

Introduction



High Performance (HP) and High Performance Spring Lock (HPSL) Connectors for the Automotive Market



The new family 2 and 3 Position High Performance (HP) connectors and High Performance Spring Lock (HPSL) have been developed to meet the OEM's new requirements. The connectors can be used in the body car, with wire-to-wire applications, as well as in the engine area on sensors or actuators.

The housing design is based on the 1.5 x 0.8 mm receptacle and tab terminals in the centerline 3.33 mm. Primary and secondary terminal locking device are integrated in the housing.

Made in PBT material, the connectors are compliant with the most severe specifications for temperature (150 °C), vibration (40 G, with our Sensor Flat Contact 2 terminal) and watertightness (IPX9K and 500 mb immersion, with an included family seal). We have integrated a Positive Mate (Go-NoGo) locking feature in the housing, which is improved with a spring system on the HP SL version.

An optional CPA (Connector Position Assurance) is also available. In order to answer to your harness guiding requirement, we created more than 15 different kind of covers which can be used whether on tab or receptacle housings.

Applications

- Engine or body car harness
- Wire-to-Wire

Features

- Connector can be connected with tab housing or header
- Positive locking device
- Primary and secondary (integrated TPA) receptacle lock
- Covers compatible
- Full shroud (seal is protected all around the connector)

2 Position 1.5 mm HP Receptacle Housings

Technical Features

No. of Positions:

2 Positions

Material:

Reinforced PBT

Wire Size Range:

Cross-section of the cables must be between 0.35 and 2.0 mm², with insulation diameter included between 1.4 and 2.8 mm

Mechanical Coding:

9 colors

Temperature Class:

T4 (150 °C)

Vibration Class:

40 G

Sealing Class:

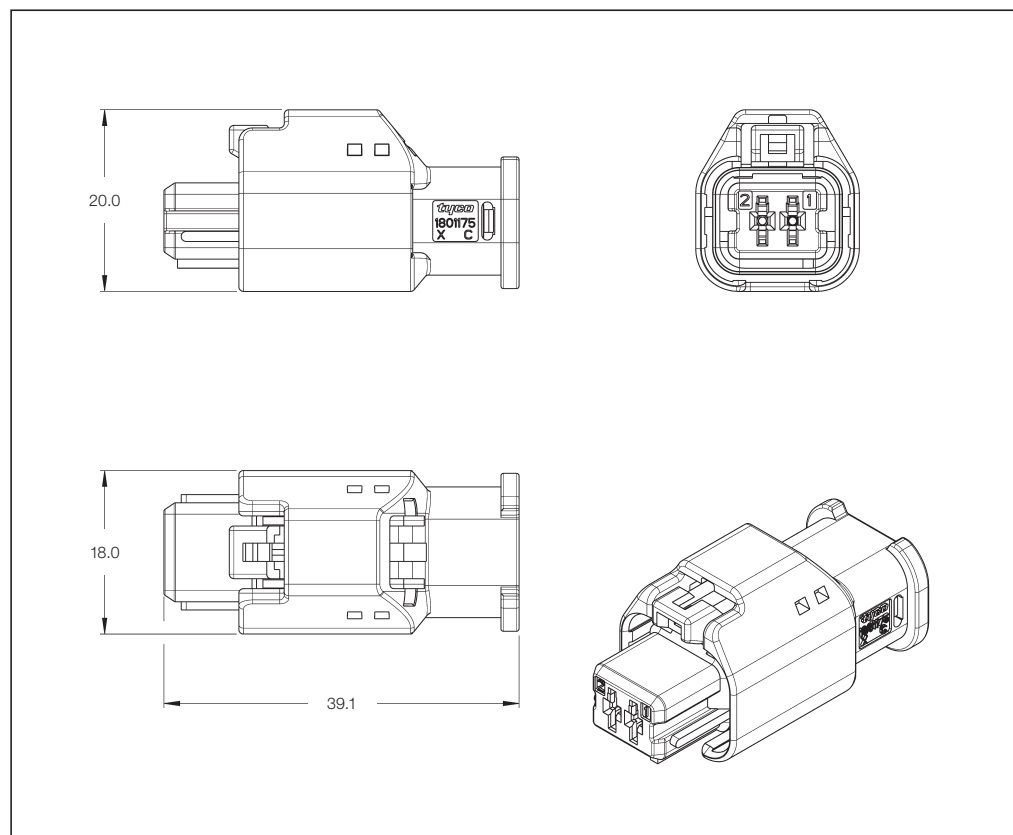
500 mb/IPX9K

Product Specification:

108-15378

Application Specification:

411-15712



2 Position 1.5 mm HP Receptacle Housings

No. of Positions	Housing Color	Part Numbers				
		Receptacle Housing	Cover	Package Quantity	Mating Tab Housing	Mating Terminals
2	Black	1801175-1	Left/Right Exit: 1801466-1	624	1801174-1	1.5 Sensor Flat 2 Terminals: 1564724-1 1670326-1 1670328-1 and Non-Tyco Electronics Terminals
	Blue	1801175-2	1-1801466-1		1801174-2	
	Gray	1801175-3	Up/Down Exit: 1801466-2		1801174-3	
	Yellow	1801175-4	1-1801466-2		1801174-4	
	Green	1801175-5	Exit in Line: 1801155-5		1801174-5	
	Brown	1801175-6	1-1801155-5		1801174-6	
	White	1801175-7	Rotative Cover 90°: 1801356-1		1801174-7	
	Red	1801175-8	1-1801356-1		—	
	Orange (Neutral Version)	1801175-9	1-1801356-1		—	

Note: Each Cover Part Number is compatible with all Housing Part Numbers.

2 Position 1.5 mm HP Receptacle Housings with CPA

Technical Features

No. of Positions:

2 Positions

Material:

Reinforced PBT

Wire Size Range:

Cross-section of the cables must be between 0.35 and 2.0 mm², with insulation diameter included between 1.4 and 2.8 mm

Mechanical Coding:

9 colors

Temperature Class:

T4 (150 °C)

Vibration Class:

40 G

Sealing Class:

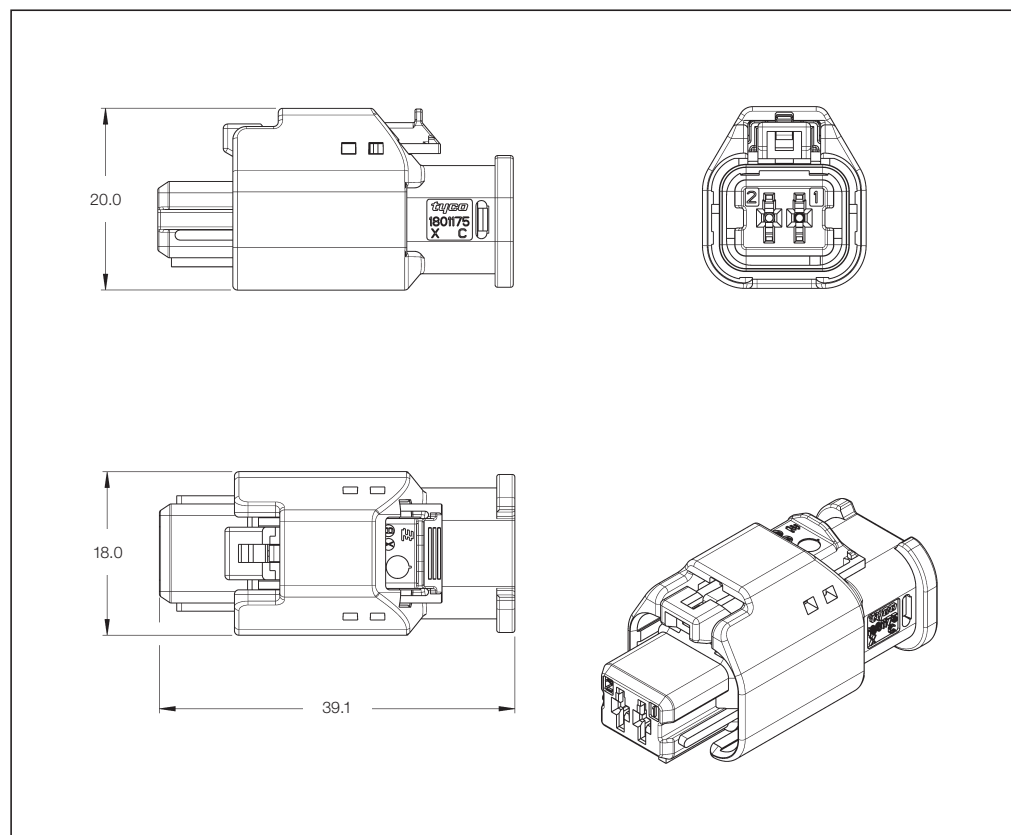
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Product Specification:

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Application Specification:

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2 Position 1.5 mm HP Receptacle Housings with CPA

No. of Positions	Housing Color	Part Numbers				
		Receptacle Housing	Cover	Package Quantity	Mating Tab Housing	Mating Terminals
2	Black	1-1801175-1	Left/Right Exit: 1801466-1	624	1801174-1	1.5 Sensor Flat 2 Terminals: 1564724-1 1670326-1 1670328-1 and Non-Tyco Electronics Terminals
	Blue	1-1801175-2	1-1801466-1		1801174-2	
	Gray	1-1801175-3	Up/Down Exit: 1801466-2		1801174-3	
	Yellow	1-1801175-4	1-1801466-2		1801174-4	
	Green	1-1801175-5	Exit in Line: 1801155-5		1801174-5	
	Brown	1-1801175-6	1-1801155-5		1801174-6	
	White	1-1801175-7	Rotative Cover 90°: 1801356-1		1801174-7	
	Red	1-1801175-8	1-1801356-1		—	
	Orange (Neutral Version)	1-1801175-9	1-1801356-1		—	

Note: Each Cover Part Number is compatible with all Housing Part Numbers.

2 Position 1.5 mm HP/HPSL Receptacle Housings

Technical Features

No. of Positions:

2 Positions

Material:

Reinforced PBT

Wire Size Range:

Cross-section of the cables must be between 0.35 and 2.0 mm², with insulation diameter included between 1.4 and 2.8 mm

Mechanical Coding:

9 colors

Temperature Class:

T4 (150 °C)

Vibration Class:

40 G

Sealing Class:

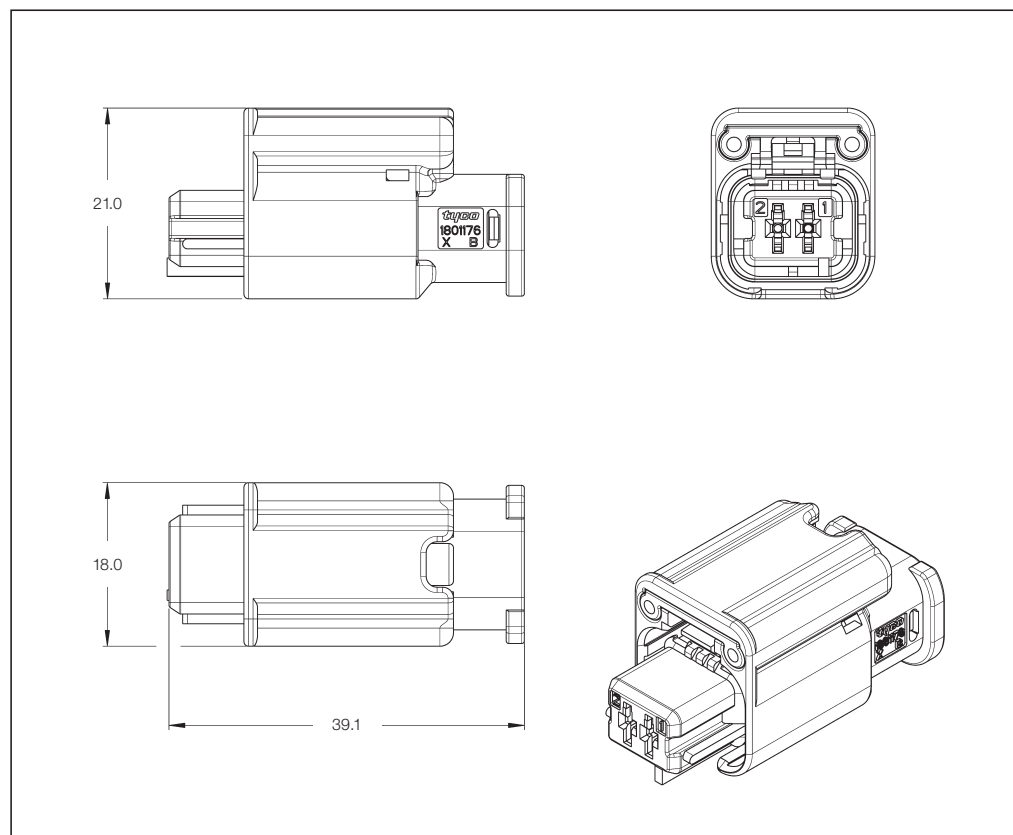
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Product Specification:

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Application Specification:

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2 Position 1.5 mm HP/HPSL Receptacle Housings

No. of Positions	Housing Color	Part Numbers				
		Receptacle Housing	Cover	Package Quantity	Mating Tab Housing	Mating Terminals
2	Black	1801176-1	Left/Right Exit: 1801466-1	572	1801174-1	1.5 Sensor Flat 2 Terminals: 1564724-1 1670326-1 1670328-1 and Non-Tyco Electronics Terminals
	Blue	1801176-2	1-1801466-1		1801174-2	
	Gray	1801176-3	Up/Down Exit: 1801466-2		1801174-3	
	Yellow	1801176-4	1-1801466-2		1801174-4	
	Green	1801176-5	Exit in Line: 1801155-5		1801174-5	
	Brown	1801176-6	1-1801155-5		1801174-6	
	White	1801176-7	Rotative Cover 90°: 1801356-1		1801174-7	
	Red	1801176-8	1-1801356-1		—	
	Orange (Neutral Version)	1801176-9	1-1801356-1		—	

Note: Each Cover Part Number is compatible with all Housing Part Numbers.

3 Position 1.5 mm HP Receptacle Housings

Technical Features

No. of Positions:

3 Positions

Material:

Reinforced PBT

Wire Size Range:

Cross-section of the cables must be between 0.35 and 2.0 mm², with insulation diameter included between 1.4 and 2.8 mm

Mechanical Coding:

9 colors

Temperature Class:

T4 (150 °C)

Vibration Class:

40 G

Sealing Class:

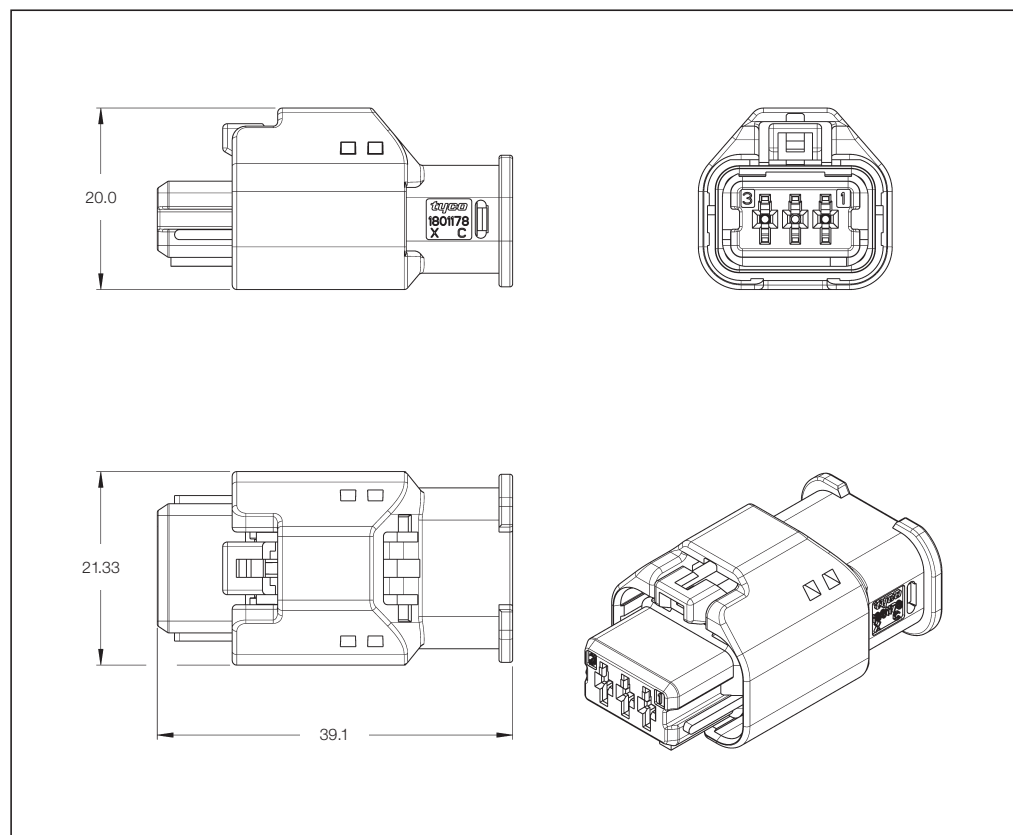
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Product Specification:

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Application Specification:

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3 Position 1.5 mm HP Receptacle Housings

No. of Positions	Housing Color	Part Numbers				
		Receptacle Housing	Cover	Package Quantity	Mating Tab Housing	Mating Terminals
3	Black	1801178-1	Left/Right Exit: 1801467-1 1-1801467-1	528	1801177-1	1.5 Sensor Flat 2 Terminals: 1564724-1 1670326-1 1670328-1 and Non-Tyco Electronics Terminals
	Blue	1801178-2			1801177-2	
	Gray	1801178-3	Up/Down Exit: 1801467-2 1-1801467-2		1801177-3	
	Yellow	1801178-4			1801177-4	
	Green	1801178-5	Exit in Line: 1801168-5 1-1801168-5		1801177-5	
	Brown	1801178-6			1801177-6	
	White	1801178-7			—	
	Red	1801178-8	Rotative Cover 90° + Adapter: 1801468-1 and 1801359-1 1-1801468-1 and 1801359-1		—	
	Orange (Neutral Version)	1801178-9			—	

Note: Each Cover Part Number is compatible with all Housing Part Numbers.

3 Position 1.5 mm HP Receptacle Housings with CPA

Technical Features

No. of Positions:

3 Positions

Material:

Reinforced PBT

Wire Size Range:

Cross-section of the cables must be between 0.35 and 2.0 mm², with insulation diameter included between 1.4 and 2.8 mm

Mechanical Coding:

9 colors

Temperature Class:

T4 (150 °C)

Vibration Class:

40 G

Sealing Class:

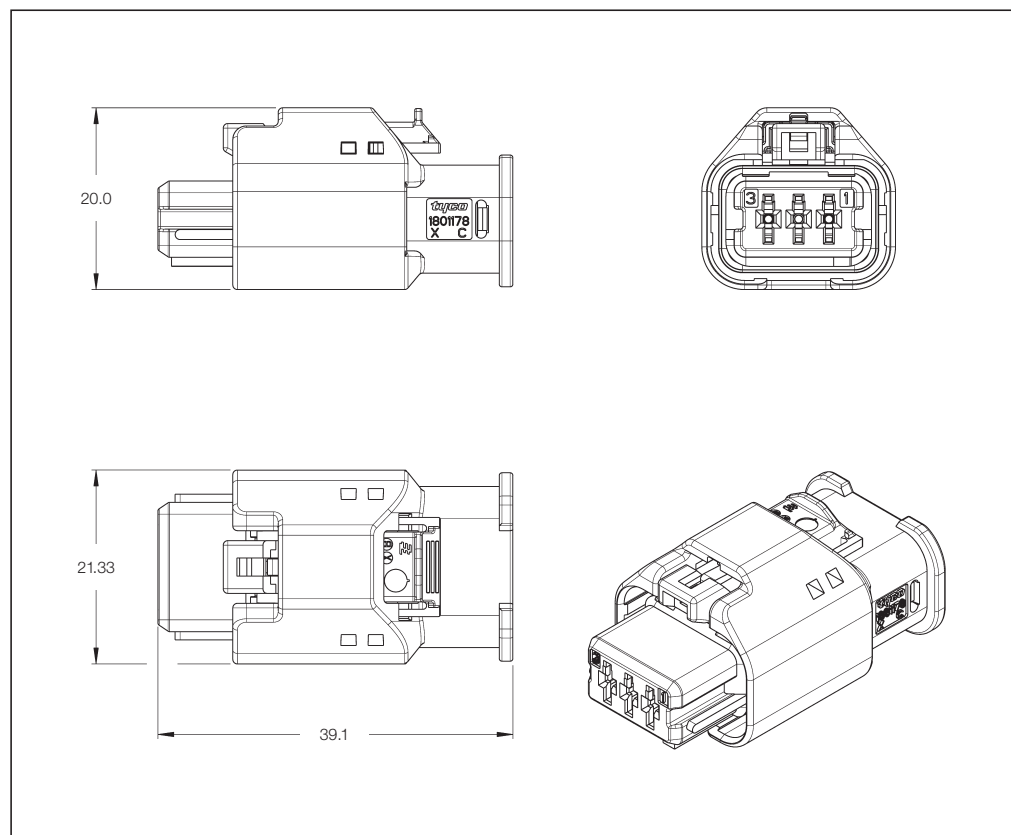
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Product Specification:

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Application Specification:

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3 Position 1.5 mm HP Receptacle Housings with CPA

No. of Positions	Housing Color	Part Numbers				
		Receptacle Housing	Cover	Package Quantity	Mating Tab Housing	Mating Terminals
3	Black	1-1801178-1	Left/Right Exit: 1801467-1	528	1801177-1	1.5 Sensor Flat 2 Terminals: 1564724-1 1670326-1 1670328-1 and Non-Tyco Electronics Terminals
	Blue	1-1801178-2	1-1801467-1		1801177-2	
	Gray	1-1801178-3	Up/Down Exit: 1801467-2		1801177-3	
	Yellow	1-1801178-4	1-1801467-2		1801177-4	
	Green	1-1801178-5	Exit in Line: 1801168-5		1801177-5	
	Brown	1-1801178-6	1-1801168-5		1801177-6	
	White	1-1801178-7	Rotative Cover 90° + Adapter: 1801468-1 and 1801359-1		—	
	Red	1-1801178-8	1-1801468-1 and 1801359-1		—	
	Orange (Neutral Version)	1-1801178-9			—	

Note: Each Cover Part Number is compatible with all Housing Part Numbers.

3 Position 1.5 mm HP/HPSL Receptacle Housings

Technical Features

No. of Positions:

3 Positions

Material:

Reinforced PBT

Wire Size Range:

Cross-section of the cables must be between 0.35 and 2.0 mm², with insulation diameter included between 1.4 and 2.8 mm

Mechanical Coding:

9 colors

Temperature Class:

T4 (150 °C)

Vibration Class:

40 G

Sealing Class:

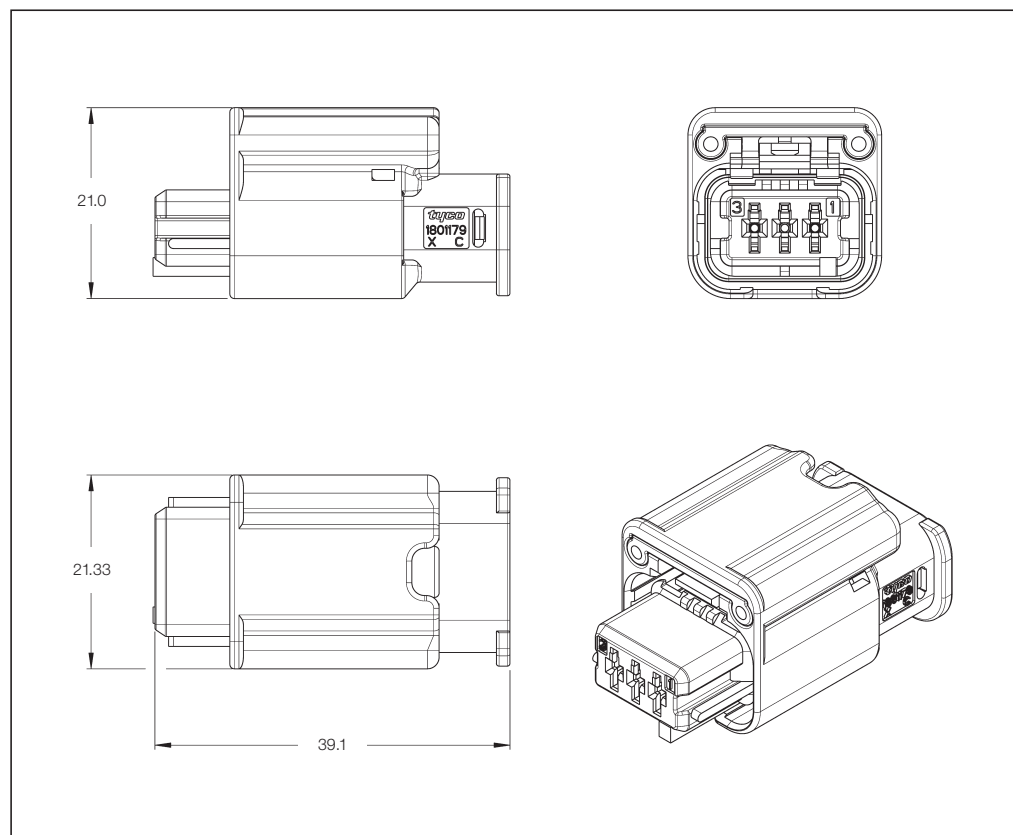
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Product Specification:

108-15378

Application Specification:

411-15712



3 Position 1.5 mm HP/HPSL Receptacle Housings

No. of Positions	Housing Color	Part Numbers				
		Receptacle Housing	Cover	Package Quantity	Mating Tab Housing	Mating Terminals
3	Black	1801179-1	Left/Right Exit:	484	1801177-1	1.5 Sensor Flat 2 Terminals: 1564724-1 1670326-1 1670328-1 and Non-Tyco Electronics Terminals
	Blue	1801179-2	1801467-1 1-1801467-1		1801177-2	
	Gray	1801179-3	Up/Down Exit:		1801177-3	
	Yellow	1801179-4	1801467-2 1-1801467-2		1801177-4	
	Green	1801179-5	Exit in Line:		1801177-5	
	Brown	1801179-6	1801168-5 1-1801168-5		1801177-6	
	White	1801179-7	Rotative Cover 90° + Adapter:		—	
	Red	1801179-8	1801468-1 and 1801359-1		—	
	Orange (Neutral Version)	1801179-9	1-1801468-1 and 1801359-1		—	

Note: Each Cover Part Number is compatible with all Housing Part Numbers.

2 Position 1.5 mm HP Tab Housings

Technical Features

No. of Positions:

2 Positions

Material:

Reinforced PBT

Wire Size Range:

Cross-section of the cables must be between 0.5 and 2.0 mm², with insulation diameter included between 1.4 and 2.8 mm

Mechanical Coding:

7 colors

Temperature Class:

T4 (150 °C)

Vibration Class:

40 G

Sealing Class:

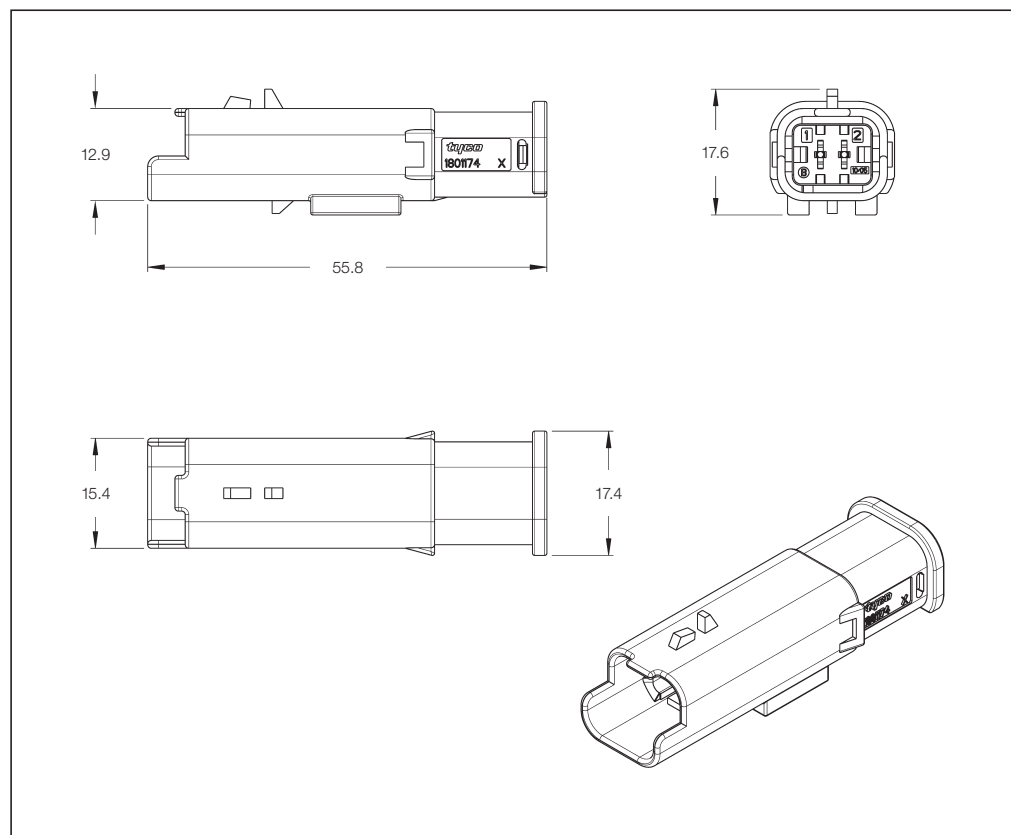
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Product Specification:

108-15378

Application Specification:

411-15712



2 Position 1.5 mm HP Tab Housings

No. of Positions	Housing Color	Part Numbers				
		Tab Housing	Cover	Package Quantity	Mating Receptacle Housing	Mating Terminals
2	Black	1801174-1		1260	1801175-1 or 1-1801175-1 or 1801176-1	Non-Tyco Electronics Terminals
	Blue	1801174-2	Left/Right Exit: 1801466-1		1801175-2 or 1-1801175-2 or 1801176-2	
	Gray	1801174-3	1-1801466-1		1801175-3 or 1-1801175-3 or 1801176-3	
	Yellow	1801174-4	Up/Down Exit: 1801466-2		1801175-4 or 1-1801175-4 or 1801176-4	
	Green	1801174-5	Exit in Line: 1801155-5		1801175-5 or 1-1801175-5 or 1801176-5	
	Brown	1801174-6	1-1801155-5		1801175-6 or 1-1801175-6 or 1801176-6	
	White	1801174-7	Rotative Cover 90°: 1801356-1		1801175-7 or 1-1801175-7 or 1801176-7	
	Orange (Neutral Version)	1801174-9	1-1801356-1		1801175-9 or 1-1801175-9 or 1801176-9	

Note: Each Cover Part Number is compatible with all Housing Part Numbers.

3 Position 1.5 mm HP Tab Housings

Technical Features

No. of Positions:

3 Positions

Material:

Reinforced PBT

Wire Size Range:

Cross-section of the cables must be between 0.5 and 2.0 mm², with insulation diameter included between 1.4 and 2.8 mm

Mechanical Coding:

6 colors

Temperature Class:

T4 (150 °C)

Vibration Class:

40 G

Sealing Class:

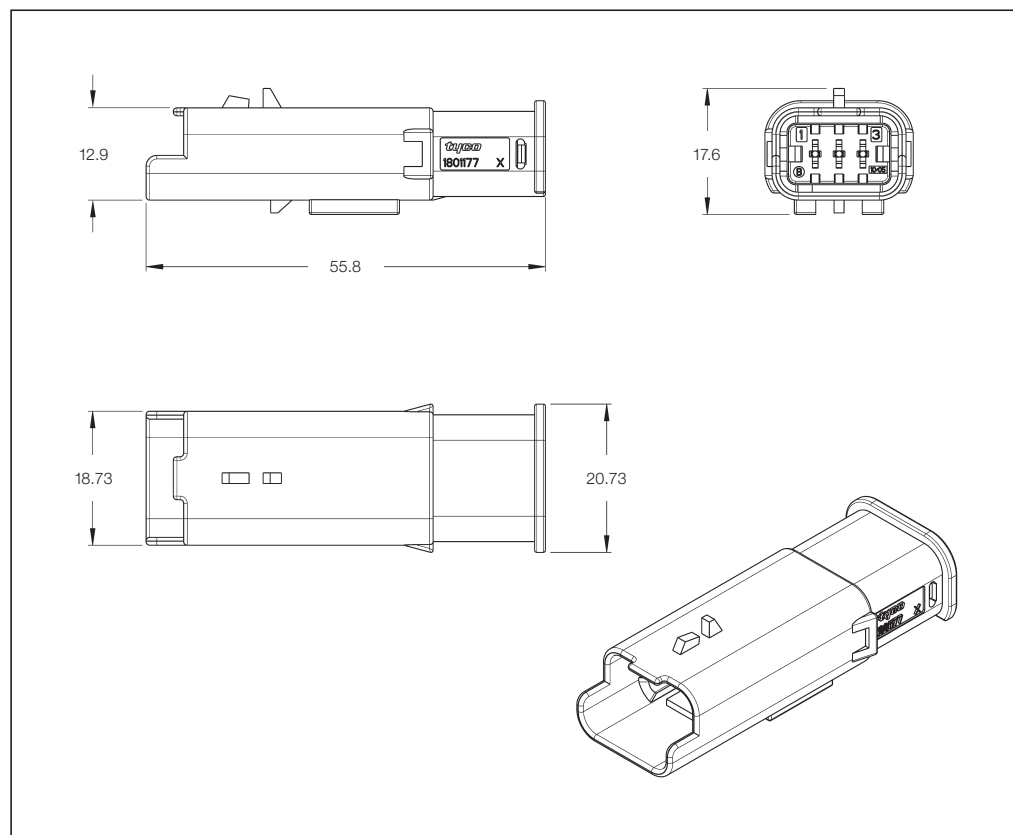
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Product Specification:

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Application Specification:

411-15712



3 Position 1.5 mm HP Tab Housings

No. of Positions	Housing Color	Part Numbers				
		Tab Housing	Cover	Package Quantity	Mating Receptacle Housing	Mating Terminals
3	Black	1801177-1	Left/Right Exit: 1801467-1 1-1801467-1	1070	1801178-1 or 1-1801178-1 or 1801179-1	Non-Tyco Electronics Terminals
	Blue	1801177-2			1801178-2 or 1-1801178-2 or 1801179-2	
	Gray	1801177-3	Up/Down Exit: 1801467-2 1-1801467-2		1801178-3 or 1-1801178-3 or 1801179-3	
	Yellow	1801177-4	Exit in Line: 1801168-5 1-1801168-5		1801178-4 or 1-1801178-4 or 1801179-4	
	Green	1801177-5	Rotative Cover 90° + Adapter: 1801468-1 and 1801359-1 1-1801468-1 and 1801359-1		1801178-5 or 1-1801178-5 or 1801179-5	
	Brown	1801177-6	1801178-6 or 1-1801178-6 or 1801179-6			
	Orange (Neutral Version)	1801177-9	1801178-9 or 1-1801178-9 or 1801179-9			

Note: Each Cover Part Number is compatible with all Housing Part Numbers.

Engineering Notes

