

# UNSEALED INTERCONNECTION SYSTEM

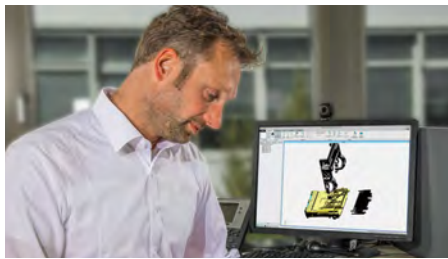
FOR INDUSTRIAL & COMMERCIAL TRANSPORTATION

TERMINALS AND CONNECTORS





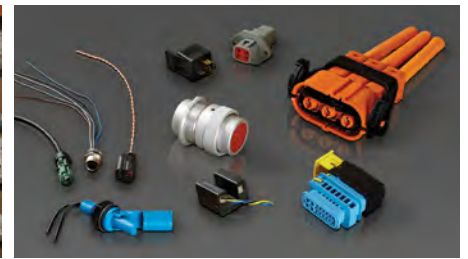
TE Connectivity (TE) Industrial & Commercial Transportation is a reliable provider of solutions for even the harshest environment. With a focus on employee expertise and durable products, we deliver the solutions and support our customers can count on.



**2,000+  
Employees**



**10,000+  
Customers**



**20,000+  
Different Parts**

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, fuel-efficient engines, 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 hybrid electric mobility solutions. These solutions 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:



Motors and Gearboxes



ABS/EBS Brake Units



Telematics Units



Sensors



Wire-To-Wire Coupling at the Chassis



Infotainment Applications

## MARKETS WE SERVE



**ON-HIGHWAY**



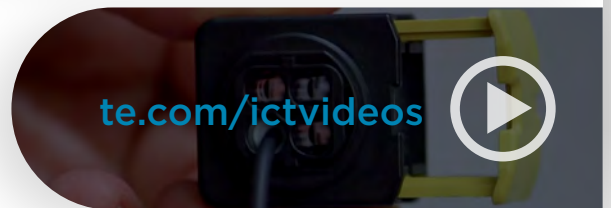
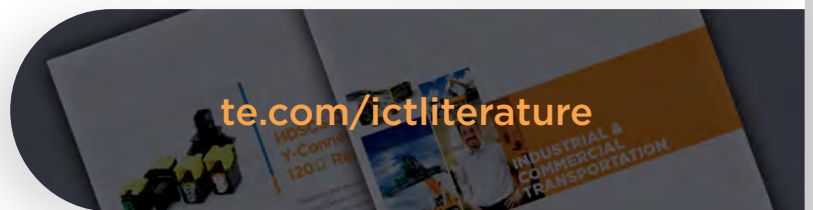
**OFF-HIGHWAY**



**RECREATIONAL  
TRANSPORTATION**

## ONLINE RESOURCES

To learn more about TE Connectivity Industrial & Commercial Transportation, its products, and their corresponding documents and videos, please check out the following pages on TE.com:



## SOLUTIONS CENTER

You can rely on TE Connectivity's PIC team to provide support for answers to your general information or technical questions in an efficient and effective manner.

Connect with our PIC staff at:

**te.com/support**

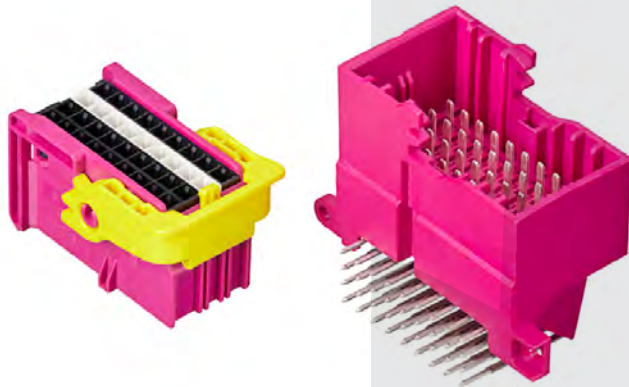




# UNSEALED INTERCONNECTION SYSTEM

## FOR INDUSTRIAL & COMMERCIAL TRANSPORTATION

TE Connectivity's Unsealed Interconnection System for Industrial & Commercial Transportation is the ideal solution for customers in search of unsealed, rugged and flexible connectors - specifically designed for inside-cabin, bulkhead and control-unit applications of on- and off-road vehicles. Adopting TE's field proven AMP MCP 1.5K, 2.8 & 9.5 contacts and - the newest addition - the PCON 12 terminals, this series ensures complete flexibility with the option to choose between 1-36 position connectors. Featuring flame retardant UL94 V-0 material alternatives, wire sizes of up to 16mm<sup>2</sup> and a reduced mating force of the 18 position monoblock connector, these products can also be used for vibration at cabin level as well as high power applications - providing the ultimate safety and reliability, alongside overall cost-effectiveness.



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# UNSEALED INTERCONNECTION SYSTEM

## BENEFITS

- Enable design flexibility with a broad range of unsealed, rugged and flexible connectors and a product offering of between 1 -36 positions
- Offer additional security with flame retardant V-0 material options (18P monoblock connector and 1P 90° unsealed connector using PCON 12 terminals)
- Facilitate contact alignment with integrated and separate secondary locking features
- Help prevent mismatch with up to 6-polarization and color key mating configurations available
- Reduce mating force below 75N with new design of the 18P monoblock connector including lever
- Ensure high reliability for long term use with vibration resistance for cabin

## KEY INDUSTRIES

The Unsealed Interconnection System can be utilized in trucks and buses, as well as construction, agriculture, and two-, three- and four-wheel ATV/UTV vehicles.



Truck



Bus



Agriculture



Construction



ATV/UTV

## APPLICATIONS

The Unsealed Interconnection System operates in wire-to-wire, wire-to-board, control unit, bulkhead, in-cabin and fuse & relay box applications.



Wire-To-Wire



Wire-To-Board



Control Unit



Bulkhead



In-Cabin



Fuse and Relay Boxes

**PRODUCT DOCUMENTATION**

Additional product documentation is available for assistance with the Unsealed Interconnection System. The following documentation may be helpful:

CATEGORY	CUSTOMER DRAWINGS	DOCUMENT
AMP MCP 2.8 6-21P	Group Drawing for 6-21P Receptacle Housings	1355073
	Group Drawing for 6-21P Tab Housings	1355072
	Group Drawing for 6-21P Tab Headers	966140
	Group Drawing for AMP MCP 2.8 Contacts Receptacle	1355036
	Group Drawing for AMP MCP 2.8 Contacts Tab	1355052
	Interface Drawing for 6-21P Connectors	114-18085-025
AMP MCP 1.5K+2.8 25P	Customer Drawing for 25P Receptacle Housings	1718484
	Customer Drawing for 25P Tab Housings	2112890
	Group Drawing for AMP MCP 2.8 Contacts Receptacle	1355036
	Group Drawing for AMP MCP 2.8 Contacts Tab	1355052
	Group Drawing for AMP MCP 1.5K Contacts Receptacle	1241436
	Group Drawing for AMP MCP 1.5K Contacts Tab	1355055
AMP MCP 1.5K 36P	Interface Drawing for 25P Connector	114-18721
	Customer Drawing for 36P Receptacle Housings	1718485
	Customer Drawing for 36P Tab Housings	2112891
	Customer Drawing for 36P Tab Headers	2236715
	Customer Drawing for 9P Inserts	1718490
	Customer Drawing for 18P Inserts	1718489
	Group Drawing for AMP MCP 1.5K Contacts Receptacle	1241436
AMP MCP 9.5 2P	Group Drawing for AMP MCP 1.5K Contacts Tab	1355055
	Interface Drawing for 36P Connectors	114-18664
	Customer Drawing for 2P AMP MCP 9.5 Receptacle Housings	1355289
	Customer Drawing for 2P AMP MCP 9.5 Tab Housings	1355290
	Group Drawing for AMP MCP 9.5 Contacts Receptacle	1355037
AMP MCP 2.8 18P Monoblock	Group Drawing for AMP MCP 9.5 Contacts Tab	2287475
	Interface Drawing for 2P 9.5 AMP MCP Connectors	114-18327-001
	Customer Drawing for 18P Monoblock Receptacle Housings	2322190
	Customer Drawing for 18P Monoblock Tab Housings	2322192
1P Using PCON 12 Terminals	Group Drawing for AMP MCP 2.8 Contacts Receptacle	1355036
	Group Drawing for AMP MCP 2.8 Contacts Tab	1355052
	Customer Drawing for 1P 90° Unsealed Connector Using PCON 12 Terminals Receptacle Housings	2308295
AMP MCP 2.8 6-21P	Customer Drawing for 1P 90° Unsealed Connector Using PCON 12 Terminals Receptacle	2840573
	Interface Drawing for 1P 90° Unsealed Connector Using PCON 12 Terminals	208-18000

CATEGORY	SPECIFICATIONS	DOCUMENT
AMP MCP 2.8 6-21P	Application Specification for 6-21P Receptacle/Tab Housings	114-94624
	Product Specification for 6-21P Receptacle Housings	108-18619-3
	Product Specification for Potential Distribution (2x9,21)	108-18879
AMP MCP 1.5K+2.8 25P/36P	Application Specification for 25/36P	114-18663
	Product Specification for 25/36P	108-18957
AMP MCP 2.8 18P Monoblock	Application Specification for 18P Monoblock	114-94610
	Product Specification for 18P Monoblock	108-94718
1P Using PCON 12 Terminals	Application Specification for 1P 90° Unsealed Connector Using PCON 12 Terminals Receptacle Housings	114-94414
	Product Specification for 1P 90° Unsealed Connector Using PCON 12 Terminals Receptacle Housings	108-94551

# UNSEALED AMP MCP 2.8 CONNECTORS



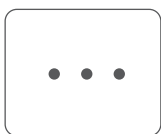
## TECHNICAL INFORMATION

No. of Positions:	3–21 Positions
Housing Material	PA66 (TAB) / PBT (REC)
Wire Size Range	2.5 mm <sup>2</sup> FLR Max. 4.0 mm <sup>2</sup> FLR Max. (3 Pos. only)
Temperature	-40°C to +120°C
Protection	IP 30
Flammability	UL 94 HB

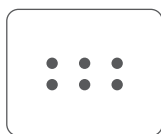
## PRODUCT SPECIFICATIONS

- Polarized to prevent improper mating
- Integrated and separate secondary lock confirms contact alignment and retention
- Mechanical and color keyed
- Up to 6 codings available for receptacle and tab housings
- In-line, bulkhead, PCB mount options
- AMP MCP 2.8 connectors for potential distribution are available

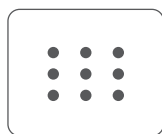
## CONFIGURATION



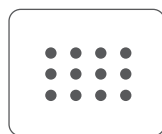
**3 Positions**  
3\*2.8



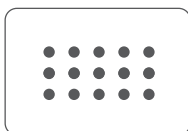
**6 Positions**  
6\*2.8



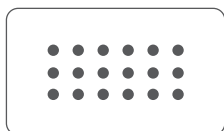
**9 Positions**  
9\*2.8



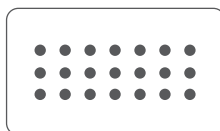
**12 Positions**  
12\*2.8



**15 Positions**  
15\*2.8



**18 Positions**  
18\*2.8



**21 Positions**  
21\*2.8



## ORDERING INFORMATION

### UNSEALED AMP MCP 2.8 CONNECTORS

No. of Positions	Keying Options	Housing Color	Part Number		
			Receptacle Housing	Mating Tab Housing	Mating PCB Header Right-Angle
3	A	Black	1-968976-9	1-968977-9	For detailed information please check Page 16 Unsealed AMP MCP 2.8 90° Headers
6		Blue**	8-968970-1	1-965641-1*	
9		Yellow**	8-968971-1	1-967626-1*	
12		Green**	8-968972-1	1-967627-1*	
15		Violet**	8-968973-1	1-967628-1*	
18		Gray	8-968974-1	1-967629-1*	
21		Brown**	8-968975-1	1-967630-1*	
3	B	Gray	2-968976-9	2-968977-9	
6		Natural	7-968970-1	2-965641-1	
9		Natural	7-968971-1	2-967626-1	
12		Natural	7-968972-1	2-967627-1	
15		Natural	7-968973-1	2-967628-1	
18		Natural	7-968974-1	-	
21		Natural	7-968975-1	2-967630-1	
3	C	Blue	3-968976-9	3-968977-9	
6		Blue	6-968970-1	3-965641-1	
9		Blue	6-968971-1	3-967626-1	
12		Blue	6-968972-1	3-967627-1	
15		Blue	6-968973-1	3-967628-1	
18		Blue	6-968974-1	-	
21		Blue	6-968975-1	3-967630-1	
6	D	Violet	5-968970-1	4-965641-1	
9		Violet	5-968971-1	4-967626-1	
12		Violet	5-968972-1	4-967627-1	
15		Violet	5-968973-1	4-967628-1	
18		Violet	5-968974-1	-	
6	E	Green	4-968970-1	5-965641-1	
12		Green	4-968972-1	5-967627-1	
18		Green	4-968974-1	5-967629-1	
21		Green	4-968975-1	5-967630-1	
6	F	Orange	9-968970-2	6-965641-1	
12		Orange	9-968972-2	6-967627-1	
18		Orange	9-968974-2	6-967629-1	
21		Orange	9-968975-2	6-967630-1	

\*Other colors available. See Product Group Drawing 1355072.

\*\*Other colors available. See Product Group Drawing 1355073

### UNSEALED AMP MCP 2.8 CONNECTORS FOR POTENTIAL DISTRIBUTION

No. of Positions	Keying Options	Housing Color	Part Number	
			Tab Housing	Mating Receptacle Housing
21	A	Brown	1-1394765-1	8-968975-1
	B	Natural	2-1394765-1	7-968975-1
2x9	B	Natural	2-1394766-1	7-968975-1
	C	Blue	3-1394766-1	6-968975-1
2x9 120Ω	C	Blue	3-1394766-2	6-968975-1
21	A	Brown	1534188-1	8-968975-1

# UNSEALED AMP MCP 1.5K & 2.8 CONNECTORS



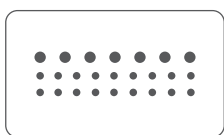
## TECHNICAL INFORMATION

No. of Positions:	25 Positions
Housing Material	PBT/ASA-GF30
Wire Size Range (with Receptacle Insert)	1718488-1 2.5 mm <sup>2</sup> FLR Max. (7x). 1718488-1 2.5 mm <sup>2</sup> FLR Max. (7x)
Temperature	-40°C to +120°C
Protection	IP 30
Flammability	UL 94 HB

## PRODUCT SPECIFICATIONS

- Polarized to prevent improper mating
- Mechanical and color keyed
- Integrated secondary lock confirms contact alignment and retention
- Several keyings available for receptacle and tab housings
- Lever mechanism for higher pin counts
- Vibration resistance at cabin level

## CONFIGURATION



**25 Positions**  
18\*1.5k + 7\*2.8



## ORDERING INFORMATION

Part Number						
No. of Positions	Keying Options	Housing Color	Carrier with Lever	7 Position Insert	18 Position Insert	Mating Tab Housing
25	A	Black	1-1718484-1	1718488-1	1718489-1	1-2112890-1
	B	Gray	1-1718484-2			1-2112890-2
	C	Light Blue	1-1718484-3			1-2112890-3
	D	Yellow Green	1-1718484-4			1-2112890-4

# UNSEALED AMP MCP 1.5K CONNECTORS



## TECHNICAL INFORMATION

No. of Positions: 36 Positions

Housing Material: PBT/ASA-GF30

Wire Size Range: 1.5 mm<sup>2</sup> FLR Max. (With Receptacle Insert)  
Part No. 1718489 and Part No. 1718490

Temperature: -40°C to +120°C

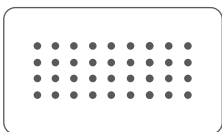
Protection: IP 30

Flammability: UL 94 HB

## PRODUCT SPECIFICATIONS

- Polarized to prevent improper mating
- Mechanical and color keyed
- Integrated secondary lock confirms contact alignment and retention
- Several keyings available for receptacle and tab housings
- Lever mechanism for higher pin counts
- Vibration resistance at cabin level
- Options for in-line, bulkhead and PCB mounts

## CONFIGURATION



36 Positions  
36\*1.5K



## ORDERING INFORMATION

### Part Number

No. of Positions	Keying Options	Housing Color	Carrier with Lever	9 Position Insert Key A	9 Position Insert Key B	18 Position Insert	Mating Tab Housing	Mating Tab Header
36	A	Brown	1-1718485-1	1718490-1	1718490-2	1718489-1	1-2112891-1	1-2236715-1
	B	Purple	1-1718485-2				1-2112891-2	1-2236715-2
	C	Green	1-1718485-3				1-2112891-3	*
	D	Blue	1-1718485-4				1-2112891-4	*
	E	Gray	1-1718485-5				1-2112891-5	-
	F	Orange	1-1718485-6				1-2112891-6	-

\*On request.

# UNSEALED AMP MCP 9.5 2 POSITION CONNECTORS



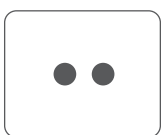
## TECHNICAL INFORMATION

No. of Positions:	2 Positions
Housing Material	PA66 GF13
Wire Size Range	10mm <sup>2</sup> FLK Max
Temperature	-40°C to +120°C
Protection	IP 30
Flammability	UL 94 HB

## PRODUCT SPECIFICATIONS

- Polarized to prevent improper mating
- Mechanical and color keyed
- Integrated secondary lock confirms contact alignment and retention
- Several keyings available for receptacle and tab housings
- For power applications

## CONFIGURATION

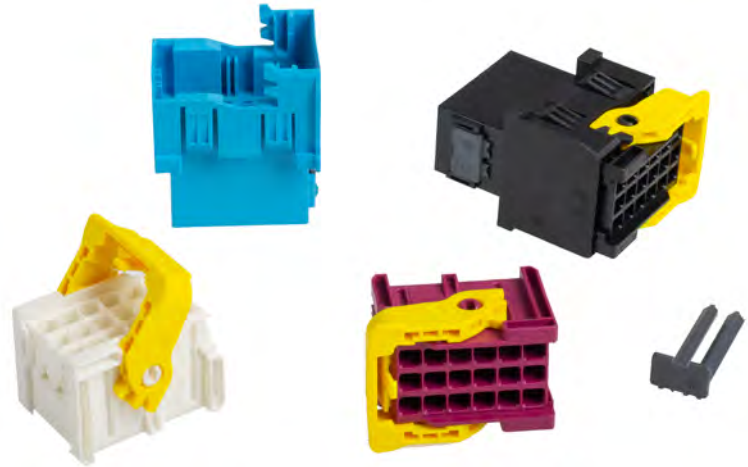


**2 Positions**  
2\*9.5

## ORDERING INFORMATION

No. of Positions	Keying Options	Housing Color	Part Number	
			Receptacle Housing	Mating Tab Housing
2	A	Black	1355289-1	1355290-1
	B	Gray	1355289-2	1355290-5
	C	Blue	1355289-3	1355290-6

# UNSEALED AMP MCP 2.8 18P MONOBLOCK CONNECTORS



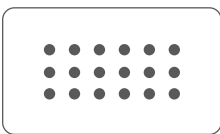
## TECHNICAL INFORMATION

No. of Positions:	18 Positions
Housing Material	PBT GF20
Wire Size Range	0.75mm <sup>2</sup> - 2.5mm <sup>2</sup>
Temperature	-40°C to +105°C
Protection	IP 30
Flammability	UL 94 V-0

## PRODUCT SPECIFICATIONS

- Requires a secondary lock to aid with contact alignment
- Reduced mating force below 75 N
- 4 color-coding options available to reduce improper mating
- Fits in existing bulkhead cut-outs and therefore no design changes are needed
- Made out of flame-retardant UL 94 V-0 material for additional safety inside the cabin

## CONFIGURATION



**18 Positions**  
18\*2.8

## ORDERING INFORMATION

No. of Positions	Keying Options	Housing Color	Part Number		
			Receptacle Housing	Mating Tab Housing	Secondary Locking Device
18	A	Black	1-2322190-1	1-2322192-1	967634-1
	B	White	2-2322190-1	2-2322192-1	
	C	Blue	3-2322190-1	3-2322192-1	
	D	Violet	4-2322190-1	4-2322192-1	



# ONE-POSITION 90° UNSEALED CONNECTOR USING PCON 12 TERMINALS



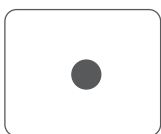
## TECHNICAL INFORMATION

No. of Positions:	1 Position
Housing Material	PBT GF10
Wire Size Range	5mm <sup>2</sup> - 16mm <sup>2</sup>
Temperature	-40°C to +105°C
Protection	IP 20
Flammability	UL 94 V-0
Voltage	Up to 60 V DC

## PRODUCT SPECIFICATIONS

- 90° cable exit configuration accommodates tight spaces
- Supports one-position power connections for ICT
- Perfect for in-cabin, bulkhead and control unit applications
- Positive and negative ratings on the connectors

## CONFIGURATION



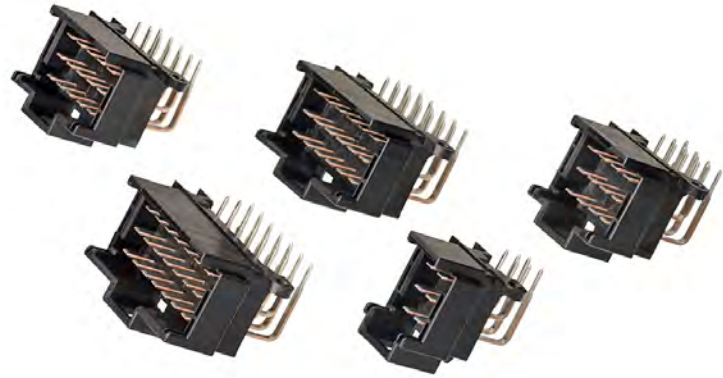
**1 Positions**  
1\*PCON 12

## ORDERING INFORMATION

No. of Positions	Keying Options	Housing Color	Part Number	
			Receptacle Housing	Mating Tab Housing
1	A	Red	1-2308295-1	-
	B	Violet	2-2308295-1	-
	C	Black	3-2308295-1	-

\*Mating Tab Housing can be developed on request

# UNSEALED AMP MCP 2.8 90° HEADERS



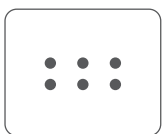
## TECHNICAL INFORMATION

No. of Positions:	6-21 Positions
Housing Material	PBT GF20
Mounting Orientation	Horizontal/90°
Termination Method	Through Hole - Solder
Tab Material	Tin/Silver Plated
Flammability	UL 94 HB

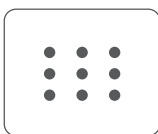
## PRODUCT SPECIFICATIONS

- Polarized to prevent improper mating
- Mechanical keyed
- Available in different codings
- PCB mounting option with 90° Pins

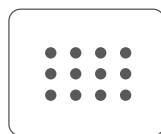
## CONFIGURATION



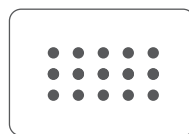
**6 Positions**  
6\*2.8



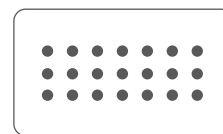
**9 Positions**  
9\*2.8



**12 Positions**  
12\*2.8



**15 Positions**  
15\*2.8



**21 Positions**  
21\*2.8

# UNSEALED AMP MCP 2.8 90° HEADERS

## ORDERING INFORMATION

	Number of positions	Header PN	Coding Header	Colour Housing	AMP MCP 2.8 Housing			
					Mating PN Housing	Coding Mating PN Housing	Colour Mating Housing	
CuSn4 Tin Plated	6	966140-5	A	BLACK	8-968970-1	A	BLUE	
		9-966140-5			8-968970-2		GREY	
	9	966140-4	A	BLACK	8-968971-1	A	YELLOW	
		9-966140-4			8-968971-2		GREY	
	12	966140-3	A	BLACK	8-968972-1	A	GREEN	
		9-966140-3			8-968972-2		GREY	
	15	966140-2	A	BLACK	8-968973-1	A	PURPLE	
		9-966140-2			8-968973-2		GREY	
	18	966140-1	A	BLACK	8-968974-1	A	GREY	
		9-966140-1						
	21	966140-6	A	BLACK	8-968975-1	A	BROWN	
		9-966140-6			8-968975-2		GREY	
	12	1-966140-3	B	NATURAL	7-968973-1	B	NATURAL	
		8-966140-3						
21	1-966140-6	B	NATURAL	7-968975-1	B	NATURAL		
	8-966140-6							
CuSn4 Silver Plated	6	3-966140-5	A	BLACK	8-968970-1	A	BLUE	
		6-966140-5			8-968970-2		GREY	
	9	3-966140-4	A	BLACK	8-968971-1	A	YELLOW	
		6-966140-4			8-968971-2		GREY	
	12	3-966140-3	A	BLACK	8-968972-1	A	GREEN	
		6-966140-3			8-968972-2		GREY	
	15	3-966140-2	A	BLACK	8-968973-1	A	PURPLE	
		6-966140-2			8-968973-2		GREY	
	18	3-966140-1	A	BLACK	8-968974-1	A	GREY	
		6-966140-1						
	21	3-966140-6	A	BLACK	8-968975-1	A	BROWN	
		6-966140-6			8-968975-2		GREY	
	CuSn0,15 Silver Plated	21	4-966140-6	B	NATURAL	7-968975-1	B	NATURAL
			5-966140-6					

# UNSEALED AMP MCP 1.5K 90° HEADERS



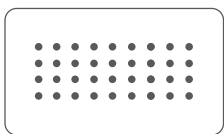
## TECHNICAL INFORMATION

No. of Positions:	36 Positions
Housing Material	PBT GF20
Mounting Orientation	Horizontal/90°
Termination Method	Through Hole - Solder
Tab Material	Tin/Silver Plated
Flammability	UL 94 HB
Voltage	Up to 60 V DC

## PRODUCT SPECIFICATIONS

- Polarized to prevent improper mating
- Mechanical keyed
- Available in different codings
- PCB mounting option with 90° Pins

## CONFIGURATION



**36 Positions**  
36\*1.5K

## ORDERING INFORMATION

No. of Positions	Housing Color	Header Right-Angle	Part Number			
			9 Position Insert Key A	9 Position Insert Key B	18 Position Insert	Carrier
36	Brown	1-2236715-1	1718490-1	1718490-2	1718489-1	1-1718485-1
	Purple	1-2236715-2				1-1718485-2

## AMP MCP ACCESSORIES

Several accessory items are available to complement the Unsealed Interconnection System, including secondary locking and covers.

### SECONDARY LOCKING

#### ORDERING INFORMATION

Positions	Keying Color	Secondary Locking
6	Blue	968271-1
9	Yellow	967631-1
12	Green	967632-1
15	Purple	967633-1
18	Grey	967634-1
21	Brown	967635-1



### COVER

#### ORDERING INFORMATION

Positions	Keying Color	Cover
25/36	Black	2112286-1





# AMP MCP CONTACTS

High reliability, power connection for long term use. The AMP MCP Interconnection System is designed for electronic and electrical power applications in passenger cars and commercial vehicles as well as harsh environment off highway vehicle applications.



## AMP MCP CONTACTS PERFORMANCE SPECIFICATION

### Durability

10 cycles (tin)
50 cycles (silver)
100 cycles (gold)

### Current Rating

Contact Size	Max Current	Max. Wire Size
1.5K	Up to 20 A	1.5mm <sup>2</sup>
2.8	Up to 40 A	4.0mm <sup>2</sup>
9.5	Up to 80 A	10mm <sup>2</sup>

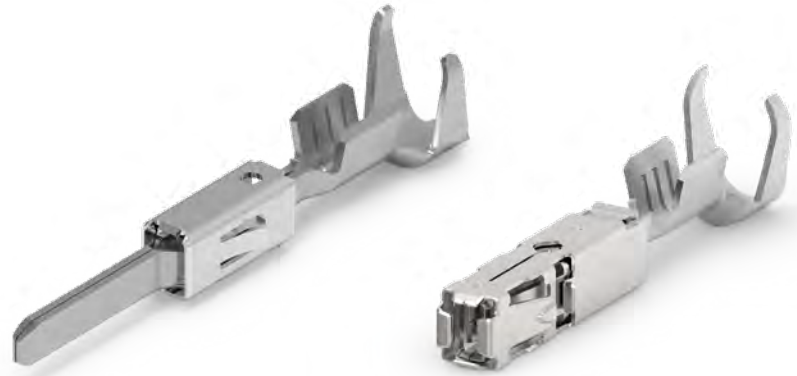
### Contact Retention

Contact Size	Min. Load
1.5K	40/60 N
2.8	80 N
9.5	150 N

### Crimp Tensile

Strength Contact Size	Tensile Strength
<b>1.5K</b>	
.22mm <sup>2</sup>	≥ 32 N
.35mm <sup>2</sup>	≥ 50 N
.50mm <sup>2</sup>	≥ 60 N
.75mm <sup>2</sup>	≥ 85 N
1.0mm <sup>2</sup>	≥ 108 N
1.25mm <sup>2</sup>	≥ 135 N (16 AWG)
1.5mm <sup>2</sup>	≥ 135 N
<b>2.8</b>	
.22mm <sup>2</sup>	≥ 28 N
.35mm <sup>2</sup>	≥ 50 N
.50mm <sup>2</sup>	≥ 60 N
.75mm <sup>2</sup>	≥ 85 N
1.0mm <sup>2</sup>	≥ 108 N
1.5mm <sup>2</sup>	≥ 150 N
2.5mm <sup>2</sup>	≥ 200 N
4.0mm <sup>2</sup>	≥ 310 N
<b>9.5</b>	
6.0mm <sup>2</sup>	350 N
10.0mm <sup>2</sup>	500 N

# AMP MCP CONTACTS



## AMP MCP 1.5K CONTACTS

Stamped & Formed Tabs and Receptacles

1.5K	Wire Size (mm <sup>2</sup> )	Insulation Diameter FLR (mm)	Strip Form Part Number	Applicator*	Finish Code	Hand Tool Complete	Extraction Tool Part Number
Receptacle Contacts	0.20-0.35	1.1-1.4	1564980	x-1530216-x	1-xxx-1/1-xxx-2/1-xxx-3	4-1579016-0	1-1579007-1
	0.5-1.0	1.4-2.1	1241374	x-1528195-x	1-xxx-1/1-xxx-2/1-xxx-3	539950-2	
	>1.0-1.5	2.2-2.4	1534334	x-1528312-x	1-xxx-1/1-xxx-3	5-1579001-3	
Tab Contacts	0.2-0.35	1.15-1.60	964265	x-1528091-x	xxx-2/xxx-3/xxx-5	169400-0, 539635-1	539960-1
	0.22-0.35	1.15-1.60	2141882	x-1528091-x	xxx-2/xxx-3	169400-0, 539635-1	
	0.5-1.0	1.4-2.1	964267	x-1528092-x	xxx-1 /xxx-2 /xxx-3 /xxx-4	169400-0, 539635-1	
	1.5	2.2-2.4	1241846	x-1528123-x	xxx-1/xxx-2	169400-0, 539635-1	

\*\*Double Crimp

### AMP MCP 1.5K Terminal Material and Finish Codes

1.5K	Finish Code	1-xxx-1	1-xxx-2	1-xxx-3		
Receptacle Contacts	Material	CuNiSi	CuNiSi	CuNiSi		
	Plating	Pre-tin Plated	Selective Gold Plated	Selective Silver Plated		
Tab Contacts	Finish Code	xxx-1	xxx-2	xxx-3	xxx-4	xxx-5
	Material	CuSn4	CuFe2	CuSn4	CuSn4	CuSn4
	Plating	Pre-tin Plated	Pre-tin Plated	Gold Plated	Selective Silver Plated	Selective Silver Plated

\*Other configurations available upon request. Please contact TE for additional information.

# AMP MCP CONTACTS



## AMP MCP 2.8 CONTACTS

Stamped & Formed Tabs and Receptacles

2.8	Wire Size (mm <sup>2</sup> )	Insulation Diameter FLR (mm)	Strip Form Part Number	Applicator	Material/Finish Codes	Hand Tool Complete	Extraction Tool Part Number
Receptacle Contacts	0.2-0.5	1.2-1.4	2141857	x-2836996-x	1-xxx-1 / 1-xxx-3	2363592-2	1-1579007-2
	0.5-1.0	1.4-2.1	968849	x-2151164-x	1-xxx-1 / 1-xxx-2 / 1-xxx-3	539722-2	
	1.0-2.5	2.2-3.0	968851	x-2151166-x	1-xxx-1 / 1-xxx-2 / 1-xxx-3	539723-2	
	2.5-4.0	3.0-3.7	968853	x-2151634-x	1-xxx-1/ 1-xxx-3	539723-2	
Tab Contacts	0.2-0.5	1.15-1.60	963860	2-878549-2	1-xxx-1/1-xxx-2/1-xxx-3 / 2-xxx-1/2-xxx-2	734538-1	1-1579007-6
	0.5-1.0	1.4-2.1	962841	2-878550-2	1-xxx-1/1-xxx-2/2-xxx-1	734417-1	
	1.0-2.5	2.2-3.0	962842	2-878551-2	1-xxx-1 / 1-xxx-2 / 1-xxx-3 / 2-xxx-1	734417-2	
	2.5-4.0	3.4-3.7	968946	2-541534-2	1-xxx-1 / 1-xxx-2 / 2-xxx-1 / 2-xxx-2	539635-1 / Matrize: 539723-2	

### AMP MCP 2.8 Terminal Material and Finish Codes

2.8	Finish Code	1-xxx-1	1-xxx-2	1-xxx-3		
Receptacle Contacts	Material	CuNiSi	CuNiSi	CuNiSi		
	Plating	Pre-tin Plated	Selective Gold Plated	Selective Silver Plated		
Tab Contacts	Finish Code	1-xxx-1	1-xxx-2	1-xxx-3	2-xxx-1	2-xxx-2
	Material	CuSn4	CuSn	CuSn	CuFe	CuFe
	Plating	Pre-tin Plated	Selective Silver Plated	Selective Gold Plated	Pre-tin Plated	Selective Silver Plated

\*Other configurations available upon request. Please contact TE for additional information.

# AMP MCP CONTACTS



## AMP MCP 9.5 CONTACTS

Stamped & Formed Tabs and Receptacles

9.5	Wire Size (mm <sup>2</sup> )	Insulation Diameter FLR (mm)	Strip Form Part Number	Applicator	Finish Codes	Hand Tool Complete	Extraction Tool Part Number
Receptacle Contacts	3.0-6.0	4.0-5.2	1719386 **	-	1-xxx-1	-	539971-1
	6.0-10.0	4.6-6.6	967588	on request	1-xxx-1 / 1-xxx-2	on request 539783-5 for 6 mm	
	6.0-10.0	4.6-6.6	1241930 **	on request	1-xxx-1	on request 539783-5 for 6 mm	
Tab Contacts	2.5-4.0	3.3-4.5	963764	on request	xxx-1 /xxx -2	734532-1	1-1579007-7
	4.0-6.0	4.0-5.2	963766	on request			
	6.0-10.0	4.6-6.6	963768	on request		734533-1	

\*\* FOR TAB 9.5 X 0.8 MM

## AMP MCP 9.5 Terminal Material and Finish Codes

9.5	Finish Code	1-xxx-1	1-xxx-2
	Material	CuNiSi	CuNiSi
Receptacle Contacts	Plating	Pre-tin Plated	Selective Silver Plated
	Finish Code	xxx-1	xxx-2
Tab Contacts	Material	CuSn	CuFe
	Plating	Pre-tin Plated	Pre-tin Plated

## PCON 12 TERMINALS

TE's PCON high-power contacts are specifically designed to support the increased connectivity requirements in high-voltage interconnection systems of hybrid and all-electric vehicles powertrain and auxiliary applications.



### PCON 12 TERMINALS PERFORMANCE SPECIFICATION

#### Durability

10 cycles
-----------

#### Current Rating

Contact Size	Max Current	Max. Wire Size
12	120A	16mm <sup>2</sup>

#### Contact Retention

Contact Size	Min. Load
12	150N

#### Crimp Tensile

Strength Contact Size	Tensile Strength
<b>PCON 12</b>	
5.0mm <sup>2</sup>	≥ 290 N
6.0mm <sup>2</sup>	≥ 320 N
8.0mm <sup>2</sup>	≥ 350 N
10mm <sup>2</sup>	≥ 450 N
12mm <sup>2</sup> -16mm <sup>2</sup>	≥ 600 N

### PCON 12 TERMINALS

Stamped & Formed Tabs and Receptacles

PCON 12	Wire Size (mm <sup>2</sup> )	Insulation Diameter FLR (mm)	Strip Form Part Number	Applicator	Finish Code	Insertion/Extraction Tool Part Number
Receptacle Contacts	5.0 - 8.0	N/A	2840573	2305470-1	xxx-1	8-1579028-2
	10.0 - 16.0	N/A	2840573		xxx-2	

#### PCON 12 Terminal Materials and Finish Code

PCON 12	Finish Code	1-xxx-1	1-xxx-2
Receptacle Contacts	Material	Cu	Cu
	Plating	Ag/Ni	Ag/Ni



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