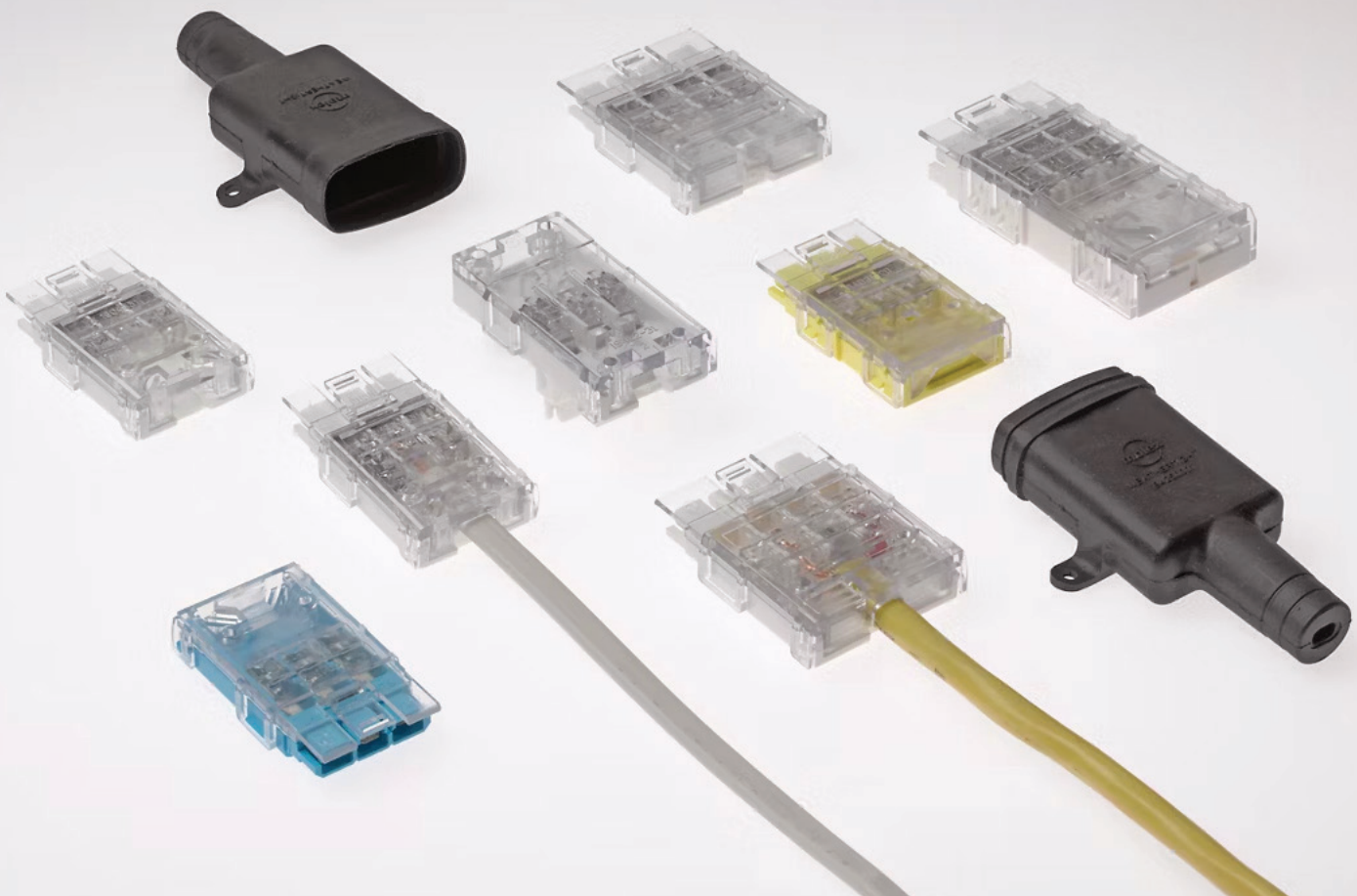


# Self-Contained Power Connectors and Accessories





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**Self-Contained Power Connectors from Molex are used to splice and tap solid and stranded non-metallic sheathed cable. The connector family supports two and three conductor plus ground circuits for AC power applications. The product line features insulation displacement contacts that provide wire termination without the need to pre-strip the wires. The splice connectors are used to splice two cable segments together and replace butt connectors, wire nuts and junction boxes used in traditional splice applications. Tap connectors operate in a similar fashion and are used to support taps of existing cable segments to create new branch circuits.**

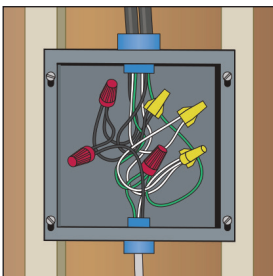
# Self-Contained Power Connectors

## Solid Cable Applications

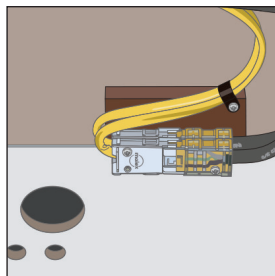
Typical connector applications for the solid cable-style connectors include crossover electrical connections for pre-wired, pre-fabricated/modular structures and homes. With this connector system, manufactured housing builders can safely and easily implement modular electrical systems within the structures at the factory and then quickly plug them together at the home site. Additional applications include lighting systems and other construction projects.

## Stranded Cable Applications

Typical applications for the stranded cable versions of the connectors include splices and taps used for AC power applications in the marine industry. With the SC Power Connectors, marine manufacturers can construct discrete modules for staterooms, salons, and galleys and plug them together in the same electrical system, as the modules are dropped into the hull further down the manufacturing line. These connectors are similar to the solid cable versions described above. Additional applications include shipboard lighting and other electrical connections that may previously have required a junction box. A special version of the Self-Contained Power Connector is also available for use with round jacketed, stranded cable including SEOW/SJEW types. Applications for this version include splice applications used in RV slide-out module manufacturing.



*Traditionally, the procedure involves connecting each wire with a wire nut inside a junction box.*



*Self-Contained Power Connectors allow users to easily transition from solid NM cable to SEOW/SJEW type cable.*

## Features and Benefits

- A double latching system provides positive connection security but is fully releasable so the connector can be mated and remated as needed during the manufacturing process.
- Once the connector is closed, the strain relief is automatically set in place so screws and human factors are not a concern.
- No special tools are required, just pliers.
- Markable surface area on the housing allows for easy circuit identification, eliminating mis-wiring.
- Double insulation displacement contacts provide maximum conductivity and reduce voltage drop.
- High-impact, crystal clear strain relief cover provides durability and allows for complete visual inspection.
- Simple two-piece construction provides ease of use and eliminates the worry of losing small parts.
- UL listed to be connected and disconnected while under load
- Stranded cable versions are UL Marine listed.
- Hermaphroditic design mates with itself so there is only one part to order and inventory.
- Optional dual mounting holes accept screws or nails.
- Connectors are engineered to meet ABYC, NMMA and US Coast Guard standards.

## Reference Information

UL File No.: E182087 (12-16 AWG)

E217798 (10 AWG)

CSA File No.: LR18689-C53

NEC Articles: 550-10K and 545-13

HUD Section: 3280.801

## Electrical

16 to 12 AWG version

Current: 20.0A

Voltage: 300V

10 AWG version

Current: 30.0A

Voltage: 300V

# Self-Contained Power Connectors



## Two-Circuit Versions

SC Power Splice Connectors are used with solid and stranded nonmetallic sheathed cable. Solid cable versions are available for 14/2, 12/2 and 10/2 wire. Stranded cable versions are available for 16/2, 14/2, 12/2 and 10/2 wire. The connectors are used to wire homes, buildings, office partitions, RVs, motor homes, boats, and many other electrical applications using 110 and 220V AC circuits.

SC Power Splice Connectors have three contacts that accept the solid or stranded conductors found in a two-conductor plus ground. Each terminal makes contact with the conductor via insulation displacement (IDT) contacts. They also help support the conductor and keep it from moving within the connector. Lastly, by having the dual IDT slots, this part operates with virtually no millivolt drop.

## Three-Circuit Version

The three-circuit splice connector can be used to splice solid nonmetallic cable 14/3 and 12/3 with ground. This connector has all the same features, assembly methods and agency approvals as the two-circuit versions. It is generally used for the wiring of smoke detectors, three-way lights and entertainment centers.

## Two-Circuit SEOW/SJEW Cable Version

The two-circuit SEOW/SJEW versions have been specifically engineered to accommodate round jacketed, stranded conductor power cords typically found in RV slide-out manufacturing applications. These products provide a time-saving alternative over hard wiring junction boxes. The SEOW/SJEW versions mate with the standard Self-Contained Power Connector products including the tap version, and provide a simple and reliable method for transitioning from solid NM cable to stranded SEOW/SJEW type cable. Designed with the double insulation displacement contact system, the two-circuit SEOW/SJEW cable versions provide maximum conductivity and minimize resistance associated with voltage drops.

## SC Power Series Tap Connectors

The SC Tap Splice is used for splicing into an existing solid conductor 14/2 and 12/2 cable with ground. Stranded wire versions are available for 16/2, 14/2 and 12/2 wire. This provides the user with the ability to add an additional branch line or add modular hookups in their products anywhere they are needed. The Molex Tap Splice is compact and fits into walls, floors and ceiling cavities with ease. Once the Tap Connector has been spliced into the cable, the branch line wire to an SC Power Splice Connector can be mated to the Tap.



## Weather Tight Boots

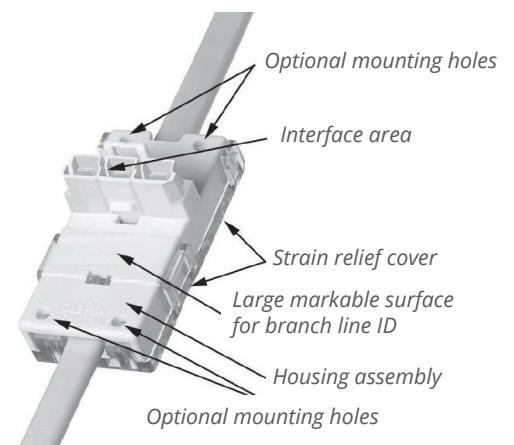
Some AC power applications require splices in areas exposed to rain and spray. The Weather Tight Boot product is a two-piece rubber cover that completely encloses the mated SC Power Connector in a splice application.

## Self-Contained Power Connector Safety Caps and Dust Covers Safety Caps

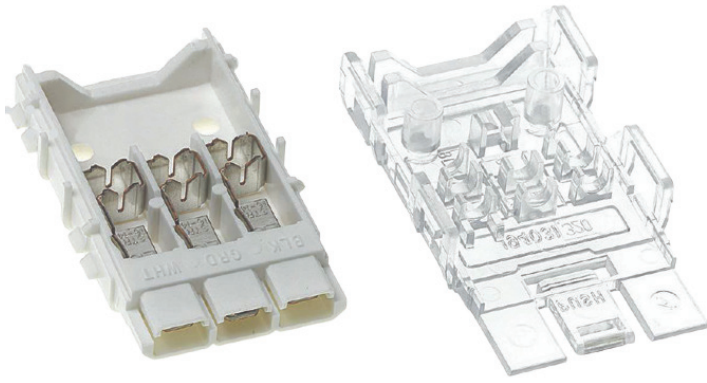
The Safety Cap fits securely over the interface area of an unmated Self-Contained Power Connector Splice, Tap or Panel Mount Connector. With this product, unmated Self-Contained Connectors can be implemented into designs and remain unmated for future use.

## Dust Covers

Dust Covers provide an effective solution for protecting unmated circuits from damage due to dust and dirt accumulation.







### Self-Contained Power Connector – 2-Circuit for Solid Wire

Wire Range (AWG)	Order Number	Housing Color	Optional Hand Tool	Optional Bench Mount Tool	Optional Arbor Press
12-14	19045-1000	White	19285-0074		64006-0200
10	19403-1300	White	19285-0084	64006-0020	64006-0200

### Self-Contained Power Connector – 2-Circuit for Stranded Wire

Wire Range (AWG)	Order Number	Housing Color	Optional Hand Tool	Optional Bench Mount Tool	Optional Arbor Press
14-16	19403-1011	Blue	19285-0074		64006-0200
12	19403-1010	Yellow	19285-0074		64006-0200
10	19403-1300	White	19285-0084	19285-0088	64006-0200

### Self-Contained Power Connector – 2-Circuit for Round Stranded Wire

Wire Range (AWG)	Insulation Diameter mm (in.)	Order Number	Housing Color	Cover Color	Optional Hand Tool	Optional Bench Arbor Press
14	8.64-11.18mm (.340-.440")	19403-1310	White	Clear	19285-0100	64006-0200
14	15.24mm (.600")	19403-0011	White	Blue	19285-0100	64006-0200
12	8.64-11.18mm (.340-.440")	19421-0001	Yellow	Clear	19285-0100	64006-0200
12	15.24mm (.600")	19421-0002	Yellow	Blue	19285-0100	64006-0200

### Self-Contained Tap Connector – 2-Circuit for Solid Wire

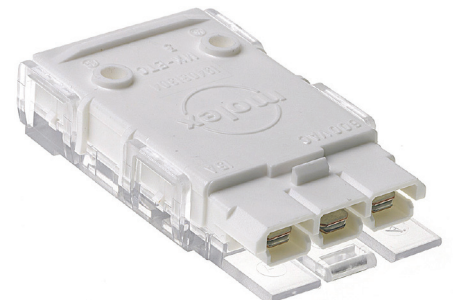
Wire Range (AWG)	Order Number	Optional Hand Tool	Optional Bench Arbor Press
12-14	19402-1000	19285-0074	64006-0200

### Self-Contained Power Connector – 3-Circuit

Wire Range (AWG)	Order Number	Housing Color	Optional Hand Tool	Optional Bench Mount Tool	Optional Arbor Press
12-14	19401-1000	White	19285-0074		64006-0200

### Weathertight Boots

Wire Range (AWG)	Wire Type	Order Number Male	Order Number Female
12-14	Solid	19425-001	19425-0002
12-14	Round Stranded	19426-001	19426-0002



### Self-contained Power Connector Safety Cap and Dust Cover

Description	Order Number
Safety Cap	19045-3180
Dust Cover	19402-5000

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