



HP / HPSL SEALED CONNECTORS

FOR THE AUTOMOTIVE INDUSTRY

INNOVATIVE TECHNOLOGIES

TE Connectivity (TE) is a leader in automotive connectivity and sensor technology. Our engineers are always working to meet complex requirements. We connect every electronic function in the vehicle – from alternative power systems to infotainment and sensor technologies. Our technologies withstand harsh environments and tolerate high temperature, vibration, shock, pressure and long-life in electronic control systems.



INTERCONNECTION SYSTEMS

Our electrical and electronic interconnection products and solutions are used to electrically and mechanically connect wires and cables, printed circuit boards, integrated circuit packages, batteries and more ...



CABLE ASSEMBLIES

TE is your partner for vehicle-specific cable assemblies. We offer research and development capabilities, prototypes and samples, as well as manufacturing facilities.



HYBRID & ELECTRIC MOBILITY SOLUTIONS

Our technologies leverage decades of innovation and experience with high-voltage transmission and distribution. Our hybrid and electric mobility solutions include a complete line of connectors, terminals, sensors, cable assemblies, contactors, and battery connection protection to help safeguard the flow of power in hybrid and electric vehicles. Connection after connection, you can count on TE for smaller, greener, lighter and smarter solutions you can trust.



SENSOR SOLUTIONS

Data is critical for making vehicles safer, more connected and greener. Customers rely on our sensor technology to provide data for control, adaptation and response of vehicle functions and features that increase safety, comfort, efficiency, and more. We collaborate to provide solutions for demanding and harsh applications such as automated transmissions, engines, clutch, brake and exhaust. Our products can be found in vehicles traveling the world's roads and highways.





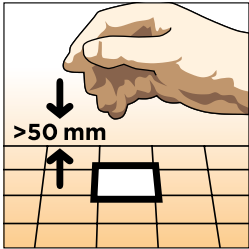
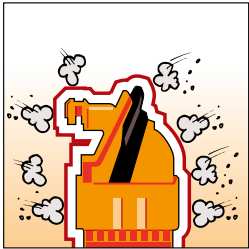
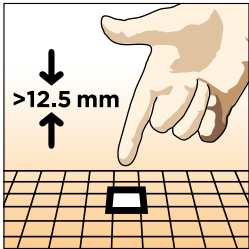
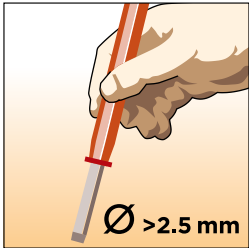
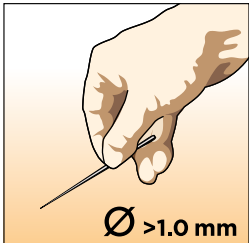
INFOTAINMENT



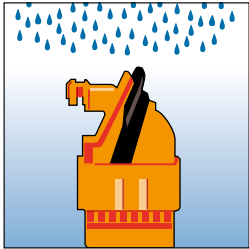
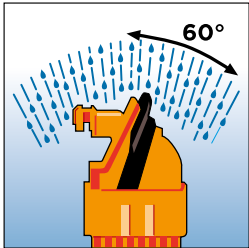
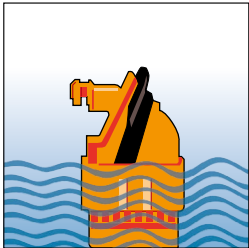
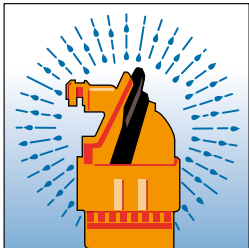
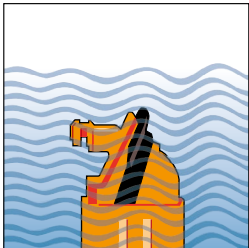
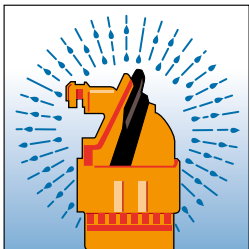
Our wide range of infotainment solutions are ideal for consumer port connections, high data rate applications, next-generation harness architecture, board-to-board connections and vehicle-to-vehicle communication.



RELAYS

From passenger comfort and infotainment to higher DC voltages and power levels to harsh environments, our relays and contactors provide critical switching functions in multiple vehicle applications. With increased contact gaps and other key design features, our relays are ideal for harsh environments such as shock and vibration.

1st Digit	Against Foreign Objects (incl. Dust)	1st Digit	Against Foreign Objects (incl. Dust)
0	 <p>Not protected.</p>	5K	 <p>Dust protected.</p>
1	 <p>Protected against solid objects greater than 50 mm (ex. back of hand).</p>	6K	 <p>Dust tight.</p>
2	 <p>Protected against solid objects greater than 12.5 mm (ex. finger).</p>		
3	 <p>Protected against solid objects greater than 2.5 mm (ex. tool).</p>		
4	 <p>Protected against solid objects greater than 1.0 mm (ex. wire).</p>		

2nd Digit	Against Water		2nd Digit	Against Water	
0		Not protected.	5		Protected against jetting water.
1		Protected against vertically dripping water.	6		Protected against powerfully jetting water.
2		Protected against dripping water when tilted up to 15°.	6K		Protected against powerfully jetting water with increased pressure (Automotive).
3		Protected against spraying water (up to 60° inclination).	7		Protected against the temporary effects of immersion up to 1 meter.
4		Protected against splashing water.	8		Protected against continuous submersion agreed with customer, but more severe than code 7.
4K		Protected against splashing water with increased pressure.	9K		Protected against high-pressure/steam-jet cleaning (Automotive).

Good Crimp Quality

Bellmouth permissible

Bellmouth must always be present

Cut-off tab present

F-CRIMP

Crimp barrel closed
Insulation is securely held

Insulation visible

Conductor visible

Locking lances and terminal body not deformed

OVERLAP CRIMP

Crimp legs overlap
Insulation is securely held

Anvil imprint symmetrical

WRAP OVER CRIMP

Crimp legs must pass each other
Insulation is securely held

Correct selection

of wire, terminal and applicator

Crimp barrel is closed, legs support each other, sufficient gap between legs and bottom of crimp, all strands are equally distributed and deformed

Test

WIRE CRIMP

Crimp heights and tolerances

For crimp height tolerances for any given contact, please refer to the relevant application specification.

Examples

Contact	P/N	Wire Range	Tolerance	Spec.
JJPT	927775	0.50 – 1.00 mm ²	±0.05 mm	114-18050
JPT	927773	1.50 – 2.50 mm ²	±0.05 mm	114-18050
MQS	962885	0.20 – 0.50 mm ²	±0.03 mm	114-18025

WIRE CRIMP

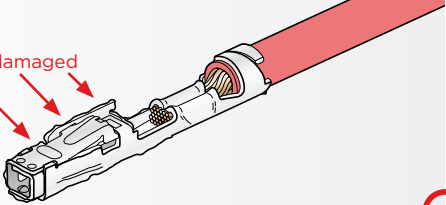
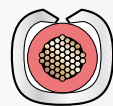

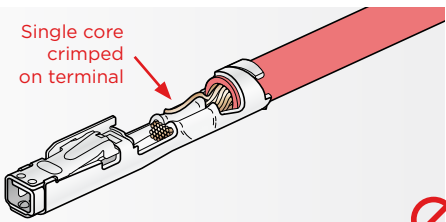
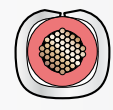
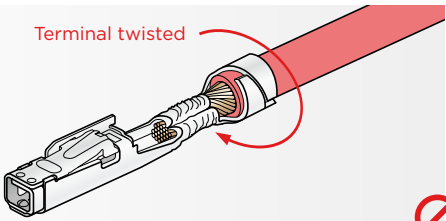
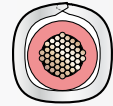
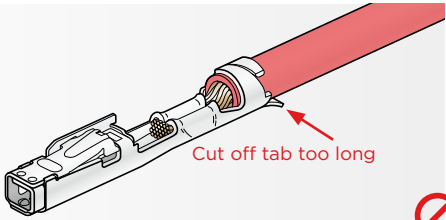
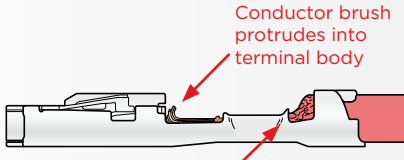
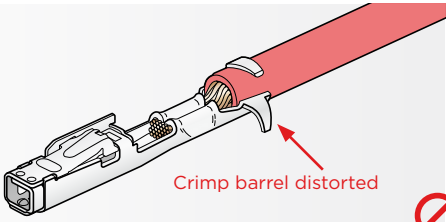
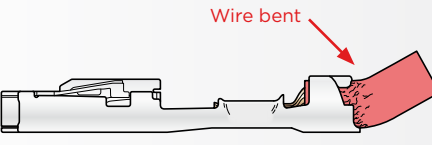
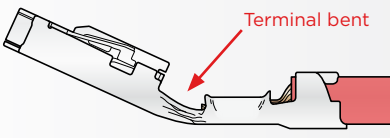
Digital crimp height micrometer
(0.001 mm increments) according to DIN ISO 9001
Part number: 547203-1

INSULATION CRIMP

Wire crimp without conductor

Insulation must be securely held after bend test (one bend cycle)

Incorrect Crimp Quality

 <p>Terminal body damaged</p>	F-CRIMP	 <p>Crimp legs are not closed</p>	 <p>Insulation is pierced</p>
 <p>Single core crimped on terminal</p>		INSULATION CRIMP OVERLAP CRIMP	 <p>Crimp legs do not overlap</p>
 <p>Terminal twisted</p>	WRAP OVER CRIMP		 <p>Insulation is not securely held</p>
 <p>Cut off tab too long</p>	 <p>Conductor brush protrudes into terminal body</p> <p>Insulation inside the wire crimp</p>		
 <p>Crimp barrel distorted</p>	 <p>Wire bent</p>		
	 <p>Terminal bent</p>		

Correct

Correct

Incorrect

Test

At TE Connectivity, we support your RoHS requirements. We've assessed more than 1.5 million end items/components for RoHS compliance, and issued new part numbers where any change was required to eliminate the restricted materials. Part numbers in this catalog are identified as:

Getting the information you need

Our comprehensive on-line RoHS Customer Support Center provides a forum to answer your questions and support your RoHS needs. A RoHS FAQ (Frequently Asked Questions) is available with links to more detailed information. You can also submit RoHS questions and receive a response within 24 hours during a normal work week.

The Support Center also provides:

Cross-Reference from Non-compliant to Compliant Products

Ability to browse RoHS Compliant Products in our on-line catalog:
www.te.com/commerce/alt/RohsAltHome.do

Downloadable Technical Data Customer Information Presentation

More detailed information regarding the definitions used above

RoHS Compliant

Part numbers in this catalog are RoHS Compliant, unless marked otherwise. These products comply with European Union Directive 2002/95/EC as amended 1 January 2006 that restricts the use of lead, mercury, cadmium, hexavalent chromium, PBB, and PBDE in certain electrical and electronic products sold into the EU as of 1 July 2006.

Note: For purposes of this Catalog, included within the definition of RoHS Compliant are products that are clearly "Out of Scope" of the RoHS Directive such as hand tools and other non-electrical accessories.

Non-RoHS Compliant

These part numbers are identified with a "t" symbol. These products do not comply with the material restrictions of the European Union Directive 2002/95/EC.

5 of 6 Compliant

A "l" symbol identifies these part numbers. These products do not fully comply with the European Union Directive 2002/95/EC because they contain lead in solderable

interfaces (they do not contain any of the other five restricted substances above allowable limits). However, these products may be suitable for use in RoHS applications where there is an application-based exception for lead in solders, such as the server, storage, or networking infrastructure exemption.

Note: Information regarding RoHS compliance is provided based on reasonable inquiry of our suppliers and represents our current actual knowledge based on the information provided by our suppliers. This information is subject to change. For latest compliance status, refer to our website referenced below. So whatever your questions when it comes to RoHS, we've got the answers at <http://www.te.com/customersupport/rohssupportcenter/>

Conversion Tables

AWG Conversion Table (Average Value)

AWG Code	Diameter (Inch)	Diameter (mm)	F (mm ²)
000000	0.5800	14.733	170.0
00000	0.5165	13.13	135.0
0000	0.4600	11.684	103.8
000	0.4096	10.40	79.0
00	0.3648	9.27	67.5
0	0.3249	8.25	53.4
1	0.2893	7.34	42.2
2	0.2576	6.55	33.7
3	0.2294	5.82	26.6
4	0.2043	5.18	21.0
5	0.1819	4.62	16.9
6	0.1620	4.115	13.25
7	0.1443	3.66	10.25
8	0.1285	3.26	8.34
9	0.1144	2.90	6.6
10	0.1019	2.59	5.27
11	0.0907	2.30	4.15
12	0.0808	2.05	3.3
13	0.0720	1.83	2.63
14	0.0641	1.63	2.08
15	0.0571	1.45	1.65
16	0.0508	1.29	1.305
17	0.0453	1.14	1.01
18	0.0403	1.02	0.79
19	0.0359	0.91	0.65
20	0.0320	0.81	0.51
21	0.0285	0.72	0.407
22	0.0253	0.64	0.32
23	0.0226	0.57	0.255
24	0.0201	0.51	0.205
25	0.0179	0.455	0.162
26	0.0159	0.40	0.125
27	0.0142	0.36	0.102
28	0.0126	0.320	0.08
29	0.0113	0.287	0.0646
30	0.0100	0.254	0.0516
31	0.0089	0.226	0.04
32	0.0080	0.203	0.0324
33	0.0071	0.180	0.0255
34	0.0063	0.160	0.02
35	0.0056	0.142	0.0158
36	0.0050	0.127	0.0127
37	0.0045	0.114	0.01
38	0.0040	0.101	0.008
39	0.0035	0.089	0.0062
40	0.0031	0.079	0.0049
41	0.0028	0.071	0.00395
42	0.0025	0.064	0.00321
43	0.0022	0.056	0.00246
44	0.00198	0.050	0.00196
45	0.00176	0.045	
46	0.00157	0.040	
47	0.00140	0.036	
48	0.00124	0.031	
49	0.00110	0.028	
50	0.00099	0.025	

Remark: Starting from 0.03 mm² (AWG 32) a wire can be crimped.

HP/HPSL Sealed Connectors

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POWERTRAIN SYSTEMS



SAFETY & SECURITY SYSTEMS



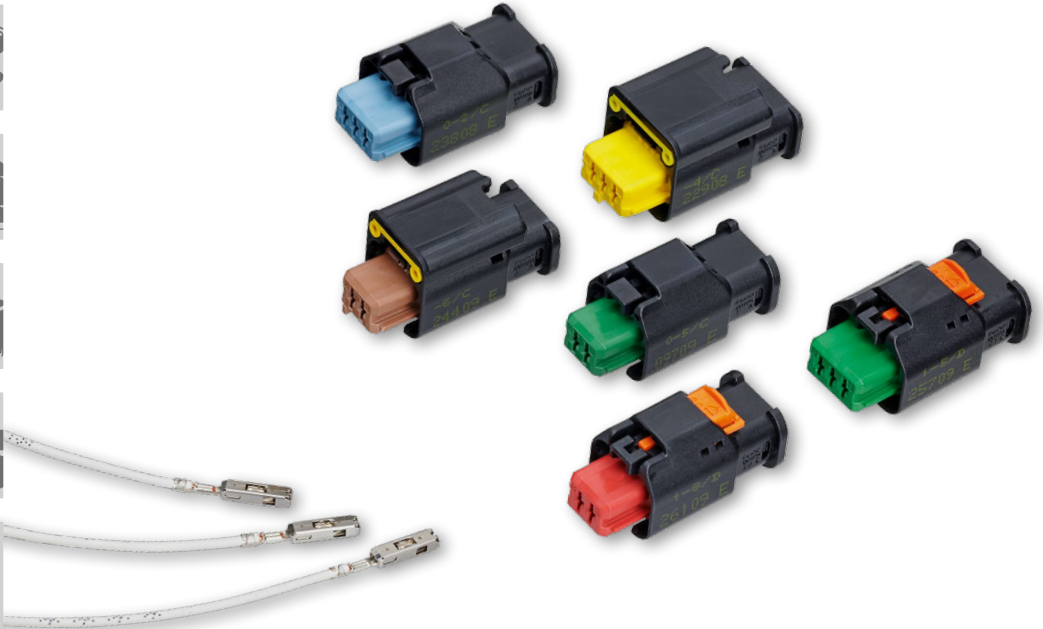
CONVENIENCE



DRIVER INFORMATION



BODY & CHASSIS SYSTEMS



HP / HPSL Sealed Connectors

INTRODUCTION

The family 2 and 3 position high performance (HP) connectors and high performance spring lock (HPSL) have been developed to meet severe OEM's requirements, especially in condition of extreme vibration.

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 HP family offers solutions to customer for electronic and electrical applications which require a high level of performance :

- Watertightness (IPX9K and 500mb immersion, with an included family seal)
- Temperature (150° C),
- Resistance to extreme vibrations conditions(40G, with TE Connectivity's Sensor Flat Contact 2 terminal)

The housing design is based on the 1.5 x 0.8mm receptacle and tab terminals in the centerline 3.33mm.

A positive mate (Go-Nogo) locking feature is integrated in the housing and is improved with a spring system in the HPSL version.

In order to answer to your harness guiding requirements, more than 15 different kind of covers can be used whether on tab or receptacle housings

Applications

- Engine or body car harness

Features

- Wire to wire applications or wire to sensors/actuators
- Spring lock version available (HPSL)
- Optional CPA for HP version
- Positive locking device
- Primary and secondary (integrated TPA) receptacle lock
- Covers compatible
- Full shroud (seal is protected all around the connector)
- High vibration level

HP /HPSL Sealed Connectors
1.5mm HP /HPSL Sealed Receptacle Housings

2 Position 1.5mm 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 2.0mm², with insulation diameter included between 1.4 and 2.8mm

Mechanical Coding:
9 colors

Temperature Class:
T4 (150° C)

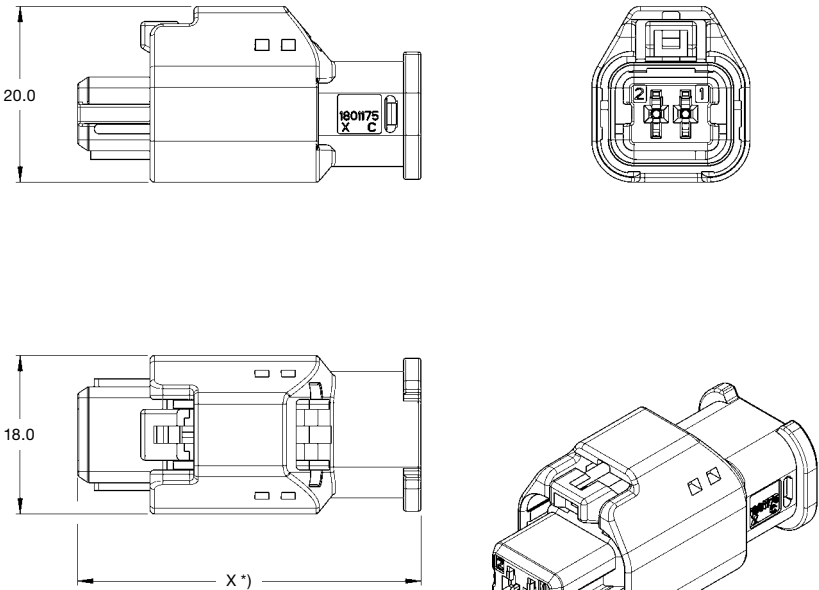
Vibration Class:
40 G

Sealing Class:
500 mb/IPX9K

Product Specification:
108-15378

Application Specification:
411-15712

Extraction Tool:
6-1579018-2
1-1579008-0
1-1579008-2



*) 39.1mm (condition of delivery) | 35.1mm (Second locking activated)

2 Position 1.5mm HP Receptacle Housing

No. of Positions	Housing Color	Part Numbers						
		Receptacle Housing	Cover	Package Quantity	Mating Tab Housing	Mating Terminals	Applicators	Hand Tools
2	Black	1801175-1	Left/Right Exit: 1801466-1 1-1801466-1 Up/Down Exit: 1801466-2 1-1801466-2 Exit in Line: 1801155-5 1-1801155-5 Rotative Cover 90°: 1801356-1 1-1801356-1	624	1801174-1	1.5 Sensor Flat 2 Terminals: 1564724-1 /-3 1670326-1 /-3 1670328-1 /-3	2151268-x (Terminal 1564724-x)	Die Set
	Blue	1801175-2			1801174-2			6-1579016-8
	Gray	1801175-3			1801174-3			Hand Tool
	Yellow	1801175-4			1801174-4			539635-1
	Green	1801175-5			1801174-5			(ERGO CRIMP)
	Brown	1801175-6			1801174-6			(Terminal 1564724-x)
	White	1801175-7			1801174-7			2151892-x (Terminal 1670328-x)
	Red	1801175-8			—			Die Set
	Orange (Neutral Version)	1801175-9			1807179-X			and Non-TE Connectivity Terminals
				Applicators for Non-TE Connectivity Terminals: Please contact TE Application Tooling	Hand Tool			
					539635-1			
					(ERGO CRIMP)			
					(Terminal 1670326-x)			

Note: Each cover part number is compatible with *all* housing part numbers

HP/HPSL Sealed Connectors

1.5mm HP/HPSL Sealed Receptacle Housings

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 2.0mm², with insulation diameter included between 1.4 and 2.8mm

Mechanical Coding:

9 colors

Temperature Class:

T4 (150°C)

Vibration Class:

40 G

Sealing Class:

500 mb/IPX9K

Product Specification:

108-15378

Application Specification:

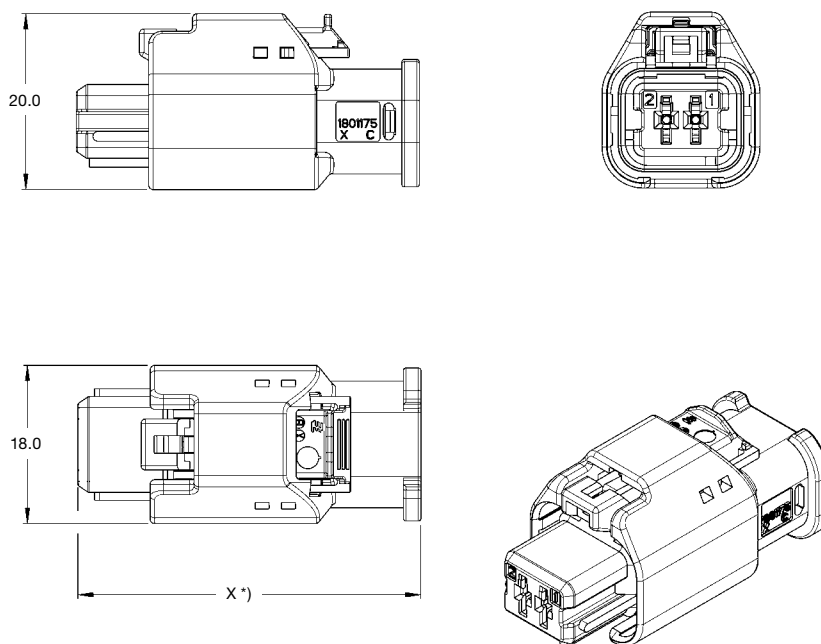
411-15712

Extraction Tool:

6-1579018-2

1-1579008-0

1-1579008-2



*) 39.1mm (condition of delivery) | 35.1mm (Second locking activated)

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	Applicators	Hand Tools
2	Black	1-1801175-1		624	1801174-1	1.5 Sensor Flat 2 Terminals: 1564724-1 /-3 1670326-1 /-3 1670328-1 /-3		Die Set
	Blue	1-1801175-2	Left/Right Exit: 1801466-1		1801174-2		2151268-x (Terminal 1564724-x)	6-1579016-8
	Gray	1-1801175-3	1-1801466-1		1801174-3			Hand Tool
	Yellow	1-1801175-4	Up/Down Exit: 1801466-2		1801174-4		2151504-x (Terminal 1670326-x)	539635-1
	Green	1-1801175-5	1-1801466-2		1801174-5			(ERGO CRIMP)
	Brown	1-1801175-6	Exit in Line: 1801155-5		1801174-6		2151892-x (Terminal 1670328-x)	1564724-x)
	White	1-1801175-7	1-1801155-5		1801174-7	and Non-TE Connectivity Terminals		Die Set
	Red	1-1801175-8	Rotative Cover 90°: 1801356-1		—		Applicators for Non-TE Connectivity Terminals:	6-1579016-8
	Orange (Neutral Version)	1-1801175-9	1-1801356-1		1801179-X		Please contact TE Application Tooling	Hand Tool
								539635-1
								(ERGO CRIMP)
								(Terminal 1670326-x)

Note: Each cover part number is compatible with *all* housing part numbers

HP /HPSL Sealed Connectors
1.5mm HP /HPSL Sealed Receptacle Housings

2 Position 1.5mm 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 2.0mm², with insulation diameter included between 1.4 and 2.8mm

Mechanical Coding:
9 colors

Temperature Class:
T4 (150° C)

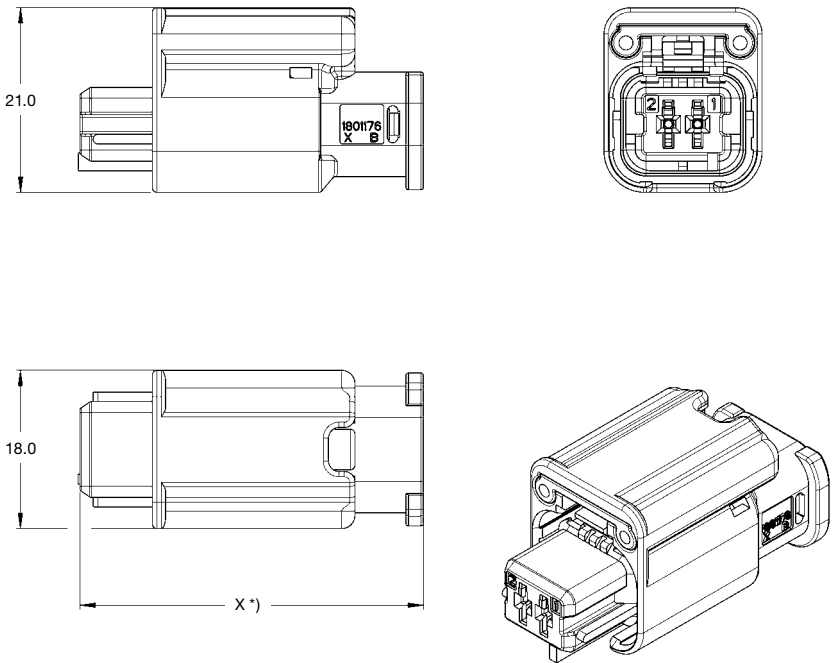
Vibration Class:
40 G

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1-1579008-0
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2 Position 1.5mm HP/HPSL Receptacle Housing

No. of Positions	Housing Color	Part Numbers						
		Receptacle Housing	Cover	Package Quantity	Mating Tab Housing	Mating Terminals	Applicators	Hand Tools
2	Black	1801176-1	Left/Right Exit: 1801466-1 1-1801466-1	572	1801174-1	1.5 Sensor Flat 2 Terminals: 1564724-1 /-3 1670326-1 /-3 1670328-1 /-3	2151268-x (Terminal 1564724-x)	Die Set
	Blue	1801176-2			1801174-2			6-1579016-8
	Gray	1801176-3			1801174-3			Hand Tool
	Yellow	1801176-4	Up/Down Exit: 1801466-2 1-1801466-2		1801174-4		2151504-x (Terminal 1670326-x)	539635-1
	Green	1801176-5			1801174-5			(ERGOGRIMP)
	Brown	1801176-6			1801174-6		2151892-x (Terminal 1670328-x)	(Terminal 1564724-x)
	White	1801176-7	Exit in Line: 1801155-5 1-1801155-5 Rotative Cover 90°:		1801174-7	and Non-TE Connectivity Terminals	Applicators for Non-TE Connectivity Terminals: Please contact TE Application Tooling	Die Set
	Red	1801176-8			—			6-1579016-8
	Orange (Neutral Version)	1801176-9			1801356-1 1-1801356-1			1801179-X

Note: Each cover part number is compatible with *all* housing part numbers

HP/HPSL Sealed Connectors

1.5mm HP/HPSL Sealed Receptacle Housings

3 Position 1.5mm 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 2.0mm², with insulation diameter included between 1.4 and 2.8mm

Mechanical Coding:

9 colors

Temperature Class:

T4 (150°C)

Vibration Class:

40 G

Sealing Class:

500 mb/IPX9K

Product Specification:

108-15378

Application Specification:

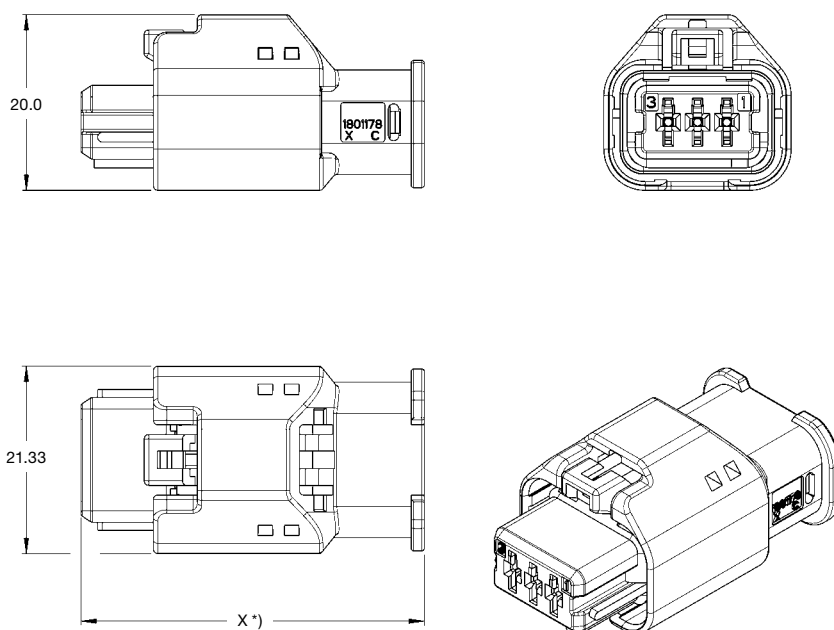
411-15712

Extraction Tool:

6-1579018-2

1-1579008-0

1-1579008-2



*) 39.1mm (condition of delivery) | 35.1mm (Second locking activated)

3 Position 1.5mm HP Receptacle Housing

No. of Positions	Housing Color	Part Numbers						
		Receptacle Housing	Cover	Package Quantity	Mating Tab Housing	Mating Terminals	Applicators	Hand Tools
3	Black	1801178-1	Left/Right Exit: 1801467-1	528	1801177-1	1.5 Sensor Flat 2 Terminals: 1564724-1 /-3 1670326-1 /-3 1670328-1 /-3	2151268-x (Terminal 1564724-x)	Die Set 6-1579016-8 Hand Tool 539635-1 (ERGOCRIMP) (Terminal 1564724-x)
	Blue	1801178-2	1-1801467-1		1801177-2			
	Gray	1801178-3	Up/Down Exit: 1801467-2		1801177-3			
	Yellow	1801178-4	1-1801467-2		1801177-4			
	Green	1801178-5	Exit in Line: 1801168-5		1801177-5			
	Brown	1801178-6	1-1801168-5		1801177-6			
	White	1801178-7	Rotative Cover 90° + Adapter:		1801177-7	and Non- TE Connectivity Terminals	Applicators for Non- TE Connectivity Terminals: Please contact TE Application Tooling	Die Set 6-1579016-8 Hand Tool 539635-1 (ERGOCRIMP) (Terminal 1670326-x)
	Red	1801178-8	1801468-1 and 1801359-1		—			
	Orange (Neutral Version)	1801178-9	1-1801468-1 and 1801359-1		1801177-X			

Note: Each cover part number is compatible with *all* housing part numbers

HP /HPSL Sealed Connectors
1.5mm HP /HPSL Sealed Receptacle Housings

3 Position 1.5mm 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 2.0mm², with insulation diameter included between 1.4 and 2.8mm

Mechanical Coding:
9 colors

Temperature Class:
T4 (150°C)

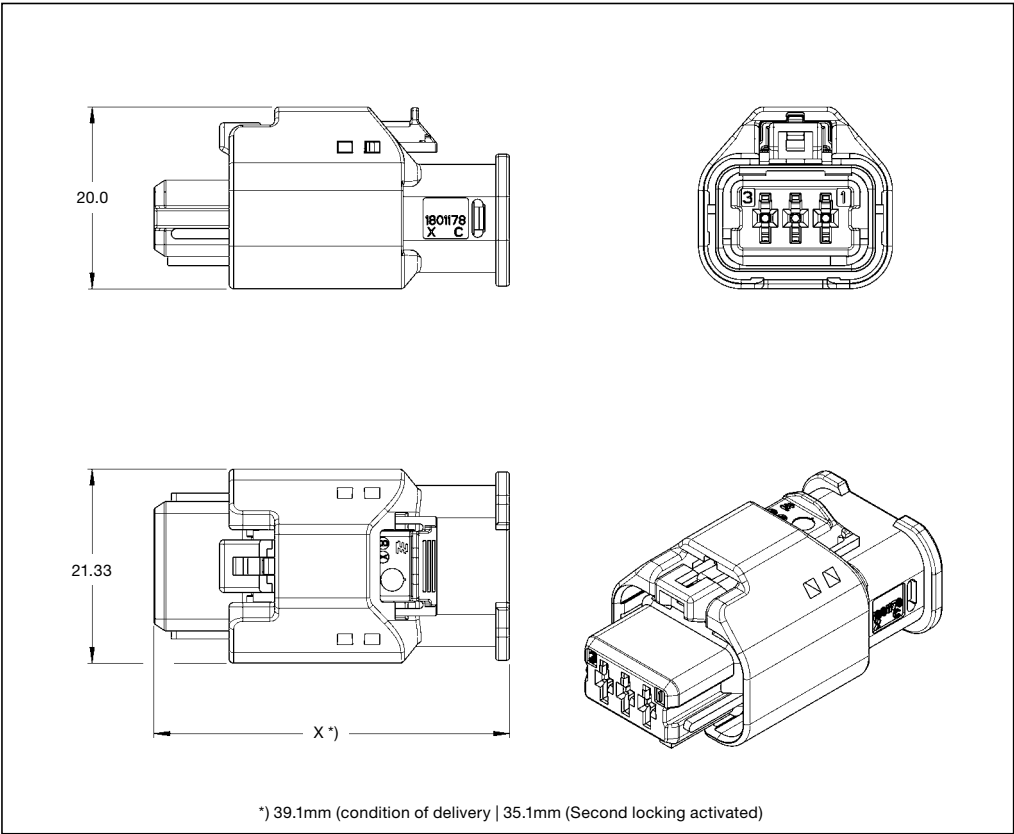
Vibration Class:
40 G

Sealing Class:
500 mb/IPX9K

Product Specification:
108-15378

Application Specification:
411-15712

Extraction Tool:
6-1579018-2
1-1579008-0
1-1579008-2



3 Position 1.5mm HP Receptacle Housings with CPA

No. of Positions	Housing Color	Part Numbers						
		Receptacle Housing	Cover	Package Quantity	Mating Tab Housing	Mating Terminals	Applicators	Hand Tools
3	Black	1-1801178-1	Left/Right Exit: 1801467-1	528	1801177-1	1.5 Sensor Flat 2 Terminals: 1564724-1 /-3 1670326-1 /-3 1670328-1 /-3	2151268-x (Terminal 1564724-x) 2151504-x (Terminal 1670326-x) 2151892-x (Terminal 1670328-x)	Die Set 6-1579016-8 Hand Tool 539635-1 (ERGOCRIMP) (Terminal 1564724-x)
	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		1801177-7	and Non- TE Connectivity Terminals	Applicators for Non- TE Connectivity Terminals: Please contact TE Application Tooling	Die Set 6-1579016-8 Hand Tool 539635-1 (ERGOCRIMP) (Terminal 1670326-x)
	Red	1-1801178-8			—			
	Orange (Neutral Version)	1-1801178-9	1-1801468-1 and 1801359-1		1801177-X			

Note: Each cover part number is compatible with *all* housing part numbers

HP/HPSL Sealed Connectors

1.5mm HP/HPSL Sealed Receptacle Housings

3 Position 1.5mm HP/HPSL Receptacle Housing

Technical Features

No. of Positions:

3 Positions

Material:

Reinforced PBT

Wire Size Range:

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

Mechanical Coding:

9 colors

Temperature Class:

T4 (150°C)

Vibration Class:

40 G

Sealing Class:

500 mb/IPX9K

Product Specification:

108-15378

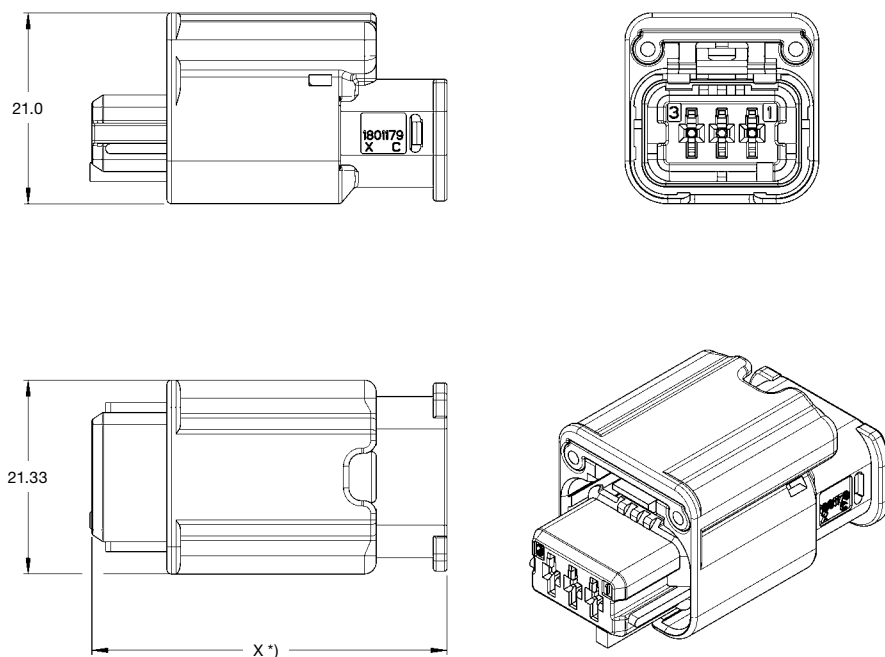
Application Specification:

411-15712

Extraction Tool:

1-1579008-0

1-1579008-2



*) 39.1mm (condition of delivery) | 35.1mm (Second locking activated)

3 Position 1.5mm HP/HPSL Receptacle Housing

No. of Positions	Housing Color	Part Numbers						
		Receptacle Housing	Cover	Package Quantity	Mating Tab Housing	Mating Terminals	Applicators	Hand Tools
3	Black	1801179-1	Left/Right Exit: 1801467-1	484	1801177-1	1.5 Sensor Flat 2 Terminals: 1564724-1 /-3 1670326-1 /-3 1670328-1 /-3	2151268-x (Terminal 1564724-x)	Die Set 6-1579016-8 Hand Tool 539635-1 (ERGOCRIMP) (Terminal 1564724-x)
	Blue	1801179-2	1-1801467-1		1801177-2			
	Gray	1801179-3	Up/Down Exit: 1801467-2		1801177-3			
	Yellow	1801179-4	1-1801467-2		1801177-4			
	Green	1801179-5	Exit in Line: 1801168-5		1801177-5			
	Brown	1801179-6	1-1801168-5		1801177-6			
	White	1801179-7	Rotative Cover 90°		1801177-7	and Non- TE Connectivity Terminals	Applicators for Non- TE Connectivity Terminals: Please contact TE Application Tooling	Die Set 6-1579016-8 Hand Tool 539635-1 (ERGOCRIMP) (Terminal 1670326-x)
	Red	1801179-8	+ Adapter: 1801468-1 and 1801359-1		—			
	Orange (Neutral Version)	1801179-9	1-1801468-1 and 1801359-1		1801177-X			

Note: Each cover part number is compatible with *all* housing part numbers

HP /HPSL Sealed Connectors
1.5mm HP /HPSL Sealed Receptacle Housings

2 Position 1.5mm HP Tab Housing

Technical Features

No. of Positions:
2 Positions

Material:
Reinforced PBT

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

Mechanical Coding:
7 colors

Temperature Class:
T4 (150°C)

Vibration Class:
40 G

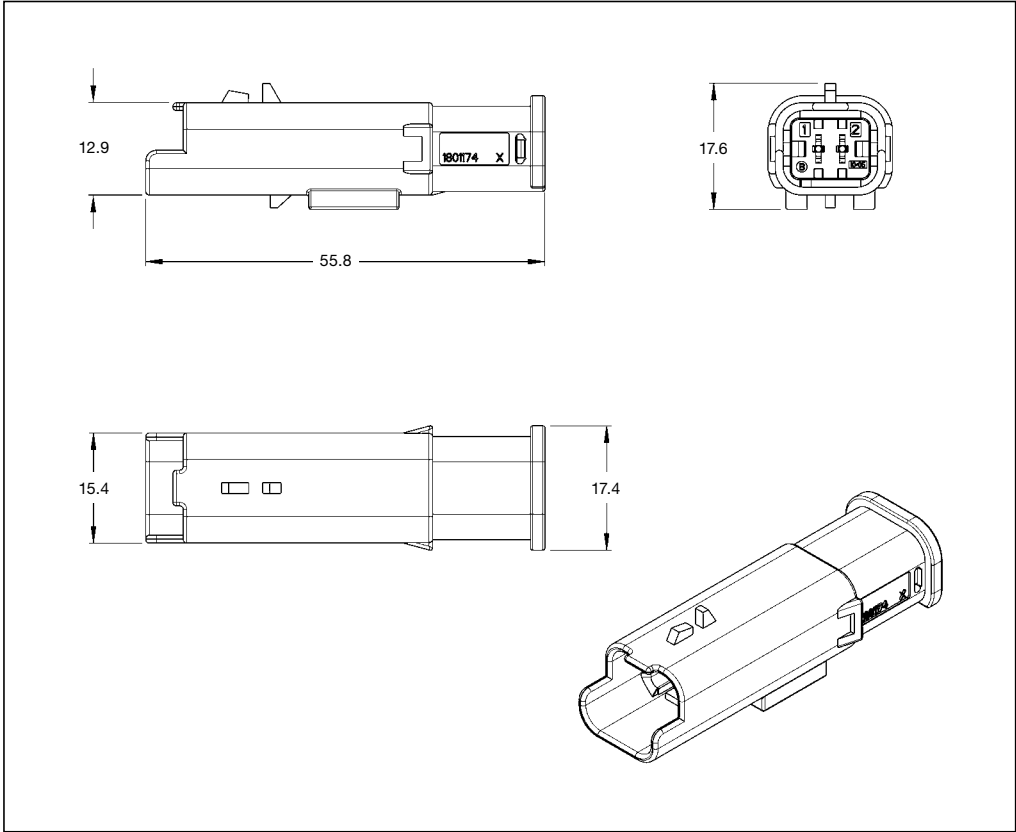
Sealing Class:
500 mb/IPX9K

Product Specification:
108-15378

Application Specification:
411-15712

Insertion Tool:
1-1579008-4

Extraction Tool:
1-1579008-1
1-1579008-3



2 Position 1.5mm HP Tab Housing

No. of Positions	Housing Color	Part Numbers					
		Tab Housing	Cover	Package Quantity	Mating Receptacle Housing	Mating Terminals	Applicators
2	Black	1801174-1	Left/Right Exit: 1801466-1 1-1801466-1 Up/Down Exit: 1801466-2 1-1801466-2 Exit in Line: 1801155-5 1-1801155-5 Rotative Cover 90°: 1801356-1 1-1801356-1	1260	1801175-1, or 1-1801175-1, or 1801176-1	Non-TE Connectivity Terminals	Applicators for Non-TE Connectivity Terminals: Please contact TE Application Tooling
	Blue	1801174-2			1801175-2, or 1-1801175-2, or 1801176-2		
	Gray	1801174-3			1801175-3, or 1-1801175-3, or 1801176-3		
	Yellow	1801174-4			1801175-4, or 1-1801175-4, or 1801176-4		
	Green	1801174-5			1801175-5, or 1-1801175-5, or 1801176-5		
	Brown	1801174-6			1801175-6, or 1-1801175-6, or 1801176-6		
	White	1801174-7			1801175-7, or 1-1801175-7, or 1801176-7		
	Orange (Neutral Version)	on request			1801175-x, or 1-1801175-x, or 1801176-x		

Note: Each cover part number is compatible with *all* housing part numbers

HP/HPSL Sealed Connectors

1.5mm HP/HPSL Sealed Receptacle Housings

3 Position 1.5mm HP Tab Housing

Technical Features

No. of Positions:

3 Positions

Material:

Reinforced PBT

Wire Size Range:

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

Mechanical Coding:

6 colors

Temperature Class:

T4 (150°C)

Vibration Class:

40 G

Sealing Class:

500 mb/IPX9K

Product Specification:

108-15378

Application Specification:

411-15712

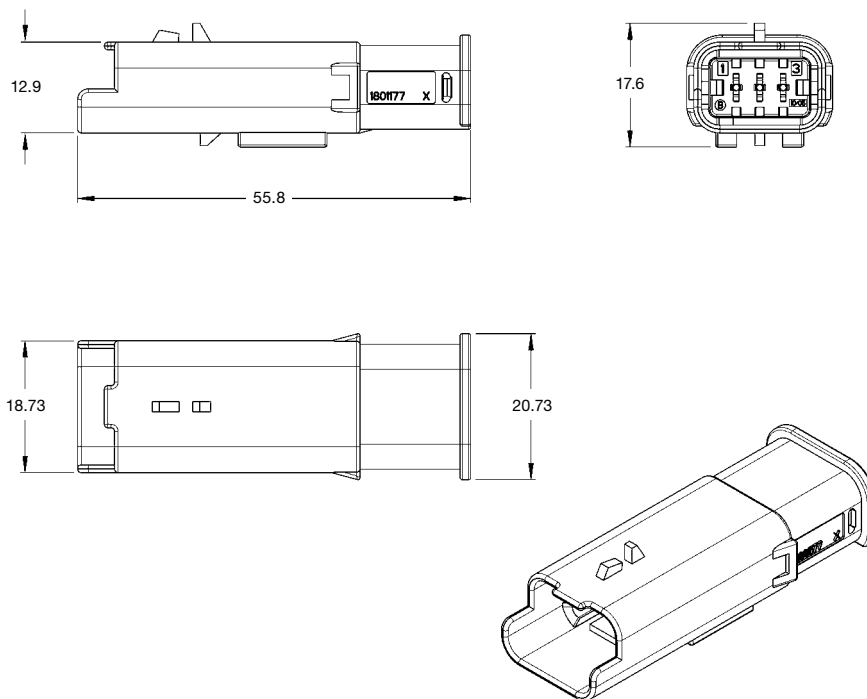
Insertion Tool:

1-1579008-5

Extraction Tool:

1-1579008-1

1-1579008-3

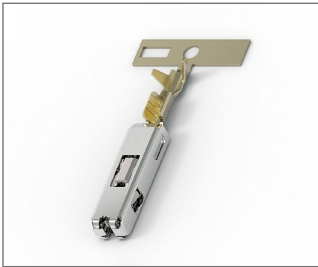


3 Position 1.5mm HP Tab Housing

No. of Positions	Housing Color	Part Numbers					
		Tab Housing	Cover	Package Quantity	Mating Receptacle Housing	Mating Terminals	Applicators
3	Black	1801177-1		1070	1801178-1, or 1-1801178-1, or 1801179-1	Non-TE Connectivity Terminals	Applicators for Non-TE Connectivity Terminals: Please contact TE Application Tooling
	Blue	1801177-2	Left/Right Exit: 1801467-1 1-1801467-1		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 1801179-4		
	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)	on request			1801178-x, or 1-1801178-x, or 1801179-x		

Note: Each cover part number is compatible with *all* housing part numbers

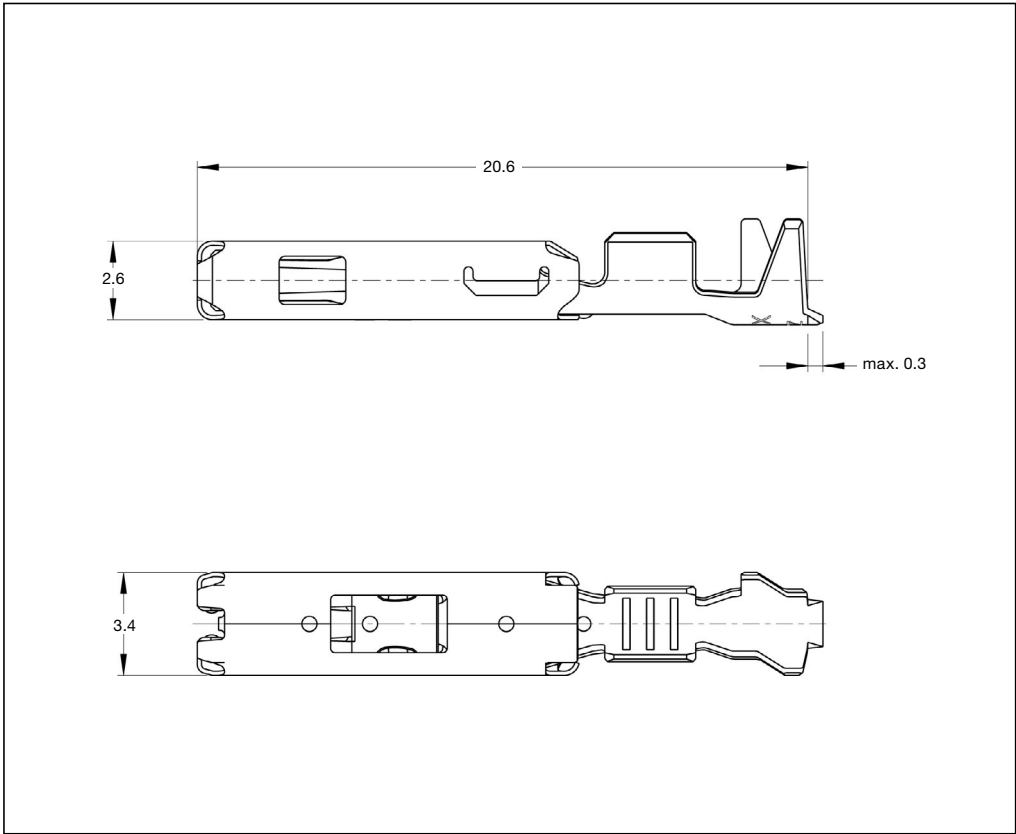
HP /HPSL Sealed Connectors
1.5mm Sensor Flat Contact Type II



Technical Features

- Contact Material:**
CuNiSi / Stainless Steel
- Wire Size Range:**
0.35-2.00mm²
- Current Carrying Capacity:**
up to 14 Ampere
for 85° C temp in 3P housing
- Total Temp Range:**
-40° C ... +130° C (tin plated)
-40° C ... +140° C (silver plated)
-40° C ... +150° C (gold plated)
- Insertion Force:**
Max 10 N
- Extraction Force:**
Max 7 N
- Extraction Tool:**
1-1579008-2
Extraction tool depends on the
assembly of contact and connector
- Product Drawing:**
1670373
- Product Specification:**
108-18617
- Application Specification:**
114-18254

Standard Receptacle Contact (SRC)



Standard Receptacle Contact (SRC)

Wire Size Range (mm ²)	Insulation Diameter (mm ²) FLR	Part Number	Finish*	Applicator	Hand Tool	Die Set
0.35-0.5	1.2-1.7	1564724	-1 / -2 / -3	2151568	539635-1	6-1579016-8
0.75-1.0	1.7-2.15	1670326	-1 / -2 / -3	1528785	539635-1	6-1579016-8
1.4-2.0	2.2-2.8	1670328	-1 / -2 / -3	1528786	539635-1	On request**

*) Finish
xxx-1 Gold plated
xxx-2 Tin plated
xxx-3 Silver plated

**) On request

In case of any tooling query please contact your local TE Connectivity representative

HP/HPSL Sealed Connectors Application Tooling



Images representative of tool type only.

Application Tooling and Equipment

FOR HP/HPSL SEALED CONNECTORS

TE Application Tooling is dedicated to providing high quality equipment options to meet all levels of our connector products specifications. We are also able to provide a broad range of equipment for other manufacturer's products.

Our equipment range is vast and almost unmatched by others operating in the same industry segments, as is our global presence and support network in the form of field service engineers and product managers.

We supply everything from simple hand tools to the most complex automated systems.

Especially for HP/HPSL sealed connectors appropriate applicators and hand tools, with suitable die sets, are available to make crimp connections that meet the demands of automotive customers.

Insertion and extraction tools are used for inserting discrete terminals into connector housings or removing them, without causing damage to either the terminals or housings. Different design types exist for our vast terminal product range including HP/HPSL sealed connectors.

Equipment is segregated into two types and managed accordingly:

Generic equipment

Where we can supply you with sufficient information referenced by Part Number such that you can identify and order what you need yourself.

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Where you will need help from our specialist product managers to identify what's just right for your Application.

Finding Equipment Online

www.tooling.te.com

- Powerful searches to find generic equipment options (Hand Tools / Applicators)
- Brochures and more detailed flyers for the specialized equipment.
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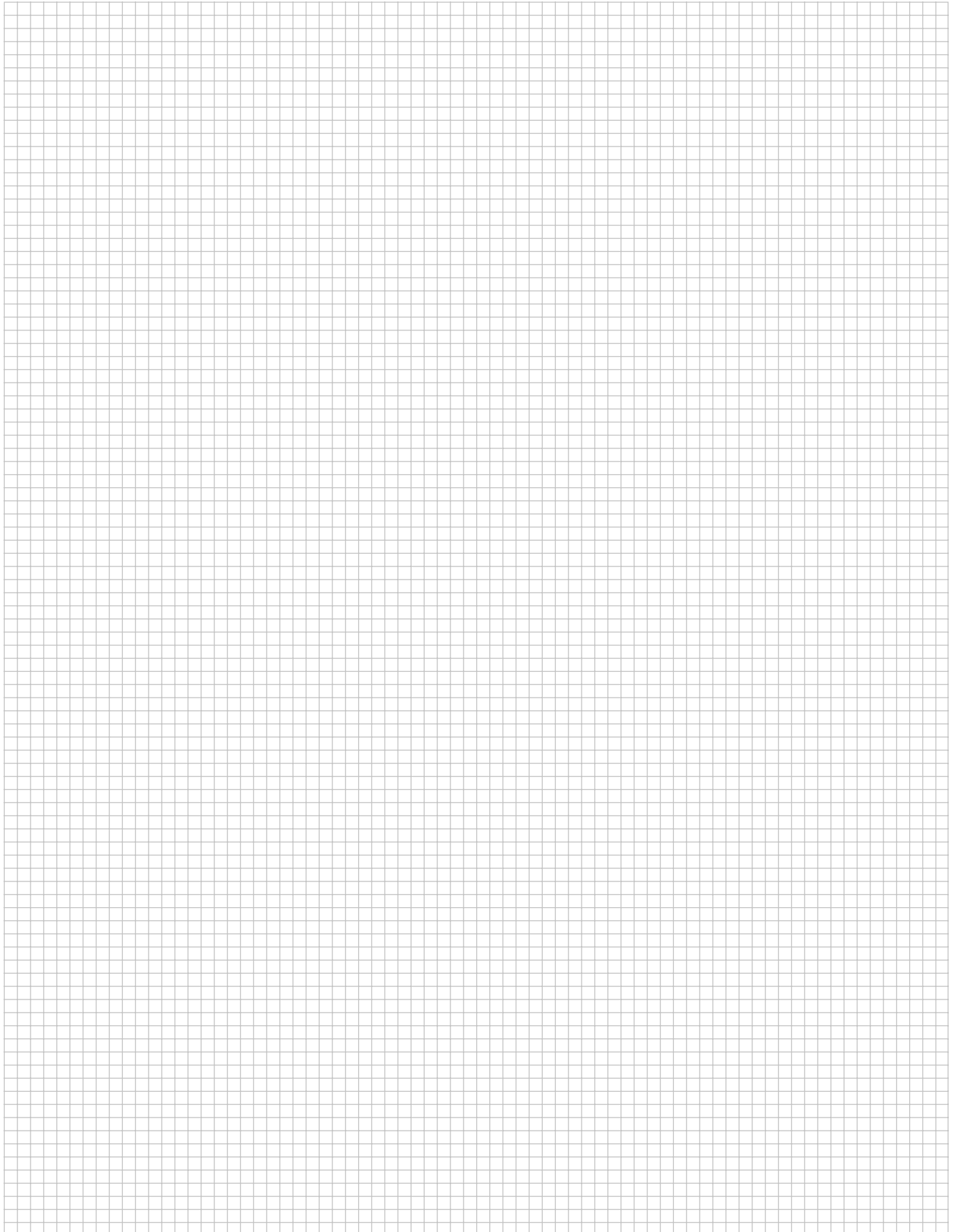


HP/HPSL Sealed Connectors

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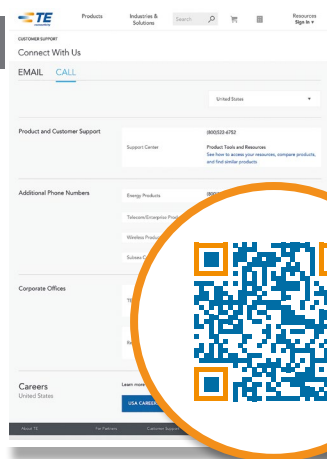
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