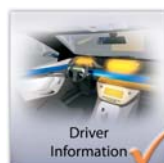
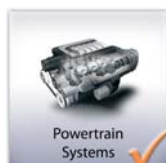
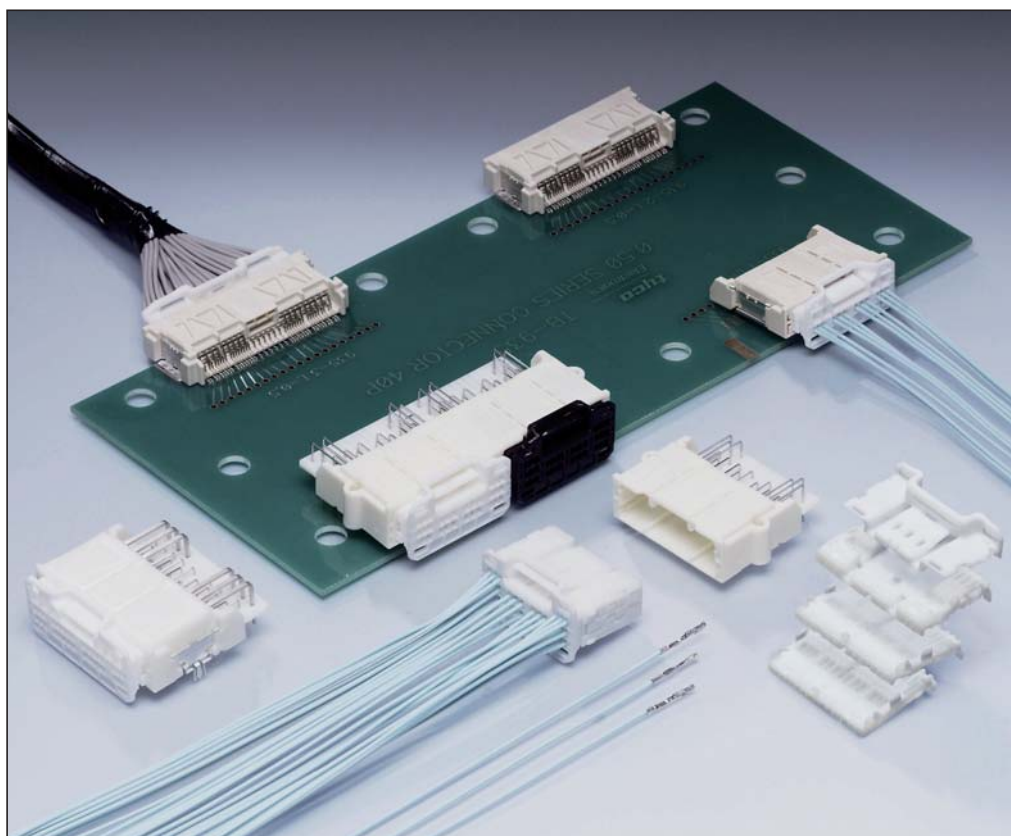


## Introduction



## Innovative Miniature 0.50 Series Connectors for Automotive & Commercial Vehicles



### 0.50 Series and 0.50/1.5 Hybrid Connectors

Tyco Electronics has developed an 0.50 series and 0.50/1.5 hybrid automotive I/O connector series for thin-type computer units, high-density circuit boards and ultra-narrow wiring.

The 0.50 series connectors offer significant improvements in miniaturization and weight reduction compared to the Tyco Electronics 0.64 connector series.

The 0.50 connector series tin plated terminals maintain the same contact reliability as the 0.64 series while reducing packaging volume by 70 percent, weight by 50 percent and height by 50 percent.

The wire-side connectors are small but easy to lock – requiring a mating force of under 55 N for the 40 position size – with an ergonomic shape for proper mating. PCB-side connectors provide a stable surface mount with a center-weighted design.

### Product Features

- Minimum pitch of 0.75 mm for surface mounting PCB
- Minimum pitch of 1.5 mm for wire harnesses
- Lead-free solder compliant

### Applications

- Drive Support System, Luggage Door Closer System
- Body ECU, Air-Conditioning ECU
- Navigation ECU
- ECUs for Compact and High Density Requirements

### 0.50 Receptacle Contacts

#### Technical Features

##### Contact Material:

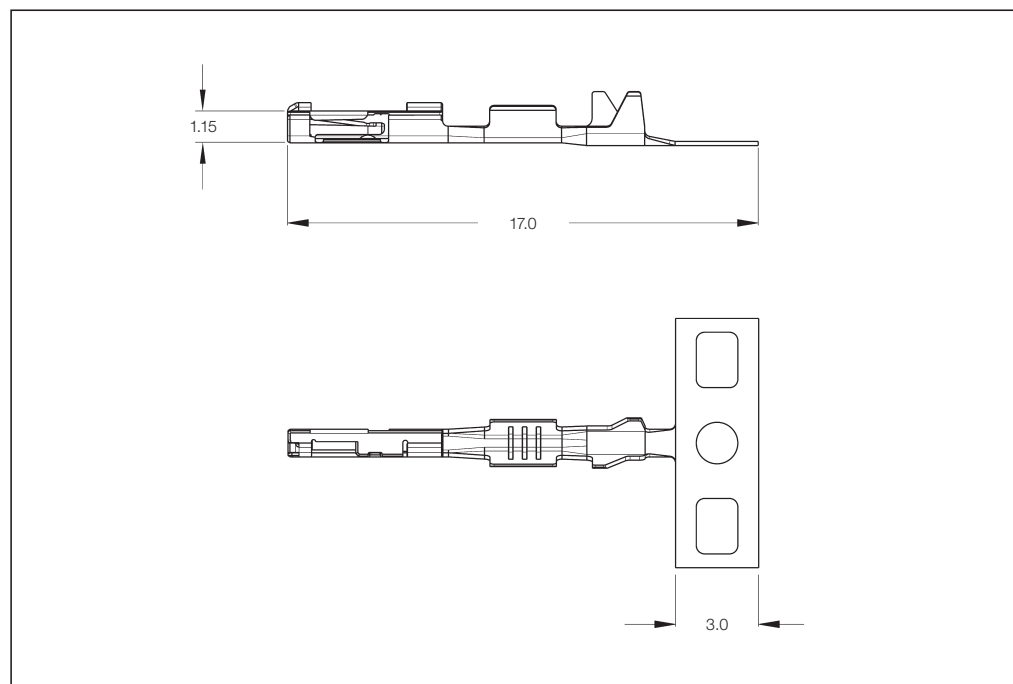
Copper Alloy

##### Contact Finish:

Pre-tin plated,  
Selective gold plated

##### Application Specification:

114-5379



### 0.50 Receptacle Contacts

Wire Size Range (mm <sup>2</sup> )	Insulation Diameter (mm)	Material and Finish	Part Numbers				Applicator	Hand Tool with Die Set
			Strip Form	Package Quantity	Loose-Piece	Package Quantity		
CHFUS 0.22–0.35	0.95–1.20	Copper alloy, pre-tin plated	1827855-1	40,000	–	–	1762850-2	–
		Copper alloy, selective gold plated	1903703-1	40,000	–	–		
CHFUS 0.35–0.50	1.10–1.40	Copper alloy, pre-tin plated	1827855-2	40,000	–	–	1762851-2	–
CPEX 0.22	1.30–1.50	Copper alloy, pre-tin plated	1827855-3	40,000	–	–	1762852-2	–
CHFUS 0.13	0.85–0.95	Copper alloy, pre-tin plated	1827855-4	40,000	–	–	1762853-2	–

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

### 1.5 Receptacle Contacts

Please consult our sales representatives to select applicable 1.5 receptacle contacts.

### 40 Position Surface Mount Type

#### Technical Features

**No. of Positions:**

40 Positions

**Housing Material**

Tab Housing:

LCP-GF

**Tab Contact Finish:**

Post-tinned

**Receptacle Housing:**

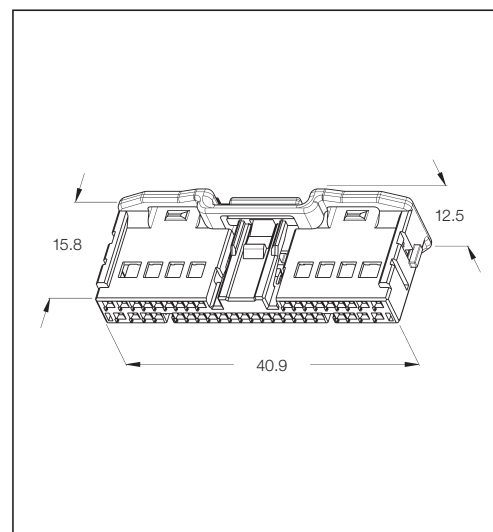
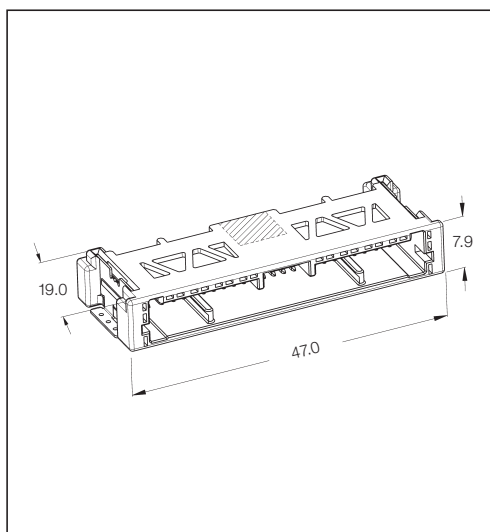
PBT

**Product Specification:**

108-78208

**Application Specification:**

411-78199



### 40 Position Surface Mount Type

No. of Positions	Keying Options	Housing Color	Part Numbers		
			Tab Housing Assembly	Cover	Mating Receptacle Housing
40	–	Natural (White)	1871806-1	–	1827842-1

### 30 Position Screw Mount Type

#### Technical Features

##### No. of Positions:

30 Positions

##### Housing Material

##### Tab Housing:

SPS-GF

##### Tab Contact Finish:

Post-tinned

##### Receptacle Housing:

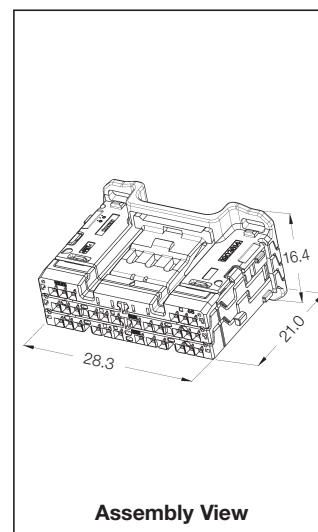
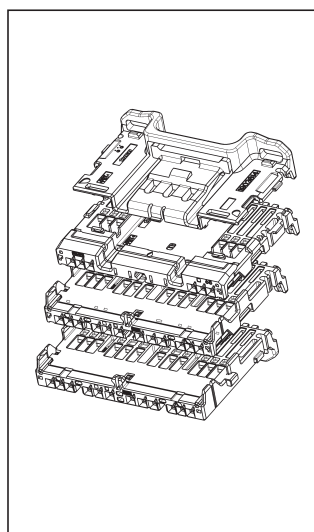
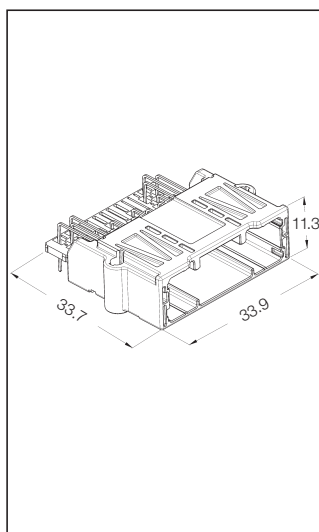
PBT

##### Product Specification:

108-78437-1

##### Application Specification:

411-78199



### 30 Position Screw Mount Type

No. of Positions	Keying Options	Housing Color	Tab Housing Assembly	Part Numbers			
				Lock Housing	Upper Receptacle	Middle Receptacle	Lower Receptacle
30	–	Natural (White)	1939440-1	1903614-1	1903615-1	1903608-4	1903611-5

### 30 Position Screw Mount Type (continued)

#### Technical Features

##### No. of Positions:

30 Positions

##### Housing Material

##### Tab Housing:

SPS-GF

##### Tab Contact Finish:

Post-tinned

##### Receptacle Housing:

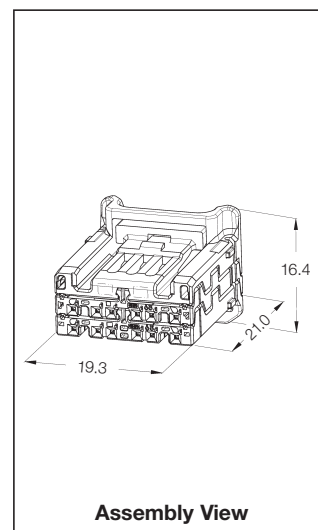
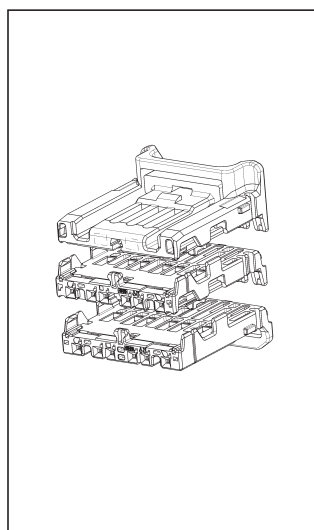
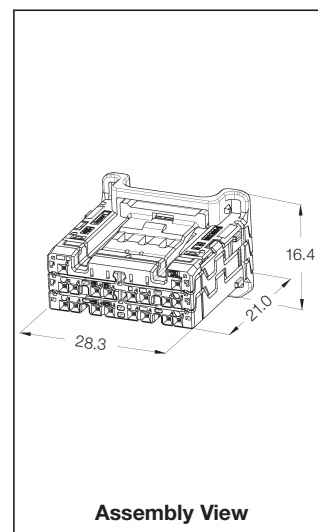
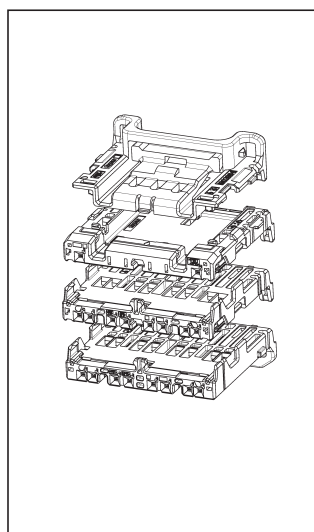
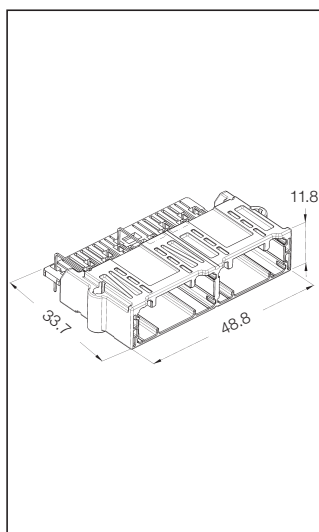
PBT

##### Product Specification:

108-78437

##### Application Specification:

411-78268



### 30 Position Screw Mount Type

No. of Positions	Keying Options	Housing Color	Tab Housing Assembly	Part Numbers			
				Lock Housing	Upper Receptacle	Middle Receptacle	Lower Receptacle
30	–	Natural (White)	1939331-1	–	–	–	–
18			–	1903984-1	1903985-1	1903988-4	1903991-4
12			–	1903994-1	–	1903995-1	1903998-1

### 60 Position Screw Mount Type

#### Technical Features

##### No. of Positions:

60 Positions

##### Housing Material

##### Tab Housing:

SPS-GF

##### Tab Contact Finish:

Post-tinned

##### Receptacle Housing:

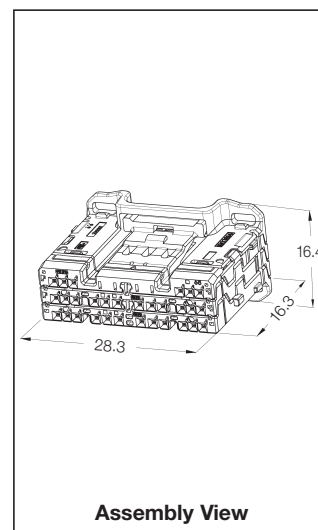
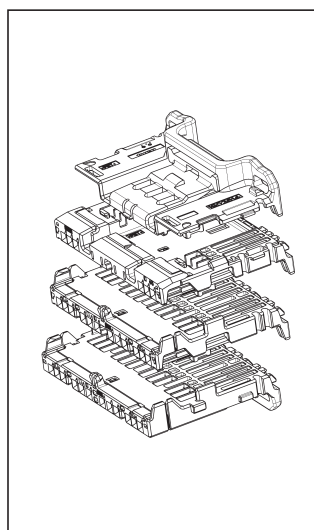
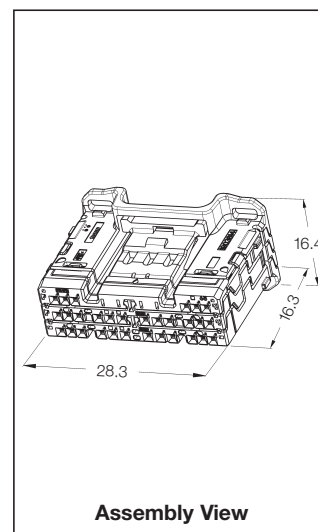
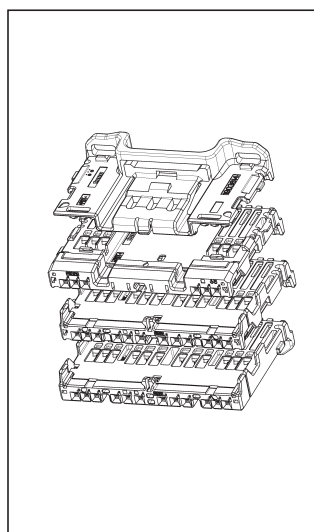
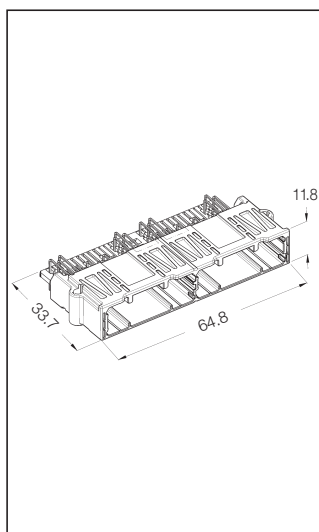
PBT

##### Product Specification:

108-78437

##### Application Specification:

411-78268



### 60 Position Screw Mount Type

No. of Positions	Keying Options	Housing Color	Tab Housing Assembly	Part Numbers			
				Lock Housing	Upper Receptacle	Middle Receptacle	Lower Receptacle
60	–	Natural (White)	1903695-2	–	–	–	–
30			–	1903614-1	1903615-3	1903608-6	1903611-4
30			–	1903614-2*	1903615-4	1-1903608-0	2-1903611-6

\*) Housing Color: Black

### 16 Position Surface Mount Type

#### Technical Features

##### No. of Positions:

16 Positions

##### Housing Material

##### Tab Housing:

LCP-GF

##### Tab Contact Finish:

Post-tinned

##### Receptacle Housing:

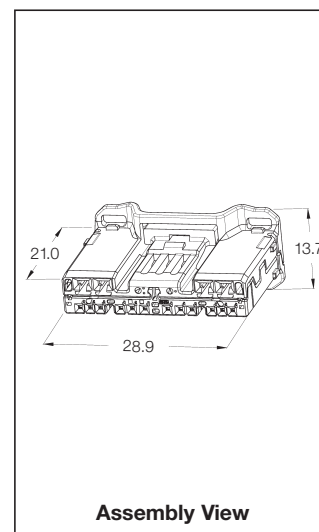
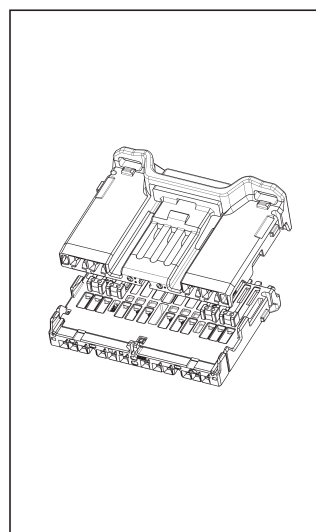
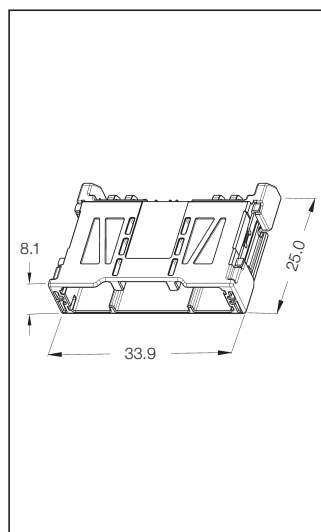
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##### Product Specification:

108-78438

##### Application Specification:

411-78199



### 16 Position Surface Mount Type

No. of Positions	Keying Options	Housing Color	Tab Housing Assembly	Part Numbers			
				Lock Housing	Upper Receptacle	Middle Receptacle	Lower Receptacle
16	–	Natural (White)	1939082-2	1903607-1	–	–	1903611-1

**Note:** 12 cavities are for 0.50 receptacle contacts and 4 cavities are for 1.5 receptacle contacts.

### 38 Position Board Lock Type

#### Technical Features

##### No. of Positions:

38 Positions

##### Housing Material

##### Tab Housing:

PBT-GF

##### Tab Contact Finish:

Post-tinned

##### Receptacle Housing:

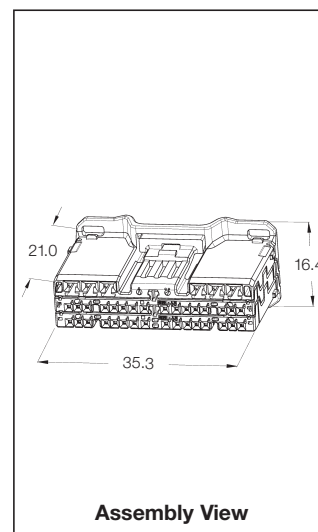
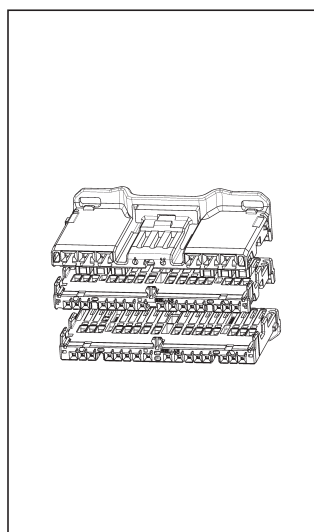
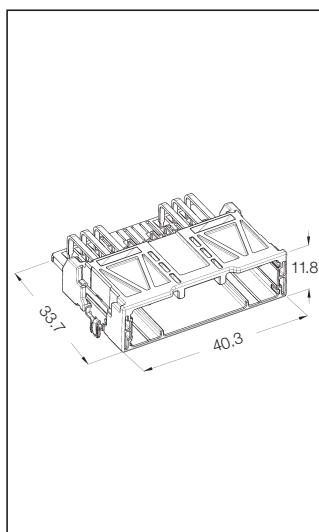
PBT

##### Product Specification:

108-78437

##### Application Specification:

411-78268



### 38 Position Board Lock Type

No. of Positions	Keying Options	Housing Color	Tab Housing Assembly	Part Numbers			
				Lock Housing	Upper Receptacle	Middle Receptacle	Lower Receptacle
38	–	Natural (White)	1903876-1	1903882-1	–	1903883-1	1903886-4

**Note:** 32 cavities are for 0.50 receptacle contacts and 6 cavities are for 1.5 receptacle contacts.



### 58 Position Board Lock Type

#### Technical Features

##### No. of Positions:

58 Positions

##### Housing Material

##### Tab Housing:

PBT-GF

##### Tab Contact Finish:

Post-tinned

##### Receptacle Housing:

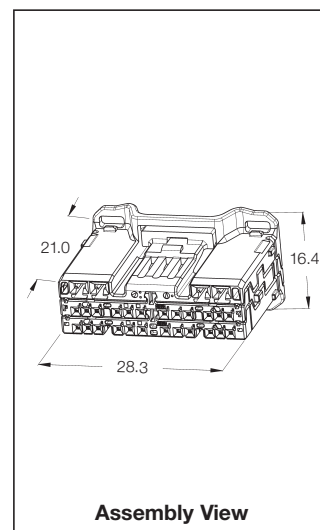
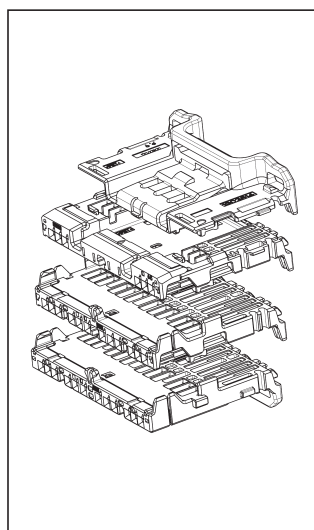
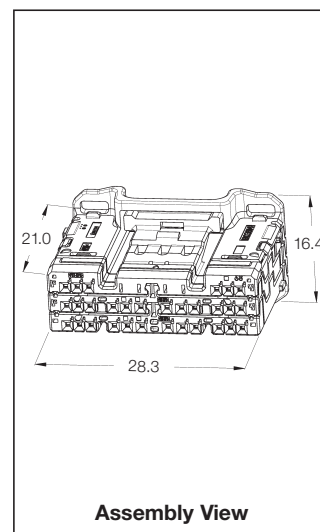
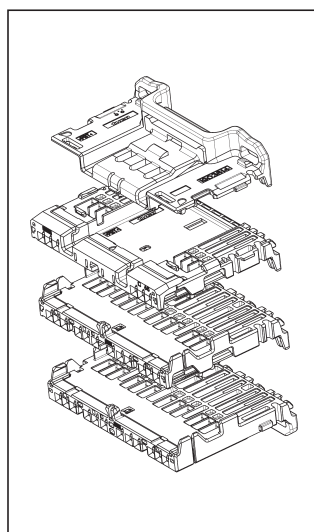
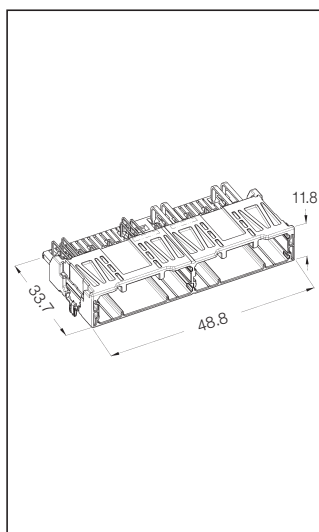
PBT

##### Product Specification:

108-78437

##### Application Specification:

411-78268



### 58 Position Screw Mount Type

No. of Positions	Keying Options	Housing Color	Tab Housing Assembly	Part Numbers			
				Lock Housing	Upper Receptacle	Middle Receptacle	Lower Receptacle
58	–	Natural (White)	1903166-1	–	–	–	–
30			–	1903614-1	1903615-1	1903608-4	1903611-6
28			–	1903607-4*	–	1903608-8	1-1903611-0

\*) Housing Color: Black

**Note:** Only the 0.50 receptacle contacts goes into 30 positions receptacle.

As to 28 positions, 24 cavities are for 0.50 receptacle contacts and 4 cavities are for 1.5 receptacle contacts.

### 76 Position Screw Mount Type

#### Technical Features

##### No. of Positions:

76 Positions

##### Housing Material

Tab Housing:

SPS-GF

##### Tab Contact Finish:

Post-tinned

##### Receptacle Housing:

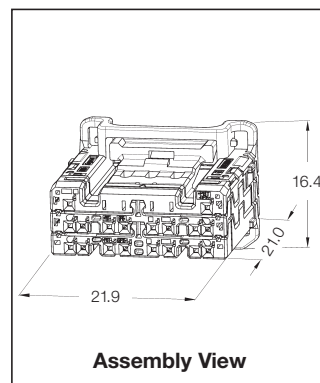
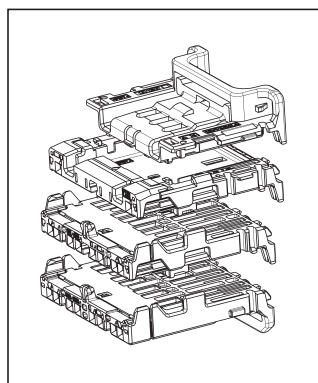
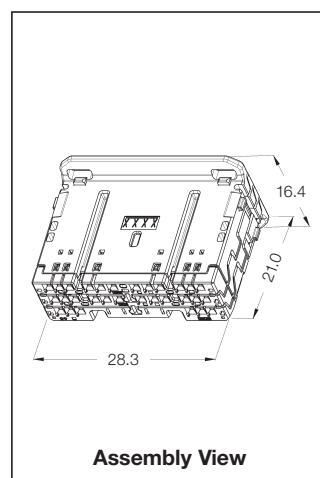
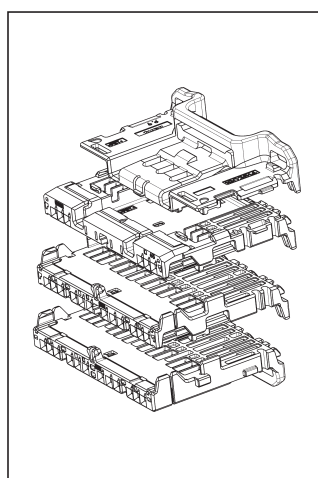
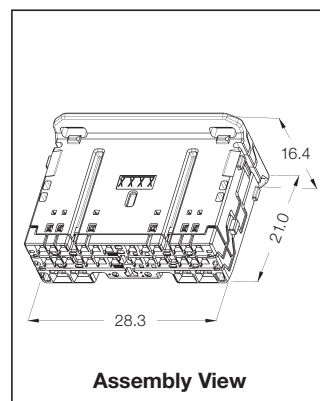
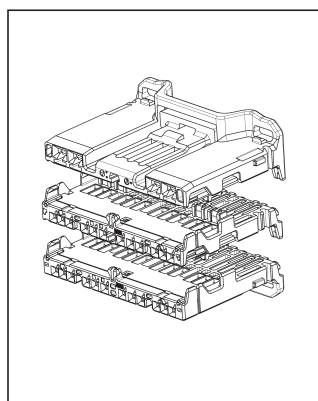
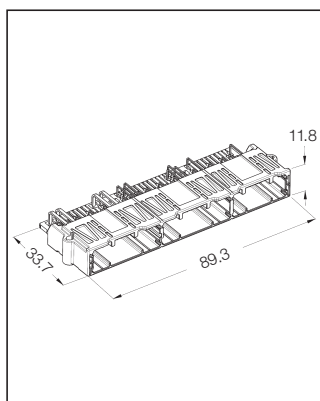
PBT

##### Product Specification:

108-78437

##### Application Specification:

411-78268



### 76 Position Screw Mount Type

No. of Positions	Keying Options	Housing Color	Tab Housing Assembly	Part Numbers			
				Lock Housing	Upper Receptacle	Middle Receptacle	Lower Receptacle
76	–	Natural (White)	1903965-1	–	–	–	–
28			–	1903607-1	–	1903608-3	1903611-4
30			–	1903614-1	1903615-1	1903608-4	1903611-5
18			–	1903984-1	1903985-1	1903988-4	1903991-4

**Note:** Only the 0.50 receptacle contacts goes into 30 positions and 18 positions receptacle.

As to 28 positions, 24 cavities are for 0.50 receptacle contacts and 4 cavities are for 1.5 receptacle contacts.