

# AMPSEAL HEADERS



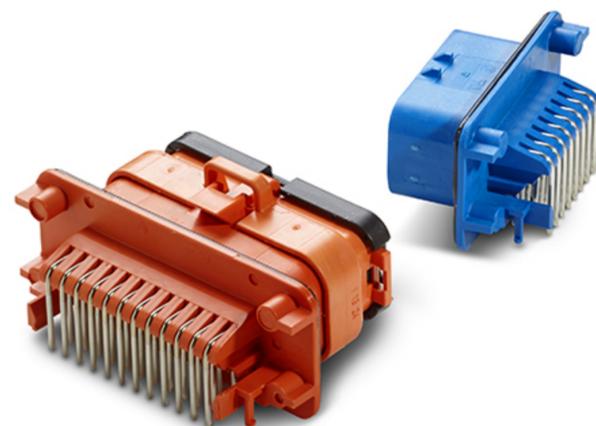
AMP | AMPSEAL

TE Model # CAT-AM78-H342

TE Internal #: CAT-AM78-H342

[View on TE.com >](#)

**Vertical and right angle versions are available, as well as with or without a flange seal.**



[Connectors > Automotive, Truck, Bus, & Off-Road Connectors > Automotive, Truck, Bus, & Off-Road Headers](#)

AMPSEAL headers are designed for printed circuit board applications and are available in 8, 14, 23, and 35 cavity arrangements. These headers are integrated with 1.3 mm contacts, carrying up to 8 amps (tin) or 17 amps (gold).



Centerline (Pitch): **4 mm**

Sealable: **Yes**

Number of Rows: **3**

Pin Diameter: **1.3 mm**

Termination Method: **Through Hole - Solder**

## Series Overview

- Accepts contact size 1.3 mm (up to 17 amps gold, up to 8 amps tin)
- 16-20 AWG (1.25-0.50 mm<sup>2</sup>)
- 8, 14, 23, and 35 cavity arrangements
- PCB mount
- Rectangular, thermoplastic housing
- Integrated latch for mating
- Integrated wedgelock confirms contact alignment and retention
- Available accessories: Wire relief

## ▶ AMPSEAL Connector Overview & Assembly Instructions (English)

Learn about our rugged AMPSEAL connectors for cable-to-board harsh environment applications. Watch this video for an overview of the connectors and for step-by-step instructions on inserting and removing contacts, as well as mating and unmating.

## Additional AMPSEAL Products

### [VIEW ALL AMPSEAL PRODUCTS](#)

AMPSEAL connectors provide rugged reliability and environmental sealing. They are available in cable plugs and PCB mount headers that are designed to stand up to high-temperature underhood applications.

## Features

### Product Type Features

Connector System	Wire-to-Board, Wire-to-Device
Sealable	Yes
Connector & Contact Terminates To	Printed Circuit Board

### Configuration Features

Number of Signal Positions	8, 14, 23, 35
Number of Positions	8, 14, 23, 35
Number of Rows	3

### Electrical Characteristics

Nominal Voltage Architecture (V)	12, 24, 42, 48, 240, 250
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### Body Features

Color	Black, Blue, Gray, Natural, Orange
Connector Code	1, 2, 4, 5, 6

### Contact Features

Tab Width (mm)	1.3
Tab Width (in)	.051
Tab Thickness (mm)	1.3
Tab Thickness (in)	.051
Pin Diameter (mm)	1.3
Pin Diameter (in)	.051
Interface Plating	Gold (Au), Tin (Sn)
Contact Current Rating (Max) (A)	11

### Termination Features

Termination Method	Through Hole - Solder
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### Mechanical Attachment

PCB Mount Alignment	With, Without
Panel Mount Feature	With, Without
PCB Mount Retention	With, Without
PCB Mount Retention Type	Board Latch, Boardlock, Solder Tail
Mounting Orientation	Horizontal/90°, Vertical/180°
Connector Mounting Type	Board Mount

### Housing Features

Centerline (Pitch) (mm)	4
Centerline (Pitch) (in)	.157

### Usage Conditions

Operating Temperature Range (°C)	-40 - 105, -40 - 125
Operating Temperature Range (°F)	-40 - 221, -40 - 257

### Operation/Application

Circuit Application	Power & Signal
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### Industry Standards

Degree of Protection	IP6K7, IP6K9K
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SEE PRODUCTS ON NEXT PAGE

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## Products (1 of 5)



**23P AMPSEAL ASSY SNAP-IN GOLD**



**HEADER ASSY, 23 POS VERTICAL**



**14 POS AMPSEAL VERTICAL HDR**



**23 POS AMPSEAL HDR SNAP IN W/G**

TE Part #	1-770669-1	1-776228-4	776262-2	776087-4
Connector System	Wire-to-Board, Wire-to-Device	Wire-to-Board, Wire-to-Device	Wire-to-Board, Wire-to-Device	Wire-to-Board, Wire-to-Device
Number of Positions	23	23	14	23
Mounting Orientation	Horizontal/90°	Vertical/180°	Vertical/180°	Horizontal/90°
Color	Black	Gray	Natural	Gray
Tab Width	1.3 mm	1.3 mm	1.3 mm	1.3 mm
Tab Thickness	1.3 mm	1.3 mm		1.3 mm
Interface Plating	Gold (Au)	Gold (Au)	Tin (Sn)	Tin (Sn)
Contact Current Rating (Max)				
Connector Mounting Type				
Operating Temperature Range	-40 - 125 °C	-40 - 125 °C	-40 - 105 °C	-40 - 105 °C
Connector Code				
EU RoHS Directive 2011/65/EU	EU RoHS Compliant	EU RoHS Compliant	EU RoHS Compliant	EU RoHS Compliant
EU ELV Directive 2000/53/EC	EU ELV Compliant	EU ELV Compliant	EU ELV Compliant	EU ELV Compliant
Product Families	AMP	AMP	AMP	AMP
Series	AMPSEAL	AMPSEAL	AMPSEAL	AMPSEAL

**\*EU RoHS Directive 2011/65/EU**

These products comply with the substance restrictions of the Restriction on Hazardous Substances Directive 2011/65/EU (RoHS2). The RoHS2 Directive requires that certain electrical and electronic equipment products do not contain mercury, cadmium, hexavalent chromium, PBB, PBDE, lead, DEHP, BBP, DBP and DIBP above defined thresholds. Products indicated as 'Compliant' do not contain any of these substances above the prohibition thresholds. Finished electrical and electronic equipment products will be CE marked as required by the Directive. Components may not be CE marked.

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## Products (2 of 5)



**23P AMPSEAL, ASSY SNAP-IN GREY**



**8 POS RTANG HDR ASSY W /GASKET**



**HEADER ASSY, 23 POS VERTICAL**



**HDR ASSY, 23 POS. VERTICAL BLK**

TE Part #	770669-4	1-776280-1	776228-2	776200-1
Connector System	Wire-to-Board, Wire-to-Device	Wire-to-Board, Wire-to-Device	Wire-to-Board, Wire-to-Device	Wire-to-Board, Wire-to-Device
Number of Positions	23	8	23	23
Mounting Orientation	Horizontal/90°	Horizontal/90°	Vertical/180°	Vertical/180°
Color	Gray	Black	Natural	Black
Tab Width	1.3 mm	1.3 mm	1.3 mm	1.3 mm
Tab Thickness	1.3 mm	1.3 mm	1.3 mm	1.3 mm
Interface Plating	Tin (Sn)	Gold (Au)	Tin (Sn)	Tin (Sn)
Contact Current Rating (Max)				
Connector Mounting Type				
Operating Temperature Range	-40 - 105 °C	-40 - 125 °C	-40 - 105 °C	-40 - 105 °C
Connector Code				
EU RoHS Directive 2011/65 /EU	EU RoHS Compliant	EU RoHS Compliant	EU RoHS Compliant	EU RoHS Compliant
EU ELV Directive 2000/53/EC	EU ELV Compliant	EU ELV Compliant	EU ELV Compliant	EU ELV Compliant
Product Families	AMP	AMP	AMP	AMP
Series	AMPSEAL	AMPSEAL	AMPSEAL	AMPSEAL

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## Products (3 of 5)



**14 POS RIGHT ANGLE  
HEADER ASSY**



**23 POS AMPSEAL ASSY  
SNAP-IN**



**35 POS AMP SEAL HDR  
ASSY**



**HEADER ASSY, 35 POS  
VERTICAL**

TE Part #	776266-1	770669-1	776180-1	1-776231-4
Connector System	Wire-to-Board, Wire-to-Device	Wire-to-Board, Wire-to-Device	Wire-to-Board, Wire-to-Device	Wire-to-Board, Wire-to-Device
Number of Positions	14	23	35	35
Mounting Orientation	Horizontal/90°	Horizontal/90°	Horizontal/90°	Vertical/180°
Color	Black	Black	Black	Gray
Tab Width	1.3 mm	1.3 mm	1.3 mm	1.3 mm
Tab Thickness	1.3 mm	1.3 mm	1.3 mm	1.3 mm
Interface Plating	Tin (Sn)	Tin (Sn)	Tin (Sn)	Gold (Au)
Contact Current Rating (Max)				
Connector Mounting Type				
Operating Temperature Range	-40 - 105 °C	-40 - 105 °C	-40 - 105 °C	-40 - 125 °C
Connector Code				
EU RoHS Directive 2011/65 /EU	EU RoHS Compliant	EU RoHS Compliant	EU RoHS Compliant	EU RoHS Compliant
EU ELV Directive 2000/53/EC	EU ELV Compliant	EU ELV Compliant	EU ELV Compliant	EU ELV Compliant
Product Families	AMP	AMP	AMP	AMP
Series	AMPSEAL	AMPSEAL	AMPSEAL	AMPSEAL

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## Products (4 of 5)



**23 POS AMP SEAL HDR ASSY SNAP**



**HEADER ASSY, 23 POS VERTICAL**



**HEADER ASSY, 35 POS VERTICAL, ORANGE**



**23P V HDR ASSY W/GASKET**

TE Part #	770669-2	1-776228-2	1-776231-6	776228-4
Connector System	Wire-to-Board, Wire-to-Device	Wire-to-Board, Wire-to-Device	Wire-to-Board, Wire-to-Device	Wire-to-Board, Wire-to-Device
Number of Positions	23	23	35	23
Mounting Orientation	Horizontal/90°	Vertical/180°	Vertical/180°	Vertical/180°
Color	Natural	Natural	Orange	Gray
Tab Width	1.3 mm	1.3 mm	1.3 mm	1.3 mm
Tab Thickness	1.3 mm	1.3 mm	1.3 mm	1.3 mm
Interface Plating	Tin (Sn)	Gold (Au)	Gold (Au)	Tin (Sn)
Contact Current Rating (Max)				
Connector Mounting Type				
Operating Temperature Range	-40 - 105 °C	-40 - 125 °C	-40 - 125 °C	-40 - 105 °C
Connector Code				
EU RoHS Directive 2011/65/EU	EU RoHS Compliant	EU RoHS Compliant	EU RoHS Compliant	EU RoHS Compliant
EU ELV Directive 2000/53/EC	EU ELV Compliant	EU ELV Compliant	EU ELV Compliant	EU ELV Compliant
Product Families	AMP	AMP	AMP	AMP
Series	AMPSEAL	AMPSEAL	AMPSEAL	AMPSEAL

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## Products (5 of 5)



**23 POS AMPSEAL HDR  
SNAP IN W/G**



**8 POS AMPSEAL VERTICAL  
HDR**



**14P AMPSEAL VERT HDR W  
/GASKET**



**35P VERT HDR ASSY W  
/GASKET**

TE Part #	1-776087-1	1-776276-2	1-776262-2	776231-5
Connector System	Wire-to-Board, Wire-to-Device	Wire-to-Board, Wire-to-Device	Wire-to-Board, Wire-to-Device	Wire-to-Board, Wire-to-Device
Number of Positions	23	8	14	35
Mounting Orientation	Horizontal/90°	Vertical/180°	Vertical/180°	Vertical/180°
Color	Black	Natural	Natural	Blue
Tab Width	1.3 mm	1.3 mm	1.3 mm	1.3 mm
Tab Thickness	1.3 mm	1.3 mm	1.3 mm	1.3 mm
Interface Plating	Gold (Au)	Gold (Au)	Gold (Au)	Tin (Sn)
Contact Current Rating (Max)				
Connector Mounting Type				
Operating Temperature Range	-40 - 125 °C	-40 - 125 °C	-40 - 125 °C	-40 - 105 °C
Connector Code				
EU RoHS Directive 2011/65 /EU	EU RoHS Compliant	EU RoHS Compliant	EU RoHS Compliant	EU RoHS Compliant
EU ELV Directive 2000/53/EC	EU ELV Compliant	EU ELV Compliant	EU ELV Compliant	EU ELV Compliant
Product Families	AMP	AMP	AMP	AMP
Series	AMPSEAL	AMPSEAL	AMPSEAL	AMPSEAL

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## Related Materials

### Catalog

#### [AMPSEAL Connector Series \(English\)](#)

AMPSEAL connectors are designed for cable-to-board harsh environment applications. Environmentally sealed for rugged reliability, these connectors are available in cable plugs and PCB mount headers engineered to withstand extreme temperature and moisture, including high-temperature underhood applications.

English

### Product Specifications

#### [AMPSEAL Connectors Product Specifications \(English\)](#)

This specification covers performance tests and quality requirements for AMPSEAL connectors.

English

### Application Specifications

#### [AMPSEAL Connectors Application Specifications \(English\)](#)

This specification covers the requirements for the application of the AMPSEAL plug connector and header assembly.

English

### Connector Selector

#### [Connector Selector \(English\)](#)

The Connector Selector is a reference guide to TE Connectivity's (TE) Industrial & Commercial Transportation electrical connectors.

English

### Flipbook Catalog

#### [Industrial & Commercial Transportation - Terminals and Connectors \(English\)](#)

TE's Industrial & Commercial Transportation Terminals and Connectors flipbook catalog features AMPSEAL, AMPSEAL 16, Circular DIN, DEUTSCH, HDSCS, LEAVYSEAL, and Superseal 1.0 connectors, contacts, tools, and accessories.

English

## Also in the Series | AMPSEAL



Automotive Connector Caps & Covers(5)



Automotive Seals & Cavity Plugs(1)



Automotive, Truck, Bus, & Off-Road Headers(111)



Automotive, Truck, Bus, & Off-Road Housings(16)



Automotive, Truck, Bus, & Off-Road Terminals(4)

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