



# INDUSTRIAL CONNECTION PRODUCTS

*no problems, only solutions*

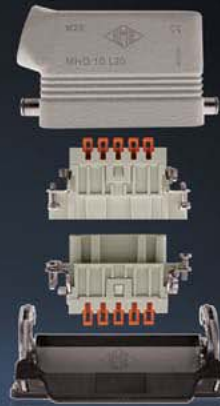
Junction Blocks



Panel Interface Connectors



Rectangular Connectors



DIN Rail Interface Modules



Cables & Receptacles

MIN Power - MIN Size I, II, III - MIL-Spec - M23 - Micro - Network - Ethernet - Nano - Solenoid Valve



Field Wireables  
& Cable Glands





# WHY MENCOM?

Competitive Pricing | Custom Solutions  
Industry Leading Technical Support

## ABOUT MENCOM

Since 1987, Mencom Corporation has provided high quality, cost effective, industrial electrical connector solutions. Our commitment to quality and customer service has made Mencom a preferred supplier for many global companies. Mencom provides expert engineering support and technically savvy customer service that is unmatched in the industry. For your next connector application, give us a call and let us show you the power of Mencom.

## no problems, only solutions

This isn't just our slogan. This is a proactive commitment to our valued customers.

Few things are worse than arriving on the jobsite with incorrect or insufficient materials. Our inside sales reps have the experience to help you select the most efficient and cost effective solutions available. They are trained to make sure you include all the correct components required to complete your project.

During regular business hours, you will always be greeted by a live person when contacting Mencom. We also staff our on-line chat function in order to assist you with any questions you might have while taking advantage of our inventory enabled website.

A team of Inside Sales Representatives and Account Specialists are on hand to help you meet your connector needs. Whether it is a quote on a special project, expediting an order, or helping to customize connectors for an application, Mencom is here to help you.

## FLEXIBLE CUSTOM SOLUTIONS

Mencom is fortunate to have a capable team of engineers with decades of experience. Combined with a progressive manufacturing facility, we are able to assist in the design and manufacturing of most any connectivity project. Our engineering team is available to work with your design and manufacturing groups to help solve your challenging connection issues. From small changes in catalog items, to custom terminations and assemblies.

- Custom Lengths for cables and receptacle leads
- Custom over-molding onto customer cables and sensors
- Plug & Play customization – to meet your spec
- Adding ring terminals, spade terminals, ferrules
- And more

These are just a few examples of the value added features Mencom can provide. We welcome the opportunity to see what solutions we can provide for your next project.





# CABLES & RECEPTACLES MIN

OVER-MOLDED CABLES | RECEPTACLES | FIELD WIREABLES | ACCESSORIES

The MIN-Series is so named because they are generally referred to in the industry as MINI-Change, 7/8" connectors, or Mini connectors. The MIN series can be used for transmission of signal and/or power.

The MIN-Series is a popular connector choice for machine safety components, lighting, Bus Networks, robots, and numerous other applications.

Our MIN-Series is available in 2~14 and 19 pole versions, divided into 3 different sizes.

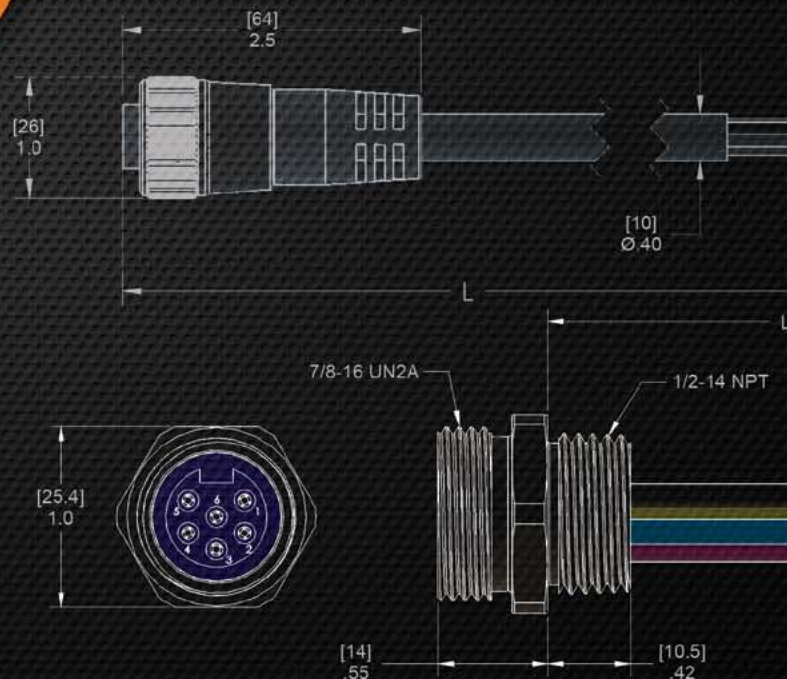


## Connector Sizes

**SIZE I** connectors include 2, 3, 4, 5, 6 & 14 pole versions. All of the Size I connectors are based on a 1" hex for the receptacles and utilize a 7/8" UN mating thread.

**SIZE II** connectors include a larger 6 pole, along with a 7 & 8 pole version. The Size II connectors are based on a 1.125" hex for the receptacles and utilize a 1" UN mating thread.

**SIZE III** connectors include 9, 10, 12 & 19 pole versions. The Size III connectors are based on a 1.25" hex for the receptacles and utilize a 1 1/8" UN mating thread.



# MIN POWER CABLES & RECEPTACLES

OVER-MOLDED CABLES | RECEPTACLES | T-CONNECTORS | ADAPTER PLUGS

The Mencom power distribution series provides a cost effective and time efficient, plug and play solution for your motor and machine power applications. This easy to use industrial series of molded cordsets, prewired receptacles, adapter plugs and tees, provide a quick disconnect option for applications that demand more power. Ideal for use with motors, conveyors, industrial lighting, and industrial heaters.



## Features

- Ideal for a complete power distribution system
- Tee's and adapters configured to transition from PMIN to MINH connectors
- Keyed connectors for easy installation
- Replaces time consuming conduit installations
- **ST00W** Gray **PVC** cable
- **IP67** protection

## PMIN Rating

<b>3 Pole</b>	10 AWG <b>600V, 30A</b>	12 AWG <b>600V, 25A</b>	14 AWG <b>600V, 18A</b>
<b>4 Pole</b>	10 AWG <b>600V, 25A</b>	12 AWG <b>600V, 20A</b>	14 AWG <b>600V, 15A</b>

## Configuration

The **MINH** Power Connectors include 3, 4 & 7 pole versions. The 3 & 4 pole connectors are based on a 1" hex for the receptacles and utilize a 7/8" UN mating thread. In this series, the 3 & 4 pole connectors use 14AWG conductors, and are rated for 600V, 18A on the 3 pole, and 15A on the 4 pole. The 7 pole connectors are based on 1.13" hex for the receptacles and utilize a 1" UN mating thread. The 7 pole connector uses a combination of two 14AWG, and five 18AWG conductors and is rated for 300V, 5A.

The **PMIN** 3 & 4 pole power connectors (often referred to as D-size) are based on a 1.5" hex for the receptacles and utilize a 1 3/8" UN2B mating thread. In this series, the 3 & 4 pole are available in 10AWG, 12AWG & 14AWG conductors.



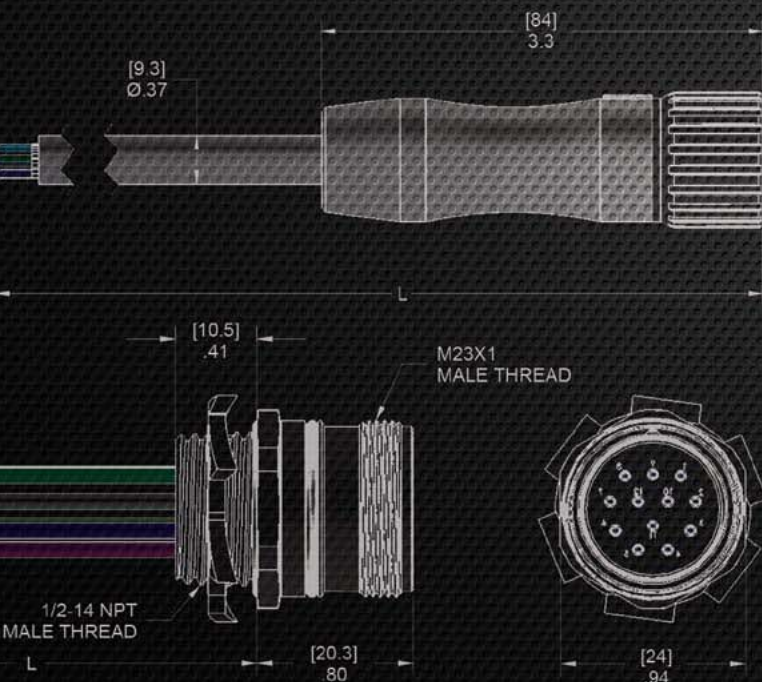
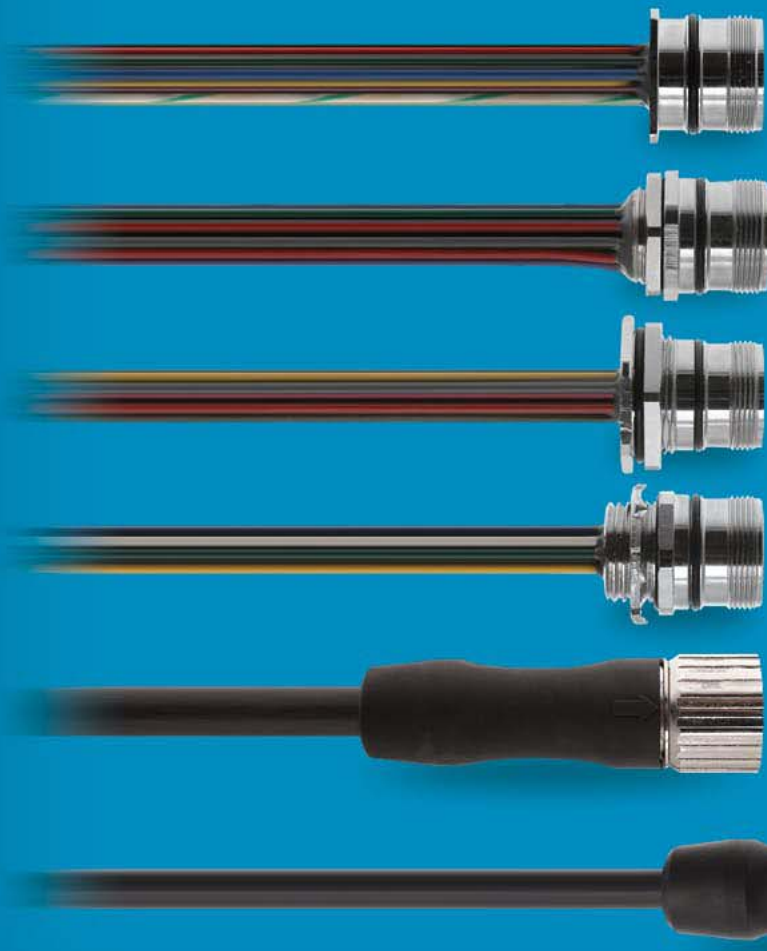
# CABLES & RECEPTACLES M23

OVER-MOLDED CABLES | RECEPTACLES | FIELD WIREABLES | ACCESSORIES

The M23 series is commonly found on such items as servo drives, motors and encoders, but their versatility has made them a common choice for industrial signal and control application. The 12 and 19 pole configurations are the most common, but a variety of other pin counts are available. The “M23” refers to the size of the mating thread. Along with being the only manufacturer to offer M23 receptacles in ½” NPT back-shells, Mencom offers a wide variety of color codes to match the needs of your application.

Please contact us to discuss your requirements.

- **Competitive Pricing**
- **Fast Turnaround**
- **Custom Wiring**
- **Durable Construction**



## MCV : M23 Cables

Mencom manufactures 12, 16, 17, & 19 pole over-molded cables. These cables are available with straight or right angle heads. The 16 and 17 pole cables utilize a weld resistant TPE jacket, while the 12 and 19 pole cables are available in PUR & TPE jacket. All cables are available in many standard off the shelf lengths. For custom applications please contact the factory.

## MCV : M23 Receptacles

The mating receptacles are available with 7 standard shell mountings including ½” NPT, M20, panel mount, & back mount.

The standard shell material is nickel plated brass, while the M20 is also available in stainless steel.

# MIL-SPEC CABLES & RECEPTACLES

5015 INDUSTRIAL EQUIVALENT | OVER-MOLDED CABLES | RECEPTACLES | FIELD WIREABLES

Industrial MIL-Spec equivalent connectors are widely accepted in many industries and applications. Each shell size allows for a variety of pin counts and configurations that allow for power or signal.

These connectors use threaded couplings to keep the connectors mated and sealed to withstand moisture, condensation and vibration.

## Applications

- Communications Systems
- Motorized Conveyors
- Factory Automation
- Industrial Machinery
- Industrial Instrumentation
- Medical Instrumentation
- Welding Equipment
- Earth-moving Equipment
- Mining Equipment
- Mobile Equipment
- Motion Control
- Motors
- Robotics
- Sensors
- Servos

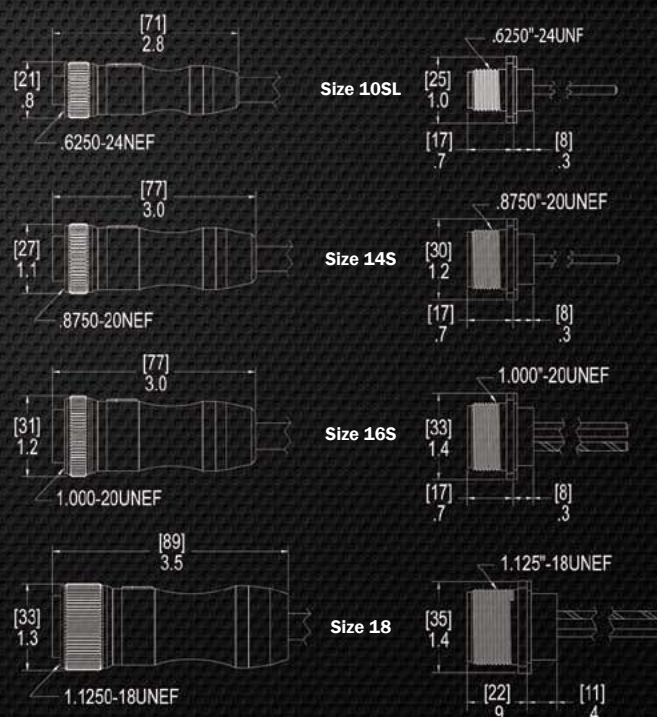


## Features

Mencom MIL-Spec equivalent connectors simplify the installation for the user while maintaining the same performance for robust applications as do the traditional MIL-Spec products. The user no longer has to purchase crimp tools or mess around with soldering because our cordsets are over-molded, and our receptacles are prewired, making installation as simple as “Plug and Play”

## Sizes

<b>Size 10SL</b>	2 and 3 pin inserts
<b>Size 14S</b>	2, 3A, 3B, 3C (different pin orientations), 4, 5, 6, & 7 pin inserts
<b>Size 16S</b>	2, 3A, 3B, 5, & 7 pin inserts
<b>Size 18</b>	3, 4, 5A, 5B, 5C, 5D, 6, 10A & 10B pin inserts





# CABLES & RECEPTACLES

# MDC/MAC/MEC/NAN

OVER-MOLDED CABLES | RECEPTACLES | FIELD WIREABLES | ACCESSORIES



## MDC : Micro-DC (M12)



The Micro-DC (MDC) series, also known as Micro-change or M12, is one of the most widely used industrial quick disconnects in the industrial market. These connectors are commonly used in factory automation for items such as sensors, actuators, motors, switches, safety light curtains and mats, and interlock switches to name a few. The MDC product is offered in 2-8 and 12 pole configurations with a variety of outer jacket material with or without shielding. The euro color code (without a ground wire) and the single keyway (A-Coded) distinguishes the MDC from other connectors that are similar in size and function.

## MAC : Micro-AC (1/2"-20)



Although commonly used for AC or DC applications, the MAC series is similar in size to the MDC series but has some unique differences. The MAC series uses a 1/2-20 mating thread and has a first make last break extended ground pin. The use of a double keyway (C-Coded) prevents it from accidentally plugging into one of the other similarly sized connectors.



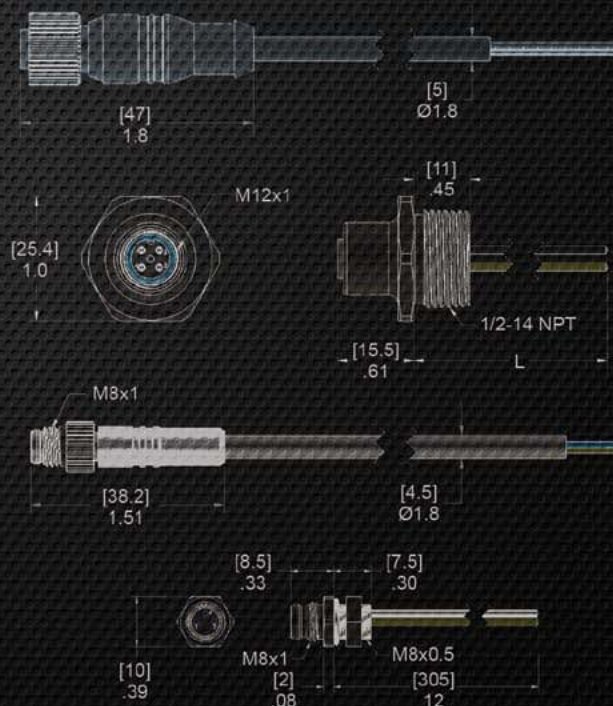
## MEC : Euro-AC (M12)



The MEC (Euro-AC) series connector is also commonly used in AC and DC applications and it uses the M12 mating thread (like the MDC). Unlike the MDC, the MEC keyway is reversed (B-Coded) and it is available with a first make last break extended ground pin connected to a green/yellow ground wire. Made popular by the European market it has found its way into many industrial applications as well as some bus systems.

## NAN : Pico (M8)

The M8 (NAN-series) is often referred to as a "pico" or "nano" connector. The small size makes it the perfect choice when space is limited. The M8 is commonly used with many of the miniature proximity and photo-electric sensors. Available in a thread-on version in 3, 4 and 6 poles, or a snap-on version for the 3 and 4 pole.



# NETWORK CABLES & RECEPTACLES

OVER-MOLDED CABLES | RECEPTACLES | FIELD WIREABLES | ACCESSORIES

## Industrial Network Connectivity

Industrial network systems allow for real-time distributed control of many connection points from a single controller. These “network bus” systems reduce the total amount of cable required and can simplify the overall design. Mencom offers a broad range of industrial network connectivity products to streamline your installation.



## DeviceNet

DeviceNet is a popular “ring and drop” system transmitting power and signal. The ring portion of the system is often called the “Trunk” line. The “Drops” come off the Trunk utilizing “T” connectors. Mencom manufactures cables, receptacles, junction blocks, terminating plugs, & “T” connectors all designed for use in a DeviceNet System.

## Foundation Fieldbus

The Foundation Fieldbus architecture provides a communications protocol for control and instrumentation systems. Each device has its own “intelligence” and communicates via a two-way communication system. Cables are made to the architecture standards, but the connectivity is based on standard M12 and MIN connectors which utilize stainless steel coupling nuts.

## Profibus

PROFIBUS (Process Field Bus) is a standard for field bus communication in automation technology. The PROFIBUS protocol has application specific profiles to meet differing factory floor requirements. Application specific profiles include:

- PROFIBUS DP : optimized for factory automation
- PROFIBUS PA : optimized for process automation

## Profinet

PROFINET is an open standard for Industrial Ethernet used for factory and process automation applications. PROFINET enables the integration of existing Fieldbus systems like PROFIBUS, and DeviceNet, without changes to existing devices. This eliminates the need and cost of replacing existing systems.



# CABLES & RECEPTACLES **ETHERNET**

OVER-MOLDED CABLES | RECEPTACLES | FIELD WIREABLES | ACCESSORIES | SWITCHES



Industrial Ethernet refers to the use of standard Ethernet protocols with rugged connectors and extended temperature switches for automation or process control in an industrial environment.

Components used in plant process areas are designed to work in harsh environments with temperature extremes, humidity, and vibration that exceed the ranges for information technology equipment intended for installation in controlled environments.



## Industrial Ethernet

The expanding acceptance of Ethernet communication in industrial applications has increased the need for Ethernet products that are built to handle the harsh environments.

Mencom has addressed this need with a series of rugged Ethernet products. The E45V3 series connectors allow for an IP67 rating while using standard RJ45 connectors. The MDE45 series utilizes M12 4 pole (D-coded) connectors which utilize 2 twisted pair Cat 5E cables, or the MDE45 M12 8 pole (A-coded) connectors which utilize a cable with 4 twisted pair Cat 5E cables. Both the 4 pole and 8 pole connectors are available in a variety of cable jacket types, as well as high flex options.

## Industry 4.0 Solutions

The latest trend in industrial automation is 'Industry 4.0' which originated by the German government to create the 'Smart Factory' based on the concept of computerized manufacturing. The smart factory requires the use of more than a billion connected devices which raise a lot of concern about the reliability and the security of network communications for all kinds of applications in the industry. Unreliable networks almost always lead to delays in production. This is no longer acceptable in the Industry 4.0 era where competition in business is very intense.

In order to minimize such unexpected downtimes and provide reliable connections, Mencom offers a wide range of industrial Ethernet switches, Secure Routers, Media converters, Serial Device Servers, and Modbus Gateways equipped with industry leading features to provide the reliable connectivity.



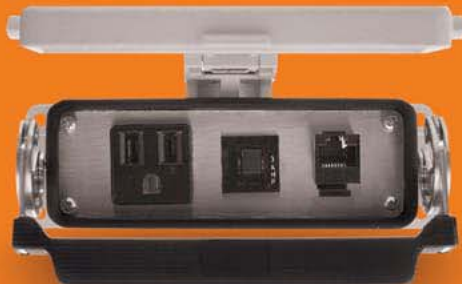
# PIC PANEL INTERFACE CONNECTORS

SANDARD HOUSING | LOW PROFILE HOUSING

A panel interface connector is a device that typically mounts to the outside of a control panel housing a PLC, computer, or other type of programmable device. Once in place, the PIC, which houses convenient pass through connections, allows quick, easy, safe access to the controls inside the cabinet.



**LP1**  
Single Cover



**LP2**  
Two Single Covers



**LP3**  
Double Covers

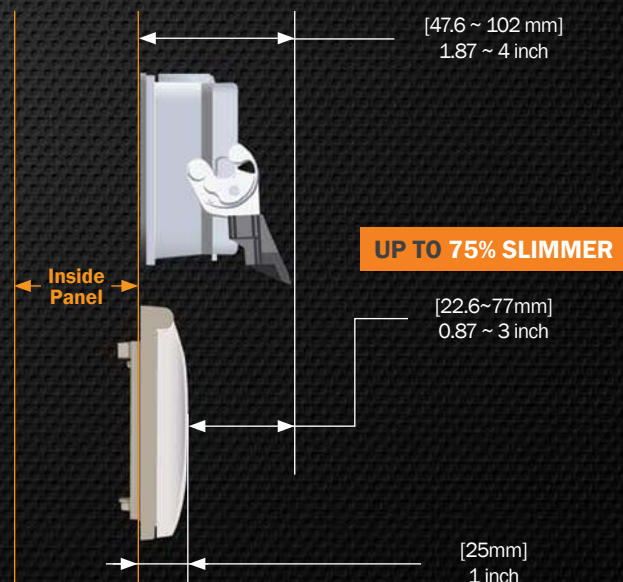
## Benefits of PICs

- The ability to quickly interface directly with the contents of the cabinet without opening the main cabinet door
- Easily match the communication system of programmable components, with thousands of component options
- Avoid potential safety hazards, such as Arc Flash, associated with opening a panel under load

## Variety of Options

Mencom currently has well over 3,000 designs in production. Our team of engineers are designing new and custom PIC models every day. Please contact us regarding your requirements.

## Housing Profile Comparison



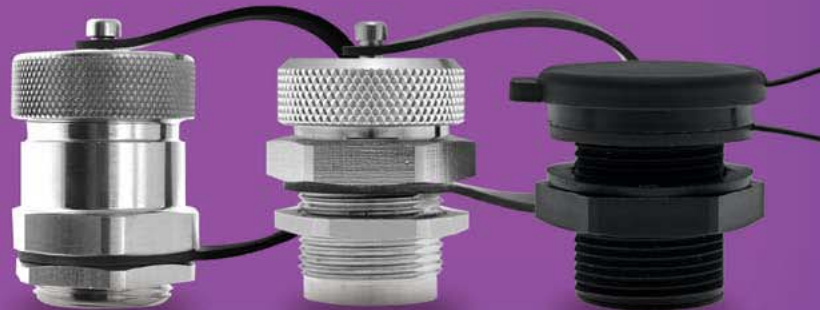


# PORT ADAPTERS

STANDARD ALUMINUM | STAINLESS STEEL | NICKEL PLATED BRASS | PLASTIC

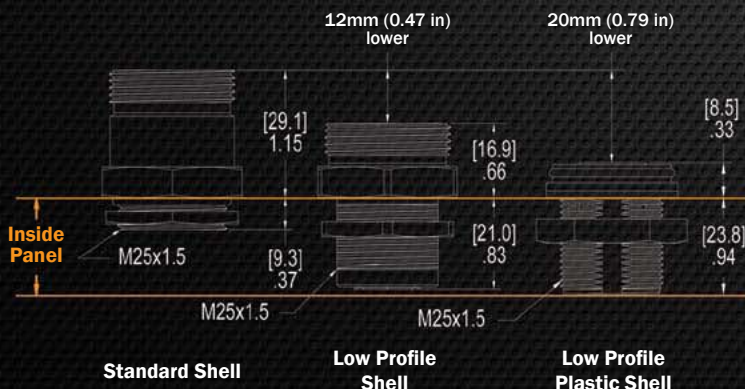


In addition to the traditional PIC where multiple components can be mixed into a housing to meet your specific needs, Mencom offers smaller circular interface connectors known as Port Adapters, ideal for tight spaces. They are available in metal and plastic versions and can easily be mounted to a cabinet through a 1" diameter hole. These circular port adapters are designed to use a single interface component. Several component options and configurations are available. A cap is supplied with all port adapters. A rubber tether, which also serves as a water tight washer, retains the cap for the metal adapters, and a plastic integrated cap for the plastic adapters. Like the traditional PIC, these port adapters are also rated IP65, making them suitable for wash down areas.



## Shell Options

- Standard Aluminum
- Stainless Steel
- Low Profile Nickel Plated Brass
- Low Profile Plastic



## Product Features

- Convenient:** Convenient access to PLC or other devices inside a panel
- Robust:** Sealed, rugged design for tough environments
- IP65 Rated:** Total protection against dust and jets of water from all directions

## Pass-Thru Components

- USB Type A to USB Type A
- USB Type A to USB Type B
- USB Type B to USB Type B
- USB Type B to USB Type A
- 6 Pin Mini DIN
- 8 Pin Mini DIN
- BNC
- RJ11
- RJ22
- RJ45 CAT 5E
- RJ45S CAT6
- Fiber Optics



# T35 DIN RAIL MOUNTED INTERFACE MODULES

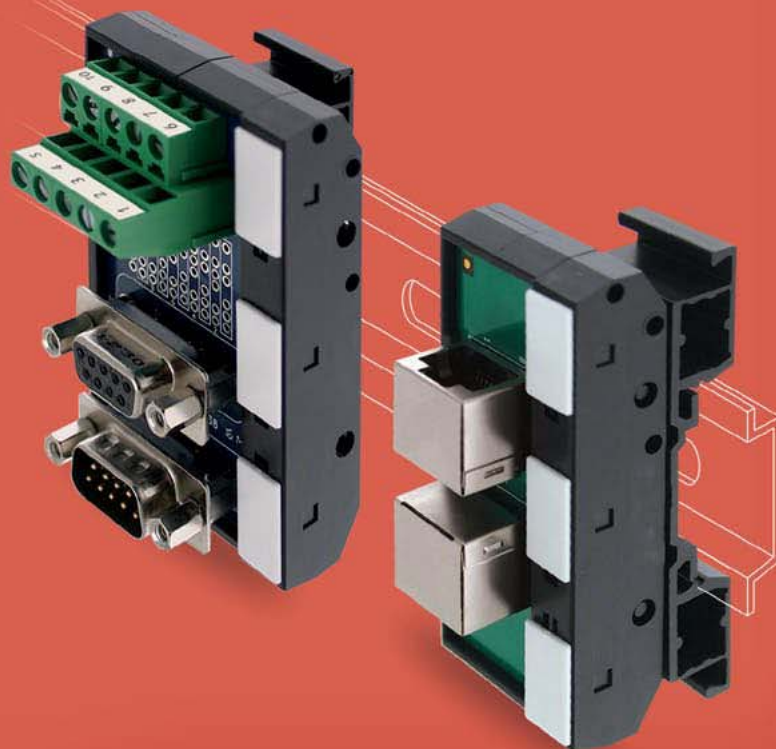
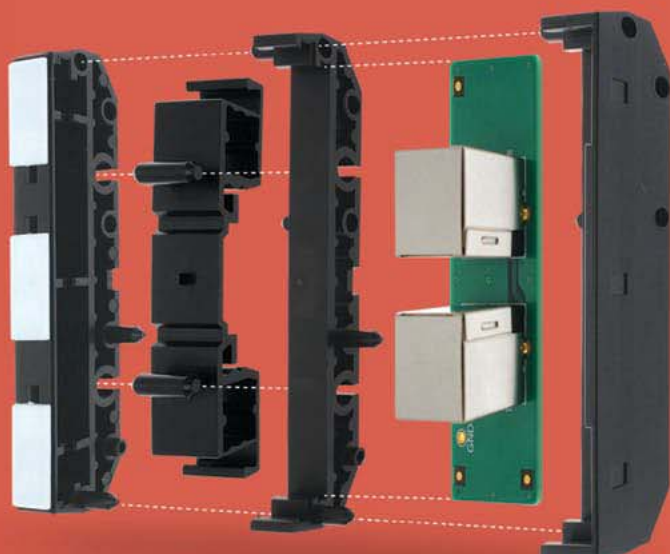
RJ45 | D-SUB | RIBBON CABLE

## Why Limit Yourself to a Terminal Block Connector on Your Din Rail?

Mencom's new, expandable T35 series of Din Rail modules allows you the convenience of mounting a wide variety of connectors to your DIN rail. Also known as "break-out boards", these modules allow the end user to take a pre-molded connection, like a ribbon cable or D-Sub, and easily break it out to individual terminal points. This is all done while taking up minimal space on the DIN rail.

Custom interface modules, which may require special circuits or components, can be engineered with quick turnaround from design to delivery.

**Contact the factory for details.**



## DIN Rail Interface Modules

Mencom offers a broad range of DIN Rail mount modules which provide a wiring transition from a variety of connectors to either fixed wiring or terminal block.

- Interface modules feature a cable locking mechanism
- Our circuit boards feature additional component holes for the easy addition of LEDs, resistors or other electronic components.
- Marking end caps are available for easy labeling

## Ribbon Cable Connector Module

### **Ribbon Cable to Fixed Screw Cable Terminal Block**

- Provides a transition from Ribbon cable to terminal blocks
- Multi-tiered terminal blocks for quick wiring
- Retention clips ensure a solid connection

## RJ45 & RJ12 Interface Module

### **RJ45 or RJ12 to Fixed Screw Terminal Block**

- Provides a transition from RJ45 to terminal blocks
- Multi-tiered terminal blocks for quick wiring

### **Interconnected RJ45 Cat5 Ethernet Connectors**

- Allows for cross wired connectors

## D-sub Interface Module

D-sub interface modules, made with male & female connections. (Currently available in 9, 15, or 25 pin options)

### **D-Sub to Fixed Screw Connection Terminal Block**

- Provides a transition from D-sub to terminal block
- Multi-tiered terminal block for quick wiring

### **Interconnected D-sub connectors**

- One male and one female per interface module



# JUNCTION BLOCK

JDC | JAC | JAN | JIN | DEVICENET

The industrial automation world is constantly searching for ways to increase installation reliability, speed up the installation process, and reduce down time. Mencom Junction Blocks provide a quick, clean, cost effective solution to help achieve all of those goals.



## Features

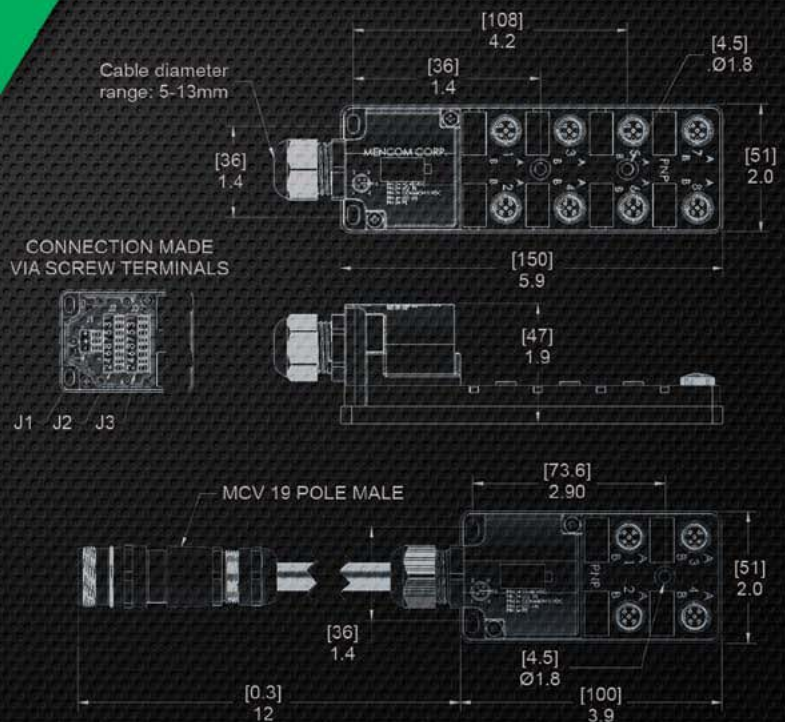
The basic design of the MIN series, MICRO series, and NAN series of blocks, allows for fast and accurate installation while reducing overall labor.

The MIN series is available in 4, 6, and 8 port configurations with MIN size I ports.

The Micro series, available for both MDC and MAC connections as well as for DeviceNet applications. Sizes from 4–12 ports with and without LED indication.

The NAN series is available with 4, 6 or 8 M8 ports with and without LED indication.

All Mencom junction blocks are IP 67 rated for harsh environments, and are available with a variety of trunk connections.

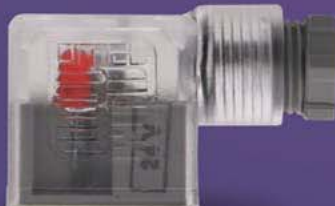


# SOLENOID VALVE CONNECTORS

CORDSETS | FIELD WIREABLES | ACCESSORIES

While most industrial electrical connectors are used in a wide variety of applications, the “solenoid valve connector” is primarily used on solenoid valves. Over the years as solenoid valves have changed and reduced in size, the solenoid valve connectors have changed as well.

Designed to conform to EN175301-803 (formerly DIN 43650), or to “de facto” industry standards, Mencom solenoid valve connectors are available in 5 different interfaces (Form A, Form B, Form C as well as Industry Standard Form B and Form C).



## How it works

A solenoid valve is an electromechanically operated valve. The valve is controlled by an electric current through a solenoid: in the case of a two-port valve the flow is switched on or off; in the case of a three-port valve, the outflow is switched between the two outlet ports. Multiple solenoid valves can be placed together on a manifold.

## Where it is used

Solenoid valves are most frequently used to control elements in fluidics. Their tasks are to shut off, release, dose, distribute or mix fluids. They are found in many application areas. Solenoids offer fast and safe switching, high reliability, long service life, and compact design.

## Features

Our standard valve connector offers a polyamide body with thermoplastic gasket integrally molded into the face of the mold connectors. Molded versions utilize a PVC jacket with 18 AWG conductors, while the field wireables are available in PG9, PG11, and ½” NPT threaded openings. Valve connectors with circuitry and suppression aid in diagnostics and protection of equipment. Several circuitry and suppression options are available. Our valve connectors all carry an IP65 protection rating.



# RECTANGULAR CONNECTORS

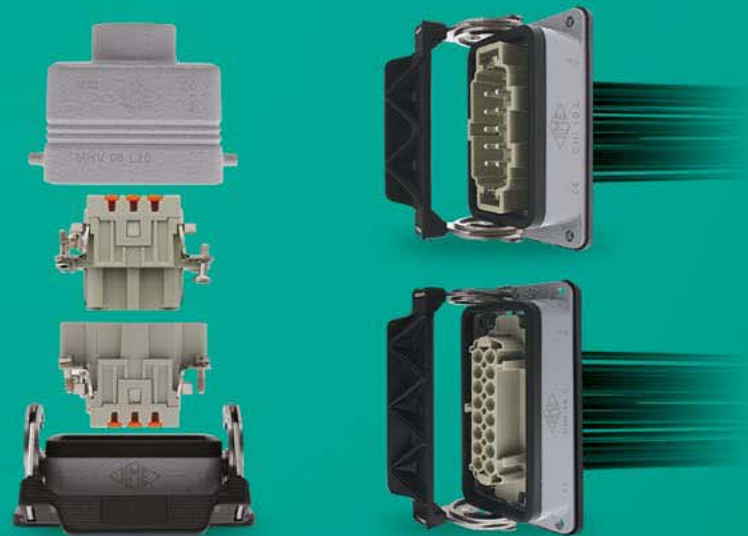
COMPLETE KITS | FULLY WIRED RECEPTACLES

ILME connectors are known for their high-quality construction and reliable connection. Mencom has a complete line of ILME rectangular hoods, housings and inserts from 1 pole to 216 pole and from milli-amps to 200 amps.

## Would You Like To Reduce Your Costs?

Mencom Corporation is now offering ILME kits consisting of the main components needed to make your connection, and Pre-Wired ILME Receptacles.

Both solutions are designed to help drastically reduce labortime and costs associated with product installation.



## Rectangular Connector Kits

No more concerns about getting the right components to make your connection. ILME kits provide all the pieces to create a complete solution for your connection project.

Available in 3 pole to 24 pole connections, the kits consist of a bulkhead panel mount base (single or double lever), a male and female insert (screw or tool less spring terminations), and a mating hood (top or side entry). The entry hole is available in several sizes, so all you need is to add the proper cable gland for your cable O.D. and you are good to go.

## Mencom Rectangular Receptacles

The ILME receptacles come fully wired. All you need to do is attach it to your panel and connect the wires inside your panel. The wires are all black with printed numbers to show their pin location. These receptacles are available in 6 pole to 24 pole configurations. The standard wire lengths for the receptacles is 0.5m, 1m and 2m, but can be made in longer lengths by request.

# Serving Industries Worldwide Since 1987

MANUFACTURING

PROCESS AUTOMATION

ALTERNATIVE ENERGY

AUTOMOTIVE

ASSEMBLY

SEMI-CONDUCTOR

AIR & SPACE

FLUID POWER

TRANSPORTATION

FOOD & BEVERAGE

FACTORY AUTOMATION

MATERIAL HANDLING

LIGHTING

PACKAGING

AGRICULTURE

AND MORE

## Some of Mencom's Satisfied Customers...

"We will strive to exceed customer's expectations by continually improving processes, products, and services to ensure they consistently meet or exceed customer requirements"

GENERAL MOTORS

BMW

CHRYSLER

PROCTER & GAMBLE

EMERSON

AUTOMATION DIRECT

TOYOTA

THERMO FISHER

PPG

NISSAN

MERCEDES

CATERPILLAR

TESLA

PEUGEOT

NESTLE

PARKER HANNIFIN

HONDA

COMAU

PORSCHE

VOLKSWAGON

FORD MOTOR COMPANY

CORNING

COCACOLA

ABB

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