

Industrial Products

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For a complete catalog of all products listed above, please contact Molex at 800-800-0449

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HTCTM U-27 to U-29



For more information, please see the last page of the catalog for the location nearest you or contact:

STANDARD RING TONGUE

The ring tongue terminal is the safest and most reliable style because it cannot be disconnected unless the screw is completely removed.

The basic Molex barrel, called Krimptite®, is noninsulated and features a quality, one-piece design. It is also the most economical style and has the greatest variety of uses where special features are not required.

The InsulKrimp® version features a rigid insulation sleeve of PVC affixed to the Krimptite barrel or the brazed-seam VersaKrimp™ barrel. It attaches to the wire with one quick crimp and the insulation sleeve protects against vibration damage by preventing wire flex at the crimp point. The funnel

entrance into the barrel eliminates wire strand "fold back," increases crimping rates and enhances wire termination reliability.

When the butted-seam Krimptite barrel is bonded with a special brazing alloy, it becomes a VersaKrimp barrel. These brazed-seam barrel terminals will not open under conditions of stress or wire pull. As versatile as it is tough, it can be crimped under most adverse conditions by many types of tooling. The VersaKrimp is ideal for hard-to-crimp solid and stranded wires.

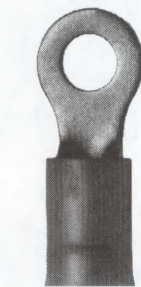
The NylaKrimp® barrel was designed specifically for larger wire applications. The color-coded barrel is formed by affixing a permanent, rigid, color-coded nylon insulating sleeve to the

barrel. The insulation has a funnel entrance into the barrel that eliminates wire strand "fold back," increases crimping rates and enhances wire termination.

AviKrimp® terminals with color-coded barrels offer you the ultimate in high-performance terminal design and rugged construction. The Tin-plated Brass sleeve strengthens the barrel and secures the wire to protect against stress and high vibration. The color-coded nylon insulating sleeve extends beyond the metal support sleeve. A funnel ferrule wire entrance into the barrel prevents wire strand "fold back" for increased crimping rates and added wire termination reliability in the standard barrel length.

Features

- Material: Copper
- Available in wire ranges from 24 to 26 AWG to 4/0.
- All parts available loose piece; some are also available on mylar tape carrier



AviKrimp



InsulKrimp



NylaKrimp



Krimptite



VersaKrimp

SPLICES

Molex offers standard and special splices for nearly every type of wiring needed.

Butt Splice

Stripped wires are inserted from each end and "butt" in the center, then a crimp at each end secures the connection.



Step Down Butt Splice

The perfect solution when two wires need to be inserted in one end of a splice and a single wire in the other end.



Parallel Splice

Stripped wires lie side-by-side in the splice and are secured by a single crimp in the middle.



AviKrimp Butt Splice

With the extra metal sleeve and nylon insulation, these splices should be used when heavy vibration is anticipated and a strong strain relief is needed.



Funnel Entry Butt Splice

With the funnel entry butt splice, the end that will be crimped by the crimping press is funneled to allow quick and easy wire insertion.



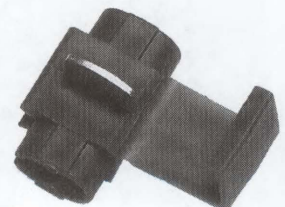
Window Butt Splice

The unique feature of this splice is the "window" that is stamped into the Copper splice and covered by nylon. The inspection window guarantees proper wire insertion and crimp tool alignment. QPL'd to Mil-T-7928/5



Multi-Lock

This is an insulation displacement connector that allows tap-and-run connections. Using only ordinary channel lock pliers, these color-coded connectors make quick, reliable, preinsulated splices without having to strip, twist or solder.



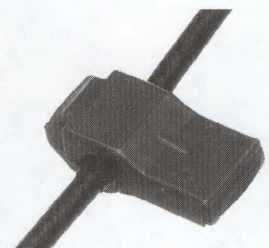
Nylon Closed End Connector

The nylon closed end connectors are used in a wide variety of situations to "pigtail" or tie together two or more wires.



Wire Tap

The Wire Tap splices onto a wire using an insulation displacement barb. No special tools are required, simply squeeze together with pliers.

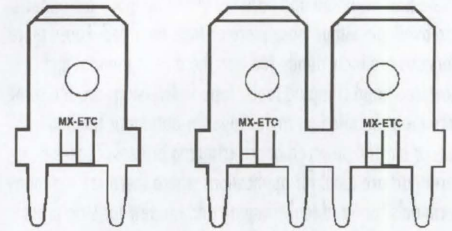


Note: The connectors shown here are only a representation of our product line. For a complete listing of all solderless terminals and connectors, please contact Molex Industrial Division at 1-800-800-0449, or at www.molex.com.

QUICK DISCONNECT TERMINALS FOR PC BOARD

Molex offers a large selection of Standard Printed Circuit Board Mountable quick disconnect terminals. Some products offer a tab support mounting feature providing increased mounting reliability and terminal strength. Products are available as strip applied and loose piece. All products can be easily inserted into printed circuit boards using widely available, industry standard bench-type and fully-automated XY insertion tooling.

Molex PC board Quick Disconnect terminals are available in tab sizes ranging from 2.79 by 0.51 mm (.110 by .020") to 6.35 by 0.81 mm (.250 by .032"). Products are available in both vertical and right angle mounting configurations. All products are manufactured to NEMA specifications and are UL and CSA recognized.



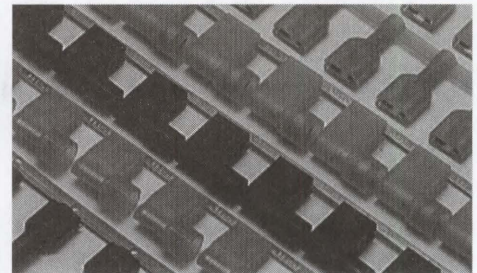
Features

- Material—Brass
- Thickness—0.81mm (.032")
- Tab conforms to NEMA specifications
- Plating—Tin 3.81µm (150µ") min. thickness

FULLY INSULATED QUICK DISCONNECTS

Features

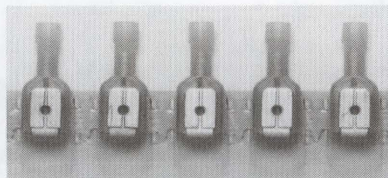
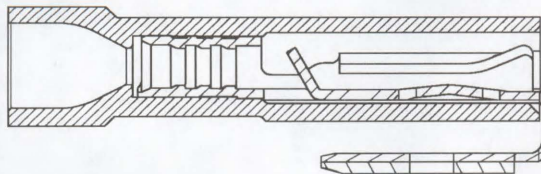
- Meets UL 310 standards (listed under UL File No. E79133)
- Color coded translucent insulator allows easy identification of terminal size and wire gauge
- Funnel entrance designed for increased crimping rates by speeding wire delivery into crimp section and eliminating wire strand fold back
- Wire stop stamped into the crimp barrel prevents insertion of over-stripped wire
- Avikrimp version has extra advantage of the secure metal support sleeve, and fulfills double crimp (support) requirements of VDE and DIN specifications
- The right angle flag terminal provides space saving design
- All parts available as loose piece; most are also available on either mylar tape, metal strip, and/or continuous molded carrier
- Some parts meet the UL 94V-0 flammability rating



FULLY INSULATED PIGGYBACK QUICK DISCONNECTS

Features

- Same functions as a standard piggyback terminal with the added feature of being fully insulated with a rigid nylon housing
- Also available in expanded flare versions
- Available in InsulKrimp (single crimp) or Avikrimp (double crimp) style

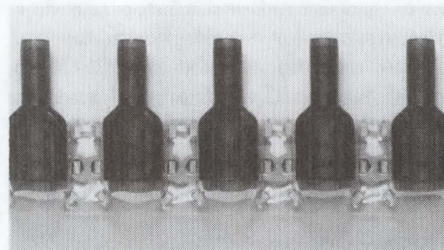
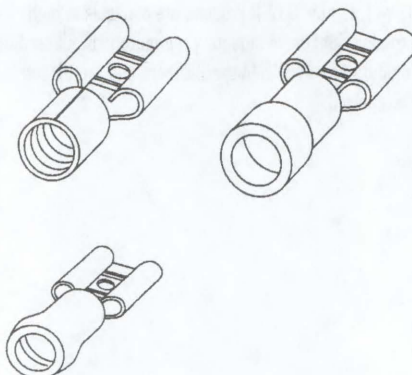


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TAPE-FED AND LOOSE PIECE QUICK DISCONNECTS

These non-insulated and partially insulated quick disconnects are available either loose piece or tape-mounted. Loose piece versions are individually fed into the dies of manual and powered hand crimping tools. Tape-fed versions are the same terminals mounted on mylar tape for automatic feeding into air- or electric-powered bench crimping presses. Tape-fed terminals are ideal for applications where there are too many terminals for hand tool crimping and too few for strip press crimping. All loose piece and tape-fed terminals have a fully Tin-plated Brass construction with closed electrical barrels.

Parts are available in the following styles: Krimptite (buted seam), InsulKrimp (PVC insulated), and Avikrimp (nylon insulated with vibration support).



OPEN BARREL STRIP SNAP PLUGS AND RECEPTACLES

The open barrel strip snap plug and receptacle product line consists of male snap plugs and female snap plug receptacles in 3.96 and 4.57mm (.156 and .180") diameters. The parts are open barrel and are available in either Krimptite (single crimp) or VibraKrimp (double crimp) style, and the wire range is 14 to 18 AWG. Both male and female parts are available plated or unplated. The female receptacles are available with or without the detent dimples (which affect the insertion and extraction forces). They are available only on metal strip carrier.





Self Contained Power Connectors

FEATURES AND SPECIFICATIONS

Introduction

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 conductors plus ground circuits for AC power applications. The product line features insulation displacement contacts which 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.

Features

- Double latching system provides positive connection security when required, 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 into place so screws and human factors are not a worry
- No special tools required, just pliers
- Large markable surface area on housing allows for easy circuit identification
- Double insulation displacement contacts provide maximum conductivity and reduce voltage drop to a bare minimum
- High impact, crystal clear strain relief cover provides durability and allows for complete visual inspection
- Simple two-piece construction provides for 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
- UL listed and CSA certified as a self-contained junction box
- Hermaphroditic design mates with itself so there is only one part to order and inventory
- Dual mounting holes accept screws or nails

Solid Cable Applications

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

Reference Information

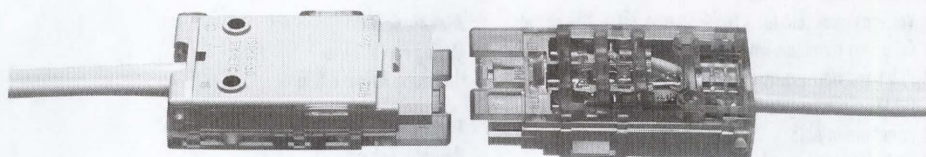
UL File No.: E182087
CSA File No.: LR18689-C53
NEC Article: 550-10K and 545-13
HUD Section: 3280.801

Electrical

16-12 AWG version
Current: 20A
Voltage: 300V
10 AWG version
Current: 30A
Voltage: 600V

Stranded Cable Applications

Typical applications for the stranded versions of the connectors include splices and taps used for AC power applications in the marine industry. With the SC power connectors, marine OEMs can manufacture discrete modules for staterooms, salons, and galleys and plug them together into the same electrical system as the modules are dropped into the hull further down the manufacturing line.



TAP CONNECTORS

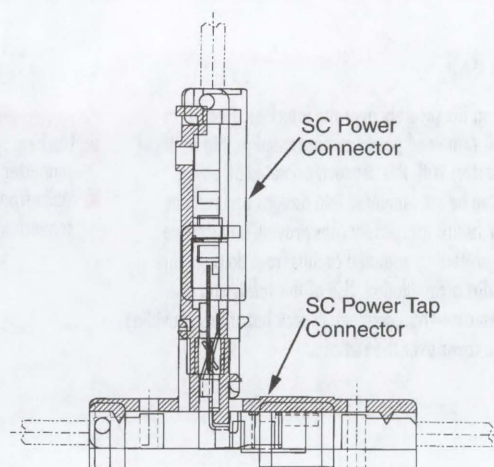
The SC tap splice is used for splicing into an existing solid conductor 14/2 and 12/2 cable with ground. Stranded wire versions are available for 16/2, 14/2, and 12/2 wire. This provides the user the ability to add an additional branch line or add modular hookups in their products anywhere they are needed.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

Reference Information

UL File No.: E182087
CSA File No.: LR18689-C53
NEC Article: 550-10K and 545-13
HUD Section: 3280.801

Electrical

16-12 AWG version
Current: 20A
Voltage: 300V



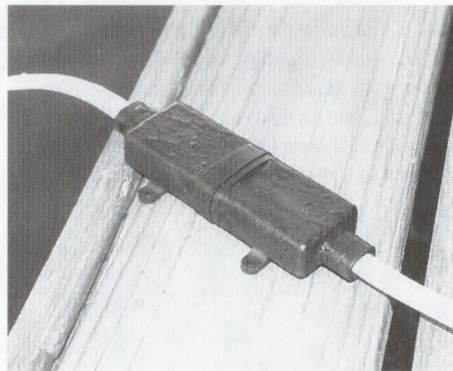
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WEATHER TIGHT BOOTS

Some AC power applications require splices in areas exposed to rain and spray. The weather tight boot product is a two-piece rubber cover which completely encloses the mated SC power connectors in a splice application.

Features and Benefits

- Weather tight per ABYC specifications
- Provides effective protection against seepage when exposed to rain and spray
- Made from durable F1 rated material, providing superior resistance to UV damage and fungus growth
- No tools required - simply slip boot over mated SC power connector
- One size fits all applications; 16, 14, and 12 AWG wire ranges



SC PANEL MOUNT CONNECTOR

The SC panel mount connector is designed to mate with the Molex SC power connector splice products. With the panel mount connector, OEMs can incorporate a pluggable electrical power interface into any equipment requiring 110V AC power normally supplied over non-metallic sheathed Copper cable. The product features crimp-on electrical contacts which are compatible with both stranded and solid wire. Three contacts are required for a typical 2 conductor plus ground AC circuit.

Features and Benefits

- Versions available for 110V 20A and 110V 30A circuits
- Crimp on terminals with poke-in housing
- Polarized housing assures proper mating
- Positive lock feature
- Panel mountable
- Recommended panel mounting hole size

Reference Information

UL File No.: E182087
CSA File No.: LR18689-C53
Packaging: Terminals—Reel

Electrical

Voltage: 300V
Current: 12 to 14 AWG—20A
10 AWG—30A
Dielectric Withstanding Voltage: 1600V

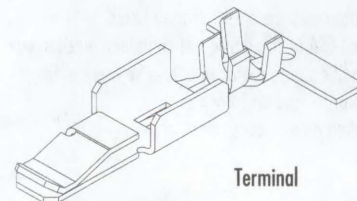
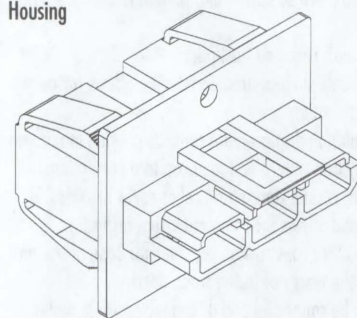
Mechanical

Mating Force: 21 lb
Unmating Force: 8.8 lb

Physical

Housing: Polyester, UL 94-5VA
Contact: High Copper Alloy
Plating: Tin
Operating Temperature: -35 to +105°C

Housing



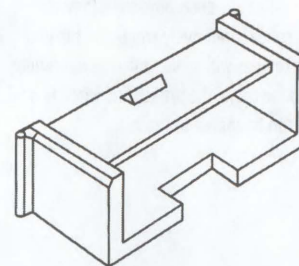
Terminal

SAFETY CAP

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 SC power connectors can be implemented into designs and remain unmated for future use. Safety caps provide an effective solution for protecting unmated circuits from damage due to dust and dirt accumulation. Use of the safety cap also provides protection from accidental shock hazard by providing a finger-safe cover over the contacts.

Features and Benefits

- Latching system provides easy mating and unmating from connector
- Made from same durable high impact resistant material as connector housing



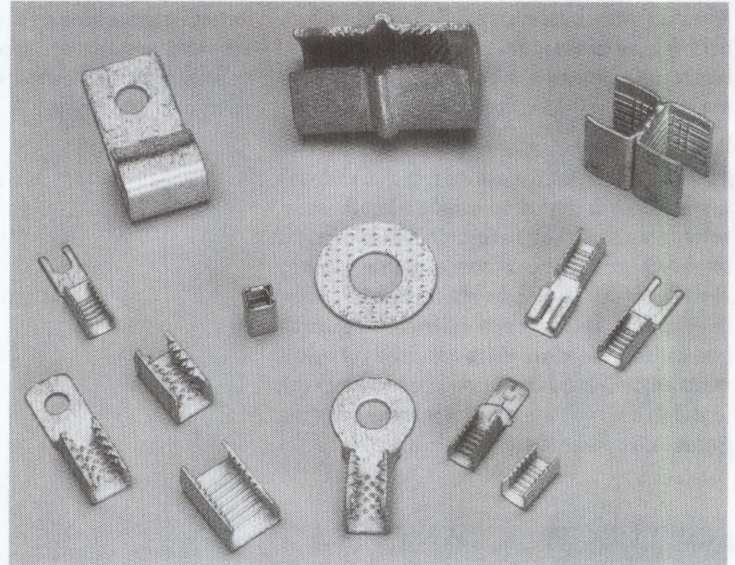
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MAGNET WIRE CONNECTORS

MagKrimp™ Terminals and Splices

Molex offers a complete line of crimp terminals and connectors that provide solutions for the splicing and tapping of magnet wire and aluminum wire. Our product offering includes ring terminals with stud sizes from #6 through 12.70mm (.500"), male and female 6.35 by 0.81 mm (.250 by .032") quick disconnects, along with spade terminals. Our taps and splices have an open side which permits easy access to wire and makes internal coil tapping easy.

The terminals and connectors are made from Copper Alloy, Tin plated, and are designed to penetrate magnet wire insulation as they are applied, eliminating the need for stripping, brazing and welding.



BATTERY TERMINALS, CONNECTORS AND ACCESSORIES

Features

Standard battery terminals

- Made from #131 Copper for high conductivity
- Tin plated to fight corrosion
- Can be installed with all major crimping tools and are solderable
- Made from sand casting
- Exceeds SAE conductivity Standard J163
- Includes 5/16" battery bolts and shoulder nuts, fully assembled for your convenience

Precision Die Cast Copper Battery Terminals

- Color coded per industry standards
- UL listed (Std. 486A) when applied with Molex HexCrimp tools No. 19078-0007 or 19078-0008
- Made of cast Copper, Tin plated twice to resist corrosion
- Exceeds SAE conductivity standards; Recommended Practices J163 and J1811
- Permanent, indelible, readable gauge and polarity stamped on terminal

Precision Die Cast Copper Battery Lugs

- Color coded connectors, cable and crimp tool form a system that is convenient, easy and foolproof
- Available as heavy wall Copper lugs, stud/side terminals (stackable and locking), and add-on terminals

MagnaLugs®

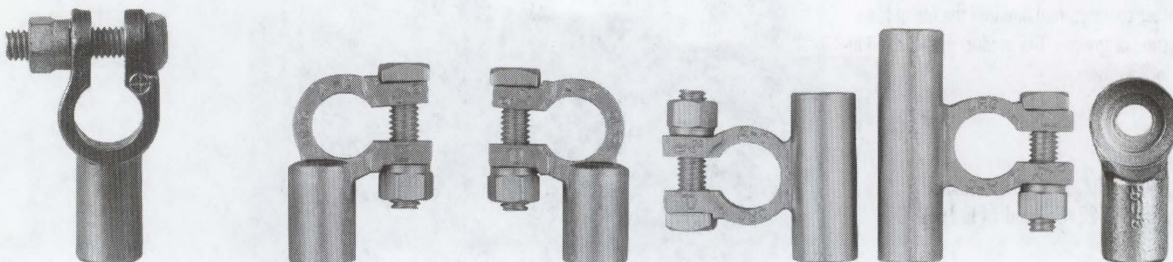
- Made of 100% Copper, Tin plated twice as thick as industry standards
- For trucks, buses, construction and farm
- Wider pad for better electrical contact, thicker pad for greater strength and conductivity
- Exceeds SAE conductivity standards; Recommended Practice J163 and J1811
- Available with or without sight holes
- Conforms to TMC Recommended Practice RP 105A, American Trucking Association, for closed eyelet terminals with anti-rotation feature
- UL listed (Std. 486A) when applied with Molex HexCrimp tools No. 19078-0007 or 19078-0008

Lead Plated Battery Connectors

- Made from #131 Contact Copper
- Made from sand casting
- Conforms to TMC Recommended Practice RP 105A, American Trucking Association
- Exceeds SAE conductivity Standard J163
- Lead plated connectors can be installed with all major crimping tools - soldering not recommended
- Includes 5/16" battery bolts and shoulder nuts, fully assembled

Also Available

- Set screw connectors
- Battery taps
- Solder terminals
- Marine battery terminals
- Military terminals
- Custom battery cables
- J Bolts
- Battery hold down kits
- Application tooling



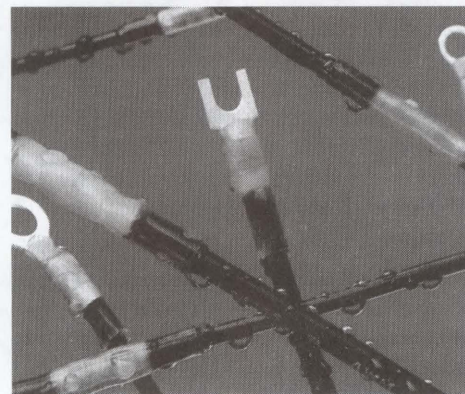
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PERMA-SEAL® TERMINALS AND SPLICES

Perma-Seal terminals and splices provide a rugged, environmentally sealed connection for wire sizes 8 to 22 AWG that will insulate, seal and protect joints from physical abuse and abrasion, water, salt and other corrosive compounds.

These terminals give you long-lasting, moisture-proof connections that withstand water, salt, corrosion and heat, all of which cause serious problems for conventional, unsealed splices. The inner wall of the heat-shrinkable insulation sleeve is lined with a special hot-melt adhesive that is inert at room temperature, permitting wires to be inserted easily into the splices and terminals. As the sleeve is heated, the adhesive melts and flows under pressure from the tubing. This action creates a voidless seal that repels moisture incursion even during pressure cycling, and stands up to some of the most rigorous tests that can be applied to high-performance splices, such as the salt fog test MIL-T-7928.

The tough insulation sleeve of Perma-Seal splices and terminals resists abrasion and cutting. This protection helps to maintain the insulation and sealing properties even in the most hostile environments, inside and out.

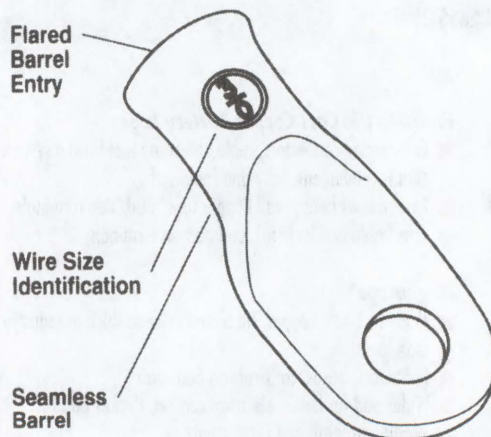


HEAVY DUTY COPPER LUGS AND SPLICES

Our heavy duty closed end crimpable terminals are designed for electrical and industrial applications such as welding equipment, forklifts, generators, power distribution equipment, motors, etc. They are manufactured of pure electrolytic Copper, and are available in 8 AWG through 4/0 AWG wire and cable with a variety of stud sizes

Features

- Rated to 35KV applications
- UL listed, CSA certified
- Crimps in industry standard tooling
- Seamless barrel design
- Can be easily soldered or crimped
- Flared barrel entry for easy wire insertion
- AWG wire size identification on barrel
- Made of CDA-110 Copper stock offering 100% conductivity

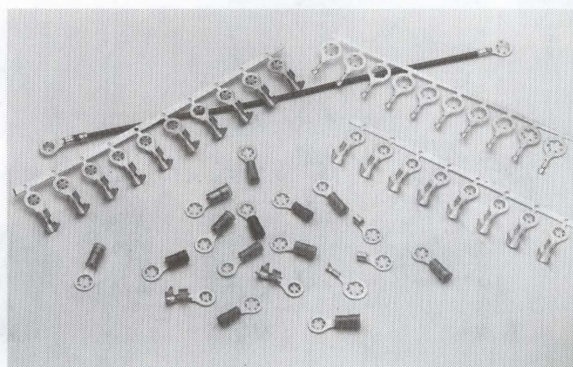


STAR RING TERMINALS

The Star Ring is a serrated ring that is mainly used for grounding. Unlike a ring terminal, when you tighten down on a star ring, the "star blades," or serrated edges, actually pierce through paint or other coatings, and bite into the metal to insure a good connection or ground. The product may also eliminate the need for lock washers.

Features

- Material: Brass or Steel
- Non-insulated, PVC insulated, or nylon insulated
- Wire ranges from 18 to 22 AWG and 14 to 16 AWG



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FEATURES AND SPECIFICATIONS

This commercial line of shielded Micro-D products with a 1.27mm (.050") pitch, offers an economical solution for commercial applications that require the density of a microminiature connector. The series is available in a right angle and vertical configuration, designed with a metal interface and grounding tabs for improved mechanical and electrical shield connection.

Also available is the cable receptacle, which has a "crimp and poke" configuration designed for hand or semi-automatic crimping. Our unique backshell design will maintain the integrity of the cable construction while the strain relief is crimped over the cable.

Features:

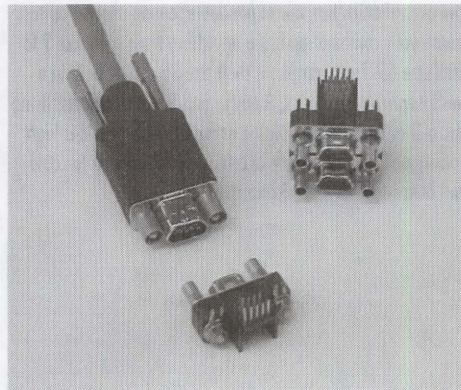
- Right angle plug available in 9, 15, 18, 25 and 51 circuits
- Vertical plug available in 9, 15 and 25 circuits
- Cable receptacle available in 9, 15, 25 and 51 28 circuits
- Solder cup version of plug available
- LCP insulator, stamped metal shell
- No epoxy
- Crimp and poke contacts on the cable receptacle for customer termination
- Current: 3.0A max.
- UL File No: E81982

Applications:

- Commercial
- Computer I/O
- Data storage
- Telecommunications



Commercial Micro-D Connector



FEATURES AND SPECIFICATIONS

Molex offers a large selection of standard (9, 15, 21, 25, 31, 37, 51 and 100 circuit) and custom sized Micro-D connectors with our Mite-Y-Pin™ contacts on a 1.27mm (.050") pitch. These connectors are available in metal or plastic shells with pre-wired, solder cup or PC tail terminations. This highly reliable connector series provides high density, space savings, low weight and shorter signal path, and are cost effective.

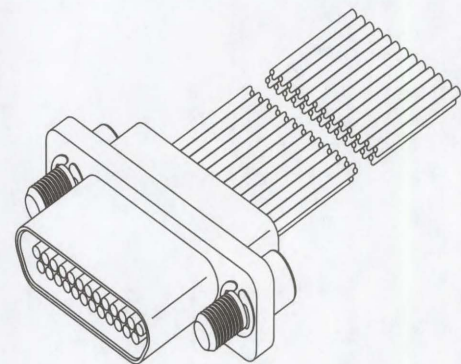
Features:

- Meet all electrical and mechanical MIL-C83513 requirements
- QPL qualified
- Current: 3.0A max.
- Wire Range: 24 to 30 AWG, stranded or solid
- Contact Retention: Fixed via epoxy
- Operating Temperature: -55 to +125°C
- Connector saver, pin and socket configuration

Applications:

- Any requiring miniaturization
- Commercial Aviation
- Instrumentation
- Medical
- Military/Aerospace
- Telecommunications

Micro-D Connectors, Including MIL-C-83513



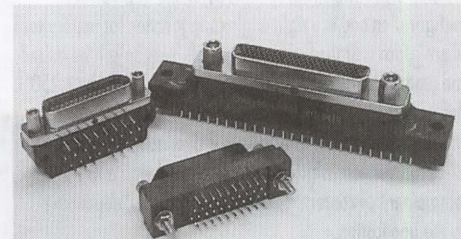
FEATURES AND SPECIFICATIONS

Molex offers a wide variety of through hole solder connectors. Eight connector configurations, from the standard Military MIL-C-83513 configurations (style 1, 4 and 5) to the higher density (style 6, 8, 16 and 18) configurations where the termination foot prints are contained within the envelope of the connector body. We also offer a configuration with surface mount tails for greater space saving on your flex circuit or PCB.

Features:

- Available in standard (9, 15, 21, 25, 31, 37, 51 and 100 circuit) and custom sizes.
- Vertical and right angle styles can be mounted to PCBs
- Various wire gauges
- Meet all electrical and mechanical MIL-C83513 requirements

Micro-D Circuits



FEATURES AND SPECIFICATIONS

This unique design offers the versatility of combining signal, power and coax lines in the same connector. With only a low-cost modification, our expandable tooling allows you to create your combination using anywhere from shell size 9 to shell size 65. For example, a shell size 35 can be built in a configuration with 2 coax, 3 power and 5 micro contacts. Using Micro-D connectors with plastic or metal shells provides high density and high reliability in cable-to-cable, board-to-cable and board-to-board applications.

Features:

- Standard coax is RG178/U or RG196/U
- Solder cup power contacts, size 16
- Vertical and right angle versions can be mounted to PCBs
- Coax or power contacts replace 6 micro contacts
- Contact retention: Fixed via epoxy

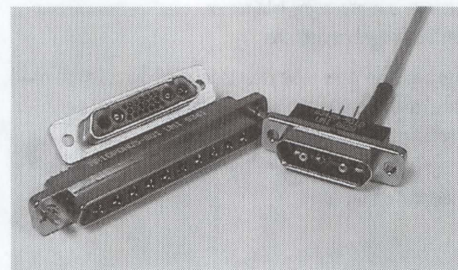
Applications:

- Any requiring a combination of signal, coax and/or power contacts.



Combo Micro-D

Signal, Coax and Power Contacts in One Connector



FEATURES AND SPECIFICATIONS

Molex offers Microminiature and Nanominiature connectors and cable assemblies for high operating temperatures up to +200°C. These high-temperature versions are built with an epoxy compound that withstands harsh environments.

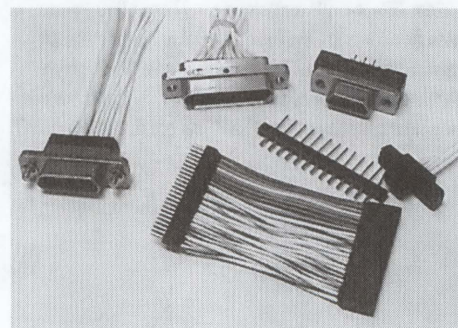
Features:

- Gray epoxy for easy visual differentiation from standard products

Applications:

- Geophysical
- Down Hole
- Industrial - harsh environment
- Military/Aerospace

High-temperature Connectors



FEATURES AND SPECIFICATIONS

Our new microminiature circular connector with a snap seal design is rugged with its standard overmold strain relief on the plug side. The strain relief is available in a vertical configuration and in a right angle configuration for applications where space is limited. The right angle version can be mated and unmated in the space of approximately 31.75mm (1.250"). This unique connector provides a quick disconnect coupling and a moisture-proof interface. It is available in a standard 12-circuit version, which may be furnished with a full complement of contacts or with fewer contacts, depending on the application.

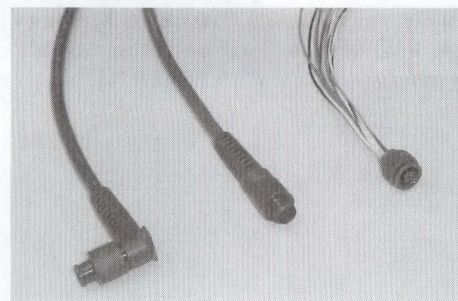
Features:

- Overmolded strain relief, vertical or right angle
- Quick disconnect coupling
- Various termination options on receptacle: solid wire, stranded wire, solder cup
- Reversible contact gender, standard is socket-in-plug
- Standard circuit size 12
- Backpanel mount receptacle

Applications:

- Biomedical I/O Cables
- Computer and Peripheral
- Industrial
- Instrumentation
- Robotics

Plastic Micro Circular Connectors



FEATURES AND SPECIFICATIONS

The 1.27 mm (.050") pitch strip connector provides a dense and reliable interconnection solution. The plastic molded body of the 50 mil strip can accommodate from 2 to 43 micro contacts. This connector is ideal for cable-to-cable, board-to-cable and board-to-board applications where minimum profile package and weight are critical. Our securing latch for quick and reliable positive lock is also available for side or end mounting where no tooling is required.

Features:

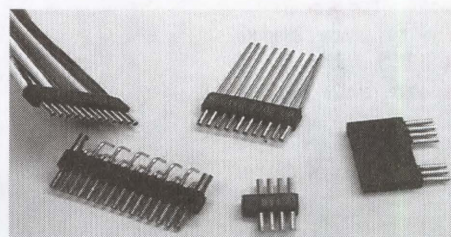
- Guide pin, jackscrews, cross mounting hole
- Solder cup contacts, size 24
- Securing latch, factory installed
- Contact retention: Fixed via epoxy
- Multiple circuit termination styles
- Current: 3.0A max.

Applications:

- Any requiring miniaturization
- Instrumentation
- Medical
- Military/Aerospace
- Telecommunications



Micro Strip Connector



FEATURES

From simple to complex harnesses, Molex has the capability and expertise to service your wire harness needs. We currently provide wire harnesses to a variety of customers in the computer, medical, commercial aviation and military markets. Our 100% turnkey assemblies are manufactured and tested to your specific requirements.

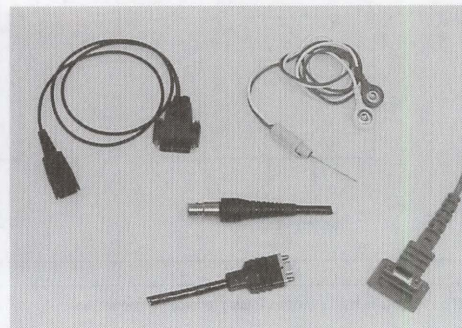
Cable Assemblies



FEATURES

Molex has a history and reputation for providing a variety of customers with unique connectors and overmolds, many of which incorporate the extremely reliable Mite-Y-Pin™ contact system. From alteration or modification of our standard Micro-D products to unique custom-built designs, Molex can meet your needs.

Custom Connector and Overmold Capabilities



BEAU® PLUGGABLE EUROSTYLE®

Features and Benefits

- Industry standard interface
- High flammability rating
- Secure, reliable contact

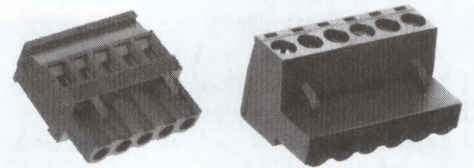
Reference Information

UL File No.: E48521

UL Guide No.: XCFR2

CSA File No.: 025562

molex® Terminal Blocks



Series	Pitch	Current	Voltage	Wire Range	Circuits
39860	5.08 (.200)	15	300	12-30	2-24
39870	5.00 (.197)	15	300	12-30	2-24
39900	3.81 (.150)	10	150	16-26	2-21

39860 39870	All	All	39860	39900	39900

Note: Reference Industrial Division Catalog for ordering information

BEAU EUROSTYLE HEADERS

Features and Benefits

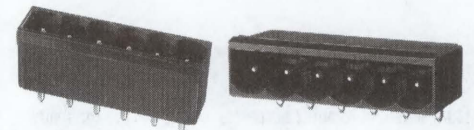
- Industry standard interface
- High flammability rating
- Compatible with convection or vapor phase soldering*

Reference Information

UL File No.: E48521

UL Guide No.: XCFR2

CSA File No.: 025562



Series	Pitch	Current	Voltage	Circuits
39860	5.08 (.200)	15	300	2-24
39870	5.00 (.197)	15	300	2-24
39900	3.81 (.150)	12	300	2-21

39860 39870	All	39860 39870	All	39860	39860	All	All	39860* 39870*	39860* 39870*

Note: Reference Industrial Division Catalog for ordering information

* SMC

BEAU PLUGGABLE EUROMATE®

Features and Benefits

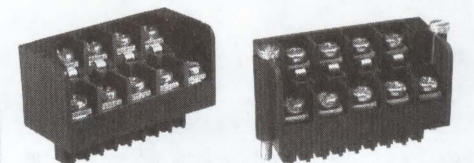
- No special tools
- Rugged and durable
- Accepts 6.35mm (.250") wire lugs
- Mates with most 3.81 or 5.08mm (.150 or .200") pin headers

Reference Information

UL File No.: E48521

UL Guide No.: XCFR2

CSA File No.: 025562



Series	Pitch	Current	Voltage	Wire Range	Circuits
39930	3.81 (.150)	12	300	14-22	3-21
39940	5.08 (.200)	15	500	12-22	3-24

All	All	All	All

Note: Reference Industrial Division Catalog for ordering information

BEAU® EUROSTYLE® FIXED TERMINAL BLOCKS



Features and Benefits

- Made for multiple termination
- Low profile, small footprint
- High flammability rating: UL 94V-0
- Modular dovetail construction*

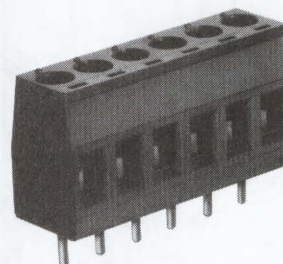
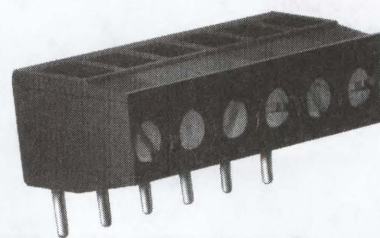
Reference Information



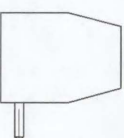
UL File No.: E48521

UL Guide No.: XCFR2

CSA File No.: 025562

Series	Pitch	Current	Voltage	Wire Range	Circuits
39830*	3.50 (.138)	8	300	16-26	2-3
39840*	5.00 (.197)	15	300	14-24	2-3
39850	5.00 (.197)	20	300	12-30	2-24
39880*	5.08 (.200)	20	300	12-30	2-24
39890	5.00 (.197)	20	300	12-30	2-24



		
38850 39880	All	38850 39880 39890

Note: Reference Industrial Division Catalog for ordering information

BEAU EUROSTYLE TWO LEVEL (FIXED) BLOCKS

Features and Benefits

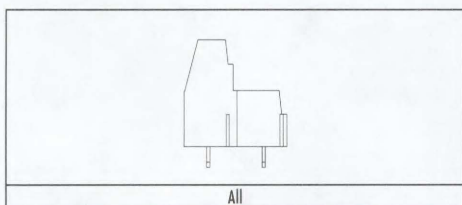
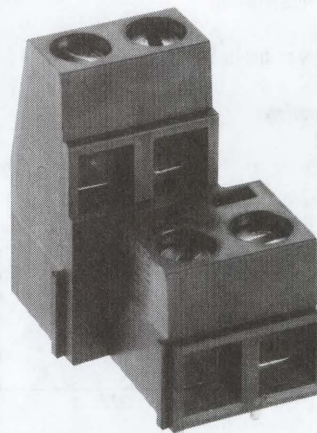
- Modular construction reduces inventory
- High flammability rating
- Secure, reliable wire retention

Reference Information

UL File No.: E167473

CSA File No.: LR102896

Series	Pitch	Current	Voltage	Wire Range	Circuits	Profile
39880	5.08 (.200)	13.5	300	14-26	4-48	Low
39880	5.08 (.200)	17.5	300	14-26	4-48	Medium
39880	5.08 (.200)	24	300	14-26	4-48	High
39890	5.00 (.197)	13.5	300	14-26	4-48	Low
39890	5.00 (.197)	17.5	300	14-26	4-48	Medium



Note: Reference Industrial Division Catalog for ordering information

BEAU EUROSTYLE THREE LEVEL (FIXED) BLOCKS

Features and Benefits

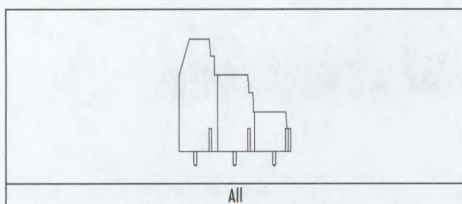
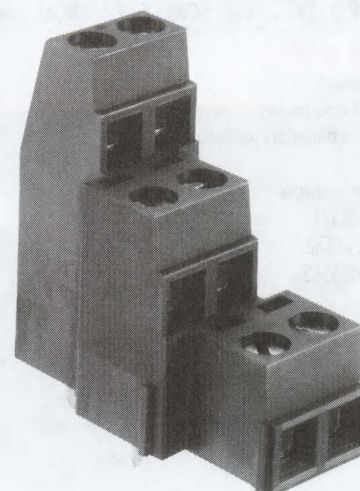
- Modular construction reduces inventory
- High flammability rating
- Secure, reliable wire retention

Reference Information

UL File No.: E167473

CSA File No.: LR102896

Series	Pitch	Current	Voltage	Wire Range	Circuits	Profile
39880	5.08 (.200)	13.5	300	16-26	6-72	Low
39880	5.08 (.200)	17.5	300	14-26	6-72	Medium
39880	5.08 (.200)	24	300	14-26	6-72	High
39890	5.00 (.197)	13.5	300	16-26	6-72	Low
39890	5.00 (.197)	17.5	300	14-26	6-72	Medium



Note: Reference Industrial Division Catalog for ordering information

BEAU® PLUGGABLE EUROSTYLE® LOCKING BLOCKS AND HEADERS

Features and Benefits

- Polarization feature
- Resists vibration and wire loads
- Convection or vapor phase soldering

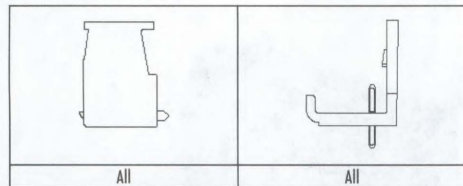
Reference Information

UL File No.: E48521

UL Guide No.: XCFR2

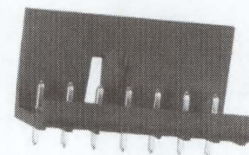
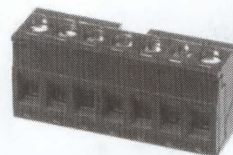
CSA File No.: 025562

Series	Pitch	Current	Voltage	Wire Range	Circuits
39980	5.08 (.200)	10	300	12-24	2-24
39990	5.00 (.197)	10	300	12-24	2-18



Note: Reference Industrial Division Catalog for ordering information

molex® Terminal Blocks



BEAU EUROSTYLE HIGH POWER (FIXED) BLOCKS

Features and Benefits

- High temperature rating
- Secure, reliable wire retention
- Molded to length
- High flammability rating: UL 94V-0

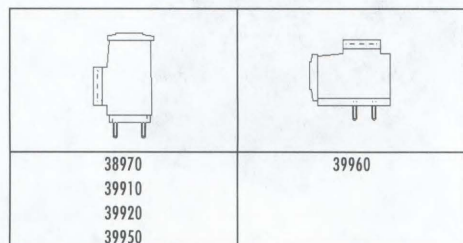
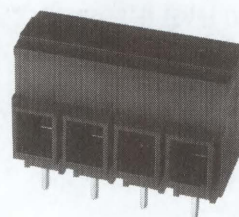
Reference Information

UL File No.: E48521

UL Guide No.: XCFR2

CSA File No.: 025562

Series	Pitch	Current	Voltage	Wire Range	Circuits
39910	10.16 (.400)	60/40	600	8-18	3-14
39920	11.00 (.433)	90S	600	3-14	2-12
39950	8.00 (.315)	20	600	12-22	3-16
39960	8.00 (.315)	30	300	10-22	3-14
39970	10.16 (.400)	60/40	300	6-18	2-12



Note: Reference Industrial Division Catalog for ordering information

BEAU EUROSTYLE TWO SCREW TERMINAL STRIPS

Features and Benefits

- Modular design
- Dead front construction
- Captive wire protectors (optional)

Reference Information

UL File No.: E48521

UL Guide No.: XCFR2

CSA File No.: 025562

Series	Pitch	Current	Voltage	Wire Range	Circuits
39100	15.01 (.591)	40	600	8-24	2-12
39150	8.00 (.315)	10	300	12-24	2-12
39160	15.01 (.591)	40	600	8-22	2-12
39400	10.01 (.394)	25	300	10-24	2-12
39600	11.99 (.472)	25	600	8-24	2-12

Standard (with standoffs)



Low Profile (option)



BEAU® SINGLE ROW BARRIER TERMINAL STRIPS

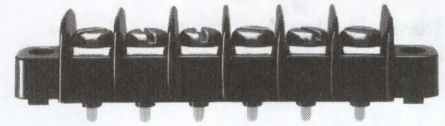
molex® Terminal Blocks

Features and Benefits

- Robust and durable welded construction
- Wide variety of screw and terminal options
- Molded to exact length, no unsightly saw cuts

Reference Information

UL File No.: E48521
UL Guide No.: XCFR2
CSA File No.: 025562



Series	Pitch	Current	Voltage	Wire Range	Circuits
38630/38631	11.12 (.438)	25	600	12-24	2-16
38700/38701	8.25 (.325)	20	300	12-22	2-30
38710/38711	9.52 (.375)	25	300	12-24	2-26
38720/38721	9.52 (.375)	25	300	12-24	2-26
38730/38731/38732	11.12 (.438)	30	300	10-24	2-30
38740/38741/38742	11.12 (.438)	30	300	10-24	2-30

Screw Only	Insulated Solder	Insulated PC	Centerline PC	Solder Turret	Centerline Wire Wrap	Centerline Right Angle PC	Insulated Fast On	Offset PC	Offset Wire Wrap	Offset Right Angle PC
All	38710 38720 38730 38740	38710 38720 38730 38740	38630 38710 38720 38730 38740	38630/38631 38710/38711 38720/38721 38730/38731 38740/38741	38631 38711 38721 38731 38741	38711 38721 38731 38741	38711 38721 38731 38741	38700	38701	38701

Note: Reference Industrial Division Catalog for ordering information

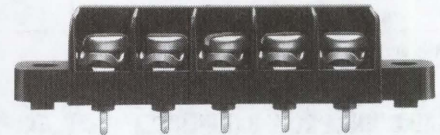
BEAU SINGLE ROW TRI-BARRIER TERMINAL STRIPS

Features and Benefits

- Robust and durable welded construction
- Wide variety of screw and terminal options
- Molded to exact length, no unsightly saw cuts
- Tri-barrier construction prevents shorting

Reference Information

UL File No.: E48521
UL Guide No.: XCFR2
CSA File No.: 025562



Series	Pitch	Current	Voltage	Wire Range	Circuits
38610	6.35 (.250)	10	300	18-22	2-32
38660	12.70 (.500)	45	600	8-18	2-15
38690/38691	8.25 (.325)	20	300	12-22	2-30
38750/38751/38752	9.52 (.375)	25	300	12-24	2-26
38634	11.12 (.438)	25	600	12-24	2-16
38704/38705	8.25 (.325)	20	300	12-22	2-12
38724/38725	9.52 (.375)	25	300	12-24	2-16
38734/38735	11.12 (.438)	30	300	10-24	2-12

Screw Only	Insulated Solder	Insulated PC	Centerline PC	Solder Turret	Centerline Wire Wrap	Centerline Right Angle PC	Insulated Fast On	Offset PC	Offset Wire Wrap	Right Angle PC	Offset Right Angle PC
All	38720 38730	38720 38730	38630 38720 38730	38630 38720 38730 38631 38721 38731	38631 38721 38731	38721 38731	38721 38731	38600 38660 38690 38700 38750	38691 38701 38751	38691	38751

Note: Reference Industrial Division Catalog for ordering information

Industrial Products

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BEAU® DUAL LEVEL PCB BARRIER TERMINAL STRIP

Features and Benefits

- Robust and durable welded construction
- Low profile, high density

Reference Information

UL File No.: E48521

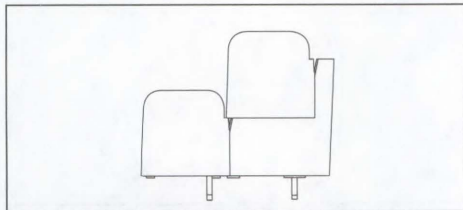
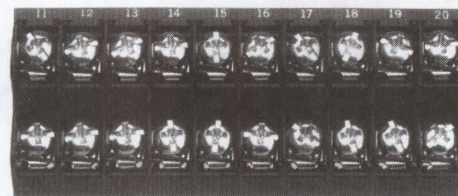
UL Guide No.: XCFR2

CSA File No.: 025562

Series	Pitch	Current	Voltage	Wire Range	Circuits
38706	8.25 (.325)	20	300	12-22	4-24



Terminal Blocks



Note: Reference Industrial Division Catalog for ordering information

BEAU SINGLE ROW PHENOLIC RIVETED QUICK CONNECT ASSEMBLIES

Features and Benefits

- Wide variety of options
- Low-cost rivets add more security

Reference Information

UL File No.: E48521

UL Guide No.: XCFR2

CSA File No.: 025562

Series	Pitch	Current	Voltage	Wire Range	Circuits
38240	9.52 (.375)	15	300	16-24	2-30
38250	11.12 (.438)	15	300	14-24	2-30
38260	14.30 (.563)	20	300	12-24	2-18



Quick Connect Parts						
38240	38240	38240	38240	38240	38240	38240
38250	38250	38250	38250	38250	38250	38250
38260	38260	38260	38260	38260	38260	38260

Note: Reference Industrial Division Catalog for ordering information

BEAU DOUBLE ROW BARRIER TERMINAL STRIPS

Features and Benefits

- Wide variety of options
- Snap-on covers
- Robust and reliable
- Closed bottom or feed-through

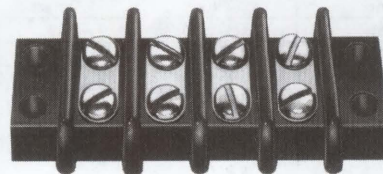
Reference Information

UL File No.: E48521

UL Guide No.: XCFR2

CSA File No.: 025562

Series	Pitch	Current	Voltage	Wire Range	Circuits
38140	9.52 (.375)	15	300	14-28	2-30
38180	11.12 (.438)	20	300	12-22	2-30
38210	14.30 (.563)	30	300	10-18	2-26
38280	17.47 (.688)	50	300	6-18	2-12
38760	9.52 (.375)	20	300	12-24	2-30
38770	9.52 (.375)	20	300	12-24	2-30
38780	11.12 (.438)	20	300	12-24	2-30



Screw Terminal	One-Sided Solder	Two-Sided Solder	Short Solder	Short PC	Long Solder	Long PC	Wire Wrap
All	38140 38180 38210 38760 38770	38140 38180 38210 38760 38770	All	38140 38760 38770	38140 38180 38210 38760 38770 38780	38140 38180 38760 38770 38780	38140 38180 38760 38770 38780

Note: Reference Industrial Division Catalog for ordering information

BEAUPUG® PANEL MOUNT PLUGS AND SOCKETS

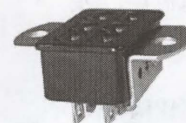
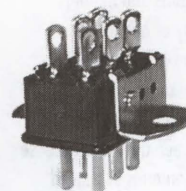
Features and Benefits

- Robust blade contacts resist damage from improper mating
- Large surface area of dual wipe female contact produces maximum current capacity
- No de-rating required—all circuits rated for full current load

Reference Information

UL File No.: E34763
CSA File No.: 22156

Series	Current	Voltage	Circuits
38330 to 38336	10	250	2-33
38440 to 38442	15	250	4-12
38540 to 38544	15	250	4-16



Angle Bracket	Less Angle Bracket	Flat Plate	Shallow Bracket	End Bracket	Snap C-Clip	Deep Bracket	Recessed Plate
38330 to 38336 38440 to 38442 38540 to 38544	38330 to 38336 38440 to 38442 38540 to 38544	38330 to 38336	38330 to 38336 38540 to 38544	38330 to 38336	38330 to 38336 38540 to 38544	38330 to 38336 38540 to 38544	38330 to 38336

Note: Reference Industrial Division Catalog for ordering information

BEAUPUG CABLE MOUNT PLUGS AND SOCKETS

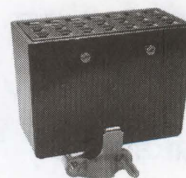
Features and Benefits

- Robust blade contacts resist damage from improper mating
- Large surface area of dual wipe female contact produces maximum current capacity
- No de-rating required—all circuits rated for full current load

Reference Information

UL File No.: E34763
CSA File No.: 22156

Series	Current	Voltage	Circuits
38330 to 38336	10	250	2-12
38540 to 38544	15	250	4-16



Blank Back Shell	Flared Hole End	Flared Hole Top	Cable Clamp End	Cable Clamp Top
38330	38330 38540	38330 38540	38330 38540	38330 38540

Note: Reference Industrial Division Catalog for ordering information

Molex offers a full line of molded cordsets and mating bulkhead receptacles for a wide variety of applications. Designed for use with AC and DC sensor and control devices, solenoid valves, limit switches, and other electrical components, these cordsets offer a cost effective alternative to hardwiring. They have been designed for ease of use, and they meet or exceed the demands of rugged industrial environments. Molex cordsets and receptacles conform to all applicable specifications for Mini, Micro, and Nano (Pico) style connectors.

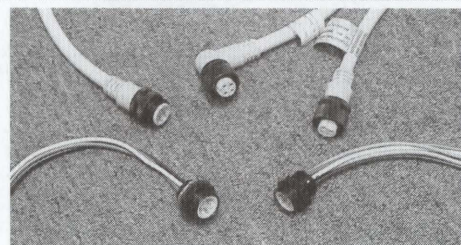
Typical applications include:

- Material Handling Equipment
- Robotics
- Test Equipment
- Instrumentation
- Factory Automation
- Conveyor Systems
- Food Processing Equipment

MINI-C CORDSETS AND RECEPTACLES

Features

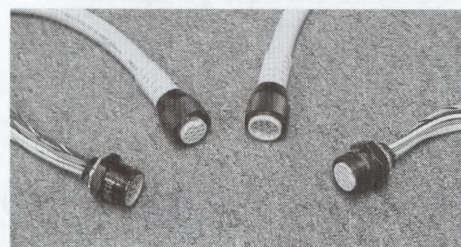
- Spring loaded coupling ring for superior vibration and shock resistance
- Mating assurance indicator allows for visual assurance of mated connector
- Hooded socket contact provides excellent contact durability
- Large coupling ring for ease of mating in tight locations
- O-ring seal provides NEMA 6P and IP67 seal
- Available with rugged ST00W-A or S00W-A cable
- Available in 2 through 6 poles
- 600V 16 AWG or 250V 18 AWG versions available



LARGE MINI-C CORDSETS AND RECEPTACLES

Features

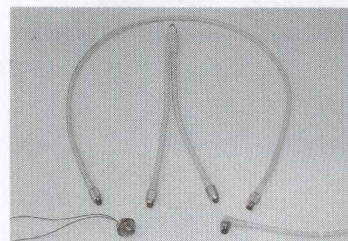
- Hooded socket contact provides excellent contact durability
- Large coupling ring for ease of mating in tight locations
- O-ring seal provides NEMA 6P and IP67 seal
- Provided with rugged ST00W-A cable
- Available in 9, 10 or 12 pole configurations
- 600 Volt 16 AWG cable



MICRO-C CORDSETS AND RECEPTACLES

Features

- Spring loaded coupling ring for superior vibration and shock resistance
- Mating assurance indicator allows for visual assurance of mated connector
- Large coupling ring for ease of mating in tight locations
- O-ring seal provides NEMA 6P and IP67 seal
- Available with PVC, PUR, or rubber jacketed cable
- Available in 3 through 5 pole single (DC) key and 2 through 5 pole dual (AC) key
- Fully shielded connectors with shield connected to coupling ring to allow shielding through panel/chassis
- Available with 22 AWG or 18 AWG conductors



NANO-C CORDSETS AND RECEPTACLES

Features

- Available with threaded coupling or quick disconnect "snap lock" coupling
- PUR molded body for superior chemical and abrasion resistance
- O-Ring seal provides NEMA 6P and IP67 seal
- Available in 3 pole 24 AWG or 4 pole 26 AWG configurations
- Gold plated contacts for superior conductivity



DEVICENET CORDSETS AND RECEPTACLES

Features

- Fully shielded cable conforms to ODVA specification
- Spring loaded coupling ring for superior vibration and shock resistance
- Mating assurance indicator allows for visual assurance of mated connector
- Large coupling ring for ease of mating in tight locations
- O-ring seal provides NEMA 6P and IP67 seal
- Full line of accessories including Terminating Caps and Tees (Passive, Diagnostic, Auxiliary Power, E-stop, and Power Introduction Tees)
- Cordsets available with Thick (Trunk) or Thin (Drop) cable
- Receptacles available with cable, discrete leads or solder cup contacts



MIL-C BACKSHELLS

The Molex Mil-C line of backshells provide an alternative to the standard backshell offerings of Mil-Spec connector manufacturers. They will mate to most Mil-Spec circular connectors, and are available in two configurations, a cable backshell for use with a large range of cable types and sizes, and a liquid tight backshell for use with type M liquid-tight conduit.

Typical applications include:

- Aerospace Ground Support Equipment
- Machine Tools
- Conveyor Systems
- Construction Machinery
- Welding Equipment
- Industrial Control Equipment

molex® Hard Shell Circular Connectors

FEATURES

Features

- Patented seal design for NEMA 4 seal between backshell and Mil-Spec connector
- Cable backshell has patented garter spring design for superior strain relief
- Liquid tight backshell for 3/8, 1/2 or 3/4" metallic liquid-tight conduit
- Available with mating threads ranging from 5/8-24 UNEF through 1-3/4 19 UNS

SPIRIT/SPECTRE SERIES

Spirit and Spectre series connectors are metal shell circular connectors that are a commercial replacement for higher cost Mil-Spec circular connectors. They are available in several sizes, contact configurations and backshell styles to fit a wide variety of needs.

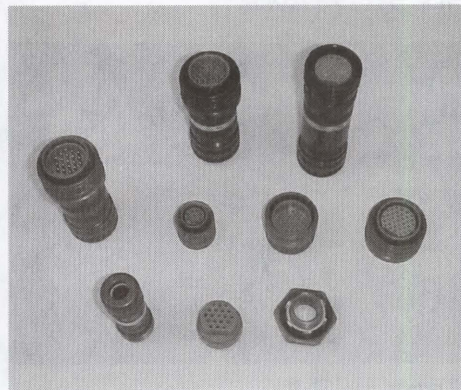
Typical applications include:

- Machine Tools
- Conveyor Systems
- Material Handling Equipment
- Welding Equipment
- Truck and Bus Controls
- Cranes and Hoists

FEATURES

Features

- Sealed diaphragms in insulator eliminate need for cavity plugs
- Spring loaded coupling for superior vibration and shock resistance
- ACME threads for two turn quick mate/unmate
- Patented garter spring strain relief design
- Fully modular design
- 8 different clocking positions possible for each front shell configuration



INTRODUCTION

Molex's new line of heavy-duty rectangular industrial connectors are designed for rugged applications such as industrial robotics, machinery equipment, transportation, power generation and industrial controls. The new line includes two subfamilies: HMC, an innovative new series that offers some unique design and modularity features; and HTC, which is compatible to some of the main rectangular industrial versions in the market today.

Each series includes a rugged metal cable-side hood, with modular housing inserts and crimp terminals that are all ordered separately. Ordering details appear on the following pages. For additional information, see Molex's Website.



Heavy Duty Rectangular Industrial Connectors

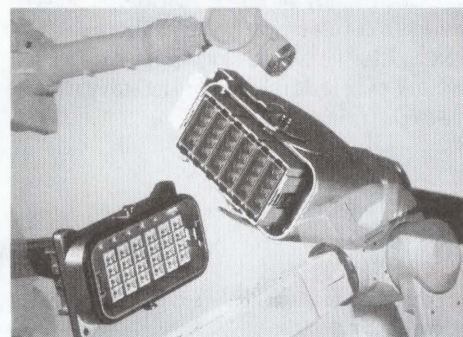
Features and Benefits

HMC™ Series

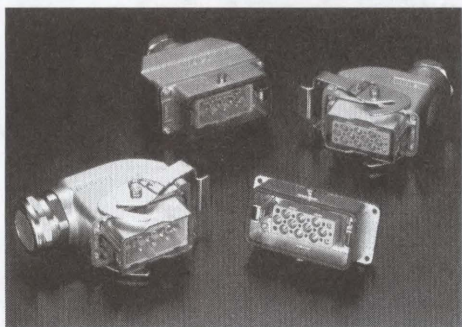
- Unique rounded-shape metal hood with single action lock for space savings and easy handling
- Easy field removal of modules
- Cable-clamp solution that integrates sealed ring and holder into one-piece cover
- Single module type enables housing inserts to be loaded into either side
- Multi-module type enables flexible module configurations for hybrid application needs

HTC™ Series

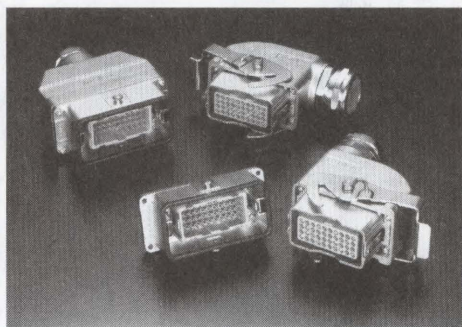
- Double-bale lock on system side provides secure mating retention
- Vertical hood and overall envelope size make it a drop-in replacement for similar industry versions
- Both signal and power versions
- Cable-clamp solution that integrates sealed ring and holder into one-piece cover



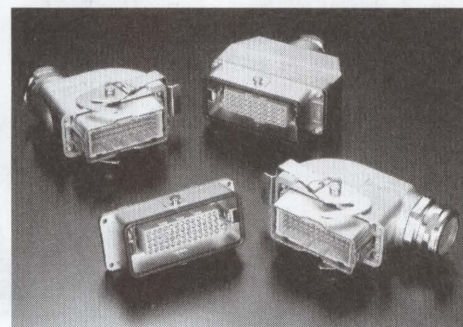
HMC SERIES—MODULE TYPE



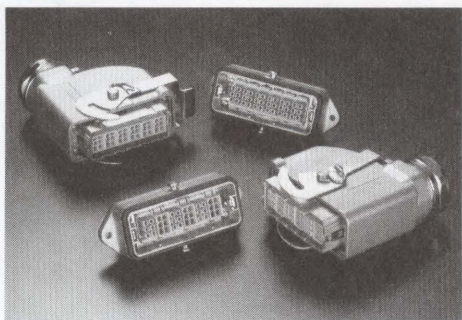
12 circuits, 35/13A, IP65



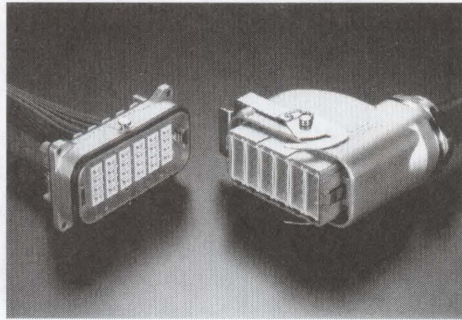
40 circuits, 13A, IP65



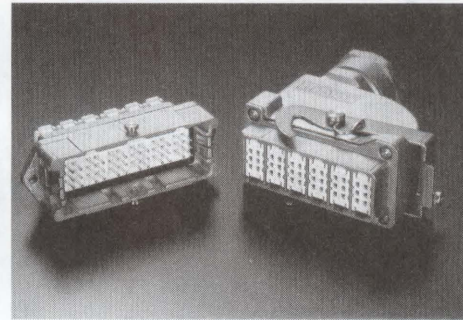
52 circuits, 13A, IP65



36 circuits, 12A, IP65

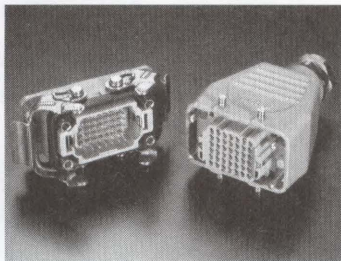


48/72 circuits, 20/12A, IP65

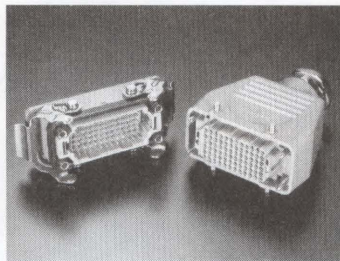


36 circuits, 6A, IP54

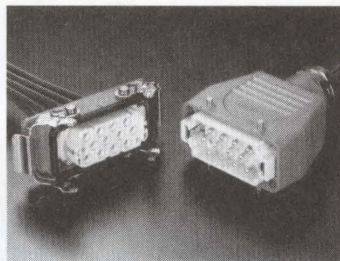
HTC SERIES



42 circuits, 15A, IP65



72 circuits, 15A, IP65



12 circuits, 40A, IP65

ACCESSORIES

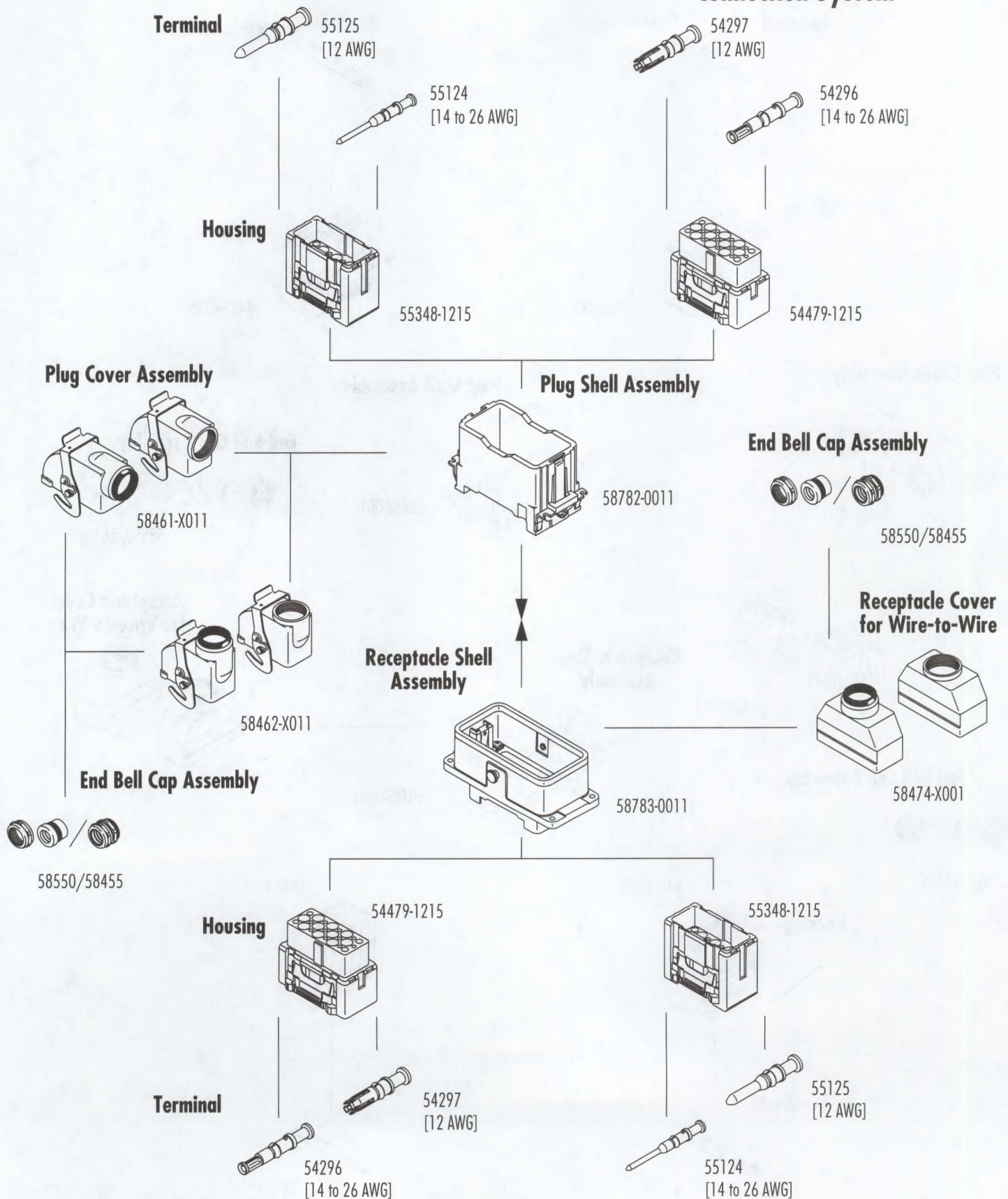


Bell Cap Assemblies



HMC™

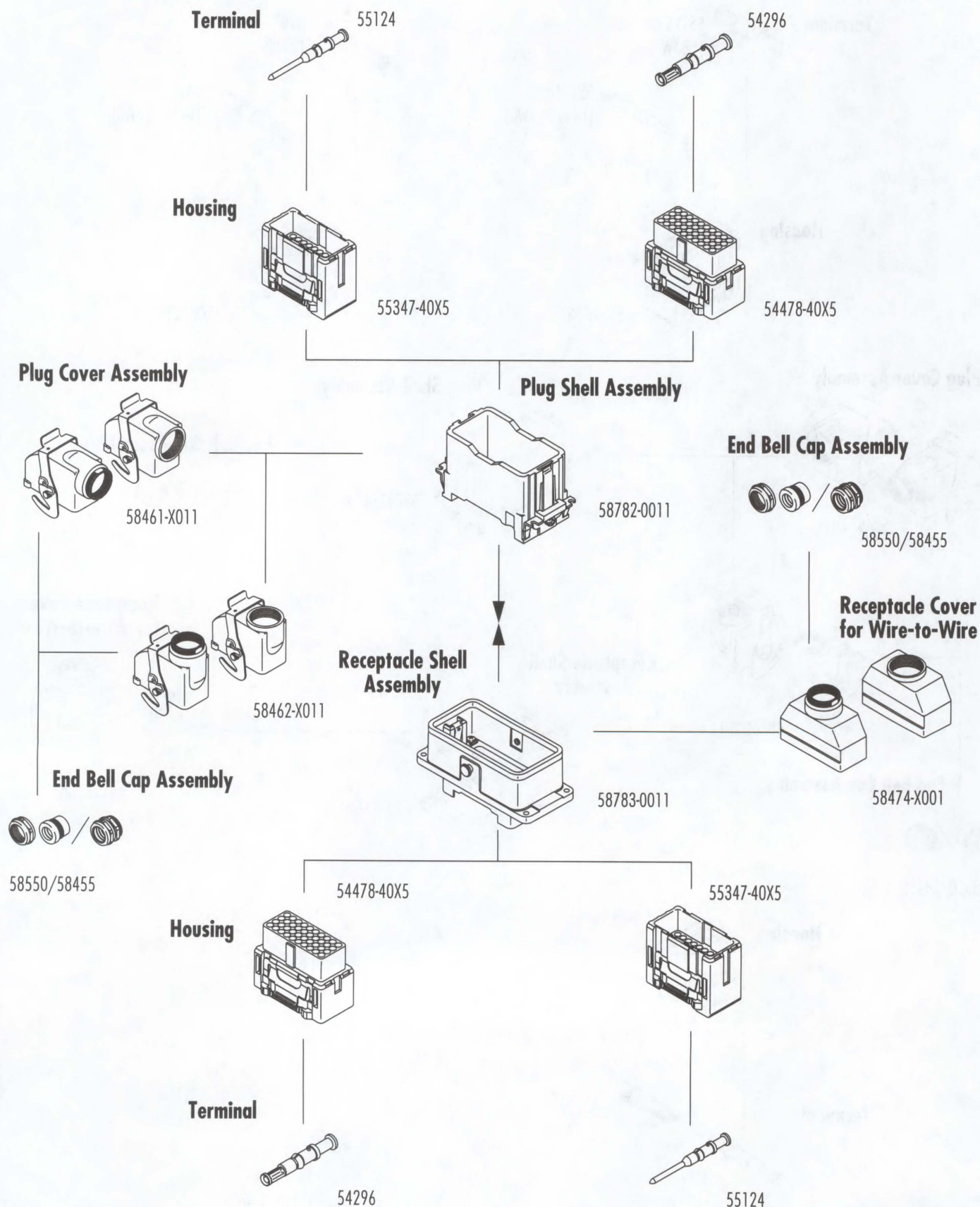
12 circuits—35A/10 circuits - IP65
13A/2 circuits
Connection System





HMC™

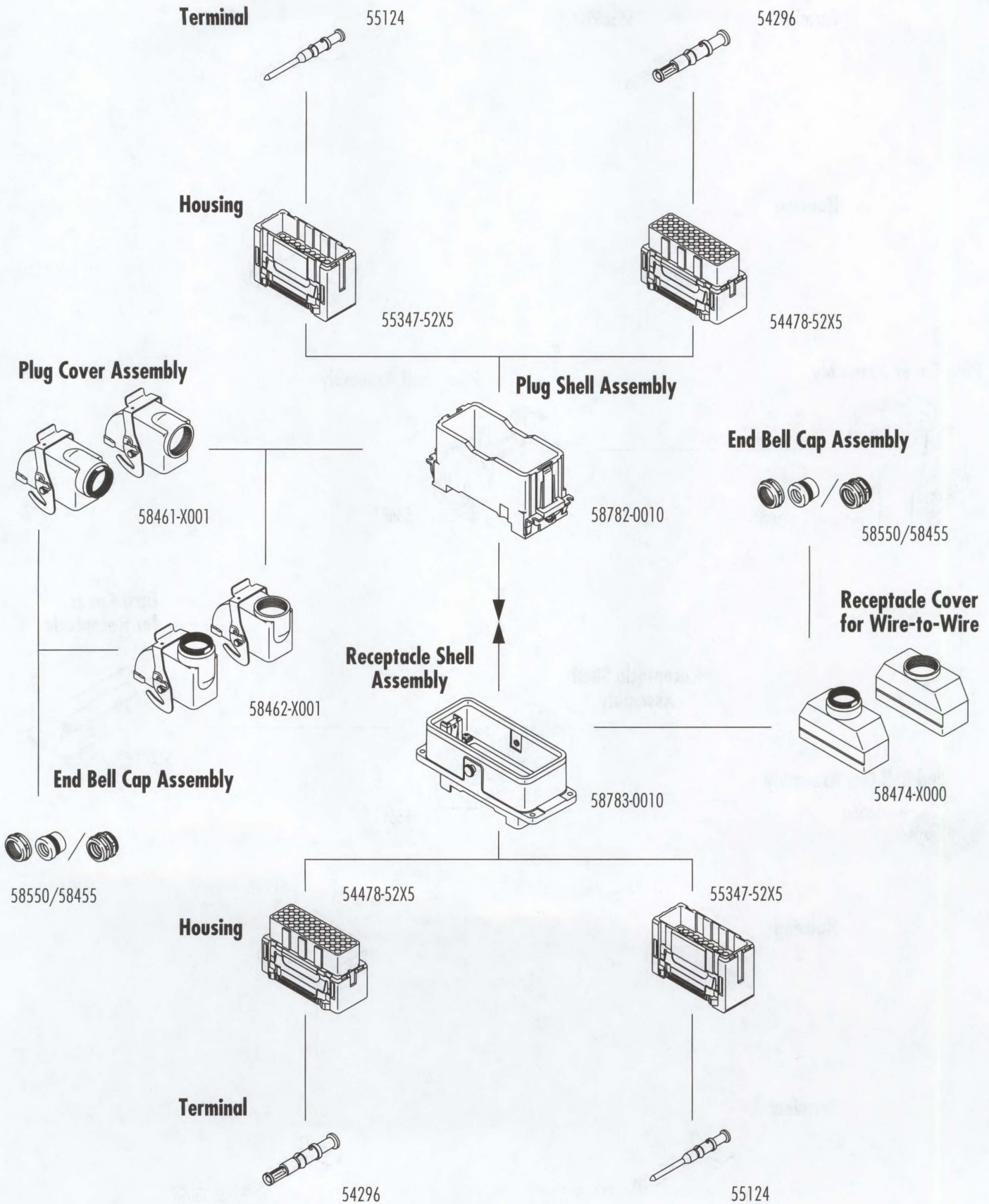
13A/40 circuits—IP65 Connection System





HMC™

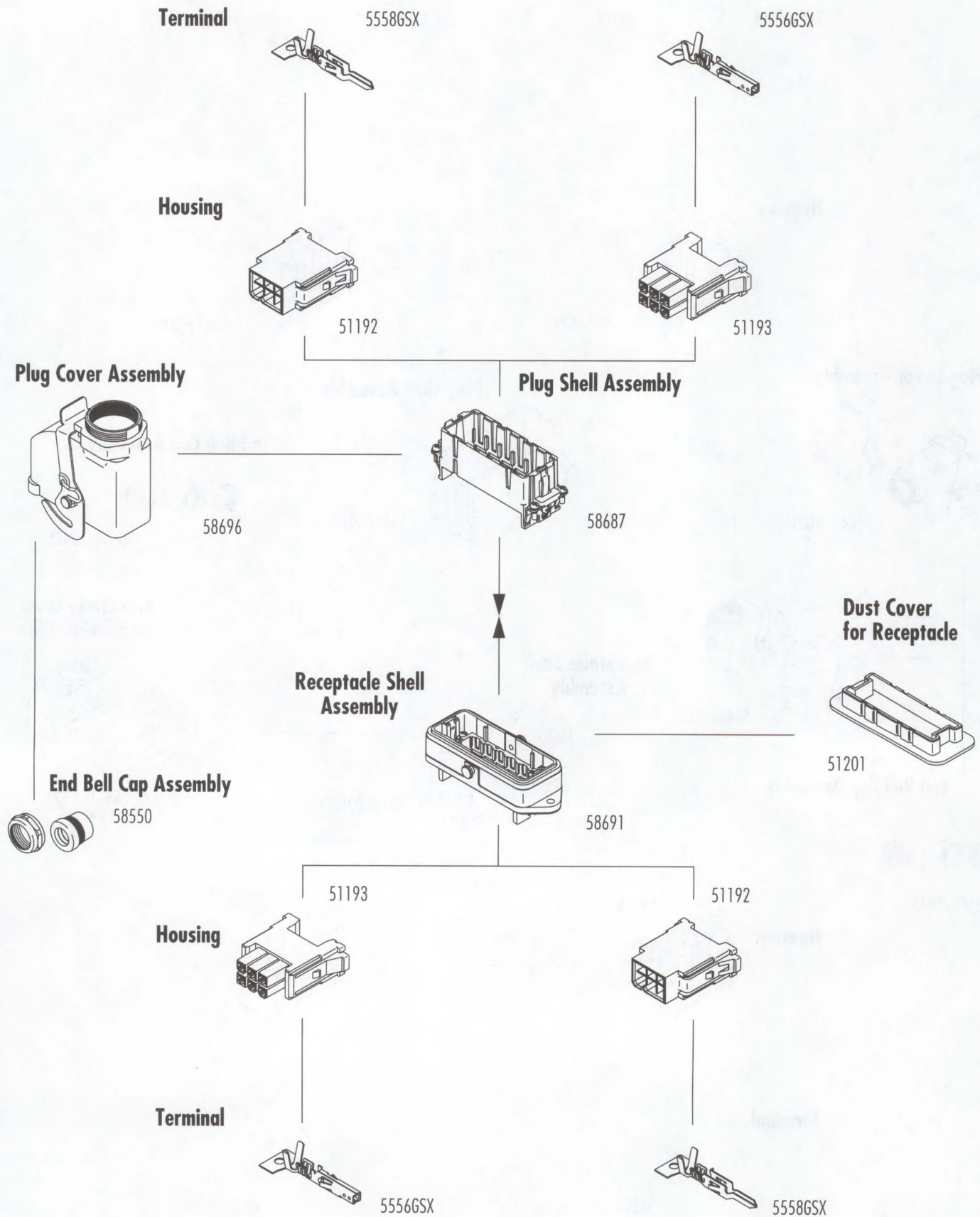
13A/52 circuits—IP65 Connection System





HMC™

12A/36 circuits—IP65 Connection System





HMC™

(20A/48 circuits)—IP65 (12A/72 circuits) Connection System

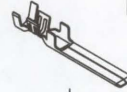
Terminal



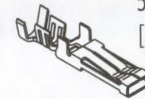
5558GSX
[12.0A/ 16 to 24 AWG]



5556GSX
[12.0A/ 16 to 24 AWG]

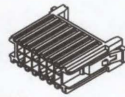


59320
[20.0A/ 14 to 16 AWG]



59319
[20.0A/ 14 to 16 AWG]

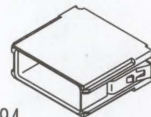
Housing



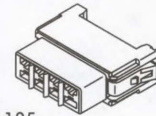
51203



51204

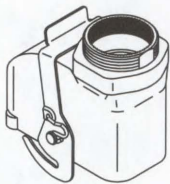


51194



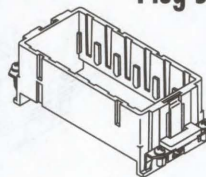
51195

Plug Cover Assembly



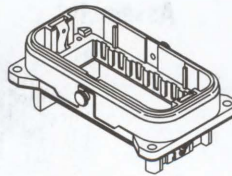
58723

Plug Shell Assembly



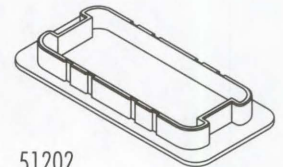
58721

Receptacle Shell Assembly



58719

Dust Cover for Receptacle



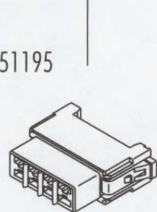
51202

End Bell Cap Assembly

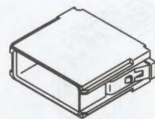


58866

Housing



51195



51194

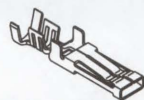


51204

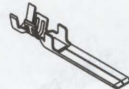


51203

Terminal



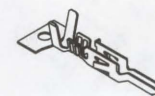
59319
[20.0A/ 14 to 16 AWG]



59320
[20.0A/ 14 to 16 AWG]



5556GSX
[12.0A/ 16 to 24 AWG]



5558GSX
[12.0A/ 16 to 24 AWG]

Industrial Products

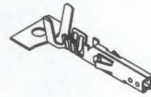
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HMC™

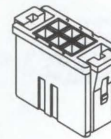
6A/36 circuits—IP54 Connection System

Terminal



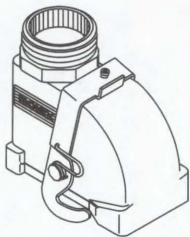
5556GSX

Housing



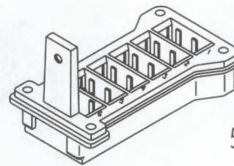
51157

Plug Cover Assembly



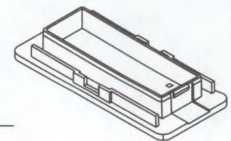
58320

Plug Shell Assembly



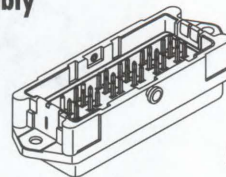
58319

Dust Cover
for Receptacle



54222

Receptacle Shell
Assembly



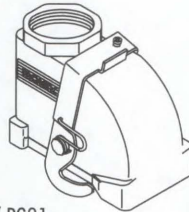
55005

End Bell Cap Assembly



58321

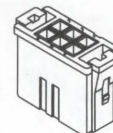
58395/PG21



58455



Housing



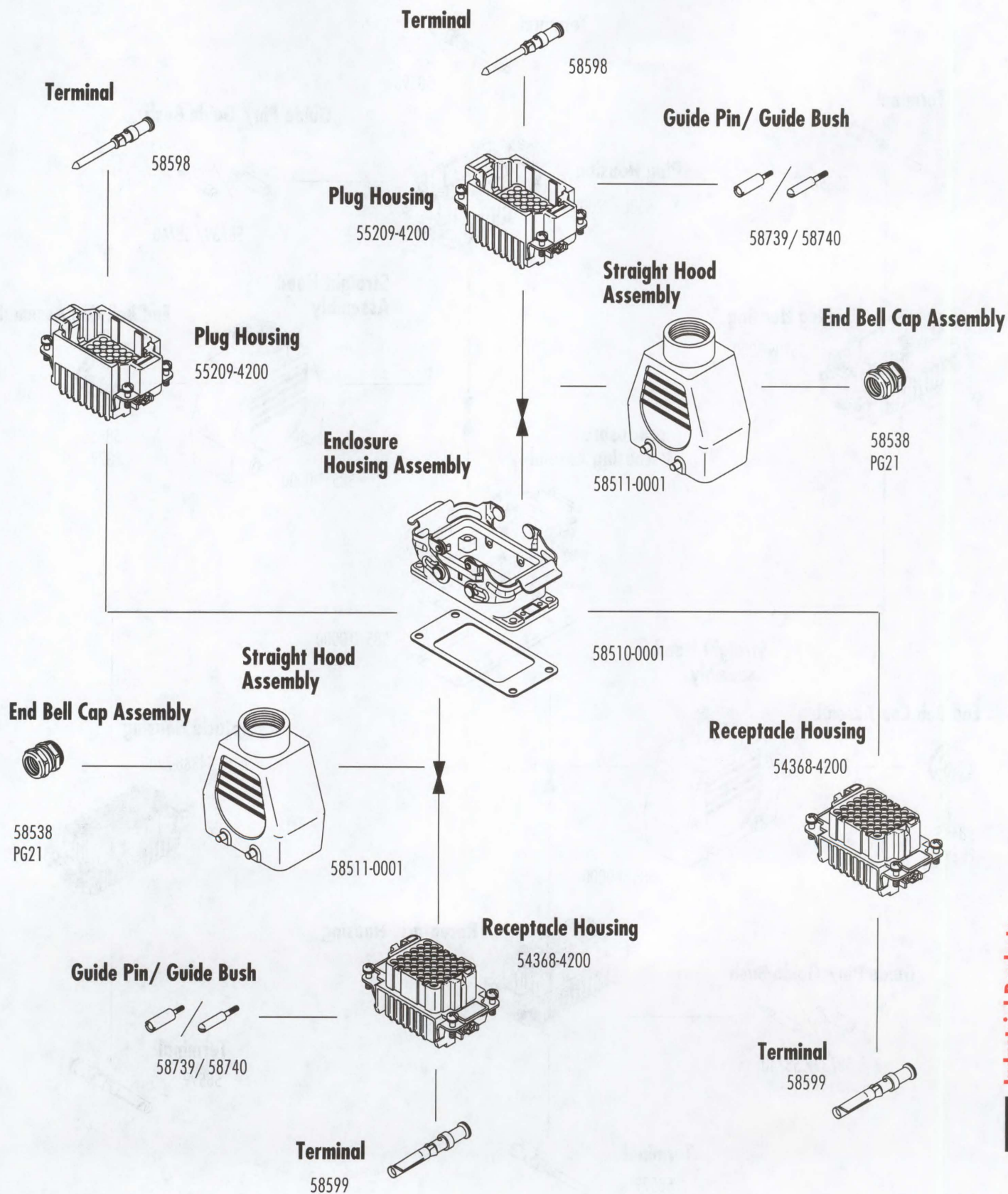
51157

Terminal

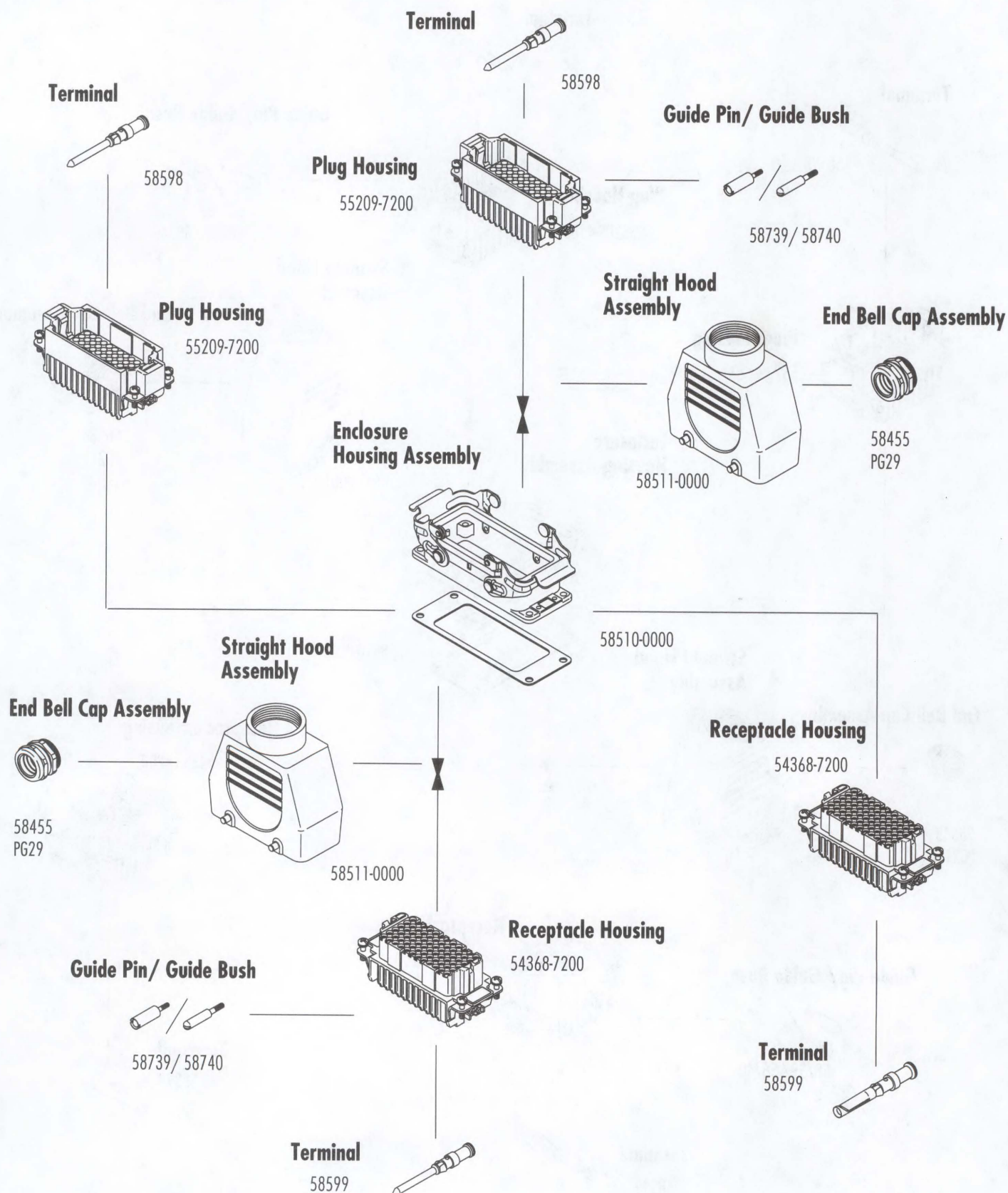


5556GSX

molex[®] HTC[™]
Signal/Small—IP65
Connection System



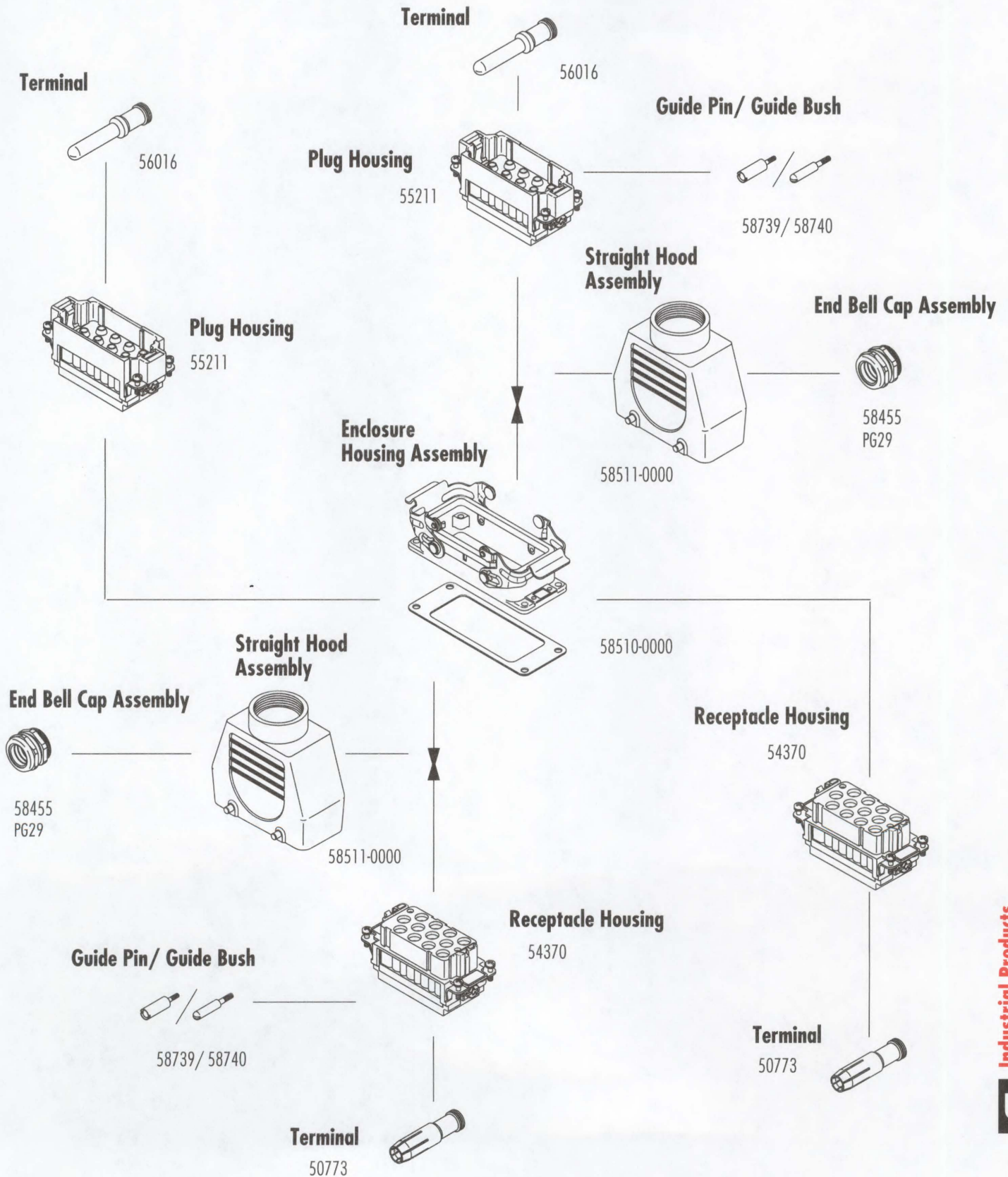
molex[®] HTC[™]
Signal/ Large—IP65
Connection System





HTC™

Power—IP65 Connection System



1. The first part of the paper is devoted to a discussion of the general principles of the theory of the structure of the atom.

2. The second part of the paper is devoted to a discussion of the general principles of the theory of the structure of the atom.

3. The third part of the paper is devoted to a discussion of the general principles of the theory of the structure of the atom.

4. The fourth part of the paper is devoted to a discussion of the general principles of the theory of the structure of the atom.

5. The fifth part of the paper is devoted to a discussion of the general principles of the theory of the structure of the atom.

6. The sixth part of the paper is devoted to a discussion of the general principles of the theory of the structure of the atom.

7. The seventh part of the paper is devoted to a discussion of the general principles of the theory of the structure of the atom.

8. The eighth part of the paper is devoted to a discussion of the general principles of the theory of the structure of the atom.

9. The ninth part of the paper is devoted to a discussion of the general principles of the theory of the structure of the atom.

10. The tenth part of the paper is devoted to a discussion of the general principles of the theory of the structure of the atom.