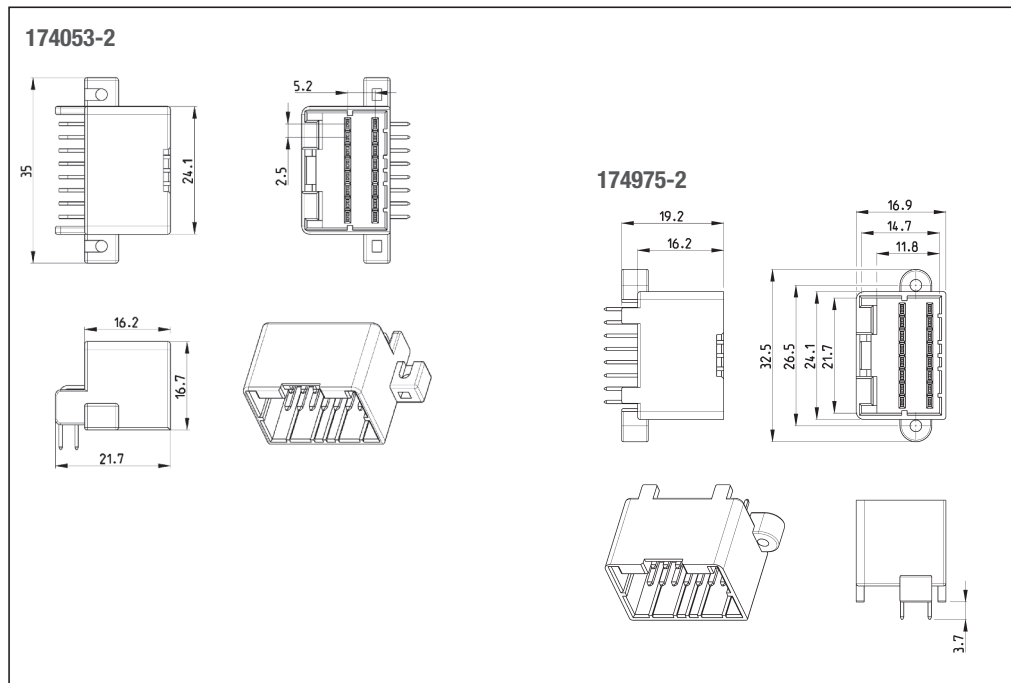
- Housing
- Cap: PBT
- Plug: PBT

**Product Specification:**

108-5244

**Application Specifications:**

- 114-5094 (040 receptacle contacts)
- 114-5162 (040 receptacle contacts)



**Technical Features**

**No. of Positions:**

20 Positions

**Applicable Wires:**

- .040: 0.3–0.5 mm<sup>2</sup> (AWG 22–20)

**Raw Material:**

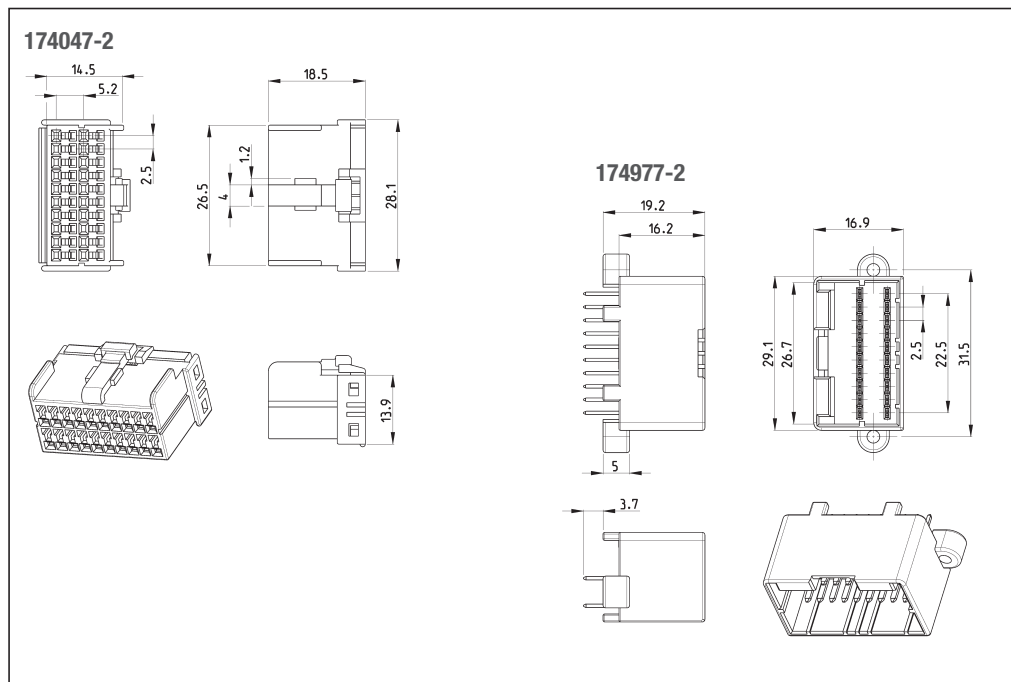
- Housing
- Cap: PBT
- Plug: PBT

**Product Specification:**

108-5244

**Application Specifications:**

- 114-5094 (040 receptacle contacts)
- 114-5162 (040 receptacle contacts)



| No. of Positions | Terminate To | Plug Assembly            | Cap Housing Horizontal Mount | Cap Housing Vertical Mount | Mating Plug |
|------------------|--------------|--------------------------|------------------------------|----------------------------|-------------|
| 16               | Board        | 174046-2                 | 174053-2                     | 174975-2                   |             |
| 16               | Board        | 174060-5<br>(single row) | 174062-5<br>(single row)     |                            |             |
| 20               | Board        | 174047-2                 | 174055-2                     | 174977-2                   |             |

**Note:** All Part Numbers are RoHS and ELV compliant.

Wire-to-Board Applications

**Technical Features**

**No. of Positions:**

28 Positions

**Applicable Wires:**

- .040: 0.3–0.5 mm<sup>2</sup> (AWG 22–20)

**Raw Material:**

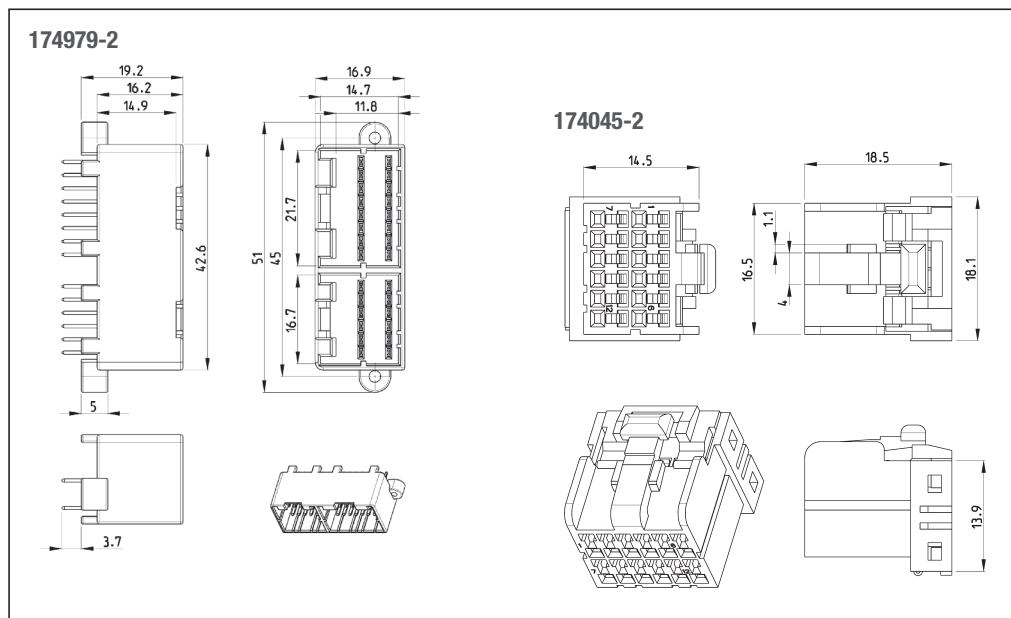
- Housing  
Cap: PBT  
Plug: PBT

**Product Specification:**

108-5244

**Application Specifications:**

- 114-5094 (040 receptacle contacts)
- 114-5162 (040 receptacle contacts)



**Technical Features**

**No. of Positions:**

36 Positions

**Applicable Wires:**

- .040: 0.3–0.5 mm<sup>2</sup> (AWG 22–20)

**Raw Material:**

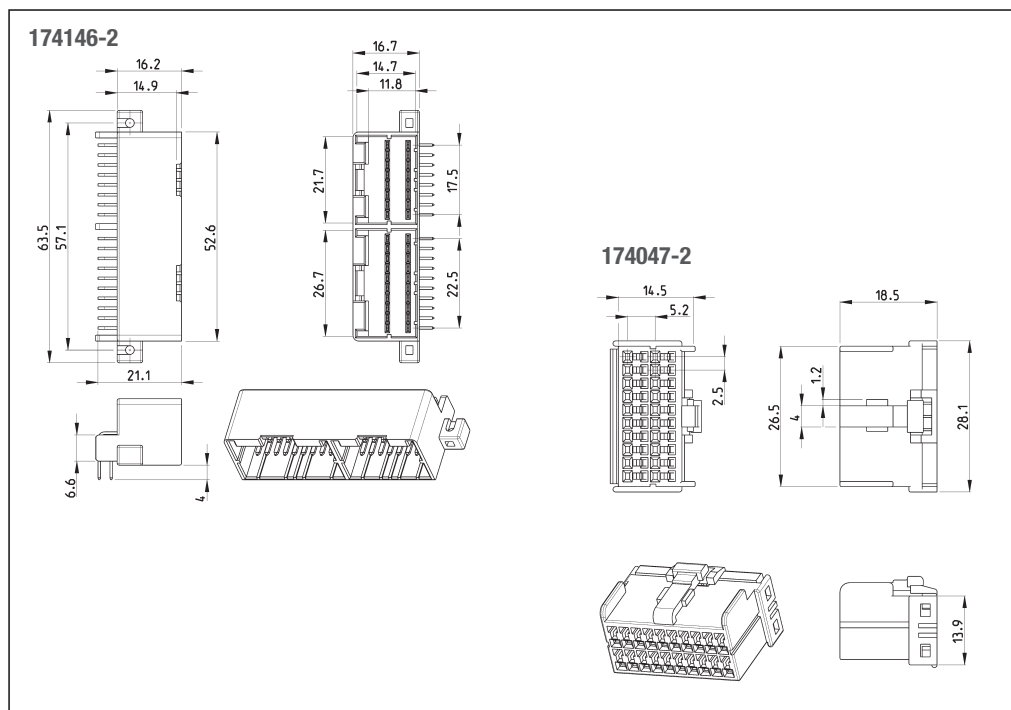
- Housing  
Cap: PBT  
Plug: PBT

**Product Specification:**

108-5244

**Application Specifications:**

- 114-5094 (040 receptacle contacts)
- 114-5162 (040 receptacle contacts)



| No. of Positions | Terminate To | Cap Housing Horizontal Mount | Cap Housing Vertical Mount | Mating Plug                    |
|------------------|--------------|------------------------------|----------------------------|--------------------------------|
| 28               | Board        |                              | 174979-2                   | 12P: 174045-2<br>16P: 174046-2 |
| 36               | Board        | 174146-2                     |                            | 20P: 174047-2<br>16P: 174046-2 |
| 36               | Board        | 178460-1                     |                            | 20P: 174047-2<br>16P: 174147-2 |

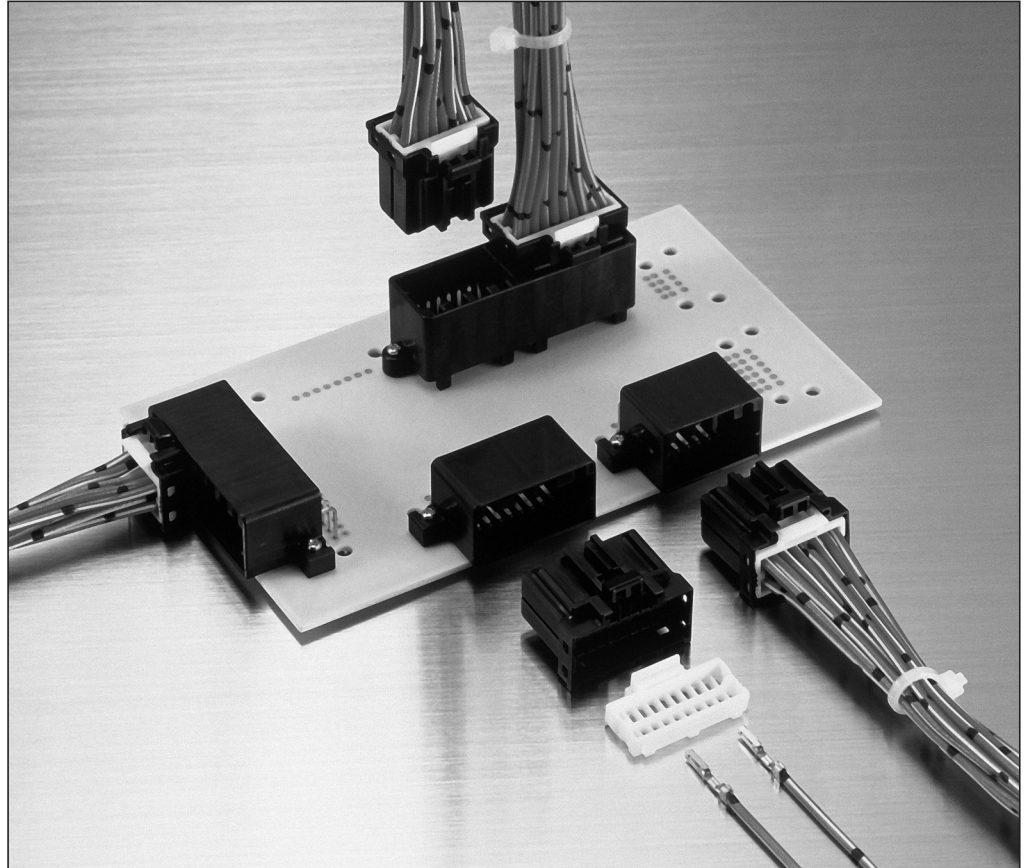
**Note:** All Part Numbers are RoHS and ELV compliant.

All specifications subject to change. Consult TE Connectivity for latest specifications.

## Introduction



**.040 MULTILOCK Connectors (Mark II) are small yet durable and easy to handle Wire-to-Wire and Wire-to-Board Connectors.**



## Features

- **Contacts are spaced at 2.5 mm centerline.**
- **The plug housings are provided with two piece double-lock plates which prevents incomplete contact insertions into housings.**
- **The board-mounting cap housing assemblies are available with vertical and horizontal types.**

**Application Specifications:**  
114-5094, 114-5162  
(.040 Receptacle Contact)  
114-5108 (.040 Tab Contact)

**Product Specification:**  
108-5281

**Instruction Sheet:**  
412-5475

Available Positions for

**Wire-to-Wire Applications:**  
12, 16 Positions

**Wire-to-Board Applications:**  
8, 12, 16, 20, 28, 36 Positions

Receptacle Contacts (for Plug Housing)

**Technical Features**

**Contact Material:**

Copper Alloy

**Contact Finishes:**

Pre-tin plated

Selective gold plated

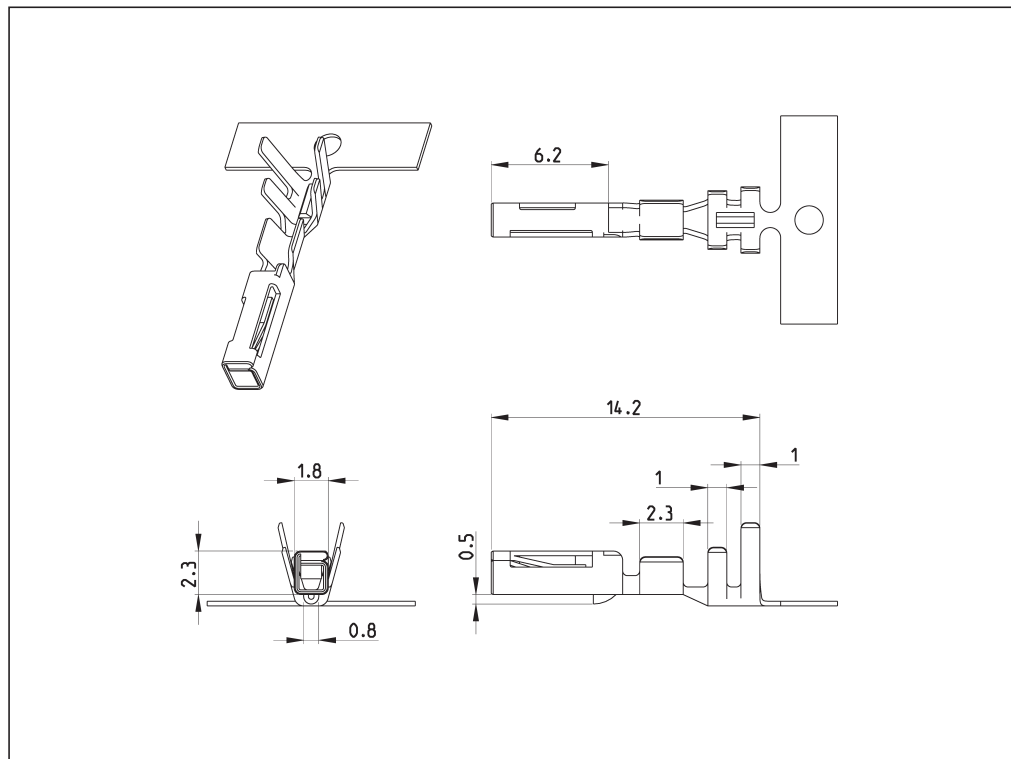
**Application Specifications:**

114-5094

114-5162

**Instruction Sheet:**

408-8547-1



| Wire Size Range    |       | Wire Insulation Diameter (mm) | Finish                | Part Numbers |             |           |
|--------------------|-------|-------------------------------|-----------------------|--------------|-------------|-----------|
| (mm <sup>2</sup> ) | (AWG) |                               |                       | Strip Form   | Loose-Piece | Hand Tool |
| 0.3–0.5            | 22–20 | 1.1–1.6                       | Pre-tin plated        | 175180-1     | –           | –         |
|                    |       |                               | Selective gold plated | 175180-2     | –           |           |
|                    |       | 1.8–2.0                       | Pre-tin plated        | 173681-1     | 175062-1    | 91577-1   |
|                    |       |                               | Selective gold plated | 173681-2     | 175062-2    |           |

**Extraction Tool:** Part No. 755430-1 (408-288J)

**Note:** All Part Numbers are RoHS and ELV compliant.

Tab Contacts (for Cap Housing) Wire-to-Wire

**Technical Features**

**Contact Material:**

Brass

**Contact Finishes:**

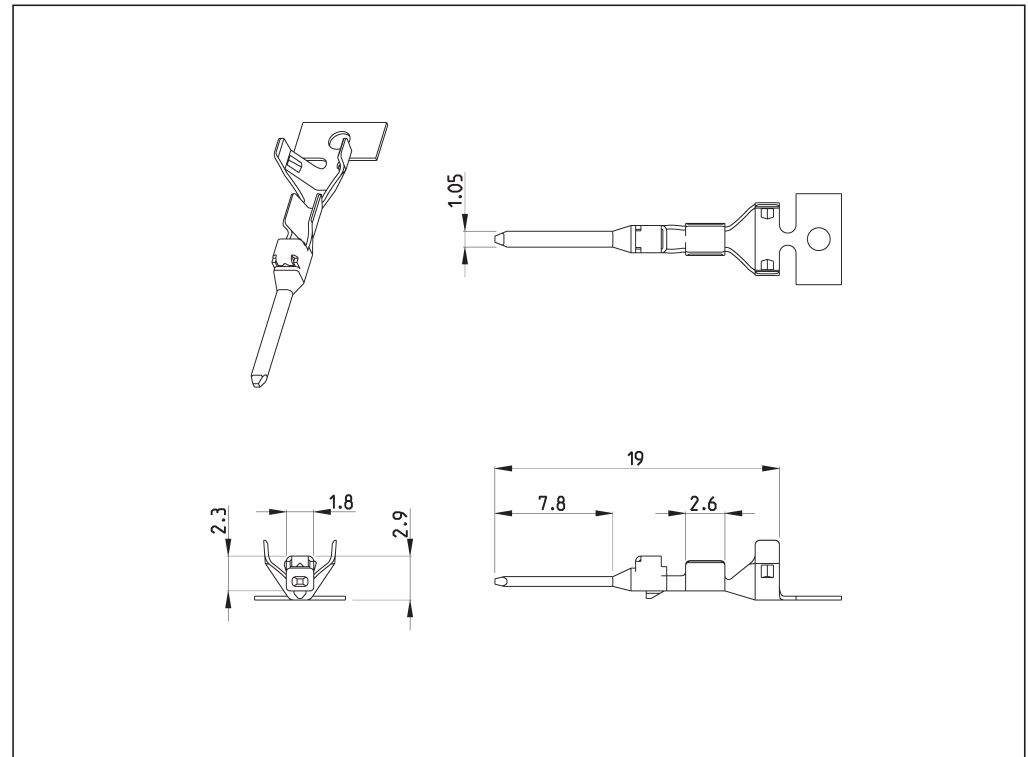
Pre-tin plated

**Application Specification:**

114-5108

**Instruction Sheet:**

408-8547-1



| Wire Size Range    |       | Wire Insulation Diameter (mm) | Finish                | Part Numbers |             |           |
|--------------------|-------|-------------------------------|-----------------------|--------------|-------------|-----------|
| (mm <sup>2</sup> ) | (AWG) |                               |                       | Strip Form   | Loose-Piece | Hand Tool |
| 0.3–0.5            | 22–20 | 1.8–2.0                       | Pre-tin plated        | 173682-1     | 175063-1    | 91577-1   |
|                    |       |                               | Selective gold plated | 2098032-3    | –           |           |

**Note:** All Part Numbers are RoHS and ELV compliant.

## Wire-to-Wire Applications

### Technical Features

#### No. of Positions:

8 Positions

#### Applicable Wires:

- .040: 0.3–0.5 mm<sup>2</sup> (AWG 22–20)

#### Raw Material:

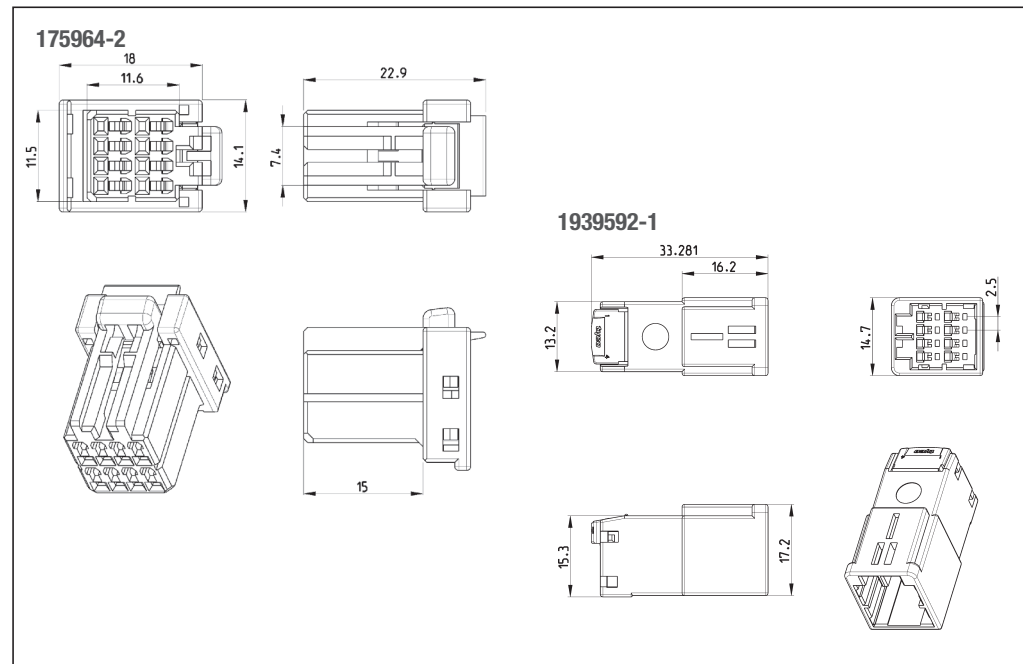
- Housing
- Cap: PBT
- Plug: PBT

#### Product Specification:

108-5471

#### Application Specifications:

- 114-5108 (040 tab contacts)
- 114-5094 (040 receptacle contacts)
- 114-5162 (040 receptacle contacts)



### Technical Features

#### No. of Positions:

12 Positions

#### Applicable Wires:

- .040: 0.3–0.5 mm<sup>2</sup> (AWG 22–20)

#### Raw Material:

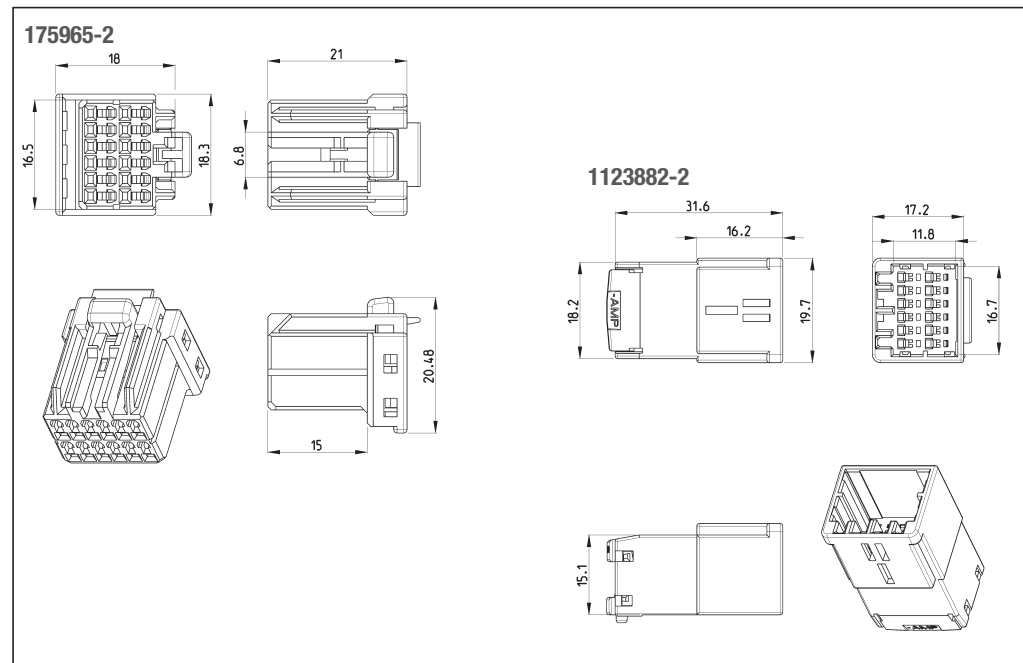
- Housing
- Cap: PBT
- Plug: PBT

#### Product Specification:

108-5471

#### Application Specifications:

- 114-5108 (040 tab contacts)
- 114-5094 (040 receptacle contacts)
- 114-5162 (040 receptacle contacts)



| No. of Positions | Terminate To | Plug Assembly | Cap Housing | Cap Housing Horizontal Mount | Cap Housing Vertical Mount | Mating Plug |
|------------------|--------------|---------------|-------------|------------------------------|----------------------------|-------------|
| 8                | Wire         | 175964-2      | 1939592-1   |                              |                            |             |
| 12               | Wire         | 175965-2      | 1123882-2   |                              |                            |             |

**Note:** All Part Numbers are RoHS and ELV compliant.

## Wire-to-Wire Applications

### Technical Features

#### No. of Positions:

16 Positions

#### Applicable Wires:

- .040: 0.3–0.5 mm<sup>2</sup> (AWG 22–20)

#### Raw Material:

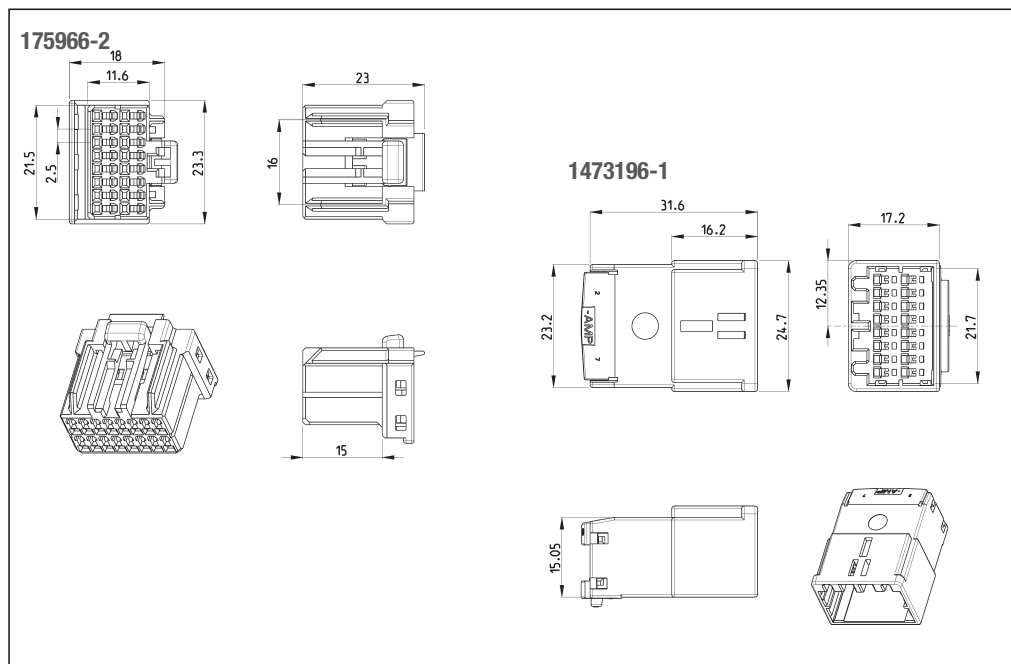
- Housing
- Cap: PBT
- Plug: PBT

#### Product Specification:

108-5471

#### Application Specifications:

114-5108 (040 tab contacts)  
114-5094 (040 receptacle contacts)  
114-5162 (040 receptacle contacts)



| No. of Positions | Terminate To | Plug Assembly | Cap Housing | Cap Housing Horizontal Mount | Cap Housing Vertical Mount | Mating Plug |
|------------------|--------------|---------------|-------------|------------------------------|----------------------------|-------------|
| 16               | Wire         | 175966-2      | 1473196-1   |                              |                            |             |

**Note:** All Part Numbers are RoHS and ELV compliant.

Wire-to-Board Applications

**Technical Features**

**No. of Positions:**

8 Positions

**Applicable Wires:**

- .040: 0.3–0.5 mm<sup>2</sup> (AWG 22–20)

**Raw Material:**

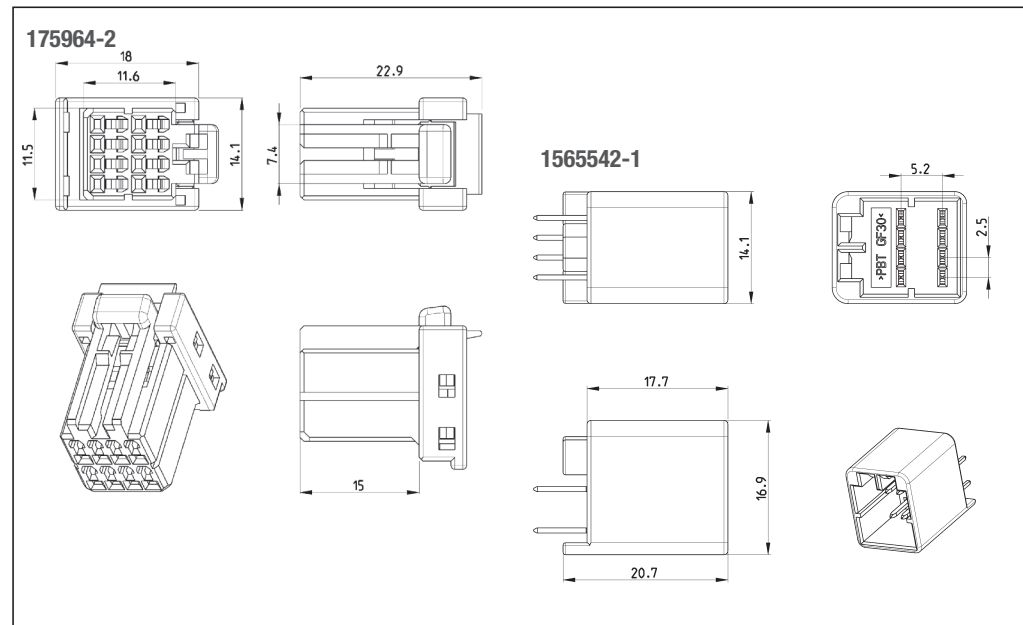
- Housing
- Cap: PBT
- Plug: PBT

**Product Specification:**

108-5471

**Application Specifications:**

- 114-5108 (040 tab contacts)
- 114-5094 (040 receptacle contacts)
- 114-5162 (040 receptacle contacts)



**Technical Features**

**No. of Positions:**

12 Positions

**Applicable Wires:**

- .040: 0.3–0.5 mm<sup>2</sup> (AWG 22–20)

**Raw Material:**

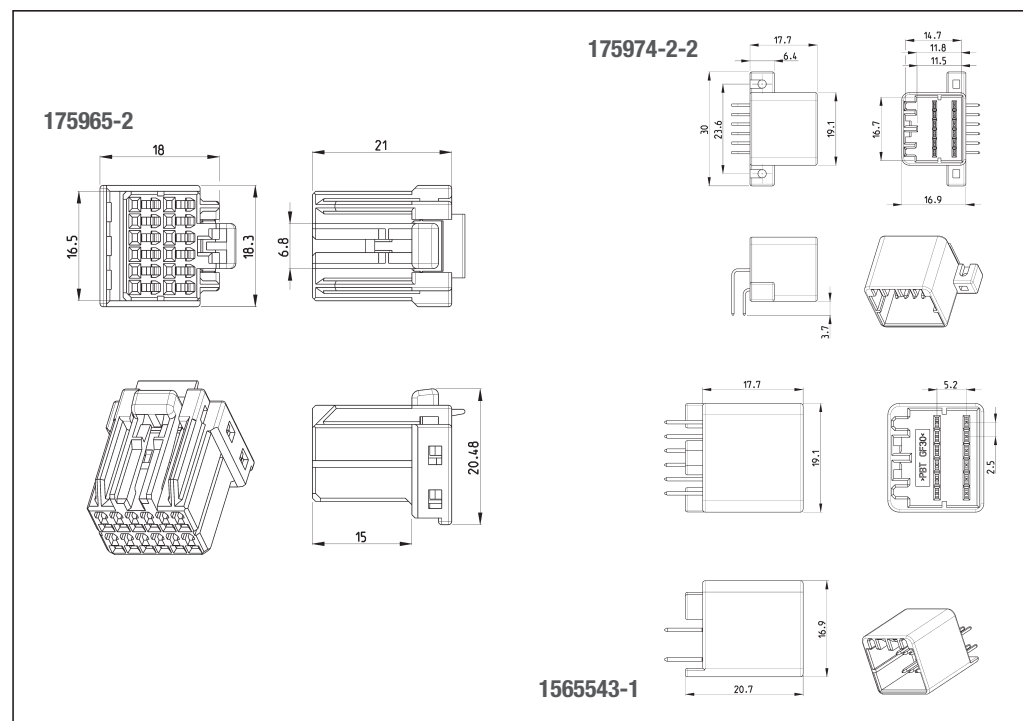
- Housing
- Cap: PBT
- Plug: PBT

**Product Specification:**

108-5471

**Application Specifications:**

- 114-5108 (040 tab contacts)
- 114-5094 (040 receptacle contacts)
- 114-5162 (040 receptacle contacts)



| No. of Positions | Terminate To | Plug Assembly | Cap Housing | Cap Housing Horizontal Mount | Cap Housing Vertical Mount | Mating Plug |
|------------------|--------------|---------------|-------------|------------------------------|----------------------------|-------------|
| 8                | Board        | 175964-2      |             | 175973-2                     | 1565542-1                  |             |
| 12               | Board        | 175965-2      |             | 175974-2                     | 1565543-1                  |             |

**Note:** All Part Numbers are RoHS and ELV compliant.

Wire-to-Board Applications

**Technical Features**

**No. of Positions:**

16 Positions

**Applicable Wires:**

- .040: 0.3–0.5 mm<sup>2</sup> (AWG 22–20)

**Raw Material:**

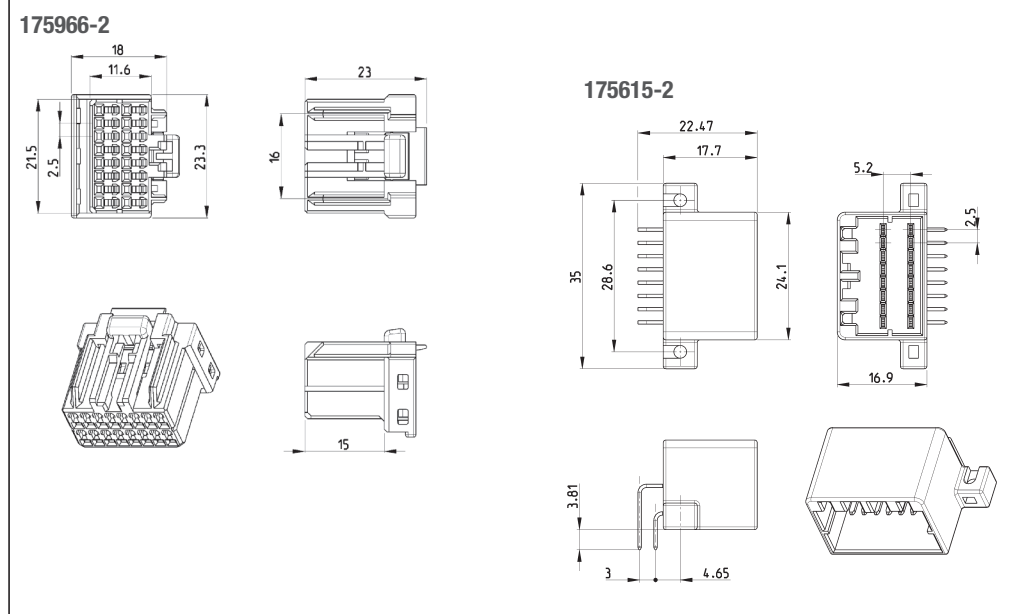
- Housing
- Cap: PBT
- Plug: PBT

**Product Specification:**

108-5281

**Application Specifications:**

- 114-5108 (040 tab contacts)
- 114-5094 (040 receptacle contacts)
- 114-5162 (040 receptacle contacts)



**Technical Features**

**No. of Positions:**

20 Positions

**Applicable Wires:**

- .040: 0.3–0.5 mm<sup>2</sup> (AWG 22–20)

**Raw Material:**

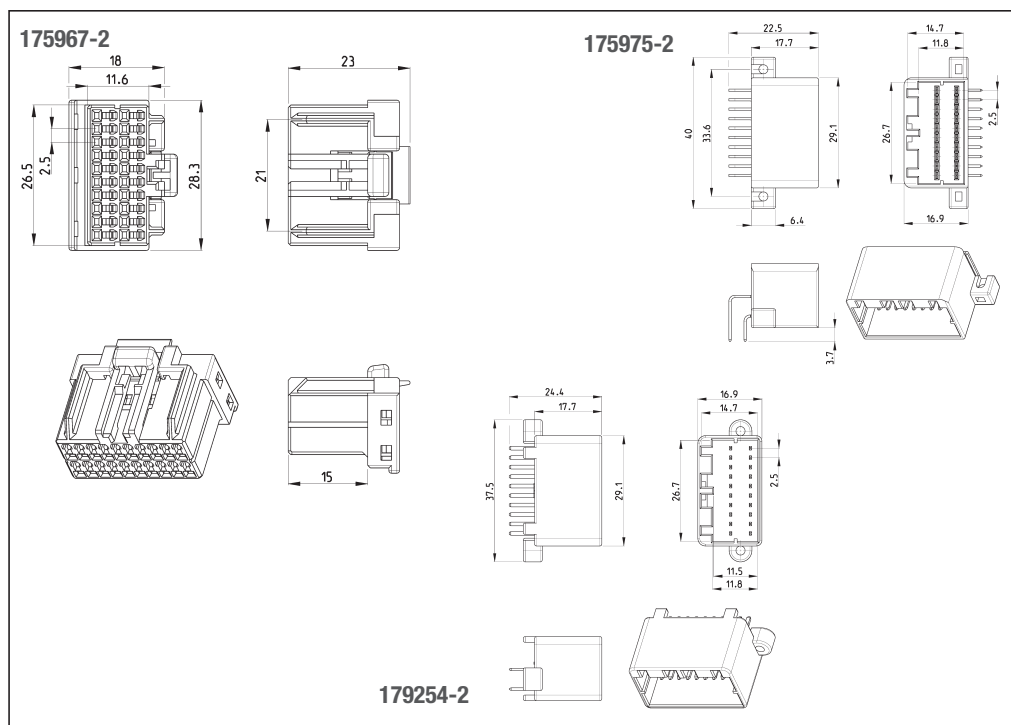
- Housing
- Cap: PBT
- Plug: PBT

**Product Specification:**

108-5281

**Application Specifications:**

- 114-5108 (040 tab contacts)
- 114-5094 (040 receptacle contacts)
- 114-5162 (040 receptacle contacts)



| No. of Positions | Terminate To | Plug Assembly | Cap Housing | Cap Housing Horizontal Mount | Cap Housing Vertical Mount | Mating Plug |
|------------------|--------------|---------------|-------------|------------------------------|----------------------------|-------------|
| 16               | Board        | 175966-5      |             | 175615-2                     |                            |             |
| 20               | Board        | 175967-2      |             | 175975-2                     | 179254-2                   |             |

**Note:** All Part Numbers are RoHS and ELV compliant.

Wire-to-Board Applications

**Technical Features**

**No. of Positions:**

28 Positions

**Applicable Wires:**

- .040: 0.3–0.5 mm<sup>2</sup> (AWG 22–20)

**Raw Material:**

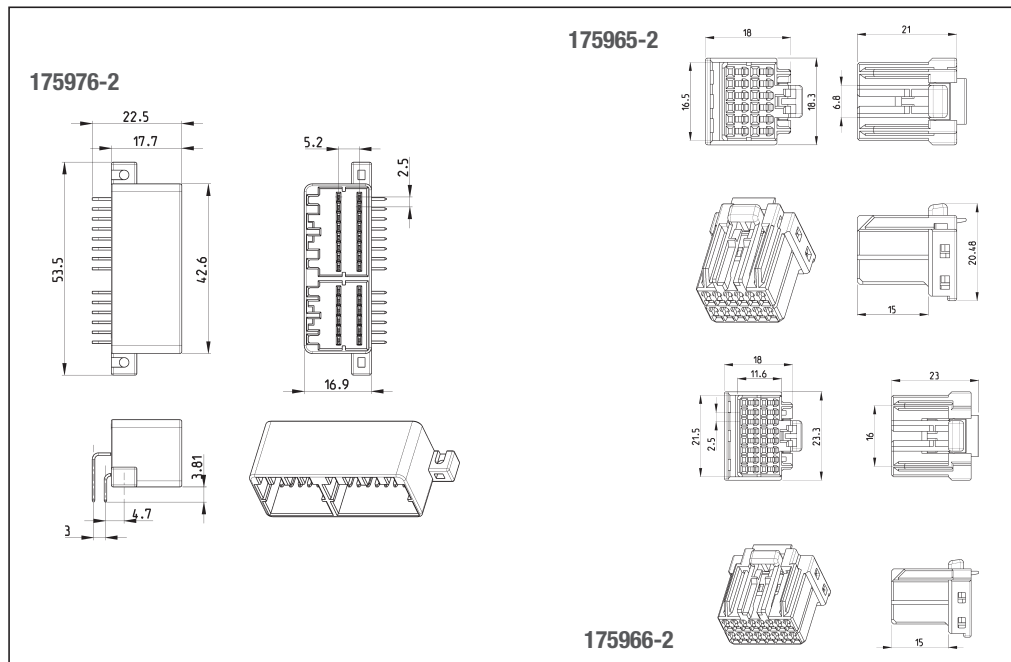
- Housing
- Cap: PBT
- Plug: PBT

**Product Specification:**

108-5281

**Application Specifications:**

- 114-5108 (040 tab contacts)
- 114-5094 (040 receptacle contacts)
- 114-5162 (040 receptacle contacts)



**Technical Features**

**No. of Positions:**

36 Positions

**Applicable Wires:**

- .040: 0.3–0.5 mm<sup>2</sup> (AWG 22–20)

**Raw Material:**

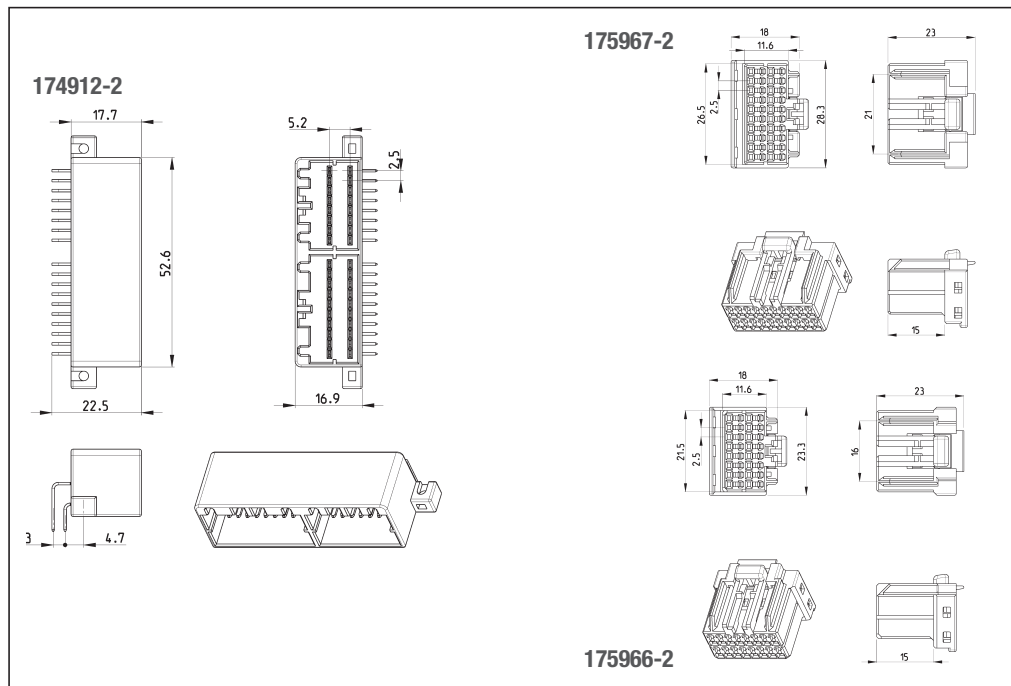
- Housing
- Cap: PBT
- Plug: PBT

**Product Specification:**

108-5281

**Application Specifications:**

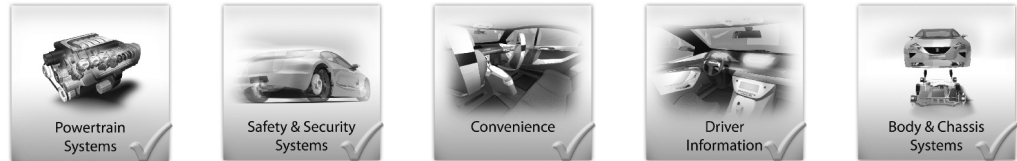
- 114-5108 (040 tab contacts)
- 114-5094 (040 receptacle contacts)
- 114-5162 (040 receptacle contacts)



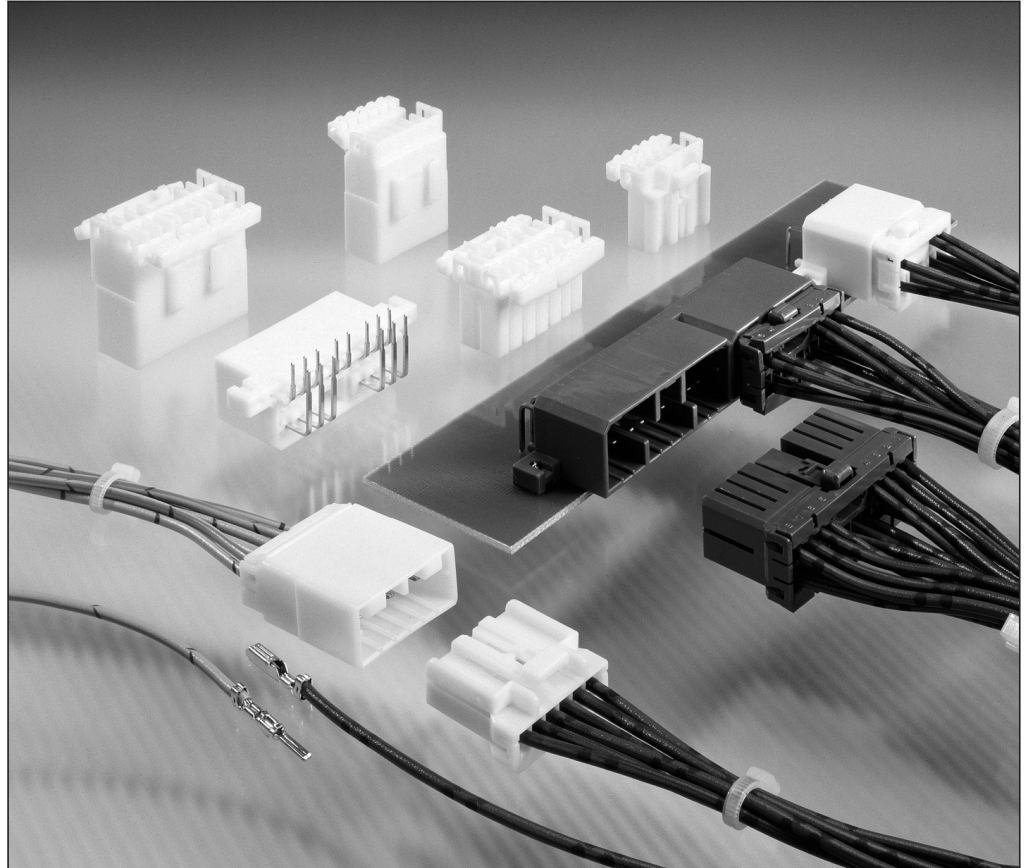
| No. of Positions | Terminate To | Plug Assembly | Cap Housing | Cap Housing Horizontal Mount | Cap Housing Vertical Mount | Mating Plug                    |
|------------------|--------------|---------------|-------------|------------------------------|----------------------------|--------------------------------|
| 28               | Board        |               |             | 175976-2                     |                            | 12P: 175965-2<br>16P: 175966-2 |
| 36               | Board        |               |             | 174912-2                     | 175977-2                   | 20P: 175967-2<br>16P: 175966-2 |

**Note:** All Part Numbers are RoHS and ELV compliant.

## Introduction



Derived from highly durable and reliable MIC Connectors, .070 Series MULTILOCK Connectors are designed as high density and high reliability connectors by adopting housing lances for Wire-to-Wire and Wire-to-Board Applications.



### Features

- Wire-to-wire and wire-to-board connectors are available.
- The Mark I plug connectors are provided with double-lock plates integrated into the body which ensures complete contact insertions into housings.
- The Mark II plug connectors are provided with two piece type double-lock mechanism to prevent half insertions of contacts.
- •The contacting point of a receptacle contact is designed to be protected.

### Application Specifications:

114-5091 (Receptacle)  
114-5134 (Receptacle)  
114-5092 (Tab)  
114-5157 (Tab)

### Product Specifications:

108-5216,  
108-5264

### Instruction Sheets:

412-5520 (Mark I)  
412-5477 (Mark II)

Available No. of Positions for

#### Wire-to-Wire Applications:

2, 3, 4, 6, 8, 10, 12, 14, 18, 20,  
30 Positions

#### Wire-to-Board Applications

(Vertical Mount Type):

3, 6, 8, 12, 14, 20, 30 Positions

(Horizontal Mount Type):

3, 6, 8, 10, 12, 14, 18, 20, 24,  
30, 42 Positions

**Note:** For performance specifications of the hybrid type connector, contact our Sales Department.

Receptacle Contacts (for Plug Housing)

**Technical Features**

**Contact Material:**

Brass  
Phosphor bronze

**Contact Finishes:**

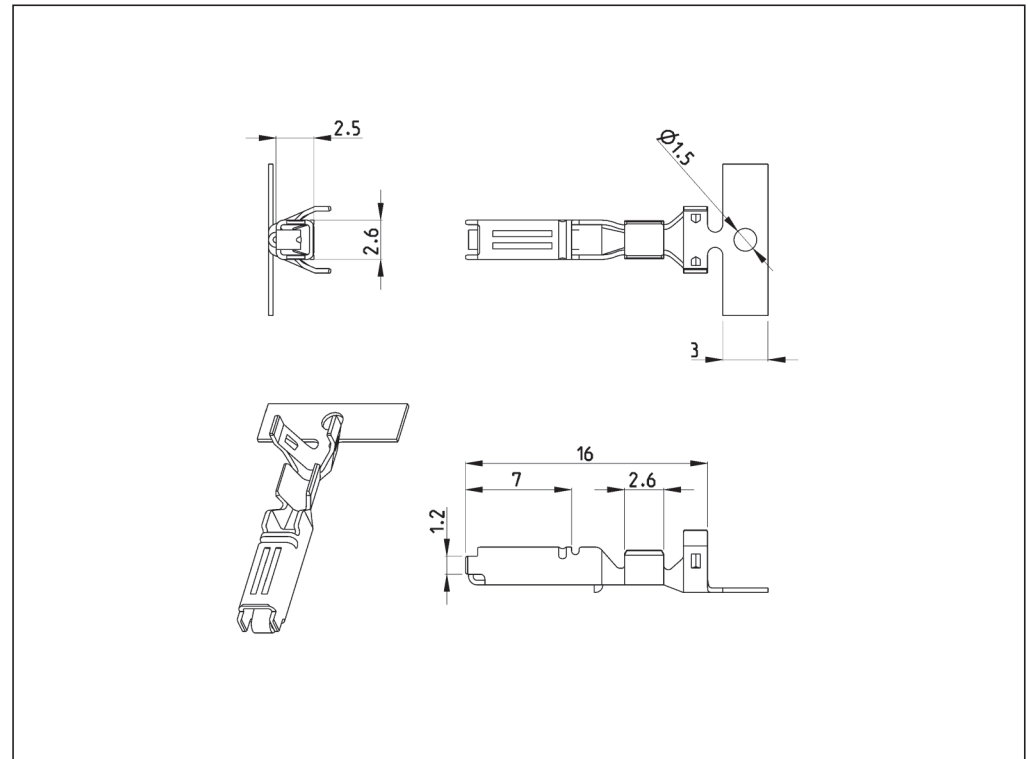
Pre-tin plated  
Selective gold plated

**Application Specifications:**

114-5091  
114-5134

**Instruction Sheet:**

408-8547-1



| Wire Size Range |       | Wire Insulation Diameter (mm) | Material and Finish | Part Numbers |          |             |                 |           |
|-----------------|-------|-------------------------------|---------------------|--------------|----------|-------------|-----------------|-----------|
|                 |       |                               |                     | Strip Form   |          | Loose-Piece |                 | Hand Tool |
|                 |       |                               |                     | (mm²)        | (AWG)    | Brass       | Phosphor Bronze |           |
| 0.2–0.3         | 24–22 | 1.4–1.9                       | Pre-tinned          | 173630-1     | 173630-6 | 175026-1    | 175026-6        | 91580-1   |
|                 |       |                               | Sel. gold           | 173630-2     | 173630-7 | 175026-2    | 175026-7        | 91580-1   |
| 0.50–1.25       | 20–16 | 2.0–2.6                       | Pre-tinned          | 173631-1     | 173631-6 | 175027-1    | 175027-6        | 91573-1   |
|                 |       |                               | Sel. gold           | 173631-2     | 173631-7 | 175027-2    | 175027-7        | 91573-1   |
| 0.3–0.5         | 24–20 | 1.0–1.5                       | Pre-tinned          | 175124-1     |          |             |                 |           |
| 0.50–1.25       | 20–16 | 1.2–2.2                       | Pre-tinned          | 175095-1     |          |             |                 |           |

**Note:** All Part Numbers are RoHS and ELV compliant.

Tab Contacts (for Cap Housing)

**Technical Features**

**Contact Material:**

Brass  
Phosphor bronze

**Contact Finishes:**

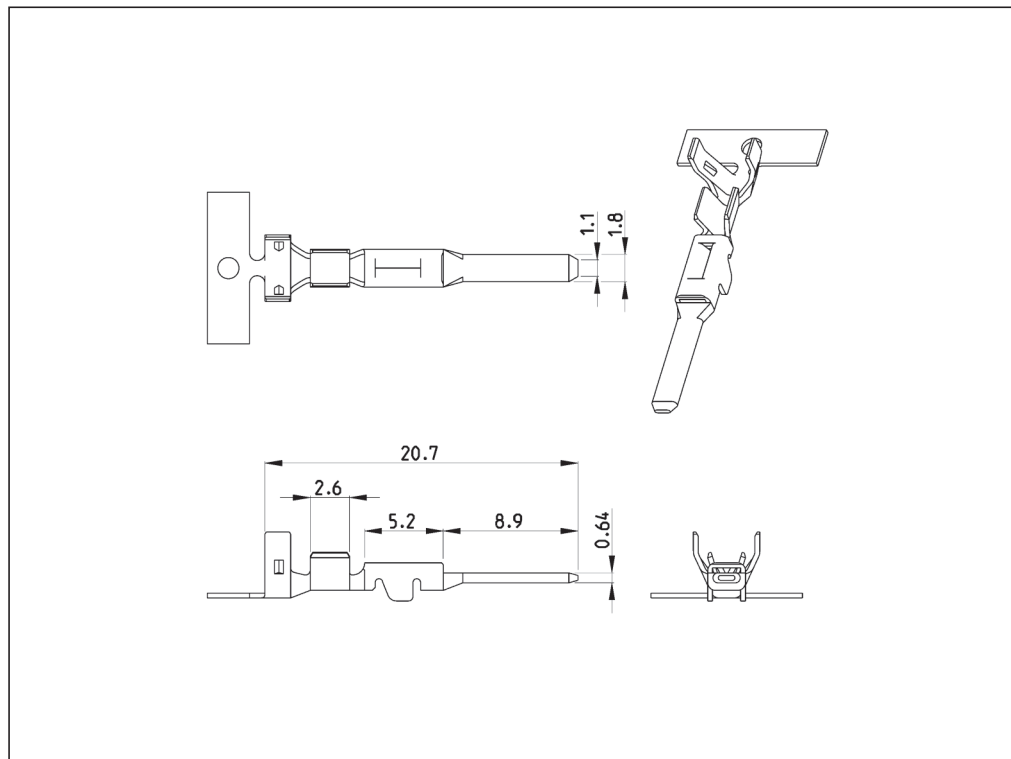
Pre-tin plated  
Selective gold plated

**Application Specifications:**

114-5092  
114-5157

**Instruction Sheet:**

408-8547-1



| Wire Size Range |       | Wire Insulation Diameter (mm) | Material and Finish | Part Numbers |                 |             |                 |           |
|-----------------|-------|-------------------------------|---------------------|--------------|-----------------|-------------|-----------------|-----------|
|                 |       |                               |                     | Strip Form   |                 | Loose-Piece |                 | Hand Tool |
| (mm²)           | (AWG) |                               |                     | Brass        | Phosphor Bronze | Brass       | Phosphor Bronze |           |
| 0.2–0.3         | 24–22 | 1.4–1.9                       | Pre-tinned          | 173633-1     | 173633-2        | 175029-1    | 175029-2        | 91580-3   |
|                 |       |                               | Sel. gold           | —            | 173633-3        | —           | 175029-3        | 91580-3   |
| 0.50–1.25       | 20–16 | 2.0–2.6                       | Pre-tinned          | 173645-1     | 173645-2        | 175030-1    | 175030-2        | 91573-1   |
|                 |       |                               | Sel. gold           | —            | 173645-3        | —           | 175030-3        | 91573-1   |
| 0.2–0.3         | 24–22 | 0.3–0.5                       | Pre-tinned          | 175207-1     |                 |             |                 |           |
| 0.50–1.25       | 20–16 | 1.2–2.2                       | Pre-tinned          | 175208-1     |                 |             |                 |           |

**Note:** All Part Numbers are RoHS and ELV compliant.

Wire-to-Wire Applications

**Technical Features**

**No. of Positions:**

2 Positions

**Applicable Wires:**

- 0.2–1.25 mm<sup>2</sup> (AWG 24–16)

**Raw Material:**

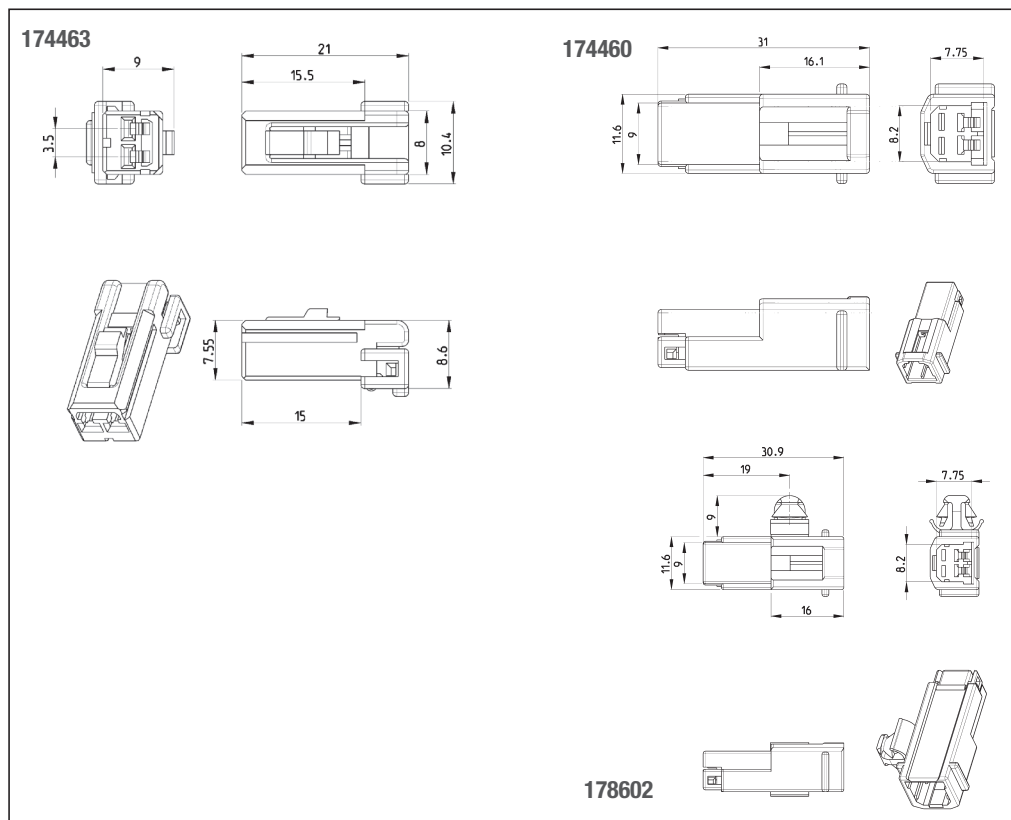
- Housing
- Cap: PBT
- Plug: PBT

**Product Specification:**

108-5264

**Application Specifications:**

114-5091 (Receptacle)  
114-5092 (Tab)



**Technical Features**

**No. of Positions:**

3 Positions

**Applicable Wires:**

- 0.2–1.25 mm<sup>2</sup> (AWG 24–16)

**Raw Material:**

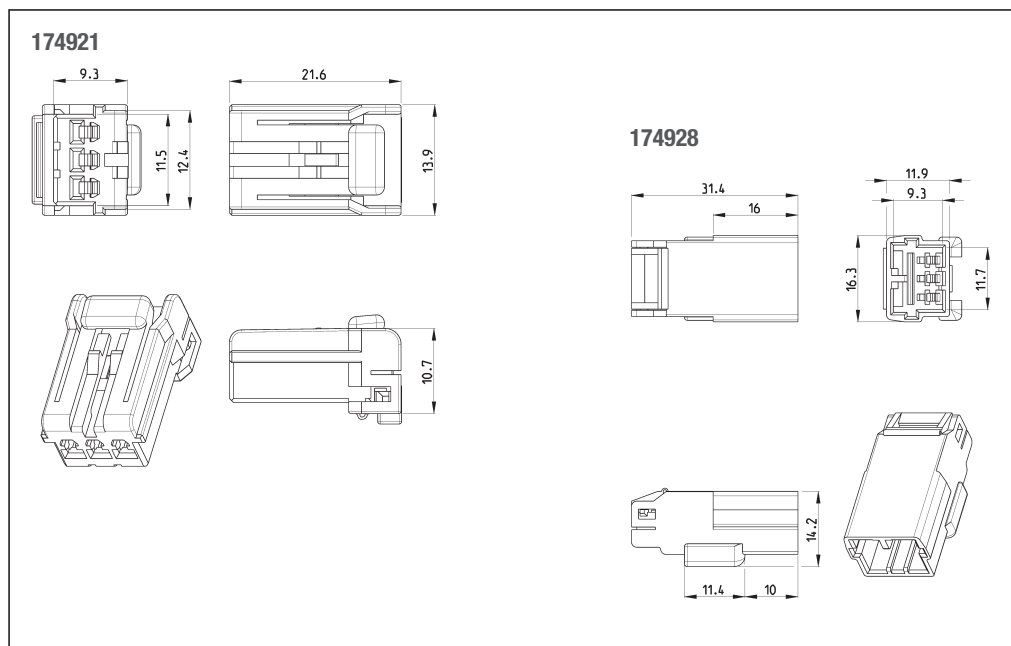
- Housing
- Cap: PBT
- Plug: PBT

**Product Specification:**

108-5264

**Application Specifications:**

114-5091 (Receptacle)  
114-5092 (Tab)



| No. of Positions | Terminate To | Plug Assembly | Cap Housing                                                  | Cap Housing Horizontal Mount | Cap Housing Vertical Mount | Mating Plug |
|------------------|--------------|---------------|--------------------------------------------------------------|------------------------------|----------------------------|-------------|
| 2                | Wire         | 174463-1      | 174460-1<br>131844-1 (Panel Mount)<br>178602-1 (Panel Mount) |                              |                            |             |
| 3                | Wire         | 174921-1      | 174928-1                                                     |                              |                            |             |

**Note:** All Part Numbers are RoHS and ELV compliant.

Wire-to-Wire Applications

**Technical Features**

**No. of Positions:**

4 Positions

**Applicable Wires:**

- 0.2–1.25 mm<sup>2</sup> (AWG 24–16)

**Raw Material:**

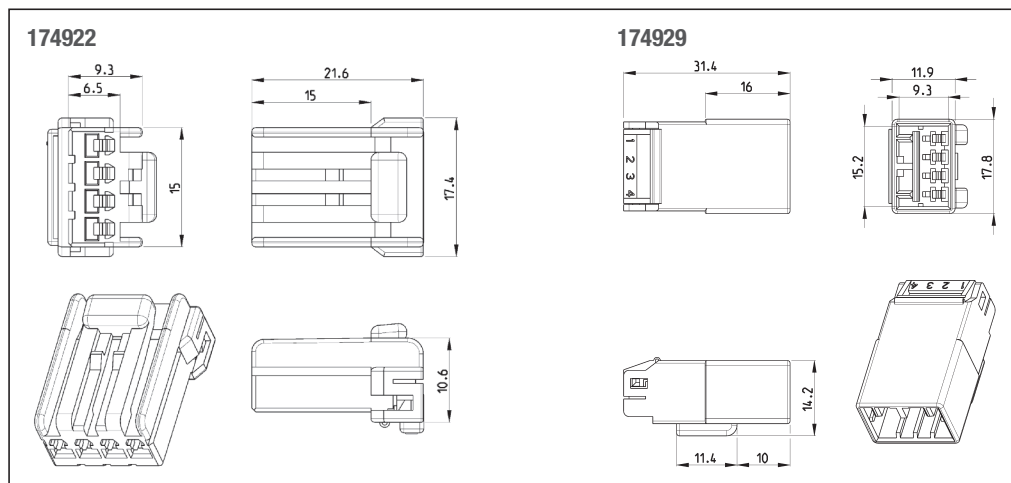
- Cap Housing: PBT
- Plug Housing: PBT

**Product Specification:**

108-5264

**Application Specifications:**

- 114-5091 (Receptacle)
- 114-5092 (Tab)



**Technical Features**

**No. of Positions:**

6 Positions

**Applicable Wires:**

- 0.2–1.25 mm<sup>2</sup> (AWG 24–16)

**Raw Material:**

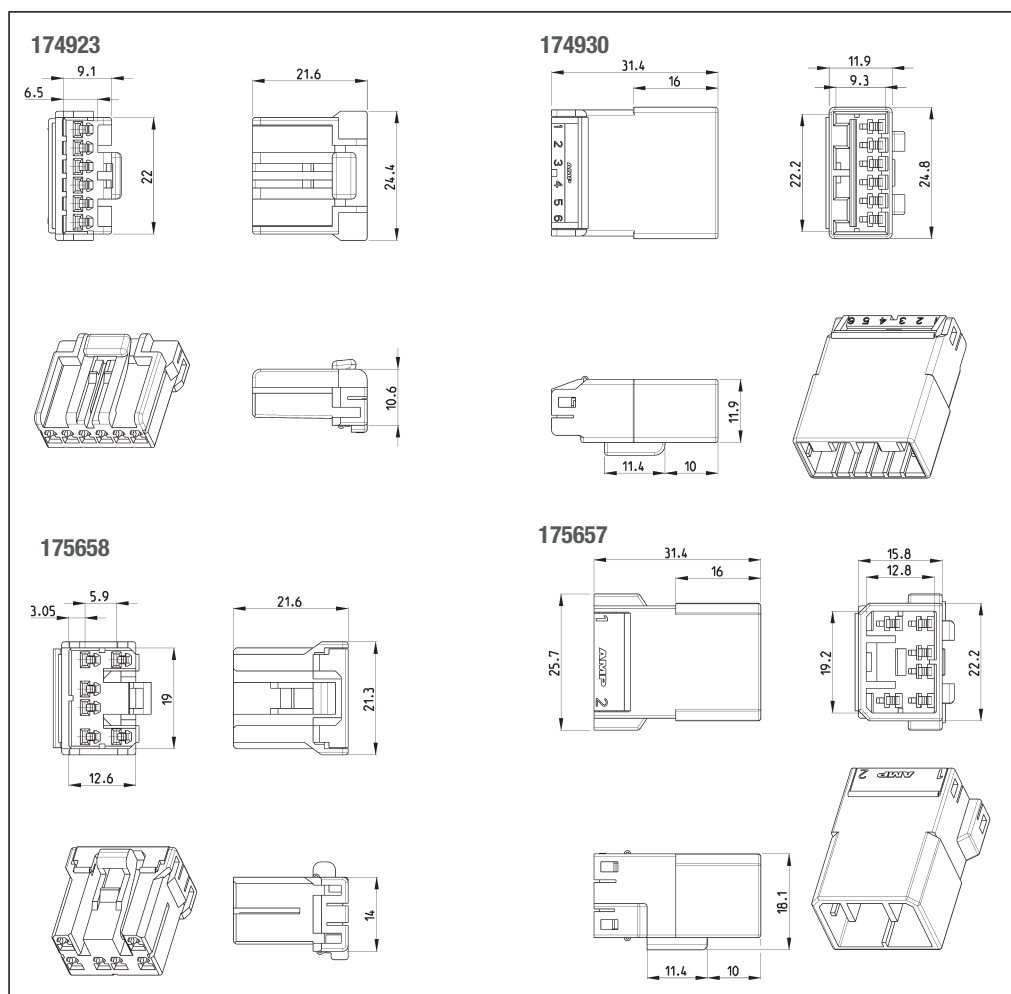
- Housing
- Cap: PBT
- Plug: PBT

**Product Specification:**

108-5264

**Application Specifications:**

- 114-5091 (Receptacle)
- 114-5092 (Tab)



| No. of Positions | Terminate To | Plug Assembly        | Cap Housing          | Cap Housing Horizontal Mount | Cap Housing Vertical Mount | Mating Plug |
|------------------|--------------|----------------------|----------------------|------------------------------|----------------------------|-------------|
| 4                | Wire         | 174922-1             | 174929-1             |                              |                            |             |
| 6                | Wire         | 174923-1<br>175658-1 | 174930-1<br>175657-1 |                              |                            |             |

**Note:** All Part Numbers are RoHS and ELV compliant.

Wire-to-Wire Applications

**Technical Features**

**No. of Positions:**

8 Positions

**Applicable Wires:**

- 0.2–1.25 mm<sup>2</sup> (AWG 24–16)

**Raw Material:**

- Housing
- Cap: PBT
- Plug: PBT

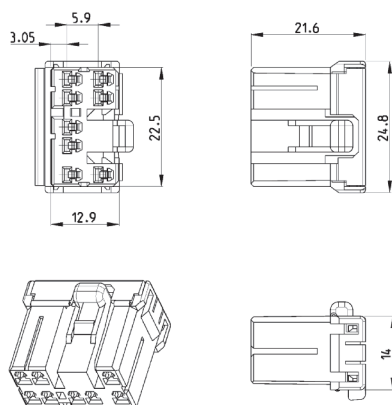
**Product Specification:**

108-5264

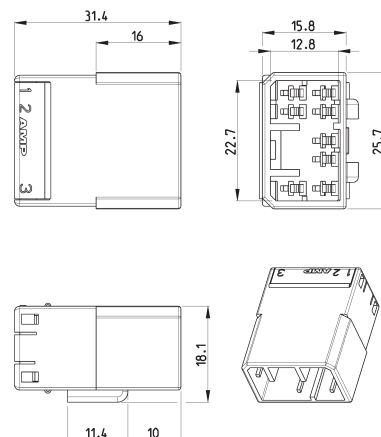
**Application Specifications:**

114-5091 (Receptacle)  
114-5092 (Tab)

**173850**



**174931**



**Technical Features**

**No. of Positions:**

10 Positions

**Applicable Wires:**

- 0.2–1.25 mm<sup>2</sup> (AWG 24–16)

**Raw Material:**

- Housing
- Cap: PBT
- Plug: PBT

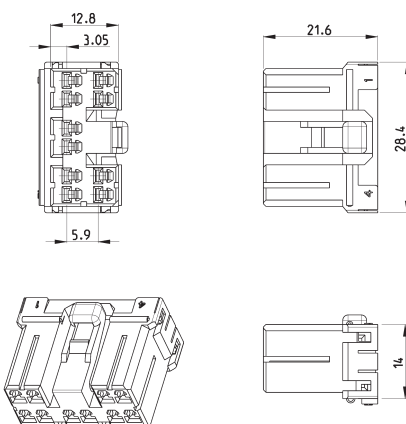
**Product Specification:**

108-5264

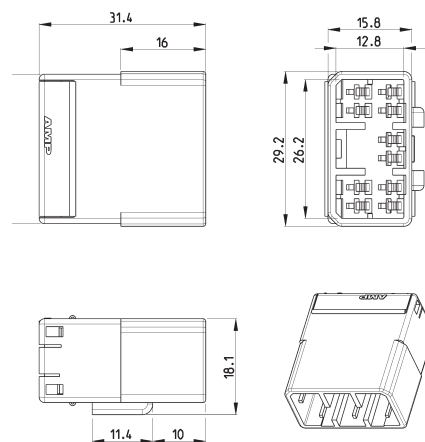
**Application Specifications:**

114-5091 (Receptacle)  
114-5092 (Tab)

**174465**



**174932**



| No. of Positions | Terminate To | Plug Assembly | Cap Housing          | Cap Housing Horizontal Mount | Cap Housing Vertical Mount | Mating Plug |
|------------------|--------------|---------------|----------------------|------------------------------|----------------------------|-------------|
| 8                | Wire         | 173850-1      | 174931-1<br>174937-1 |                              |                            |             |
| 10               | Wire         | 174465-1      | 174932-1             |                              |                            |             |

**Note:** All Part Numbers are RoHS and ELV compliant.

## Wire-to-Wire Applications

### Technical Features

**No. of Positions:**

12 Positions

**Applicable Wires:**

- 0.2–1.25 mm<sup>2</sup> (AWG 24–16)

**Raw Material:**

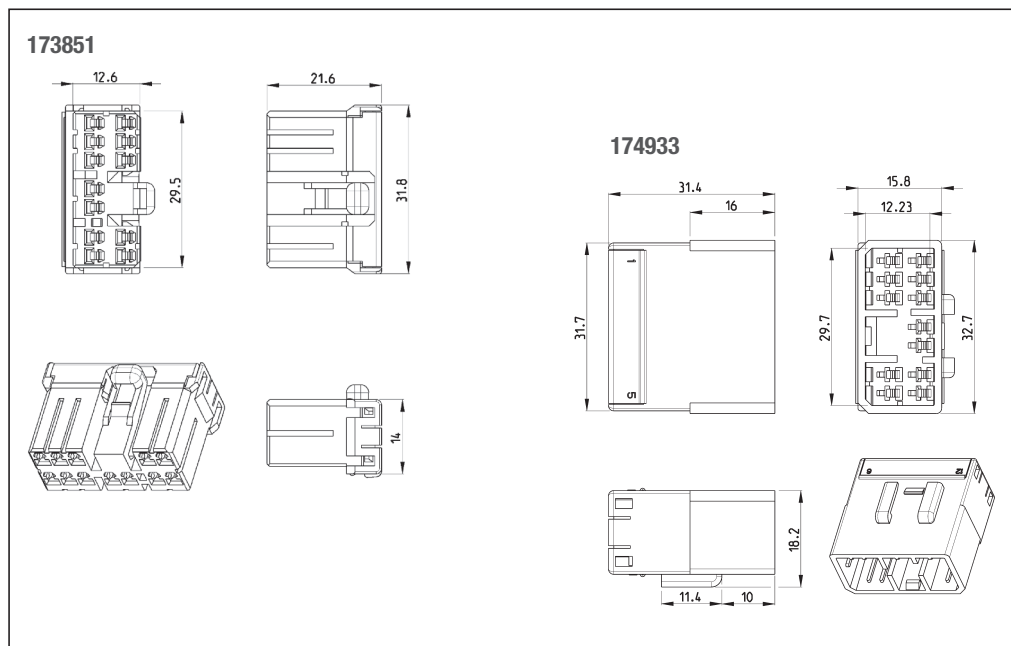
- Housing
- Cap: PBT
- Plug: PBT

**Product Specification:**

108-5264

**Application Specifications:**

- 114-5091 (Receptacle)
- 114-5092 (Tab)



### Technical Features

**No. of Positions:**

14 Positions

**Applicable Wires:**

- 0.2–1.25 mm<sup>2</sup> (AWG 24–16)

**Raw Material:**

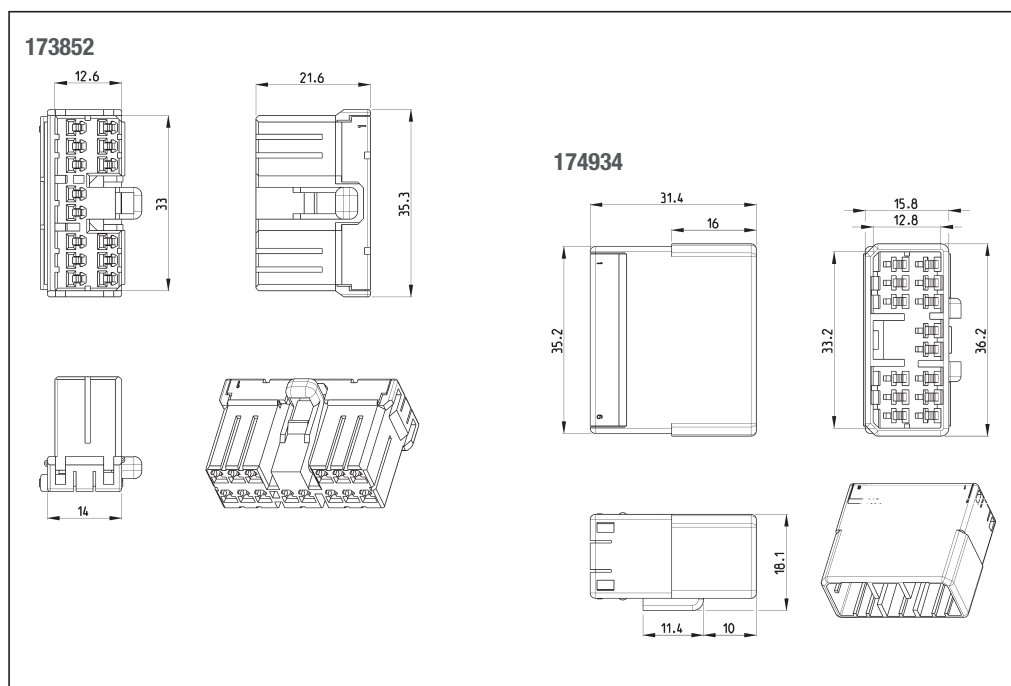
- Housing
- Cap: PBT
- Plug: PBT

**Product Specification:**

108-5264

**Application Specifications:**

- 114-5091 (Receptacle)
- 114-5092 (Tab)



| No. of Positions | Terminate To | Plug Assembly | Cap Housing | Cap Housing Horizontal Mount | Cap Housing Vertical Mount | Mating Plug |
|------------------|--------------|---------------|-------------|------------------------------|----------------------------|-------------|
| 12               | Wire         | 173851-1      | 174933-1    |                              |                            |             |
| 14               | Wire         | 173852-1      | 174934-1    |                              |                            |             |

**Note:** All Part Numbers are RoHS and ELV compliant.

## Wire-to-Wire Applications

### Technical Features

#### No. of Positions:

18 Positions

#### Applicable Wires:

- 0.2–1.25 mm<sup>2</sup> (AWG 24–16)

#### Raw Material:

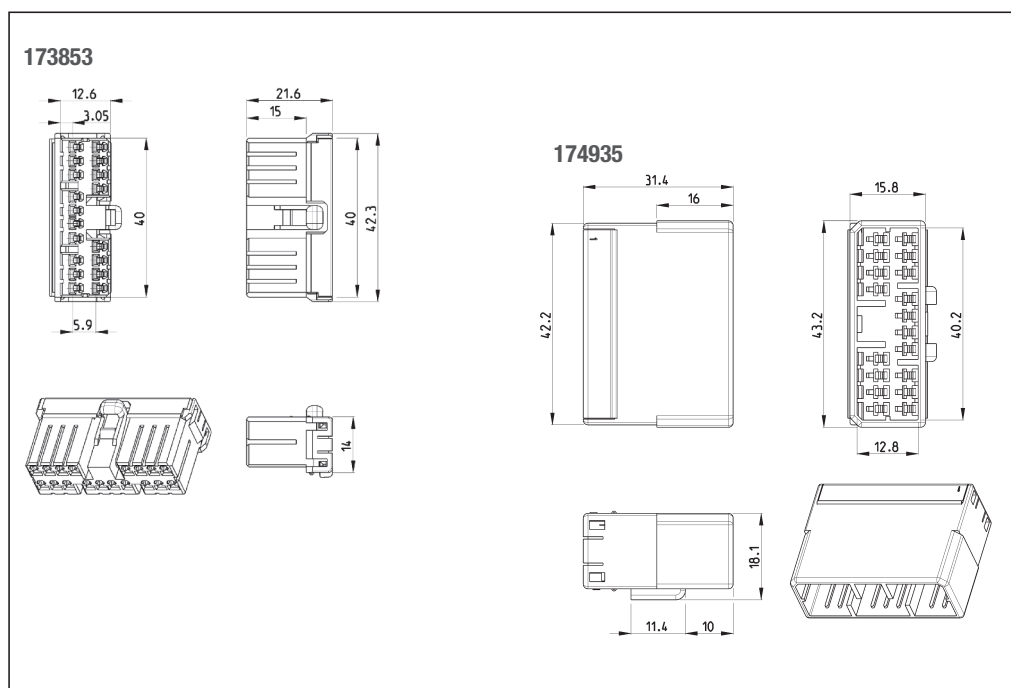
- Housing
- Cap: PBT
- Plug: PBT

#### Product Specification:

108-5264

#### Application Specifications:

114-5091 (Receptacle)  
114-5092 (Tab)



### Technical Features

#### No. of Positions:

20 Positions

#### Applicable Wires:

- 0.2–1.25 mm<sup>2</sup> (AWG 24–16)

#### Raw Material:

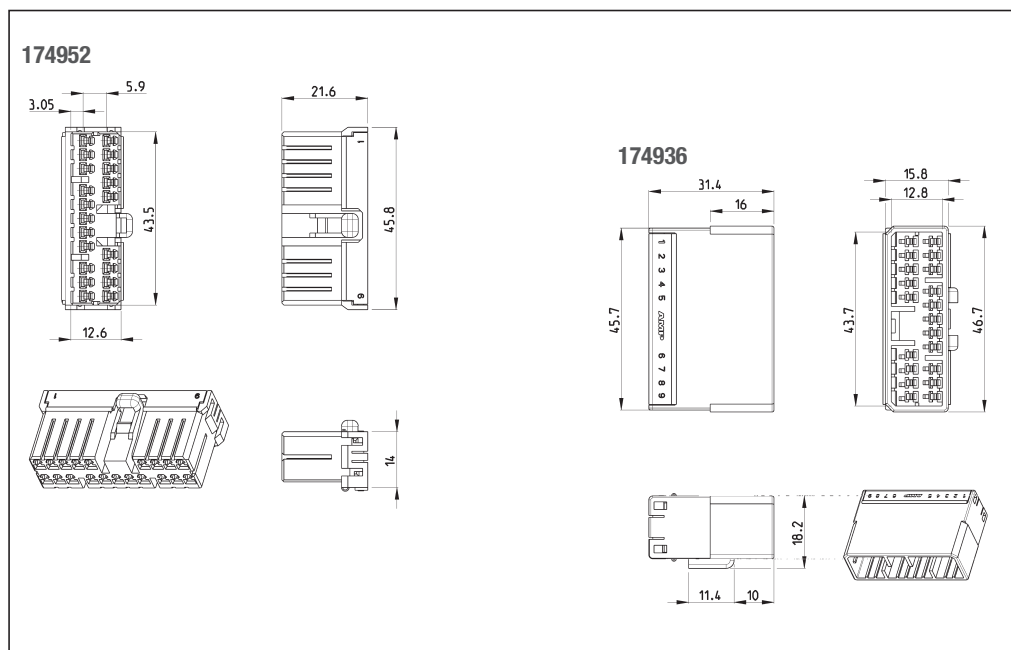
- Housing
- Cap: PBT
- Plug: PBT

#### Product Specification:

108-5264

#### Application Specifications:

114-5091 (Receptacle)  
114-5092 (Tab)



| No. of Positions | Terminate To | Plug Assembly | Cap Housing                        | Cap Housing Horizontal Mount | Cap Housing Vertical Mount | Mating Plug |
|------------------|--------------|---------------|------------------------------------|------------------------------|----------------------------|-------------|
| 18               | Wire         | 173853-1      | 174935-1                           |                              |                            |             |
| 20               | Wire         | 174952-1      | 174936-1<br>174938-1 (Panel Mount) |                              |                            |             |

**Note:** All Part Numbers are RoHS and ELV compliant.

Wire-to-Wire Applications

**Technical Features**

**No. of Positions:**

30 Positions

**Applicable Wires:**

- 0.2–1.25 mm<sup>2</sup> (AWG 24–16)

**Raw Material:**

- Housing
- Cap: PBT
- Plug: PBT

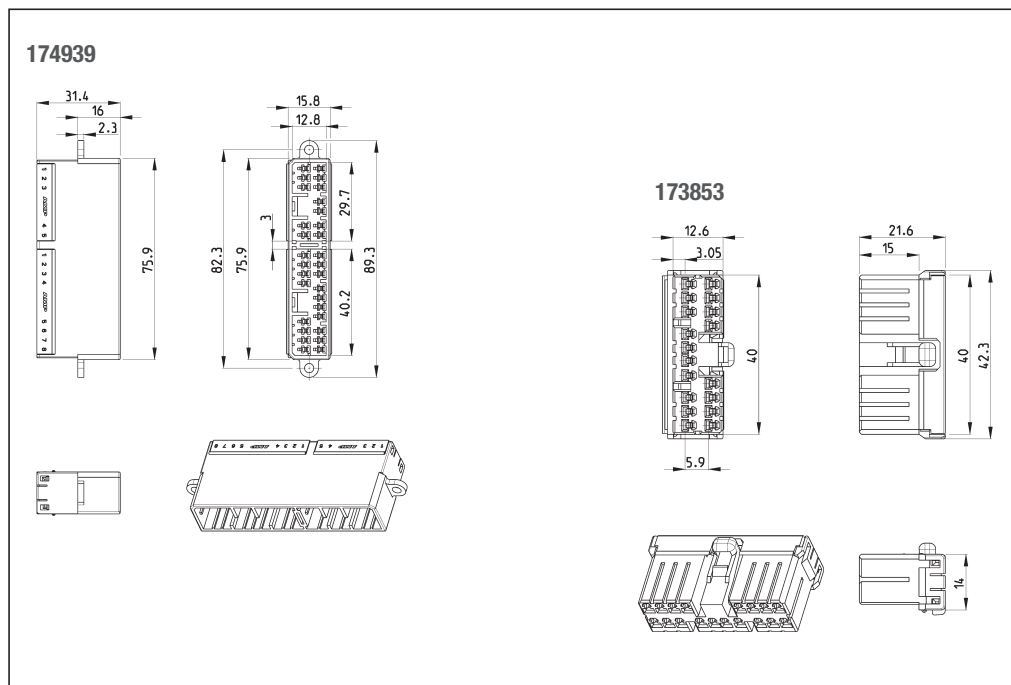
**Product Specification:**

108-5264

**Application Specifications:**

114-5091 (Receptacle)

114-5092 (Tab)



| No. of Positions | Terminate To | Plug Assembly | Cap Housing            | Cap Housing Horizontal Mount | Cap Housing Vertical Mount | Mating Plug          |
|------------------|--------------|---------------|------------------------|------------------------------|----------------------------|----------------------|
| 30               | Wire         |               | 174939-1 (Panel Mount) |                              |                            | 173853-1<br>173851-1 |

**Note:** All Part Numbers are RoHS and ELV compliant.

Wire-to-Board Applications

**Technical Features**

**No. of Positions:**

3 Positions

**Applicable Wires:**

- 0.2–1.25 mm<sup>2</sup> (AWG 24–16)

**Raw Material:**

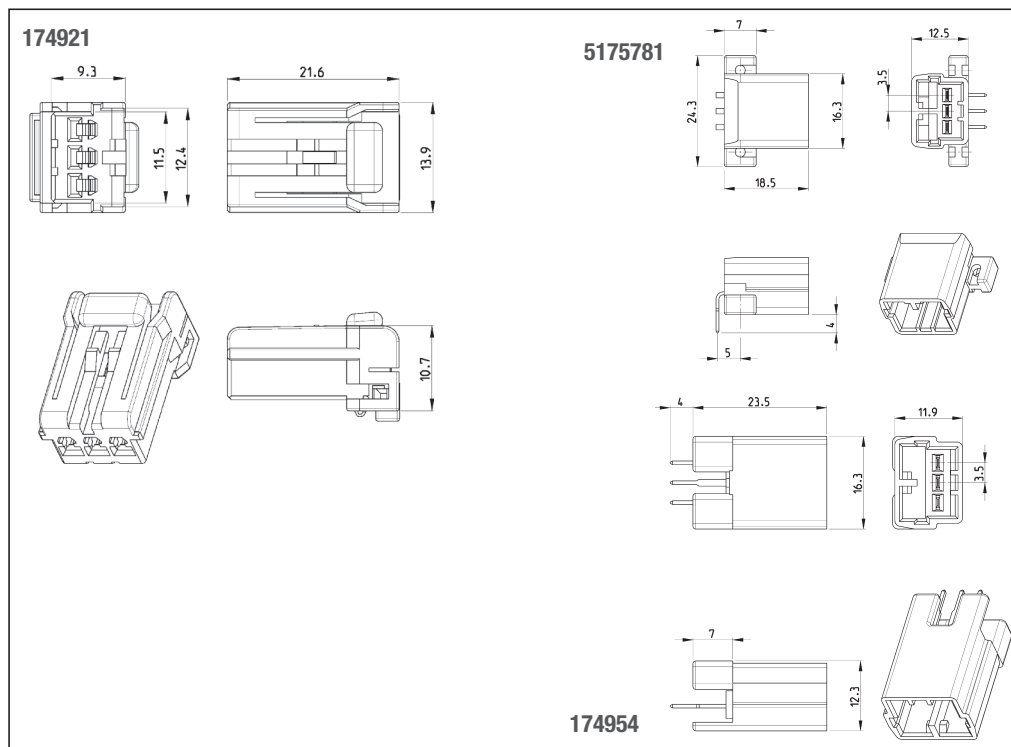
- Housing
- Cap: PBT
- Plug: PBT

**Product Specification:**

108-5216

**Application Specification:**

114-5091 (Receptacle)



**Technical Features**

**No. of Positions:**

6 Positions

**Applicable Wires:**

- 0.2–1.25 mm<sup>2</sup> (AWG 24–16)

**Raw Material:**

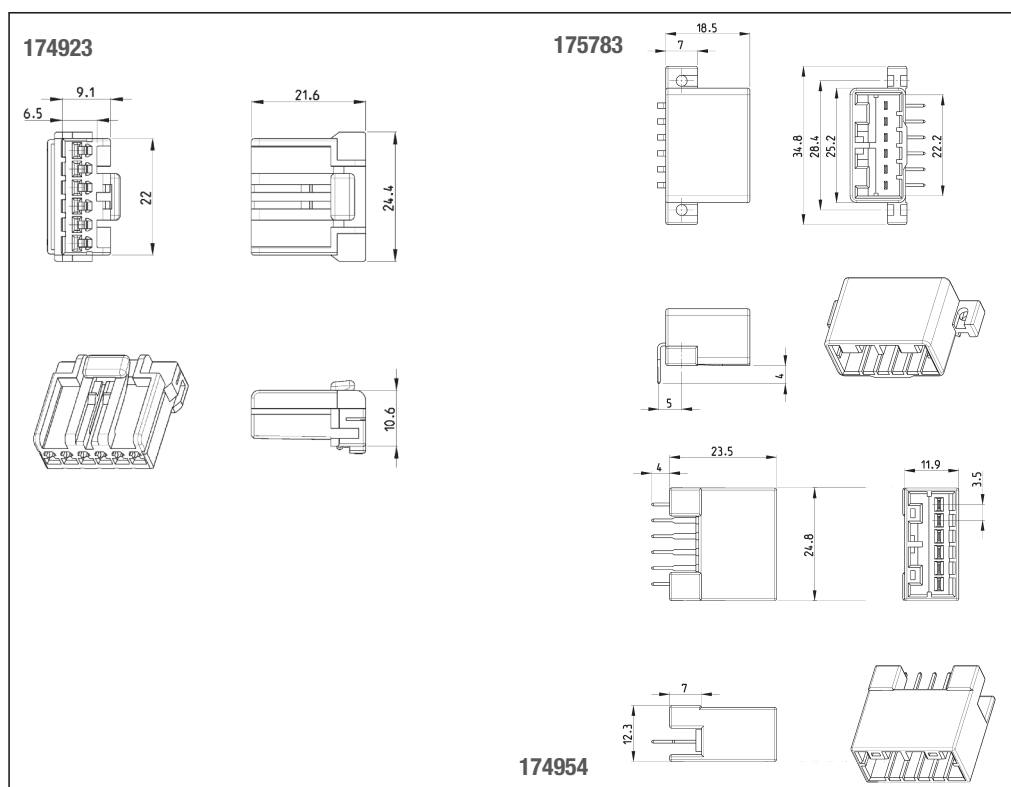
- Housing
- Cap: PBT
- Plug: PBT

**Product Specification:**

108-5216

**Application Specification:**

114-5091 (Receptacle)



| No. of Positions | Terminate To | Plug Assembly | Cap Housing | Cap Housing Horizontal Mount | Cap Housing Vertical Mount | Mating Plug |
|------------------|--------------|---------------|-------------|------------------------------|----------------------------|-------------|
| 3                | Board        | 174921-1      |             | 5175781-1                    | 174953-1                   |             |
| 6                | Board        | 174923-1      |             | 175783-1                     | 174954-1                   |             |

**Note:** All Part Numbers are RoHS and ELV compliant.

Wire-to-Board Applications

**Technical Features**

**No. of Positions:**

8 Positions

**Applicable Wires:**

- 0.2–1.25 mm<sup>2</sup> (AWG 24–16)

**Raw Material:**

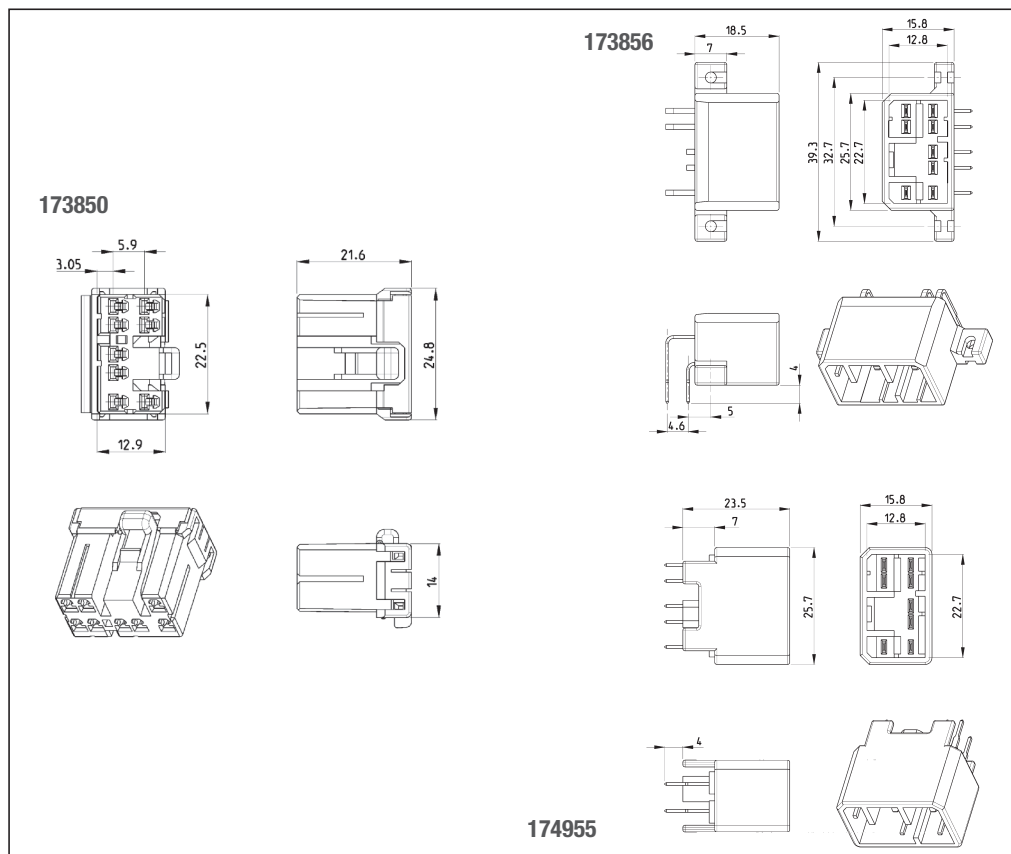
- Housing
- Cap: PBT
- Plug: PBT

**Product Specification:**

108-5216

**Application Specification:**

114-5091 (Receptacle)



**Technical Features**

**No. of Positions:**

10 Positions

**Applicable Wires:**

- 0.2–1.25 mm<sup>2</sup> (AWG 24–16)

**Raw Material:**

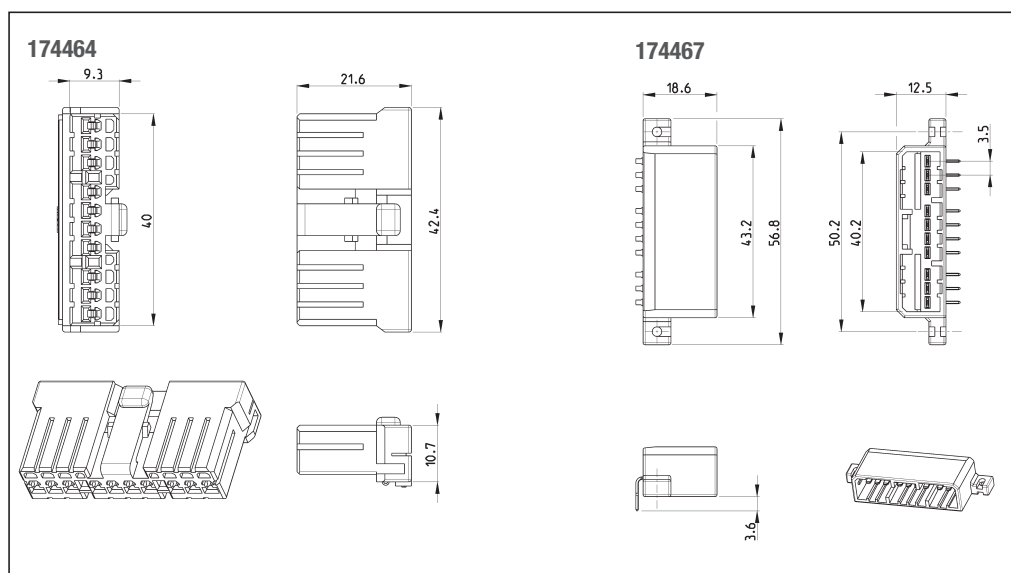
- Housing
- Cap: PBT
- Plug: PBT

**Product Specification:**

108-5216

**Application Specification:**

114-5091 (Receptacle)



| No. of Positions | Terminate To | Plug Assembly                | Cap Housing | Cap Housing Horizontal Mount    | Cap Housing Vertical Mount | Mating Plug |
|------------------|--------------|------------------------------|-------------|---------------------------------|----------------------------|-------------|
| 8                | Board        | 173850-1<br>176113-1 Mark II |             | 173856-1<br>179096-1 Flange cut | 174955-1                   |             |
| 10               | Board        | 174464-1<br>176115-1 Mark II |             | 174467-1                        |                            |             |

**Note:** All Part Numbers are RoHS and ELV compliant.

Wire-to-Board Applications

**Technical Features**

**No. of Positions:**

12 Positions

**Applicable Wires:**

- 0.2–1.25 mm<sup>2</sup> (AWG 24–16)

**Raw Material:**

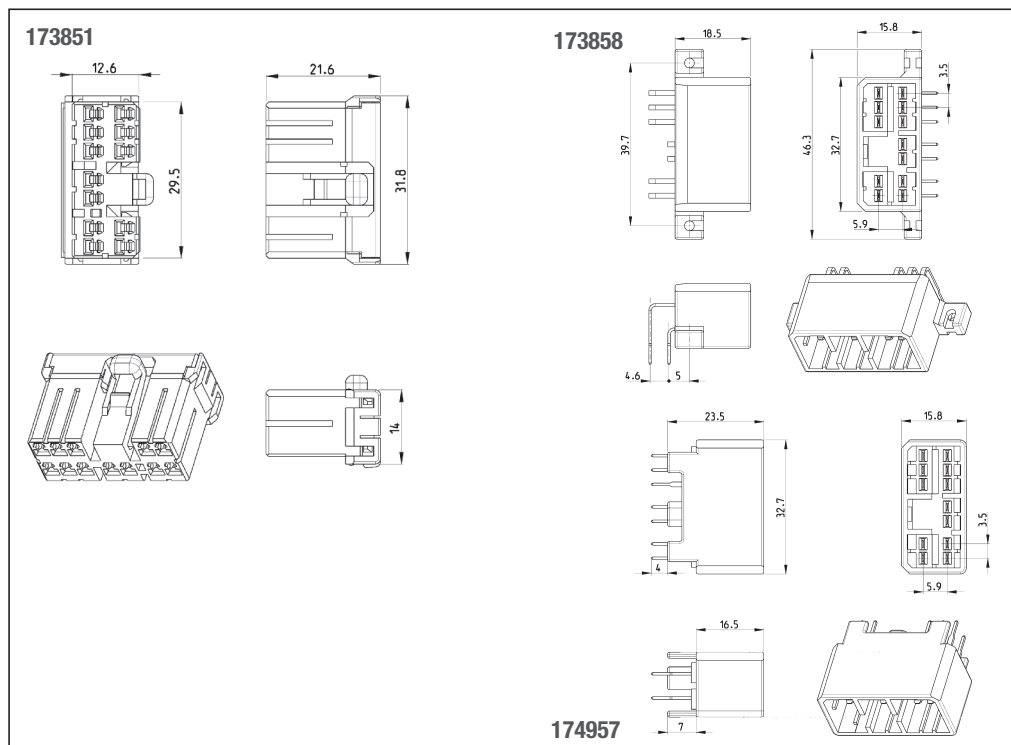
- Housing
- Cap: PBT
- Plug: PBT

**Product Specification:**

108-5216

**Application Specification:**

114-5091 (Receptacle)



**Technical Features**

**No. of Positions:**

14 Positions

**Applicable Wires:**

- 0.2–1.25 mm<sup>2</sup> (AWG 24–16)

**Raw Material:**

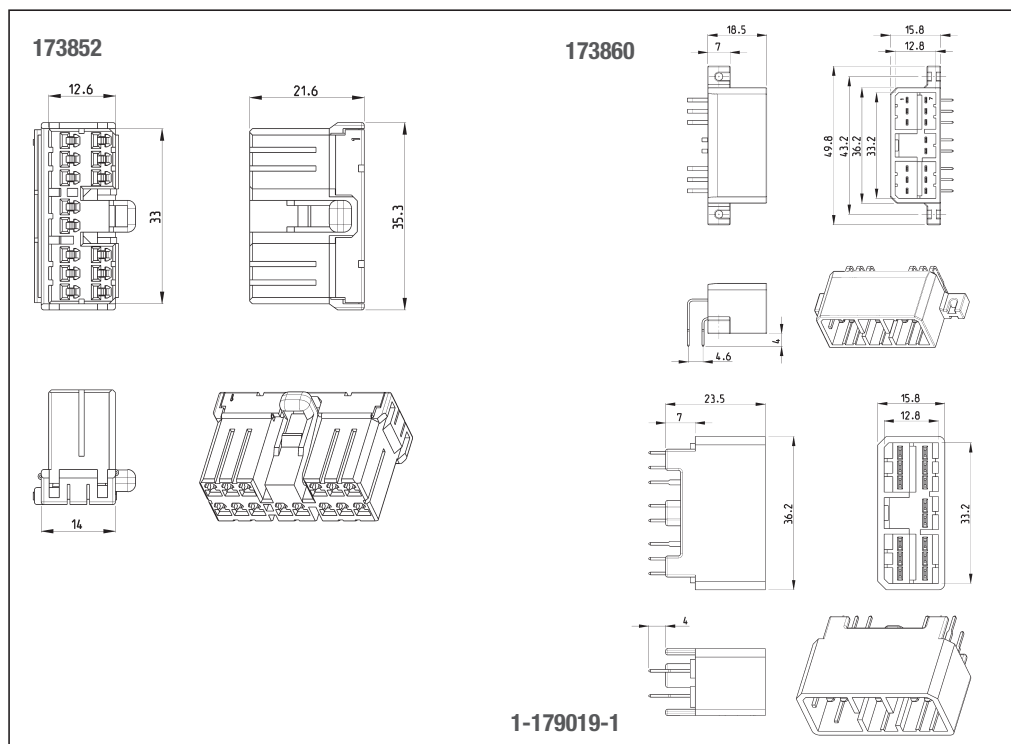
- Housing
- Cap: PBT
- Plug: PBT

**Product Specification:**

108-5216

**Application Specification:**

114-5091 (Receptacle)



| No. of Positions | Terminate To | Plug Assembly                | Cap Housing | Cap Housing Horizontal Mount | Cap Housing Vertical Mount | Mating Plug |
|------------------|--------------|------------------------------|-------------|------------------------------|----------------------------|-------------|
| 12               | Board        | 173851-1<br>176116-1 Mark II |             | 173858-1                     | 174957-1                   |             |
| 14               | Board        | 173852-1<br>176117-1 Mark II |             | 173860-1                     | 1-179019-1                 |             |

**Note:** All Part Numbers are RoHS and ELV compliant.

Wire-to-Board Applications

**Technical Features**

**No. of Positions:**

18 Positions

**Applicable Wires:**

- 0.2–1.25 mm<sup>2</sup> (AWG 24–16)

**Raw Material:**

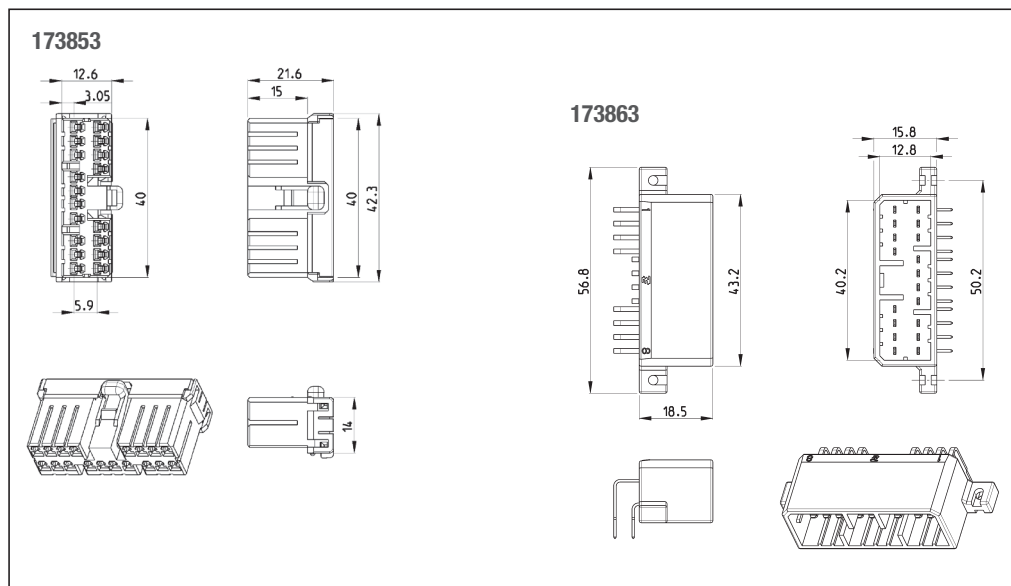
- Housing  
Cap: PBT  
Plug: PBT

**Product Specification:**

108-5216

**Application Specification:**

114-5091 (Receptacle)



**Technical Features**

**No. of Positions:**

20 Positions

**Applicable Wires:**

- 0.2–1.25 mm<sup>2</sup> (AWG 24–16)

**Raw Material:**

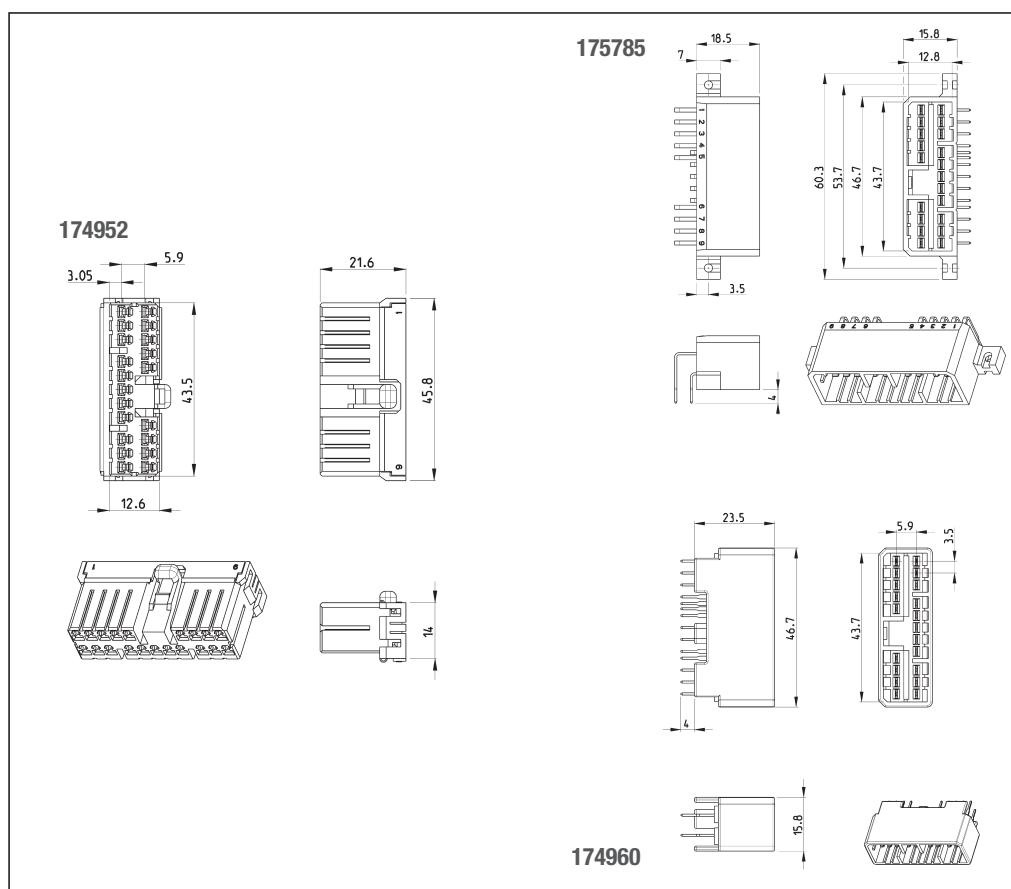
- Housing  
Cap: PBT  
Plug: PBT

**Product Specification:**

108-5216

**Application Specification:**

114-5091 (Receptacle)



| No. of Positions | Terminate To | Plug Assembly                | Cap Housing | Cap Housing Horizontal Mount | Cap Housing Vertical Mount | Mating Plug |
|------------------|--------------|------------------------------|-------------|------------------------------|----------------------------|-------------|
| 18               | Board        | 173853-1<br>173118-1 Mark II |             | 173862-1                     |                            |             |
| 20               | Board        | 174952-1<br>176119-1 Mark II |             | 175785-1                     | 174960-1                   |             |

**Note:** All Part Numbers are RoHS and ELV compliant.



Wire-to-Board Applications

**Technical Features**

**No. of Positions:**

42 Positions

**Applicable Wires:**

- 0.2–1.25 mm<sup>2</sup> (AWG 24–16)

**Raw Material:**

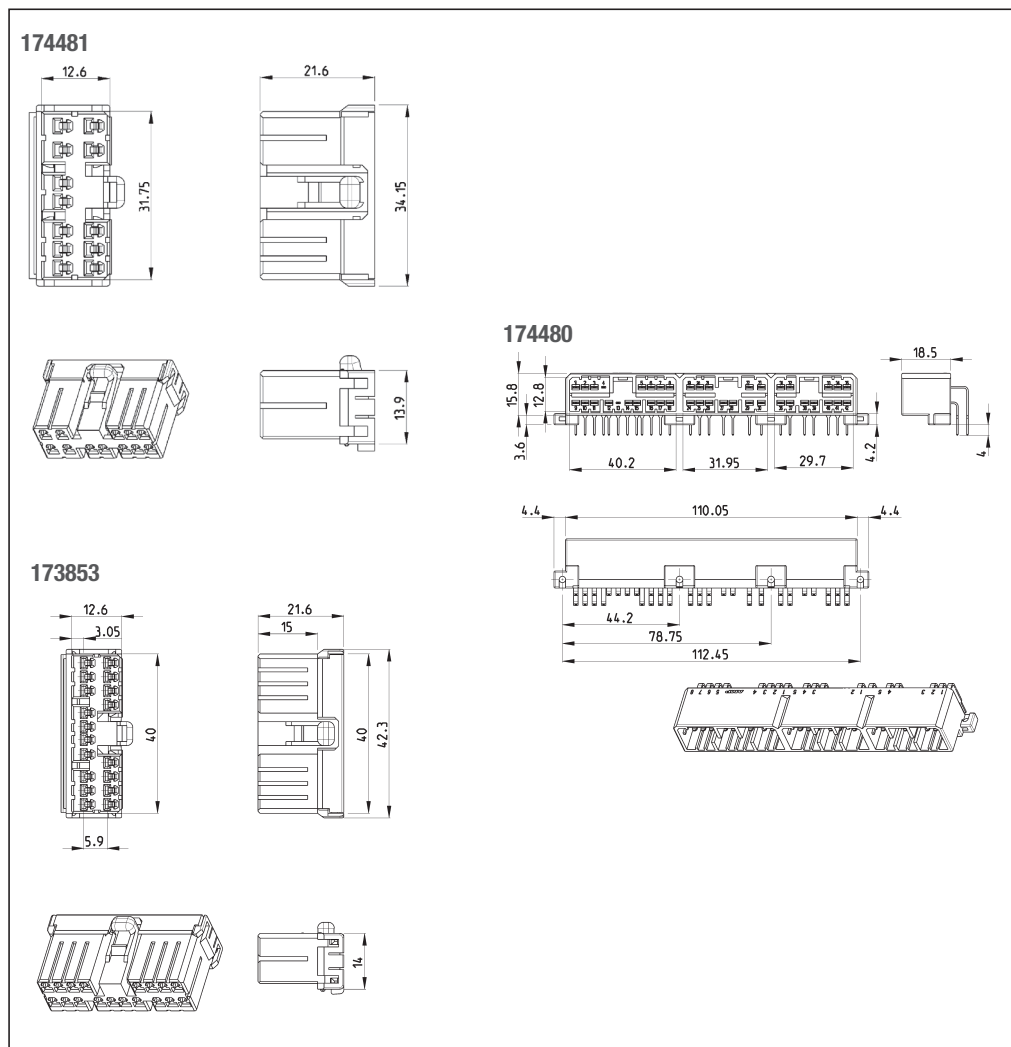
- Housing
- Cap: PBT
- Plug: PBT

**Product Specification:**

108-5216

**Application Specification:**

114-5091 (Receptacle)



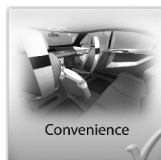
| No. of Positions | Terminate To | Plug Assembly                                      | Cap Housing | Cap Housing Horizontal Mount | Cap Housing Vertical Mount | Mating Plug |
|------------------|--------------|----------------------------------------------------|-------------|------------------------------|----------------------------|-------------|
| 42               | Board        | 174481-1 (12p)<br>173851-1 (12p)<br>173853-1 (18p) |             | 174480-1                     |                            |             |

**Note:** All Part Numbers are RoHS and ELV compliant.

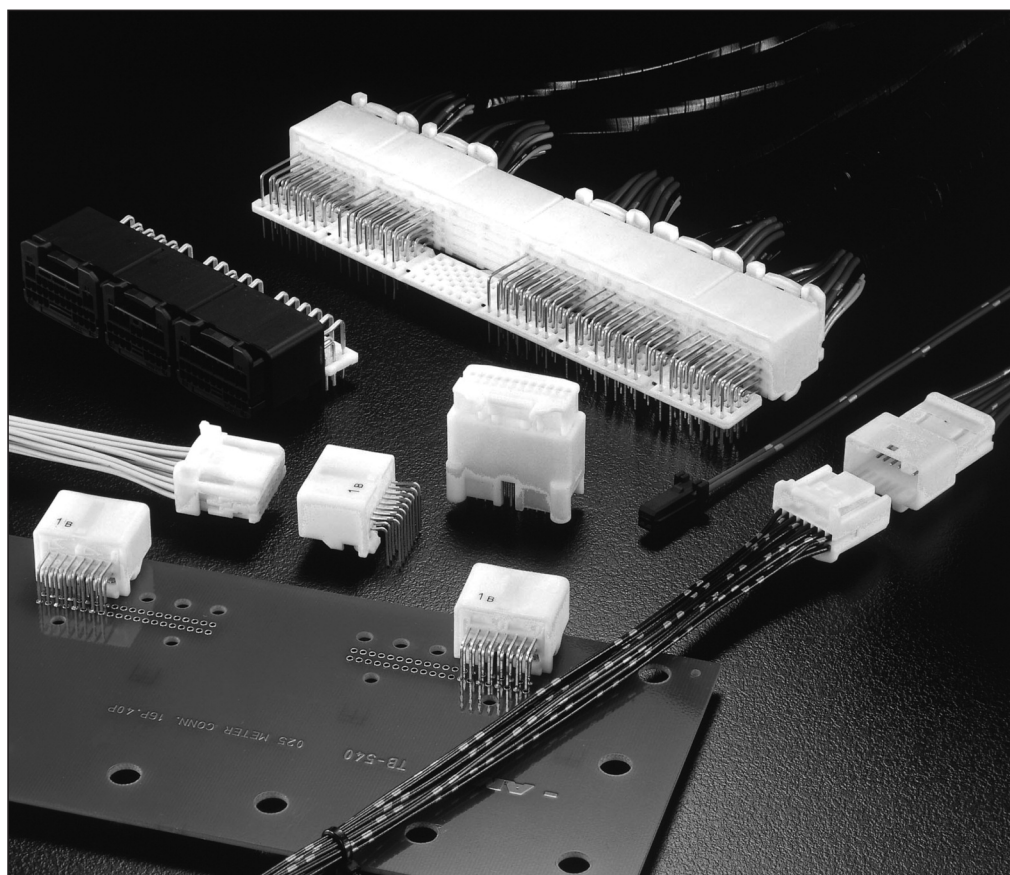
Engineering Notes

A large rectangular area filled with a light gray grid, intended for handwritten engineering notes. The grid consists of small squares, approximately 10x10 units in size, covering the majority of the page area below the header and above the footer.

## Introduction



**.025 (0.64 mm) Series Connectors are High-Density Connectors for Automotive Applications such as ECU and down sized Wire Harnesses.**



## Features

- Connectors for automotive applications suitable for high-density mountings.
- Designed to resist deformation of contacts by scooping at mating/unmating.
- Low insertion force contacts optimized to tolerate fretting corrosion.
- Side-locks prevent half-mating of connector halves and increase connector retention force.
- Without closing double locks, connectors cannot mate.
- Hybrid types of 0.25/.040 and 0.25/.090 are also available.
- Many numbers of positioned housings will be available.

See the following pages for Application Specifications, Product Specification and Instruction Sheet.

Receptacle Contacts (for Contact Lance)

**Technical Features**

**Contact Material:**

Copper Alloy

**Contact Finish:**

Pre-tin plated

Post-tin plated

Selective gold plated

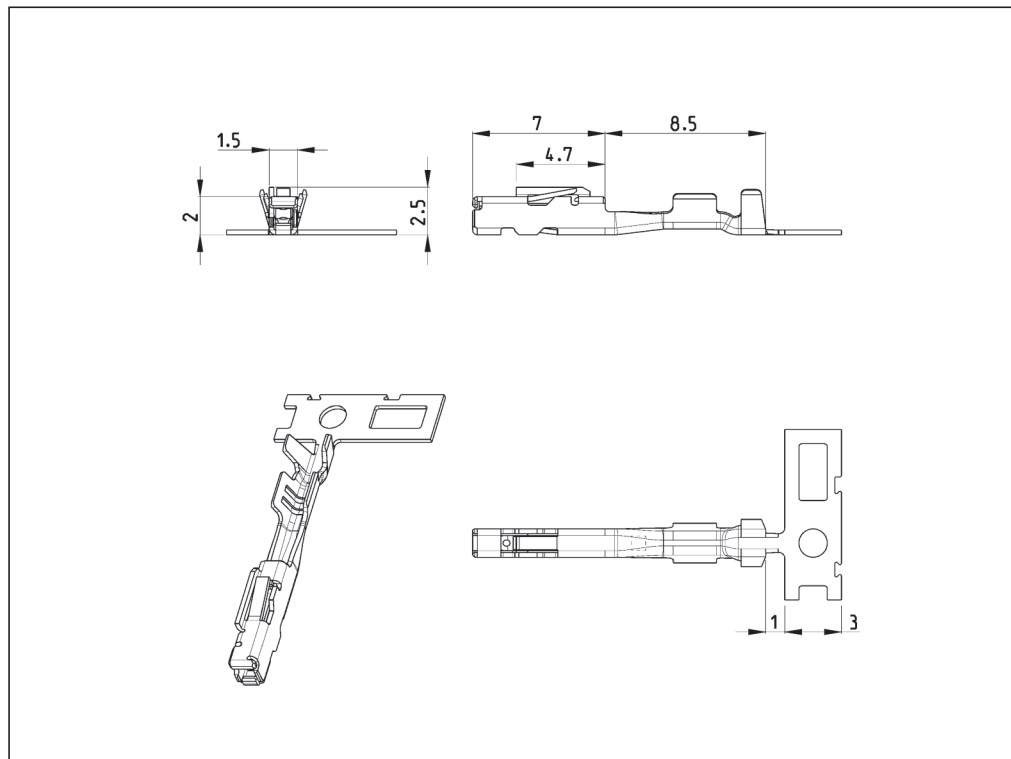
**Application Specifications:**

114-5250-1

114-5276-1

**Instruction Sheet:**

411-5981



| Wire Size Range    |       | Wire Insulation<br>Diameter<br>(mm) | Material and Finish                 | Part Numbers |             |
|--------------------|-------|-------------------------------------|-------------------------------------|--------------|-------------|
| (mm <sup>2</sup> ) | (AWG) |                                     |                                     | Strip Form   | Loose-Piece |
| 0.22–0.5           |       | 0.95–1.70                           | Copper Alloy, pre-tin plated        | 1123343-1    | 1318143-1   |
|                    |       |                                     | Copper Alloy, selective gold plated | 1123343-2    | 1318143-2   |
| 0.3–0.5            |       | 1.10–1.35                           | Copper Alloy, post-tinned           | 1318688-1    |             |
| 0.08–0.14          |       | 1.1–1.4                             | Copper Alloy, post-tinned           | 1565403-1    |             |
| 0.22               |       | 0.8–1.2                             | Copper Alloy, post-tinned           | 1565404-1    |             |

**Note:** All Part Numbers are RoHS and ELV compliant.

Receptacle Contacts (for Housing Lance)

**Technical Features**

**Contact Material:**

Copper Alloy

**Contact Finish:**

Pre-tin plated

Selective gold plated

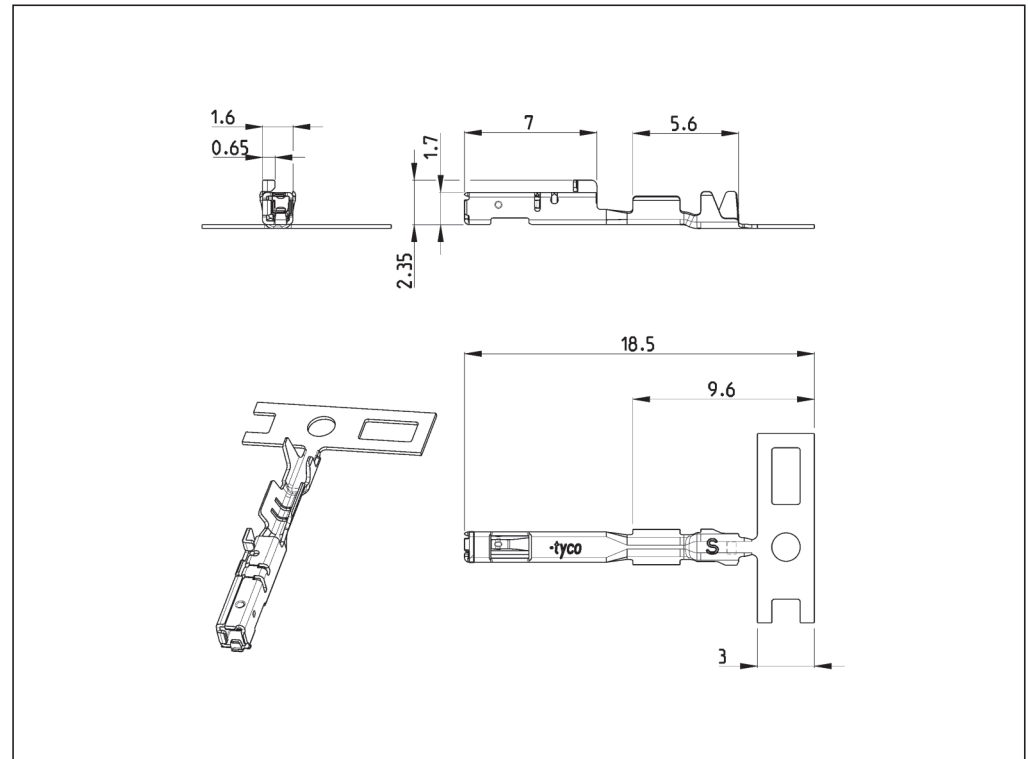
**Application Specification:**

114-5329-1

**Instruction Sheet:**

411-78188

411-78187



| Wire Size Range    |       | Wire Insulation Diameter (mm) | Material and Finish                 | Part Numbers |             |
|--------------------|-------|-------------------------------|-------------------------------------|--------------|-------------|
| (mm <sup>2</sup> ) | (AWG) |                               |                                     | Strip Form   | Loose-Piece |
| 0.13–0.22          |       | 0.81–1.05                     | Copper Alloy, pre-tin plated        | 1674936-1    | 1827805-1   |
|                    |       |                               | Copper Alloy, selective gold plated | 1674936-2    | 1827805-2   |
| 0.35–0.50          |       | 1.06–1.70                     | Copper Alloy, pre-tin plated        | 1674311-1    | 1827804-1   |
|                    |       |                               | Copper Alloy, selective gold plated | 1674311-2    | 1827804-2   |

**Note:** All Part Numbers are RoHS and ELV compliant.

Receptacle Contacts (for Contact Lance)

**Technical Features**

**Contact Material:**

Copper Alloy  
Brass

**Contact Finish:**

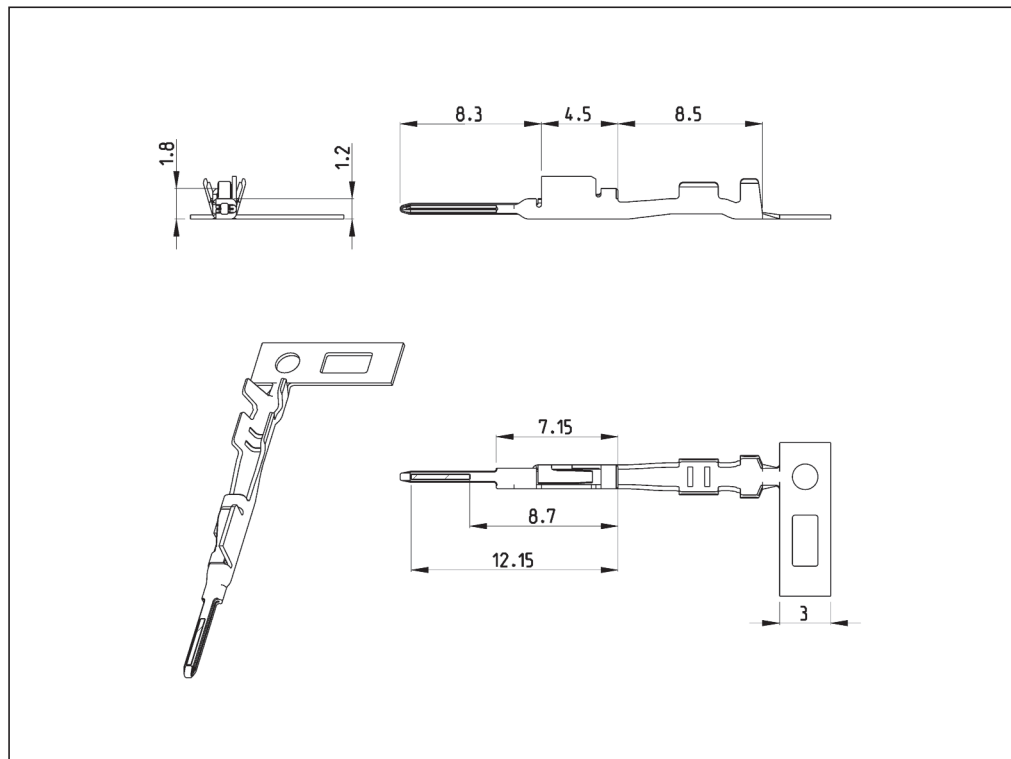
Pre-tin plated  
Post-tin plated  
Selective gold plated

**Application Specifications:**

114-5291-1  
114-5276-1

**Instruction Sheet:**

411-5981



| Wire Size Range    |       | Wire Insulation<br>Diameter<br>(mm) | Material and Finish          | Part Numbers |             |
|--------------------|-------|-------------------------------------|------------------------------|--------------|-------------|
| (mm <sup>2</sup> ) | (AWG) |                                     |                              | Strip Form   | Loose-Piece |
| 0.22–0.50          |       | 0.95–1.70                           | Brass, pre-tin plated        | 1376109-1    | 1376607-1   |
|                    |       |                                     | Brass, selective gold plated | 1376109-2    | 1376607-2   |
| 0.08–0.14          |       | 1.1–1.4                             | Copper Alloy, post-tinned    | 1473818-1 *  |             |
| 0.22               |       | 0.8–1.2                             | Copper Alloy, post-tinned    | 1565406-1 *  |             |

\*) IDC Terminal Version.

**Note:** All Part Numbers are RoHS and ELV compliant.

.040 (1.0 mm) Receptacle Contacts (for some .025 Series and Hybrid Plugs)

**Technical Features**

**Contact Material:**

Copper Alloy

**Contact Finish:**

Pre-tin plated

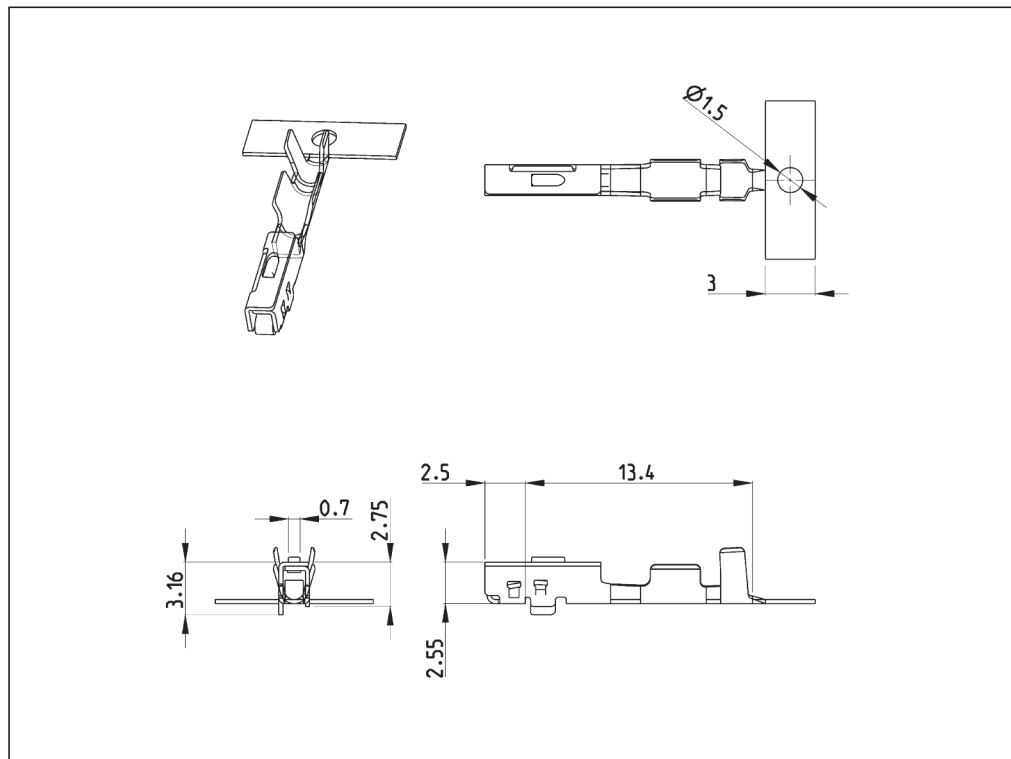
Selective gold plated

**Application Specification:**

114-5217-1

**Instruction Sheet:**

411-78003



| Wire Size Range    |       | Wire Insulation Diameter (mm) | Material and Finish                 | Part Numbers |             |
|--------------------|-------|-------------------------------|-------------------------------------|--------------|-------------|
| (mm <sup>2</sup> ) | (AWG) |                               |                                     | Strip Form   | Loose-Piece |
| 0.3–0.5            |       | 1.4–1.7                       | Copper Alloy, pre-tin plated        | 316836-1     | 1376700-1   |
|                    |       |                               | Copper Alloy, selective gold plated | 316837-2     | 1376701-2   |

**Note:** All Part Numbers are RoHS and ELV compliant.

**.025 (0.64) Series Connectors**

**Technical Features**

**No. of Positions:**

2 Positions

**Housing Materials:**

PBT

**Wire Size Range:**

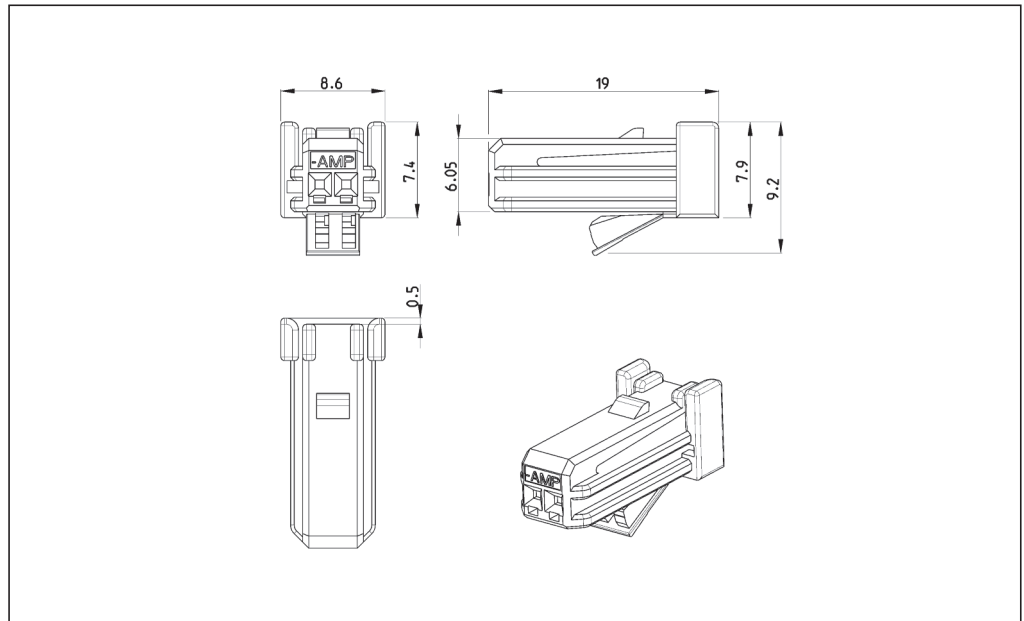
0.22–0.5 mm<sup>2</sup>

**Product Specification:**

108-5675

**Application Specification:**

114-5250



| No. of Positions | Terminate To | Plug Assembly          | Cap Housing | Cap Housing Horizontal Mount | Cap Housing Vertical Mount | Mating Plug |
|------------------|--------------|------------------------|-------------|------------------------------|----------------------------|-------------|
| 2                | Board        | 1473143-1<br>1473143-2 | N/A         |                              |                            |             |

**Note:** All Part Numbers are RoHS and ELV compliant.

.025 (0.64) Series Connectors

**Technical Features**

**No. of Positions:**

4 Positions

**Housing Materials:**

PBT, SPS

**Wire Size Range:**

0.13–0.5 mm<sup>2</sup>

**Product Specifications:**

108-5675

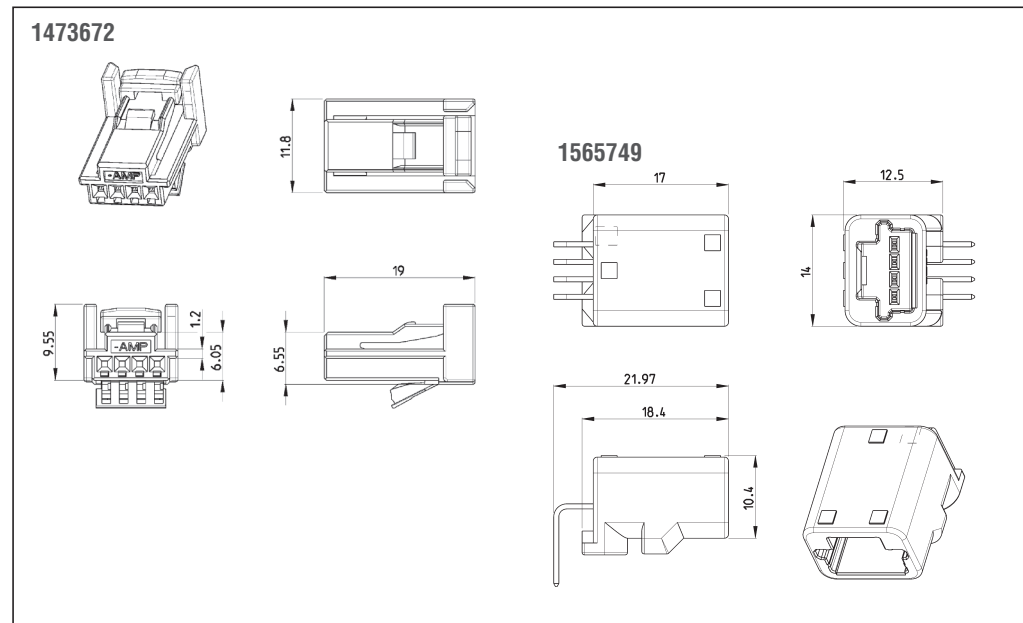
108-5660

108-78247

**Application Specifications:**

114-5250

114-5329



| No. of Positions | Terminate To | Plug Assembly                                                                           | Cap Housing | Cap Housing Horizontal Mount | Cap Housing Vertical Mount | Mating Plug |
|------------------|--------------|-----------------------------------------------------------------------------------------|-------------|------------------------------|----------------------------|-------------|
| 4                | Wire         | 1473800-1 <sup>1)</sup><br>(sub plug for IDC contact)                                   | 1473790-1   |                              |                            |             |
|                  |              | 1473801-1 <sup>1)</sup><br>(lock housing for IDC contact)<br>*) 1717248-1 <sup>1)</sup> |             |                              |                            |             |
| 4                | Board        | 1318620-2 <sup>2)</sup>                                                                 |             |                              | 1376515-1                  |             |
| 4                | Board        | 1473672-1 <sup>2)</sup>                                                                 |             | 1565749-1<br>1-1565749-0     |                            |             |
|                  |              | 1473672-1 (key 1)                                                                       |             | 1565749-1 (key 1)            |                            |             |
|                  |              | 1473672-2 (key 2)                                                                       |             | 1565749-3 (key 2)            |                            |             |
| 4                | Board        | 1746911-1 <sup>3)</sup>                                                                 |             | 1746909-1                    |                            |             |

<sup>1)</sup> IDC Terminal Version

<sup>2)</sup> Contact Lance Version

<sup>3)</sup> Housing Lance Version

\*) IDC Contact Pre-loaded Sub Housing

**Note:** All Part Numbers are RoHS and ELV compliant.

.025 (0.64) Series Connectors

**Technical Features**

**No. of Positions:**

6 Positions

**Housing Materials:**

PBT

**Wire Size Range:**

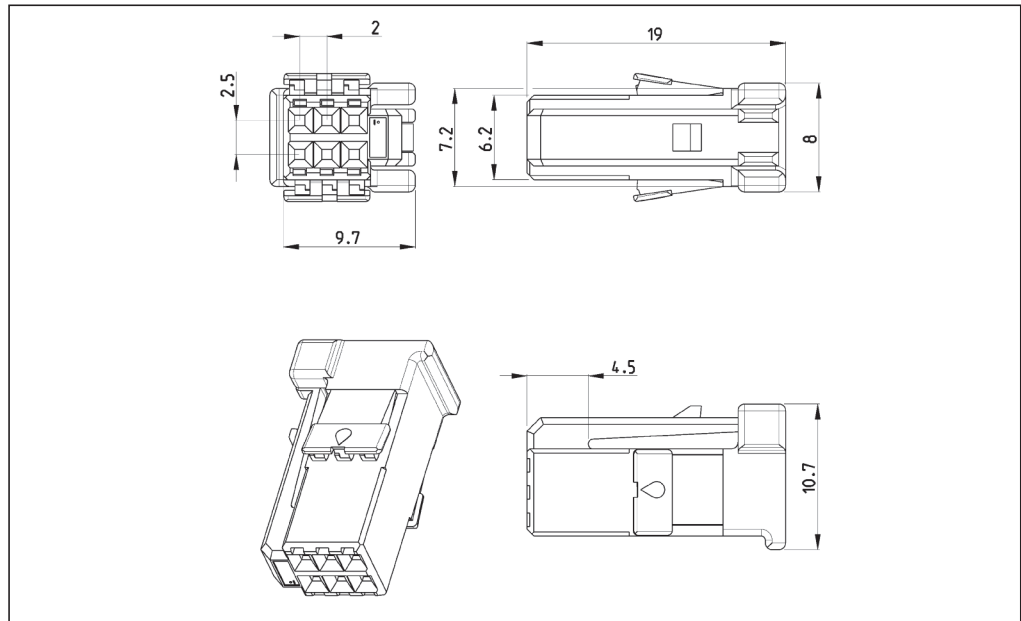
0.22–0.5 mm<sup>2</sup>

**Product Specification:**

108-5620

**Application Specification:**

114-5250



| No. of Positions | Terminate To | Plug Assembly           | Cap Housing | Cap Housing Horizontal Mount | Cap Housing Vertical Mount | Mating Plug |
|------------------|--------------|-------------------------|-------------|------------------------------|----------------------------|-------------|
| 6                | Wire         | 1318305-2 <sup>2)</sup> |             |                              |                            |             |

<sup>2)</sup> Contact Lance Version

**Note:** All Part Numbers are RoHS and ELV compliant.

.025 (0.64) Series Connectors

**Technical Features**

**No. of Positions:**

7 Positions

**Housing Materials:**

PBT

**Wire Size Range:**

0.22–0.5 mm<sup>2</sup>

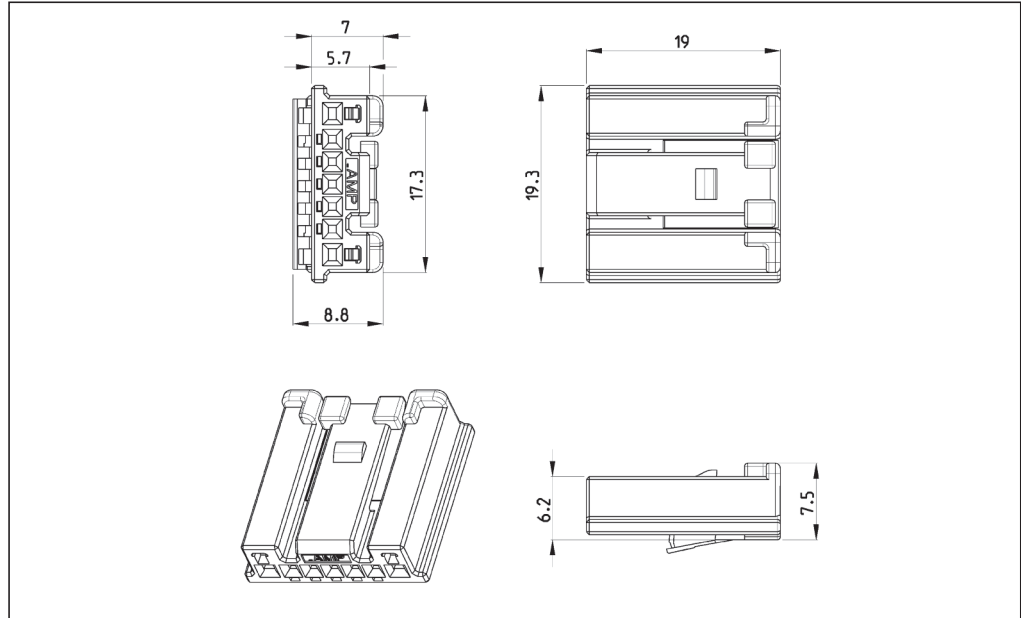
**Product Specification:**

108-5664

**Application Specifications:**

114-5217

114-5250



| No. of Positions | Terminate To | Plug Assembly           | Cap Housing | Cap Housing Horizontal Mount | Cap Housing Vertical Mount | Mating Plug |
|------------------|--------------|-------------------------|-------------|------------------------------|----------------------------|-------------|
| 7                | Wire         | 1318801-1 <sup>2)</sup> |             |                              |                            |             |

<sup>2)</sup> Contact Lance Version

**Note:** All Part Numbers are RoHS and ELV compliant.

.025 (0.64) Series Connectors

**Technical Features**

**No. of Positions:**

8 Positions

**Housing Materials:**

PBT

SPS

**Wire Size Range:**

0.13–0.5 mm<sup>2</sup>

**Product Specifications:**

108-5660

108-5664

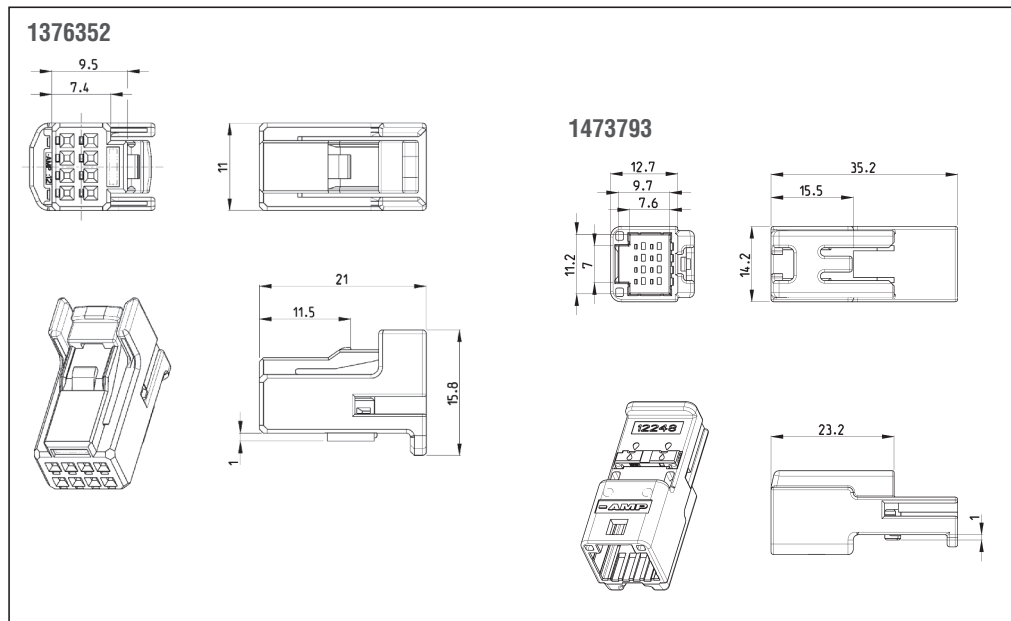
108-5931

108-5668

**Application Specifications:**

114-5329

114-5250



| No. of Positions | Terminate To | Plug Assembly                                                                                                                                                               | Cap Housing | Cap Housing Horizontal Mount        | Cap Housing Vertical Mount | Mating Plug |
|------------------|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------------------------------|----------------------------|-------------|
| 8                | Wire         | 1376352-1 <sup>2)</sup><br>1717103-1 <sup>3)</sup><br>(sub plug for IDC contact)<br>1473800-1 <sup>1)</sup><br>(lock housing for IDC contact)<br>*) 1473802-1 <sup>1)</sup> | 1473793-1   |                                     |                            |             |
| 8<br>(2 row)     | Board        | 1376352-1 <sup>2)</sup><br>1717103-1 <sup>3)</sup><br>(sub plug for IDC contact)<br>1473800-1<br>(lock housing for IDC contact)<br>*) 1473802-1                             |             | 1376350-2<br>1376350-9              | 1939403-1 (SMD)            |             |
| 8<br>(1 row)     | Board        | 1376368-1 <sup>2)</sup><br>1746875-1 <sup>3)</sup>                                                                                                                          |             | 1376366-2<br>1376366-8<br>1747285-2 |                            |             |

<sup>1)</sup> IDC Terminal Version

<sup>2)</sup> Contact Lance Version

<sup>3)</sup> Housing Lance Version

\*) IDC Contact Pre-loaded Sub Housing

**Note:** All Part Numbers are RoHS and ELV compliant.

.025 (0.64) Series Connectors

**Technical Features**

**No. of Positions:**

12 Positions

**Housing Materials:**

PBT

SPS

**Wire Size Range:**

0.13–0.5 mm<sup>2</sup>

**Product Specifications:**

108-5660

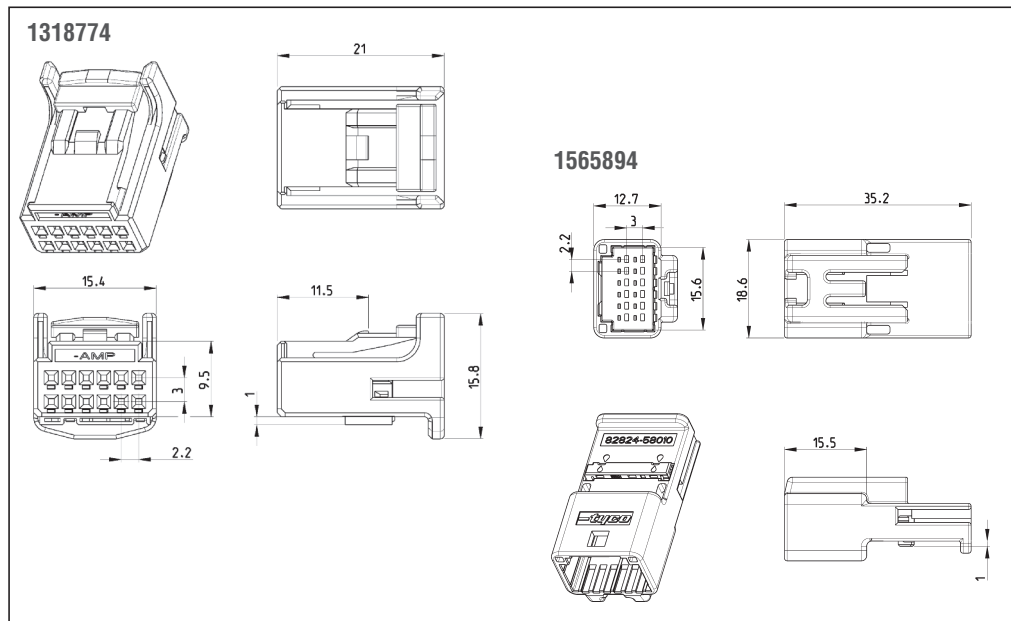
108-5931

108-5668

**Application Specifications:**

114-5329

114-5250



| No. of Positions | Terminate To | Plug Assembly                  | Cap Housing | Cap Housing Horizontal Mount | Cap Housing Vertical Mount | Mating Plug |
|------------------|--------------|--------------------------------|-------------|------------------------------|----------------------------|-------------|
| 12               | Wire         | 1318774-1 <sup>2)</sup>        | 1565894-1   |                              |                            |             |
|                  |              | 1376675-1 <sup>2)</sup>        |             |                              |                            |             |
|                  |              | (short body)                   |             |                              |                            |             |
|                  |              | 1717106-1 <sup>3)</sup>        |             |                              |                            |             |
|                  |              | 1746872-1 <sup>2)</sup>        |             |                              |                            |             |
|                  |              | (short body)                   |             |                              |                            |             |
|                  |              | 1473809-1 <sup>1)</sup>        |             |                              |                            |             |
|                  |              | (sub plug for IDC contact)     |             |                              |                            |             |
|                  |              | 1473810-1 <sup>1)</sup>        |             |                              |                            |             |
|                  |              | (lock housing for IDC contact) |             |                              |                            |             |
| 12               | Board        | *) 1717591-1 <sup>1)</sup>     |             |                              |                            |             |
|                  |              | 1318774-1 <sup>2)</sup>        |             |                              |                            |             |
|                  |              | 1376675-1 <sup>2)</sup>        |             |                              |                            |             |
|                  |              | (short body)                   |             |                              |                            |             |
|                  |              | 1717106-1 <sup>3)</sup>        |             |                              |                            |             |
|                  |              | 1746872-1 <sup>2)</sup>        |             |                              |                            |             |
|                  |              | (short body)                   |             |                              |                            |             |
|                  |              | 1473809-1                      |             |                              |                            |             |
|                  |              | (sub plug for IDC contact)     |             |                              |                            |             |
|                  |              | 1473810-1                      |             |                              |                            |             |
|                  |              | (lock housing for IDC contact) |             | 1-1318772-3                  | 1473898-4                  |             |
|                  |              | *) 1717591-1                   |             |                              |                            |             |
|                  |              | 1318774-1 <sup>2)</sup>        |             |                              |                            |             |
|                  |              | 1376675-1 <sup>2)</sup>        |             |                              |                            |             |
|                  |              | (short body)                   |             |                              |                            |             |
|                  |              | 1717106-1 <sup>3)</sup>        |             |                              |                            |             |
|                  |              | 1746872-1 <sup>2)</sup>        |             |                              |                            |             |
|                  |              | (short body)                   |             |                              |                            |             |
|                  |              | 1473809-1                      |             |                              |                            |             |
|                  |              | (sub plug for IDC contact)     |             |                              |                            |             |
|                  |              | 1473810-1                      |             | 1318772-2                    | 1473898-1                  |             |
|                  |              | (lock housing for IDC contact) |             |                              |                            |             |
|                  |              | *) 1717591-1                   |             |                              |                            |             |
|                  |              | 1318774-1 <sup>2)</sup>        |             |                              |                            |             |
|                  |              | 1376675-1 <sup>2)</sup>        |             |                              |                            |             |
|                  |              | (short body)                   |             |                              |                            |             |
|                  |              | 1717106-1 <sup>3)</sup>        |             |                              |                            |             |
|                  |              | 1746872-1 <sup>2)</sup>        |             |                              |                            |             |
|                  |              | (short body)                   |             |                              |                            |             |
|                  |              | 1473809-1                      |             |                              |                            |             |

<sup>1)</sup> IDC Terminal Version

<sup>2)</sup> Contact Lance Version

<sup>3)</sup> Housing Lance Version

\*) IDC Contact Pre-loaded Sub Housing

**Note:** All Part Numbers are RoHS and ELV compliant.

.025 (0.64) Series Connectors

**Technical Features**

**No. of Positions:**

16 Positions

**Housing Materials:**

PBT

SPS

**Wire Size Range:**

0.13–0.5 mm<sup>2</sup>

**Product Specifications:**

108-5660

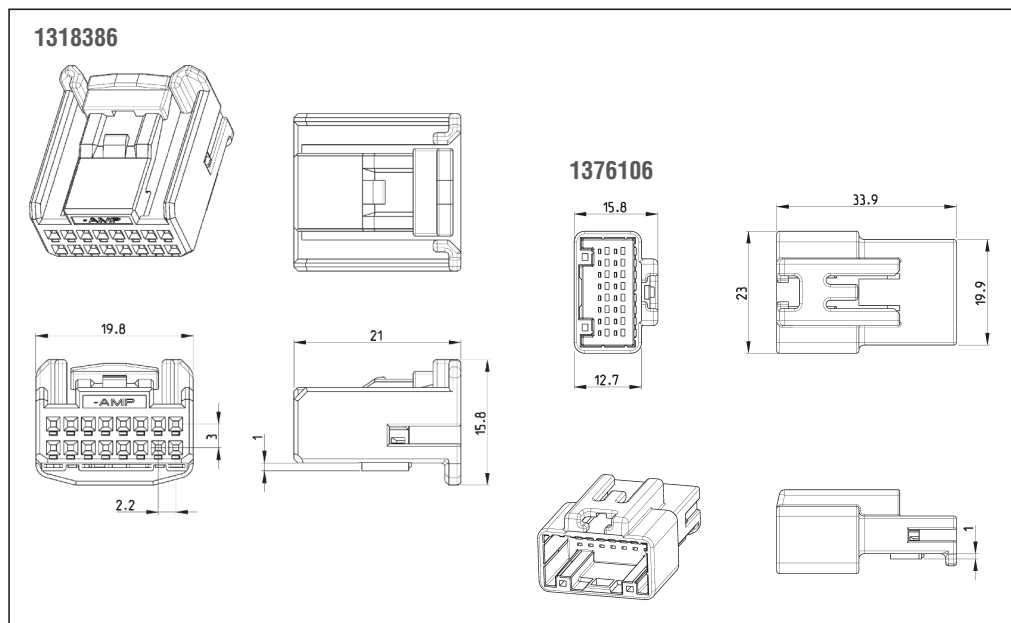
108-5931

108-5668

**Application Specifications:**

114-5329

114-5250



| No. of Positions | Terminate To | Plug Assembly                  | Cap Housing        | Cap Housing Horizontal Mount | Cap Housing Vertical Mount | Mating Plug |
|------------------|--------------|--------------------------------|--------------------|------------------------------|----------------------------|-------------|
| 16               | Wire         | 1318386-1 <sup>2)</sup>        | 1376106-1          |                              |                            |             |
|                  |              | 1717109-1 <sup>3)</sup>        | 1473203-1          |                              |                            |             |
|                  |              | 1318692-1                      | 1473796-1          |                              |                            |             |
|                  |              | (sub plug for IDC contact)     |                    |                              |                            |             |
|                  |              | 1318694-1                      |                    |                              |                            |             |
| 16               | Board        | (lock housing for IDC contact) |                    |                              |                            |             |
|                  |              | 1318690-1 <sup>*</sup>         |                    |                              |                            |             |
|                  |              | 1318386-1 <sup>2)</sup>        | 1612040-2          | 1318382-2                    | 1565476-1                  |             |
|                  |              | 1717109-1 <sup>3)</sup>        | (SMD bottom entry) | 1318382-3                    | 1717396-2 (SMD)            |             |
|                  |              | 1318692-1                      |                    |                              |                            |             |
| 16               | Board        | (sub plug for IDC contact)     |                    |                              |                            |             |
|                  |              | 1318694-1 <sup>*</sup>         |                    |                              |                            |             |
|                  |              | (lock housing for IDC contact) |                    |                              |                            |             |
| 16               | Board        | 1318690-1                      |                    |                              |                            |             |

<sup>2)</sup> Contact Lance Version

<sup>3)</sup> Housing Lance Version

<sup>\*</sup>) IDC Contact Pre-loaded Sub Housing

**Note:** All Part Numbers are RoHS and ELV compliant.

.025 (0.64) Series Connectors

**Technical Features**

**No. of Positions:**

20 Positions

**Housing Materials:**

PBT

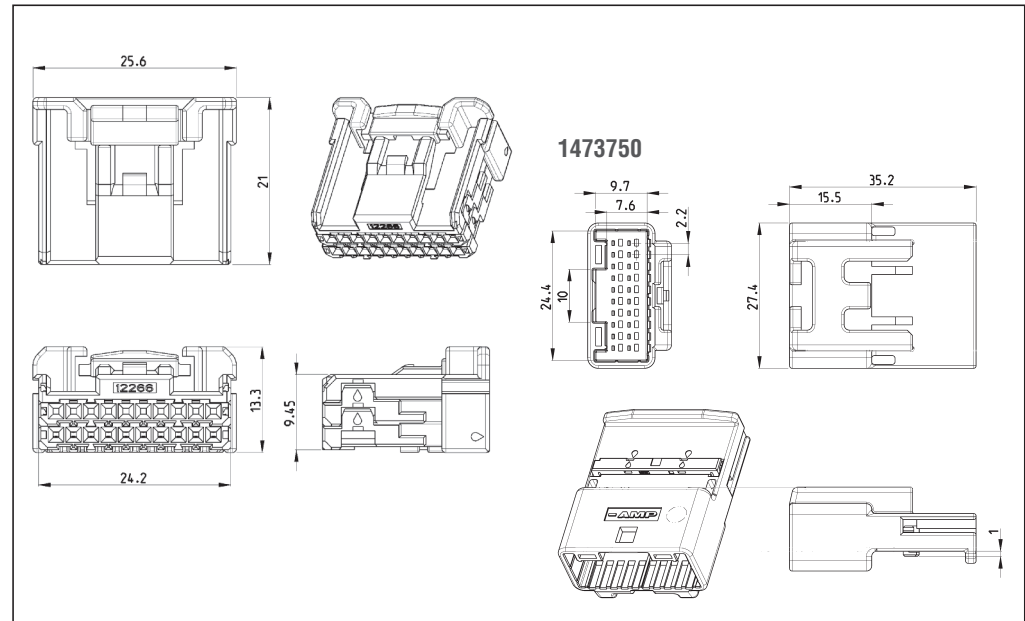
**Wire Size Range:**

0.22–0.5 mm<sup>2</sup>

**Product Specification:**

108-5660

**Application Specification:**



| No. of Positions | Terminate To | Plug Assembly                                                                                         | Cap Housing | Cap Housing Horizontal Mount | Cap Housing Vertical Mount | Mating Plug |
|------------------|--------------|-------------------------------------------------------------------------------------------------------|-------------|------------------------------|----------------------------|-------------|
| 20               | Wire         | 1473807-1<br>(sub plug for IDC contact)<br>1473808-1<br>(lock housing for IDC contact)<br>1717249-1*) | 1473750-1   |                              |                            |             |

\*) IDC Contact Pre-loaded Sub Housing

**Note:** All Part Numbers are RoHS and ELV compliant.

.025 (0.64) Series Connectors

**Technical Features**

**No. of Positions:**

24 Positions

**Housing Materials:**

PBT

SPS

**Wire Size Range:**

0.13–0.5 mm<sup>2</sup>

**Product Specifications:**

108-5660

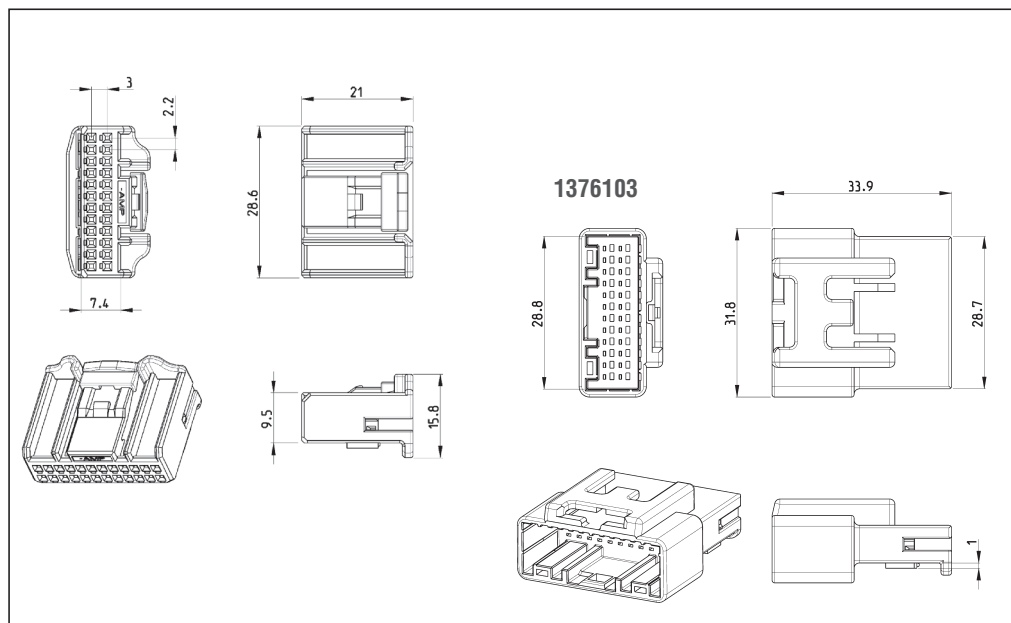
108-5931

108-5668

**Application Specifications:**

114-5329

114-5250



| No. of Positions | Terminate To | Plug Assembly                                                                                                                                                            | Cap Housing                  | Cap Housing Horizontal Mount | Cap Housing Vertical Mount                | Mating Plug |
|------------------|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|------------------------------|-------------------------------------------|-------------|
| 24               | Wire         | 1318917-1 <sup>2)</sup><br>1717112-1 <sup>3)</sup><br>1473803-1<br>(sub plug for IDC contact)<br>1473804-1<br>(lock housing for IDC contact)<br>1746126-1 <sup>*</sup> ) | 1376103-1                    |                              |                                           |             |
|                  |              |                                                                                                                                                                          |                              |                              |                                           |             |
| 24               | Board        | 1318917-1 <sup>2)</sup><br>1717112-1 <sup>3)</sup><br>1473803-1<br>(sub plug for IDC contact)<br>1473804-1<br>(lock housing for IDC contact)<br>1746126-1 <sup>*</sup> ) |                              | 1-1318853-3<br>1318853-2     | 1376111-2<br>1376111-6<br>1717394-2 (SMD) |             |
|                  |              |                                                                                                                                                                          |                              |                              |                                           |             |
| 24               |              | N/A                                                                                                                                                                      | 1-1612048-0<br>(low profile) |                              |                                           |             |

<sup>2)</sup> Contact Lance Version

<sup>3)</sup> Housing Lance Version

<sup>\*</sup>) IDC Contact Pre-loaded Sub Housing

**Note:** All Part Numbers are RoHS and ELV compliant.

.025 (0.64) Series Connectors

**Technical Features**

**No. of Positions:**

28 Positions

**Housing Materials:**

PBT

**Wire Size Range:**

0.13–0.5 mm<sup>2</sup>

**Product Specifications:**

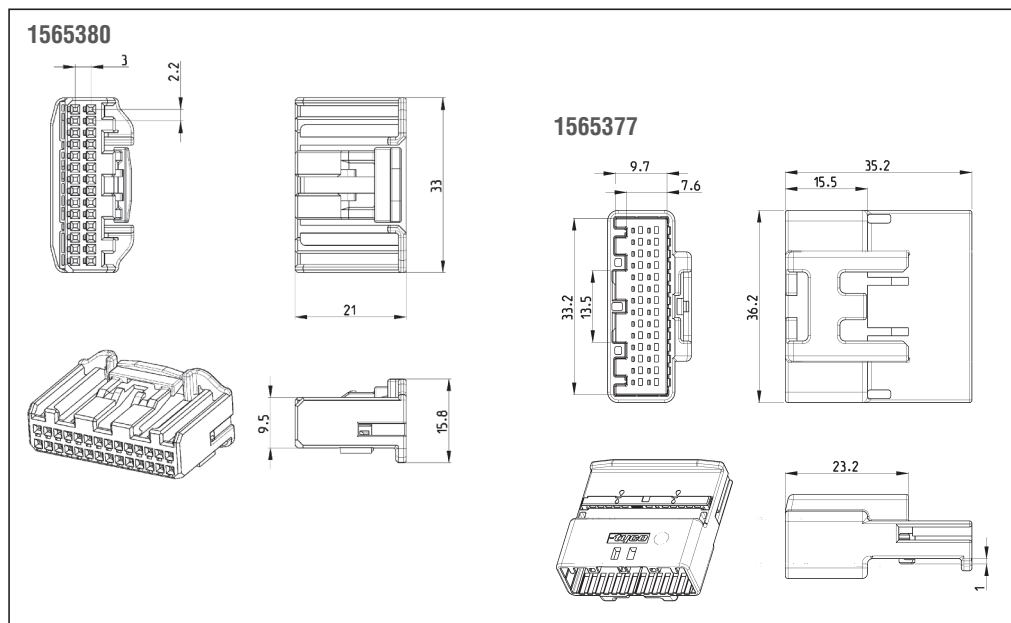
108-5931

108-5668

**Application Specifications:**

114-5329

114-5250



| No. of Positions | Terminate To | Plug Assembly                                      | Cap Housing | Cap Housing Horizontal Mount | Cap Housing Vertical Mount | Mating Plug |
|------------------|--------------|----------------------------------------------------|-------------|------------------------------|----------------------------|-------------|
| 28               | Wire         | 1565380-1 <sup>2)</sup><br>1717115-1 <sup>3)</sup> | 1565377-1   |                              |                            |             |
| 28               | Board        | 1565380-1 <sup>2)</sup><br>1717115-1 <sup>3)</sup> |             | 1565373-4                    | 1565375-4                  |             |

<sup>1)</sup> IDC Terminal Version

<sup>2)</sup> Contact Lance Version

<sup>3)</sup> Housing Lance Version

**Note:** All Part Numbers are RoHS and ELV compliant.

.025 (0.64) Series Connectors

**Technical Features**

**No. of Positions:**

32 Positions

**Housing Materials:**

PBT

SPS

**Wire Size Range:**

0.13–0.5 mm<sup>2</sup>

**Product Specifications:**

108-5660

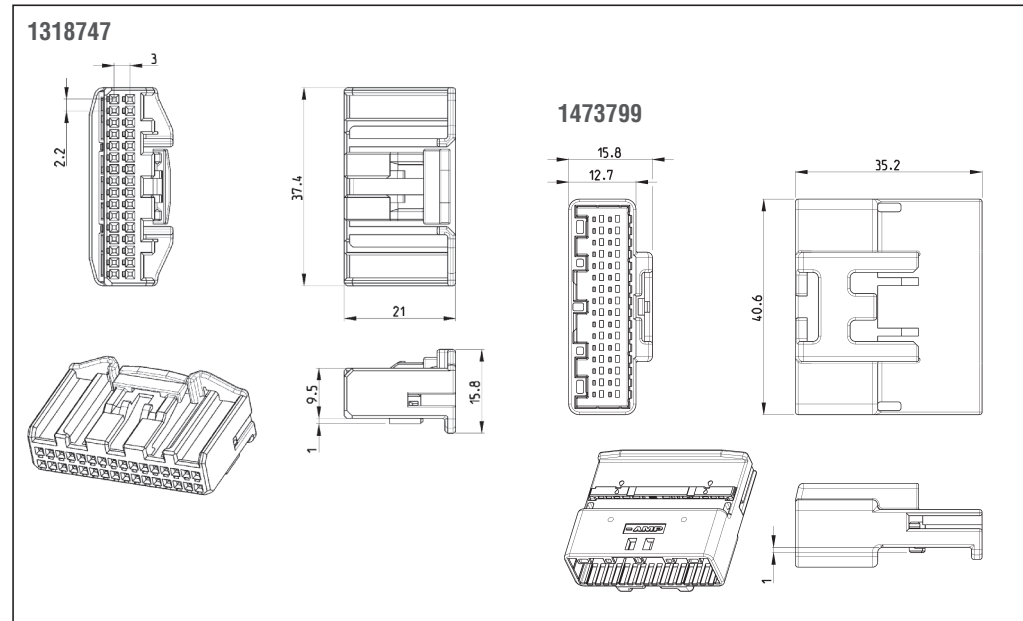
108-5931

108-5668

**Application Specifications:**

114-5329

114-5250



| No. of Positions | Terminate To | Plug Assembly                  | Cap Housing                | Cap Housing Horizontal Mount | Cap Housing Vertical Mount | Mating Plug |
|------------------|--------------|--------------------------------|----------------------------|------------------------------|----------------------------|-------------|
| 32               | Wire         | 1318747-1 <sup>2)</sup>        | 1473799-1                  |                              |                            |             |
|                  |              | 1717118-1 <sup>3)</sup>        |                            |                              |                            |             |
|                  |              | 1473805-1                      |                            |                              |                            |             |
|                  |              | (sub plug for IDC contact)     |                            |                              |                            |             |
|                  |              | 1473806-1                      |                            |                              |                            |             |
| 32               | Board        | (lock housing for IDC contact) |                            |                              |                            |             |
|                  |              | 1717250-1 <sup>*</sup>         |                            |                              |                            |             |
|                  |              | 1318747-1 <sup>2)</sup>        |                            | 1318745-2                    |                            |             |
|                  |              | 1717118-1 <sup>1)</sup>        |                            | 1318745-5                    |                            |             |
|                  |              | 1473805-1                      |                            |                              |                            |             |
| 32               | Board        | (sub plug for IDC contact)     |                            |                              |                            |             |
|                  |              | 1473806-1                      |                            |                              |                            |             |
|                  |              | (lock housing for IDC contact) |                            |                              |                            |             |
| 32               | Board        | 1717250-1 <sup>*</sup>         |                            |                              |                            |             |
|                  |              | N/A                            | 1612050-6<br>(low profile) |                              |                            |             |

<sup>1)</sup> IDC Terminal Version

<sup>2)</sup> Contact Lance Version

<sup>3)</sup> Housing Lance Version

<sup>\*</sup>) IDC Contact Pre-loaded Sub Housing

**Note:** All Part Numbers are RoHS and ELV compliant.



.025 (0.64 mm) / .375 (9.5 mm) Wire-to-Board Applications

**Technical Features**

**No. of Positions:**

24 Positions

**Housing Materials:**

PBT

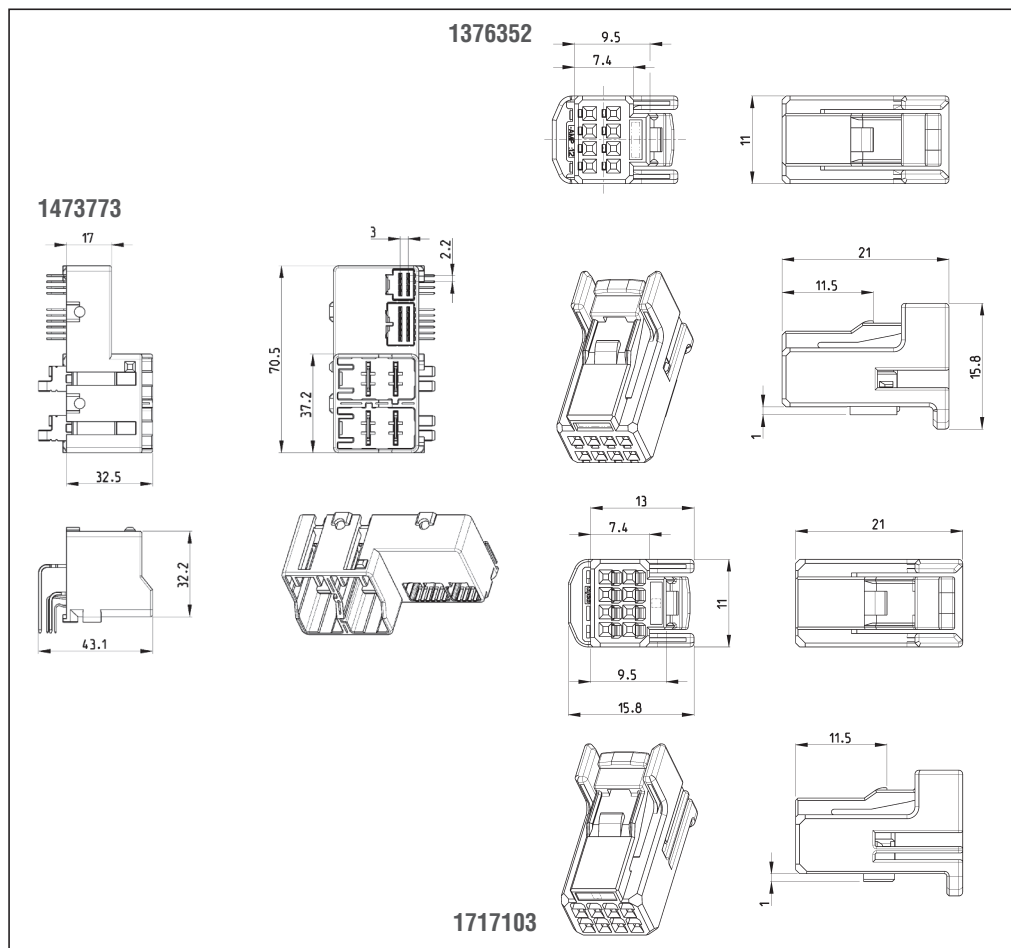
**Wire Size Range:**

0.13–0.5 mm<sup>2</sup>

**Product Specification:**

108-5773

**Application Specification:**



| No. of Positions | Terminate To | Plug Assembly | Cap Housing | Cap Housing Horizontal Mount | Cap Housing Vertical Mount | Mating Plug                                        |
|------------------|--------------|---------------|-------------|------------------------------|----------------------------|----------------------------------------------------|
| 24               | Board        |               |             | 1473773-7                    |                            |                                                    |
| 8                |              |               |             |                              |                            | 1376352-1 <sup>2)</sup><br>1717103-1 <sup>3)</sup> |
| 12               |              |               |             |                              |                            | 1565287-1 <sup>2)</sup><br>1747375-1 <sup>3)</sup> |
| 2 **)            |              |               |             |                              |                            |                                                    |

<sup>2)</sup> Contact Lance Version

<sup>3)</sup> Housing Lance Version

<sup>\*)</sup> IDC Contact Pre-loaded Sub Housing

<sup>\*\*)</sup> Please contact TE Connectivity for the 2 position of .375 (9.5) plug and receptacle contact

**Note:** All Part Numbers are RoHS and ELV compliant.

.025 (0.64 mm) / .375 (9.5 mm) Wire-to-Board Applications

**Technical Features**

**No. of Positions:**

26 Positions

**Housing Materials:**

SPS

PBT

**Wire Size Range:**

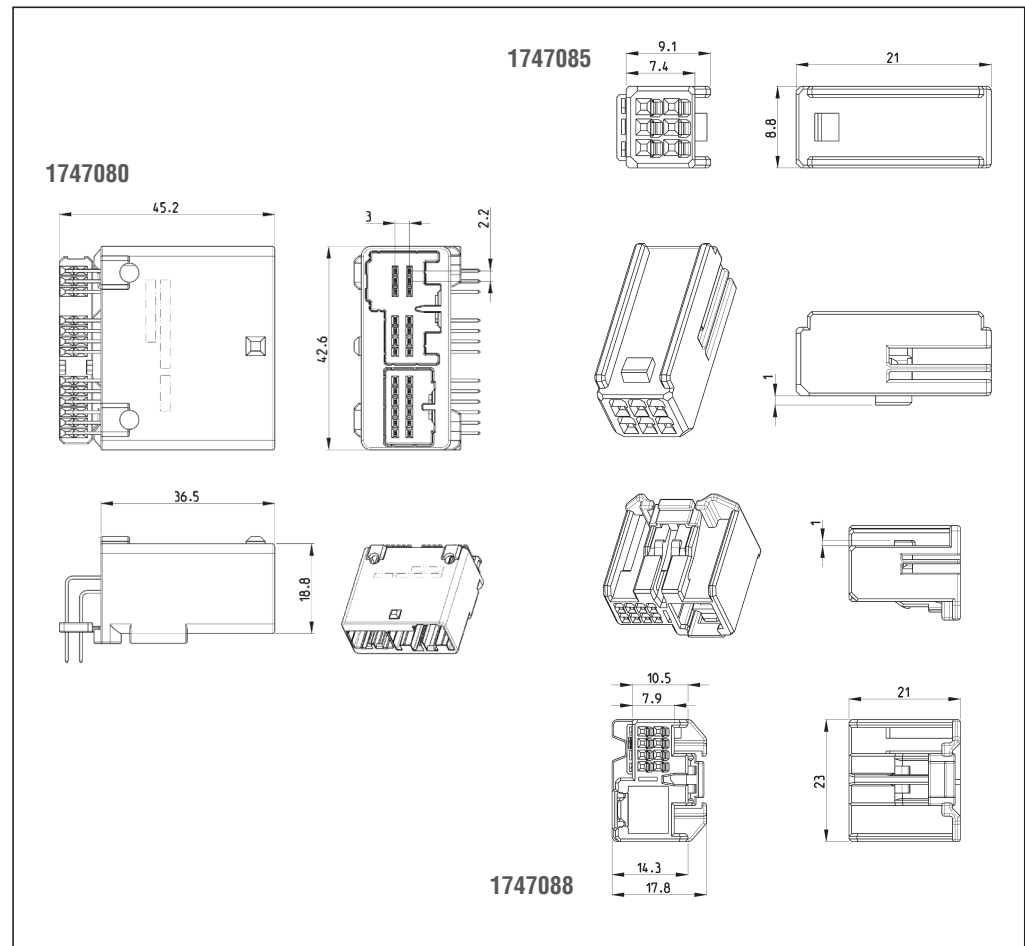
0.13–0.5 mm<sup>2</sup>

**Product Specification:**

108-5773

**Application Specification:**

411-78150



| No. of Positions | Terminate To | Plug Assembly | Cap Housing | Cap Housing Horizontal Mount | Cap Housing Vertical Mount | Mating Plug             |
|------------------|--------------|---------------|-------------|------------------------------|----------------------------|-------------------------|
| 26               | Board        |               |             | 1747080-1                    |                            |                         |
| 6                |              |               |             |                              |                            | 1747085-1 <sup>2)</sup> |
| 8                |              |               |             |                              |                            | 1747088-1 <sup>2)</sup> |

<sup>2)</sup> Contact Lance Version

**Note:** All Part Numbers are RoHS and ELV compliant.

.025 (0.64 mm) / .375 (9.5 mm) Wire-to-Board Applications

**Technical Features**

**No. of Positions:**

28 Positions

**Housing Materials:**

SPS

PBT

**Wire Size Range:**

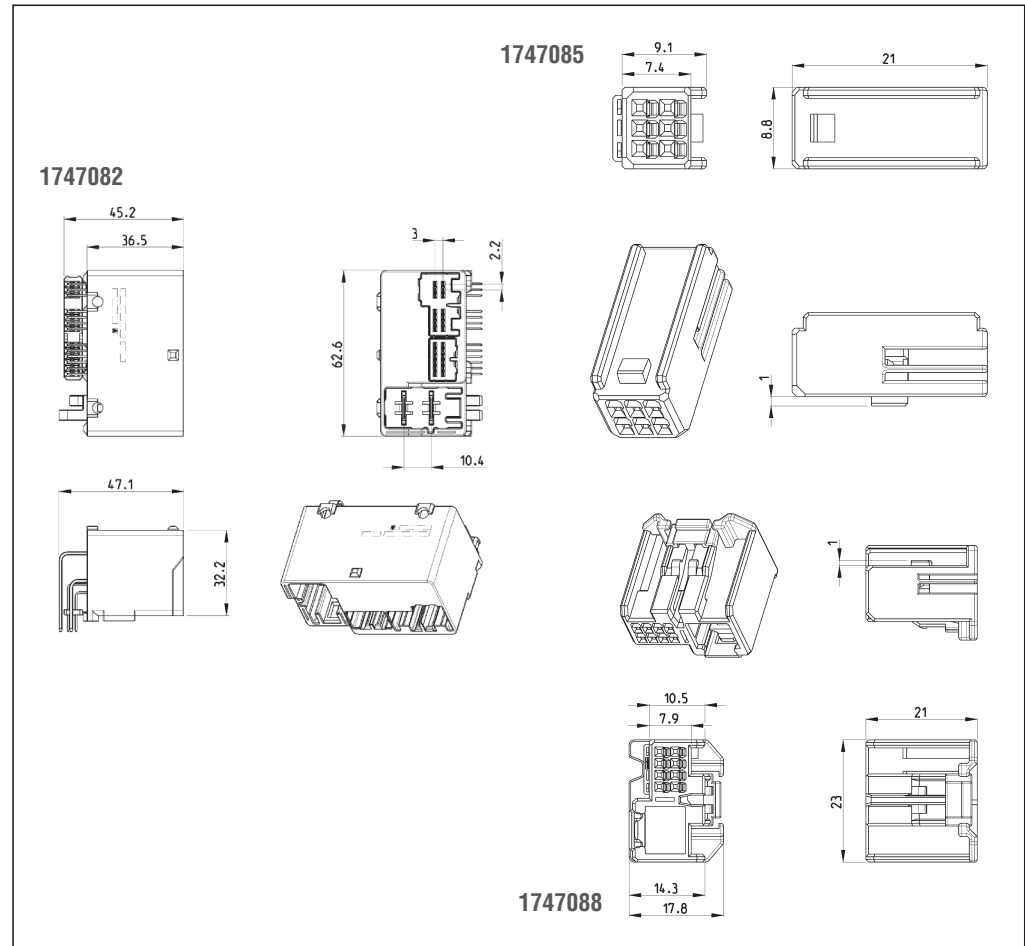
0.13–0.5 mm<sup>2</sup>

**Product Specification:**

108-5773

**Application Specification:**

411-78150



| No. of Positions | Terminate To | Plug Assembly | Cap Housing | Cap Housing Horizontal Mount | Cap Housing Vertical Mount | Mating Plug             |
|------------------|--------------|---------------|-------------|------------------------------|----------------------------|-------------------------|
| 28               | Board        |               |             | 1747082-2                    |                            |                         |
| 6                |              |               |             |                              |                            | 1747085-1 <sup>3)</sup> |
| 8                |              |               |             |                              |                            | 1747088-1 <sup>3)</sup> |

<sup>3)</sup> Housing Lance Version

**Note:** All Part Numbers are RoHS and ELV compliant.

## Technical Features

### No. of Positions:

70 Positions

### Housing Materials:

SPS

PBT

### Wire Size Range:

0.13–0.5 mm<sup>2</sup>

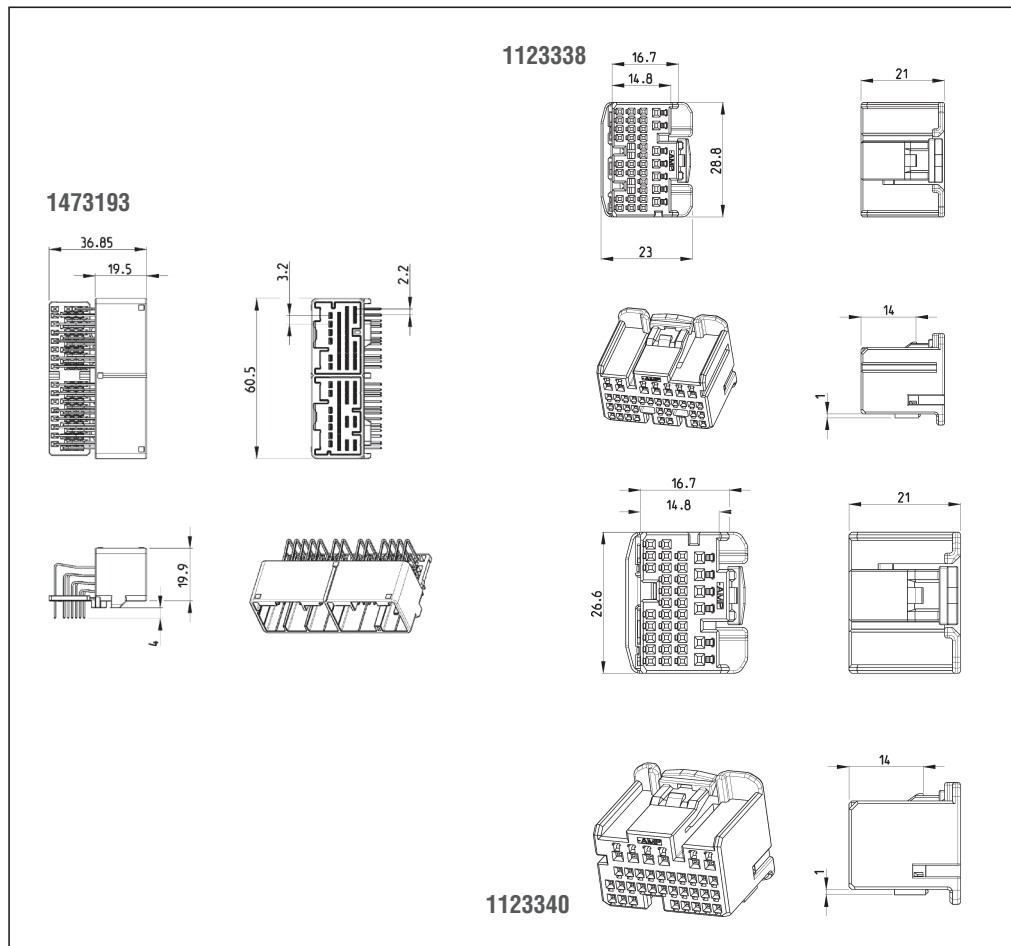
### Product Specification:

108-5674

### Application Specifications:

114-5217

114-5250



| No. of Positions | Terminate To | Plug Assembly | Cap Housing | Cap Housing Horizontal Mount | Cap Housing Vertical Mount | Mating Plug                                        |
|------------------|--------------|---------------|-------------|------------------------------|----------------------------|----------------------------------------------------|
| 70               | Board        |               |             | 1473193-8<br>1473193-7       |                            |                                                    |
| 35<br>key A      |              |               |             |                              |                            | 1123338-1 <sup>2)</sup><br>1674558-1 <sup>3)</sup> |
| 35<br>key B      |              |               |             |                              |                            | 1123340-1 <sup>2)</sup><br>1674928-1 <sup>3)</sup> |

<sup>2)</sup> Contact Lance Version

<sup>3)</sup> Housing Lance Version

**Note:** All Part Numbers are RoHS and ELV compliant.

## Technical Features

### No. of Positions:

135 Positions

### Housing Materials:

SPS

PBT

### Wire Size Range:

0.13–0.5 mm<sup>2</sup>

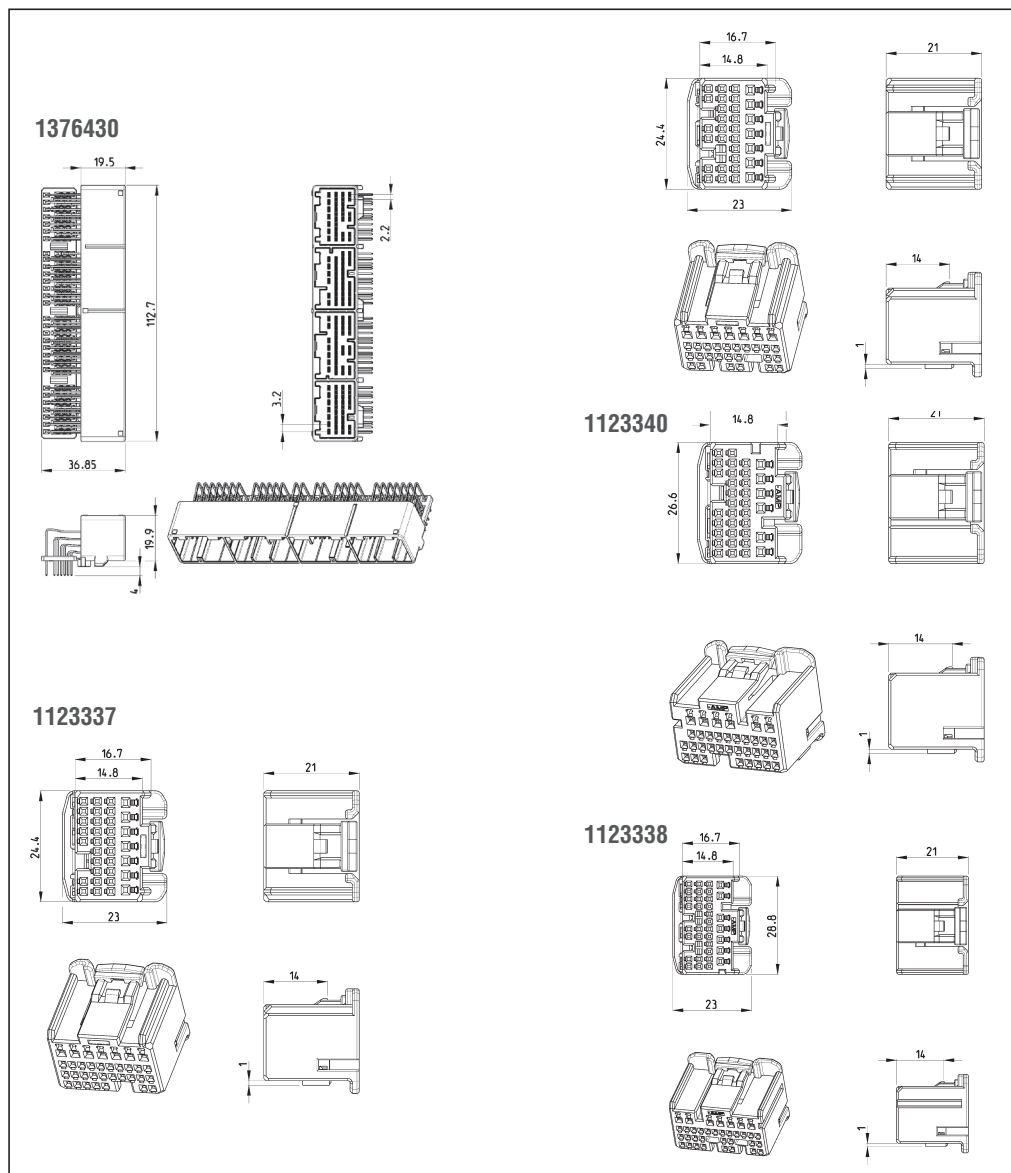
### Product Specification:

108-5674

### Application Specifications:

114-5217

114-5250



| No. of Positions | Terminate To | Plug Assembly | Cap Housing                | Cap Housing Horizontal Mount | Cap Housing Vertical Mount | Mating Plug                                        |
|------------------|--------------|---------------|----------------------------|------------------------------|----------------------------|----------------------------------------------------|
| 135              | Board        |               | 1-1376430-8<br>2-1376430-2 |                              |                            |                                                    |
| 31               |              |               |                            |                              |                            | 1123341-1 <sup>2)</sup><br>1674919-1 <sup>3)</sup> |
| 34               |              |               |                            |                              |                            | 1123337-1 <sup>2)</sup><br>1674925-1 <sup>3)</sup> |
| 35<br>key A      |              |               |                            |                              |                            | 1123338-1 <sup>2)</sup><br>1674558-1 <sup>3)</sup> |
| 35<br>key B      |              |               |                            |                              |                            | 1123340-1 <sup>2)</sup><br>1674928-1 <sup>3)</sup> |

<sup>2)</sup> Contact Lance Version

<sup>3)</sup> Housing Lance Version

**Note:** All Part Numbers are RoHS and ELV compliant.

## Technical Features

### No. of Positions:

167 Positions

### Housing Materials:

SPS

PBT

### Wire Size Range:

0.13–0.5 mm<sup>2</sup>

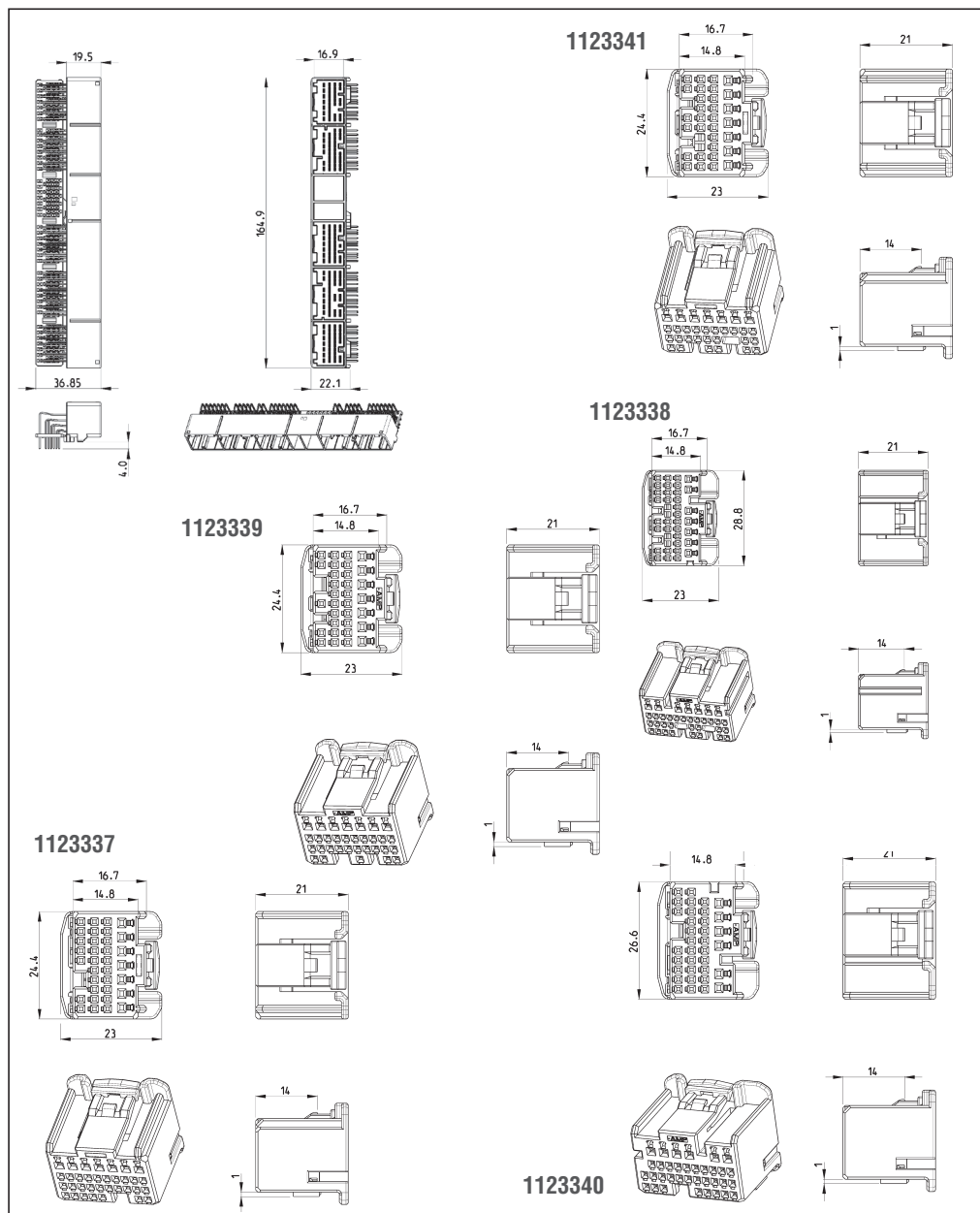
### Product Specification:

108-5674

### Application Specifications:

114-5217

114-5250



| No. of Positions | Terminate To | Plug Assembly | Cap Housing            | Cap Housing Horizontal Mount | Cap Housing Vertical Mount | Mating Plug                                        |
|------------------|--------------|---------------|------------------------|------------------------------|----------------------------|----------------------------------------------------|
| 167              | Board        |               | 6318813-3<br>1612435-4 |                              |                            |                                                    |
| 31               |              |               |                        |                              |                            | 1123341-1 <sup>2)</sup><br>1674919-1 <sup>3)</sup> |
| 32               |              |               |                        |                              |                            | 1123339-1 <sup>2)</sup><br>1674922-1 <sup>3)</sup> |
| 34               |              |               |                        |                              |                            | 1123337-1 <sup>2)</sup><br>1674925-1 <sup>3)</sup> |
| 35<br>key A      |              |               |                        |                              |                            | 1123338-1 <sup>2)</sup><br>1674558-1 <sup>3)</sup> |
| 35<br>key B      |              |               |                        |                              |                            | 1123340-1 <sup>2)</sup><br>1674928-1 <sup>3)</sup> |

<sup>2)</sup> Contact Lance Version      <sup>3)</sup> Housing Lance Version

**Note:** All Part Numbers are RoHS and ELV compliant.

.025 (0.64 mm) / .40 III (1.0 mm) Wire-to-Board Applications

**Technical Features**

**No. of Positions:**

200 Positions

**Housing Materials:**

SPS

PBT

**Wire Size Range:**

0.13–0.5 mm<sup>2</sup>

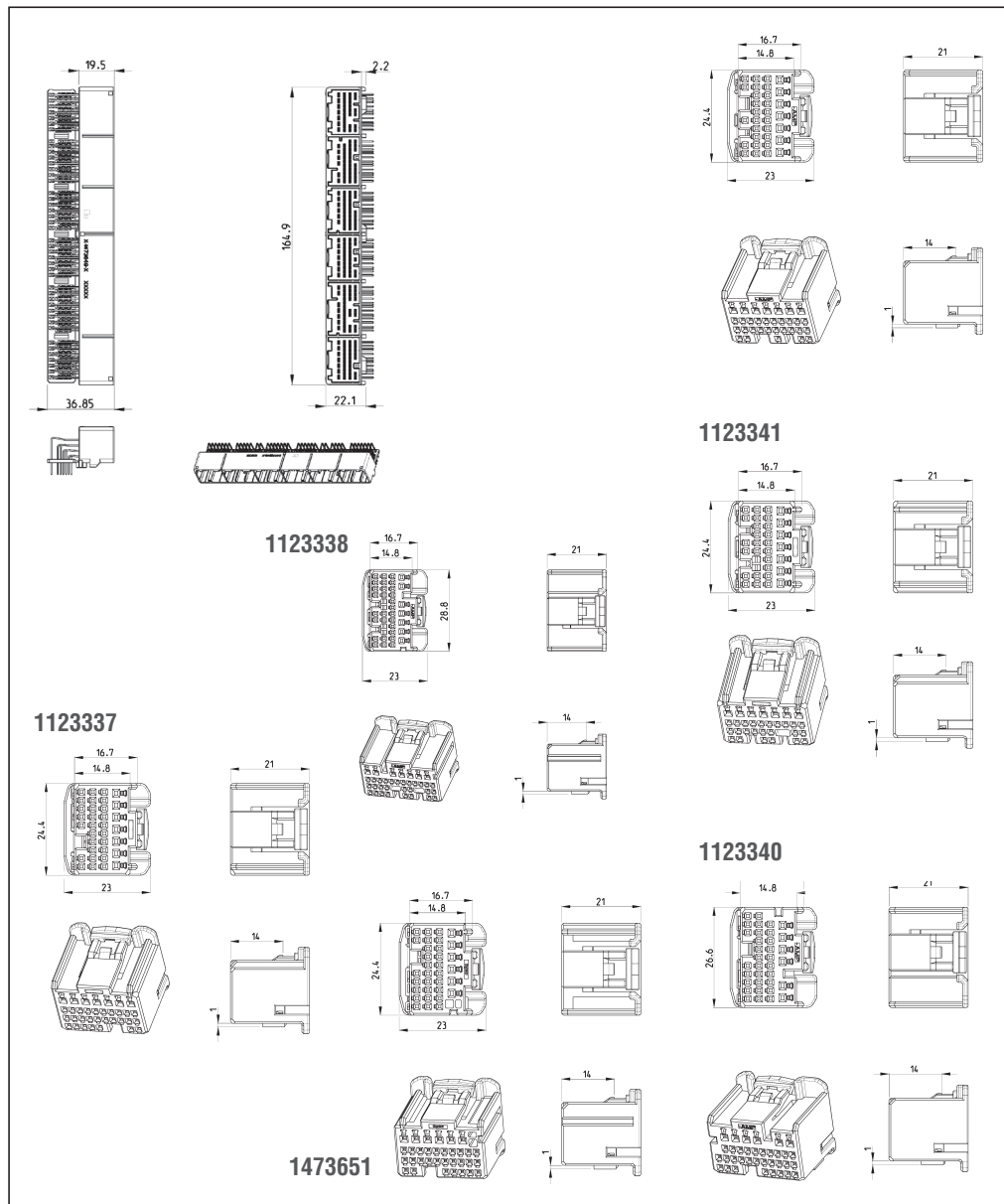
**Product Specification:**

108-5674

**Application Specifications:**

114-5217

114-5250



| No. of Positions | Terminate To | Plug Assembly | Cap Housing            | Cap Housing Horizontal Mount | Cap Housing Vertical Mount | Mating Plug                                        |
|------------------|--------------|---------------|------------------------|------------------------------|----------------------------|----------------------------------------------------|
| 200              | Board        |               | 6473649-1<br>1473649-4 |                              |                            |                                                    |
| 31               |              |               |                        |                              |                            | 1123341-1 <sup>2)</sup><br>1674919-1 <sup>3)</sup> |
| 32               |              |               |                        |                              |                            | 1123339-1 <sup>2)</sup><br>1674922-1 <sup>3)</sup> |
| 34               |              |               |                        |                              |                            | 1123337-1 <sup>2)</sup><br>1674925-1 <sup>3)</sup> |
| 35<br>key A      |              |               |                        |                              |                            | 1123338-1 <sup>2)</sup><br>1674558-1 <sup>3)</sup> |
| 35<br>key B      |              |               |                        |                              |                            | 1123340-1 <sup>2)</sup><br>1674928-1 <sup>3)</sup> |
| 33               |              |               |                        |                              |                            | 1473651-1 <sup>2)</sup><br>1827617-1 <sup>3)</sup> |

<sup>2)</sup> Contact Lance Version      <sup>3)</sup> Housing Lance Version

**Note:** All Part Numbers are RoHS and ELV compliant.

.025 (0.64 mm) / .090 II (2.3 mm) Wire-to-Board Applications

**Technical Features**

**No. of Positions:**

26 Positions

**Housing Materials:**

SPS

PBT

**Wire Size Range:**

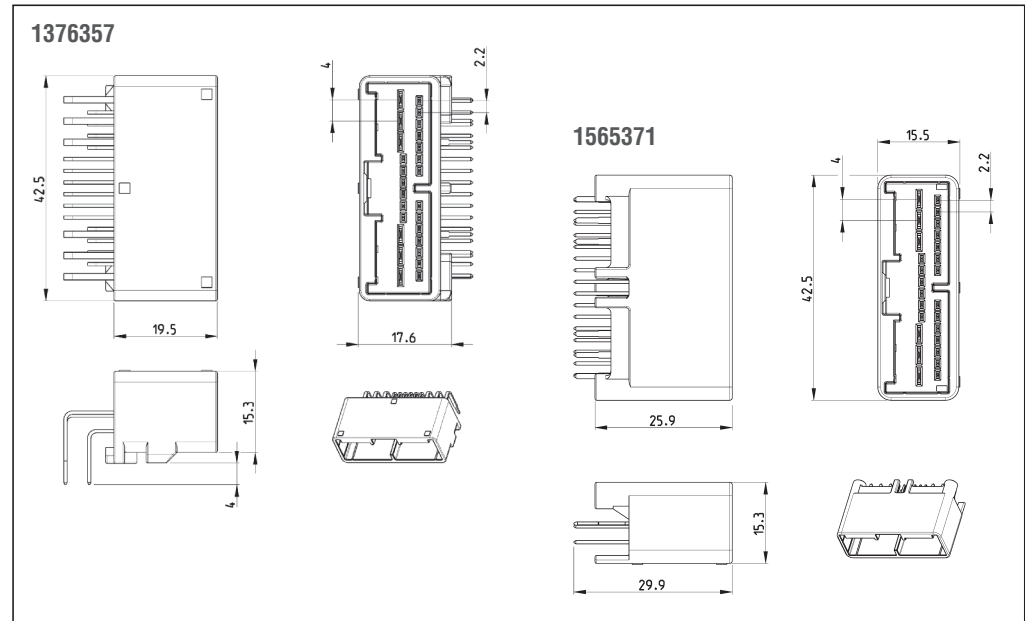
0.13–0.5 mm<sup>2</sup>

**Product Specification:**

108-5667

**Application Specification:**

114-5250



| No. of Positions | Terminate To | Plug Assembly | Cap Housing | Cap Housing Horizontal Mount | Cap Housing Vertical Mount | Mating Plug                                        |
|------------------|--------------|---------------|-------------|------------------------------|----------------------------|----------------------------------------------------|
| 26               | Board        |               |             | 1376357-3<br>1376357-8       | 1565371-3                  | 1376360-1 <sup>2)</sup><br>1674932-1 <sup>3)</sup> |

<sup>2)</sup> Contact Lance Version

<sup>3)</sup> Housing Lance Version

**Note:** All Part Numbers are RoHS and ELV compliant.

.025 (0.64 mm) / .090 II (2.3 mm) Wire-to-Board Applications

**Technical Features**

**No. of Positions:**

50 Positions

**Housing Materials:**

SPS

PBT

**Wire Size Range:**

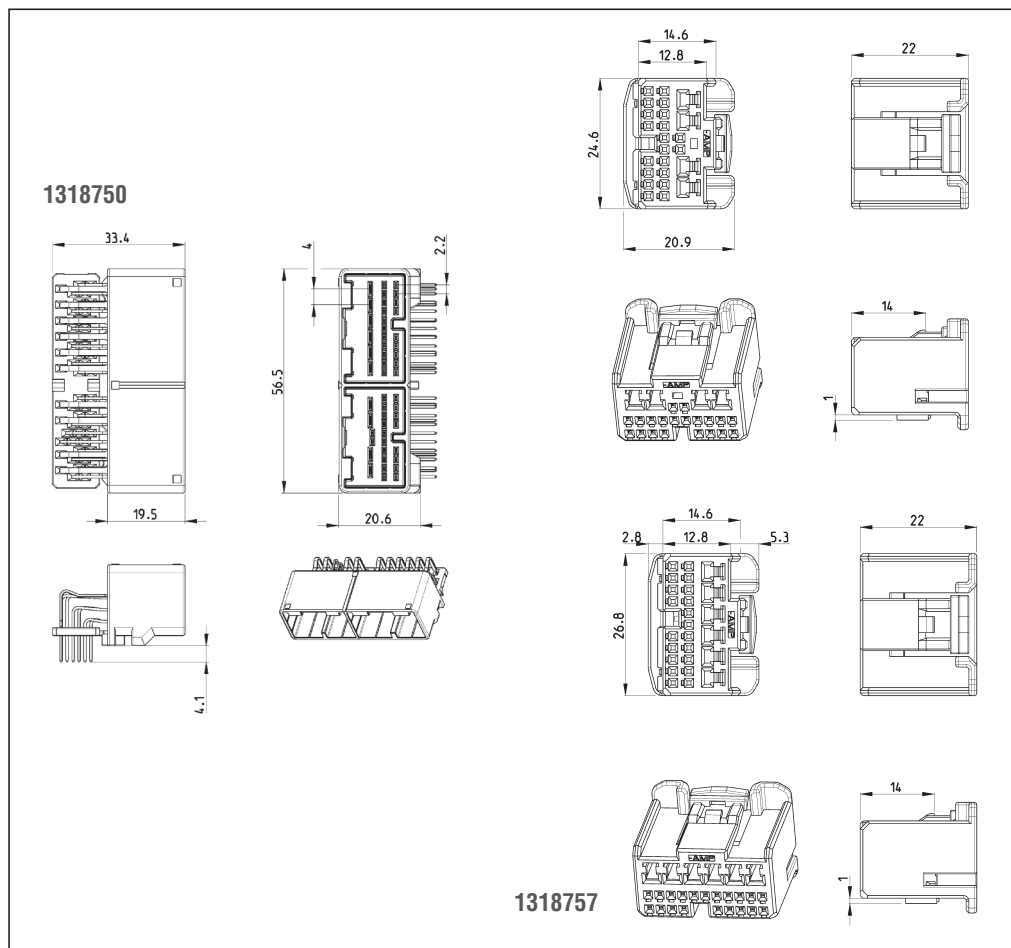
0.13–0.5 mm<sup>2</sup>

**Product Specification:**

108-5667

**Application Specification:**

114-5250



| No. of Positions | Terminate To | Plug Assembly | Cap Housing | Cap Housing Horizontal Mount | Cap Housing Vertical Mount | Mating Plug                                                         |
|------------------|--------------|---------------|-------------|------------------------------|----------------------------|---------------------------------------------------------------------|
| 50               | Board        |               |             | 1318750-2<br>1-1318750-2     |                            |                                                                     |
| 24               |              |               |             |                              |                            | 1318756-1 <sup>2)</sup><br>1746864-1 <sup>3)</sup><br>1612802-1 key |
| 26               |              |               |             |                              |                            | 1318757-1 <sup>2)</sup><br>1746863-1 <sup>3)</sup><br>1612803-1 key |

<sup>2)</sup> Contact Lance Version

<sup>3)</sup> Housing Lance Version

**Note:** All Part Numbers are RoHS and ELV compliant.

.025 (0.64 mm) / .090 II (2.3 mm) Wire-to-Board Applications

**Technical Features**

**No. of Positions:**

80 Positions

**Housing Materials:**

SPS

PBT

**Wire Size Range:**

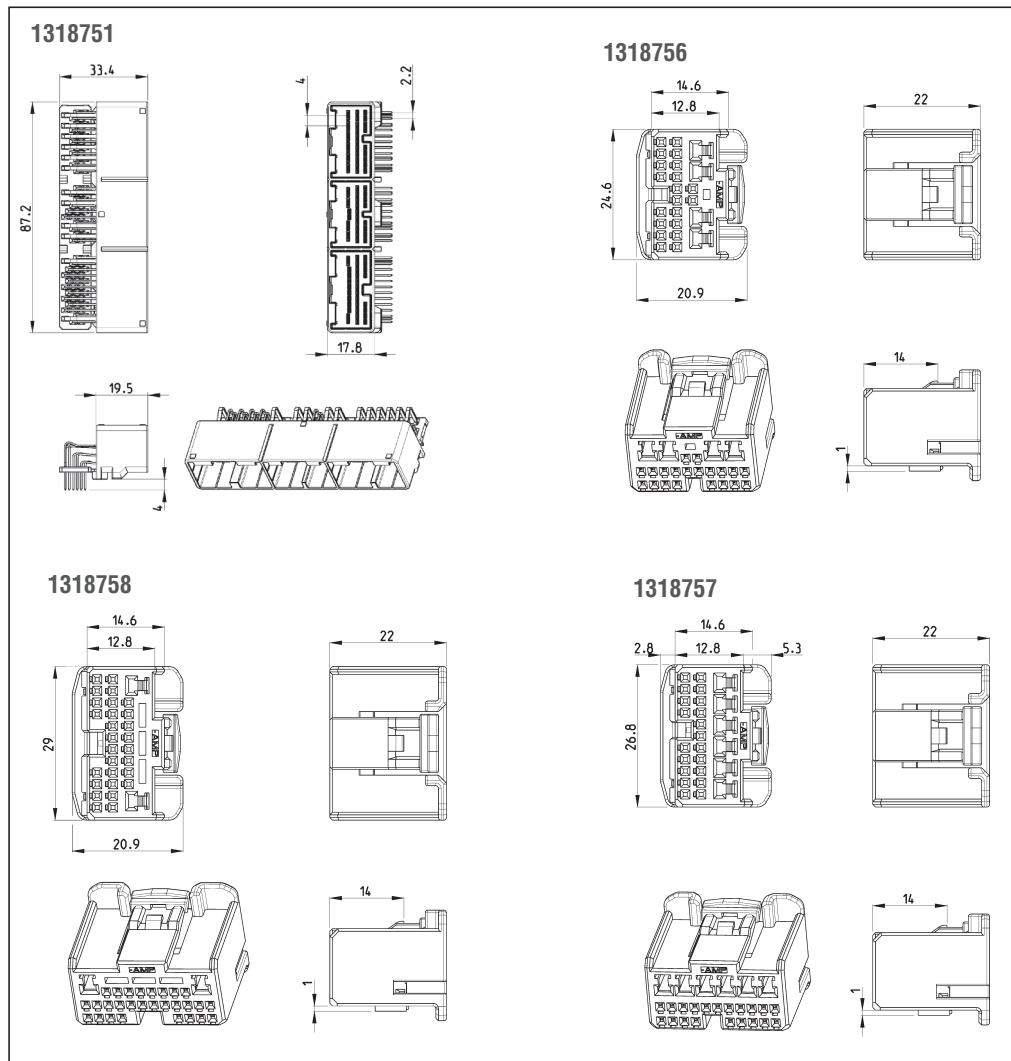
0.13–0.5 mm<sup>2</sup>

**Product Specification:**

108-5667

**Application Specification:**

114-5250



| No. of Positions | Terminate To | Plug Assembly | Cap Housing | Cap Housing Horizontal Mount | Cap Housing Vertical Mount | Mating Plug                                                         |
|------------------|--------------|---------------|-------------|------------------------------|----------------------------|---------------------------------------------------------------------|
| 80               | Board        |               |             | 1318751-7<br>1-1318751-3     |                            |                                                                     |
| 24               |              |               |             |                              |                            | 1318756-1 <sup>2)</sup><br>1746864-1 <sup>3)</sup><br>1612802-1 key |
| 26               |              |               |             |                              |                            | 1318757-1 <sup>2)</sup><br>1746863-1 <sup>3)</sup><br>1612803-1 key |
| 30               |              |               |             |                              |                            | 1318758-1 <sup>2)</sup><br>1746865-1 <sup>3)</sup><br>1318758-2 key |

<sup>2)</sup> Contact Lance Version

<sup>3)</sup> Housing Lance Version

**Note:** All Part Numbers are RoHS and ELV compliant.

Engineering Notes

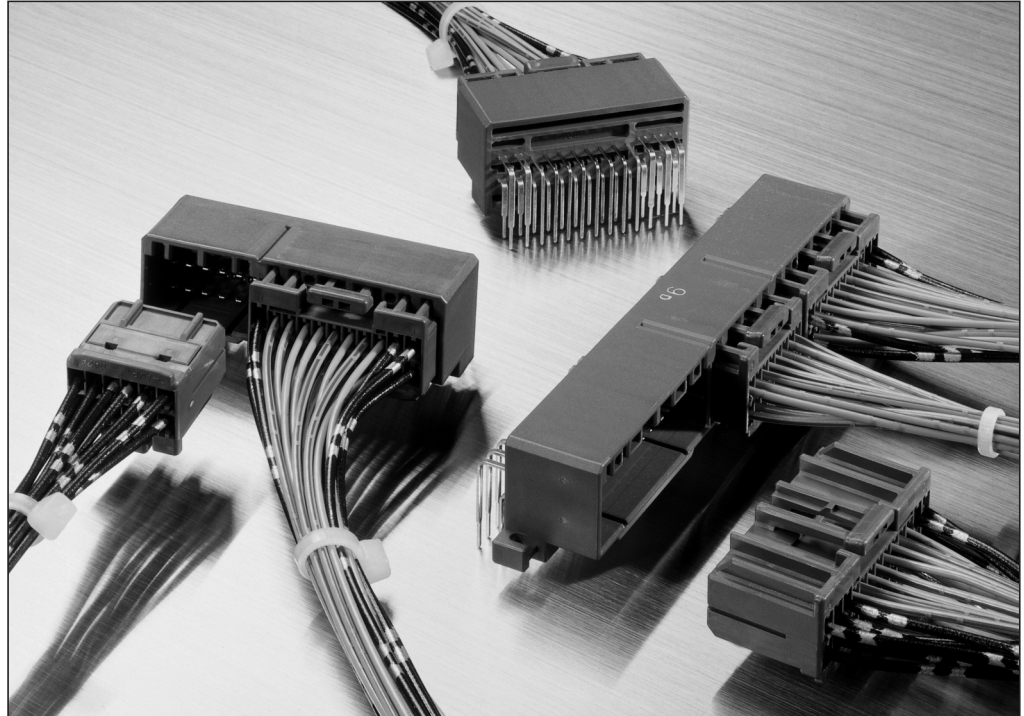


## Introduction



### .040/.070 Hybrid I/O Connectors are developed for the Automotive ECU

- Connectors for use with a mixture of .040 terminals for signal circuits and .070 terminals for power circuits.
- Plug connector for wire termination are supplied with hinge lock or side lock.
- High range of pin count variants.



#### Cap Assemblies for Horizontal Mount Type

- I/O connectors for hybrid connections of signal circuits (.040 contacts) and power circuits (.070 contacts).
- Versatile variations in number of positions are available in the range of 26 Pos. to 76 Pos.
- Housings prevent contacts from being deformed by rocking at mating and unmating (anti-Kojiri action).
- Contacts are available with pre-tinned versions and gold plated versions.

#### Plug Housings with the Hinge Double-Lock

- The double-lock mechanism using the hinge lock prevents incomplete insertions of contacts.
- The plug housing features a housing lance design which eliminate the possibility of contacts being tangled with one another or deformed lance.
- The receptacle contacts (.040 and .070) to be used on plug housings have a box shaped design so that contacting area are protected and highly resistant to damage from outside.

**Product Specification:**  
108-5280

**Application Specifications:**  
114-5111 (.040)  
114-5133 (.040)  
114-5091 (.070)  
114-5134 (.070)

**Instruction Sheet:**  
412-5476

#### Plug Housings Mark II with the Side Double-Lock

- The double-lock mechanism using the side lock prevents incomplete insertions of contacts.
- The plug housing features a housing lance design which eliminate the possibility of contacts being tangled with one another or deformed lance.
- The receptacle contacts (.040 and .070) to be used on plug housings have a leaf at the contacting area protected by the box shaped design which makes a highly reliable contact at low insertion force.
- The plugs cannot mate with caps in case the double-lock is not applied.

**Product Specification:**  
108-5342

**Application Specifications:**  
114-5159 (.040 II)  
114-5160 (.070 II)

**Instruction Sheet:**  
412-5631

**Available Positions**  
26, 34, 38, 42, 48, 54, 64, 76

0.40 Receptacle Contacts (for Hingle Double Lock Type)

**Technical Features**

**Contact Material:**

Copper Alloy

**Contact Finishes:**

Pre-tin plated

Selective gold plated

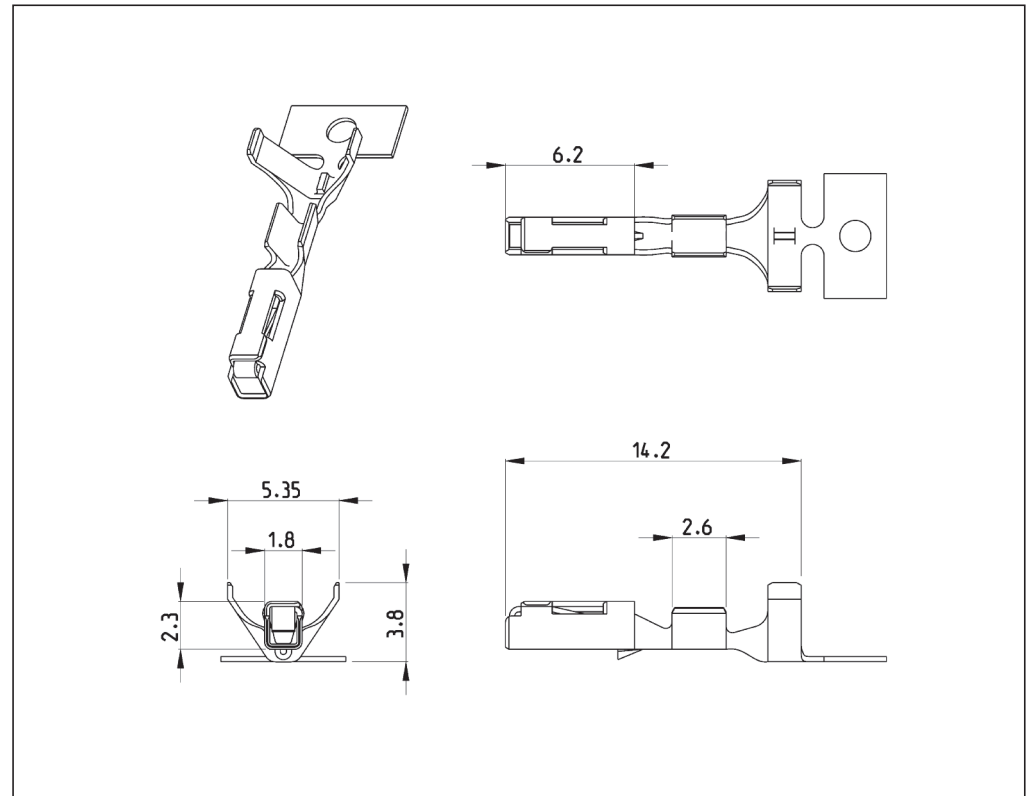
**Application Specifications:**

114-5111

114-5133

**Instruction Sheet:**

408-8547-1



| Wire Size Range    |       | Wire Insulation Diameter (mm) | Finish                | Part Numbers |             |           |
|--------------------|-------|-------------------------------|-----------------------|--------------|-------------|-----------|
| (mm <sup>2</sup> ) | (AWG) |                               |                       | Strip Form   | Loose-Piece | Hand Tool |
| 0.3–0.5            | 20–22 | 1.4–2.0                       | Pre-tin plated        | 173716-1     | 175061-1    | 91577-1   |
|                    |       |                               | Selective gold plated | 173716-2     | 175061-2    |           |
|                    |       | 1.1–1.3                       | Pre-tin plated        | 175094-1     |             |           |
|                    |       |                               | Selective gold plated | 175094-2     |             |           |

**Note:** All Part Numbers are RoHS and ELV compliant.

0.70 Receptacle Contacts (for Hinge Door Lock Type)

**Technical Features**

**Contact Material:**

Brass

**Contact Finishes:**

Pre-tin plated

Selective gold plated

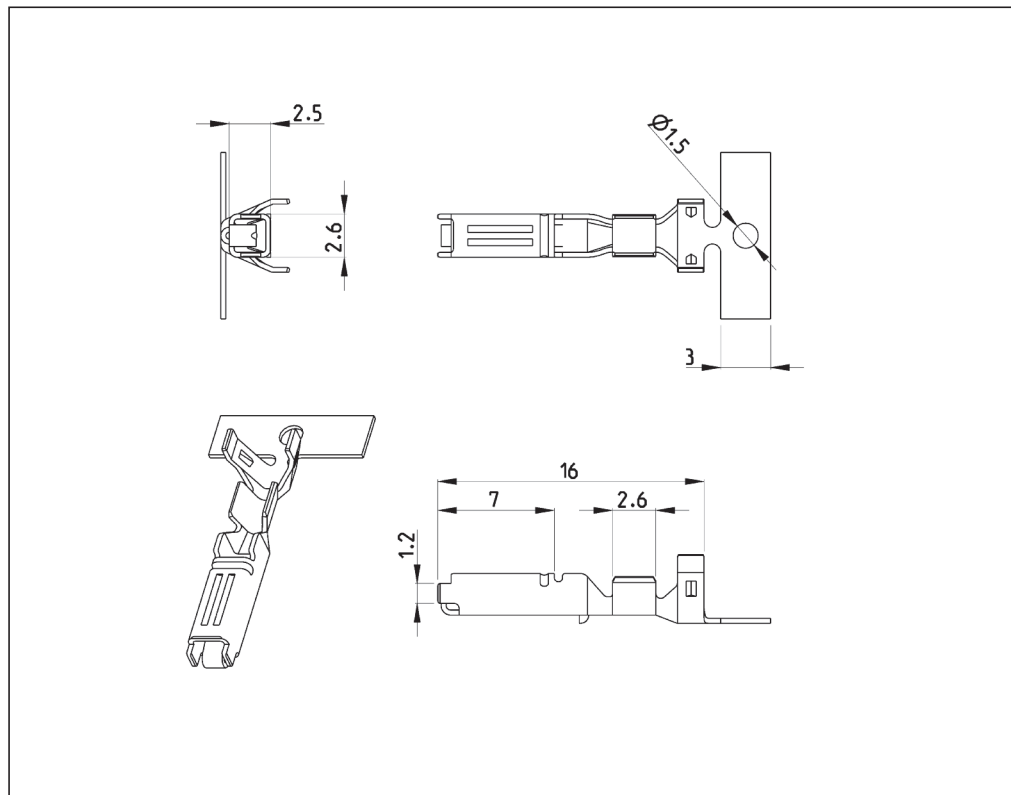
**Application Specifications:**

114-5091

114-5134

**Instruction Sheet:**

408-8547-1



| Wire Size Range |       | Wire Insulation<br>Diameter<br>(mm) | Material<br>and Finish | Part Numbers |                 |             |                 | Hand<br>Tool |
|-----------------|-------|-------------------------------------|------------------------|--------------|-----------------|-------------|-----------------|--------------|
| (mm²)           | (AWG) |                                     |                        | Strip Form   |                 | Loose-Piece |                 |              |
|                 |       |                                     |                        | Brass        | Phosphor Bronze | Brass       | Phosphor Bronze |              |
| 0.20–0.30       | 24–22 | 1.4–1.9                             | Pre-tin plated         | 173630-1     | 173630-6        | 175026-1    | 175026-6        | 91580-1      |
|                 |       |                                     | Selective gold plated  | 173630-2     | 173630-7        | 175026-2    | 175026-7        |              |
| 0.50–1.25       | 20–16 | 2.0–2.6                             | Pre-tin plated         | 173631-1     | 173631-6        | 175027-1    | 175027-6        | 91573-1      |
|                 |       |                                     | Selective gold plated  | 173631-2     | 173631-7        | 175027-2    | 175027-7        |              |
| 0.20–0.30       | 24–22 | 1.1–1.3                             | Selective gold plated  | 175124-2     |                 |             |                 |              |
| 0.50–1.25       | 20–16 | 1.3–1.8                             | Pre-tin plated         | 175095-1     |                 |             |                 |              |

**Note:** All Part Numbers are RoHS and ELV compliant.

0.40 II Receptacle Contacts (for Side Double Lock Type)

**Technical Features**

**Contact Material:**

Copper Alloy

**Contact Finishes:**

Pre-tin plated

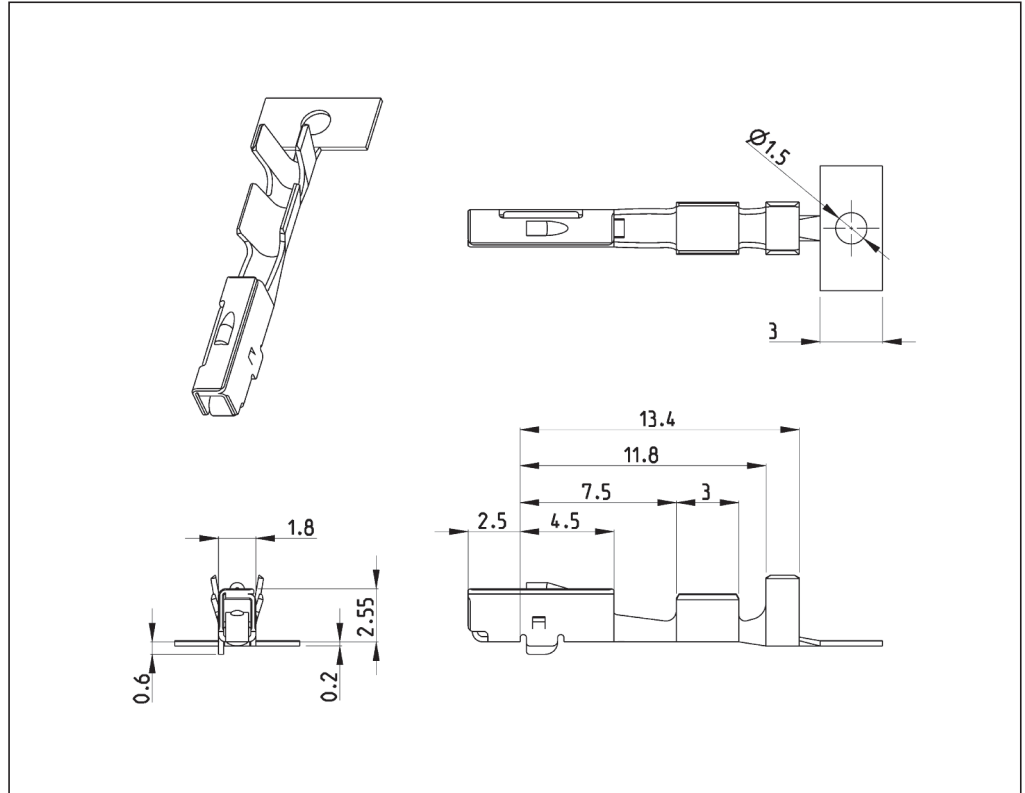
Selective gold plated

**Application Specifications:**

114-5159

**Instruction Sheet:**

408-8547-1



| Wire Size Range    |       | Wire Insulation Diameter (mm) | Finish                | Part Numbers |             |           |
|--------------------|-------|-------------------------------|-----------------------|--------------|-------------|-----------|
| (mm <sup>2</sup> ) | (AWG) |                               |                       | Strip Form   | Loose-Piece | Hand Tool |
| 0.3–0.5            | 18–22 | 1.1–1.8                       | Pre-tin plated        | 175265-1     | 179417-1    | 91588-1   |
|                    |       |                               | Selective gold plated | 175266-2     | 179418-2    |           |

**Note:** All Part Numbers are RoHS and ELV compliant.

0.70 II Receptacle Contacts (for Side Double Lock Type)

**Technical Features**

**Contact Material:**

Brass

**Contact Finishes:**

Pre-tin plated

Selective gold plated

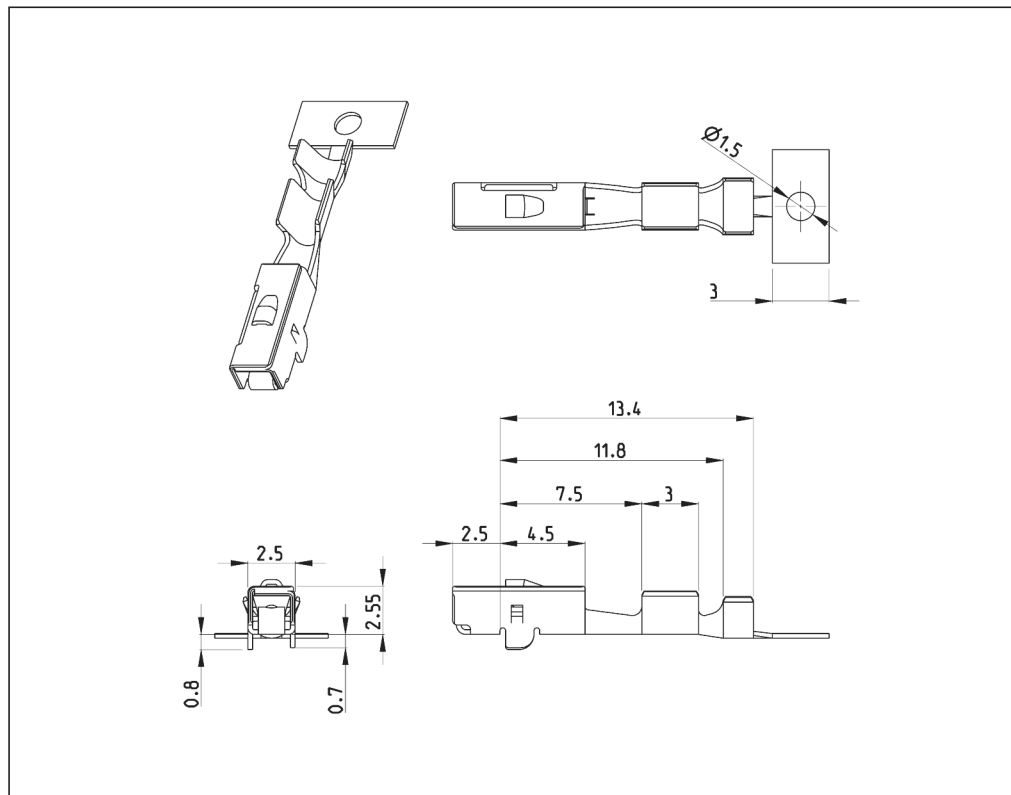
**Application Specifications:**

114-5160

**Instruction Sheet:**

411-5658

411-5659



| Wire Size Range    |       | Wire Insulation Diameter (mm) | Finish                | Part Numbers |             |           |
|--------------------|-------|-------------------------------|-----------------------|--------------|-------------|-----------|
| (mm <sup>2</sup> ) | (AWG) |                               |                       | Strip Form   | Loose-Piece | Hand Tool |
| 0.30–0.85          | 18–22 | 1.1–1.8                       | Pre-tin plated        | 175268-1     | 179423-1    | 934195-1  |
|                    |       |                               | Selective gold plated | 175275-2     | 179424-2    |           |
| 0.50–1.25          | 16–20 | 1.8–2.5                       | Pre-tin plated        | 175269-1     | 179425-1    | 934196-1  |
|                    |       |                               | Selective gold plated | 175276-2     | 179426-2    |           |

**Note:** All Part Numbers are RoHS and ELV compliant.

Wire-to-Board Applications

**Technical Features**

**No. of Positions:**

26 Positions

**Housing Materials:**

PBT

**Wire Size Range:**

0.2–1.25 mm<sup>2</sup>

**Product Specifications:**

108-5280

108-5342

**Application Specifications:**

114-5111 (.040)

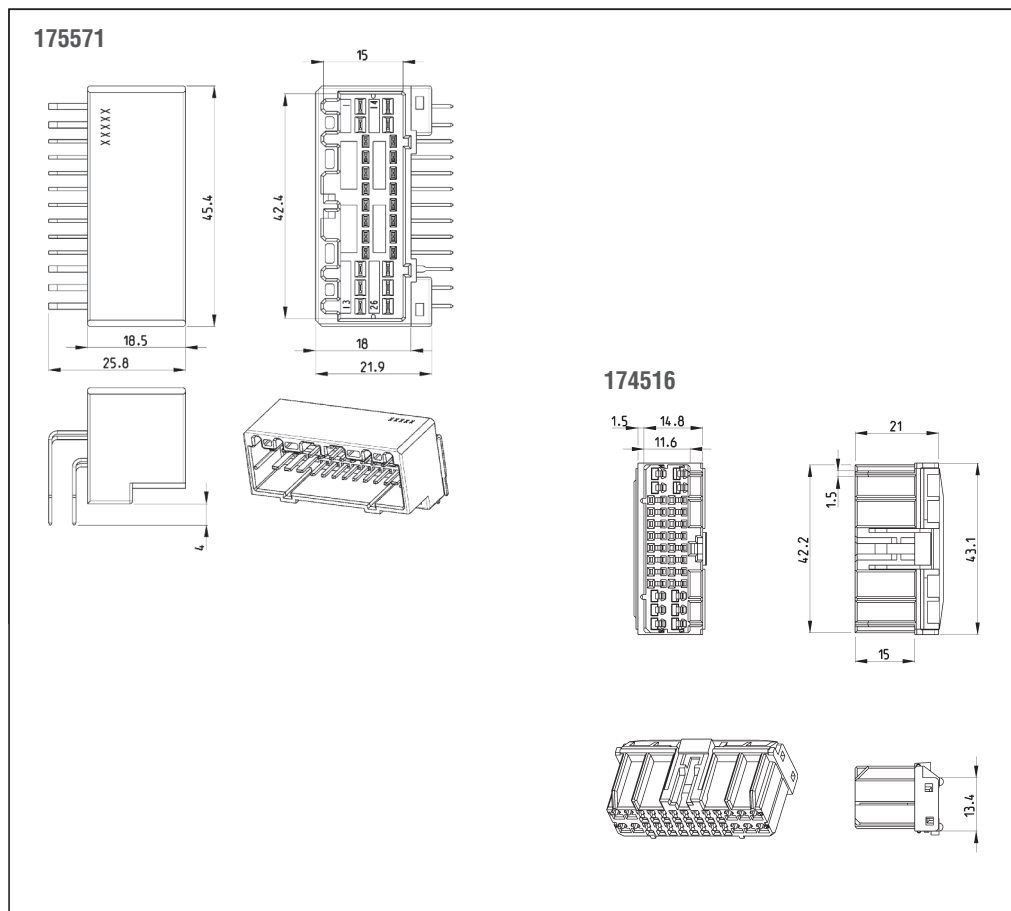
114-5133 (.040)

114-5091 (.070)

114-5134 (.070)

114-5159 (.040 II)

114-5160 (.070 II)



| No. of Positions | Terminate To          | Plug Assembly | Cap Housing Assembly                         | Cap Housing Horizontal Mount | Cap Housing Vertical Mount | Mating Plug        |
|------------------|-----------------------|---------------|----------------------------------------------|------------------------------|----------------------------|--------------------|
| 26               | Printed Circuit Board |               | 178811-6 Gray                                |                              |                            | 174516 (Hinge)     |
|                  |                       |               | 175571-6 Gray                                |                              |                            | 917992 (Side Lock) |
|                  |                       |               | 178762-6 Gray (Different Key)                |                              |                            | 175567 (Hinge)     |
|                  |                       |               | 175569-6 Gray (Special Key)                  |                              |                            | 917994 (Side Lock) |
|                  |                       |               | 2-176206-6 Light Gray (Bottom mount ears)    |                              |                            | 176204 (Hinge)     |
|                  |                       |               |                                              |                              |                            | 917997 (Side Lock) |
|                  |                       |               | 178900-1 Natural (Side mount ears)           |                              |                            | 176204 (Hinge)     |
|                  |                       |               |                                              |                              |                            | 917997 (Side Lock) |
|                  |                       |               | 2-178209-2 Black (Low profile mounting ears) |                              |                            | 178747 (Hinge)     |
|                  |                       |               |                                              |                              |                            | 917850 (Side Lock) |

**Note:** All Part Numbers are RoHS and ELV compliant.

Wire-to-Board Applications

**Technical Features**

**No. of Positions:**

34 Positions

**Housing Materials:**

PBT

**Wire Size Range:**

0.2–1.25 mm<sup>2</sup>

**Product Specifications:**

108-5280

108-5342

**Application Specifications:**

114-5111 (.040)

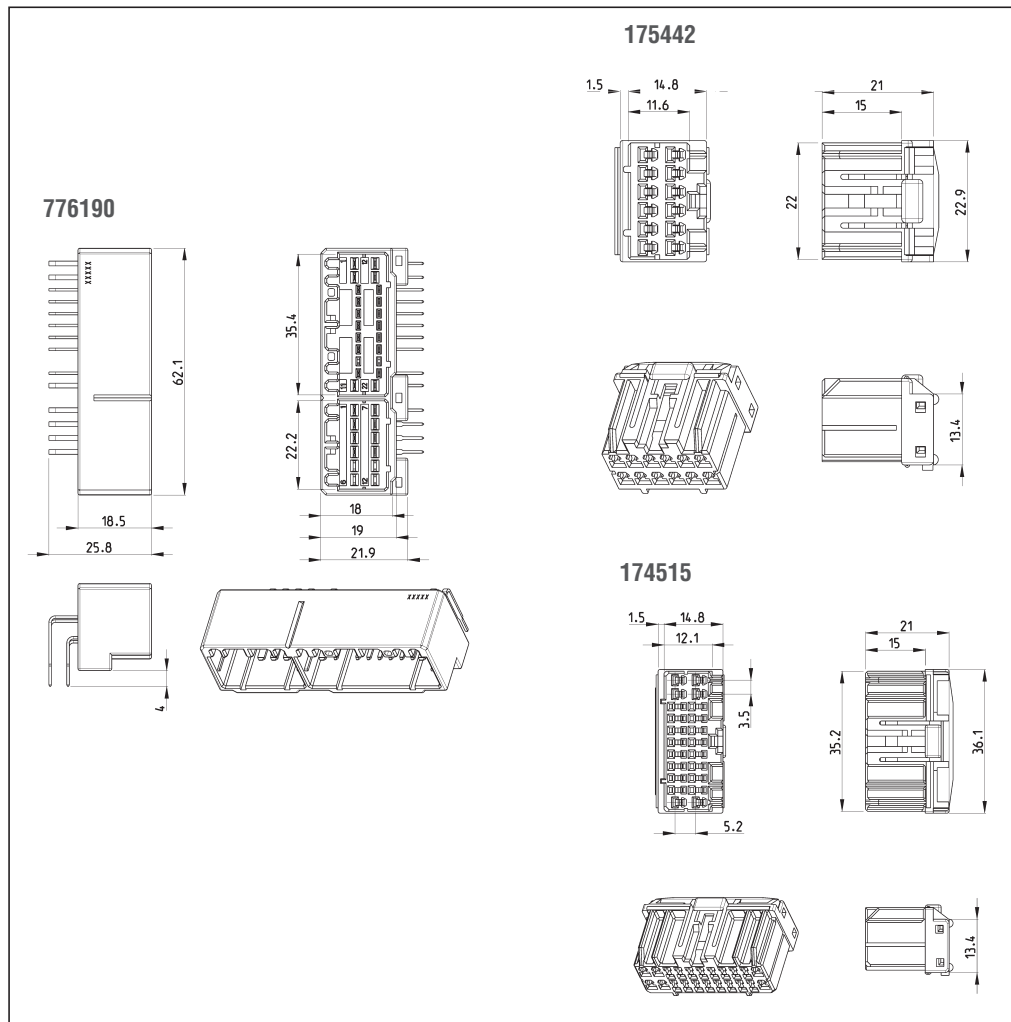
114-5133 (.040)

114-5091 (.070)

114-5134 (.070)

114-5159 (.040 II)

114-5160 (.070 II)



| No. of Positions | Terminate To          | Plug Assembly | Cap Housing Assembly                                                                                                    | Cap Housing Horizontal Mount | Cap Housing Vertical Mount | Mating Plug                                                                                                              |
|------------------|-----------------------|---------------|-------------------------------------------------------------------------------------------------------------------------|------------------------------|----------------------------|--------------------------------------------------------------------------------------------------------------------------|
| 34               | Printed Circuit Board |               | 175444-2 Black<br>776190-6 Gray<br>(partially loaded version 28p)<br>2-176255-1 White<br>(partially loaded version 30p) |                              |                            | 175442 (Hinge)<br>174515 (Hinge)<br>178881 (Side Lock)<br>917978 (Side Lock)<br>178798 (Side Lock)<br>917989 (Side Lock) |

**Note:** All Part Numbers are RoHS and ELV compliant.

Wire-to-Board Applications

**Technical Features**

**No. of Positions:**

38 Positions

**Housing Materials:**

PBT

**Wire Size Range:**

0.2–1.25 mm<sup>2</sup>

**Product Specifications:**

108-5280

108-5342

**Application Specifications:**

114-5111 (.040)

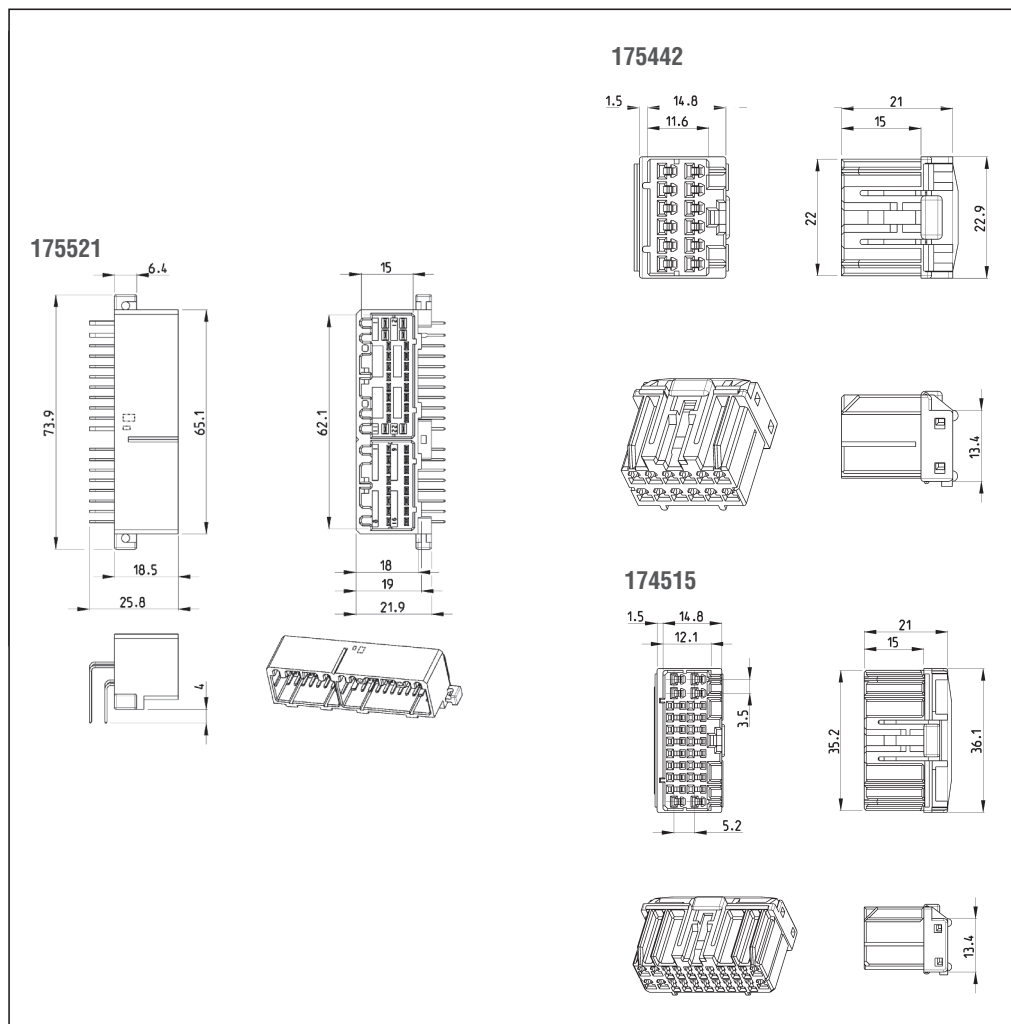
114-5133 (.040)

114-5091 (.070)

114-5134 (.070)

114-5159 (.040 II)

114-5160 (.070 II)



| No. of Positions | Terminate To          | Plug Assembly | Cap Housing Assembly                   | Cap Housing Horizontal Mount | Cap Housing Vertical Mount | Mating Plug            |
|------------------|-----------------------|---------------|----------------------------------------|------------------------------|----------------------------|------------------------|
| 38               | Printed Circuit Board |               | 175521-6 Gray<br>(Side mount ears)     |                              |                            | 175442 (Hinge 16p)     |
|                  |                       |               | 638048-1 Black<br>(High temp. version) |                              |                            | 174515 (Hinge 22p)     |
|                  |                       |               | 178093-2 Black                         |                              |                            | 917981 (Side Lock 16p) |
|                  |                       |               |                                        |                              |                            | 917989 (Side Lock 22p) |
|                  |                       |               |                                        |                              |                            | 175442 (Hinge 12p)     |
|                  |                       |               |                                        |                              |                            | 174516 (Hinge 26p)     |
|                  |                       |               |                                        |                              |                            | 917978 (Side Lock 12p) |
|                  |                       |               |                                        |                              |                            | 917992 (Side Lock 26p) |

**Note:** All Part Numbers are RoHS and ELV compliant.

Wire-to-Board Applications

**Technical Features**

**No. of Positions:**

42 Positions

**Housing Materials:**

PBT

**Wire Size Range:**

0.2–1.25 mm<sup>2</sup>

**Product Specifications:**

108-5280

108-5342

**Application Specifications:**

114-5111 (.040)

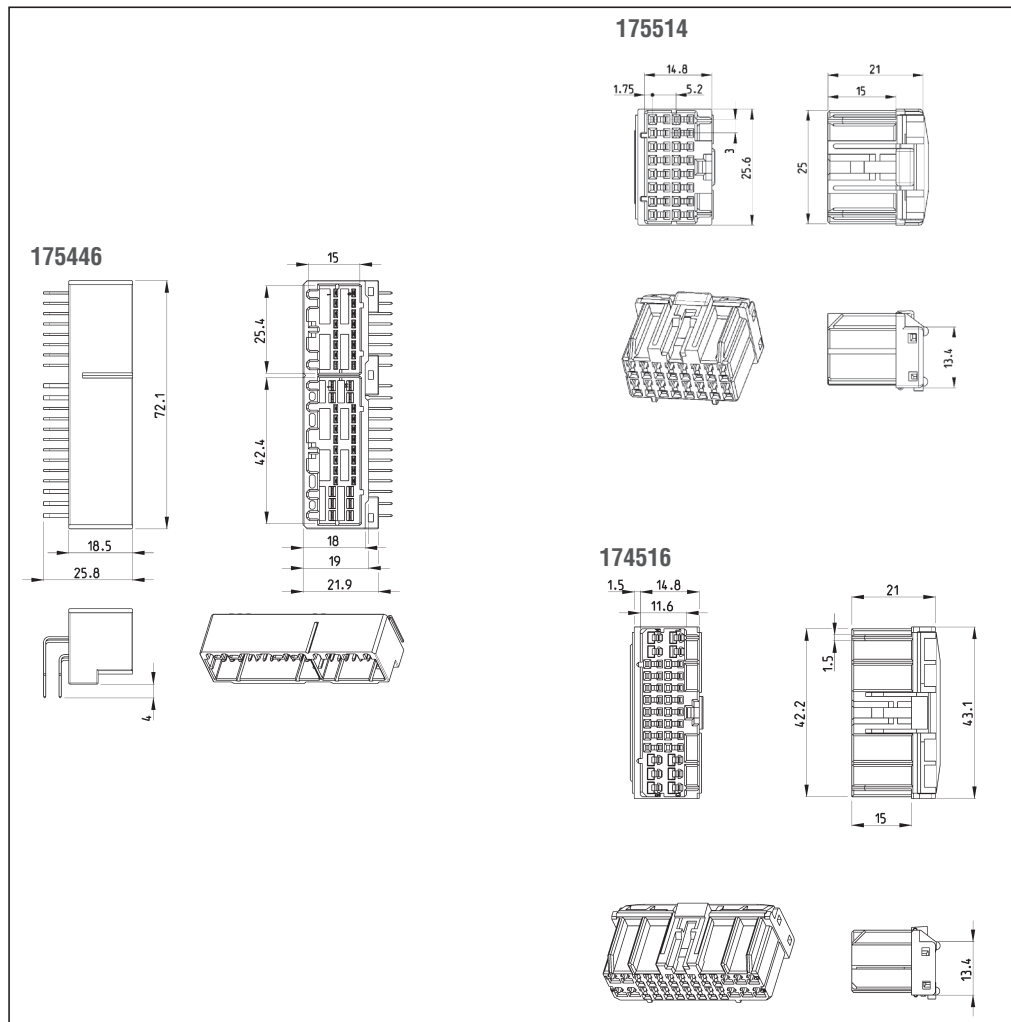
114-5133 (.040)

114-5091 (.070)

114-5134 (.070)

114-5159 (.040 II)

114-5160 (.070 II)



| No. of Positions | Terminate To          | Plug Assembly | Cap Housing Assembly | Cap Housing Horizontal Mount | Cap Housing Vertical Mount | Mating Plug                                                                                  |
|------------------|-----------------------|---------------|----------------------|------------------------------|----------------------------|----------------------------------------------------------------------------------------------|
| 42               | Printed Circuit Board |               | 175446-1 White       |                              |                            | 175514 (Hinge 16p)<br>174516 (Hinge 26p)<br>917981 (Side Lock)<br>917992 (Side Lock)         |
|                  |                       |               | 176242-1 White       |                              |                            | 176243 (Hinge 16p)<br>175567 (Hinge 26p)<br>917983 (Side Lock 16p)<br>917994 (Side Lock 26p) |
|                  |                       |               | 2-177542-1 White     |                              |                            | 917986 (Side Lock 16p)<br>917992 (Side Lock 26p)                                             |

**Note:** All Part Numbers are RoHS and ELV compliant.

Wire-to-Board Applications

**Technical Features**

**No. of Positions:**

48 Positions

**Housing Materials:**

PBT

**Wire Size Range:**

0.2–1.25 mm<sup>2</sup>

**Product Specifications:**

108-5280

108-5342

**Application Specifications:**

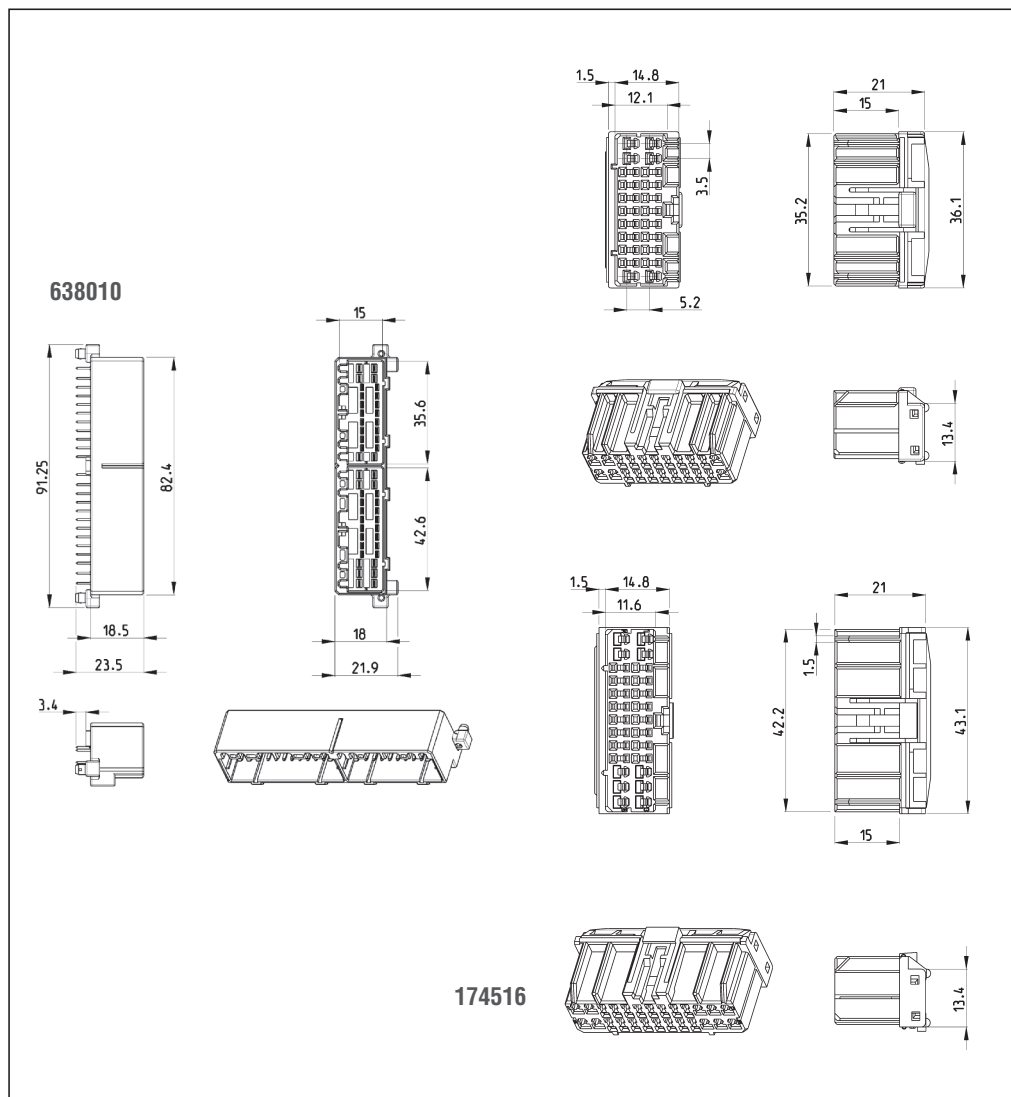
114-5111 (.040)

114-5133 (.040)

114-5091 (.070)

114-5134 (.070)

114-5159 (.040 II)



| No. of Positions | Terminate To          | Plug Assembly | Cap Housing Assembly                             | Cap Housing Horizontal Mount | Cap Housing Vertical Mount | Mating Plug                                                                                  |
|------------------|-----------------------|---------------|--------------------------------------------------|------------------------------|----------------------------|----------------------------------------------------------------------------------------------|
| 48               | Printed Circuit Board |               | 179375-1 Gray<br>174917-6 Gray<br>638010-1 Black |                              |                            | 174515 (Hinge 22p)<br>174516 (Hinge 26p)<br>917989 (Side Lock 22p)<br>917992 (Side Lock 26p) |

**Note:** All Part Numbers are RoHS and ELV compliant.

Wire-to-Board Applications

**Technical Features**

**No. of Positions:**

54 Positions

**Housing Materials:**

PBT

**Wire Size Range:**

0.2–1.25 mm<sup>2</sup>

**Product Specifications:**

108-5280

108-5342

**Application Specifications:**

114-5111 (.040)

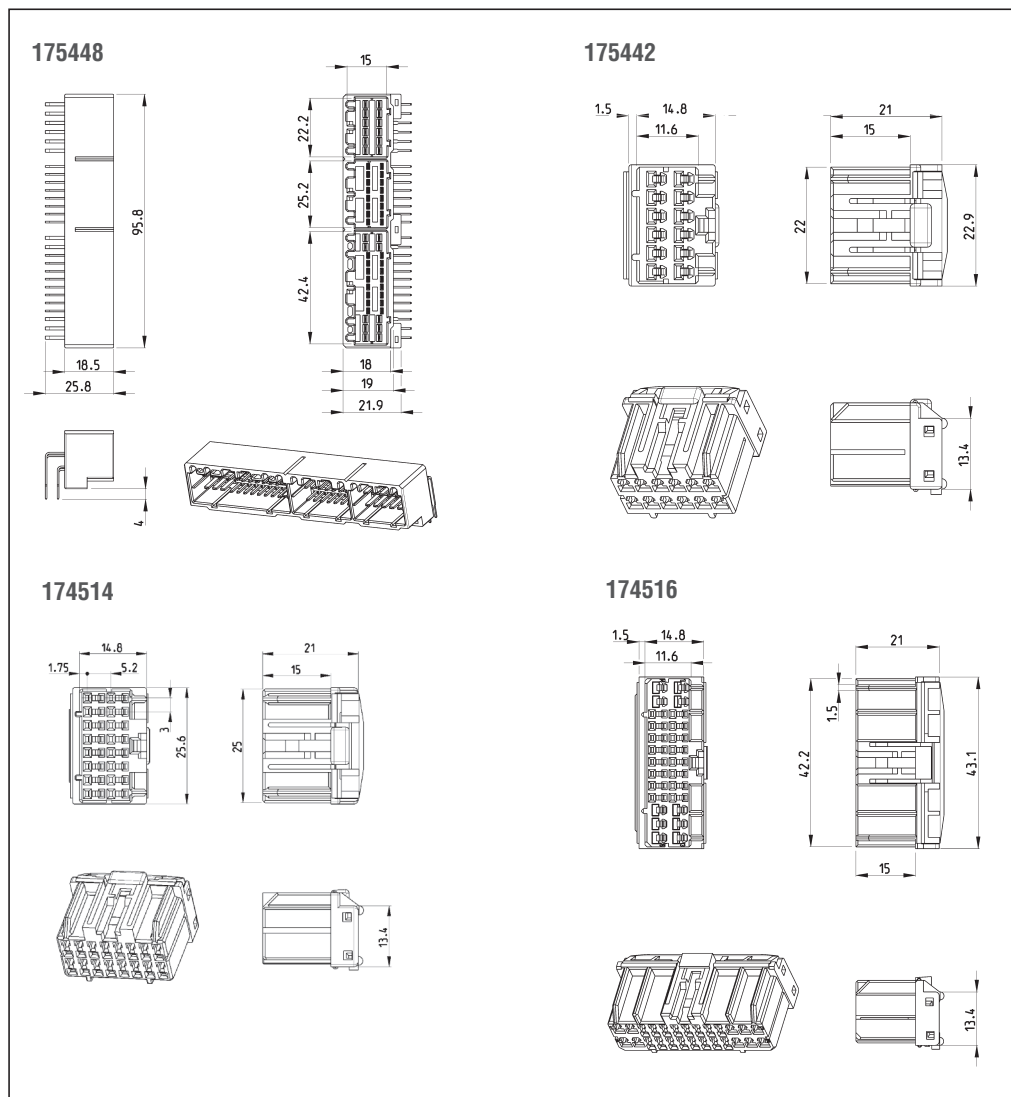
114-5133 (.040)

114-5091 (.070)

114-5134 (.070)

114-5159 (.040 II)

114-5160 (.070 II)



| No. of Positions | Terminate To          | Plug Assembly | Cap Housing Assembly | Cap Housing Horizontal Mount | Cap Housing Vertical Mount | Mating Plug                                                                                                                                  |
|------------------|-----------------------|---------------|----------------------|------------------------------|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| 54               | Printed Circuit Board |               | 175448-6 Gray        |                              |                            | 175442 (Hinge 12p)<br>174514 (Hinge 16p)<br>174516 (Hinge 26p)<br>917978 (Side Lock 12p)<br>917981 (Side Lock 16p)<br>917992 (Side Lock 26p) |

**Note:** All Part Numbers are RoHS and ELV compliant.

Wire-to-Board Applications

**Technical Features**

**No. of Positions:**

64 Positions

**Housing Materials:**

PBT

**Wire Size Range:**

0.2–1.25 mm<sup>2</sup>

**Product Specifications:**

108-5280

108-5342

**Application Specifications:**

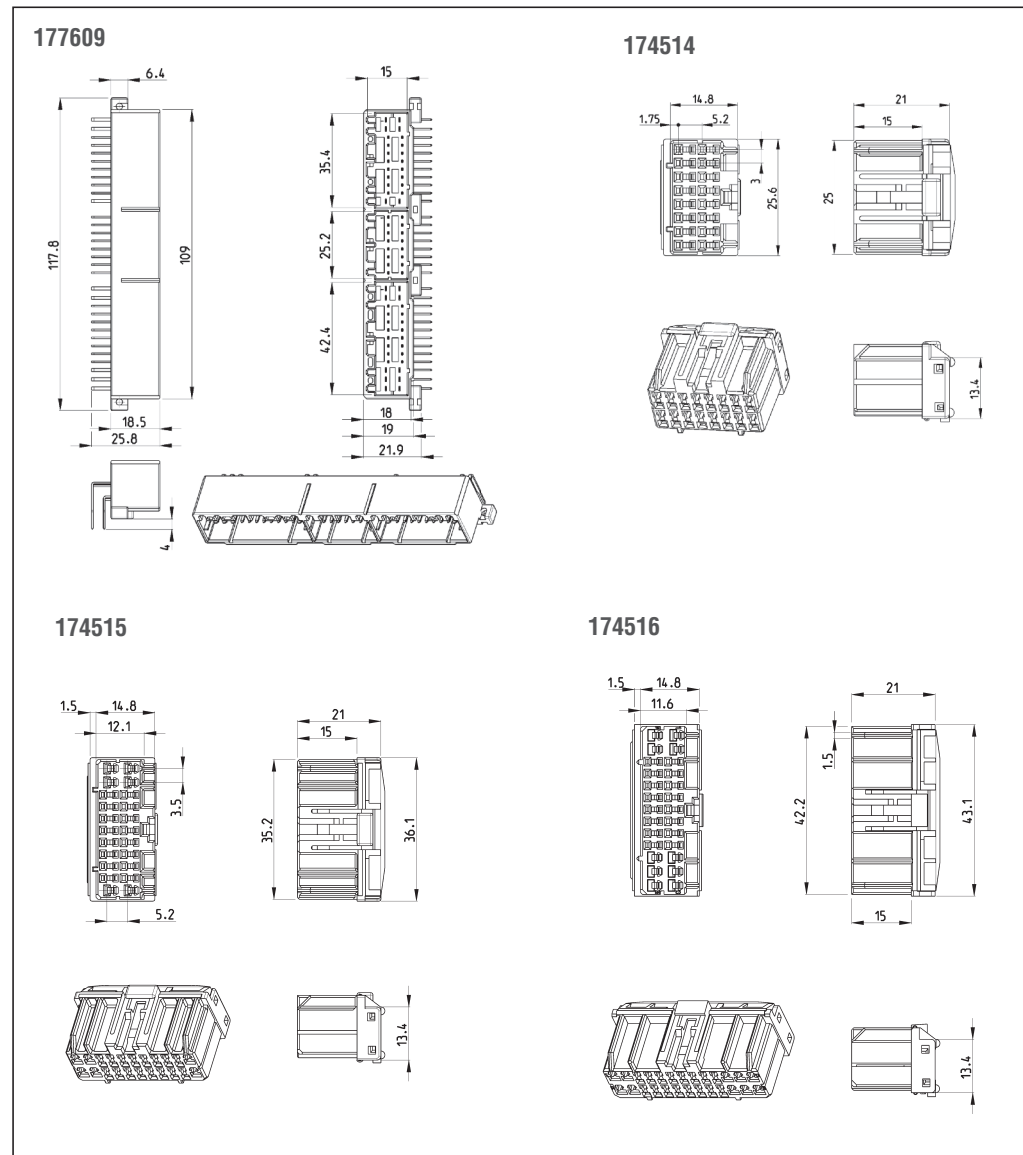
114-5111 (.040)

114-5133 (.040)

114-5091 (.070)

114-5134 (.070)

114-5159 (.040 II)



| No. of Positions | Terminate To          | Plug Assembly | Cap Housing Assembly                                     | Cap Housing Horizontal Mount | Cap Housing Vertical Mount | Mating Plug                                                                                                                                  |
|------------------|-----------------------|---------------|----------------------------------------------------------|------------------------------|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| 64               | Printed Circuit Board |               | 917322-5 Blue<br>776189-6 Gray<br>2-176122-6 Gray        |                              |                            | 175109 (Hinge 16p)<br>175110 (Hinge 22p)<br>175111 (Hinge)                                                                                   |
|                  |                       |               | 178764-1 White<br>1-174518-6 Gray<br>177609-1 Light Gray |                              |                            | 174514 (Hinge 16p)<br>174515 (Hinge 22p)<br>174516 (Hinge 26p)<br>917989 (Side Lock 22p)<br>917981 (Side Lock 16p)<br>917992 (Side Lock 26p) |

**Note:** All Part Numbers are RoHS and ELV compliant.

Wire-to-Board Applications

**Technical Features**

**No. of Positions:**

76 Positions

**Housing Materials:**

PBT

**Wire Size Range:**

0.2–1.25 mm<sup>2</sup>

**Product Specifications:**

108-5280

108-5342

**Application Specifications:**

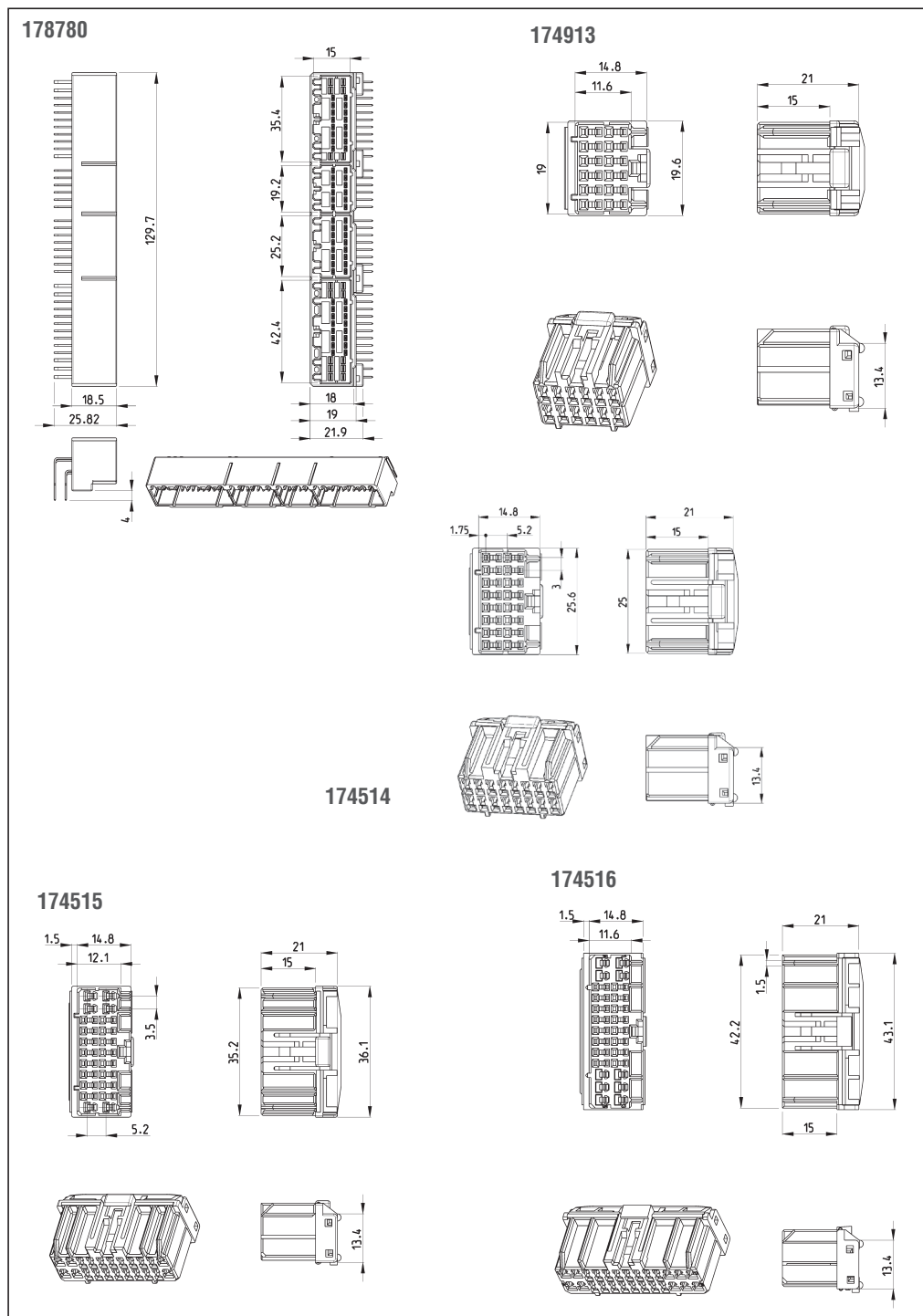
114-5111 (.040)

114-5133 (.040)

114-5091 (.070)

114-5134 (.070)

114-5159 (.040 II)



| No. of Positions | Terminate To          | Plug Assembly | Cap Housing Assembly | Cap Housing Horizontal Mount | Cap Housing Vertical Mount | Mating Plug            |
|------------------|-----------------------|---------------|----------------------|------------------------------|----------------------------|------------------------|
| 76               | Printed Circuit Board |               | 174915-6 Gray        |                              |                            | 174913 (Hinge 12p)     |
|                  |                       |               | 2-178780-6 Gray      |                              |                            | 174514 (Hinge 16p)     |
|                  |                       |               |                      |                              |                            | 174515 (Hinge 22p)     |
|                  |                       |               |                      |                              |                            | 174516 (Hinge)         |
|                  |                       |               |                      |                              |                            | 917975 (Side Lock 12p) |
|                  |                       |               |                      |                              |                            | 917989 (Side Lock 22p) |
|                  |                       |               |                      |                              |                            | 917981 (Side Lock 16p) |
|                  |                       |               |                      |                              |                            | 917992 (Side Lock 26p) |

**Note:** All Part Numbers are RoHS and ELV compliant.

Engineering Notes

A large rectangular area filled with a fine grid of light gray lines, intended for drawing or writing engineering notes. The grid covers the majority of the page below the header and above the footer.