



MICRO MATE-N-LOK CONNECTOR SYSTEM

Quick Reference Guide

The Micro MATE-N-LOK 3 mm connector system offers wire-to-wire and wire-to-board connections with contacts on a 3 mm (0.118) centerline and current ratings up to 5 Amps max. per line. Both single-row and dual-row configurations are available. Crimp, snap-in pin and receptacle contacts are used to terminate 30-18 (0.05-0.9 mm²) AWG wire with insulation diameters up to 1.52 mm. Plug and receptacle housings allow wire-to-wire and wire-to-panel configurations and header assemblies offer wire-to-board connections in vertical and right angle configurations. These IR reflow process compatible headers are available in through-hole and surface mount configurations with multiple board mount options.

FEATURES AND BENEFITS

- Wire-to-wire and wire-to-board pin and receptacle connector system
- Contacts are on 3 mm centerline spacing and are available in strip form or loose piece
- Panel mount or free-hanging versions
- Dual beam receptacle contact design for improved reliability
- PCB mount pin header assemblies available in both vertical and right angle styles and surface mount or through hole versions
- Available in low profile design (<4.7 mm)
- Discrete wire interconnect available in 2-12 position single row and 2-24 position dual row
- Housings available to accommodate 18 AWG wire in select circuits up to 6 position
- UL, CSA and VDE approved

PRODUCT APPLICATIONS

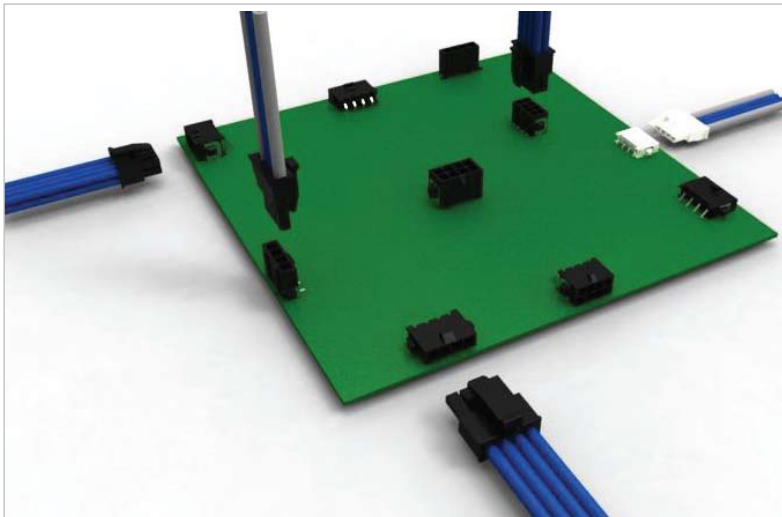
- Household appliances
- Lighting
- Factory automation
- Data storage
- Gaming
- Vending
- Garage door openers
- Security systems

CONTACTS

Wire Size Range AWG (mm ²)	Insulation Diameter Range	Receptacle	Pin	Contact Base Part No. (PN)		Plating			Application Tooling*	Hand Tool
				Strip Form	Loose Piece	Tin	15µ Gold	30µ Gold		
26-30 0.12-0.05	.035-.060 0.89-1.52	x	-	794607	794611	PN-1	1-PN-1	1-PN-2	2151142-1	91502-1
20-24 0.50-0.20	.035-.060 0.89-1.52	x	-	794606	794610	PN-1	1-PN-1	1-PN-2	2151022-1	91501-1
22-18 0.3-0.9	.059-.110 1.50-2.79	x	-	2008625	-	PN-1	PN-2	PN-3	2266495-1	2217299-1 (18AWG)
26-30 0.12-0.05	.035-.060 0.89-1.52	-	x	794609	794613	1-PN-0	1-PN-1	1-PN-2	2836146-1	91502-1
20-24 0.50-0.20	.035-.060 0.89-1.52	-	x	94608	794612	1-PN-0	1-PN-1	1-PN-2	2151616-1	91501-1

* For application tooling, see 114-13000 for AMPOMATOR CLS Machine, AMP-O-LECTRICC Model K Terminator and AMP-O-LECTRIC Model G Terminator.

Note: To select a contact and plating, first select the contact base part number and add appropriate plating prefix and suffix. For example, for a loose piece receptacle with 30µ gold plating, select base part number 794610 and add the plating prefix and suffix for 30µ gold to obtain part number 1-794610-2.



SINGLE ROW HEADERS

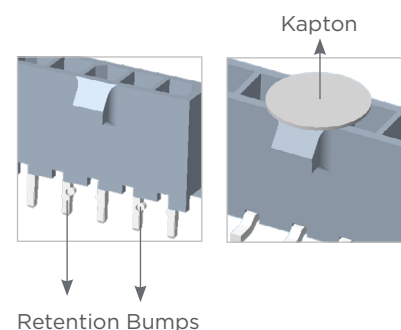
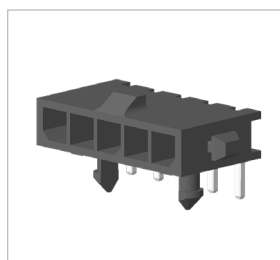
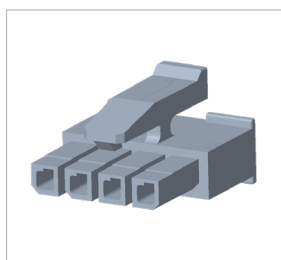
Part No. (PN)	Position	Single Row	Plating Style			Vertical	Right Angle	SMT	Thruhole	SMT Hold Down	Thru-hole Metal Hold Down	Plastic Hold Down	Kapton	Retention feature on Solder Tail	Packing Type		Mating Half
			Tin	15µ gold	30µ gold										Tray	Tape and Reel	
x-1445050-x	2-12	x	x			x			x			x		x	x		x-1445022-x
x-1445051-x	2-12	x	x			x			x		x				x		x-1445022-x
x-1445052-x	2-12	x	x			x		x			x		x			x	x-1445022-x
x-1445053-x	2-12	x	x			x		x		x			x			x	x-1445022-x
x-1445054-x	2-12	x	x				x		x		x				x		x-1445022-x
x-1445055-x	2-12	x	x				x		x			x			x		x-1445022-x
x-1445056-x	2-12	x	x				x	x			x					x	x-1445022-x
x-1445057-x	2-12	x	x				x	x		x						x	x-1445022-x
x-1445084-x	2-12	x		x		x			x			x		x	x		x-1445022-x
x-1445085-x	2-12	x		x		x			x		x				x		x-1445022-x
x-1445086-x	2-12	x		x		x					x		x			x	x-1445022-x
x-1445087-x	2-12	x		x		x				x			x			x	x-1445022-x
x-1445088-x	2-12	x		x			x		x		x				x		x-1445022-x
x-1445089-x	2-12	x		x			x		x			x			x		x-1445022-x
x-1445090-x	2-12	x		x			x	x			x					x	x-1445022-x
x-1445091-x	2-12	x		x			x	x		x						x	x-1445022-x
x-1445093-x	2-12	x			x	x			x			x		x	x		x-1445022-x
x-1445094-x	2-12	x			x	x			x		x				x		x-1445022-x
x-1445095-x	2-12	x			x	x		x			x		x			x	x-1445022-x
x-1445096-x	2-12	x			x	x		x		x			x			x	x-1445022-x
x-1445097-x	2-12	x			x		x		x		x				x		x-1445022-x
x-1445098-x	2-12	x			x		x		x			x			x		x-1445022-x
x-1445099-x	2-12	x			x		x	x			x					x	x-1445022-x
x-1445100-x	2-12	x			x		x	x		x						x	x-1445022-x

PART NUMBER EXPLANATION

2-PN-2	2 Position Header
2-PN-3	3 Position Header
2-PN-4	4 Position Header
2-PN-5	5 Position Header
2-PN-6	6 Position Header
2-PN-7	7 Position Header
2-PN-8	8 Position Header
2-PN-9	9 Position Header
3-PN-0	10 Position Header
3-PN-1	11 Position Header
3-PN-2	12 Position Header

Note: To select the complete part number,

- Use 2- prefix for single row headers up to 9 positions
- Use 3- prefix for single row headers from 10 to 12 positions
- The -X suffix indicates number of positions
(Example: 2-1445050-5 would be a 5 position header.
3-1445050-1 would be an 11 position header)



DOUBLE ROW HEADERS

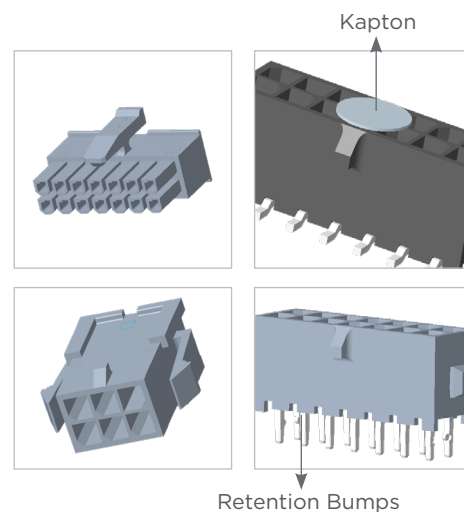
Part No. (PN)	Position	Double Row	Plating Style			Vertical	Right Angle	SMT	Thruhole	SMT Hold Down	Metal Hold Down	Plastic Hold Down	Kapton	Retention feature on Solder Tail	Packing Type		Mating Half
			Tin	15µ gold	30µ gold										Tray	Tape and Reel	
x-794618-x	2-24	x	x				x		x			x			x		x-794617-x
x-794619-x	2-24	x		x			x		x			x			x		x-794617-x
x-794620-x	2-24	x			x		x		x			x			x		x-794617-x
x-794621-x	2-24	x	x				x	x				x				x	x-794617-x
x-794622-x	2-24	x		x			x	x				x				x	x-794617-x
x-794623-x	2-24	x			x		x	x				x				x	x-794617-x
x-794624-x	2-24	x	x				x	x			x					x	x-794617-x
x-794625-x	2-24	x		x			x	x			x					x	x-794617-x
x-794626-x	2-24	x			x		x	x			x					x	x-794617-x
x-794627-x	2-24	x	x				x	x		x						x	x-794617-x
x-794628-x	2-24	x		x			x	x		x						x	x-794617-x
x-794629-x	2-24	x			x		x	x		x						x	x-794617-x
x-794630-x	2-24	x	x			x			x					x	x		x-794617-x
x-794631-x	2-24	x		x		x			x					x	x		x-794617-x
x-794632-x	2-24	x			x	x			x					x	x		x-794617-x
x-794633-x	2-24	x	x			x		x			x		x			x	x-794617-x
x-794634-x	2-24	x		x		x		x			x		x			x	x-794617-x
x-794635-x	2-24	x			x	x		x			x		x			x	x-794617-x
x-794636-x	2-24	x	x			x		x		x			x			x	x-794617-x
x-794637-x	2-24	x		x		x		x		x			x			x	x-794617-x
x-794638-x	2-24	x			x	x		x		x			x			x	x-794617-x
x-794677-x	2-24	x	x				x		x		x				x		x-794617-x
x-794678-x	2-24	x		x			x		x		x				x		x-794617-x
x-794679-x	2-24	x			x		x		x		x				x		x-794617-x
x-794680-x	2-24	x	x			x			x		x			x	x		x-794617-x
x-794681-x	2-24	x		x		x			x		x			x	x		x-794617-x
x-794682-x	2-24	x			x	x			x		x			x	x		x-794617-x

PART NUMBER EXPLANATION

3-PN-2	2 Position Header
3-PN-4	4 Position Header
3-PN-6	6 Position Header
3-PN-8	8 Position Header
4-PN-0	10 Position Header
4-PN-2	12 Position Header
4-PN-4	14 Position Header
4-PN-6	16 Position Header
4-PN-8	18 Position Header
5-PN-0	20 Position Header
5-PN-2	22 Position Header
5-PN-4	24 Position Header

Note: To select the complete part number,

- Use 3- prefix for dual row headers up to 8 positions
- Use 4- prefix for dual row headers from 10 to 18 positions
- Use 5- prefix for dual row headers from 20 to 24 positions
- The -X suffix indicates number of positions (Example: 3-794630-4 would be a 4 position header. 4-794630-4 would be a 14 position header. 5-794630-4 would be a 24 position header.)



HOUSINGS

No. of Circuits	Part No.	Plug	Receptacle	Single Row	Double Row	Free Hanging	Panel Mount	With Mates	Terminals
2-12	x-1445049-x	x		x		x		x-1445022-x	x-794608-x
2-12	x-1445048-x	x		x			x	x-1445022-x	x-794609-x
2-24*	x-794616-x	x			x	x		x-794617-x	x-794612-x
2-24*	x-794615-x	x			x		x	x-794617-x	x-794613-x
2-12	x-1445022-x		x	x				x-1445049-x, x-1445048-x All single row headers	x-794606-x x-794607-x
2-24*	x-794617-x		x					x-794616-x, x-794615-x, All double row headers	x-794610-x x-794611-x 2008625-x

Note:

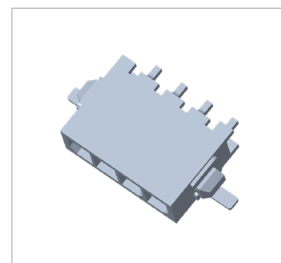
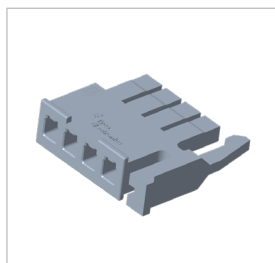
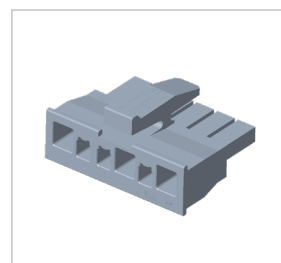
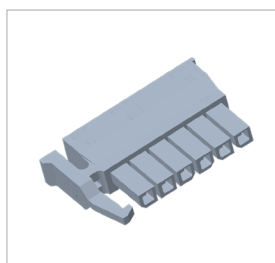
- Use the prefix and suffix to indicate position size.
(Example: 794617-2 would be a 2 position housing and 2-794617-4 would be a 24 position housing)
- Receptacle terminals mate in the Receptacle housings and Pin terminals mate in the Plug housings

SELECT 18 AWG RECEPTACLE HOUSINGS

No. of Position	Part No.	18 AWG Circuits	Black	Top Latch	Side Latch
2	2008570-2	1, 2	x		x
3	2008570-3	1, 3	x		x
4	2008570-4	1, 4	x		x
5	2008570-5	1, 3, 5	x		x
6	2008570-6	1, 3, 6	x		x
2	2008571-2	1, 2	x	x	
3	2008571-3	1, 3	x	x	
4	2008571-4	1, 4	x	x	
5	2008571-5	1, 3, 5	x	x	
6	2008571-6	1, 3, 6	x	x	

Notes:

- For natural color add 1- prefix to base part number
- Remaining circuits accommodate 20 AWG wire or smaller using standard contacts



LOW PROFILE RECEPTACLE HOUSING

No. of Position	Color and Part No.	
	Natural	Black
2	2029102-2	2029047-2
3	2029102-3	2029047-3
4	2029102-4	2029047-4

LOW PROFILE RIGHT ANGLE SURFACE MOUNT HEADERS

No. of Position	Color and Part No.	
	Natural	Black
2	2029104-2	2029030-2
3	2029104-3	2029030-3
4	2029104-4	2029030-4

VDE APPROVED CONNECTORS

No. of Circuits	Part Number	Plug	Receptacle	Single Row	Double Row	Free Hanging	Panel Mount	With Mates	Terminals
2 to 4	2315758-x	x			x		x	2315744-x	x-794608-x, x-794609-x, x-794612-x, x-794613-x
2 to 4	2315759-x	x			x	x		2315744-x	x-794608-x, x-794609-x, x-794612-x, x-794613-x
6 to 10	3-794615-x	x			x		x	x-794617-x	x-794608-x, x-794609-x, x-794612-x, x-794613-x
6 to 10	3-794616-x	x			x	x		x-794617-x	x-794608-x, x-794609-x, x-794612-x, x-794613-x
2, 3 and 4	2315785-x	x		x		x		2315752-x	x-794608-x, x-794609-x, x-794612-x, x-794613-x
2, 3 and 4	2315786-x	x		x			x	2315752-x	x-794608-x, x-794609-x, x-794612-x, x-794613-x
2 to 4	2315744-x		x		x			2315758-x, 2315759-x	x-794606-x, x-794607-x, x-794610-x, x-794611-x, 2008625-x
6 to 10	3-794617-x		x		x			x-794615-x, x-794616-x	x-794606-x, x-794607-x, x-794610-x, x-794611-x, 2008625-x
2, 3 and 4	2315752-x		x	x				2315785-x, 2315786-x	x-794606-x, x-794607-x, x-794610-x, x-794611-x, 2008625-x

Note:

- Use the suffix -6 (6 position housing), -8 (8 position housing) or -0 (10 position housing)
- These connectors have keying by position size different of the standard receptacle and plug connectors

ADDITIONAL HEADERS

Part Number	N° of Circuits	Single Row	Double Row	Plating			Vertical	Right Angle	SMT	Thru-hole	SMT Hold Down	Metal Hold Down	Plastic Hold Down	Kapton	Retention feature on Solder Tail	Packaging Type		Mating Half
				Tin	15µ Gold	30µ Gold										Tray	Tape & Reel	
x-1586835-x	12		x			x	x		x		x			x			x	x-794617-x
x-1586842-x	2 to 8, 12, 16, 20		x	x			x		x		x			x			x	x-794617-x
x-1740655-x	2, 4, 24		x	x				x		x		x						x-794617-x
x-2029031-x	4	x		x			x		x		x						x	x-1445022-x
x-2029032-x	2	x				x	x		x		x			x			x	x-1445022-x
2029033	3	x		x			x			x			x		x	x		x-1445022-x
2029037	4, 10	x				x	x			x		x				x		x-1445022-x
2029076	2 to 5	x		x				x	x		x						x	x-1445022-x
2029266	2 to 4	x				x		x	x		x						x	x-1445022-x
2029304	12		x	x			x			x					x		x	x-794617-x
2315124	10 to 12		x	x			x		x			x					x	x-794617-x

QUESTIONS THAT WILL HELP YOU BETTER SELECT THE PRODUCT THAT YOU NEED:

What are the current and voltage requirements for your application?

The Micro MATE-N-LOK 3 mm connector system has a maximum current rating of 5 Amps per line and is rated for 250 Volts AC/DC.

What are the wire type and size requirements?

The Micro MATE-N-LOK 3 mm connector system contacts are approved for use with 22-18 (0.3-0.9), 24-20 (0.2-0.6) and 30-26 (0.05-0.15) AWG wire with a maximum insulation diameter of 0.110 (2.79).

What are the number of positions?

The Micro MATE-N-LOK 3 mm connector system is available in 2-12 position single row and 2-24 position dual row configurations on a 3.0 mm pitch.

What are the operating temperature requirements?

The Micro-MATE-N-LOK 3 mm connector system has a maximum operating temperature of 105°C. For more information regarding operating temperatures refer to Product Specification 108-1836.

What packaging types are offered for headers and housings?

The Micro MATE-N-LOK 3 mm connector system offers tape and reel packaging for surface mount headers, tray packaging for thru-board headers and bulk packaging for all receptacle and plug housings.

What is the benefit of choosing low-profile receptacle housings?

The Micro MATE-N-LOK 3 mm connector system offers a low profile receptacle housing for applications that need to meet minimal height requirements. This low profile design offers a mated height of only 4.7 mm and is available in 2, 3 and 4 positions, in black or natural color.

What is the benefit of using an 18 AWG select circuit receptacle housing?

The Micro MATE-N-LOK 3 mm connector system offers a special 18 AWG wire-to-board select circuit housing for low voltage lighting applications. Designed to accommodate 18 AWG UL1007 wire in select circuits of the 2, 3, 4, 5 and 6 position housings, this product is ideal to minimize millivolt drops on long wire runs sometimes required by low voltage conventional and solid state lighting.

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