

HIVONEX CONNECTORS & CHARGING SOLUTIONS

FOR HIGH VOLTAGE E-MOBILITY APPLICATIONS



HIVONEX Connectors & Charging Solutions

for High Voltage E-mobility Applications



WE GO TO EXTREMES TO MAKE SURE **EVERY CONNECTION COUNTS**

TE Connectivity (TE) Industrial & Commercial Transportation (ICT) is a reliable provider of solutions for even the harshest environments. With a focus on employee expertise and durable products, we deliver the solutions and support our customers can count on.

Years ago, tractors, construction equipment, trucks, and boats had simple electrical systems that might have included electrical starting and a basic lighting package. Today, ECUs, joysticks, electric motors, LED lights, and CAN systems are standard equipment. The need to protect sensitive electrical systems from vibration, moisture, dust, dirt, salt, and airborne particles has never been greater. TE Industrial & Commercial Transportation is a leader in supporting today’s increasingly complex and sophisticated equipment and applications.

Our comprehensive line of products includes an unparalleled portfolio of rugged sensors, terminals, connectors, relays, and HIVONEX E-mobility solutions. They are designed to withstand the harshest environmental conditions and to help vehicles operate safer, cleaner, and smarter.

Our solutions adapt to virtually any **harsh environment application**, including:



E-Motor



ABS/EBS
Brake Units



Telematics
Units



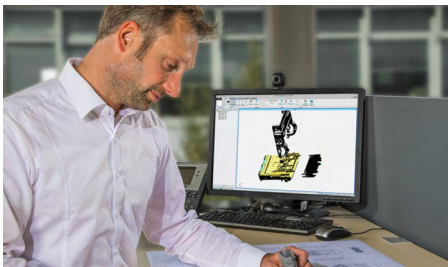
Sensors



Wire-To-Wire
Coupling at
the Chassis



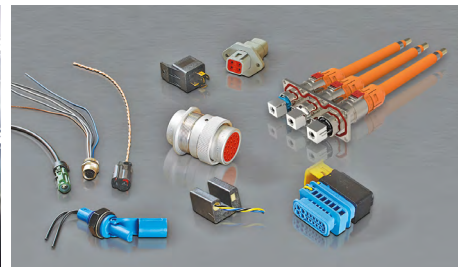
Infotainment
Applications



**2,000+
EMPLOYEES**



**10,000
CUSTOMERS**



**20,000+
DIFFERENT PARTS**

MARKETS WE SERVE



ON-HIGHWAY

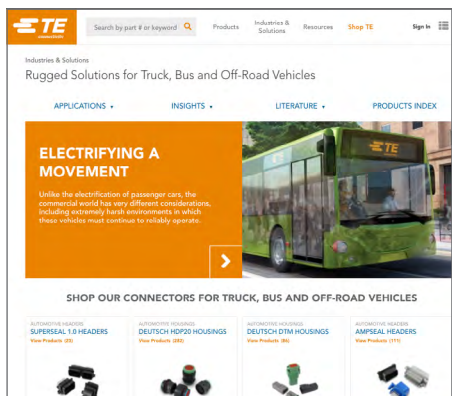


OFF-HIGHWAY

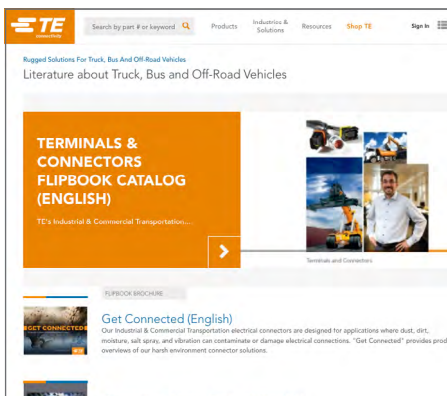


**RECREATIONAL
TRANSPORTATION**

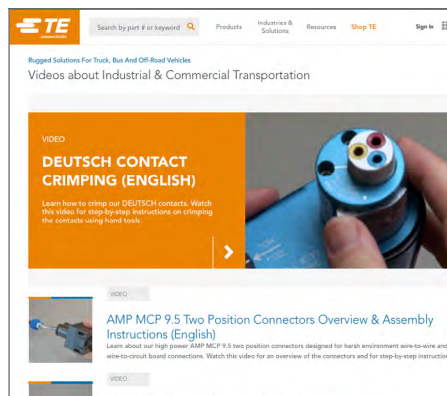
ONLINE RESOURCES



TE.COM/ICT



LITERATURE



VIDEOS



TE SOLUTION CENTER

You can rely on TE Connectivity's helpful Solution Center team to provide answers to your general and technical questions.

Connect with our Solution Center staff at:

te.com/support

PowerTube

Key Features & Benefits 5
 PowerTube Header Design Overview 6

PowerTube 1000

Part Numbers 8
 180 Degree 9
 90 Degree 10
 Plug - 35-70 mm² (crimped version) 11
 Plug - 35 mm² - Finger & Tool (crimped version) 12
 Plug - 50 mm² - Finger & Tool (crimped version) 13
 Plug - 70 mm² - Finger & Tool (crimped version) 14
 Plug - 35 mm² - Finger & Tool (EMPT version) 15
 Plug - 50 mm² - Finger & Tool (EMPT version) 16
 Plug - 70 mm² - Finger & Tool (EMPT version) 17

PowerTube 1400

Part Numbers 18
 180 Degree 19
 90 Degree 20
 Plug - 70-120 mm² (With Spacer) 21
 Plug - 70 mm² - Finger & Tool 22
 Plug - 95 mm² - Finger & Tool 23
 Plug - 120 mm² - Finger & Tool 24
 Plug - 150 mm² (No Spacer) 25
 Plug - 150 mm² - Finger & Tool 26

HVA HD400

Key Features & Benefits 28
 HVA HD400 Header 29
 HVA HD400 Plug 30

IPT-HD

Key Features & Benefits 32
 Dimensions 33
 Part Numbers 34

Charging Inlets

Key Features & Benefits 36
 CCS1 Kit without LED indicator 37
 CCS2 Kit without LED indicator 38

Charging Inlet Pigtail Cable Assemblies

CCS1 Kit with LED indicator 39
 CCS2 Kit with LED indicator 40
 LED Version 41
 Non-LED Version 42

AMP+ IPT Shielded Ring Tongue Kits

1 Position, 70 mm², Individually Shielded Cable

A Keying 44
 B Keying 45

1 Position, 95 mm², Individually Shielded Cable

A Keying 46
 A Keying 47
 B Keying 48

1 Position, 120 mm², Individually Shielded Cable

A Keying 49

2 Position, 50 mm², Individually Shielded Cable

A Keying 50

3 Position, 50 mm², Individually Shielded Cable

Keying N/A 51

AMP+ HVA 280 Kits

2 Position, 4 mm², Individually Shielded Cable

A Keying 52
 B Keying 53

2 Position, 4 mm², Multicore Cable

Shunted HVIL, A Keying 54
 Shunted HVIL, B Keying 55
 Shunted HVIL, D Keying 56
 Shunted HVIL, E Keying 57
 Shunted HVIL, A Keying 58
 Shunted HVIL, B Keying 59
 Pass-through HVIL, A Keying 60
 Pass-through HVIL, B Keying 61
 Pass-through HVIL, D Keying 62
 Pass-through HVIL, E Keying 63

3 Position, 2.5 mm²

A Keying 64
 B Keying 65

AMP+ HVA 630 Kits

2 Position, 4 mm², Multicore Cable

Bridge in Connector, A Keying 66

2 Position, 6 mm², Multicore Cable

Bridge in Connector, A Keying 67

3 Position, 4 mm², Multicore Cable

Bridge in Connector, A Keying 68

4 Position, 4 mm², Multicore Cable

Bridge in Connector, A Keying 69

5 Position, 6 mm², Multicore Cable

Bridge in Connector, A Keying 70

AMP+ HVP 800 Kits

2 Position, 50 mm², Individually Shielded Cable, 90°

Bridge in Connector, A Keying 71
 Bridge in Connector, B Keying 72

2 Position, 50 mm², Individually Shielded Cable, 180°

Bridge in Connector, A Keying 73
 Bridge in Connector, B Keying 74

3 Position, 50 mm², Individually Shielded Cable, 90°

Bridge in Connector, A Keying 75
 Bridge in Connector, B Keying 76

3 Position, 50 mm², Individually Shielded Cable, 180°

Bridge in Connector, A Keying 77
 Bridge in Connector, B Keying 78



PowerTube

Key Features & Benefits 5
PowerTube Header Design Overview..... 6

PowerTube 1000

Part Numbers..... 8
180 Degree..... 9
90 Degree..... 10
Plug - 35-70 mm² (crimped version) 11
Plug - 35 mm² - Finger & Tool (crimped version) . .12
Plug - 50 mm² - Finger & Tool (crimped version) . .13
Plug - 70 mm² - Finger & Tool (crimped version) . .14
Plug - 35 mm² - Finger & Tool (EMPT version).....15
Plug - 50 mm² - Finger & Tool (EMPT version)16
Plug - 70 mm² - Finger & Tool (EMPT version)17

PowerTube 1400

Part Numbers..... 18
180 Degree..... .19
90 Degree..... 20
Plug- 70-120 mm² (With Spacer)21
Plug - 70 mm² - Finger & Tool 22
Plug - 95 mm² - Finger & Tool 23
Plug - 120 mm² - Finger & Tool 24
Plug - 150 mm² (No Spacer)..... 25
Plug - 150 mm² - Finger & Tool 26



PowerTube Design Overview

Modular, Scalable and Immensely Powerful

Newest addition to our HIVONEX connectors and charging solutions, the PowerTube connector series is the right choice for high power applications in E-mobility industrial and commercial vehicles. Built to handle large electrical loads, these modular and scalable connectors are manufactured to adapt to your designs and hold up to intense environmental demands.

Key Features & Benefits:

High Performance

- IP6K9K protection and ISO 16750-3 profile vibration performance
- Connector Position Assurance (CPA) and High Voltage Interlock Loop (HVIL) for each pin
- Circular 360° shielding provides excellent EMI protection

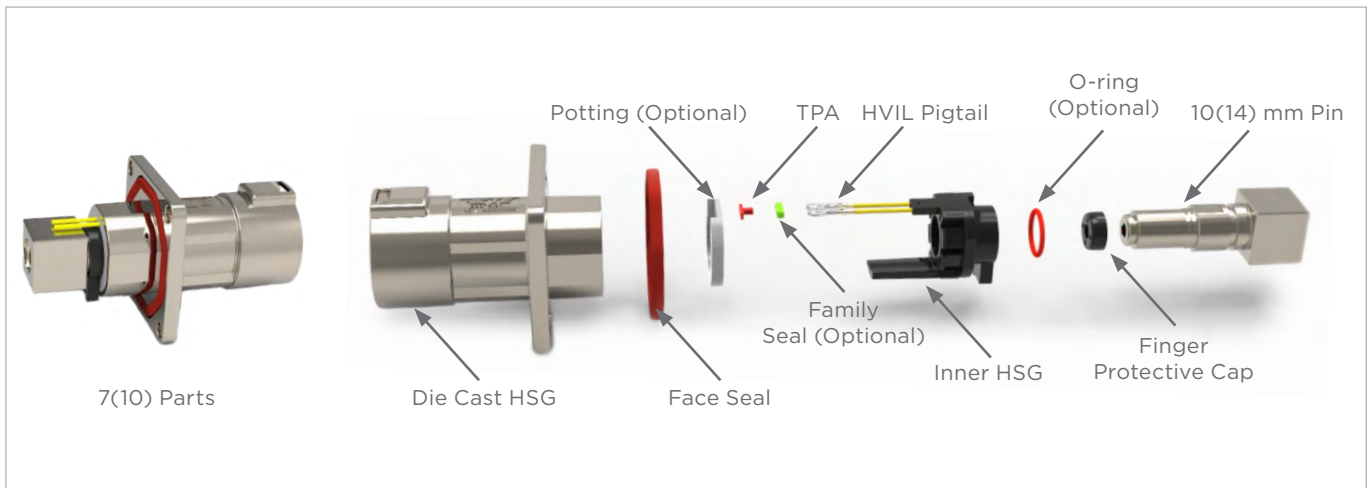
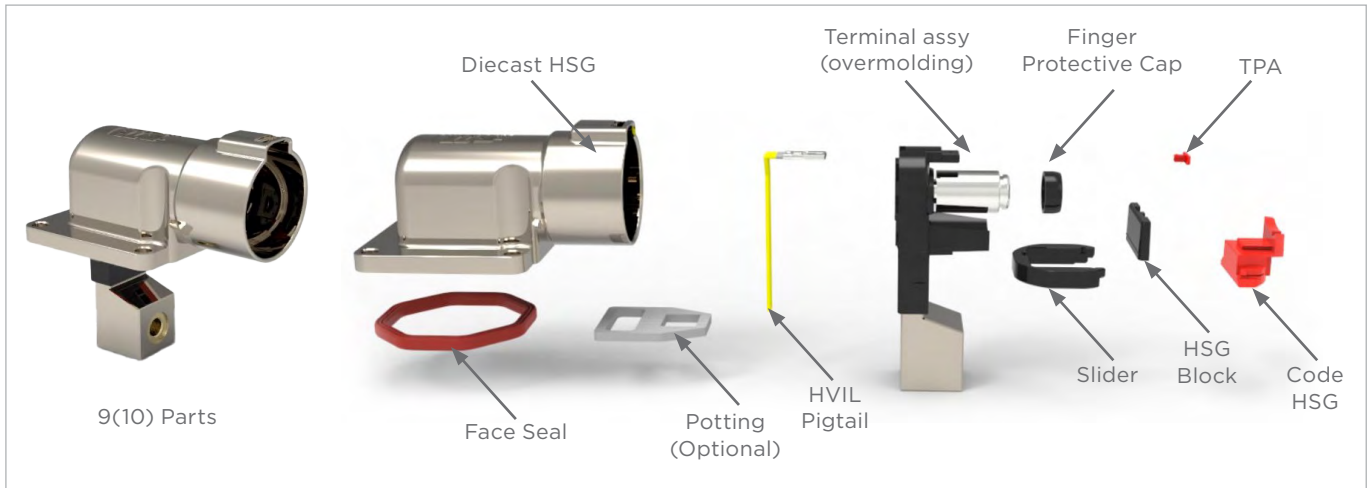
Modular and Scalable

- Up to 3 pins in one header connector and large cable range
- Cube-shaped bus bar enables multiple screw orientations for easier tool access
- Both 180° and 90° headers use the same size interface on the aggregate
- Unshielded (48 V) and shielded (high voltage) systems can be serviced with the same connector system

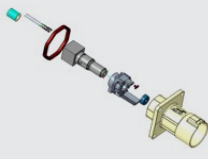
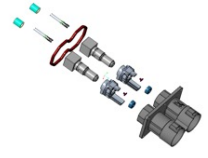
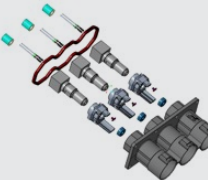
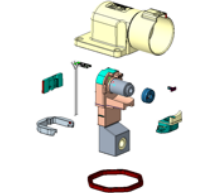
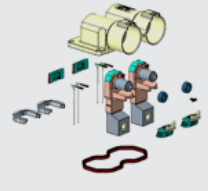
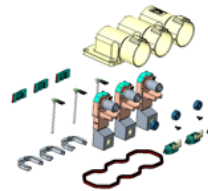
Reduced Total Applied Cost

- Modularity reduces inventory cost
- Circular connector design enables simplified routing
- Decreases complexity of assembly and reduced number of components
- Single connector design enables improved serviceability in the field

POWERTUBE HEADER DESIGN OVERVIEW



POWERTUBE 1000

Basic Part Number	Description	Picture	With Nut (Y/N)
2394060	1POS,PIN DIA 14.0 HDR ASSY,180DEG.UNSEALED		Y
2394061	2POS,PIN DIA 14.0 HDR ASSY,1800DEG.UNSEALED		Y
2394062	3POS,PIN DIA 14.0 HDR ASSY,180DEG.UNSEALED		Y
2394070	1POS,PIN DIA 14.0 HDR ASSY,90DEG.UNSEALED		Y
2394071	2POS,PIN DIA 14.0 HDR ASSY,90DEG.UNSEALED		Y
2394072	3POS,PIN DIA 14.0 HDR ASSY,90DEG.UNSEALED		Y

180 DEGREE

1 POSITION					
Coding	Front	Right	Back	Left	Top
A	2394060-1	2-2394060-1	4-2394060-1	6-2394060-1	8-2394060-1
B	2394060-2	2-2394060-2	4-2394060-2	6-2394060-2	8-2394060-2
C	2394060-3	2-2394060-3	4-2394060-3	6-2394060-3	8-2394060-3
D	2394060-4	2-2394060-4	4-2394060-4	6-2394060-4	8-2394060-4
E	2394060-5	2-2394060-5	4-2394060-5	6-2394060-5	8-2394060-5
F	2394060-6	2-2394060-6	4-2394060-6	6-2394060-6	8-2394060-6
G	2394060-7	2-2394060-7	4-2394060-7	6-2394060-7	8-2394060-7
H	2394060-8	2-2394060-8	4-2394060-8	6-2394060-8	8-2394060-8
J	2394060-9	2-2394060-9	4-2394060-9	6-2394060-9	8-2394060-9
K	1-2394060-1	3-2394060-1	5-2394060-1	7-2394060-1	9-2394060-1
L	1-2394060-2	3-2394060-2	5-2394060-2	7-2394060-2	9-2394060-2
M	1-2394060-3	3-2394060-3	5-2394060-3	7-2394060-3	9-2394060-3

2 POSITIONS			
Coding	Front	Back	Top
A/B	2394061-1	1-2394061-1	2-2394061-1
C/D	2394061-2	1-2394061-2	2-2394061-2
E/F	2394061-3	1-2394061-3	2-2394061-3
G/H	2394061-4	1-2394061-4	2-2394061-4
J/K	2394061-5	1-2394061-5	2-2394061-5
L/M	2394061-6	1-2394061-6	2-2394061-6

3 POSITIONS			
Coding	Front	Back	Top
A/B/C	2394062-1	1-2399608-1	2-2399608-1
D/E/F	2394062-2	1-2399608-2	2-2399608-2
G/H/J	2394062-3	1-2399608-3	2-2399608-3
K/L/M	2394062-4	1-2399608-4	2-2399608-4

POWERTUBE 1000

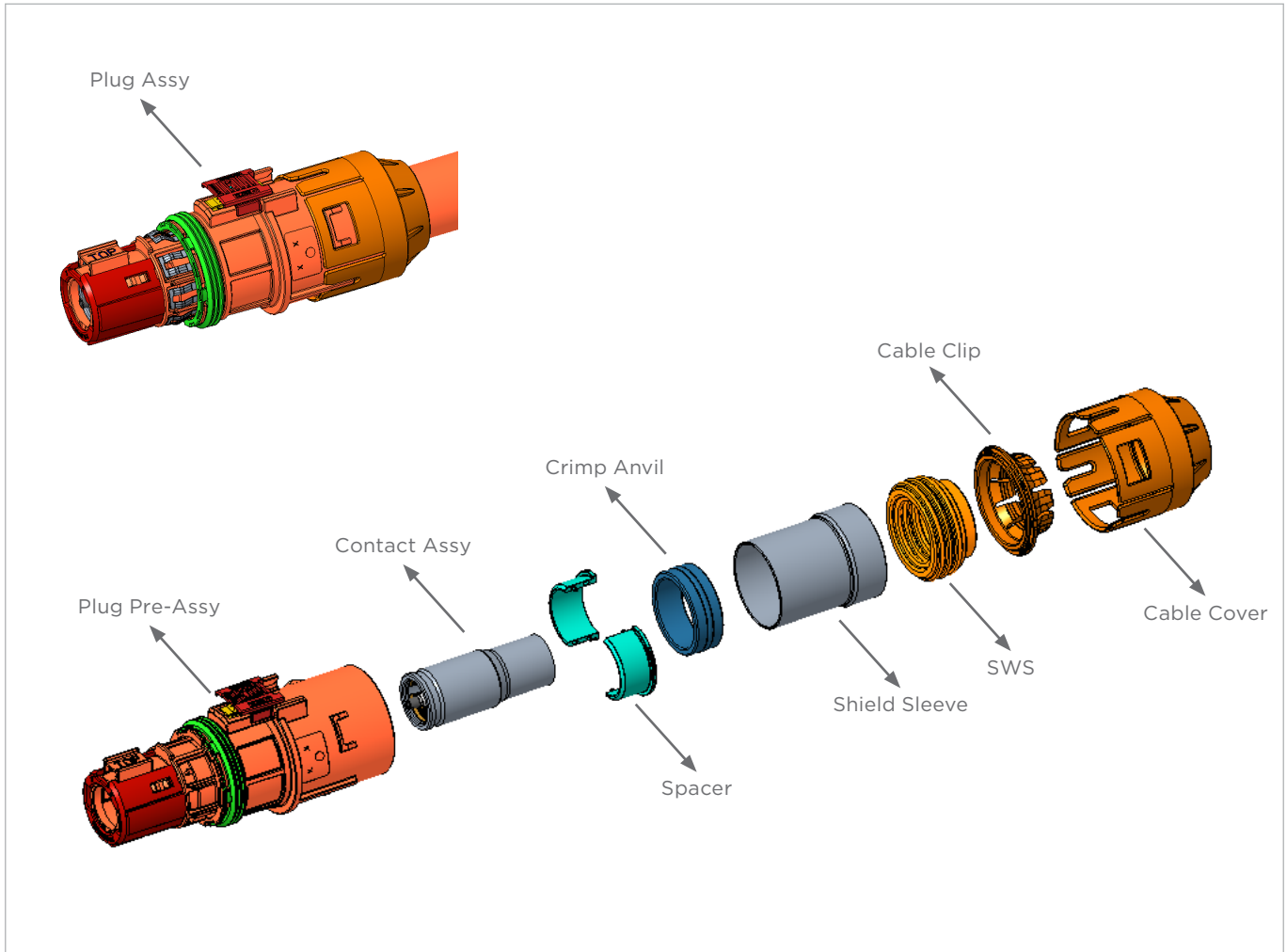
90 DEGREE

1 POSITION					
Coding	Front	Right	Back	Left	Top
A	2394070-1	2-2394070-1	4-2394070-1	6-2394070-1	8-2394070-1
B	2394070-2	2-2394070-2	4-2394070-2	6-2394070-2	8-2394070-2
C	2394070-3	2-2394070-3	4-2394070-3	6-2394070-3	8-2394070-3
D	2394070-4	2-2394070-4	4-2394070-4	6-2394070-4	8-2394070-4
E	2394070-5	2-2394070-5	4-2394070-5	6-2394070-5	8-2394070-5
F	2394070-6	2-2394070-6	4-2394070-6	6-2394070-6	8-2394070-6
G	2394070-7	2-2394070-7	4-2394070-7	6-2394070-7	8-2394070-7
H	2394070-8	2-2394070-8	4-2394070-8	6-2394070-8	8-2394070-8
J	2394070-9	2-2394070-9	4-2394070-9	6-2394070-9	8-2394070-9
K	1-2394070-1	3-2394070-1	5-2394070-1	7-2394070-1	9-2394070-1
L	1-2394070-2	3-2394070-2	5-2394070-2	7-2394070-2	9-2394070-2
M	1-2394070-3	3-2394070-3	5-2394070-3	7-2394070-3	9-2394070-3

2 POSITIONS			
Coding	Front	Back	Top
A/B	2394071-1	1-2394071-1	2-2394071-1
C/D	2394071-2	1-2394071-2	2-2394071-2
E/F	2394071-3	1-2394071-3	2-2394071-3
G/H	2394071-4	1-2394071-4	2-2394071-4
J/K	2394071-5	1-2394071-5	2-2394071-5
L/M	2394071-6	1-2394071-6	2-2394071-6

3 POSITIONS			
Coding	Front	Back	Top
A/B/C	2394072-1	1-2394072-1	2-2394072-1
D/E/F	2394072-2	1-2394072-2	2-2394072-2
G/H/J	2394072-3	1-2394072-3	2-2394072-3
K/L/M	2394072-4	1-2394072-4	2-2394072-4

PLUG - 35-70 MM² (CRIMPED & EMPT VERSIONS)



PLUG - 35 MM² - FINGER & TOOL (CRIMPED VERSION)

	Coding	Plug Pre-Assy	Contact Assy	Spacer	Crimp Anvil	Shield Sleeve	SWS	Cable Clip	Cable Cover
CABLE 35 mm ² Finger access	Code A	2394085-1	2395861-1	2395861-1	2383855-1	2383853-6	2394111-1	2394112-1	2394113-1
	Code B	2394085-2							
	Code C	2394085-3							
	Code D	2394085-4							
	Code E	2394085-5							
	Code F	2394085-6							
	Code G	2394085-7							
	Code H	2394085-8							
	Code J	2394085-9							
	Code K	1-2394085-1							
	Code L	1-2394085-2							
	Code M	1-2394085-3							
	CABLE 35 mm ² Tool access	Code A							
Code B		2-2394085-2							
Code C		2-2394085-3							
Code D		2-2394085-4							
Code E		2-2394085-5							
Code F		2-2394085-6							
Code G		2-2394085-7							
Code H		2-2394085-8							
Code J		2-2394085-9							
Code K		3-2394085-1							
Code L		3-2394085-2							
Code M		3-2394085-3							

PLUG - 50 MM² - FINGER & TOOL (CRIMPED VERSION)

	Coding	Plug Pre-Assy	Contact Assy	Spacer	Crimp Anvil	Shield Sleeve	SWS	Cable Clip	Cable Cover
CABLE 50 mm ² Finger access	Code A	2394085-1							
	Code B	2394085-2							
	Code C	2394085-3							
	Code D	2394085-4							
	Code E	2394085-5							
	Code F	2394085-6							
	Code G	2394085-7							
	Code H	2394085-8							
	Code J	2394085-9							
	Code K	1-2394085-1							
	Code L	1-2394085-2							
	Code M	1-2394085-3							
	CABLE 50 mm ² Tool access	Code A							
Code B		2-2394085-2							
Code C		2-2394085-3							
Code D		2-2394085-4							
Code E		2-2394085-5							
Code F		2-2394085-6							
Code G		2-2394085-7							
Code H		2-2394085-8							
Code J		2-2394085-9							
Code K		3-2394085-1							
Code L		3-2394085-2							
Code M		3-2394085-3							

PLUG - 70 MM² - FINGER & TOOL (CRIMPED VERSION)

	Coding	Plug Pre-Assy	Contact Assy	Spacer	Crimp Anvil	Shield Sleeve	SWS	Cable Clip	Cable Cover
CABLE 70 mm ² Finger access	Code A	2394085-1	2383445-3	2395861-3	2383855-3	2383853-2	2394111-3	2394112-3	2394113-3
	Code B	2394085-2							
	Code C	2394085-3							
	Code D	2394085-4							
	Code E	2394085-5							
	Code F	2394085-6							
	Code G	2394085-7							
	Code H	2394085-8							
	Code J	2394085-9							
	Code K	1-2394085-1							
	Code L	1-2394085-2							
	Code M	1-2394085-3							
	CABLE 70 mm ² Tool access	Code A							
Code B		2-2394085-2							
Code C		2-2394085-3							
Code D		2-2394085-4							
Code E		2-2394085-5							
Code F		2-2394085-6							
Code G		2-2394085-7							
Code H		2-2394085-8							
Code J		2-2394085-9							
Code K		3-2394085-1							
Code L		3-2394085-2							
Code M		3-2394085-3							

PLUG - 35 MM² - FINGER & TOOL (EMPT VERSION)

	Coding	Plug Pre-Assy	Contact Assy	Spacer	Crimp Anvil	Shield Sleeve	SWS	Cable Clip	Cable Cover
CABLE 35 mm ² Finger Access	Code A	2394085-1	2383445-4	2395861-1	2410636-1	2410635-1	2394111-1	2394112-1	2394113-1
	Code B	2394085-2							
	Code C	2394085-3							
	Code D	2394085-4							
	Code E	2394085-5							
	Code F	2394085-6							
	Code G	2394085-7							
	Code H	2394085-8							
	Code J	2394085-9							
	Code K	1-2394085-1							
	Code L	1-2394085-2							
	Code M	1-2394085-3							
	CABLE 35 mm ² Tool Access	Code A							
Code B		2-2394085-2							
Code C		2-2394085-3							
Code D		2-2394085-4							
Code E		2-2394085-5							
Code F		2-2394085-6							
Code G		2-2394085-7							
Code H		2-2394085-8							
Code J		2-2394085-9							
Code K		3-2394085-1							
Code L		3-2394085-2							
Code M		3-2394085-3							

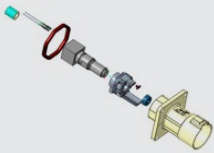
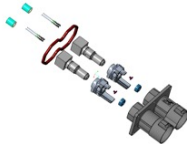
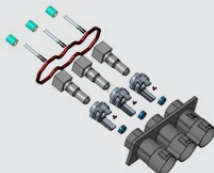
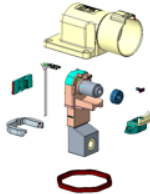
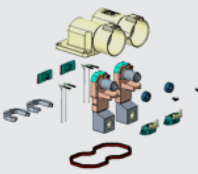
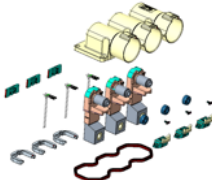
PLUG - 50 MM² - FINGER & TOOL (EMPT VERSION)

	Coding	Plug Pre-Assy	Contact Assy	Spacer	Crimp Anvil	Shield Sleeve	SWS	Cable Clip	Cable Cover
CABLE 50 mm ² Finger access	Code A	2394085-1	2383445-5	2395861-2	2410636-2	2410635-1	2394111-2	2394112-2	2394113-2
	Code B	2394085-2							
	Code C	2394085-3							
	Code D	2394085-4							
	Code E	2394085-5							
	Code F	2394085-6							
	Code G	2394085-7							
	Code H	2394085-8							
	Code J	2394085-9							
	Code K	1-2394085-1							
	Code L	1-2394085-2							
	Code M	1-2394085-3							
	CABLE 50 mm ² Tool access	Code A							
Code B		2-2394085-2							
Code C		2-2394085-3							
Code D		2-2394085-4							
Code E		2-2394085-5							
Code F		2-2394085-6							
Code G		2-2394085-7							
Code H		2-2394085-8							
Code J		2-2394085-9							
Code K		3-2394085-1							
Code L		3-2394085-2							
Code M		3-2394085-3							

PLUG - 70 MM² - FINGER & TOOL (EMPT VERSION)

	Coding	Plug Pre-Assy	Contact Assy	Spacer	Crimp Anvil	Shield Sleeve	SWS	Cable Clip	Cable Cover
CABLE 70 mm ² Finger Access	Code A	2394085-1	2383445-6	2395861-3	2410636-3	2410635-1	2394111-3	2394112-3	2394113-3
	Code B	2394085-2							
	Code C	2394085-3							
	Code D	2394085-4							
	Code E	2394085-5							
	Code F	2394085-6							
	Code G	2394085-7							
	Code H	2394085-8							
	Code J	2394085-9							
	Code K	1-2394085-1							
	Code L	1-2394085-2							
	Code M	1-2394085-3							
	CABLE 70 mm ² Tool Access	Code A							
Code B		2-2394085-2							
Code C		2-2394085-3							
Code D		2-2394085-4							
Code E		2-2394085-5							
Code F		2-2394085-6							
Code G		2-2394085-7							
Code H		2-2394085-8							
Code J		2-2394085-9							
Code K		3-2394085-1							
Code L		3-2394085-2							
Code M		3-2394085-3							

POWERTUBE 1400

Basic Part Number	Description	Picture	With Nut (Y/N)
2399606	1POS,PIN DIA 14.0 HDR ASSY,180DEG.UNSEALED		Y
2399607	2POS,PIN DIA 14.0 HDR ASSY,1800DEG.UNSEALED		Y
2399608	3POS,PIN DIA 14.0 HDR ASSY,180DEG.UNSEALED		Y
2399609	1POS,PIN DIA 14.0 HDR ASSY,90DEG.UNSEALED		Y
2399610	2POS,PIN DIA 14.0 HDR ASSY,90DEG.UNSEALED		Y
2399611	3POS,PIN DIA 14.0 HDR ASSY,90DEG.UNSEALED		Y

180 DEGREE

1 POSITION					
Coding	Front	Right	Back	Left	Top
A	2399606-1	2-2399606-1	4-2399606-1	6-2399606-1	8-2399606-1
B	2399606-2	2-2399606-2	4-2399606-2	6-2399606-2	8-2399606-2
C	2399606-3	2-2399606-3	4-2399606-3	6-2399606-3	8-2399606-3
D	2399606-4	2-2399606-4	4-2399606-4	6-2399606-4	8-2399606-4
E	2399606-5	2-2399606-5	4-2399606-5	6-2399606-5	8-2399606-5
F	2399606-6	2-2399606-6	4-2399606-6	6-2399606-6	8-2399606-6
G	2399606-7	2-2399606-7	4-2399606-7	6-2399606-7	8-2399606-7
H	2399606-8	2-2399606-8	4-2399606-8	6-2399606-8	8-2399606-8
J	2399606-9	2-2399606-9	4-2399606-9	6-2399606-9	8-2399606-9
K	1-2399606-1	3-2399606-1	5-2399606-1	7-2399606-1	9-2399606-1
L	1-2399606-2	3-2399606-2	5-2399606-2	7-2399606-2	9-2399606-2
M	1-2399606-3	3-2399606-3	5-2399606-3	7-2399606-3	9-2399606-3

2 POSITIONS			
Coding	Front	Back	Top
A/B	2399607-1	1-2399607-1	2-2399607-1
C/D	2399607-2	1-2399607-2	2-2399607-2
E/F	2399607-3	1-2399607-3	2-2399607-3
G/H	2399607-4	1-2399607-4	2-2399607-4
J/K	2399607-5	1-2399607-5	2-2399607-5
L/M	2399607-6	1-2399607-6	2-2399607-6

3 POSITIONS			
Coding	Front	Back	Top
A/B/C	2399608-1	1-2399608-1	2-2399608-1
D/E/F	2399608-2	1-2399608-2	2-2399608-2
G/H/J	2399608-3	1-2399608-3	2-2399608-3
K/L/M	2399608-4	1-2399608-4	2-2399608-4

POWERTUBE 1400

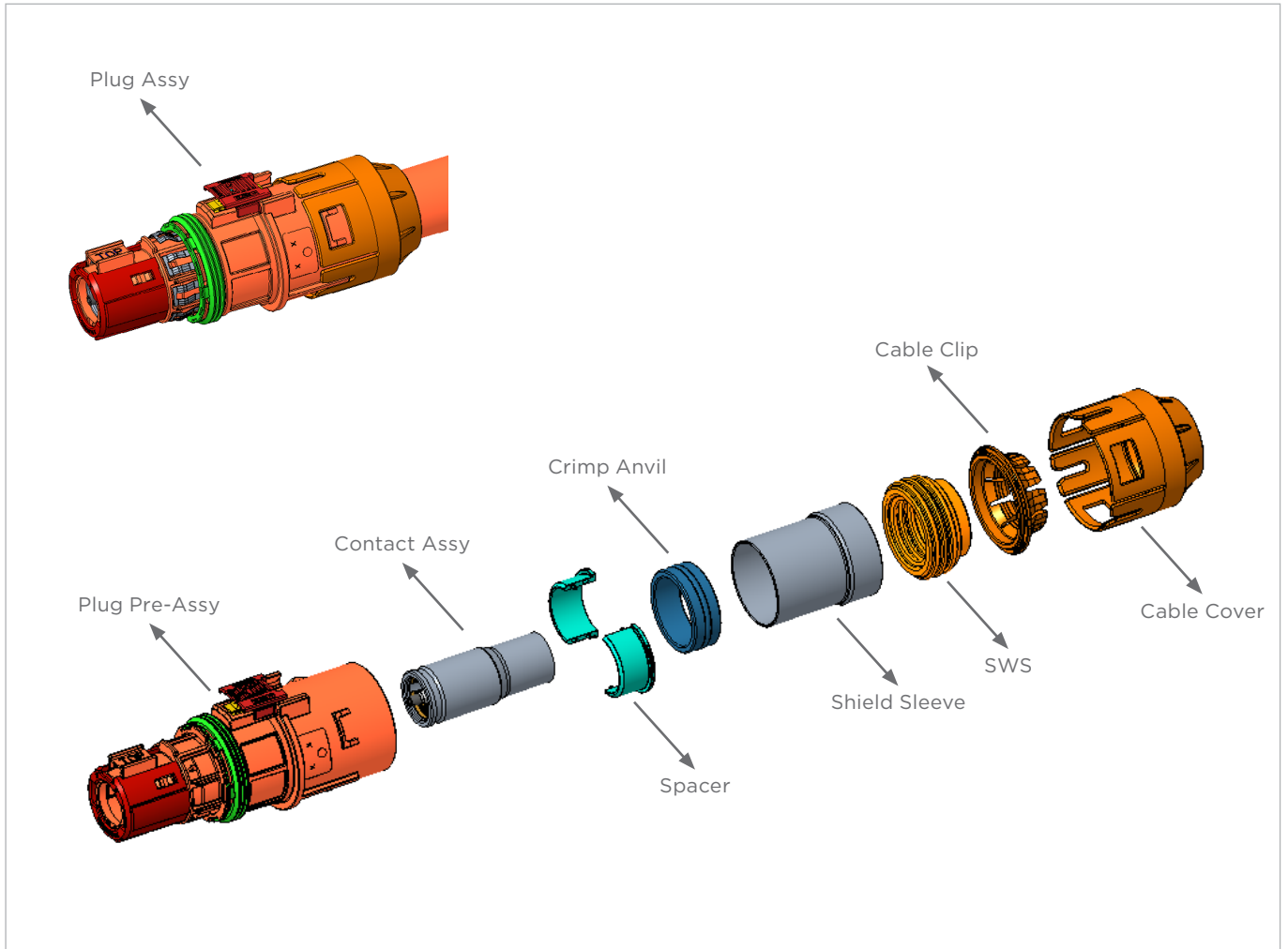
90 DEGREE

1 POSITION					
Coding	Front	Right	Back	Left	Top
A	2399609-1	2-2399609-1	4-2399609-1	6-2399609-1	8-2399609-1
B	2399609-2	2-2399609-2	4-2399609-2	6-2399609-2	8-2399609-2
C	2399609-3	2-2399609-3	4-2399609-3	6-2399609-3	8-2399609-3
D	2399609-4	2-2399609-4	4-2399609-4	6-2399609-4	8-2399609-4
E	2399609-5	2-2399609-5	4-2399609-5	6-2399609-5	8-2399609-5
F	2399609-6	2-2399609-6	4-2399609-6	6-2399609-6	8-2399609-6
G	2399609-7	2-2399609-7	4-2399609-7	6-2399609-7	8-2399609-7
H	2399609-8	2-2399609-8	4-2399609-8	6-2399609-8	8-2399609-8
J	2399609-9	2-2399609-9	4-2399609-9	6-2399609-9	8-2399609-9
K	1-2399609-1	3-2399609-1	5-2399609-1	7-2399609-1	9-2399609-1
L	1-2399609-2	3-2399609-2	5-2399609-2	7-2399609-2	9-2399609-2
M	1-2399609-3	3-2399609-3	5-2399609-3	7-2399609-3	9-2399609-3

2 POSITIONS			
Coding	Front	Back	Top
A/B	2399610-1	1-2399610-1	2-2399610-1
C/D	2399610-2	1-2399610-2	2-2399610-2
E/F	2399610-3	1-2399610-3	2-2399610-3
G/H	2399610-4	1-2399610-4	2-2399610-4
J/K	2399610-5	1-2399610-5	2-2399610-5
L/M	2399610-6	1-2399610-6	2-2399610-6

3 POSITIONS			
Coding	Front	Back	Top
A/B/C	2399611-1	1-2399611-1	2-2399611-1
D/E/F	2399611-2	1-2399611-2	2-2399611-2
G/H/J	2399611-3	1-2399611-3	2-2399611-3
K/L/M	2399611-4	1-2399611-4	2-2399611-4

PLUG - 70-120 MM² (WITH SPACER)



PLUG - 70 MM² - FINGER & TOOL

	Coding	Plug Pre- Assy	Contact Assy	Spacer	Shield Sleeve	Crimp Anvil	SWS	Cable Clip	Cable Cover
CABLE 70 mm ² Finger Access	Code A	2399663-1	2386340-1	2399666-1	2387548-1	2387549-1	2399667-1	2399668-1	2399669-1
	Code B	2399663-2							
	Code C	2399663-3							
	Code D	2399663-4							
	Code E	2399663-5							
	Code F	2399663-6							
	Code G	2399663-7							
	Code H	2399663-8							
	Code J	2399663-9							
	Code K	1-2399663-1							
	Code L	1-2399663-2							
	Code M	1-2399663-3							
	CABLE 70 mm ² Tool Access	Code A							
Code B		2-2399663-2							
Code C		2-2399663-3							
Code D		2-2399663-4							
Code E		2-2399663-5							
Code F		2-2399663-6							
Code G		2-2399663-7							
Code H		2-2399663-8							
Code J		2-2399663-9							
Code K		3-2399663-1							
Code L		3-2399663-2							
Code M		3-2399663-3							

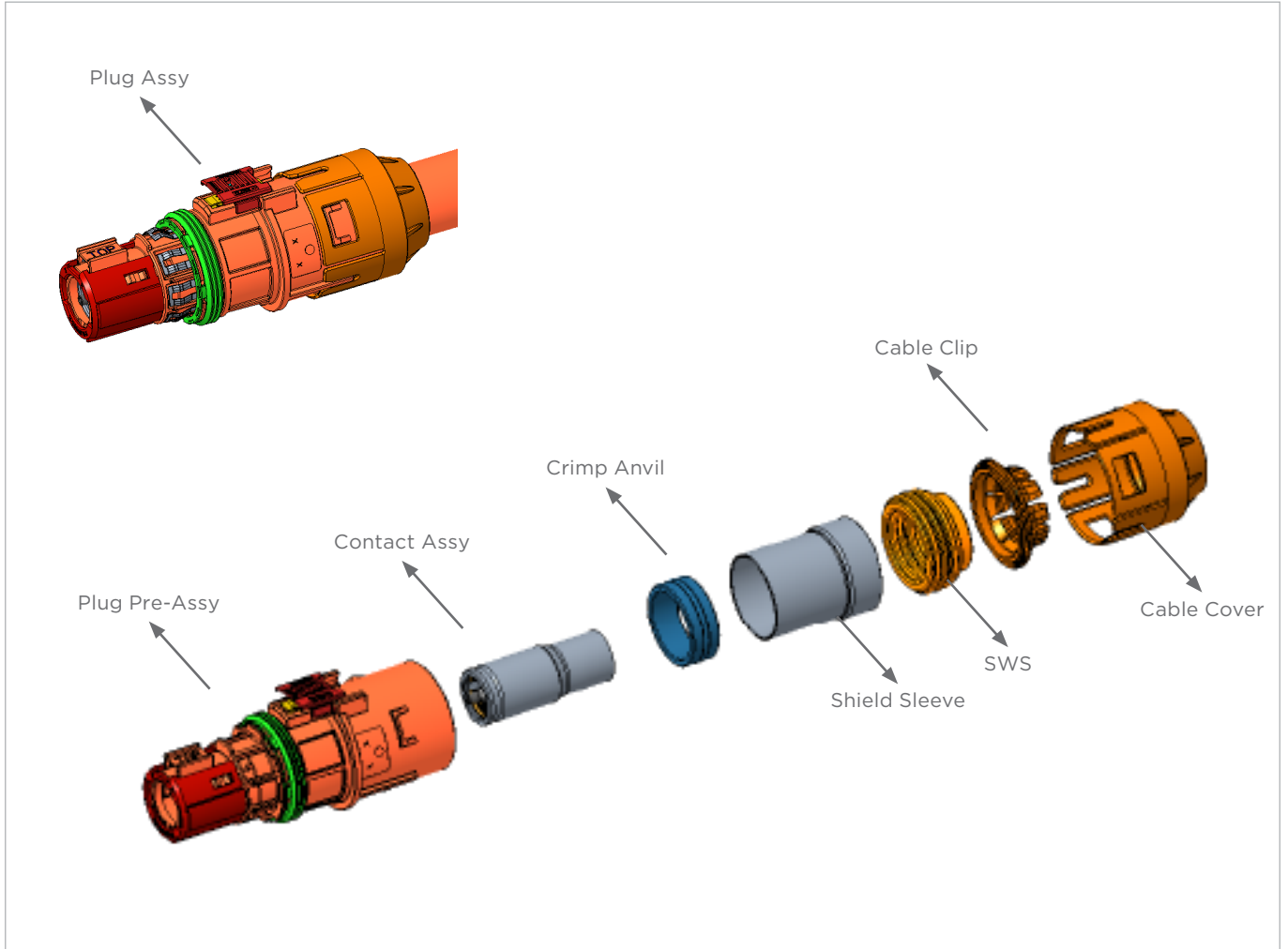
PLUG - 95 MM² - FINGER & TOOL

	Coding	Plug Pre- Assy	Contact Assy	Spacer	Shield Sleeve	Crimp Anvil	SWS	Cable Clip	Cable Cover
CABLE 95 mm ² Finger Access	Code A	2399663-1	2386340-2	2399666-2	2387548-1	2387549-2	2399667-2	2399668-2	2399669-2
	Code B	2399663-2							
	Code C	2399663-3							
	Code D	2399663-4							
	Code E	2399663-5							
	Code F	2399663-6							
	Code G	2399663-7							
	Code H	2399663-8							
	Code J	2399663-9							
	Code K	1-2399663-1							
	Code L	1-2399663-2							
	Code M	1-2399663-3							
	CABLE 95 mm ² Tool Access	Code A							
Code B		2-2399663-2							
Code C		2-2399663-3							
Code D		2-2399663-4							
Code E		2-2399663-5							
Code F		2-2399663-6							
Code G		2-2399663-7							
Code H		2-2399663-8							
Code J		2-2399663-9							
Code K		3-2399663-1							
Code L		3-2399663-2							
Code M		3-2399663-3							

PLUG - 120MM² - FINGER & TOOL

	Coding	Plug Pre- Assy	Contact Assy	Spacer	Shield Sleeve	Crimp Anvil	SWS	Cable Clip	Cable Cover
CABLE 120 mm ² Finger Access	Code A	2399663-1							
	Code B	2399663-2							
	Code C	2399663-3							
	Code D	2399663-4							
	Code E	2399663-5							
	Code F	2399663-6							
	Code G	2399663-7							
	Code H	2399663-8							
	Code J	2399663-9							
	Code K	1-2399663-1							
	Code L	1-2399663-2							
	Code M	1-2399663-3							
				2386340-3	2399666-1	2387548-1	2387549-1	2399667-1	2399668-1
CABLE 120 mm ² Tool Access	Code A	2-2399663-1							
	Code B	2-2399663-2							
	Code C	2-2399663-3							
	Code D	2-2399663-4							
	Code E	2-2399663-5							
	Code F	2-2399663-6							
	Code G	2-2399663-7							
	Code H	2-2399663-8							
	Code J	2-2399663-9							
	Code K	3-2399663-1							
Code L	3-2399663-2								
Code M	3-2399663-3								

PLUG - 150 MM² (NO SPACER)



PLUG - 150 MM² - FINGER & TOOL

	Coding	Plug Pre-Assy	Contact Assy	Shield Sleeve	Crimp Anvil	SWS	Cable Clip	Cable Cover
CABLE 150 mm ² Finger Access	Code A	2399663-1	2386340-4	2387548-1	2387549-1	2399667-1	2399668-1	2399669-1
	Code B	2399663-2						
	Code C	2399663-3						
	Code D	2399663-4						
	Code E	2399663-5						
	Code F	2399663-6						
	Code G	2399663-7						
	Code H	2399663-8						
	Code J	2399663-9						
	Code K	1-2399663-1						
	Code L	1-2399663-2						
	Code M	1-2399663-3						
	CABLE 150 mm ² Tool Access	Code A						
Code B		2-2399663-2						
Code C		2-2399663-3						
Code D		2-2399663-4						
Code E		2-2399663-5						
Code F		2-2399663-6						
Code G		2-2399663-7						
Code H		2-2399663-8						
Code J		2-2399663-9						
Code K		3-2399663-1						
Code L		3-2399663-2						
Code M		3-2399663-3						

POWERTUBE 1400



HVA HD400

Key Features & Benefits	28
HVA HD400 Header	29
HVA HD400 Plug	30



HVA HD400

High performance and versatility in a compact package

TE's HIVONEX HVA HD400 high voltage accessories connector is just the connectivity system for the job. Compact and adaptable, the design allows for either 2 or 3 conductors in the same interface, handling 2.5, 4 and 6 mm² LV216 conductor cross sections single-core cabling (multi-core and ISO cabling on the way). Capable of handling up to 1000 VDC, and 60 A (at 80°C). With an operating temperature of -40°C to +140°C, dust and water ingress protection rating of IP68 and IP6K9K, contact position assurance (CPA), as well as ability to withstand transmission-level vibrations, the HVA HD400 connector can perform reliably in the most extreme of environments. Regardless of where in the vehicle the high voltage accessory is, you can deploy the HIVONEX HVA HD400 connector.

Key Features & Benefits

High Level of Performance

- Capable of handling up to 1000 VDC, and 60 A (at 80°C)
- Can withstand transmission-level vibrations
- Connector Position Assurance (CPA) for additional security
- High protection level - IP68 IP6K9K and sand and dust protection on lock structure

Form and Function

- 2 or 3 positions in same interface for compact design

Adaptability

- Designed for use with nearly any high voltage accessory in the vehicle
- Wide array of cable sizing: can handle 2.5, 4 and 6 mm² LV216 conductor cross-sections single-core cabling (multi-core and ISO cabling on the way)
- Available for automation cable assembly



HVA HD400 Header

DIMENSIONS



PRODUCT FEATURES

Contact System	4 mm DIA
Mounting Styles	Cable to Panel
Flammability Rating	UL94-V0
Positions	2 or 3
Coding	A
IP Rating	IP68 / IP6K9K
Operating Temp. Range	-40°C to +140°C
Product Specification	108-160170
Application Specification	114-160095

ORDER INFORMATION

	Cavities	Part Number		# / Assembly
Header				
	2	2-2371113-1/-2/-3	3-2371113-1/-2	1
	3	2371113-1/-2/-3	1-2371113-1/-2	1
Pin Terminal	Cable Size			# / Assembly
	2.5 mm ²	4.0 mm ²	6.0 mm ²	
	2349180-1	2349180-2	2349180-2	2 or 3
Cap	2389821-1			1



HVA HD400 Plug

DIMENSIONS



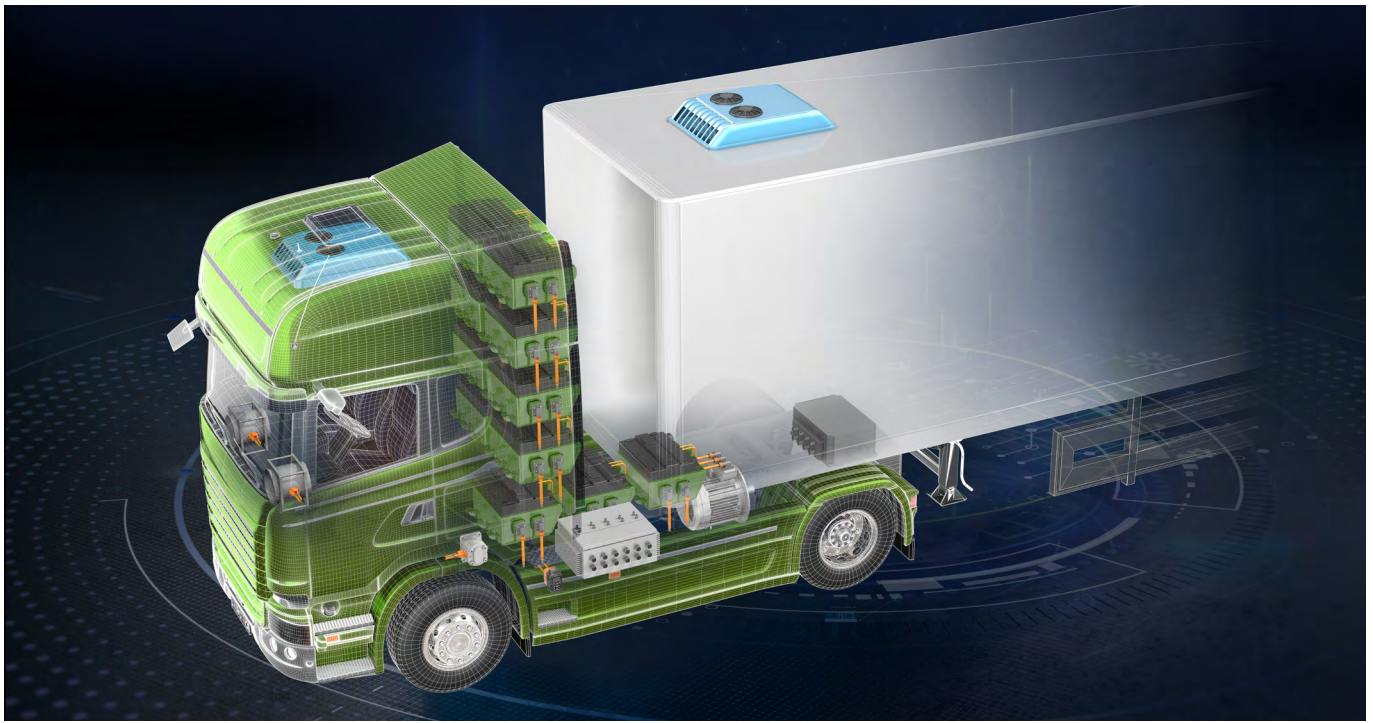
PRODUCT FEATURES

Contact System	4 mm DIA
Mounting Styles	Cable to Panel
Flammability Rating	UL94-V0
Positions	2 or 3
Coding	A
IP Rating	IP68 / IP6K9K
Operating Temp. Range	-40°C to +140°C
Product Specification	108-160170
Application Specification	114-160093

ORDER INFORMATION

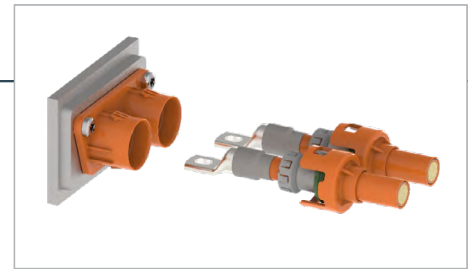
	Cavity	Part Number	# / Assembly	Picture
Housing	2	1-2371035-1/-2/-3	1	
	2	2371035-1/-2/-3	1	

	Cable Size			# / Assembly
	2.5 mm ²	4.0 mm ²	6.0 mm ²	
Socket Terminal	2-2349177-1	2-2349177-2	2-2349177-2	2 or 3
Outer Ferrule	2371243-1	2371243-1	2371243-1	2 or 3
Inner Ferrule	2371242-1	2371242-2	2371242-3	2 or 3
Single Wire Seal	2371244-1	2371244-2	2371244-3	2 or 3
Seal Retainer	2371245-1	2371245-2	2371245-3	2 or 3
Cap	2420809-1			
Blind	2-2371035-1			



IPT-HD

Key Features & Benefits	32
Dimensions.....	33
Part Numbers.....	34



IPT-HD

Power Bolt High Voltage Connector

Part of the HIVONEX product suite for high voltage E-mobility, the IPT-HD power bolt connector is a bolted solution aimed at MCU (Motor Control Unit), E-axle, and E-motor applications. Designed to withstand extreme temperatures, and engine-level vibrations, it also offers a new shielding design to improve electromagnetic compatibility (EMC) performance. With support for up to 3 positions, 50, 70, and 95 mm² wire size, as well availability as pre-made wire harnesses, the IPT-HD power bolt connector can help increase assembly flexibility.

Key Features & Benefits:

Enhanced EMC Performance

- Low-contact resistance shielding – even after the vibration
- Handles excessive engine-level vibrations
- IP67, IP68 and IP6K9K sealing rated

Increased Assembly Efficiency

- Flexible assembly with single wiring harness
- Quick, easy machining of mounting holes

Broader Range of Applications

- 50/70/95 mm² conductor cross-sections
- ISO compliant / LV216
- MCU (Motor Control Unit), E-axle and E-motor applications

Enhanced EMC Performance

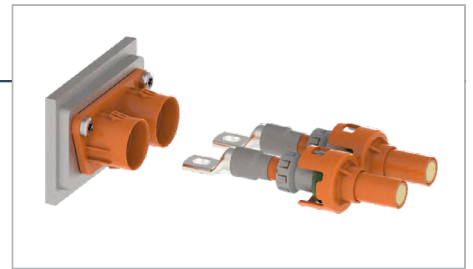
- Low-contact resistance shielding
- Handles excessive engine-level vibrations
- IP67, IP68 and IP6K9K sealing rated

Increased Assembly Efficiency

- Flexible assembly with single wiring harness
- Quick, easy machining of mounting holes

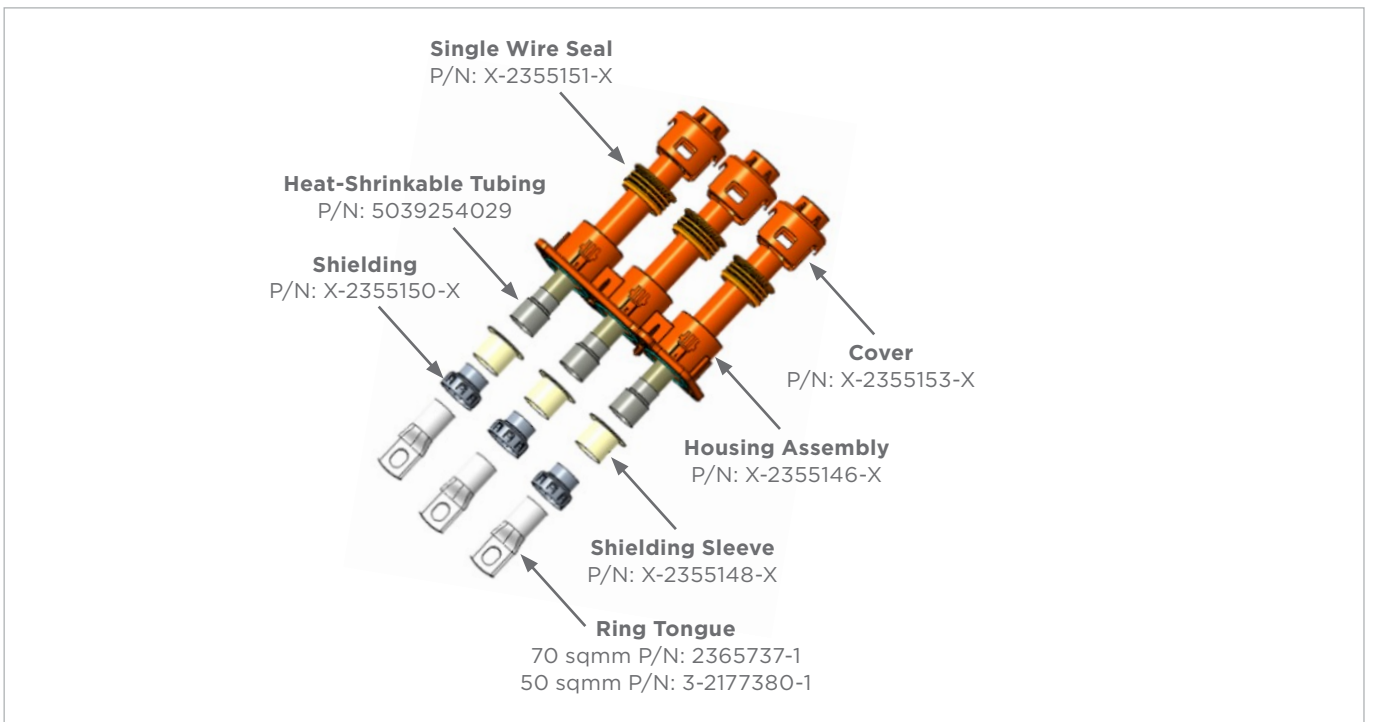
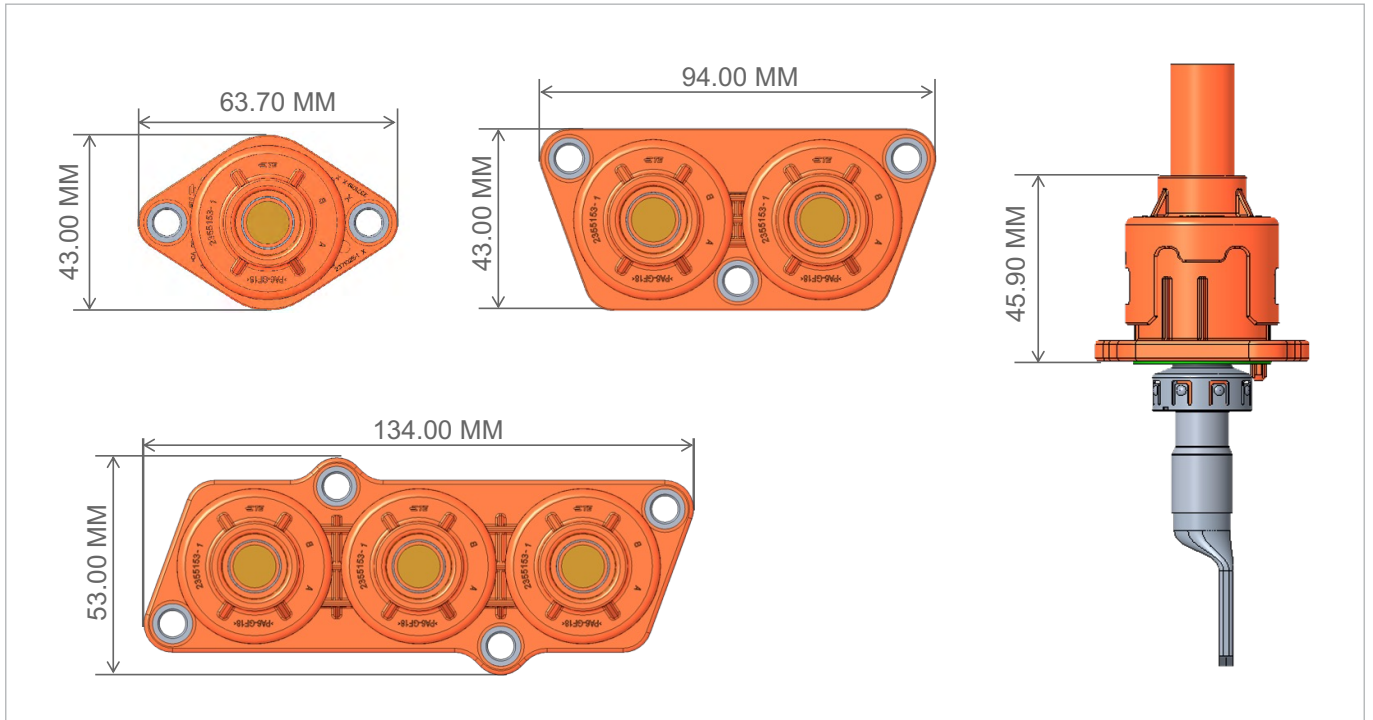
Broader Range of Applications

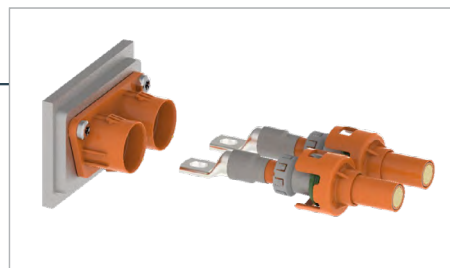
- 50/70/95 mm conductor cross-sections
- ISO Compliant/LV216
- MCU, E-axle, and E-motor applications



IPT-HD

DIMENSIONS





IPT-HD

PART NUMBERS

IPT-HD Power Bolt Connector Housing					Cable Assembly Components							
Cavity	Picture	With Shipping Cap	Without Shipping Cap	QPA	Description	QPA	LV216 Cable			ISO Cable		
							50 mm ² Solution	70 mm ² Solution	95 mm ² Solution	50 mm ² Solution	70 mm ² Solution	95 mm ² Solution
3		2355146-1	2355146-2	1	Shielding	3	2355150-4	2355150-2	2355148-4	2355150-4	2355150-2	2355150-8
					Shielding Sleeve	3	2355148-2	2355148-1	2355151-3	2355148-3	2355148-1	2355148-5
					Single Wire Seal	3	2355151-2	2355151-1	2355153-5	2355151-2	2355151-1	2355151-3
					Seal Cover	3	2355153-2	2355153-1	2365737-2	2355153-4	2355153-3	2355153-6
					Ring Tongue Terminal	3	3-2177380-1	2365737-1	2355150-8	3-2177380-1	2365737-1	2365737-2
2		2371017-1	2371017-2	1	Shielding	2	2355150-4	2355150-2	2355148-4	2355150-4	2355150-2	2355150-8
					Shielding Sleeve	2	2355148-2	2355148-1	2355151-3	2355148-3	2355148-1	2355148-5
					Single Wire Seal	2	2355151-2	2355151-1	2355153-5	2355151-2	2355151-1	2355151-3
					Seal Cover	2	2355153-2	2355153-1	2365737-2	2355153-4	2355153-3	2355153-6
					Ring Tongue Terminal	2	3-2177380-1	2365737-1	2355150-8	3-2177380-1	2365737-1	2365737-2
1		2371019-1	2371019-2	1	Shielding	1	2355150-4	2355150-2	2355148-4	2355150-4	2355150-2	2355150-8
					Shielding Sleeve	1	2355148-2	2355148-1	2355151-3	2355148-3	2355148-1	2355148-5
					Single Wire Seal	1	2355151-2	2355151-1	2355153-5	2355151-2	2355151-1	2355151-3
					Seal Cover	1	2355153-2	2355153-1	2365737-2	2355153-4	2355153-3	2355153-6
					Ring Tongue Terminal	1	3-2177380-1	2365737-1	2365737-2	3-2177380-1	2365737-1	2365737-2



Charging Inlets

Key Features & Benefits 36
CCS1 Kit without LED indicator 37
CCS2 Kit without LED indicator 38

Charging Inlet Pigtail Cable Assemblies

CCS1 Kit with LED indicator 39
CCS2 Kit with LED indicator 40
LED Version 41
Non-LED Version 42



Charging Inlets

High performance and versatility in a compact package

As hybrid and electric vehicles claim their share of the industrial and commercial transportation market, it's vital to ensure that designs enable fast, secure charging without compromising on the ruggedness required on the field. TE Connectivity's HIVONEX charging inlets are ready to meet these challenges. While connectivity inside a hybrid or electric vehicle requires high standards and safety, none are as likely to be interacted with as much as the charging port. Ensuring that it's easy, safe, and reliable even in extreme conditions is a necessity, for the good of the vehicle, as well as everyone that operates or maintains it. TE's HIVONEX charging inlets, built specifically for industrial and commercial vehicles, are the right choice for facing the challenge.

Key Features & Benefits:

Modular Design

- Cable exits to left and right side
- Optional LED charging indicator for end-user ease of use
- Optional snap-on protective flaps with choice of opening direction

Built for Industrial and Commercial Vehicle Applications

- Capable of 10,000 mating cycles, while charging at 250 VAC (at 32 A), and 1000 VDC (at 250 A)
- Larger cable sizes than what's seen in the Automotive market – DC 70 mm²/PE 25 mm²/AC 6 mm²
- Enhanced safety features: integrated actuator for end position sensing, integrated PT1000 temperature sensors for enhanced temperature monitoring

Simplify Your Supply Chain

- Pre-made kits available from TE and key distributors
- Pigtail cable assemblies available in 1.5 m or 3 m length



Charging Inlets

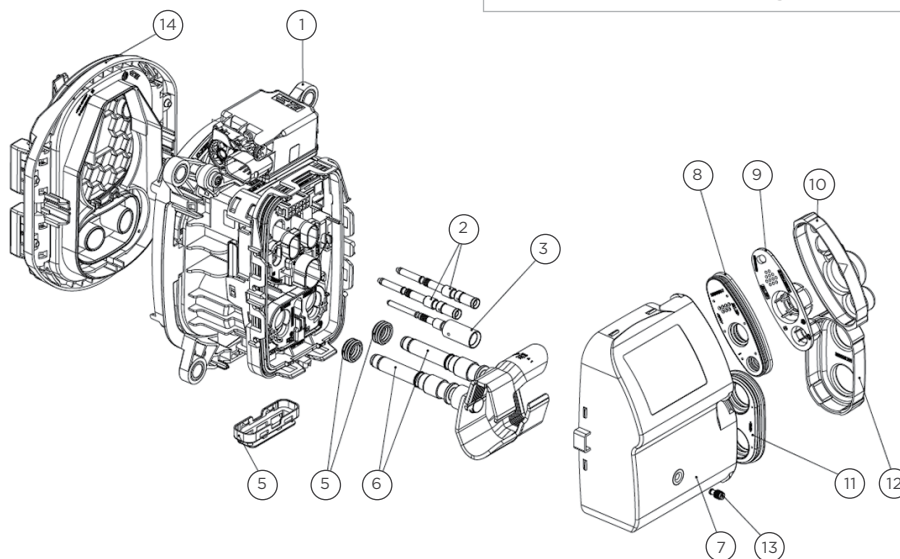
Charging Inlets CCS1 Kit without LED indicator

Cable Size DC 70 mm²
PE 25 mm²
AC 6 mm²

Application Specification 114-94674

Product Specification 108-94803

Pigtail PN See **pigtail PN ordering information pages** for details



BILL OF MATERIALS

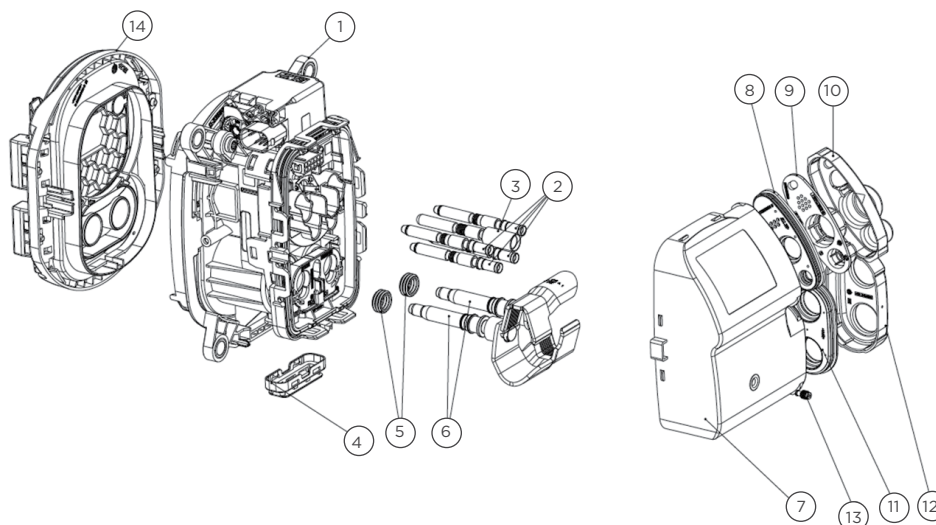
Flap Opening Direction	Right	Right	Left	Left	No Flap	No Flap	Part Number	Description	Item	
	Cable Exits Direction	Right	Left	Right	Left	Right				Left
Quantity required per assembly		1	1	-	-	-	-	2358664-3	Flap, Assy, Inlet Combo 1, right	14
		-	-	1	1	-	-	2358664-1	Flap, Assy, Inlet Combo 1, left	14
		1	1	1	1	1	1	963143-1	MQS Sealing Plug	13
		1	1	1	1	1	1	2366667-1	Cover, Cable Seal, Combo DC	12
		1	1	1	1	1	1	2366539-1	Family Seal, Combo DC	11
		1	1	1	1	1	1	2296057-2	Cover, Cable Seal, AC	10
		1	1	1	1	1	1	2367140-2	Strain Relief, AC	9
		1	1	1	1	1	1	2350592-7	Family Seal, AC	8
		1	-	1	-	1	-	1-2303200-2	Cable Exit, Rec, Combo right	7
		-	1	-	1	-	1	1-2303200-1	Cable Exit, Rec, Combo left	7
		2	2	2	2	2	2	2306180-1	ø 8 mm, Pin Terminal	6
		2	2	2	2	2	2	2120571-1	Sealing	5
		1	1	1	1	1	1	2292534-1	Protection Cap Charge Inlets	4
		1	1	1	1	1	1	2293267-5	ø 2.8 mm, Pin Terminal, PE 25 mm ²	3
		2	2	2	2	2	2	2293266-3	ø 3.6 mm, Pin Terminal	2
	1	1	1	1	1	1	2366402-1	Combo 1, Charge Inlet Assy, without LED	1	
Kit Part Number	2375501-6	2375501-5	2375501-4	2375501-3	2375501-2	2375501-1				



Charging Inlets

Charging Inlets CCS2 Kit without LED indicator

Cable Size	DC 70 mm ² PE 25 mm ² AC 6 mm ²
Application Specification	114-94675
Product Specification	108-94804
Pigtail PN	See pigtail PN ordering information pages for details



BILL OF MATERIALS

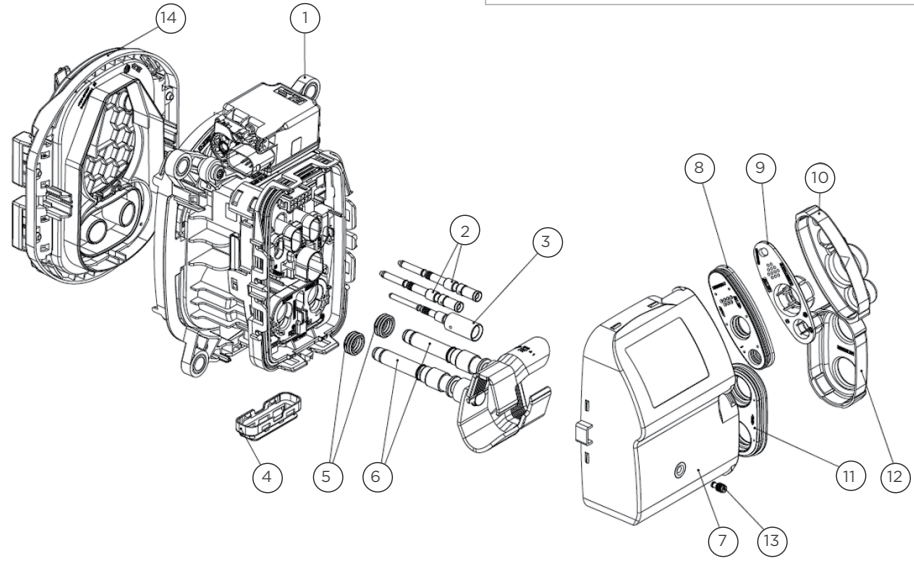
Flap Opening Direction	Right	Right	Left	Left	No Flap	No Flap	Part Number	Description	Item	
	Cable Exits Direction	Right	Left	Right	Left	Right				Left
Quantity required per assembly		1	1	-	-	-	-	2358664-4	Flap, Assy, Inlet Combo 1, right	14
		-	-	1	1	-	-	2358664-2	Flap, Assy, Inlet Combo 1, left	14
		1	1	1	1	1	1	963143-1	MQS Sealing Plug	13
		1	1	1	1	1	1	2366667-1	Cover, Cable Seal, Combo DC	12
		1	1	1	1	1	1	2366539-1	Family Seal, Combo DC	11
		1	1	1	1	1	1	2296057-2	Cover, Cable Seal, AC	10
		1	1	1	1	1	1	2367140-1	Strain Relief, AC	9
		1	1	1	1	1	1	1-2350592-5	Family Seal, AC	8
		1	-	1	-	1	-	1-2303200-2	Cable Exit, Rec, Combo right	7
		-	1	-	1	-	1	1-2303200-1	Cable Exit, Rec, Combo left	7
		2	2	2	2	2	2	2306177-1	ø 8 mm, Pin Terminal	6
		2	2	2	2	2	2	2120571-1	Sealing	5
		1	1	1	1	1	1	2292534-1	Protection Cap Charge Inlets	4
		1	1	1	1	1	1	2293270-5	Pin ø 6 mm, rigid, Power PE	3
		4	4	4	4	4	4	2293269-3	ø.6 mm, Pin Terminal	2
	1	1	1	1	1	1	2377400-1	Combo 2, Charge Inlet Assy, without LED	1	
Kit Part Number	2375502-6	2375502-5	2375502-4	2375502-3	2375502-2	2375502-1				



Charging Inlets

Charging Inlets CCS1 Kit with LED indicator

Cable Size	DC 70 mm ² PE 25 mm ² AC 6 mm ²
Application Specification	114-94722
Product Specification	108-94838
Pigtail PN	See pigtail PN ordering information pages for details



BILL OF MATERIALS

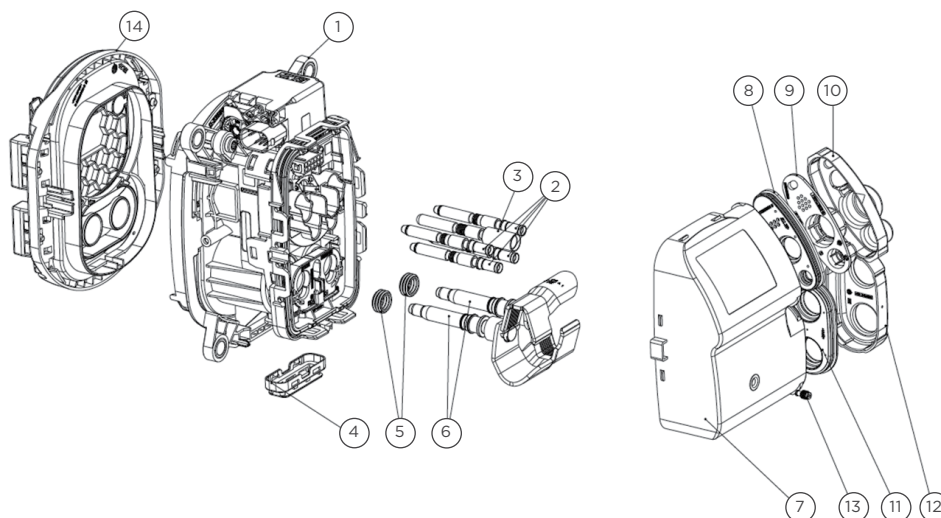
Flap Opening Direction	Right	Right	Left	Left	No Flap	No Flap	Part Number	Description	Item	
	Cable Exits Direction	Right	Left	Right	Left	Right				Left
Quantity required per assembly		1	1	-	-	-	-	2358664-7	Flap, Assy, Inlet Combo 1, right	14
		-	-	1	1	-	-	2358664-5	Flap, Assy, Inlet Combo 1, left	14
		1	1	1	1	1	1	963143-1	MQS Sealing Plug	13
		1	1	1	1	1	1	2366667-1	Cover, Cable Seal, Combo DC	12
		1	1	1	1	1	1	2366539-1	Family Seal, Combo DC	11
		1	1	1	1	1	1	2296057-2	Cover, Cable Seal, AC	10
		1	1	1	1	1	1	2367140-2	Strain Relief, AC	9
		1	1	1	1	1	1	2366865-4	Family Seal, AC	8
		1	-	1	-	1	-	1-2303200-2	Cable Exit, Rec, Combo right	7
		-	1	-	1	-	1	1-2303200-1	Cable Exit, Rec, Combo left	7
		2	2	2	2	2	2	2306180-1	ø 8 mm, Pin Terminal	6
		2	2	2	2	2	2	2120571-1	Sealing	5
		1	1	1	1	1	1	2292534-1	Protection Cap Charge Inlets	4
		1	1	1	1	1	1	2293267-5	ø 2.8 mm, Pin Terminal, PE 25 mm ²	3
		2	2	2	2	2	2	2293266-3	ø 3.6 mm, Pin Terminal	2
	1	1	1	1	1	1	2381070-1	Combo 1, Charge Inlet Assy, with LED	1	
Kit Part Number	2388501-6	2388501-5	2388501-4	2388501-3	2388501-2	2388501-1				



Charging Inlets

Charging Inlets CCS2 Kit with LED indicator

Cable Size	DC 70 mm ² PE 25 mm ² AC 6 mm ²
Application Specification	114-94723
Product Specification	108-94839
Pigtail PN	See pigtail PN ordering information pages for details



BILL OF MATERIALS

Flap Opening Direction	Right	Right	Left	Left	No Flap	No Flap	Part Number	Description	Item	
	Cable Exits Direction	Right	Left	Right	Left	Right				Left
Quantity required per assembly		1	1	-	-	-	-	2358664-8	Flap, Assy, Inlet Combo 1, right	14
		-	-	1	1	-	-	2358664-6	Flap, Assy, Inlet Combo 1, left	14
		1	1	1	1	1	1	963143-1	MQS Sealing Plug	13
		1	1	1	1	1	1	2366667-1	Cover, Cable Seal, Combo DC	12
		1	1	1	1	1	1	2366539-1	Family Seal, Combo DC	11
		1	1	1	1	1	1	2296057-2	Cover, Cable Seal, AC	10
		1	1	1	1	1	1	2367140-1	Strain Relief, AC	9
		1	1	1	1	1	1	2366865-3	Family Seal, AC	8
		1	-	1	-	1	-	1-2303200-2	Cable Exit, Rec, Combo right	7
		-	1	-	1	-	1	1-2303200-1	Cable Exit, Rec, Combo left	7
		2	2	2	2	2	2	2306177-1	ø 8 mm, Pin Terminal	6
		2	2	2	2	2	2	2120571-1	Sealing	5
		1	1	1	1	1	1	2292534-1	Protection Cap Charge Inlets	4
		1	1	1	1	1	1	2293270-5	Pin ø 6 mm, rigid, Power PE	3
		4	4	4	4	4	4	2293269-3	ø.6 mm, Pin Terminal	2
	1	1	1	1	1	1	2379769-1	Combo 2, Charge Inlet Assy, without LED	1	
Kit Part Number	2388502-6	2388502-5	2388502-4	2388502-3	2388502-2	2388502-1				

Charging Inlet Pigtail Cable Assemblies

LED Version

PN	Variant	Pigtail Length	LED?	Flap Direction	Cable Exit Direction
2393947-1	CCS1	1.5 m	Yes	No Flap	Left
2393947-2				No Flap	Right
2393947-3				Left Flap	Left
2393947-4				Left Flap	Right
2393947-5				Right Flap	Left
2393947-6				Right Flap	Right
1-2393947-1		3 m	Yes	No Flap	Left
1-2393947-2				No Flap	Right
1-2393947-3				Left Flap	Left
1-2393947-4				Left Flap	Right
1-2393947-5				Right Flap	Left
1-2393947-6				Right Flap	Right
2393949-1	CCS2	1.5 m	Yes	No Flap	Left
2393949-2				No Flap	Right
2393949-3				Left Flap	Left
2393949-4				Left Flap	Right
2393949-5				Right Flap	Left
2393949-6				Right Flap	Right
1-2393949-1		3 m	Yes	No Flap	Left
1-2393949-2				No Flap	Right
1-2393949-3				Left Flap	Left
1-2393949-4				Left Flap	Right
1-2393949-5				Right Flap	Left
1-2393949-6				Right Flap	Right

Charging Inlet Pigtail Cable Assemblies

Non-LED Version

PN	Variant	Pigtail Length	LED?	Flap Direction	Cable Exit Direction
2377168-1	CCS1	1.5 m	N/A	No Flap	Left
2377168-2				No Flap	Right
2377168-3				Left Flap	Left
2377168-4				Left Flap	Right
2377168-5				Right Flap	Left
2377168-6				Right Flap	Right
1-2377168-1		3 m		No Flap	Left
1-2377168-2				No Flap	Right
1-2377168-3				Left Flap	Left
1-2377168-4				Left Flap	Right
1-2377168-5				Right Flap	Left
1-2377168-6				Right Flap	Right
2377698-1	CCS2	1.5 m	N/A	No Flap	Left
2377698-2				No Flap	Right
2377698-3				Left Flap	Left
2377698-4				Left Flap	Right
2377698-5				Right Flap	Left
2377698-6				Right Flap	Right
1-2377698-1		3 m		No Flap	Left
1-2377698-2				No Flap	Right
1-2377698-3				Left Flap	Left
1-2377698-4				Left Flap	Right
1-2377698-5				Right Flap	Left
1-2377698-6				Right Flap	Right

CHARGING INLETS PIGTAIL ASSEMBLY



AMP+ IPT Shielded Ring Tongue Kits

1 Position, 70 mm², Individually Shielded Cable

A Keying	44
B Keying	45

1 Position, 95 mm², Individually Shielded Cable

A Keying	46
A Keying	47
B Keying	48

1 Position, 120 mm², Individually Shielded Cable

A Keying	49
----------------	----

2 Position, 50 mm², Individually Shielded Cable

A Keying	50
----------------	----

3 Position, 50 mm², Individually Shielded Cable

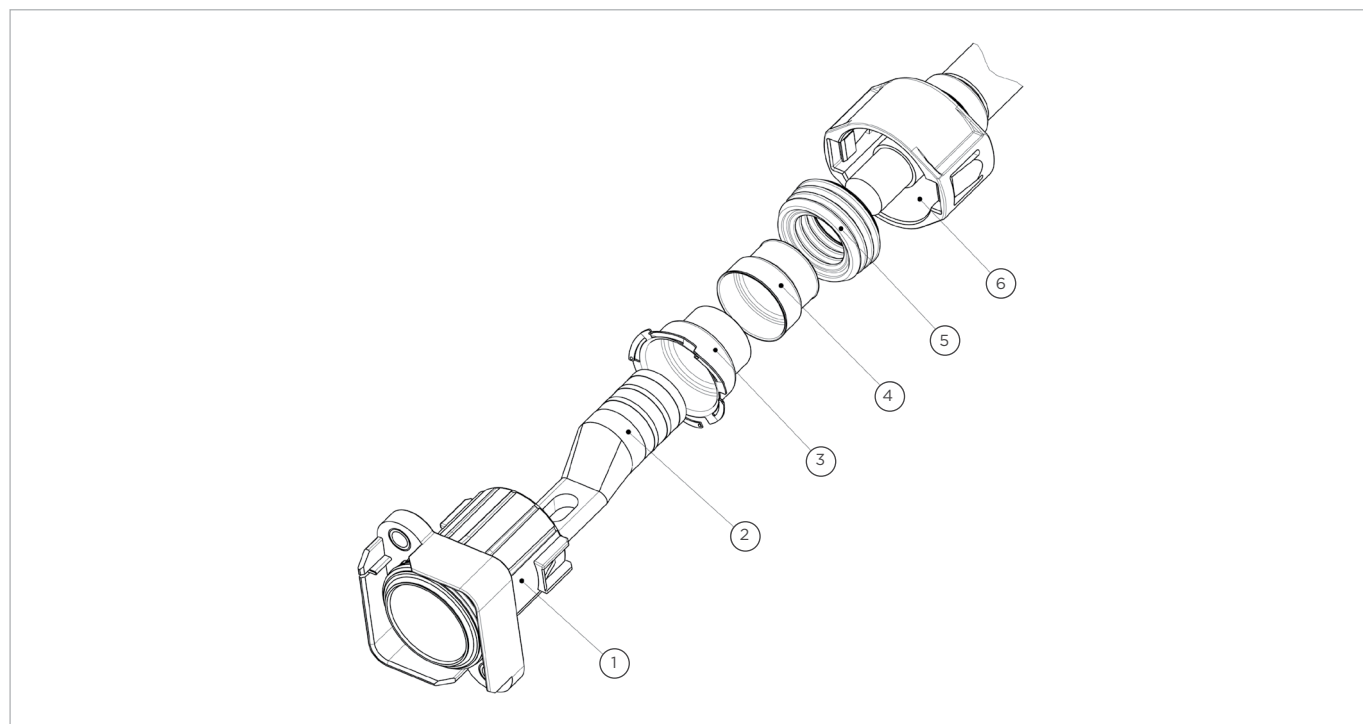
Keying N/A	51
------------------	----



AMP+ High Current Connectors and Headers

AMP+ IPT

Kit Number **YIPT-1PXI-70MM-000**



AMP+ IPT CONNECTOR SERIES

Position	1
Cable Size	70 mm ²
Wire Type	Individually Shielded
HVIL	Not present
Key Coding	A
Validated Cables	HEW-KABEL 50560
	Gebauer & Griller 88910
	Huber+Suhner 84 100 298
Application Specification	114-18769
Product Specification	108-94026
Interface Specification	114-18737

BILL OF MATERIALS

Item No	Part Number	Description	Quantity
①	1-1670816-1	1 Pos. Ring Tongue Housing Assembly, Key A	1
②	1670815-1	Ring Tongue	1
③	1670814-1	EMC Crimp Contact	1
④	1670813-2	EMC Crimp Sleeve	1
⑤	1670820-2	Single Wire Seal	1
⑥	1670821-2	Protection Cap	1

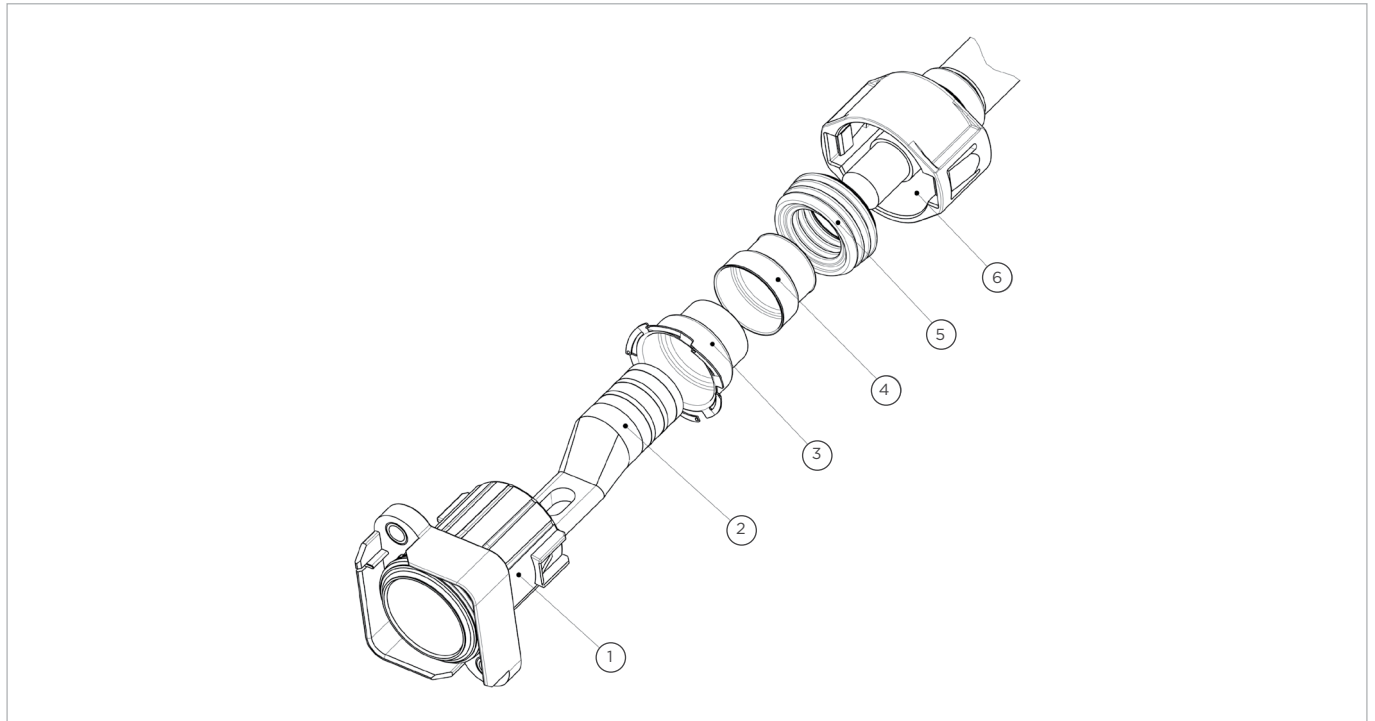


AMP+ High Current Connectors and Headers

AMP+ IPT

Kit Number **YIPT-1PXI-70MM-B-0**

AMP+ IPT



AMP+ IPT CONNECTOR SERIES

Position	1
Cable Size	70 mm ²
Wire Type	Individually Shielded
HVIL	Not present
Key Coding	B
Validated Cables	HEW-KABEL 50560 Gebauer & Griller 88910 Huber+Suhner 84 100 298
Application Specification	114-18769
Product Specification	108-94026
Interface Specification	114-18737

BILL OF MATERIALS

Item No	Part Number	Description	Quantity
①	2-1670816-1	1 Pos. Ring Tongue Housing Assembly, Key B	1
②	1670815-1	Ring Tongue	1
③	1670814-1	EMC Crimp Contact	1
④	1670813-2	EMC Crimp Sleeve	1
⑤	1670820-2	Single Wire Seal	1
⑥	1670821-2	Protection Cap	1

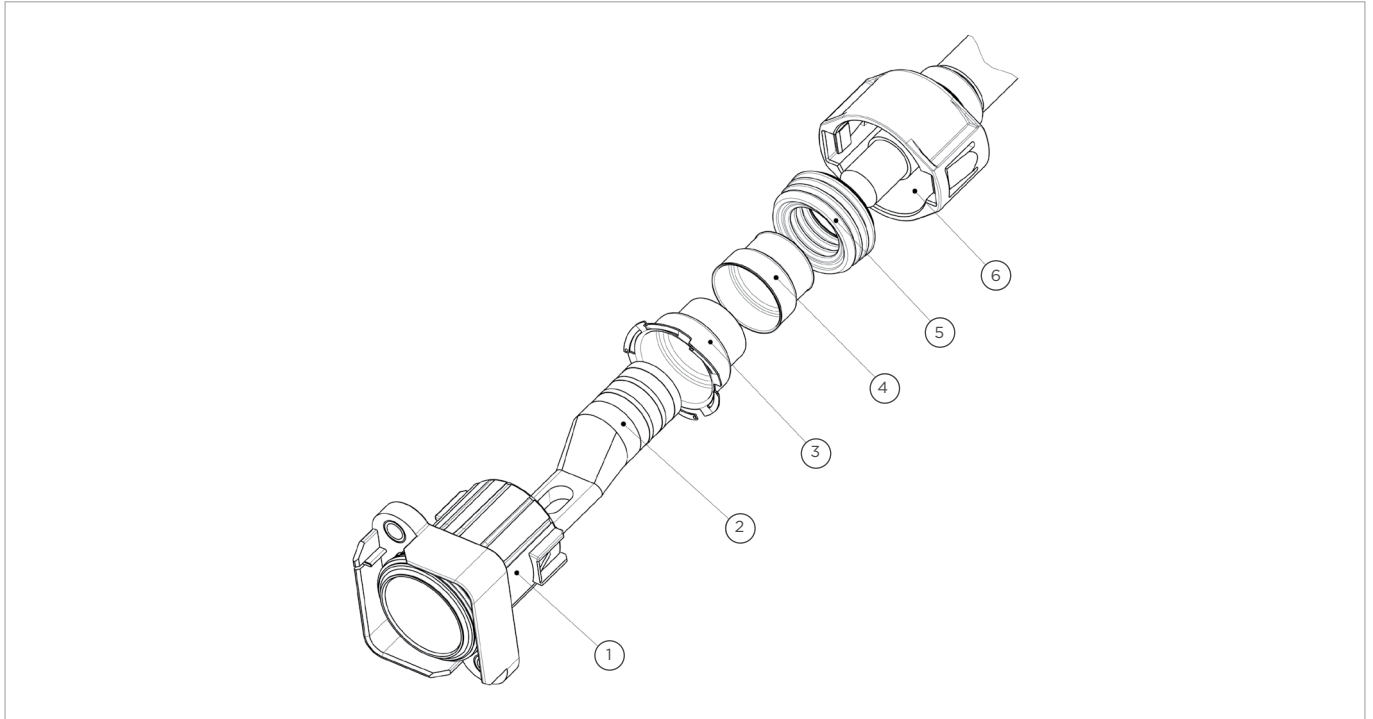


AMP+ High Current Connectors and Headers

AMP+ IPT

Kit Number **YIPT-1PXI-95MM-000**

AMP+ IPT



AMP+ IPT CONNECTOR SERIES

Position	1
Cable Size	95 mm ²
Wire Type	Individually Shielded
HVIL	Not present
Key Coding	A
Validated Cables	HEW-KABEL 45733 Gebauer & Griller 64995305
Application Specification	114-18769
Product Specification	108-94026
Interface Specification	114-18737

BILL OF MATERIALS

Item No	Part Number	Description	Quantity
①	1-1670816-1	1 Pos. Ring Tongue Housing Assembly, Key A	1
②	1670815-2	Ring Tongue	1
③	1670814-1	EMC Crimp Contact	1
④	1670813-1	EMC Crimp Sleeve	1
⑤	1670820-1	Single Wire Seal	1
⑥	1670821-1	Protection Cap	1

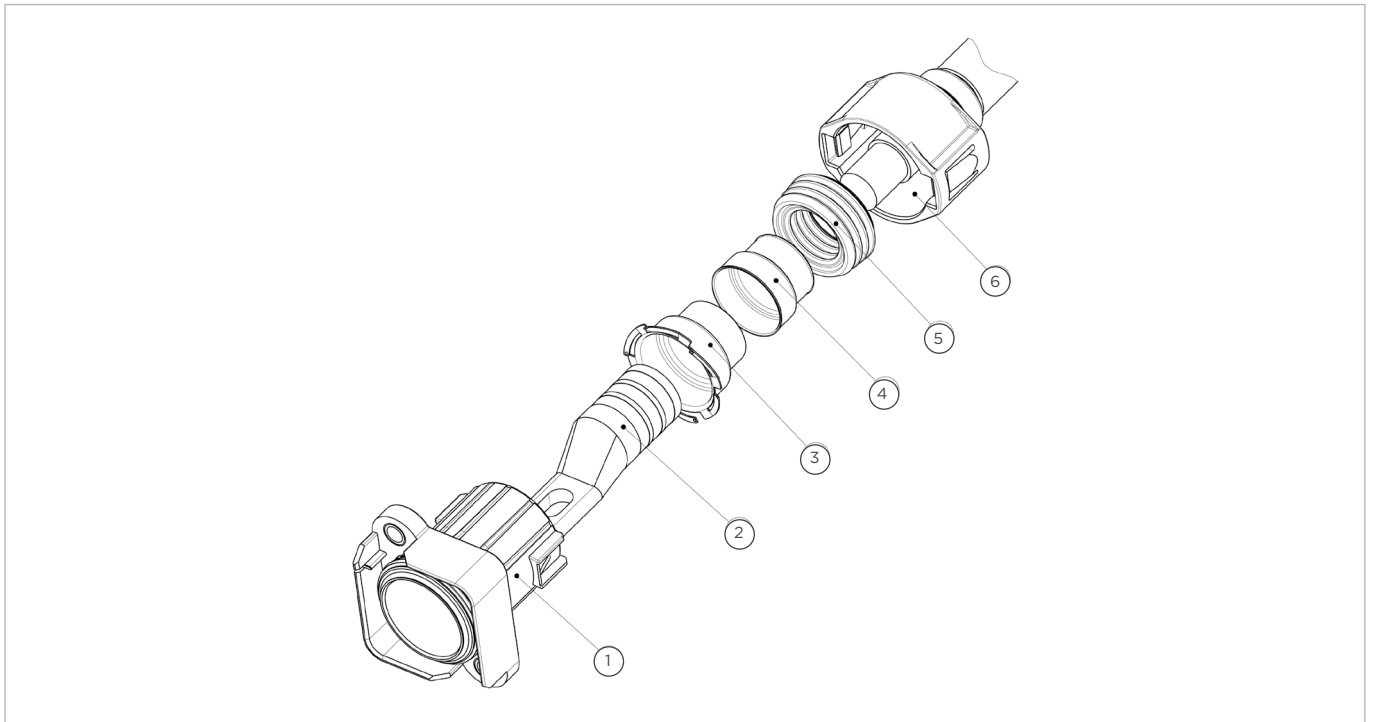


AMP+ High Current Connectors and Headers

AMP+ IPT

Kit Number **YIPT-1PXI-70MM-B-0**

AMP+ IPT



AMP+ IPT CONNECTOR SERIES

Position	1
Cable Size	95 mm ²
Wire Type	Individually Shielded
HVIL	Not present
Key Coding	A
Validated Cables	Huber+Suhner 84 100 299
Application Specification	114-18769
Product Specification	108-94026
Interface Specification	114-18737

BILL OF MATERIALS

Item No	Part Number	Description	Quantity
①	1-1670816-1	1 Pos. Ring Tongue Housing Assembly, Key A	1
②	1670815-2	Ring Tongue	1
③	1670814-1	EMC Crimp Contact	1
④	1670813-1	EMC Crimp Sleeve	1
⑤	0-2364891-1	Single Wire Seal	1
⑥	0-1670821-3	Protection Cap	1

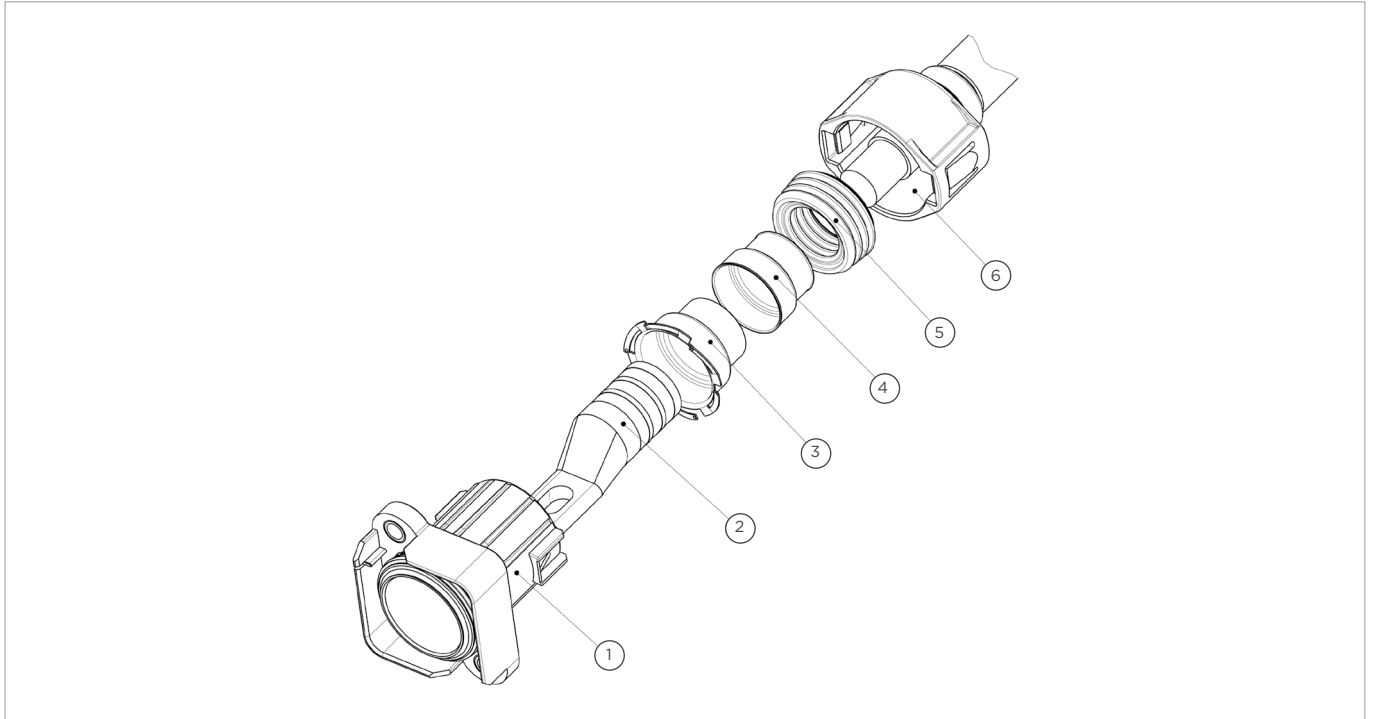


AMP+ High Current Connectors and Headers

AMP+ IPT

Kit Number **YIPT-1PXI-95MM-B-0**

AMP+ IPT



AMP+ IPT CONNECTOR SERIES

Position	1
Cable Size	95 mm ²
Wire Type	Individually Shielded
HVIL	Not present
Key Coding	B
Validated Cables	Huber+Suhner 84 100 299
Application Specification	114-18769
Product Specification	108-94026
Interface Specification	114-18737

BILL OF MATERIALS

Item No	Part Number	Description	Quantity
①	2-1670816-1	1 Pos. Ring Tongue Housing Assembly, Key B	1
②	1670815-2	Ring Tongue	1
③	1670814-1	EMC Crimp Contact	1
④	1670813-1	EMC Crimp Sleeve	1
⑤	0-2364891-1	Single Wire Seal	1
⑥	0-1670821-3	Protection Cap	1

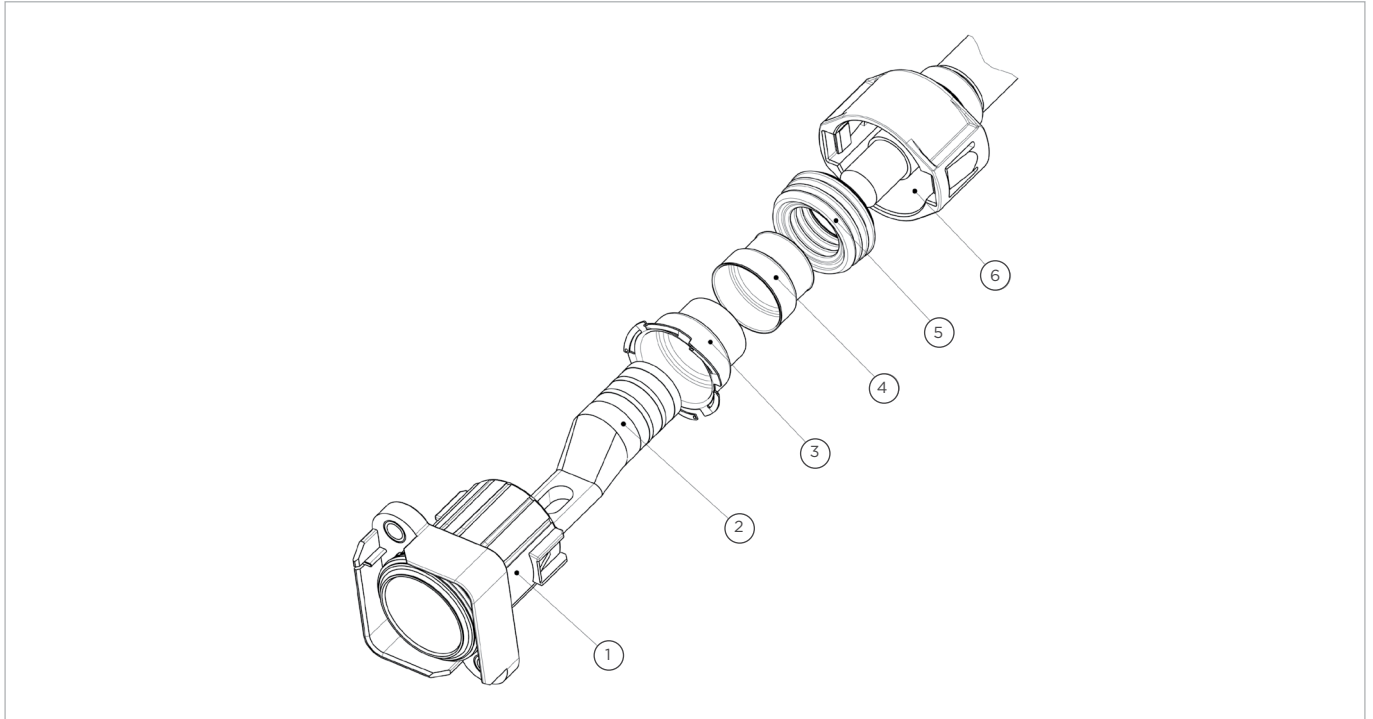


AMP+ High Current Connectors and Headers

AMP+ IPT

Kit Number **YIPT-1PXI-120MM-00**

AMP+ IPT



AMP+ IPT CONNECTOR SERIES

Position	1
Cable Size	120 mm ²
Wire Type	Individually Shielded
HVIL	Not present
Key Coding	A
Validated Cables	HEW-KABEL 45734
Application Specification	114-18769
Product Specification	108-94026
Interface Specification	114-18737

BILL OF MATERIALS

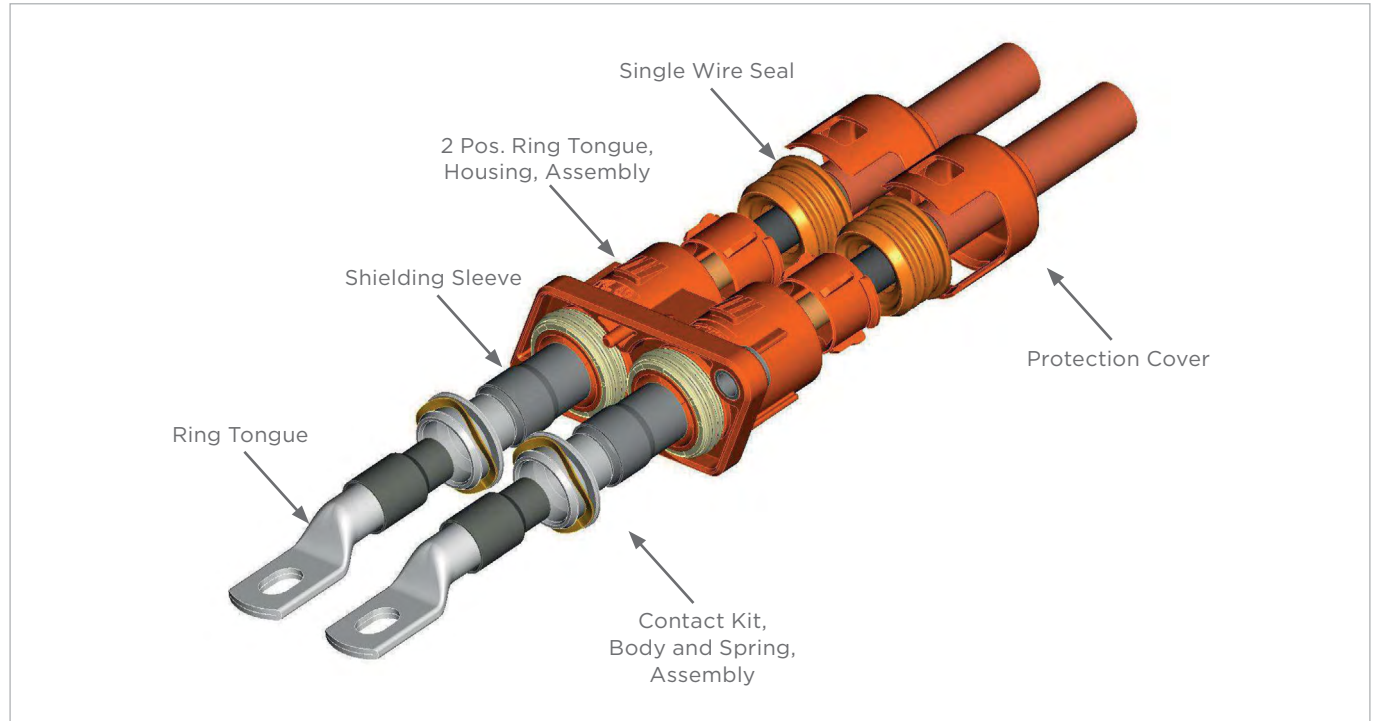
Item No	Part Number	Description	Quantity
①	1-1670816-1	1 Pos. Ring Tongue Housing Assembly, Key A	1
②	1670815-3	Ring Tongue	1
③	1670814-1	EMC Crimp Contact	1
④	1670813-1	EMC Crimp Sleeve	1
⑤	1670820-1	Single Wire Seal	1
⑥	1670821-1	Protection Cap	1



AMP+ High Current Connectors and Headers

AMP+ IPT

Kit Number **YIPT-2pxi-00000000**



AMP+ IPT CONNECTOR SERIES

Position	2
Cable Size	50 mm ²
Wire Type	Individually Shielded
HVIL	Not present
Key Coding	N/A
Validated Cables	Coroplast 9-2611
Application Specification	114-94133
Product Specification	108-94293
Interface Specification	114-94132-2

BILL OF MATERIALS

Part Number	Description	Quantity
2141784-2	2 Pos. Ring Tongue, Housing Assembly	1
1719826-7	Single Wire Seal	2
2141810-4	Shielding Sleeve	2
2141809-3	Contact Kit, Body and Spring, Assembly	2
1-1991225-7	Protective Cover	2
3-2177380-1	Ring Tongue	2

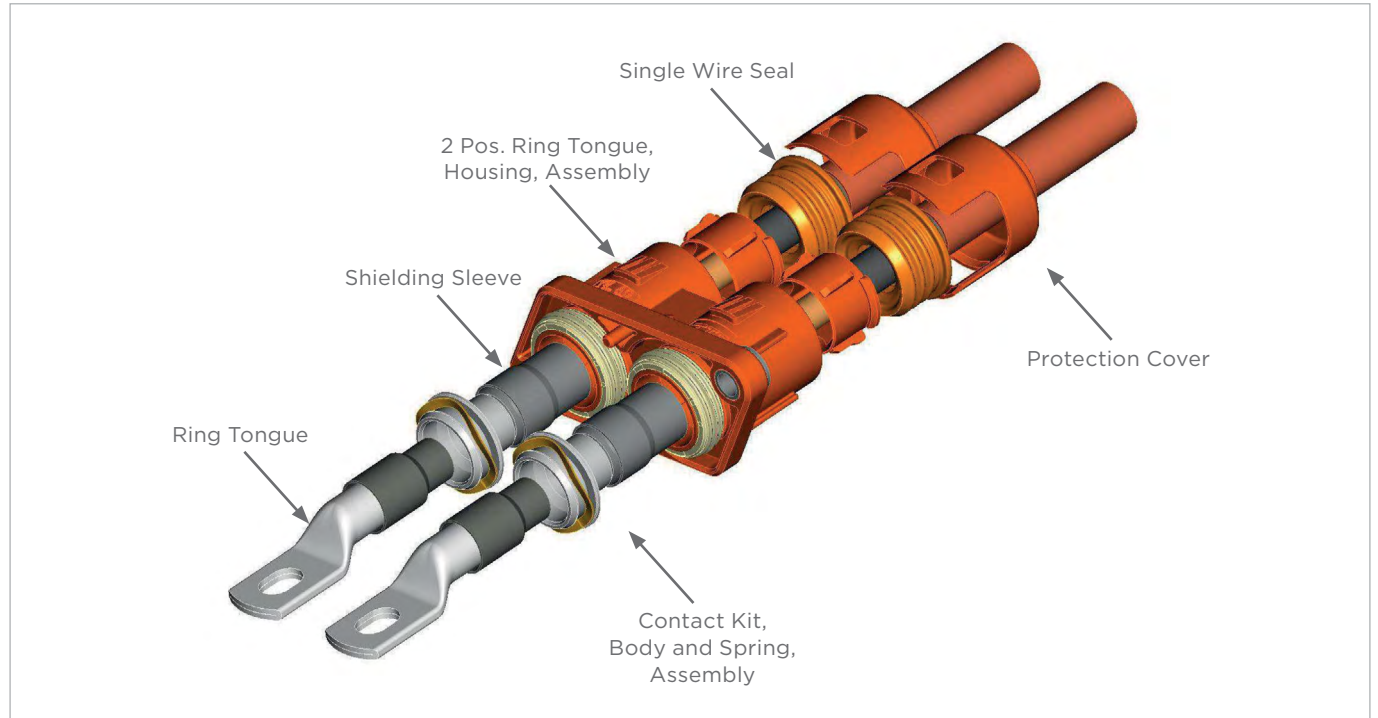


AMP+ High Current Connectors and Headers

AMP+ IPT

Kit Number **YIPT-2pxi-00000000**

AMP+ IPT

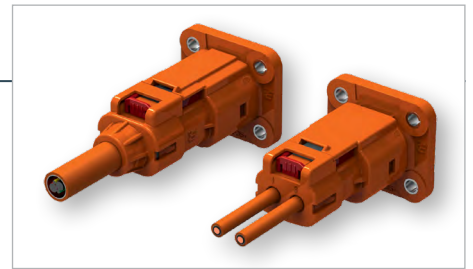


AMP+ IPT CONNECTOR SERIES

Position	3
Cable Size	50 mm ²
Wire Type	Individually Shielded
HVIL	Not present
Key Coding	N/A
Validated Cables	Coroplast 9-2611
Application Specification	114-94133
Product Specification	108-94293
Interface Specification	114-94132-3

BILL OF MATERIALS

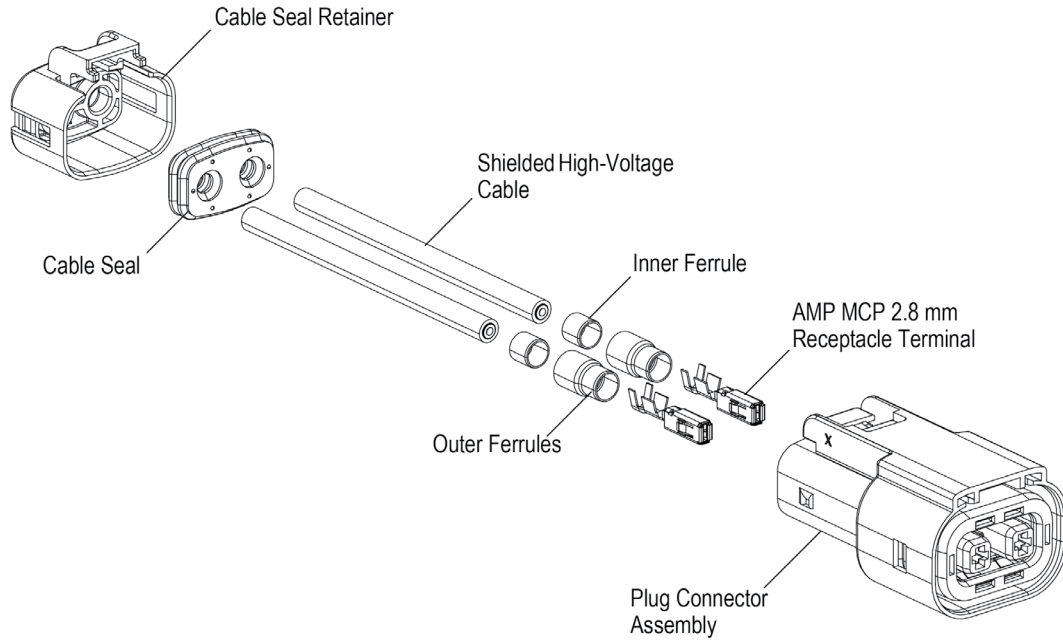
Part Number	Description	Quantity
2141783-2	3 Pos. Ring Tongue, Housing Assembly	1
1719826-7	Single Wire Seal	3
2141810-4	Shielding Sleeve	3
2141809-3	Contact Kit, Body and Spring, Assembly	3
1-1991225-7	Protective Cover	3
3-2177380-1	Ring Tongue	3



AMP+ High Current Connectors and Headers

AMP+ HVA 280

Kit Number **YHVA280-2phi-4mm-A**

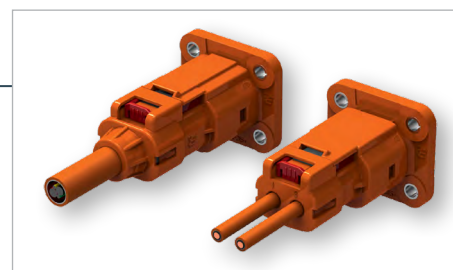


AMP+ HVA 280 CONNECTOR SERIES

Position	2
Cable Size	4 mm ²
Wire Type	Individually Shielded
HVIL	Present, Shunt Version
Key Coding	A
Validated Cables	Huber+Suhner 12582674
	Leoni 76231175A
Application Specification	114-13259
Product Specification	108-2394
Mating Header PN	2103124-1

BILL OF MATERIALS

Part Number	Description	Quantity
4-2103177-1	Plug subassy, finger accessible with CPA, Key A	1
1587828-3	Inner ferrule	2
1587829-3	Outer ferrule	2
1587826-3	Seal, cable	1
2103181-3	Cable seal retainer	1
1-968853-3	AMP MCP 2.8 terminal, female, 4 mm ²	2

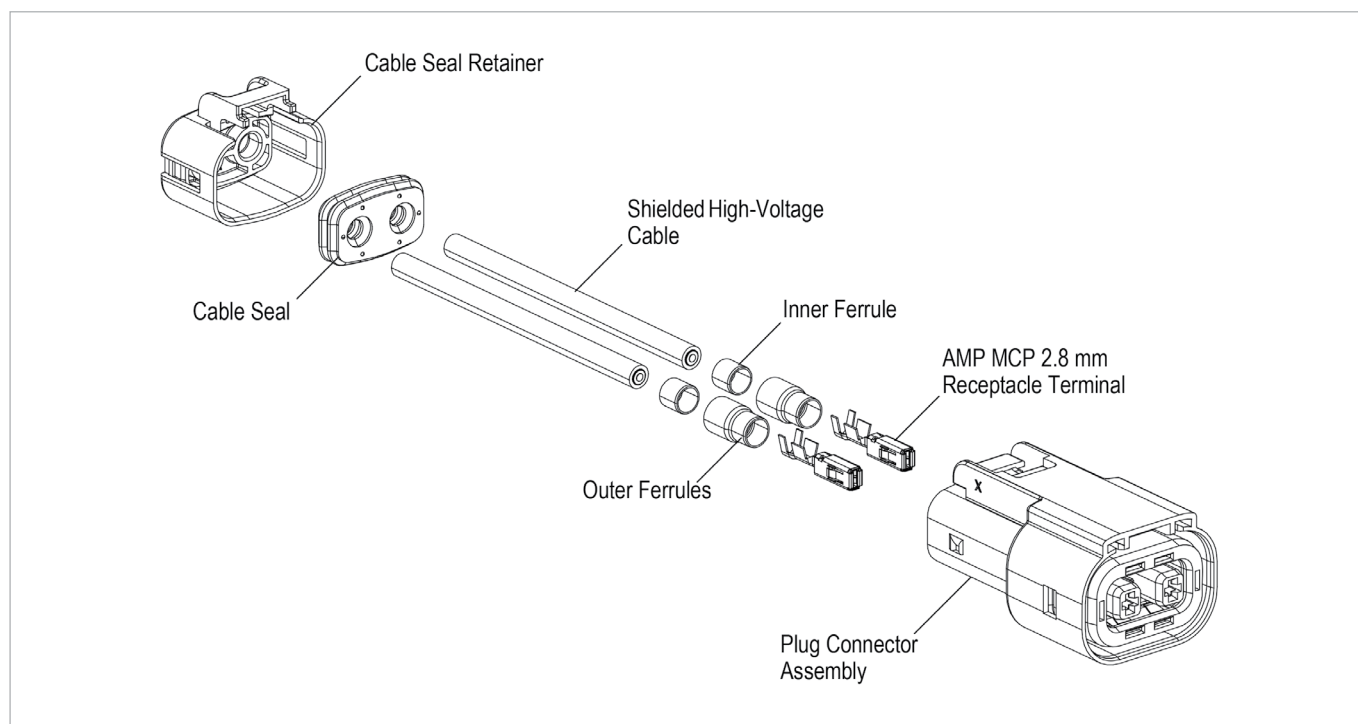


AMP+ High Current Connectors and Headers

AMP+ HVA 280

Kit Number **YHVA280-2phi-4mm-B**

AMP+ HVA 280

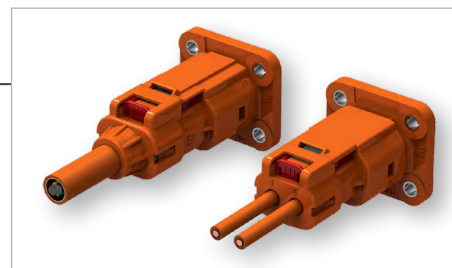


AMP+ HVA 280 CONNECTOR SERIES

Position	2
Cable Size	4 mm ²
Wire Type	Individually Shielded
HVIL	Present, Shunt Version
Key Coding	B
Validated Cables	Huber+Suhner 12582674
	Leoni 76231175A
Application Specification	114-13259
Product Specification	108-2394
Mating Header PN	2103124-2

BILL OF MATERIALS

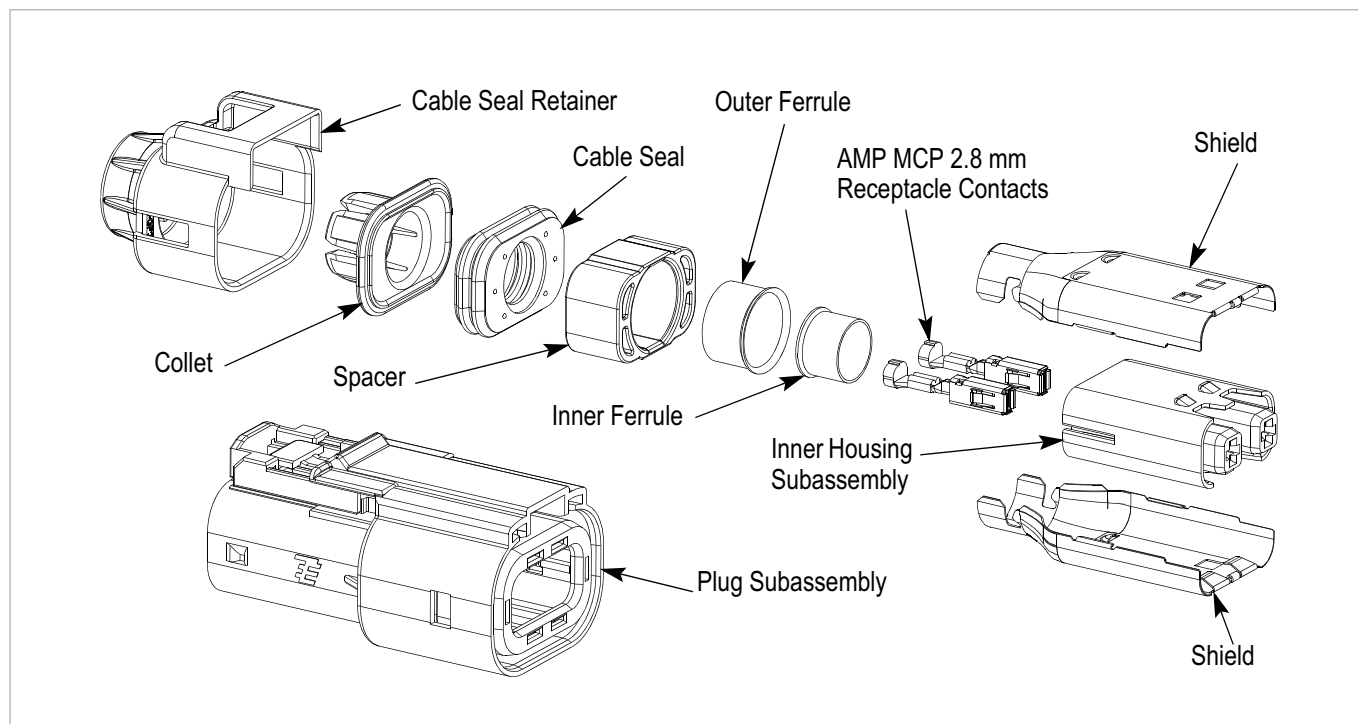
Part Number	Description	Quantity
4-2103177-2	Plug subassy, finger accessible with CPA, Key B	1
1587828-3	Inner ferrule	2
1587829-3	Outer ferrule	2
1587826-3	Seal, cable	1
2103181-3	Cable seal retainer	1
1-968853-3	AMP MCP 2.8 terminal, female, 4 mm ²	2



AMP+ High Current Connectors and Headers

AMP+ HVA 280

Kit Number **YHV280-2pm-s-4mm-A**

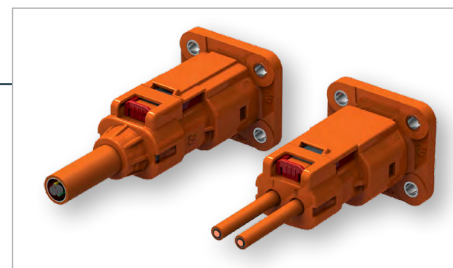


AMP+ HVA 280 CONNECTOR SERIES

Position	2
Cable Size	4 mm ²
Wire Type	Multicore
HVIL	Present, Shunt Version
Key Coding	A
Validated Cables	Coroplast 9-2641
Application Specification	114-13305
Product Specification	108-32020
Mating Header PN	2103124-1

BILL OF MATERIALS

Part Number	Description	Quantity
4-2103015-1	Plug subassy, finger latch, with CPA, Key A	1
1587985-1	Inner housing subassy, shunted	1
1-2103157-1	Shield	2
1587723-3	Inner ferrule	1
1587724-3	Outer ferrule	1
2103153-1	Spacer	1
2103154-1	Cable seal	1
2103155-1	Collet	1
2103013-1	Cable seal retainer	1
1-968853-3	AMP MCP 2.8, 2.5 - 4.0 mm ²	2

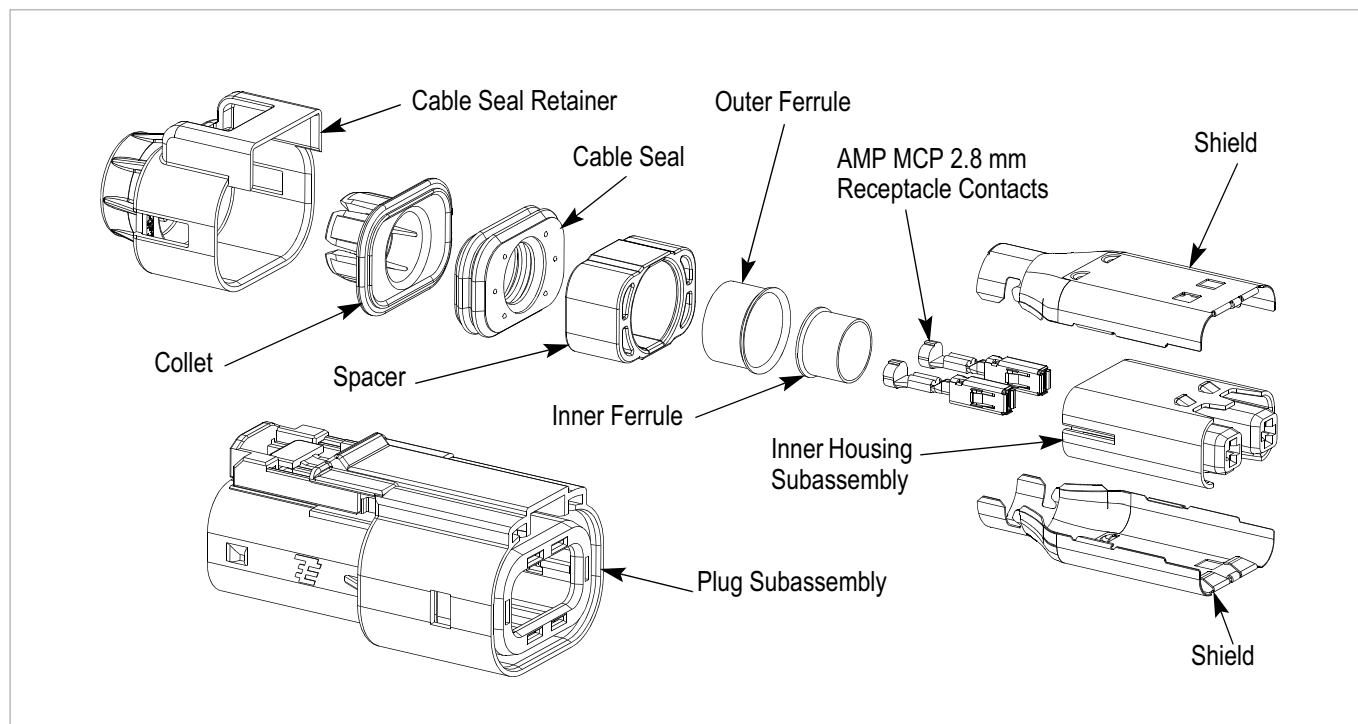


AMP+ High Current Connectors and Headers

AMP+ HVA 280

Kit Number **YHV280-2pm-s-4mm-B**

AMP+ HVA 280

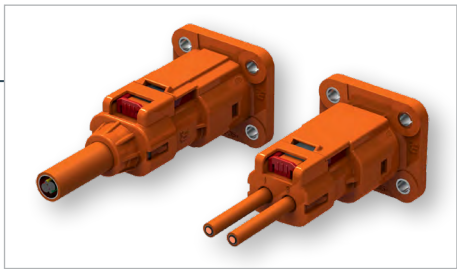


AMP+ HVA 280 CONNECTOR SERIES

Position	2
Cable Size	4 mm ²
Wire Type	Multicore
HVIL	Present, Shunt Version
Key Coding	B
Validated Cables	Coroplast 9-2641
Application Specification	114-13305
Product Specification	108-32020
Mating Header PN	2103124-2

BILL OF MATERIALS

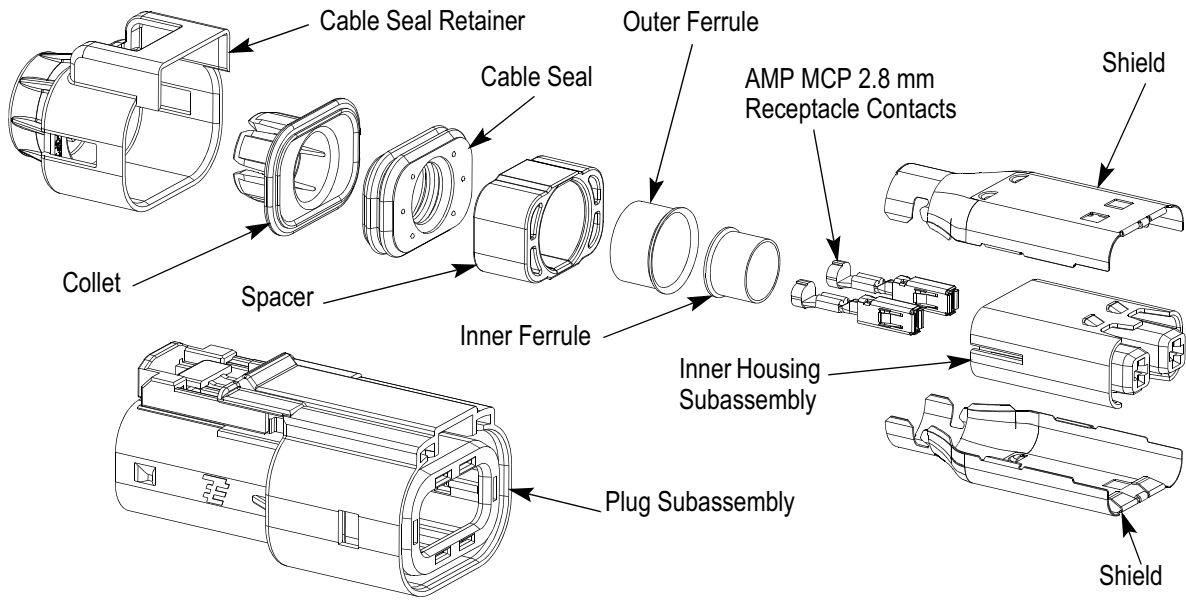
Part Number	Description	Quantity
4-2103015-2	Plug subassy, finger latch, with CPA, Key B	1
1587985-1	Inner housing subassy, shunted	1
1-2103157-1	Shield	2
1587723-3	Inner ferrule	1
1587724-3	Outer ferrule	1
2103153-1	Spacer	1
2103154-1	Cable seal	1
2103155-1	Collet	1
2103013-1	Cable seal retainer	1
1-968853-3	AMP MCP 2.8, 2.5 - 4.0 mm ²	2



AMP+ High Current Connectors and Headers

AMP+ HVA 280

Kit Number **YHV280-2pm-s-4mm-D**

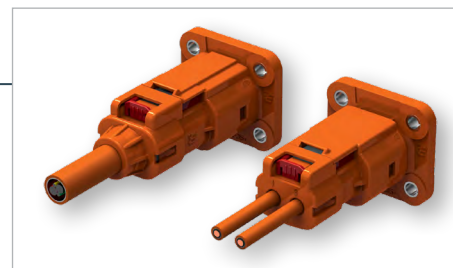


AMP+ HVA 280 CONNECTOR SERIES

Position	2
Cable Size	4 mm ²
Wire Type	Multicore
HVIL	Present, Shunt Version
Key Coding	D
Validated Cables	Coroplast 9-2641
Application Specification	114-13305
Product Specification	108-32020
Mating Header PN	2103124-4

BILL OF MATERIALS

Part Number	Description	Quantity
4-2103015-4	Plug subassy, finger latch, with CPA, Key D	1
1587985-1	Inner housing subassy, shunted	1
1-2103157-1	Shield	2
1587723-3	Inner ferrule	1
1587724-3	Outer ferrule	1
2103153-1	Spacer	1
2103154-1	Cable seal	1
2103155-1	Collet	1
2103013-1	Cable seal retainer	1
1-968853-3	AMP MCP 2.8, 2.5 - 4.0 mm ²	2

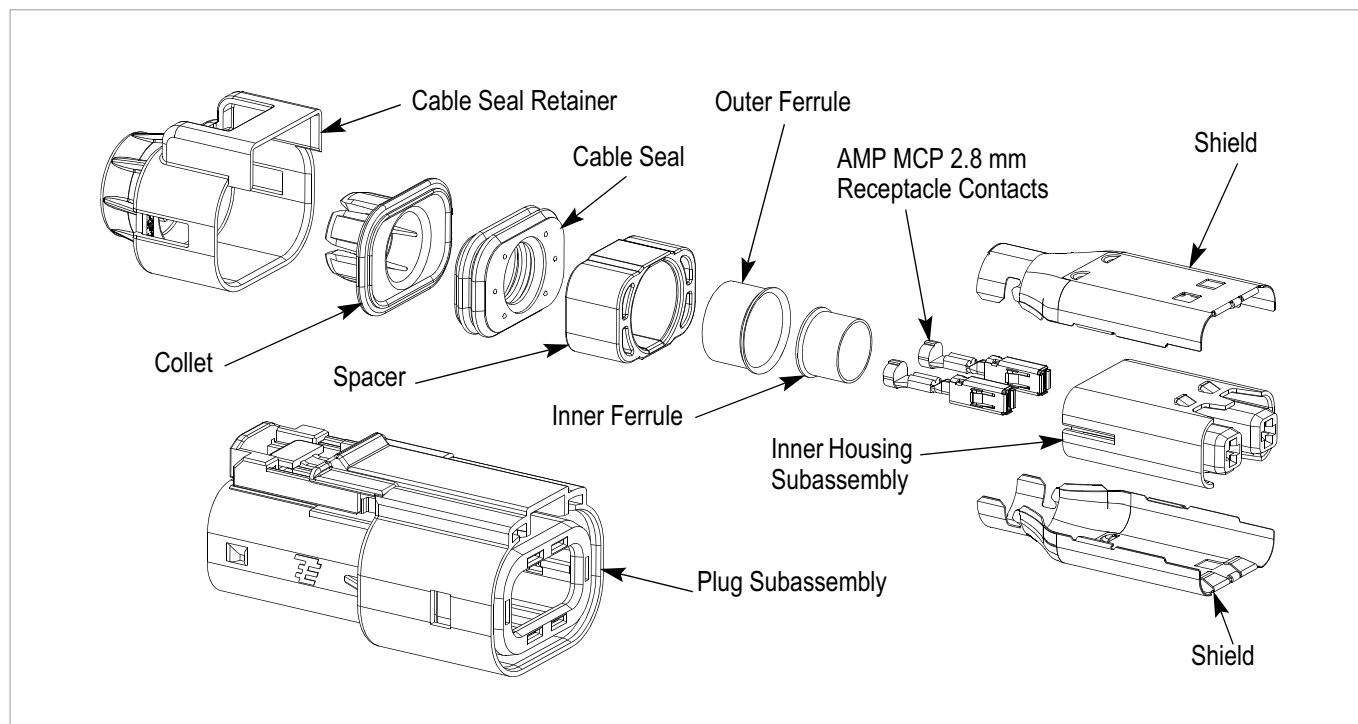


AMP+ High Current Connectors and Headers

AMP+ HVA 280

Kit Number **YHV280-2pm-s-4mm-E**

AMP+ HVA 280

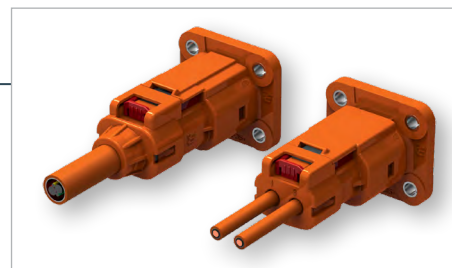


AMP+ HVA 280 CONNECTOR SERIES

Position	2
Cable Size	4 mm ²
Wire Type	Multicore
HVIL	Present, Shunt Version
Key Coding	E
Validated Cables	Coroplast 9-2641
Application Specification	114-13305
Product Specification	108-32020
Mating Header PN	2103124-5

BILL OF MATERIALS

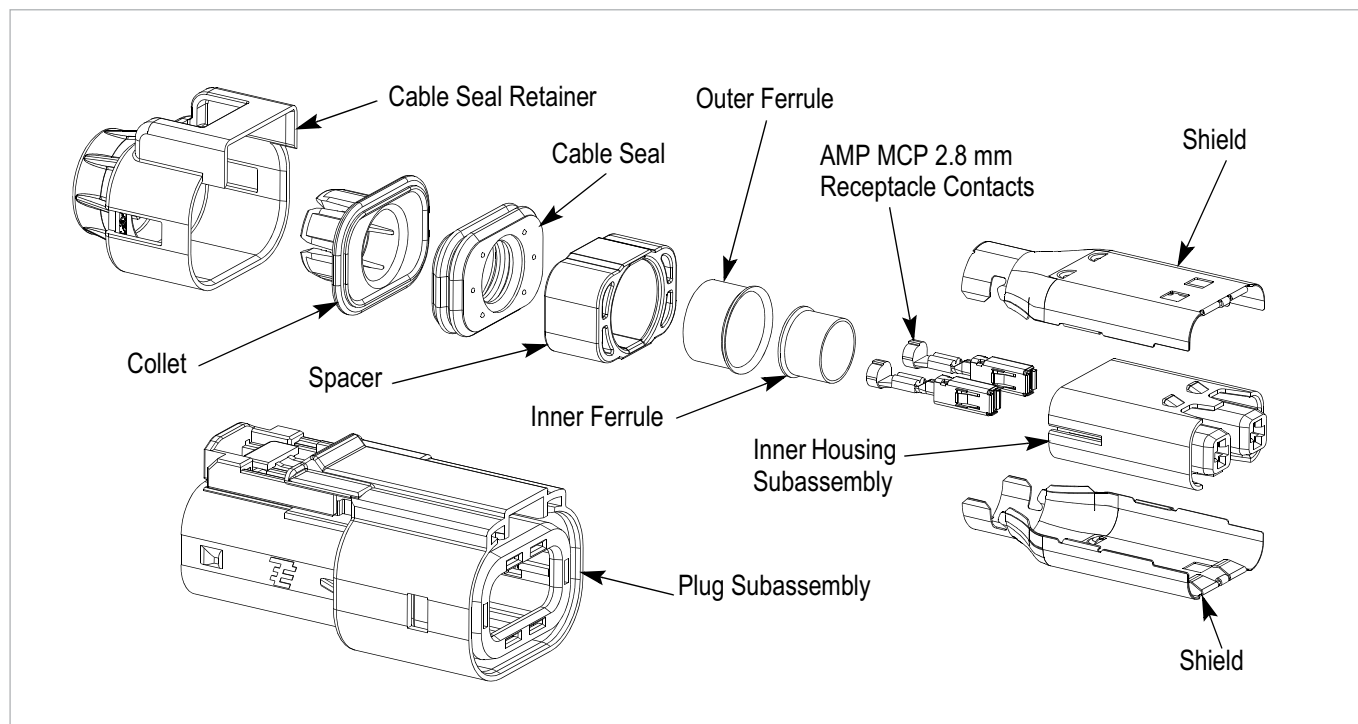
Part Number	Description	Quantity
4-2103015-5	Plug subassy, finger latch, with CPA, Key E	1
1587985-1	Inner housing subassy, shunted	1
1-2103157-1	Shield	2
1587723-3	Inner ferrule	1
1587724-3	Outer ferrule	1
2103153-1	Spacer	1
2103154-1	Cable seal	1
2103155-1	Collet	1
2103013-1	Cable seal retainer	1
1-968853-3	AMP MCP 2.8, 2.5 - 4.0 mm ²	2



AMP+ High Current Connectors and Headers

AMP+ HVA 280

Kit Number **YHVA280-2PHM-4MM-A**

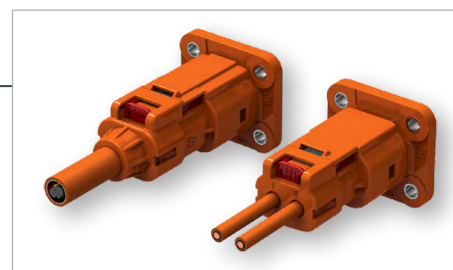


AMP+ HVA 280 CONNECTOR SERIES

Position	2
Cable Size	4 mm ²
Wire Type	Multicore
HVIL	Present, Shunt Version
Key Coding	A
Validated Cables	Huber+Suhner 12 582 308
Application Specification	114-13305
Product Specification	108-32020
Mating Header PN	2103124-5

BILL OF MATERIALS

Part Number	Description	Quantity
4-2103015-1	Plug subassy, finger latch, with CPA, Key A	1
1587985-1	Inner Housing	1
1-968853-3	Contact	2
1-2103157-2	Shield	1
1587723-2	Inner ferrule	1
1587724-2	Outer ferrule	1
2103153-1	Spacer	1
2103154-2	Cable seal	1
2103155-2	Collet	1
2103013-2	Cable seal retainer	2

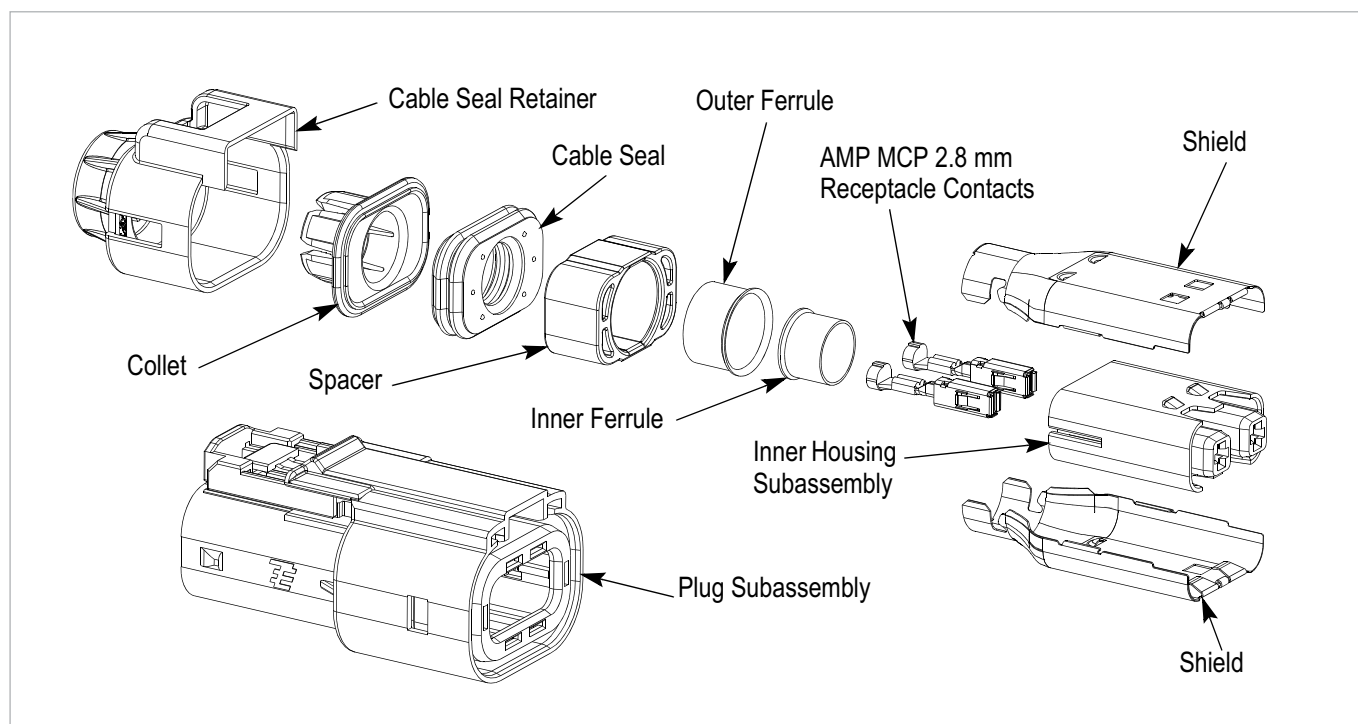


AMP+ High Current Connectors and Headers

AMP+ HVA 280

Kit Number **YHVA280-2PHM-4MM-A**

AMP+ HVA 280

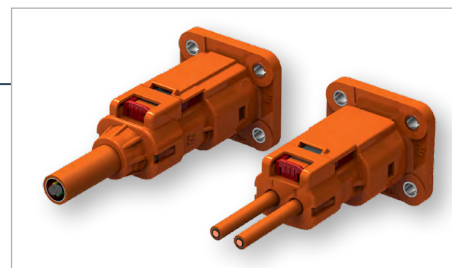


AMP+ HVA 280 CONNECTOR SERIES

Position	2
Cable Size	4 mm ²
Wire Type	Multicore
HVIL	Present, Shunt Version
Key Coding	E
Validated Cables	Huber+Suhner 12 582 308
Application Specification	114-13305
Product Specification	108-32020
Mating Header PN	2103124-5

BILL OF MATERIALS

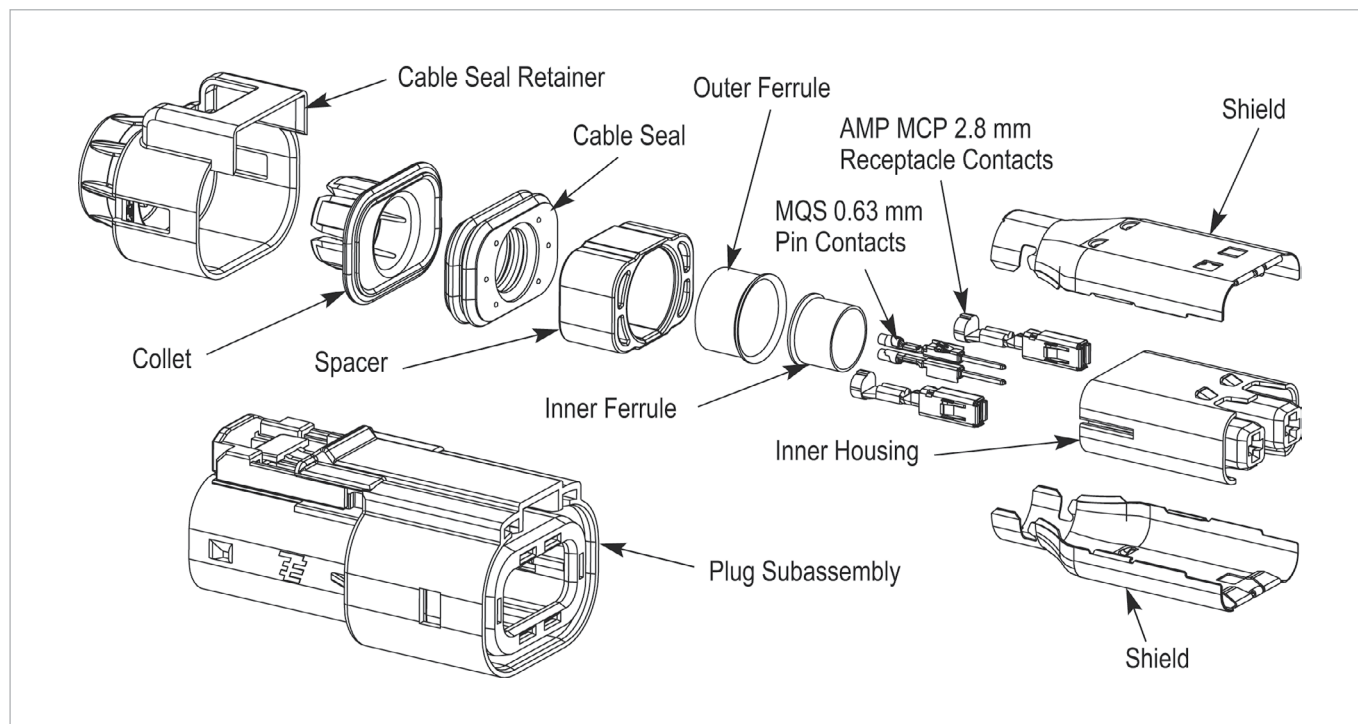
Part Number	Description	Quantity
4-2103015-5	Plug subassy, finger latch, with CPA, Key E	1
1587985-1	Inner Housing	1
1-968853-3	Contact	2
1-2103157-2	Shield	1
1587723-2	Inner Ferrule	1
1587724-2	Outer Ferrule	1
2103153-1	Spacer	1
2103154-2	Cable seal	1
2103155-2	Collet	1
2103013-2	Cable seal retainer	2



AMP+ High Current Connectors and Headers

AMP+ HVA 280

Kit Number **YHV280-2pm-p-4mm-A**

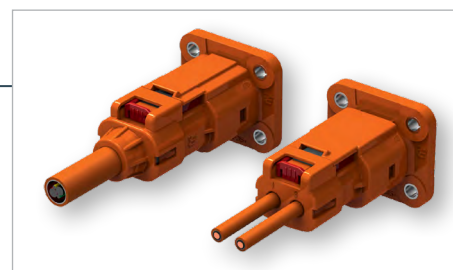


AMP+ HVA 280 CONNECTOR SERIES

Position	2
Cable Size	4 mm ²
Wire Type	Multicore
HVIL	Present, Pass-Through
Key Coding	A
Validated Cables	Kromberg & Schubert 64994093
Application Specification	114-13310
Product Specification	108-32020
Mating Header PN	2103124-1

BILL OF MATERIALS

Part Number	Description	Quantity
4-2103015-1	Plug subassy, finger latch, with CPA, Key A	1
1587977-2	Inner housing, pass-through HVIL	1
5-963716-2	MQS terminal, .5-.75 mm ²	2
1-968853-3	AMP MCP 2.8, 2.5 -4.0 mm ²	2
1-2103157-1	Shield	2
1587723-3	Inner ferrule	1
1587724-3	Outer ferrule	1
2103153-1	Spacer	1
2103154-1	Cable seal	1
2103155-1	Collet	1
2103013-1	Cable seal retainer	1

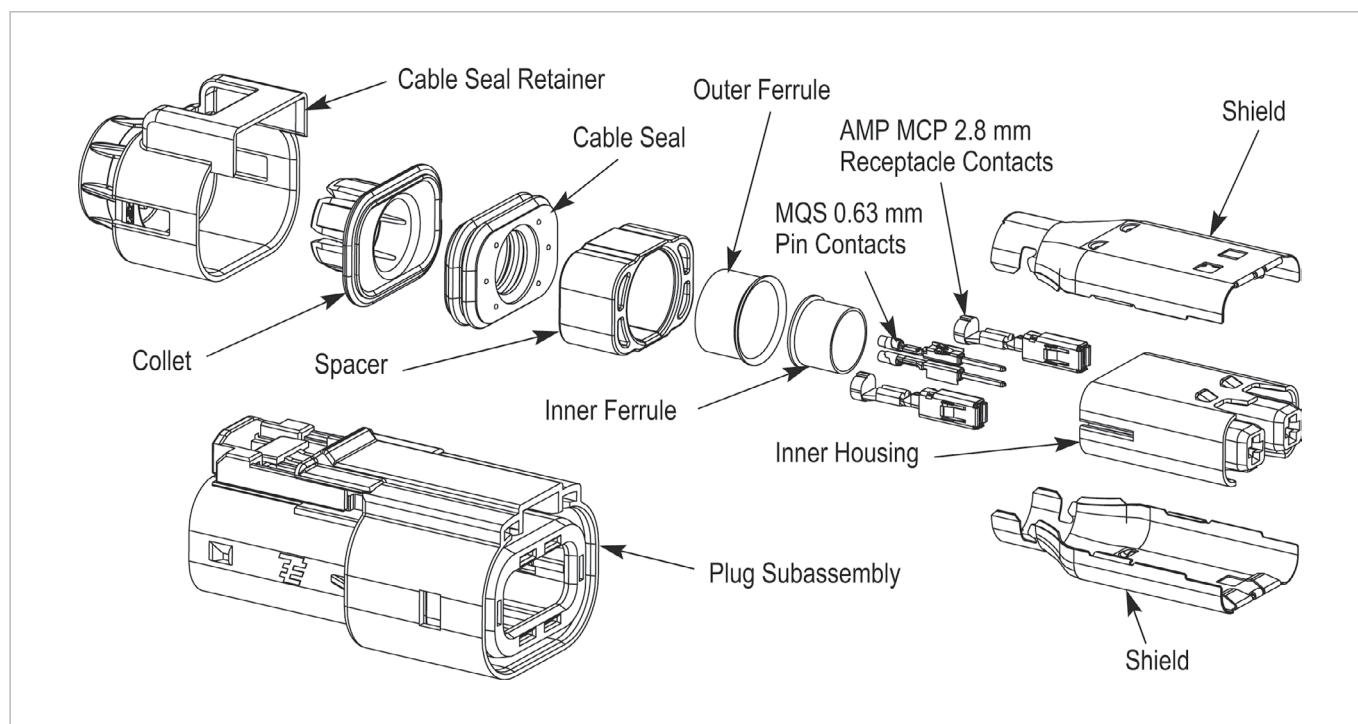


AMP+ High Current Connectors and Headers

AMP+ HVA 280

Kit Number **YHV280-2pm-p-4mm-B**

AMP+ HVA 280

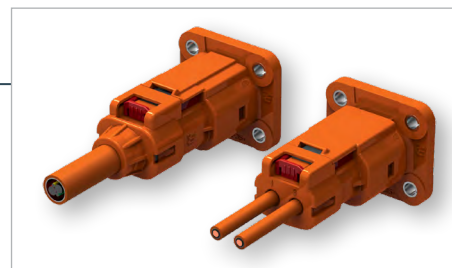


AMP+ HVA 280 CONNECTOR SERIES

Position	2
Cable Size	4 mm ²
Wire Type	Multicore
HVIL	Present, Pass-Through
Key Coding	B
Validated Cables	Kromberg & Schubert 64994093
Application Specification	114-13310
Product Specification	108-32020
Mating Header PN	2103124-2

BILL OF MATERIALS

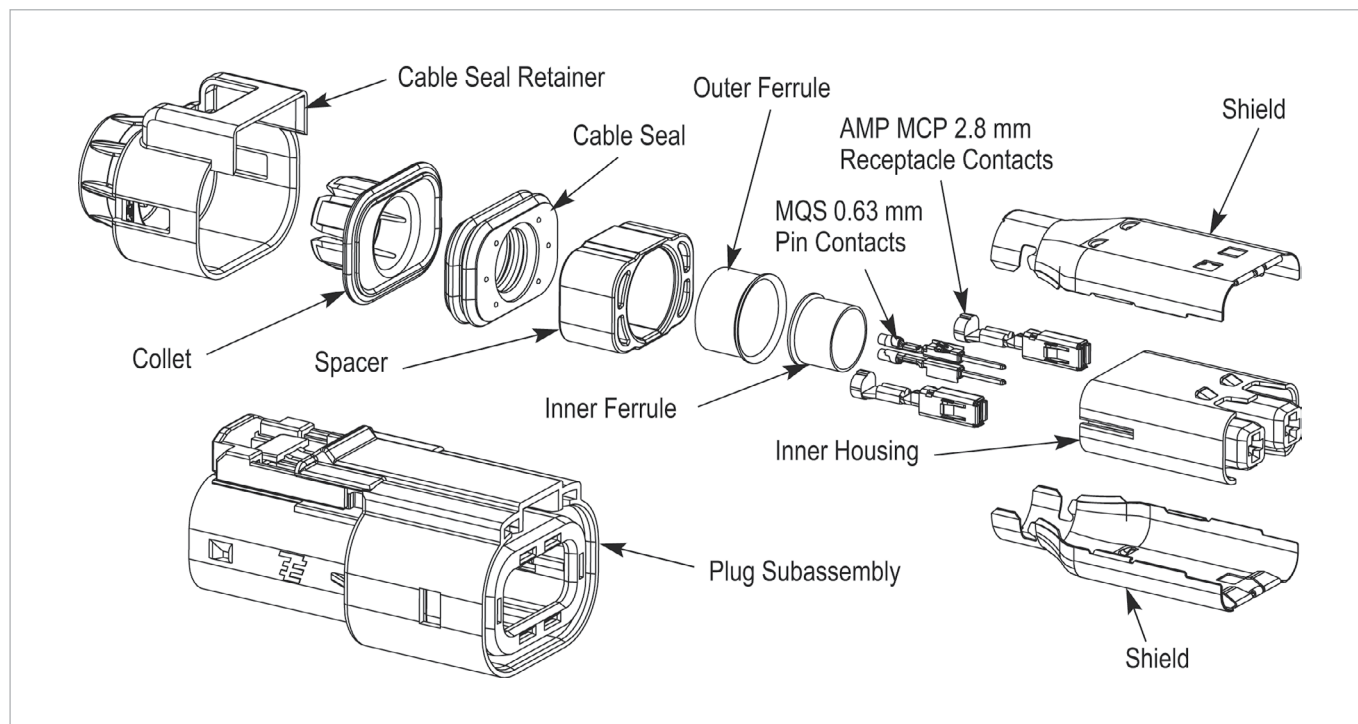
Part Number	Description	Quantity
4-2103015-2	Plug subassy, finger latch, with CPA, Key B	1
1587977-2	Inner housing, pass-through HVIL	1
5-963716-2	MQS terminal .5 - .75 mm ²	2
1-968853-3	AMP MCP 2.8, 2.5 - 4.0 mm ²	2
1-2103157-1	Shield	2
1587723-3	Inner ferrule	1
1587724-3	Outer ferrule	1
2103153-1	Spacer	1
2103154-1	Cable seal	1
2103155-1	Collet	1
2103013-1	Cable seal retainer	1



AMP+ High Current Connectors and Headers

AMP+ HVA 280

Kit Number **YHV280-2pm-p-4mm-D**

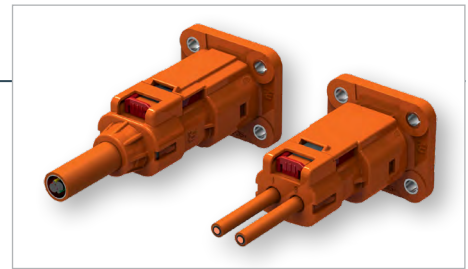


AMP+ HVA 280 CONNECTOR SERIES

Position	2
Cable Size	4 mm ²
Wire Type	Multicore
HVIL	Present, Pass-Through
Key Coding	D
Validated Cables	Kromberg & Schubert 64994093
Application Specification	114-13310
Product Specification	108-32020
Mating Header PN	2103124-4

BILL OF MATERIALS

Part Number	Description	Quantity
4-2103015-4	Plug subassy, finger latch, with CPA, Key D	1
1587977-2	Inner housing, pass-through HVIL	1
5-963716-2	MQS terminal, .5-.75 mm ²	2
1-968853-3	AMP MCP 2.8, 2.5-4.0 mm ²	2
1-2103157-1	Shield	2
1587723-3	Inner ferrule	1
1587724-3	Outer ferrule	1
2103153-1	Spacer	1
2103154-1	Cable seal	1
2103155-1	Collet	1
2103013-1	Cable seal retainer	1

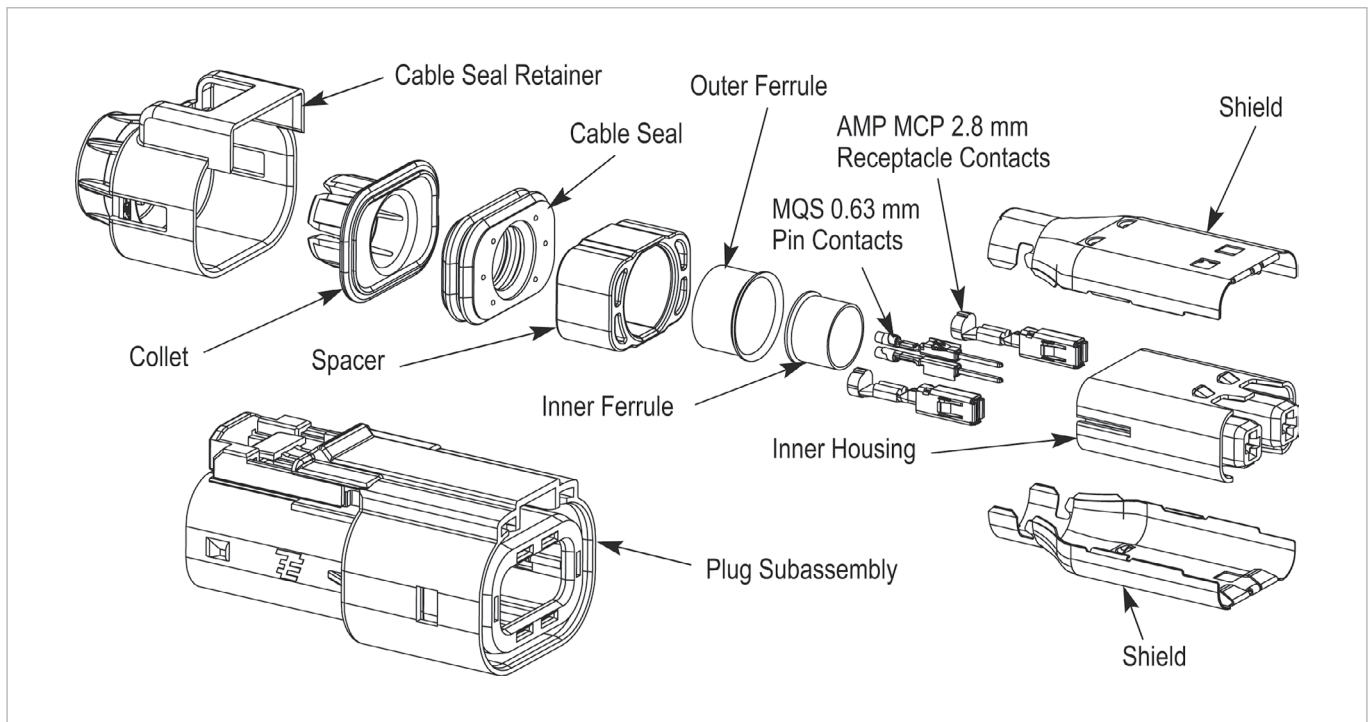


AMP+ High Current Connectors and Headers

AMP+ HVA 280

Kit Number **YHV280-2pm-p-4mm-E**

AMP+ HVA 280

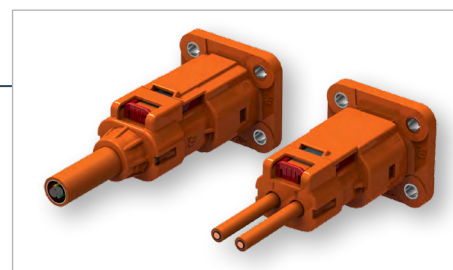


AMP+ HVA 280 CONNECTOR SERIES

Position	2
Cable Size	4 mm ²
Wire Type	Multicore
HVIL	Present, Pass-Through
Key Coding	E
Validated Cables	Kromberg & Schubert 64994093
Application Specification	114-13310
Product Specification	108-32020
Mating Header PN	2103124-5

BILL OF MATERIALS

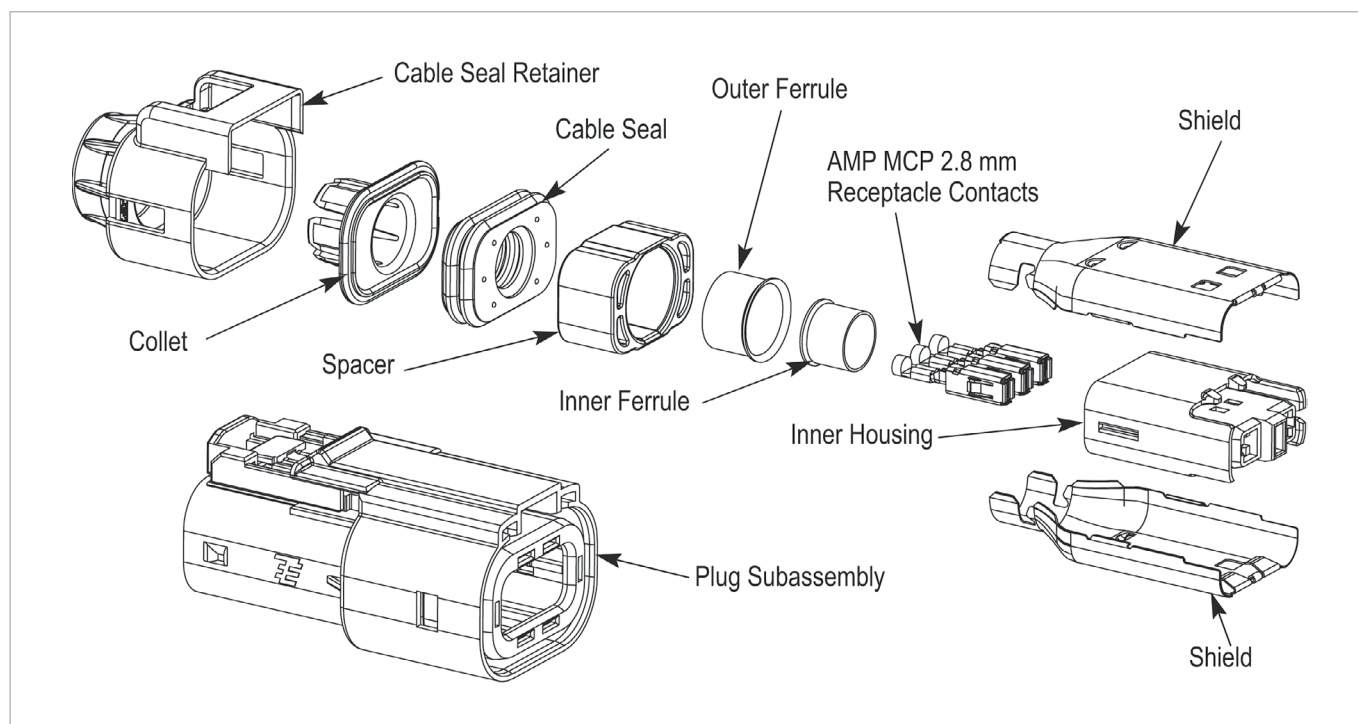
Part Number	Description	Quantity
4-2103015-5	Plug subassy, finger latch, with CPA, Key E	1
1587977-2	Inner housing, pass-through HVIL	1
5-963716-2	MQS terminal, .5-.75 mm ²	2
1-968853-3	AMP MCP 2.8, 2.5-4.0 mm ²	2
1-2103157-1	Shield	2
1587723-3	Inner ferrule	1
1587724-3	Outer ferrule	1
2103153-1	Spacer	1
2103154-1	Cable seal	1
2103155-1	Collet	1
2103013-1	Cable seal retainer	1



AMP+ High Current Connectors and Headers

AMP+ HVA 280

Kit Number **YHVA280-3pxm-A-000**

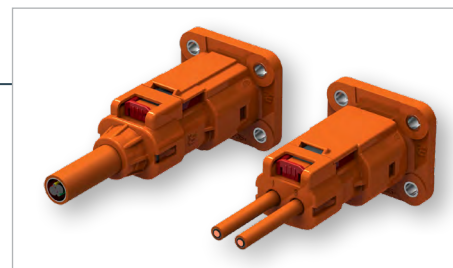


AMP+ HVA 280 CONNECTOR SERIES

Position	3
Cable Size	2.5 mm ²
Wire Type	Multicore
HVIL	Not present
Key Coding	A
Validated Cables	Coroplast 9-2641
Application Specification	114-32056
Product Specification	108-32020
Mating Header PN	
Outer Housing	2103247-1
Inner Housing	2103321-1

BILL OF MATERIALS

Part Number	Description	Quantity
4-2103015-1	Plug subassy, finger accessible with CPA, Key A	1
2103306-1	Inner housing	1
1-2103157-2	Shield, plug, Ag	2
1587723-2	Inner ferrule	1
1587724-2	Outer ferrule	1
2103153-1	Spacer	1
2103154-2	Cable seal	1
2103155-2	Collet	1
2103013-2	Cable seal retainer	1
1-968851-3	AMP MCP 2.8 terminal female, Ag, >1.0-2.5 mm ²	3

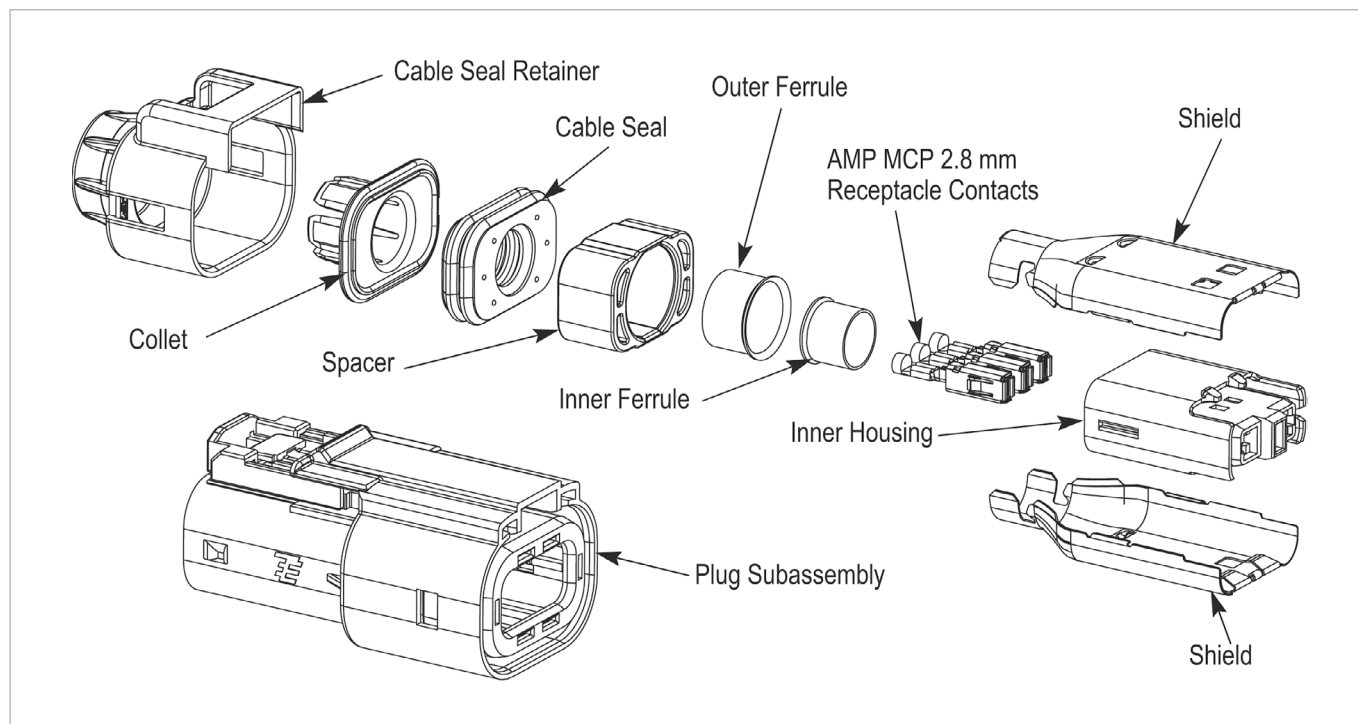


AMP+ High Current Connectors and Headers

AMP+ HVA 280

Kit Number **YHVA280-3pxm-B-000**

AMP+ HVA 280

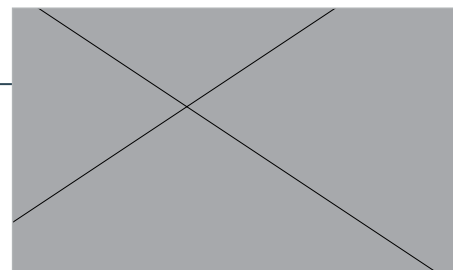


AMP+ HVA 280 CONNECTOR SERIES

Position	3
Cable Size	2.5 mm ²
Wire Type	Multicore
HVIL	Not present
Key Coding	B
Validated Cables	Coroplast 9-2641
Application Specification	114-32056
Product Specification	108-32020
Mating Header PN	
Outer Housing	2103247-2
Inner Housing	2103321-2

BILL OF MATERIALS

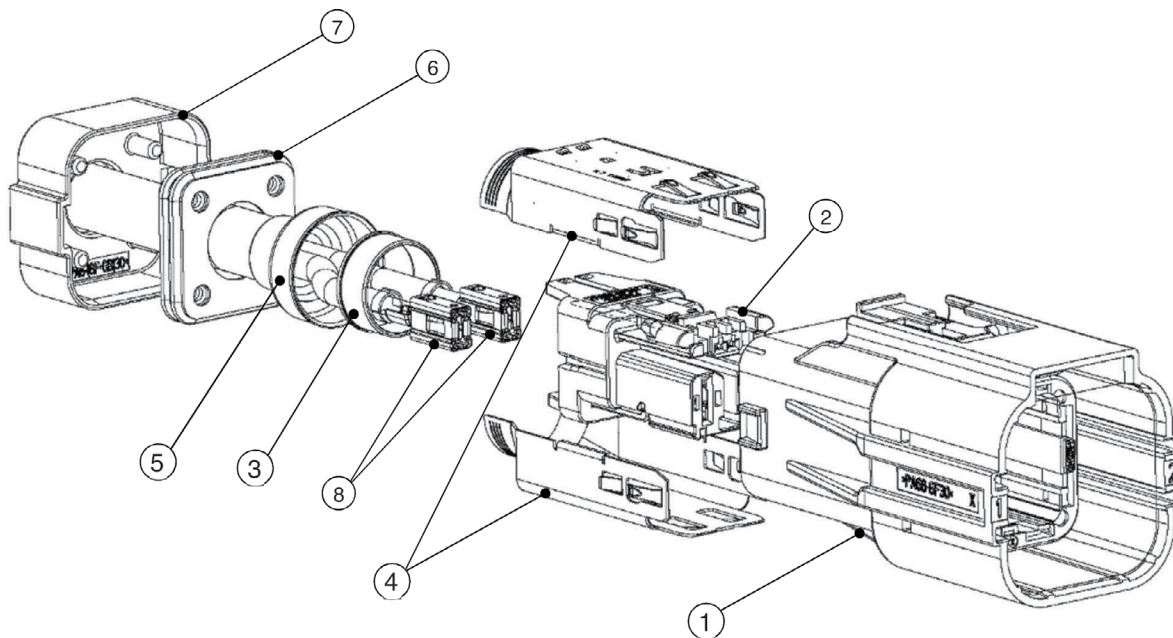
Part Number	Description	Quantity
4-2103015-2	Plug subassy, finger accessible with CPA, Key B	1
2103306-1	Inner housing	1
1-2103157-2	Shield, plug, Ag	2
1587723-2	Inner ferrule	1
1587724-2	Outer ferrule	1
2103153-1	Spacer	1
2103154-2	Cable seal	1
2103155-2	Collet	1
2103013-2	Cable seal retainer	1
1-968851-3	AMP MCP 2.8 terminal female, Ag, >1.0-2.5 mm ²	3



AMP+ High Current Connectors and Headers

AMP+ HVA 630

Kit Number **YHVA630-2phm-4mm-A**



AMP+ HVA 630 CONNECTOR SERIES

Position	2
Cable Size	4 mm ²
Wire Type	Multicore
HVIL	Bridge in the connector
Key Coding	A
Validated Cables	Coroplast 9-2641
Application Specification	114-94100
Product Specification	108-94264
Mating Header PN	
90°	1-2141272-1
180°	2-2141272-1

BILL OF MATERIALS

Item No	Part Number	Description	Quantity
①	2141256-1	Plug housing assy, Code A	1
②	2141259-1	Receptacle housing assy	1
③	2141261-1	Shield crimp ferrule, inner	1
④	2141262-3	Shielding	2
⑤	2141263-3	Outer crimp ferrule	1
⑥	2141264-3	Cable seal	1
⑦	2141265-3	Cover	1
⑧	2-1241408-3	AMP MCP 6.3/4.8 contact	2

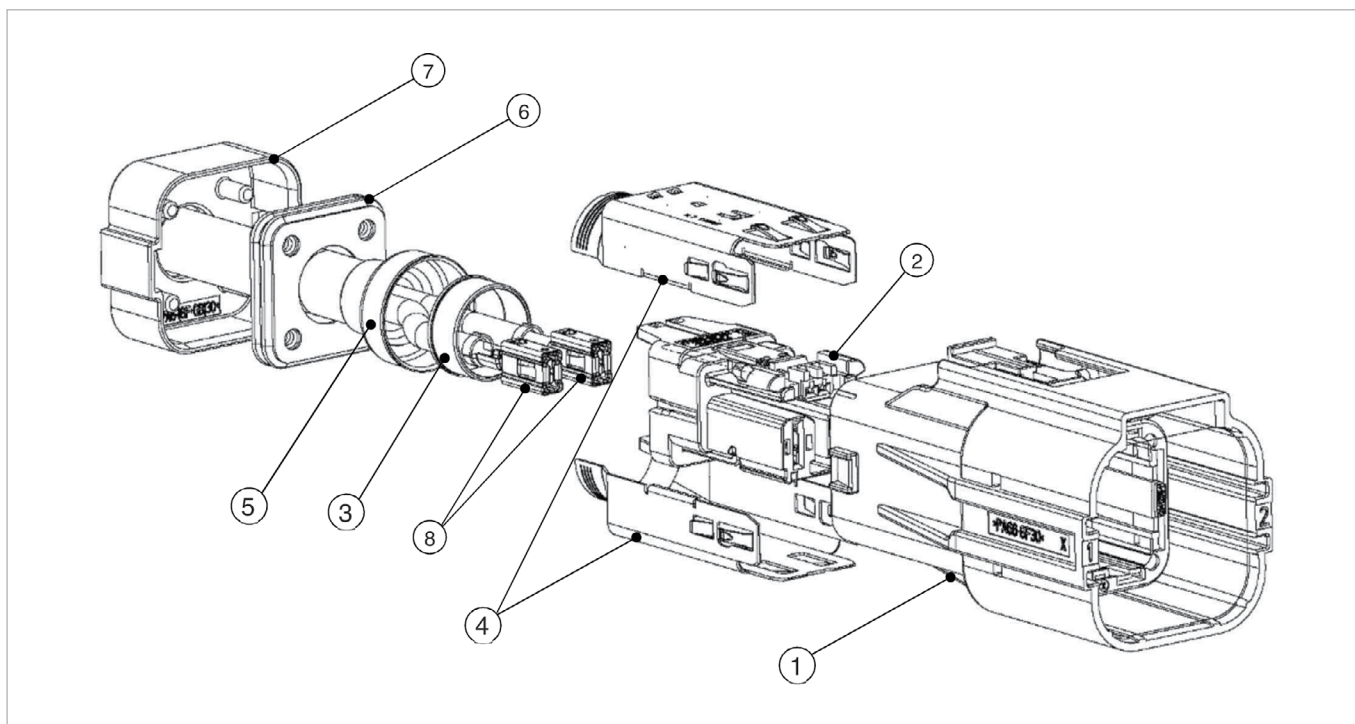


AMP+ High Current Connectors and Headers

AMP+ HVA 630

Kit Number **YHVA630-2phm-6mm-A**

AMP+ HVA 630



AMP+ HVA 630 CONNECTOR SERIES

Position	2
Cable Size	6 mm ²
Wire Type	Multicore
HVIL	Bridge in the connector
Key Coding	A
Validated Cables	Coroplast 9-2641
Application Specification	114-94100
Product Specification	108-94264
Mating Header PN	
90°	1-2141272-1
180°	2-2141272-1

BILL OF MATERIALS

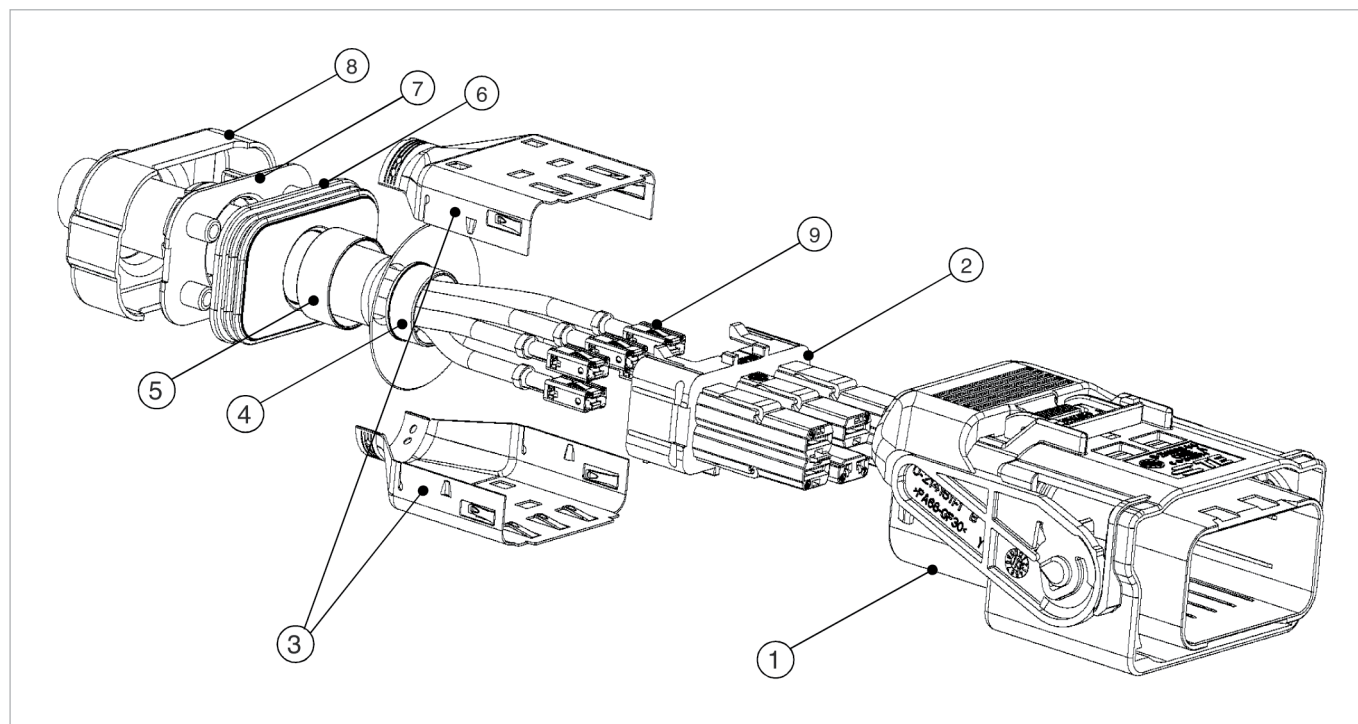
Item No	Part Number	Description	Quantity
①	2141256-1	Plug housing assy, Code A	1
②	2141259-1	Receptacle housing assy	1
③	2141261-1	Shield crimp ferrule, inner	1
④	2141262-3	Shielding	2
⑤	2141263-4	Outer crimp ferrule	1
⑥	2141264-4	Cable seal	1
⑦	2141265-4	Cover	1
⑧	2-1241408-3	AMP MCP 6.3/4.8 contact	2



AMP+ High Current Connectors and Headers

AMP+ HVA 630

Kit Number **YHVA630-3phm-4mm-A**



AMP+ HVA 630 CONNECTOR SERIES

Position	3
Cable Size	4 mm ²
Wire Type	Multicore
HVIL	Bridge in the connector
Key Coding	A
Validated Cables	Coroplast 9-2641
Application Specification	114-94114
Product Specification	108-94235
Mating Header PN	
90°	2141269-1
180°	2236454-1

BILL OF MATERIALS

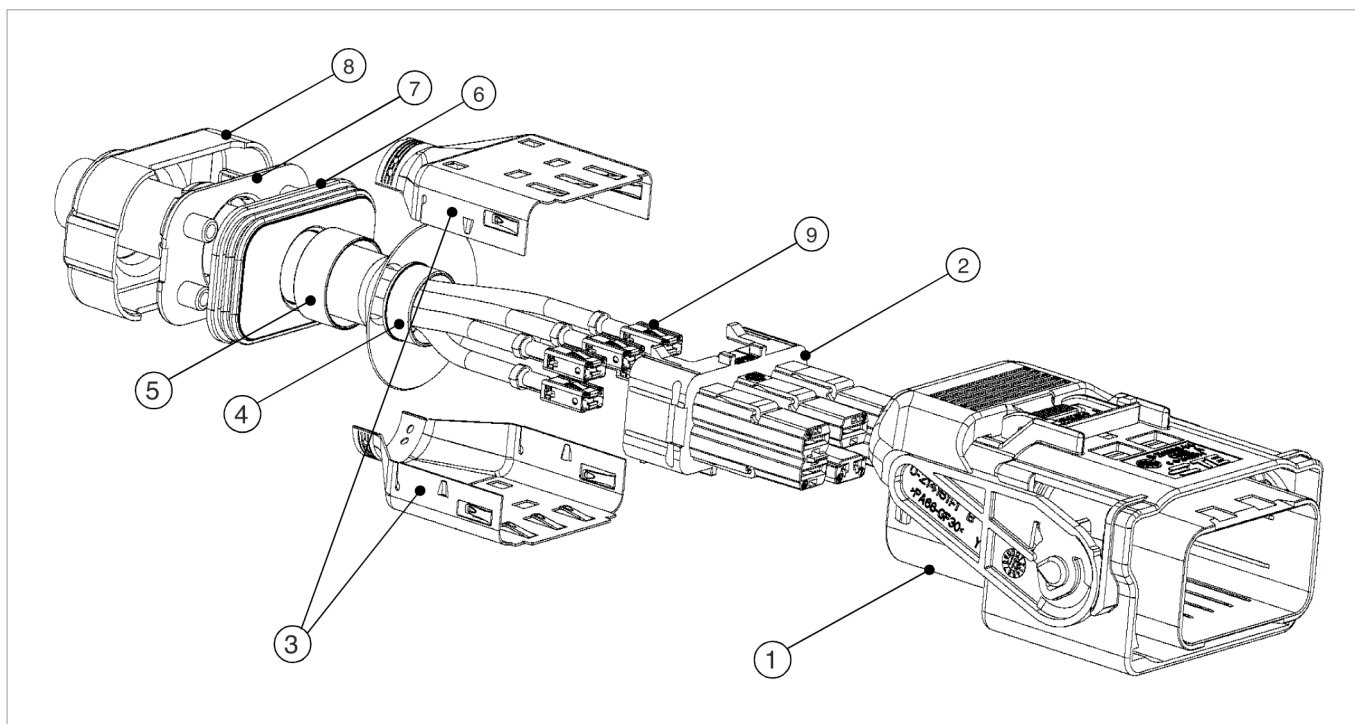
Item No	Part Number	Description	Quantity
①	2141608-4	Outer housing assy with CPA, Code A	1
②	2141630-1	Receptacle housing assy with HVIL	1
③	2141616-1	Shielding	2
④	2141261-1	Shield crimp ferrule, inner	1
⑤	2141617-1	Outer crimp ferrule	1
⑥	2141612-3	Cable seal	1
⑦	2141613-3	Carrier cable seal	1
⑧	2141614-3	Cover cable seal	1
⑨	2-1241408-3	AMP MCP 6.3/4.8 contact	3



AMP+ High Current Connectors and Headers

AMP+ HVA 630

Kit Number **YHVA630-4phm-4mm-A**



AMP+ HVA 630 CONNECTOR SERIES

Position	4
Cable Size	4 mm ²
Wire Type	Multicore
HVIL	Bridge in the connector
Key Coding	A
Validated Cables	Coroplast 9-2641
Application Specification	114-94114
Product Specification	108-94235
Mating Header PN	
90°	2141269-1
180°	2236454-1

BILL OF MATERIALS

Item No	Part Number	Description	Quantity
①	2141608-4	Outer housing assy with CPA, Code A	1
②	2141630-1	Receptacle housing assy with HVIL	1
③	2141616-1	Shielding	2
④	2141261-1	Shield crimp ferrule, inner	1
⑤	2141617-1	Outer crimp ferrule	1
⑥	2141612-4	Cable seal	1
⑦	2141613-4	Carrier cable seal	1
⑧	2141614-4	Cover cable seal	1
⑨	2-1241408-3	AMP MCP 6.3/4.8 contact	4

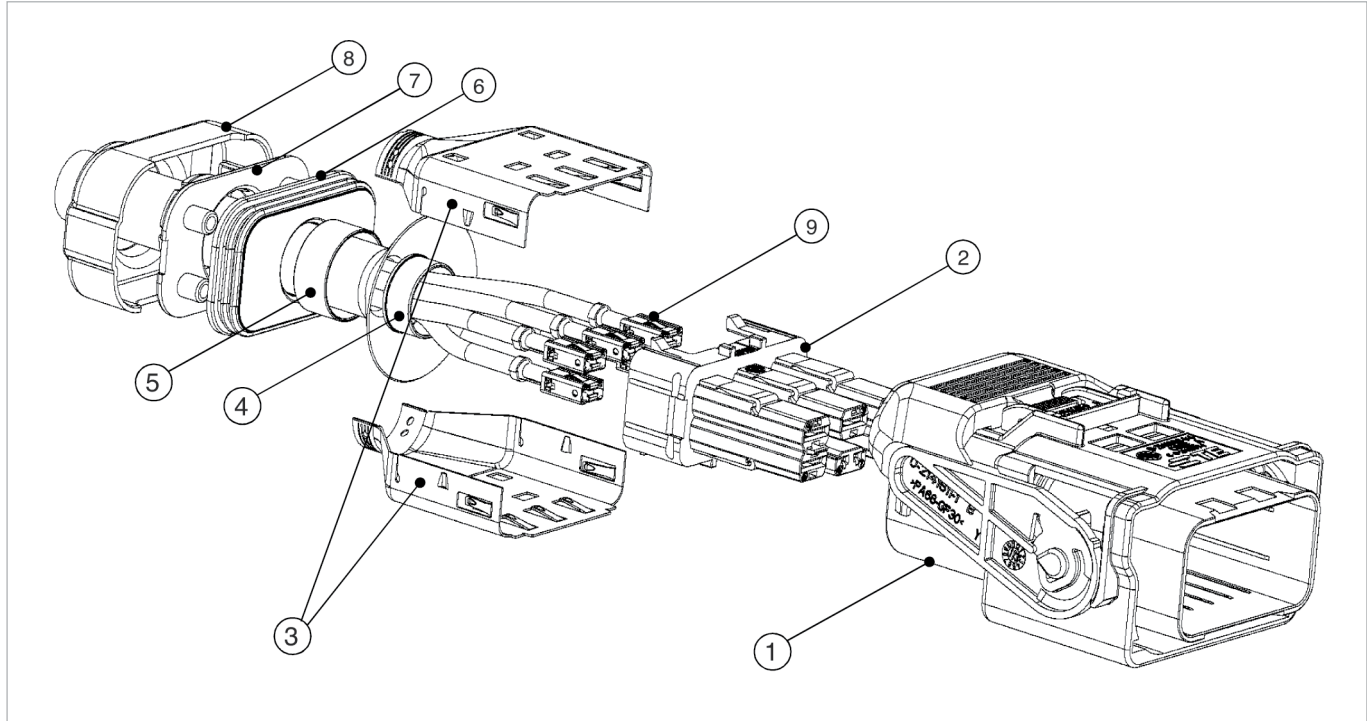


AMP+ High Current Connectors and Headers

AMP+ HVA 630

Kit Number **YHVA630-5phm-6mm-A**

AMP+ HVA 630



AMP+ HVA 630 CONNECTOR SERIES

Position	5
Cable Size	6 mm ²
Wire Type	Multicore
HVIL	Bridge in the connector
Key Coding	A
Validated Cables	Coroplast 9-2641
	Huber+Suhner 84 130 729
Application Specification	114-94114
Product Specification	108-94235
Mating Header PN	
90°	2141269-1
180°	2236454-1

BILL OF MATERIALS

Item No	Part Number	Description	Quantity
①	2141608-4	Outer housing assy with CPA, Code A	1
②	2141630-1	Receptacle housing assy with HVIL	1
③	2141616-1	Shielding	2
④	2141261-1	Shield crimp ferrule, inner	1
⑤	2141617-1	Outer crimp ferrule	1
⑥	2141612-5	Cable seal	1
⑦	2141613-5	Carrier cable seal	1
⑧	2141614-5	Cover cable seal	1
⑨	2-1241408-3	AMP MCP 6.3/4.8 contact	5

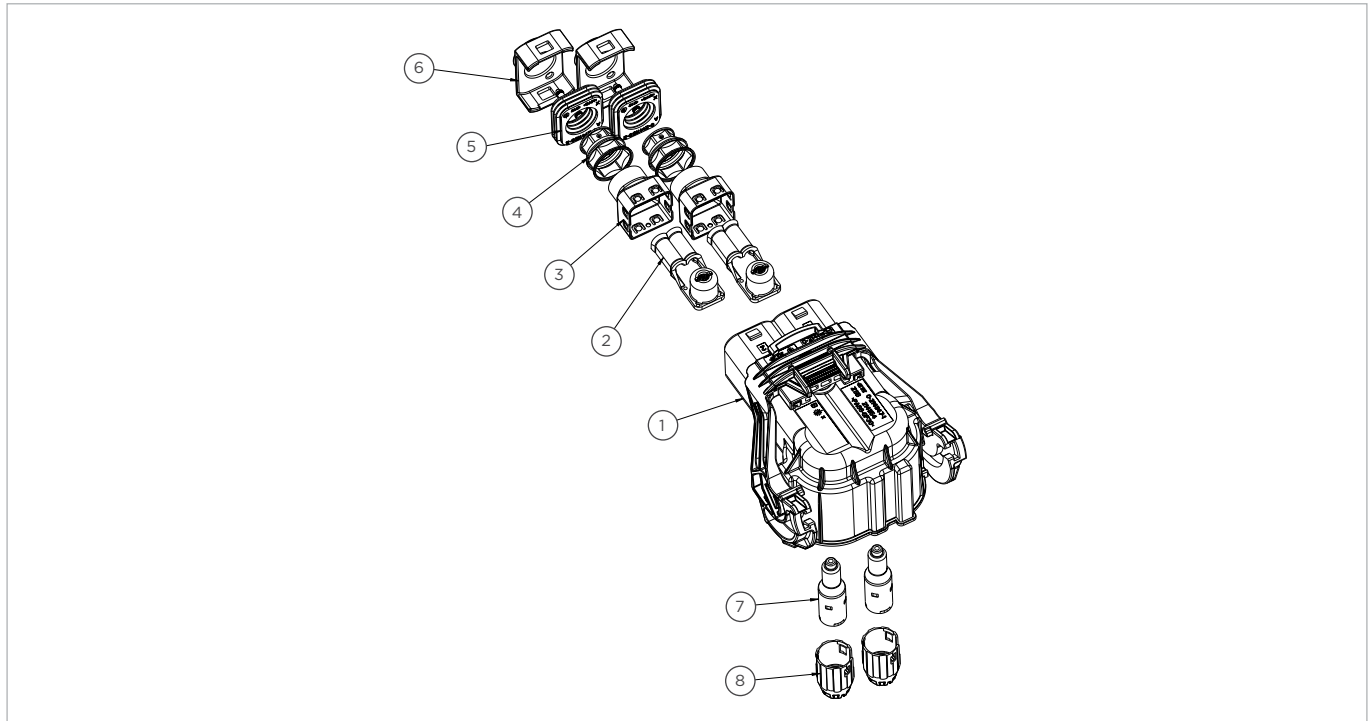


AMP+ High Current Connectors and Headers

AMP+ HVP 800

Kit Number **YHV800-2p-90-50m-A**

AMP+ HVP 800



AMP+ HVP 800 CONNECTOR SERIES

Position	2
Cable Size	50 mm ²
Connector Orientation	90°
Wire Type	Individually Shielded
HVIL	Bridge in the connector
Key Coding	A
Validated Cables	Coroplast 9-2611
Application Specification	114-94052
Product Specification	108-94268
Mating Header PN	2141227-1

BILL OF MATERIALS

Item No	Part Number	Description	Quantity
①	1-2141154-1	2Pos, Rec Hsg 90° Assy, Key A	1
②	2141211-2	Deep drawn socket, 90°, Assy	2
③	9-2141158-2	Shielding sleeve, 90°	2
④	9-2141157-1	Shield crimp ferrule, 90°	2
⑤	2141156-1	Single wire seal	2
⑥	2141155-1	Cover, seal	2
⑦	2141212-1	Deep drawn socket, Pin 90°, Assy	2
⑧	2141159-1	Finger protection cap	2

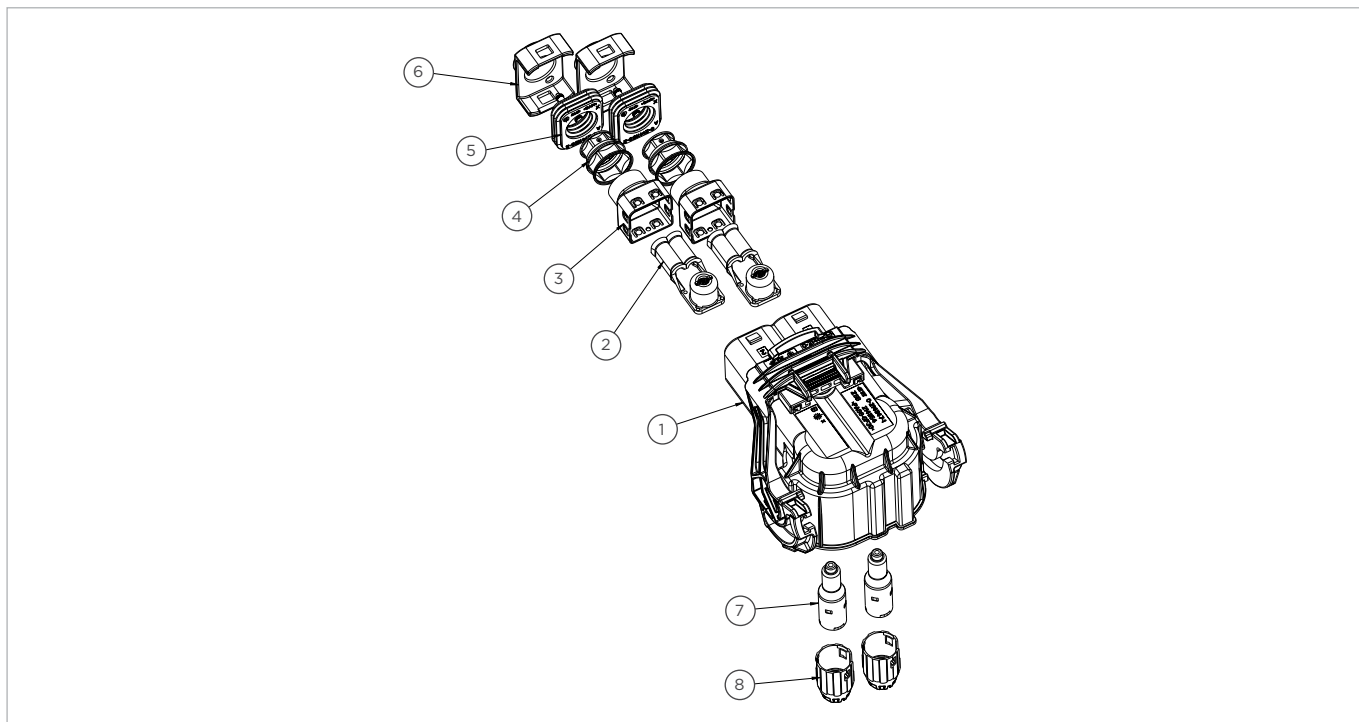


AMP+ High Current Connectors and Headers

AMP+ HVP 800

Kit Number **YHV800-2p-90-50m-B**

AMP+ HVP 800



AMP+ HVP 800 CONNECTOR SERIES

Position	2
Cable Size	50 mm ²
Connector Orientation	90°
Wire Type	Individually Shielded
HVIL	Bridge in the connector
Key Coding	B
Validated Cables	Coroplast 9-2611
Application Specification	114-94052
Product Specification	108-94268
Mating Header PN	2141227-2

BILL OF MATERIALS

Item No	Part Number	Description	Quantity
①	1-2141154-2	2Pos, Rec Hsg 90° Assy, Key B	1
②	2141211-2	Deep drawn socket, 90°, Assembly	2
③	9-2141158-2	Shielding sleeve, 90°	2
④	9-2141157-1	Shield crimp ferrule, 90°	2
⑤	2141156-1	Single wire seal	2
⑥	2141155-1	Cover, seal	2
⑦	2141212-1	Deep drawn socket, Pin 90°, Assembly	2
⑧	2141159-1	Finger protection cap	2

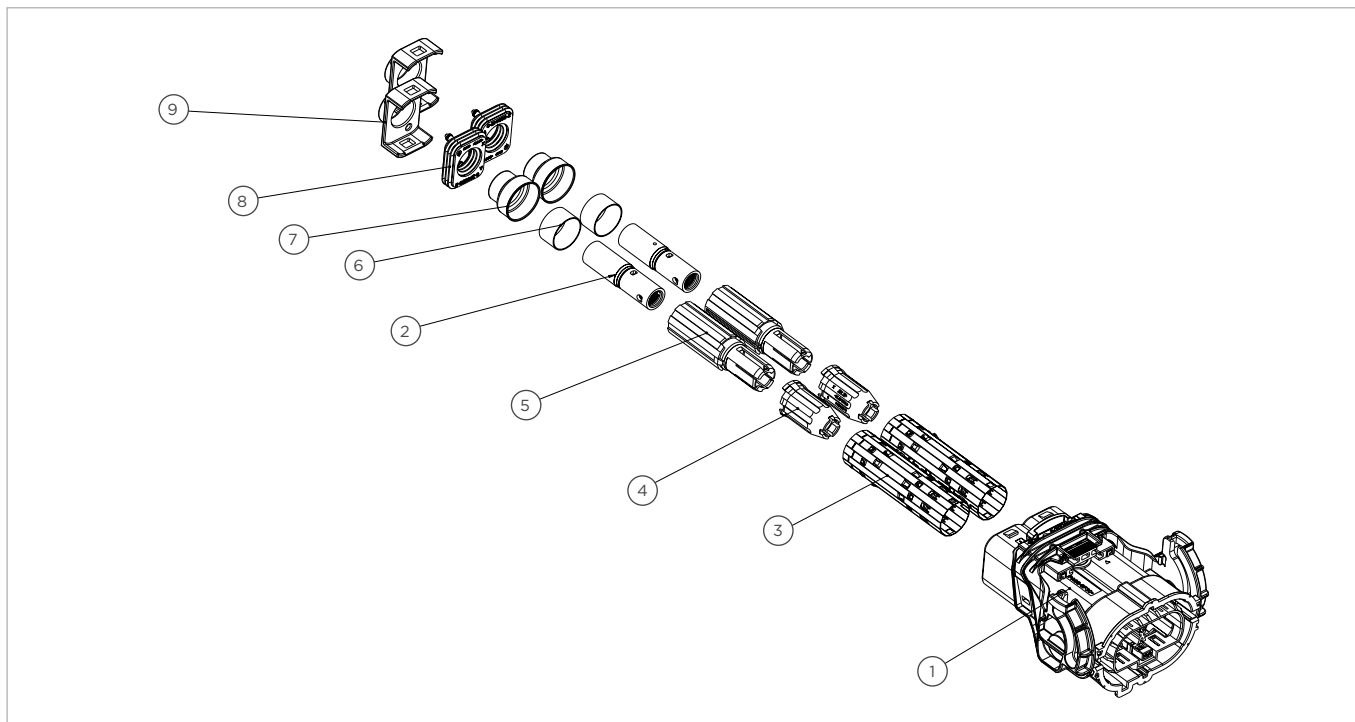


AMP+ High Current Connectors and Headers

AMP+ HVP 800

Kit Number **YH800-2p-180-50m-A**

AMP+ HVP 800



AMP+ HVP 800 CONNECTOR SERIES

Position	2
Cable Size	50 mm ²
Connector Orientation	180°
Wire Type	Individually Shielded
HVIL	Bridge in the connector
Key Coding	A
Validated Cables	Coroplast 9-2611
Application Specification	114-94130
Product Specification	108-94297
Mating Header PN	2141227-1

BILL OF MATERIALS

Item No	Part Number	Description	Quantity
①	1-2177053-1	2Pos, Rec Hsg 180° Assy, Key A	1
②	2208608-3	Stamped contact, 50 mm ² , 180°, Assy	2
③	2177060-3	Shielding Sleeve, 180°	2
④	2177059-1	Finger Protection Cap, 180°	2
⑤	2177058-1	Insulation insert, 180°	2
⑥	2177061-2	Inner crimp ferrule, 180°	2
⑦	2177090-1	Shield crimp ferrule, 180°	2
⑧	2141156-1	Single wire seal	2
⑨	2141155-1	Cover, seal	2

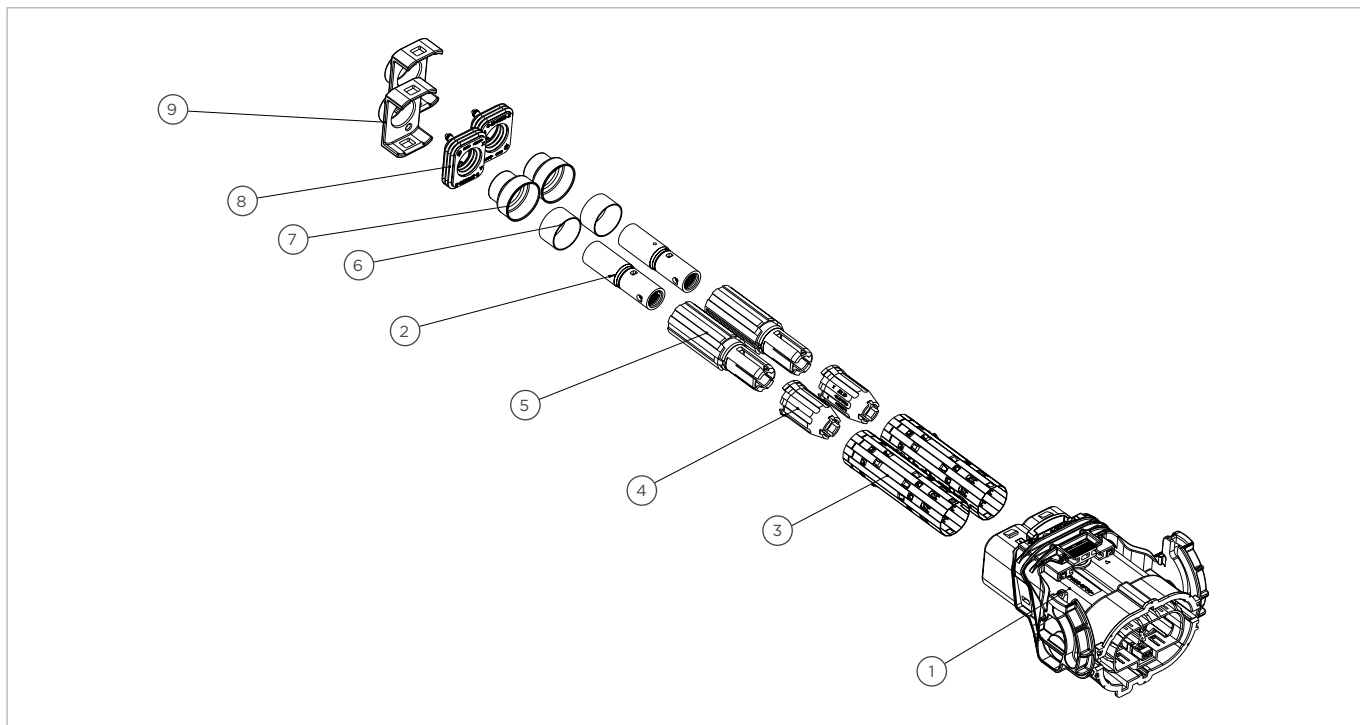


AMP+ High Current Connectors and Headers

AMP+ HVP 800

Kit Number **YH800-2p-180-50m-B**

AMP+ HVP 800



AMP+ HVP 800 CONNECTOR SERIES

Position	2
Cable Size	50 mm ²
Connector Orientation	180°
Wire Type	Individually Shielded
HVIL	Bridge in the connector
Key Coding	B
Validated Cables	Coroplast 9-2611
Application Specification	114-94130
Product Specification	108-94297
Mating Header PN	2141227-2

BILL OF MATERIALS

Item No	Part Number	Description	Quantity
①	1-2177053-3	2Pos, Rec Hsg 180° Assy, Key B	1
②	2208608-3	Stamped contact, 50 mm ² , 180°, Assy	2
③	2177060-3	Shielding Sleeve, 180°	2
④	2177059-1	Finger Protection Cap, 180°	2
⑤	2177058-1	Insulation insert, 180°	2
⑥	2177061-2	Inner crimp ferrule, 180°	2
⑦	2177090-1	Shield crimp ferrule, 180°	2
⑧	2141156-1	Single wire seal	2
⑨	2141155-1	Cover, seal	2

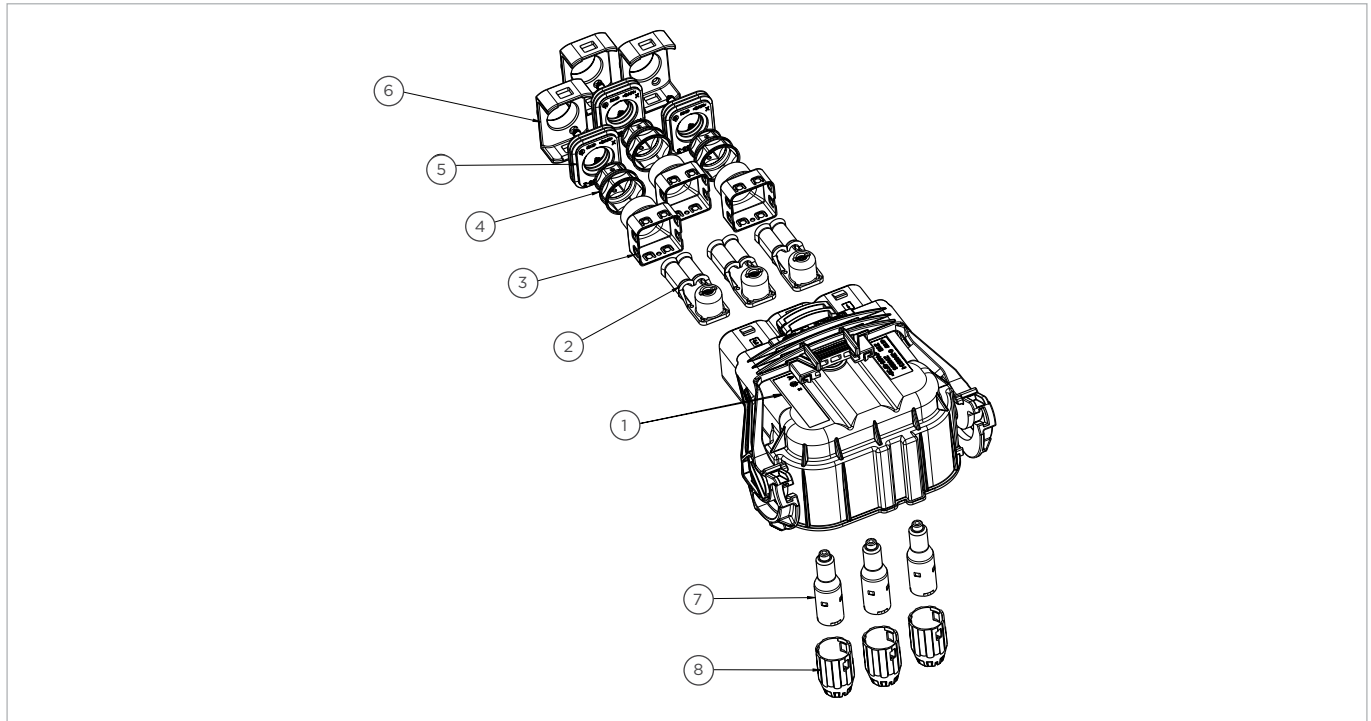


AMP+ High Current Connectors and Headers

AMP+ HVP 800

Kit Number **YHV800-3p-90-50m-A**

AMP+ HVP 800



AMP+ HVP 800 CONNECTOR SERIES

Position	3
Cable Size	50 mm ²
Connector Orientation	90°
Wire Type	Individually Shielded
HVIL	Bridge in the connector
Key Coding	A
Validated Cables	Coroplast 9-2611
Application Specification	114-94052
Product Specification	108-94268
Mating Header PN	2141230-1

BILL OF MATERIALS

Item No	Part Number	Description	Quantity
①	1-2141166-1	3 Pos, Rec Hsg 90° Assy, Key A	1
②	2141211-2	Deep drawn socket, 90°, Assy	3
③	9-2141158-2	Shielding Sleeve, 90°	3
④	9-2141157-1	Shield crimp ferrule, 90°	3
⑤	2141156-1	Single wire seal	3
⑥	2141155-1	Cover, seal	3
⑦	2141212-1	Deep drawn socket, Pin 90°, Assy	3
⑧	2141159-1	Finger Protection Cap	3

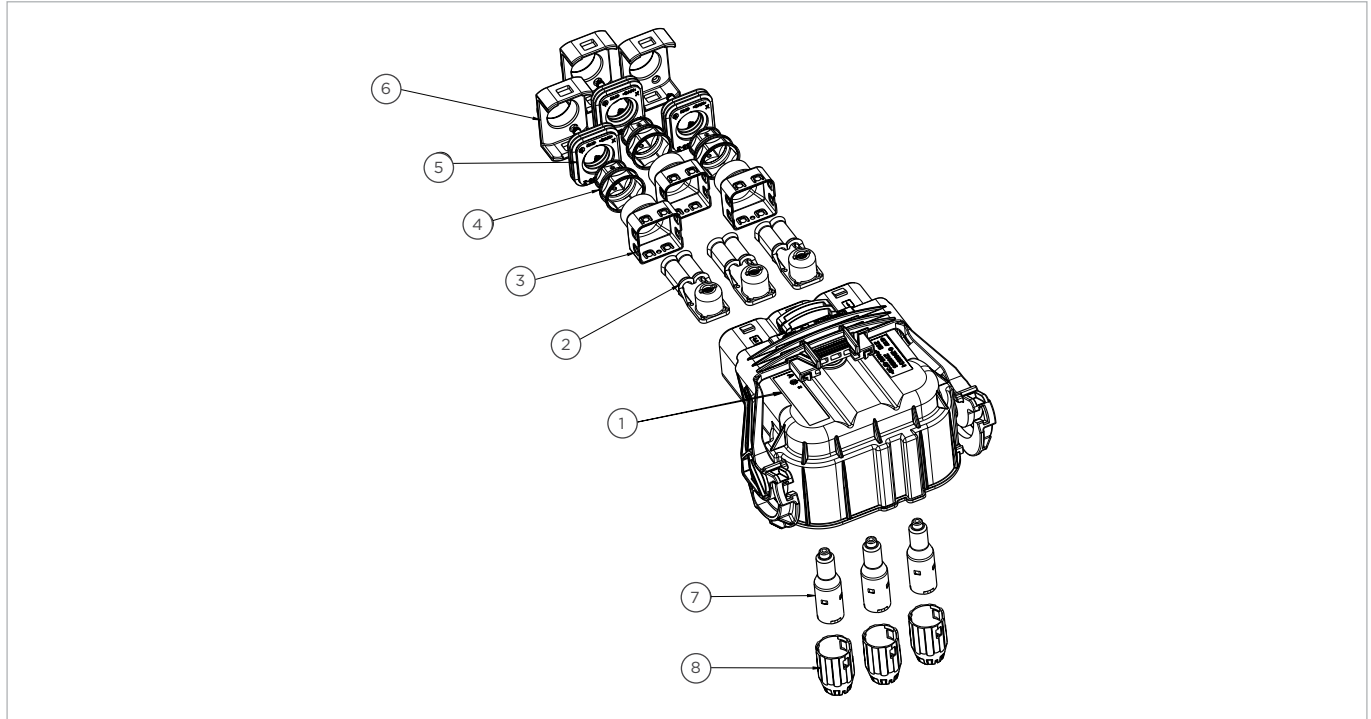


AMP+ High Current Connectors and Headers

AMP+ HVP 800

Kit Number **YHV800-3p-90-50m-B**

AMP+ HVP 800



AMP+ HVP 800 CONNECTOR SERIES

Position	3
Cable Size	50 mm ²
Connector Orientation	90°
Wire Type	Individually Shielded
HVIL	Bridge in the connector
Key Coding	B
Validated Cables	Coroplast 9-2611
Application Specification	114-94052
Product Specification	108-94268
Mating Header PN	2141230-2

BILL OF MATERIALS

Item No	Part Number	Description	Quantity
①	1-2141166-2	3 Pos, Rec Hsg 90° Assy, Key B	1
②	2141211-2	Deep drawn socket, 90°, Assy	3
③	9-2141158-2	Shielding Sleeve, 90°	3
④	9-2141157-1	Shield crimp ferrule, 90°	3
⑤	2141156-1	Single wire seal	3
⑥	2141155-1	Cover, seal	3
⑦	2141212-1	Deep drawn socket, Pin 90°, Assy	3
⑧	2141159-1	Finger Protection Cap	3

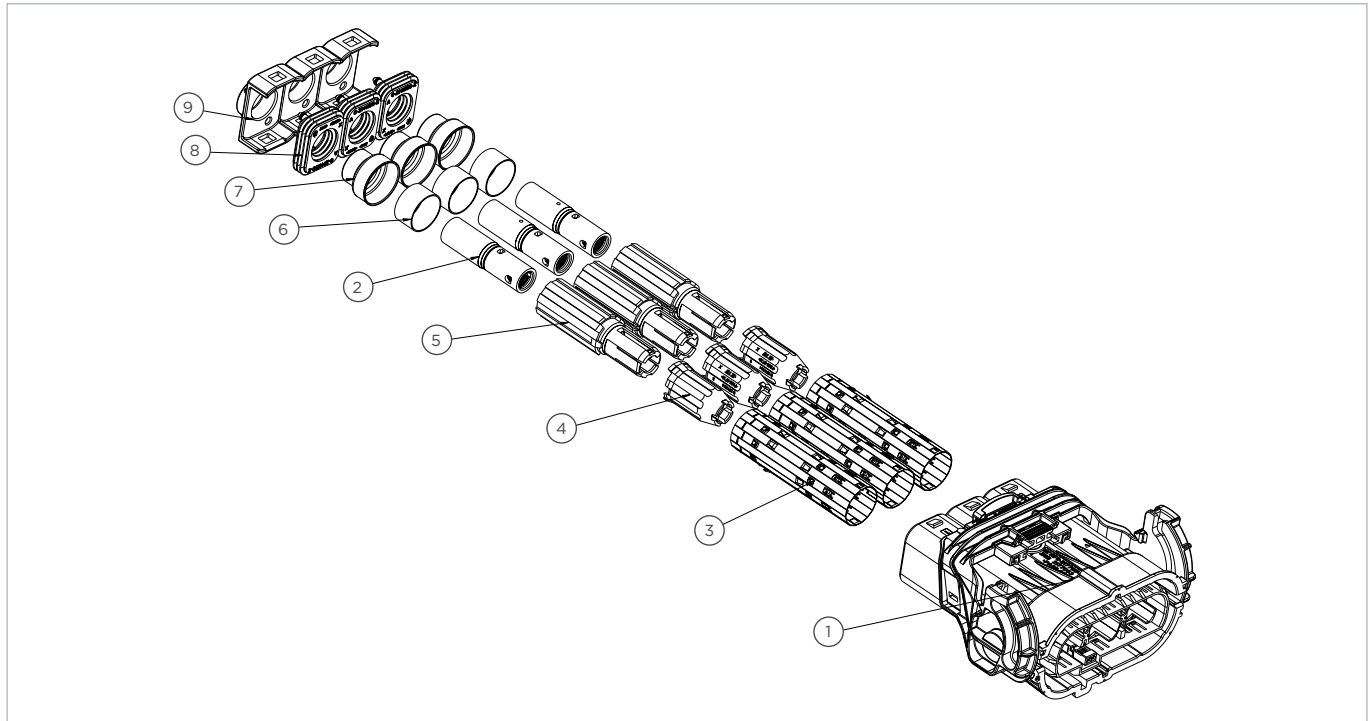


AMP+ High Current Connectors and Headers

AMP+ HVP 800

Kit Number **YH800-3p-180-50m-A**

AMP+ HVP 800



AMP+ HVP 800 CONNECTOR SERIES

Position	3
Cable Size	50 mm ²
Connector Orientation	180°
Wire Type	Individually Shielded
HVIL	Bridge in the connector
Key Coding	A
Validated Cables	Coroplast 9-2611
Application Specification	114-94130
Product Specification	108-94297
Mating Header PN	2141230-1

BILL OF MATERIALS

Item No	Part Number	Description	Quantity
①	1-2177063-1	3 Pos, Rec Hsg 180° Assy, Key A	1
②	2208608-3	Stamped contact, 50 mm ² , 180°, Assy	3
③	2177060-3	Shielding Sleeve, 180°	3
④	2177059-1	Finger Protection Cap, 180°	3
⑤	2177058-1	Insulation insert, 180°	3
⑥	2177061-2	Inner crimp ferrule, 180°	3
⑦	2177090-1	Shield crimp ferrule, 180°	3
⑧	2141156-1	Single wire seal	3
⑨	2141155-1	Cover, seal	3

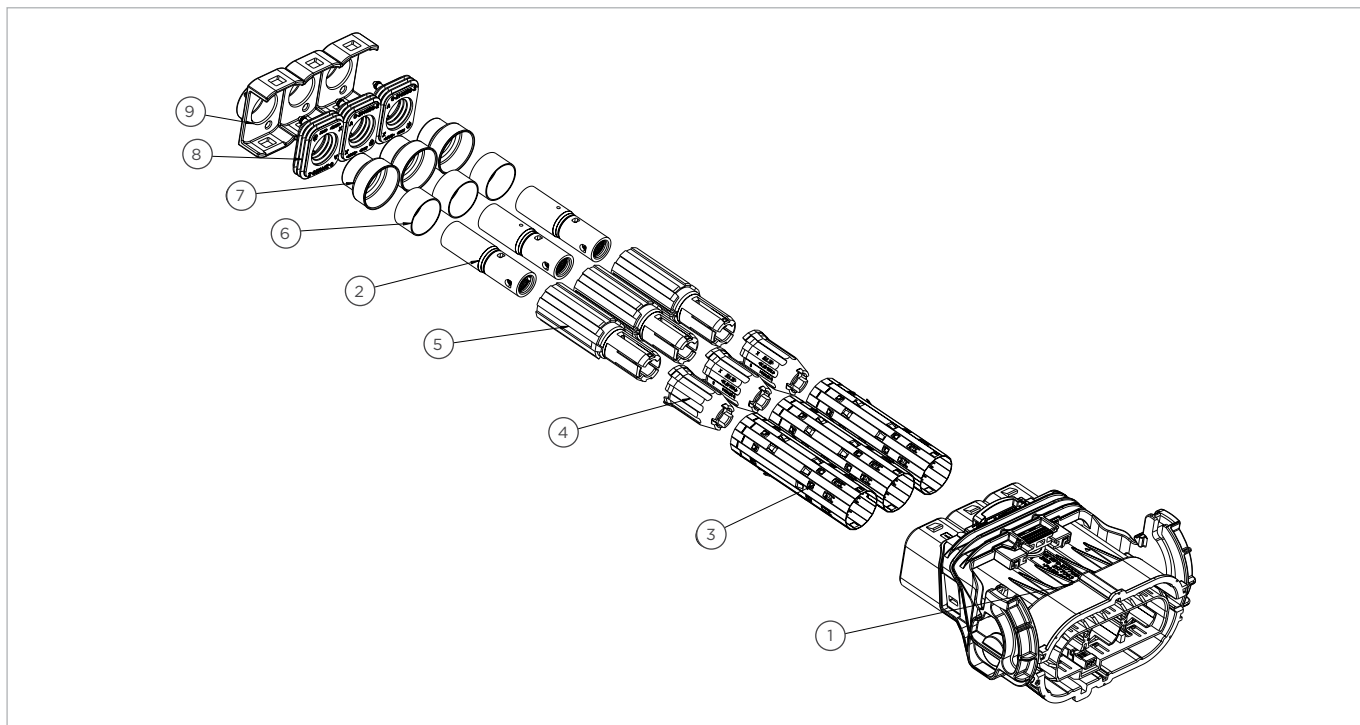


AMP+ High Current Connectors and Headers

AMP+ HVP 800

Kit Number **YH800-3p-180-50m-B**

AMP+ HVP 800



AMP+ HVP 800 CONNECTOR SERIES

Position	3
Cable Size	50 mm ²
Connector Orientation	180°
Wire Type	Individually Shielded
HVIL	Bridge in the connector
Key Coding	B
Validated Cables	Coroplast 9-2611
Application Specification	114-94130
Product Specification	108-94297
Mating Header PN	2141230-2

BILL OF MATERIALS

Item No	Part Number	Description	Quantity
①	1-2177063-3	3 Pos, Rec Hsg 180° Assy, Key B	1
②	2208608-3	Stamped contact, 50 mm ² , 180°, Assy	3
③	2177060-3	Shielding Sleeve, 180°	3
④	2177059-1	Finger Protection Cap, 180°	3
⑤	2177058-1	Insulation insert, 180°	3
⑥	2177061-2	Inner crimp ferrule, 180°	3
⑦	2177090-1	Shield crimp ferrule, 180°	3
⑧	2141156-1	Single wire seal	3
⑨	2141155-1	Cover, seal	3

ABOUT TE CONNECTIVITY

TE Connectivity is a global industrial technology leader creating a safer, sustainable, productive, and connected future. Our broad range of connectivity and sensor solutions, proven in the harshest environments, enable advancements in transportation, industrial applications, medical technology, energy, data communications, and the home. With more than 85,000 employees, including over 8,000 engineers, working alongside customers in approximately 140 countries, TE ensures that EVERY CONNECTION COUNTS. Learn more at www.te.com and on LinkedIn, Facebook, WeChat and Twitter.

LET'S CONNECT

We make it easy to connect with our experts and are ready to provide all the support you need. For additional information or product assistance, please contact your field representative or our customer service department. Additional information is also available on the website te.com/ict.

TECHNICAL SUPPORT

www.te.com/support

United States +1 800 522 6752

Germany +49 6151 607 1999

China +86 400 820 6015

Japan +81 44 844 8052

te.com/HIVONEX

AMP+, AMP MCP, HC-STAK, HIVONEX, MQS, TE Connectivity, TE, TE connectivity (logo), and EVERY CONNECTION COUNTS are trademarks owned or licensed by the TE Connectivity Ltd. family of companies.

Huber+Suhner, Leoni, Coroplast, Kromberg & Schubert, Gebauer & Griller, HEW-KABEL are trademarks.

All other logos, products and/or company names referred to herein might be trademarks of their respective owners.

The information given herein, including drawings, illustrations and schematics which are intended for illustration purposes only, is believed to be reliable. However, TE Connectivity makes no warranties as to its accuracy or completeness and disclaims any liability in connection with its use. TE Connectivity's obligations shall only be as set forth in TE Connectivity's Standard Terms and Conditions of Sale for this product and in no case will TE Connectivity be liable for any incidental, indirect or consequential damages arising out of the sale, resale, use or misuse of the product. Users of TE Connectivity products should make their own evaluation to determine the suitability of each such product for the specific application.

© 2023 TE Connectivity Corporation. All Rights Reserved.

3-1773983-4 | Revision 05-2023

TE Connectivity

4849 Hempstead Station Drive
Kettering, OH 45429
USA