

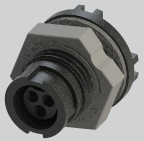
**iconn** an R2M co.  
**SYSTEMS, LLC**

**2016 PRODUCT CATALOG**

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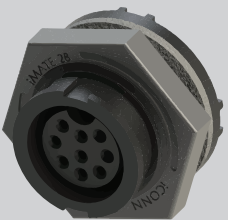
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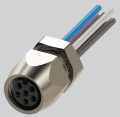
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iCPC 37



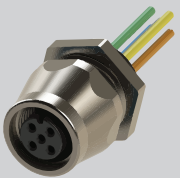
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i8



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i12



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iMINI



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# AMPERAGE OPTIONS

Voltage Rating	iMATE 17	iMATE 23	iMATE 28	iCPC	i8	i12	iMINI
24 AWG contact				300V		2.1	
23 AWG contact					3.5		
22 AWG contact						5	
20 AWG contact	7.5	7.5	7.5		7.5	7.5	
16 AWG contact		13	13	13			
14 AWG contact							17
12 AWG contact			23				

Amperages shown are maximum for a single contact, and based on a 30°C temperature rise

Amperages for complete connector assemblies depends on:

- Number of Contacts
- Wire insulation temperature rating specified
- Maximum ambient temperature of the application
- Expected amperage duty cycle of the connector

Consult iCONN Systems for the exact connector amperage rating for your application

# CUSTOM ENGINEERED SOLUTIONS

## CAPABILITIES

### 3D Modeling Software

### Electrical, Mechanical, and Environmental Testing Capabilities

### Vertical Integration Capabilities

Overmolding / Insert Molding  
Component Molding  
Low Pressure Molding  
Selective Soldering  
-PCBs, Flex Circuits  
CNC Swiss Screw Machining  
Various CNC Machining Capabilities

### 3D Printer Rapid Prototyping

## FEATURES

**MADE IN THE USA**

**IP RATED  
(67, 68, 69K)**

## 5 Step Custom Engineered Solutions

**STEP ONE:  
RESEARCH AND STRATEGY**

**STEP TWO:  
DESIGN ENGINEERING**

**STEP THREE:  
PROTOTYPE / PRE-PRODUCTION /  
ENVIRONMENTAL / MECHANICAL  
ANALYSIS**

**STEP FOUR:  
PRODUCTION**

**STEP FIVE:  
QUALITY**

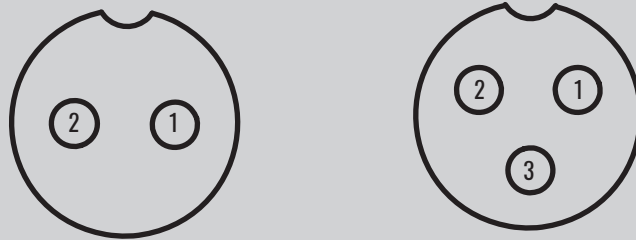


For more details, please visit our website, or contact us:



## STRAIGHT OR RIGHT ANGLE OVERMOLDED PLUGS

### MALE AND FEMALE PLUG CONFIGURATIONS



## OVERMOLDED IN-LINE RECEPTACLES OR PANEL MOUNT RECEPTACLES

### MALE AND FEMALE RECEPTACLE CONFIGURATIONS



## Materials:

Plug Housing	Glass Filled PBT
Coupling Nut	PA66
Receptacle Housing	Glass Filled PBT
Jam Nut	Glass Filled PBT
Mounting Gasket	Neoprene
Contacts	Cu Alloy, Gold over Nickel Plating
Plug O-Ring	Silicone
Overmold	Material will vary depending on cable selection

## Dimensions:

Receptacle Mounting OD	0.43" (10.8 mm)
Basic Plug OD	0.59" (15.0 mm)
In-Line Receptacle OD	0.53" (13.5 mm)
Overmold Length w Strain Relief	1.15 (29.2 mm)
Max Cable Diameter	0.35" (8.9 mm)
Contact Sizes Available	20 AWG

## Performance:

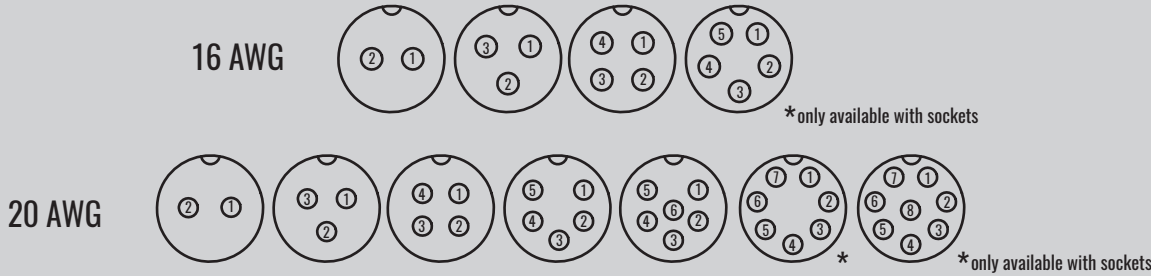
Ingress Protection	IP 67
Max Continuous Temperature	Overmold material and wire/cable selection will influence the overall max temperature rating of assembly

# iMATE™ 17 SERIES



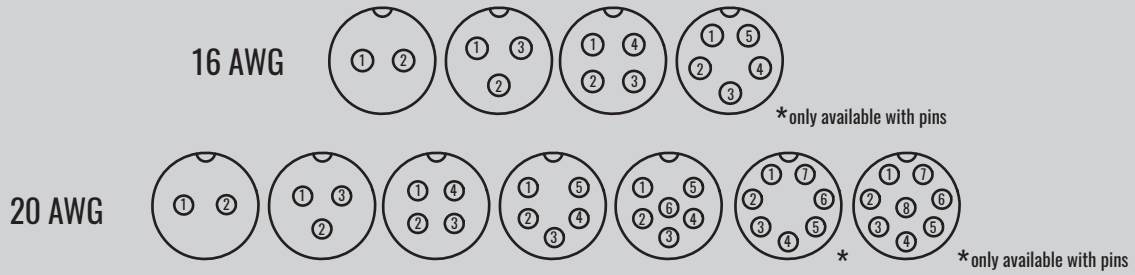
# STRAIGHT OR RIGHT ANGLE OVERMOLDED PLUGS

## MALE AND FEMALE PLUG CONFIGURATIONS



# OVERMOLDED IN-LINE RECEPTACLES OR PANEL MOUNT RECEPTACLES

## MALE AND FEMALE RECEPTACLE CONFIGURATIONS





## Materials:

Plug Housing	Glass Filled PBT
Coupling Nut	Glass Filled PBT
Receptacle Housing	Glass Filled PBT
Jam Nut	Glass Filled PBT
Mounting Gasket	Neoprene
Contacts	Cu Alloy, Gold over Nickel Plating
Plug O-Ring	Silicone
Overmold	Material will vary depending on cable selection

## Dimensions:

Receptacle Mounting OD	0.60" (15.3 mm)
Basic Plug OD	0.75" (19.0 mm)
In-Line Receptacle OD	0.68" (17.3 mm)
Overmold Length w Strain Relief	1.52" (38.5 mm)
Max Cable Diameter	0.35" (8.9 mm)
Contact Sizes Available	16 AWG, 20 AWG

## Performance:

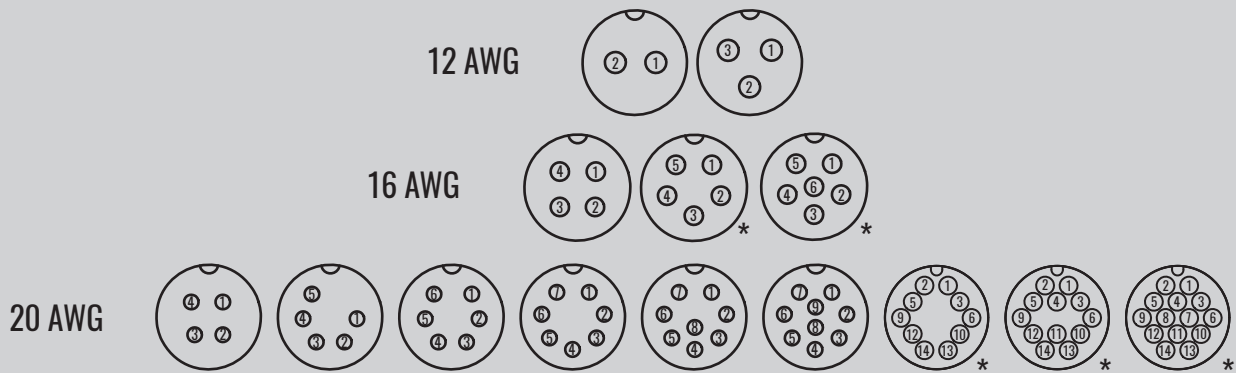
Ingress Protection	IP 67
Max Continuous Temperature	Overmold material and wire/cable selection will influence the overall max temperature rating of assembly

# iMATE™ 23 SERIES



# STRAIGHT OR RIGHT ANGLE OVERMOLDED PLUGS

## MALE AND FEMALE PLUG CONFIGURATIONS

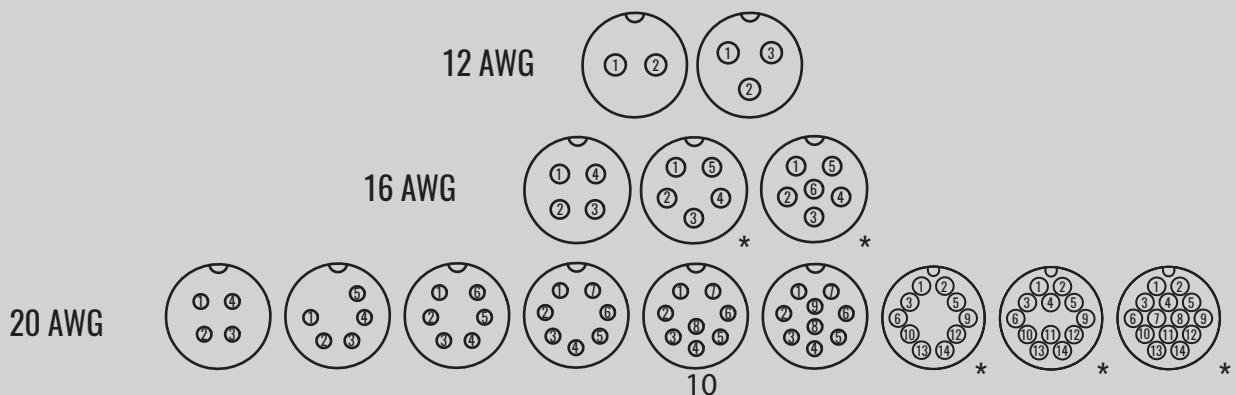


\* only available with sockets



# OVERMOLDED IN-LINE RECEPTACLES OR PANEL MOUNT RECEPTACLES

## MALE AND FEMALE RECEPTACLE CONFIGURATIONS



\* only available with pins



## Materials:

Plug Housing	Glass Filled PBT
Coupling Nut	Glass Filled PBT
Receptacle Housing	Glass Filled PBT
Jam Nut	Glass Filled PBT
Mounting Gasket	Neoprene
Contacts	Cu Alloy, Gold over Nickel Plating
Plug O-Ring	Silicone
Overmold	Material will vary depending on cable selection

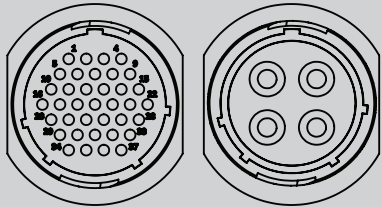
## Dimensions:

Receptacle Mounting OD	0.79" (20.0 mm)
Basic Plug OD	0.94" (23.8 mm)
In-Line Receptacle OD	0.87" (22.0 mm)
Overmold Length w Strain Relief	1.57" (39.8 mm)
Max Cable Diameter	0.50" (12.7 mm)
Contact Sizes Available	12 AWG, 16 AWG, 20 AWG

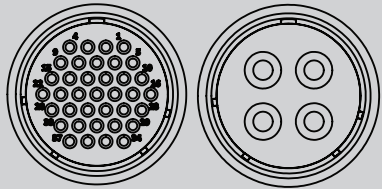
## Performance:

Ingress Protection	IP 67
Max Continuous Temperature	Overmold material and wire/cable selection will influence the overall max temperature rating of assembly

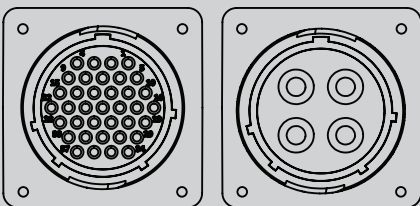
# iMATE™ 28 SERIES



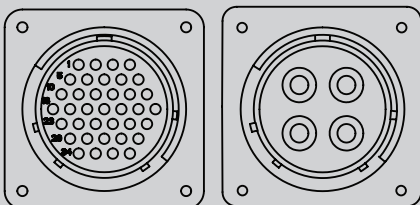
## MALE IN-LINE RECEPTACLE CONFIGURATION



## FEMALE PLUG CONFIGURATION



## FEMALE PANEL MOUNT CONFIGURATION



## MALE PANEL MOUNT CONFIGURATION

\*PIN AND SOCKETS AVAILABLE IN ALL INSERT STYLES

## Materials:

Contact Carrier	Glass Filled PBT
Coupling Nut	PBT
Panel Mount Housing	Glass Filled PA
Mounting Gasket/O-ring	Buna
Contacts	Cu Alloy, Gold over Nickel Plating
Plug O-Ring	Silicone
Overmold	Material will vary depending on cable selection

## Dimensions:

Receptacle Mounting Flange	1.74" SP
Basic Plug OD	1.74" DIA.
In-Line Receptacle OD	1.70" DIA.
Overmold Length w Strain Relief	2.90"
Max Cable Diameter	0.70"
Contact Sizes Available	16 AWG

## Performance:

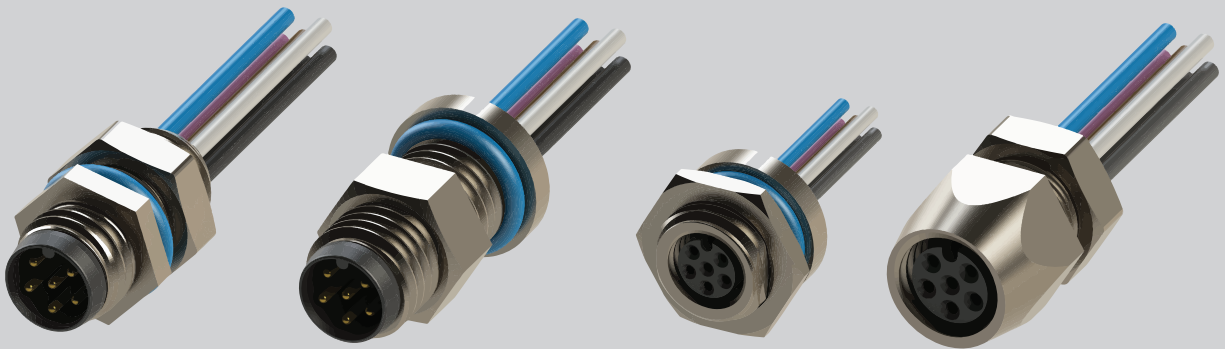
Ingress Protection	NA
Max Continuous Temperature	Overmold material and wire/cable selection will influence the overall max temperature rating of assembly

# iCPC SERIES



# STRAIGHT OR RIGHT ANGLE OVMOLDED PLUGS

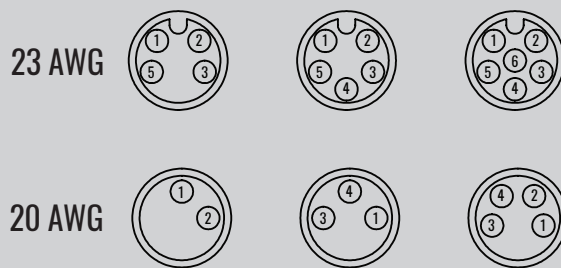
THREADED AND QUICK CONNECT AVAILABLE



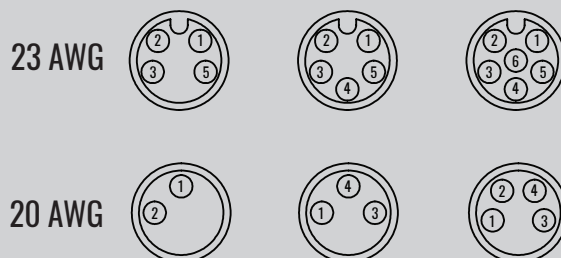
# PANEL MOUNT RECEPTACLES

REAR AND FRONT MOUNT AVAILABLE

## FEMALE CONFIGURATIONS



## MALE CONFIGURATIONS





## Materials:

Contact Carrier	Mineral Filled PA
Coupling Nut	Nickel Plated Brass or Stainless Steel
Panel Mount Housing	Nickel Plated Brass or Stainless Steel
Jam Nut	Nickel Plated Brass or Stainless Steel
Mounting Gasket/O-Ring	Buna
Contacts	Cu Alloy, Gold over Nickel Plating
Plug O-Ring	Silicone
Overmold	Material will vary depending on cable selection

## Dimensions:

Receptacle Mounting OD	M8 Thread
Basic Plug OD	0.39" (9.9 mm)
In-Line Receptacle OD	0.39" (9.9 mm)
Overmold Length w Strain Relief	1.07" (27.2 mm)
Max Cable Diameter	0.20" (5.08 mm)
Contact Sizes Available	20 AWG, 23 AWG

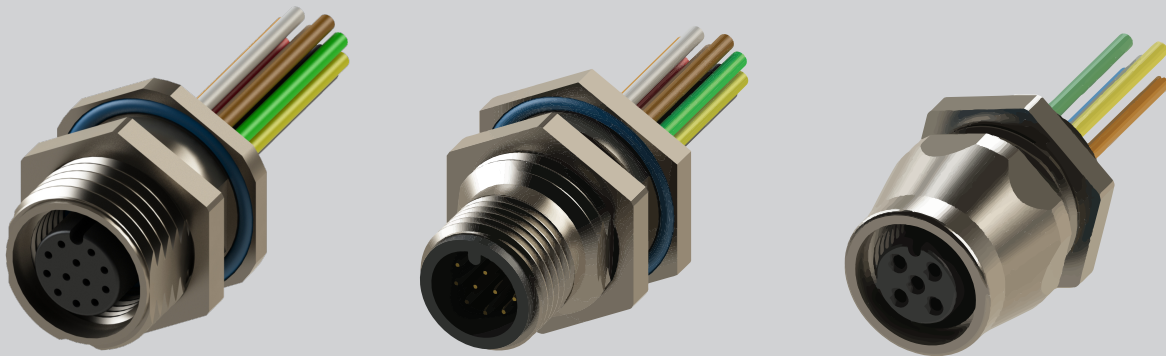
## Performance:

Ingress Protection	IP 67
Max Continuous Temperature	Overmold material and wire/cable selection will influence the overall max temperature rating of assembly

# iSENSOR™ i8 SERIES



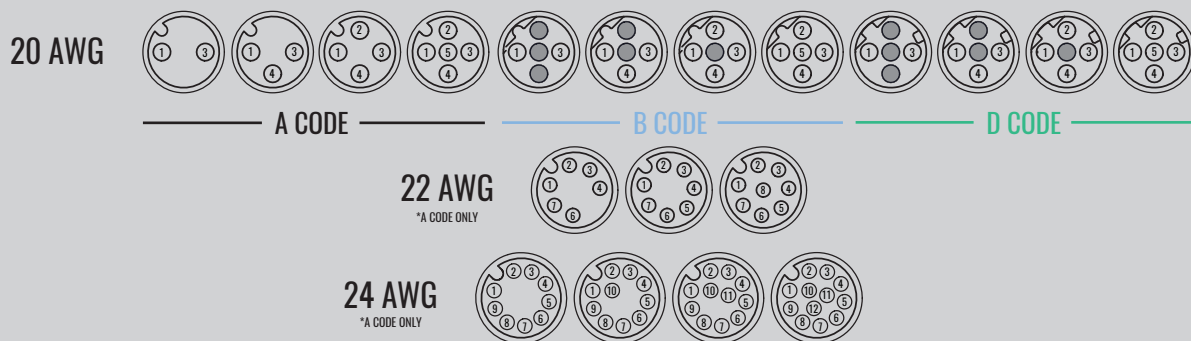
## STRAIGHT OR RIGHT ANGLE OVERMOLDED PLUGS



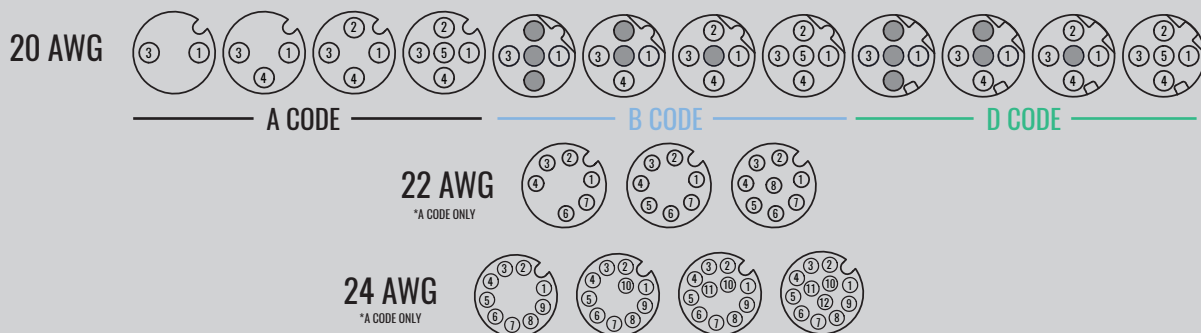
## PANEL MOUNT RECEPTACLES

REAR AND FRONT MOUNT AVAILABLE

### FEMALE CONFIGURATIONS



### MALE CONFIGURATIONS





## Materials:

Contact Carrier	Mineral Filled PA
Coupling Nut	Nickel Plated Brass or Stainless Steel
Panel Mount Housing	Nickel Plated Brass or Stainless Steel
Jam Nut	Nickel Plated Brass or Stainless Steel
Mounting Gasket/O-Ring	Buna
Contacts	Cu Alloy, Gold over Nickel Plating
Plug O-Ring	Silicone
Overmold	Material will vary depending on cable selection

## Dimensions:

Receptacle Mounting OD	PG9 Thread
Basic Plug OD	0.56" (14.2 mm)
In-Line Receptacle OD	0.56" (14.2 mm)
Overmold Length w Strain Relief	1.14" (29.0 mm)
Max Cable Diameter	0.33" (8.38 mm)
Contact Sizes Available	20 AWG, 22 AWG, 24 AWG

## Performance:

Ingress Protection	IP 67
Max Continuous Temperature	Overmold material and wire/cable selection will influence the overall max temperature rating of assembly

# iSENSOR™ i12 SERIES



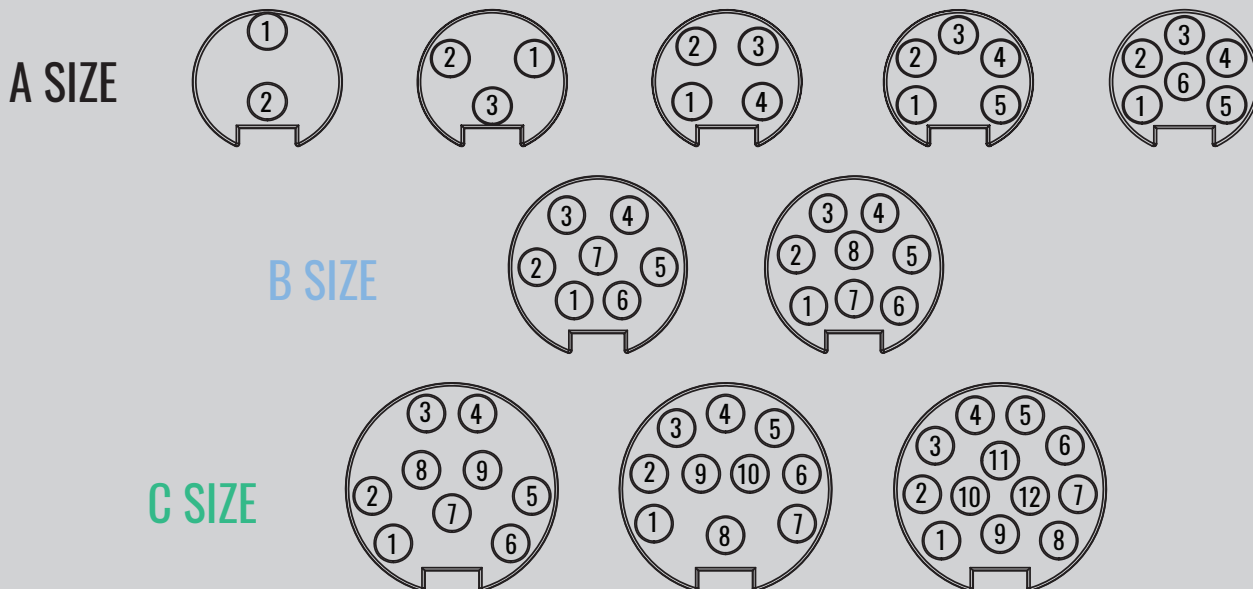
## STRAIGHT OR RIGHT ANGLE OVERMOLDED PLUGS



## PANEL MOUNT RECEPTACLES

FRONT MOUNT

14 AWG CONTACTS





## Materials:

Contact Carrier	Rigid PVC
Coupling Nut	Nickel Plated Brass or Stainless Steel
Panel Mount Housing	Nickel Plated Brass or Stainless Steel
Jam Nut	Nickel Plated Brass or Stainless Steel
Mounting Gasket/O-Ring	Buna
Contacts	Cu Alloy, Gold over Nickel Plating
Plug O-Ring	Silicone
Overmold	Material will vary depending on cable selection

## Dimensions:

Receptacle Mounting OD	A - 1" HEX	B - 1 1/8" HEX	C - 1 1/8" SQUARE
Basic Plug OD	A - 1"	B - 1 1/4"	C - 1 1/4"
Receptacle Mounting Thread	A - 1/2" NPT	B - 1/2" NPT	C - 3/4" NPT
Overmold Length w Strain Relief	A - 1.14"	B - 2"	C - 2"
Max Cable Diameter	A - .27"	B - .44"	C - .52"
Contact Sizes Available	14 AWG		

## Performance:

Ingress Protection	IP 67
Max Continuous Temperature	Overmold material and wire/cable selection will influence the overall max temperature rating of assembly

# iMINI A · B · C SERIES

# CHECK OUT MORE ON THE WEB!

[www.iconnsystems.com](http://www.iconnsystems.com)

