

BUCHANAN WireMate

CONNECTORS

BUCHANAN WireMate CONNECTORS

TE Connectivity (TE)'s low profile PCB connectors are ideal for LED lighting applications and accommodate multiple design requirements with up to 6 position connector configurations. The releasable poke-in wire connector features an integral conductor release mechanism recessed below the top side of the connector. This mechanism cannot be compromised or broken during multiple insertion and release cycles and requires no special tooling. The modular version of the releasable poke-in connector enables flexibility in design and color configurations enable easy identification.

INDOOR LIGHTING



HVAC CONTROLS

OUTDOOR LIGHTING



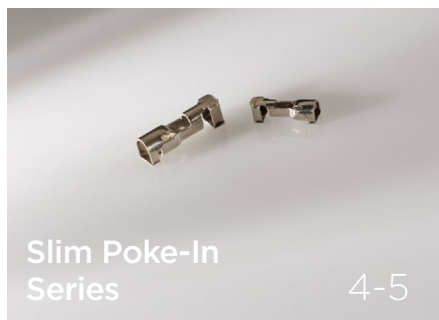
THERMOSTAT

ACCESS CONTROL

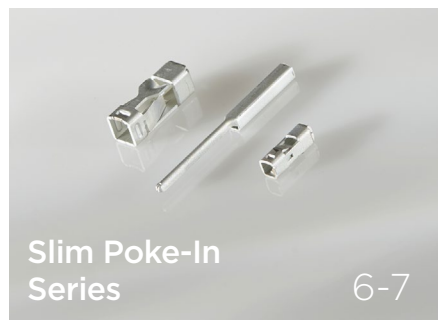


WHAT'S INSIDE

BUCHANAN WireMate Connectors



NON-RELEASABLE
Current rating: 6-16A
Voltage rating: 300 VAC



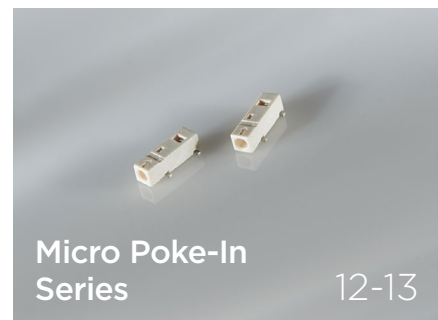
RELEASABLE
Current rating: 6-10A
Voltage rating: 300 VAC



RELEASABLE
Current rating: 6A with 18AWG
5A with 20 AWG & 22 AWG
Voltage rating: 400 VAC



RELEASABLE
Current rating: 5-9A
Voltage rating: 600 VAC/DC



NON-RELEASABLE
Current rating: 3A Max
Voltage rating: 250 VAC/DC



RELEASABLE
Current rating: 6A Max
Voltage rating: 600 VAC Max



RELEASABLE
Current rating: Up to 10A Max
Voltage rating: 300 VAC Max



RELEASABLE
Current - Voltage rating:
3.5mm: 2-12 position: 8A @ 300 VAC
5.0mm: 2-9 position: 15A @ 300 VAC
5.0mm: 10-12 position: 10A @ 300 VAC

BUCHANAN WireMate CONNECTOR

Slim Poke-In Series

TE Connectivity (TE)'s BUCHANAN WireMate connector slim poke-in series are developed for wire to PCB board connection. The slim connector with no housing serves as an easy poke-in connector with strong retention ability. The advantage of using this connector is that the conductor can be connected quickly without special tools and the small profile saves the space on the PCB.



Applications

- LED Lighting Systems
- Home Automation
- Security Systems
- Telecommunications

Electrical

- Voltage rating: 300 VAC Max
- Dielectric strength: 2000 VAC

Specifications

- Application Specification: [114-137049](#)
- Product Specification: [108-137049](#)
- UL Approval: UL1977

Materials

- Contact: Copper Alloy with Tin plating

Mechanical

- Operating temperature range -40 to 125°C
- Wire retention: 30N Minimum
- Current rating: see table below

Benefits

- Quick solderless poke-in connector design
- Slim contacts that have no covering housing
- Several solutions for solid and stranded wire from 16 AWG to 24 AWG
- Safety standards with UL/CQC approval
- Available in Tape & Reel packaging

Current Ratings

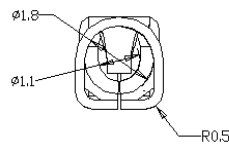
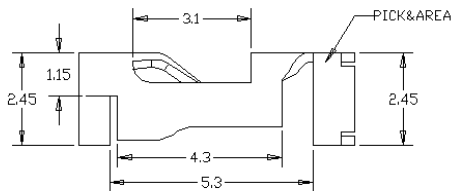
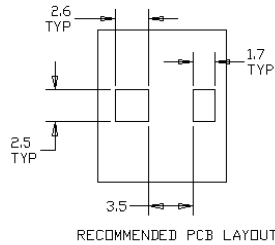
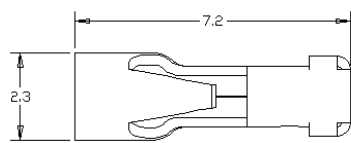
Part Number	16 AWG	18 AWG	20 AWG	22 AWG	24 AWG
2834010-3	-	-	11 A	8 A	6 A
2834012-3	16 A	13 A	11 A	-	-

Product Selection Information

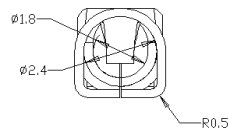
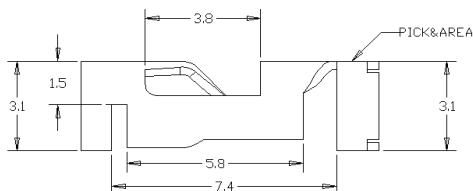
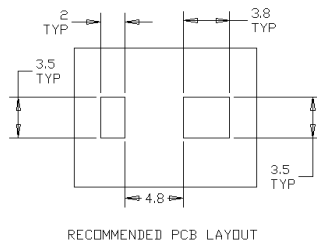
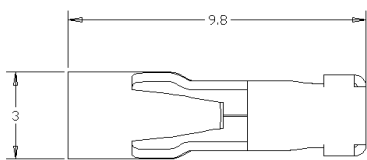
Part Number	Description
2834010-3	For wire 20, 22 and 24 AWG
2834012-3	For wire 16, 18 and 20 AWG

Dimensions

2834010-3



2834012-3



Dimensions are shown for reference purposes only. Specifications subject to change.

BUCHANAN WireMate CONNECTOR

Slim Poke-In Series

TE Connectivity (TE)'s BUCHANAN WireMate connector slim poke-in series is designed for quick and easy Wire-to-Board and Board-to-Board connectivity in a low profile, slim form factor. The releasable contact function along with the design for multiple wire sizes allows for convenience in installation and rework. Additionally, the low profile and small footprint allows for high density and compact PCB designs.



Applications

- Telecommunication Systems
- Lighting Systems
- Security
- Room and Area Lighting

Electrical

- **Current Rating:** 10A for wire 18 AWG
6A for wire 20 AWG & 22 AWG
4A for board to board connection
- **Voltage Rating:** 300 VAC Max

Mechanical

- **Operating Temperature:** -40°C to +105°C
- **Wire Gauge - 2834167-3:** 18-22 AWG (solid/stranded)
2834171-3: 20-24 AWG (solid/stranded)
- Tin dipped required for stranded

Material

- **Contact:** Copper Alloy with Tin plating

Specifications

- **Application Specification:** [114-137166](#)
- **Product Specification:** [108-137166](#)

Product Compliance / Approvals

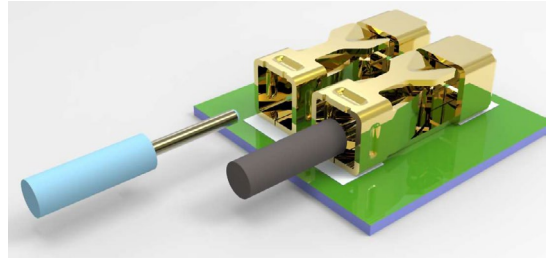
- **UL Approval:** UL1977 / File: E28476

Benefits

- Releasable function allows for quick rework
- Designed for compact PCB layouts
- Bare contact offers size and cost savings from housed poke-in
- Wide range of wire sizes accepted
- Board-to-board mating function

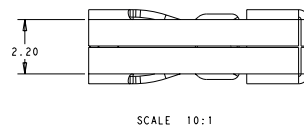
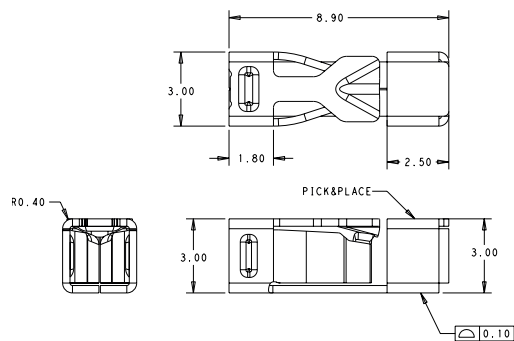
Product Selection Information

Part Number	Description
2834167-3	Releasable Slim Female Contact
2834171-3	Ultraminiature Slim Contact
2834172-3	Ultraminiature Slim Male Pin Contact

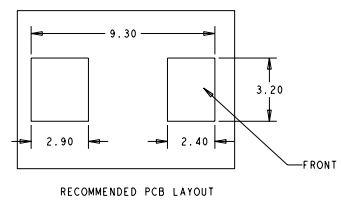


Dimensions

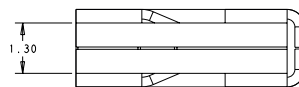
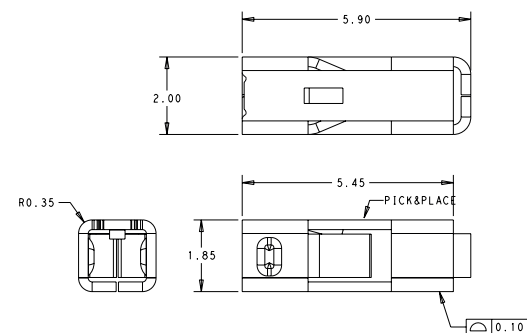
2834167-3



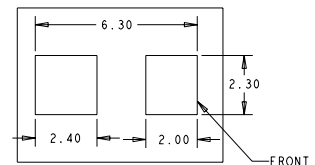
RECOMMENDED PCB LAYOUT



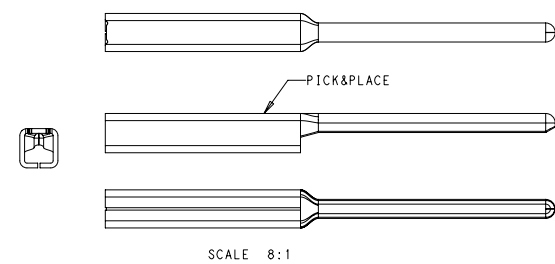
2834171-3



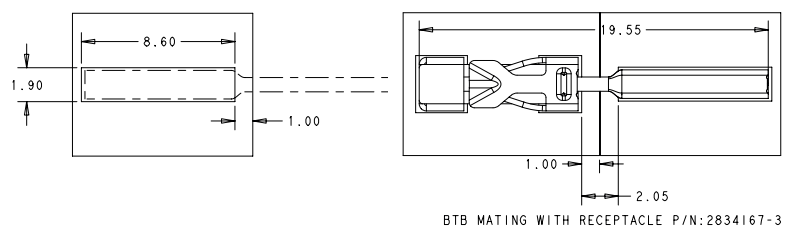
RECOMMENDED PCB LAYOUT



2834172-3



RECOMMENDED PCB LAYOUT



BUCHANAN WireMate CONNECTOR

Poke-In Series

TE Connectivity (TE)'s introduces the BUCHANAN WireMate connector poke-in series is a 4.0mm pitch modular connector for Wire-to-Board connectivity. The poke-in feature allows for easy and fast installation and its modular design enables a flexible solution. In addition, this connector comes in various color configurations making identification and assembly easy and efficient.



Applications

- Access Controls
- LED Lighting
- Small Appliances
- Thermostats

Electrical

- Current rating: 6A with 18 AWG
5A with 20 AWG & 22 AWG
- Voltage rating: 400 VAC Max
- Dielectric strength: 1800 VAC

Mechanical

- Operating Temperature: -40°C - + 105°

Specifications

- Application Specification: [114-137055](#)
- Product Specification: [108-137055](#)
- UL Approval: UL1977
- IEC60838 comply with clause 15 of IEC 60598-1

Materials

- Contact: Copper Alloy with Tin plating

Benefits

- Modular Technology enables flexibility in design
- Easy and fast installation with poke-in contact feature
- Color configurations enables easy identification
- Compact size design for space saving

Colors

- Beige | Natural
- Black
- Blue
- Brown
- Gray
- Red
- White
- Yellow

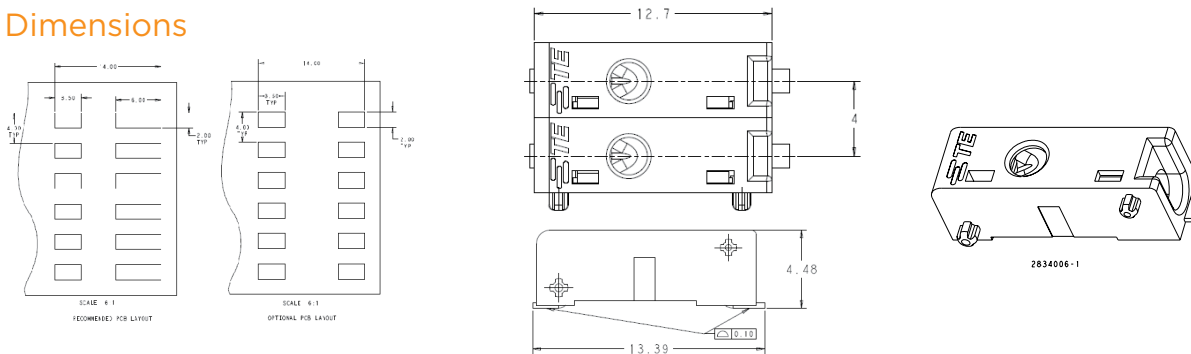
BUCHANAN WireMate CONNECTOR POKE-IN SERIES

Product Selection Information

	Number of Positions	Description	Color	Part Number
	1	1 Pole Modular Releasable Poke-In Connector	Black	2-2834006-1
	1	1 Pole Modular Releasable Poke-In Connector	Red	3-2834006-1
	2	2 Pole Modular Releasable Poke-In Connector	White / Red	5-2834006-2
	2	2 Pole Modular Releasable Poke-In Connector	Red / Black	7-2834006-2
	2	2 Pole Modular Releasable Poke-In Connector	Black / White	8-2834006-2
	3	3 Pole Modular Releasable Poke-In Connector	Black / White / Red	5-2834006-3
	2	2 Pole Modular Releasable Poke-In Connector	Gray / Blue	1-2834006-0
	2	2 Pole Modular Releasable Poke-In Connector	Brown / Yellow	2-2834006-0
	1	1 Pole Modular Releasable Poke-In Connector	Natural	2834006-1
	2	2 Pole Modular Releasable Poke-In Connector	Natural	2834006-2
	3	3 Pole Modular Releasable Poke-In Connector	Natural	2834006-3
	3	2 Pole Modular Releasable Poke-In Connector	Natural	1-2834006-2

Contact a TE Sales representative if you need other poles with various color configuration.

Dimensions



BUCHANAN WireMate CONNECTOR

Poke-In Series

TE Connectivity (TE)'s low profile, SMT releasable poke-in wire connector accommodates multiple design requirements with 1, 2 & 3 position connector configurations. The releasable poke-in wire connector features an integral conductor release mechanism, recessed below the top side of the connector and cannot be compromised or broken during multiple insertion and release cycles. Ideal for LED lighting applications, the surface mount releasable poke-in connectors accept 18 to 22 gauge solid and stranded conductors and are tape and reel packaged for high speed SMT processing.

Applications

- Linear or Circular LED Light Modules
- Metering and Control Terminal Block Connections
- Power to Contact Boards in Applications and Building Equipment

Electrical

- **Current rating:** 18 AWG wire - 9A
20-22 AWG wire - 5A
- **Voltage rating:** 600 VAC/DC

Mechanical

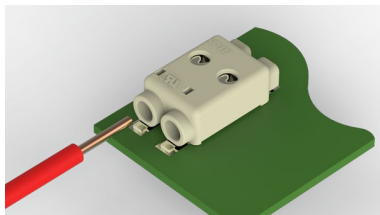
- **Operating temperature:** -40°C to 130°C

Specifications

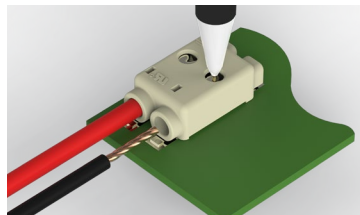
- **Application specification:** [114-32113](#)
- **Product specification:** [108-32063](#)
- **UL and cUL recognized:** E28476

Materials

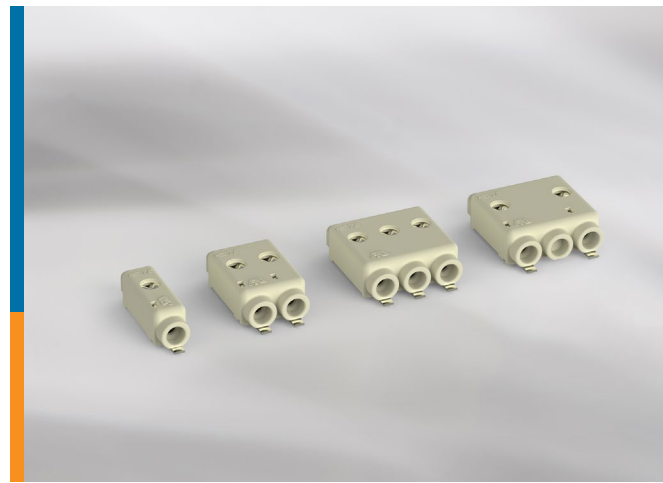
- **Housing:** UL 94 V0 high temperature resistant thermoplastic
- **Contacts:** Tin over nickel plated copper alloy



Insert solid conductors horizontal to printed circuit board to complete termination



Insert stranded conductors horizontal to printed circuit boards and/or remove both solid and stranded conductors by first depressing the release mechanism with a ball point pen or the tip of any small device. Remove the conductors by pulling horizontal to the printed circuit board.



Benefits

- Automated production with flat top surface for vacuum pick up and high temperature material for re-flow processing
- Low profile design and rounded corners prevent obstruction of LED lighting and minimizes shadowing
- Side by side stackable design on 4 mm spacing supports higher connection variations, minimizes part number inventory and lowers production costs
- Integral robust wire release mechanism to help prevent damage during wire assembly and rework
- Requires no specialized tools for wire insertion or removal
- Accommodates multiple design requirements with 1, 2 & 3 position connector configurations
- Support high voltage connections with a 2 position 8 mm centerline version
- Accepts 18 - 22 gauge solid, stranded or pre-bond conductors in AWG or metric sizes to support global applications
- Prevent obstruction of LED lights with a low profile design and rounded corners to minimize shadows

Releasable Poke-in Wire Connector Features

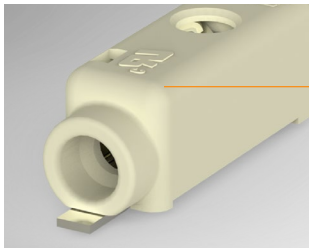
- 1 Low profile design and rounded corners prevent obstruction of LED light and minimizes shadowing
- 2 Flat top surface for vacuum pick up
- 3 Side by side stackable on 4mm centers
- 4 Recessed release mechanism eliminates multi-surface features on top of connector and cannot be pried upward during conductor insertion eliminating potential for breakage
- 5 Integral terminal release confines wire on all four sides inside terminal housing ensuring secure connection

Wire types and sizes accepted

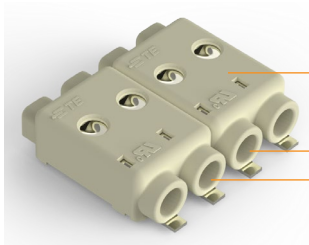
- **Solid wire:** 18, 20, 22 AWG, 0.75 and 0.34mm²
- **Stranded wire:** 18 AWG & 0.5mm², 16 strands Max, 20, 22 AWG, 7 strands Max, 0.75mm² 24 strands Max, 0.34mm² 19 strands Max
- **Prebond wire:** 18 AWG, 16 strands Max, 20 AWG, 7 strands Max
- **Max insulation OD:** 2.5mm (.098") Max
- **Strip Length:** 9.0mm ± 1.0 (0.354" ± 0.039)

Product Selection Information

Number of Positions	Part Number	"A" Dimension	"B" Dimension
1 Position	2213301-1	3.90mm	12.00mm
2 Position	2213301-2	7.90mm	16.00mm
3 Position	2213301-3	11.90mm	20.00mm
2 Position High Voltage	1-2213301-2	11.90mm	20.00mm

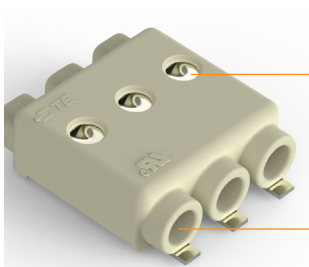


1



2

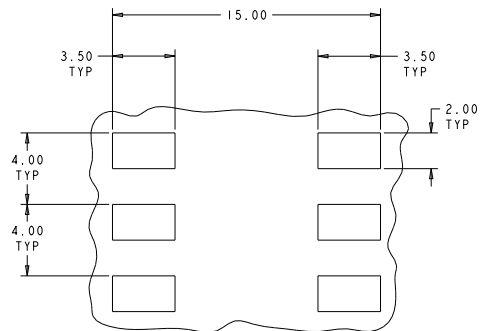
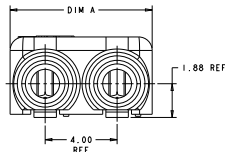
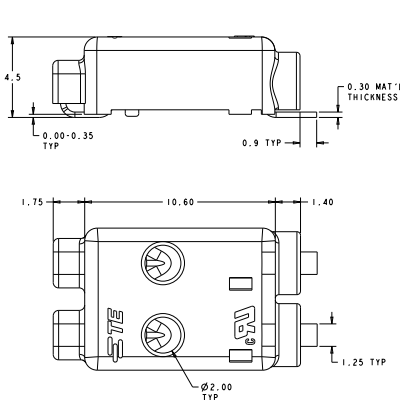
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4

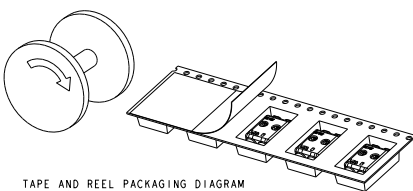
5

Dimensions

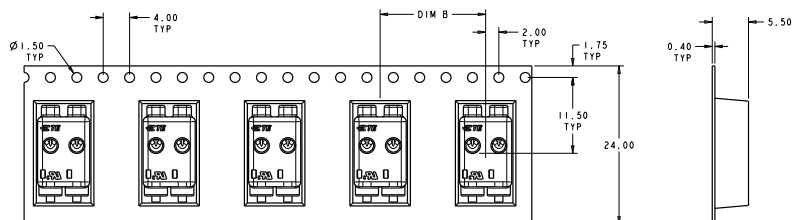


Recommended PCB Layout

Tape and Reel Packaging Diagram - 2213301-2 shown for reference



TAPE AND REEL PACKAGING DIAGRAM
2213301-2 SHOWN FOR REFERENCE



BUCHANAN WireMate CONNECTOR

Micro Poke-In Series

TE Connectivity (TE)'s BUCHANAN WireMate micro poke-in wire SSL connector is a low profile, printed circuit board connector specifically designed for LED lighting applications. The connector is currently available in a one position version that accepts 24 and 26 AWG solid wire only. The connector is designed with rounded corners to minimize shadowing. The connector is RoHS compliant and is a cost effective alternative to hand soldering wires to printed circuit boards.



Applications

- LED Lighting
- Small Appliances
- Thermostats
- Digital Signage

Electrical

- 250 VAC, 3A Max
- 250 VDC, 3A Max
- 1500 Dielectric Withstanding Voltage

Mechanical

- Wire retention force: 6N Minimum
- Wire Insertion Force: 8N (24 AWG) 6N (26 AWG)
- Operating Temperature: -25°C to 130°C

Specifications

- Application Specification: [114-5482](#)
- Product Specification: [108-78810](#)
- UL1977
- JPN DENANHO

Materials

- Housing: High temperature resistant thermoplastic
- Contact: Copper Alloy, tin over Nickel plating

Benefits

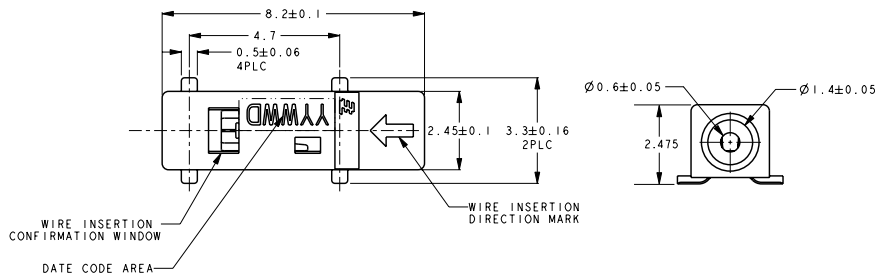
- Compact size design for space savings
- Low profile flat surface allows for vacuum pick up
- High temperature material for type reflow processes
- Tape & reel packaging for high speed assembly

BUCHANAN WireMate CONNECTORS MICRO POKE-IN SERIES

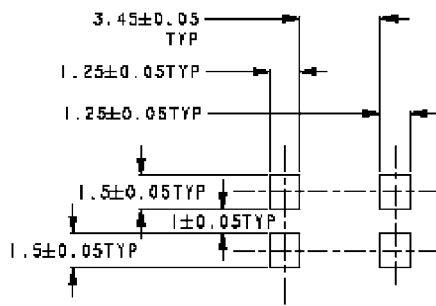
Product Selection Information

Part Number	Description
2134611-1	Micro Poke-In Series Connector

Dimensions



Referential Connector placement

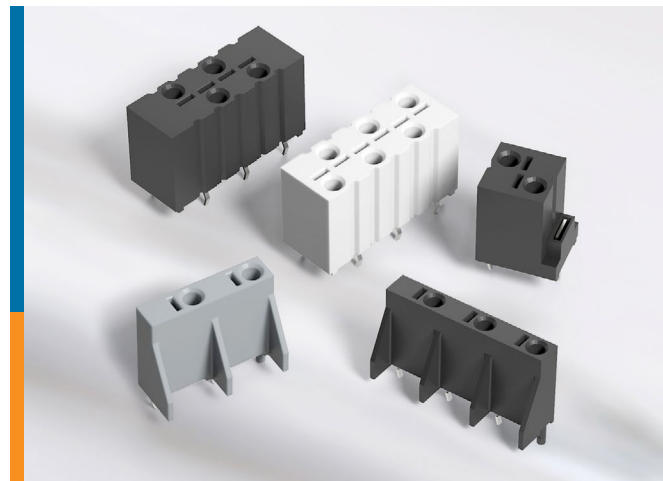


Referential P.C.B. layout

BUCHANAN WireMate CONNECTOR

Vertical Poke-In Series

TE Connectivity (TE)'s BUCHANAN WireMate connectors vertical poke-in series are now offered in tray packaging for pick and place insertion for LED driver applications. The in-line connectors are available in 2 & 3 positions. The vertical poke-in connectors can also be offered in tray packaging. They are available in 2, 4 & 6 staggered positions. Compatible in potable and non-potable applications, with printed circuit board wave solder processes, the connectors allow for insertion of stripped solid conductor wire without special tooling. Designed for permanent connections within OEM assemblies, wire is securely held in place but can be removed with an extraction tool, if required.



Applications

- Lighting Ballast and LED Drivers
- Garage Door Openers
- HVAC Controls
- Security Systems
- Vending and Gaming Products

Electrical

- **Current Rating:** 6A Max (UL)
- **Voltage Rating:** 600 VAC Max
- **Dielectric Strength:** 2200 VAC

Mechanical

- **Wire Retention:** 5 lb. (22.25 N)
- **Durability:** 5 cycles
- **Pitch:** .138 (3.5 mm) staggered centerline .322 (8.2 mm) in-line centerline
- **-30 °C to 105 °C operating temperature**

Specifications

- **Application Specifications:** [114-13075](#) Vertical Poke-In
[114-13223](#) In-Line Poke-In
- **Product Specifications:** [108-2059](#) Vertical Poke-In
[108-2059-1](#) In-Line Poke-In
- UL 1977

Materials

- **Housing:** UL 94 V-0 rated PBT
- **Contact:** Pre-tin over nickel plate copper alloy

Benefits

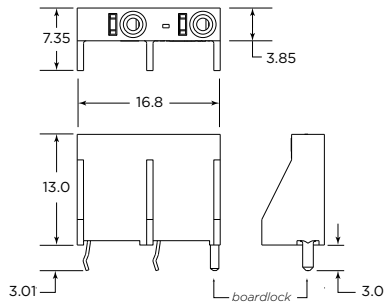
- Eliminates the need to hand solder or fixture and wave-solder wires directly to printed circuit board
- In-line screwless version terminates industry standard 18 AWG solid wire
- Staggered versions terminate industry standard 18-16 AWG solid wire and 18 AWG bonded wire
- Thru-hole solder mount with retention features integral to solder legs for PCB retention
- 2 & 4 position staggered and in-line versions have secondary board locks for additional retention
- Now available in tray packaging (2 & 3 position In-Line Screwless connectors only)

Product Selection Information

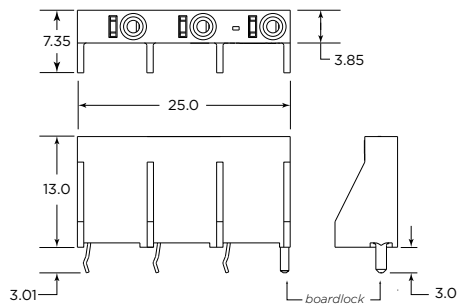
Part Number	Description
1-2213629-2	2 Position Vertical Poke-In Connector In Pocket Trays
2213629-3	3 Position Vertical Poke-In Connector In Pocket Trays
1-2008552-2	2 Position In-Line Poke-In Wire Connector
2008552-3	3 Position In-Line Poke-In Wire Connector
1811957-1	2 Position Vertical Poke-In Wire Connector with Boardlock
1811444-1	4 Position Vertical Poke-In Wire Connector
1811398-1	6 Position Vertical Poke-In Wire Connector

Dimensions

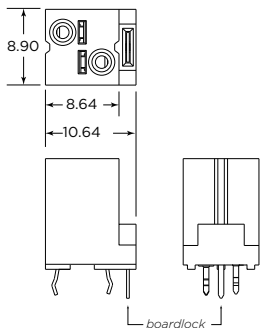
2 position in-line screwless wire connector



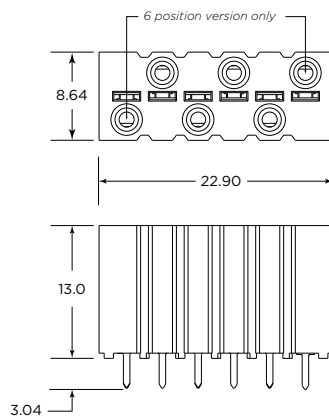
3 position in-line screwless wire connector



2 position screwless wire connector



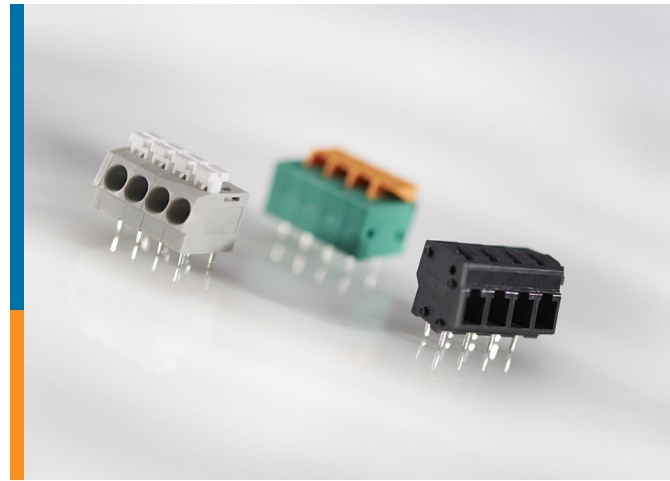
4 & 6 position screwless wire connector



BUCHANAN WireMate CONNECTORS

Modular Screwless Series

TE Connectivity (TE)'s BUCHANAN WireMate connectors modular screwless series are flexible and efficient and the wires are easy to replace with no need for special tooling. Its multifarious product pitch enables design flexibility and the different color configurations helps ease identification. High density and compact design enable this series to be used in the field of telecommunication system, lighting system, security, and wire arrangement of architectures.



Applications

- LED Driver
- Lighting System
- Power Supply

Electrical

- Current Rating: Up to 10A Max
- Voltage Rating: 300 VAC Max
- Dielectric Strength: 2000 VAC

Mechanical

- Operating Temperature: -40°C-+105°C
- Reusable Cycles: 5 cycles

Specifications

- Application Specification: [114-137080](#)
- Product Specification: [108-137080](#)
- UL Approval: UL1059

Materials

- Housing: PA, UL 94 V-0
- Contact: Copper Alloy with Tin plating

Benefits

- Achieve quick assembly without the need for special tooling
- Help save space with a high density compact design
- Obtain design flexibility with multifarious Product Pitch
- Help ease identification with different colors configuration

BUCHANAN WireMate CONNECTOR MODULAR SCREWLESS SERIES

Product Selection Information

	Pitch	Position Size	Style	Housing Design	Color	Part Number
	5.00 mm	2	Double Side Entry	Modular		1-2834014-2
	5.00 mm	4	Double Side Entry	Modular		1-2834014-4
	5.00 mm	6	Double Side Entry	Modular		1-2834014-6
	2.54 mm	3	Top Side Entry	Modular		1-2834015-3
	2.54 mm	2	Side Entry	Modular		1-2834016-2
	5.00 mm	2	Top Lever	Modular		1-2834018-2
	5.00 mm	3	Top Lever	Modular		1-2834018-3
	3.50 mm	2	Top Entry	Modular		1-2834019-2
	3.50 mm	3	Top Entry	Modular		1-2834019-3
	2.50 mm	2	Top Side Entry	Modular		1-2834021-2
	2.50 mm	3	Top Side Entry	Modular		1-2834021-3
	2.50 mm	4	Top Side Entry	Modular		1-2834021-4
	3.50 mm	2	Top Side Entry	Modular		1-2834011-2
	3.50 mm	3	Top Side Entry	Modular		1-2834011-3
	3.50 mm	4	Top Side Entry	Modular		1-2834011-4
	3.50 mm	5	Top Side Entry	Modular		1-2834011-5
	5.08 mm	3	Top Side Entry	Modular	Gray	2834114-2
	3.81 mm	2	Side Entry	Modular	Gray	2834088-1
	3.81 mm	3	Side Entry	Modular	Gray	2834088-2
	5.00 mm	3	Side Entry	Modular	Gray	2834089-2
	5.00 mm	4	Side Entry	Modular	Gray	2834089-3
	5.08 mm	2	Side Entry	Modular	Gray	2834090-1
	5.00 mm	2	Side Entry	Modular	Gray	2834095-1
	5.00 mm	2	Side Entry	Modular	Gray	2834097-1
	2.50 mm	2	Top Side Entry	Modular	Gray	2834084-1
	2.54 mm	2	Top Side Entry	Modular	Gray	2834085-1
	2.54 mm	3	Top Side Entry	Modular	Gray	2834085-2
	5.00 mm	2	Top Side Entry	Modular	Gray	2834078-1
	5.00 mm	3	Top Side Entry	Modular	Gray	2834078-2
	5.00 mm	2	Top Side Entry	Modular	Gray	2834076-1
	5.08 mm	3	Top Side Entry	Modular	Gray	2834077-2
	5.00 mm	2	Side Entry	Modular	Gray	2834098-1
	5.00 mm	2	Side Entry	Modular	Gray	2834080-1
	5.00 mm	2	Side Entry	Modular	Gray	2834082-1
	5.00 mm	3	Side Entry	Modular	Gray	2834082-2

Contact a TE Sales representative if you need other poles with various color configuration.

BUCHANAN WireMate CONNECTOR

Surface Mount TB Series

TE Connectivity (TE)'s BUCHANAN WireMate connectors surface mount series is a two-piece pluggable connector solution designed for customers seeking to switch from wave soldering to surface mount PCB processing. The new series includes surface mount headers and mating plugs in vertical and right-angle configurations from 2 to 12 poles. The surface mount headers are one of several product offerings from TE enabling customers to make the change to full SMT processed printed circuit boards.



Applications

- HVAC Equipment and Controls
- Industrial Controls
- Security Systems
- Industrial Lighting Solutions
- Elevator/Escalator

Electrical

- **Current/Voltage Rating:** 3.5mm: 2-12 position: 8A @ 300 VAC
5.0mm: 2-9 position: 15A @ 300 VAC
5.0mm: 10-12 position: 10A @ 300 VAC
- **Impulse Withstanding Voltage:** 2500 VAC

Mechanical

- **Wire Gauge:** 3.5mm: 30-16 AWG
5.0mm: 26-12 AWG
- **Screw Torque:** 4.5 in-lbf

Materials

- **Housing:** Thermoplastic, Black (UL 94 V-0)
- **Contact:** Copper Alloy, Tin Plated

Product Compliance / Approvals

- UL E60677



Benefits

- Surface mount headers allow for simple reflow soldering and faster PCB assembly
- Retention features ensure secure PCB mounting
- 90°, 180°, 270° wire entry plugs




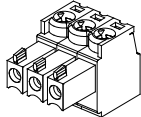
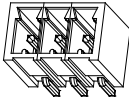

BUCHANAN WireMate CONNECTOR SURFACE MOUNT TB SERIES

Product Selection Information

3.5mm Plug

mates with **3.5mm Header**

or mates with **3.5mm Header**





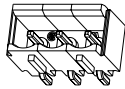
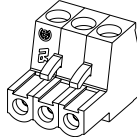
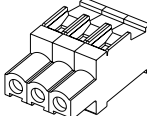
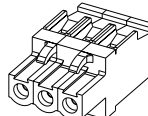
Positions	Plug PN's	Description	Header PN's	Description	Header PN's	Description
2	2213936-2	3.5mm Pitch 180° Wire Entry Plug  2213936-3	2213932-2	3.5mm Pitch SMT Right Angle Standard Header 	2213933-2	3.5mm Pitch SMT Right Angle Header with Retention Pins 
3	2213936-3		2213932-3		2213933-3	
4	2213936-4		2213932-4		2213933-4	
5	2213936-5		2213932-5		2213933-5	
6	2213936-6		2213932-6		2213933-6	
7	2213936-7		2213932-7		2213933-7	
8	2213936-8		2213932-8		2213933-8	
9	2213936-9		2213932-9		2213933-9	
10	1-2213936-0		1-2213932-0		1-2213933-0	
11	1-2213936-1		1-2213932-1		1-2213933-1	
12	1-2213936-2		1-2213932-2		1-2213933-2	

5.0mm Header

mates with **5.0mm Plug**

or mates with **5.0mm Plug**

or mates with **5.0mm Plug**

Positions	Header PN's	Description	Plugs PN's	Description	Plugs PN's	Description	Plugs PN's	Description
2	2305908-2	5.0mm Pitch SMT Right Angle Standard Header 	2305909-2	5.0mm Pitch 180° Wire Entry Plug with Retention Clips 	2213934-2	5.0mm Pitch 270° Wire Entry Plug with Retention Clips 	2213935-2	5.0mm Pitch 90° Wire Entry Plug with Retention Clips 
3	2305908-3		2305909-3		2213934-3		2213935-3	
4	2305908-4		2305909-4		2213934-4		2213935-4	
5	2305908-5		2305909-5		2213934-5		2213935-5	
6	2305908-6		2305909-6		2213934-6		2213935-6	
7	2305908-7		2305909-7		2213934-7		2213935-7	
8	2305908-8	2305908-3	2305909-8	2305909-3	2213934-8	2213934-3	2213935-8	2213935-3
9	2305908-9		2305909-9		2213934-9		2213935-9	
10	1-2305908-0		1-2305909-0		1-2213934-0		1-2213935-0	
11	1-2305908-1		1-2305909-1		1-2213934-1		1-2213935-1	
12	1-2305908-2		1-2305909-2		1-2213934-2		1-2213935-2	