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.

SUPERSEDED
NOT the LATEST REVISION

Engineering Notes

All specifications subject to change. Consult Tyco Electronics for latest specifications.

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 Tyco Electronics 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 %)

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 (Reeled)	Plating		Wire Size (AWG)	Insulation Diameter Range		Terminal Part Number (Loose-Piece)	Plating	
		Au	Ni		Inch	mm		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 Tyco Electronics Product Specialist.

Size 16 Terminal / Wire Selection for Connector Wire Seal Chart

Wire Size (Insulation Type)	Insulation Diameter (Nominal)		Terminal Part Number (Reeled)						Connector Wire Seal	
			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 mm² (TXL)	1.78	0.070	✔	✔						✔
0.5 mm² (GXL)	2.22	0.087	✔	✔						✔
0.5 mm² (SXL)	2.55	0.100	✔	✔					✔	
20 AWG (TXL)	1.78	0.070	✔	✔						✔
20 AWG (GXL)	2.16	0.085	✔	✔						✔
20 AWG (SXL)	2.44	0.096	✔	✔					✔	
18 AWG (TXL)	1.98	0.078	✔	✔			✔	✔		✔
18 AWG (GXL)	2.34	0.092	✔	✔	✔	✔	✔	✔	✔	✔
18 AWG (SXL)	2.72	0.107			✔	✔	✔	✔	✔	
1.0 mm² (TXL)	2.28	0.090					✔	✔	✔	✔
1.0 mm² (GXL)	2.72	0.107			✔	✔	✔	✔	✔	
1.0 mm² (SXL)	3.15	0.124			✔	✔	✔	✔	✔	
16 AWG (TXL)	2.24	0.088					✔	✔	✔	✔
16 AWG (GXL)	2.62	0.103			✔	✔	✔	✔	✔	
16 AWG (SXL)	3.05	0.120			✔	✔	✔	✔	✔	
2.0 mm² (TXL)	2.58	0.102			✔	✔	✔	✔	✔	
2.0 mm² (GXL)	3.02	0.119			✔	✔	✔	✔	✔	
2.0 mm² (SXL)	3.65	0.144					✔	✔		
14 AWG (TXL)	2.62	0.103			✔	✔	✔	✔	✔	
14 AWG (GXL)	2.97	0.117			✔	✔	✔	✔	✔	
14 AWG (SXL)	3.58	0.141					✔	✔	✔	

Note: Insulation Diameter (Nominal) accuracy not guaranteed.

All specifications subject to change. Consult Tyco Electronics for latest specifications.

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

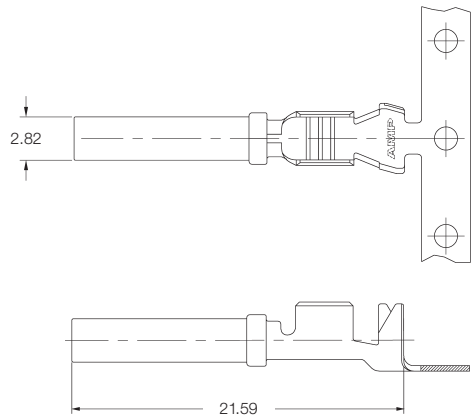
Current Carrying Capacity:
13 amps

Temperature Range
–40 °C to +125 °C

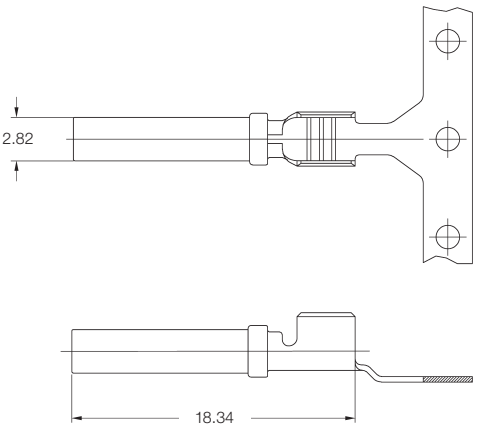
Product Specification:
108-2184

Application Specification:
114-13045

with Wire Insulation Support



without Wire Insulation Support



Receptacle Contacts with Wire Insulation Support

Wire Size Range		Insulation Diameter (mm)	Material and Finish	Part Numbers				Applicator	Hand Tool
(mm²)	(AWG)			Strip Form	Package Quantity	Loose-Piece	Package Quantity		
0.5–0.8	20–18	1.27–2.72	Copper Alloy, Gold	1924464-1	4,000	1924580-1	1,000	See Application Specification 114-13045	
			Copper Alloy, Nickel	1924464-2	4,000	1924580-2	1,000		
0.8–2.0	18–14	2.26–3.33	Copper Alloy, Gold	776492-1	4,000	776299-1	1,000		
			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 Range		Insulation Diameter (mm)	Material and Finish	Part Numbers				Applicator	Hand Tool
(mm²)	(AWG)			Strip Form	Package Quantity	Loose-Piece	Package Quantity		
0.8–2.0	18–14	2.18–3.67	Copper Alloy, Gold	776491-1	4,000	776297-1	1,000	See Application Specification 114-13045	
			Copper Alloy, Nickel	776491-2	4,000	776297-2	1,000		

Note: All Part Numbers are RoHS and ELV compliant.

Pin Contacts

Technical Features

Contact Material:
Copper Alloy

Contact Finish:
Gold or Nickel

Wire Size Range:
0.5–2.0 mm^2 (20–14 AWG)

Insulation Diameter:
1.27–3.67 mm

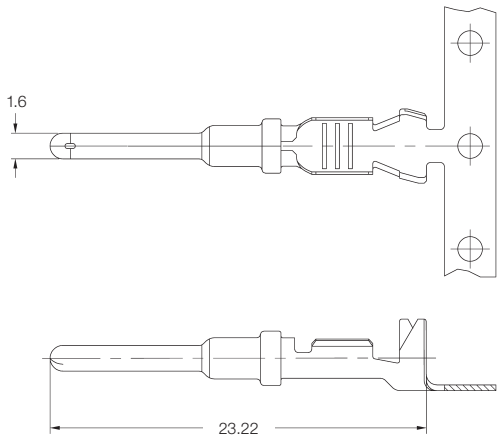
Current Carrying Capacity:
13 amps

Temperature Range
–40 °C to +125 °C

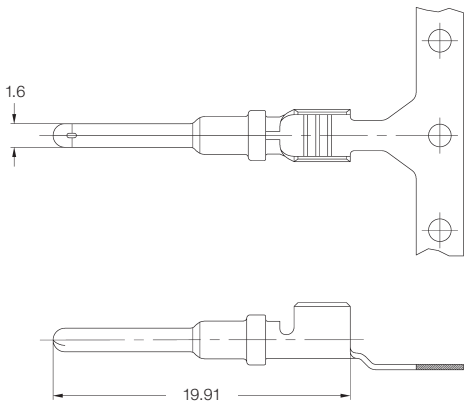
Product Specification:
108-2184

Application Specification:
114-13045

with Wire Insulation Support



without Wire Insulation Support



Pin Contacts with Wire Insulation Support

Wire Size Range		Insulation Diameter (mm)	Material and Finish	Part Numbers				Applicator	Hand Tool
(mm^2)	(AWG)			Strip Form	Package Quantity	Loose-Piece	Package Quantity		
0.5–0.8	20–18	1.27–2.72	Copper Alloy, Gold	1924463-1	4,000	1924579-1	1,000	See Application Specification 114-13045	
			Copper Alloy, Nickel	1924463-3	4,000	1924579-3	1,000		
0.8–2.0	18–14	2.26–3.33	Copper Alloy, Gold	638078-1	4,000	776300-1	1,000		
			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 Range		Insulation Diameter (mm)	Material and Finish	Part Numbers				Applicator	Hand Tool
(mm^2)	(AWG)			Strip Form	Package Quantity	Loose-Piece	Package 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 114-13045	
			Copper Alloy, Nickel	638112-3	4,000	776298-2	1,000		

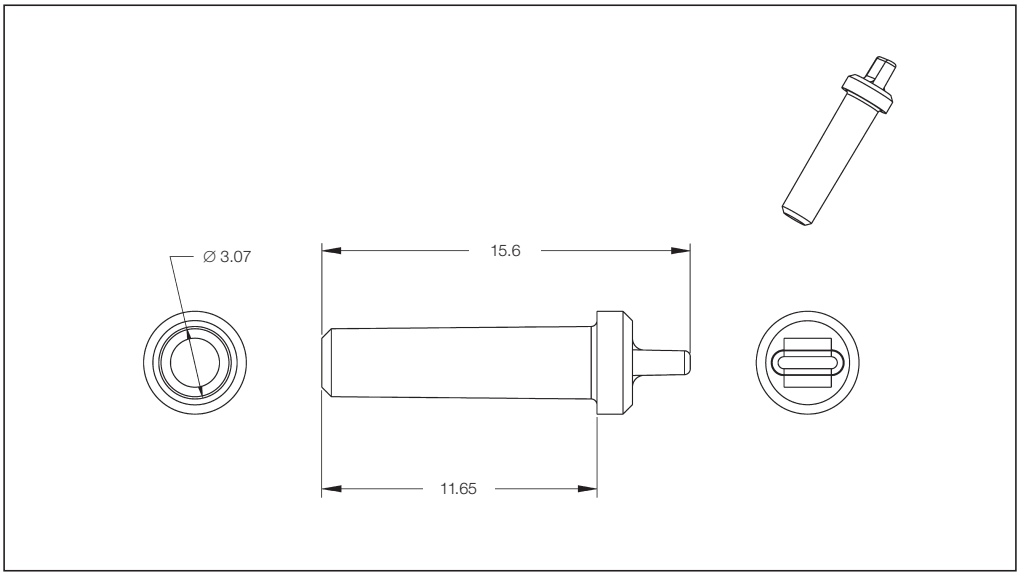
Note: All Part Numbers are RoHS and ELV compliant.

All specifications subject to change. Consult Tyco Electronics for latest specifications.

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)			
Standard Diameter	3.07	16	Yellow	776363-1	10,000
Reduced Diameter	2.55	20	White	776364-1	10,000

Engineering Notes

All specifications subject to change. Consult Tyco Electronics for latest specifications.

Introduction



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.

1-Row Sealed Receptacle (Plug) Housings

Technical Features

No. of Positions:
2 (1×2) Positions Assembly

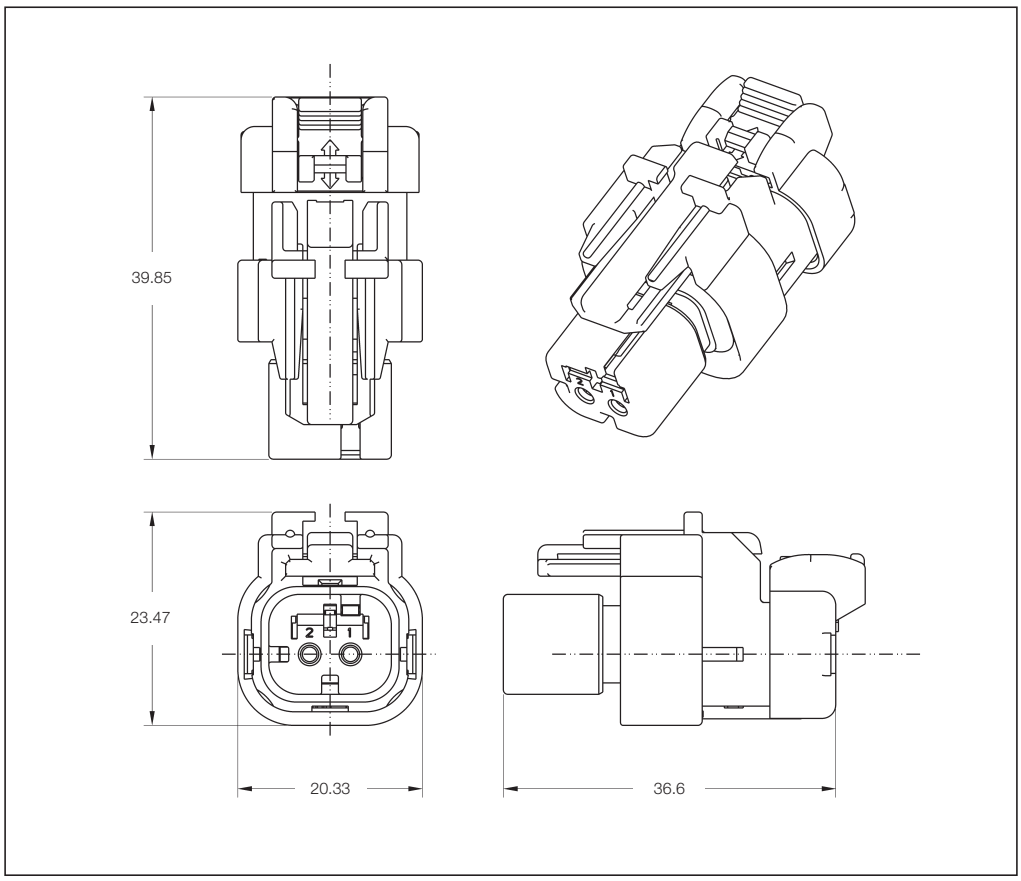
Housing Material:
Glass Reinforced PBT

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 Receptacle Housings 1-Row with Standard Diameter Wire Seal

No. of Positions	PLR Color	Keying	Part Numbers	
			Receptacle (Plug) Housing	Mating Pin (Cap) Housing
2	Red	Key A	776427-1	776428-1
				1717672-1
	Gray	Key B	776427-2	776428-2
				1717672-2
	Yellow	Key C	776427-3	776428-3
				1717672-3
	Green	Key D	776427-4	776428-4
				1717672-4

Sealed Receptacle Housings 1-Row with Reduced Diameter Wire Seal

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

All specifications subject to change. Consult Tyco Electronics for latest specifications.

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

Technical Features

No. of Positions:
3 (1×3) Positions Assembly

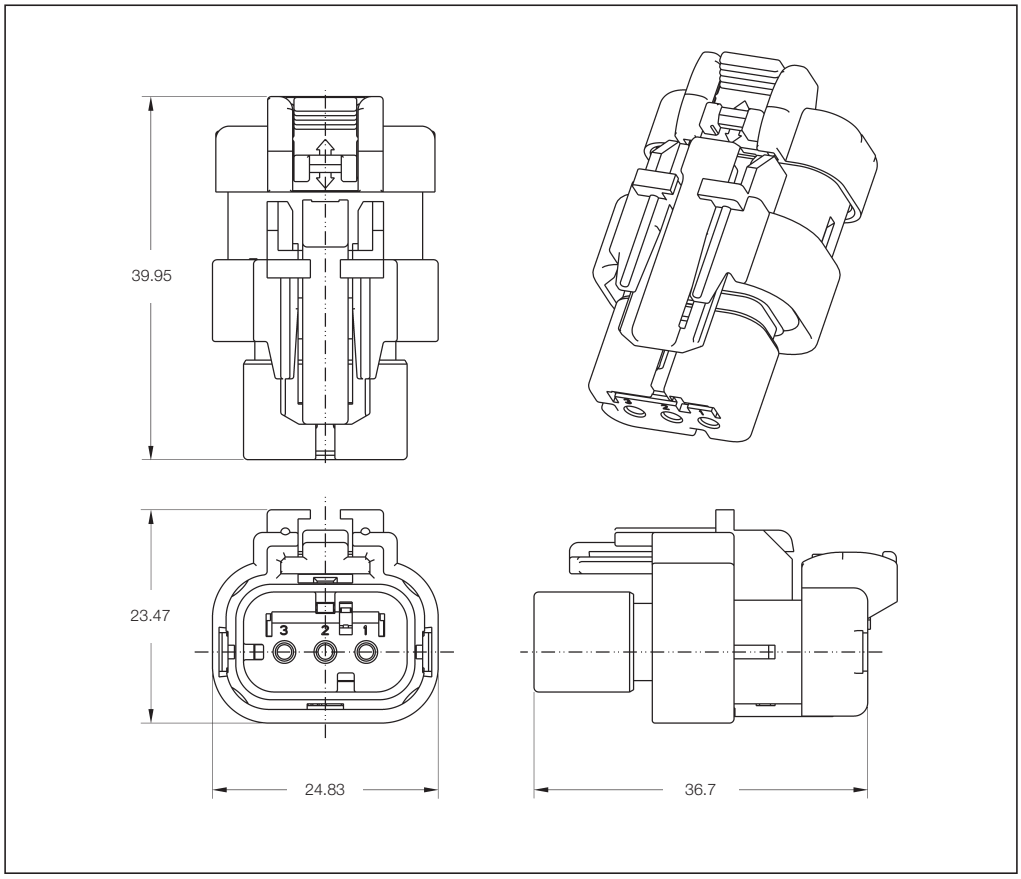
Housing Material:
Glass Reinforced PBT

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 Receptacle Housings 1-Row with Standard Diameter Wire Seal

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

Sealed Receptacle Housings 1-Row with Reduced Diameter Wire Seal

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

2-Row Sealed Receptacle (Plug) Housings

Technical Features

No. of Positions:
4 (2×2) Positions Assembly

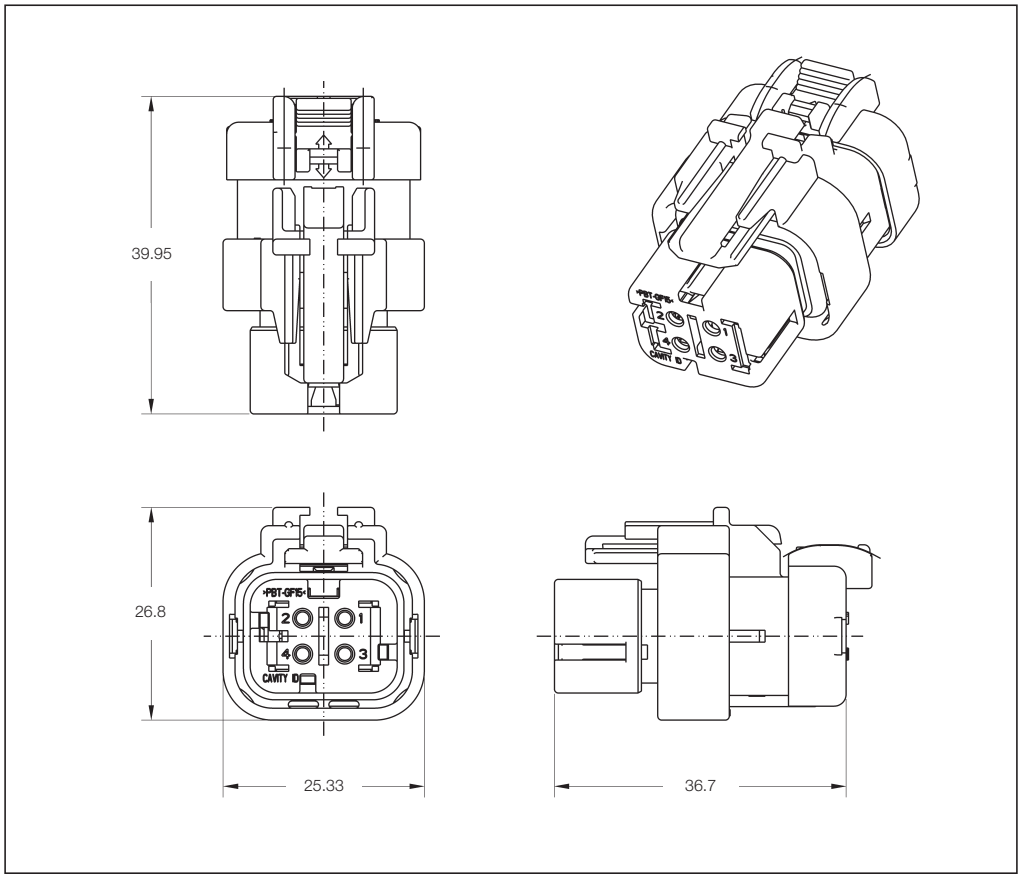
Housing Material:
Glass Reinforced PBT

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 Receptacle Housings 2-Row with Standard Diameter Wire Seal

No. of Positions	PLR Color	Keying	Part Numbers	
			Receptacle (Plug) Housing	Mating Pin (Cap) Housing
4	Red	Key A	776487-1	776488-1
				1717674-1
	Gray	Key B	776487-2	776488-2
				1717674-2
	Yellow	Key C	776487-3	776488-3
				1717674-3
	Green	Key D	776487-4	776488-4
				1717674-4

Sealed Receptacle Housings 2-Row with Reduced Diameter Wire Seal

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

All specifications subject to change. Consult Tyco Electronics for latest specifications.

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

Technical Features

No. of Positions:
6 (2×3) Positions Assembly

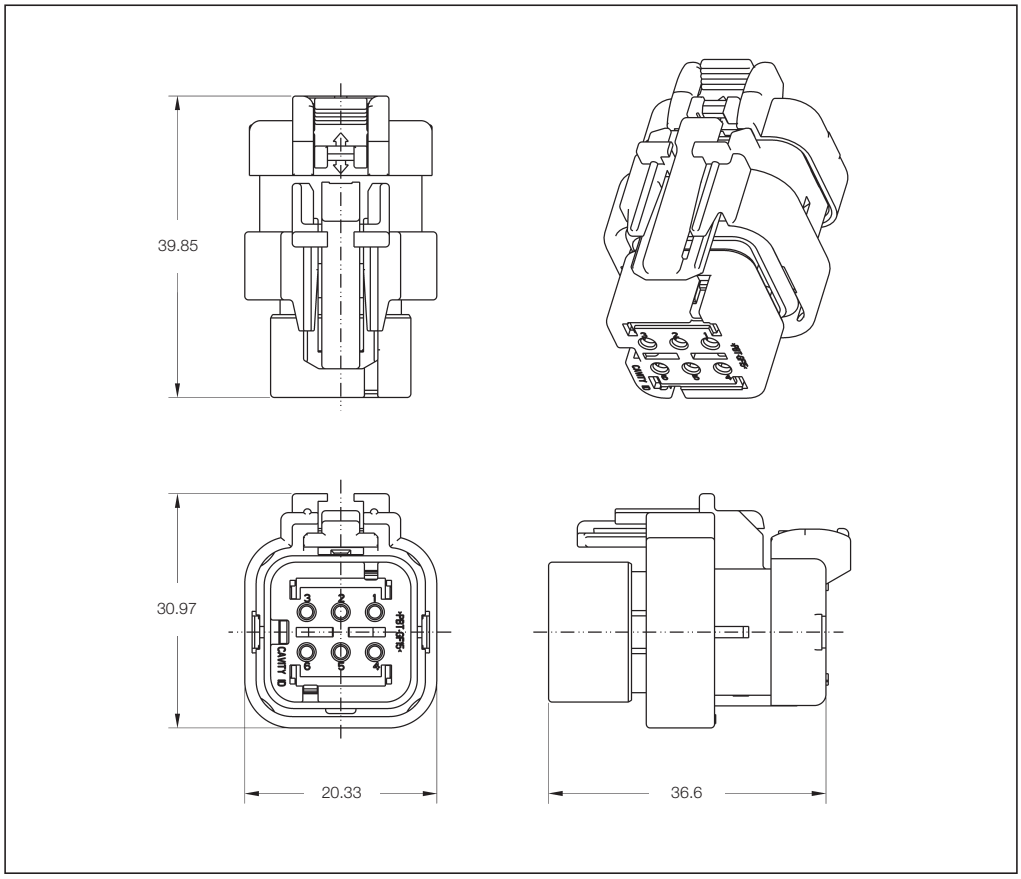
Housing Material:
Glass Reinforced PBT

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 Receptacle Housings 2-Row with Standard Diameter Wire Seal

No. of Positions	PLR Color	Keying	Part Numbers	
			Receptacle (Plug) Housing	Mating Pin (Cap) Housing
6	Red	Key A	776433-1	776434-1
				1717675-1
	Gray	Key B	776433-2	776434-2
				1717675-2
	Yellow	Key C	776433-3	776434-3
				1717675-3

Sealed Receptacle Housings 2-Row with Reduced Diameter Wire Seal

No. of Positions	PLR Color	Keying	Part Numbers	
			Receptacle (Plug) Housing	Mating Pin (Cap) Housing
6	Red	Key A	776531-1	776537-1
				1717975-1
	Gray	Key B	776531-2	776537-2
				1717975-2
	Yellow	Key C	776531-3	776537-3
				1717975-3

2-Row Sealed Receptacle (Plug) Housings

Technical Features

No. of Positions:
8 (2×4) Positions Assembly

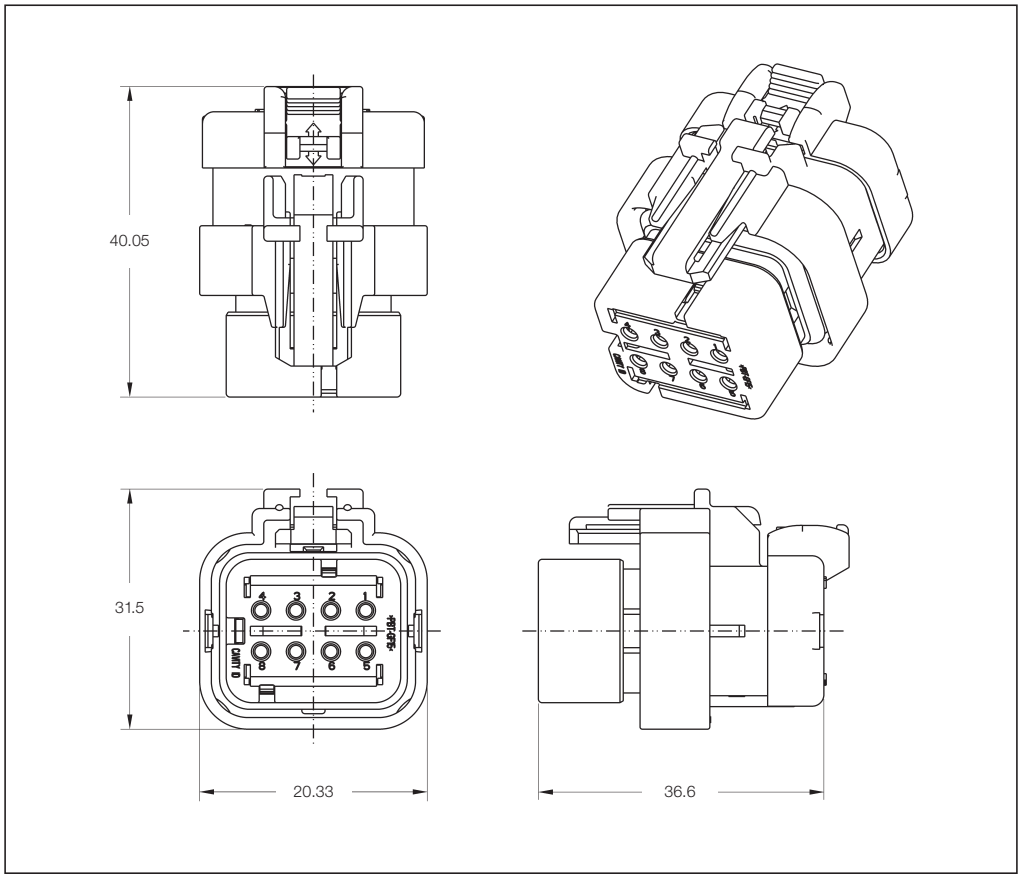
Housing Material:
Glass Reinforced PBT

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 Receptacle Housings 2-Row with Standard Diameter Wire Seal

No. of Positions	PLR Color	Keying	Part Numbers	
			Receptacle (Plug) Housing	Mating Pin (Cap) Housing
8	Red	Key A	776494-1	776495-1
				1717676-1
	Gray	Key B	776494-2	776495-2
				1717676-2
	Yellow	Key C	776494-3	776495-3
				1717676-3
	Green	Key D	776494-4	776495-4
				1717676-4

Sealed Receptacle Housings 2-Row with Reduced Diameter Wire Seal

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

All specifications subject to change. Consult Tyco Electronics for latest specifications.

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

Technical Features

No. of Positions:
12 (2×6) Positions Assembly

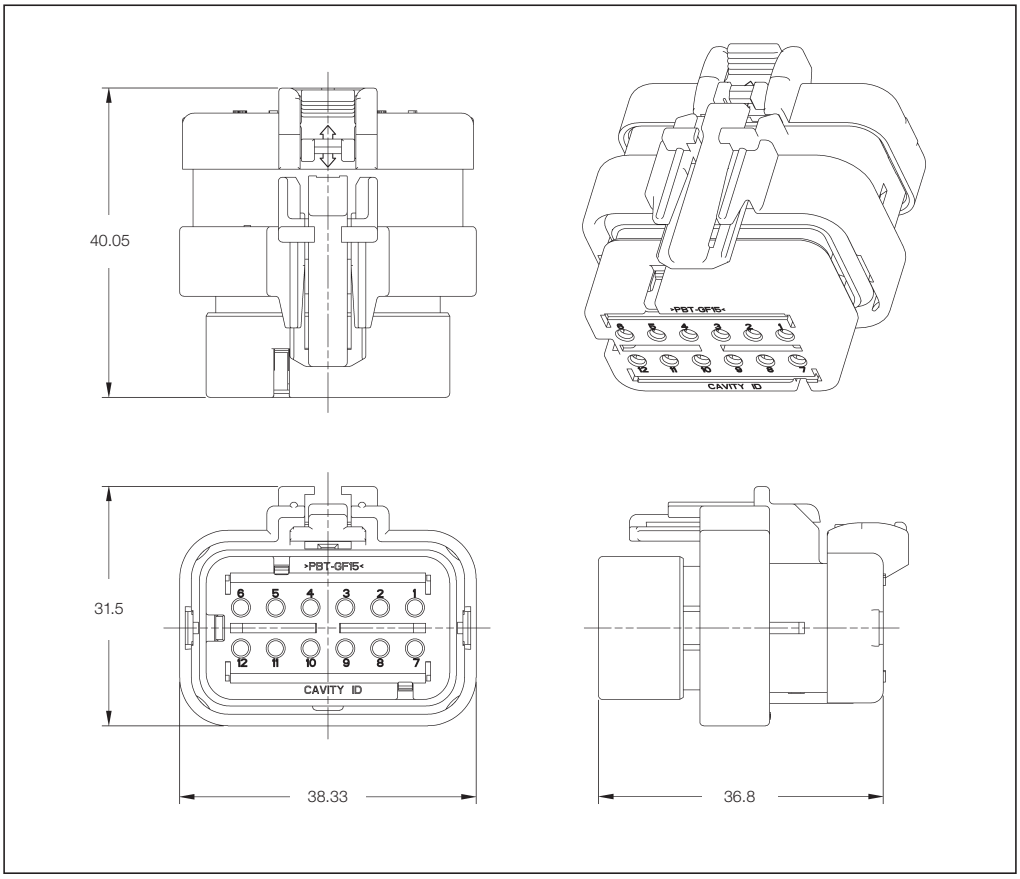
Housing Material:
Glass Reinforced PBT

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 Receptacle Housings 2-Row with Standard Diameter Wire Seal

No. of Positions	PLR Color	Keying	Part Numbers	
			Receptacle (Plug) Housing	Mating Pin (Cap) Housing
12	Red	Key A	776437-1	776538-1
				1717677-1
	Gray	Key B	776437-2	776538-2
				1717677-2
	Yellow	Key C	776437-3	776538-3
				1717677-3
	Green	Key D	776437-4	776538-4
				1717677-4

Sealed Receptacle Housings 2-Row with Reduced Diameter Wire Seal

No. of Positions	PLR Color	Keying	Part Numbers	
			Receptacle (Plug) Housing	Mating Pin (Cap) Housing
12	Red	Key A	776533-1	776539-1
				1717934-1
	Gray	Key B	776533-2	776539-2
				1717934-2
	Yellow	Key C	776533-3	776539-3
				1717934-3
	Green	Key D	776533-4	776539-4
				1717934-4

1-Row Sealed Pin (Cap) Housings

Technical Features

No. of Positions:
2 (1×2) Positions Assembly

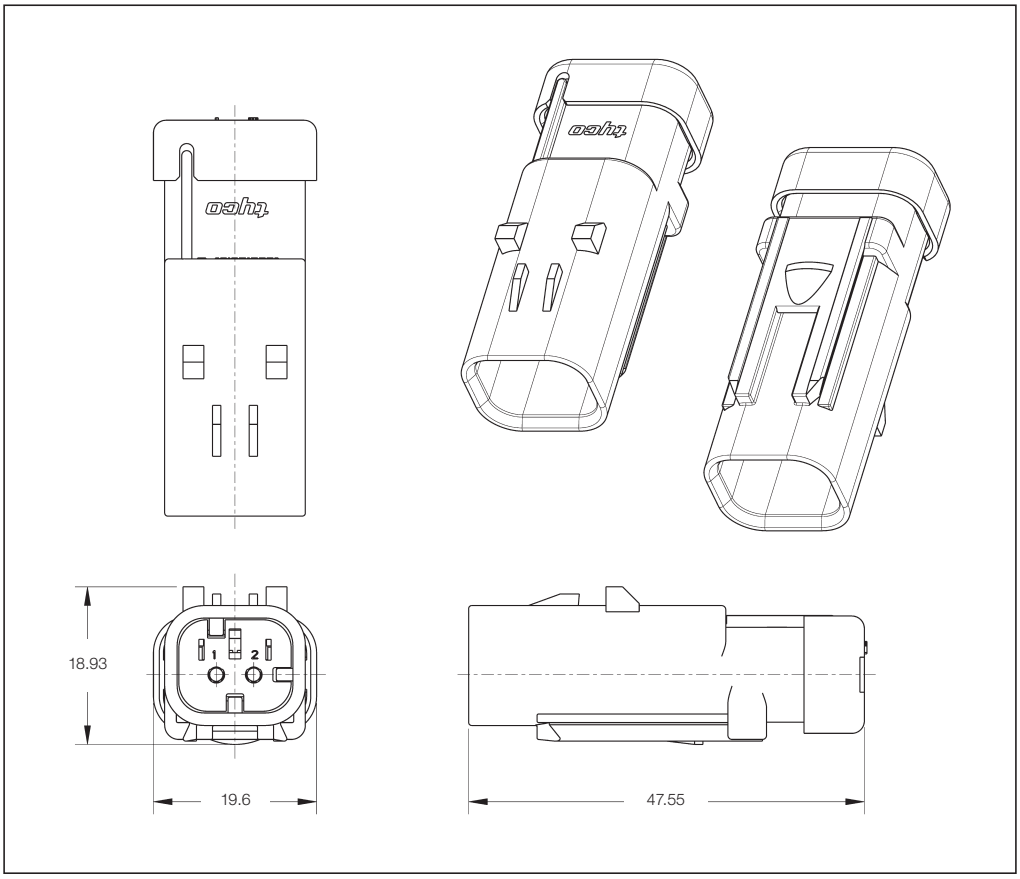
Housing Material:
Glass Reinforced PBT

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	PLR Color	Keying	Part Numbers	
			Pin (Cap) Housing	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 Positions	PLR Color	Keying	Part Numbers	
			Pin (Cap) Housing	Mating Receptacle (Plug) Housing
2	Red	Key A	776534-1	776522-1
	Gray	Key B	776534-2	776522-2
	Yellow	Key C	776534-3	776522-3
	Green	Key D	776534-4	776522-4

All specifications subject to change. Consult Tyco Electronics for latest specifications.

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

Technical Features

No. of Positions:
2 (1×2) Positions Assembly

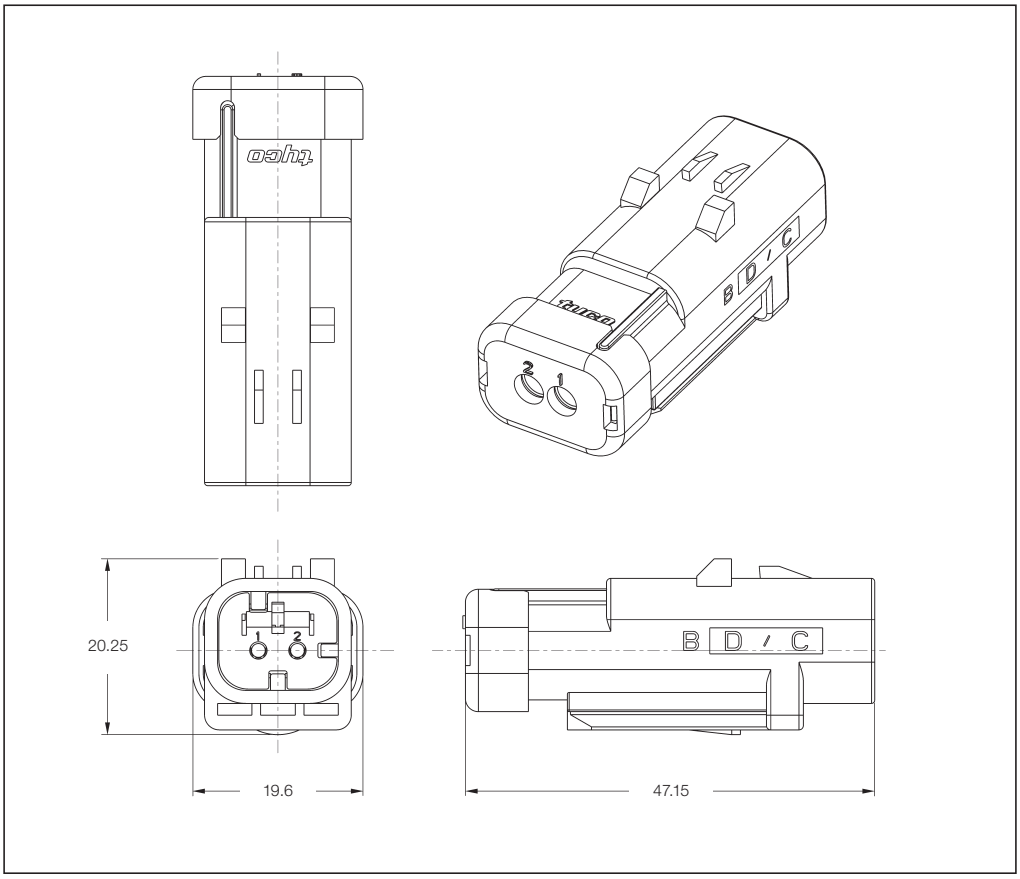
Housing Material:
Glass Reinforced PBT

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	Keying	Part Numbers	
			Pin (Cap) Housing	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

1-Row Sealed Pin (Cap) Housings

Technical Features

No. of Positions:
3 (1×3) Positions Assembly

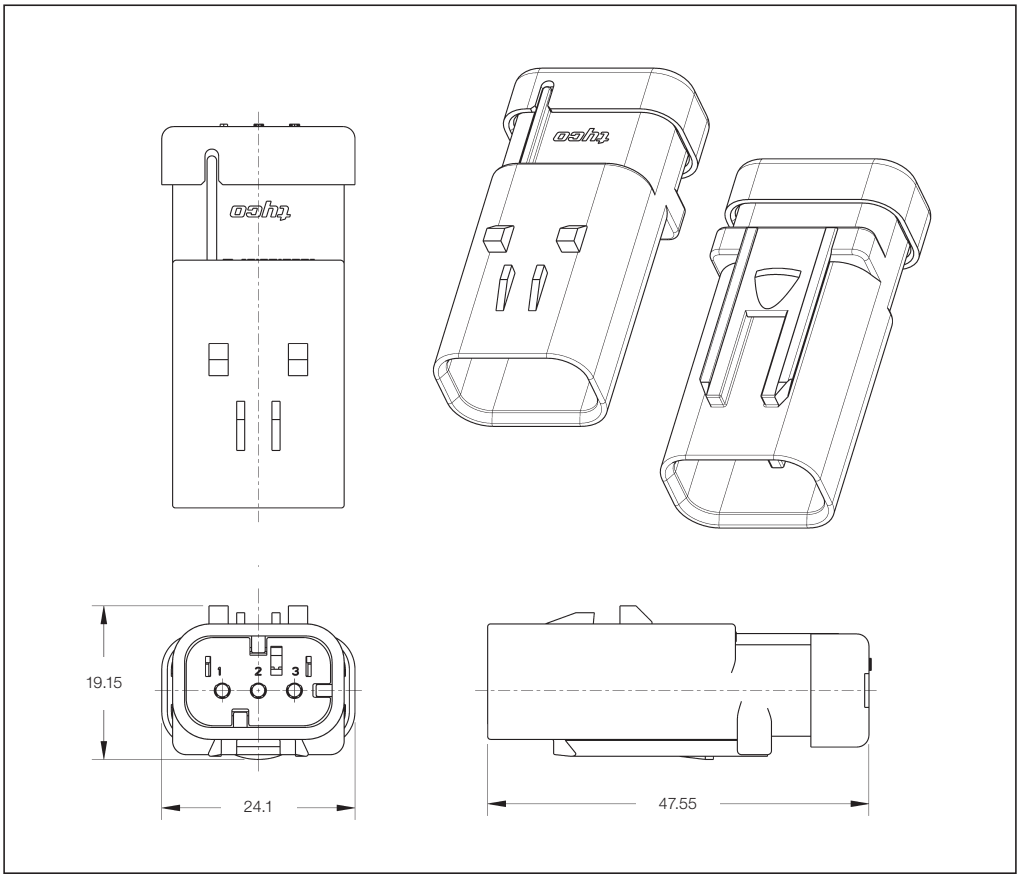
Housing Material:
Glass Reinforced PBT

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	PLR Color	Keying	Part Numbers	
			Pin (Cap) Housing	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 Positions	PLR Color	Keying	Part Numbers	
			Pin (Cap) Housing	Mating Receptacle (Plug) Housing
3	Red	Key A	776535-1	776523-1
	Gray	Key B	776535-2	776523-2
	Yellow	Key C	776535-3	776523-3
	Green	Key D	776535-4	776523-4

All specifications subject to change. Consult Tyco Electronics for latest specifications.

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

Technical Features

No. of Positions:
3 (1×3) Positions Assembly

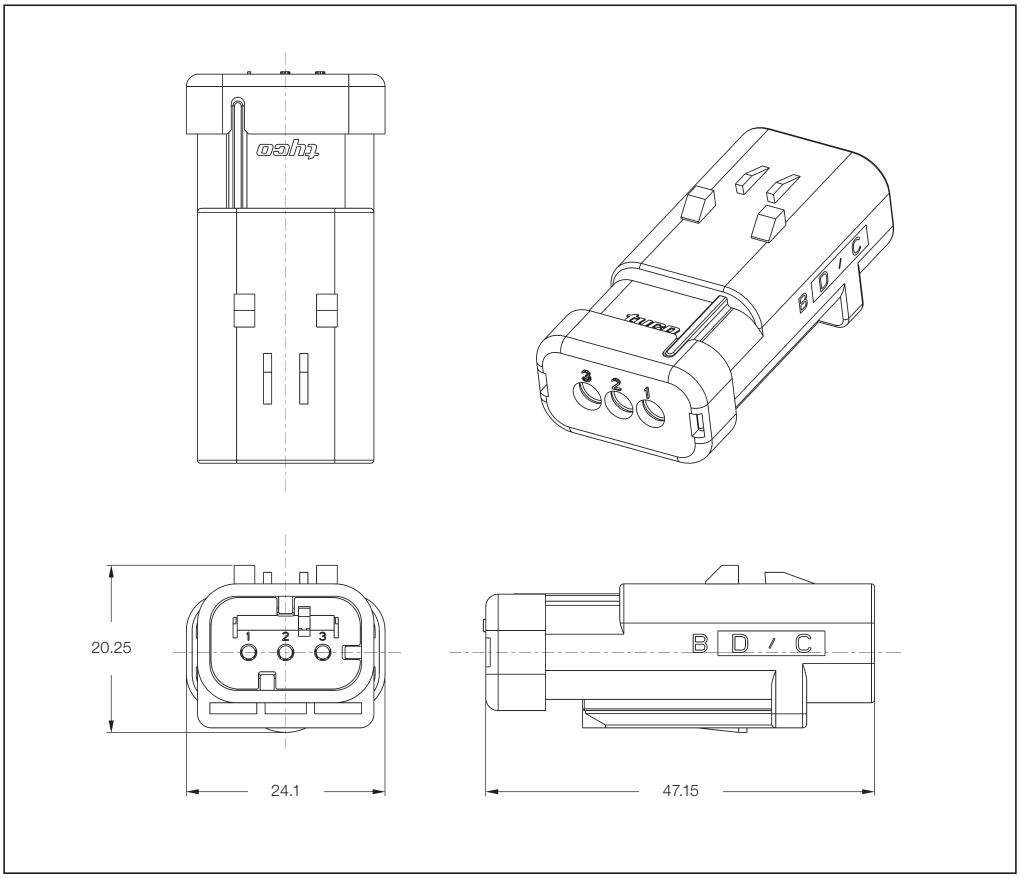
Housing Material:
Glass Reinforced PBT

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	Keying	Part Numbers	
			Pin (Cap) Housing	Mating Receptacle (Plug) Housing
3	Red	Key A	1717673-1	776429-1
	Gray	Key B	1717673-2	776429-2
	Yellow	Key C	1717673-3	776429-3
	Green	Key D	1717673-4	776429-4

2-Row Sealed Pin (Cap) Housings

Technical Features

No. of Positions:
4 (2×2) Positions Assembly

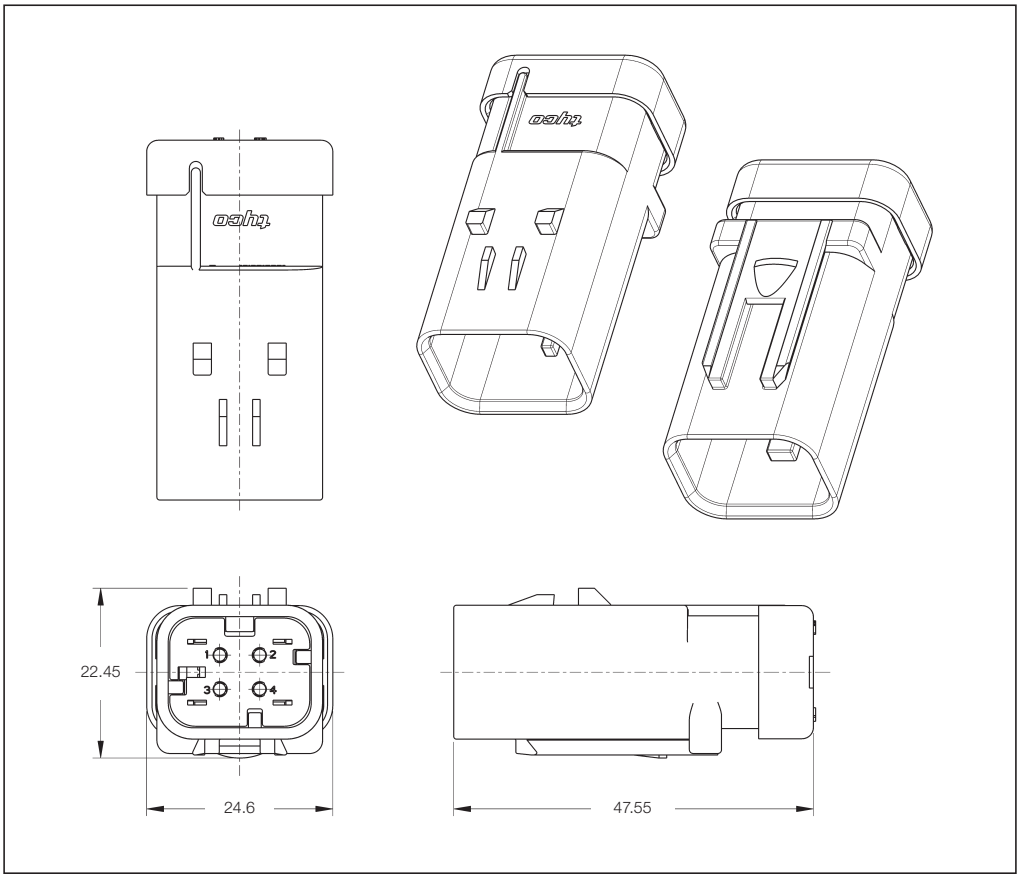
Housing Material:
Glass Reinforced PBT

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 Positions	PLR Color	Keying	Part Numbers	
			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 Positions	PLR Color	Keying	Part Numbers	
			Pin (Cap) Housing	Mating Receptacle (Plug) Housing
4	Red	Key A	776536-1	776524-1
	Gray	Key B	776536-2	776524-2
	Yellow	Key C	776536-3	776524-3
	Green	Key D	776536-4	776524-4

All specifications subject to change. Consult Tyco Electronics for latest specifications.

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

Technical Features

No. of Positions:
4 (2×2) Positions Assembly

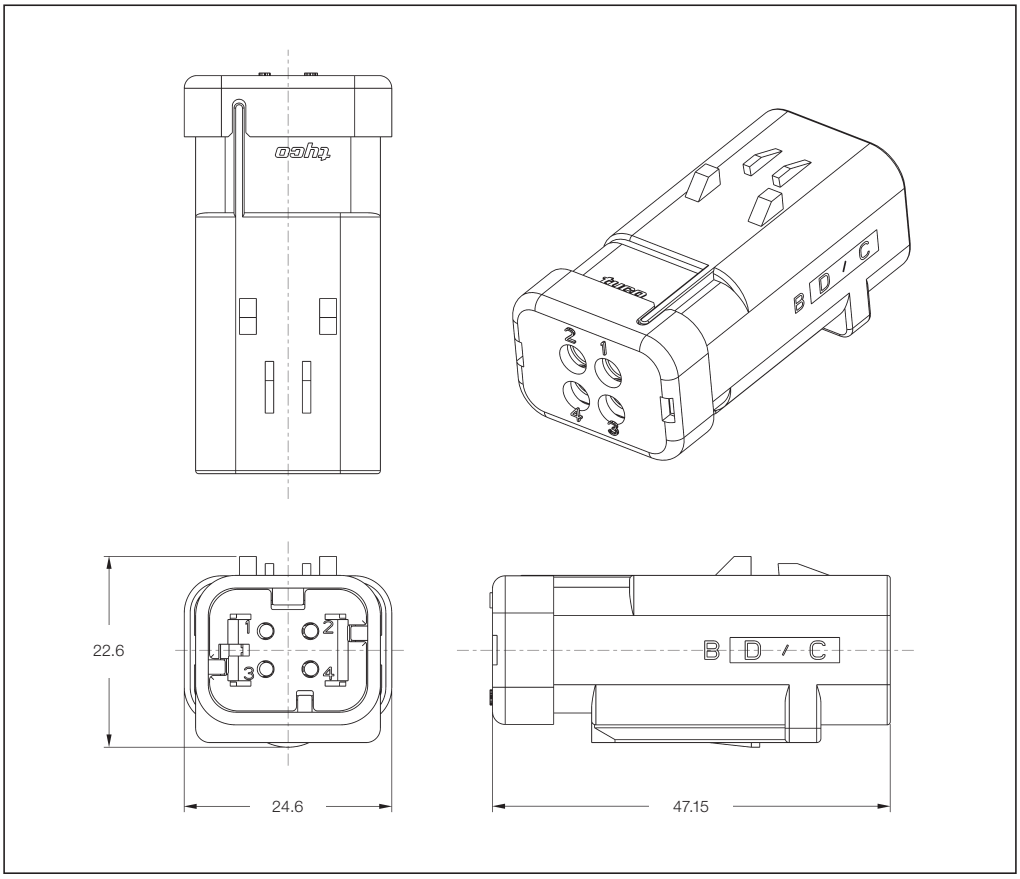
Housing Material:
Glass Reinforced PBT

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
4	Red	Key A	1717674-1	776487-1
	Gray	Key B	1717674-2	776487-2
	Yellow	Key C	1717674-3	776487-3
	Green	Key D	1717674-4	776487-4

2-Row Sealed Pin (Cap) Housings

Technical Features

No. of Positions:
6 (2×3) Positions Assembly

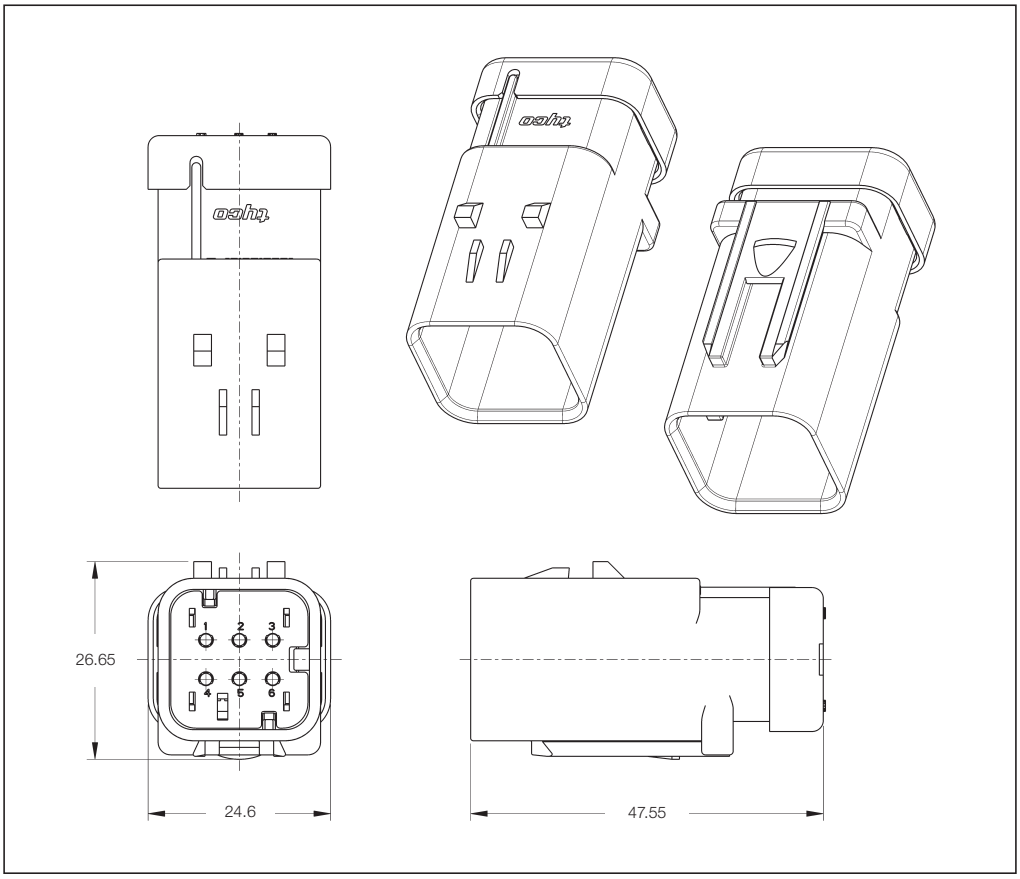
Housing Material:
Glass Reinforced PBT

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 Positions	PLR Color	Keying	Part Numbers	
			Pin (Cap) Housing	Mating Receptacle (Plug) Housing
6	Red	Key A	776434-1	776433-1
	Gray	Key B	776434-2	776433-2
	Yellow	Key C	776434-3	776433-3

Sealed Pin Housings 2-Row with Reduced Diameter Wire Seal

No. of Positions	PLR Color	Keying	Part Numbers	
			Pin (Cap) Housing	Mating Receptacle (Plug) Housing
6	Red	Key A	776537-1	776531-1
	Gray	Key B	776537-2	776531-2
	Yellow	Key C	776537-3	776531-3

All specifications subject to change. Consult Tyco Electronics for latest specifications.

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

Technical Features

No. of Positions:
6 (2×3) Positions Assembly

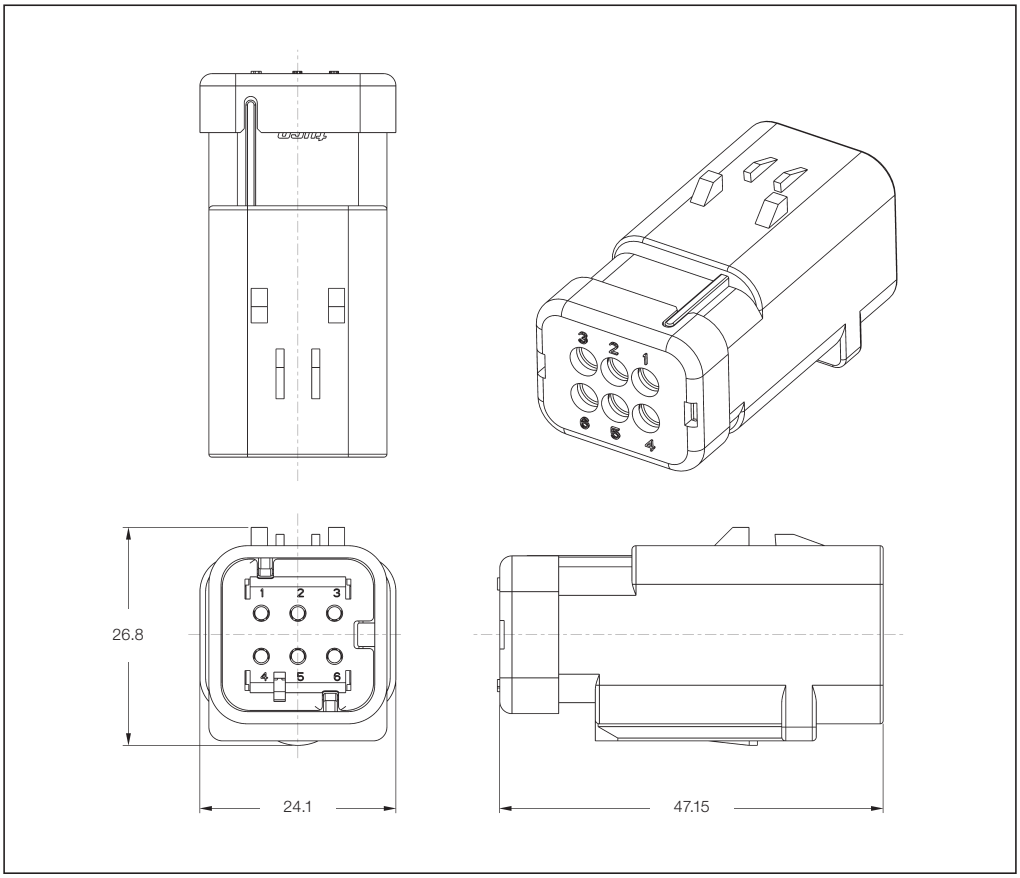
Housing Material:
Glass Reinforced PBT

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 – Reversed Mounting Feature

No. of Positions	PLR Color	Keying	Part Numbers	
			Pin (Cap) Housing	Mating Receptacle (Plug) Housing
6	Red	Key A	1717675-1	776433-1
	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 Positions	PLR Color	Keying	Part Numbers	
			Pin (Cap) Housing	Mating Receptacle (Plug) Housing
6	Red	Key A	1717975-1	776531-1
	Gray	Key B	1717975-2	776531-2
	Yellow	Key C	1717975-3	776531-3

2-Row Sealed Pin (Cap) Housings

Technical Features

No. of Positions:
8 (2×4) Positions Assembly

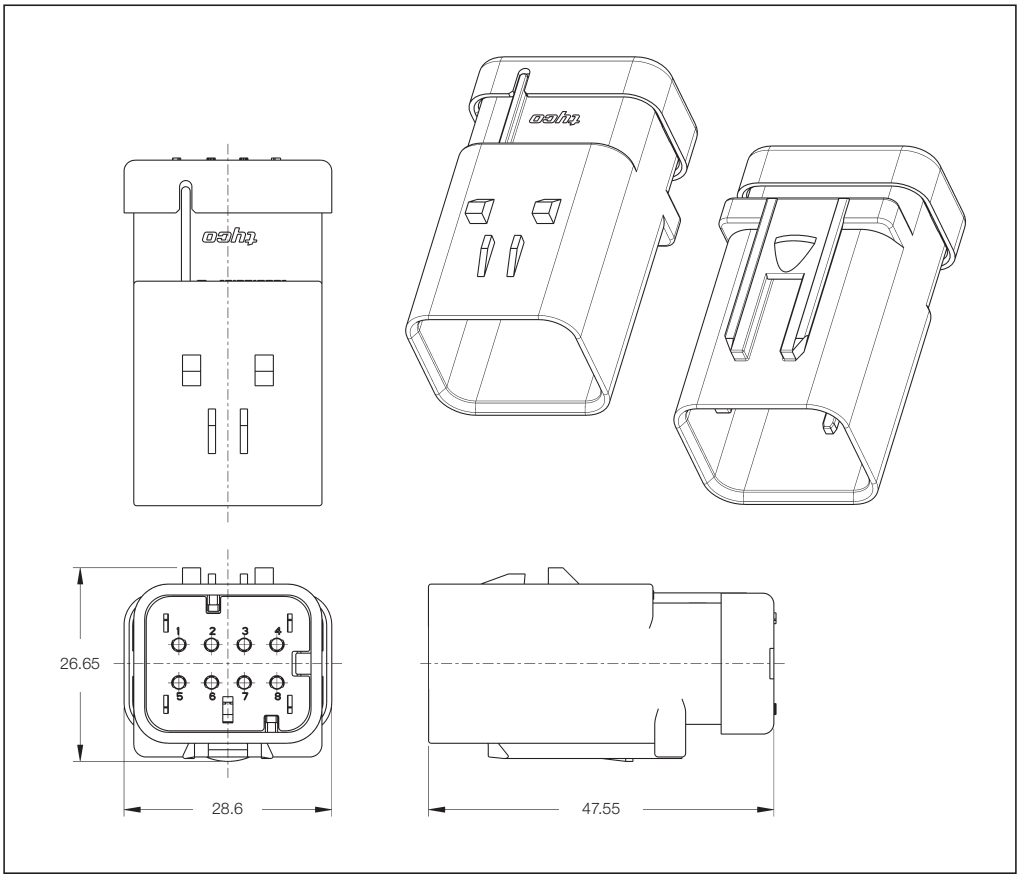
Housing Material:
Glass Reinforced PBT

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 Positions	PLR Color	Keying	Part Numbers	
			Pin (Cap) Housing	Mating Receptacle (Plug) Housing
8	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 Positions	PLR Color	Keying	Part Numbers	
			Pin (Cap) Housing	Mating Receptacle (Plug) Housing
8	Red	Key A	776538-1	776532-1
	Gray	Key B	776538-2	776532-2
	Yellow	Key C	776538-3	776532-3
	Green	Key D	776538-4	776532-4

All specifications subject to change. Consult Tyco Electronics for latest specifications.

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

Technical Features

No. of Positions:
8 (2×4) Positions Assembly

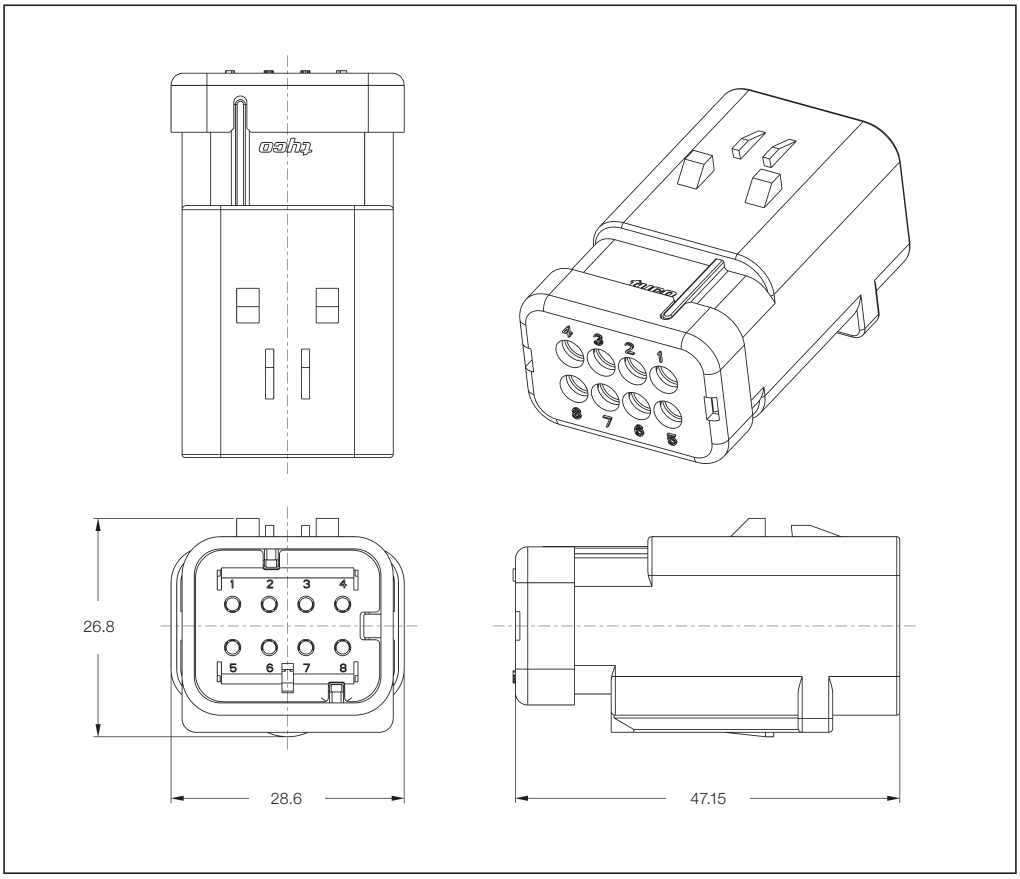
Housing Material:
Glass Reinforced PBT

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
2	Red	Key A	1717676-1	776494-1
	Gray	Key B	1717676-2	776494-2
	Yellow	Key C	1717676-3	776494-3
	Green	Key D	1717676-4	776494-4

2-Row Sealed Pin (Cap) Housings

Technical Features

No. of Positions:
12 (2×6) Positions Assembly

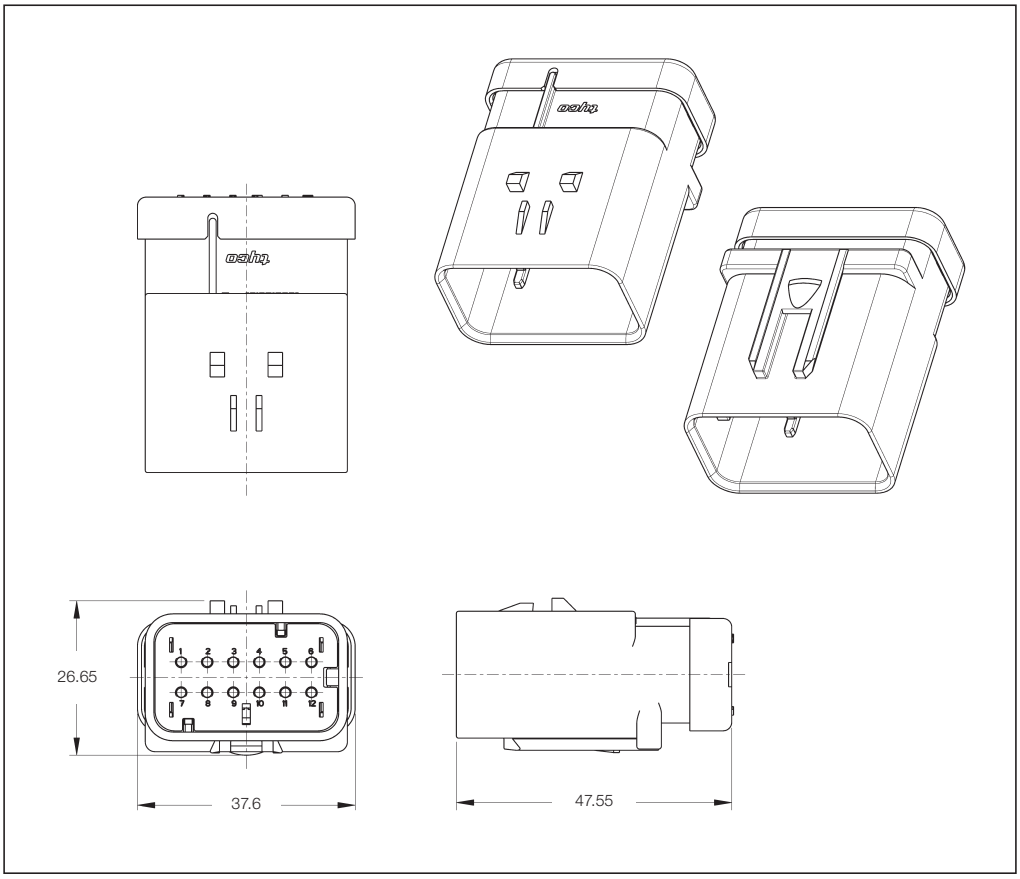
Housing Material:
Glass Reinforced PBT

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 Positions	PLR Color	Keying	Part Numbers	
			Pin (Cap) Housing	Mating Receptacle (Plug) Housing
12	Red	Key A	776438-1	776437-1
	Gray	Key B	776438-2	776437-2
	Yellow	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 Positions	PLR Color	Keying	Part Numbers	
			Pin (Cap) Housing	Mating Receptacle (Plug) Housing
12	Red	Key A	776539-1	776533-1
	Gray	Key B	776539-2	776533-2
	Yellow	Key C	776539-3	776533-3
	Green	Key D	776539-4	776533-4

All specifications subject to change. Consult Tyco Electronics for latest specifications.

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

Technical Features

No. of Positions:
12 (2×6) Positions Assembly

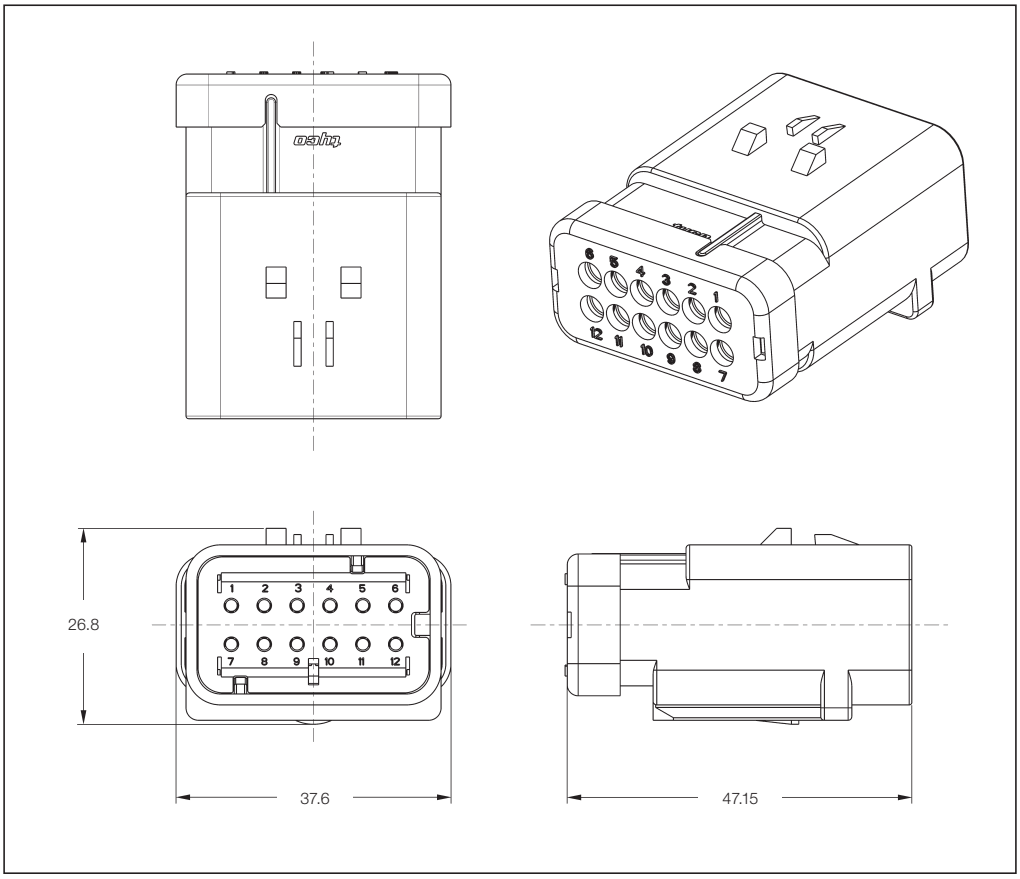
Housing Material:
Glass Reinforced PBT

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 – Reversed Mounting Feature

No. of Positions	PLR Color	Keying	Part Numbers	
			Pin (Cap) Housing	Mating Receptacle (Plug) Housing
12	Red	Key A	1717677-1	776437-1
	Gray	Key B	1717677-2	776437-2
	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 Positions	PLR Color	Keying	Part Numbers	
			Pin (Cap) Housing	Mating Receptacle (Plug) Housing
12	Red	Key A	1717934-1	776533-1
	Gray	Key B	1717934-2	776533-2
	Yellow	Key C	1717934-3	776533-3
	Green	Key D	1717934-4	776533-4

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	Type	Part Number
2 Position / 90° Exit / NC 08	Plug Type	2035366-1
	Cap Type	2098436-1
3 Position / 90° Exit / NC 08	Plug Type	2035366-2
	Cap Type	2098436-2
4 Position / 90° Exit / NC 08	Plug Type	2035366-7
	Cap Type	2098436-7
6 Position / 90° Exit / NC 08	Plug Type	2035366-8
	Cap Type	2098436-8
2 Position / 90° Exit / NC 12	Plug Type	2035366-3
	Cap Type	2098436-3
3 Position / 90° Exit / NC 12	Plug Type	2035366-4
	Cap Type	2098436-4
4 Position / 90° Exit / NC 12	Plug Type	2035366-9
	Cap Type	2098436-9
6 Position / 90° Exit / NC 12	Plug Type	1-2035366-0
	Cap Type	1-2098436-0

Note: All Part Numbers are RoHS and ELV compliant.

All specifications subject to change. Consult Tyco Electronics for latest specifications.

Backshell Matrix

No. of Positions	Conduit Size	Part Numbers				
		Standard Straight	Standard 90°	Low Profile 90°	Mating Connectors	Type
2	NC08 NW7.5	2035047-1*	Plug Assy 2035048-1* Cap Assy		5366-1 776522-ALL	776427-ALL
					8436-1 776534-ALL	776428-ALL
3	NC08 NW7.5	2035047-2*	Plug Assy 2035048-2* Cap Assy		5366-2 776523-ALL	776429-ALL
					8436-2 776535-ALL	776430-ALL
4	NC08 NW7.5	2035047-3*	Plug Assy 2035048-3* Cap Assy		5366-7 776524-ALL	776487-ALL
					8436-7 776536-ALL	776488-ALL
6	NC08 NW7.5	2035047-4*	Plug Assy – Cap Assy		5366-8 776531-ALL	776433-ALL
					8436-8 776537-ALL	776434-ALL
2	NC12 NW10	–	Plug Assy – Cap Assy		5366-3 776522-ALL	776427-ALL
					8436-3 776534-ALL	776428-ALL
3	NC12 NW10	–	Plug Assy 2035048-6* Cap Assy		5366-4 776523-ALL	776429-ALL
					8436-4 776535-ALL	776430-ALL
4	NC12 NW10	2035047-5*	Plug Assy 2035048-7* Cap Assy		5366-9 776524-ALL	776487-ALL
					8436-9 776536-ALL	776488-ALL
6	NC12 NW10	2035047-6*	–	1-2035366-0	776433-ALL 776531-ALL	Plug Assy
				1-2098436-0	776434-ALL 776537-ALL	Cap Assy
8	NC12 NW10	2035047-7*	–	–	776494-ALL 776532-ALL	Plug Assy
				–	776495-ALL 776538-ALL	Cap Assy
12	NC12 NW10	2035047-8*	–	–	776437-ALL 776533-ALL	Plug Assy
				–	776438-ALL 776539-ALL	Cap Assy

Backshell Matrix (continued)

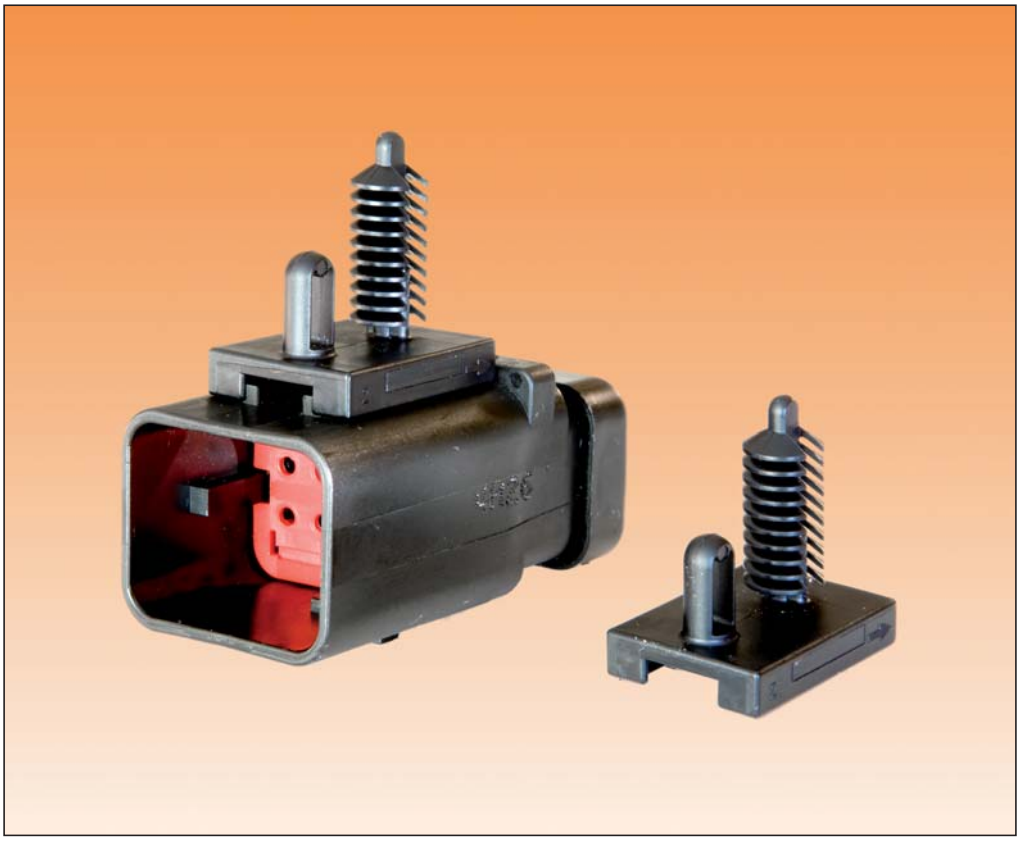
No. of Positions	Conduit Size	Part Numbers				
		Standard Straight	Standard 90°	Low Profile 90°	Mating Connectors	Type
2	NC16 NW13	–	–	–	776427-ALL	Plug Assy
					776522-ALL	
				–	776428-ALL	Cap Assy
					776534-ALL	
3	NC16 NW13	–	–	–	776429-ALL	Plug Assy
					776523-ALL	
				–	776430-ALL	Cap Assy
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

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

All specifications subject to change. Consult Tyco Electronics for latest specifications.

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

Please call your local Tyco Electronics representative for personal assistance or visit our website.

Note: All Part Numbers are RoHS and ELV compliant.

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638112-3	30-4, 30-6
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776297-2	30-4, 30-5
776298-1	30-4, 30-6
776298-2	30-4, 30-6
776299-1	30-4, 30-5
776299-2	30-4, 30-5
776300-1	30-4, 30-6
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