



Introduction





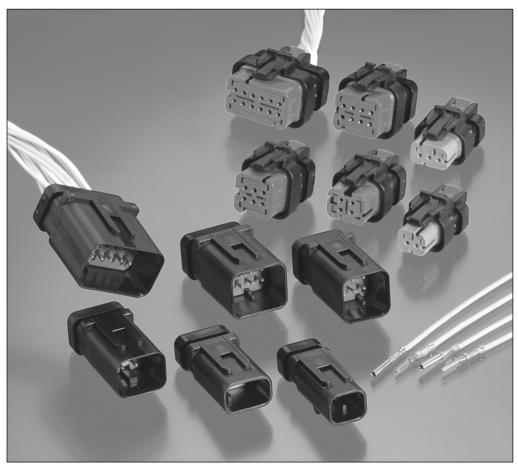






Product Features

- Keyed / polarized, prevents mismating
- Lanceless contacts, no damaged tangs or tangled contacts
- Integral CPA protects against accidental unlocking
- Sleeved assembly for contact beam protection provides
 50 durability cycles
- Attachment feature on pin housing provides connector clip mounting
- Integral PLR provides primary latch reinforcement with no additional assembly
- Sealing of interface and wires provides for environmental integrity
- Resistant to a wide range of chemicals
- RoHS and ELV compliant



The AMPSEAL 16 Connector System is targeted for off-road, heavy duty industrial, recreational and agricultural applications. This wire-to-wire and wire-to-device connector line was designed to meet the rigorous demands of an industry that requires the highest standards in performance.

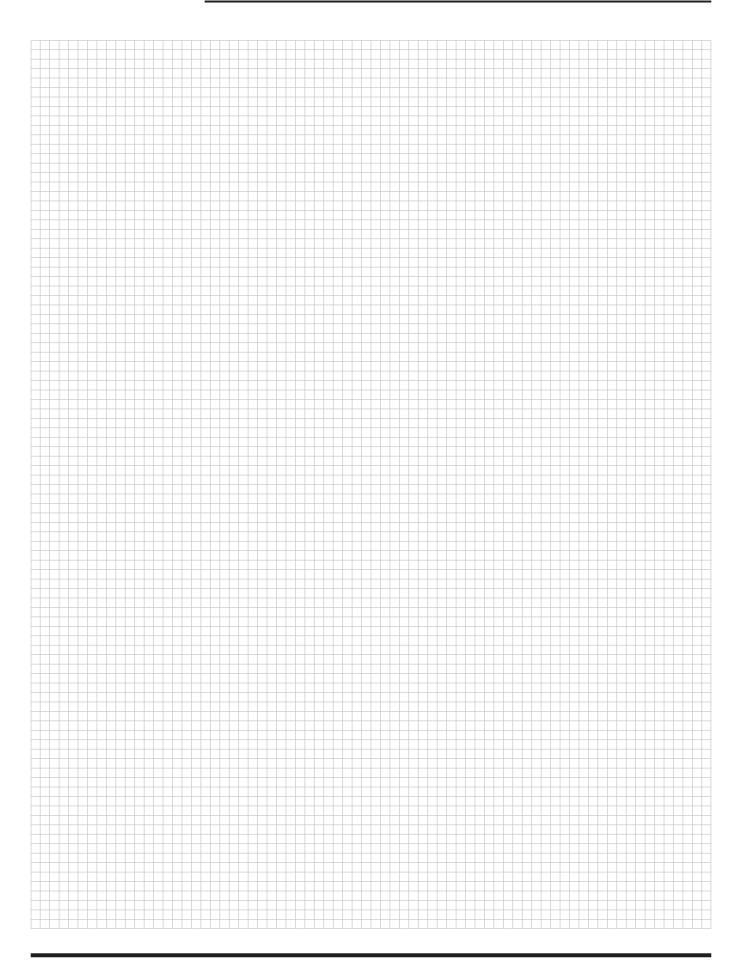
Thermoplastic housings (-40 °C to +125 °C rated) and silicone seals allow the connectors to withstand extreme temperatures and moisture.

This connector family will feature the HDSF Size 16 Pin and Socket contacts as a terminal system.

These contacts are stamped and formed versions of the screw machined MIL-C-39029 contacts. The 2-, 3-, 4-, 6-, 8- and 12-position housings will offer a one-piece assembly for both plug and cap.



Engineering Notes



AMPSEAL 16 Connector System Contact System

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Introduction





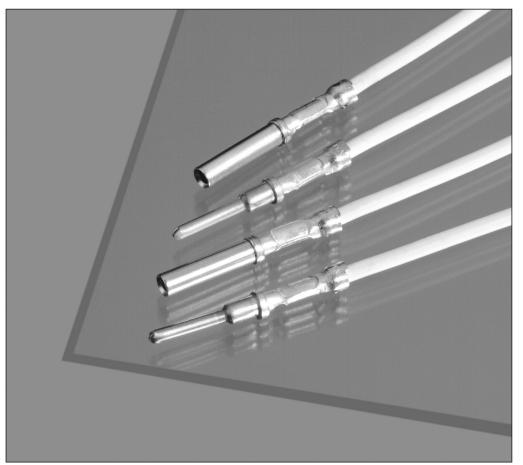






Product Features

- 1.58 mm Pin and Socket System per MIL-C-39029
- Lanceless design
- Dual Beam Socket Contact
- Wire Size Range 0.5-2.0 mm² (20-14 AWG)
- Wire Insulation 1.3-3.7 mm
- Terminal Plating Gold or Nickel
- Current Rating up to 13 amps
- Vibration Performance up to 35 G's
- RoHS and ELV compliant



The HDSF Size 16 Pin and Socket contacts system is a stamped and formed version of the screw machine MIL-C-39029 contacts.

The TE Connectivity Size 16 contact system offers a thicker and higher performance alloy base metal, providing the following superior benefits over most of the competitive stamped and formed size 16 contact systems.

- 1. Increased terminal/ beam strength
- 2. Greater resistance to stress relaxation
- 3. Increased current carrying ability due to lower T-Rise (20%)

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Size 16 Terminal Selection Guide

The Terminal Summary Chart can be used as a quick guide to determine the part number for a particular application based on the following:

1) Insulation Barrel preference; 2) Plating preference; 3) Wire Size; and 4) Insulation Diameter.

Size 16 Terminal Summary Chart

	Terminal Part Number	Pla	ting	Wire Size	Insulation Rar		Terminal Part Number	Plating	
	(Reeled)	Au	Ni	(AWG)	Inch	mm	(Loose-Piece)	Au	Ni
Pin with Insulation Barrel	1924463	-1	-3	20–18	0.050-0.107	1.27-2.72	1924579	-1	-3
Socket with Insulation Barrel	1924464	-1	-2	20–18	0.050-0.107	1.27-2.72	1924580	-1	-2
Pin with Insulation Barrel	638078	-1	-3	18–14 *	0.089-0.131	2.26-3.33	776300	-1	-2
Socket with Insulation Barrel	776492	-1	-2	18–14 *	0.089-0.131	2.26-3.33	776299	-1	-2
Pin without Insulation Barrel	638112	-1	-3	18–14	0.077-0.155	1.96-3.94	776298	-1	-2
Socket without Insulation Barrel	776491	-1	-2	18–14	0.077-0.155	1.96-3.94	776297	-1	-2

^{*) 14} AWG (SXL) wire not recommended for crimping on terminals with an Insulation Barrel.

The Terminal/Wire Selection for Connector Wire Seal Chart can be used as a guide to determine the following:

1) Wire Size and Insulation Type; 2) Nominal Insulation Diameter; 3) Recommended Terminal Part Number; and 4) Recommended Connector Wire Seal. For questions and concerns, please consult a TE Connectivity Product Specialist.

Size 16 Terminal / Wire Selection for Connector Wire Seal Chart

				Te	rminal Part N	lumber (Reel	ed)		Connector Wire Seal	
Wire Size (Insulation Type)		n Diameter ninal)	1924463	1924464	638078	776492	638112	776491	Standard Diameter (mm)	Reduced Diameter (mm)
	(mm)	(Inch)	(Pin)	(Socket)	(Pin)	(Socket)	(Pin)	(Socket)	2.18-3.67	1.30-2.54
0.5 mm ² (TXL)	1.78	0.070	V	V						v
0.5 mm ² (GXL)	2.22	0.087	v	V						✓
0.5 mm ² (SXL)	2.55	0.100	v	✓					V	
20 AWG (TXL)	1.78	0.070	v	✓						✓
20 AWG (GXL)	2.16	0.085	v	✓						✓
20 AWG (SXL)	2.44	0.096	v	✓					V	
18 AWG (TXL)	1.98	0.078	V	V			V	V		v
18 AWG (GXL)	2.34	0.092	v	✓	V	~	v	~	V	✓
18 AWG (SXL)	2.72	0.107			V	V	V	V	V	
1.0 mm ² (TXL)	2.28	0.090					V	V	V	v
1.0 mm ² (GXL)	2.72	0.107			V	V	v	V	V	
1.0 mm ² (SXL)	3.15	0.124			V	V	v	V	V	
16 AWG (TXL)	2.24	0.088					~	~	V	✓
16 AWG (GXL)	2.62	0.103			~	~	~	~	V	
16 AWG (SXL)	3.05	0.120			~	~	~	~	V	
2.0 mm ² (TXL)	2.58	0.102			~	~	~	~	V	
2.0 mm ² (GXL)	3.02	0.119			~	~	~	~	V	
2.0 mm ² (SXL)	3.65	0.144					~	~		
14 AWG (TXL)	2.62	0.103			~	~	~	~	V	
14 AWG (GXL)	2.97	0.117			~	~	~	~	V	
14 AWG (SXL)	3.58	0.141					~	~	V	

Note: Insulation Diameter (Nominal) accuracy not guaranteed.

Contact System

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Receptacle Contacts (Sockets)

Technical Features

Contact Material:

Copper Alloy

Contact Finish:

Gold or Nickel

Wire Size Range:

0.5-2.0 mm² (20-14 AWG)

Insulation Diameter:

1.27-3.67 mm

Current Carrying Capacity:

13 amps

Temperature Range

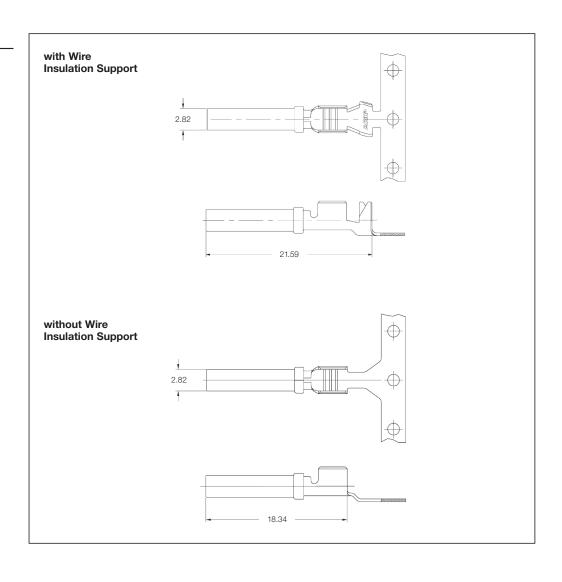
-40 °C to +125 °C

Product Specification:

108-2184

 ${\bf Application\ Specification:}$

114-13045



Receptacle Contacts with Wire Insulation Support

	Size	Insulation	Material			Part	Part Numbers		
(mm²)	(AWG)	Diameter (mm)	and Finish	Strip Form	Package Quantity	Loose- Piece	Package Quantity	Applicator	Hand Tool
0.5–0.8	20–18	1.07.0.70	Copper Alloy, Gold	1924464-1	4,000	1924580-1	1,000		
0.5-0.8	20-16	1.27–2.72	Copper Alloy, Nickel	1924464-2	4,000	1924580-2	1,000	See Application	Specification
0.8–2.0	18–14	2.26–3.33	Copper Alloy, Gold	776492-1	4,000	776299-1	1,000	114-13	3045
0.0-2.0	10-14	2.20-3.33	Copper Alloy, Nickel	776492-2	4,000	776299-2	1,000		

Note: All Part Numbers are RoHS and ELV compliant.

Receptacle Contacts without Wire Insulation Support

	Wire Size Insulation		Material	Part Numbers						
(mm²)	(AWG)	Diameter (mm)	and Finish	Strip Form	Package Quantity	Loose- Piece	Package Quantity	Applicator	Hand Tool	
		0.40.0.07	Copper Alloy, Gold	776491-1	4,000	776297-1	1,000	See Application	Specification	
0.8–2.0	18–14	2.18–3.67	Copper Alloy, Nickel	776491-2	4,000	776297-2	1,000	114-13045		

Note: All Part Numbers are RoHS and ELV compliant.

Contact System

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Pin Contacts

Technical Features

Contact Material:

Copper Alloy

Contact Finish:

Gold or Nickel

Wire Size Range:

0.5-2.0 mm² (20-14 AWG)

Insulation Diameter:

1.27-3.67 mm

Current Carrying Capacity:

13 amps

Temperature Range

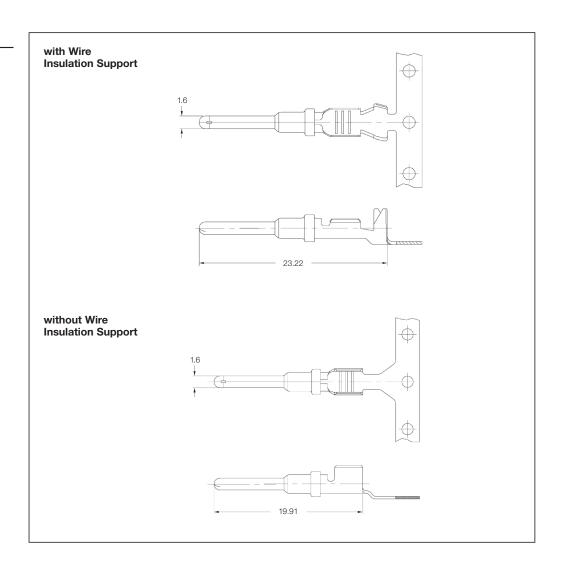
-40 °C to +125 °C

Product Specification:

108-2184

 ${\bf Application\ Specification:}$

114-13045



Pin Contacts with Wire Insulation Support

	Size	Insulation	Material	Pai			Numbers		
(mm²)	(AWG)	Diameter (mm)	and Finish	Strip Form	Package Quantity	Loose- Piece	Package Quantity	Applicator	Hand Tool
0.5–0.8	20–18	1.27-2.72	Copper Alloy, Gold	1924463-1	4,000	1924579-1	1,000		
0.5-0.6	20-10	20-10 1.21-2.12 —	Copper Alloy, Nickel	1924463-3	4,000	1924579-3	1,000	See Application	Specification
0.8–2.0	18–14	2.26–3.33	Copper Alloy, Gold	638078-1	4,000	776300-1	1,000	114-13045	
0.0-2.0	10-14	2.20-3.33	Copper Alloy, Nickel	638078-3	4,000	776300-2	1,000		

Note: All Part Numbers are RoHS and ELV compliant.

Pin Contacts without Wire Insulation Support

	Wire Size Insulation		Material	Part Numbers						
Rar		Diameter (mm)	and Finish	Strip	Package	Loose-	Package	Applicator	Hand Tool	
(mm²)	(mm²) (AWG) (mm)	(,,,,,		Form	Quantity	Piece	Quantity			
0.8-2.0	18–14	2.18–3.67	Copper Alloy, Gold	638112-1	4,000	776298-1	1,000	See Application	Specification	
0.0-2.0	10-14	2.10-0.07	Copper Alloy, Nickel	638112-3	4,000	776298-2	1,000	114-1	3045	

Note: All Part Numbers are RoHS and ELV compliant.

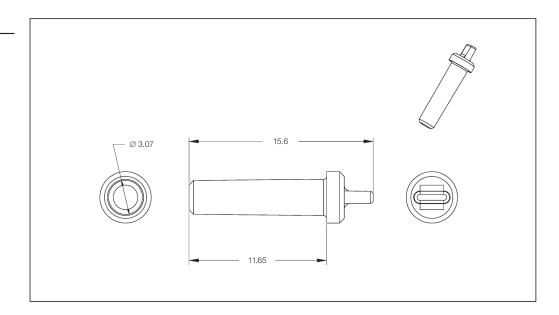
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Cavity Plugs for Unsealed Cavity

Technical Features

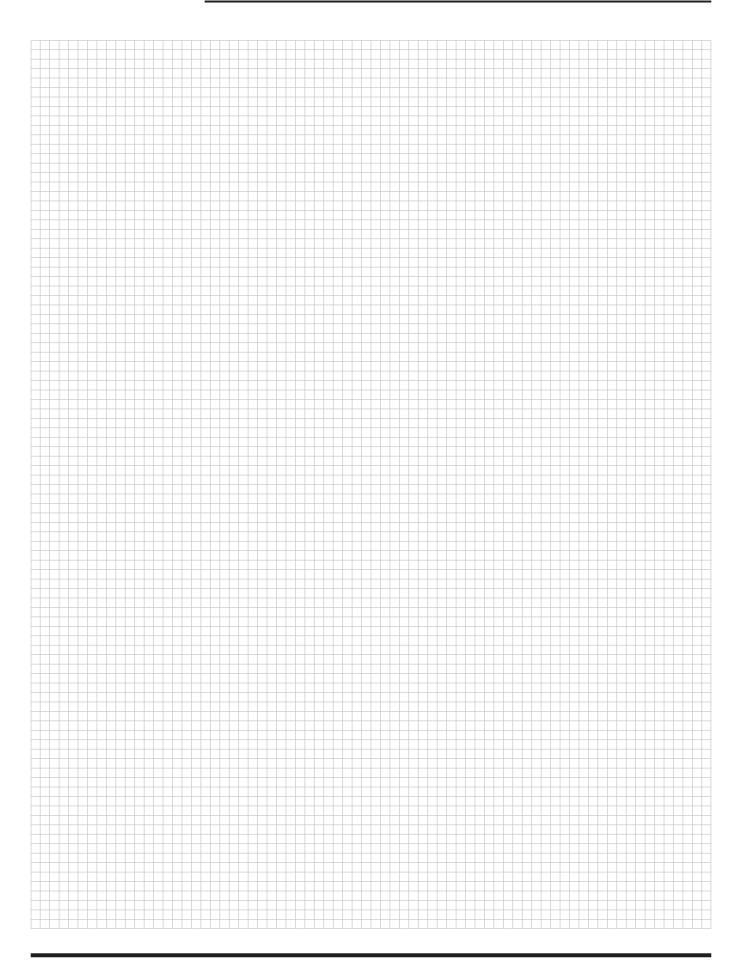
- Material: Glass reinforced PBT
- Resistant to a wide range of chemicals
- UL 94-HB rated
- RoHS and ELV compliant



	Contact Cavity Size		Color	Part Number	Package Quantity	
	(mm)	(AWG)			Quantity	
Standard Diameter	3.07	16	Yellow	776363-1	10,000	
Reduced Diameter	2.55	20	White	776364-1	10,000	



Engineering Notes



Housings and Connectors

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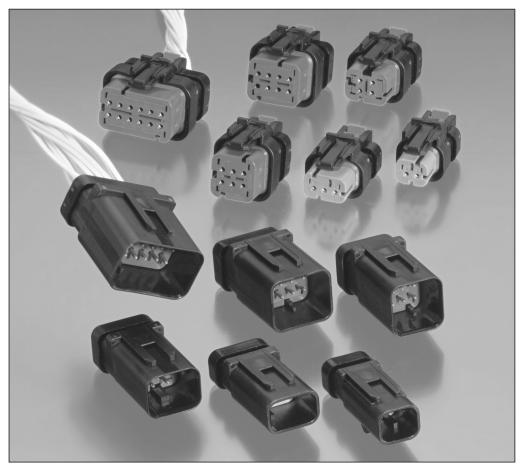






Product Features

- Integral PLR provides primary latch reinforcement with no additional assembly
- Keyed / polarized, prevents mismating
- Integral CPA protects against accidental unlocking
- Attachment feature on pin housing provides connector clip mounting
- Resistant to a wide range of chemicals
- RoHS and ELV compliant



The AMPSEAL 16 Receptacle and Pin housings come fully assembled, offering a one-piece approach for applied cost savings. Receptacle housing assemblies consist of the plug housing with both interface and wire seals, wire seal cover, PLR & CPA.

Thermoplastic housings (-40 °C to +125 °C rated) and silicone seals allow connectors to withstand extreme temperatures and moisture.

Pin housing assemblies are comprised of cap housing with wire seal, wire seal cover, and PLR. The single latch design with anti-overstress feature is only one of many additional features. Both color coding and physical keying prevents mismating when multiple housings of the same position size are used in the application.

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1-Row Sealed Receptacle (Plug) Housings

Technical Features

No. of Positions:

2 (1×2) Position Assembly

Housing Material:

Glass Reinforced PBT

Wire Size Range:

2.18-3.67 mm 1.30-2.54 mm

(with reduced diameter wire seal)

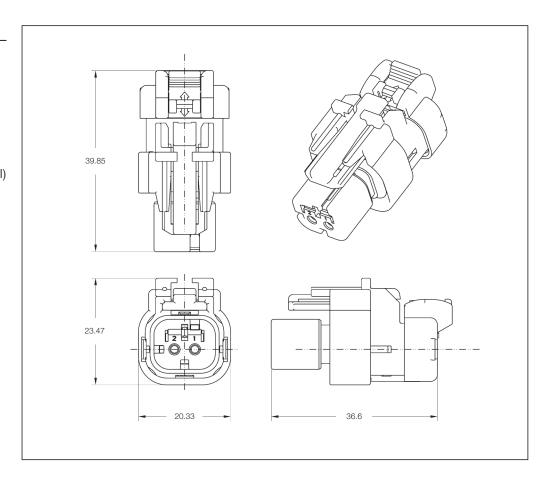
Product Specification:

108-2184

 $\label{lem:application} \textbf{Application Specification:}$

114-13065

- UL 94-HB rated
- Resistant to a wide range of chemicals
- RoHS and ELV compliant



Sealed Receptacle Housings 1-Row with Standard Diameter Wire Seal

No. of	DI D O-I	V i	Part Numbers				
Positions	PLR Color	Keying	Receptacle (Plug) Housing	Mating Pin (Cap) Housing			
	Red	Kov A	776407 1	776428-1			
	Red	Key A	Key A 776427-1	1717672-1			
		Key B	776427-2	776428-2			
2	Gray	Rey D	110421-2	1717672-2			
2	Velleur	Kay C	776427-3	776428-3			
	Yellow	Key C	110421-3	1717672-3			
	Croon	Key D	776407 4	776428-4			
	Green		776427-4	1717672-4			

No. of	PLR Color	Koving	Part Numbers			
Positions	PLR Color	Keying	Receptacle (Plug) Housing	Mating Pin (Cap) Housing		
	Red	Key A	776522-1	776534-1		
0	Gray	Key B	776522-2	776534-2		
2	Yellow	Key C	776522-3	776534-3		
	Green	Key D	776522-4	776534-4		

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1-Row Sealed Receptacle (Plug) Housings (continued)

Technical Features

No. of Positions:

 $3 (1 \times 3)$ Position Assembly

Housing Material:Glass Reinforced PBT

Wire Size Range:

2.18-3.67 mm

1.30-2.54 mm

(with reduced diameter wire seal)

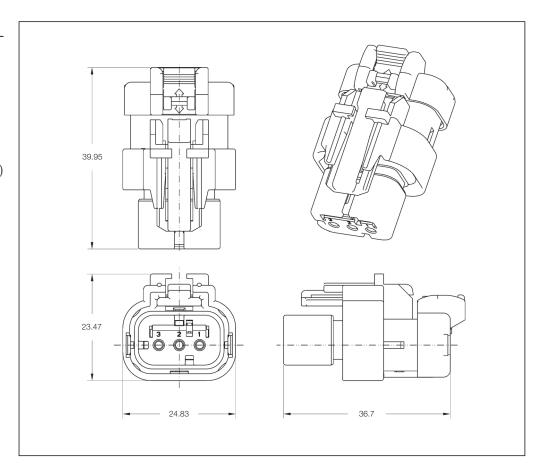
Product Specification:

108-2184

 ${\bf Application\ Specification:}$

114-13065

- UL 94-HB rated
- Resistant to a wide range of chemicals
- RoHS and ELV compliant



Sealed Receptacle Housings 1-Row with Standard Diameter Wire Seal

No. of	PLR Color	Varian	Part Numbers			
Positions	PLR Color	Keying	Receptacle (Plug) Housing	Mating Pin (Cap) Housing		
	Red	Key A	776429-1	776430-1		
	neu	Key A	776429-1	1717673-1		
	Gray	V D 770400.0	776429-2	776430-2		
3	Gray	Key B	110429-2	1717673-2		
3	Vollow	Key C	776429-3	776430-3		
	Yellow	Ney C	110429-3	1717673-3		
	Green	Key D	776429-4	776430-4		
	Green	rey D	110429-4	1717673-4		

No. of	PLR Color	Varian	Part Numbers			
Positions	PLR Color	Keying	Receptacle (Plug) Housing	Mating Pin (Cap) Housing		
	Red	Key A	776523-1	776535-1		
2	Gray	Key B	776523-2	776535-2		
3	Yellow	Key C	776523-3	776535-3		
	Green	Key D	776523-4	776535-4		

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2-Row Sealed Receptacle (Plug) Housings

Technical Features

No. of Positions:

4 (2×2) Position Assembly

Housing Material:Glass Reinforced PBT

Wire Size Range:

2.18-3.67 mm

1.30-2.54 mm (with reduced diameter wire seal)

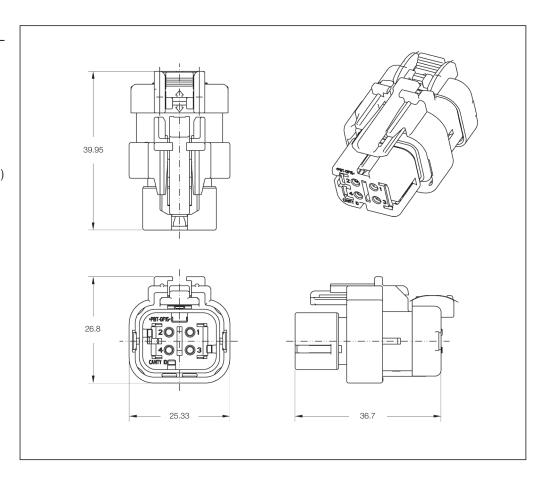
Product Specification:

108-2184

 ${\bf Application\ Specification:}$

114-13065

- UL 94-HB rated
- Resistant to a wide range of chemicals
- RoHS and ELV compliant



Sealed Receptacle Housings 2-Row with Standard Diameter Wire Seal

No. of	DI D. O-I	Vi	Part Nu	umbers	
Positions	PLR Color	Keying	Receptacle (Plug) Housing	Mating Pin (Cap) Housing	
	Red	Kov A	776407 1	776488-1	
	nea	Key A	Key A 776487-1	1717674-1	
		Key B	776487-2	776488-2	
4	Gray	Key D	110401-2	1717674-2	
4	Vollow	Key C	776487-3	776488-3	
	Yellow	Key C	110461-3	1717674-3	
Green	Kov D	776487-4	776488-4		
	Green	Key D	110481-4	1717674-4	

No. of	PLR Color	Varian	Part No	umbers
Positions	PLR Color	Keying	Receptacle (Plug) Housing Mating Pin (Cap	Mating Pin (Cap) Housing
	Red	Key A	776524-1	776536-1
4	Gray	Key B	776524-2	776536-2
4	Yellow	Key C	776524-3	776536-3
	Green	Key D	776524-4	776536-4

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2-Row Sealed Receptacle (Plug) Housings (continued)

Technical Features

No. of Positions:

6 (2×3) Position Assembly

Housing Material:Glass Reinforced PBT

Wire Size Range:

2.18-3.67 mm

1.30-2.54 mm

(with reduced diameter wire seal)

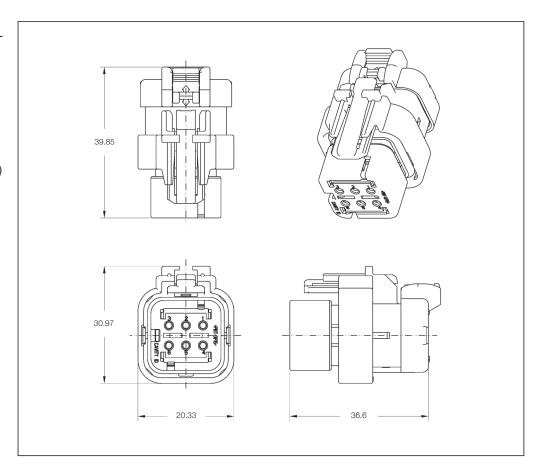
Product Specification:

108-2184

 ${\bf Application\ Specification:}$

114-13065

- UL 94-HB rated
- Resistant to a wide range of chemicals
- RoHS and ELV compliant



Sealed Receptacle Housings 2-Row with Standard Diameter Wire Seal

No. of PLR Color Positions	DI D Color		Part Nu	umbers
	PLR Color	Keying	Receptacle (Plug) Housing	Mating Pin (Cap) Housing
-	Red	14 . A	776433-1	776434-1
	Red	Key A	110433-1	1717675-1
6	Crov	K D	770400 0	776434-2
6 Gray Yellow	Key B	776433-2	1717675-2	
	Vollow	Kov C	776499 9	776434-3
	Key C	776433-3	1717675-3	

No. of Positions	DI D Color		Part Numbers	
	PLR Color	Keying	Receptacle (Plug) Housing Mating Pin (Ca	Mating Pin (Cap) Housing
Red	Dod	May A	776531-1	776537-1
	Red	Key A		1717975-1
6	Crov	Key B	776531-2	776537-2
6 Gray Yellow	Gray		•	1717975-2
	Vollow			776537-3
	rellOW			1717975-3

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2-Row Sealed Receptacle (Plug) Housings

Technical Features

No. of Positions:

8 (2×4) Position Assembly

Housing Material:

Glass Reinforced PBT

Wire Size Range:

2.18-3.67 mm

1.30-2.54 mm (with reduced diameter wire seal)

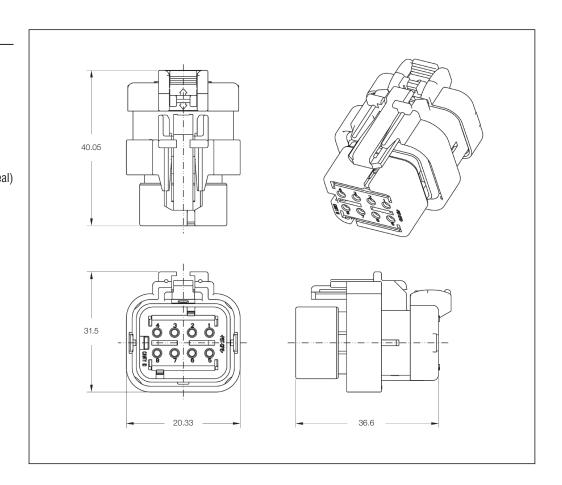
Product Specification:

108-2184

 $\label{lem:application} \textbf{Application Specification:}$

114-13065

- UL 94-HB rated
- Resistant to a wide range of chemicals
- RoHS and ELV compliant



Sealed Receptacle Housings 2-Row with Standard Diameter Wire Seal

No. of	DI D O-I		Part Numbers	
Positions	PLR Color	Keying	Receptacle (Plug) Housing	Mating Pin (Cap) Housing
	Red	17. A	776404 1	776495-1
	neu	Key A		1717676-1
	Crov	Karr D	776494-2 -	776495-2
8	Gray	Key B		1717676-2
0	Yellow	Key C 776494-3	776404 0	776495-3
	Yellow		770494-3	1717676-3
	Croon	Key D	776404 4	776495-4
	Green	Key D	776494-4	1717676-4

No. of Positions	PLR Color	Koving	Part Numbers	
	PLN COIOI	Keying	Receptacle (Plug) Housing	Mating Pin (Cap) Housing
	Red	Key A	776532-1	776538-1
0	Gray	Key B	776532-2	776538-2
8	Yellow	Key C	776532-3	776538-3
	Green	Key D	776532-4	776538-4

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2-Row Sealed Receptacle (Plug) Housings (continued)

Technical Features

No. of Positions:

12 (2×6) Position Assembly

Housing Material:

Glass Reinforced PBT

Wire Size Range:

2.18-3.67 mm

1.30-2.54 mm (with reduced diameter wire seal)

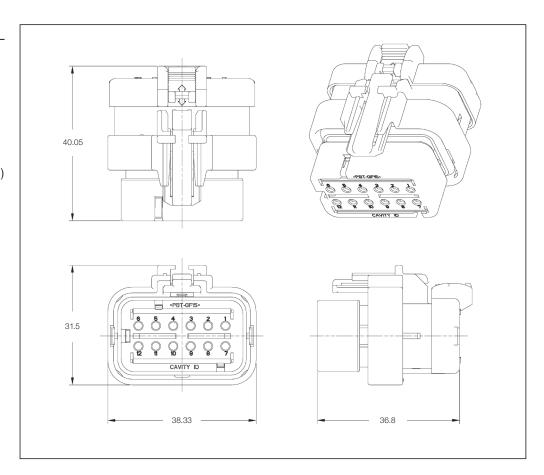
Product Specification:

108-2184

 ${\bf Application\ Specification:}$

114-13065

- UL 94-HB rated
- Resistant to a wide range of chemicals
- RoHS and ELV compliant



Sealed Receptacle Housings 2-Row with Standard Diameter Wire Seal

No. of	lo. of PLR Color			umbers
Positions	PLR Color	Keying	Receptacle (Plug) Housing	Mating Pin (Cap) Housing
	Red		776497 1	776538-1
	Red	Key A	776437-1 776538- 1717677- 776437-2 776538- 1717677- 776437-3 776538- 1717677-	1717677-1
	Crov	Kov B	776407 0	776538-2
12	Gray	Key B	110431-2	1717677-2
12	Yellow	Kay C	776437-3	776538-3
	rellow	Key C		1717677-3
	Green	Kov D	776437-4	776538-4
	Green	Key D	770437-4	1717677-4

No. of	PLR Color	Keying	Part Nu	umbers
Positions	PLN COIOI	Reyling	Receptacle (Plug) Housing	Mating Pin (Cap) Housing
	Red	Key A	776533-1	776539-1
	neu	Ney A	77033-1	1717934-1
	Gray	Vov D	776533-2	776539-2
12	Gray	Key B	1717934-2	
12	Yellow	Kov C	776533-3	776539-3
	reliow	Key C		1717934-3
	Green	Kov D	776533-4	776539-4
	Green	Key D	770033-4	1717934-4

Housings and Connectors

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1-Row Sealed Pin (Cap) Housings

Technical Features

No. of Positions:

2 (1×2) Position Assembly

Housing Material: Glass Reinforced PBT

Wire Size Range:

2.18-3.67 mm

1.30-2.54 mm (with reduced diameter wire seal)

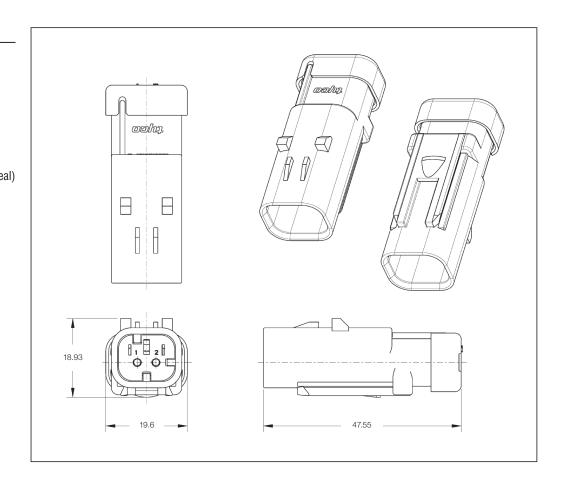
Product Specification:

108-2184

Application Specification:

114-13065

- UL 94-HB rated
- Resistant to a wide range of chemicals
- RoHS and ELV compliant



Sealed Pin Housings 1-Row with Standard Diameter Wire Seal

No. of Positions	DI D O-I	Vi	Р	art Numbers
	PLR Color	Keying	Pin (Cap) Housing Mating Receptacle (Plug) I	Mating Receptacle (Plug) Housing
2	Red	Key A	776428-1	776427-1
	Gray	Key B	776428-2	776427-2
	Yellow	Key C	776428-3	776427-3
	Green	Key D	776428-4	776427-4

Sealed Pin Housings 1-Row with Reduced Diameter Wire Seal

No. of	PLR Color	Vd	Р	art Numbers
Positions	PLR Color	Keying	Pin (Cap) Housing Mating Receptacle (Plug) 776534-1 776522-1	Mating Receptacle (Plug) Housing
	Red	Key A	776534-1	776522-1
0	Gray	Key B	776534-2	776522-2
2	Yellow	Key C	776534-3	776522-3
	Green	Key D	776534-4	776522-4

Section Catalog 1654281-2 Revised 4-2010 Main Catalog 1654400-1 Chapter 30 – Issued 4-2010

Housings and Connectors

1-Row Sealed Pin (Cap) Housings - Reversed Type

Technical Features

No. of Positions:

2 (1×2) Position Assembly

Housing Material:

Glass Reinforced PBT

Wire Size Range:

2.18-3.67 mm

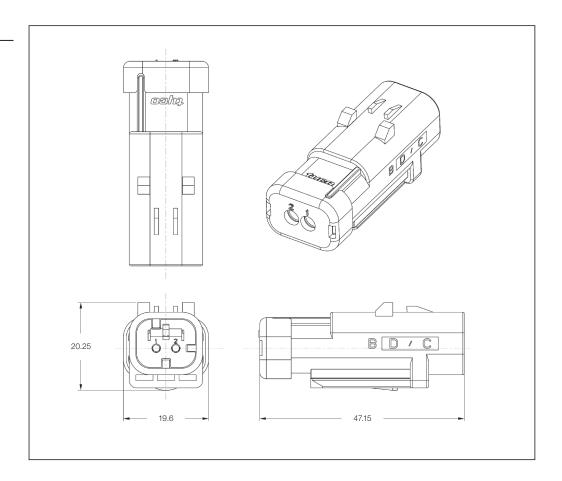
Product Specification:

108-2184

Application Specification:

114-13065

- UL 94-HB rated
- Resistant to a wide range of chemicals
- RoHS and ELV compliant



Sealed Pin Housings 1-Row – Reversed Mounting Feature

No. of Positions	PLR Color Keving		Part Numbers	
	PLR Color	Keying	Pin (Cap) Housing Mating Receptacle (Plug	Mating Receptacle (Plug) Housing
2	Red	Key A	1717672-1	776427-1
	Gray	Key B	1717672-2	776427-2
	Yellow	Key C	1717672-3	776427-3
	Green	Key D	1717672-4	776427-4

Section Catalog 1654281-2 Revised 4-2010 Main Catalog 1654400-1 Chapter 30 - Issued 4-2010

1-Row Sealed Pin (Cap) Housings

Technical Features

No. of Positions:

 $3 (1 \times 3)$ Position Assembly

Housing Material:

Glass Reinforced PBT

Wire Size Range:

2.18-3.67 mm 1.30-2.54 mm

(with reduced diameter wire seal)

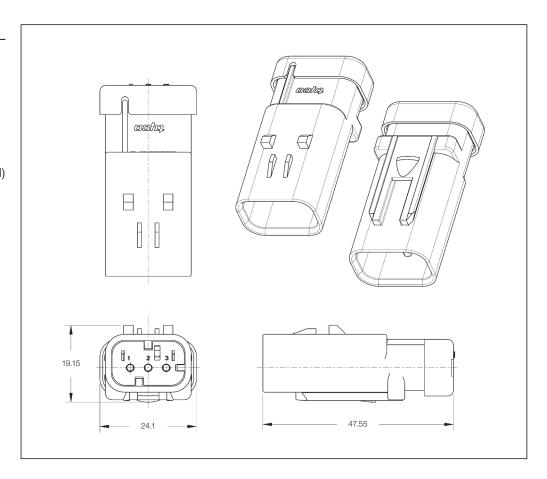
Product Specification:

108-2184

 ${\bf Application\ Specification:}$

114-13065

- UL 94-HB rated
- Resistant to a wide range of chemicals
- RoHS and ELV compliant



Sealed Pin Housings 1-Row with Standard Diameter Wire Seal

No. of Positions	DI D Colon		Part Numbers	
	PLR Color	Keying	Pin (Cap) Housing Mating Receptacle (Plug) H	Mating Receptacle (Plug) Housing
3	Red	Key A	776430-1	776429-1
	Gray	Key B	776430-2	776429-2
	Yellow	Key C	776430-3	776429-3
	Green	Key D	776430-4	776429-4

Sealed Pin Housings 1-Row with Reduced Diameter Wire Seal

No. of	PLR Color	Vi	P	art Numbers
Positions	PLR Color	Keying	Pin (Cap) Housing Mating Receptacle (Plug) In 1776535-1 776535-1 776523-1	Mating Receptacle (Plug) Housing
	Red	Key A	776535-1	776523-1
2	Gray	Key B	776535-2	776523-2
3	Yellow	Key C	776535-3	776523-3
	Green	Key D	776535-4	776523-4

Section Catalog 1654281-2 Revised 4-2010 Main Catalog 1654400-1 Chapter 30 – Issued 4-2010

Housings and Connectors

1-Row Sealed Pin (Cap) Housings - Reversed Type

Technical Features

No. of Positions:

3 (1 \times 3) Position Assembly

Housing Material:

Glass Reinforced PBT

Wire Size Range:

2.18-3.67 mm

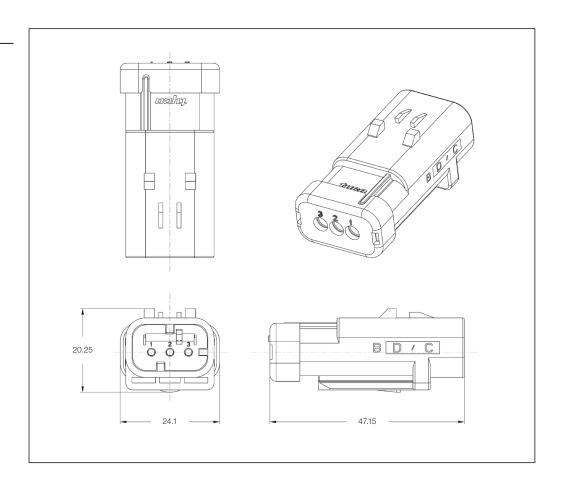
 $\label{lem:product Specification:} \textbf{Product Specification:}$

108-2184

Application Specification:

114-13065

- UL 94-HB rated
- Resistant to a wide range of chemicals
- RoHS and ELV compliant



Sealed Pin Housings 1-Row – Reversed Mounting Feature

No. of	DI D O-I	Keying	Part Numbers	
Positions	PLR Color		Pin (Cap) Housing	Mating Receptacle (Plug) Housing
	Red	Key A	1717673-1	776429-1
9	Gray	Key B	1717673-2	776429-2
3	Yellow	Key C	1717673-3	776429-3
	Green	Key D	1717673-4	776429-4

Section Catalog 1654281-2 Revised 4-2010 Main Catalog 1654400-1 Chapter 30 – Issued 4-2010

2-Row Sealed Pin (Cap) Housings

Technical Features

No. of Positions:

4 (2×2) Position Assembly

Housing Material:

Glass Reinforced PBT

Wire Size Range:

2.18-3.67 mm 1.30-2.54 mm

(with reduced diameter wire seal)

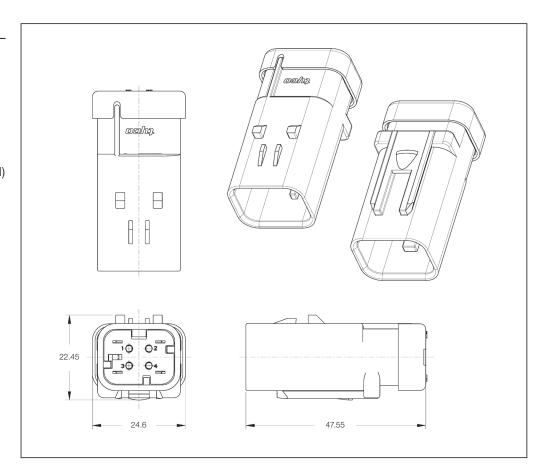
Product Specification:

108-2184

 ${\bf Application\ Specification:}$

114-13065

- UL 94-HB rated
- Resistant to a wide range of chemicals
- RoHS and ELV compliant



Sealed Pin Housings 2-Row with Standard Diameter Wire Seal

No. of Positions	DI D O I	Keying	Part Numbers	
	PLR Color		Pin (Cap) Housing	Mating Receptacle (Plug) Housing
4	Red	Key A	776488-1	776487-1
	Gray	Key B	776488-2	776487-2
	Yellow	Key C	776488-3	776487-3
	Green	Key D	776488-4	776487-4

Sealed Pin Housings 2-Row with Reduced Diameter Wire Seal

No. of	DI D O-I	V du	Part Numbers	
Positions	PLR Color	Keying	Pin (Cap) Housing	Mating Receptacle (Plug) Housing
	Red	Key A	776536-1	776524-1
4	Gray	Key B	776536-2	776524-2
4	Yellow	Key C	776536-3	776524-3
	Green	Key D	776536-4	776524-4

Section Catalog 1654281-2 Revised 4-2010 Main Catalog 1654400-1 Chapter 30 - Issued 4-2010

2-Row Sealed Pin (Cap) Housings - Reversed Type

Technical Features

No. of Positions:

4 (2×2) Position Assembly

Housing Material:

Glass Reinforced PBT

Wire Size Range:

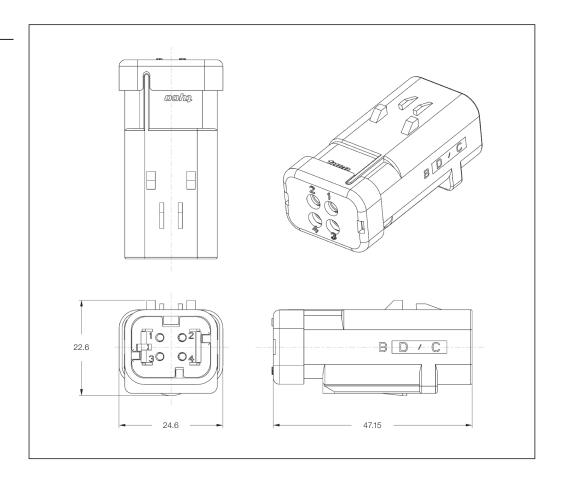
2.18-3.67 mm

Product Specification:

108-2184

Application Specification: 114-13065

- UL 94-HB rated
- Resistant to a wide range of chemicals
- RoHS and ELV compliant



Sealed Pin Housings 2-Row – Reversed Mounting Feature

No. of	DI D O-I	Varian	Part Numbers	
Positions	PLR Color	Keying	Pin (Cap) Housing	Mating Receptacle (Plug) Housing
	Red	Key A	1717674-1	776487-1
4	Gray	Key B	1717674-2	776487-2
4	Yellow	Key C	1717674-3	776487-3
	Green	Key D	1717674-4	776487-4

Section Catalog 1654281-2 Revised 4-2010 Main Catalog 1654400-1 Chapter 30 – Issued 4-2010

2-Row Sealed Pin (Cap) Housings

Technical Features

No. of Positions:

6 (2×3) Position Assembly

Housing Material:

Glass Reinforced PBT

Wire Size Range:

2.18-3.67 mm

1.30-2.54 mm

(with reduced diameter wire seal)

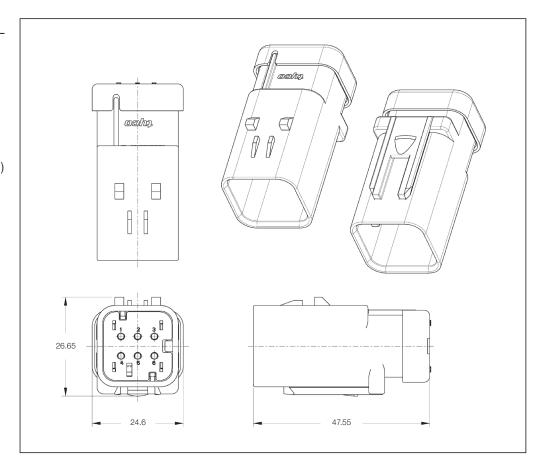
Product Specification:

108-2184

 ${\bf Application\ Specification:}$

114-13065

- UL 94-HB rated
- Resistant to a wide range of chemicals
- RoHS and ELV compliant



Sealed Pin Housings 2-Row with Standard Diameter Wire Seal

No. of	DI R Color	Keying	Part Numbers	
Positions			Pin (Cap) Housing	Mating Receptacle (Plug) Housing
	Red	Key A	776434-1	776433-1
6	Gray	Key B	776434-2	776433-2
	Yellow	Key C	776434-3	776433-3

Sealed Pin Housings 2-Row with Reduced Diameter Wire Seal

PLR Color	Keying ———		
		Pin (Cap) Housing	Mating Receptacle (Plug) Housing
Red	Key A	776537-1	776531-1
Gray	Key B	776537-2	776531-2
Yellow	Key C	776537-3	776531-3
	Gray	Gray Key B	Red Key A 776537-1 Gray Key B 776537-2

Section Catalog 1654281-2 Revised 4-2010 Main Catalog 1654400-1 Chapter 30 – Issued 4-2010

2-Row Sealed Pin (Cap) Housings - Reversed Type

Technical Features

No. of Positions:

6 (2×3) Position Assembly

Housing Material:Glass Reinforced PBT

Wire Size Range: 2.18-3.67 mm

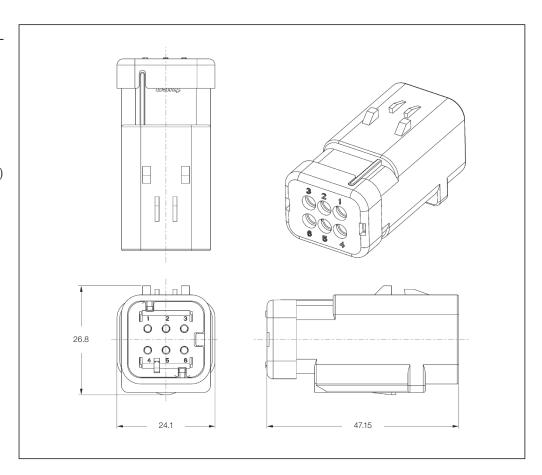
1.30-2.54 mm (with reduced diameter wire seal)

 ${\bf Product\ Specification:}$

108-2184

Application Specification: 114-13065

- UL 94-HB rated
- Resistant to a wide range of chemicals
- RoHS and ELV compliant



Sealed Pin Housings 2-Row – Reversed Mounting Feature

No. of	DI R Color	Keying	Part Numbers	
Positions			Pin (Cap) Housing	Mating Receptacle (Plug) Housing
	Red	Key A	1717675-1	776433-1
6	Gray	Key B	1717675-2	776433-2
	Yellow	Key C	1717675-3	776433-3

Sealed Pin Housings 2-Row – Reversed Type with Reduced Diameter Wire Seal

No. of	PLR Color	V andra a	Part Numbers	
Positions	PLR Color	Keying	Pin (Cap) Housing	Mating Receptacle (Plug) Housing
	Red	Key A	1717975-1	776531-1
6	Gray	Key B	1717975-2	776531-2
	Yellow	Key C	1717975-3	776531-3

Section Catalog 1654281-2 Revised 4-2010 Main Catalog 1654400-1 Chapter 30 - Issued 4-2010

2-Row Sealed Pin (Cap) Housings

Technical Features

No. of Positions:

8 (2×4) Position Assembly

Housing Material:Glass Reinforced PBT

Wire Size Range:

2.18-3.67 mm

1.30-2.54 mm (with reduced diameter wire seal)

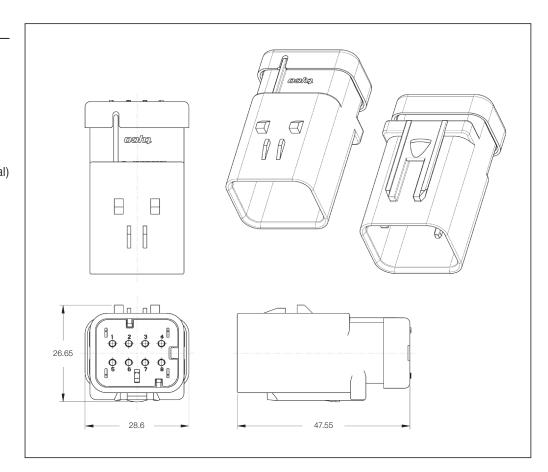
Product Specification:

108-2184

 ${\bf Application\ Specification:}$

114-13065

- UL 94-HB rated
- Resistant to a wide range of chemicals
- RoHS and ELV compliant



Sealed Pin Housings 2-Row with Standard Diameter Wire Seal

No. of Positions	PLR Color	Keying	Part Numbers	
			Pin (Cap) Housing	Mating Receptacle (Plug) Housing
8 Red Gray Yellow	Red	Key A	776495-1	776494-1
	Gray	Key B	776495-2	776494-2
	Yellow	Key C	776495-3	776494-3
	Green	Key D	776495-4	776494-4

Sealed Pin Housings 2-Row with Reduced Diameter Wire Seal

No. of	PLR Color	V du	Part Numbers	
Positions		Keying	Pin (Cap) Housing	Mating Receptacle (Plug) Housing
	Red	Key A	776538-1	776532-1
8 Gray Yellow	Gray	Key B	776538-2	776532-2
	Key C	776538-3	776532-3	
	Green	Key D	776538-4	776532-4

Section Catalog 1654281-2 Revised 4-2010 Main Catalog 1654400-1 Chapter 30 – Issued 4-2010

Housings and Connectors

2-Row Sealed Pin (Cap) Housings - Reversed Type

Technical Features

No. of Positions:

8 (2×4) Position Assembly

Housing Material:

Glass Reinforced PBT

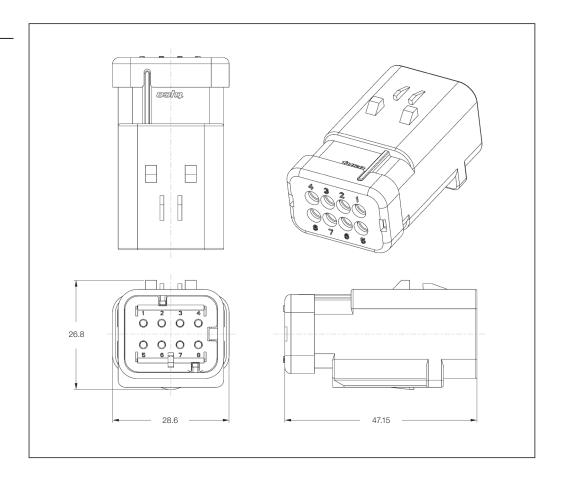
Wire Size Range: 2.18-3.67 mm

Product Specification:

108-2184

Application Specification: 114-13065

- UL 94-HB rated
- Resistant to a wide range of chemicals
- RoHS and ELV compliant



Sealed Pin Housings 2-Row – Reversed Mounting Feature

No. of Positions	PLR Color	Keying	Part Numbers	
			Pin (Cap) Housing	Mating Receptacle (Plug) Housing
	Red	Key A	1717676-1	776494-1
	Gray	Key B	1717676-2	776494-2
2	Yellow	Key C	1717676-3	776494-3
	Green	Key D	1717676-4	776494-4

Section Catalog 1654281-2 Revised 4-2010 Main Catalog 1654400-1 Chapter 30 – Issued 4-2010

2-Row Sealed Pin (Cap) Housings

Technical Features

No. of Positions:

12 (2×6) Position Assembly

Housing Material:

Glass Reinforced PBT

Wire Size Range:

2.18-3.67 mm

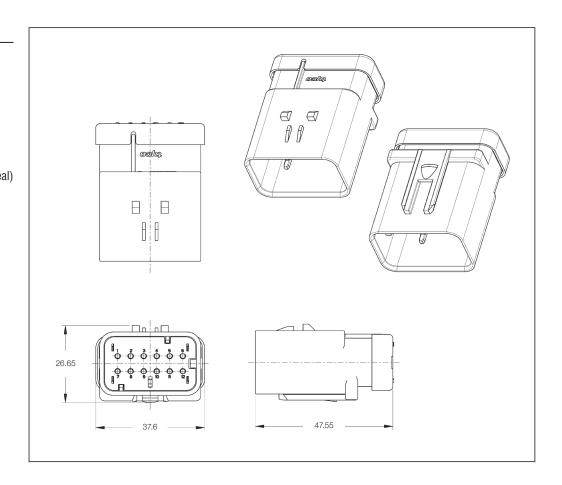
1.30-2.54 mm (with reduced diameter wire seal)

Product Specification:

108-2184

Application Specification: 114-13065

- UL 94-HB rated
- Resistant to a wide range of chemicals
- RoHS and ELV compliant



Sealed Pin Housings 2-Row with Standard Diameter Wire Seal

No. of PLR Coll Positions	DI D O I	Keying	Part Numbers	
	PLR Color		Pin (Cap) Housing	Mating Receptacle (Plug) Housing
12 Red Gray Yellow	Red	Key A	776438-1	776437-1
	Gray	Key B	776438-2	776437-2
	Key C	776438-3	776437-3	
	Green	Key D	776438-4	776437-4

Sealed Pin Housings 2-Row with Reduced Diameter Wire Seal

No. of	PLR Color	Keying	Part Numbers		
Positions	PLN COIOI		Pin (Cap) Housing	Mating Receptacle (Plug) Housing	
	Red	Key A	776539-1	776533-1	
12	Gray	Key B	776539-2	776533-2	
12	Yellow	Key C	776539-3	776533-3	
	Green	Key D	776539-4	776533-4	

Section Catalog 1654281-2 Revised 4-2010 Main Catalog 1654400-1 Chapter 30 - Issued 4-2010

Housings and Connectors

2-Row Sealed Pin (Cap) Housings - Reversed Type

Technical Features

No. of Positions:

12 (2×6) Position Assembly

Housing Material:

Glass Reinforced PBT

Wire Size Range:

2.18-3.67 mm

1.30-2.54 mm

(with reduced diameter wire seal)

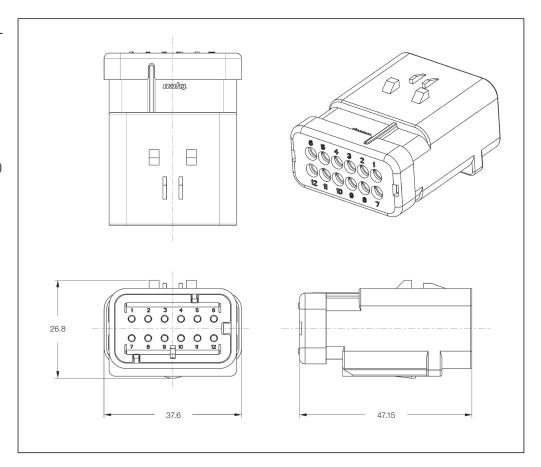
Product Specification:

108-2184

 ${\bf Application\ Specification:}$

114-13065

- UL 94-HB rated
- Resistant to a wide range of chemicals
- RoHS and ELV compliant



Sealed Pin Housings 2-Row – Reversed Mounting Feature

No. of	DI D O-I	Keying	Part Numbers		
Positions	PLR Color		Pin (Cap) Housing	Mating Receptacle (Plug) Housing	
	Red	Key A	1717677-1	776437-1	
10	Gray	Key B	1717677-2	776437-2	
12	Yellow	Key C	1717677-3	776437-3	
	Green	Key D	1717677-4	776437-4	

Sealed Pin Housings 2-Row – Reversed Type with Reduced Diameter Wire Seal

No. of	PLR Color	Keying	Part Numbers		
Positions	PLR Color		Pin (Cap) Housing	Mating Receptacle (Plug) Housing	
	Red	Key A	1717934-1	776533-1	
12	Gray	Key B	1717934-2	776533-2	
12	Yellow	Key C	1717934-3	776533-3	
	Green	Key D	1717934-4	776533-4	

Vertical and 90° Backshells

AMPSEAL 16 Vertical and 90° Backshells for Commercial Vehicle Markets



Standard Height

Description	Part Number	
2 Position / 0° Exit / NC 08	2035047-1	
3 Position / 0° Exit / NC 08	2035047-2	
4 Position / 0° Exit / NC 08	2035047-3	
6 Position / 0° Exit / NC 08	2035047-4	
4 Position / 0° Exit / NC 12	2035047-5	
6 Position / 0° Exit / NC 12	2035047-6	
8 Position / 0° Exit / NC 12	2035047-7	
12 Position / 0° Exit / NC 12	2035047-8	
8 Position / 0° Exit / NC 16	2035047-9	
12 Position / 0° Exit / NC 16	1-2035047-0	
12 Position / 0° Exit / NC 20	1-2035047-1	
2 Position / 90° Exit / NC 08	2035048-1	
3 Position / 90° Exit / NC 08	2035048-2	
4 Position / 90° Exit / NC 08	2035048-3	
2 Position / 90° Exit / NC 12	2035048-5	
3 Position / 90° Exit / NC 12	2035048-6	
4 Position / 90° Exit / NC 12	2035048-7	

Note: All Part Numbers are RoHS and ELV compliant.

Low Profile

Description	Туре	Part Number	
2 Position / 90° Exit / NC 08	Plug Type	2035366-1	
2 FOSILIOIT/ 90 LXIL/ NO 00	Cap Type	2098436-1	
3 Position / 90° Exit / NC 08	Plug Type	2035366-2	
3 FOSILIOIT/ 90 EXIL/ NO 00	Cap Type	2098436-2	
4 Position / 90° Exit / NC 08	Plug Type	2035366-7	
4 FOSILIOIT / 90 EXIL / NO 00	Cap Type	2098436-7	
6 Position / 90° Exit / NC 08	Plug Type	2035366-8	
0 POSITION / 90 EXIL / NO 00	Cap Type	2098436-8	
	Plua Typo	2025266.2	
2 Position / 90° Exit / NC 12	Plug Type	2035366-3	
	Plug Type Cap Type Plug Type	2035366-3 2098436-3 2035366-4	
2 Position / 90° Exit / NC 12 3 Position / 90° Exit / NC 12	Cap Type	2098436-3	
3 Position / 90° Exit / NC 12	Cap Type Plug Type	2098436-3 2035366-4	
	Cap Type Plug Type Cap Type	2098436-3 2035366-4 2098436-4	
3 Position / 90° Exit / NC 12	Cap Type Plug Type Cap Type Plug Type	2098436-3 2035366-4 2098436-4 2035366-9	

Note: All Part Numbers are RoHS and ELV compliant.

Section Catalog 1654281-2 Revised 4-2010 Main Catalog 1654400-1 Chapter 30 – Issued 4-2010

Backshell Matrix

No. of	Conduit	Part Numbers				
Positions	Size	Standard Straight	Standard 90°	Low Profile 90°	Mating Connectors	Туре
		2035047-1*	2035048-1*	2035366-1	776427-ALL	Plug Assy
2	NC08				776522-ALL	
	NW7.5			2098436-1	776428-ALL	Cap Assy
					776534-ALL	
		2035047-2*	2035048-2*	2035366-2	776429-ALL	Plug Assy
_	NC08				776523-ALL	
3	NW7.5				776430-ALL	
				2098436-2	776535-ALL	Cap Assy
				0005000 7	776487-ALL	D
	NC08	0005047.04	0005040.0#	2035366-7	776524-ALL	Plug Assy
4	NW7.5	2035047-3*	2035048-3*		776488-ALL	0 1
				2098436-7	776536-ALL	Cap Assy
					776433-ALL	
	NC08	0005047.4#		2035366-8	776531-ALL	Plug Assy
6	NW7.5	2035047-4*	_		776434-ALL	Cap Assy
				2098436-8	776537-ALL	
					776427-ALL	Plug Assy
	NC12			2035366-3	776522-ALL	
2	NW10	-	-		776428-ALL	Cap Assy
				2098436-3	776534-ALL	
					776429-ALL	
_	NC12			2035366-4	776523-ALL	Plug Assy
3	NW10	-	2035048-6 *	2098436-4	776430-ALL	Cap Assy
					776535-ALL	
					776487-ALL	Plug Assy Cap Assy
	NC12		0005010.7*	2035366-9	776524-ALL	
4	NW10	2035047-5 *	2035048-7*		776488-ALL	
				2098436-9	776536-ALL	
				4 0005000	776433-ALL	D .
	NC12	0005047.0*		1-2035366-0	776531-ALL	Plug Assy
6	NW10	2035047-6 *	_	1 0000100 0	776434-ALL	0 4
				1-2098436-0	776537-ALL	- Cap Assy
					776494-ALL	Dl: ^ -
	NC12	0005047.7*		_	776532-ALL	Plug Assy
8	NW10	2035047-7*	_		776495-ALL	
				_	776538-ALL	- Cap Assy
		NC12 2035047-8*	-	-	776437-ALL	Db : A -
10	NC12				776533-ALL	Plug Assy
12					776438-ALL	Con Asses
				_	776539-ALL	- Cap Assy

Note: *) Backshell available only with latch window. Can be used for Cap Assembly if desired.

Section Catalog 1654281-2 Revised 4-2010 Main Catalog 1654400-1 Chapter 30 – Issued 4-2010

Backshell Matrix (continued)

No. of	Conduit			Part Numbers		
Positions	Size	Standard Straight	Standard 90°	Low Profile 90°	Mating Connectors	Туре
		-	-	-	776427-ALL	Plug Assy
2	NC16				776522-ALL	
2	NW13				776428-ALL	Con Assu
					776534-ALL	Cap Assy
					776429-ALL	Plug Assy
3	NC16			_	776523-ALL	
3	NW13	_	_		776430-ALL	Cap Assy
				_	776535-ALL	
					776487-ALL	Plug Assy
4	NC16				776524-ALL	
4	NW13	_	_		776488-ALL	Cap Assy
				_	776536-ALL	
		-	-		776433-ALL	Plug Assy
6	NC16				776531-ALL	
O	NW13				776434-ALL	Cap Assy
					776537-ALL	
	NC16 NW13	NC16 2035047-9*	-		776494-ALL	Plug Assy Cap Assy
8					776532-ALL	
0		2033047-9			776495-ALL	
					776538-ALL	
12		NC16 1-2035047-0*	-	-	776437-ALL	Plug Assy
	NC16				776533-ALL	
	NW13	1-2033047-0*			776438-ALL	
					776539-ALL	Cap Assy
		NC20 1-2035047-1* NW17	-		776437-ALL	Plug Assy
12	NC20				776533-ALL	
IZ.	NW17				776438-ALL	Cap Assy
				_	776539-ALL	Oap ASSy

Note: *) Backshell available only with latch window. Can be used for Cap Assembly if desired.

Mounting Clips

AMPSEAL 16 Mounting Clips for Commercial Vehicle Markets



Description	Part Number
Mounting Clip with Anti-Rotational Feature	1924487-2
Mounting Clip without Anti-Rotational Feature	1924487-1
Description	Part Number
Cavity (Seal) Plug	776363-1
Cavity (Seal) Plug	776364-1

Please call your local TE Connectivity representative for personal assistance or visit our website.

Note: All Part Numbers are RoHS and ELV compliant.



Engineering Notes

