

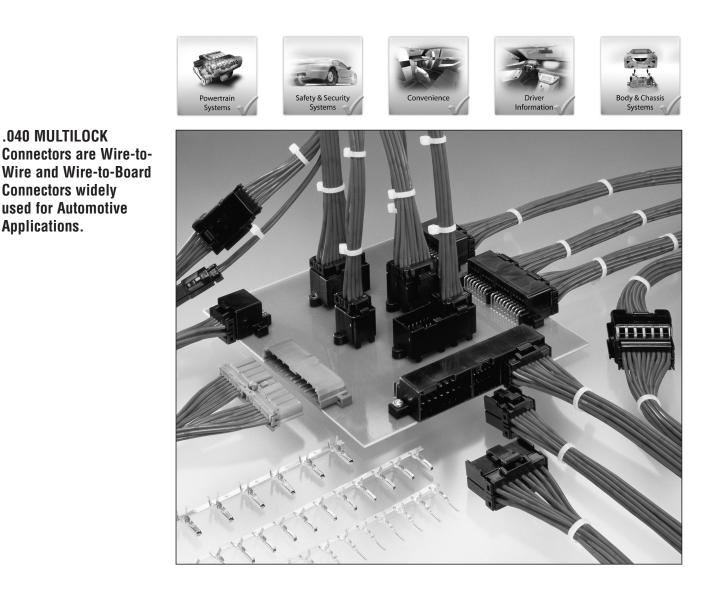
.040 MULTILOCK

**Connectors widely** used for Automotive

Applications.

# **MULTILOCK Connector System** .040 MULTILOCK Connectors

Introduction



#### **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

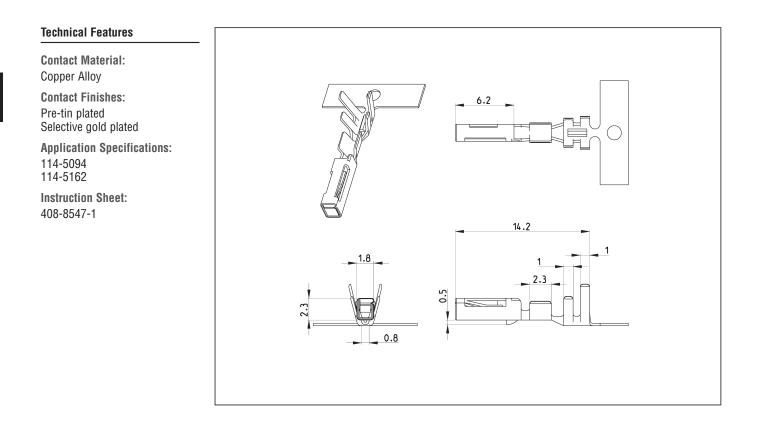
Available No. of Positions for

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)

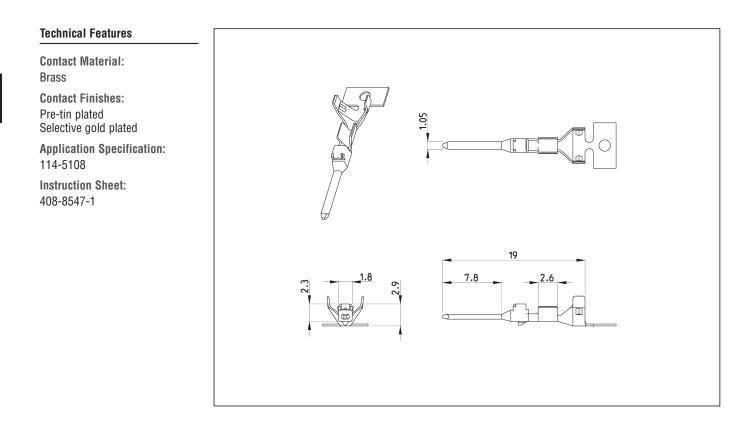


Wire Siz	e Range	Wire Insulation	Finish	Part Numbers		
(mm²)	(AWG)	Diameter (mm)	Finish	Strip Form	Loose-Piece	Hand Tool
		1.1–1.6	Copper Alloy, pre-tinned	175180-1	-	
0.0.0.5	22-20*	1.1-1.0	Copper Alloy, selective gold	175180-2	-	_
0.3–0.5 22–20*	22-20*	10.00	Copper Alloy, pre-tinned	173681-1	175062-1	01577.1
	1.8–2.0	Copper Alloy, selective gold	173681-2	175062-2	91577-1	

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



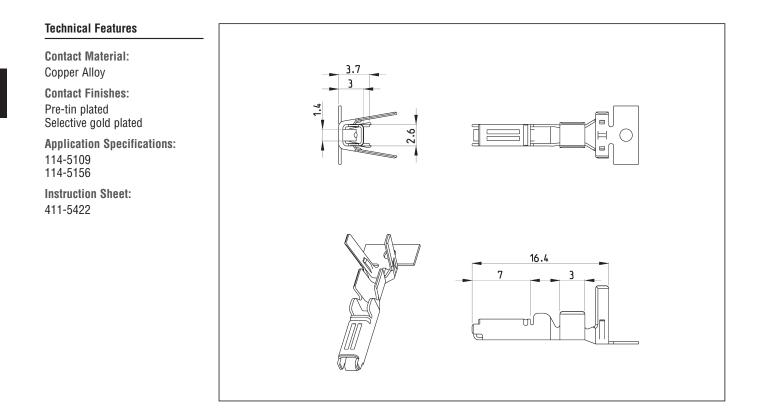
## Tab Contacts (for Cap Housing) Wire-to-Wire



Wire Siz	e Range	Wire Insulation	Finish	Part Numbers		
(mm²)	(AWG)	Diameter (mm)	Finish	Strip Form	Loose-Piece	Hand Tool
0.0.05 00.00	0.3–0.5	Pre-tin plated	173682-1	175063-1	91577-1	
0.3–0.5 22–20		0.3-0.5	Selective gold plated	2098032-3	175063-1	91377-1



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



Wire Size	Range	Wire Insulation	Finish	Part Numbers		
(mm²)	(AWG)	Diameter (mm)	FINISN	Strip Form	Loose-Piece	Hand Tool
05.20	0.5.0.0		Copper Alloy, pre-tinned	173708-1	175081-1	911771-1
0.5-2.0	0.5–2.0 20–14	2.2–2.9	Copper Alloy, selective gold	173708-2	175081-2	911771-1
0.50-1.25	20–16	1.3–2.1	Copper Alloy, pre-tinned	175221-1	-	



# 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)

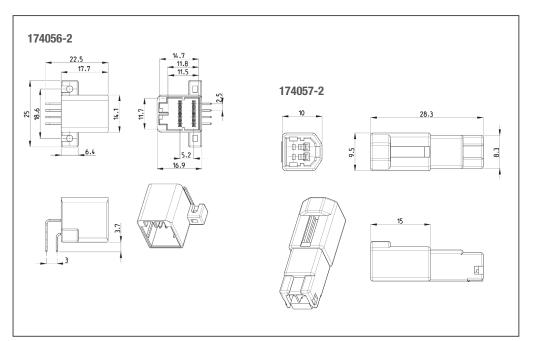
**Raw Material:** 

 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:

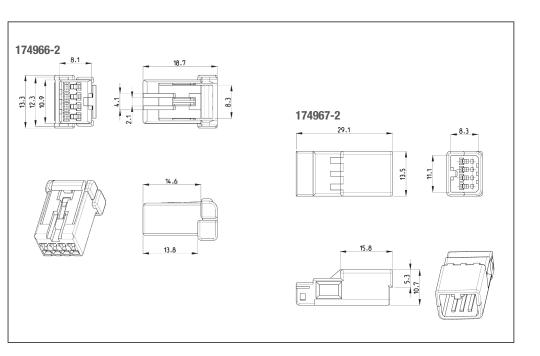
 Housing Cap: PBT Plug: PBT

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			



# 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)

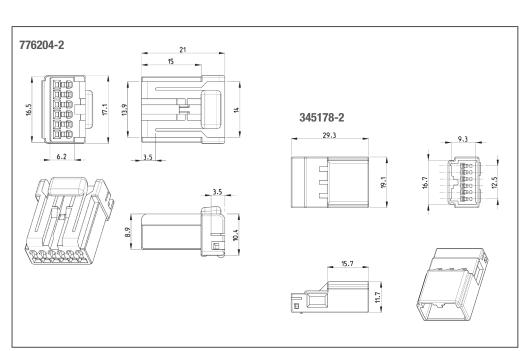
**Raw Material:** 

 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:

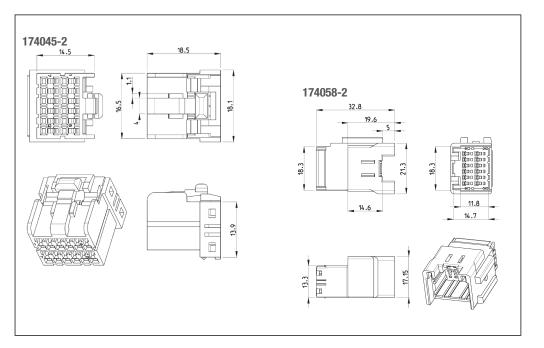
 Housing Cap: PBT Plug: PBT

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			



# 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)

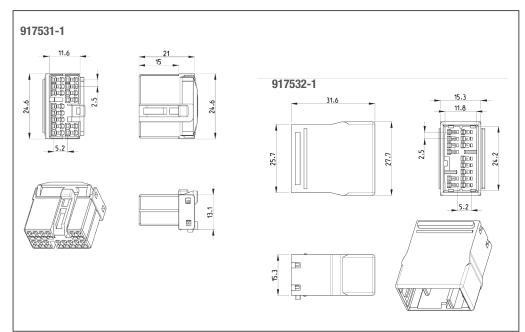
**Raw Material:** 

 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:

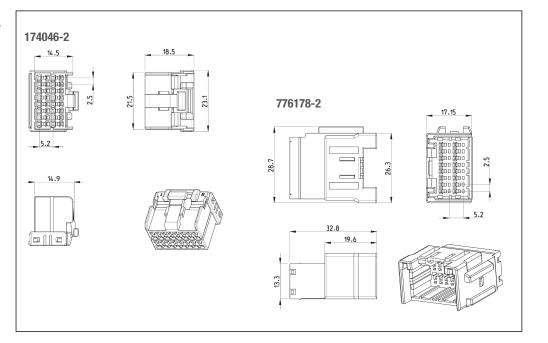
 Housing Cap: PBT Plug: PBT

**Product Specification:** 108-5352

Application Specifications:

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

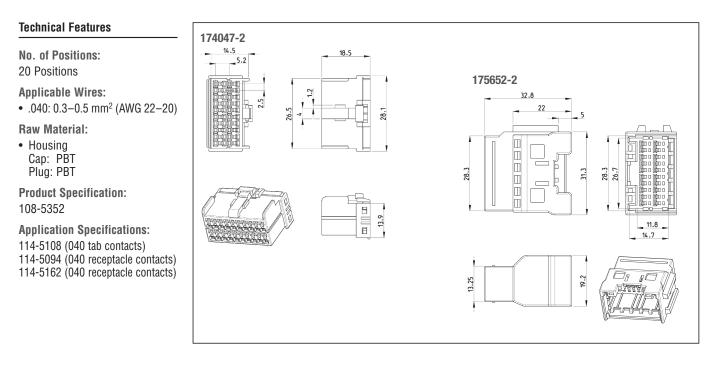
114-5162 (040 receptacle contacts)



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			



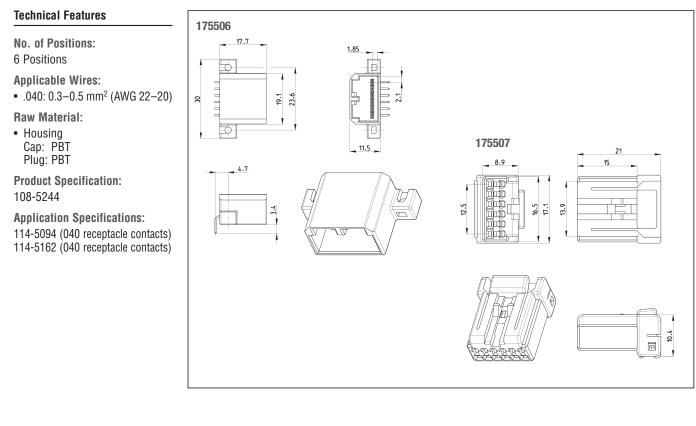
# Wire-to-Wire Applications



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			



# Wire-to-Board Applications



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



# Wire-to-Board Applications

#### **Technical Features**

No. of Positions: 8 Positions

Applicable Wires:

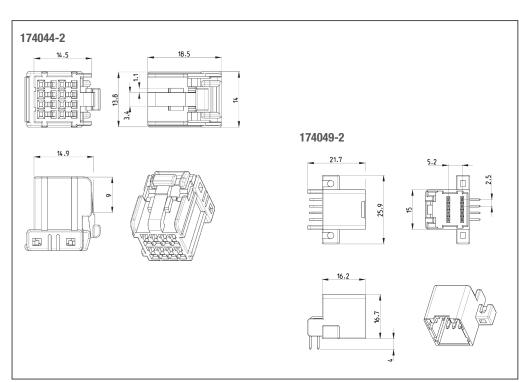
• .040: 0.3–0.5 mm<sup>2</sup> (AWG 22–20)

**Raw Material:** 

 Housing Cap: PBT Plug: PBT

**Product Specification:** 108-5244

Application Specifications: 114-5094 (040 receptacle contacts) 114-5162 (040 receptacle contacts)



#### **Technical Features**

No. of Positions: 12 Positions

Applicable Wires:

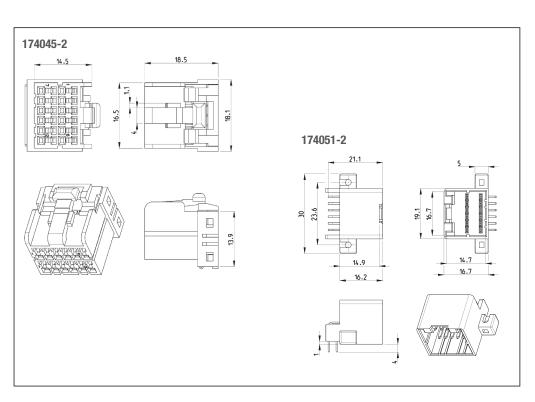
.040: 0.3–0.5 mm<sup>2</sup> (AWG 22–20)

Raw Material: • Housing

Cap: PBT Plug: PBT

Product Specification: 108-5244

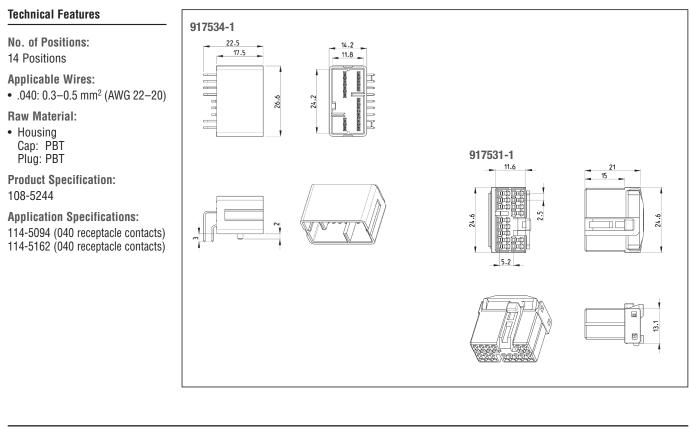
Application Specifications: 114-5094 (040 receptacle contacts) 114-5162 (040 receptacle contacts)



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	



# Wire-to-Board Applications



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



# Wire-to-Board Applications

#### **Technical Features**

No. of Positions: 16 Positions

10 1 03110113

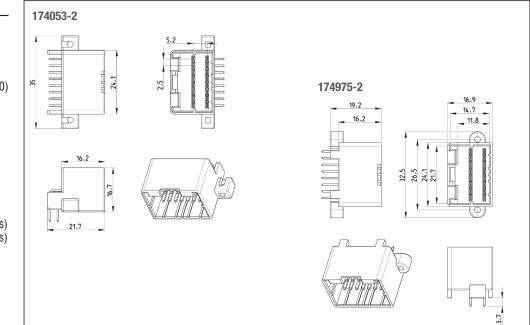
Applicable Wires: • .040: 0.3-0.5 mm<sup>2</sup> (AWG 22-20)

**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

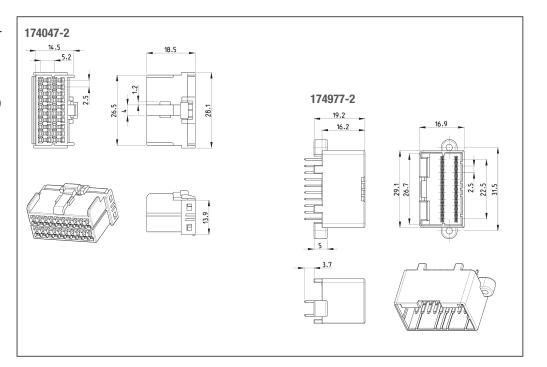
Applicable Wires: • .040: 0.3-0.5 mm<sup>2</sup> (AWG 22-20)

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 (single row)	174062-5 (single row)		
20	Board	174047-2	174055-2	174977-2	



# Wire-to-Board Applications

#### **Technical Features**

No. of Positions: 28 Positions

Applicable Wires:

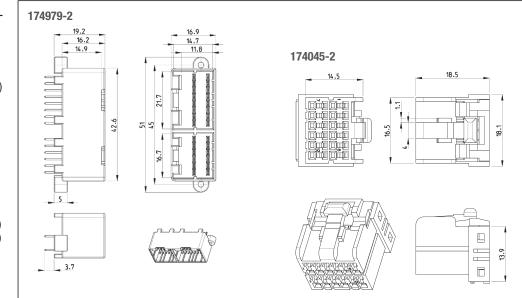
• .040: 0.3–0.5 mm<sup>2</sup> (AWG 22–20)

**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:

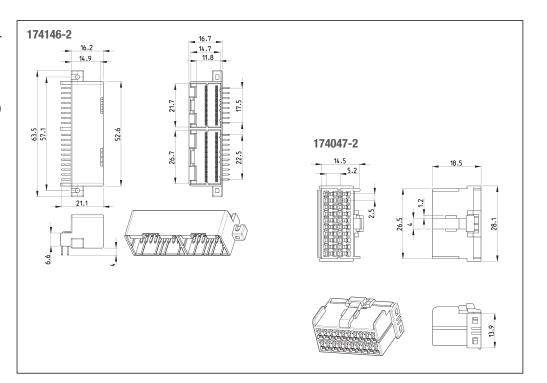
.040: 0.3–0.5 mm<sup>2</sup> (AWG 22–20)

**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 16P: 174046-2
36	Board	174146-2		20P: 174047-2 16P: 174046-2
36	Board	178460-1		20P: 174047-2 16P: 174147-2



# Wire-to-Board Applications

#### **Technical Features**

No. of Positions: 48 Positions

Applicable Wires:

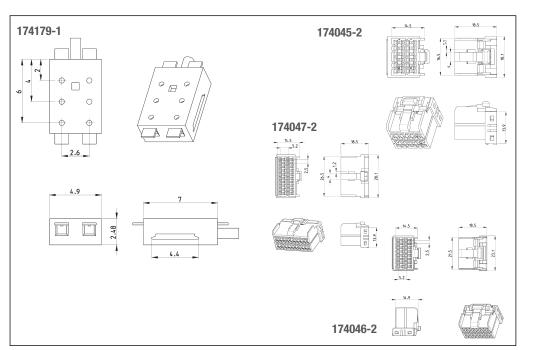
• .040: 0.3–0.5 mm<sup>2</sup> (AWG 22–20)

**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:

60 Positions

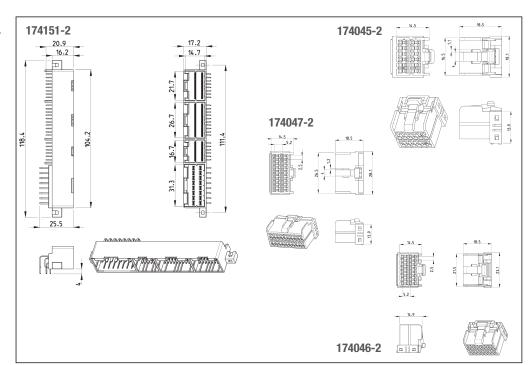
- Applicable Wires:
- .040: 0.3–0.5 mm<sup>2</sup> (AWG 22–20)

**Raw Material:** 

 Housing Cap: PBT Plug: PBT

**Product Specification:** 108-5244

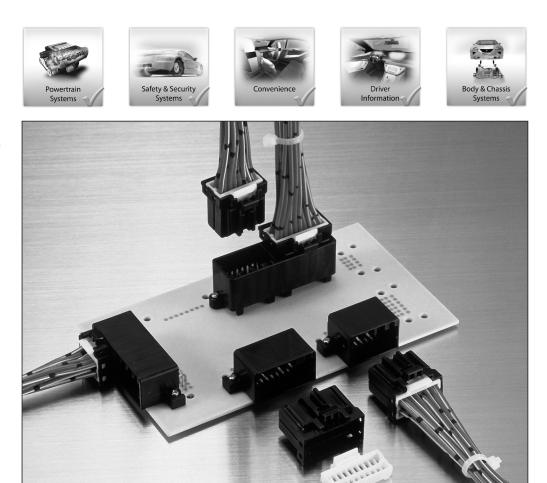
Application Specifications: 114-5094 (040 receptacle contacts) 114-5162 (040 receptacle contacts)



No. of Positions	Terminate To	Cap Housing Horizontal Mount	Cap Housing Vertical Mount	Mating Plug
48	Board	174179-1		12P: 174045-2 16P: 174147-2 20P: 174047-2
64	Board	3-174151-2		12P: 174045-2 16P: 174147-2 20P: 174047-2 16P: 174046-2



Introduction



.040 MULTILOCK Connectors (Mark II) are small yet durable and easy to hande 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 Receptace Contact) 114-5108 (.040 Tab Contact)

**Product Specification:** 108-5281

Instruction Sheet: 412-5475

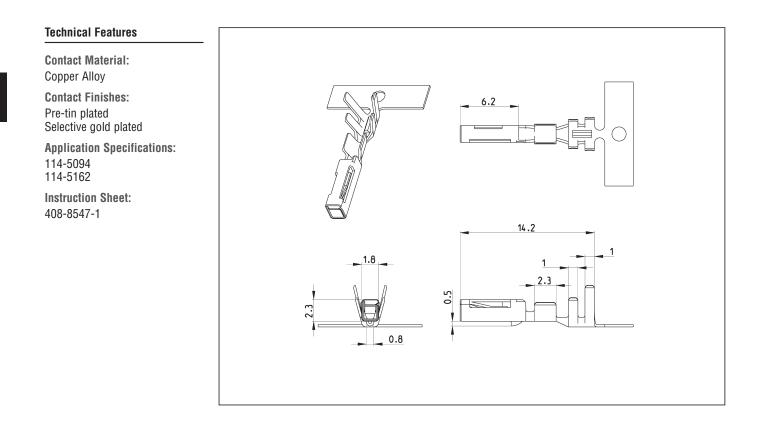
Available Positions for

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

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



# Receptacle Contacts (for Plug Housing)

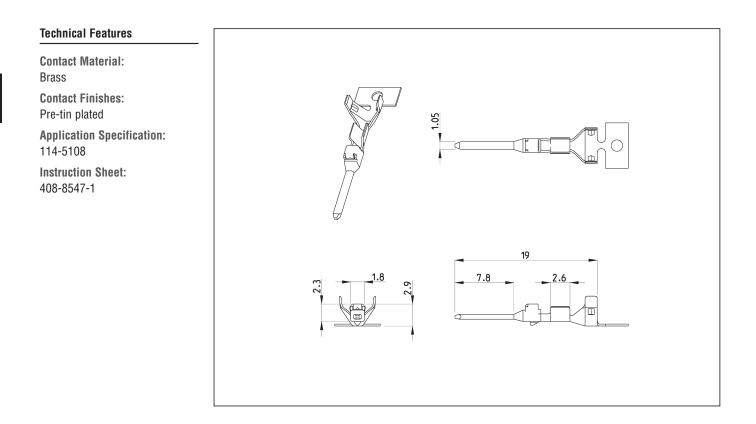


Wire Siz	e Range	Wire Insulation	<b>Finite</b>	Part Numbers		
(mm²)	(AWG)	Diameter (mm)	Finish	Strip Form	Loose-Piece	Hand Tool
		1.1-1.6	Pre-tin plated	175180-1	-	_
0.0.0.5	00.00	1.1-1.0	Selective gold plated	175180-2	-	
0.3–0.5 22–20	10.00	Pre-tin plated	173681-1	175062-1	91577-1	
	1.8–2.0	Selective gold plated	173681-2	175062-2		

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



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



Wire Siz	e Range	Wire Insulation	<b>F</b> inish	Part Numbers		
(mm²)	(AWG)	Diameter (mm)	Finish	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	
	1.0-2.0	Selective gold plated	2098032-3 –	91577-1		



#### **Technical Features**

No. of Positions: 8 Positions

Applicable Wires:

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

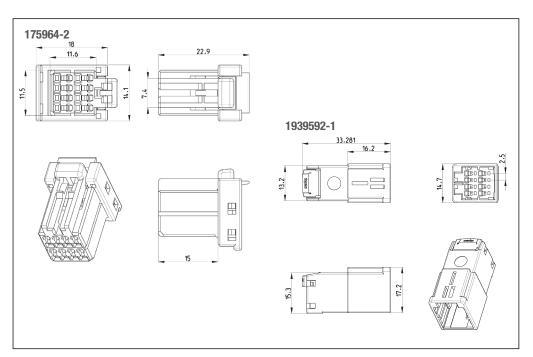
**Raw Material:** 

 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:

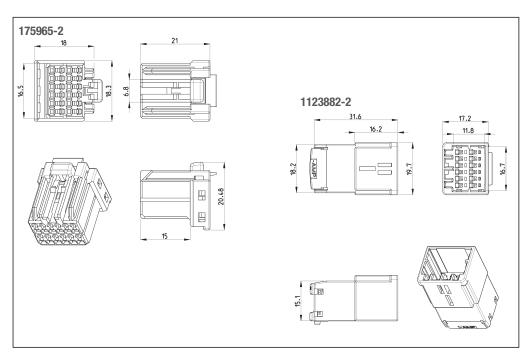
- .040: 0.3–0.5 mm<sup>2</sup> (AWG 22–20)
- Raw Material:

 Housing Cap: PBT Plug: PBT

**Product Specification:** 108-5471

Application Specifications: 114-5108 (040 tab contacts) 114-5094 (040 receptacle contacts)

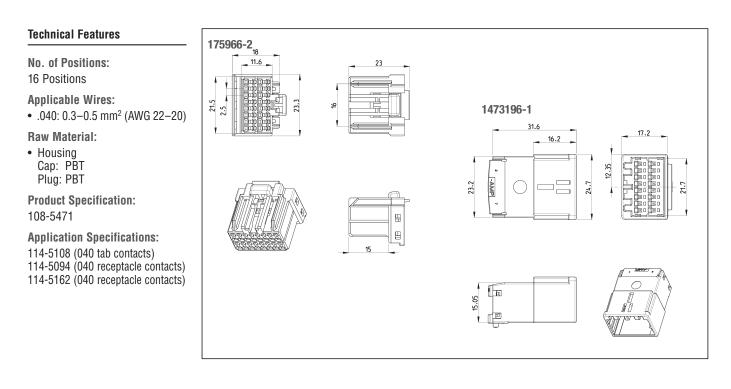
114-5162 (040 receptacle contacts)



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			



## Wire-to-Wire Applications



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			



## 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)



No. of Positions: 12 Positions

Applicable Wires:

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

**Raw Material:** 

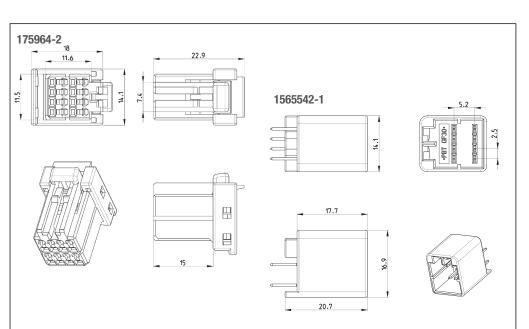
 Housing Cap: PBT Plug: PBT

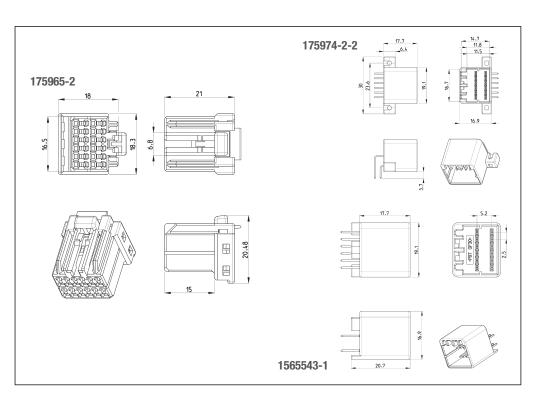
**Product Specification:** 108-5471

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	



# 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)



No. of Positions: 20 Positions

**Applicable Wires:** 

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

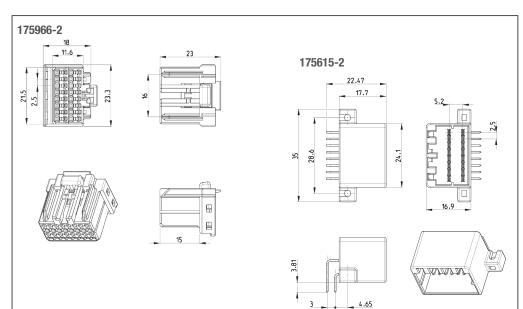
**Raw Material:** 

 Housing Cap: PBT Plug: PBT

**Product Specification:** 108-5281

**Application Specifications:** 

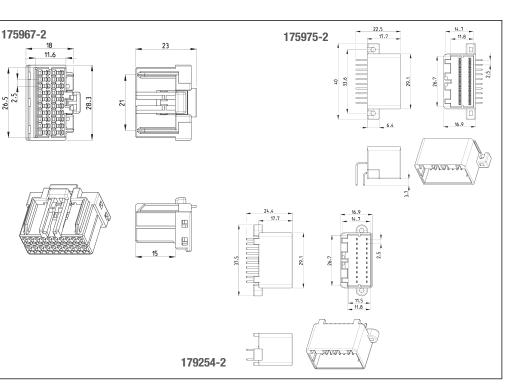
114-5108 (040 tab contacts) 114-5094 (040 receptacle contacts) 114-5162 (040 receptacle contacts)







26.5 2.5



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	



# Wire-to-Board Applications



No. of Positions: 28 Positions

Applicable Wires:

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

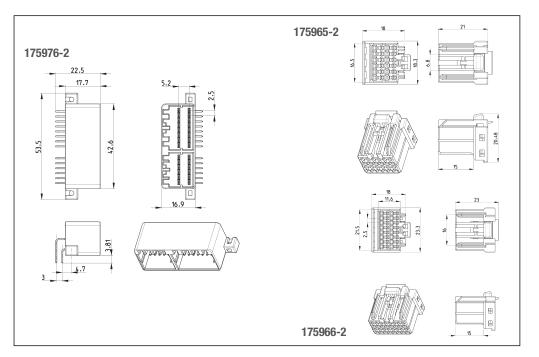
**Raw Material:** 

 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)

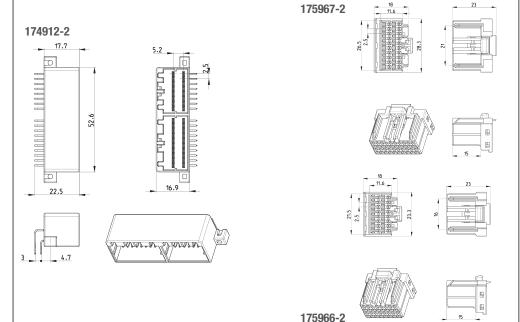
Raw Material:

 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)



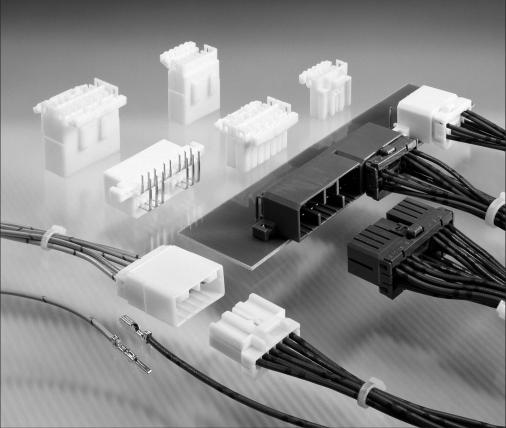
No. of Positions	Terminate To	Plug Assembly	Cap Housing	Cap Housing Horizontal Mount	Cap Housing Vertical Mount	Mating Plug
28	Board			175976-2		12P: 175965-2 16P: 175966-2
36	Board			174912-2	175977-2	20P: 175967-2 16P: 175966-2



# Introduction



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



#### Features

- Wire-to-wire and wire-toboard connectors are available.
- The Mark I plug connectors are provided with doublelock 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):

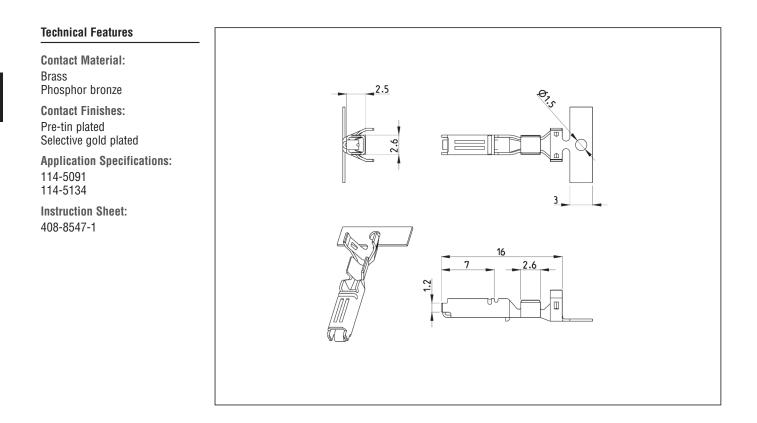
3, 6, 8, 12, 14, 20, 30 Positions (Horizontal Mount Type):

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)



Wire Size	Range	Wire Insulation		Part Numbers					
		Diameter	Material	s	Strip Form		ose-Piece	Hand	
(mm²) (AWG)	(mm)		Brass	Phosphor Bronze	Brass	Phosphor Bronze	Tool		
0.2–0.3 24–22	1.4-1.9 -	Pre-tinned	173630-1	173630-6	175026-1	175026-6	91580-1		
	1.4-1.9	Sel. gold	173630-2	173630-7	175026-2	175026-7	91580-1		
0.50 1.05	20–16		Pre-tinned	173631-1	173631-6	175027-1	175027-6	91573-1	
0.50–1.25	20-16	2.0–2.6 -	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					



Tab Contacts (for Cap Housing)

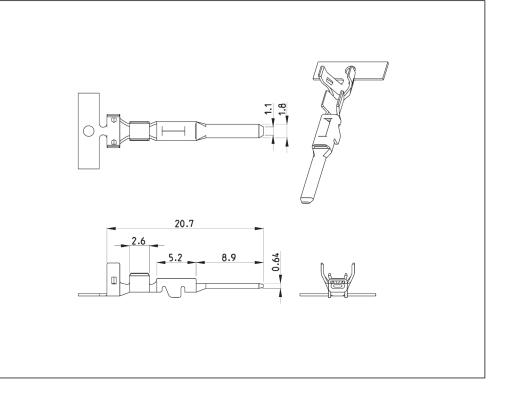
#### **Technical Features**

**Contact Material:** Brass Phosphor bronze

**Contact Finishes:** Pre-tin plated Selective gold plated

Application Specifications: 114-5092 114-5157

Instruction Sheet: 408-8547-1

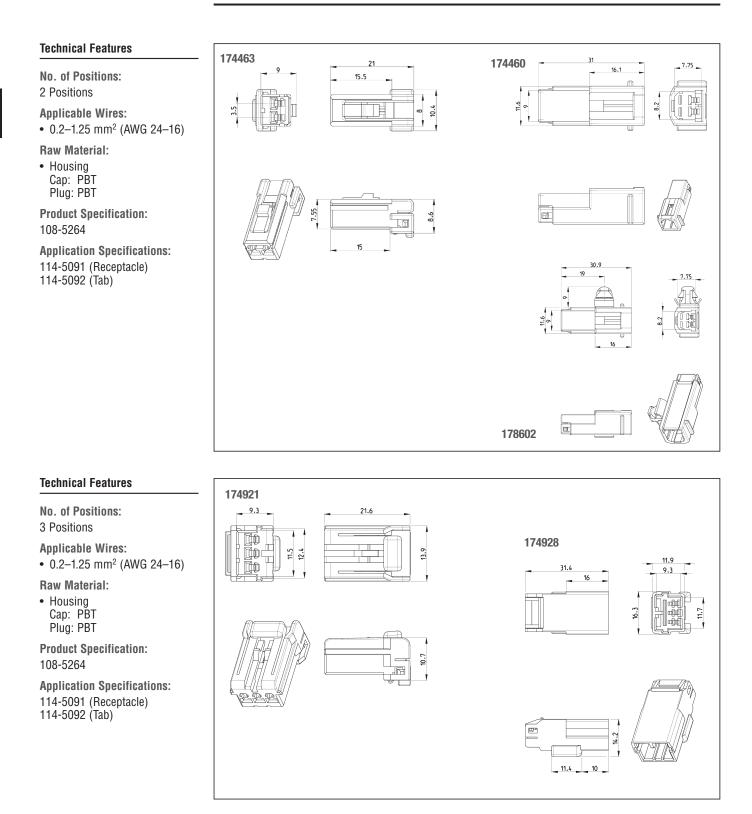


Wire Size	Range	Wire Insulation		Part Numbers					
		Diameter	Material and Finish	s	Strip Form		ose-Piece	Hand	
(mm²) (AWG)	(mm)		Brass	Phosphor Bronze	Brass	Phosphor Bronze	Tool		
0.2–0.3 24–22	1.4-1.9 -	Pre-tinned	173633-1	173633-2	175029-1	175029-2	91580-3		
	1.4-1.9	Sel. gold	_	173633-3	_	175029-3	91580-3		
0.50 1.05	20-16		Pre-tinned	173645-1	173645-2	175030-1	175030-2	91573-1	
0.50–1.25	20-16	2.0–2.6 -	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					



# MULTILOCK Connector System .070 MULTILOCK Connectors Mark I and Mark II

## Wire-to-Wire Applications



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 131844-1 (Panel Mount) 178602-1 (Panel Mount)			
3	Wire	174921-1	174928-1			



#### **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

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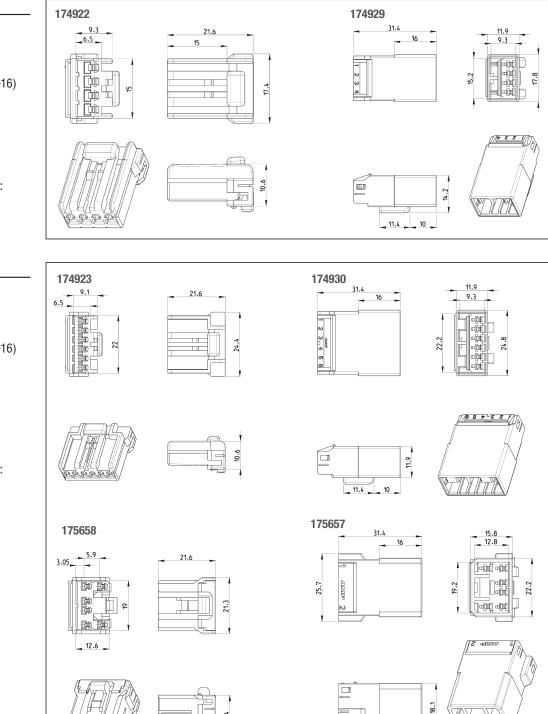
Applicable Wires: • 0.2–1.25 mm<sup>2</sup> (AWG 24–16)

Raw Material:

 Housing Cap: PBT Plug: PBT

**Product Specification:** 108-5264

Application Specifications: 114-5091 (Receptacle) 114-5092 (Tab)



11.4 10

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 175658-1	174930-1 175657-1			



#### **Technical Features**

No. of Positions: 8 Positions

Applicable Wires:

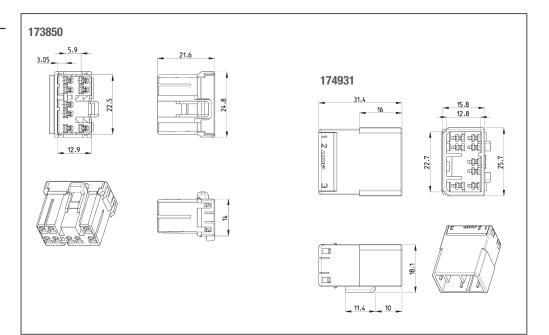
• 0.2-1.25 mm<sup>2</sup> (AWG 24-16)

Raw Material:

 Housing Cap: PBT Plug: PBT

**Product Specification:** 108-5264

Application Specifications: 114-5091 (Receptacle) 114-5092 (Tab)



#### **Technical Features**

No. of Positions: 10 Positions

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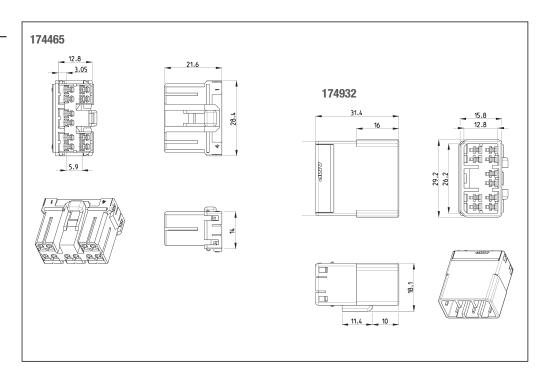
Applicable Wires: • 0.2–1.25 mm<sup>2</sup> (AWG 24–16)

**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
8	Wire	173850-1	174931-1 174937-1			
10	Wire	174465-1	174932-1			



#### **Technical Features**

No. of Positions: 12 Positions

Applicable Wires:

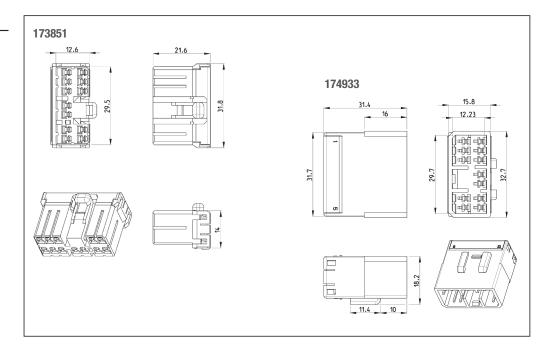
• 0.2-1.25 mm<sup>2</sup> (AWG 24-16)

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

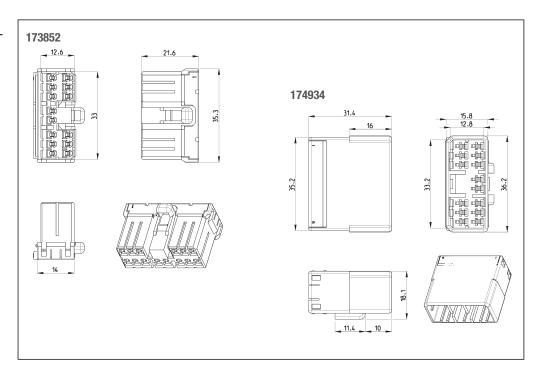
Applicable Wires: • 0.2–1.25 mm<sup>2</sup> (AWG 24–16)

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			



#### **Technical Features**

No. of Positions: 18 Positions

Applicable Wires:

• 0.2-1.25 mm<sup>2</sup> (AWG 24-16)

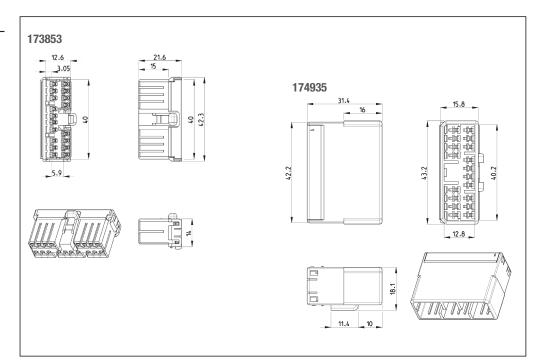
**Raw Material:** 

 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:

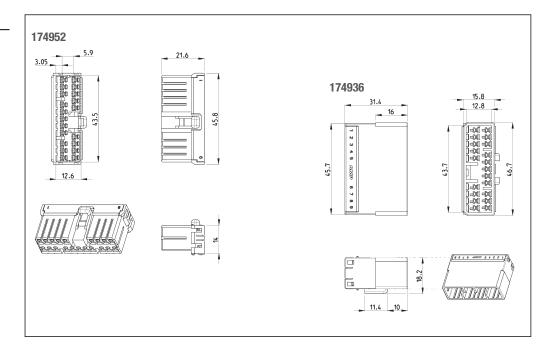
• 0.2-1.25 mm<sup>2</sup> (AWG 24-16)

**Raw Material:** 

 Housing Cap: PBT Plug: PBT

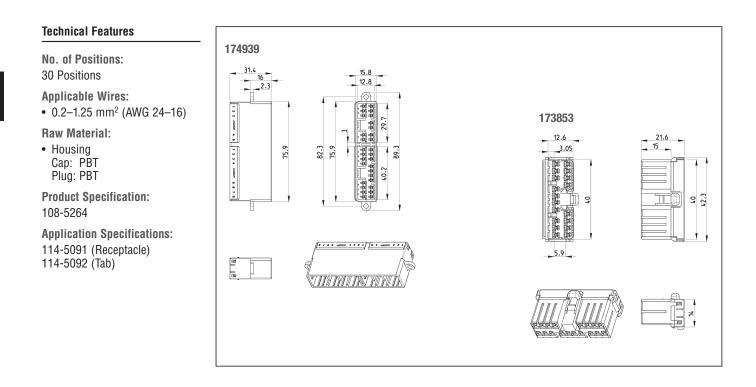
**Product Specification:** 108-5264

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 174938-1 (Panel Mount)			





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 173851-1



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## Wire-to-Board Applications

174921

9.3

#### **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:

**Applicable Wires:** 

**Product Specification:** 

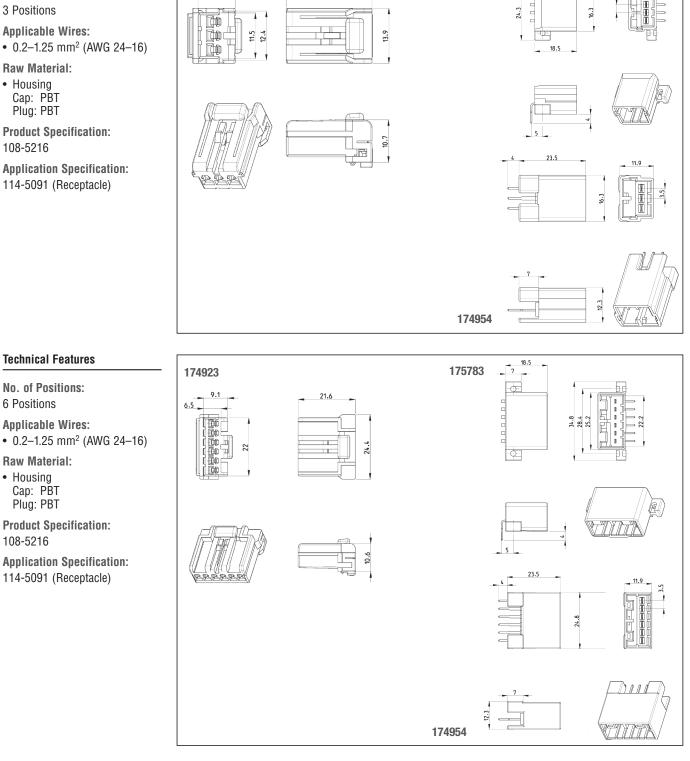
114-5091 (Receptacle)

**Application Specification:** 

**Raw Material:** • Housing Cap: PBT Plug: PBT

108-5216

6 Positions



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	



Wire-to-Board Applications

#### **Technical Features**

No. of Positions: 8 Positions

Applicable Wires:

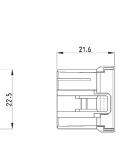
• 0.2-1.25 mm<sup>2</sup> (AWG 24-16)

**Raw Material:** 

 Housing Cap: PBT Plug: PBT

**Product Specification:** 108-5216

Application Specification: 114-5091 (Receptacle)



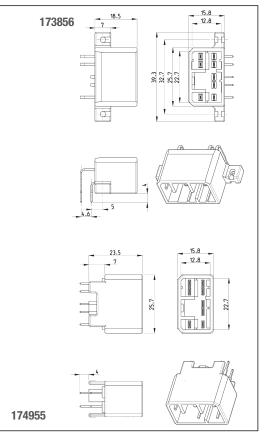
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173850

3.05





#### **Technical Features**

No. of Positions: 10 Positions

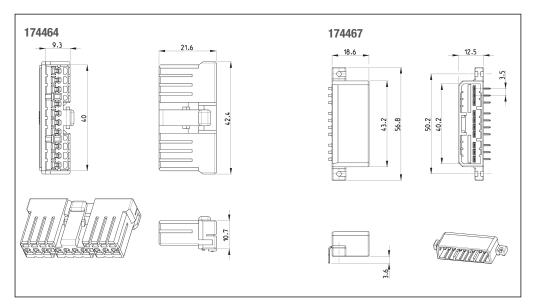
Applicable Wires: • 0.2–1.25 mm<sup>2</sup> (AWG 24–16)

**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 176113-1 Mark II		173856-1 179096-1 Flange cut	174955-1	
10	Board	174464-1 176115-1 Mark II		174467-1		



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173858

## Wire-to-Board Applications

173851



No. of Positions: 12 Positions

**Applicable Wires:** 

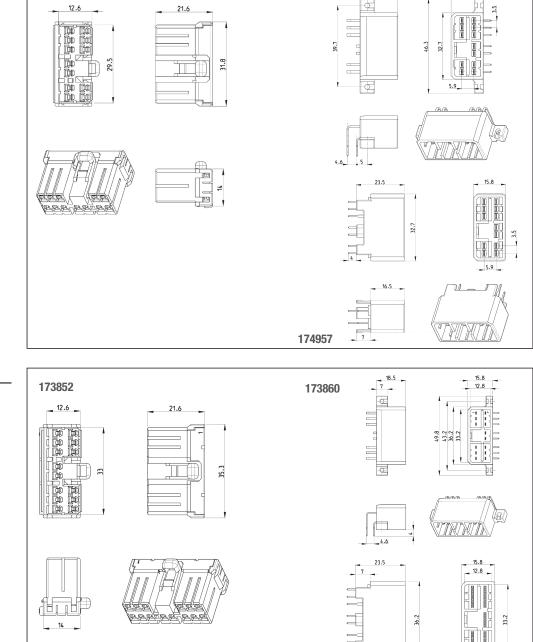
• 0.2-1.25 mm<sup>2</sup> (AWG 24-16)

**Raw Material:** 

• Housing Cap: PBT Plug: PBT

**Product Specification:** 108-5216

Application Specification: 114-5091 (Receptacle)



1-179019-1



No. of Positions:

14 Positions

**Applicable Wires:** 

• 0.2–1.25 mm<sup>2</sup> (AWG 24–16)

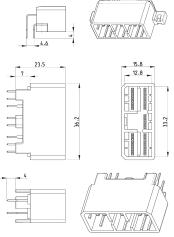
**Raw Material:** 

 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 176116-1 Mark II		173858-1	174957-1	
14	Board	173852-1 176117-1 Mark II		173860-1	1-179019-1	



# Wire-to-Board Applications

173853

#### **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:** 

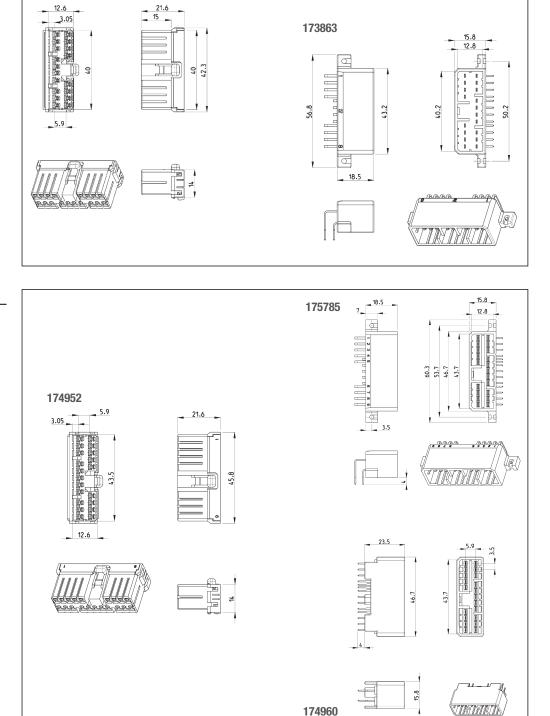
• 0.2-1.25 mm<sup>2</sup> (AWG 24-16)

**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 173118-1 Mark II		173862-1		
20	Board	174952-1 176119-1 Mark II		175785-1	174960-1	



# Wire-to-Board Applications

#### **Technical Features**

No. of Positions: 24 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: 30 Positions

Applicable Wires:

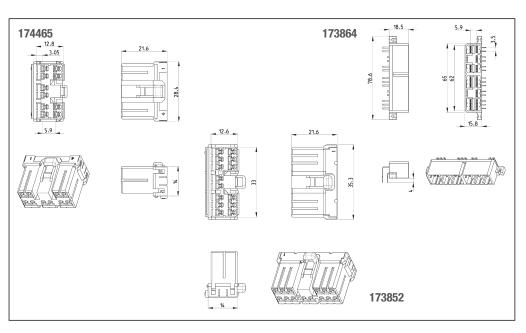
• 0.2–1.25 mm<sup>2</sup> (AWG 24–16)

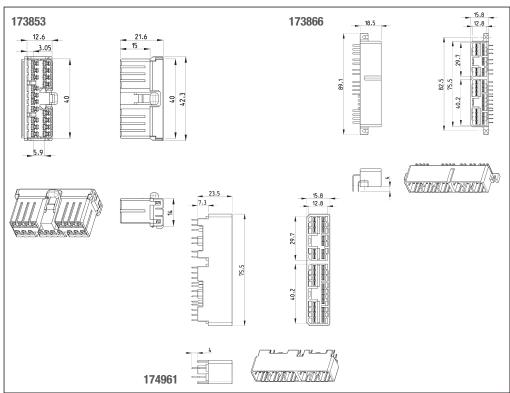
Raw Material: • Housing

Cap: PBT Plug: PBT

Product Specification: 108-5216

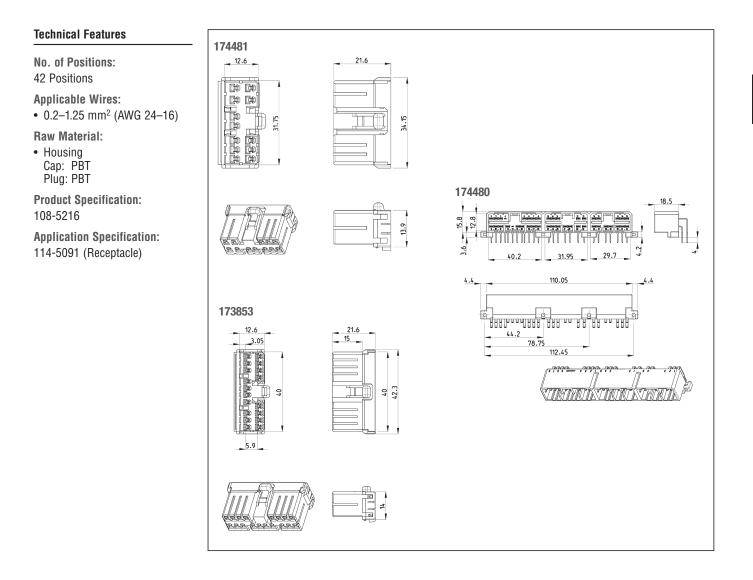
Application Specification: 114-5091 (Receptacle)





No. of Positions	Terminate To	Plug Assembly	Cap Housing	Cap Housing Horizontal Mount	Cap Housing Vertical Mount	Mating Plug
24	Board	174465-1 (10p) 173852-1 (14p) 176114-1 (10p) Mark II 176117-1 (14p) Mark II			173864-1	
30	Board	173851-1 (12p) 173853-1 (18) 176116-1 (12p) Mark II 176118-1 (18p) Mark II		173866-1 179098-1 Flange cut 174458-1	174961-1	





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



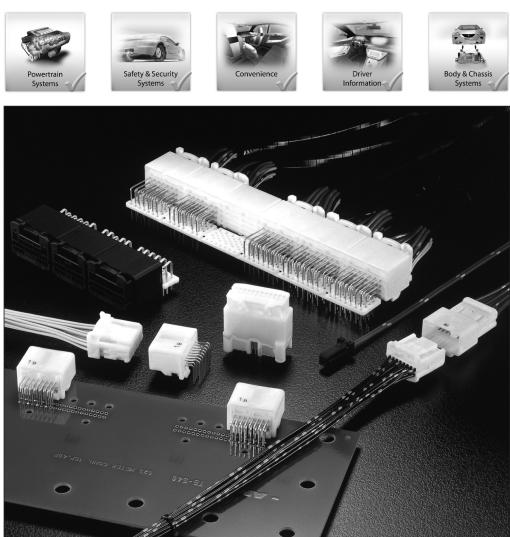
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# MULTILOCK Connector System .025 (0.64 mm) Series Connectors

Introduction



#### 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 halfmating 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.

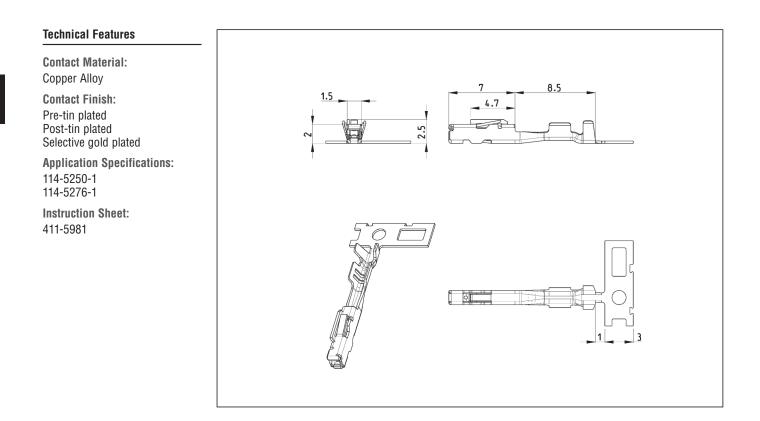
See the following pages for Application Specifications, Product Specification and Instruction Sheet.

Connectors are High-Density Connectors for Automotive Applications such as ECU and down sized Wire Harnesses.

.025 (0.64 mm) Series



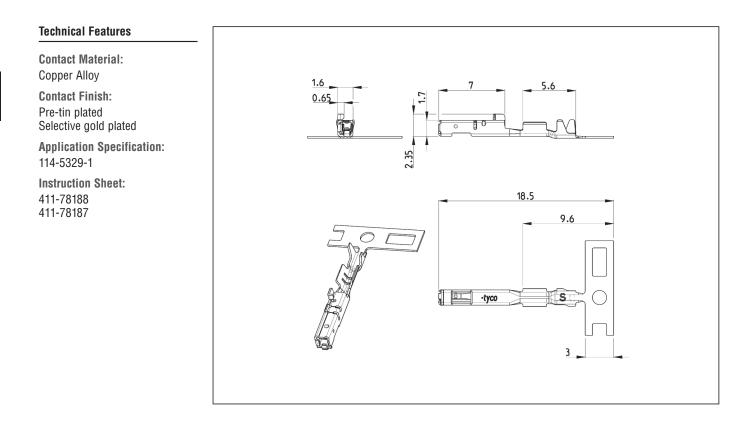
#### Receptacle Contacts (for Contact Lance)



Wire Size	e Range	Wire Insulation		Part N	umbers
(mm²)	(AWG)	Diameter (mm)	Material and Finish -	Strip Form	Loose-Piece
0.22-0.5		0.95-1.70	Copper Alloy, pre-tin plated	1123343-1	1318143-1
0.22-0.5		0.95-1.70	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	



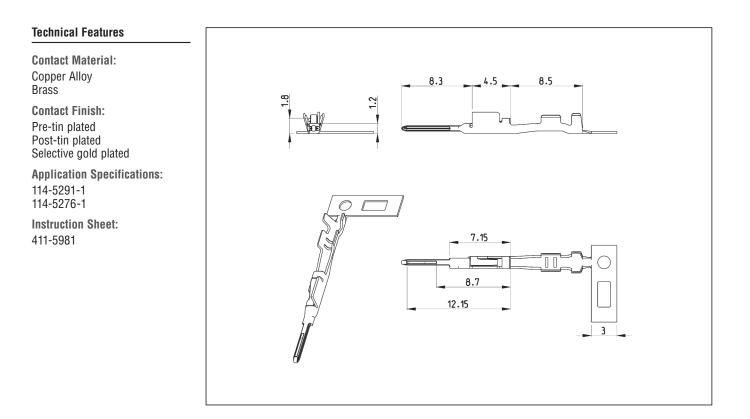
#### Receptacle Contacts (for Housing Lance)



Wire Size	e Range	Wire Insulation		Part Numbers		
(mm²)	(AWG)	Diameter (mm)	Material and Finish -	Strip Form	Loose-Piece	
0.13-0.22		0.81-1.05	Copper Alloy, pre-tin plated	1674936-1	1827805-1	
0.13-0.22		0.81-1.05	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	
0.35-0.50		1.00-1.70	Copper Alloy, selective gold plated	1674311-2	1827804-2	



### Receptacle Contacts (for Contact Lance)

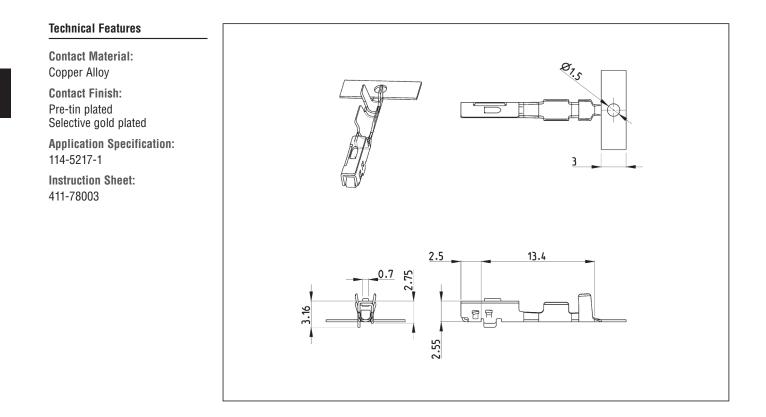


Wire Size	e Range	Wire Insulation	Material and Finish	Part Numbers		
(mm²)	(AWG)	Diameter (mm)	Material and Finish	Strip Form	Loose-Piece	
0.22-0.50		0.95-1.70	Brass, pre-tin plated	1376109-1	1376607-1	
0.22-0.50		0.95-1.70	Brass, selective gold plated	1376109-2	1376607-2	
0.08-0.14		1.1–1.4	Copper Alloy, post-tinned	1473818-1*		
0.22		0.8-1.2	Copper Alloy, post-tinned	1565406-1 <b>*</b>		

\*) IDC Terminal Version.

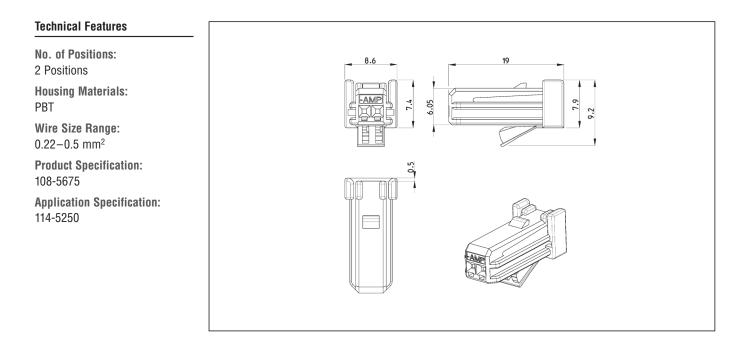


## .040 (1.0 mm) Receptacle Contacts (for some .025 Series and Hybrid Plugs)



Wire Siz	e Range	Wire Insulation	Metanial and Finish	Part N	umbers
(mm²)	(AWG)	Diameter (mm)	Material and Finish -	Strip Form	Loose-Piece
0.3–0.5		1.4–1.7	Copper Alloy, pre-tin plated	316836-1	1376700-1
0.3-0.5		1.4-1.7	Copper Alloy, selective gold plated	316837-2	1376701-2



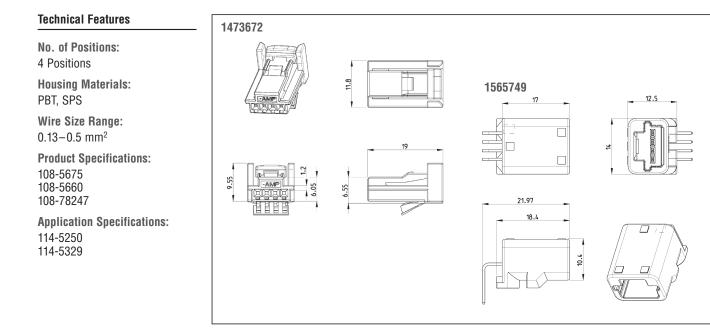


No. of Positions	Terminate To	Plug Assembly	Cap Housing	Cap Housing Horizontal Mount	Cap Housing Vertical Mount	Mating Plug
2	Board	1473143-1 1473143-2	N/A			

Note: All Part Numbers are RoHS and ELV compliant.

5-44





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> ) (sub plug for IDC contact) 1473801-1 <sup>1</sup> ) (lock housing for IDC contact) *) 1717248-1 <sup>1</sup> )	1473790-1			
4	Board	1318620-2 <b>²</b> )			1376515-1	
		1473672-1 <b>²</b> )		1565749-1 1-1565749-0		
4	Board	1473672-1 (key 1)		1565749-1 (key 1)		
		1473672-2 (key 2)		1565749-3 (key 2)		
4	Board	1746911-1 <b>3</b> )		1746909-1		

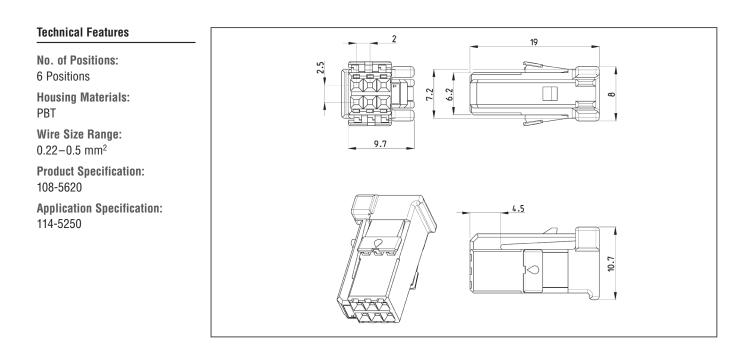
1) IDC Terminal Version

2) Contact Lance Version

3) Housing Lance Version

\*) IDC Contact Pre-loaded Sub Housing

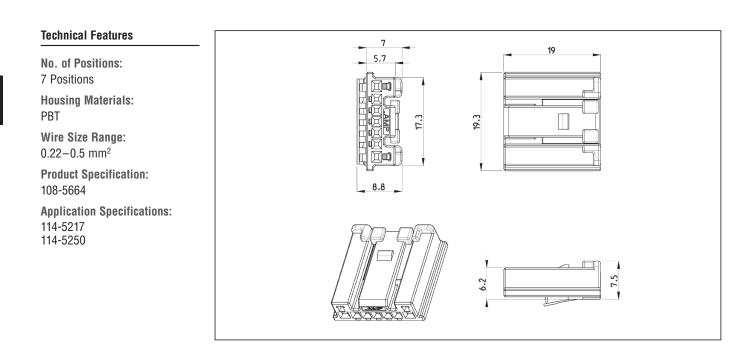




No. of Positions	Terminate To	Plug Assembly	Cap Housing	Cap Housing Horizontal Mount	Cap Housing Vertical Mount	Mating Plug
6	Wire	1318305-2 <b>²</b> )				

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





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

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



# MULTILOCK Connector System .025 (0.64 mm) Series Connectors

.025 (0.64) Series Connectors

#### **Technical Features**

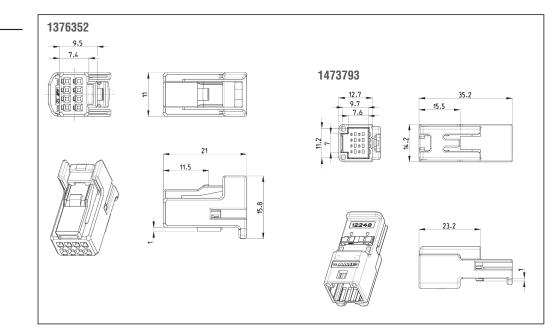
No. of Positions: 8 Positions

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> ) 1717103-1 <sup>3</sup> ) (sub plug for IDC contact) 1473800-1 <sup>1</sup> ) (lock housing for IDC contact) *) 1473802-1 <sup>1</sup> )	1473793-1			
8 (2 row)	Board	1376352-1 <sup>2</sup> ) 1717103-1 <sup>3</sup> ) (sub plug for IDC contact) 1473800-1 (lock housing for IDC contact) *) 1473802-1		1376350-2 1376350-9	1939403-1 (SMD)	
8 (1 row)	Board	1376368-1 <b>²</b> ) 1746875-1 <b>³</b> )		1376366-2 1376366-8 1747285-2		

1) IDC Terminal Version

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

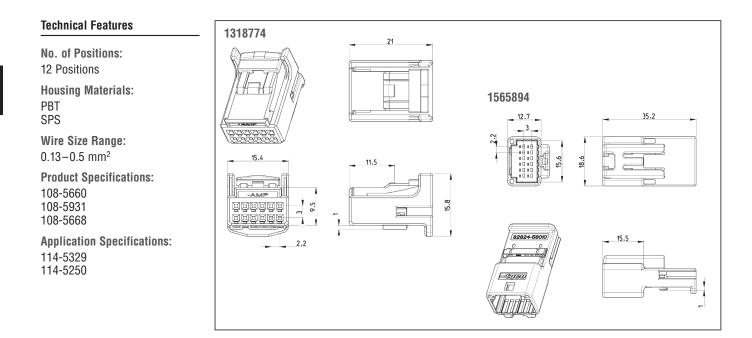
3) Housing Lance Version

\*) IDC Contact Pre-loaded Sub Housing



# MULTILOCK Connector System .025 (0.64 mm) Series Connectors

.025 (0.64) Series Connectors



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> ) 1376675-1 <sup>2</sup> ) (short body) 1717106-1 <sup>3</sup> ) 1746872-1 <sup>2</sup> ) (short body) 1473809-11) (sub plug for IDC contact) 1473810-1 <sup>1</sup> ) (lock housing for IDC contact) *) 1717591-1 <sup>1</sup> )	1565894-1			
12	Board	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) *) 1717591-1		1-1318772-3 1318772-2	1473898-4 1473898-1	

1) IDC Terminal Version

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

3) Housing Lance Version

\*) IDC Contact Pre-loaded Sub Housing



#### **Technical Features**

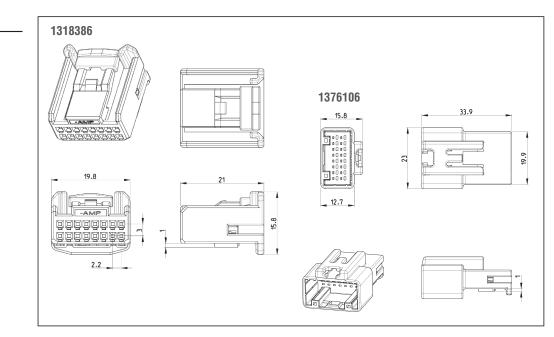
No. of Positions: 16 Positions

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> ) 1717109-1 <sup>3</sup> ) 1318692-1 (sub plug for IDC contact) 1318694-1 (lock housing for IDC contact) 1318690-1*)	1376106-1 1473203-1 1473796-1			
16	Board	1318386-1 <sup>2</sup> ) 1717109-1 <sup>3</sup> ) 1318692-1 (sub plug for IDC contact) 1318694-1*) (lock housing for IDC contact) 1318690-1	1612040-2 (SMD bottom entry)	1318382-2 1318382-3	1565476-1 1717396-2 (SMD)	

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

3) Housing Lance Version

\*) IDC Contact Pre-loaded Sub Housing



# MULTILOCK Connector System .025 (0.64 mm) Series Connectors

#### .025 (0.64) Series Connectors

#### **Technical Features**

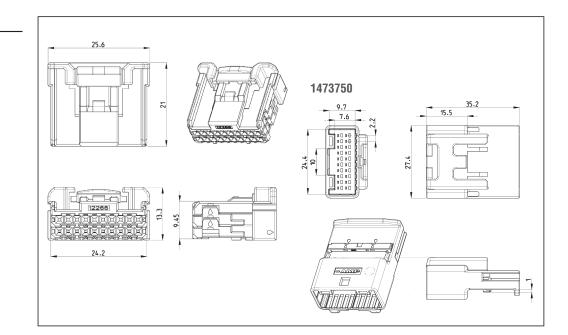
No. of Positions: 20 Positions

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 (sub plug for IDC contact) 1473808-1 (lock housing for IDC contact) 1717249-1*)	1473750-1			

\*) IDC Contact Pre-loaded Sub Housing



# MULTILOCK Connector System .025 (0.64 mm) Series Connectors

#### .025 (0.64) Series Connectors



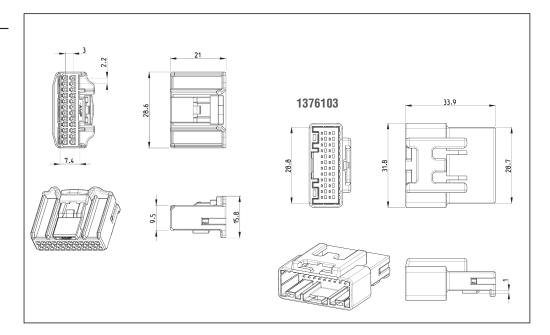
No. of Positions: 24 Positions

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> ) 1717112-1 <sup>3</sup> ) 1473803-1 (sub plug for IDC contact) 1473804-1 (lock housing for IDC contact) 1746126-1*)	1376103-1			
24	Board	1318917-1 <sup>2</sup> ) 1717112-1 <sup>3</sup> ) 1473803-1 (sub plug for IDC contact) 1473804-1 (lock housing for IDC contact) 1746126-1*)		1-1318853-3 1318853-2	1376111-2 1376111-6 1717394-2 (SMD)	
24		N/A	1-1612048-0 (low profile)			

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

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

\*) IDC Contact Pre-loaded Sub Housing



#### **Technical Features**

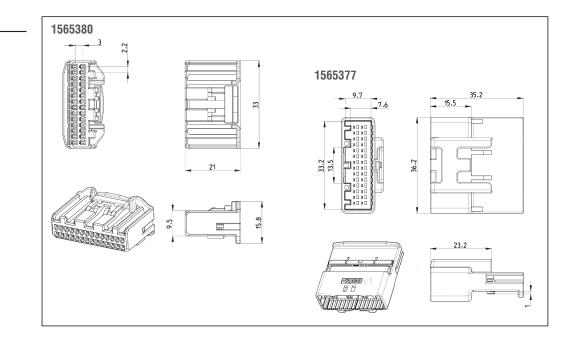
No. of Positions: 28 Positions

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 <b>²</b> ) 1717115-1 <b>3</b> )	1565377-1			
28	Board	1565380-1 <b>²</b> ) 1717115-1 <b>3</b> )		1565373-4	1565375-4	

1) IDC Terminal Version

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

3) Housing Lance Version



# MULTILOCK Connector System .025 (0.64 mm) Series Connectors

.025 (0.64) Series Connectors



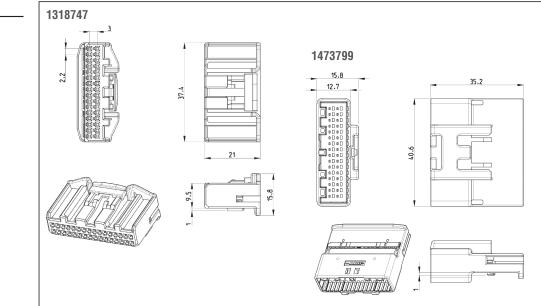
No. of Positions: 32 Positions

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> ) 1717118-1 <sup>3</sup> ) 1473805-1 (sub plug for IDC contact) 1473806-1 (lock housing for IDC contact) 1717250-1*)	1473799-1			
32	Board	1318747-1 <sup>2</sup> ) 1717118-1 <sup>1</sup> ) 1473805-1 (sub plug for IDC contact) 1473806-1 (lock housing for IDC contact) 1717250-1*)		1318745-2 1318745-5		
		N/A	1612050-6 (low profile)			

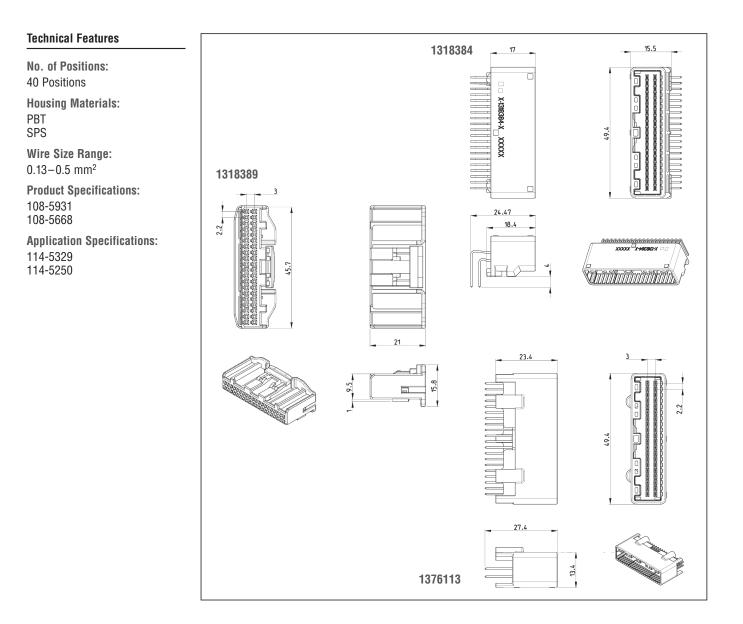
1) IDC Terminal Version

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

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

\*) IDC Contact Pre-loaded Sub Housing





No. of Positions	Terminate To	Plug Assembly	Cap Housing	Cap Housing Horizontal Mount	Cap Housing Vertical Mount	Mating Plug
40	Board	1318389-1 <sup>2</sup> ) 1674312-1 <sup>3</sup> ) 1318693-2 (sub plug for IDC contact) 1318695-1 (lock housing for IDC contact) 1318691-1*)		1318384-2 1-1318384-3	1376113-2 1376113-5 174764-2 (SMD)	
		N/A	1612052-6 (low profile)			

1) IDC Terminal Version

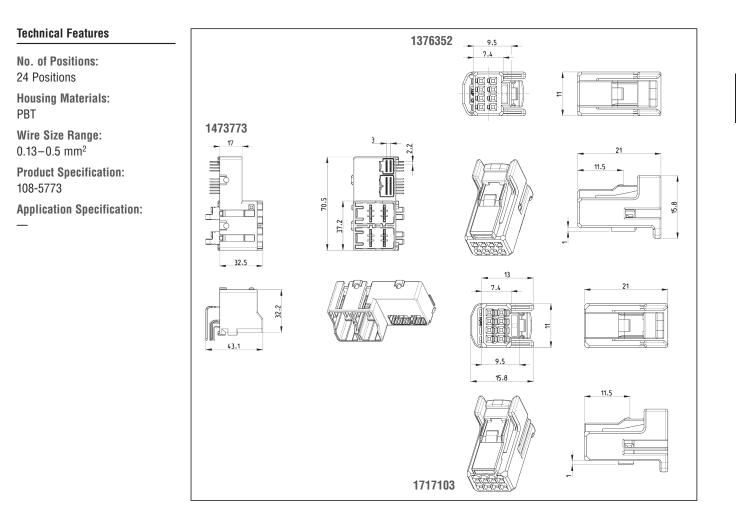
<sup>2</sup>) Contact Lance Version

3) Housing Lance Version

\*) IDC Contact Pre-loaded Sub Housing



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



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 <b>²</b> ) 1717103-1 <b>³</b> )
12						1565287-1 <b>²</b> ) 1747375-1 <b>³</b> )
2 **)						

2) Contact Lance Version

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

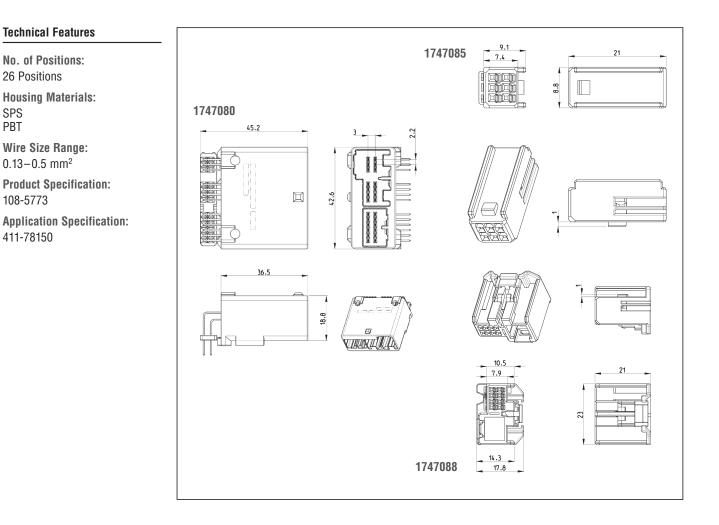
\*) IDC Contact Pre-loaded Sub Housing

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



PBT

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

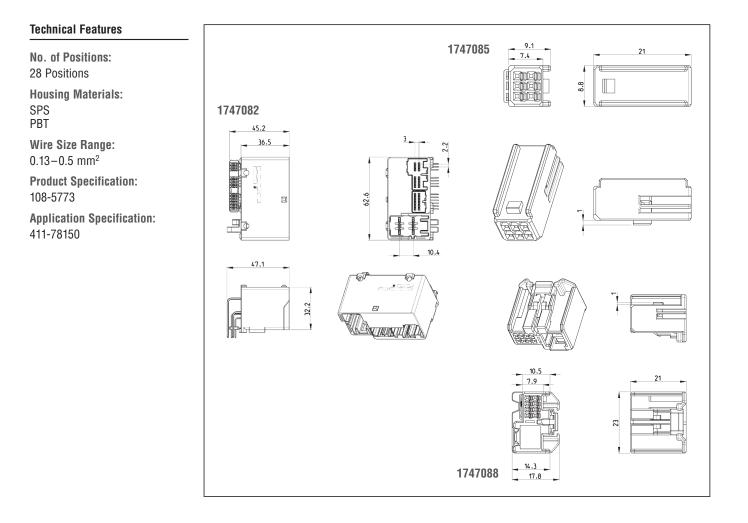


No. of Positions	Terminate To	Plug Assembly	Cap Housing	Cap Housing Horizontal Mount	Cap Housing Vertical Mount	Mating Plug
26	Board			1747080-1		
6						1747085-1 <b>3</b> )
8						1747088-1 <b>3</b> )

2) Contact Lance Version



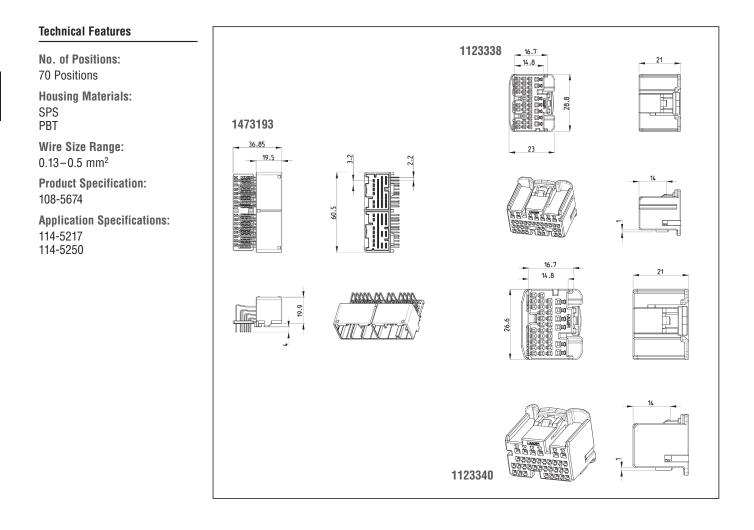
#### .025 (0.64 mm) / .375 (9.5 mm) Wire-to-Board Applications



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 <b>3</b> )
8						1747088-1 <b>3</b> )

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



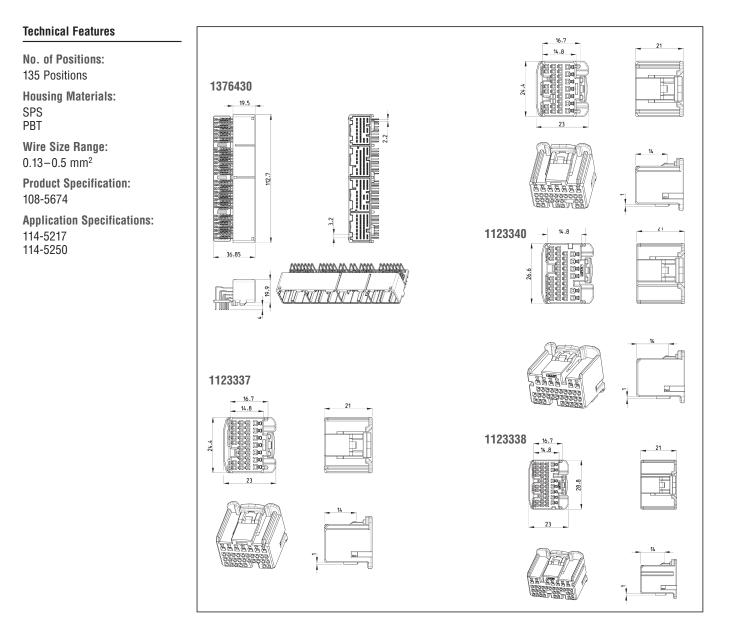


No. of Positions	Terminate To	Plug Assembly	Cap Housing	Cap Housing Horizontal Mount	Cap Housing Vertical Mount	Mating Plug
70	Board			1473193-8 1473193-7		
35 key A						1123338-1 <b>2</b> ) 1674558-1 <b>3</b> )
35 key B						1123340-1 <b>2</b> ) 1674928-1 <b>3</b> )

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

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



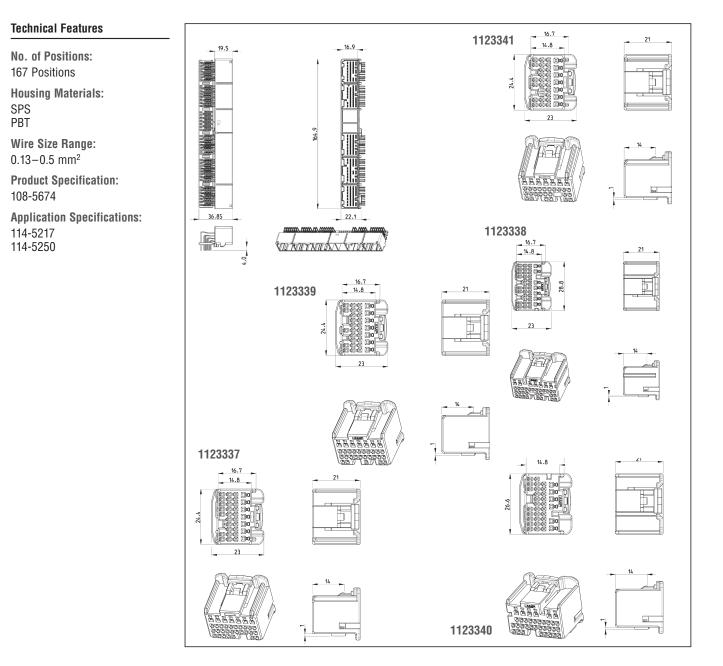


No. of Positions	Terminate To	Plug Assembly	Cap Housing	Cap Housing Horizontal Mount	Cap Housing Vertical Mount	Mating Plug
135	Board		1-1376430-8 2-1376430-2			
31						1123341-1 <b>²</b> ) 1674919-1 <b>³</b> )
34						1123337-1 <b>²</b> ) 1674925-1 <b>³</b> )
35 key A						1123338-1 <b>²</b> ) 1674558-1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

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

3) Housing Lance Version

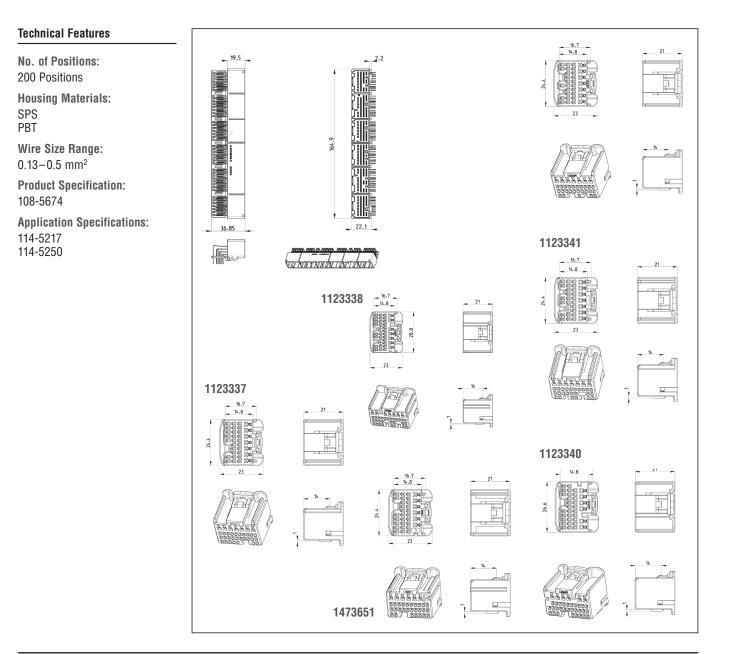




No. of Positions	Terminate To	Plug Assembly	Cap Housing	Cap Housing Horizontal Mount	Cap Housing Vertical Mount	Mating Plug
167	Board		6318813-3 1612435-4			
31						1123341-1 <b>²</b> ) 1674919-1 <b>³</b> )
32						1123339-1 <b>²</b> ) 1674922-1 <b>³</b> )
34						1123337-1 <b>²</b> ) 1674925-1 <b>³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

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

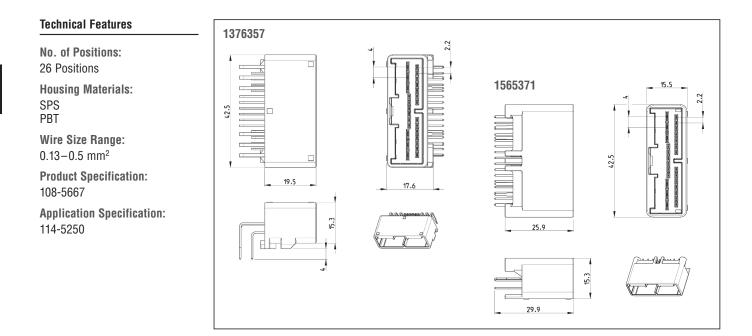




No. of Positions	Terminate To	Plug Assembly	Cap Housing	Cap Housing Horizontal Mount	Cap Housing Vertical Mount	Mating Plug
200	Board		6473649-1 1473649-4			
31						1123341-1 <b>²</b> ) 1674919-1 <b>³</b> )
32						1123339-1 <b>²</b> ) 1674922-1 <b>³</b> )
34						1123337-1 <b>²</b> ) 1674925-1 <b>3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

<sup>2</sup>) Contact Lance Version
<sup>3</sup>) Housing Lance Version
Note: All Part Numbers are RoHS and ELV compliant.



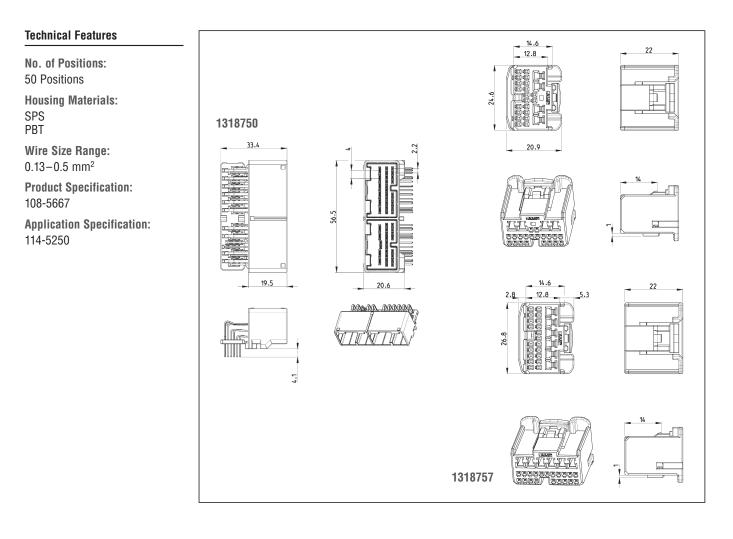


No. of Positions	Terminate To	Plug Assembly	Cap Housing	Cap Housing Horizontal Mount	Cap Housing Vertical Mount	Mating Plug
26	Board			1376357-3 1376357-8	1565371-3	1376360-1 <b>²</b> ) 1674932-1 <b>³</b> )

2) Contact Lance Version

3) Housing Lance Version



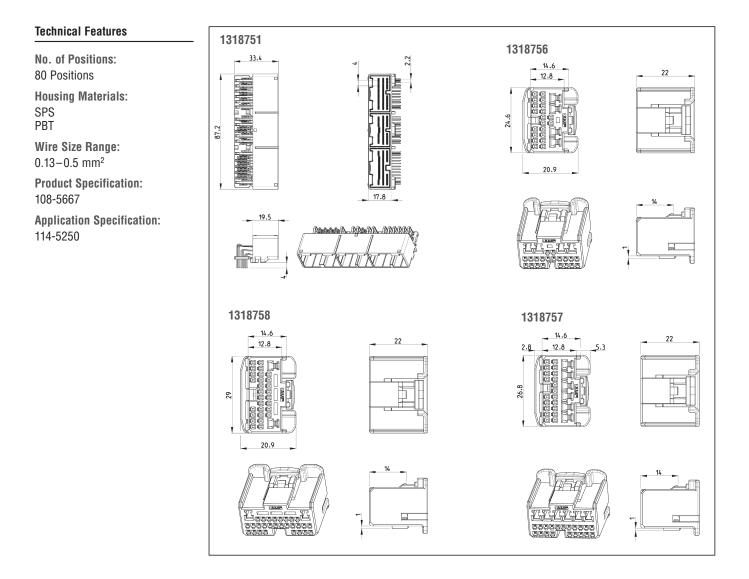


No. of Positions	Terminate To	Plug Assembly	Cap Housing	Cap Housing Horizontal Mount	Cap Housing Vertical Mount	Mating Plug
50	Board			1318750-2 1-1318750-2		
24						1318756-1 <b>²</b> ) 1746864-1 <b>³</b> ) 1612802-1 key
26						1318757-1 <b>²</b> ) 1746863-1 <b>³</b> ) 1612803-1 key

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

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





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

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

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



**Engineering Notes** 

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.040/.070 Hybrid I/O

for the Automotive ECU

Connectors for use with a mixture of .040 terminals for signal circuits and .070 terminals for power

Plug connector for wire termination are supplied

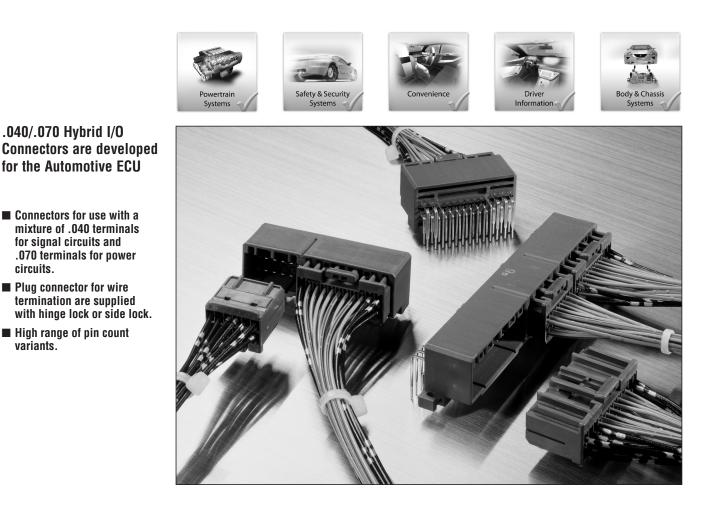
High range of pin count

circuits.

variants.

# MULTILOCK Connector System .040/.070 Series Hybrid I/O Connectors

Introduction



**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)

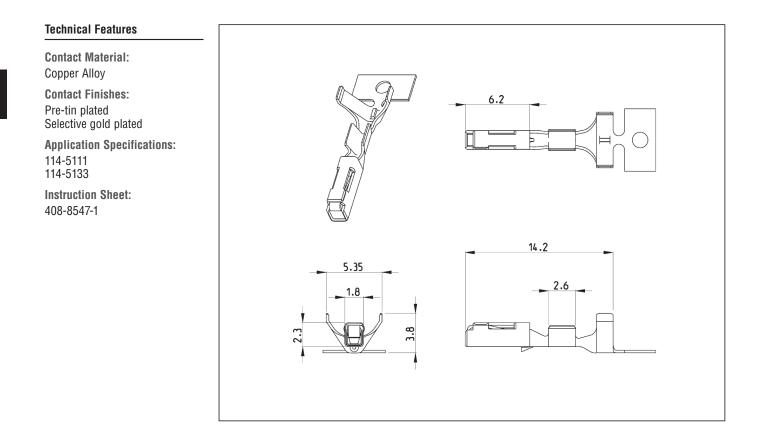
**Instruction Sheet:** 412-5631

**Available Positions** 

26, 34, 38, 42, 48, 54, 64, 76



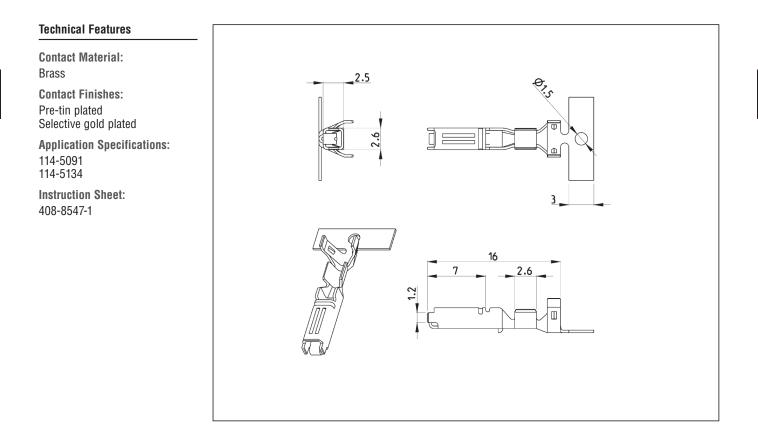
## 0.40 Receptacle Contacts (for Hingle Double Lock Type)



Wire Size	e Range	Wire Insulation Diameter	Finish	Part Numbers			
(mm²)	(AWG)	(mm)	FINISN	Strip Form	Loose-Piece	Hand Tool	
		14.0.0	Pre-tin plated	173716-1	175061-1	01577 1	
0005	00.00	1.4–2.0	Selective gold plated	173716-2	175061-2	91577-1	
0.3-0.5	0.3–0.5 20–22		Pre-tin plated	175094-1			
		1.1–1.3	Selective gold plated	175094-2			



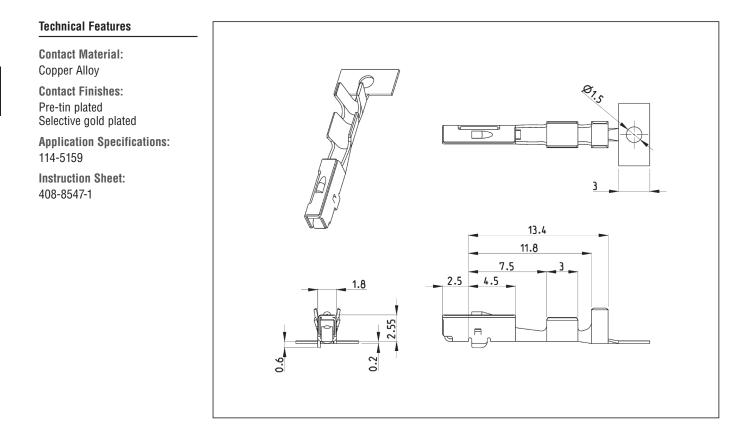
#### 0.70 Receptacle Contacts (for Hinge Door Lock Type)



Wire Size	e Range	Wire Insulation			F	Part Numbers		
		Diameter	Material and Finish	S	trip Form	Lo	ose-Piece	Hand
(mm²)	(AWG)	(mm)		Brass	Phosphor Bronze	Brass	Phosphor Bronze	Tool
0.20-0.30	04.00	1.4-1.9	Pre-tin plated	173630-1	173630-6	175026-1	175026-6	91580-1
0.20-0.30	20–0.30 24–22	1.4-1.9	Selective gold plated	173630-2	173630-7	175026-2	175026-7	91200-1
0.50-1.25	20–16	2.0-2.6	Pre-tin plated	173631-1	173631-6	175027-1	175027-6	01570 1
0.50-1.25	20-16	2.0-2.0	Selective gold plated	173631-2	173631-7	175027-2	175027-7	91573-1
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				



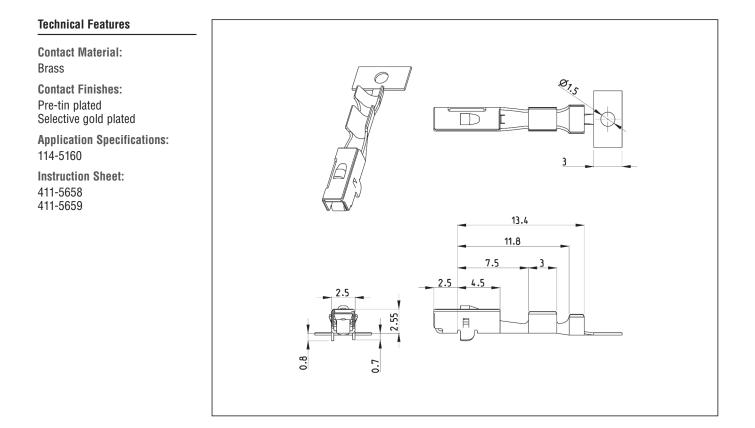
## 0.40 II Receptacle Contacts (for Side Double Lock Type)



Wire Siz	e Range	Wire Insulation Diameter	Finish	Part Numbers			
(mm²)	(AWG)	(mm)	FILISI	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	
0.3-0.5	10-22	1.1-1.0	Selective gold plated	175266-2	179418-2	91000-1	



## 0.70 II Receptacle Contacts (for Side Double Lock Type)



Wire Size	Range	Wire Insulation Diameter	Finish Part Nu		Part Numbers	
(mm²)	(AWG)	(mm)	FINISN	Strip Form	Loose-Piece	Hand Tool
0.00.0.05	10.00	1.1–1.8	Pre-tin plated	175268-1	179423-1	024105 1
0.30–0.85	18–22	1.1-1.0	Selective gold plated	175275-2	179424-2	934195-1
0.50 1.05	16.00	1005	Pre-tin plated	175269-1	179425-1	024106 1
0.50–1.25	16–20	1.8–2.5	Selective gold plated	175276-2	179426-2	934196-1





No. of Positions: 26 Positions

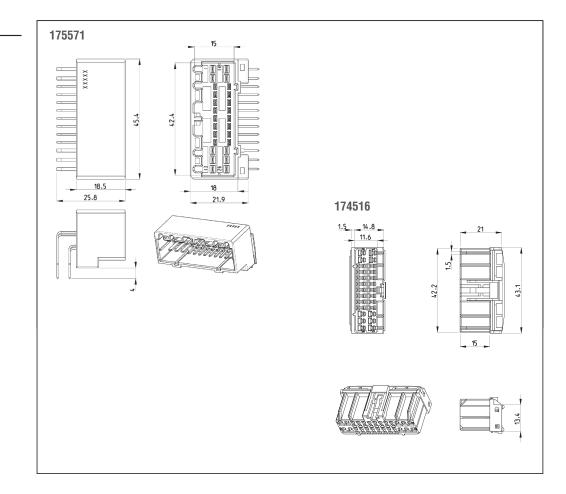
Housing Materials: PBT

Wire Size Range: 0.2–1.25 mm<sup>2</sup>

Product Specifications: 108-5280 108-5342

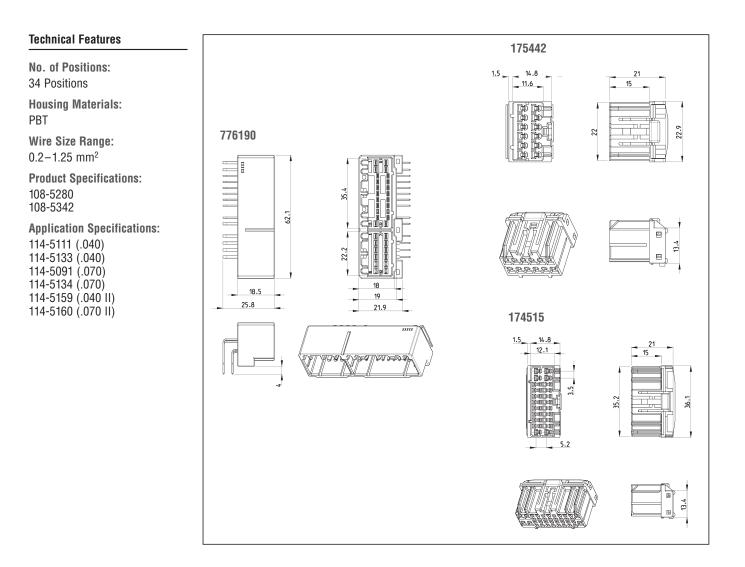
Application Specifications: 114-5111 (.040) 114-5133 (.040) 114-5091 (.070) 114-5134 (.070) 114-5159 (.040 II)

114-5159 (.040 II) 114-5160 (.070 II)



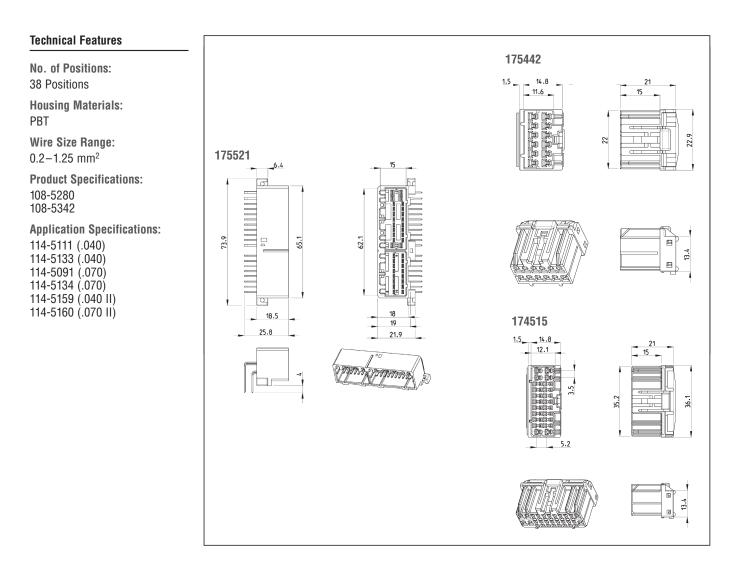
No. of Positions	Terminate To	Plug Assembly	Cap Housing Assembly	Cap Housing Horizontal Mount	Cap Housing Vertical Mount	Mating Plug
			178811-6 Gray 175571-6 Gray			174516 (Hinge)
			,			917992 (Side Lock)
			178762-6 Gray (Different Key) 175569-6 Gray (Special Key)			175567 (Hinge)
						917994 (Side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





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



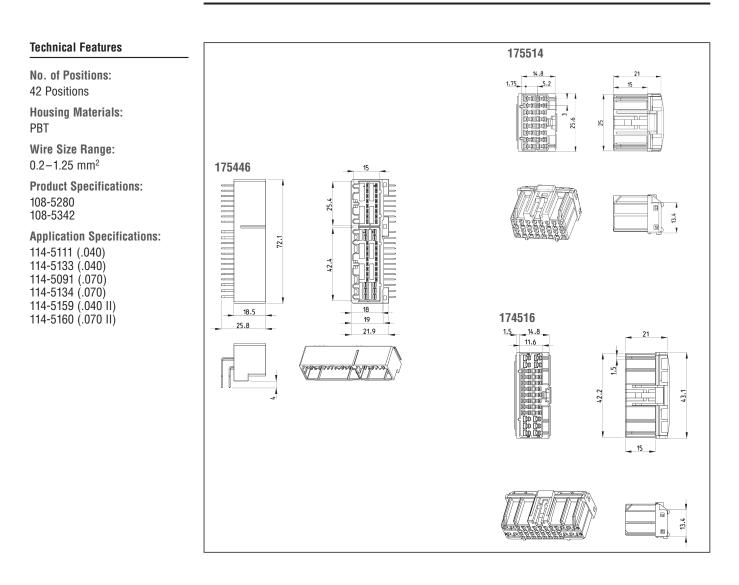


No. of Positions	Terminate To	Plug Assembly	Cap Housing Assembly	Cap Housing Horizontal Mount	Cap Housing Vertical Mount	Mating Plug
22	Printed		175521-6 Gray (Side mount ears) 638048-1 Black (High temp. version)			175442 (Hinge 16p) 174515 (Hinge 22p) 917981 (Side Lock 16p) 917989 (Side Lock 22p)
38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

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

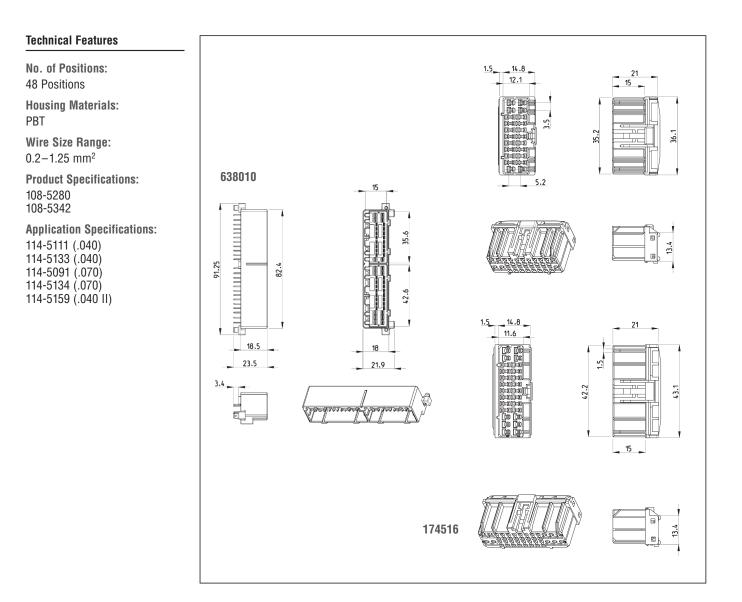
5-74





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



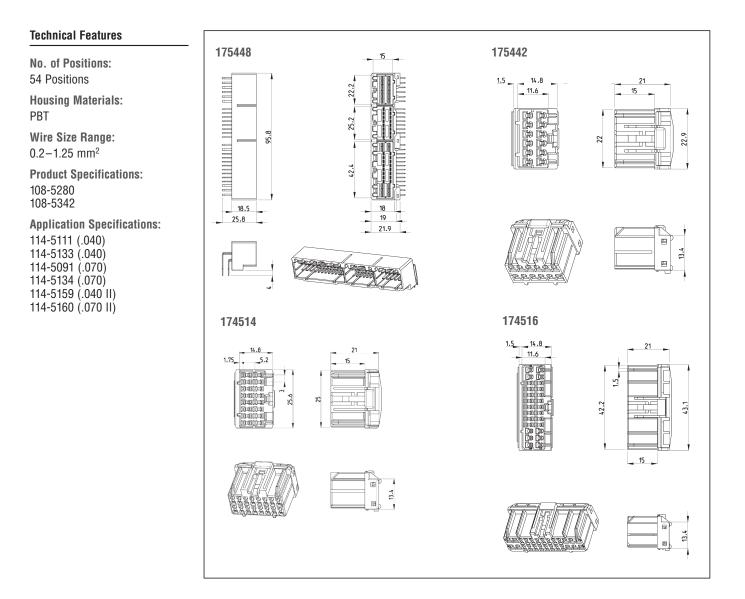


No. of	Terminate	Plug	Cap Housing	Cap Housing	Cap Housing	Mating Plug
Positions	To	Assembly	Assembly	Horizontal Mount	Vertical Mount	
48	Printed Circuit Board		179375-1 Gray 174917-6 Gray 638010-1 Black			174515 (Hinge 22p) 174516 (Hinge 26p) 917989 (Side Lock 22p) 917992 (Side Lock 26p)



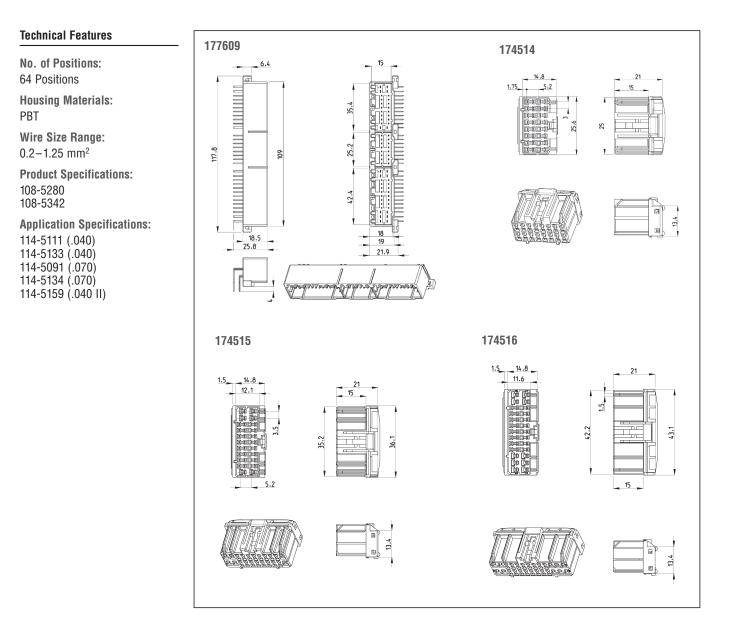
# MULTILOCK Connector System .040/.070 Series Hybrid I/O Connectors

#### Wire-to-Board Applications



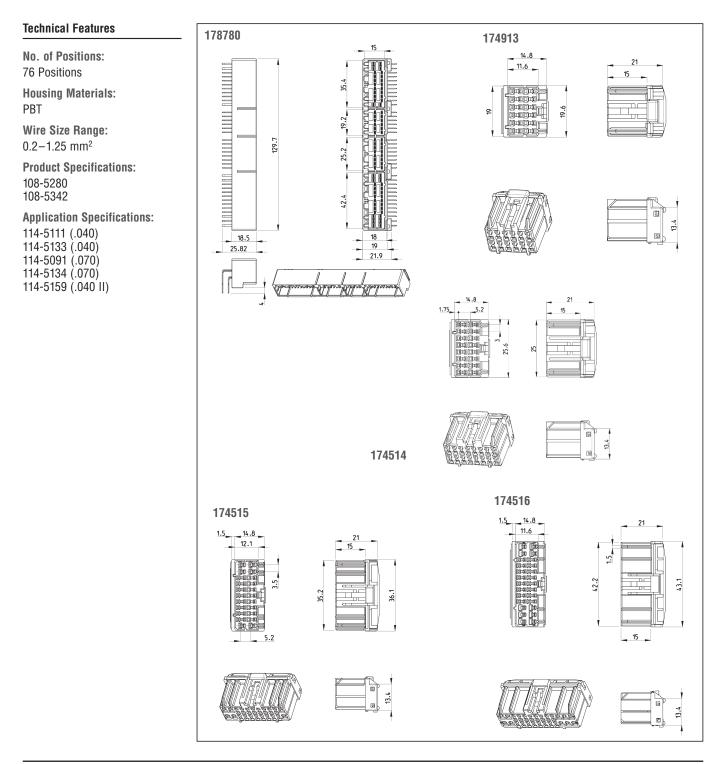
No. of	Terminate	Plug	Cap Housing	Cap Housing	Cap Housing	Mating Plug
Positions	To	Assembly	Assembly	Horizontal Mount	Vertical Mount	
54	Printed Circuit Board		175448-6 Gray			175442 (Hinge 12p) 174514 (Hinge 16p) 174516 (Hinge 26p) 917978 (Side Lock 12p) 917981 (Side Lock 16p) 917992 (Side Lock 26p)





No. of Positions	Terminate To	Plug Assembly	Cap Housing Assembly	Cap Housing Horizontal Mount	Cap Housing Vertical Mount	Mating Plug
			917322-5 Blue 776189-6 Gray 2-176122-6 Gray			175109 (Hinge 16p) 175110 (Hinge 22p) 175111 (Hinge)
64	Printed Circuit Board		178764-1 White 1-174518-6 Gray 177609-1 Light Gray			174514 (Hinge 16p) 174515 (Hinge 22p) 174516 (Hinge 26p)
			177009-1 Light Gray			917989 (Side Lock 22p) 917981 (Side Lock 16p) 917992 (Side Lock 26p)





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



**Engineering Notes** 

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