

# ULTRA-LOCK™ CONNECTION SYSTEM



**PUSHED FOR TIME?  
PUSHED FOR RELIABILITY?  
PUSHED FOR PERFORMANCE?**



# ULTRA-LOCK™ CONNECTION SYSTEM

## Designed For Performance And Reliability

Automation improves the consistency, quality and cost of product manufactured throughout the world. Market leaders are focused on increasing productivity through reduced downtime and higher output. Brad Harrison®, the name you have come to know and trust for threaded quick-disconnect technology, has developed a revolutionary new connection system – **Ultra-Lock**. The Ultra-Lock design surpasses the performance and reliability of traditional threaded connectors to deliver increased productivity and cost savings.



### PERFORMANCE

Ultra-Lock connectors incorporate a unique radial seal and mechanical locking design that deliver unsurpassed performance. They are designed to eliminate connector-related intermittent signals in the harshest environments. Fewer intermittent signals mean less downtime, more uptime and better productivity. With Ultra-Lock connectors, you simply push-to-lock them into place...and they stay locked! It's that easy.

### RELIABILITY

Threaded connectors are not always connected correctly, causing your productivity to suffer. Vibration and mechanical shock can loosen these connections, leading to intermittent signals, false data, improper sequencing and downtime on a production line. Ultra-Lock connectors have built-in reliability and eliminate the operator dependency of threaded connectors. They are fast, simple and secure...each and every time.

### SAVES TIME AND MONEY

Ultra-Lock technology is designed to eliminate connector-related production downtime and associated costs. When a problem occurs, costs skyrocket – not just because of lost production time, but also because of troubleshooting, damaged material and broken tools. Say goodbye to the unexpected with the Ultra-Lock connection system...and save time and money.

**NEVER LET A LOOSE CONNECTION COST YOU LOST PRODUCTION TIME AND MONEY AGAIN!**



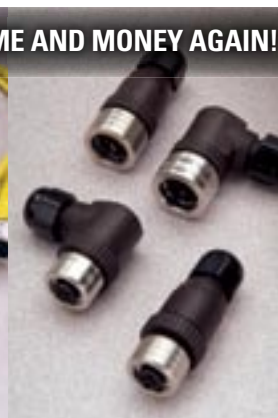
DISTRIBUTION BOXES



CORDSETS



RECEPTACLES



FIELD-ATTACHABLE CONNECTORS



ADAPTER

Next Generation M12 Connection Technology

# M12

**Suited For Broad-Based  
Industry Applications**

Automotive  
Material Handling  
Food/Beverage  
Pharmaceutical  
Petrochem



**Apply the Ultra-Lock Technology and...**

- **Eliminate Downtime**
- **Maximize Productivity**
- **Lower Installed Costs**
- **Reduce Cost of Ownership**

# *Technology At Its Best*

For additional product and technical information, visit [woodhead.com/ultralock](http://woodhead.com/ultralock).

# ULTRA-LOCK™ CONNECTION SYSTEM

## The Fastest, Easiest, Most Secure Connection

### FAST

Simply push down to connect...and pull up to disconnect – *THAT'S IT*. The Ultra-Lock system reduces installation time by 90% when compared with threaded connectors.

### SIMPLE

There's no twisting or turning with Ultra-Lock connectors. That's a big advantage when working in tight spaces or with blind-mate applications. The simplicity and ergonomic design also mean operator fatigue is significantly reduced.

### SECURE

Ultra-Lock connectors are mated with the same, simple, downward pressure every time an installation is made because of the unique O-ring seal. This operator-independent, radial seal maintains an IP 67/68/69K watertight connection.

Typical axial compression seals used in threaded connectors are dependent upon how tight the operator makes the connection. The problem is how tight is tight? No two connections are the same without using a torque wrench every time. Ultra-Lock technology takes the guesswork out of connections.

*Simply push down to lock.*



Push Down



### ULTRA-LOCK RADIAL SEAL

Operator-Independent  
Reliable, watertight,  
constant-pressure seal.

### TRADITIONAL THREADED CONNECTORS



#### UNDER-TIGHTENING

Axial Compression Seal is incomplete allowing moisture to penetrate and create shorts.



#### OVER-TIGHTENING

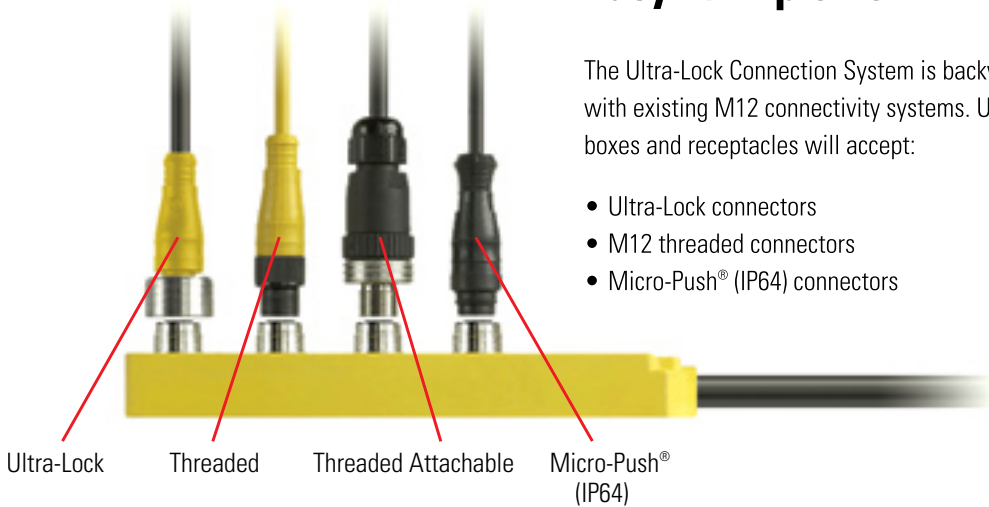
Axial Compression Seal can become damaged so moisture can enter.



## Easy To Implement

The Ultra-Lock Connection System is backward-compatible with existing M12 connectivity systems. Ultra-Lock distribution boxes and receptacles will accept:

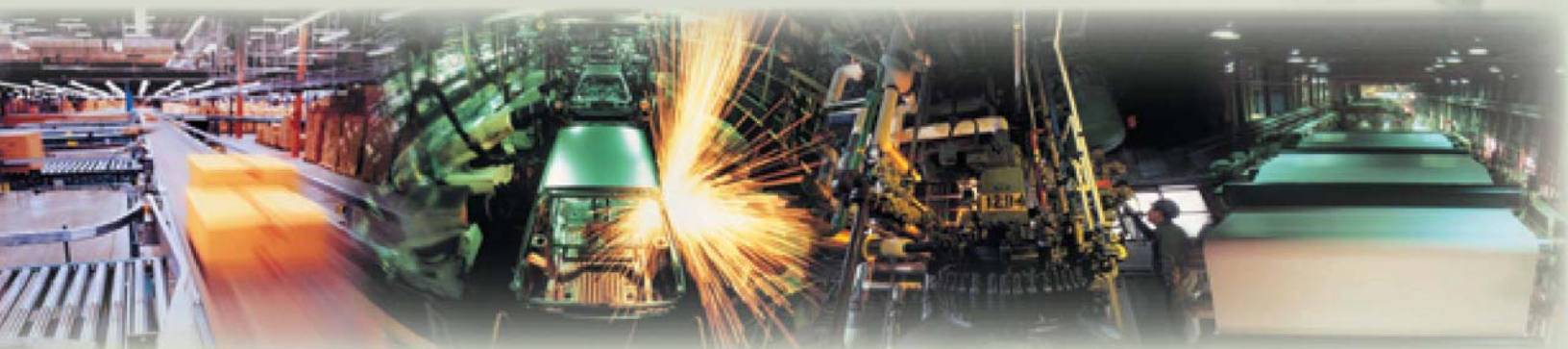
- Ultra-Lock connectors
- M12 threaded connectors
- Micro-Push® (IP64) connectors



Sensors with Ultra-Lock technology will also work with standard threaded connectors.

# Ultra-Lock

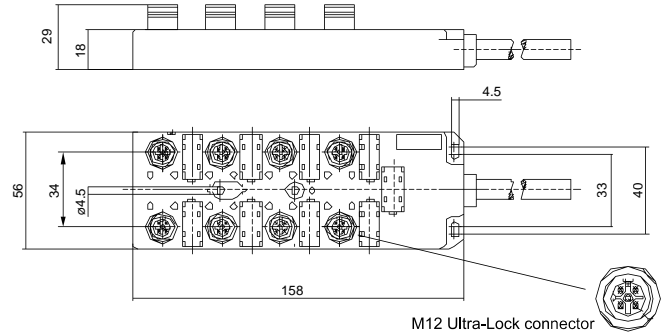
- **Improve your performance and reliability.**
- **Convert your system to save time and money.**



# ULTRA-LOCK™ DISTRIBUTION BOXES

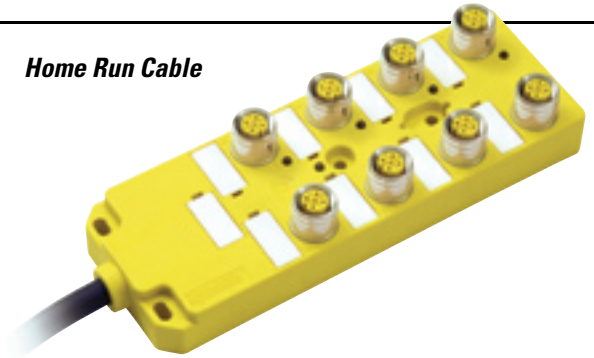
Ultra-Lock Distribution Boxes are offered with 4, 6 or 8 ports, with single- or dual-input/output (I/O) per port. They are available in a variety of formats for backward compatibility with different connector styles. We also offer cabled or two-connector styles for the “Home Run” connection.

- Accepts Ultra-Lock and threaded M12 cordsets.
- For connecting actuators and sensors.



Dimensions (mm)

Home Run Cable



## TECHNICAL DATA

### Mechanical

Housing	PBT
Contact Carrier	PBT
Shell Material	Nickel over Brass
Contact	Phosphor Bronze
Contact Plating	Gold over Nickel
Cable Jacket	PUR
O-Ring	Viton

### Electrical

Rated Voltage (IEC 60 664-1)	10-30 VDC
Insulation Resistance (IEC 60 512-2)	>10 <sup>9</sup> Ω
Rated Current T amb. 40C (IEC 60 512-3)	2 Amps per I/O
Maximum Total Current	12 Amps
Contact Resistance (IEC 60 512-2)	<5mΩ

### Environmental

Pollution Degree (IEC 60 664-1)	3
Protection (IEC 60 529)	IP 67/68/69K
Operating Temperature	-25°C / 90°C

### Certification

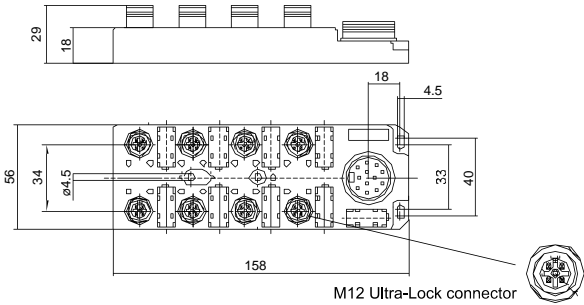
CSA & UL

## ORDERING INFORMATION

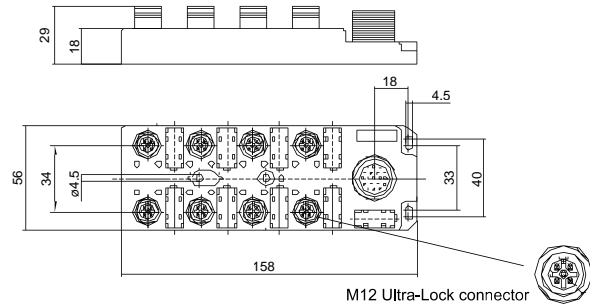
Description	w/Integral Cable (5 meter)	w/Integral Mini-Change® Connector	w/Integral M23 Connector
<b>Single I/O per port</b>	<b>Part No.</b>	<b>Part No.</b>	<b>Part No.</b>
4-Port, 5-Pole/4 wire-single I/O per port	BKY400P-FBP-05	BKY401P-FBB	BKY401P-FBC
6-Port, 5-Pole/4 wire-single I/O per port	BKY600P-FBP-05	BKY601P-FBB	BKY601P-FBC
8-Port, 5-Pole/4 wire-single I/O per port	BKY800P-FBP-05	BKY801P-FBB	BKY801P-FBC
<b>Dual I/O per port</b>	<b>Part No.</b>	<b>Part No.</b>	<b>Part No.</b>
4-Port, 5-Pole/5 wire-dual I/O per port	BKY405P-FBP-05	BKY403P-FBB	BKY403P-FBC
6-Port, 5-Pole/5 wire-dual I/O per port	BKY605P-FBP-05	BKY603P-FBB	BKY603P-FBC
8-Port, 5-Pole/5 wire-dual I/O per port	BKY805P-FBP-05	BKY803P-FBB	BKY803P-FBC

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# M12

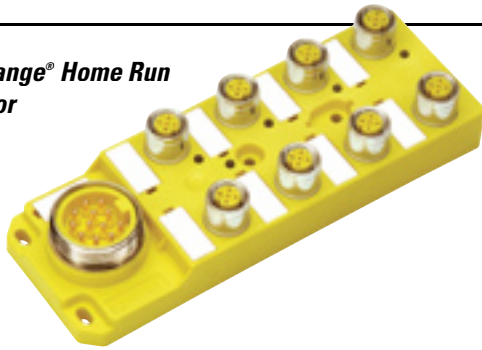


M12 Ultra-Lock connector

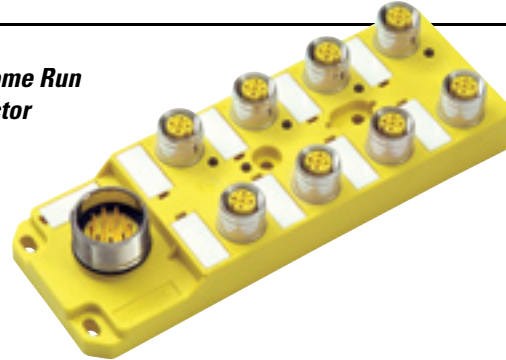


M12 Ultra-Lock connector

### Mini-Change® Home Run Connector



### M23 Home Run Connector



### Mini-Change Home Run Cordsets



### M23 Home Run Connectors – Field Attachable



#### TECHNICAL DATA

##### Mechanical

Contact Carrier	PVC
Contact	Phosphor Bronze
Contact Plating	Gold over Nickel
Molded Body	PVC
Coupling Nut	Epoxy-Coated Zinc

##### Electrical

Voltage Rating	300V AC/DC
Amperage	3A for large pins, 2A for small pins

##### Environmental

Protection	IP 67/68
Operating Temperature	-20°C / 80°C

##### Certification

CSA & UL

#### TECHNICAL DATA

##### Mechanical

Contact	Phosphor Bronze
Contact Plating	Gold over Nickel

##### Electrical

Rated Current	6A Maximum
Rated Voltage	60V
Degree of Protection	IP 67

#### ORDERING INFORMATION

##### Mini-Change Home Run Cordset

Length	Straight		Right Angle	
	12 Pin (Single I/O) Part No.	19 Pin (Dual I/O) Part No.	12 Pin (Single I/O) Part No.	19 Pin (Dual I/O) Part No.
5M	302100B04M050	303000B20M050	302101B04M050	303001B20M050
10M	302100B04M100	303000B20M100	302101B04M100	303001B20M100

##### M23 Home Run Connector – Field Attachable

	Part No.	Cable Diameter
90° Connector-Female**	C12FA01122	0.24"-0.39" (6-10mm)
90° Connector-Female**	C12FA01123	0.31"-0.47" (8-12mm)
90° Connector-Female**	C12FA01124	0.39"-0.55" (10-14mm)

\*\* Connectors only - does not include cable.

For additional product and technical information, visit [woodhead.com/ultralock](http://woodhead.com/ultralock).

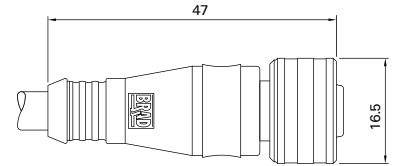
# ULTRA-LOCK™ CORDSETS

Ultra-Lock single-keyway M12 cordsets are available with three cable types and manufactured to optimize performance for your application.

- PVC – for most standard applications.
- PUR – for oil and coolant environments.
- TPE – for welding areas and applications requiring repeated cable flexing.

Ultra-Lock cordsets are offered in single- or double-ended configurations. They come with Ultra-Lock connectors on the distribution box end and Ultra-Lock or threaded connectors on the device end. Using threaded connector ends allows immediate use of the Ultra-Lock system with existing threaded devices.

## Dimensions (mm)



**Mates with Ultra-Lock Compatible Sensors and Receptacles**

## TECHNICAL DATA

### Mechanical

Connector Body	PUR
Contact Carrier	PUR
Locking Mechanism	Nickel Plated Brass
Contact	Male: Brass Female: Phosphor Bronze
Contact Plating	Gold over Nickel
O-Ring	Viton
Durability	30,000 Mate/Demate

### Electrical

Rated Voltage (IEC 60 664-1)	3 & 4-Pole: 250V 5-Pole: 60V
Insulation Resistance (IEC 60 512-2)	>10 <sup>9</sup> Ω
Rated Current T amb. 40C (IEC 60 512-3)	4 A
Contact Resistance (IEC 60 512-2)	<5mΩ

### Environmental

Pollution Degree (IEC 60 664-1)	3
Protection (IEC 60 529)	IP 67/68/69K
Operating Temperature	-25°C / 90°C

### Certification

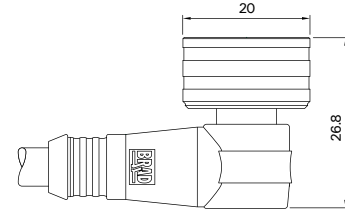
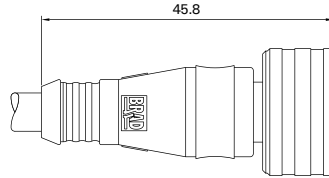
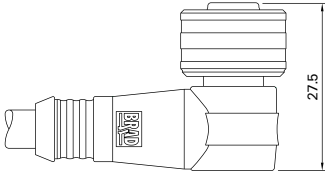
CSA & UL

For additional product and technical information, visit [woodhead.com/ultralock](http://woodhead.com/ultralock).



Designed For Performance And Reliability

# M12



**Mates with Ultra-Lock™ Compatible Sensors and Receptacles**



**Mates with Ultra-Lock Distribution Boxes and Receptacles**



**Mates with Ultra-Lock Distribution Boxes and Receptacles**

## ORDERING INFORMATION

Example: W03000A09M020 = Ultra-Lock single-ended cordset, 3-pole, female straight, PVC cable, 2 meters in length.

**W 0 3 0 0 0 A 0 9 M 0 2 0**

### Connector Type

#### 1st Character

- W** M12 Ultra-Lock connector
- 8** M12 threaded connector

#### 2nd Character

- 0** Single-ended cordset
- W** Double-ended cordset, M12 Ultra-Lock connector
- 8** Double-ended cordset, M12 threaded connector

### Number of Poles

- 3** 3-pole
- 4** 4-pole
- 5** 5-pole

### Unit of Measure

**M** Meters

### Configuration

#### Single-Ended Cordset

- 000** Female straight
- 001** Female 90°
- 006** Male straight
- 007** Male 90°
- 0N1** Female LED NPN 90°
- 0P1** Female LED PNP 90°

#### Double-Ended Cordset

- 030** Female straight / Male straight
- 031** Female 90° / Male straight
- 032** Female straight / Male 90°
- 033** Female 90° / Male 90°

### Cable Length

#### Single-Ended

- 020** 2 meter
- 040** 4 meter
- 050** 5 meter
- 060** 6 meter
- 100** 10 meter

#### Double-Ended

- 003** 0.3 meter
- 006** 0.6 meter
- 010** 1 meter
- 020** 2 meter
- 030** 3 meter
- 040** 4 meter
- 050** 5 meter

*Other lengths available upon request.*

### Cable Type

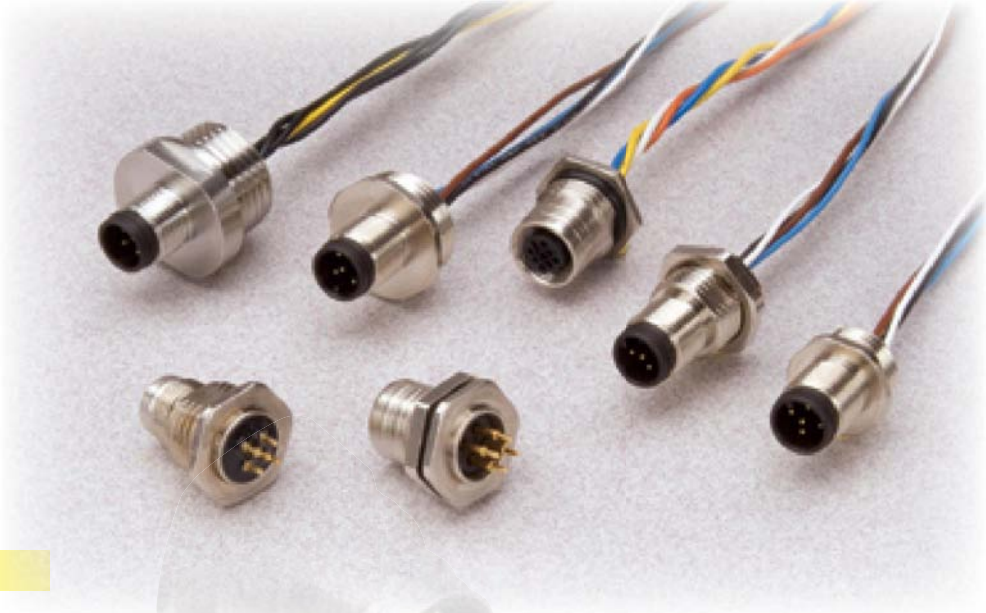
- A09** PVC 0.34mm<sup>2</sup> (22AWG) Yellow
- B03** PUR 0.34mm<sup>2</sup> (22AWG) Black
- K05** TPE 0.34mm<sup>2</sup> (22AWG) Yellow

# ULTRA-LOCK™ RECEPTACLES

Ultra-Lock receptacles give you greater flexibility because they are designed to accept both Ultra-Lock and standard M12 threaded cordsets.

Ultra-Lock receptacles are available in the following formats:

- Multiple NPT and PG9 mounting configurations.
- Front or rear panel mounting.
- With wire leads or PCB mount contacts.



## TECHNICAL DATA

### Mechanical

Receptacle Housing	Nickel Plated Brass
Contact Carrier	PA 6.6
Contact	Male: Brass Female: Phosphor Bronze
Contact Plating	Gold over Nickel

### Electrical

Rated Voltage	4-Pole: 250V 5-Pole: 60V
Insulation Resistance (IEC 60 512-2)	>10 <sup>9</sup> Ω
Contact Resistance (IEC 60 512-2)	<5mΩ

### Environmental

Pollution Degree (IEC 60 664-1)	3
Protection (IEC 60 529)	IP 67/68/69K
Operating Temperature	-25°C / 90°C

### Certification

CSA & UL

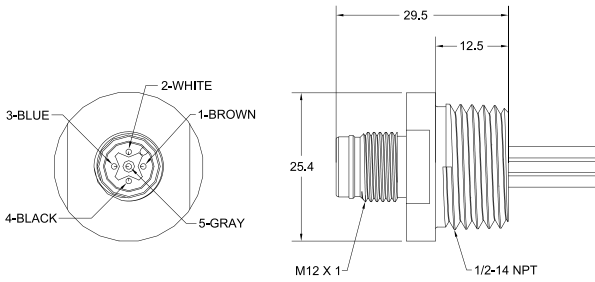
## ORDERING INFORMATION

Front Mount					
		1/2" NPT (with leads)		1/4" NPT (with leads)	
		4-Pole Part No.	5-Pole Part No.	4-Pole Part No.	5-Pole Part No.
<b>Male</b>		WR4006A18C300	WR5006A18C300	WR4A06A18C300	WR5A06A18C300
<b>Female</b>		WR4000A18C300	WR5000A18C300	WR4A00A18C300	WR5A00A18C300
Rear Mount					
		PG9 (with leads)		PG9 (PCB contacts)	
		4-Pole Part No.	5-Pole Part No.	4-Pole Part No.	5-Pole Part No.
<b>Male</b>		WR4J46E03C300	WR5J46E03C300	WR4J46000	WR5J46000
<b>Female</b>		WR4J40E03C300	WR5J40E03C300	WR4J40001	WR5J40001

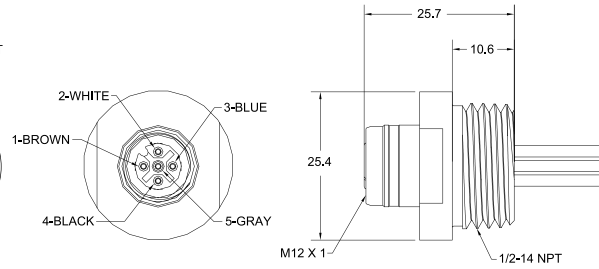
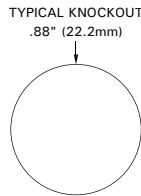
For additional product and technical information, visit [woodhead.com/ultralock](http://woodhead.com/ultralock).

Dimensions (mm)

1/2" NPT (with leads)

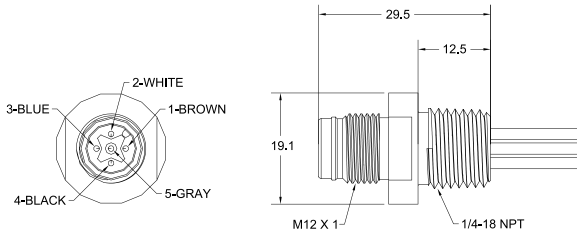


WR5006A18C300

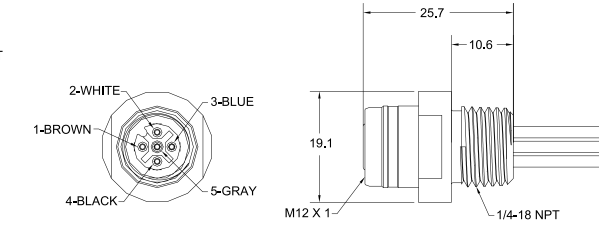
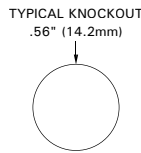


WR5000A18C300

1/4" NPT (with leads)

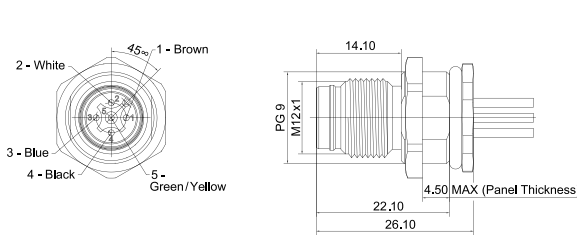


WR5A06A18C300

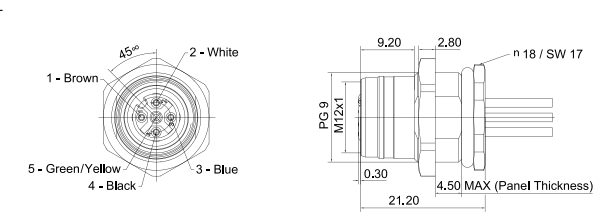
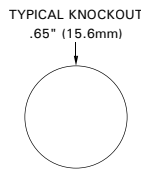


WR5A00A18C300

PG9 (with leads)

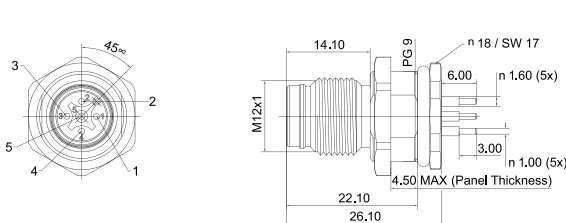


WR5J46E03C300

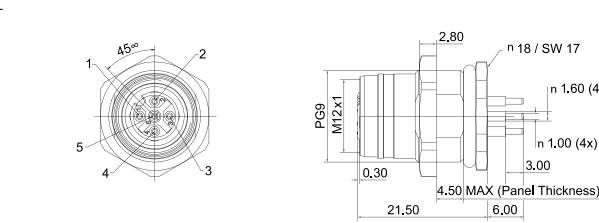
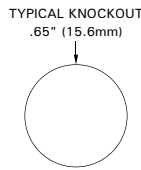


WR5J40E03C300

PG9 (PCB contacts)



WR5J46000



WR5J40001

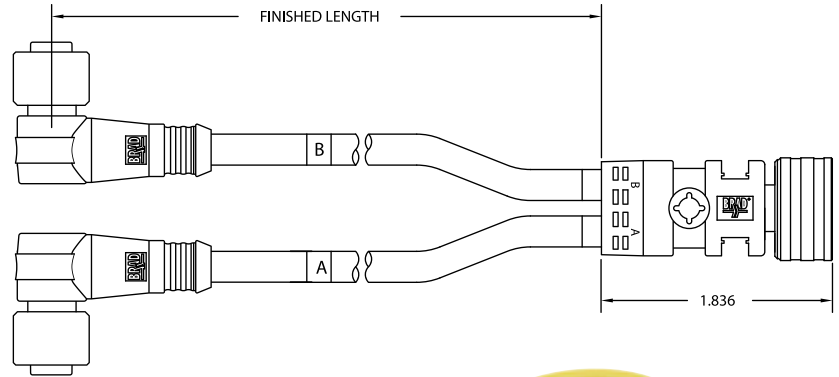
# ULTRA-LOCK™ IN-LINE SPLITTERS

Ultra-Lock In-Line Splitters allow you to service two devices through just one connection to the Ultra-Lock dual-I/O distribution box. Splitters are available with straight or right-angle connectors on the device ends.

In-Line Splitters are offered with Ultra-Lock connectors on all ends or with threaded connectors on the device ends. This gives you immediate use of the Ultra-Lock connector on the distribution box so you can connect to existing threaded sensors or other devices.

Ultra-Lock Splitters are available with three different application-specific cables:

- PVC for most standard applications.
- PUR for oil and coolant environments.
- TPE for welding areas and applications requiring repeated cable flexing.



## TECHNICAL DATA

### Mechanical

Connector Body	PUR
Contact Carrier	PUR
Locking Mechanism	Nickel Plated Brass
Contact	Male: Brass Female: Phosphor Bronze
Contact Plating	Gold over Nickel
O-Ring	Viton
Durability	30,000 Mate/Demate

### Electrical

Rated Voltage (IEC 60 664-1)	250V
Insulation Resistance (IEC 60 512-2)	>10 <sup>9</sup> Ω
Rated Current T amb. 40C (IEC 60 512-3)	4 A
Contact Resistance (IEC 60 512-2)	<5mΩ

### Environmental

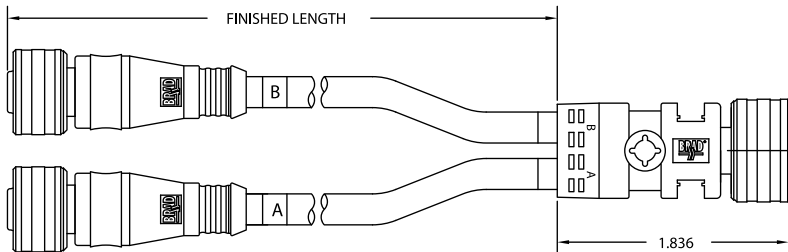
Pollution Degree (IEC 60 664-1)	3
Protection (IEC 60 529)	IP 67/68/69K
Operating Temperature	-25°C / 90°C

### Certification

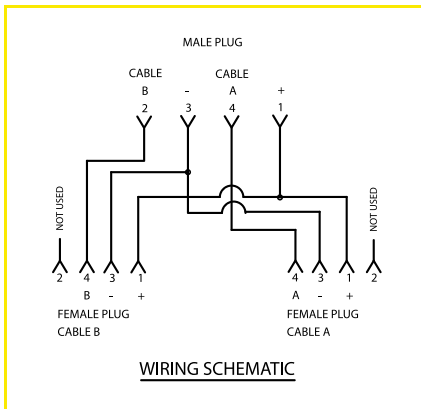
CSA & UL

Designed For Performance And Reliability

# M12



Dimensions (mm)



## ORDERING INFORMATION

**WW 4 A30 A09 M 020**

### Connector Type

#### 1st Character (Device End)

- W** Ultra-Lock™ connector
- 8** Single-keyway, M12 threaded connector

#### 2nd Character (Distribution Box End)

- W** Ultra-Lock connector

### Number of Poles

- 4** 4-pole (male end)

### Configuration

- A30** Female straight connectors
- A31** Female 90° connectors

### Unit of Measure

- M** Meters

### Cable Length

#### Standard Lengths

- 003** 0.3 meter
- 006** 0.6 meter
- 010** 1.0 meter
- 020** 2.0 meter
- 030** 3.0 meter
- 040** 4.0 meter
- 050** 5.0 meter

### Cable Type

- A09** PVC 0.34mm<sup>2</sup> (22AWG) Yellow
- B03** PUR 0.34mm<sup>2</sup> (22AWG) Black
- K05** TPE 0.34mm<sup>2</sup> (22AWG) Yellow

# ULTRA-LOCK™ FIELD-ATTACHABLE CONNECTORS

The performance and reliability of the Ultra-Lock connection system have been combined with the flexibility of the attachable connector. A user can take the male or female single-ended cordset, dress it out on the machine to the exact length required and then finish it off with an Ultra-Lock attachable connector.

Attachable connectors are available in straight and right-angle designs. Both are available as either male or female connectors.



## TECHNICAL DATA

### Mechanical

Connector Face	Polyamide
Molded Body	Polyamide
Contact	Brass
Coupling Nut	Nickel Plated Brass
Grommet	Nitrile Rubber
Maximum Conductor Size	18 AWG

### Electrical

Voltage Rating	4-Pole: 250V AC 300V DC 5-Pole: 30V AC 36V DC
Amperage	4-Pole: 4A 5-Pole: 4A

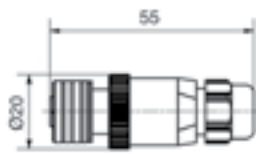
### Environmental

Protection	IP 67/68
Operating Temperature	-25°C / 90°C

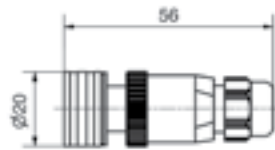
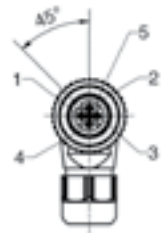
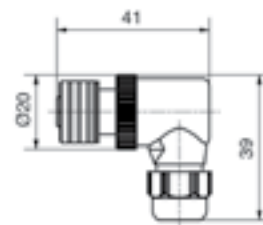
### Certification

CSA & UL

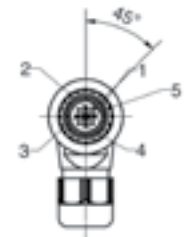
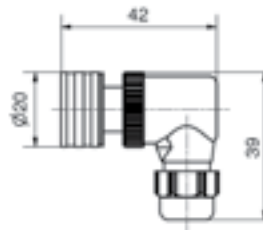
### Dimensions (mm)



### Female



### Male



## ORDERING INFORMATION

### PG7 Cable Fitting 3.3mm–6.6mm (.13"–.26")

	4-Pole Part No.	5-Pole Part No.
<b>FEMALE</b>		
STRAIGHT	WA4000-31	WA5000-31
90°	WA4001-31	WA5001-31
<b>MALE</b>		
STRAIGHT	WA4006-31	WA5006-31
90°	WA4007-31	WA5007-31

### PG9 Cable Fitting 4.1mm–8.1mm (.16"–.32")

	4-Pole Part No.	5-Pole Part No.
<b>FEMALE</b>		
STRAIGHT	WA4000-32	WA5000-32
<b>MALE</b>		
STRAIGHT	WA4006-32	WA5006-32

## ULTRA-LOCK™ ADAPTER

The Ultra-Lock Adapter is used to ease the transition from threaded to Ultra-Lock connectivity. As machine builders specify Ultra-Lock connectors into new and existing systems, there may be a few mating devices not yet available with Ultra-Lock technology. If this is the case, the user can simply use the Ultra-Lock Adapter to connect the specified Ultra-Lock cordsets to the few remaining threaded devices until they are Ultra-Lock compatible.



### TECHNICAL DATA

#### Mechanical

Connector Body	PUR
Contact Carrier	PUR
Locking Mechanism	Nickel Plated Brass
Contact	Male: Brass Female: Phosphor Bronze
Contact Plating	Gold over Nickel
O-Ring	Viton

#### Electrical

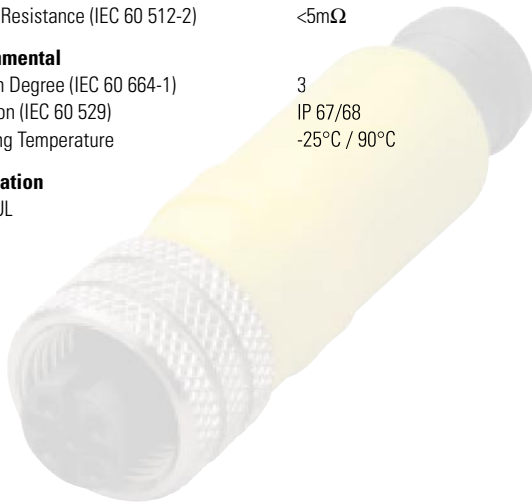
Rated Voltage (IEC 60 664-1)	4-Pole: 250V 5-Pole: 60V
Insulation Resistance (IEC 60 512-2)	>10 <sup>9</sup> Ω
Rated Current T amb. 40C (IEC 60 512-3)	4 A
Contact Resistance (IEC 60 512-2)	<5mΩ

#### Environmental

Pollution Degree (IEC 60 664-1)	3
Protection (IEC 60 529)	IP 67/68
Operating Temperature	-25°C / 90°C

#### Certification

CSA & UL

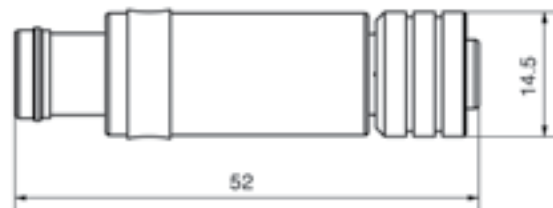


Threaded Sensor

Ultra-Lock Adapter

Ultra-Lock Cordset

### Dimensions (mm)



### ORDERING INFORMATION

Pole Count	Part No.
4-pole	8W4030
5-pole	8W5030

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# Receptacle Catalog Number Matrix

Use these Catalog Number Matrices to generate a custom or existing part number. From each grouping of specifications choose the corresponding code to create a single 13 character alpha/numeric part number for ordering. Below is an example of a properly constructed Receptacle part number and how it translates to an actual part.

## 3R2004A20A1201

12 Pole Female Straight Receptacle with 12" leads, 16 AWG, PVC, U.S. Color Code, Optional Stainless Steel Shell

3 R 2 0 0 4 A 2 0 A 1 2 0 1

<p><b>PRODUCT FAMILY</b> (2 characters)</p> <p>1<sup>st</sup> Character</p> <p>1 2 to 6 Pole (A-size)</p> <p>2 6 to 8 Pole (B-size)</p> <p>3 9, 10, 12 Pole (C-size)</p> <p>2<sup>nd</sup> Character</p> <p>R Receptacle</p>	<p><b>NUMBER OF POLES</b></p> <p>X X Pole: 2 to 9 Pole</p> <p>1 10 Pole C-size only</p> <p>2 12 Pole C-size only</p>	<p><b>RECEPTACLE TYPE</b></p> <p>004 Female Straight, ½" - 14NPT Mounting Thread</p> <p>005 Female 90°, ½" - 14NPT Mounting Thread 2-6 Pole A-size only</p> <p>006 Male Straight, ½" - 14NPT Mounting Thread</p> <p>007 Male 90°, ½" - 14NPT Mounting Thread 2-6 Pole A-size only</p> <p>D04 Female Straight, PG13.5 Mounting Thread, 3-5 Pole only</p> <p>D06 Male Straight, PG13.5 Mounting Thread, 3-5 Pole only</p> <p>G04 Female Straight Flange Mount 2-6 Pole A-size only</p> <p>G06 Male Straight Flange Mount 2-6 Pole A-size only</p>	<p><b>WIRE TYPE</b></p> <p>A16 18 AWG PVC UL 1015 IEC DC Color Code 3P &amp; 4P</p> <p>A17 18 AWG PVC UL 1061 AUTO Color Code 3P-5P</p> <p>A20 16 AWG PVC UL 1015 U.S. Color Code 2P-12P</p> <p>A24 16 AWG PVC UL 1015 AUTO Color Code 3P &amp; 5P</p> <p>A25 18 AWG PVC UL 1015 IEC AC Color Code 3P &amp; 5P</p>	<p><b>UNIT OF MEASURE</b></p> <p>A Inches</p> <p>F Feet</p> <p>Note: use feet for length greater than 1 foot</p>	<p><b>LENGTH</b></p> <p>1st Digit 10 X Length</p> <p>2nd Digit 1 X Length</p> <p>3rd Digit .1 X Length</p>	<p><b>OPTIONAL SHELL MATERIAL</b> (For receptacle type 004 and 006 only)</p> <p>Blank Zinc Diecast, epoxy coat</p> <p>1 Stainless Steel, Type 303</p> <p>2 Non-Metallic Nylon 6/6 (2P - 6P, A-size only)</p>
--	--	---	--	--	--	--

# Connector Catalog Number Matrix

Below is an example of a properly constructed Connector part number and how it translates to an actual part.

## 113020A01F2001

Mini-Change® 3 Pole Female Straight to Male Straight Double-Ended Cordset with 20' of 16 AWG, ST00W-A, U.S. Color Code, Stainless Steel Coupling Nut

# 1 1 3 0 2 0 A 0 1 F 2 0 0 1

LENGTH	
1st Digit	10 X Length
2nd Digit	1 X Length
3rd Digit	.1 X Length

UNIT OF MEASURE	
F	Feet

CABLE TYPE	
A01	16 AWG Type ST00W U.S. Color Code 2P-12P
A02	16 AWG Type ST00W AUTO Color Code 3P&5P
A03	18 AWG PVC Jacket AUTO Color Code 3P-5P
A05	18 AWG PVC Jacket IEC DC Color Code 3P&4P
A06	18 AWG PVC Jacket IEC AC Color Code 3P
A07	20 AWG PVC Jacket IEC AC Color Code 5P
B13	18 AWG PUR Coil Cord AUTO Color Code 3P&5P
C01	16 AWG Type SOO AUTO Color Code 3P-5P
K02	18 AWG TPE Jacket AUTO Color Code 3P&5P

CONNECTOR TYPE	
Single-Ended Cordset	
000	Female Straight
001	Female 90°
002	Male Straight
003	Male 90°
Double-Ended Cordset	
020	Female Straight - Male Straight
021	Female 90° - Male Straight
022	Female Straight - Male 90°
023	Female 90° - Male 90°

NUMBER OF POLES	
X	X Pole: 2 to 9 Pole
1	10 Pole C-size only
2	12 Pole C-size only

PRODUCT FAMILY (2 characters)	
1 <sup>st</sup> Character	
1	2 to 6 Pole 1" Coupler A-size
2	6 to 8 Pole 1½" Coupler B-size
3	9, 10, 12 Pole 1¼" Coupler C-size
2 <sup>nd</sup> Character	
0	Single-Ended Cordset A, B & C sizes
1	Double-Ended Cordset A-size
2	Double-Ended Cordset B-size
3	Double-Ended Cordset C-size

COUPLING NUT	
Blank	Zinc Diecast, epoxy coat
1	Stainless Steel, Type 303
2	Non-Metallic Nylon 6/6 (2P - 6P, A-size only)



# Single-Ended Cordsets

#16 AWG yellow ST00W cable – U.S. color code

Oil-resistant PVC jacket

Low-resistance contact design with gold/palladium nickel plating

	2P	3P	4P	5P	6P
FEMALE FACE VIEW					
COLOR CODE	1- white 2- black	1- green-gnd 2- black 3- white	1- black 3- red 2- white 4- green-gnd	1- white 4- orange 2- red 5- black 3- green-gnd	1- white 4- orange 2- red 5- black 3- green-gnd 6- blue
VOLTAGE	600V AC/DC	600V AC/DC	600V AC/DC	600V AC/DC	600V AC/DC
CURRENT	13A	13A	10A	8A	8A
CONDUCTOR	#16-2	#16-3	#16-4	#16-5	#16-6

FEMALE	FIG	SINGLE-ENDED CORDSETS WITH #16 AWG ST00W CABLE 3 FEET LONG				
STRAIGHT	1	102000A01F030	103000A01F030	104000A01F030	105000A01F030	106000A01F030
90°	2	102001A01F030	103001A01F030	104001A01F030	105001A01F030	106001A01F030
MATING RECEPTACLE*	5	1R2006A20A120	1R3006A20A120	1R4006A20A120	1R5006A20A120	1R6006A20A130
MALE	FIG	SINGLE-ENDED CORDSETS WITH #16 AWG ST00W CABLE 3 FEET LONG				
STRAIGHT	3	102002A01F030	103002A01F030	104002A01F030	105002A01F030	106002A01F030
90°	4	102003A01F030	103003A01F030	104003A01F030	105003A01F030	106003A01F030
MATING RECEPTACLE*	5	1R2004A20A120	1R3004A20A120	1R4004A20A120	1R5004A20A120	1R6004A20A120

## CATALOG OPTIONS

\*See Page 46 for additional Mating Receptacles

Use the following chart to modify your part's specifications

102000A01F0301

**CABLE LENGTH**

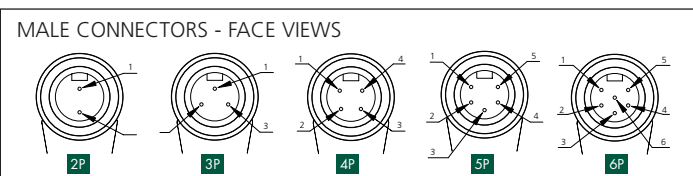
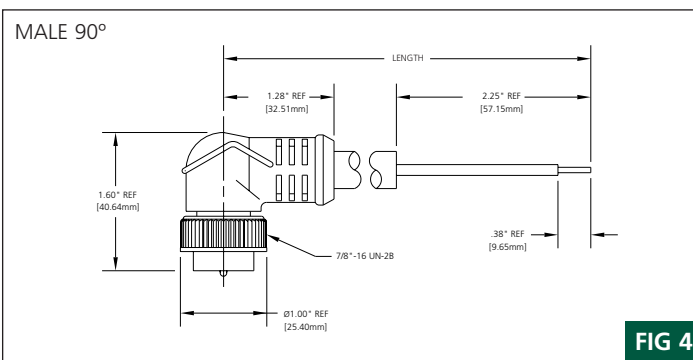
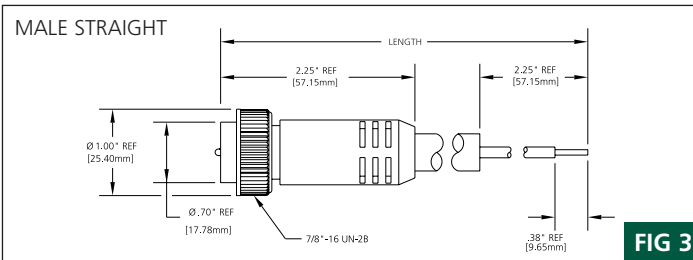
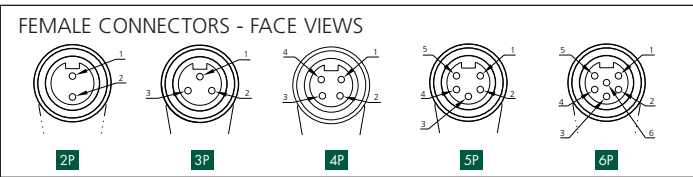
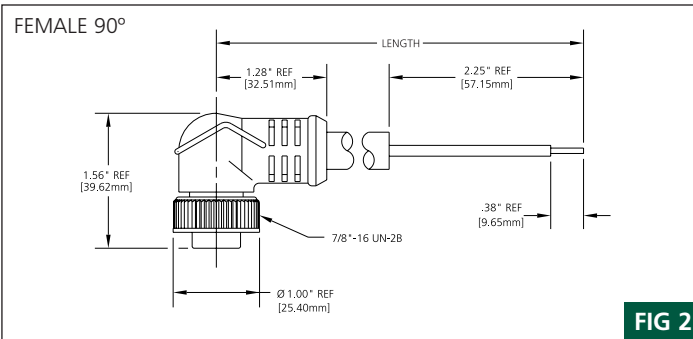
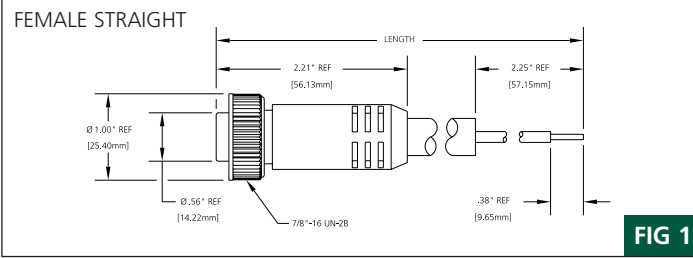
6'	060
12'	120
15'	150
20'	200
25'	250
30'	300

**COUPLING NUT**

STAINLESS STEEL	.....	ADD 1
NON-METALLIC	.....	ADD 2

# Specifications

## CONNECTOR DIMENSIONS



**MECHANICAL**  
 CONNECTOR FACE: PVC - UL STD 94 - V0  
 MOLDED BODY: PVC - UL STD 94 - V0  
 COUPLING NUT: ZINC DIECAST W/ BLACK EPOXY

E-COAT, OPTIONAL STAINLESS STEEL TYPE 303 OR NON-METALLIC GRAY NYLON 6/6

**CABLE:** YELLOW, #16 AWG, PVC JACKET, PVC CONDUCTOR INSULATION OVER 65 X #34 COPPER STRANDING, UL ST00W CSA ST

**CABLE DIAMETER:**  
 2P - .37" (9.4mm)  
 3P - .41" (10.4mm)  
 4P - .42" (10.7mm)  
 5P - .50" (12.7mm)  
 6P - .54" (13.7mm)

**ELECTRICAL**  
 VOLTAGE RATING: 600V AC/DC  
 AMPERAGE:

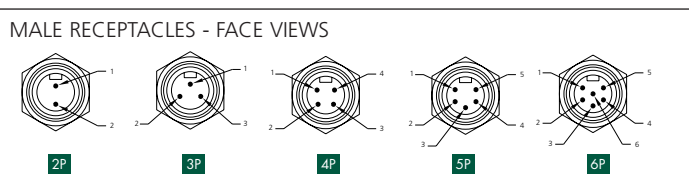
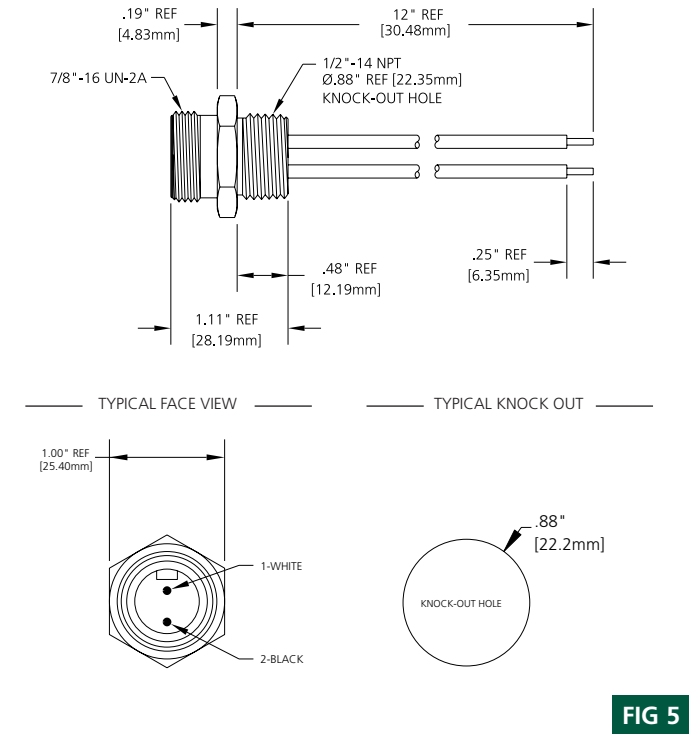
2P - 13A  
 3P - 13A  
 4P - 10A  
 5P - 8A  
 6P - 8A

**ENVIRONMENTAL**  
 PROTECTION: IP 68 NEMA 6P  
 AMBIENT OPERATING TEMP: -4° TO 221° F (-20° TO 105° C)

**CERTIFICATIONS**  
 UL: UL RECOGNIZED, FILE NO. E46237  
 CSA: CSA CERTIFIED, FILE NO. LR6837

## RECEPTACLE DIMENSIONS

MALE RECEPTACLE WITH 1/2" - 14NPT THREADS  
 FEMALE STRAIGHT WITH 1/2" - 14NPT THREADS  
 SEE PAGE 46 FOR ADDITIONAL RECEPTACLES





# Single-Ended Cordsets

**AUTOMOTIVE**

#16 AWG yellow type 500 cable – auto color code  
 Oil-resistant NBR rubber jacket  
 Low-resistance contact design with gold/palladium nickel plating

	3P	4P	5P
FEMALE FACE VIEW			
COLOR CODE	1- green-gnd 2- red w/ black trace 3- red w/ white trace	1- red w/ black trace 3- red 2- red w/ white trace 4- green-gnd	1- red w/ white trace 4- red w/ orange trace 2- red 5- red w/ black trace 3- green-gnd
VOLTAGE	600V AC/DC	600V AC/DC	600V AC/DC
CURRENT	13A	10A	8A
CONDUCTOR	#16-3	#16-4	#16-5

FEMALE	FIG	SINGLE-ENDED CORDSETS WITH #16 AWG TYPE 500 CABLE 3 FEET LONG		
STRAIGHT	1	103000C01F030	104000C01F030	105000C01F030
90°	2	103001C01F030	104001C01F030	105001C01F030
MATING RECEPTACLE*	5	1R3006A24A120	1R4006A20A120	1R5006A24A120
MALE	FIG	SINGLE-ENDED CORDSETS WITH #16 AWG TYPE 500 CABLE 3 FEET LONG		
STRAIGHT	3	103002C01F030	104002C01F030	105002C01F030
90°	4	103003C01F030	104003C01F030	105003C01F030
MATING RECEPTACLE*	5	1R3004A24A120	1R4004A20A120	1R5004A24A120

## CATALOG OPTIONS

\*See Pages 62 or 46 for additional Mating Receptacles

Use the following chart to modify your part's specifications

103000C01F0301

**CABLE LENGTH**

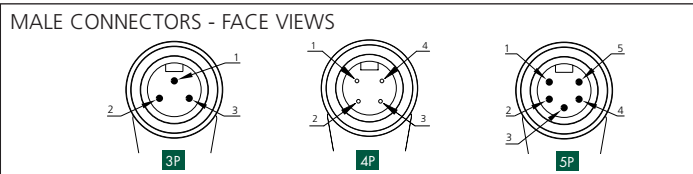
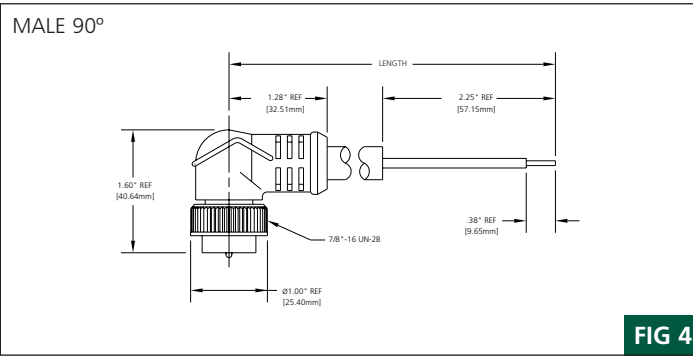
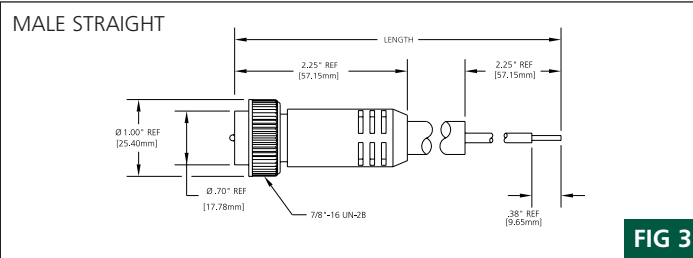
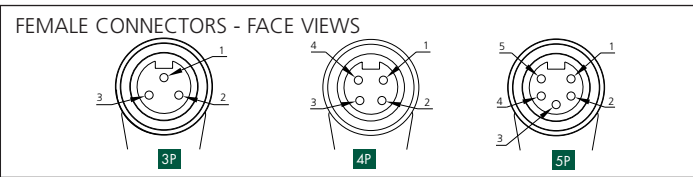
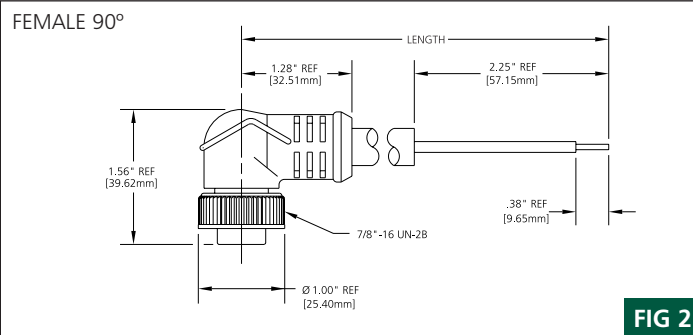
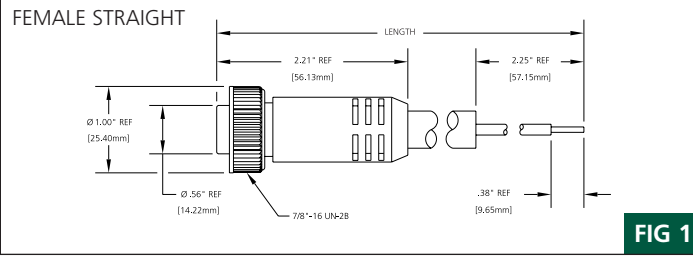
6'	060
12'	120
20'	200

**COUPLING NUT**

STAINLESS STEEL	...ADD 1
NON-METALLIC	...ADD 2

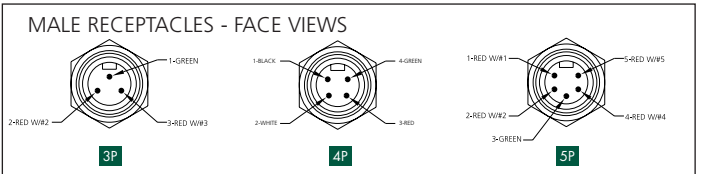
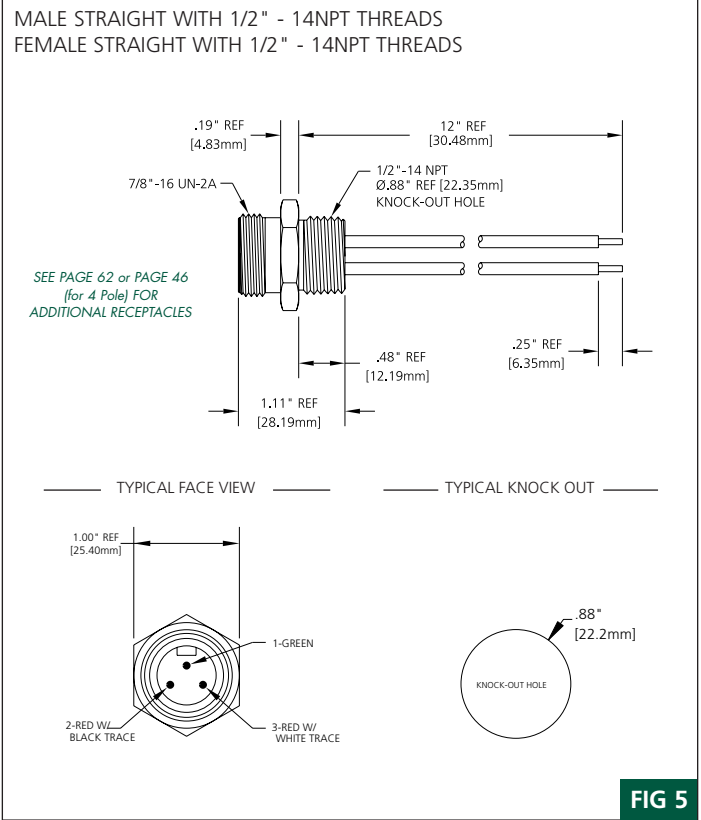
# Specifications

## CONNECTOR DIMENSIONS



- MECHANICAL**  
 CONNECTOR FACE: PVC - UL STD 94 - V0  
 MOLDED BODY: PVC - UL STD 94 - V0  
 COUPLING NUT: ZINC DIECAST W/ BLACK EPOXY COAT, OPTIONAL STAINLESS STEEL TYPE 303 OR NON-METALLIC GRAY NYLON 6/6
- CABLE:**  
 YELLOW, #16 AWG, NITRILE RUBBER/PVC JACKET, HYPALON CONDUCTOR INSULATION OVER 65 X #34 COPPER STRANDING, 600V, UL TYPE S00 CSA 50
- OUTSIDE DIAMETER:**  
 3P - .42" (10.7mm)  
 4P - .45" (11.4mm)  
 5P - .52" (13.2mm)
- ELECTRICAL**  
 VOLTAGE RATING: 600V AC/DC  
 AMPERAGE:  
 3P - 13A  
 4P - 10A  
 5P - 8A
- ENVIRONMENTAL**  
 PROTECTION: IP 68, NEMA 6P  
 AMBIENT OPERATING TEMP: -4° TO 194° F (-20° TO 90° C)
- CERTIFICATIONS**  
 UL: UL RECOGNIZED, FILE NO. E46237  
 CSA: CSA CERTIFIED, FILE NO. LR6837

## RECEPTACLE DIMENSIONS





# Single-Ended Cordsets

#18 AWG yellow AWM 2661 cable – auto color code  
 Oil-resistant PVC jacket  
 Low-resistance contact design with gold/palladium nickel plating

<b>NEW</b>	<b>3P</b>	<b>4P</b>	<b>5P</b>
<b>FEMALE FACE VIEW</b>			
<b>COLOR CODE</b>	1- green-gnd 2- red w/ black trace 3- red w/ white trace	1- red w/ black trace 3- red 2- red w/ white trace 4- green-gnd	1- red w/ white trace 4- red w/ yellow trace 2- red 5- red w/ black trace 3- green-gnd
<b>VOLTAGE</b>	300V AC/DC	300V AC/DC	300V AC/DC
<b>CURRENT</b>	10A	7A	5.6A
<b>CONDUCTOR</b>	#18-3	#18-4	#18-5

<b>FEMALE</b>	<b>FIG</b>	<b>SINGLE-ENDED CORDSETS WITH #18 AWG PVC CABLE 3 FEET LONG</b>		
<b>STRAIGHT</b>	1	103000A03F030	104000A03F030	105000A03F030
<b>90°</b>	2	103001A03F030	104001A03F030	105001A03F030
<b>MATING RECEPTACLE*</b>	5	1R3006A17A120	1R4006A17A120	1R5006A17A120
<b>MALE</b>	<b>FIG</b>	<b>SINGLE-ENDED CORDSETS WITH #18 AWG PVC CABLE 3 FEET LONG</b>		
<b>STRAIGHT</b>	3	103002A03F030	104002A03F030	105002A03F030
<b>90°</b>	4	103003A03F030	104003A03F030	105003A03F030
<b>MATING RECEPTACLE*</b>	5	1R3004A17A120	1R4004A17A120	1R5004A17A120

## CATALOG OPTIONS

\*See Page 58 for additional Mating Receptacles

Use the following chart to modify your part's specifications

**103000A03F0301**

**CABLE LENGTH**

6'	060
12'	120
20'	200

**COUPLING NUT**

STAINLESS STEEL	ADD 1
NON-METALLIC	ADD 2

# Specifications

## CONNECTOR DIMENSIONS

### FEMALE STRAIGHT

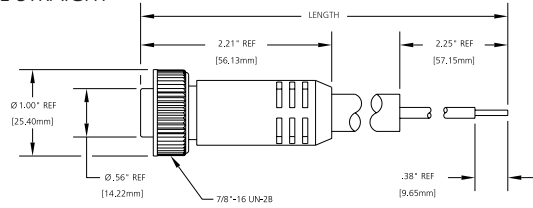


FIG 1

### FEMALE 90°

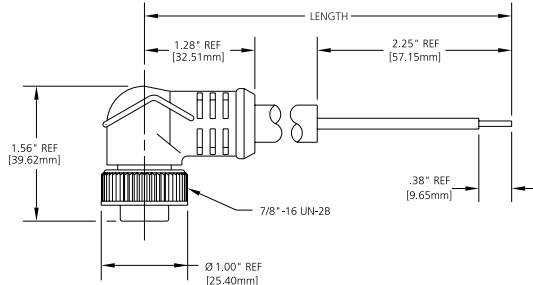
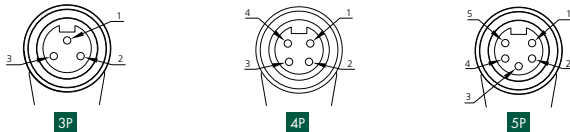


FIG 2

### FEMALE CONNECTORS - FACE VIEWS



### MALE STRAIGHT

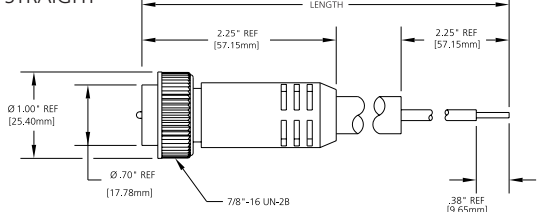


FIG 3

### MALE 90°

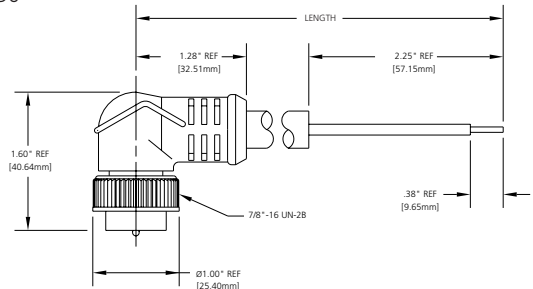
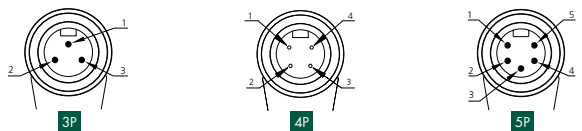


FIG 4

### MALE CONNECTORS - FACE VIEWS



### MECHANICAL

CONNECTOR FACE: PVC - UL STD 94 - V0  
 MOLDED BODY: PVC - UL STD 94 - V0  
 COUPLING NUT: ZINC DIECAST W/ BLACK EPOXY COAT, OPTIONAL STAINLESS STEEL TYPE 303 OR NON-METALLIC GRAY NYLON 6/6  
 CABLE: YELLOW, #18 AWG, PVC JACKET & PVC CONDUCTOR INSULATION OVER 41 X #34 COPPER STRANDING, 300V, UL STYLE 2661 CSA AWM I/II A/B  
 OUTSIDE DIAMETER: 3P - .28" (7.1mm)  
 4P - .28" (7.1mm)  
 5P - .28" (7.1mm)

### ELECTRICAL

VOLTAGE RATING: 300 V AC/DC  
 AMPERAGE: 3P - 10A  
 4P - 7A  
 5P - 5.6A

### ENVIRONMENTAL

PROTECTION: IP 68, NEMA 6P  
 AMBIENT OPERATING TEMP: -4° TO 221° F (-20° TO 105° C)

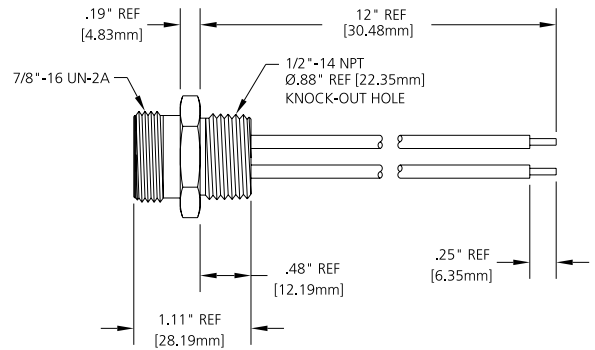
### CERTIFICATIONS

UL: UL RECOGNIZED, FILE NO.E46237  
 CSA: CSA CERTIFIED, FILE NO.LR6837

## RECEPTACLE DIMENSIONS

### MALE STRAIGHT WITH 1/2" - 14NPT THREADS FEMALE STRAIGHT WITH 1/2" - 14NPT THREADS

SEE PAGE 58 FOR  
 ADDITIONAL  
 RECEPTACLES



TYPICAL FACE VIEW      TYPICAL KNOCK OUT

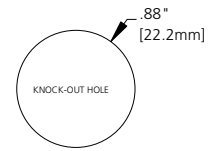
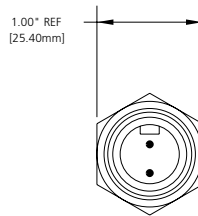
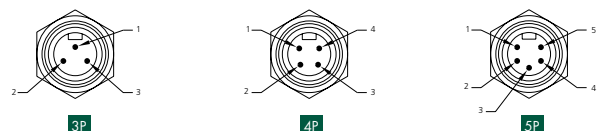


FIG 5

### MALE RECEPTACLES - FACE VIEWS





# Single-Ended Cordsets

**AUTOMOTIVE**

#16 AWG yellow ST00W cable – auto color code  
 Oil-resistant PVC jacket  
 Low-resistance contact design with gold/palladium nickel plating

	3P	5P
FEMALE FACE VIEW		
COLOR CODE	1- green-gnd 2- red w/ #2 3- red w/ #3	1- red w/ #1 2- red w/ #2 3- green-gnd 4- red w/ #4 5- red w/ #5
VOLTAGE	600V AC/DC	600V AC/DC
CURRENT	13A	8A
CONDUCTOR	#16-3	#16-5

FEMALE	FIG	SINGLE-ENDED CORDSETS WITH #16 AWG ST00W CABLE 3 FEET LONG	
STRAIGHT	1	103000A02F030	105000A02F030
90°	2	103001A02F030	105001A02F030
MATING RECEPTACLE*	5	1R3006A24A120	1R5006A24A120
MALE	FIG	SINGLE-ENDED CORDSETS WITH #16 AWG ST00W CABLE 3 FEET LONG	
STRAIGHT	3	103002A02F030	1R5002A02F030
90°	4	103003A02F030	1R5003A02F030
MATING RECEPTACLE*	5	1R3004A24A120	1R5004A24A120

## CATALOG OPTIONS

\*See Page 62 for additional Mating Receptacles

Use the following chart to modify your part's specifications

103000A02F0301

**CABLE LENGTH**

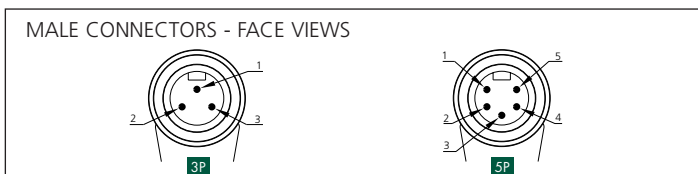
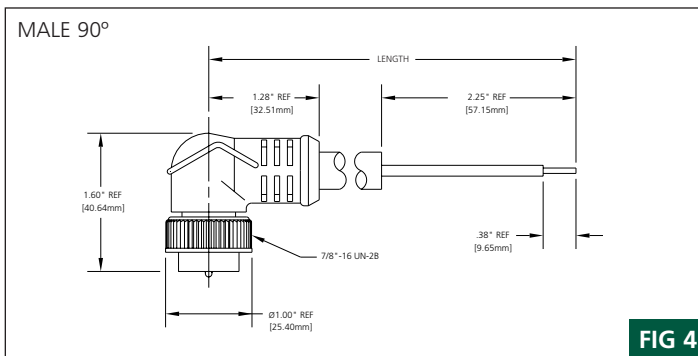
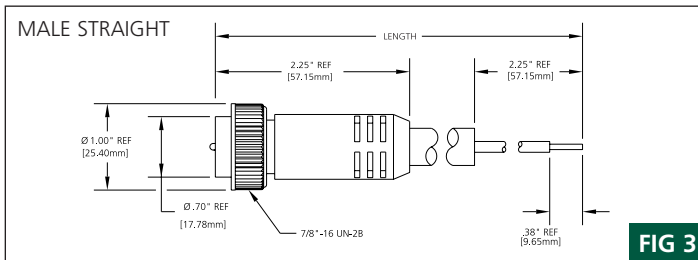
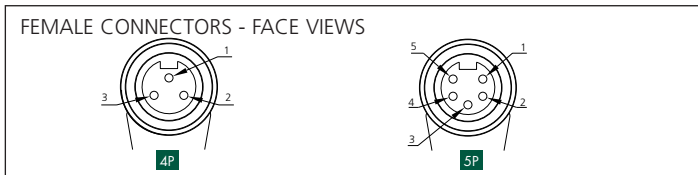
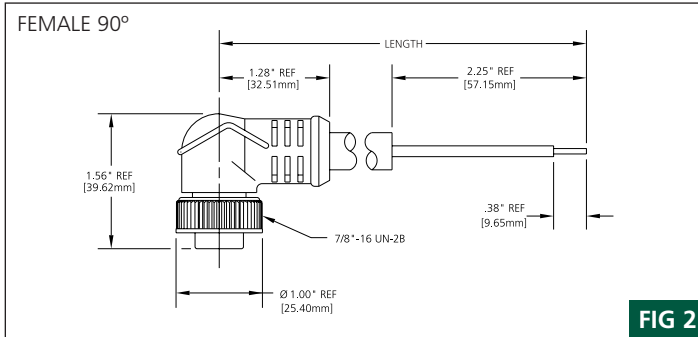
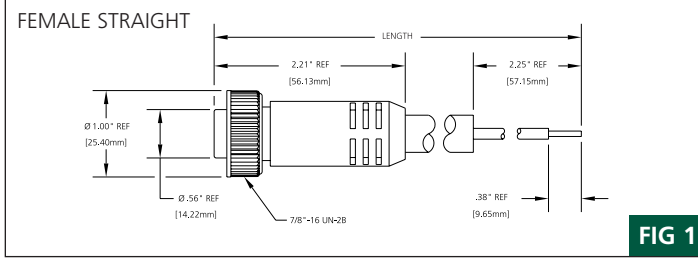
6'	060
12'	120
20'	200

**COUPLING NUT**

STAINLESS STEEL	ADD 1
NON-METALLIC	ADD 2

# Specifications

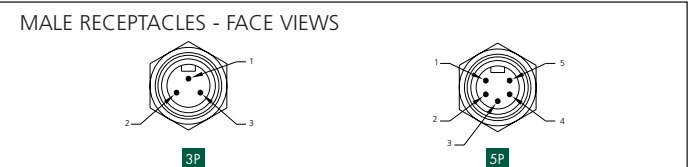
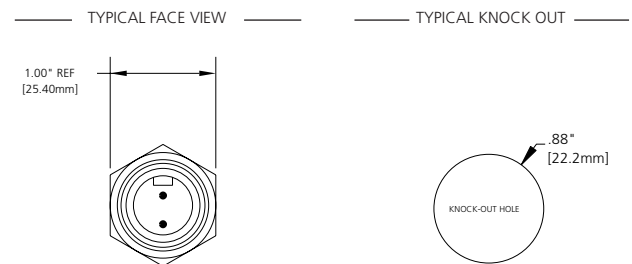
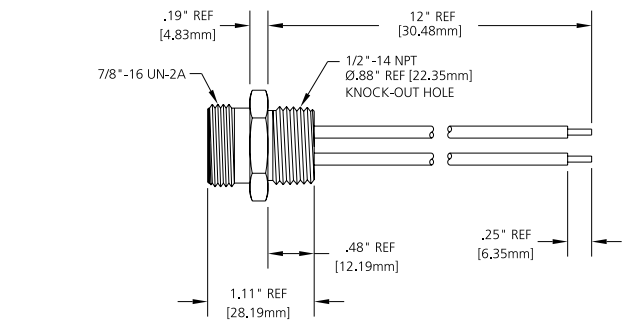
## CONNECTOR DIMENSIONS



- MECHANICAL**  
 CONNECTOR FACE: PVC - UL STD 94 - V0  
 MOLDED BODY: PVC - UL STD 94 - V0  
 COUPLING NUT: ZINC DIECAST W/ BLACK EPOXY COAT, OPTIONAL STAINLESS STEEL TYPE 303 OR NON-METALLIC GRAY NYLON 6/6
- CABLE:** YELLOW, #16 AWG, PVC JACKET & PVC CONDUCTOR INSULATION OVER 65 X #34 COPPER STRANDING, 600V, UL ST00W, CSA ST
- OUTSIDE DIAMETER:**  
 3P - .41" (10.4mm)  
 5P - .50" (12.7mm)
- ELECTRICAL**  
 VOLTAGE RATING: 600 V AC/DC  
 AMPERAGE:  
 3P - 13A  
 5P - 8A
- ENVIRONMENTAL**  
 PROTECTION: IP 68, NEMA 6P  
 AMBIENT OPERATING TEMP: -4° TO 221° F (-20° TO 105° C)
- CERTIFICATIONS**  
 UL: UL RECOGNIZED, FILE NO. E46237  
 CSA: CSA CERTIFIED, FILE NO. LR6837

## RECEPTACLE DIMENSIONS

MALE STRAIGHT WITH 1/2" - 14NPT THREADS  
 FEMALE STRAIGHT WITH 1/2" - 14NPT THREADS  
 SEE PAGE 62 FOR ADDITIONAL RECEPTACLES





# Single-Ended Cordsets

#18 and #20 AWG yellow PVC cable – IEC color code  
 Oil-resistant PVC jacket  
 Low-resistance contact design with gold/palladium nickel plating

	3P	3P	4P	5P
FEMALE FACE VIEW				
COLOR CODE	1- green/yellow-gnd 2- brown 3- blue	1- black 2- brown 3- blue	1- black 2- blue 3- brown 4- white	1- black 2- blue 3- green/yellow-gnd 4- brown 5- white
VOLTAGE	300V AC/DC	300V AC/DC	300V AC/DC	300V AC/DC
CURRENT	10A	7A	5.6A	4A
CONDUCTOR	18 AWG	18 AWG	18 AWG	20 AWG

FEMALE	FIG	SINGLE-ENDED CORDSETS WITH #18 OR #20 AWG PVC CABLE 1 METER LONG			
STRAIGHT	1	103000A06M010	103000A05M010	104000A05M010	105000A07M010
90°	2	103001A06M010	103001A05M010	104001A05M010	105001A07M010
MATING RECEPTACLE*	5	1R3D06A25A120	1R3D06A16A120	1R4D06A16A120	1R5D06A25A120
MALE	FIG	SINGLE-ENDED CORDSETS WITH #18 OR #20 AWG PVC CABLE 1 METER LONG			
STRAIGHT	3	103002A06M010	103002A05M010	104002A05M010	105002A07M010
90°	4	103003A06M010	103003A05M010	104003A05M010	105003A07M010
MATING RECEPTACLE*	5	1R3D04A25A120	1R3D04A16A120	1R4D04A16A120	1R5D04A25A120

## CATALOG OPTIONS

\*See Page 66 for additional Mating Receptacles

Use the following chart to modify your part's specifications

103000A06M0101

**CABLE LENGTH**

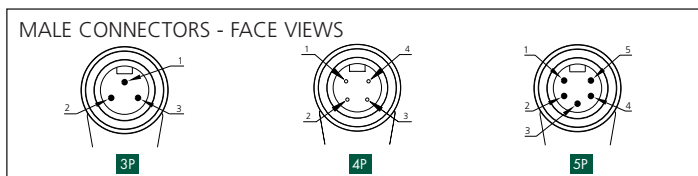
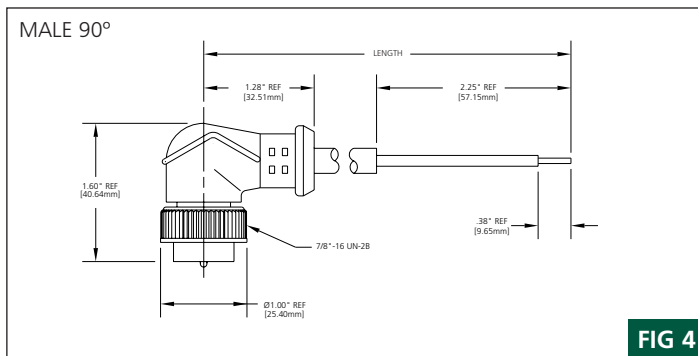
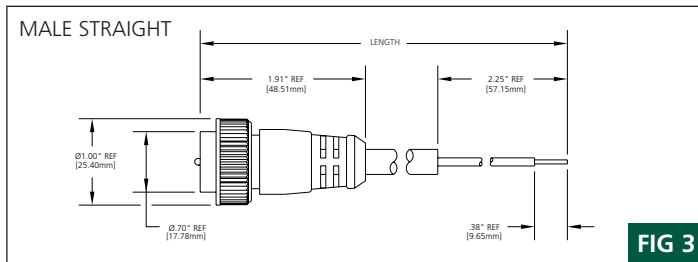
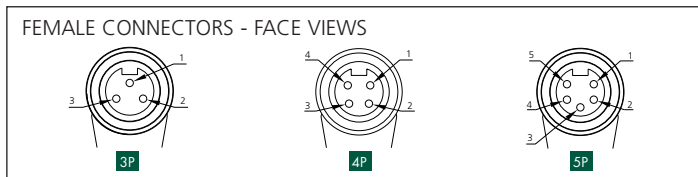
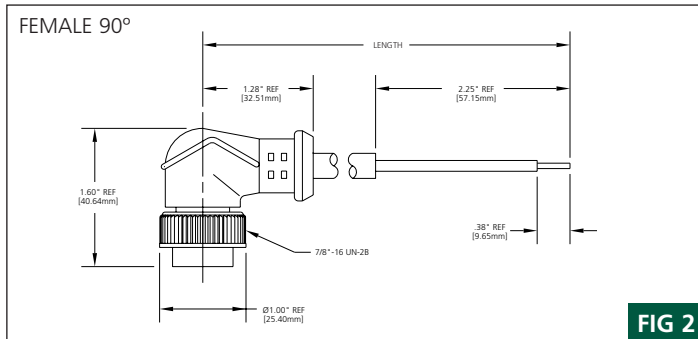
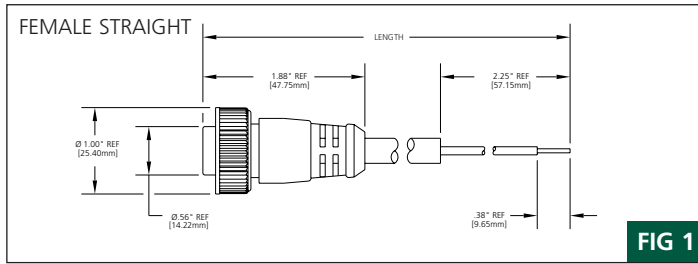
2 METERS . . . . .	020
5 METERS . . . . .	050

**COUPLING NUT**

STAINLESS STEEL . . . . .	ADD 1
NON-METALLIC . . . . .	ADD 2

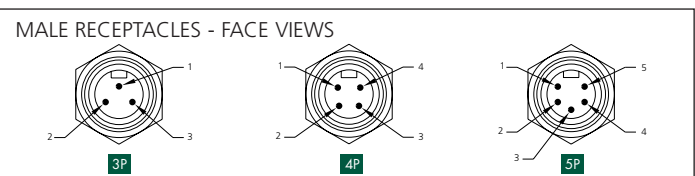
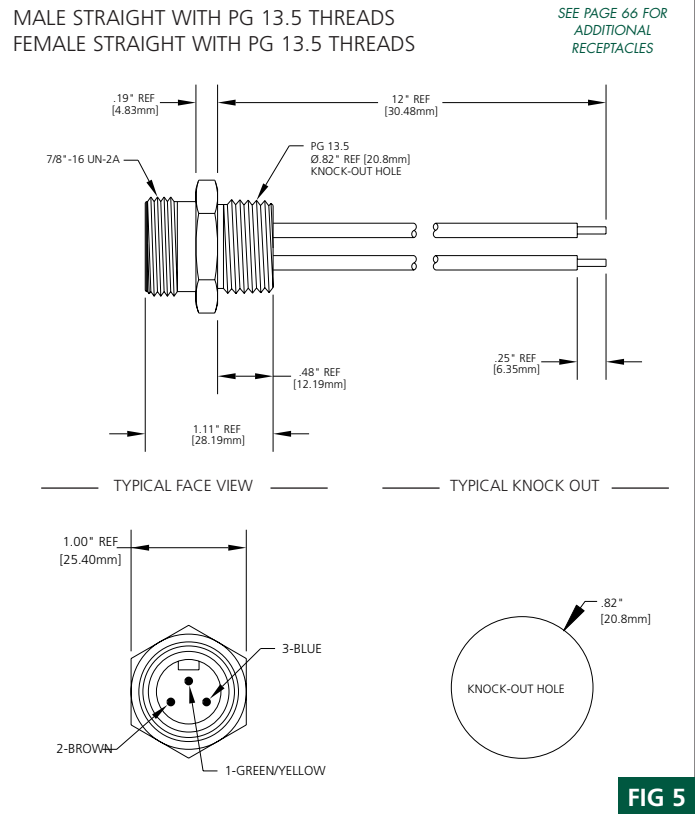
# Specifications

## CONNECTOR DIMENSIONS



- MECHANICAL**  
 CONNECTOR FACE: PVC - UL STD 94 - V0  
 MOLDED BODY: PVC - UL STD 94 - V0  
 COUPLING NUT: ZINC DIECAST W/ BLACK EPOXY COAT, OPTIONAL STAINLESS STEEL TYPE 303 OR NON-METALLIC GRAY NYLON 6/6
- CABLE:** YELLOW, PVC JACKET & PVC CONDUCTOR INSULATION, 3P & 4P: #18 AWG, 41 X #34 COPPER STRANDING, 5P: #20 AWG, 26 X #34 COPPER STRANDING, 300V
- OUTSIDE DIAMETER:**  
 2P + GRD - .21" (5.3mm)  
 3P - .29" (7.4mm)  
 4P - .28" (7.1mm)  
 5P - .28" (7.1mm)
- ELECTRICAL**  
 VOLTAGE RATING: 300 V AC/DC  
 AMPERAGE: 2P + GRD - 10A  
 3P - 7A  
 4P - 5.6A  
 5P - 4A
- ENVIRONMENTAL**  
 PROTECTION: IEC IP 68, NEMA 6P  
 AMBIENT OPERATING TEMP: -4° C to +221° C (-20 to 90° C)
- CERTIFICATIONS**  
 UL: UL RECOGNIZED, FILE NO. E46237  
 CSA: CSA CERTIFIED, FILE NO. LR6837

## RECEPTACLE DIMENSIONS



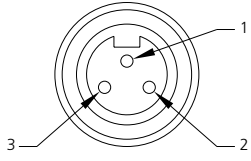
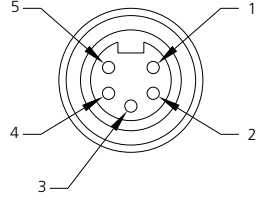


# Single-Ended Coil Cordsets

#18 AWG yellow PUR cable – auto color code

Oil- and abrasion-resistant jacket

Low-resistance contact design with gold/palladium nickel plating

<b>NEW</b>	<b>3P</b>	<b>5P</b>
<b>FEMALE FACE VIEW</b>		
<b>COLOR CODE</b>	1- green-gnd 2- red w/ black trace 3- red w/ white trace	1- red w/ white trace      4- red w/ yellow trace 2- red                              5- red w/ black trace 3- green-gnd
<b>VOLTAGE</b>	300V AC/DC	300V AC/DC
<b>CURRENT</b>	10A	5.6A
<b>CONDUCTOR</b>	#18-3	#18-5

**SINGLE-ENDED CORDSETS WITH #18 AWG PUR CABLE - COIL CORD**

<b>FEMALE</b>	<b>FIG</b>	1.5' Retracted 4.5' Extended	4' Retracted 12' Extended	1.5' Retracted 4.5' Extended	4' Retracted 12' Extended
<b>STRAIGHT</b>	1	103000B13F045	103000B13F120	105000B13F045	105000B13F120
<b>90°</b>	2	103001B13F045	103001B13F120	105001B13F045	105001B13F120
<b>MATING RECEPTACLE*</b>	5	1R3006A24A120		1R5006A24A120	

**SINGLE-ENDED CORDSETS WITH #18 AWG PUR CABLE - COIL CORD**

<b>MALE</b>	<b>FIG</b>	1.5' Retracted 4.5' Extended	4' Retracted 12' Extended	1.5' Retracted 4.5' Extended	4' Retracted 12' Extended
<b>STRAIGHT</b>	3	103002B13F045	103002B13F120	105002B13F045	105002B13F120
<b>90°</b>	4	103003B13F045	103003B13F120	105003B13F045	105003B13F120
<b>MATING RECEPTACLE*</b>	6	1R3004A24A120		1R5004A24A120	

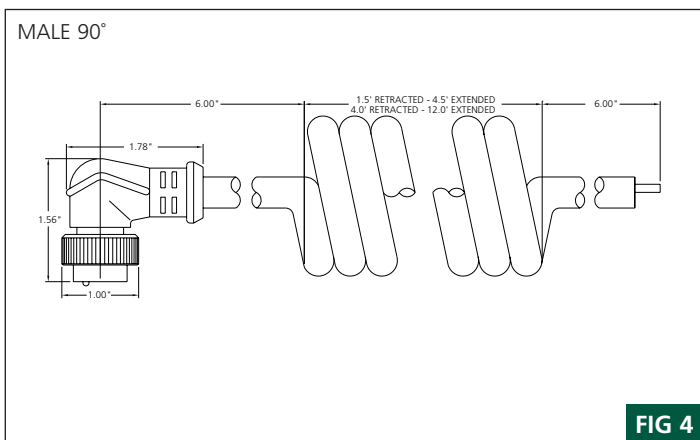
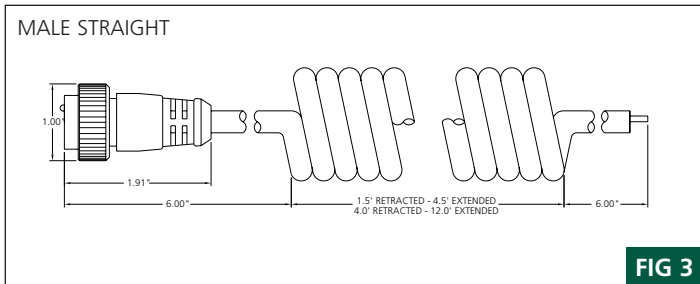
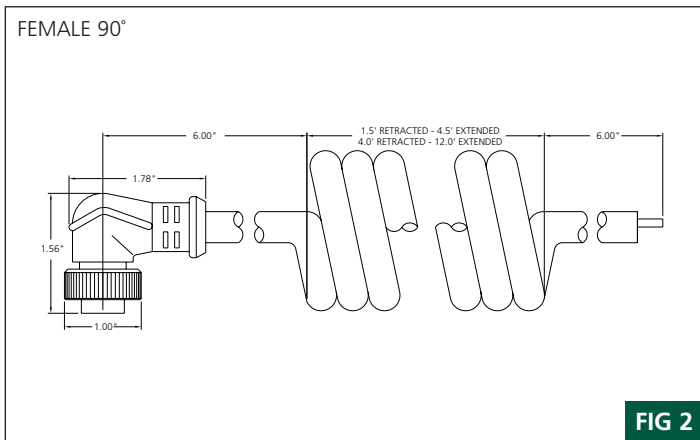
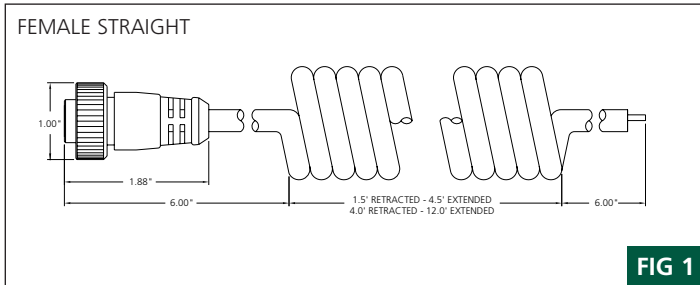
\*See Page 58 for additional Mating Receptacles

# Specifications

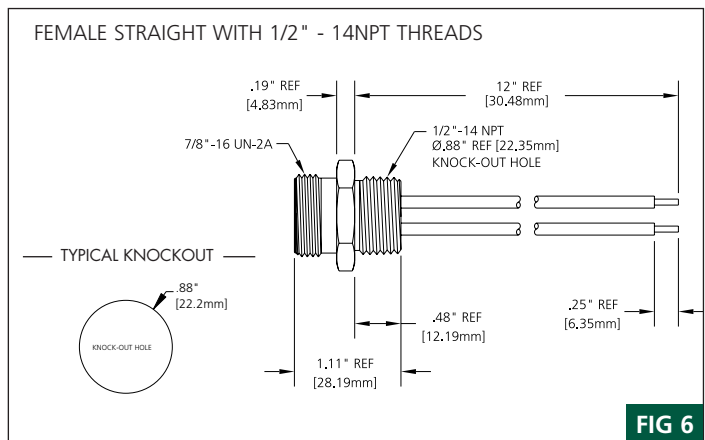
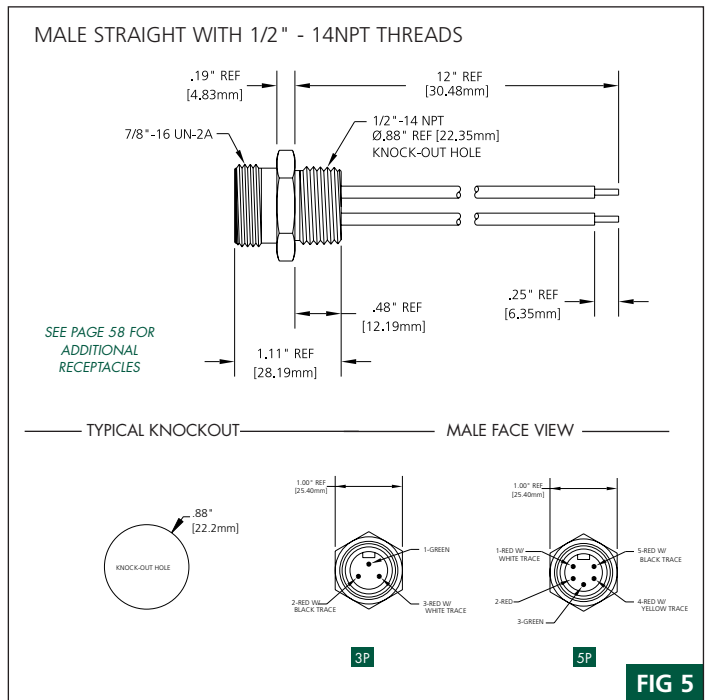


- MECHANICAL**  
 CONNECTOR FACE: PVC - UL STD 94 - V0  
 MOLDED BODY: PVC - UL STD 94 - V0  
 COUPLING NUT: ZINC DIECAST W/ BLACK EPOXY COAT  
 CABLE: YELLOW, #18 AWG, PUR JACKET & POLYPROPYLENE CONDUCTOR INSULATION OVER 168 X #40 COPPER STRANDING, 300V, UL STYLE 20197 CSA AWM I/II A/B  
 3P - .25" (6.4mm)  
 5P - .30" (7.6mm)
- ELECTRICAL**  
 VOLTAGE RATING: 300 V AC/DC  
 AMPERAGE: 3P - 10A  
 5P - 5.6A
- ENVIRONMENTAL**  
 PROTECTION: IP 68, NEMA 6P  
 AMBIENT OPERATING TEMP: -4° to 176° F (-20° to 80° C)
- CERTIFICATIONS**  
 UL: UL RECOGNIZED, File No. E46237  
 CSA: CSA CERTIFIED, File No. LR6837

## CONNECTOR DIMENSIONS



## RECEPTACLE DIMENSIONS





# Single-Ended Cordsets

#16 AWG yellow ST00W cable – U.S. color code  
 Oil-resistant PVC jacket  
 Low-resistance contact design with gold/palladium nickel plating

	6P	7P	8P
FEMALE FACE VIEW			
COLOR CODE	1- orange 2- blue 3- black 4- white 5- red 6- green-gnd	1- white-black trace 2- black 3- white 4- red 5- orange 6- blue 7- green-gnd	1- orange 2- blue 3- white-black trace 4- black 5- white 6- red 7- green-gnd 8- red-black trace
VOLTAGE	600V AC/DC	600V AC/DC	600V AC/DC
CURRENT	8A	8A	7A
CONDUCTOR	#16-6	#16-7	#16-8

FEMALE	FIG	SINGLE-ENDED CORDSETS WITH #16 AWG ST00W CABLE 3 FEET LONG		
STRAIGHT	1	206000A01F030	207000A01F030	208000A01F030
90°	2	206001A01F030	207001A01F030	208001A01F030
MATING RECEPTACLE*	5	2R6006A20A120	2R7006A20A120	2R8006A20A120
MALE	FIG	SINGLE-ENDED CORDSETS WITH #16 AWG ST00W CABLE 3 FEET LONG		
STRAIGHT	3	206002A01F030	207002A01F030	208002A01F030
90°	4	206003A01F030	207003A01F030	208003A01F030
MATING RECEPTACLE*	5	2R6004A20A120	2R7004A20A120	2R8004A20A120

## CATALOG OPTIONS

\*See Page 76 for additional Mating Receptacles

Use the following chart to modify your part's specifications

206000A01F0301

**CABLE LENGTH**

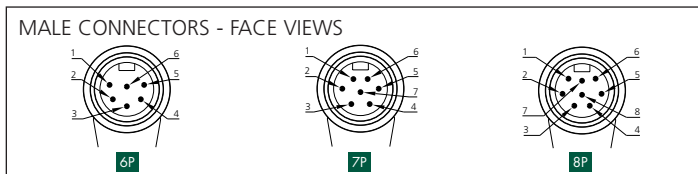
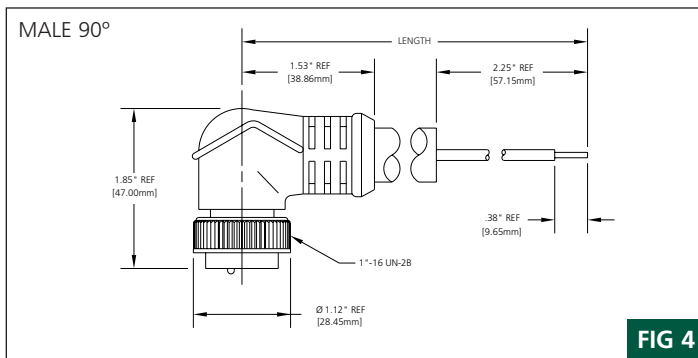
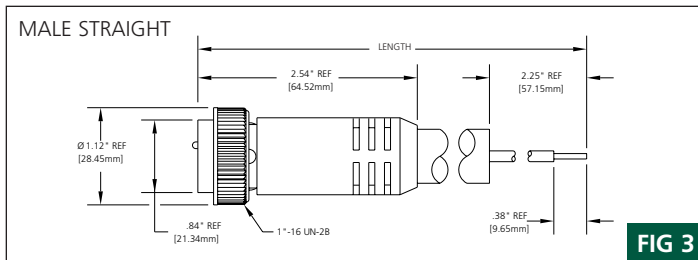
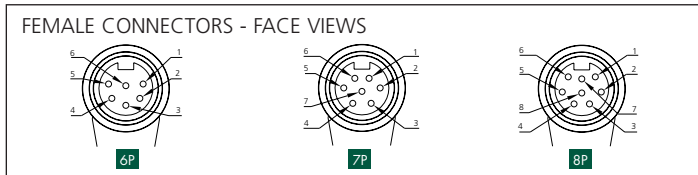
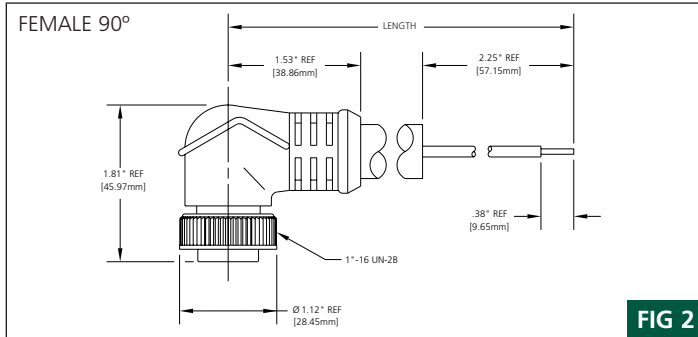
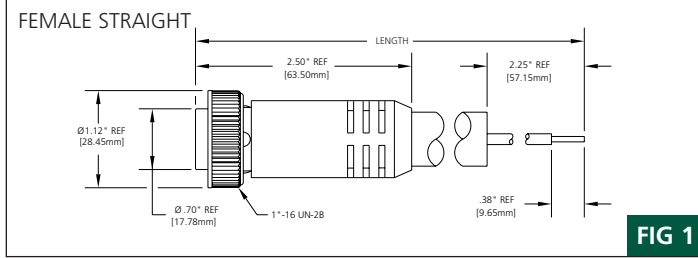
6' .....	060
12' .....	120
20' .....	200

**COUPLING NUT**

STAINLESS STEEL .....	ADD 1
-----------------------	-------

# Specifications

## CONNECTOR DIMENSIONS



**MECHANICAL**  
 CONNECTOR FACE:  
 MOLDED BODY:  
 COUPLING NUT:

PVC - UL STD 94 - V0  
 PVC - UL STD 94 - V0  
 ZINC DIECAST W/ BLACK EPOXY  
 COAT, OPTIONAL STAINLESS STEEL  
 TYPE 303

**CABLE:** YELLOW, #16 AWG, PVC JACKET & PVC CONDUCTOR INSULATION OVER 65 X #34 COPPER STRANDING, 600V, UL ST00W CSA ST  
**OUTSIDE DIAMETER:**  
 6P - .54" (13.7mm)  
 7P - .54" (13.7mm)  
 8P - .61" (15.5mm)

**ELECTRICAL**  
 VOLTAGE RATING:  
 AMPERAGE:

600 V AC/DC  
 6P - 8A  
 7P - 8A  
 8P - 7A

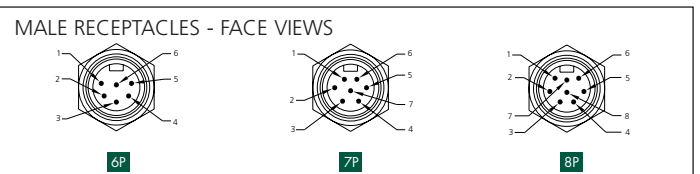
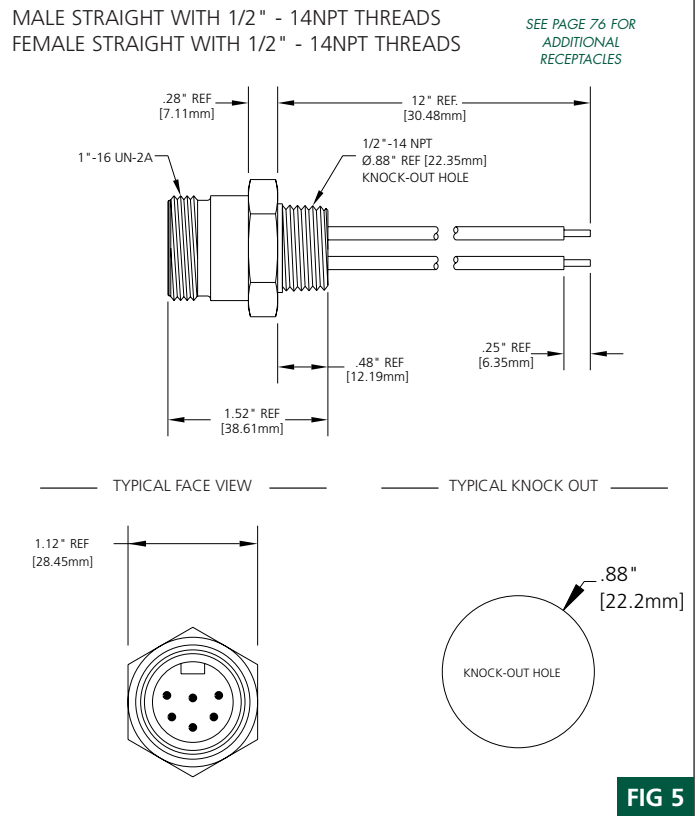
**ENVIRONMENTAL**  
 PROTECTION:  
 AMBIENT OPERATING TEMP:

IP 68, NEMA 6P  
 -4° to 221° F (-20° to 105° C)

**CERTIFICATIONS**

UL: UL RECOGNIZED, File No. E46237  
 CSA: CSA CERTIFIED, File No. LR6837

## RECEPTACLE DIMENSIONS





# Single-Ended Cordsets

#16 AWG yellow ST00W cable – U.S. color code  
 Oil-resistant PVC jacket  
 Low-resistance contact design with gold/palladium nickel plating

	9P	10P	12P
FEMALE FACE VIEW			
COLOR CODE	1- orange 2- blue 3- red-black trace 4- green-black trace 5- white 6- red 7- green-gnd 8- white-black trace 9- black	1- orange 2- blue 3- white-black trace 4- red-black trace 5- green-black trace 6- orange-black trace 7- red 8- green-gnd 9- black 10- white	1- orange 2- blue 3- white-black trace 4- red-black trace 5- green-black trace 6- orange-black trace 7- blue-black trace 8- black-white trace 9- green-gnd 10- red 11- white 12- black
VOLTAGE	600V AC/DC	600V AC/DC	600V AC/DC
CURRENT	7A	7A	5A
CONDUCTOR	#16-9	#16-10	#16-12

FEMALE	FIG	SINGLE-ENDED CORDSETS WITH #16 AWG ST00W CABLE 3 FEET LONG		
STRAIGHT	1	309000A01F030	301000A01F030	302000A01F030
90°	2	309001A01F030	301001A01F030	302001A01F030
MATING RECEPTACLE*	5	3R9006A20A120	3R1006A20A120	3R2006A20A120
MALE	FIG	SINGLE-ENDED CORDSETS WITH #16 AWG ST00W CABLE 3 FEET LONG		
STRAIGHT	3	309002A01F030	301002A01F030	302002A01F030
90°	4	309003A01F030	301003A01F030	302003A01F030
MATING RECEPTACLE*	5	3R9004A20A120	3R1004A20A120	3R2004A20A120

## CATALOG OPTIONS

\*See Page 82 for additional Mating Receptacles

Use the following chart to modify your part's specifications

309000A01F0301

**CABLE LENGTH**

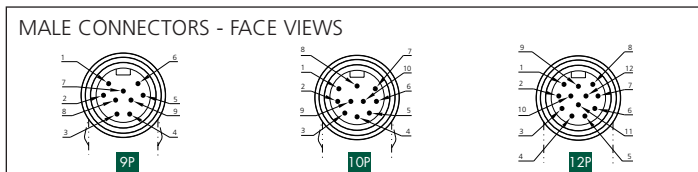
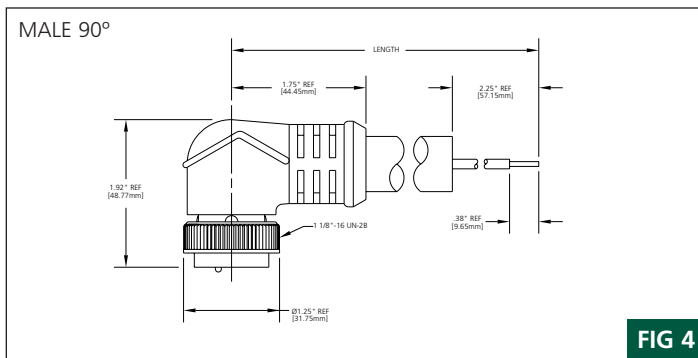
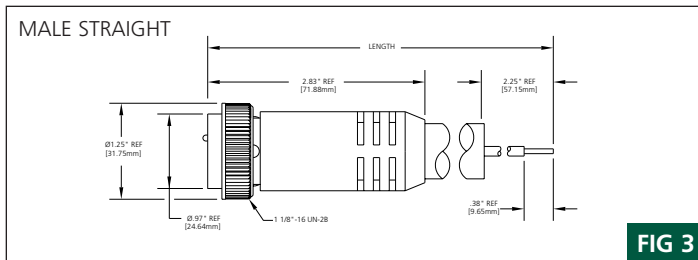
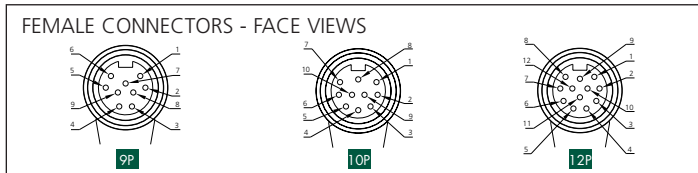
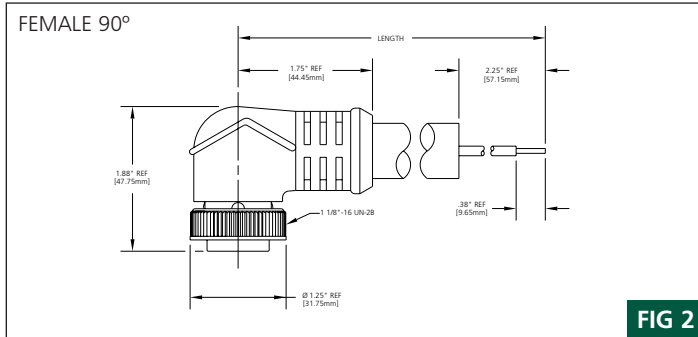
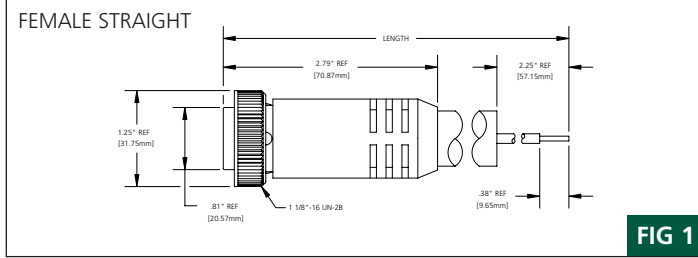
6'	060
12'	120
20'	200

**COUPLING NUT**

STAINLESS STEEL . . . . .ADD 1

# Specifications

## CONNECTOR DIMENSIONS



**MECHANICAL**  
 CONNECTOR FACE:  
 MOLDED BODY:  
 COUPLING NUT:

PVC - UL STD 94 - V0  
 PVC - UL STD 94 - V0  
 ZINC DIECAST W/ BLACK EPOXY  
 COAT, OPTIONAL STAINLESS STEEL  
 TYPE 303

**CABLE:**  
 YELLOW, #16 AWG, PVC JACKET &  
 PVC CONDUCTOR INSULATION  
 OVER 65 X #34 COPPER STRANDING,  
 600V, UL STYLE ST00W CSA ST

**OUTSIDE DIAMETER:**  
 9P - .64" (16.3mm)  
 10P - .66" (16.8mm)  
 12P - .71" (18.0mm)

**ELECTRICAL**  
 VOLTAGE RATING:  
 AMPERAGE:

600 V AC/DC  
 9P - 7A  
 10P - 7A  
 12P - 5A

**ENVIRONMENTAL**  
 PROTECTION:  
 AMBIENT OPERATING TEMP:

IP 68, NEMA 6P  
 -4° to 221° F (-20° to 105° C)

**CERTIFICATIONS**

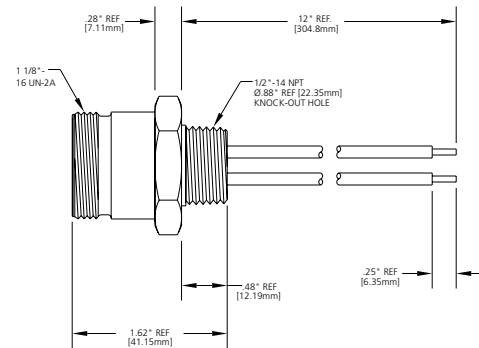
UL:  
 CSA:

UL RECOGNIZED, File No. E46237  
 CSA CERTIFIED, File No. LR6837

## RECEPTACLE DIMENSIONS

MALE STRAIGHT WITH 1/2" - 14NPT THREADS  
 FEMALE STRAIGHT WITH 1/2" - 14NPT THREADS

SEE PAGE 82 FOR  
 ADDITIONAL  
 RECEPTACLES



———— TYPICAL FACE VIEW ———— TYPICAL KNOCK OUT ————

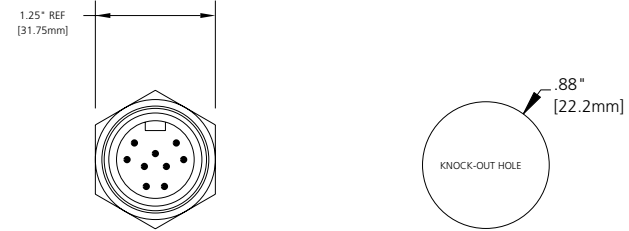
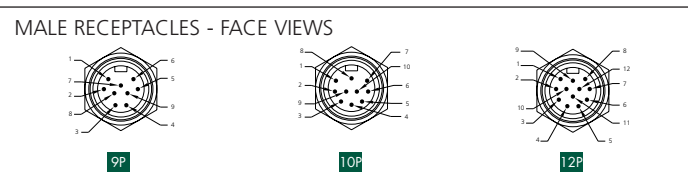


FIG 5





# Double-Ended Cordsets

#16 AWG yellow ST00W cable – U.S. color code  
 Oil-resistant PVC jacket  
 Low-resistance contact design with gold/palladium nickel plating

	2P	3P	4P	5P	6P
FEMALE FACE VIEW					
COLOR CODE	1- white 2- black	1- green-gnd 2- black 3- white	1- black 3- red 2- white 4- green-gnd	1- white 4- orange 2- red 5- black 3- green-gnd	1- white 4- orange 2- red 5- black 3- green-gnd 6- blue
VOLTAGE	600V AC/DC	600V AC/DC	600V AC/DC	600V AC/DC	600V AC/DC
CURRENT	13A	13A	10A	8A	8A
CONDUCTOR	#16-2	#16-3	#16-4	#16-5	#16-6

FEMALE/MALE	FIG	DOUBLE-ENDED CORDSETS WITH #16 AWG ST00W CABLE 3 FEET LONG				
STRAIGHT/STRAIGHT	1	112020A01F030	113020A01F030	114020A01F030	115020A01F030	116020A01F030
90°/STRAIGHT	2	112021A01F030	113021A01F030	114021A01F030	115021A01F030	116021A01F030
STRAIGHT/90°	3	112022A01F030	113022A01F030	114022A01F030	115022A01F030	116022A01F030
90°/90°	4	112023A01F030	113023A01F030	114023A01F030	115023A01F030	116023A01F030

## CATALOG OPTIONS

Use the following chart to modify your part's specifications

112020A01F0301

### CABLE LENGTH

6'	060
12'	120
15'	150
20'	200
25'	250
30'	300

### COUPLING NUT

STAINLESS STEEL	ADD 1
NON-METALLIC	ADD 2

# Specifications



**MECHANICAL**  
 CONNECTOR FACE: PVC - UL STD 94 - V0  
 MOLDED BODY: PVC - UL STD 94 - V0  
 COUPLING NUT: ZINC DIECAST W/ BLACK EPOXY-COAT, OPTIONAL STAINLESS STEEL TYPE 303 OR NON-METALLIC GRAY NYLON 6/6

**CABLE:**  
 YELLOW, PVC JACKET W/ PVC CONDUCTOR INSULATION, #16 AWG, 65 X #34 STRANDING, UL TYPE ST00W CSA ST

**OUTSIDE DIAMETER:**  
 2P - .37" (9.4mm)  
 3P - .41" (10.4mm)  
 4P - .42" (10.7mm)  
 5P - .50" (12.7mm)  
 6P - .54" (13.7mm)

**ELECTRICAL**  
 VOLTAGE RATING: 600V AC/DC  
 AMPERAGE:  
 2P - 13A  
 3P - 13A  
 4P - 10A  
 5P - 8A  
 6P - 8A

**ENVIRONMENTAL**  
 PROTECTION: IP 68, NEMA 6P  
 AMBIENT OPERATING TEMP: -4° TO 221° F (-20° TO 105° C)

**CERTIFICATIONS**  
 UL: UL RECOGNIZED, FILE NO. E46237  
 CSA: CSA CERTIFIED, FILE NO. LR6837

## CONNECTOR DIMENSIONS

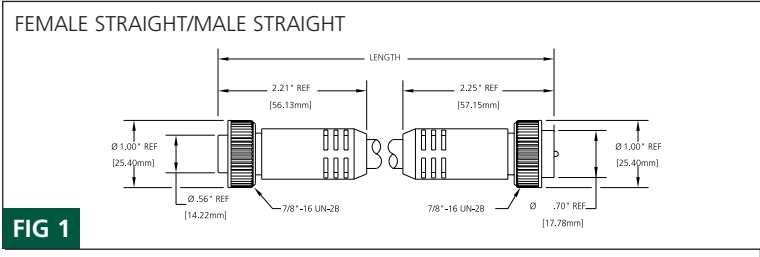


FIG 1

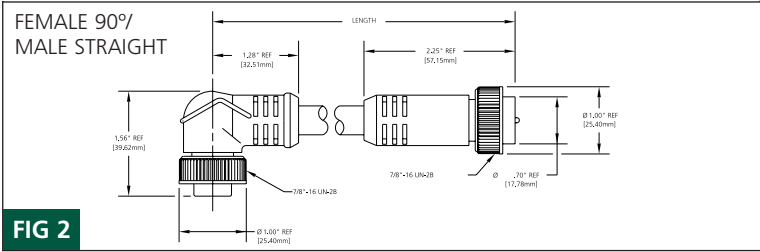


FIG 2

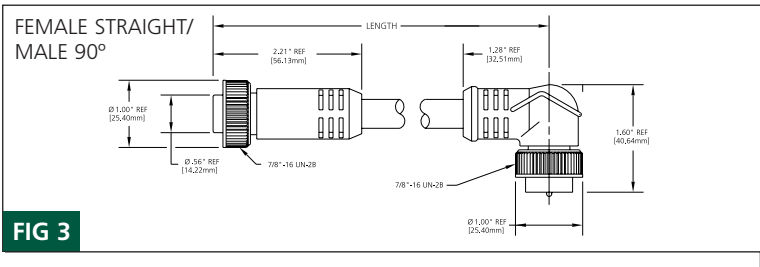


FIG 3

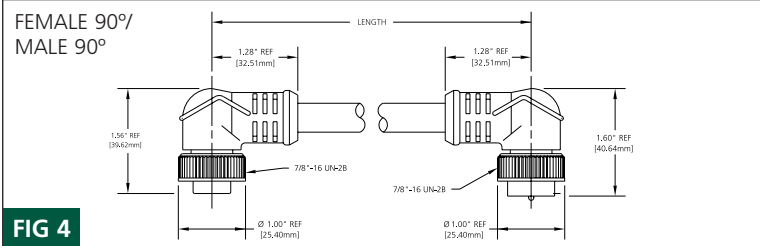
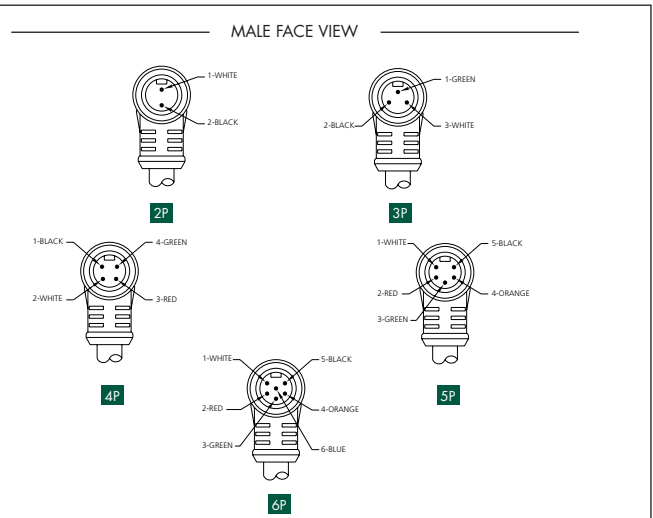
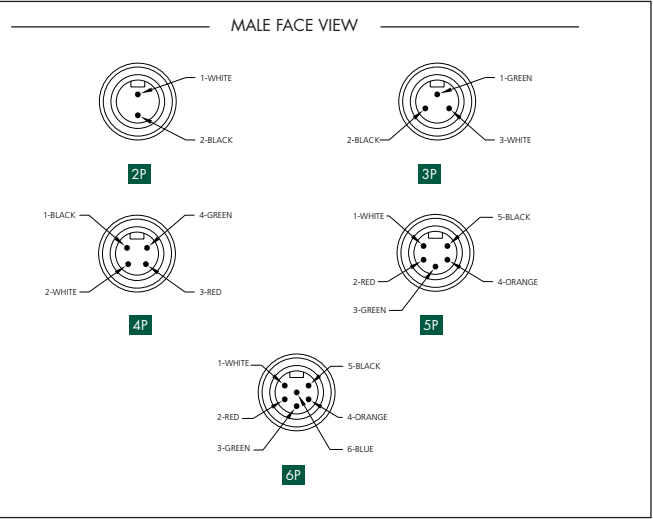


FIG 4





# Double-Ended Cordsets

#16 AWG yellow type 500 cable – auto color code  
 Oil-resistant NPR rubber jacket  
 Low-resistance contact design with gold/palladium nickel plating

	3P	4P	5P
FEMALE FACE VIEW			
COLOR CODE	1- green-gnd 2- red w/ black trace 3- red w/ white trace	1- red w/ black trace 3- red 2- red w/ white trace 4- green-gnd	1- red w/ white trace 4- red w/ orange trace 2- red 5- red w/ black trace 3- green-gnd
VOLTAGE	600V AC/DC	600V AC/DC	600V AC/DC
CURRENT	13A	10A	8A
CONDUCTOR	#16-3	#16-4	#16-5

FEMALE/MALE	FIG	DOUBLE-ENDED CORDSETS WITH #16 AWG TYPE 500 CABLE 3 FEET LONG		
STRAIGHT/STRAIGHT	1	113020C01F030	114020C01F030	115020C01F030
90°/STRAIGHT	2	113021C01F030	114021C01F030	115021C01F030
STRAIGHT/90°	3	113022C01F030	114022C01F030	115022C01F030
90°/90°	4	113023C01F030	114023C01F030	115023C01F030

## CATALOG OPTIONS

Use the following chart to modify your part's specifications

113020C01F0301

**CABLE LENGTH**

6'	060
12'	120
20'	200

**COUPLING NUT**

STAINLESS STEEL	ADD 1
NON-METALLIC	ADD 2

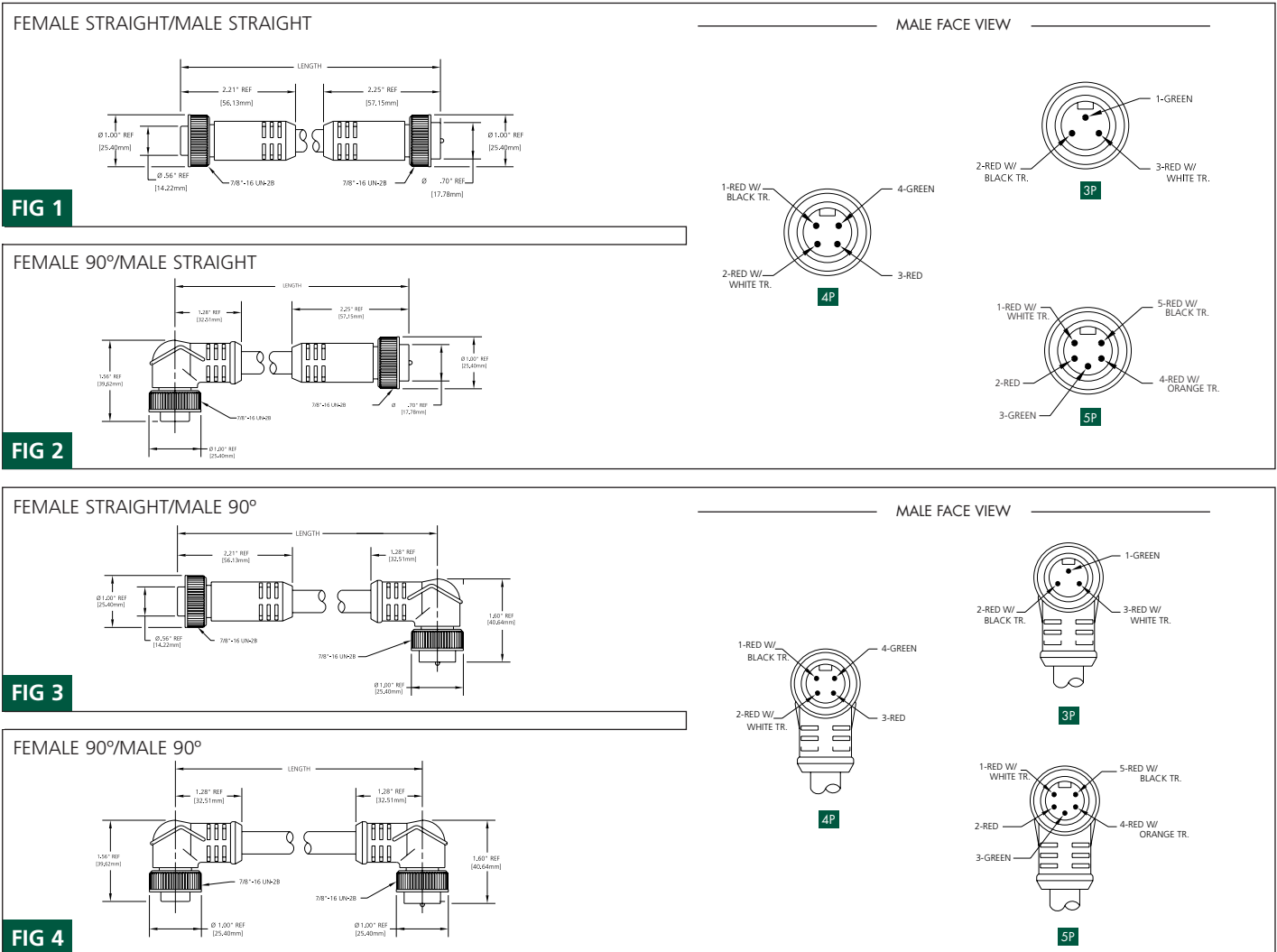
# Specifications

3P to 5P



<b>MECHANICAL</b>	
CONNECTOR FACE:	PVC - UL STD 94 - V0
MOLDED BODY:	PVC - UL STD 94 - V0
COUPLING NUT:	ZINC DIECAST W/ BLACK EPOXY COAT, OPTIONAL STAINLESS STEEL
	TYPE 303 OR NON-METALLIC GRAY NYLON 6/6
CABLE:	YELLOW, #16 AWG, NITRILE RUBBER/PVC JACKET & HYPALON CONDUCTOR INSULATION OVER 65 X #34 COPPER STRANDING, 600V, UL TYPE SOO CSA SO
OUTSIDE DIAMETER:	3P - .42" (10.7mm) 4P - .45" (11.4mm) 5P - .52" (13.2mm)
<b>ELECTRICAL</b>	
VOLTAGE RATING:	600 V AC/DC
AMPERAGE:	3P - 13A 4P - 10A 5P - 8A
<b>ENVIRONMENTAL</b>	
PROTECTION:	IP68, NEMA 6P
AMBIENT OPERATING TEMP:	-4° TO 194° F (-20° TO 90° C)
<b>CERTIFICATIONS</b>	
UL:	UL RECOGNIZED, FILE NO. E46237
CSA:	CSA CERTIFIED, FILE NO. LR6837

## CONNECTOR DIMENSIONS





# Double-Ended Cordsets

#18 AWG yellow AWM 2661 cable – auto color code  
 Oil-resistant PVC jacket  
 Low-resistance contact design with gold/palladium nickel plating

<b>NEW</b>	<b>3P</b>	<b>4P</b>	<b>5P</b>
<b>FEMALE FACE VIEW</b>			
<b>COLOR CODE</b>	1- green-gnd 2- red w/ black trace 3- red w/ white trace	1- red w/ black trace 3- red 2- red w/ white trace 4- green-gnd	1- red w/ white trace 4- red w/ yellow trace 2- red 5- red w/ black 3- green-gnd
<b>VOLTAGE</b>	300V AC/DC	300V AC/DC	300V AC/DC
<b>CURRENT</b>	10A	7A	5.6A
<b>CONDUCTOR</b>	#18-3	#18-4	#18-5

FEMALE/MALE	FIG	DOUBLE-ENDED CORDSETS WITH #18 AWG PVC CABLE 3 FEET LONG		
STRAIGHT/STRAIGHT	1	113020A03F030	114020A03F030	115020A03F030
90°/STRAIGHT	2	113021A03F030	114021A03F030	115021A03F030
STRAIGHT/90°	3	113022A03F030	114022A03F030	115022A03F030
90°/90°	4	113023A03F030	114023A03F030	115023A03F030

## CATALOG OPTIONS

Use the following chart to modify your part's specifications

**113020A03F0301**

**CABLE LENGTH**

6'	060
12'	120
20'	200

**COUPLING NUT**

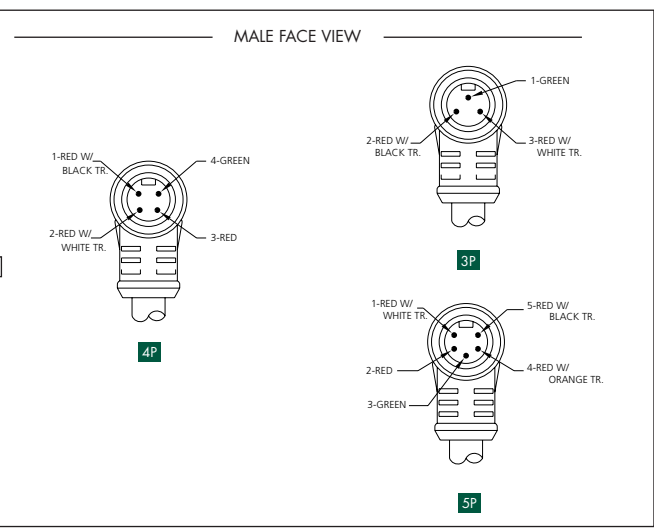
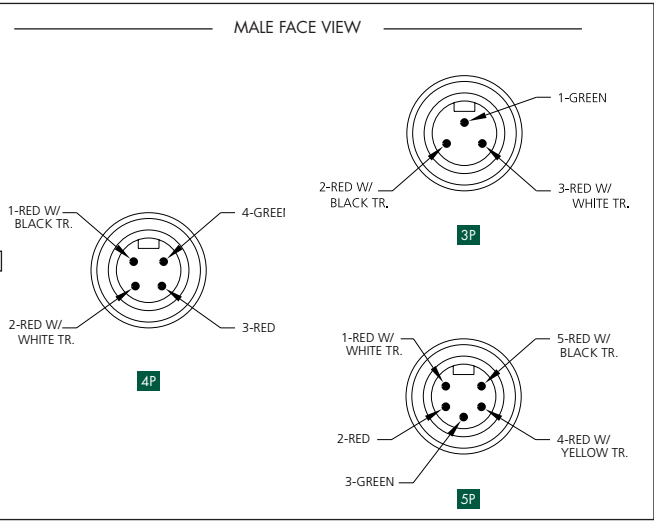
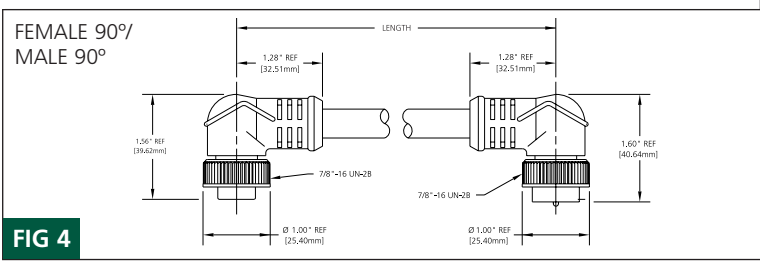
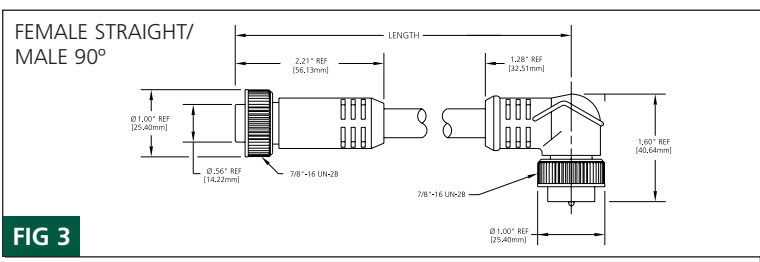
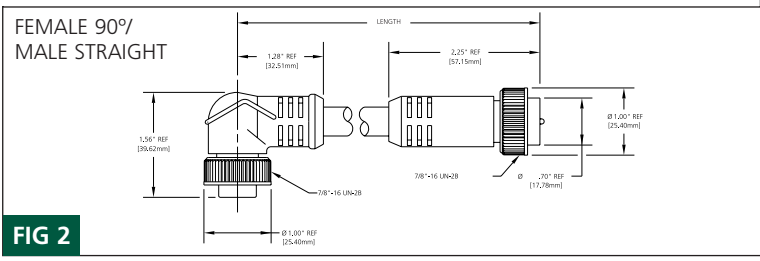
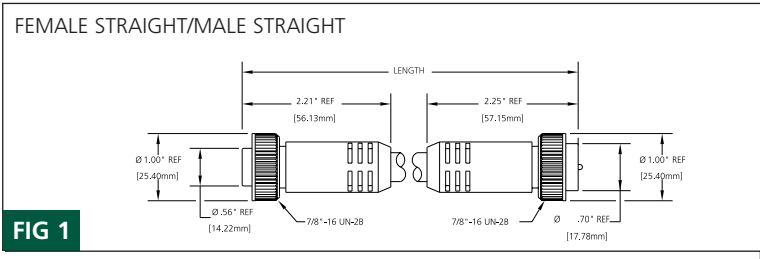
STAINLESS STEEL	ADD 1
NON-METALLIC	ADD 2

# Specifications



- MECHANICAL**  
 CONNECTOR FACE: PVC - UL STD 94 - V0  
 MOLDED BODY: PVC - UL STD 94 - V0  
 COUPLING NUT: ZINC DIECAST W/ BLACK EPOXY COAT, OPTIONAL STAINLESS STEEL TYPE 303 OR NON-METALLIC GRAY NYLON 6/6
- CABLE:**  
 YELLOW, #18 AWG, PVC JACKET & PVC CONDUCTOR INSULATION OVER 41 X #34 COPPER STRANDING, 300V, UL STYLE 2661, CSA AWM I/II A/B
- OUTSIDE DIAMETER:**  
 3P - .28" (7.1mm)  
 4P - .28" (7.1mm)  
 5P - .28" (7.1mm)
- ELECTRICAL**  
 VOLTAGE RATING: 300 V AC/DC  
 AMPERAGE:  
 3P - 10A  
 4P - 7A  
 5P - 5.6A
- ENVIRONMENTAL**  
 PROTECTION: IP 68 NEMA 6P  
 AMBIENT OPERATING TEMP: -4° TO 221° F (-20° TO 105° C)
- CERTIFICATIONS**  
 UL: UL RECOGNIZED, FILE NO. E46237  
 CSA: CSA CERTIFIED, FILE NO. LR6837

## CONNECTOR DIMENSIONS





# Double-Ended Cordsets

#16 AWG yellow ST00W cable – U.S. color code  
 Oil-resistant PVC jacket  
 Low-resistance contact design with gold/palladium nickel plating

	6P	7P	8P
FEMALE FACE VIEW			
COLOR CODE	1- orange 2- blue 3- black 4- white 5- red 6- green-gnd	1- white-black trace 2- black 3- white 4- red 5- orange 6- blue 7- green-gnd	1- orange 2- blue 3- white-black trace 4- black 5- white 6- red 7- green-gnd 8- red-black trace
VOLTAGE	600V AC/DC	600V AC/DC	600V AC/DC
CURRENT	8A	8A	7A
CONDUCTOR	#16-6	#16-7	#16-8

FEMALE/MALE	FIG	DOUBLE-ENDED CORDSETS WITH #16 AWG ST00W CABLE 3 FEET LONG		
STRAIGHT/STRAIGHT	1	226020A01F030	227020A01F030	228020A01F030
90°/STRAIGHT	2	226021A01F030	227021A01F030	228021A01F030
STRAIGHT/90°	3	226022A01F030	227022A01F030	228022A01F030
90°/90°	4	226023A01F030	227023A01F030	228023A01F030

## CATALOG OPTIONS

Use the following chart to modify your part's specifications

226020A01F0301

**CABLE LENGTH**

6'	060
12'	120
20'	200

**COUPLING NUT**

STAINLESS STEEL . . . . .ADD 1

# Specifications

6P to 8P



- MECHANICAL**  
 CONNECTOR FACE: PVC - UL STD 94 - V0  
 MOLDED BODY: PVC - UL STD 94 - V0  
 COUPLING NUT: ZINC DIECAST W/ BLACK EPOXY-COAT, OPTIONAL STAINLESS STEEL TYPE 303
- CABLE:**  
 YELLOW, #16 PVC JACKET & PVC CONDUCTOR INSULATION OVER 65 X #34 COPPER STRANDING, UL ST00W CSA ST
- OUTSIDE DIAMETER:**  
 6P - .54" (13.7mm)  
 7P - .54" (13.7mm)  
 8P - .61" (15.5mm)
- ELECTRICAL**  
 VOLTAGE RATING: 600V AC/DC  
 AMPERAGE:  
 6P - 8A  
 7P - 8A  
 8P - 7A
- ENVIRONMENTAL**  
 PROTECTION: IP 68, NEMA 6P  
 AMBIENT OPERATING TEMP: -4° TO 221° F (-20° TO 105° C)
- CERTIFICATIONS**  
 UL: UL RECOGNIZED, FILE NO. E46237  
 CSA: CSA CERTIFIED, FILE NO. LR6837

## CONNECTOR DIMENSIONS

FEMALE STRAIGHT/MALE STRAIGHT

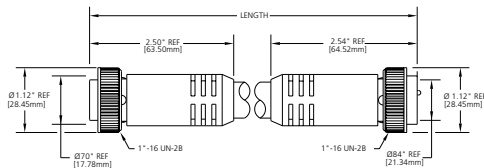


FIG 1

FEMALE 90°/MALE STRAIGHT

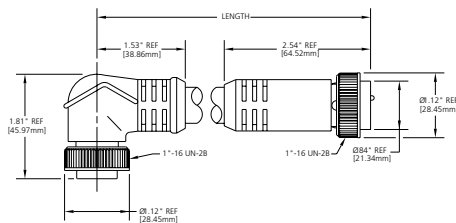


FIG 2

FEMALE STRAIGHT/MALE 90°

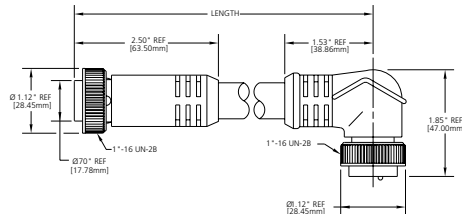


FIG 3

FEMALE 90°/MALE 90°

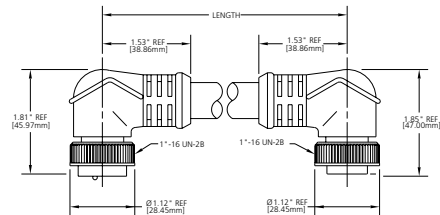
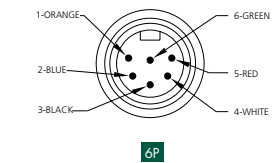
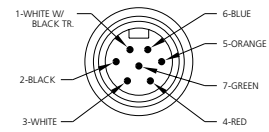


FIG 4

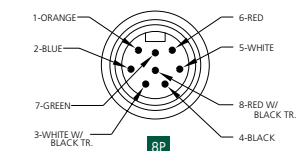
MALE FACE VIEW



6P

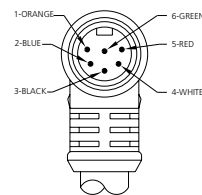


7P

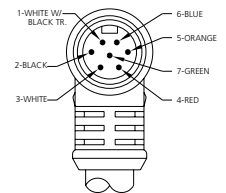


8P

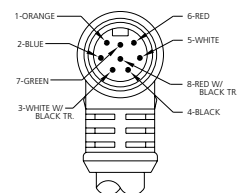
MALE FACE VIEW



6P



7P



8P



# Double-Ended Cordsets

#16 AWG yellow ST00W cable – U.S. color code  
 Oil-resistant PVC jacket  
 Low-resistance contact design with gold/palladium nickel plating

	9P	10P	12P
FEMALE FACE VIEW			
COLOR CODE	1- orange 2- blue 3- red-black trace 4- green-black trace 5- white 6- red 7- green-gnd 8- white-black trace 9- black	1- orange 2- blue 3- white-black trace 4- red-black trace 5- green-black trace 6- orange-black trace 7- red 8- green-gnd 9- black 10- white	1- orange 2- blue 3- white-black trace 4- red-black trace 5- green-black trace 6- orange-black trace 7- blue-black trace 8- black-white trace 9- green-gnd 10- red 11- white 12- black
VOLTAGE	600V AC/DC	600V AC/DC	600V AC/DC
CURRENT	7A	7A	5A
CONDUCTOR	#16-9	#16-10	#16-12

FEMALE/MALE	FIG	DOUBLE-ENDED CORDSETS WITH #16 AWG ST00W CABLE 3 FEET LONG		
STRAIGHT/STRAIGHT	1	339020A01F030	331020A01F030	332020A01F030
90°/STRAIGHT	2	339021A01F030	331021A01F030	332021A01F030
STRAIGHT/90°	3	339022A01F030	331022A01F030	332022A01F030
90°/90°	4	339023A01F030	331023A01F030	332023A01F030

## CATALOG OPTIONS

Use the following chart to modify your part's specifications

339020A01F0301

**CABLE LENGTH**

6' . . . . .	060
12' . . . . .	120
20' . . . . .	200

**COUPLING NUT**

STAINLESS STEEL . . . . .ADD 1

# Specifications

9P 10P & 12P



<b>MECHANICAL</b>	
CONNECTOR FACE:	PVC - UL STD 94 - V0
MOLDED BODY:	PVC - UL STD 94 - V0
COUPLING NUT:	ZINC DIECAST W/ BLACK EPOXY COAT, OPTIONAL STAINLESS STEEL TYPE 303
CABLE:	YELLOW, #16 AWG, PVC JACKET & PVC CONDUCTOR INSULATION OVER 65 X #34 COPPER STRANDING, 600V, UL STYLE ST00W CSA ST
OUTSIDE DIAMETER:	9P - .64" (16.3mm) 10P - .66" (16.8mm) 12P - .71" (18.0mm)
<b>ELECTRICAL</b>	
VOLTAGE RATING:	600 V AC/DC
AMPERAGE:	9P - 7A 10P - 7A 12P - 5A
<b>ENVIRONMENTAL</b>	
PROTECTION:	IP 68, NEMA 6P
AMBIENT OPERATING TEMP:	-4° to 221° F (-20° to 105° C)
<b>CERTIFICATIONS</b>	
UL:	UL RECOGNIZED, FILE NO. E46237
CSA:	CSA CERTIFIED, FILE NO. LR6837

## CONNECTOR DIMENSIONS

FEMALE STRAIGHT/MALE STRAIGHT

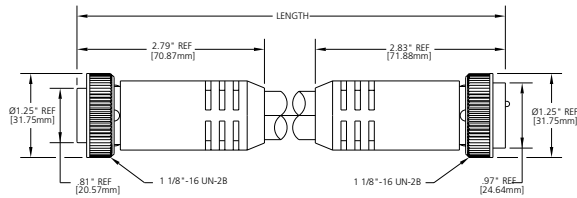


FIG 1

FEMALE 90°/MALE STRAIGHT

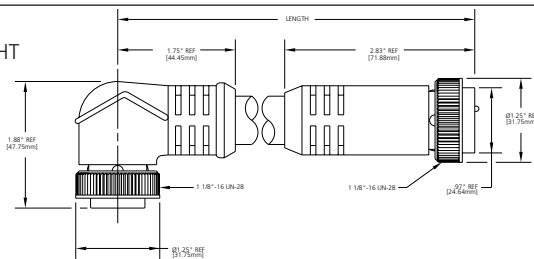


FIG 2

FEMALE STRAIGHT/MALE 90°

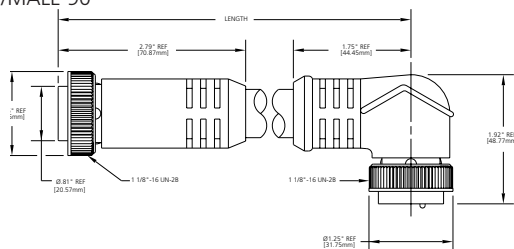


FIG 3

FEMALE 90°/MALE 90°

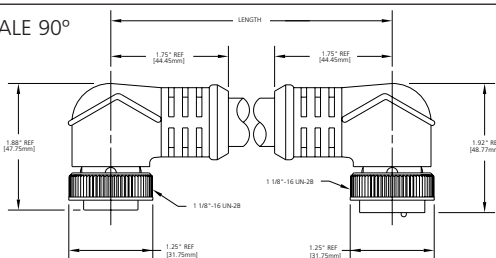
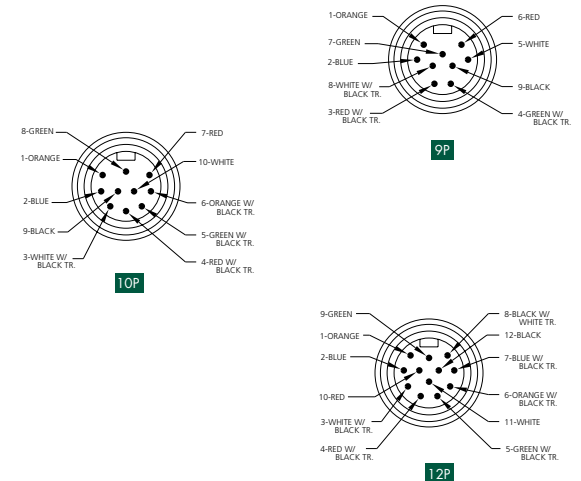


FIG 4

MALE FACE VIEW





# Receptacles

#16 AWG PVC 12-inch leads – U.S. color code, epoxy potted  
 Straight, 90° and flange mount in male and female versions  
 Low-resistance contact design with gold/palladium nickel plating

	2P	3P	4P	5P	6P
MALE FACE VIEW					
COLOR CODE	1- white 2- black	1- green-gnd 2- black 3- white	1- black 3- red 2- white 4- green-gnd	1- white 4- orange 2- red 5- black 3- green-gnd	1- white 4- orange 2- red 5- black 3- green-gnd 6- blue
VOLTAGE	600V AC/DC	600V AC/DC	600V AC/DC	600V AC/DC	600V AC/DC
CURRENT	13A	13A	10A	8A	8A
CONDUCTOR	#16-2	#16-3	#16-4	#16-5	#16-6

MALE	FIG	RECEPTACLES WITH #16 AWG PVC LEADS 12 INCHES LONG				
STRAIGHT	1	1R2006A20A120	1R3006A20A120	1R4006A20A120	1R5006A20A120	1R6006A20A120
90°	3	1R2007A20A120	1R3007A20A120	1R4007A20A120	1R5007A20A120	1R6007A20A120
FLANGE MOUNT	2	1R2G06A20A120	1R3G06A20A120	1R4G06A20A120	1R5G06A20A120	1R6G06A20A120
FEMALE	FIG	RECEPTACLES WITH #16 AWG PVC LEADS 12 INCHES LONG				
STRAIGHT	1	1R2004A20A120	1R3004A20A120	1R4004A20A120	1R5004A20A120	1R6004A20A120
90°	3	1R2005A20A120	1R3005A20A120	1R4005A20A120	1R5005A20A120	1R6005A20A120
FLANGE MOUNT	2	1R2G04A20A120	1R3G04A20A120	1R4G04A20A120	1R5G04A20A120	1R6G04A20A120

PART NO.	ACCESSORIES
5601	Locknut 1/2"-14NPT, zinc plated steel
5611	Gasket, black neoprene

## CATALOG OPTIONS

Use the following chart to modify your part's specifications

1R2006A20A1201

**CABLE LENGTH**

3' .....	F030
6' .....	F060

**SHELL**

STAINLESS STEEL SHELL	.ADD 1
NON-METALLIC SHELL	.ADD 2
(AVAILABLE ON MALE & FEMALE STRAIGHT RECEPTACLES ONLY)	

# Specifications



**MECHANICAL**

SHELL: ZINC DIECAST W/ BLACK EPOXY COAT, OPTIONAL STAINLESS STEEL TYPE 303 OR NON-METALLIC GRAY NYLON 6/6  
 90°: ZINC DIECAST W/ BLACK E-COAT  
 FLANGE MOUNT: GRAY ANODIZED ALUMINUM  
 INSERT: PVC - UL STD 94 - V0  
 CONDUCTORS: #16 AWG, PVC INSULATION OVER 26 X #30 COPPER STRANDING, 600V, UL STYLE I015 CSA TEW

**ELECTRICAL**

VOLTAGE RATING: 600 V AC/DC  
 AMPERAGE: 2P - 13A  
 3P - 13A  
 4P - 10A  
 5P - 8A  
 6P - 8A

**ENVIRONMENTAL**

PROTECTION: IP 68, NEMA 6P  
 AMBIENT OPERATING TEMP: -4° TO 221° F (-20° TO 105° C)

**CERTIFICATIONS**

UL: UL RECOGNIZED, FILE NO. E46237  
 CSA: CSA CERTIFIED, FILE NO. LR6837

## RECEPTACLE DIMENSIONS

MALE STRAIGHT WITH 1/2" - 14NPT THREADS  
 FEMALE STRAIGHT WITH 1/2" - 14NPT THREADS

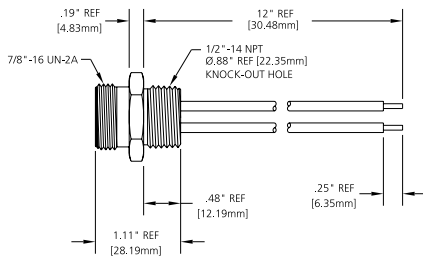
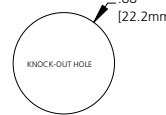
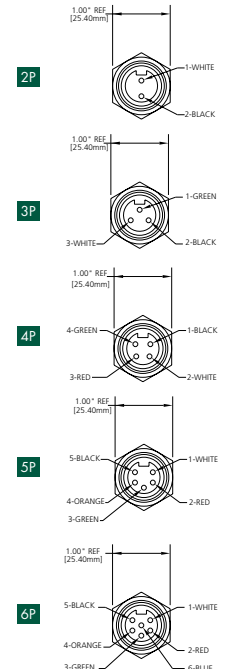


FIG 1

TYPICAL KNOCKOUT



FEMALE FACE VIEW



MALE FLANGE MOUNT  
 FEMALE FLANGE MOUNT

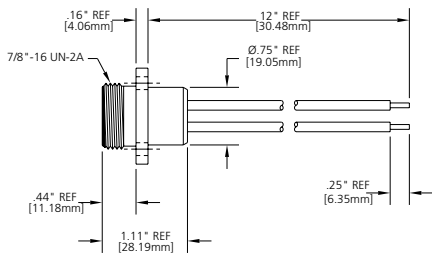
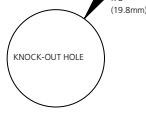
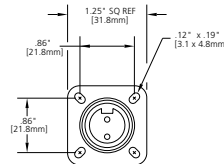


FIG 2

TYPICAL KNOCKOUT



MOUNTING DETAIL



MALE 90° WITH 1/2" - 14NPT THREADS  
 FEMALE 90° WITH 1/2" - 14NPT THREADS

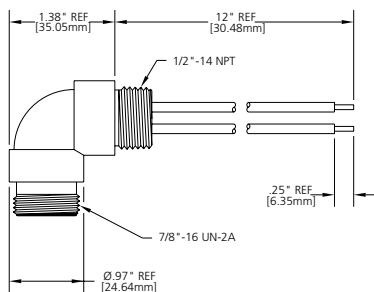
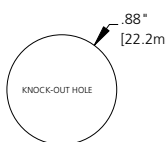
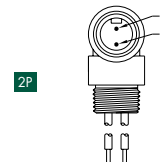


FIG 3

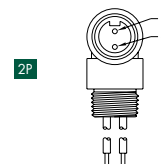
TYPICAL KNOCKOUT



TYPICAL MALE FACE VIEW



TYPICAL FEMALE FACE VIEW





# Receptacles

#18 AWG PVC 12-inch leads – IEC color code, epoxy potted  
 Anodized aluminum shell with PG 13.5 mounting thread  
 Low-resistance contact design with gold/palladium nickel plating

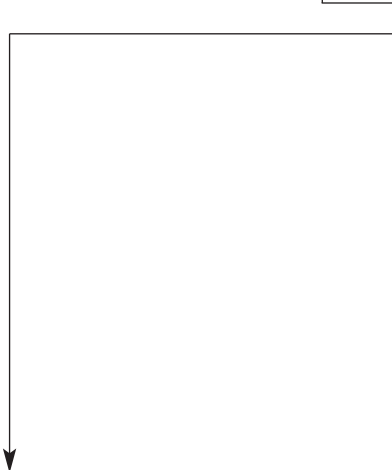
	3P	3P	4P	5P
MALE FACE VIEW				
COLOR CODE	1- green/yellow-gnd 2- brown 3- blue	1- black 2- brown 3- blue	1- black 2- blue 3- brown 4- white	1- black 2- blue 3- green/yellow-gnd 4- brown 5- white
VOLTAGE	300V	300V	300V	300V
CURRENT	10A	7A	5.6A	5.6A
CONDUCTOR	#18-3	#18-3	#18-4	#18-5

MALE	FIG	RECEPTACLES WITH #18 AWG PVC LEADS 12 INCHES LONG			
STRAIGHT	1	1R3D06A25A120	1R3D06A16A120	1R4D06A16A120	1R5D06A25A120
FEMALE	FIG	RECEPTACLES WITH #18 AWG PVC LEADS 12 INCHES LONG			
STRAIGHT	2	1R3D04A25A120	1R3D04A16A120	1R4D04A16A120	1R5D04A25A120

## CATALOG OPTIONS

Use the following chart to modify your part's specifications

**1R3D06A25A120**



**CABLE LENGTH**

1 METER . . . . .	M010
2 METER . . . . .	M020

# Specifications



**MECHANICAL**

SHELL: GRAY ANODIZED ALUMINUM  
 INSERT: PVC - UL STD 94 - V0  
 CONDUCTORS: #18 AWG, PVC INSULATION OVER  
 16 X #30 COPPER STRANDING, 600V,  
 UL STYLE 1015, CSA TEW

**ELECTRICAL**

VOLTAGE RATING: 300 V AC/DC  
 AMPERAGE: 2P + GRD - 10A  
 3P - 7A  
 4P - 5.6A  
 5P - 5.6A

**ENVIRONMENTAL**

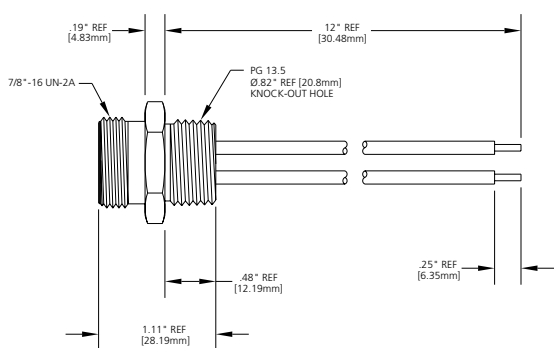
PROTECTION: IP 68, NEMA 6P  
 AMBIENT OPERATING TEMP: -4° TO 221° F (-20° TO 105° C)

**CERTIFICATIONS**

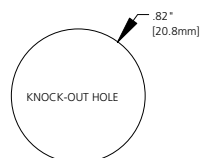
UL: UL RECOGNIZED, FILE NO. E46237  
 CSA: CSA CERTIFIED, FILE NO. LR6837

## RECEPTACLE DIMENSIONS

### MALE STRAIGHT WITH PG 13.5 THREADS



TYPICAL KNOCKOUT



FEMALE FACE VIEW

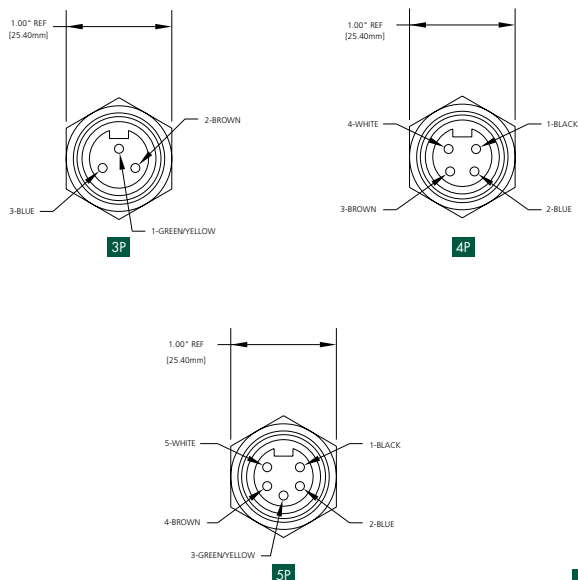
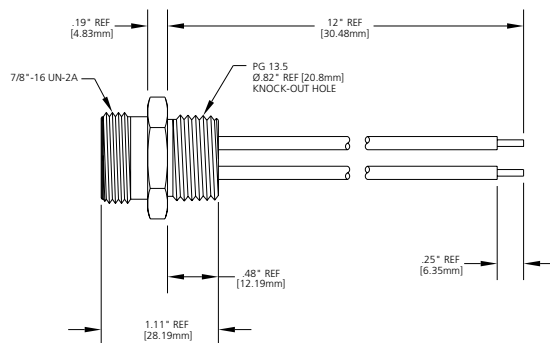


FIG 1

### MALE STRAIGHT WITH PG 13.5 THREADS



TYPICAL KNOCKOUT

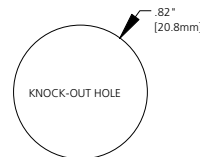
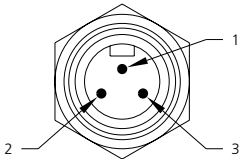
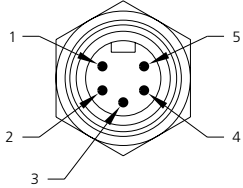


FIG 2



# Receptacles AUTOMOTIVE

#16 AWG PVC 12-inch leads – auto color code, epoxy potted  
 Straight and 90° male – straight female  
 Low-resistance contact design with gold/palladium nickel plating

	3P	5P
MALE FACE VIEW		
COLOR CODE	1- green-gnd 2- red w/ #2 3- red w/ #3	1- red w/ #1 2- red w/ #2 3- green-gnd 4- red w/ #4 5- red w/ #5
VOLTAGE	600V AC/DC	600V AC/DC
CURRENT	13A	8A
CONDUCTOR	#16-3	#16-5

MALE	FIG	RECEPTACLES WITH #16 AWG PVC LEADS 12 INCHES LONG	
STRAIGHT WITH 1/2" -14NPT	1	1R3006A24A120	1R5006A24A120
90° WITH 1/2" -14NPT	2	1R3007A24A120	1R5007A24A120

FEMALE	FIG	RECEPTACLES WITH #16 AWG PVC LEADS 12 INCHES LONG	
STRAIGHT WITH 1/2" -14NPT	3	1R3004A24A120	1R5004A24A120

PART NO.	ACCESSORIES
5601	Locknut 1/2" -14NPT, zinc plated steel
5611	Gasket, black neoprene

## CATALOG OPTIONS

Use the following chart to modify your part's specifications

1R3006A24A1201

**LEAD LENGTH**

3' .....	F030
6' .....	F060

**SHELL**

STAINLESS STEEL SHELL .ADD 1  
 (AVAILABLE ON STRAIGHT ONLY)

# Specifications



**MECHANICAL**

SHELL: STRAIGHT & 90° ZINC DIECAST W/ BLACK EPOXY COAT, OPTIONAL STAINLESS STEEL TYPE 303 ON STRAIGHT SHELL DESIGN

INSERT: PVC - UL STD 94 - V0

CONDUCTORS: #16 AWG PVC INSULATION OVER 26 X #30 COPPER STRANDING, 600V, UL STYLE 1015, CSA TEW

**ELECTRICAL**

VOLTAGE RATING: 600 V AC/DC

AMPERAGE: 3P - 13A

5P - 8A

**ENVIRONMENTAL**

PROTECTION: IP 68, NEMA 6P

AMBIENT OPERATING TEMP: -4° TO 221° F (-20° TO 105° C)

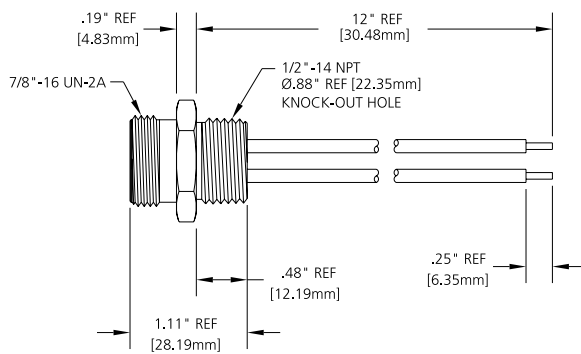
**CERTIFICATIONS**

UL: UL RECOGNIZED, FILE NO. E46237

CSA: CSA CERTIFIED, FILE NO. LR6837

## RECEPTACLE DIMENSIONS

MALE STRAIGHT WITH 1/2" - 14NPT THREADS



TYPICAL KNOCKOUT

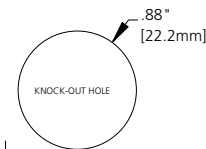
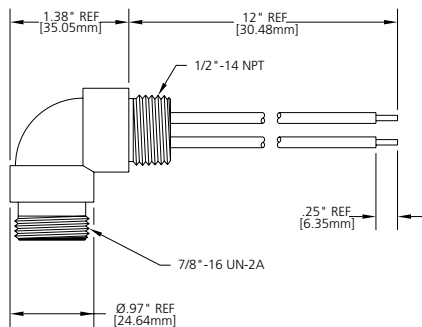
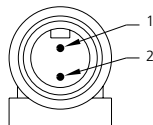


FIG 1

MALE 90° WITH 1/2" - 14NPT THREADS



TYPICAL MALE FACE VIEW



TYPICAL FEMALE FACE VIEW

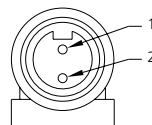
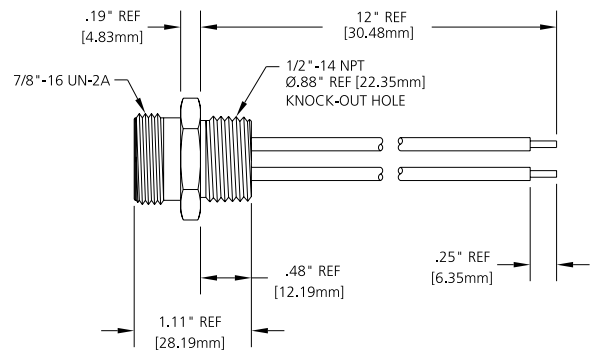
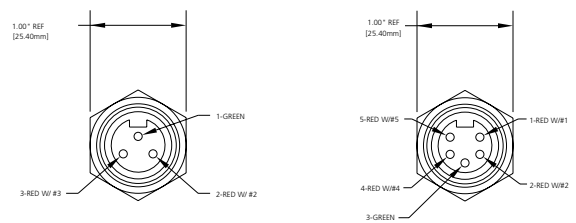


FIG 2

FEMALE STRAIGHT W/ 1/2" - 14NPT THREADS



FEMALE FACE VIEW



3P

5P

TYPICAL KNOCKOUT

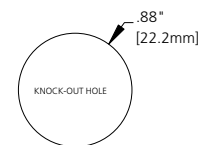


FIG 3



# Receptacles

#18 AWG PVC 12-inch leads - auto color code – epoxy potted  
 Straight male & female  
 Low-resistance contact design with gold/palladium nickel plating

	3P	4P	5P
MALE FACE VIEW			
COLOR CODE	1- green-gnd 2- red w/ black trace 3- red w/ white trace	1- red w/ black trace 3- red 2- red w/ white trace 4- green-gnd	1- red w/ white trace 4- red w/ yellow trace 2- red 5- red w/ black trace 3- green-gnd
VOLTAGE	300V AC/DC	300V AC/DC	300V AC/DC
CURRENT	10A	7A	5.6A
CONDUCTOR	#18-3	#18-4	#18-5

MALE	FIG	RECEPTACLES WITH #18 AWG PVC LEADS 12 INCHES LONG		
STRAIGHT	1	1R3006A17A120	1R4006A17A120	1R5006A17A120
FEMALE	FIG	RECEPTACLES WITH #18 AWG PVC LEADS 12 INCHES LONG		
STRAIGHT	2	1R3004A17A120	1R4004A17A120	1R5004A17A120

PART NO.	ACCESSORIES
5601	Locknut 1/2 "-14NPT, zinc plated steel
5611	Gasket, black neoprene

## CATALOG OPTIONS

Use the following chart to modify your part's specifications

**1R3006A17A120**

**CABLE LENGTH**

3' .....	F030
6' .....	F060

# Specifications



**MECHANICAL**

SHELL: ZINC DIECAST W/ BLACK EPOXY COAT, OPTIONAL STAINLESS STEEL TYPE 303

INSERT: PVC - UL STD 94 - V0

CONDUCTORS: #18 AWG, PVC INSULATION OVER 16 X #30 COPPER STRANDING, 300V, UL STYLE 1061, CSA AWM SR

**ELECTRICAL**

VOLTAGE RATING: 300 V AC/DC

AMPLERAGE: 3P - 10A

4P - 7A

5P - 5.6A

**ENVIRONMENTAL**

PROTECTION: IP 68, NEMA 6P

AMBIENT OPERATING TEMP: -4° TO 176° F (-20° TO 80° C)

**CERTIFICATIONS**

UL: UL RECOGNIZED, FILE NO. E46237

CSA: CSA CERTIFIED, FILE NO. LR6837

## RECEPTACLE DIMENSIONS

MALE STRAIGHT WITH 1/2" - 14NPT THREADS

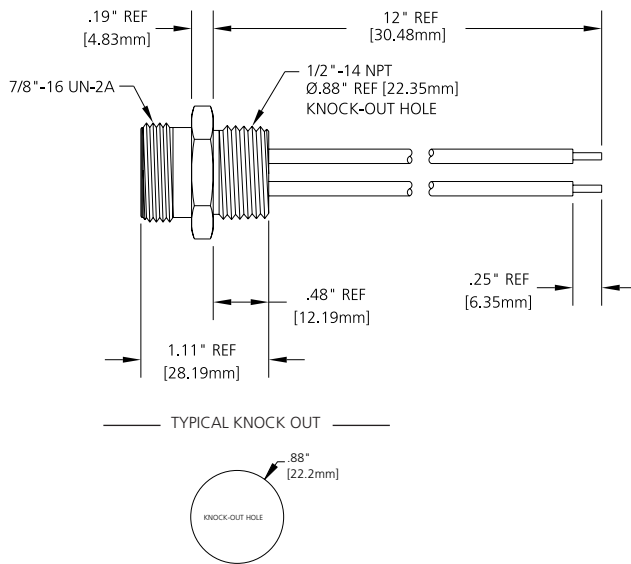


FIG 1

FEMALE STRAIGHT WITH 1/2" - 14NPT THREADS

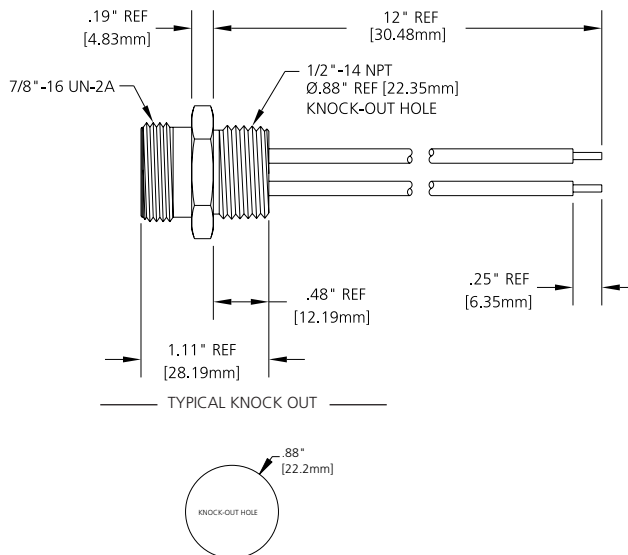
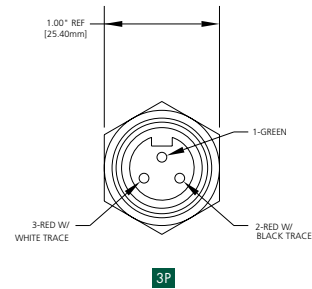
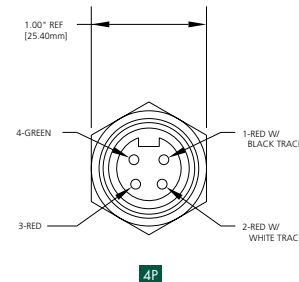


FIG 2

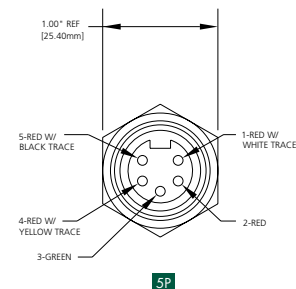
FEMALE FACE VIEW



3P



4P



5P



# Receptacles

#16 AWG PVC 12-inch Leads – U.S. color code, epoxy potted  
 Black epoxy coat zinc diecast shell design  
 Use in control panels, junction boxes and sensors

	6P	7P	8P
MALE FACE VIEW			
COLOR CODE	1- orange 2- blue 3- black 4- white 5- red 6- green-gnd	1- white-black trace 2- black 3- white 4- red 5- orange 6- blue 7- green-gnd	1- orange 2- blue 3- white-black trace 4- black 5- white 6- red 7- green-gnd 8- red-black trace
VOLTAGE	600V AC/DC	600V AC/DC	600V AC/DC
CURRENT	8A	8A	7A
CONDUCTOR	#16-6	#16-7	#16-8

MALE	FIG	RECEPTACLES WITH #16 AWG PVC LEADS 12 INCHES LONG		
STRAIGHT WITH 1/2"-14NPT	2	2R6006A20A120	2R7006A20A120	2R8006A20A120
FEMALE	FIG	RECEPTACLES WITH #16 AWG PVC LEADS 12 INCHES LONG		
STRAIGHT WITH 1/2"-14NPT	1	2R6004A20A120	2R7004A20A120	2R8004A20A120

PART NO.	ACCESSORIES
5601	Lockout 1/2 "-14NPT, zinc plated steel
5611	Gasket, black neoprene

## CATALOG OPTIONS

Use the following chart to modify your part's specifications

2R6006A20A1201

**LEAD LENGTH**

3' .....	F030
6' .....	F060

**SHELL**

STAINLESS STEEL . . . . .ADD 1

# Specifications



**MECHANICAL**

SHELL: ZINC DIECAST W/ BLACK EPOXY COAT, OPTIONAL STAINLESS STEEL TYPE 303

INSERT: PVC - UL STD 94 - V0  
 CONDUCTORS: #16 AWG PVC INSULATION OVER 26 X #30 COPPER STRANDING, 600V, UL STYLE 1015 CSA TEW

**ELECTRICAL**

VOLTAGE RATING: 600 V AC/DC  
 AMPERAGE: 6P - 8A  
 7P - 8A  
 8P - 7A

**ENVIRONMENTAL**

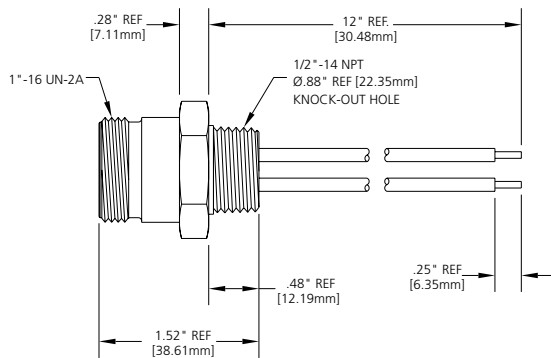
PROTECTION: IP 68, NEMA 6P  
 AMBIENT OPERATING TEMP: -4° to 221° F (-20° to 105° C)

**CERTIFICATIONS**

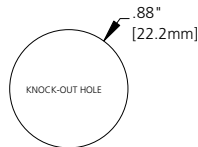
UL: UL RECOGNIZED, FILE NO. E46237  
 CSA: CSA CERTIFIED, FILE NO. LR6837

## RECEPTACLE DIMENSIONS

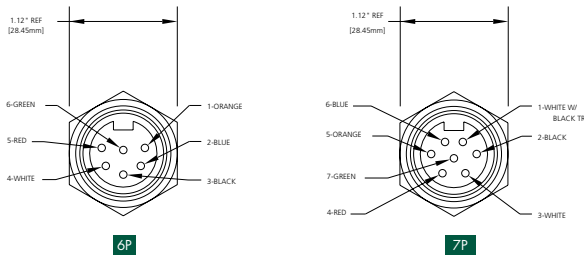
FEMALE STRAIGHT WITH 1/2" - 14NPT



TYPICAL KNOCKOUT

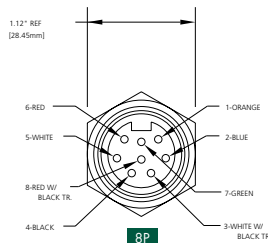


FEMALE FACE VIEW



6P

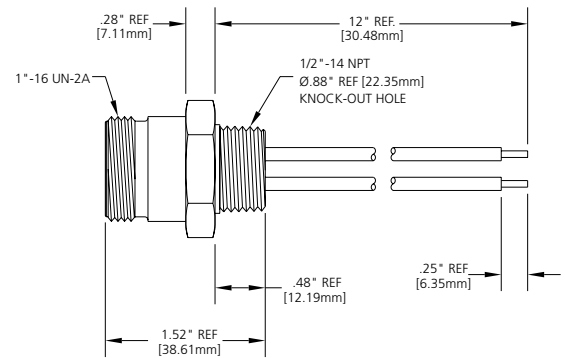
7P



8P

FIG 1

MALE STRAIGHT WITH 1/2" - 14NPT



TYPICAL KNOCKOUT

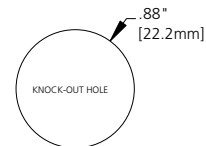


FIG 2



# Receptacles

#16 AWG PVC 12-inch leads - U.S. color code, epoxy potted  
 Black epoxy coat zinc diecast shell design  
 Use in control panels, junction boxes and sensors

	9P	10P	12P
MALE FACE VIEW			
COLOR CODE	1- orange 2- blue 3- red-black trace 4- green-black trace 5- white 6- red 7- green-gnd 8- white-black trace 9- black	1- orange 2- blue 3- white-black trace 4- red 5- green-black trace 6- orange-black trace 7- red 8- green-gnd 9- black 10- white	1- orange 2- blue 3- white-black trace 4- red-black trace 5- green-black trace 6- orange-black trace 7- blue-black trace 8- black-white trace 9- green-gnd 10- red 11- white 12- black
VOLTAGE	600V AC/DC	600V AC/DC	600V AC/DC
CURRENT	7A	7A	5A
CONDUCTOR	#16-9	#16-10	#16-12

MALE	FIG	RECEPTACLES WITH #16 AWG PVC LEADS 12 INCHES LONG		
STRAIGHT WITH 1/2" -14NPT	2	3R9006A20A120	3R1006A20A120	3R2006A20A120
FEMALE	FIG	RECEPTACLES WITH #16 AWG PVC LEADS 12 INCHES LONG		
STRAIGHT WITH 1/2" -14NPT	1	3R9004A20A120	3R1004A20A120	3R2004A20A120

PART NO.	ACCESSORIES
5601	Locknut 1/2" -14NPT, zinc plated steel
5611	Gasket, black neoprene

## CATALOG OPTIONS

Use the following chart to modify your part's specifications

**3R9004A20A1201**

**LEAD LENGTH**

3' .....	F030
6' .....	F060

**COUPLING NUT**

STAINLESS STEEL SHELL .ADD 1

# Specifications



**MECHANICAL**

SHELL: ZINC DIECAST W/ BLACK EPOXY COAT, OPTIONAL STAINLESS STEEL TYPE 303

INSERT: PVC - UL STD 94 - V0

CONDUCTORS: #16 AWG, PVC INSULATION OVER 26 X #30 COPPER STRANDING, 600V, UL STYLE 1015 CSA TEW

**ELECTRICAL**

VOLTAGE RATING: 600 V AC/DC

AMPERAGE: 9P - 7A

10P - 7A

12P - 5A

**ENVIRONMENTAL**

PROTECTION: IP 68, NEMA 6P

AMBIENT OPERATING TEMP: -4° TO 221° F (-20° TO 105° C)

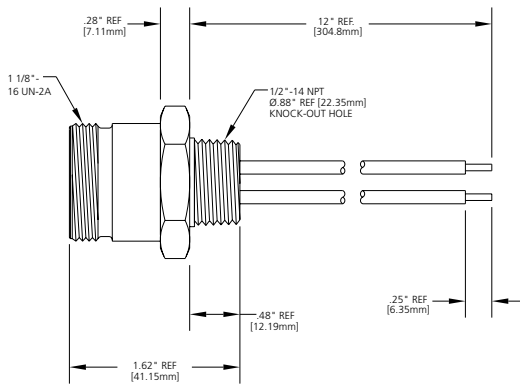
**CERTIFICATIONS**

UL: UL RECOGNIZED, FILE NO.E46237

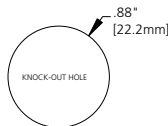
CSA: CSA CERTIFIED, FILE NO. LR6837

## RECEPTACLE DIMENSIONS

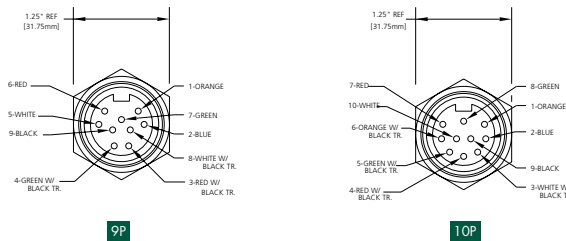
### FEMALE STRAIGHT WITH 1/2" - 14NPT



TYPICAL KNOCKOUT

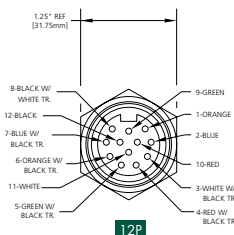


FEMALE FACE VIEW



9P

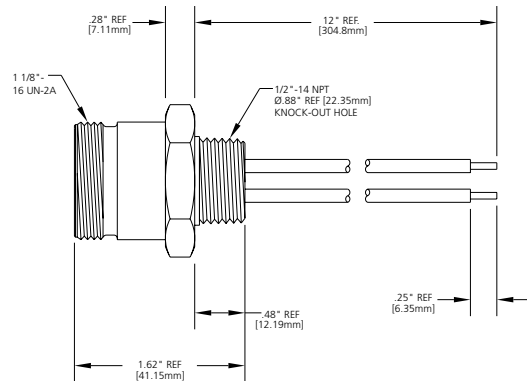
10P



12P

FIG 1

### MALE STRAIGHT WITH 1/2" - 14NPT



TYPICAL KNOCKOUT

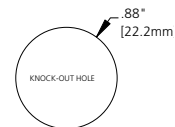
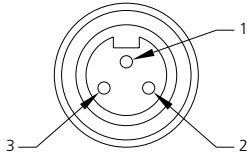
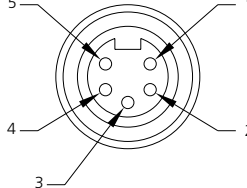


FIG 2



# Single & Double-Ended Cordsets

#18 AWG yellow TPE universal high flex cable – auto color code  
 Excellent chemical-, oil- and weld slag-resistance  
 Low-resistance contact design with gold/palladium nickel plating

<b>NEW</b>	<b>3P</b>	<b>5P</b>
<b>FEMALE FACE VIEW</b>		
<b>COLOR CODE</b>	1- green-gnd 2- red w/ black trace 3- red w/ white trace	1- red w/ white trace 2- red 3- green-gnd 4- red w/ yellow trace 5- red w/ black trace
<b>VOLTAGE</b>	300V AC/DC	300V AC/DC
<b>CURRENT</b>	10A	5.6A
<b>CONDUCTOR</b>	#18-3	#18-5

FEMALE	FIG	<b>SINGLE-ENDED CORDSETS WITH #18 AWG TPE CABLE 6 FEET LONG</b>	
STRAIGHT	1	103000K02F060	105000K02F060
90°	2	103001K02F060	105001K02F060
MATING RECEPTACLE*	4	1R3006A17A120	1R5006A17A120
FEMALE/MALE	FIG	<b>DOUBLE-ENDED CORDSETS WITH #18 AWG TPE CABLE 6 FEET LONG</b>	
STRAIGHT/STRAIGHT	3	113020K02F060	115020K02F060

## CATALOG OPTIONS

\*See Page 58 for additional Mating Receptacles

Use the following chart to modify your part's specifications

103000K02F0601

**CABLE LENGTH**

12'	120
20'	200

**COUPLING NUT**

STAINLESS STEEL	.ADD 1
NON-METALLIC	.ADD 2

# Specifications



## CONNECTOR DIMENSIONS

### FEMALE STRAIGHT

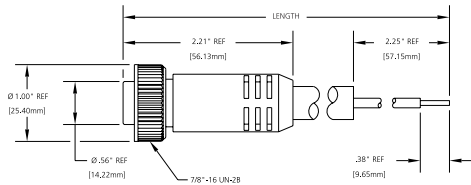


FIG 1

### FEMALE 90°

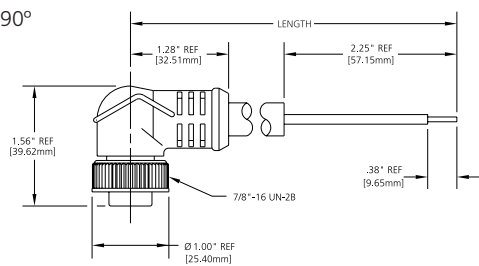


FIG 2

### FEMALE STRAIGHT/MALE STRAIGHT

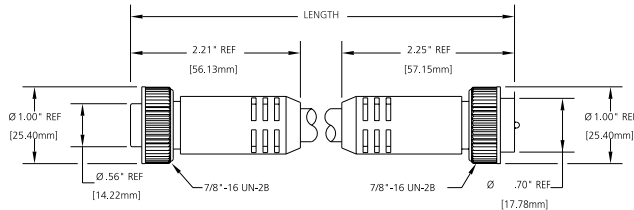


FIG 3

#### MALE FACE VIEW



### MECHANICAL

CONNECTOR FACE: PVC - UL STD 94 - V0  
 MOLDED BODY: PVC - UL STD 94 - V0  
 COUPLING NUT: ZINC DIECAST W/ BLACK EPOXY COAT, OPTIONAL STAINLESS STEEL TYPE 303 OR NON-METALLIC GRAY NYLON 6/6  
 CABLE: YELLOW, #18 AWG, TPE JACKET & PVC CONDUCTOR INSULATION OVER 41 X #34 COPPER STRANDING, 300V, UL STYLE 20626, CSA AWM I/II A/B  
 OUTSIDE DIAMETER: 3P - .26" (6.6mm)  
 5P - .30" (7.6mm)

### ELECTRICAL

VOLTAGE RATING: 300 V AC/DC  
 AMPERAGE: 3P - 10A  
 5P - 5.6A

### ENVIRONMENTAL

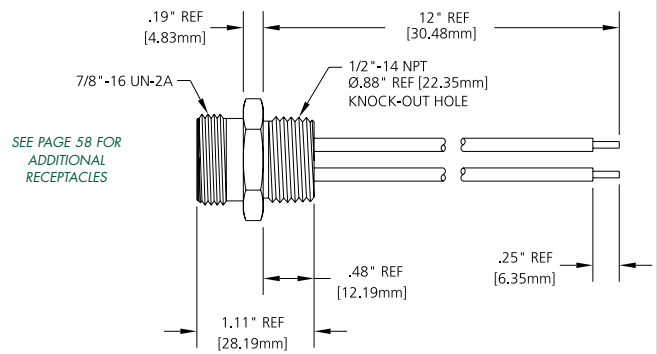
PROTECTION: IP 68, NEMA 6P  
 AMBIENT OPERATING TEMP: -4° TO 221° F (-20° TO 105° C)

### CERTIFICATIONS

UL: UL RECOGNIZED, FILE NO. E46237  
 CSA: CSA CERTIFIED, FILE NO. LR6837

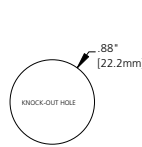
## RECEPTACLE DIMENSIONS

### MALE STRAIGHT WITH 1/2" - 14NPT THREADS



SEE PAGE 58 FOR ADDITIONAL RECEPTACLES

#### TYPICAL KNOCKOUT



#### MALE FACE VIEW

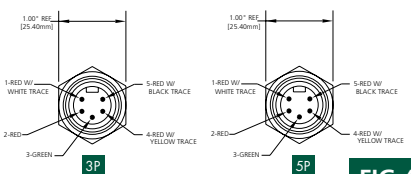


FIG 4

## CHEMICAL & OIL-RESISTANCE CHART - TPE CABLE

ACIDS & BASES	PERFORMANCE	OILS & FUELS	PERFORMANCE
SULFURIC ACID 30%	EXCELLENT	ASTM OIL 1,2, OR 3	EXCELLENT
NITRIC ACID 10%	EXCELLENT	TRIMSOL	EXCELLENT
SODIUM HYDROXIDE 10%	EXCELLENT	SIMEOL	EXCELLENT
AMMONIUM HYDROXIDE 10%	EXCELLENT	MOBIL OIL DTE 24 OR 26	EXCELLENT
HYDROCHLORIC ACID 20%	EXCELLENT	KEROSENE	EXCELLENT
GLACIAL ACIDIC ACID	GOOD	TRANSFORMER OIL	GOOD



# Single & Double-Ended LED Cordsets

Extended-life yellow LED – 100,000 hours continuous use  
 Clear PVC body – female straight and 90°  
 Provides output indication for AC sensors

<b>NEW</b>	<b>3P with LED</b>
FEMALE FACE VIEW	
COLOR CODE	1- green-gnd                      3- red w/white-L1 2- red w/black-load            red-L2
LED CIRCUIT DIAGRAM	
VOLTAGE	120V AC ± 10%
CURRENT	3A
CONDUCTOR	#18-4

FEMALE	FIG	SINGLE-ENDED CORDSETS WITH #18 AWG PVC CABLE 3 FEET LONG
STRAIGHT LED	1	1030A0A03F030
90° LED	2	1030A1A03F030
FEMALE/ MALE-4P	FIG	DOUBLE-ENDED CORDSETS WITH #18 AWG PVC CABLE 6 FEET LONG
STRAIGHT LED/ STRAIGHT	3	1130A2A03F060
90° LED/ STRAIGHT	4	1130A3A03F060
STRAIGHT LED/ 90°	5	1130A4A03F060
90° LED/ 90°	6	1130A5A03F060

## CATALOG OPTIONS

Use the following chart to modify your part's specifications

# 1030A0A03F030

**CABLE LENGTH**

6' .....	060
12' .....	120
20' .....	200

# Specifications



**MECHANICAL**

CONNECTOR FACE: PVC - UL STD 94 - V0  
 MOLDED BODY: PVC - UL STD 94 - V0  
 COUPLING NUT: ZINC DIECAST W/ BLACK EPOXY COAT  
 CABLE: YELLOW, #18 AWG, PVC JACKET & PVC CONDUCTOR INSULATION OVER 41 X #34 COPPER STRANDING, 300V, UL STYLE Z661 CSA AWM III A/B 4P - .28" (7.1mm)

**ELECTRICAL**

OUTSIDE DIAMETER: 300 V AC/DC  
 VOLTAGE RATING: 3P - 3A  
 AMPERAGE: 3P - 3A

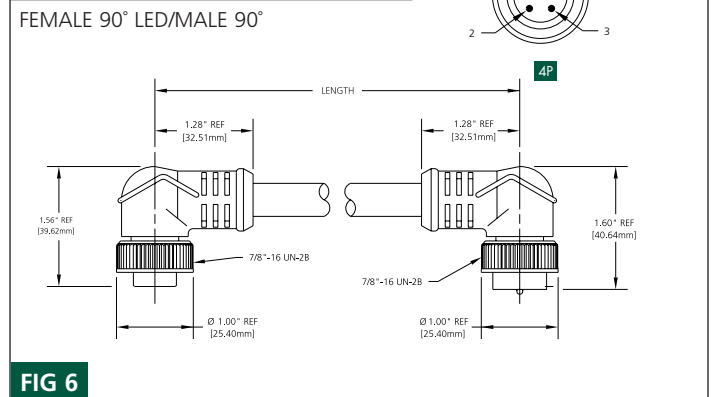
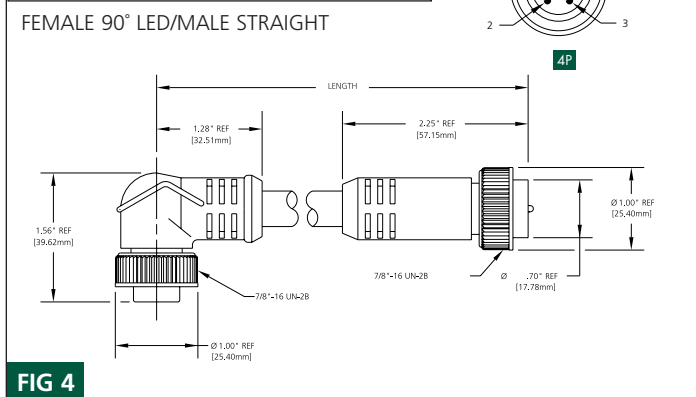
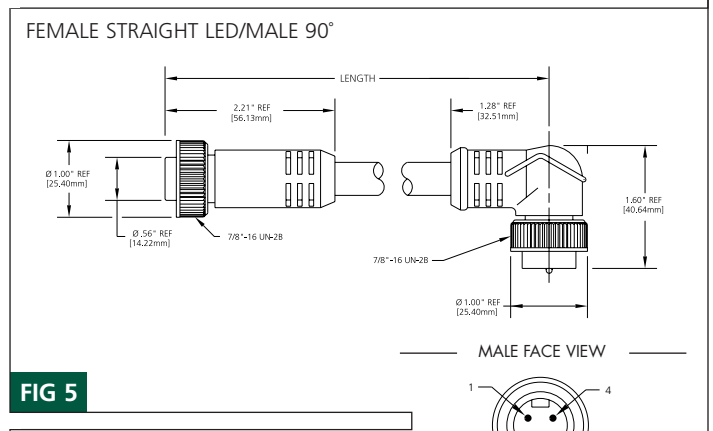
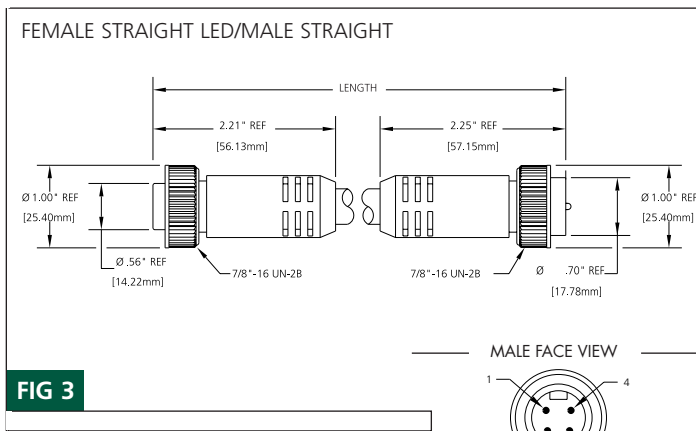
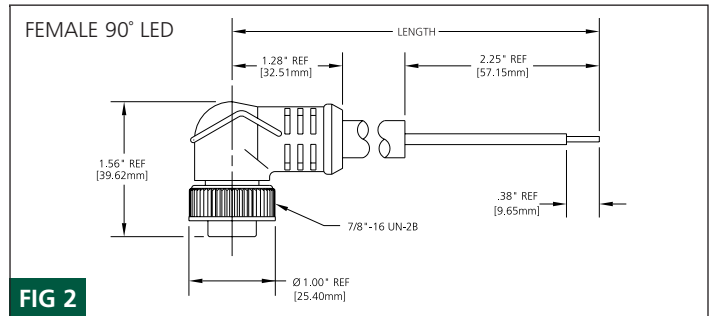
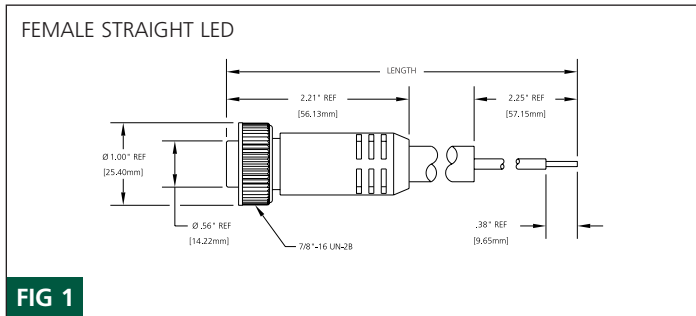
**ENVIRONMENTAL**

PROTECTION: IP 68, NEMA 6P  
 AMBIENT OPERATING TEMP: -4° to 221° F (-20° to 90° C)

**CERTIFICATIONS**

UL: UL RECOGNIZED, FILE NO. E46237  
 CSA: CSA CERTIFIED, FILE NO. LR6837

## CONNECTOR DIMENSIONS





# Single & Double-Ended Cordsets & Receptacles

#18 AWG power and #22 AWG control conductors  
 Oil- and abrasion-resistant black polyurethane (PUR) jacket  
 Mating receptacles available in male and female designs

<b>NEW</b>	<b>19P</b>		
FEMALE FACE VIEW		MALE FACE VIEW	
COLOR CODE	1- violet 2- red 3- gray 4- red/blue 5- blue (#18AWG)	6- green 7- brown (#18AWG) 8- white/green 9- white/yellow 10- white/gray	11- black 12- green/yellow-gnd (#18AWG) 13- yellow/brown 14- brown/green 15- white 16- yellow 17- pink 18- gray/brown 19- gray/pink
VOLTAGE	300V		
CURRENT	3A / 2A		
CONDUCTOR	#18-3 / #22-16		

FEMALE	FIG	<b>SINGLE-ENDED CORDSETS WITH #18 AWG/#22 AWG PVC CABLE 5 METERS LONG</b>
STRAIGHT	1	303000P80M050
MATING MALE RECEPTACLE*	3	3R3N36E80C300
FEMALE/MALE	FIG	<b>DOUBLE-ENDED CORDSETS WITH #18 AWG/#22 AWG PVC CABLE 5 METERS LONG</b>
STRAIGHT/STRAIGHT	2	333030P80M050
MATING FEMALE RECEPTACLE*	4	3R3N30E80C300

## CATALOG OPTIONS

Use the following chart to modify your part's specifications

303000P80M050

**CABLE LENGTH**

10 METER . . . . . M100

# Specifications



**MECHANICAL**

CONNECTOR FACE: PVC - UL STD 94 - V0  
 MOLDED BODY: PVC - UL STD 94 - V0  
 COUPLING NUT: ZINC DIECAST W/ BLACK EPOXY COAT  
 CONTACT: GOLD PLATED BRASS  
 CABLE: BLACK, #18 AWG (.75mm<sup>2</sup>) & #22 AWG (.34mm<sup>2</sup>), PUR JACKET & PVC CONDUCTOR INSULATION OVER, 42 X .15mm (#18) AND 42 X .10mm (#22) COPPER STRANDING

OUTSIDE DIAMETER: 19P - .45" (11.4mm)  
 RECEPTACLE SHELL: GRAY ANODIZED ALUMINUM  
 RECEPTACLE INSERT: PVC - UL STD 94 - V0  
 RECEPTACLE CONDUCTORS: #22 AWG W/ PVC INSULATION #18 AWG W/ PVC INSULATION

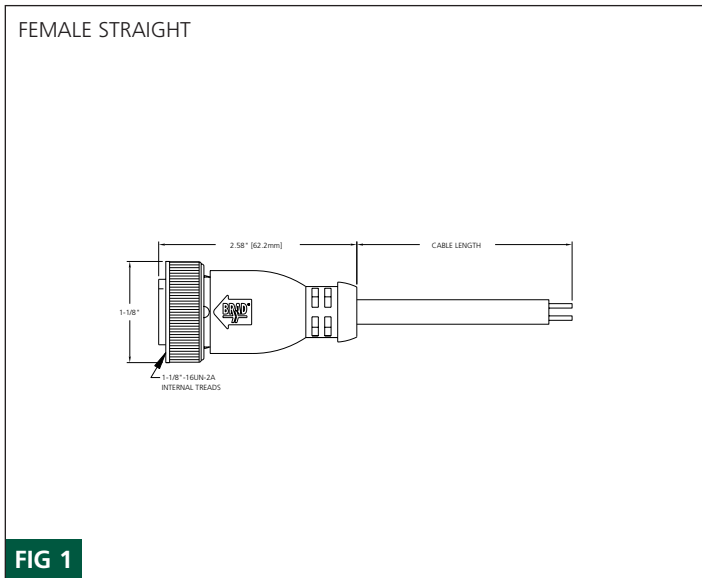
**ELECTRICAL**

VOLTAGE RATING: 300V AC/DC  
 AMPERAGE: 3A - 18AWG  
 2A - 22AWG

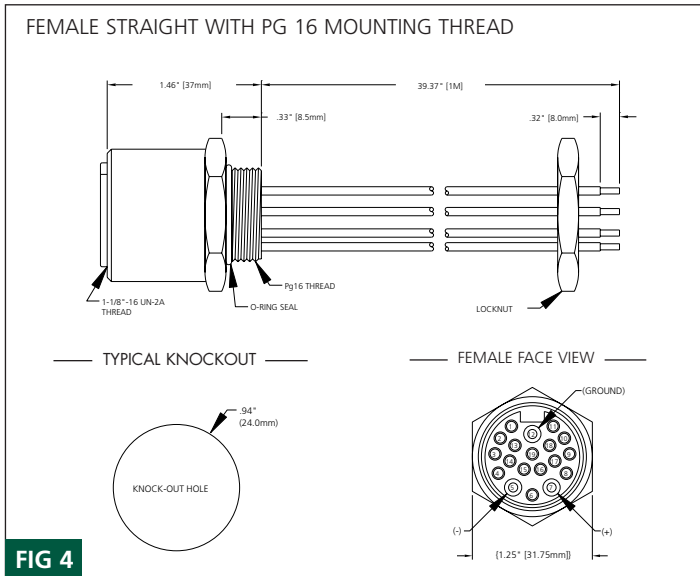
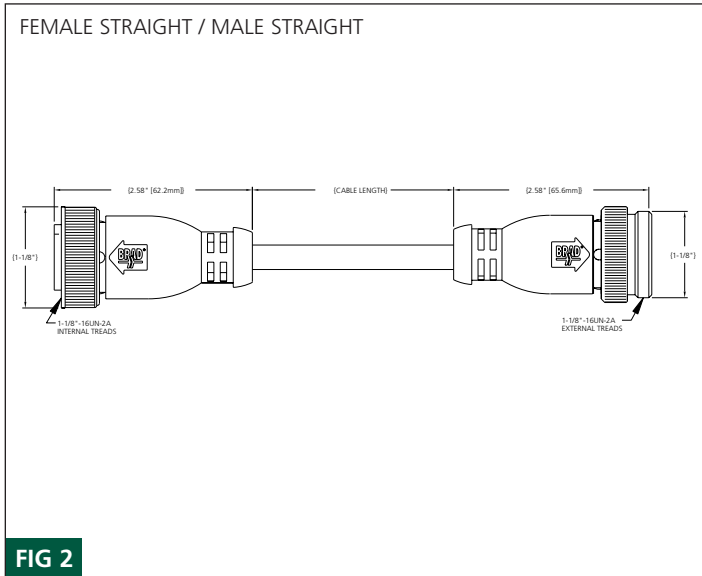
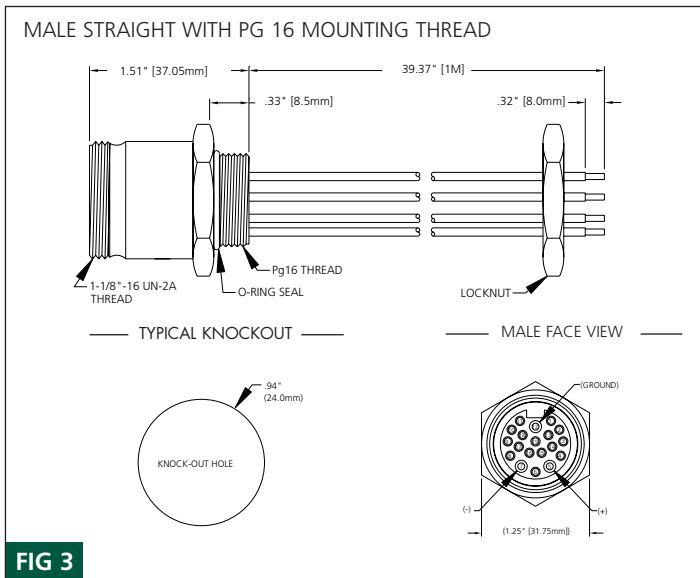
**ENVIRONMENTAL**

PROTECTION: IP 68  
 AMBIENT OPERATING TEMP: -4° TO 176° F (-20° TO 80° C)

## CORDSET DIMENSIONS



## RECEPTACLE DIMENSIONS





# Attachable Connectors

Allows easy field conversion to quick disconnect  
 Male with internal or external threads - female with internal threads  
 Secure screw terminals #15 AWG to #24 AWG - compatible with existing Mini-Change®

**NEW**

	3P	4P	5P
FEMALE FACE VIEW			
VOLTAGE	600V AC/DC	600V AC/DC	600V AC/DC
CURRENT	13A	13A	8A
CABLE RANGE	.20"-.48" (5mm-12mm) O.D.	.20"-.48" (5mm-12mm) O.D.	.20"-.48" (5mm-12mm) O.D.

FEMALE	FIG	CATALOG NUMBER		
STRAIGHT WITH INTERNAL THREADS	1	1A3000-34	1A4000-34	1A5000-34
MATING RECEPTACLE	4	1R3006A20A120	1R4006A20A120	1R5006A20A120

	3P	4P	5P
MALE FACE VIEW			
VOLTAGE	600V AC/DC	600V AC/DC	600V AC/DC
CURRENT	13A	13A	8A
CABLE RANGE	.20"-.48" (5mm-12mm) O.D.	.20"-.48" (5mm-12mm) O.D.	.20"-.48" (5mm-12mm) O.D.

MALE	FIG	CATALOG NUMBER		
STRAIGHT WITH EXTERNAL THREADS	2	1A3006-34	1A4006-34	1A5006-34
MATING RECEPTACLE*	5	1R3000A20A120	104000A20A120	1R5000A20A120
STRAIGHT WITH INTERNAL THREADS	3	1A3002-34	1A4002-34	1A5002-34
MATING RECEPTACLE*	6	1R3004A20A120	1R4004A20A120	1R5004A20A120

\*See Page 46 for additional Mating Receptacles

# Specifications



<b>MECHANICAL</b>	
CONNECTOR FACE:	POLYURETHANE
BODY:	POLYAMIDE PA6
CONTACT:	GOLD-PLATED BRASS
COUPLING NUT:	NICKEL-PLATED BRASS
GROMMET:	NEOPRENE
CABLE RANGE O.D.:	.20" - .48" (5.0 - 12.0mm)
ACCEPTABLE WIRE GAUGE RANGE:	#24 AWG (.25mm <sup>2</sup> ) - #15 AWG (2.0mm <sup>2</sup> )
<b>ELECTRICAL</b>	
VOLTAGE RATING:	600 V AC/DC
AMPERAGE:	3P - 13A 4P - 13A 5P - 8A
<b>ENVIRONMENTAL</b>	
PROTECTION:	IP 68
AMBIENT OPERATING TEMP:	-40° TO 176° F (-40° TO 80° C)
<b>CERTIFICATIONS</b>	
CSA:	CSA CERTIFIED, FILE NO. LR6837

## CONNECTOR DIMENSIONS

FEMALE STRAIGHT WITH INTERNAL THREADS

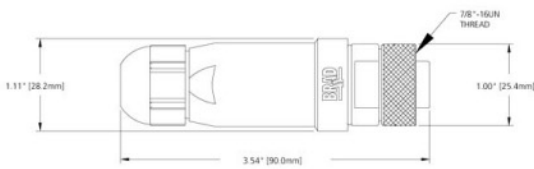


FIG 1

## RECEPTACLE DIMENSIONS

MALE RECEPTACLE WITH EXTERNAL THREADS AND 1/2" - 14NPT MOUNTING THREADS

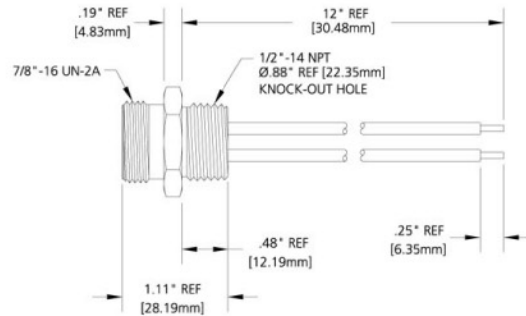


FIG 4

MALE STRAIGHT WITH EXTERNAL THREADS

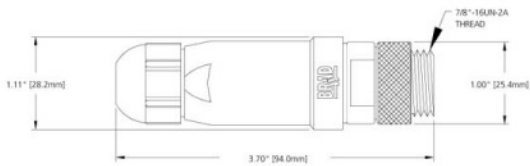


FIG 2

FEMALE RECEPTACLE WITH INTERNAL THREADS AND 1/2" - 14NPT MOUNTING THREADS

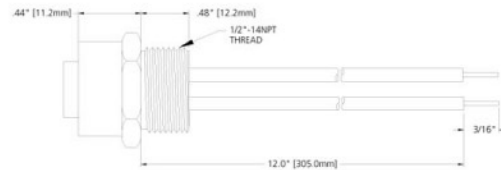


FIG 5

SEE PAGE 46 FOR ADDITIONAL RECEPTACLES

MALE STRAIGHT WITH INTERNAL THREADS

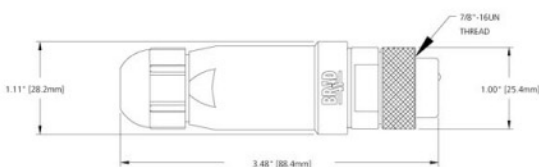


FIG 3

FEMALE RECEPTACLE WITH EXTERNAL THREADS AND 1/2" - 14NPT MOUNTING THREADS

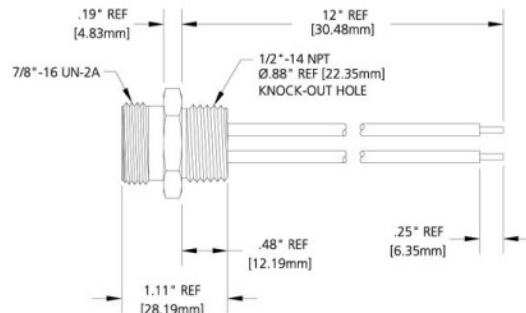


FIG 6



# Accessory Products

Closure caps for receptacles, connectors and Multi-ports  
 Threaded unions for mating (2) cordsets  
 Female and male plugs for liquid tight conduit terminations  
 90° adapters with (1) male and (1) female plug

CLOSURE CAPS & THREADED UNIONS					
DESCRIPTION	FOR USE WITH	FIG	2P to 6P (A size)	6P (B size) to 8P	9P to 12P
ALUMINUM CLOSURE CAP WITH INTERNAL THREADS	MALE & FEMALE RECEPTACLES + MULTIPORT BASE UNITS	1	65-0086	65-0103	65-0105
ALUMINUM CLOSURE CAP WITH EXTERNAL THREADS	MALE & FEMALE CONNECTORS	2	65-0085	65-0102	65-0104
ALUMINUM THREADED UNION	MALE & FEMALE CONNECTORS	3	55-0426	55-0466	55-0496

MINI-CHANGE® PLUGS WITH #16 AWG PVC LEADS 6'-0" LONG FOR 1/2" LIQUID TIGHT CONDUIT					
		2P	3P	4P	5P
FEMALE FACE VIEW					
COLOR CODE		1- white 2- black	1- green-gnd 2- black 3- white	1- black 2- white 3- red 4- green-gnd	1- white 2- red 3- green-gnd 4- orange 5- black
FEMALE	FIG 4	40718	40925	41132	41344
MALE	FIG 4	40780	41037	51149	41593

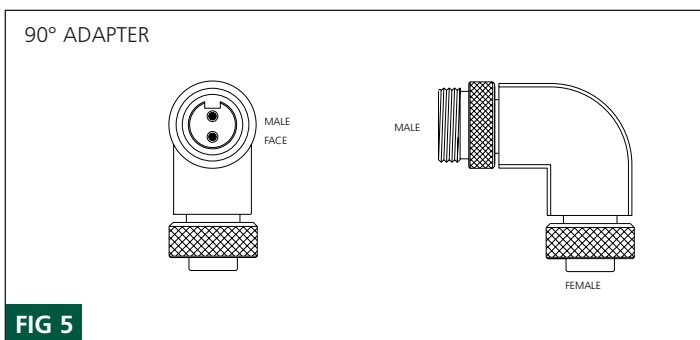
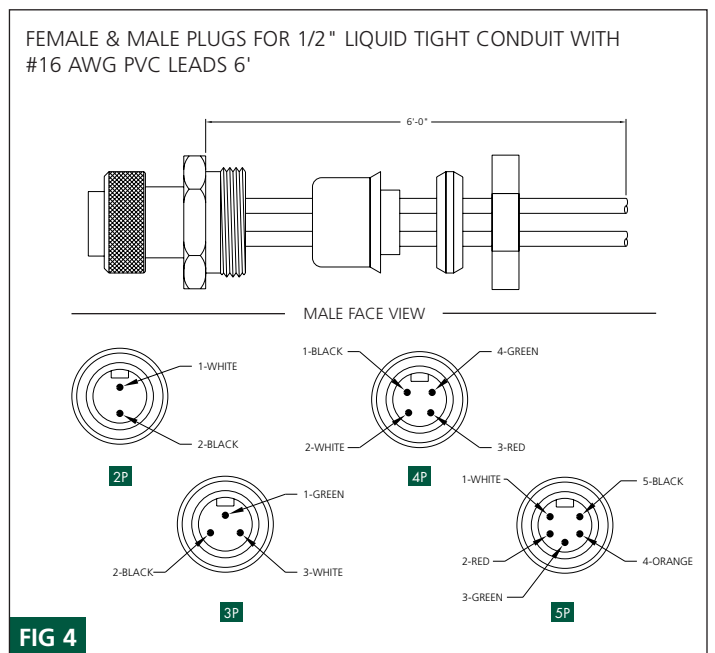
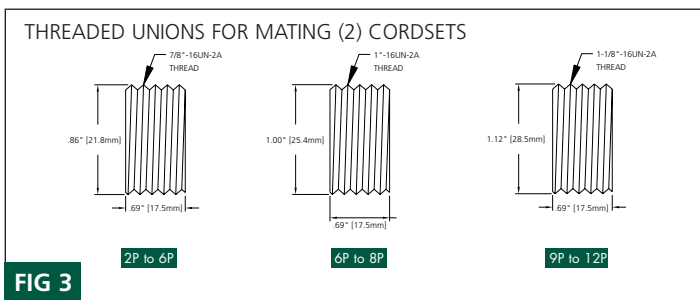
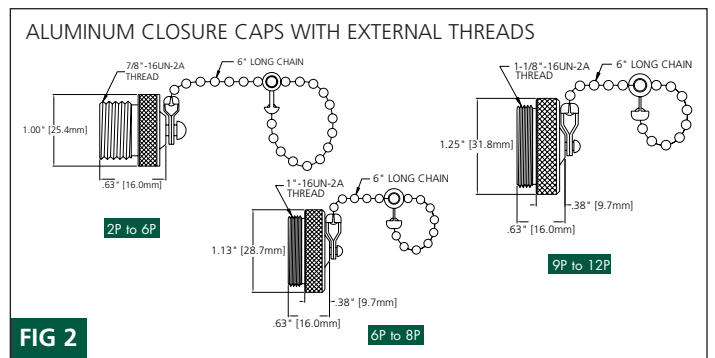
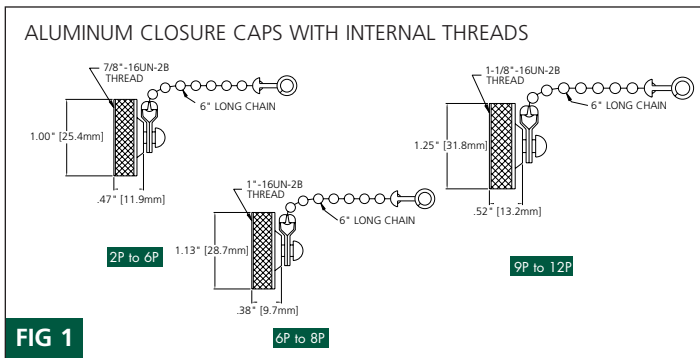
90° ADAPTERS WITH (1) MALE PLUG AND (1) FEMALE PLUG					
		2P	3P	4P	5P
90°	FIG 5	40761	41048	41212	41481

# Specifications



- MECHANICAL**  
 CLOSURE CAPS W/ INTERNAL THREADS: GRAY ANODIZED ALUMINUM  
 CLOSURE CAPS W/ EXTERNAL THREADS: BLACK ANODIZED ALUMINUM  
 THREADED UNION: GRAY ANODIZED ALUMINUM  
 LIQUID-TIGHT PLUGS: ZINC PLATED STEEL  
 CONNECTOR BODY: ZINC PLATED STEEL  
 COUPLING NUT: GRAY ANODIZED ALUMINUM  
 CLAMP NUT: ZINC PLATED STEEL  
 INSERT: PVC - UL STD 94 - V0  
 90° ADAPTER CONNECTOR BODY: YELLOW NYLON  
 COUPLING NUTS: ZINC DIECAST W/ BLACK EPOXY  
 INSERT: PVC - UL STD 94 - V0
- ELECTRICAL**  
 LIQUID-TIGHT PLUGS AND 90° ADAPTORS: 600V  
 VOLTAGE RATING: CURRENT: 2P - 13A  
 3P - 10A  
 4P - 8A  
 5P - 8A
- ENVIRONMENTAL**  
 PROTECTION: IP65, NEMA 4  
 AMBIENT OPERATING TEMP: -4° TO 221° F (-20° TO 105° C)
- CERTIFICATIONS**  
 UL: UL RECOGNIZED, FILE NO. E46237  
 CSA: CSA CERTIFIED, FILE NO. LR6837

## ACCESSORY DIMENSIONS & DETAILS



# Receptacle Catalog Number Matrix

Below is an example of a properly constructed Receptacle part number and how it translates to an actual part.

## 7R3006A17A120

Micro-Change® Dual Keyway, 3 Pole Male Straight Receptacle, 1/2"-14 NPT Mounting Threads with 12 Inch Leads, 18 AWG, PVC, auto color code.

7 R 3 0 0 6 A 1 7 A 1 2 0

<b>PRODUCT FAMILY</b>	<b>NUMBER OF POLES</b> X X Pole 2 to 6 Pole Available for Dual Keyway 3 to 5 Pole Available for Single Keyway 3 and 4 Pole Available for Reverse Keyway	<b>RECEPTACLE TYPE</b> 006 Male Straight 1/2"-14 NPT Mounting Threads, Single and Dual Key A06 Male Straight 1/4"-18 NPT Mounting Threads, Dual Key Only E06 Male Straight M 14 X 1 Mounting Threads, Single and Reverse Key A00 Female Straight 1/4"-18 NPT Mounting Threads, Single and Dual Key B00 Female Straight Back Panel Mount, Single and Dual Key	<b>WIRE TYPE</b> Dual Keyway A17 18 AWG, PVC Auto Color Code A19 22 AWG, PVC Auto Color Code Single Keyway A16 18 AWG, PVC DC Color Code A18 22 AWG, PVC DC Color Code Reverse Keyway A26 22 AWG, PVC Int'l AC Color Code	<b>UNIT OF MEASURE</b> A Inches F Feet M Meters	<b>WIRE LENGTH</b> 1st Digit 10 X Length 2nd Digit 1 X Length 3rd Digit .1 X Length	<b>SHELL MATERIAL</b> Blank Additional Character 1 Standard Material Stainless Steel

# Cordset Catalog Number Matrix

Below is an example of a properly constructed Cordset part number and how it translates to an actual part.

## 803000A09M020

Micro-Change® Single Keyway M12 3 Pole Female Straight Single-Ended Cordset,  
22 AWG PVC Cable with DC Color Code, 2 meters long.

# 803000A09M020

PRODUCT FAMILY		NUMBER OF POLES	CABLE TYPE	CONNECTOR TYPE	UNIT OF MEASURE	CABLE LENGTH	COUPLING NUT
1 <sup>st</sup> Character	2 <sup>nd</sup> Character						
7	0	X	000	000	F	10 X Length	Blank
8	7	X	S00	000	M	1 X Length	1
B	8	3	001	001		.1 X Length	2
	B	3	S01	001			
		5	006	006			
		5	S06	006			
		5	007	007			
		5	S07	007			
		5	ON0	030			
		5	OP0	030			
		5	ON1	031			
		5	OP1	031			
		5		032			
		5		032			
		5		033			
		5		ON7			
		5		ON9			
		5		OP7			
		5		OP9			



# Single-Ended Cordsets

Dual Keyway 1/2" - 20 UNF

**AUTOMOTIVE**

#22 AWG yellow PVC cable with metallic braid – auto color code  
 #18 AWG yellow PVC cable without metallic braid – auto color code  
 Low-resistance contact design with gold/palladium nickel plating

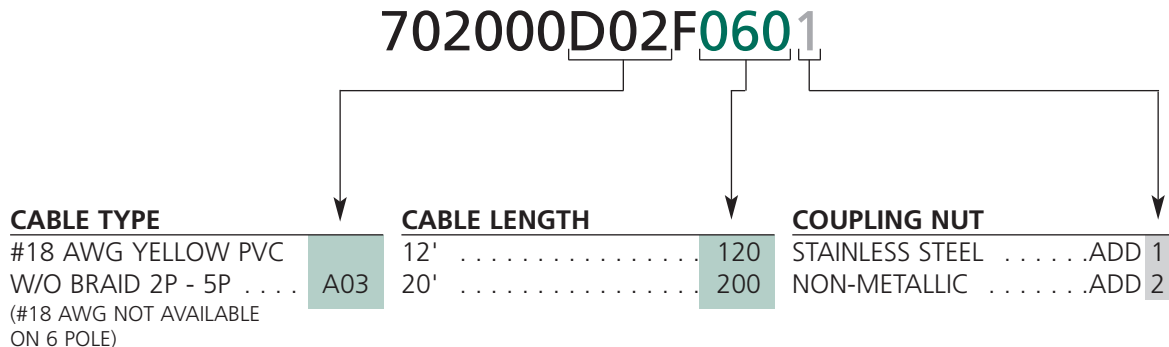
	2P	3P	4P	5P	6P
FEMALE FACE VIEW					
COLOR CODE	1- brown 2- blue	1- green - gnd 2- red - black trace 3- red - white trace	1- red - black trace 2- red - white trace 3- red 4- green - gnd	1- red - white trace 2- red 3- green - gnd 4- red - yellow trace 5- red - black trace	1- red - white trace 2- red 3- green - gnd 4- red - yellow trace 5- red - black trace 6- red - blue trace
VOLTAGE	250V AC/DC	250V AC/DC	250V AC/DC	250V AC/DC	250V AC/DC
CURRENT	4A	4A	4A	4A	4A
CONDUCTOR	#22-2	#22-3	#22-4	#22-5	#22-6

FEMALE	FIG	SINGLE - ENDED CORDSETS WITH #22 AWG PVC CABLE WITH BRAID 6 FEET LONG				
STRAIGHT	1	702000D02F060	703000D02F060	704000D02F060	705000D02F060	706000D02F060
90°	2	702001D02F060	703001D02F060	704001D02F060	705001D02F060	706001D02F060
MATING RECEPTACLE*	5	7R2006A19A120	7R3006A19A120	7R4006A19A120	7R5006A19A120	7R6006A19A120
MALE	FIG	SINGLE - ENDED CORDSETS WITH #22 AWG PVC CABLE WITH BRAID 6 FEET LONG				
STRAIGHT	3	702006D02F060	703006D02F060	704006D02F060	705006D02F060	706006D02F060
90°	4	702007D02F060	703007D02F060	704007D02F060	705007D02F060	706007D02F060
MATING RECEPTACLE*	6	7R2A00A19A120	7R3A00A19A120	7R4A00A19A120	7R5A00A19A120	7R6A00A19A120

## CATALOG OPTIONS

\*See Page 134 for additional Mating Receptacles

Use the following chart to modify your part's specifications



# Specifications

## CONNECTOR DIMENSIONS

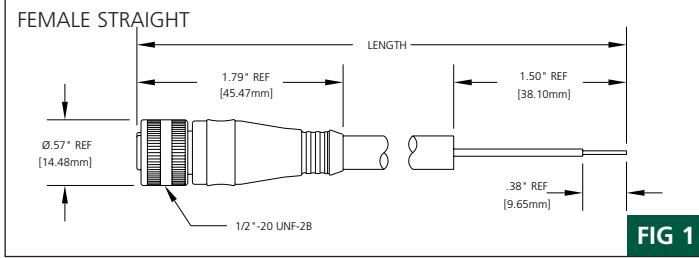


FIG 1

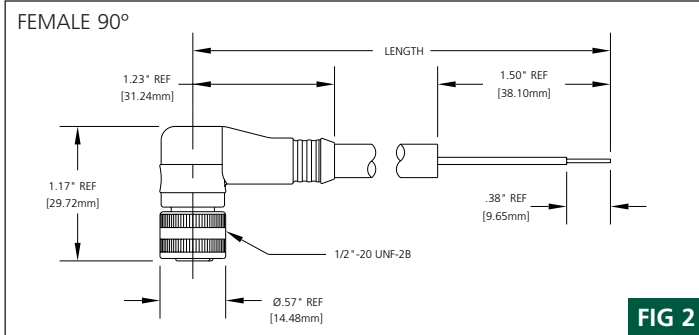


FIG 2

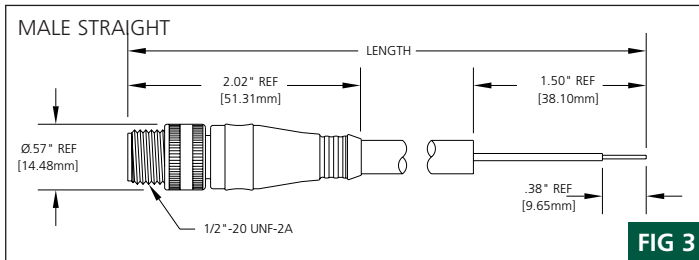
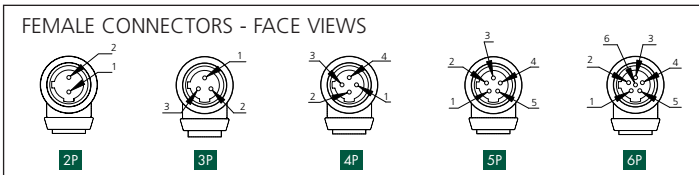


FIG 3

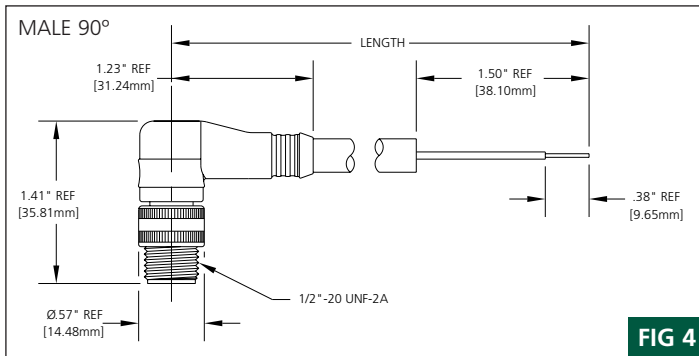
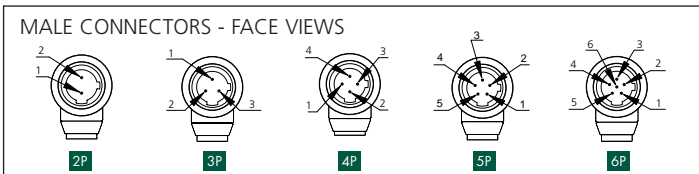


FIG 4



**MECHANICAL**  
 CONNECTOR FACE: NYLON 6/6  
 MOLDED BODY: PVC  
 O-RING: NITRILE RUBBER  
 COUPLING NUT: ZINC DIECAST W/ BLACK EPOXY COAT, OPTIONAL STAINLESS STEEL TYPE 303, NON-METALLIC WHITE DELRIN



**CABLE:** YELLOW #22 AWG PVC JACKET 70% METALLIC BRAID AND PVC CONDUCTOR INSULATION OVER 26 X #36 COPPER STRANDING, 300V, UL STYLE 2661, CSA AWM I/II A/B  
 YELLOW #18 AWG PVC JACKET AND PVC CONDUCTOR INSULATION OVER 41 X #34 COPPER STRANDING, 300V, UL STYLE 2661, CSA AWM I/II A/B  
**OUTSIDE DIAMETER:**  
 #22 AWG #18 AWG  
 WITH 70% BRAID WITHOUT BRAID  
 2P - .23" (5.8mm) 2P - .29" (7.4mm)  
 3P - .23" (5.8mm) 3P - .29" (7.4mm)  
 4P - .25" (6.4mm) 4P - .29" (7.4mm)  
 5P - .26" (6.6mm) 5P - .29" (7.4mm)  
 6P - .29" (7.4mm)

**ELECTRICAL**  
 VOLTAGE RATING: 250V AC/DC  
 AMPERAGE: 2P - 4A  
 3P - 4A  
 4P - 4A  
 5P - 4A  
 6P - 4A

**ENVIRONMENTAL**  
 PROTECTION: IP 68, NEMA 6P  
 AMBIENT OPERATING TEMP: -4° TO 221° F (-20° TO 105° C)

**CERTIFICATIONS**  
 UL: UL LISTED, FILE NO. E152210  
 CSA: CSA CERTIFIED, FILE NO LR6837

## RECEPTACLE DIMENSIONS

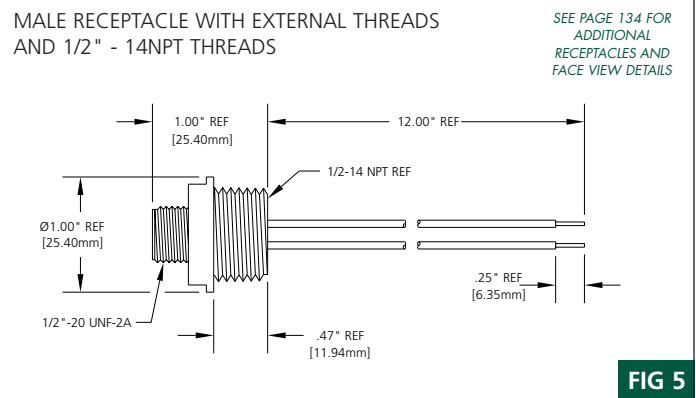


FIG 5

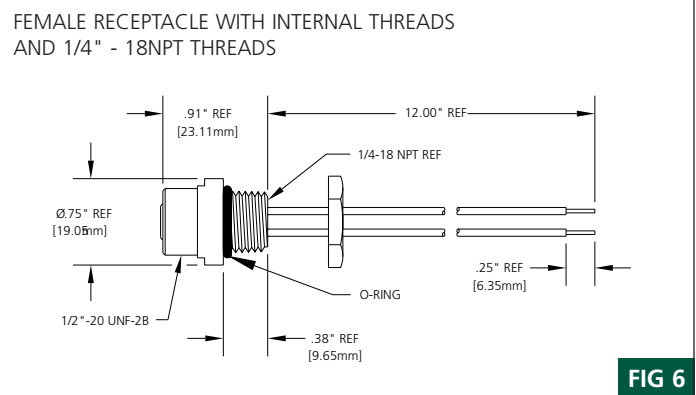


FIG 6



# Single-Ended Cordsets

Dual Keyway 1/2" - 20 UNF

AUTOMOTIVE

#18 AWG yellow PUR high-flex cable – auto color code  
 Oil- and abrasion-resistant polyurethane jacket  
 Low-resistance contact design with gold/palladium nickel plating

	2P	3P	4P	5P
FEMALE FACE VIEW				
COLOR CODE	1- brown 2- blue	1- green - gnd 2- red/black 3- red/white	1- red/black 2- red/white 3- red 4- green - gnd	1- red/white 2- red 3- green - gnd 4- red/yellow 5- red/black
VOLTAGE	250V AC/DC	250V AC/DC	250V AC/DC	250V AC/DC
CURRENT	4A	4A	4A	4A
CONDUCTOR	#18-2	#18-3	#18-4	#18-5

FEMALE	FIG	SINGLE-ENDED CORDSETS WITH #18 AWG HIGH FLEX PUR CABLE 6 FEET LONG			
STRAIGHT	1	702000B01F060	703000B01F060	704000B01F060	705000B01F060
90°	2	702001B01F060	703001B01F060	704001B01F060	705001B01F060
MATING RECEPTACLE*	5	7R2006A19A120	7R3006A19A120	7R4006A19A120	7R5006A19A120
MALE W/ EXTERNAL THREADS	FIG	SINGLE-ENDED CORDSETS WITH #18 AWG HIGH FLEX PUR CABLE 6 FEET LONG			
STRAIGHT	3	702006B01F060	703006B01F060	704006B01F060	705006B01F060
90°	4	702007B01F060	703007B01F060	704007B01F060	705007B01F060
MATING RECEPTACLE*	6	7R2A00A19A120	7R3A00A19A120	7R4A00A19A120	7R5A00A19A120

## CATALOG OPTIONS

\*See Page 134 for additional Mating Receptacles

Use the following chart to modify your part's specifications

702000B01F0601

**CABLE LENGTH**

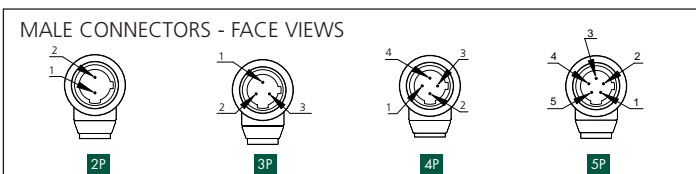
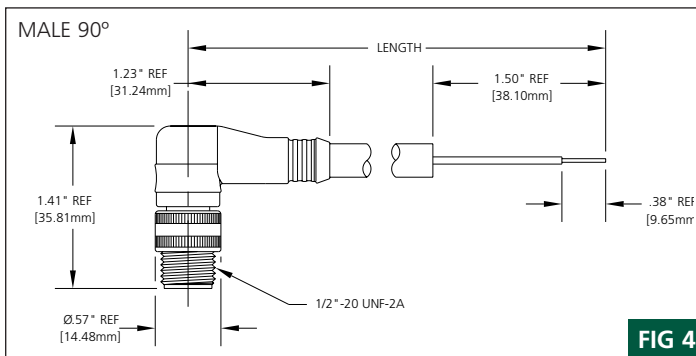
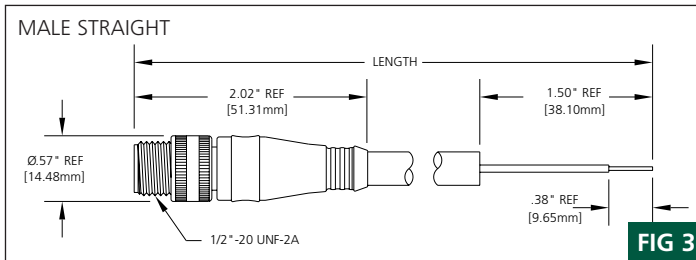
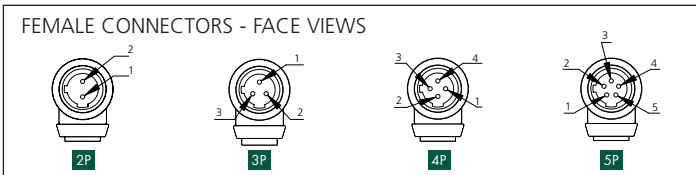
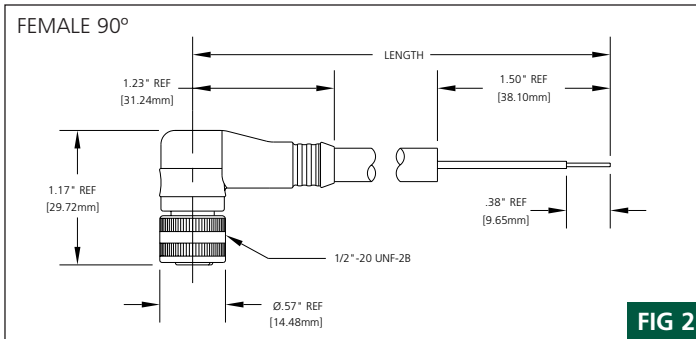
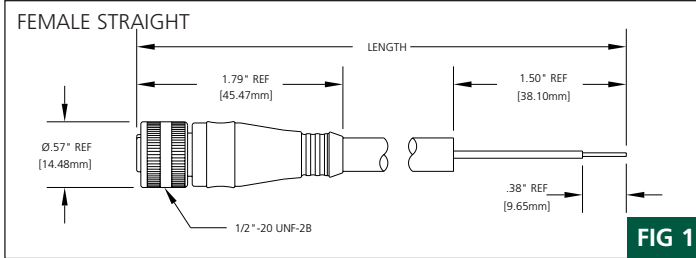
12'	120
20'	200

**COUPLING NUT**

STAINLESS STEEL . . . . .ADD 1

# Specifications

## CONNECTOR DIMENSIONS



- MECHANICAL**  
 CONNECTOR FACE: NYLON 6/6  
 MOLDED BODY: POLYURETHANE  
 O-RING: VITON  
 COUPLING NUT: ZINC DIECAST W/ BLACK EPOXY COAT, OPTIONAL STAINLESS STEEL TYPE 303
- CABLE:**  
 YELLOW #18 AWG POLYURETHANE JACKET AND PVC CONDUCTOR INSULATION OVER 65 X #36 COPPER STRANDING, 300V, UL STYLE 20549, CSA AWM I/II A/B
- OUTSIDE DIAMETER:**  
 2P - .24" (6.1mm)  
 3P - .27" (6.9mm)  
 4P - .29" (7.4mm)  
 5P - .32" (8.1mm)
- ELECTRICAL**  
 VOLTAGE RATING: 250V AC/DC  
 AMPERAGE:  
 2P - 4A  
 3P - 4A  
 4P - 4A  
 5P - 4A
- ENVIRONMENTAL**  
 PROTECTION: IP 68, NEMA 6P  
 AMBIENT OPERATING TEMP: -4° TO 176° F (-20° TO 80° C)
- CERTIFICATIONS**  
 UL: UL LISTED, FILE NO. E152210  
 CSA: CSA CERTIFIED, FILE NO LR6837

## RECEPTACLE DIMENSIONS

MALE RECEPTACLE WITH EXTERNAL THREADS AND 1/2" - 14NPT THREADS

SEE PAGE 134 FOR ADDITIONAL RECEPTACLES AND FACE VIEW DETAILS

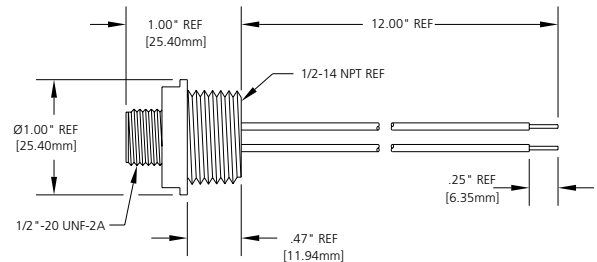


FIG 5

FEMALE RECEPTACLE WITH INTERNAL THREADS AND 1/4" - 18NPT THREADS

SEE PAGE 134 FOR ADDITIONAL RECEPTACLES AND FACE VIEW DETAILS

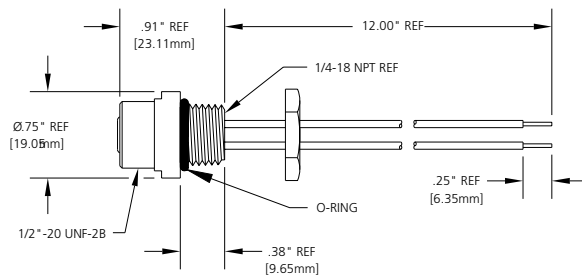


FIG 6

3P



# Single-Ended Coil Cordsets

## Dual Keyway 1/2" - 20 UNF

**AUTOMOTIVE**

#18 AWG yellow PUR cable – auto color code  
 Oil- and abrasion-resistant polyurethane jacket  
 Low-resistance contact design with gold/palladium nickel plating

<b>NEW</b>	<b>3P</b>
FEMALE FACE VIEW	
COLOR CODE	1- green - gnd 2- red w/black trace 3- red w/white trace
CURRENT	250V AC/DC
VOLTAGE	4A
CONDUCTOR	#18-3

FEMALE		SINGLE - ENDED CORDSETS WITH #18 AWG PUR CABLE - COIL CORD	
		1.5 FEET RETRACTED/4.5 FEET EXTENDED	4 FEET RETRACTED/12 FEET EXTENDED
STRAIGHT	1	703000B13F045	703000B13F120
90°	2	703001B13F045	703001B13F120
MATING RECEPTACLE*	5	7R3006A19A120	
MALE		SINGLE - ENDED CORDSETS WITH #18 AWG PUR CABLE - COIL CORD	
		1.5 FEET RETRACTED/4.5 FEET EXTENDED	4 FEET RETRACTED/12 FEET EXTENDED
STRAIGHT	3	703006B13F045	703006B13F120
90°	4	703007B13F045	703007B13F120
MATING RECEPTACLE*	6	7R3A00A19A120	

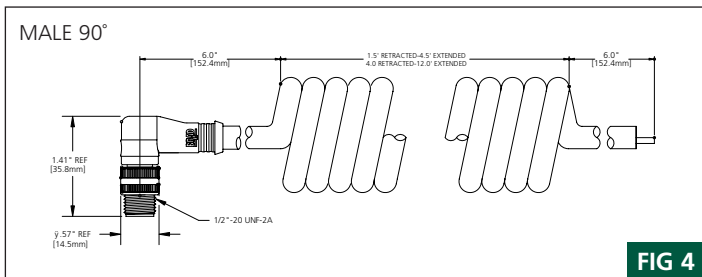
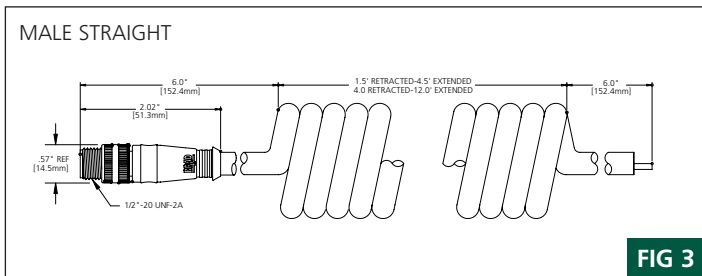
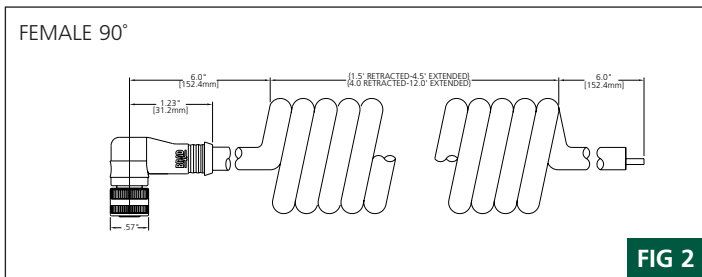
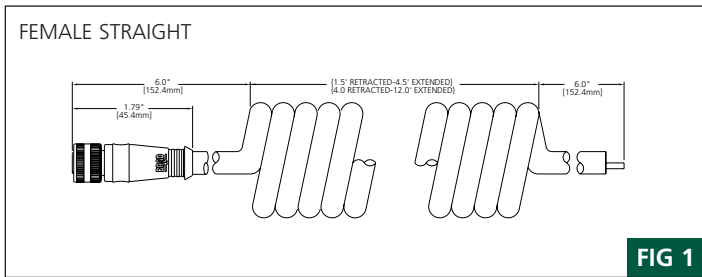
\*See Page 134 for additional Mating Receptacles

# Specifications

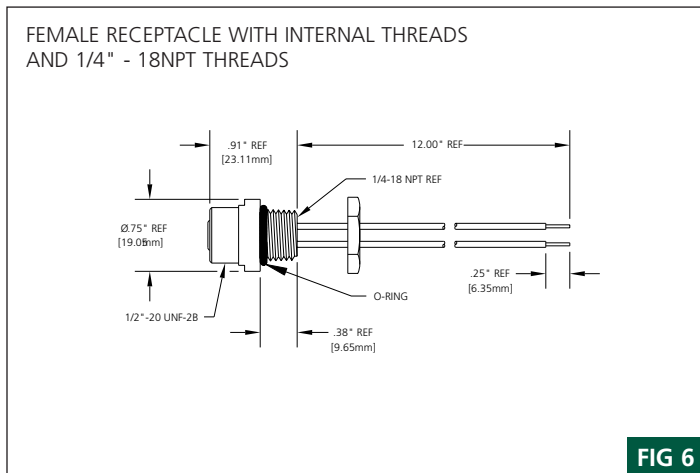
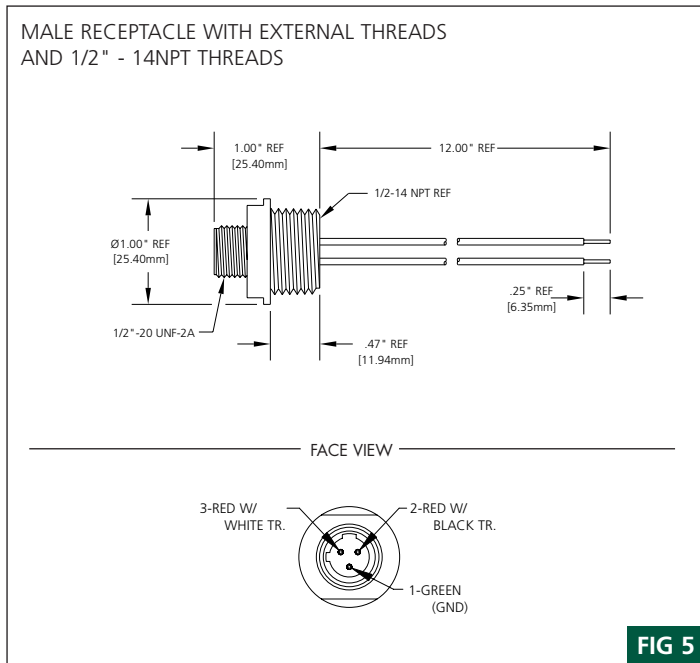


- MECHANICAL**  
 CONNECTOR FACE: NYLON 6/6  
 MOLDED BODY: POLYURETHANE  
 O-RING: NITRILE RUBBER  
 COUPLING NUT: ZINC DIECAST W/ BLACK EPOXY COAT  
 CABLE: YELLOW #18 AWG POLYURETHANE JACKET AND POLYPROPYLENE CONDUCTOR INSULATION OVER 168 X #40 COPPER STRANDING, 300V, UL STYLE 20197, CSA AWM I/II A/B
- ELECTRICAL**  
 OUTSIDE DIAMETER: 3P - .25" (6.4mm)  
 VOLTAGE RATING: 250V AC/DC  
 AMPERAGE: 3P - 4A
- ENVIRONMENTAL**  
 PROTECTION: IP 68, NEMA 6P  
 AMBIENT OPERATING TEMP: -4° F TO 176° (-20° TO 80° C)
- CERTIFICATIONS**  
 UL: UL LISTED, FILE NO. E152210  
 CSA: CSA CERTIFIED, FILE NO LR6837

## CONNECTOR DIMENSIONS



## RECEPTACLE DIMENSIONS





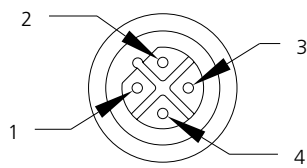
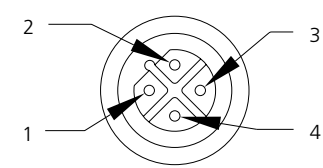
# Single-Ended Cordsets

## Reverse Keyway M12

#22 AWG yellow PVC cable – IEC color code

Oil-resistant PVC jacket

Low-resistance contact design with gold/palladium nickel plating

	3P	4P
FEMALE FACE VIEW		
COLOR CODE	1- brown 2- blue 3- not used 4- green/yellow - gnd	1- brown 2- blue 3- black 4- green/yellow - gnd
VOLTAGE	250V AC/DC	250V AC/DC
CURRENT	4A	3A
CONDUCTOR	#22-3	#24-4

FEMALE	FIG	SINGLE - ENDED CORDSETS WITH #22 AWG PVC CABLE 2 METERS LONG	
STRAIGHT	1	B03000A11M020	B04000A11M020
90°	2	B03001A11M020	B04001A11M020
MATING RECEPTACLE*	3	BR3E06A26A120	BR4E06A26A120

### CATALOG OPTIONS

\*See Page 150 for additional Mating Receptacles

Use the following chart to modify your part's specifications

**B03000A11M020**

**CABLE LENGTH**

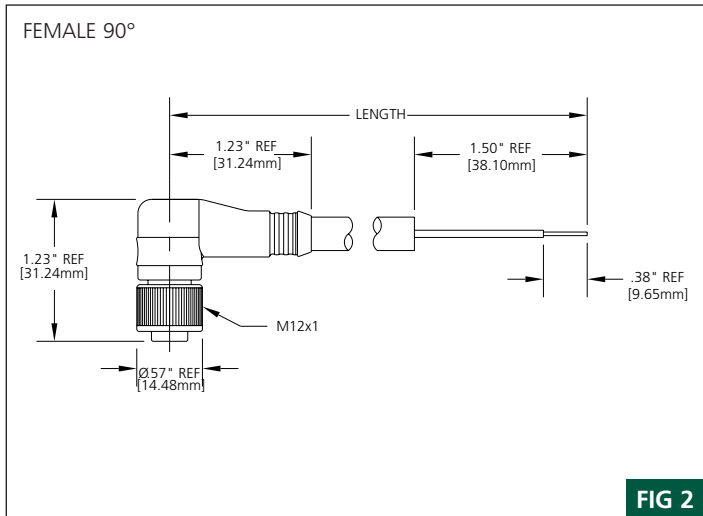
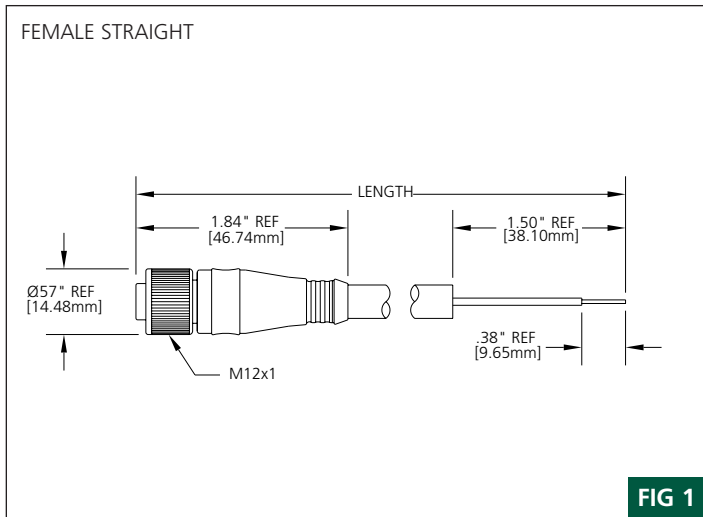
4 METER .....	040
5 METER .....	050

# Specifications

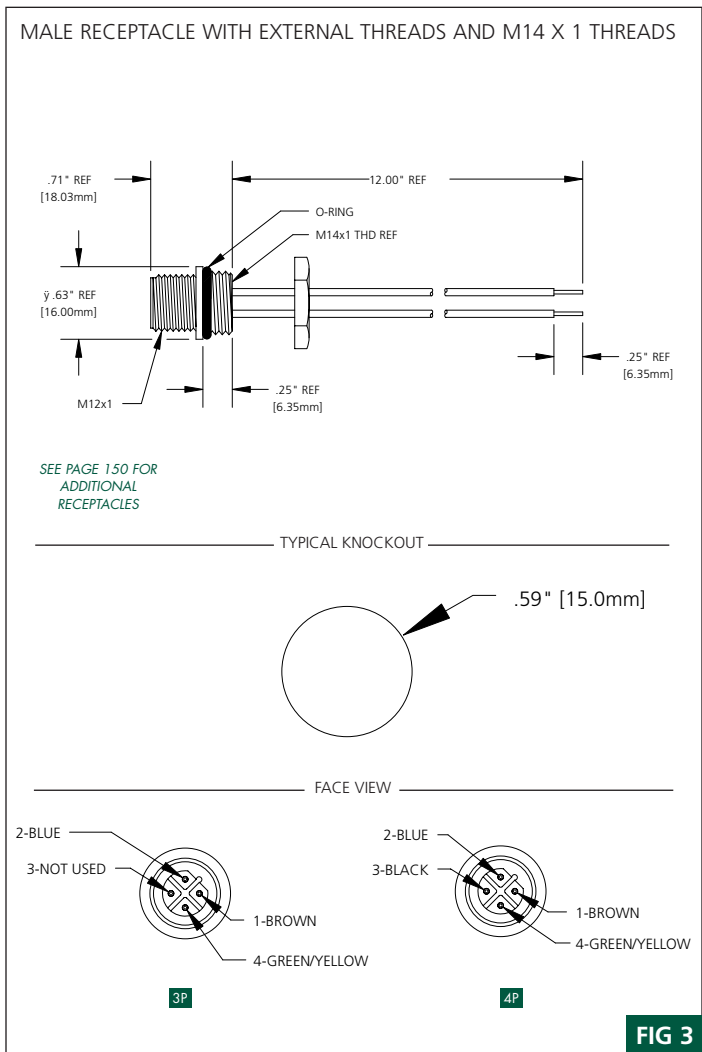


<b>MECHANICAL</b>	
CONNECTOR FACE:	NYLON 6/6
MOLDED BODY:	PVC
O-RING:	NITRILE RUBBER
COUPLING NUT:	ZINC DIECAST WITH BLACK EPOXY COAT
CABLE:	#22 AWG:3P, #24 AWG:4P PVC JACKET AND PVC CONDUCTOR INSULATION OVER 19 X #36 COPPER STRANDING, 300V
OUTSIDE DIAMETER:	3P - .20" (5.0mm) 4P - .18" (4.6mm)
<b>ELECTRICAL</b>	
VOLTAGE RATING:	250V AC/DC
AMPERAGE:	3P - 4A 4P - 3A
<b>ENVIRONMENTAL</b>	
PROTECTION:	IP 68, NEMA 6P
AMBIENT OPERATING TEMP:	14° TO 158° F (-10° TO 70° C)
<b>CERTIFICATIONS</b>	
UL:	UL LISTED, FILE NO. E152210
CSA:	CSA CERTIFIED, FILE NO LR6837

## CONNECTOR DIMENSIONS



## RECEPTACLE DIMENSIONS





# Single-Ended Cordsets

## 360° Shield Dual Keyway 1/2" - 20 UNF

#22 AWG black PVC cable with braid shield and drain – auto color code  
 Oil-resistant PVC jacket  
 For use in high EMI and RFI environments

<b>NEW</b>	<b>2P</b>	<b>3P</b>	<b>4P</b>	<b>5P</b>	<b>6P</b>
<b>FEMALE FACE VIEW</b>					
<b>COLOR CODE</b>	1- blue 2- brown Coupling nut - drain	1- green - gnd 2- red/black 3- red/white Coupling nut - drain	1- red/black 2- red/white 3- red 4- green - gnd Coupling nut - drain	1- red/white 2- red 3- green - gnd 4- red/yellow 5- red/black Coupling nut - drain	1- red/white 2- red 3- green - gnd 4- red/yellow 5- red/black 6- red/blue Coupling nut - drain
<b>VOLTAGE</b>	250V AC/DC	250V AC/DC	250V AC/DC	250V AC/DC	250V AC/DC
<b>CURRENT</b>	4A	4A	4A	4A	4A
<b>CONDUCTOR</b>	#22-2 + #22 Drain	#22-3 + #22 Drain	#22-4 + #22 Drain	#22-5 + #22 Drain	#22-6 + #22 Drain

<b>FEMALE</b>	<b>FIG</b>	<b>SINGLE - ENDED CORDSETS WITH #22 AWG PVC CABLE WITH SHIELD 2 METERS LONG</b>				
<b>STRAIGHT</b>	1	702S00D05F060	703S00D05F060	704S00D05F060	705S00D05F060	706S00D05F060
<b>90°</b>	2	702S01D05F060	703S01D05F060	704S01D05F060	705S01D05F060	706S01D05F060
<b>MATING RECEPTACLE*</b>	3	7R2006A19A1203	7R3006A19A1203	7R4006A19A1203	7R5006A19A1203	7R6006A19A1203

### CATALOG OPTIONS

\*See Page 146 for additional Mating Receptacles

Use the following chart to modify your part's specifications

# 702S00D05F060

**CABLE LENGTH**

12'	120
20'	200

# Specifications



**MECHANICAL**  
 CONNECTOR FACE: POLYBUTYLENE TEREPHTHALATE (PBT)  
 MOLDED BODY: PBT  
 O-RING: NITRILE RUBBER  
 COUPLING NUT: NICKEL PLATED BRASS  
 CABLE: BLACK #22 AWG PVC JACKET 80% METALLIC BRAID SHIELD AND PVC CONDUCTOR INSULATION OVER 26 X #36 COPPER STRANDING, 300V, UL STYLE 2661, CSA AWM I/II A/B

OUTSIDE DIAMETER:  
 2P - .23" (5.8mm)  
 3P - .23" (5.8mm)  
 4P - .25" (6.4mm)  
 5P - .26" (6.6mm)  
 6P - .29" (7.4mm)

**ELECTRICAL**  
 VOLTAGE RATING: 250V AC/DC  
 AMPERAGE: 2P TO 6P - 4A

**ENVIRONMENTAL**  
 SHIELD EFFECTIVENESS RATING: 70.4dB AVERAGE FROM 0-320 MHz  
 PROTECTION: IP 68, NEMA 6P  
 AMBIENT OPERATING TEMP: -4° TO 221° F (-20° TO 105° C)

**CERTIFICATIONS**  
 CSA: CSA CERTIFIED, FILE NO LR6837

## CONNECTOR DIMENSIONS

FEMALE STRAIGHT\*\*

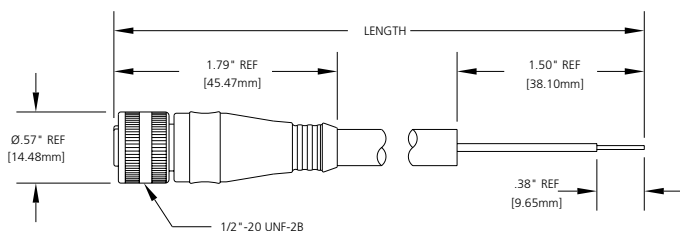


FIG 1

FEMALE 90°\*\*

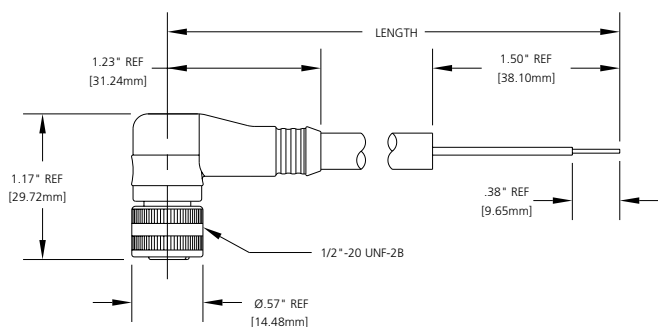
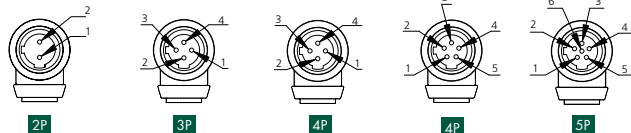


FIG 2

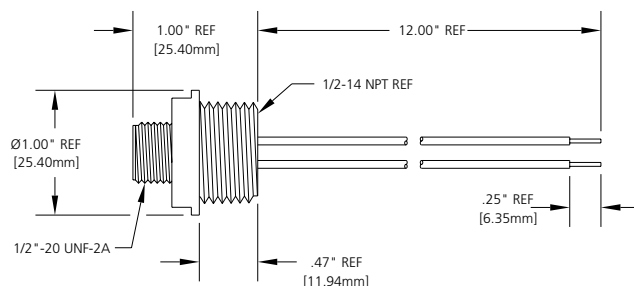
FEMALE CONNECTORS - FACE VIEWS



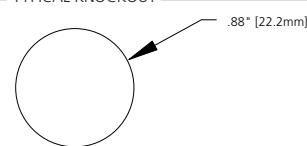
## RECEPTACLE DIMENSIONS

MALE RECEPTACLE WITH EXTERNAL THREADS AND 1/2" - 14NPT THREADS

SEE PAGE 146 FOR ADDITIONAL RECEPTACLES



TYPICAL KNOCKOUT



MALE FACE VIEW

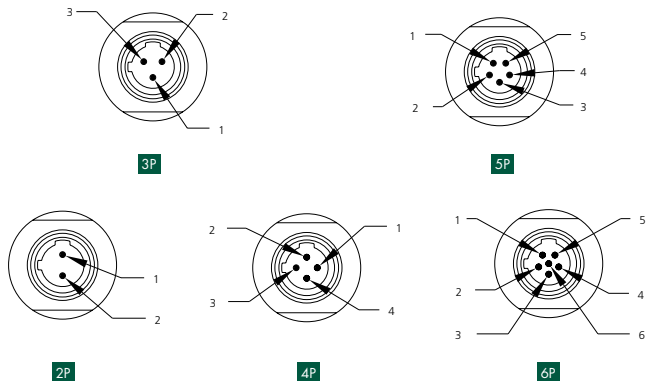


FIG 3

\*\*Electrical continuity exists for coupling nut to drain conductor.



# Double-Ended Cordsets

## Dual Keyway 1/2" - 20 UNF

**AUTOMOTIVE**

#22 AWG yellow PVC cable with metallic braid – auto color code  
 #18 AWG yellow PVC cable without metallic braid – auto color code  
 Low-resistance contact design with gold/palladium nickel plating

	2P	3P	4P	5P	6P
FEMALE FACE VIEW					
COLOR CODE	1- brown 2- blue	1- green - gnd 2- red - black trace 3- red - white trace	1- red - black trace 2- red - white trace 3- red 4- green - gnd	1- red - white trace 2- red 3- green - gnd 4- red - yellow trace 5- red - black trace	1- red - white trace 2- red 3- green - gnd 4- red - yellow trace 5- red - black trace 6- red- blue trace
VOLTAGE	250V AC/DC	250V AC/DC	250V AC/DC	250V AC/DC	250V AC/DC
CURRENT	4A	4A	4A	4A	4A
CONDUCTOR	#22-2	#22-3	#22-4	#22-5	#22-6

FEMALE/MALE	FIG	DOUBLE - ENDED CORDSETS WITH #22 AWG PVC CABLE WITH BRAID 6 FEET LONG				
STRAIGHT/STRAIGHT	1	772030D02F060	773030D02F060	774030D02F060	775030D02F060	776030D02F060
90°/STRAIGHT	2	772031D02F060	773031D02F060	774031D02F060	775031D02F060	776031D02F060
STRAIGHT/90°	3	772032D02F060	773032D02F060	774032D02F060	775032D02F060	—
90°/90°	4	772033D02F060	773033D02F060	774033D02F060	775033D02F060	—

### CATALOG OPTIONS

\*See Page 134 for additional Mating Receptacles

Use the following chart to modify your part's specifications

**772030D02F0601**

**CABLE TYPE**

#18 AWG YELLOW  
 PVC W/O BRAID 2P - 5P  
 (#18 AWG NOT AVAILABLE  
 ON 6 POLE)

A03

**CABLE LENGTH**

12' ..... 120  
 20' ..... 200

200

**COUPLING NUT**

STAINLESS STEEL ..... .ADD 1  
 NON-METALLIC ..... .ADD 2

# Specifications



**MECHANICAL**  
 CONNECTOR FACE: PVC  
 MOLDED BODY: NITRILE RUBBER  
 O-RING: ZINC DIECAST W/ BLACK EPOXY COAT, OPTIONAL STAINLESS STEEL  
 COUPLING NUT: TYPE 303, NON-METALLIC WHITE DELRIN

**CABLE:** YELLOW #22 AWG PVC JACKET 70% METALLIC BRAID AND PVC CONDUCTOR INSULATION OVER 26 X #36 COPPER STRANDING, 300V, UL STYLE 2661, CSA AWM I/II A/B  
 YELLOW #18 AWG PVC JACKET AND PVC CONDUCTOR INSULATION OVER 41 X #34 COPPER STRANDING, 300V, UL STYLE 2661, CSA AWM I/II A/B

**OUTSIDE DIAMETER:**  
 WITH 70% BRAID      WITHOUT BRAID  
 2P - .23" (5.8mm)    2P - .29" (7.4mm)  
 3P - .23" (5.8mm)    3P - .29" (7.4mm)  
 4P - .25" (6.4mm)    4P - .29" (7.4mm)  
 5P - .26" (6.6mm)    5P - .29" (7.4mm)  
 6P - .29" (7.4mm)

**ELECTRICAL**  
 VOLTAGE RATING: 250V AC/DC  
 AMPERAGE: 2P - 4A  
 3P - 4A  
 4P - 4A  
 5P - 4A  
 6P - 4A

**ENVIRONMENTAL**  
 PROTECTION: IP 68, NEMA 6P  
 AMBIENT OPERATING TEMP: -4° TO 221° F (-20° TO 105° C)  
**CERTIFICATIONS**  
 UL: UL LISTED, FILE NO. E152210  
 CSA: CSA CERTIFIED, FILE NO LR6837

## CONNECTOR DIMENSIONS

FEMALE STRAIGHT/MALE STRAIGHT

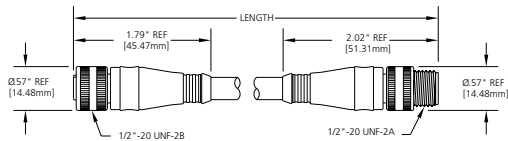


FIG 1

FEMALE 90°/MALE STRAIGHT

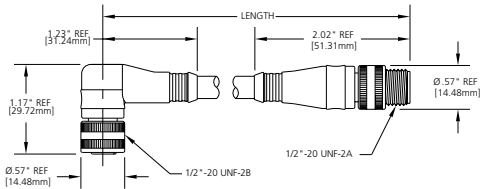


FIG 2

FEMALE STRAIGHT/MALE 90°

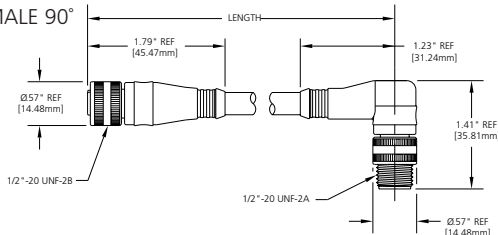


FIG 3

FEMALE 90°/MALE 90°

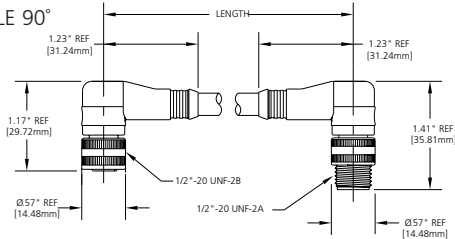
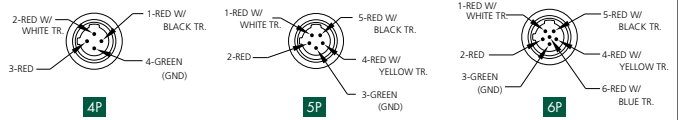
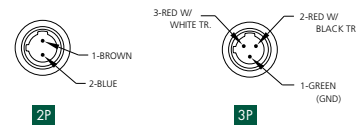
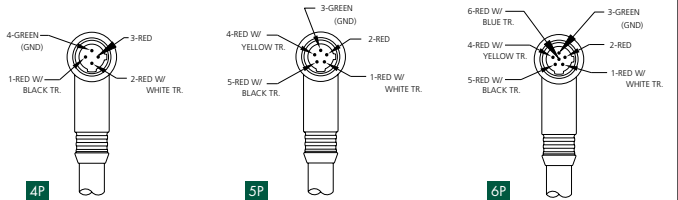
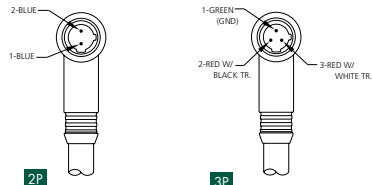


FIG 4

MALE FACE VIEW



MALE FACE VIEW





# Double-Ended Cordsets

## Dual Keyway 1/2" - 20 UNF

**AUTOMOTIVE**

#18 AWG yellow PUR high-flex cable – auto color code  
 Oil- and abrasion-resistant polyurethane jacket  
 Low-resistance contact design with gold/palladium nickel plating

	2P	3P	4P	5P
FEMALE FACE VIEW				
COLOR CODE	1- brown 2- blue	1- green - gnd 2- red /black 3- red/white	1- red /black 2- red /white 3- red 4- green - gnd	1- red /white 2- red 3- green - gnd 4- red/yellow 5- red/black
VOLTAGE	250V AC/DC	250V AC/DC	250V AC/DC	250V AC/DC
CURRENT	4A	4A	4A	4A
CONDUCTOR	#18-2	#18-3	#18-4	#18-5

FEMALE/MALE	FIG	DOUBLE - ENDED CORDSETS WITH #18 AWG HIGH FLEX PUR CABLE 6 FEET LONG			
STRAIGHT/ STRAIGHT	1	772030B01F060	773030B01F060	774030B01F060	775030B01F060
90°/STRAIGHT	2	772031B01F060	773031B01F060	774031B01F060	775031B01F060

### CATALOG OPTIONS

\*See Page 134 for additional Mating Receptacles

Use the following chart to modify your part's specifications

772030B01F0601

**CABLE LENGTH**

12'	120
20'	200

**COUPLING NUT**

STAINLESS STEEL . . . . .ADD 1

# Specifications



<b>MECHANICAL</b>	
CONNECTOR FACE:	NYLON 6/6
MOLDED BODY:	POLYURETHANE
O-RING:	VITON
COUPLING NUT:	ZINC DIECAST W/ BLACK EPOXY COAT, OPTIONAL STAINLESS STEEL TYPE 303
CABLE:	YELLOW #18 AWG POLYURETHANE JACKET AND PVC CONDUCTOR INSULATION OVER 65 X #36 COPPER STRANDING, 300V, UL STYLE 20549, CSA AWM I/II A/B
OUTSIDE DIAMETER:	2P - .24" (6.1mm) 3P - .27" (6.9mm) 4P - .29" (7.4mm) 5P - .32" (8.1mm)
<b>ELECTRICAL</b>	
VOLTAGE RATING:	250V AC/DC
AMPERAGE:	2P - 4A 3P - 4A 4P - 4A 5P - 4A
<b>ENVIRONMENTAL</b>	
PROTECTION:	IP 68, NEMA 6P
AMBIENT OPERATING TEMP:	-4° TO 176° F (-20° TO 80° C)
<b>CERTIFICATIONS</b>	
UL:	UL LISTED, FILE NO. E152210
CSA:	CSA CERTIFIED, FILE NO LR6837

## CABLE DIMENSIONS

### FEMALE STRAIGHT/MALE STRAIGHT

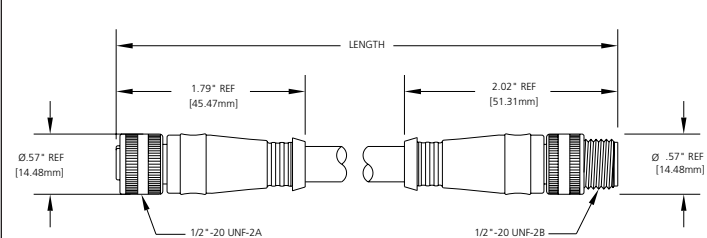


FIG 1

### FEMALE 90°/MALE STRAIGHT

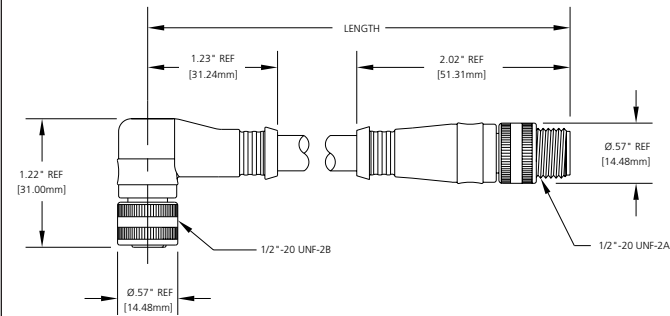
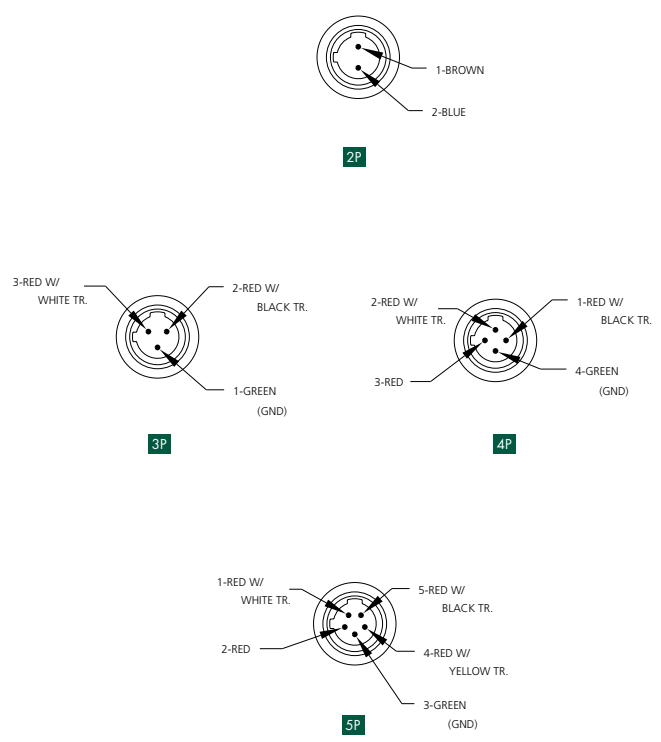


FIG 2

### MALE FACE VIEW

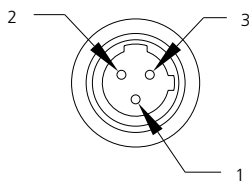
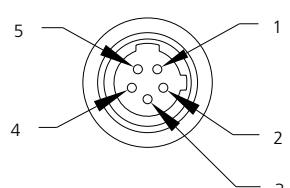




# Single & Double-Ended Cordsets Dual Keyway 1/2" - 20 UNF

**AUTOMOTIVE**

#18 AWG yellow thermoplastic elastomer (TPE) cable – auto color code  
 Oil-, chemical- and weld slag-resistant TPE jacket “universal” cable  
 Low-resistance contact design with gold/palladium nickel plating

<b>NEW</b>	<b>3P</b>	<b>5P</b>
<b>FEMALE FACE VIEW</b>		
<b>COLOR CODE</b>	1- green - gnd 2- red - black trace 3- red - white trace	1- red - white trace 4- red - yellow trace 2- red 5- red - black trace 3- green - gnd
<b>VOLTAGE</b>	250V AC/DC	250V AC/DC
<b>CURRENT</b>	4A	4A
<b>CONDUCTOR</b>	#18-3	#18-5

<b>FEMALE</b>	<b>FIG</b>	<b>SINGLE-ENDED CORDSETS WITH #18 AWG TPE CABLE 6 FEET LONG</b>	
STRAIGHT	1	703000K02F060	705000K02F060
90°	2	703001K02F060	705001K02F060
MATING RECEPTACLE*	4	7R3006A19A120	7R5006A19A120
<b>FEMALE/MALE</b>	<b>FIG</b>	<b>DOUBLE-ENDED CORDSETS WITH #18 AWG TPE CABLE 6 FEET LONG</b>	
STRAIGHT/STRAIGHT	3	773030K02F060	775030K02F060

## CATALOG OPTIONS

\*See Page 134 for additional Mating Receptacles

Use the following chart to modify your part's specifications

**703000K02F0601**

**CABLE LENGTH**

12'	120
20'	200

**COUPLING NUT**

STAINLESS STEEL . . . . .ADD 1

# Specifications



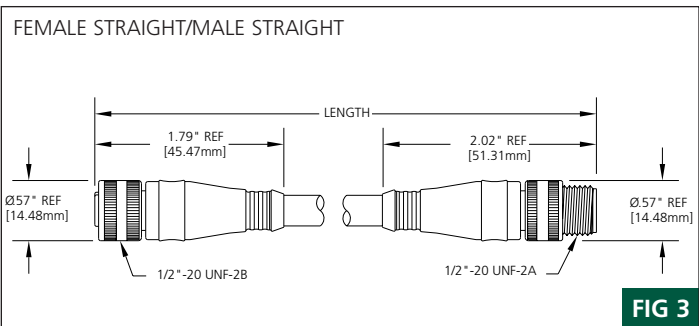
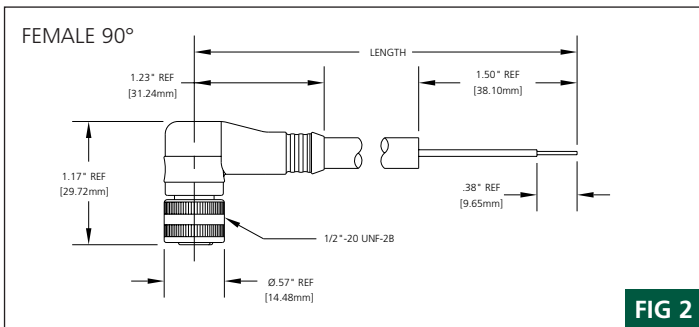
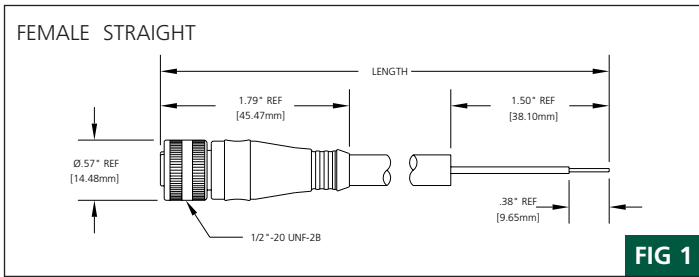
**MECHANICAL**  
 CONNECTOR FACE: NYLON 6/6  
 MOLDED BODY: PVC  
 O-RING: NITRILE RUBBER  
 COUPLING NUT: ZINC DIECAST W/ BLACK EPOXY COAT, OPTIONAL STAINLESS STEEL TYPE 303  
 CABLE: YELLOW #18 AWG THERMOPLASTIC ELASTOMER (TPE) JACKET AND PVC CONDUCTOR INSULATION OVER 41 X #34 COPPER STRANDING, 300V, UL STYLE 20327, CSA AWM VII A/B  
 OUTSIDE DIAMETER:  
 3P - .26" (6.6mm)  
 5P - .30" (7.6mm)

**ELECTRICAL**  
 VOLTAGE RATING: 250V AC/DC  
 AMPERAGE: 3P - 4A  
 5P - 4A

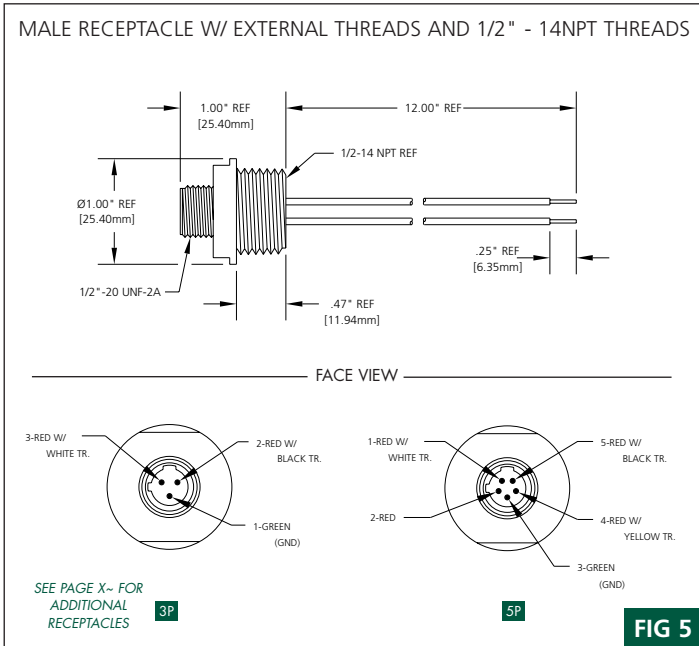
**ENVIRONMENTAL**  
 PROTECTION: IP 68, NEMA 6P  
 AMBIENT OPERATING TEMP: -4° TO 221° F (-20° TO 105° C)

**CERTIFICATIONS**  
 UL: UL LISTED, FILE NO. E152210  
 CSA: CSA CERTIFIED, FILE NO LR6837

## CONNECTOR DIMENSIONS



## RECEPTACLE DIMENSIONS



## CHEMICAL & OIL RESISTANCE CHART - TPE CABLE

ACIDS & BASES	PERFORMANCE	OILS & FUELS	PERFORMANCE
SULFURIC ACID 30%	EXCELLENT	ASTM OIL 1, 2 OR 3	EXCELLENT
NITRIC ACID 10%	EXCELLENT	TRIMSOL	EXCELLENT
SODIUM HYDROXIDE 10%	EXCELLENT	SIMEOL	EXCELLENT
AMMONIUM HYDROXIDE 10%	EXCELLENT	MOBIL OIL DTE 24 OR 26	EXCELLENT
HYDROCHLORIC ACID 20%	EXCELLENT	KEROSENE	EXCELLENT
GLACIAL ACIDIC ACID	GOOD	TRANSFORMER OIL	GOOD

3P



# Field-Attachable Connectors

## Dual Keyway 1/2" - 20 UNF

Screw terminal connection accepts #18 AWG conductors maximum  
 Easy field installation of quick-disconnect design  
 For use with all standard dual keyway 1/2" - 20 UNF receptacles and cordsets

<b>NEW</b>	<b>3P</b>
FEMALE FACE VIEW	
MALE FACE VIEW	
VOLTAGE	250V AC/DC
CURRENT	4A

FEMALE	FIG	FIELD-ATTACHABLE CONNECTORS WITH PG 7 CABLE FITTING (.13 - .26" OD [3.3 - 6.6mm] CABLE)
STRAIGHT	1	7A3000-31
90°	2	7A3001-31
FEMALE	FIG	FIELD-ATTACHABLE CONNECTORS WITH PG 9 CABLE FITTING (.16 - .32" OD [4.1 - 8.1mm] CABLE)
STRAIGHT	1	7A3000-32
MATING RECEPTACLE*	3	7R3A06A19A120
MALE	FIG	FIELD-ATTACHABLE CONNECTORS WITH PG 7 CABLE FITTING (.13 - .26" OD [3.3 - 6.6mm] CABLE)
STRAIGHT	4	7A3006-31
90°	5	7A3007-31
MALE	FIG	FIELD-ATTACHABLE CONNECTORS WITH PG 9 CABLE FITTING (.16 - .32" OD [4.1 - 8.1mm] CABLE)
STRAIGHT	4	7A3006-32
MATING RECEPTACLE*	6	7R3A00A19A120

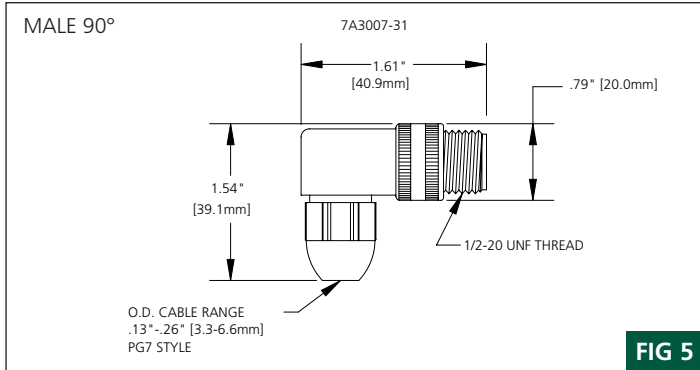
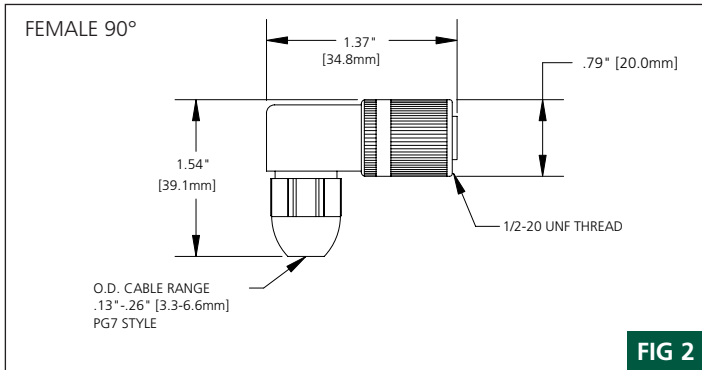
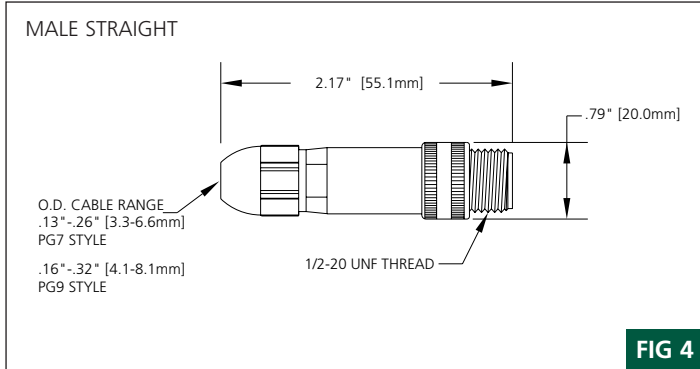
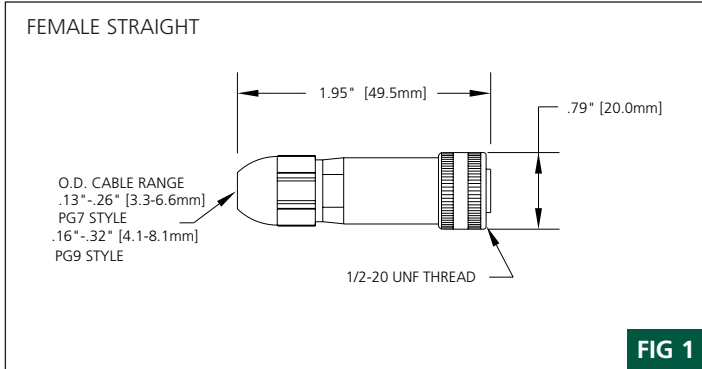
\*See Page 134 for additional Mating Receptacles

# Specifications

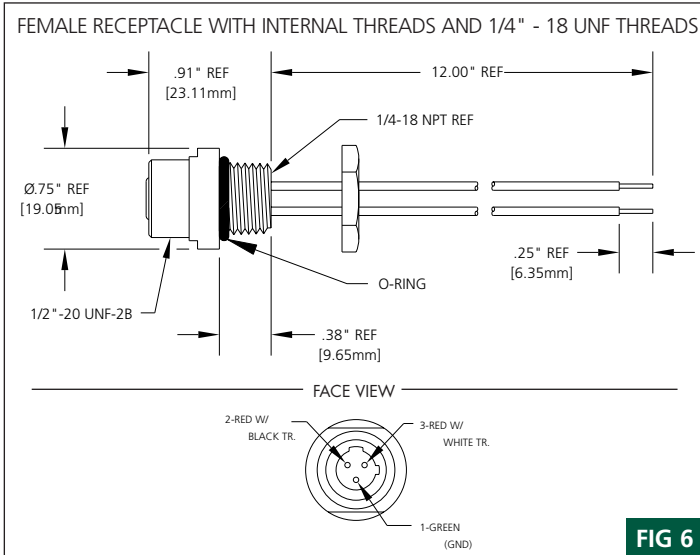
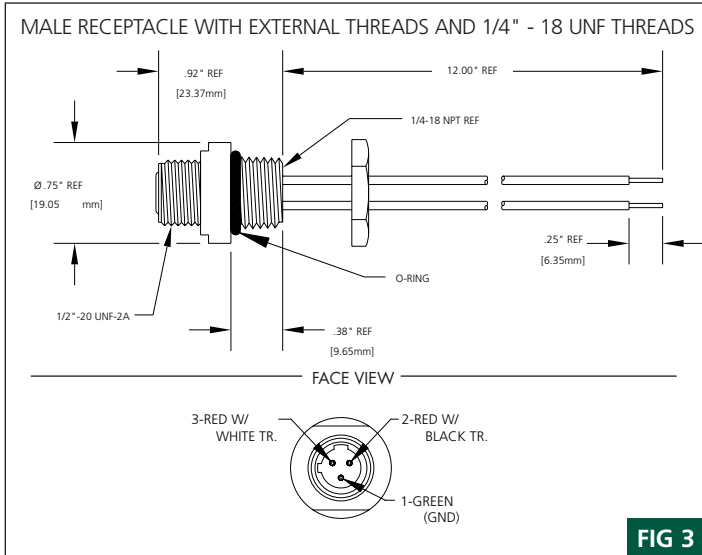


<b>MECHANICAL</b>	
CONNECTOR FACE:	NYLON 6/6
MOLDED BODY:	NYLON 6/6
CONTACT:	GOLD PLATED COPPER ALLOY
COUPLING NUT:	NICKEL PLATED BRASS
GROMMET:	NITRILE RUBBER
MAXIMUM CONDUCTOR SIZE:	18 AWG
<b>ELECTRICAL</b>	
VOLTAGE RATING:	250V AC/DC
AMPERAGE:	3P - 4A
<b>ENVIRONMENTAL</b>	
PROTECTION:	IP 68
AMBIENT OPERATING TEMP:	-40° TO 185° F (-40° TO 85°C)

## CONNECTOR DIMENSIONS



## RECEPTACLE DIMENSIONS



3P to 5P



# Receptacles-Dual Keyway

## Back Panel Mount

#18 AWG PVC 1 meter leads – automotive color code, epoxy potted  
 Gray anodized aluminum shell  
 Easy installation and keyway orientation

	2P	3P	4P	5P
FEMALE FACE VIEW				
COLOR CODE	1- brown 2- blue	1- green - gnd 2- red - black trace 3- red - white trace	1- red - black trace 3- red 2- red - white trace 4- green - gnd	1- red - white trace 4- red - yellow trace 2- red 5- red - black trace 3- green-gnd
VOLTAGE	250V AC/DC	250V AC/DC	250V AC/DC	250V AC/DC
CURRENT	4A	4A	4A	4A
CONDUCTOR	#18-2	#18-3	#18-4	#18-5

FEMALE	FIG	RECEPTACLES WITH #18 AWG PVC LEADS 1 METER LONG			
BACK PANEL AMOUNT	1	7R2B00A17M010	7R3B00A17M010	7R4B00A17M010	7R5B00A17M010

### CATALOG OPTIONS

Use the following chart to modify your part's specifications

# 7R2B00A17M010



LEAD LENGTH	
2 METER	020
3 METER	030

# Specifications



**MECHANICAL**

SHELL: GRAY ANODIZED ALUMINUM  
 INSERT: NYLON 6/6  
 O-RING: NITRILE RUBBER  
 GASKET: NITRILE RUBBER  
 CONDUCTOR: #18 AWG WITH PVC INSULATION  
 OVER 16 X #30 COPPER STRANDING,  
 300V, UL STYLE 1061, CSA AWM SR

**ELECTRICAL**

VOLTAGE RATING: 250V AC/DC  
 AMPERAGE: 2P - 4A  
 3P - 4A  
 4P - 4A  
 5P - 4A

**ENVIRONMENTAL**

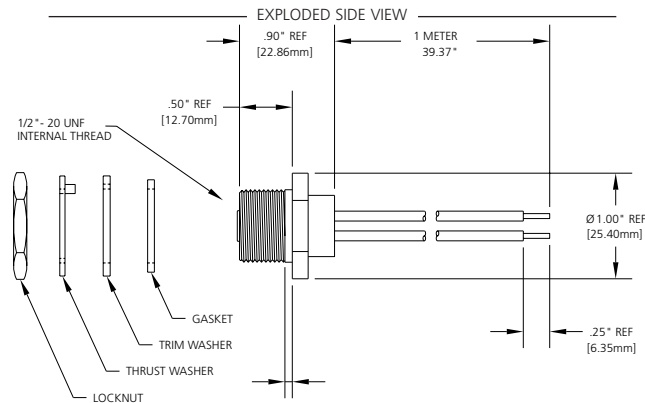
PROTECTION: IP 65, NEMA 4  
 AMBIENT OPERATING TEMP: -4° TO 176° F (-20° TO 80° C)

**CERTIFICATIONS**

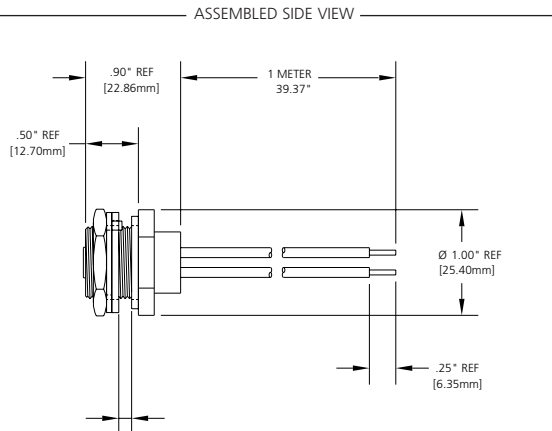
UL: UL LISTED, FILE NO. E152210  
 CSA: CSA CERTIFIED, FILE NO LR6837

## RECEPTACLE DIMENSIONS

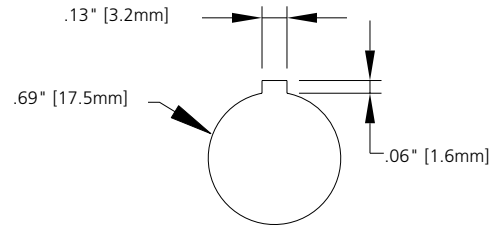
FEMALE RECEPTACLE WITH INTERNAL THREADS  
 BACK PANEL MOUNT



ACCOMMODATES PANEL THICKNESS FROM .060" [1.5mm] WITH TRIM WASHER TO .200" [5.5mm] WITHOUT TRIM WASHER.



TYPICAL KNOCKOUT



FEMALE FACE VIEW

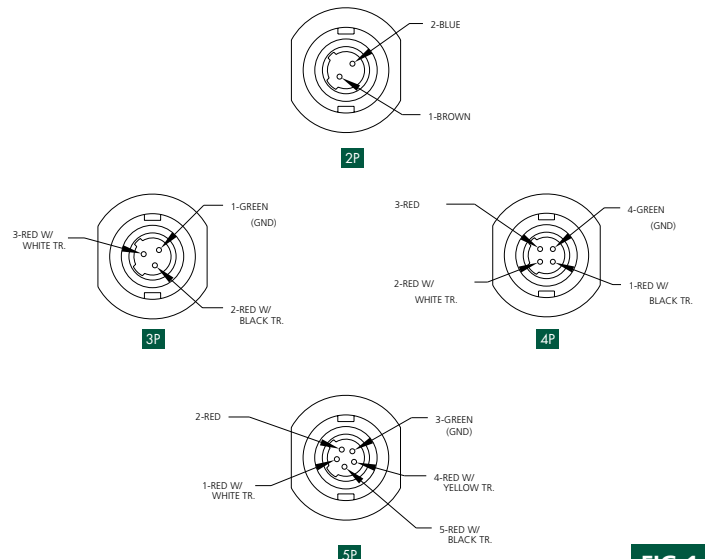


FIG 1

2P to 6P



# Receptacles

## 360° Shield Dual Keyway 1/2" - 20 UNF

#22 AWG PVC 12-inch leads – AC color code, epoxy potted

Bright nickel-plated brass shell

For use with 360° shielded dual keyway cordsets

<b>NEW</b>	<b>2P</b>	<b>3P</b>	<b>4P</b>	<b>5P</b>	<b>6P</b>
<b>MALE FACE VIEW</b>					
<b>COLOR CODE</b>	1- brown 2- blue	1- green 2- red/black 3- red/white	1- red/black 3- red 2- red/white 4- green	1- red/white 4- red/yellow 2- red 5- red/black 3- green	1- red/white 4- red/yellow 2- red 5- red/black 3- green 6- red/blue
<b>VOLTAGE</b>	250V AC/DC	250V AC/DC	250V AC/DC	250V AC/DC	250V AC/DC
<b>CURRENT</b>	4A	4A	4A	4A	4A
<b>CONDUCTOR</b>	#22-2	#22-3	#22-4	#22-5	#22-6

<b>TYPE</b>	<b>FIG</b>	<b>RECEPTACLES WITH #22 AWG PVC LEAD 12 INCHES LONG</b>				
MALE 1/4-14NPT EXTERNAL THREADS	1	7R2006A19A1203	7R3006A19A1203	7R4006A19A1203	7R5006A19A1203	7R6006A19A1203

# Specifications



**MECHANICAL**

SHELL: NICKEL-PLATED BRASS  
 INSERT: NYLON 6/6  
 O-RING: NITRILE RUBBER  
 CONDUCTOR: #22 AWG WITH PVC INSULATION  
 OVER 26 X #36 COPPER STRANDING,  
 300V, UL STYLE 1061, CSA AWM SR

**ELECTRICAL**

VOLTAGE RATING: 250V AC/DC  
 AMPERAGE: 2P TO 6P - 4A

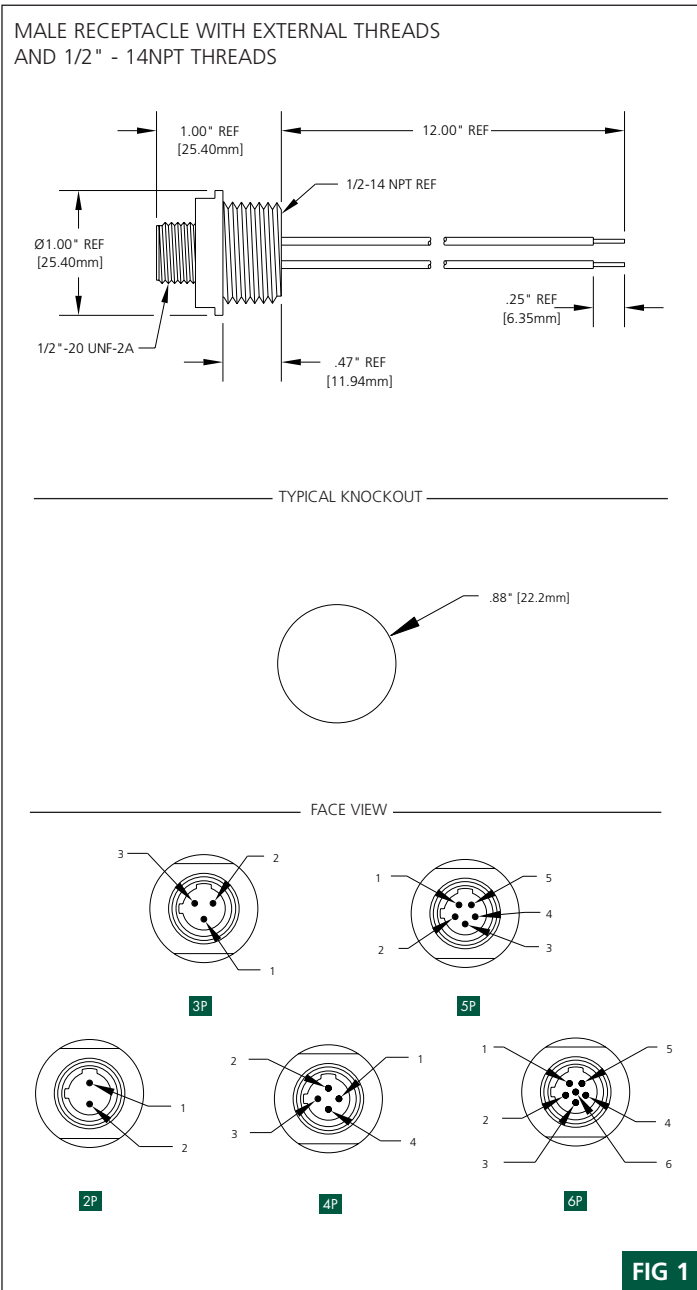
**ENVIRONMENTAL**

PROTECTION: IP 68, NEMA 6P  
 AMBIENT OPERATING TEMP: -4° TO 176° F (-20° TO 80° C)

**CERTIFICATIONS**

UL: UL LISTED, FILE NO. E152210  
 CSA: CSA CERTIFIED, FILE NO LR6837

## RECEPTACLE DIMENSIONS



3P & 4P



# Receptacles

## Reverse Keyway M12

#22 AWG PVC 12 inch leads, fully epoxy potted  
 Black anodized aluminum shell  
 Used in control panels, junction boxes and sensors

	3P	4P
MALE FACE VIEW		
COLOR CODE	1- brown 2- blue 3- not used 4- green/yellow - gnd	1- brown 2- blue 3- black 4- green/yellow - gnd
VOLTAGE	250V AC/DC	250V AC/DC
CURRENT	4A	3A
CONDUCTOR	#22-3	#22-4

MALE	FIG	RECEPTACLES WITH #22 AWG PVC LEADS 12 INCHES LONG	
M14 X1 THREAD	1	BR3E06A26A120	BR4E06A26A120

### CATALOG OPTIONS

Use the following chart to modify your part's specifications

**BR3E06A26A120**

**LEAD LENGTH**  
 2 METER ..... M020

# Specifications

3P & 4P



**MECHANICAL**

SHELL: BLACK ANODIZED ALUMINUM  
 INSERT: NYLON 6/6  
 O-RING: NITRILE RUBBER  
 CONDUCTOR: #22 AWG WITH PVC INSULATION OVER 26 X #36 COPPER STRANDING, 300V, UL STYLE 1061, CSA AWM SR OUTSIDE

**ELECTRICAL**

VOLTAGE RATING: 250V AC/DC  
 AMPERAGE: 3P - 4A  
 4P - 4A

**ENVIRONMENTAL**

PROTECTION: IP 68, NEMA 6P  
 AMBIENT OPERATING TEMP: 14° TO 176° F (-10° TO 80° C)

**CERTIFICATIONS**

UL: UL LISTED, FILE NO. E152210  
 CSA: CSA CERTIFIED, FILE NO LR6837

## RECEPTACLE DIMENSIONS

MALE RECEPTACLE WITH EXTERNAL THREADS AND M14 X 1 THREADS

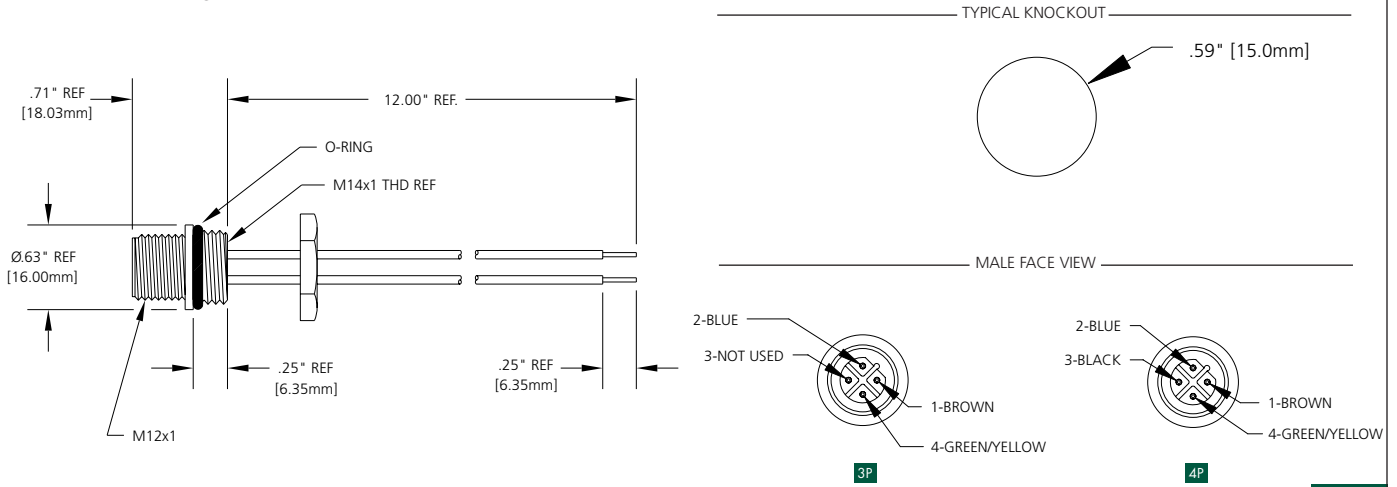


FIG 1



# In-Line Splitter

## Dual Keyway 1/2" - 20 UNF

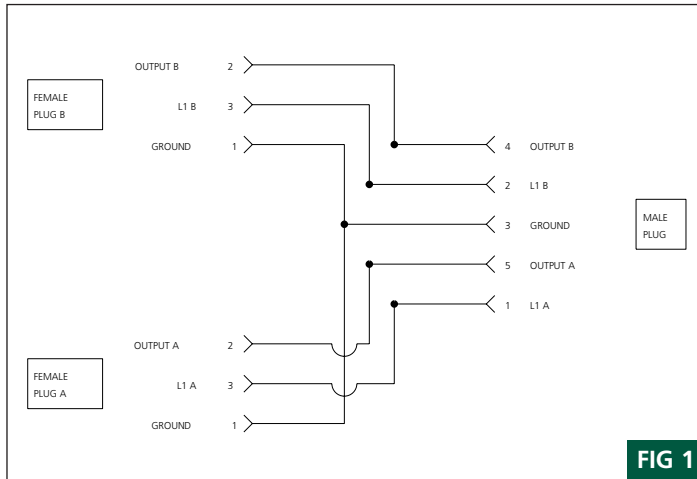
#18 AWG yellow thermoplastic (TPE) elastomer cable  
 Combines two 3-wire AC devices into one 5P male receptacle  
 Oil-, chemical- and weld slag-resistant TPE jacket

NEW	3P		5P	
FEMALE FACE VIEW	<p>TYPICAL FOR A &amp; B</p>		MALE FACE VIEW	
PIN SCHEMATIC	1- gnd 2- output A & B 3- L1A & L1B		PIN SCHEMATIC	1- L1A 2- L1B 3- gnd 4- output B 5- output A
VOLTAGE	250V AC/DC			
CURRENT	4A			
CONDUCTOR	#18-3		5P Male Dual Keyway Connection	

FEMALE	FIG	SPLITTER CORDSET WITH (2) 3P FEMALE LEADS #18 AWG YELLOW TPE CABLE 1 FOOT LONG	
STRAIGHT	2 AND 3	775A30K02F010	
FEMALE	FIG	SPLITTER CORDSET WITH (2) FEMALE LEADS #18 AWG YELLOW TPE CABLE (1) 7" LONG OUTPUT A (1) 9"	
STRAIGHT	1 AND 3	775B30K02A090	

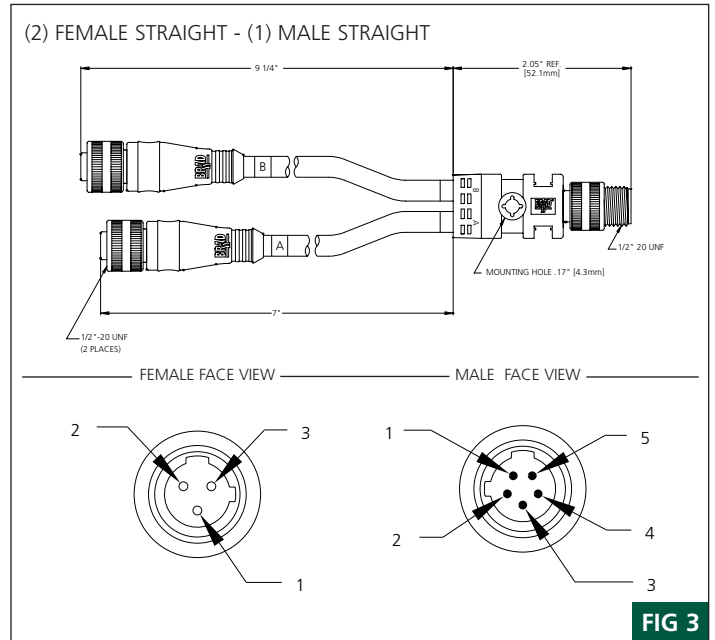
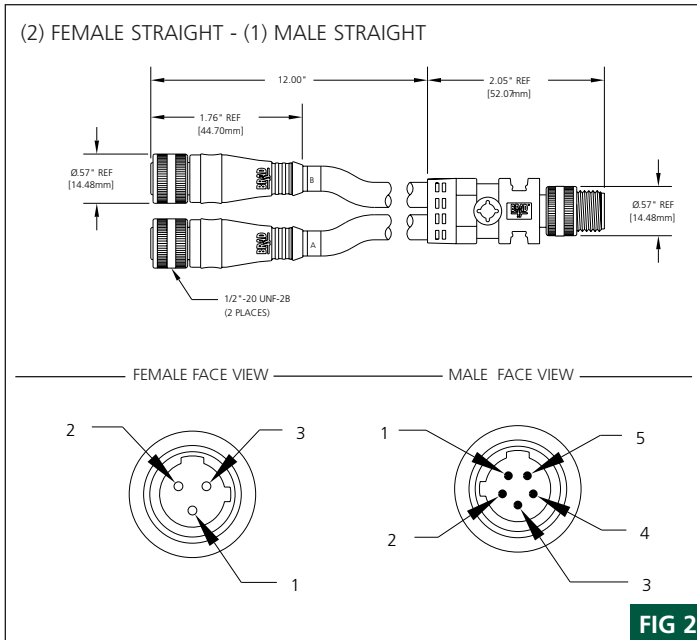
# Specifications

## SCHEMATIC DETAILS



- MECHANICAL**  
 CONNECTOR FACE: NYLON 6/6  
 PLUG MOLDED BODY: PVC  
 SPLITTER BODY: PVC  
 O-RING: NITRILE RUBBER  
 COUPLING NUT: ZINC DIECAST W/ BLACK EPOXY COAT  
 CABLE: YELLOW #18 AWG THERMOPLASTIC ELASTOMER (TPE) JACKET AND PVC CONDUCTOR INSULATION OVER 4 X #34 COPPER STRANDING, 300V, UL STYLE 20327, CSA AWM VII A/B 3P - .26" (6.6mm)
- ELECTRICAL**  
 VOLTAGE RATING: 250V AC/DC  
 AMPERAGE: 5P - 4A TOTAL
- ENVIRONMENTAL**  
 PROTECTION: IP 68, NEMA 6P  
 AMBIENT OPERATING TEMP: -4° F TO 221° F (-20° TO 105° C)
- CERTIFICATIONS**  
 UL: UL LISTED, FILE NO. E152210

## SPLITTER DIMENSIONS



## CHEMICAL & OIL RESISTANCE CHART - TPE CABLE

ACIDS & BASES	PERFORMANCE	OILS & FUELS	PERFORMANCE
SULFURIC ACID 30%	EXCELLENT	ASTM OIL 1, 2, OR 3	EXCELLENT
NITRIC ACID 10%	EXCELLENT	TRIMSOL	EXCELLENT
SODIUM HYDROXIDE 10%	EXCELLENT	SIMEOL	EXCELLENT
AMMONIUM HYDROXIDE 10%	EXCELLENT	MOBIL OIL DTE 24 OR 26	EXCELLENT
HYDROCHLORIC ACID 20%	EXCELLENT	KEROSENE	EXCELLENT
GLACIAL ACIDIC ACID	GOOD	TRANSFORMER OIL	GOOD

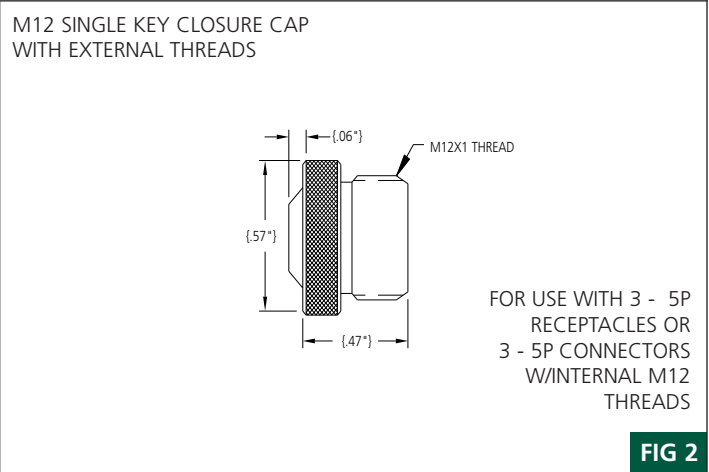
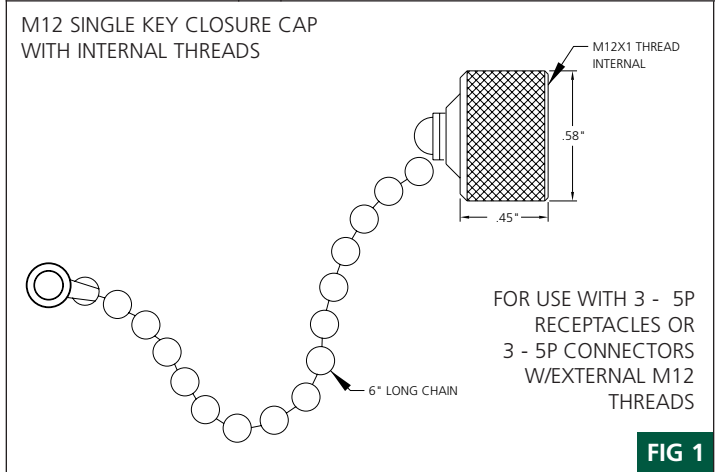


# Single-Keyway M12 and Dual-Keyway 1/2" - 20 UNF

Single keyway M12 closure caps  
 Dual keyway 1/2" - 20 UNF closure caps  
 Dual keyway 1/2" - 20 UNF to Mini-Change® quick-disconnect adapters

## MICRO-CHANGE SINGLE KEYWAY M12 ACCESSORIES

DESCRIPTION	FIG	3P	4P	5P
METALLIC CLOSURE CAP WITH INTERNAL THREADS	1	80011		
METALLIC CLOSURE CAP WITH EXTERNAL THREADS	2	80015		
NON-METALLIC CLOSURE CAP WITH EXTERNAL THREADS	2	80013		



## MICRO-CHANGE DUAL KEYWAY 1/2" - 20 UNF ACCESSORIES

DESCRIPTION	FIG	2P	3P	4P	5P	6P
ADAPTER WITH 1/2 - 20 MALE DUAL KEY TO FEMALE MINI-CHANGE	3	70004	70204	70404	70604	—
ADAPTER WITH 1/2 - 20 FEMALE DUAL KEY TO MALE MINI-CHANGE	4	70005	70205	70405	70605	—
METALLIC CLOSURE CAP WITH INTERNAL THREADS	5	70010				
METALLIC CLOSURE CAP WITH EXTERNAL THREADS	5	70015				

# Specifications



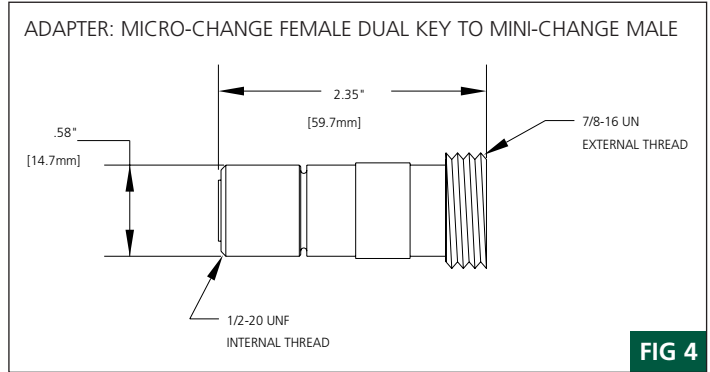
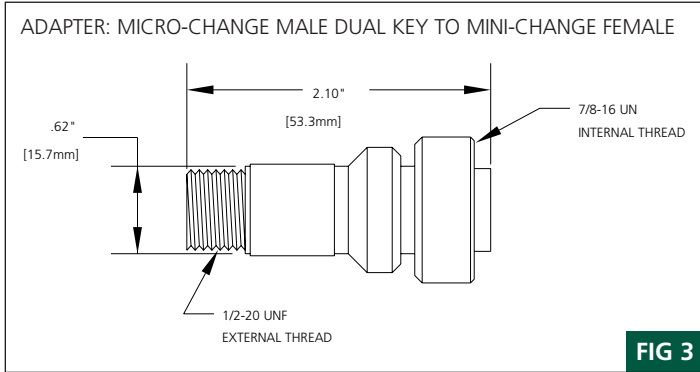
**MECHANICAL**  
 CLOSURE CAPS  
 SINGLE KEYWAY M12  
 METALLIC:  
 NON-METALLIC:  
 DUAL KEYWAY  
 METALLIC:

BLACK ANODIZED ALUMINUM  
 NYLON 6/6  
 GRAY ANODIZED ALUMINUM

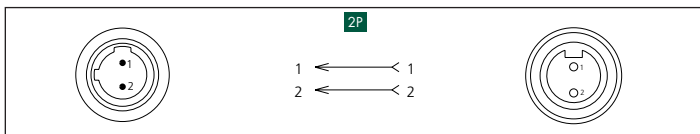
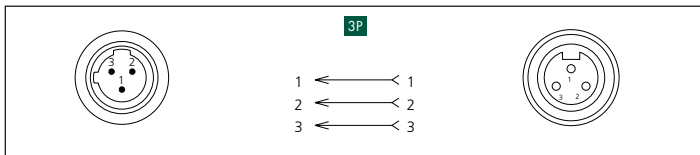
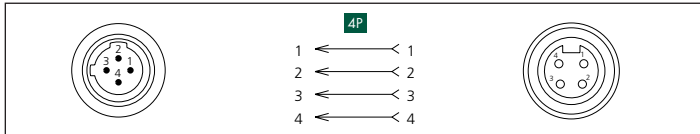
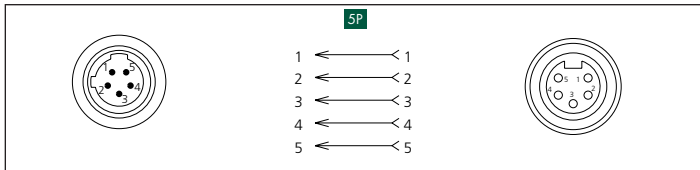
**DUAL KEYWAY ADAPTERS**  
 ADAPTER FACE:  
 ADAPTER BODY:  
 CONDUCTORS:

PVC  
 GRAY ANODIZED ALUMINUM  
 #22 AWG WITH IRR. PVC INSULATION  
 OVER 7 X #30 COP PER STRANDING,  
 300V, UL STYLE 1430, CSA REW

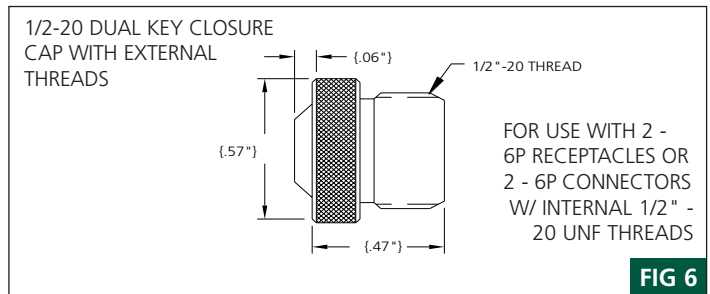
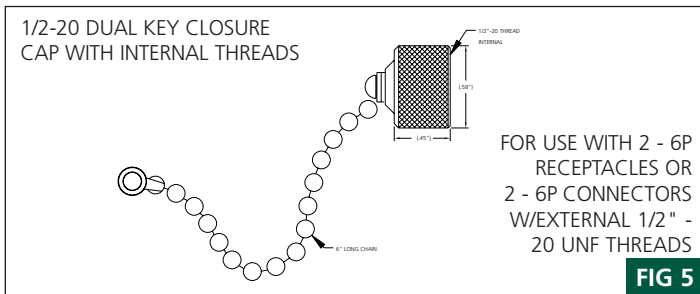
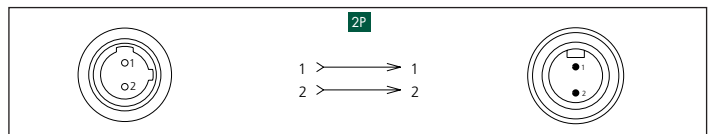
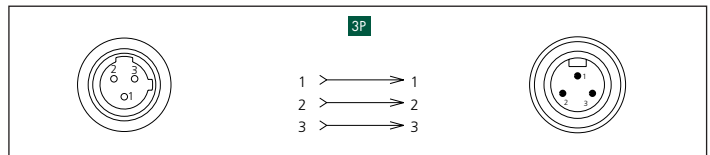
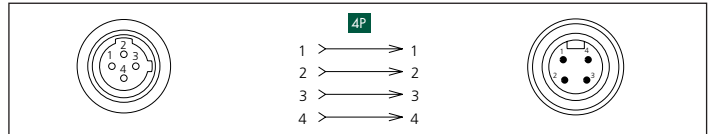
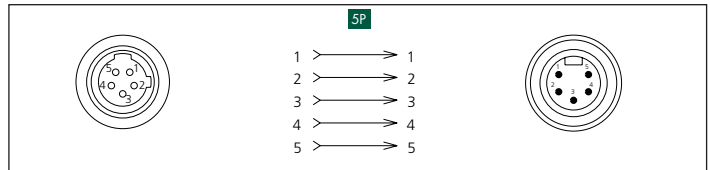
## MICRO-CHANGE® ACCESSORIES



MICRO-CHANGE DUAL KEY MALE FACE VIEW	CONNECTION DIAGRAM	MINI-CHANGE FEMALE FACE VIEW
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MICRO-CHANGE DUAL KEY FEMALE FACE VIEW	CONNECTION DIAGRAM	MINI-CHANGE MALE FACE VIEW
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# Tee Splitter

## Single Keyway M12 & Dual Keyway 1/2" - 20 UNF

#22 AWG yellow PVC cable with metallic braid

Combines two 3-wire devices into one 4P conductor cable

5 lengths available in both single keyway and dual keyway

	3P		3P	
FEMALE FACE VIEW	<p>TYPICAL FOR J1 &amp; J2</p>		<p>TYPICAL FOR J1 &amp; J2</p>	
WIRING CODE	1- brown 2- not use 3- blue	4- J1 black J2 white 5- not used	WIRING CODE	1- green 2- J1 red/black trace J2 red 3- red/white trace
VOLTAGE	250V AC/DC			
CURRENT	4A			
CONDUCTOR	#22 - 4			

SINGLE KEYWAY M12			DUAL KEYWAY 1/2" - 20 UNF		
LEAD LENGTH	FIG	SPLITTER CORDSET WITH #22 AWG YELLOW PVC CABLE WITH BRAID	LEAD LENGTH	FIG	SPLITTER CORDSET WITH #22 AWG YELLOW PVC CABLE WITH BRAID
1 METER	1 AND 3	80350-001	3 FEET	2 AND 4	70355-001
2 METER	1 AND 3	80350-002	6 FEET	2 AND 4	70355-002
4 METER	1 AND 3	80350-003	12 FEET	2 AND 4	70355-003
5 METER	1 AND 3	80350-004	20 FEET	2 AND 4	70355-004
10 METER	1 AND 3	80350-005	40 FEET	2 AND 4	70355-005

# Specifications

## DIMENSIONS

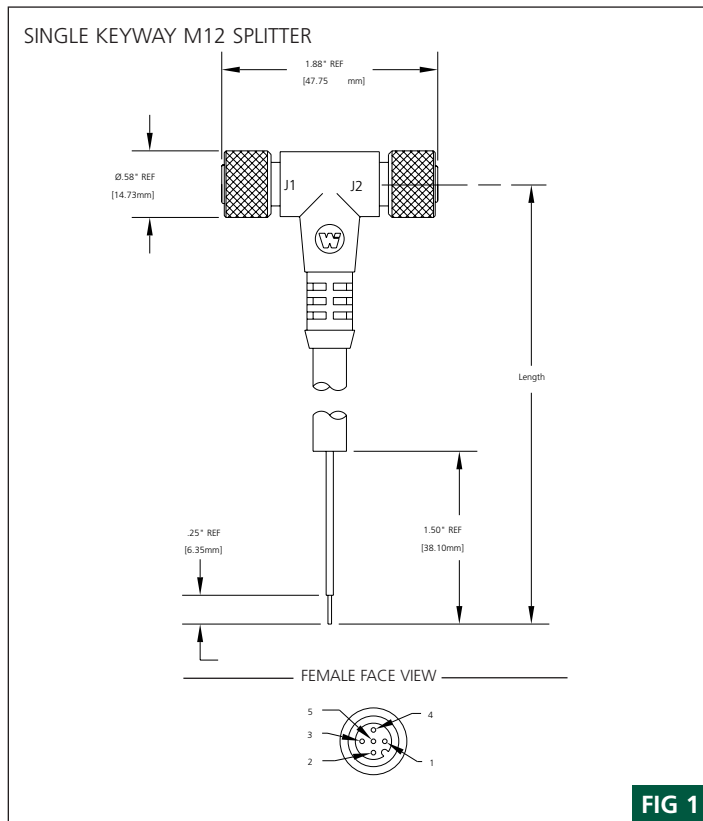


FIG 1

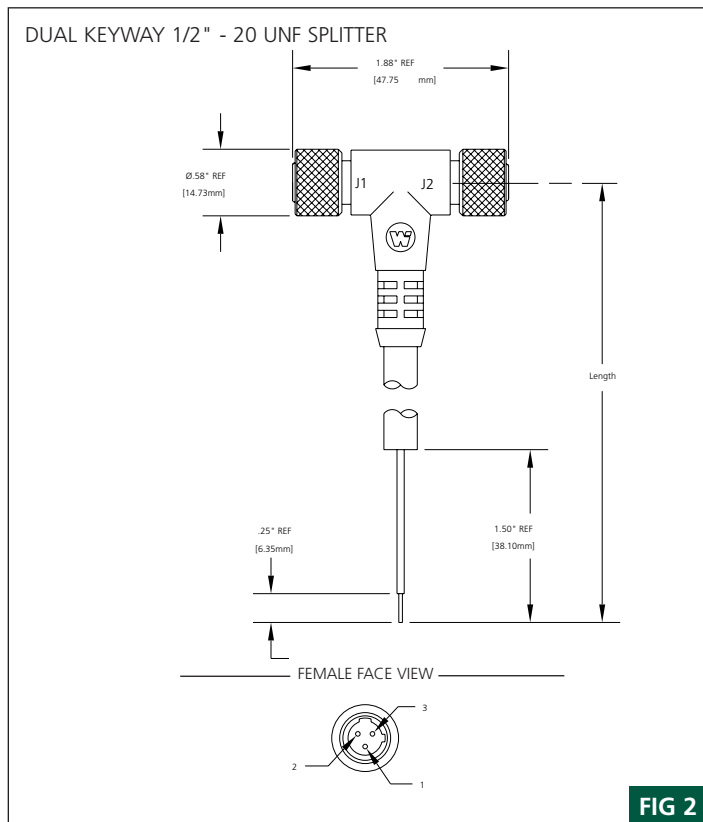


FIG 2



- MECHANICAL**  
 CONNECTOR FACE: NYLON 6/6  
 MOLDED BODY: PVC  
 O-RING: NITRILE RUBBER  
 COUPLING NUT: ZINC DIECAST W/ BLACK EPOXY COAT  
 CABLE: YELLOW #22 PVC JACKET 80% METALLIC BRAID AND PVC CONDUCTOR INSULATION OVER 26 X #36 COPPER STRANDING, 300V, UL STYLE 2661 CSA AWM I/II A/B 4P - .25" (6.4mm)
- OUTSIDE DIAMETER:**  
**ELECTRICAL**  
 VOLTAGE RATING: 250 V AC/DC  
 AMPERAGE: 4P CABLE - 4A TOTAL
- ENVIRONMENTAL**  
 PROTECTION: IP 68, NEMA 6P  
 AMBIENT OPERATING TEMP: -4° TO 221° F (-20° TO 105° C)
- CERTIFICATIONS**  
 UL: UL LISTED, FILE NO. E152210  
 CSA: CSA CERTIFIED, FILE NO LR6837  
 SINGLE KEYWAY ONLY

## SCHEMATIC DETAILS

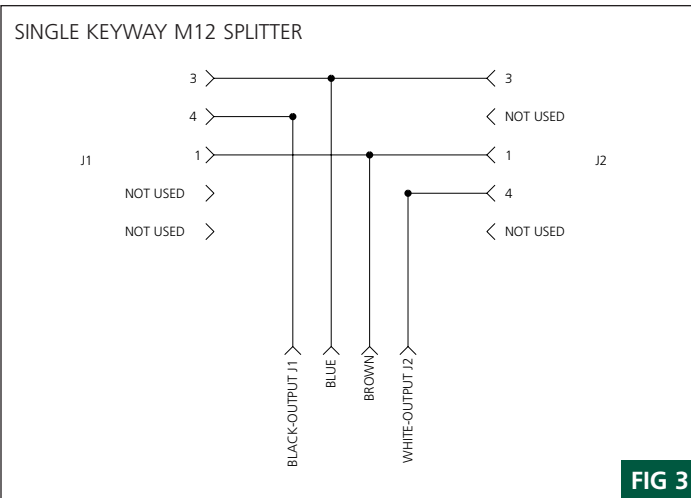


FIG 3

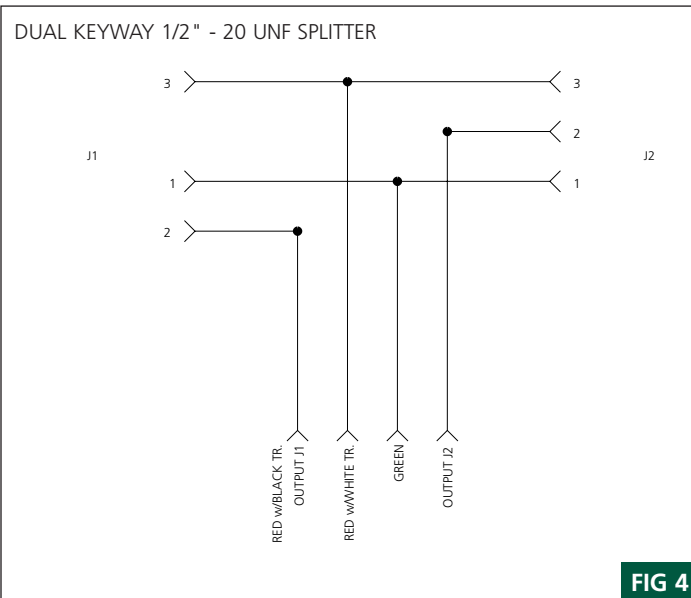


FIG 4



# Single-Ended Cordsets

## Single Keyway M12

#22 AWG yellow PVC cables with or without braid – DC color code  
 Oil-resistant PVC jacket for all types of heavy-duty industrial environments  
 Highly reliable low-resistance contact design with gold/palladium nickel plating

	3P	4P	5P
FEMALE FACE VIEW			
COLOR CODE	1- brown 2- not used 3- blue 4- black 5- not used	1- brown 2- white 3- blue 4- black 5- not used	1- brown 2- white 3- blue 4- black 5- gray
VOLTAGE	250V AC/DC	250V AC/DC	250V AC/DC
CURRENT	4A	4A	4A
CONDUCTOR	#22-3	#22-4	#22-5

FEMALE	FIG	SINGLE-ENDED CORDSETS WITH #22 AWG PVC CABLE WITHOUT BRAID 2 METERS LONG		
STRAIGHT	1	803000A09M020	804000A09M020	805000A09M020
90°	2	803001A09M020	804001A09M020	805001A09M020
MATING RECEPTACLE*	5	8R3006A18A120	8R4006A18A120	8R5006A18A120
MALE	FIG	SINGLE-ENDED CORDSETS WITH #22 AWG PVC CABLE WITHOUT BRAID 2 METERS LONG		
STRAIGHT	3	803006A09M020	804006A09M020	805006A09M020
90°	4	803007A09M020	804007A09M020	805007A09M020
MATING RECEPTACLE*	6	8R3A00A18A120	8R4A00A18A120	8R5A00A18A120

### CATALOG OPTIONS

\*See Page 116 for additional Mating Receptacles

Use the following chart to modify your part's specifications

**803000A09M0201**

**WIRE TYPE**

#22 AWG YELLOW PVC  
 W/ METALLIC BRAID . . . . . **D01**

**CABLE LENGTH**

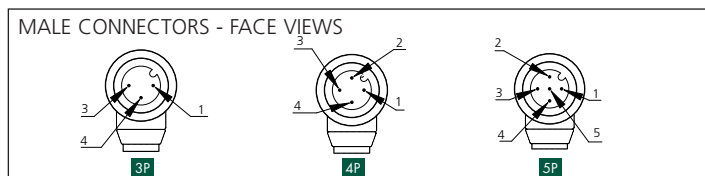
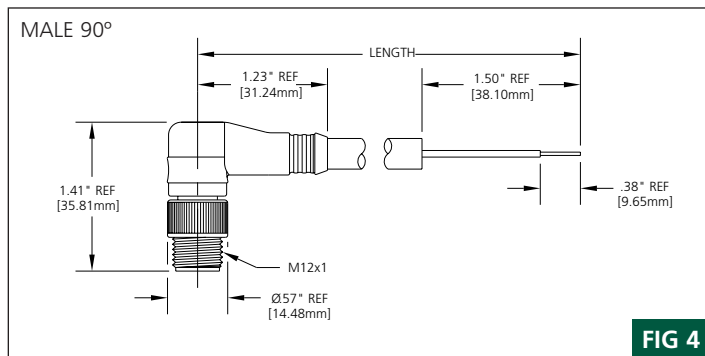
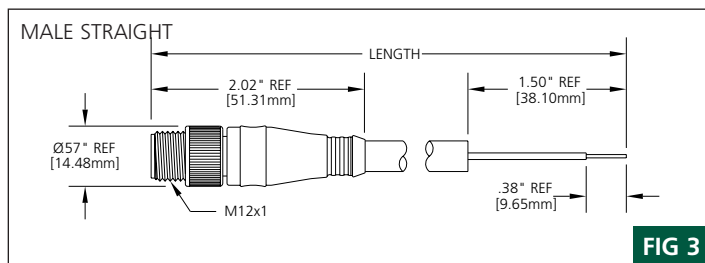
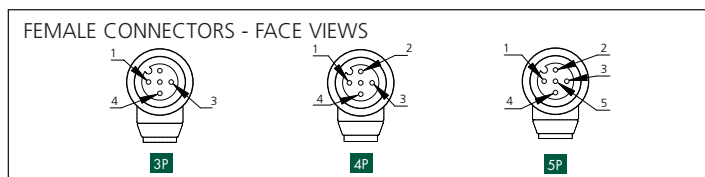
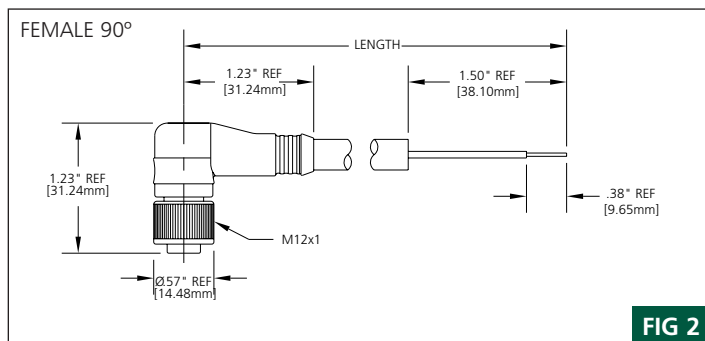
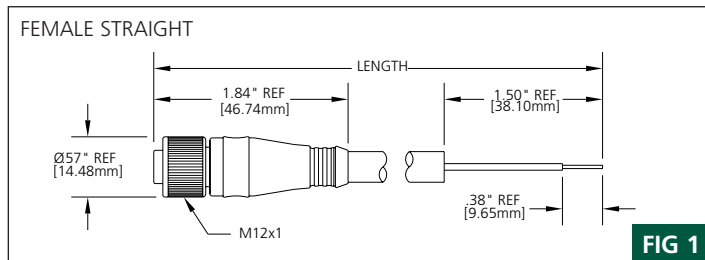
4 METER . . . . . **040**  
 5 METER . . . . . **050**

**COUPLING NUT**

STAINLESS STEEL . . . . . **ADD 1**  
 NON-METALLIC . . . . . **ADD 2**  
 (NON-METALLIC AVAILABLE ON  
 FEMALE CONNECTORS ONLY)

# Specifications

## CONNECTOR DIMENSIONS



**MECHANICAL**  
 CONNECTOR FACE: NYLON 6/6  
 MOLDED BODY: PVC  
 O-RING: NITRILE RUBBER  
 COUPLING NUT: ZINC DIECAST W/ BLACK EPOXY COAT, OPTIONAL STAINLESS STEEL TYPE 303 OR NON-METALLIC BLACK DELRIN



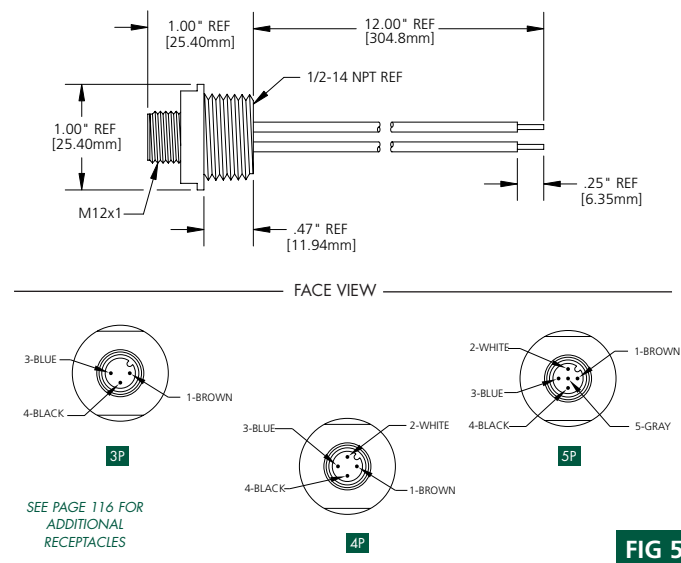
**CABLE:** YELLOW #22 AWG PVC JACKET AND PVC CONDUCTOR INSULATION OVER 26 X #36 COPPER STRANDING, 300V, UL STYLE 2661, CSA AWM VII A/B, OPTIONAL 80% METALLIC BRAID  
**WITHOUT BRAID WITH BRAID**  
**OUTSIDE DIAMETER:**  
 3P - .18" (4.6mm) 3P - .23" (5.8mm)  
 4P - .20" (5.1mm) 4P - .25" (6.4mm)  
 5P - .23" (5.8mm) 5P - .26" (6.6mm)

**ELECTRICAL**  
 VOLTAGE RATING: 250 V AC/DC  
 AMPERAGE:  
 3P - 4A  
 4P - 4A  
 5P - 4A

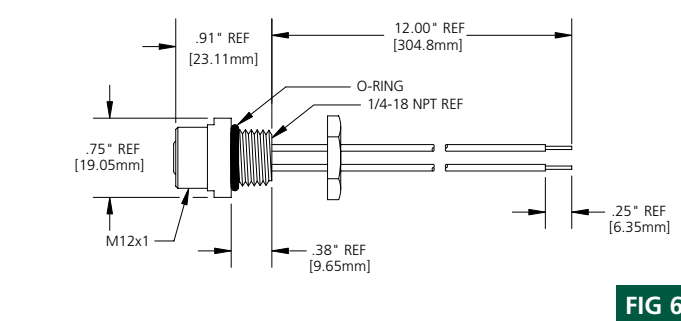
**ENVIRONMENTAL**  
 PROTECTION: IP 68, NEMA 6P  
 AMBIENT OPERATING TEMP: -4° TO 221° F (-20° TO 105° C)  
**CERTIFICATIONS**  
 UL: UL LISTED, FILE NO. E152210  
 CSA: CSA CERTIFIED, FILE NO. LR6837

## RECEPTACLE DIMENSIONS

### MALE RECEPTACLE W/ EXTERNAL THREADS AND 1/2" - 14NPT THREADS



### FEMALE RECEPTACLE W/ INTERNAL THREADS AND 1/4" - 18NPT THREADS





# Single-Ended Cordsets

## Single Keyway M12

#18 AWG SJOOW cable – DC color code  
 Oil- and abrasion-resistant jacket  
 Highly reliable low-resistance contact design with gold/palladium nickel plating

	3P	4P
FEMALE FACE VIEW		
COLOR CODE	1- brown 2- not used 3- blue 4- black 5- not used	1- brown 2- white 3- blue 4- black 5- not used
VOLTAGE	250V AC/DC	250V AC/DC
CURRENT	4A	4A
CONDUCTOR	#18-3	#18-4

FEMALE	FIG	SINGLE-ENDED CORDSETS WITH #18 AWG SJOOW CABLE 2 METERS LONG	
STRAIGHT	1	803000C02M020	804000C02M020
90°	2	803001C02M020	804001C02M020
MATING RECEPTACLE*	5	8R3006A16A120	8R4006A16A120
MALE	FIG	SINGLE-ENDED CORDSETS WITH #18 AWG SJOOW CABLE 2 METERS LONG	
STRAIGHT	3	803006C02M020	804006C02M020
90°	4	803007C02M020	804007C02M020
MATING RECEPTACLE*	6	8R3A00A16A120	8R4A00A16A120

### CATALOG OPTIONS

\*See Page 116 for additional Mating Receptacles

Use the following chart to modify your part's specifications

803000C02M0201

**CABLE LENGTH**

4 METER	040
5 METER	050

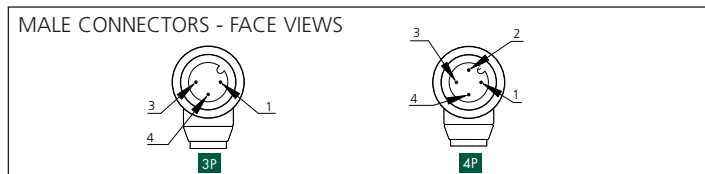
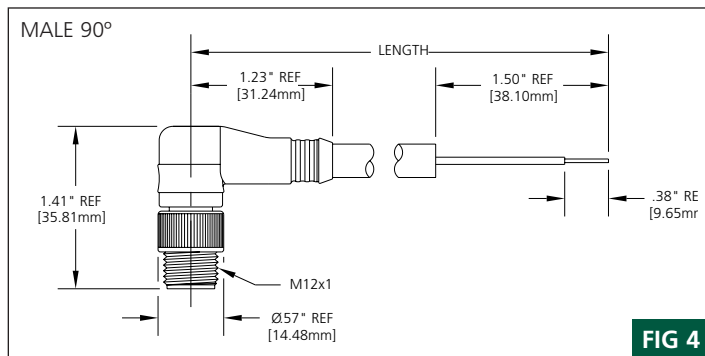
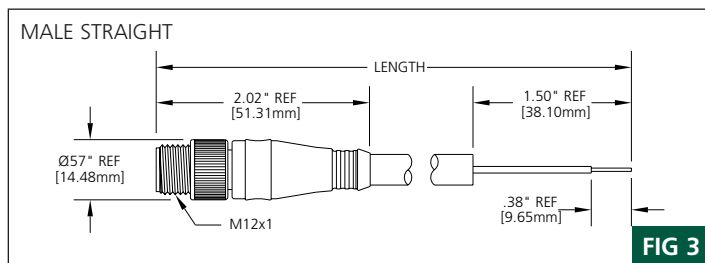
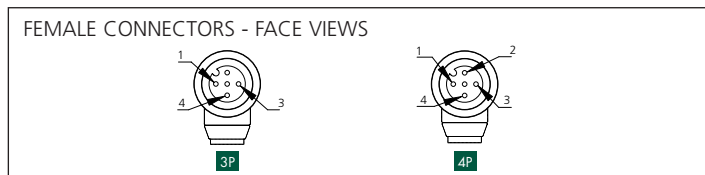
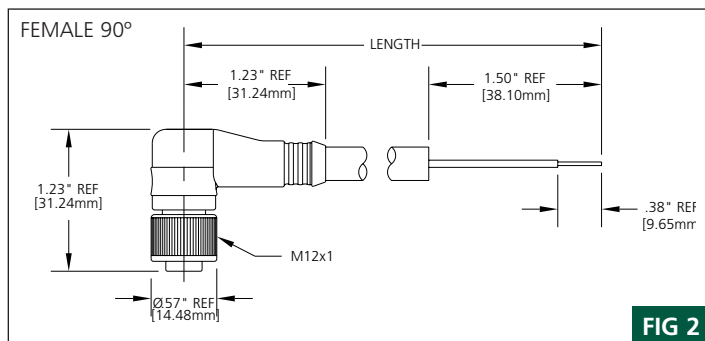
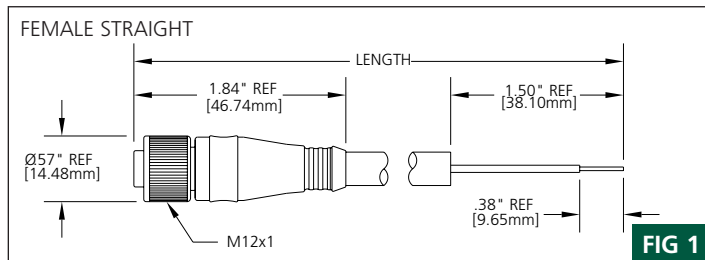
**COUPLING NUT**

STAINLESS STEEL	ADD 1
NON-METALLIC	ADD 2

(NON-METALLIC AVAILABLE ON FEMALE CONNECTORS ONLY)

# Specifications

## CONNECTOR DIMENSIONS



- MECHANICAL**
- CONNECTOR FACE: NYLON 6/6
  - MOLDED BODY: PVC
  - O-RING: NITRILE RUBBER
  - COUPLING NUT: ZINC DIECAST W/ BLACK EPOXY COAT, OPTIONAL STAINLESS STEEL TYPE 303 OR NON-METALLIC BLACK DELRIN
- CABLE:** YELLOW #18 AWG THERMOSET RUBBER JACKET AND EPDM CONDUCTOR INSULATION OVER 41 X #34 COPPER STRANDING, 300V, UL STYLE SJ00W, CSA CERTIFIED SJOW
- OUTSIDE DIAMETER:**  
 3P - .32" (8.3mm)  
 4P - .33" (8.4mm)
- ELECTRICAL**
- VOLTAGE RATING: 250V AC/DC
  - AMPERAGE: 3P - 4A  
4P - 4A
- ENVIRONMENTAL**
- PROTECTION: IP 68, NEMA 6P
  - AMBIENT OPERATING TEMP: -4° TO 221° F (-20° TO 105° C)
- CERTIFICATIONS**
- UL: UL LISTED, FILE NO. E152210
  - CSA: CSA CERTIFIED, FILE NO LR6837

## RECEPTACLE DIMENSIONS

### MALE RECEPTACLE W/ EXTERNAL THREADS AND 1/2" -14NPT THREADS

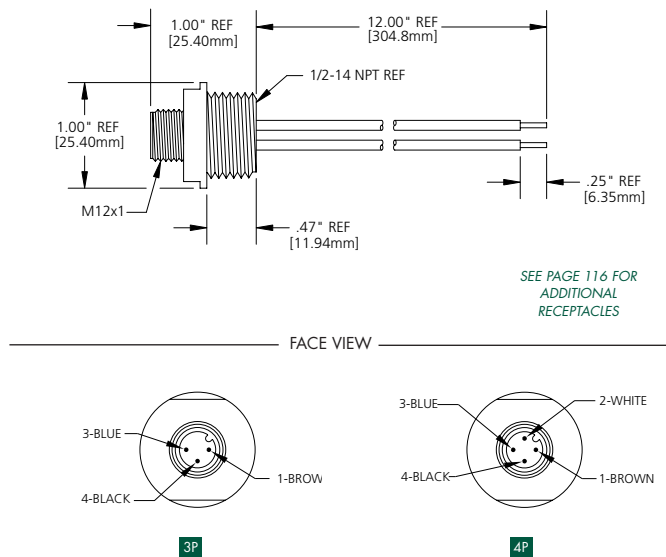


FIG 5

### FEMALE RECEPTACLE W/ INTERNAL THREADS AND 1/4" -18NPT THREADS

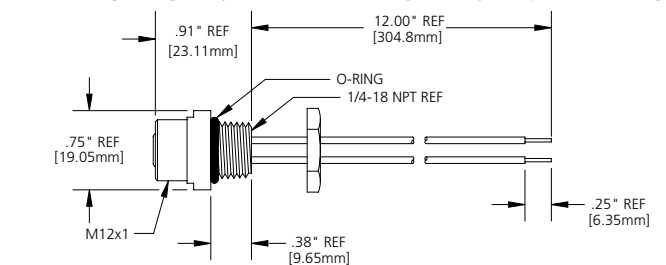


FIG 6

4P



# Single-Ended Coil Cordsets

## Single Keyway M12

#18 AWG or #22 AWG yellow PUR cable - DC color code  
 Oil- and abrasion-resistant polyurethane jacket  
 Low-resistance contact design with gold/palladium nickel plating

<b>NEW</b>	<b>4P</b>
FEMALE FACE VIEW	
COLOR CODE	1- brown 2- white 3- blue 4- black 5- not used
VOLTAGE	250V AC/DC
CURRENT	4A
CONDUCTOR	#22-4

FEMALE	FIG	SINGLE-ENDED CORDSETS WITH #22 AWG PUR CABLE - COIL CORD	
		1.5 FEET RETRACTED/4.5 FEET EXTENDED	4 FEET RETRACTED/12 FEET EXTENDED
STRAIGHT	1	804000B11F045	804000B11F120
90°	2	804001B11F045	804001B11F120
MATING RECEPTACLE*	4	8R4006A18A120	
MALE	FIG	SINGLE - ENDED CORDSETS WITH #22 AWG PUR CABLE - COIL CORD	
		1.5 FEET RETRACTED/4.5 FEET EXTENDED	4 FEET RETRACTED/12 FEET EXTENDED
STRAIGHT	3	804006B11F045	804006B11F120
MATING RECEPTACLE*	5	8R4A00A18A120	

### CATALOG OPTIONS

\*See Page 116 for additional Mating Receptacles

Use the following chart to modify your part's specifications

# 804000B11F045

**CABLE TYPE**

18 AWG YELLOW PUR . . . **B12**

# Specifications



- MECHANICAL**  
 CONNECTOR FACE: NYLON 6/6  
 MOLDED BODY: PVC  
 O-RING: NITRILE RUBBER  
 COUPLING NUT: ZINC DIECAST W/BLACK EPOXY COAT  
 CABLE: YELLOW #22 AWG POLYURETHANE JACKET AND POLYPROPYLENE CONDUCTOR INSULATION OVER 26 X #36 COPPER STRANDING, 300V, UL STYLE 20197, CSA AWM I/II A/B
- OUTSIDE DIAMETER:  
 4P - .20" (5.1mm)  
 4P - .27" (6.8mm)
- ELECTRICAL**  
 VOLTAGE RATING: 250V AC/DC  
 AMPERAGE: 4P - 4A
- ENVIRONMENTAL**  
 PROTECTION: IP 68, NEMA 6P  
 AMBIENT OPERATING TEMP: -4° TO 176° F (-20° TO 80° C)
- CERTIFICATIONS**  
 UL: UL LISTED, FILE NO. E152210  
 CSA: CSA CERTIFIED, FILE NO LR6837

## CONNECTOR DIMENSIONS

### FEMALE STRAIGHT

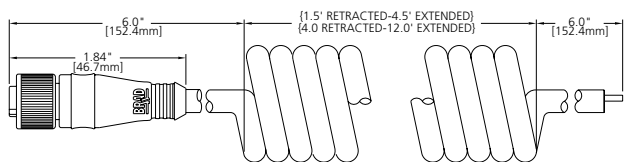


FIG 1

### FEMALE 90°

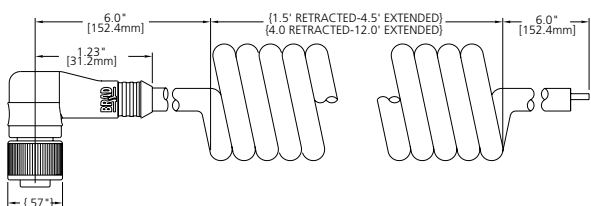


FIG 2

### MALE STRAIGHT

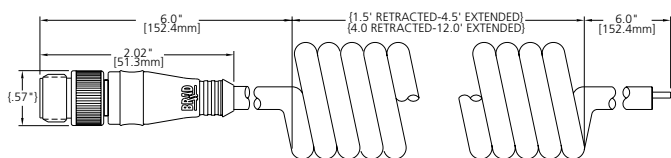
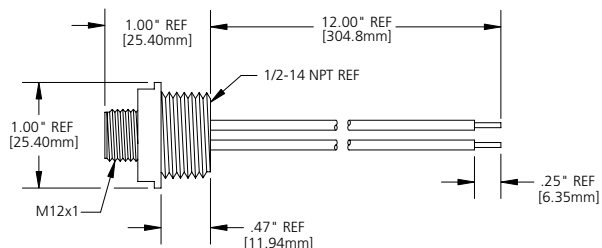


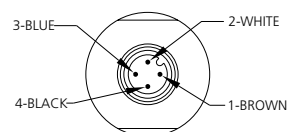
FIG 3

## RECEPTACLE DIMENSIONS

### MALE RECEPTACLE W/ EXTERNAL THREADS AND 1/2" -14NPT THREADS



FACE VIEW



SEE PAGE 116 FOR ADDITIONAL RECEPTACLES

4P

FIG 4

### FEMALE RECEPTACLE W/ INTERNAL THREADS AND 1/4" -18NPT THREADS

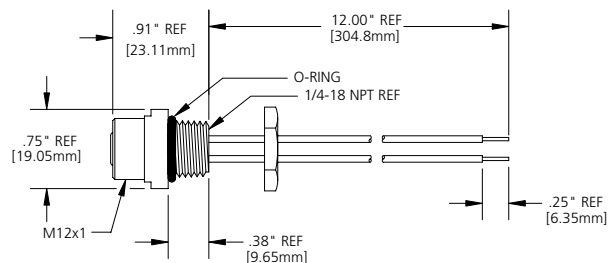


FIG 5



# Single-Ended Cordsets

## Single Keyway M12

#24 AWG black PUR cable  
 Oil- and abrasion-resistant polyurethane jacket  
 High-density pin count in standard M12 quick-disconnect

<b>NEW</b>	<b>8P</b>	
FACE VIEW	FEMALE	MALE
COLOR CODE	1- white 2- brown 3- green 4- yellow	5- gray 6- pink 7- blue 8- red
VOLTAGE	30V AC / 36V DC	
CURRENT	4A	
CONDUCTOR	#24-8	

FEMALE	FIG	SINGLE-ENDED CORDSETS WITH #24 AWG PUR CABLE 2 METERS
STRAIGHT	1	808000P02M020
90°	2	808001P02M020
MATING RECEPTACLE	4	8R8J36E03C3003
MALE	FIG	SINGLE-ENDED CORDSETS WITH #24 AWG PUR CABLE 2 METERS
STRAIGHT	3	808006P02M020
MATING RECEPTACLE	5	8R8J30E03C3003

### CATALOG OPTIONS

Use the following chart to modify your part's specifications

**808000P02M020**

**CABLE LENGTH**

4 METER	040
5 METER	050

# Specifications

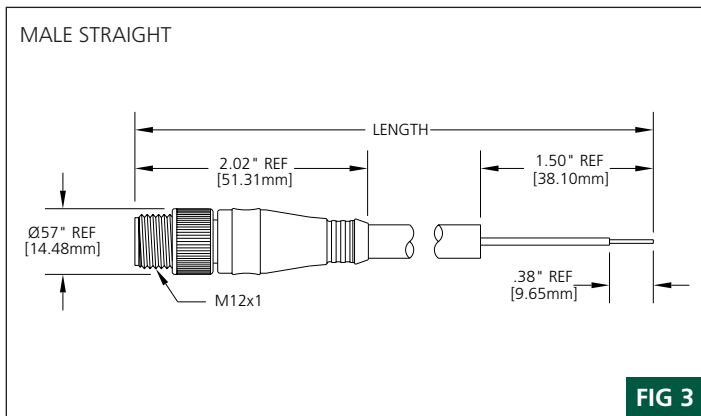
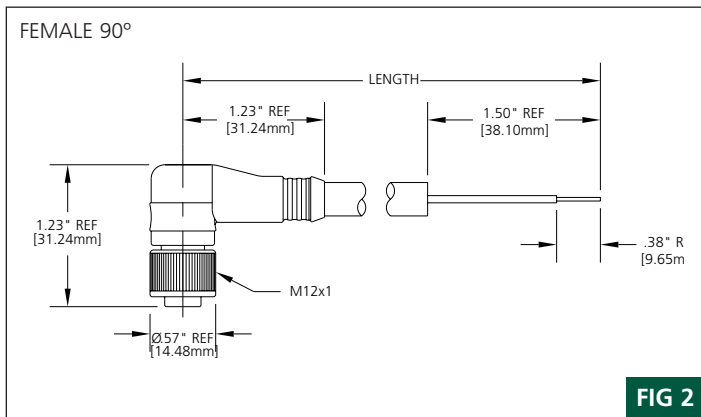
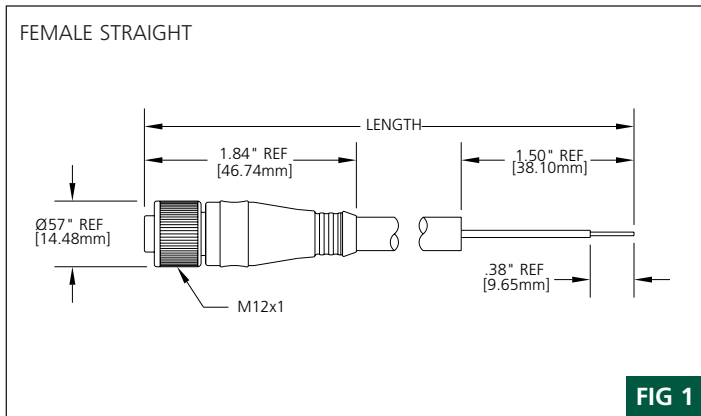


**MECHANICAL**  
 CONNECTOR FACE: POLYAMIDE (NYLON)  
 MOLDED BODY: PVC  
 O-RING: VITON  
 COUPLING NUT: ZINC DIECAST W/ BLACK EPOXY COAT  
 CABLE: BLACK #24 AWG POLYURETHANE JACKET AND PVC CONDUCTOR INSULATION, 300V

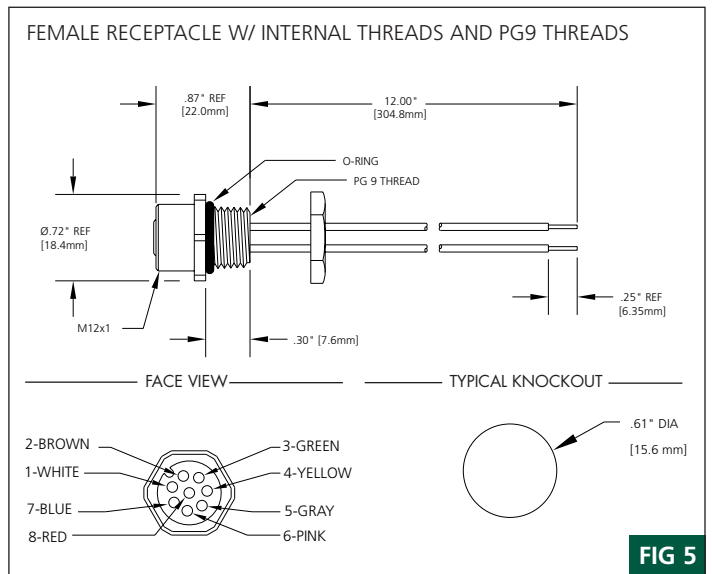
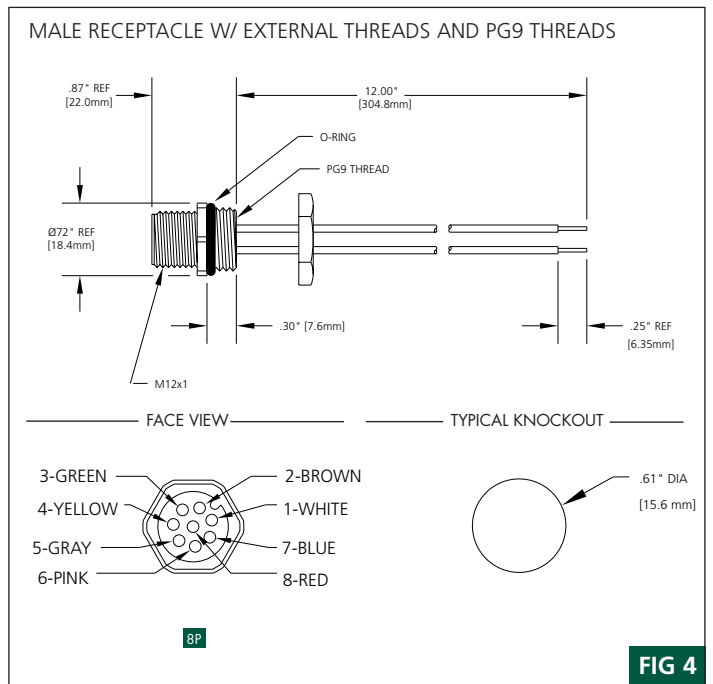
**ELECTRICAL**  
 OUTSIDE DIAMETER: 8P - .29" (7.4mm)  
 VOLTAGE RATING: 30V AC; 36V DC  
 AMPERAGE: 8P - 4A

**ENVIRONMENTAL**  
 PROTECTION: IP 68, NEMA 6P  
 AMBIENT OPERATING TEMP: -4° TO 185° F (-20° TO 85°C)

## CONNECTOR DIMENSIONS



## RECEPTACLE DIMENSIONS





Many applications do not necessarily require an IP68 seal. Further, many of these same applications require the quick and easy mating of connector and sensor. It is for these applications we have created the new Brad Harrison® Micro-Push™ connector.

## Physical Media

### Features

- **Easy Push-On Mating with Control Components**
- **No Coupler to Turn, Eliminating Frustration Associated with Tight Locations**
- **Fits 12mm Threaded Components, Such as Proximity Sensors**
- **Significantly Reduces Installation Time**
- **Excellent Vibration Resistance**
- **Visual & Tactile Keyway Alignment**
- **Sealed to IP64**
- **Ergonomic Design**



Female Straight Version



Male 90-Degree Version

### Brad Harrison®



### Brad Harrison Micro-Push Connectors

The Brad Harrison Micro-Push connector family from Woodhead Connectivity allows easy connections in a fraction of the time associated with threaded coupling connectors. In fact, the more sensors (or other control components) in your application, the more Micro-Push connectors make assembly and maintenance of your system faster and easier.

If your application is in a relatively benign and static environment, your machine doesn't need connectors capable of withstanding submersion. And with space at a premium on today's automation equipment, assemblers are having a tough time getting their fingers around a coupling nut and even more trouble turning them down, which is a leading cause of intermittent connections. But with the Brad Harrison Micro-Push connector, you just line up the keyways using the arrow on the body and push. That's it! There is no coupler and hence, no "back-off." By simply "pushing it on," you've created a strong, vibration-resistant connection, without turning or twisting.

## Specifications

### Cable

**Type** #22 AWG, AWM2661  
**Jacket** Black PVC  
**O.D.** 3P: .18"/4P: .20"

### Connector

**Overmold** Black PVC  
**Insert** Nylon 6/6  
**Contacts** Gold-Plated Brass

### Environmental Protection

IP64

### Electrical

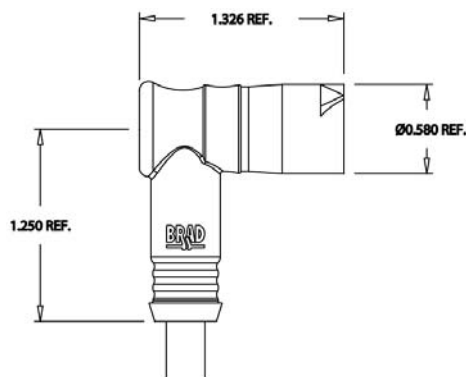
**Voltage** 250V AC/DC  
**Amperage** 4A

## Ordering Information

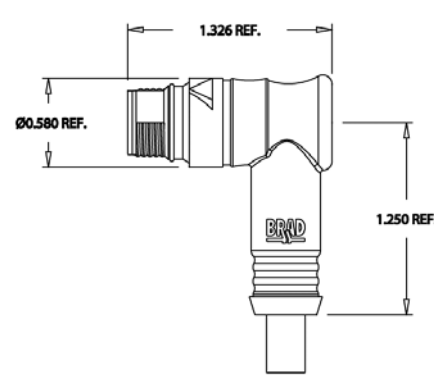
### Single-Keyway Micro-Push™ Cordsets

Cordset	Description	Cable Length	3-Pole Part Number	4-Pole Part Number
Single-ended	Female Straight	2	N03000A41M020G	N04000A41M020G
		5	N03000A41M050G	N04000A41M050G
		10	N03000A41M100G	N04000A41M100G
	Female 90-Degree	2	N03001A41M020G	N04001A41M020G
		5	N03001A41M050G	N04001A41M050G
		10	N03001A41M100G	N04001A41M100G
Double-ended	Male Str./Female Str.	1	NN3030A41M010G	NN4030A41M010G
		2	NN3030A41M020G	NN4030A41M020G
		5	NN3030A41M050G	NN4030A41M050G
	Female 90/Male Str.	1	NN3031A41M010G	NN4031A41M010G
		2	NN3031A41M020G	NN4031A41M020G
		5	NN3031A41M050G	NN4031A41M050G

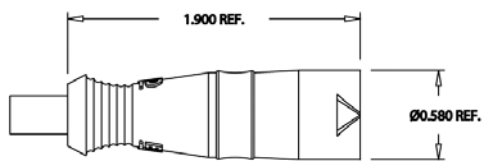
## Dimensions



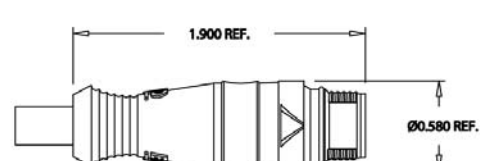
Female 90-Degree



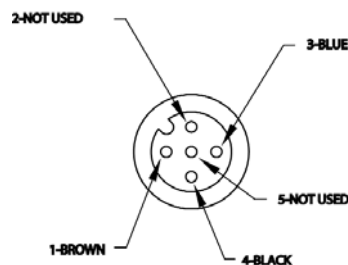
Male 90-Degree



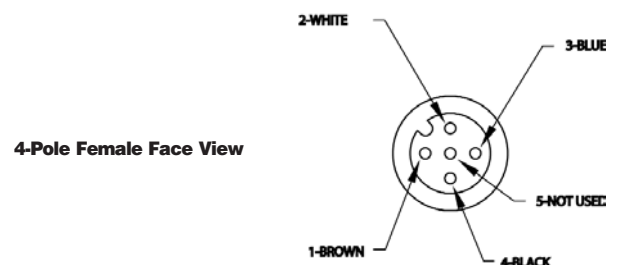
Female Straight



Male Straight



3-Pole Female Face View



4-Pole Female Face View



# Double-Ended Cordsets

## Single Keyway M12

#22 AWG yellow PVC cables with or without braid – DC color code  
 Oil-resistant PVC jacket for all types of heavy-duty industrial environments  
 Highly reliable low-resistance contact design with gold/palladium nickel plating

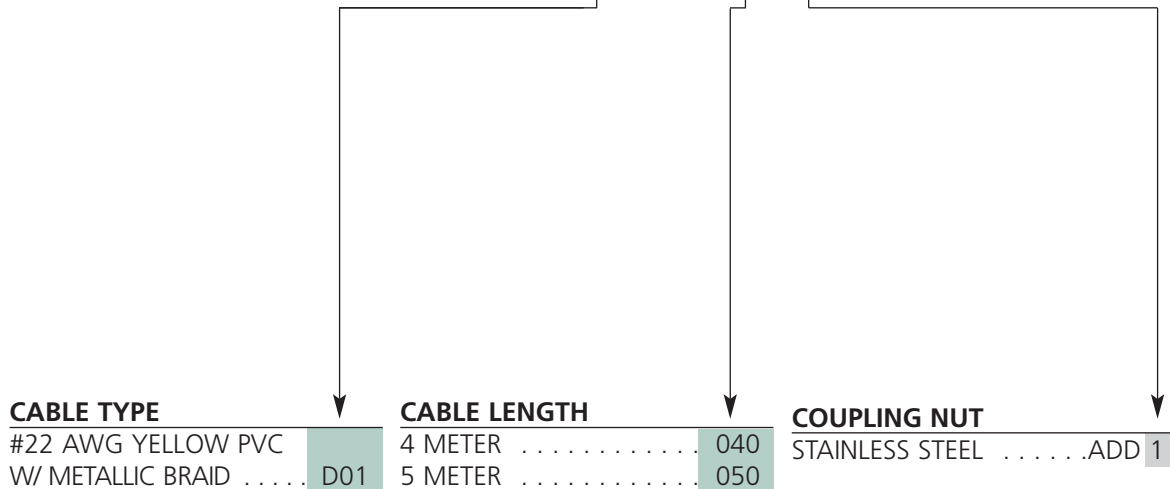
	3P	4P	5P
FEMALE FACE VIEW			
COLOR CODE	1- brown 2- not used 3- blue 4- black 5- not used	1- brown 2- white 3- blue 4- black 5- not used	1- brown 2- white 3- blue 4- black 5- gray
VOLTAGE	250V AC/DC	250V AC/DC	250V AC/DC
CURRENT	4A	4A	4A
CONDUCTOR	#22-3	#22-4	#22-5

FEMALE/MALE	FIG	DOUBLE-ENDED CORDSETS WITH #22 AWG PVC CABLE WITHOUT BRAID 2 METERS LONG		
STRAIGHT/ STRAIGHT	1	883030A09M020	884030A09M020	885030A09M020
90°/STRAIGHT	2	883031A09M020	884031A09M020	885031A09M020
STRAIGHT/90°	3	883032A09M020	884032A09M020	885032A09M020
90°/90°	4	883033A09M020	884033A09M020	885033A09M020

### CATALOG OPTIONS

Use the following chart to modify your part's specifications

**883030A09M0201**

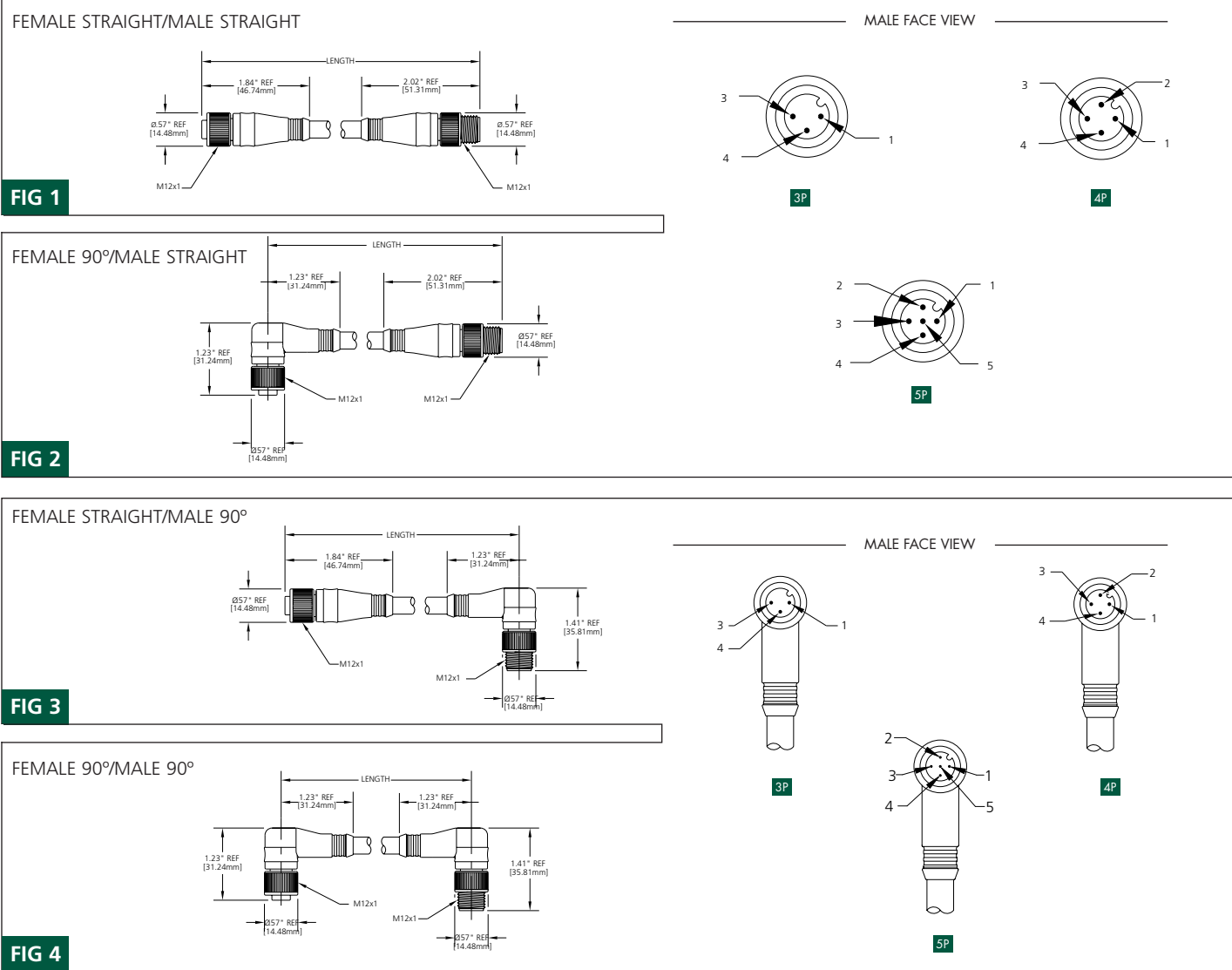


# Specifications



- MECHANICAL**  
 CONNECTOR FACE: NYLON 6/6  
 MOLDED BODY: PVC  
 O-RING: NITRILE RUBBER  
 COUPLING NUT: ZINC DIECAST W/ BLACK EPOXY COAT, OPTIONAL STAINLESS STEEL TYPE 303
- CABLE: YELLOW #22 AWG PVC JACKET AND PVC CONDUCTOR INSULATION OVER 26 X #36 COPPER STRANDING, 300V, UL STYLE 2661, CSA I/II A/B, OPTIONAL 80% METALLIC BRAID
- OUTSIDE DIAMETER: WITHOUT BRAID WITH BRAID  
 3P - .18" (4.6mm) 3P - .23" (5.8mm)  
 4P - .20" (5.1mm) 4P - .25" (6.4mm)  
 5P - .23" (5.8mm) 5P - .26" (6.6mm)
- ELECTRICAL**  
 VOLTAGE RATING: 250 V AC/DC  
 AMPERAGE: 3P - 4A  
 4P - 4A  
 5P - 4A
- ENVIRONMENTAL**  
 PROTECTION: IP 68, NEMA 6P  
 AMBIENT OPERATING TEMP: -4° TO 221° F (-20° TO 105° C)
- CERTIFICATIONS**  
 UL: UL LISTED, FILE NO. E152210  
 CSA: CSA CERTIFIED, FILE NO. LR6837

## CONNECTOR DIMENSIONS





# Double-Ended Cordsets

## Single Keyway M12

#18 AWG SJOOW cable – DC color code  
 Oil- and abrasion-resistant jacket  
 Highly reliable low-resistance contact design with gold/palladium nickel plating

	3P	4P
FEMALE FACE VIEW		
COLOR CODE	1- brown 2- not used 3- blue 4- black 5- not used	1- brown 2- white 3- blue 4- black 5- not used
VOLTAGE	250V AC/DC	250V AC/DC
CURRENT	4A	4A
CONDUCTOR	#18-3	#18-4

FEMALE/MALE	FIG	DOUBLE - ENDED CORDSETS WITH #18 AWG SJOOW CABLE 2 METERS LONG	
STRAIGHT/ STRAIGHT	1	883030C02M020	884030C02M020
90°/ STRAIGHT	2	883031C02M020	884031C02M020
STRAIGHT/ 90°	3	883032C02M020	884032C02M020
90°/90°	4	883033C02M020	884033C02M020

### CATALOG OPTIONS

Use the following chart to modify your part's specifications

883030C02M0201

**CABLE LENGTH**

4 METER	040
5 METER	050

**COUPLING NUT**

STAINLESS STEEL	ADD 1
-----------------	-------

# Specifications



**MECHANICAL**  
 CONNECTOR FACE: NYLON 6/6  
 MOLDED BODY: PVC  
 O-RING: NITRILE RUBBER  
 COUPLING NUT: ZINC DIECAST W/ BLACK EPOXY COAT, OPTIONAL STAINLESS STEEL TYPE 303

CABLE: YELLOW #18 AWG THERMOSET RUBBER JACKET AND EPDM CONDUCTOR INSULATION OVER 41 X #34 COPPER STRANDING, 300V, UL LISTED SJOW, CSA CERTIFIED SJOW

OUTSIDE DIAMETER: 3P - .32" (8.3mm)  
 4P - .33" (8.4mm)

**ELECTRICAL**  
 VOLTAGE RATING: 250V AC/DC  
 AMPERAGE: 3P - 4A  
 4P - 4A

**ENVIRONMENTAL**  
 PROTECTION: IP 68, NEMA 6P  
 AMBIENT OPERATING TEMP: -4° TO 221° F (-20° TO 105° C)

**CERTIFICATIONS**  
 UL: UL LISTED, FILE NO. E152210  
 CSA: CSA CERTIFIED, FILE NO LR6837

## CONNECTOR DIMENSIONS

FEMALE STRAIGHT/MALE STRAIGHT

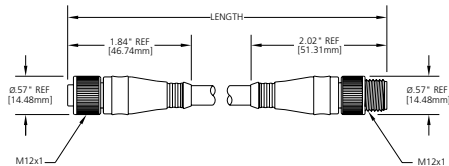
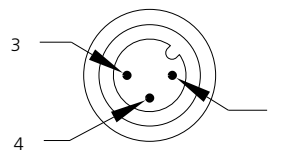


FIG 1

MALE FACE VIEW



FEMALE 90°/MALE STRAIGHT

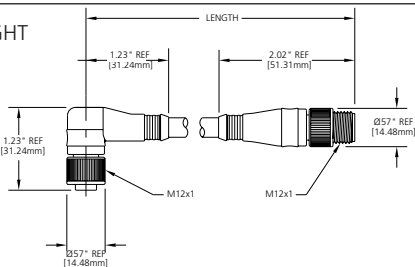
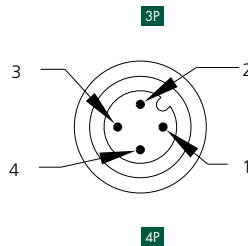


FIG 2



FEMALE STRAIGHT/MALE 90°

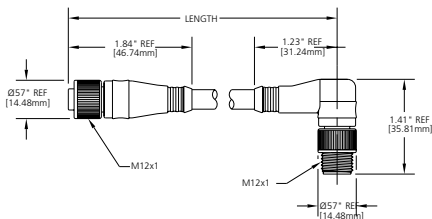
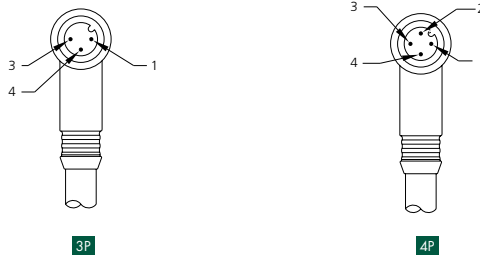


FIG 3

MALE FACE VIEW



FEMALE 90°/MALE 90°

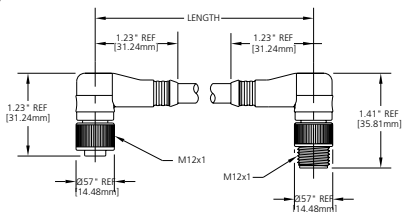


FIG 4

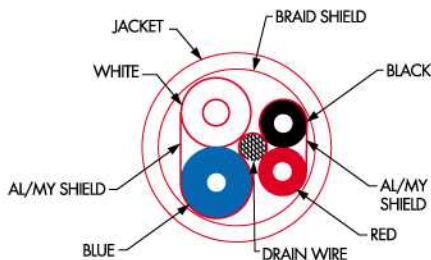


By combining low-profile M8 and M12 form factors into the same double-ended cordset, we have opened up room for connectorized M12 devices to plug into Brad Harrison® Ultra-Thin MPIS® molded junction boxes ▲

## Ultra-Thin Drop Cordsets

### Features

- **Highly flexible DeviceNet cabling: Ideal for neat machine dressing and small cable bend radius installations**
- **Combines M12 popularity with M8 space savings**
- **Available in straight and 90° versions, allowing user to route cable as needed**
- **Sealed to IP68, allows for continuous connection integrity, even in harsh industrial environments**
- **Single-ended versions for use with devices with open terminal strip or field attachable-style connectors**



**Ultra-Thin cable cross section**

### Brad Harrison M8 to M12 DeviceNet Cordsets

By reducing the size of both the cable and its bend radius, Brad Harrison® ultra-thin cabling systems allow you to make more connections in the already densely populated areas on your machines.

The Brad Harrison ultra-thin double-ended cordsets are designed to connect a multitude of input/output devices, such as micro-motors, MFCs and pressure sensors to a high-density drop distribution block. These cordsets have M8 male connectors (to mate with the female receptacles in the drop box), while the other end is a female low-profile M12 connector (to mate with the male on the device).

Combining two different form factors into one cordset allows you to have a high-density interconnection system without changing your existing devices.

Our M8 to M12 cordsets allow easy connection of a large number of M12 devices to Brad Harrison MPIS® molded junction boxes ▲

**BRAD HARRISON®**

# Ultra-Thin Drop Cordsets



## Specifications

### Mechanical

**Connector Face**  
**M12:** Nylon 6/6  
**M8:** PUR  
**Molded Body:** PVC  
**Coupling Nut:** Nickel-plated Brass

### Electrical

**Voltage**  
**M12:** 250V AC/DC  
**M8:** 60V AC/75V DC  
**Amperage**  
**M12:** 4A  
**M8:** 3A  
**Contacts**  
**M12:** Phosphor-Bronze Alloy  
**M8:** Brass  
**Contact Plating** Both have gold-over-nickel per ODVA specification  
**Cable Drop Length** Per ODVA specifications

### Environmental

**Protection** IP68, NEMA 6P  
**Operating Temperature** -4° to 176°F (-20° to 80°C)

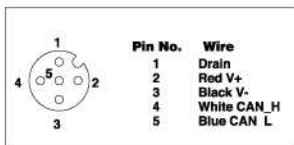
### Certifications

UL/CSA Pending

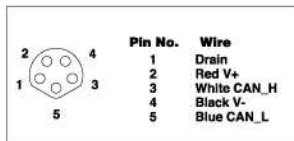
### Cabling

**Overall**  
**Rating:** 300V, 80°C FT1  
**Jacket Material:** PVC  
**Drain Wire:** #26 Copper  
**Cable Diameter:** Ultra-Thin 0.20" (5.1mm)  
**Color:** Grey  
**Power Pair**  
**Wire:** (2) #26AWG (19 x 38) Indiv. Tinned Copper  
**Shielding:** Two shielded pairs with overall braid shield  
**Impedance:** 120 Ohms  
**Max Amperage:** 1.67A  
**Color Code:** Red/Black  
**Data Pair**  
**Wire:** (2) #26AWG (19 x 38) Indiv. Tinned Copper  
**DC Resistance:** 38.9 Ohms/1000 feet  
**Capacitance:** 26pf/ft. @ 1Mhz  
**Color Code:** White/Blue  
**Approvals**  
**UL:** AWM 2095, UL 1581 Flame  
**CSA:** AWM I/II A/B

## Schematics

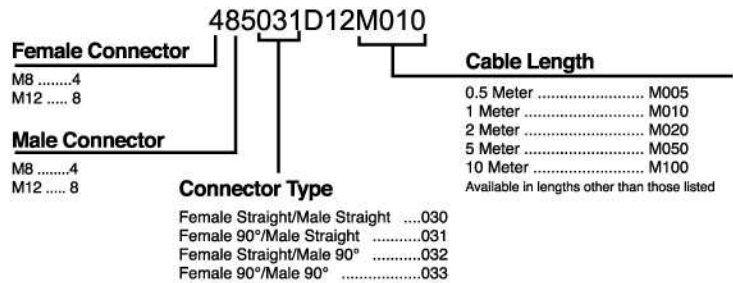


**M12 Female Face View**



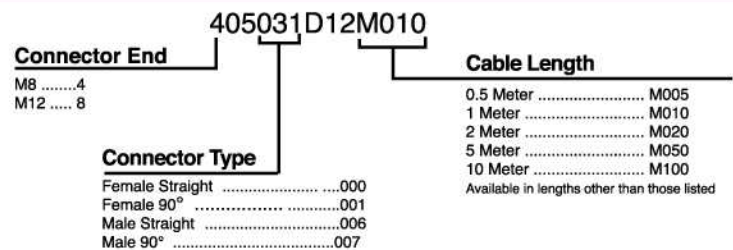
**M8 Female Face View**

## Double-ended Cordset Options



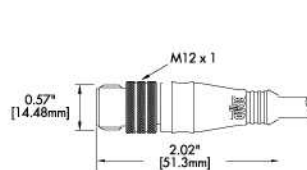
Example: 485031D12M010 = M8 Female 90°/M12 Male Straight, 1 meter cable

## Single-ended Cordset Options

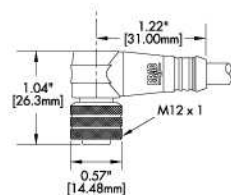


Example: 405000D12M010 = M8 Female Straight, 1 meter cable

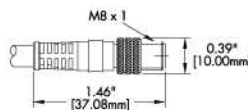
## Dimensions



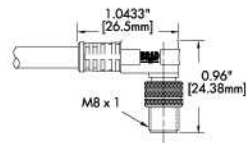
**M12 Straight Male Connector Head**



**M12 90° Female Connector Head**



**M8 Straight Male Connector Head**



**M8 90° Male Connector Head**

### Ultra-Thin Cable: Topology

Communication Rate	Trunk Length	Trunk Exchange (Thick Cable)	Cumulative Drop	Maximum Drop
125kb	66m (216.5 ft)	7.6	156m (512 ft)	6m (20 ft)
250kb	66m (216.5 ft)	3.8	78m (256 ft)	6m (20 ft)
500kb	66m (216.5 ft)	1.5	39m (128 ft)	6m (20 ft)

For Sales and Technical Support, Call 1-800-225-7724 or visit us on the web: [www.connector.com](http://www.connector.com)

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3P



# Single & Double-Ended Cordsets

## Single Keyway M12

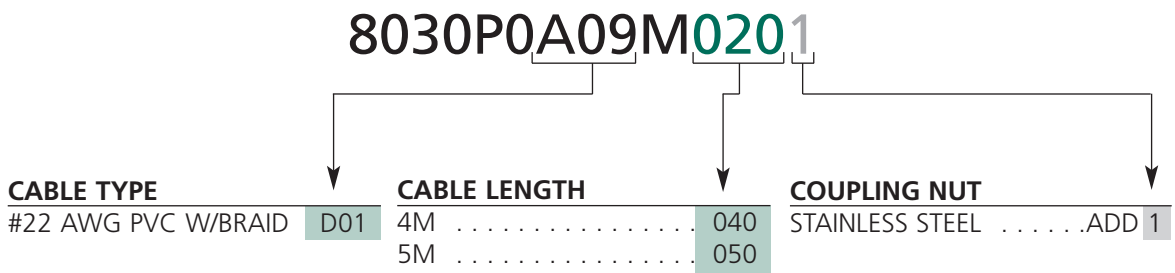
#22 AWG yellow PVC cable with or without braid - DC color code  
 Green LED for power indication yellow LED for output indication  
 Clear PVC body - for use with PNP or NPN type sensor

	3P PNP	3P NPN
FEMALE FACE VIEW		
COLOR CODE	1- brown 2- not used 3- blue 4- black 5- not used	1- brown 2- not used 3- blue 4- black 5- not used
LED CIRCUIT DIAGRAM		
VOLTAGE	10 TO 30V DC	
CURRENT	4A	
CURRENT	#22-3	

FEMALE	FIG	SINGLE-ENDED CORDSETS WITH #22 AWG PVC CABLE WITHOUT BRAID 2 METERS LONG	
STRAIGHT LED	1	8030P0A09M020	8030N0A09M020
90° LED	2	8030P1A09M020	8030N1A09M020
FEMALE/MALE	FIG	DOUBLE-ENDED CORDSETS WITH #22 AWG PVC CABLE WITHOUT BRAID 2 METERS LONG	
90° LED/STRAIGHT	3	8830P7A09M020	8830N7A09M020
90° LED/90°	4	8830P9A09M020	8830N9A09M020

### CATALOG OPTIONS

Use the following chart to modify your part's specifications



# Specifications



**MECHANICAL**

CONNECTOR FACE: NYLON 6/6  
 MOLDED BODY: PVC  
 O-RING: NITRILE RUBBER  
 COUPLING NUT: ZINC DIECAST W/ BLACK EPOXY COAT, OPTIONAL STAINLESS STEEL TYPE 303  
 CABLE: YELLOW 22 AWG PVC JACKET AND PVC CONDUCTOR INSULATION OVER 26 X #36 COPPER STRANDING, 300V, UL STYLE 2661, CSA AWM I/II A/B, OPTIONAL 80% METALLIC BRAID  
 OUTSIDE DIAMETER: WITHOUT BRAID WITH BRAID  
 3P - .18" (4.6mm) 3P - .23" (5.8mm)

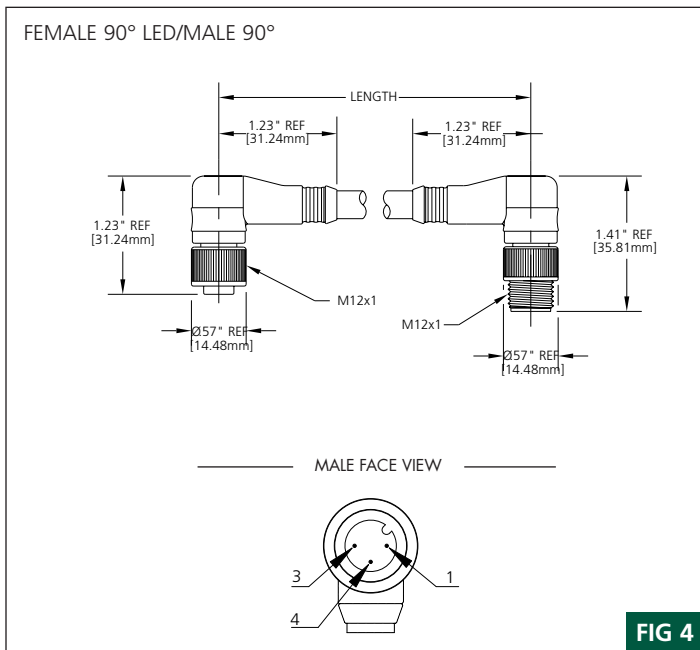
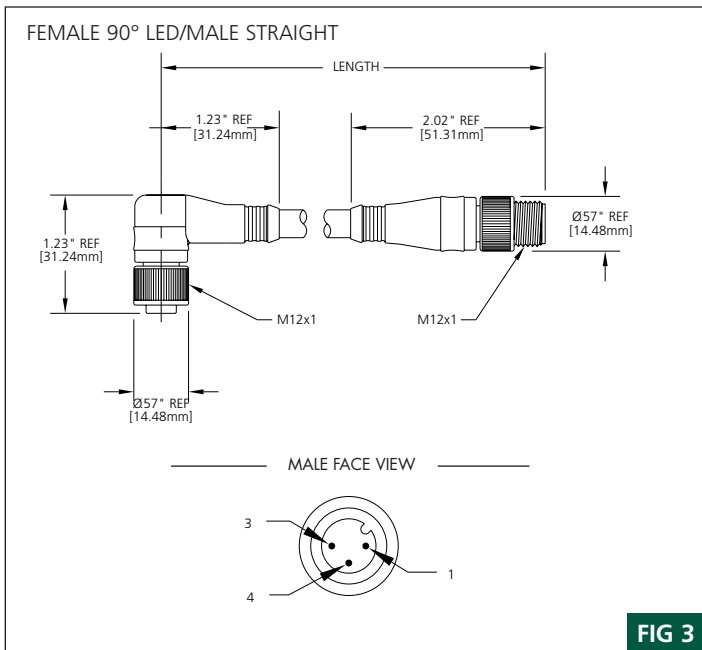
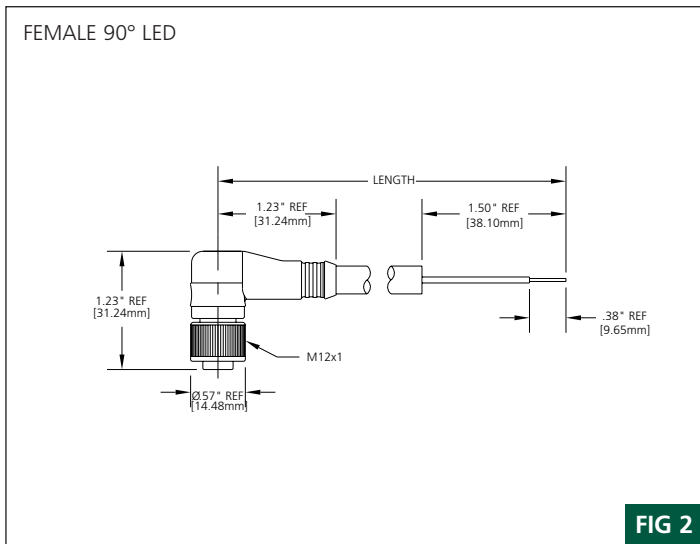
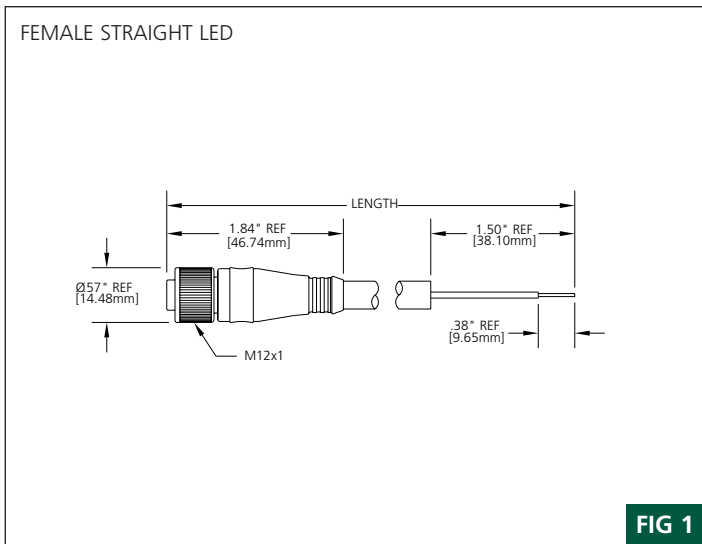
**ELECTRICAL**

VOLTAGE RATING: 10 - 30 V DC  
 AMPERAGE: 3P - 4A  
 ENVIRONMENTAL PROTECTION: IP 68, NEMA 6P  
 AMBIENT OPERATING TEMP: -4° TO 221° F (-20° TO 105° C)

**CERTIFICATIONS**

UL: UL LISTED, FILE NO. E152210  
 CSA: CSA CERTIFIED, FILE NO LR6837

## CONNECTOR DIMENSIONS





# Specifications



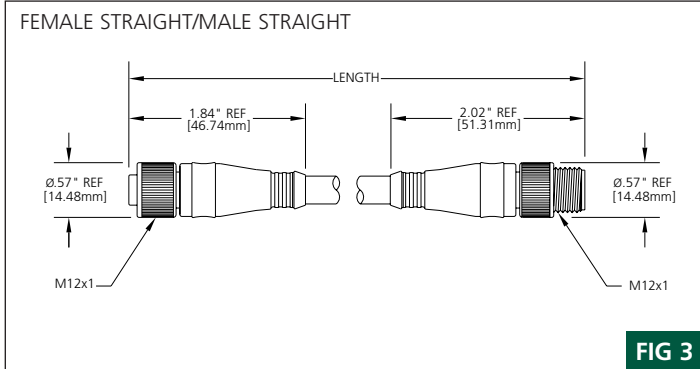
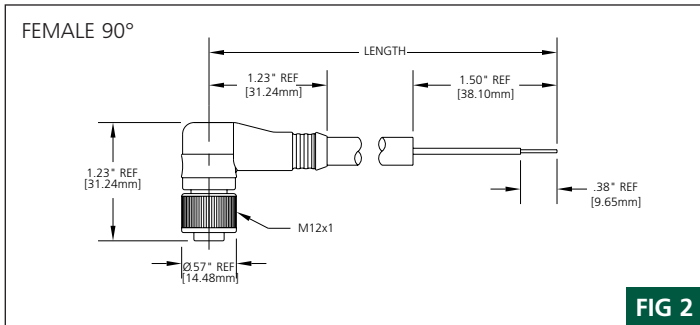
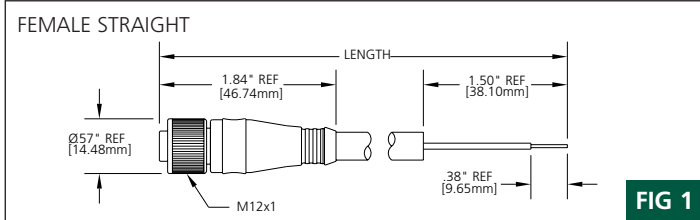
**MECHANICAL**  
 CONNECTOR FACE: NYLON 6/6  
 MOLDED BODY: PVC  
 O-RING: NITRILE RUBBER  
 COUPLING NUT: ZINC DIECAST W/ BLACK EPOXY  
 COAT, OPTIONAL STAINLESS STEEL TYPE  
 CABLE: YELLOW #18 AWG THERMOPLASTIC ELASTOMER (TPE) JACKET AND PVC CONDUCTOR INSULATION OVER 41 X #34 COPPER STRANDING, 300V, UL STYLE 20327, CSA AWM I/II A/B 4P - .28" (7.1mm)

**ELECTRICAL**  
 OUTSIDE DIAMETER: 4P - .28" (7.1mm)  
 VOLTAGE RATING: 250 V AC/DC  
 AMPERAGE: 4P - 4A

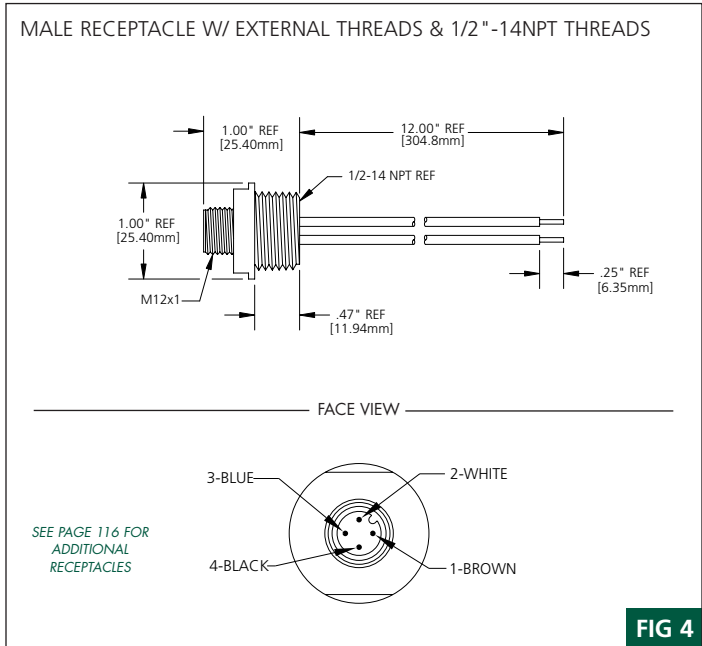
**ENVIRONMENTAL**  
 PROTECTION: IP 68, NEMA 6P  
 AMBIENT OPERATING TEMP: -4° TO 221° F (-20° TO 105° C)

**CERTIFICATIONS**  
 UL: UL LISTED, FILE NO. E152210  
 CSA: CSA CERTIFIED, FILE NO LR6837

## CONNECTOR DIMENSIONS



## RECEPTACLE DIMENSIONS



## CHEMICAL & OIL RESISTANCE CHART - TPE CABLE

ACIDS & BASES	PERFORMANCE	OILS & FUELS	PERFORMANCE
SULFURIC ACID 30%	EXCELLENT	ASTM OIL 1, 2, OR 3	EXCELLENT
NITRIC ACID 10%	EXCELLENT	TRIMSOL	EXCELLENT
SODIUM HYDROXIDE 10%	EXCELLENT	SIMEOL	EXCELLENT
AMMONIUM HYDROXIDE 10%	EXCELLENT	MOBIL OIL DTE 24 OR 26	EXCELLENT
HYDROCHLORIC ACID 20%	EXCELLENT	KEROSENE	EXCELLENT
GLACIAL ACIDIC ACID	GOOD	TRANSFORMER OIL	GOOD

4P & 5P



# Field-Attachable Connectors

## Single Keyway M12

Screw terminal connection accepts up to #18 AWG conductors  
 Easy field installation of quick-disconnect design  
 For use with all standard single keyway M12 receptacles and cordsets

	4P	5P
FEMALE FACE VIEW		
MALE FACE VIEW		
VOLTAGE	250V AC / 300V DC	30V AC / 36V DC
CURRENT	4A	4A

FEMALE	FIG	CATALOG NUMBER WITH PG 7 CABLE FITTING (.13 - .26" OD [3.3 - 6.6MM] CABLE)	
STRAIGHT	1	8A4000-31	8A5000-31
90°	2	8A4001-31	8A5001-31
FEMALE	FIG	CATALOG NUMBER WITH PG 9 CABLE FITTING (.16 - .32" OD [4.1 - 8.1MM] CABLE)	
STRAIGHT	1	8A4000-32	8A5000-32
MATING RECEPTACLE*	3	8R4006A18A120	8R5006A18A120
MALE	FIG	CATALOG NUMBER WITH PG 7 CABLE FITTING (.13 - .26" OD [3.3 - 6.6MM] CABLE)	
STRAIGHT	4	8A4006-31	8A5006-31
90°	5	8A4007-31	8A5007-31
MALE	FIG	CATALOG NUMBER WITH PG 9 CABLE FITTING (.16 - .32" OD [4.1 - 8.1MM] CABLE)	
STRAIGHT	4	8A4006-32	8A5006-32
MATING RECEPTACLE*	6	8R4A00A18A120	8R5A00A18A120

\*See Page 116 for additional Mating Receptacles

# Specifications



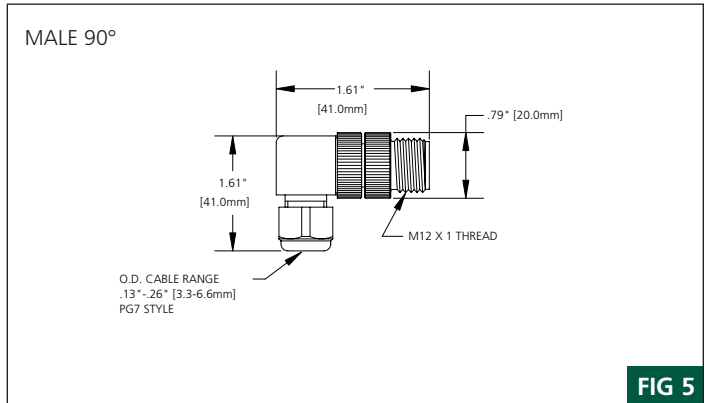
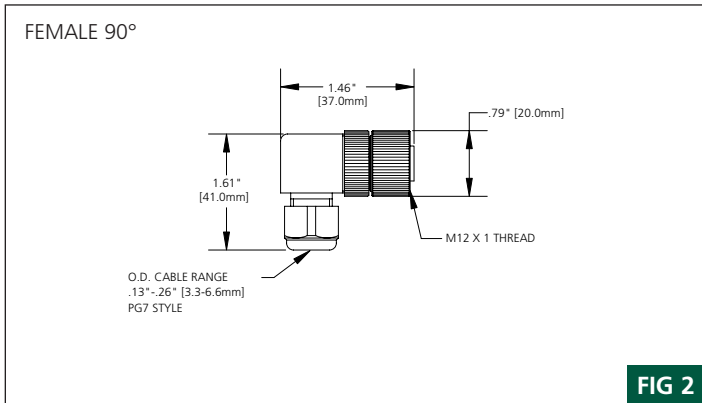
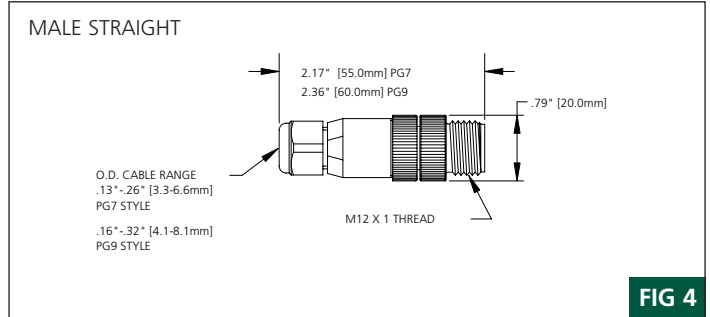
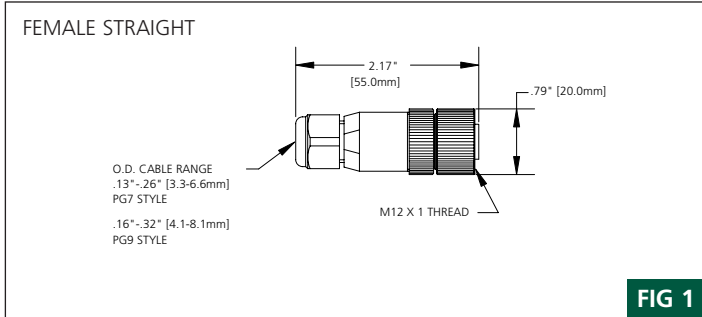
**MECHANICAL**  
 CONNECTOR FACE: POLYAMIDE  
 MOLDED BODY: POLYAMIDE  
 CONTACT: SILVER PLATED BRASS  
 COUPLING NUT: NICKEL PLATED BRASS  
 GROMMET: NITRILE RUBBER  
 MAXIMUM CONDUCTOR SIZE: 18 AWG

**ELECTRICAL**  
 VOLTAGE RATING: 4P - 250V AC 300V DC  
 5P - 30V AC 36V DC  
 AMPERAGE: 4P - 4A  
 5P - 4A

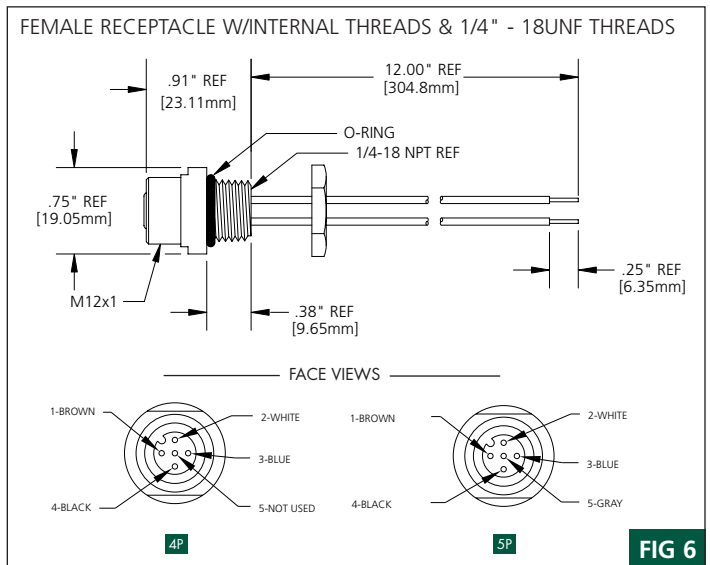
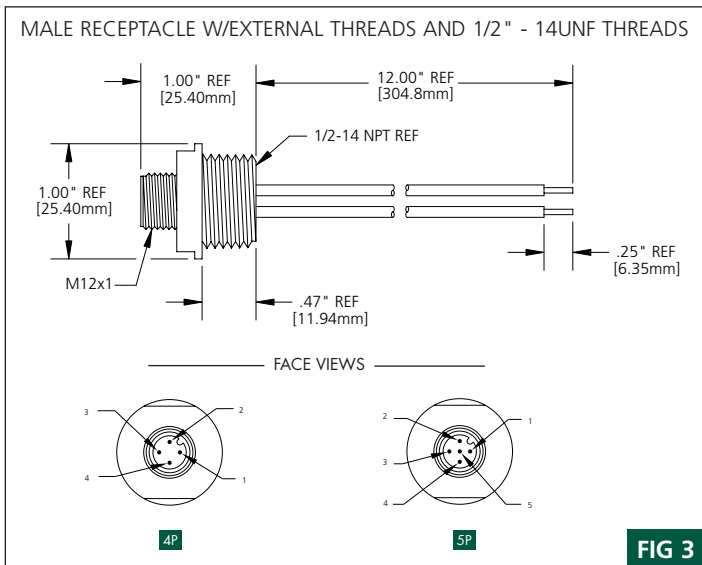
**ENVIRONMENTAL**  
 PROTECTION: IP 68  
 AMBIENT OPERATING TEMP: -13° TO 194° F (-25° TO 90 °C)

**CERTIFICATIONS**  
 CSA: CSA CERTIFIED, FILE NO LR6837

## CONNECTOR DIMENSIONS



## RECEPTACLE DIMENSIONS



4P



# Field Attachable Connectors

## Single Keyway M12

Solder connection accepts #22 AWG conductors maximum  
 Secure termination for high vibration applications  
 For use with all standard single keyway M12 receptacles & cordsets

	<b>4P</b>
MALE FACE VIEW	
VOLTAGE	250V AC/125V DC
CURRENT	3A

MALE	FIG	O.D CABLE RANGE	FIELD-ATTACHABLE CONNECTORS WITH SOLDER TERMINATIONS
STRAIGHT	1	.12-.15"/3-4mm	F04MA03123
		.15-.20"/4-5mm	F04MA03124
		.20-.24"/5-6mm	F04MA03126
MATING RECEPTACLE*	2		8R4A00A18A120

ACCESSORIES	
EXTRACTION TOOL – REQUIRED FOR DISASSEMBLY	F04A29

\*See Page 116 for additional Mating Receptacles

# Specifications



<b>MECHANICAL</b>	
CONNECTOR FACE:	NYLON 6/6
MOLDED BODY:	NYLON 6/6
CONTACT:	GOLD PLATED BRASS
COUPLING NUT:	ALUMINUM
GROMMET:	NITRILE RUBBER
MAXIMUM CONDUCTOR SIZE:	#22 AWG
<b>ELECTRICAL</b>	
VOLTAGE RATING:	250V AC / 125V DC
AMPERAGE:	4P - 3A
<b>ENVIRONMENTAL</b>	
PROTECTION:	IP 67, NEMA 6
AMBIENT OPERATING TEMP:	-40° TO 185° F (-40° TO 85°C)
<b>CERTIFICATIONS</b>	
UL:	UL LISTED, FILE NO. E103202
CSA:	CSA CERTIFIED, FILE NO LR62678

## CONNECTOR DIMENSIONS

MALE STRAIGHT

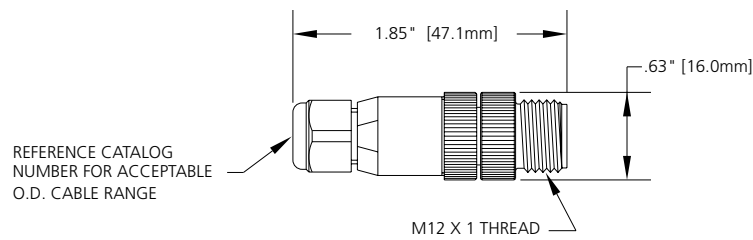


FIG 1

## RECEPTACLE DIMENSIONS

FEMALE RECEPTACLE W/INTERNAL THREADS & 1/4" - 18UNF THREADS

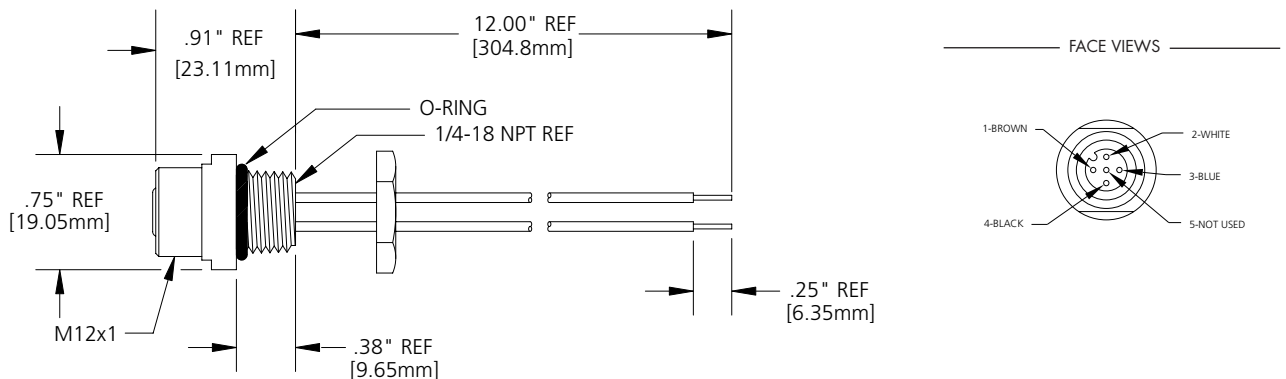


FIG 2

3P to 5P



# Receptacles

## Single Keyway M12

#22 AWG PVC 12 inch leads - DC color code, epoxy potted  
 Black anodized aluminum shell  
 Used in control panels junction boxes and sensors

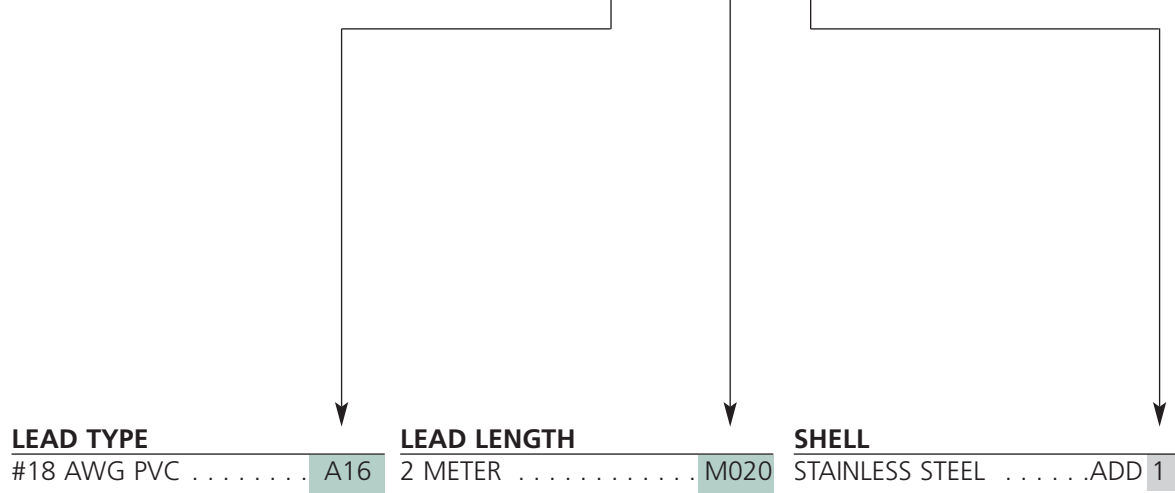
	3P	4P	5P
MALE FACE VIEW			
COLOR CODE	1- brown 3- blue 4- black	1- brown 2- white 3- blue 4- black	1 brown 2 white 3 blue 4 black 5 gray
VOLTAGE	250V AC/DC	250V AC/DC	250V AC/DC
CURRENT	4A	4A	4A
CONDUCTOR	#22-3	#22-4	#22-5

MALE	FIG	RECEPTACLES WITH #22 AWG PVC LEADS 12 INCHES LONG		
M14 X 1 THREAD	1	8R3E06A18A120	8R4E06A18A120	8R5E06A18A120
1/2" - 14NPT	2	8R3006A18A120	8R4006A18A120	8R5006A18A120
FEMALE	FIG	RECEPTACLES WITH #22 AWG PVC LEADS 12 INCHES LONG		
1/4" - 18NPT	3	8R3A00A18A120	8R4A00A18A120	8R5A00A18A120

### CATALOG OPTIONS

Use the following chart to modify your part's specifications

**8R3E06A18A1201**



# Specifications



**MECHANICAL**

SHELL: BLACK ANODIZED ALUMINUM  
 OPTIONAL STAINLESS STEEL TYPE 303  
 NYLON 6/6  
 INSERT:  
 CONDUCTORS: #22 AWG WITH PVC INSULATION  
 OVER 26 X #36 COPPER STRANDING,  
 300V, UL STYLE 1061, CSA AWM SR  
 NITRILE RUBBER

O-RING:

**ELECTRICAL**

VOLTAGE RATING: 250V AC/DC  
 3P - 4A  
 4P - 4A  
 5P - 4A

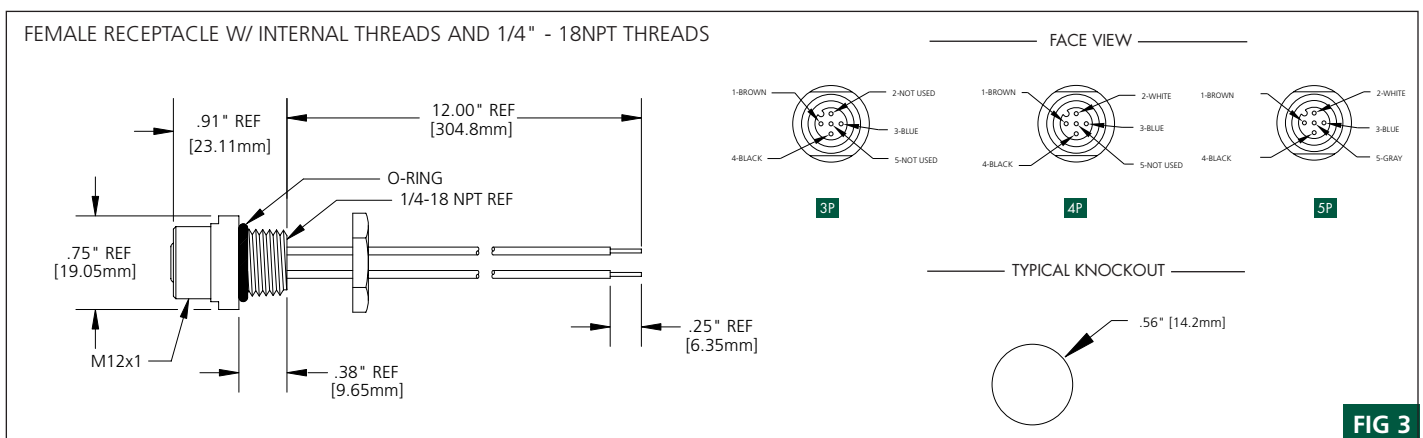
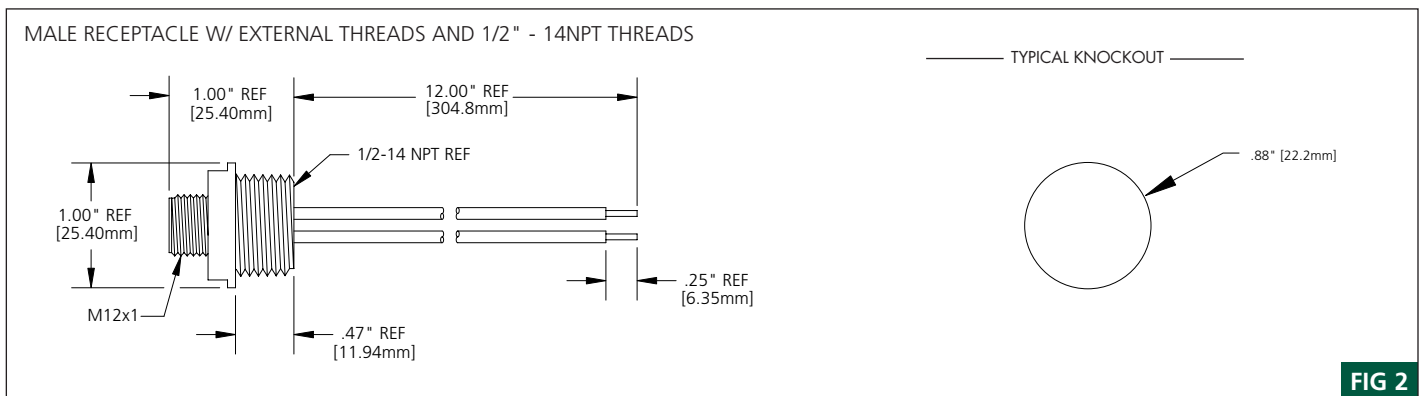
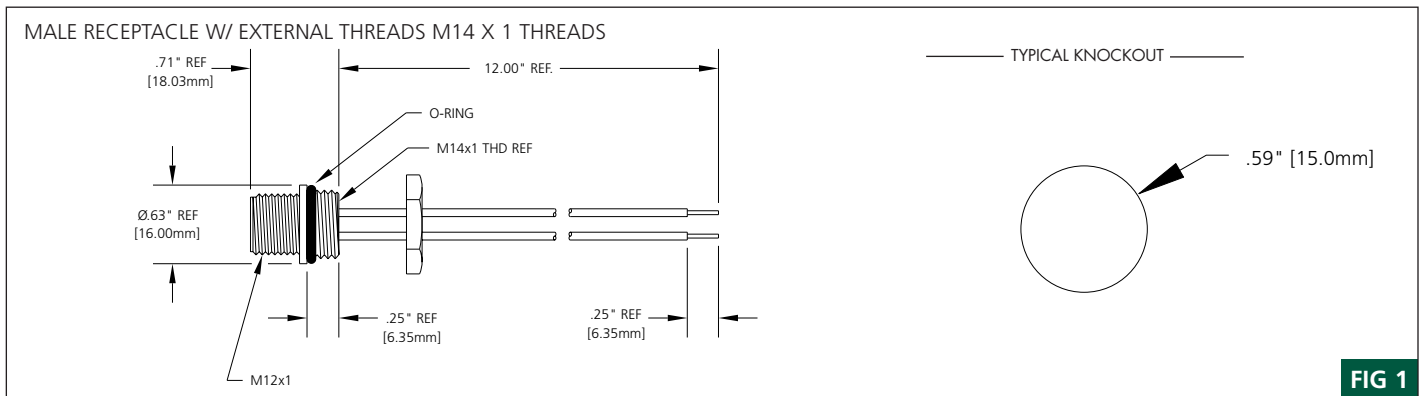
**ENVIRONMENTAL**

PROTECTION: IP 68, NEMA 6P  
 AMBIENT OPERATING TEMP: -4° TO 176° F (-20° TO 80°C)

**CERTIFICATIONS**

UL: 3P & 4P UL LISTED, FILE NO.  
 E152210; 5P UL RECOGNIZED  
 CSA: CSA CERTIFIED, FILE NO LR6837

## RECEPTACLE DIMENSIONS



3P to 5P



# Receptacles-Back Panel Mount Single Keyway M12

#18 AWG PVC 1 meter leads - DC color code, epoxy potted  
Black anodized aluminum shell  
Easy installation and keyway orientation

	3P	4P	5P
FEMALE FACE VIEW			
COLOR CODE	1- brown 2- not used 3- blue 4- black 5- not used	1- brown 2- white 3- blue 4- black 5- not used	1- brown 2- white 3- blue 4- black 5- gray
VOLTAGE	250V AC/DC	250V AC/DC	250V AC/DC
CURRENT	4A	4A	4A
CONDUCTOR	#18-3	#18-4	#18-5

FEMALE	FIG	RECEPTACLES WITH #18 AWG PVC LEADS 1 METER LONG		
BACKPANEL MOUNT	1	8R3B00A16M010	8R4B00A16M010	8R5B00A16M010

## CATALOG OPTIONS

Use the following chart to modify your part's specifications

**8R3B00A16M010**

**LEAD LENGTH**

2 METER .....	020
3 METER .....	030

# Specifications



**MECHANICAL**

SHELL: BLACK ANODIZED ALUMINUM  
 INSERT: NYLON 6/6  
 CONDUCTOR: #18 AWG WITH PVC INSULATION  
 OVER 26 X #30 COPPER STRANDING,  
 300V, UL STYLE 1569, CSA TRSR-64  
 O-RING: NITRILE RUBBER  
 GASKET: NITRILE RUBBER

**ELECTRICAL**

VOLTAGE RATING: 250V AC/DC  
 AMPERAGE: 3P - 4A  
 4P - 4A  
 5P - 4A

**ENVIRONMENTAL**

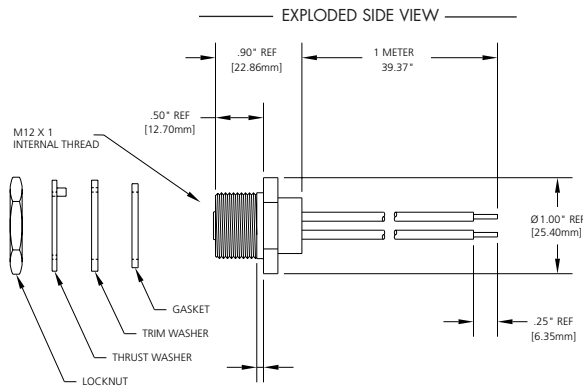
PROTECTION: IP 65, NEMA 4  
 AMBIENT OPERATING TEMP: -4° TO 176° F (-20° TO 80° C)

**CERTIFICATIONS**

UL: UL LISTED, FILE NO. E152210  
 CSA: CSA CERTIFIED, FILE NO. LR6837

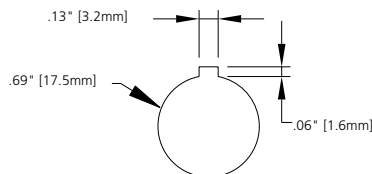
## RECEPTACLE DIMENSIONS

### FEMALE RECEPTACLE W/ INTERNAL THREADS BACK PANEL MOUNT



ACCOMMODATES PANEL THICKNESS FROM .060" [1.5mm] WITH TRIM WASHER TO .200" [5.5mm] WITHOUT TRIM WASHER.

### TYPICAL KNOCKOUT



### FEMALE FACE VIEW

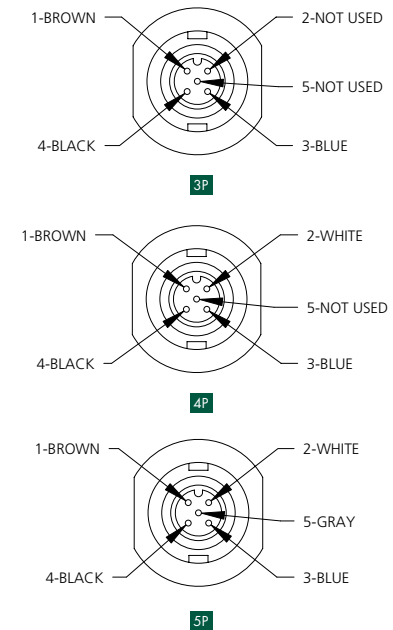


FIG 1



# Single-Keyway M12 and Dual-Keyway 1/2" - 20 UNF

Single keyway M12 closure caps  
 Dual keyway 1/2" - 20 UNF closure caps  
 Dual keyway 1/2" - 20 UNF to Mini-Change® quick-disconnect adapters

## MICRO-CHANGE SINGLE KEYWAY M12 ACCESSORIES

DESCRIPTION	FIG	3P	4P	5P
METALLIC CLOSURE CAP WITH INTERNAL THREADS	1	80011		
METALLIC CLOSURE CAP WITH EXTERNAL THREADS	2	80015		
NON-METALLIC CLOSURE CAP WITH EXTERNAL THREADS	2	80013		

M12 SINGLE KEY CLOSURE CAP WITH INTERNAL THREADS

FOR USE WITH 3 - 5P RECEPTACLES OR 3 - 5P CONNECTORS W/EXTERNAL M12 THREADS

**FIG 1**

M12 SINGLE KEY CLOSURE CAP WITH EXTERNAL THREADS

FOR USE WITH 3 - 5P RECEPTACLES OR 3 - 5P CONNECTORS W/INTERNAL M12 THREADS

**FIG 2**

## MICRO-CHANGE DUAL KEYWAY 1/2" - 20 UNF ACCESSORIES

DESCRIPTION	FIG	2P	3P	4P	5P	6P
ADAPTER WITH 1/2 - 20 MALE DUAL KEY TO FEMALE MINI-CHANGE	3	70004	70204	70404	70604	—
ADAPTER WITH 1/2 - 20 FEMALE DUAL KEY TO MALE MINI-CHANGE	4	70005	70205	70405	70605	—
METALLIC CLOSURE CAP WITH INTERNAL THREADS	5	70010				
METALLIC CLOSURE CAP WITH EXTERNAL THREADS	5	70015				

# Specifications



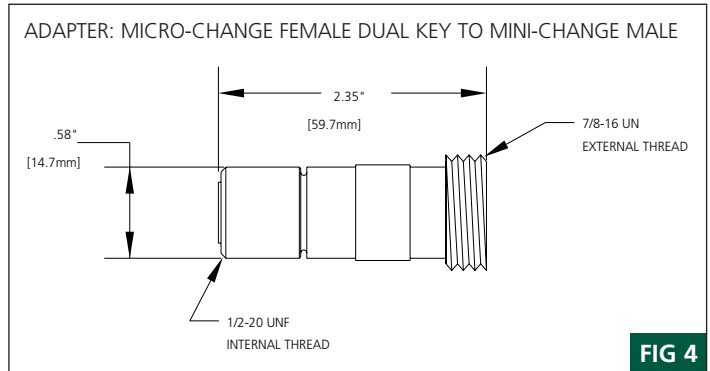
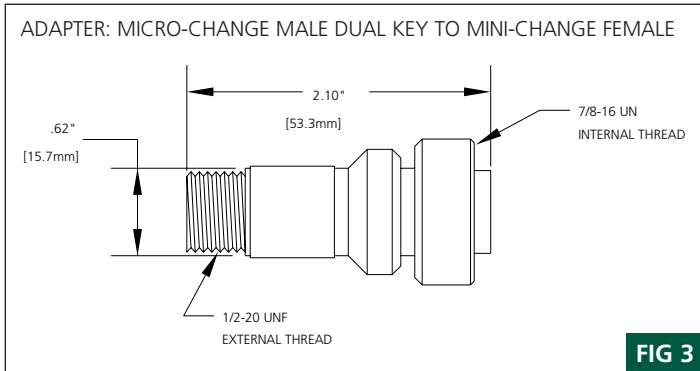
**MECHANICAL**  
 CLOSURE CAPS  
 SINGLE KEYWAY M12  
 METALLIC:  
 NON-METALLIC:  
 DUAL KEYWAY  
 METALLIC:

BLACK ANODIZED ALUMINUM  
 NYLON 6/6  
 GRAY ANODIZED ALUMINUM

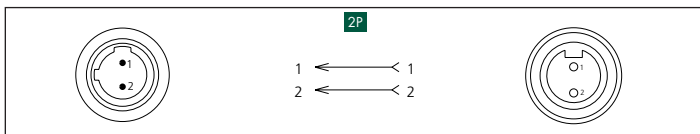
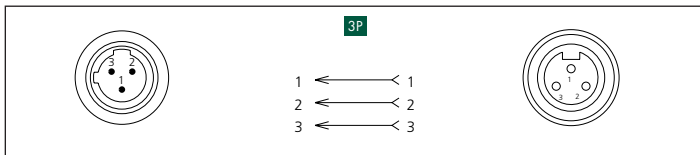
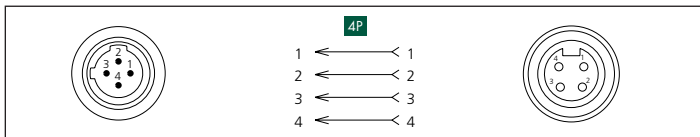
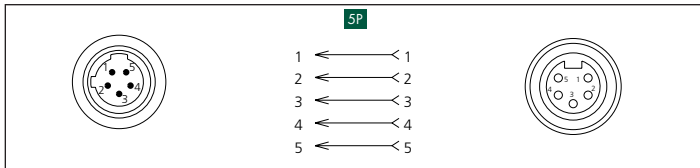
**DUAL KEYWAY ADAPTERS**  
 ADAPTER FACE:  
 ADAPTER BODY:  
 CONDUCTORS:

PVC  
 GRAY ANODIZED ALUMINUM  
 #22 AWG WITH IRR. PVC INSULATION  
 OVER 7 X #30 COP PER STRANDING,  
 300V, UL STYLE 1430, CSA REW

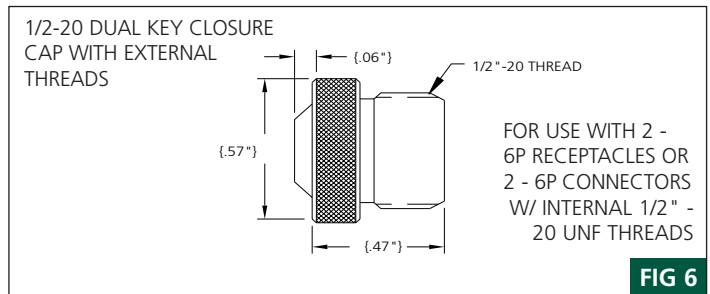
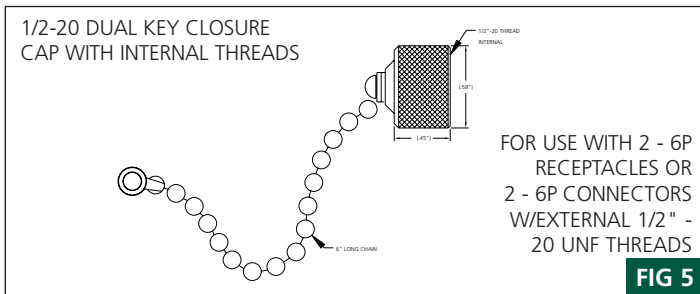
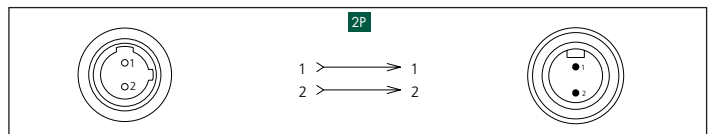
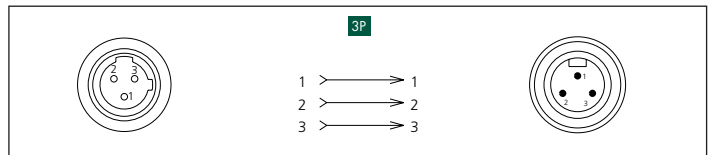
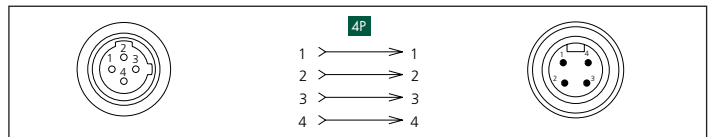
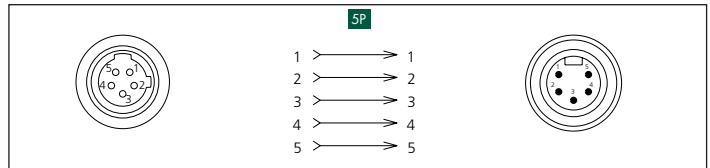
## MICRO-CHANGE® ACCESSORIES



MICRO-CHANGE DUAL KEY MALE FACE VIEW	CONNECTION DIAGRAM	MINI-CHANGE FEMALE FACE VIEW
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MICRO-CHANGE DUAL KEY FEMALE FACE VIEW	CONNECTION DIAGRAM	MINI-CHANGE MALE FACE VIEW
--	--------------------	----------------------------

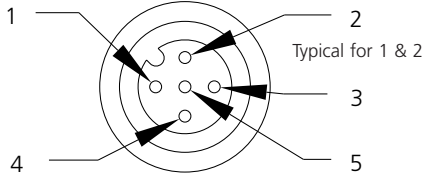
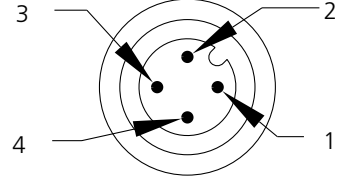




# In-Line Splitters

## Single Keyway M12

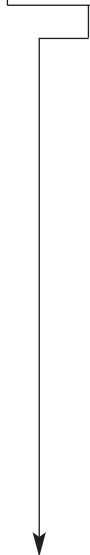
#22 AWG yellow PVC cable  
 Combines two 3-wire DC sensors into one 4P quick-disconnect cable

		3P		4P	
FEMALE FACE VIEW		MALE FACE VIEW			
PIN SCHEMATIC	1- V+ 2- not used	3- V- 4- output 5- not used	PIN SCHEMATIC	1- V+ 2- output 2	3- V- 4- output 1
VOLTAGE	250V AC/DC				
CURRENT	4A				
CONDUCTOR	#22-3			#22-4	
FEMALE	FIG	SPLITTER CORDSETS WITH 2 FEMALE WITH 2 METER CABLE; 1 MALE WITH 3 METER CABLE			
STRAIGHT	1 AND 2	884F30A09M3M2			

### CATALOG OPTIONS

Use the following chart to modify your part's specifications:

# 884F30A09M3M2



**OPTIONS**

- 2 FEMALE W/ 2 METER CABLE; 1 MALE W/ 4 METER CABLE . . . M4M2
- 2 FEMALE W/ 3 METER CABLE; 1 MALE W/ 4 METER CABLE . . . M4M3
- 2 FEMALE W/ 2 METER CABLE; 1 MALE W/ 8 METER CABLE . . . M8M2

# Specifications



- MECHANICAL**  
 CONNECTOR FACE: NYLON 6/6  
 PLUG MOLDED BODY: PVC  
 SPLITTER BODY: PVC  
 O-RING: NITRILE RUBBER  
 COUPLING NUT: ZINC DIECAST W/ BLACK EPOXY COAT  
 CABLE:  
 3P - .20" (5.1mm)  
 4P - .21" (5.3mm)
- ELECTRICAL**  
 VOLTAGE RATING: 250V AC/DC  
 AMPERAGE: 4P - 4A TOTAL
- ENVIRONMENTAL**  
 PROTECTION: IP 68, NEMA 6P  
 AMBIENT OPERATING TEMP: -4° TO 221° F (-20° TO 105° C)
- CERTIFICATIONS**  
 UL: UL LISTED, FILE NO. E152210

## SPLITTER DIMENSIONS

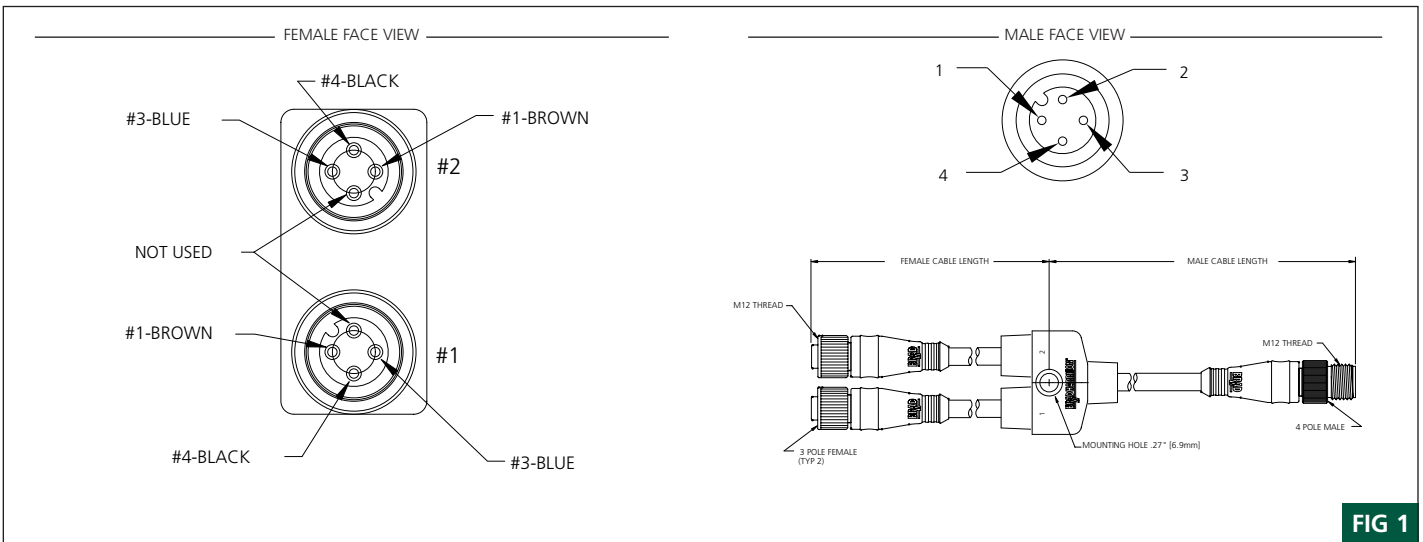


FIG 1

## SCHEMATIC DETAILS

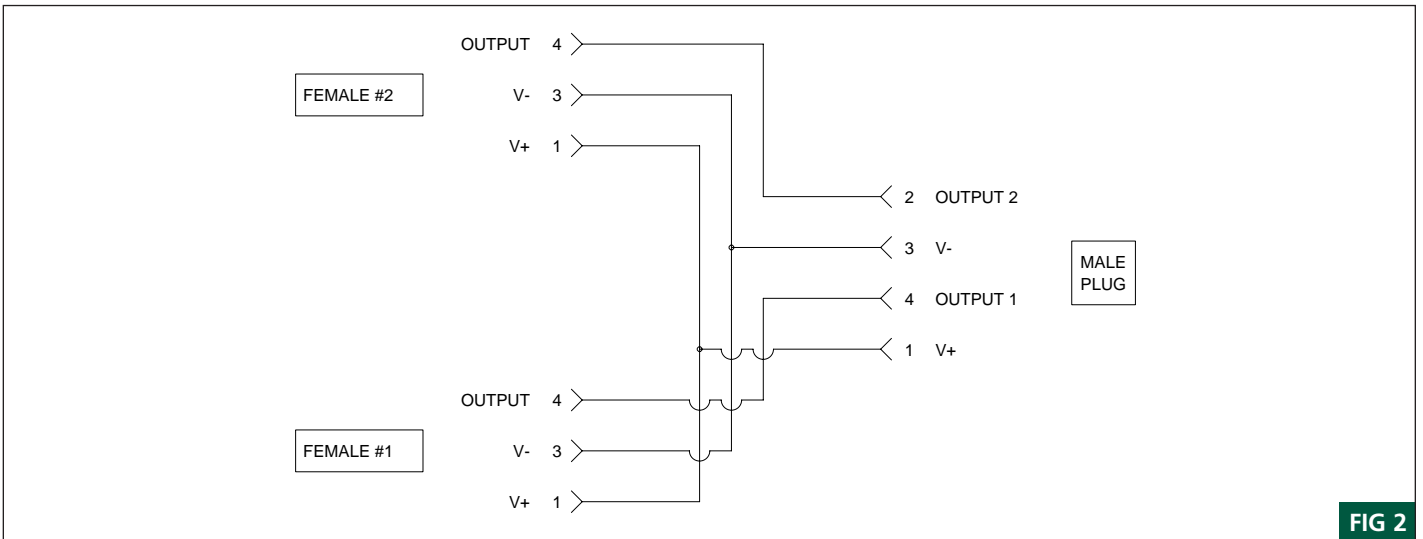


FIG 2



# In-Line Splitter

## Single Keyway M12

#18 AWG yellow thermoplastic (TPE) elastomer cable  
 Combines two 3-wire DC sensors into one 4P male receptacle  
 Oil-, chemical- and weld slag-resistant TPE jacket

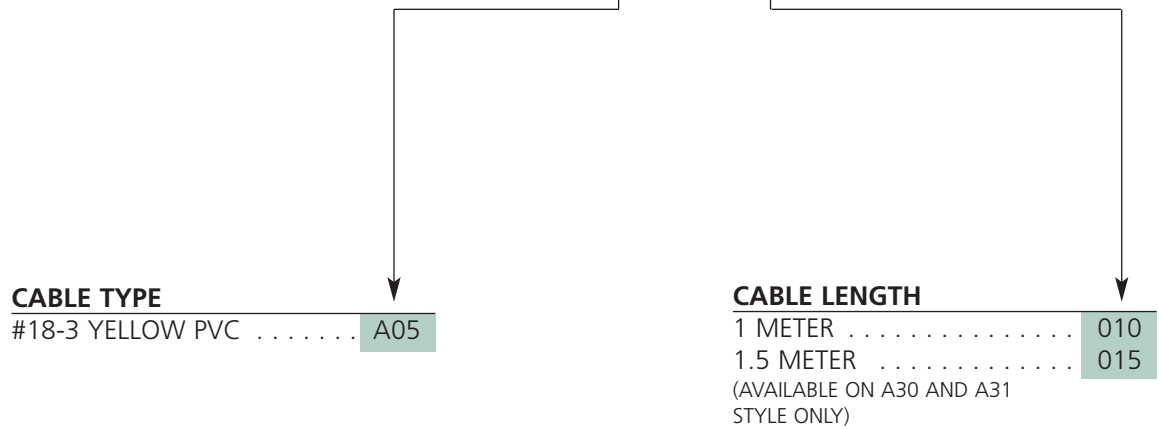
	3P		4P	
FEMALE FACE VIEW				
PIN SCHEMATIC	1- v+ 2- not used 3- v- 4- output 5- not used		PIN SCHEMATIC 1- v+ 2- output B 3- v- 4- output A	
VOLTAGE	250 V AC/DC			
CURRENT	4A			
CONDUCTOR	#18-3		4P Male M12 Connection	

FEMALE	FIG	SPLITTER CORDSET WITH (2) FEMALE LEADS #18 AWG TPE CABLE .3M (11.8") LONG
STRAIGHT	1 AND 5	884A30K03M003
90°	2 AND 5	884A31K03M003
FEMALE	FIG	SPLITTER CORDSET WITH (2) FEMALE LEADS #18 AWG YELLOW TPE CABLE (1) 7" LONG A OUTPUT (1) 9" LONG B OUTPUT
STRAIGHT	3 AND 5	884B30K03A090
90°	4 AND 5	884B31K03A090

### CATALOG OPTIONS

Use the following chart to modify your part's specifications

# 884A30K03M003



# Specifications

## SPLITTER DIMENSIONS

(2) FEMALE STRAIGHT/(1) MALE STRAIGHT

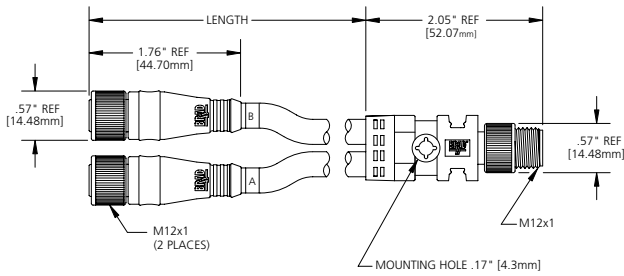


FIG 1

(2) FEMALE 90°/(1) MALE STRAIGHT

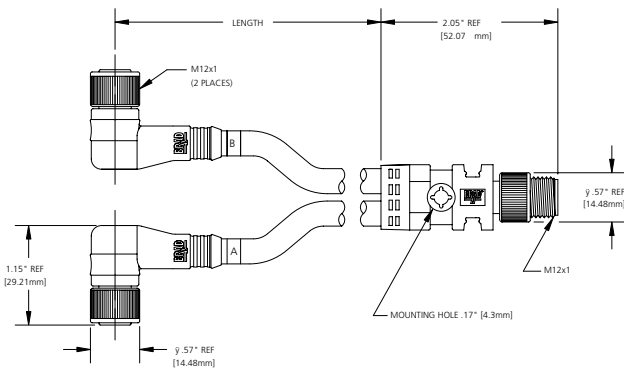


FIG 2

(2) FEMALE STRAIGHT/  
(1) MALE STRAIGHT

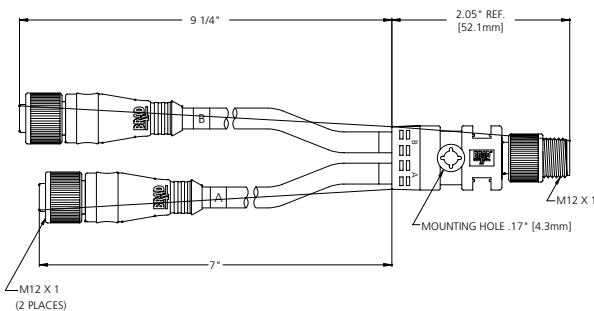


FIG 3



- MECHANICAL**  
 CONNECTOR FACE: NYLON 6/6  
 PLUG MOLDED BODY: PVC  
 SPLITTER BODY: PVC  
 O-RING: NITRILE RUBBER  
 COUPLING NUT: ZINC DIECAST W/ BLACK EPOXY COAT  
 CABLE: YELLOW #18 AWG TPE JACKET AND PVC CONDUCTOR INSULATION OVER 41 X #34 COPPER STRANDING, 300V, UL STYLE 2661, CSA AWM I/II A/B 4P - .28" (7.1mm)
- OUTSIDE DIAMETER:  
**ELECTRICAL**  
 VOLTAGE RATING: 250V AC/DC  
 AMPERAGE: 4P - 4A TOTAL
- ENVIRONMENTAL**  
 PROTECTION: IP 68, NEMA 6P  
 AMBIENT OPERATING TEMP: -4° TO 221° F (-20° TO 105° C)
- CERTIFICATIONS**  
 UL: UL LISTED, FILE NO. E152210

(2) FEMALE 90°/(1) MALE STRAIGHT

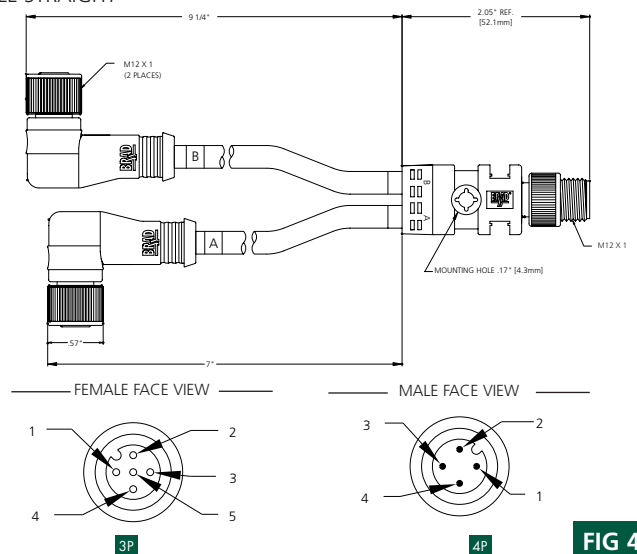


FIG 4

## SCHEMATIC DETAILS

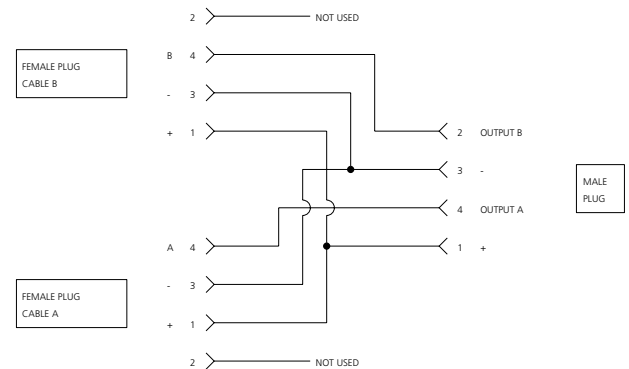


FIG 5



# Solid Body Splitter

## Single Keyway M12

Rugged yellow or black PVC solid body design  
 Compact design saves space  
 Choice of two wiring schematics

NEW	3P		4P	
FEMALE FACE VIEW			MALE FACE VIEW	
PIN SCHEMATIC	1- v+ 2- not used 3- v-	4- output 5- not used	PIN SCHEMATIC	1- v+ 2- output 2 3- v- 4- output 1
VOLTAGE	250V AC/DC			
CURRENT	4A			

CONNECTIONS	FIG	PVC BODY COLOR	SOLID BODY SPLITTER WITH (2) 3P FEMALE CONNECT AND (1) 4P MALE CONNECTION
MALE M12 & (2) FEMALE M12	1 AND 2	Yellow	81594
MALE M12 & (2) FEMALE M12	1 AND 3	Black	81589

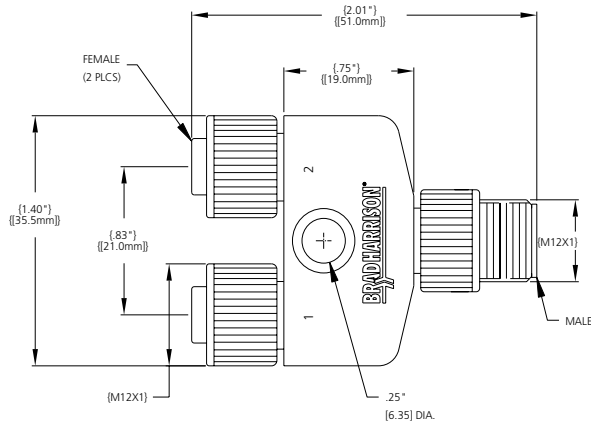
# Specifications



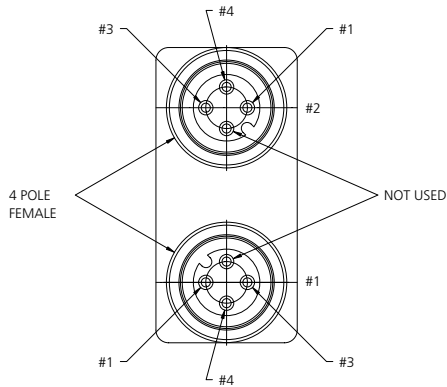
- MECHANICAL**
- CONNECTOR FACE: NYLON 6/6
- SPLITTER BODY: PVC
- O-RING: NITRILE RUBBER
- COUPLING NUT: ZINC DIECAST W/ BLACK EPOXY COAT
- ELECTRICAL**
- VOLTAGE RATING: 250V AC/DC
- AMPERAGE: 4P - 4A TOTAL
- ENVIRONMENTAL**
- PROTECTION: IP 68, NEMA 6P
- AMBIENT OPERATING TEMP: -4° TO 221° F (-20° TO 105° C)
- CERTIFICATIONS**
- CSA: CSA CERTIFIED, FILE NO LR6837

## DIMENSIONS

(2) FEMALE - (1) MALE STRAIGHT



FEMALE FACE VIEW



MALE FACE VIEW

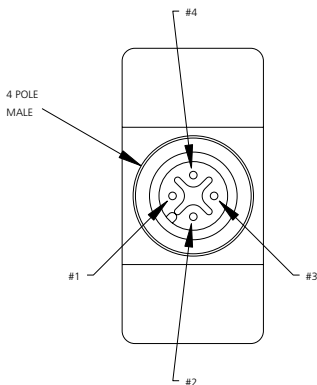


FIG 1

## SCHEMATIC DETAILS

PART NUMBER 81594

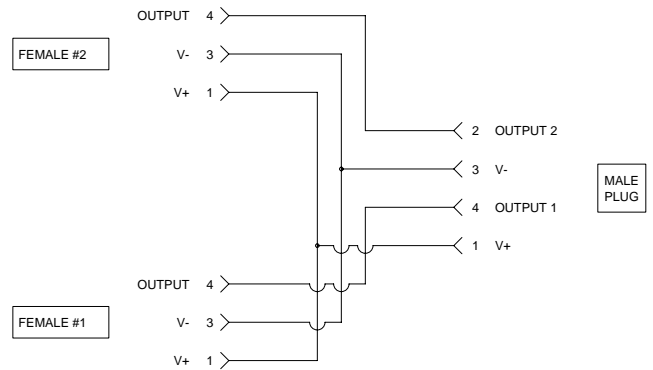


FIG 2

PART NUMBER 81589

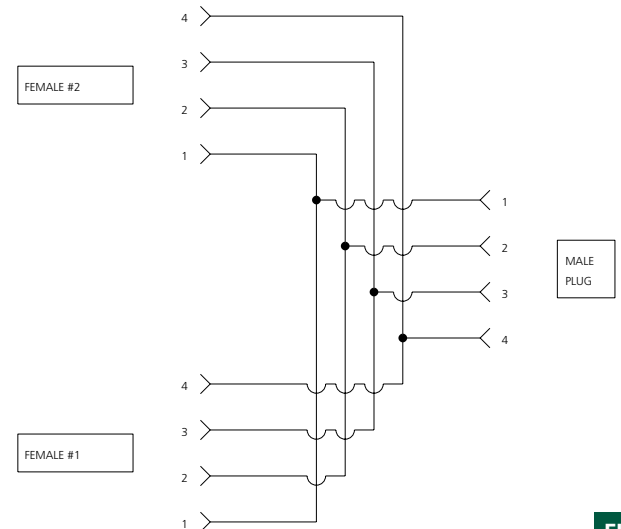


FIG 3



# Tee Splitter

## Single Keyway M12 & Dual Keyway 1/2" - 20 UNF

#22 AWG yellow PVC cable with metallic braid

Combines two 3-wire devices into one 4P conductor cable

5 lengths available in both single keyway and dual keyway

	3P		3P	
FEMALE FACE VIEW	<p>TYPICAL FOR J1 &amp; J2</p>		<p>TYPICAL FOR J1 &amp; J2</p>	
WIRING CODE	1- brown 2- not use 3- blue	4- J1 black J2 white 5- not used	WIRING CODE	1- green 2- J1 red/black trace J2 red 3- red/white trace
VOLTAGE	250V AC/DC			
CURRENT	4A			
CONDUCTOR	#22 - 4			

SINGLE KEYWAY M12			DUAL KEYWAY 1/2" - 20 UNF		
LEAD LENGTH	FIG	SPLITTER CORDSET WITH #22 AWG YELLOW PVC CABLE WITH BRAID	LEAD LENGTH	FIG	SPLITTER CORDSET WITH #22 AWG YELLOW PVC CABLE WITH BRAID
1 METER	1 AND 3	80350-001	3 FEET	2 AND 4	70355-001
2 METER	1 AND 3	80350-002	6 FEET	2 AND 4	70355-002
4 METER	1 AND 3	80350-003	12 FEET	2 AND 4	70355-003
5 METER	1 AND 3	80350-004	20 FEET	2 AND 4	70355-004
10 METER	1 AND 3	80350-005	40 FEET	2 AND 4	70355-005

# Specifications

## DIMENSIONS

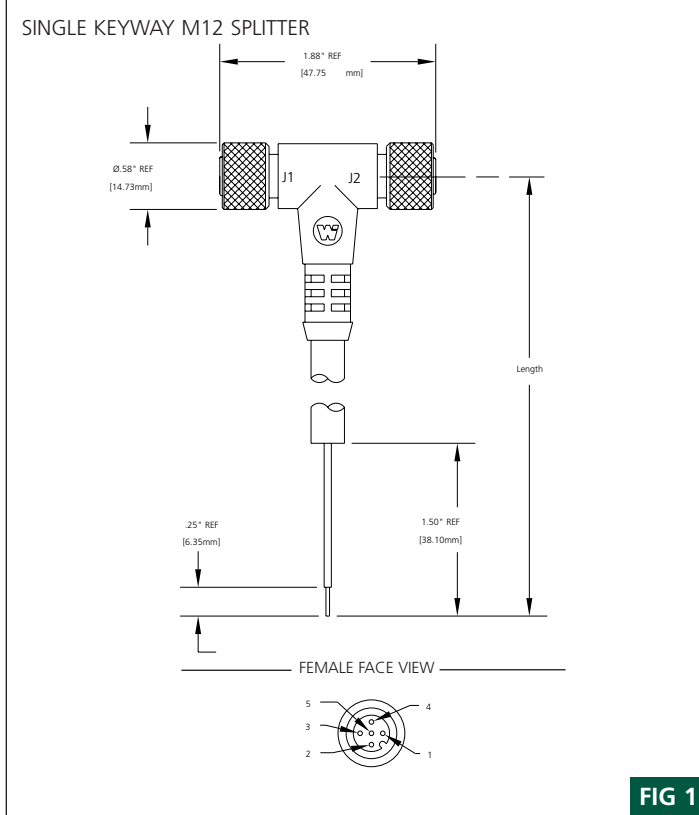


FIG 1

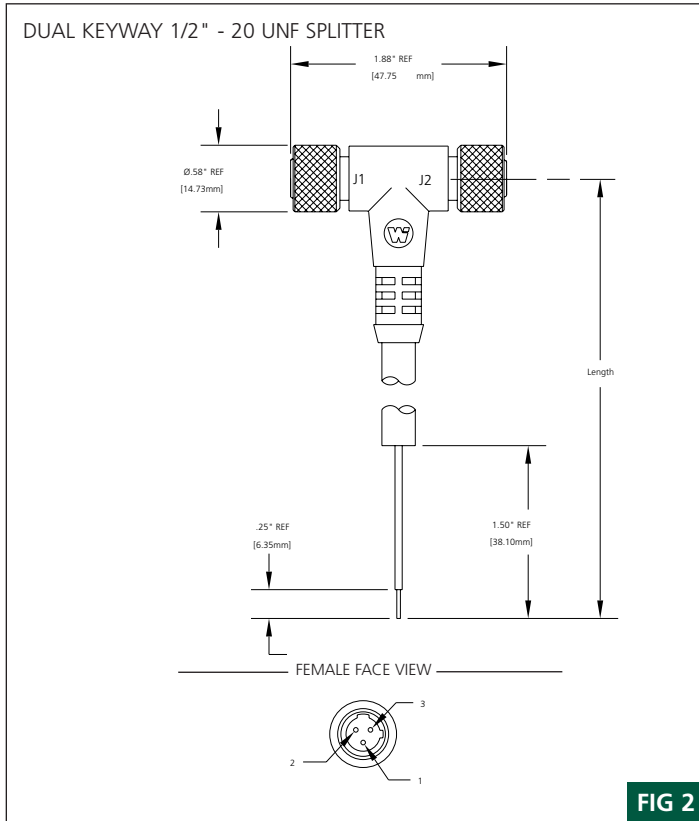


FIG 2



- MECHANICAL**
- CONNECTOR FACE: NYLON 6/6
- MOLDED BODY: PVC
- O-RING: NITRILE RUBBER
- COUPLING NUT: ZINC DIECAST W/ BLACK EPOXY COAT
- CABLE: YELLOW #22 PVC JACKET 80% METALLIC BRAID AND PVC CONDUCTOR INSULATION OVER 26 X #36 COPPER STRANDING, 300V, UL STYLE 2661 CSA AWM I/II A/B 4P - .25" (6.4mm)
- OUTSIDE DIAMETER: 4P CABLE - 4A TOTAL
- ELECTRICAL**
- VOLTAGE RATING: 250 V AC/DC
- AMPERAGE: 4P CABLE - 4A TOTAL
- ENVIRONMENTAL**
- PROTECTION: IP 68, NEMA 6P
- AMBIENT OPERATING TEMP: -4° TO 221° F (-20° TO 105° C)
- CERTIFICATIONS**
- UL: UL LISTED, FILE NO. E152210
- CSA: CSA CERTIFIED, FILE NO LR6837
- SINGLE KEYWAY ONLY

## SCHEMATIC DETAILS

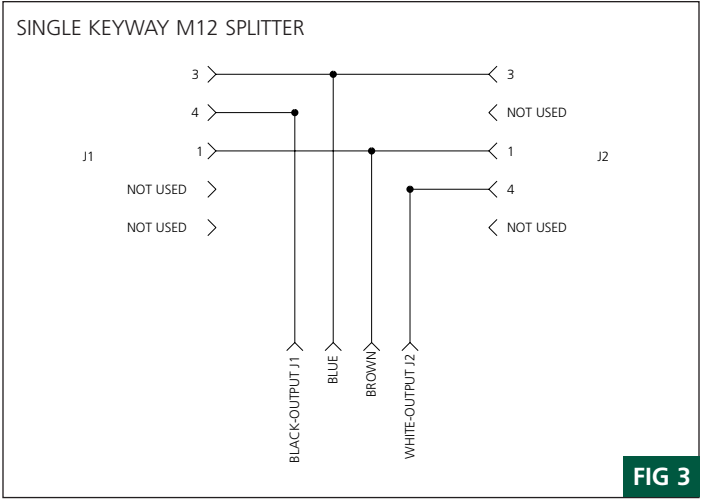


FIG 3

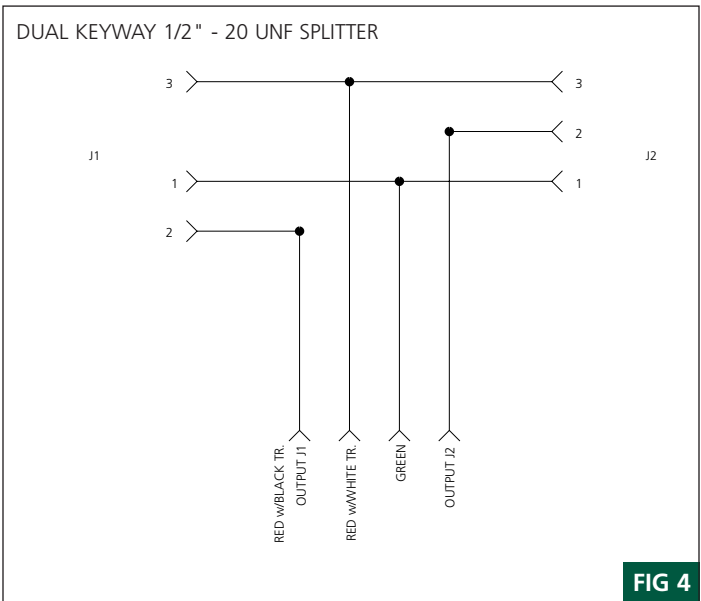


FIG 4

# Receptacle Catalog Number Matrix

Use these Catalog Number Matrices to generate a custom or existing part number. From each grouping of specifications choose the corresponding code to create a single 13 character alpha/numeric part number for ordering. Below is an example of a properly constructed Receptacle part number and how it translates to an actual part.

## 4R4P06A27C300

4 pole Nano-Change® Male Straight Receptacle, M8 x 0.5mm MTG threads with Threaded Coupling and 30 Centimeter Leads, 24 AWG, PVC, UL Style 1061.

4 R 4 P 0 6 A 2 7 C 3 0 0

**LENGTH** (3 characters)  
 1st Digit 10 X Value  
 2nd Digit 1 X Value  
 3rd Digit .1 X Value

**UNIT OF MEASURE**

C Centimeters  
 M Meters  
 Note: use meters for length greater than 30 centimeters

**WIRE TYPE**

A27 24 AWG, PVC, UL Style 1061

**RECEPTACLE TYPE**

P00 Female Straight, M8 X 0.5mm mounting threads  
 P06 Male Straight, M8 X 0.5mm mounting threads  
 F06 Male Straight, M8 X 1.0mm mounting threads

**NUMBER OF POLES**

3, 4, or 5 Pole configurations available

**PRODUCT FAMILY** (2 characters)

1<sup>st</sup> Character 4 Nano-Change with Threaded Coupling  
 2<sup>nd</sup> Character R Receptacle (first character = 4)





# M8 Single & Double-Ended Cordsets Snap Cordset

#24 AWG yellow PVC cable  
Oil-resistant high-flex PUR jacket available  
Secure static fit for quick installation

	3P	4P
FEMALE FACE VIEW		
COLOR CODE	1- brown 3- blue 4- black	1- brown 2- white 3- blue 4- black
VOLTAGE	60V AC / 75V DC	60V AC / 75V DC
CURRENT	4A	4A
CONDUCTOR	#24-3	#24-4

FEMALE	FIG	SINGLE-ENDED CORDSETS WITH 2 METER PVC CABLE	
STRAIGHT	1	503000A10M020	504000A10M020
90°	2	503001A10M020	504001A10M020
MATING RECEPTACLE*	6	4R3P06A27C300	4R4P06A27C300
MALE	FIG	SINGLE-ENDED CORDSETS WITH 2 METER PVC CABLE	
STRAIGHT	3	503006A10M020	504006A10M020
FEMALE/ MALE	FIG	DOUBLE-ENDED CORDSETS WITH 2 METER PVC CABLE	
STRAIGHT/ STRAIGHT	4	553030A10M020	554030A10M020
90°/ STRAIGHT	5	553031A10M020	554031A10M020

## CATALOG OPTIONS

\*See Page 176 for additional Mating Receptacles

Use the following chart to modify your part's specifications

**503000A10M020**

**CABLE TYPE**

PUR CABLE #24 AWG YELLOW . B09

**CABLE LENGTH**

4 METER . . . . . 040  
5 METER . . . . . 050

# Specifications

## CABLE DIMENSIONS

FEMALE STRAIGHT

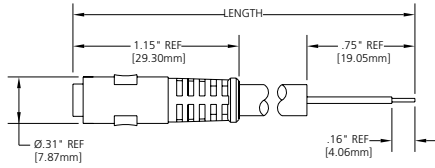


FIG 1

FEMALE 90°

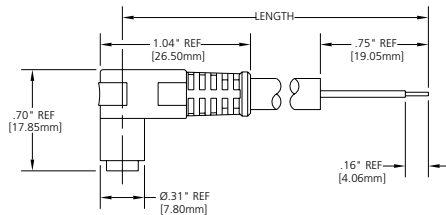
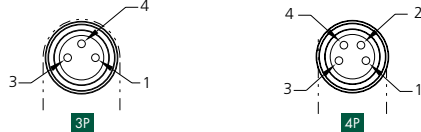


FIG 2

FEMALE CONNECTORS - FACE VIEWS



MALE STRAIGHT

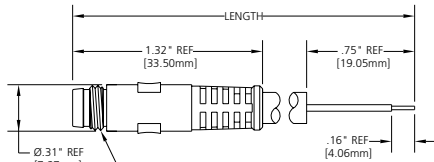


FIG 3

FEMALE STRAIGHT/MALE STRAIGHT

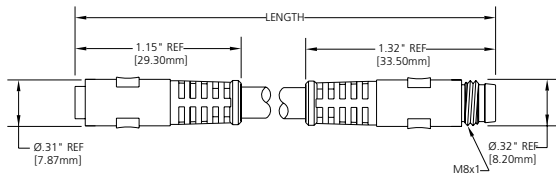


FIG 4

90° FEMALE/MALE STRAIGHT

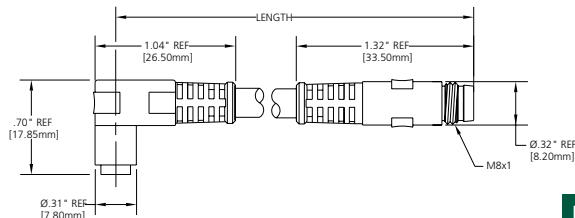


FIG 5

MALE CONNECTORS - FACE VIEWS



### MECHANICAL

CONNECTOR FACE: PBT  
 MOLDED BODY MATERIAL: TPE  
 CABLE: YELLOW, PVC CABLE JACKET, #24 AWG OVER 19 X #36 COPPER STRANDING, UL STYLE 2661

OPTION: YELLOW, HIGH-FLEX PUR CABLE JACKET, #24 AWG OVER 128 X #44 STRANDING, UL STYLE 20233

OUTSIDE DIAMETER: PVC PUR  
 3/C 0.17" (4.3mm) 0.18" (4.6mm)  
 4/C 0.18" (4.6mm) 0.18" (4.6mm)

### ELECTRICAL

VOLTAGE RATING: 60V AC / 75V DC  
 AMPERAGE: 3P - 4A  
 4P - 4A

### ENVIRONMENTAL

PROTECTION: NEMA 4, IP 65  
 AMBIENT OPERATING TEMP: -4° TO 221°F (-20° TO 105°C) - PVC  
 -4° TO 176°F (-20° TO 80°C) - PUR

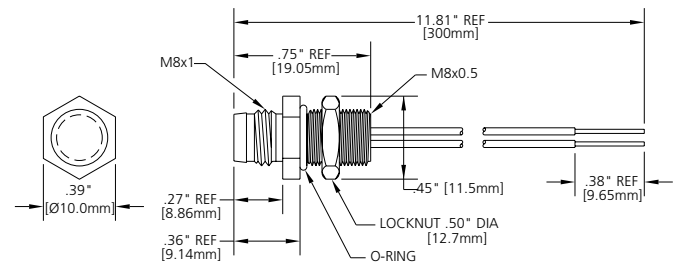
### CERTIFICATION

UL: UL RECOGNIZED, FILE NO. E152210

## RECEPTACLE DIMENSIONS

MALE RECEPTACLE

(ACCOMMODATES THREADED AND SNAP FEMALE CORDSETS)



SEE PAGE 176 FOR ADDITIONAL RECEPTACLES

MALE FACE VIEW

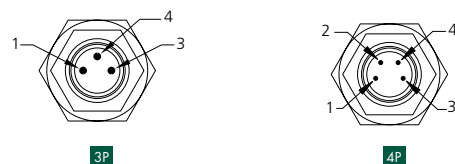


FIG 6



# M8 Single-Ended Cordsets

## Threaded Cordsets

#24 AWG yellow PVC cable  
 Oil-resistant high-flex PUR jacket available  
 Threaded coupling to withstand harsh industrial environments

**NEW 5 Pole**

	3P	4P	5P
FEMALE FACE VIEW			
COLOR CODE	1- brown 3- blue 4- black	1- brown 2- white 3- blue 4- black	1- brown 2- white 3- blue 4- black 5- gray
VOLTAGE	60V AC / 75V DC	60V AC / 75V DC	60V AC / 75V DC
CURRENT	4A	4A	3A
CONDUCTOR	#24-3	#24-4	#24-5

FEMALE	FIG	SINGLE-ENDED CORDSETS WITH 2 METER PVC CABLE		
STRAIGHT	1	403000A10M020	404000A10M020	405000A10M020
90°	2	403001A10M020	404001A10M020	405001A10M020
MATING RECEPTACLE*	5	4R3P06A27C300	4R4P06A27C300	4R5P06A27C300
MALE	FIG	SINGLE-ENDED CORDSETS WITH 2 METER PVC CABLE		
STRAIGHT	3	403006A10M020	404006A10M020	405006A10M020
90°	4	403007A10M020	404007A10M020	405007A10M020
MATING RECEPTACLE*	6	4R3P00A27C030	4R4P00A27C030	4R5P00A27C030

### CATALOG OPTIONS

\*See Page 176 for additional Mating Receptacles

Use the following chart to modify your part's specifications

**403000A10M020**

**CABLE TYPE**

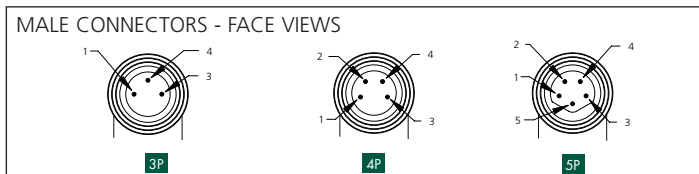
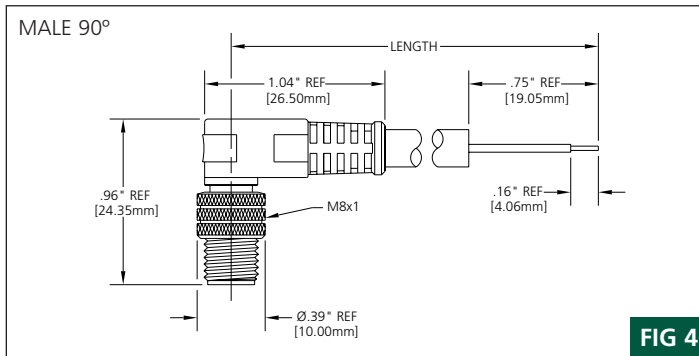
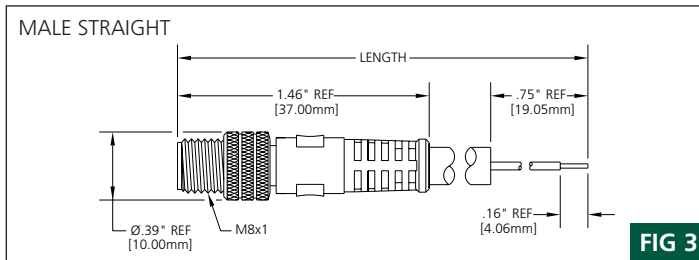
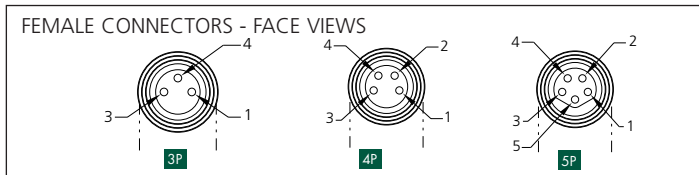
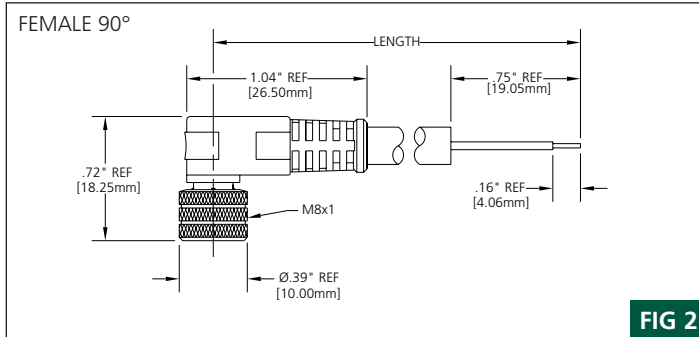
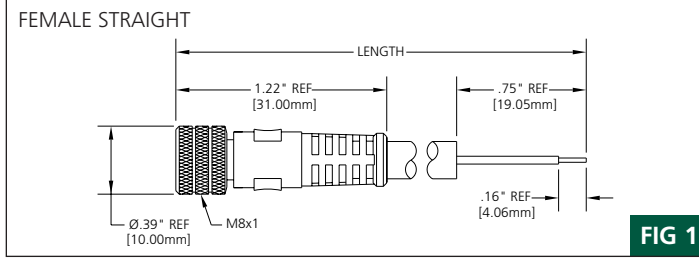
PUR CABLE #24 AWG YELLOW **B09**

**CABLE LENGTH**

4 METER ..... **040**  
 5 METER ..... **050**

# Specifications

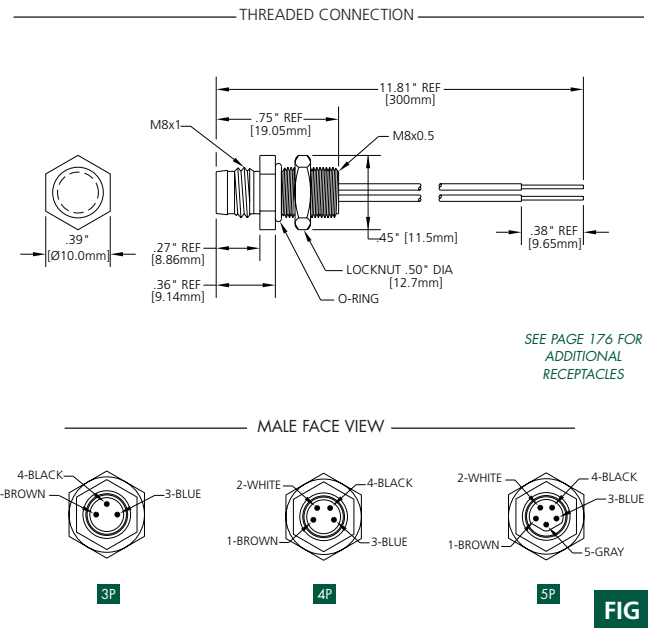
## CABLE DIMENSIONS



- MECHANICAL**
- CONNECTOR FACE: PBT
  - MOLDED BODY: TPE
  - O-RING: VITON
  - COUPLING NUT: NICKEL-PLATED BRASS
  - CABLE: YELLOW, PVC CABLE JACKET, #24 AWG OVER 19 X #36 COPPER STRANDING, UL STYLE 2661
  - OPTION: YELLOW, HIGH-FLEX PUR CABLE JACKET, #24 AWG OVER 128 X #44 STRANDING, UL STYLE 20233
- OUTSIDE DIAMETER:**
- |                   |               |
|-------------------|---------------|
| PVC               | PUR           |
| 3/C 0.17" (4.3mm) | 0.18" (4.6mm) |
| 4/C 0.18" (4.6mm) | 0.18" (4.6mm) |
| 5/C 0.20" (5.1mm) | 0.20" (5.1mm) |
- ELECTRICAL**
- VOLTAGE RATING: 60V AC / 75V DC
  - AMPERAGE: 3P - 4A, 4P - 4A, 5P - 3A
- ENVIRONMENTAL**
- PROTECTION: NEMA 6P, IP 68
  - AMBIENT OPERATING TEMP: -4° TO 221°F (-20° TO 105°C) - PVC, -4° TO 176°F (-20° TO 80°C) - PUR
- CERTIFICATIONS**
- UL: UL RECOGNIZED, FILE NO. E152210

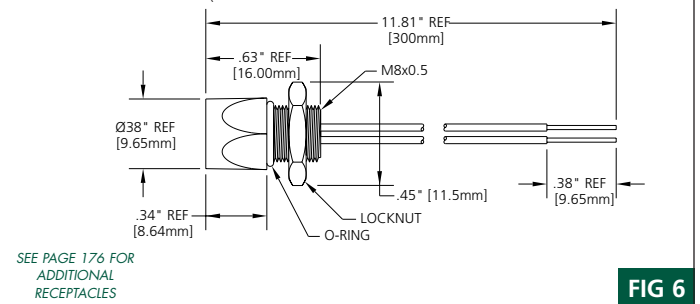
## RECEPTACLE DIMENSIONS

### MALE RECEPTACLE (ACCOMMODATES THREADED AND SNAP FEMALE CORDSETS)



SEE PAGE 176 FOR ADDITIONAL RECEPTACLES

### FEMALE RECEPTACLE (ACCOMMODATES THREADED MALE CORDSETS)



SEE PAGE 176 FOR ADDITIONAL RECEPTACLES



# M8 Double-Ended Cordsets

## Threaded Cordsets

#24 AWG yellow PVC cable  
 Oil-resistant high-flex PUR jacket available  
 Threaded coupling to withstand harsh industrial environments

**NEW 5 Pole**

	3P	4P	5P
FEMALE FACE VIEW			
COLOR CODE	1- brown 3- blue 4- black	1- brown 2- white 3- blue 4- black	1- brown 2- white 3- blue 4- black 5- gray
VOLTAGE	60V AC / 75V DC	60V AC / 75V DC	60V AC / 75V DC
CURRENT	4A	4A	3A
CONDUCTOR	#24-3	#24-4	#24-5

FEMALE/MALE	FIG	DOUBLE-ENDED CORDSETS WITH 2 METER PVC CABLE		
STRAIGHT/STRAIGHT	1	443030A10M020	444030A10M020	445030A10M020
90°/STRAIGHT	2	443031A10M020	444031A10M020	445031A10M020
STRAIGHT/90°	3	443032A10M020	444032A10M020	445032A10M020
90°/90°	4	443033A10M020	444033A10M020	445033A10M020

### CATALOG OPTIONS

\*See Page 176 for additional Mating Receptacles

Use the following chart to modify your part's specifications

**403000A10M020**

**CABLE TYPE**

PUR CABLE #24 AWG YELLOW **B09**

**CABLE LENGTH**

4 METER ..... **040**  
 5 METER ..... **050**

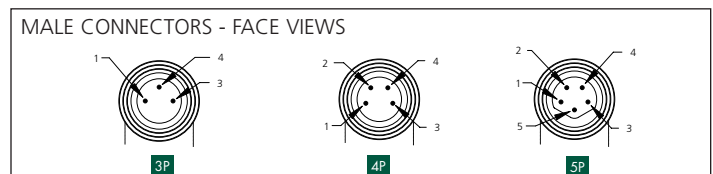
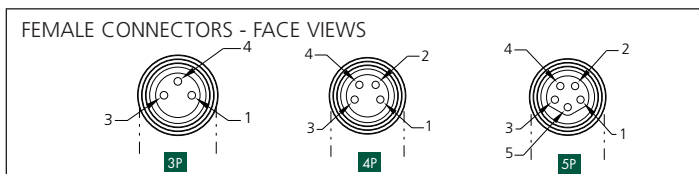
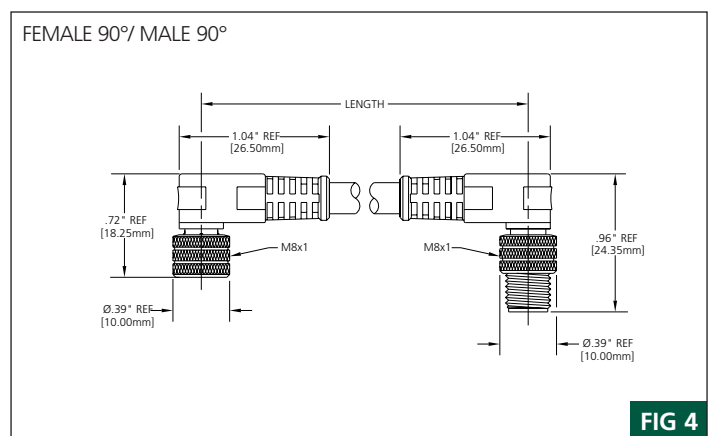
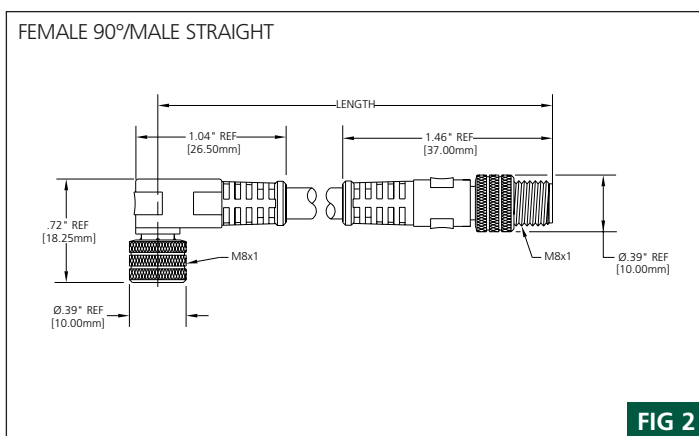
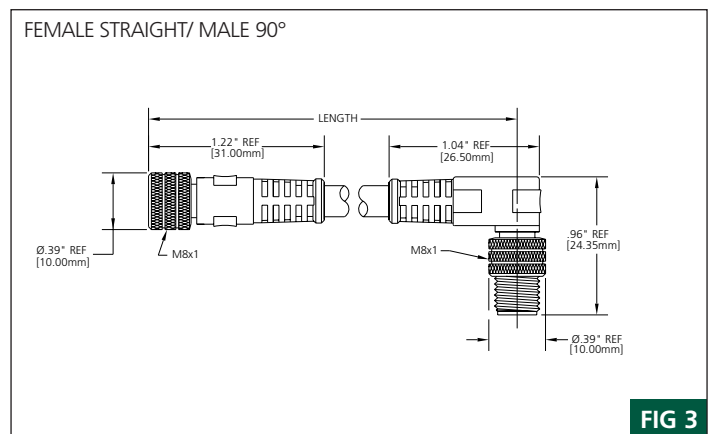
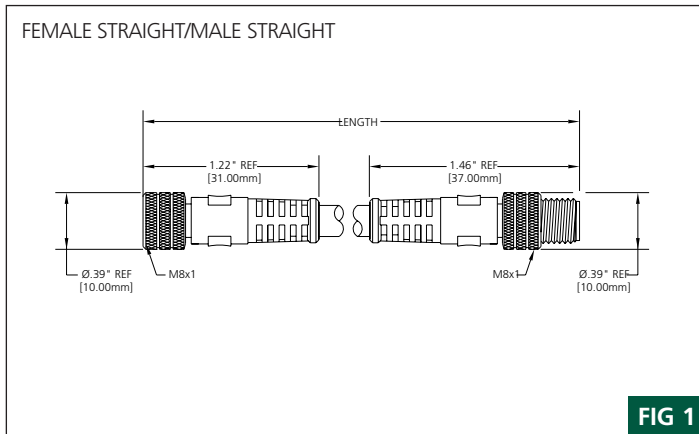
# Specifications

3P to 5P



<b>MECHANICAL</b>	
CONNECTOR FACE:	PBT
MOLDED BODY:	TPE
O-RING:	VITON
COUPLING NUT:	NICKEL-PLATED BRASS
CABLE:	YELLOW, PVC CABLE JACKET, #24 AWG OVER 19 X #36 COPPER STRANDING, UL STYLE 2661
OPTION:	YELLOW, HIGH-FLEX PUR CABLE JACKET, #24 AWG OVER 128 X #44 STRANDING, UL STYLE 20233
OUTSIDE DIAMETER:	PVC PUR
3/C	0.17" (4.3mm) 0.18" (4.6mm)
4/C	0.18" (4.6mm) 0.18" (4.6mm)
5/C	0.20" (5.1mm) 0.20" (5.1mm)
<b>ELECTRICAL</b>	
VOLTAGE RATING:	60V AC / 75V DC
AMPERAGE:	3P - 4A 4P - 4A 5P - 3A
<b>ENVIRONMENTAL</b>	
PROTECTION:	NEMA 6P, IP 68
AMBIENT OPERATING TEMP:	-4° TO 221°F (-20° TO 105°C) - PVC -4° TO 176°F (-20° TO 80°C) - PUR
<b>CERTIFICATIONS</b>	
UL:	UL RECOGNIZED, FILE NO.E152210

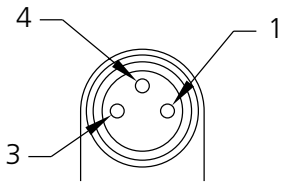
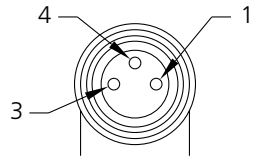
## CONNECTOR DIMENSIONS





# M8 Single & Double-Ended LED Cordsets

Clear PVC body for easy visibility of green power and yellow output LED  
 Extended life LEDs – 100,000 continuous hours of use  
 PNP and NPN versions  
 Snap and coupling nut versions

	3P Snap Connection	3P Threaded Connection
FEMALE FACE VIEW		
COLOR CODE	1- brown 3- blue 4- black	1- brown 3- blue 4- black
VOLTAGE	10-30V DC	10-30V DC
CURRENT	4A	4A
CONDUCTOR	#24-3	#24-3

FEMALE	FIG	SINGLE-ENDED LED CORDSETS WITH 2 METER PVC CABLE	
90° PNP	1	5030P1A10M020	4030P1A10M020
90° NPN	1	5030N1A10M020	4030N1A10M020
MATING RECEPTACLE*	4	4R3P06A27C300	4R3P06A27C300
FEMALE/MALE	FIG	DOUBLE-ENDED LED CORDSETS WITH 2 METER PVC CABLE	
90° PNP/STRAIGHT	2	5530P7A10M020	4430P7A10M020
90° PNP/90°	3	—	4430P9A10M020
90° NPN/STRAIGHT	2	5530N7A10M020	4430N7A10M020
90° NPN/90°	3	—	4430N9A10M020

## CATALOG OPTIONS

\*See Page 176 for additional Mating Receptacles

Use the following chart to modify your part's specifications

**5030P1A10M020**

**CABLE TYPE**

PUR CABLE #24 AWG YELLOW . **B09**

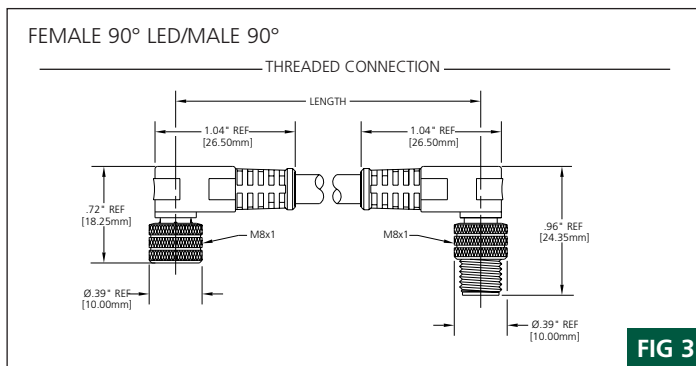
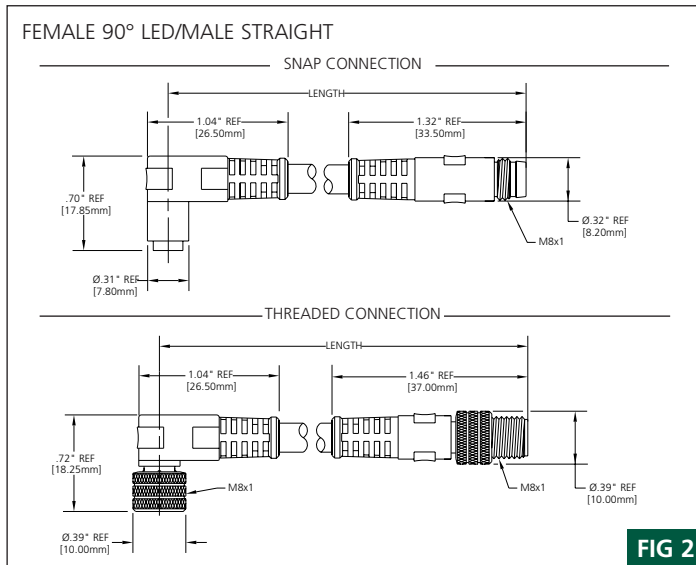
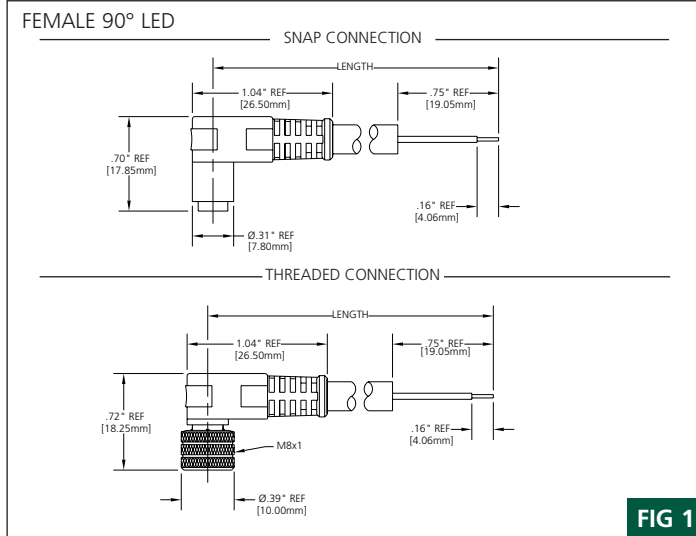
**CABLE LENGTH**

4 METER . . . . . **040**  
 5 METER . . . . . **050**

# Specifications



## CABLE DIMENSIONS



### MECHANICAL

CONNECTOR FACE: PBT  
 MOLDED BODY: PVC  
 O-RING: VITON (THREADED ONLY)  
 COUPLING NUT: NICKEL-PLATED BRASS  
 CABLE: YELLOW, PVC CABLE JACKET, #24 AWG OVER 19 X #36 COPPER STRANDING, UL STYLE 2661  
 OPTION: YELLOW, HIGH-FLEX PUR CABLE JACKET, #24 AWG OVER 128 X #44 STRANDING, UL STYLE 20233  
 OUTSIDE DIAMETER: PVC PUR  
 0.17" (4.3mm) 0.18" (4.6mm)

### ELECTRICAL

VOLTAGE RATING: 10-30 V DC  
 AMPERAGE: 4A

### ENVIRONMENTAL

PROTECTION: NEMA 4, IP 65 (SNAP);  
 NEMA 6P, IP 68 (COUPLER)

### AMBIENT OPERATING TEMP:

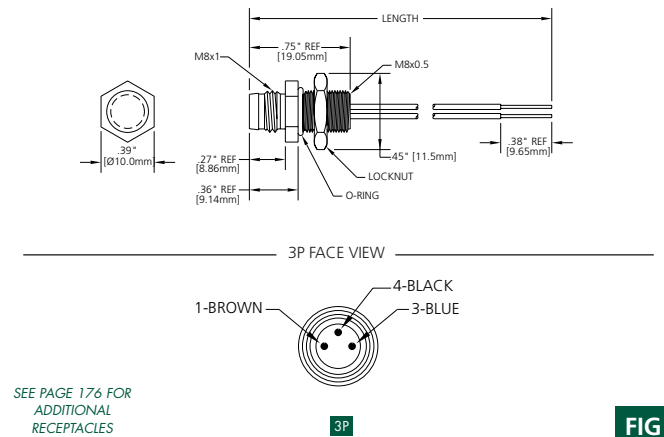
-4° TO 221°F (-20° TO 105°C) - PVC  
 -4° TO 176°F (-20° TO 80°C) - PUR

### CERTIFICATIONS

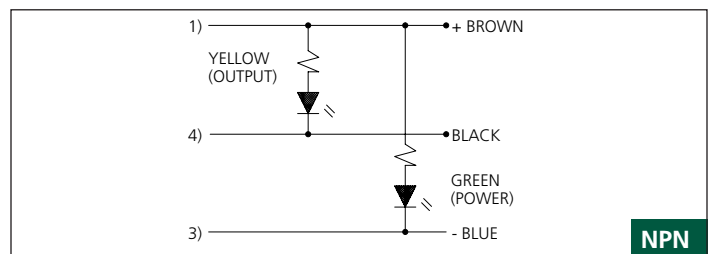
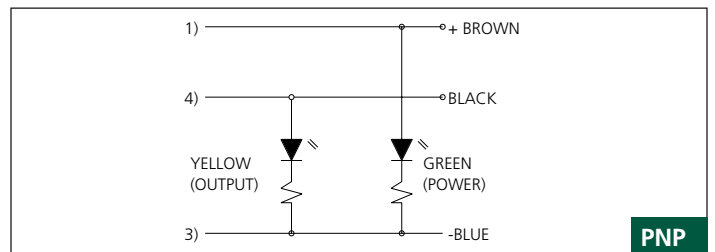
UL: UL RECOGNIZED, FILE NO. E155210

## RECEPTACLE DIMENSIONS

**MALE RECEPTACLE**  
 (ACCOMMODATES THREADED AND SNAP FEMALE CORDSETS)



## LED CIRCUIT DIAGRAM





# M8 Receptacles

Nickel-plated brass body  
IP 68 rating on threaded connection

**NEW 5 Pole**

	3P	4P	5P
MALE FACE VIEW			
COLOR CODE	1- brown 3- blue 4- black	1- brown 2- white 3- blue 4- black	1- brown 2- white 3- blue 4- black 5- gray
VOLTAGE	60V AC / 75V DC	60V AC / 75V DC	60V AC / 75V DC
CURRENT	4A	4A	3A
CONDUCTOR	#24-3	#24-4	#24-5

MALE ACCEPTS SNAP OR THREADED CORDSETS	FIG	RECEPTACLES WITH 30 CENTIMETER #24 AWG PVC LEADS		
M8 X 0.5 MOUNTING THREADS	1	4R3P06A27C300	4R4P06A27C300	4R5P06A27C300
M8 X 1 MOUNTING THREADS	2	4R3F06A27C300	4R4F06A27C300	—
FEMALE ACCEPTS THREADED CORDSETS ONLY	FIG	RECEPTACLES WITH 30 CENTIMETER #24 AWG PVC LEADS		
M8 X 0.5 MOUNTING THREADS	3	4R3P00A27C300	4R4P00A27C300	4R5P00A27C300

## CATALOG OPTIONS

Note: For mating cordsets see pages 168-175  
Refer to compatibility matrix for cordset/receptacle combinations

Use the following chart to modify your part's specifications

**4R5P06A27C300**

**LEAD LENGTH**  
60 CENTIMETER ..... **600**

# Specifications



- MECHANICAL**  
 CONNECTOR FACE: PBT  
 SHELL: NICKEL-PLATED BRASS  
 O-RING: VITON  
 WIRE: PVC; #24 AWG (19X #36)
- ELECTRICAL**  
 VOLTAGE RATING: 60V AC / 75V DC  
 AMPERAGE: 3P - 4A  
 4P - 4A  
 5P - 3A
- ENVIRONMENTAL**  
 PROTECTION: NEMA 6P, IP 68 (COUPLER)  
 NEMA 4, IP 65 (SNAP)
- AMBIENT OPERATING TEMP: -4° TO 221°F (-20° TO 105°C) - PVC
- CERTIFICATIONS**  
 UL: UL RECOGNIZED, FILE NO. 152210

## RECEPTACLE DIMENSIONS

MALE - M8 X 0.5 MOUNTING THREADS  
 (ACCOMMODATES SNAP AND THREADED FEMALE CORDSETS)

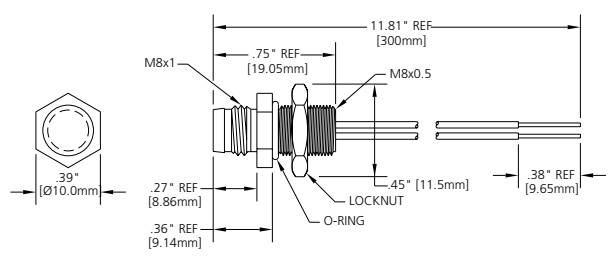
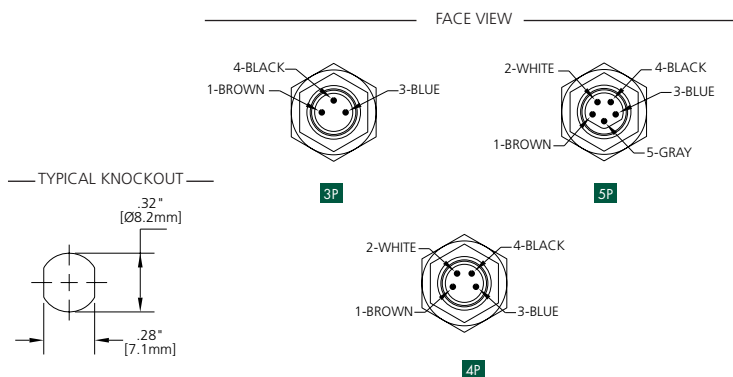


FIG 1



MALE - M8 X 1 MOUNTING THREADS  
 (ACCOMMODATES SNAP AND THREADED FEMALE CORDSETS)

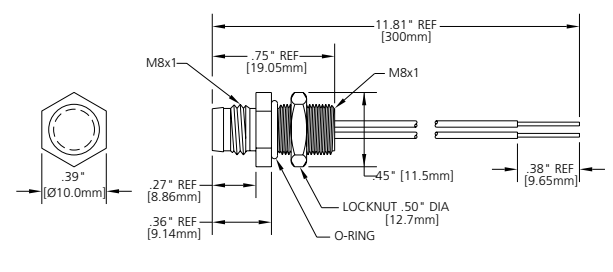
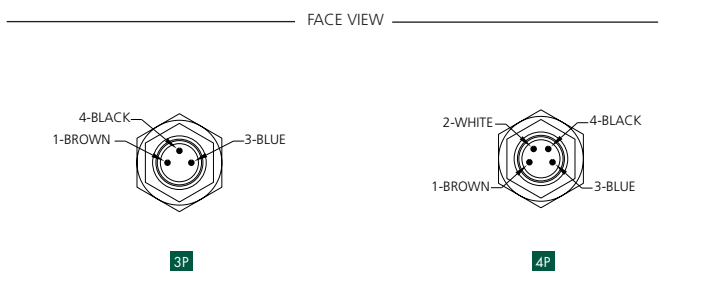


FIG 2



FEMALE - M8 X 0.5 MOUNTING THREADS  
 (ACCOMMODATES THREADED MALE CORDSETS ONLY)

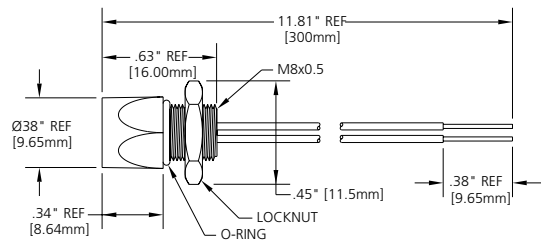
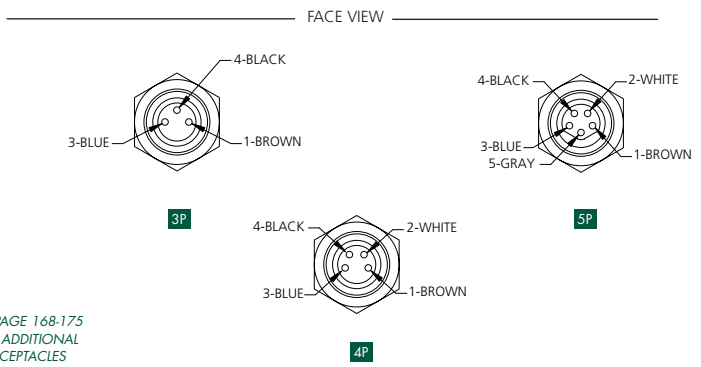


FIG 3



SEE PAGE 168-175  
 FOR ADDITIONAL  
 RECEPTACLES



# M8 Field-Attachable Connectors

Allows easy field conversion to threaded connection quick-disconnect  
 Solder connections for reliability in vibration applications  
 Male and female in both straight and 90° versions

NEW	3P	4P
FEMALE FACE VIEW		
MALE FACE VIEW		
VOLTAGE	60V AC / 75V DC	60V AC / 75V DC
CURRENT	4A	4A

FEMALE	FIG	FIELD-ATTACHABLE CONNECTORS WITH 3.5-5.0mm (.137-.196" OD) CABLE FITTING	
STRAIGHT	1	N03FA03124	N04FA03124
90°	2	N03FA04124	N04FA04124
MATING RECEPTACLE*		4R3P06A27C300	4R4P06A27C300
MALE	FIG	FIELD-ATTACHABLE CONNECTORS WITH 3.5-5.0mm (.137-.196" OD) CABLE FITTING	
STRAIGHT	3	N03MA03124	N04MA03124
90°	4	N03MA04124	N04MA04124
MATING RECEPTACLE*		4R3P00A27C300	4R4P00A27C300

\*See Page 176 for additional Mating Receptacles

# Specifications



**MECHANICAL**

CONNECTOR FACE: PA  
 BODY: PA  
 COUPLING NUT: NICKEL-PLATED BRASS  
 TERMINATION: SOLDER LUGS; ACCEPTS CONDUCTOR TO #20 AWG

**ELECTRICAL**

VOLTAGE RATING: 60V AC/ 75V DC  
 AMPERAGE: 4A

**ENVIRONMENTAL**

PROTECTION: IP 67  
 AMBIENT OPERATING TEMP: 32° TO 185° F (0° TO 85° C)

## CONNECTOR DIMENSIONS

FEMALE STRAIGHT

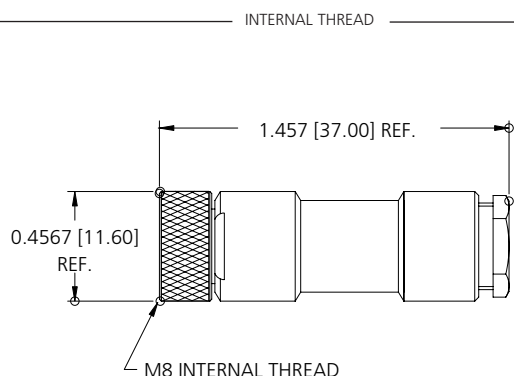


FIG 1

MALE STRAIGHT

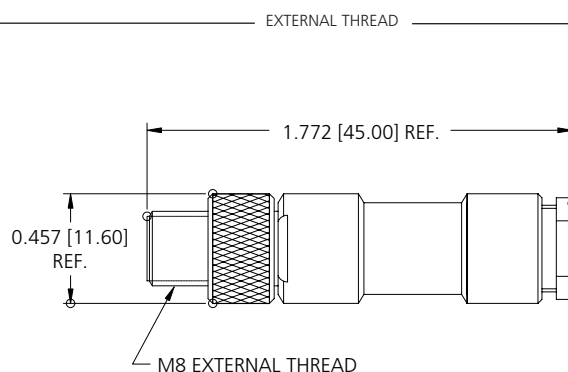


FIG 3

FEMALE 90°

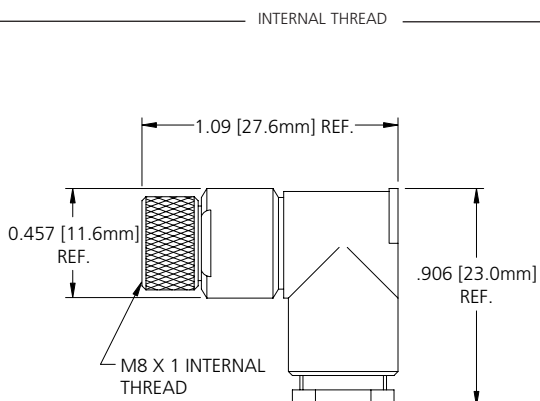


FIG 2

MALE 90°

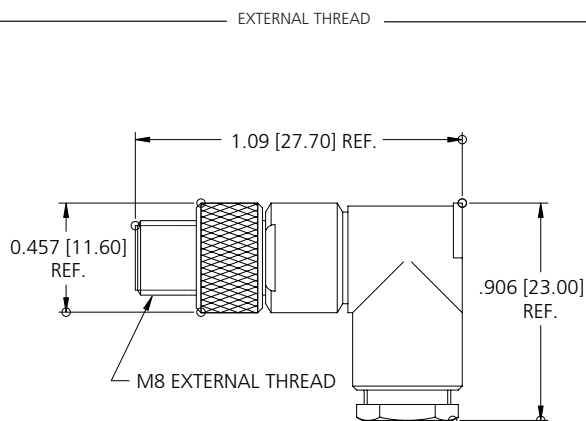


FIG 4



# M8 Splitter - (2) Female to (1) Male

Combines two inputs into one small footprint molded output connection  
 M8 to M8 threaded connection and M8 to M12 connections  
 Consolidates 3-wire DC sensors or switches

NEW	"Y" Splitter - M8 to M8	"Y" Splitter - M8 to M12
FEMALE FACE VIEW INPUTS	Typical For A & B 	Typical For A & B 
FEMALE PIN	1- +VDC 2- output 3- common	1- +VDC 2- output 3- common
MALE FACE VIEW OUTPUT		
MALE PIN	1- +VDC 2- output (Branch "B") 3- common 4- output (Branch "A")	1- +VDC 2- output (Branch "B") 3- common 4- output (Branch "A")
VOLTAGE	60V AC / 75V DC	
CURRENT	4A	

	FIG	"Y" MOLDED SPLITTER (2) 3P M8 FEMALE INPUTS; (1) 4P M8 MALE OUTPUT
SPLITTER	1 AND 3	080804LMF00000

Note: for cordsets to connect to inputs see pages 168-175

	FIG	"Y" MOLDED SPLITTER (2) 3P M8 FEMALE INPUTS; (1) 4P M12 MALE OUTPUT
SPLITTER	2 AND 3	080804EMF00000

Note: For cordsets to connect to inputs see pages 168-175  
 For multiple connection junction boxes (MPIS) see pages 302-315

# Specifications



**MECHANICAL**

CONNECTOR FACE: PUR  
 MOLDED BODY: PUR  
 COUPLING NUT MATERIAL: NICKEL-PLATED BRASS

**ELECTRICAL**

VOLTAGE RATING: 75 V DC; 60 V AC  
 AMPERAGE: 4A

**ENVIRONMENTAL**

PROTECTION: IEC IP 68  
 AMBIENT OPERATING TEMPERATURE: 32° TO 185°C (0° TO 85°C)

## SCHEMATIC

MALE OUTPUT CONNECTION/  
 FEMALE INPUT CONNECTION

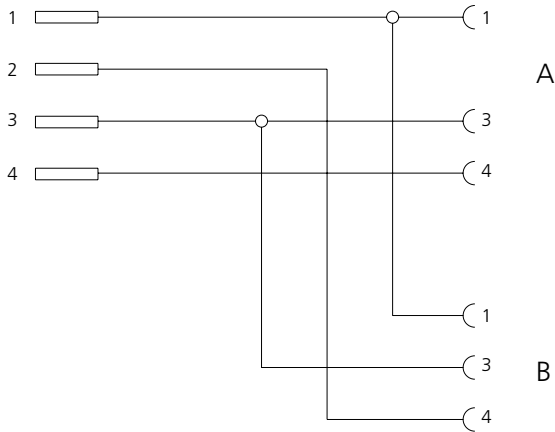


FIG 3

## SPLITTER DIMENSIONS

M8 to M8 "Y" SPLITTER

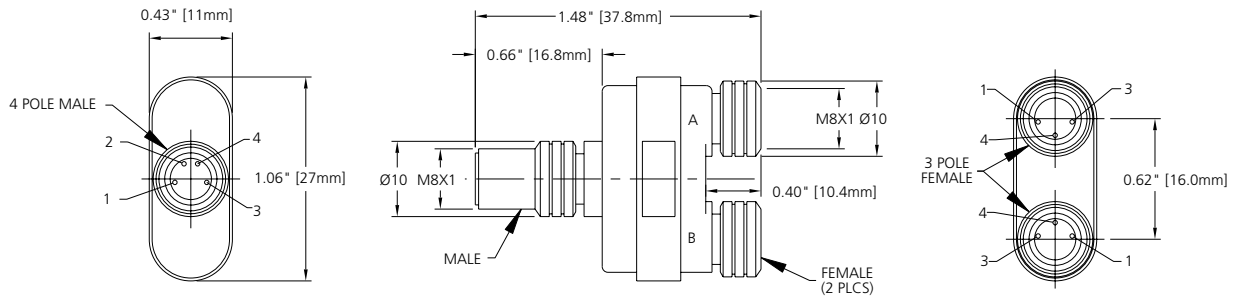


FIG 1

M8 to M12 "Y" SPLITTER

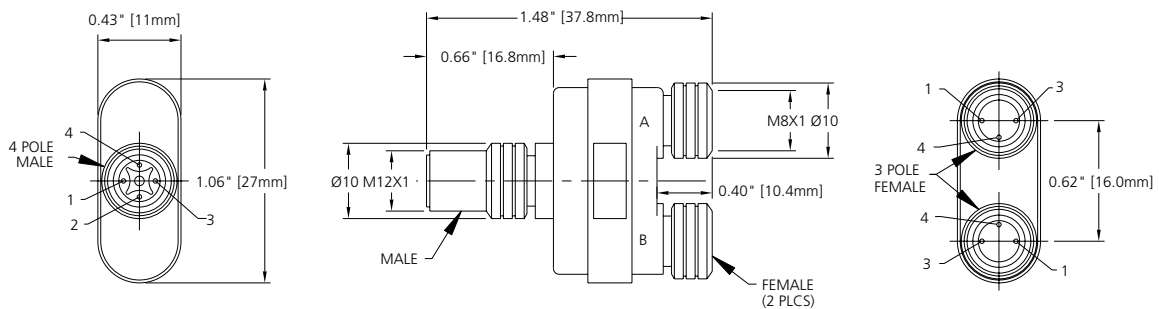


FIG 2



# Control Connectors 8P - 12P

Heavy-duty control connectors 8P-12P, with black Type SO cord  
 Fully shrouded for impact resistance to insure reliability  
 Flip covers on receptacles protect and lock plug to prevent disengagement

	8P	9P	10P	11P	12P
FEMALE FACE VIEW					
COLOR CODE**	1- green 2- orange 3- blue 4- white/black trace 5- red/black trace 6- black 7- white 8- red	1- green 2- orange 3- blue 4- white/black trace 5- red/black trace 6- green/black trace 7- black 8- white 9- red	1- green 2- orange 3- blue 4- white/black trace 5- red/black trace 6- green/black trace 7- orange/black trace 8- black 9- white 10- red	1- green 2- orange 3- blue 4- white/black trace 5- red/black trace 6- green/black trace 7- orange/black trace 8- blue/black trace 9- white 10- black 11- red	1- green 2- orange 3- blue 4- white/black trace 5- red/black trace 6- green/black trace 7- orange/black trace 8- blue/black trace 9- white 10- black 11- red 12- black/white trace
VOLTAGE	600V AC	600V AC	600V AC	600V AC	600V AC
CURRENT/ CONDUCTOR	#12/14.0A #14/10.5A	#12/14.0A #14/10.5A	#12/14.0A #14/10.5A	#12/10.0A #14/7.0A	#12/10.0A #14/7.0A

FEMALE	FIG	FEMALE PLUGS WITH 600V AC NEOPRENE JACKETED SO CABLE AND MATING RECEPTACLES				
#12 6' CABLE	1	34415	34725	65015	—	35629
#12 12' CABLE	1	34416	34726	65017	—	35630
#14 6' CABLE	1	34418	34728	65018	—	35632
#14 12' CABLE	1	34419	34729	65019	—	35633
MATING RECEPTACLE	3	34421	34716	65014	—	35620

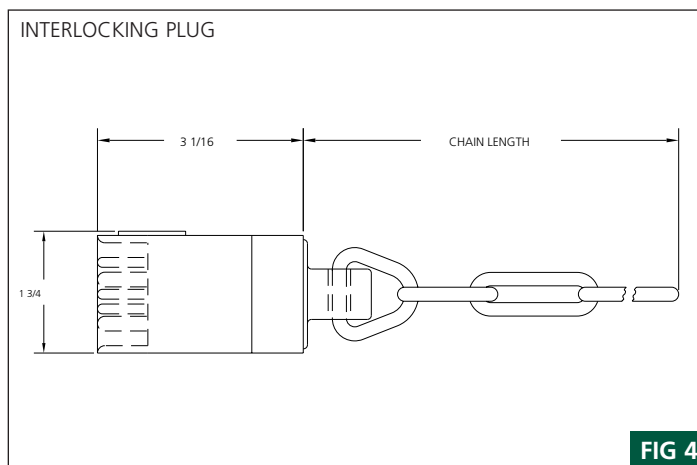
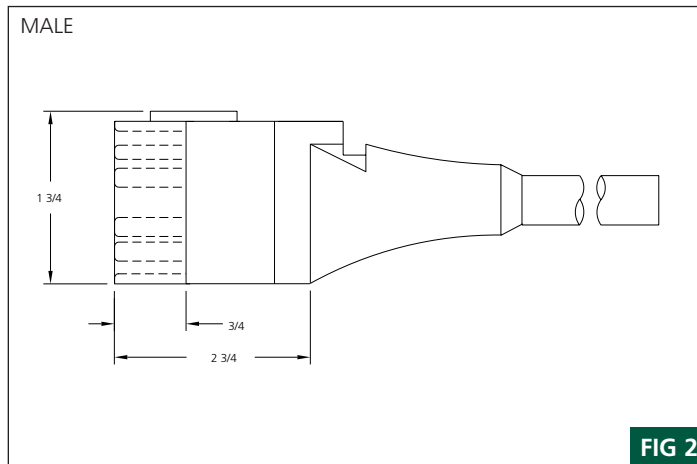
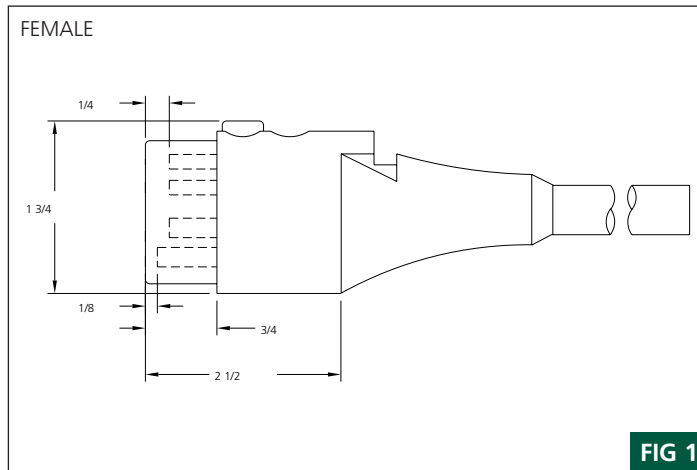
MALE	FIG	MALE PLUGS WITH 600V AC NEOPRENE JACKETED SO CABLE AND MATING RECEPTACLES				
#12 6' CABLE	2	34404	—	65005	65303	35622
#12 12' CABLE	2	34405	—	65003	65302	35610
#14 6' CABLE	2	34406	34717	65006	65305	35653
#14 12' CABLE	2	34407	34718	65004	65306	35654
MATING RECEPTACLE	3	34401	34701	65001	65301	35601

INTERLOCK PLUGS	FIG	INTERLOCK PLUGS PINS 2-8, 3-9, 4-6 AND 5-7 SHORTED, 2' CHAIN				
PLUG WITH #1/0 CHAIN	4	—	34740	—	—	—
INTERLOCK PLUGS	FIG	INTERLOCK PLUGS PINS 2-4, 3-9, 5-10, 6-8, 7-11 SHORTED, 3' CHAIN				
PLUG WITH #1/0 CHAIN	4	—	—	—	—	35664
INTERLOCK PLUGS	FIG	INTERLOCK PLUGS PINS 1-12, 2-4, 5-10, 6-8, SHORTED, 3' CHAIN				
PLUG WITH #4 CHAIN	4	—	—	—	—	35706

\*\*Use 12 conductor cable, black with white trace N/C

# Specifications

## PLUG DIMENSIONS



### MECHANICAL (CORDSET)

PLUG FACE: BLACK NEOPRENE  
 SHROUD (MALE ONLY): POLYCARBONATE  
 CONTACT: BRASS  
 CABLE: BLACK NEOPRENE JACKET, TYPE S0  
 UL LISTED, CSA 90° C CERTIFIED

### OUTSIDE DIAMETER:

	#14 AWG	#12 AWG
8/C	.765" (19.4mm)	.830" (21.1mm)
9/C	.870" (22.1mm)	1.015" (25.8mm)
10/C	.870" (22.1mm)	.980" (25.0mm)
11/C	.903" (22.9mm)	.903" (22.9mm)
12/C	.903" (22.9mm)	.903" (22.9mm)
STRANDING	41 X #30	65 X #30

### MECHANICAL (RECEPTACLE)

HOUSING: NEOPRENE  
 CONTACT: BRASS  
 FLIP LID: NEOPRENE  
 TERMINATION: SCREW TYPE  
 TERMINAL WIRE SIZES: #16 TO #12 AWG

### ELECTRICAL

VOLTAGE RATING: 600V AC  
 AMPERAGE: 7 TO 14A

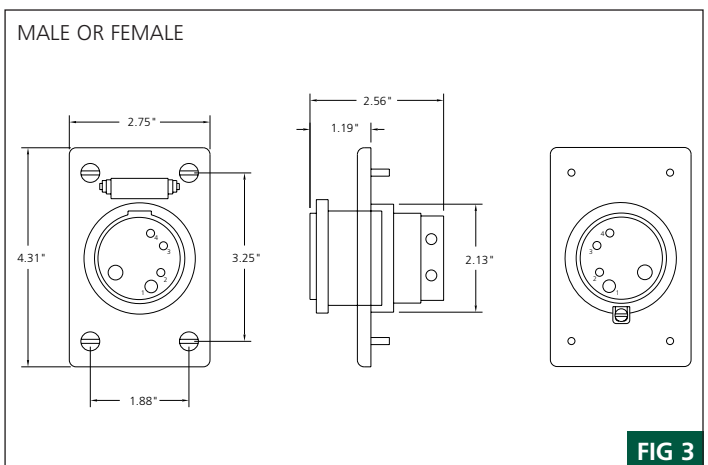
### ENVIRONMENTAL

AMBIENT OPERATING TEMP: -4° TO 194° F (-20° TO 60° C)

### CERTIFICATIONS

UL: UL RECOGNIZED, FILE NO E4623

## RECEPTACLE DIMENSIONS





# Control Connectors 3P - 7P

Heavy-duty control connectors, 3P-7P cordsets with black Type SO cord  
 Fully shrouded for impact resistance to insure reliability  
 Flip covers on receptacles protect contacts and lock plug to prevent disengagement

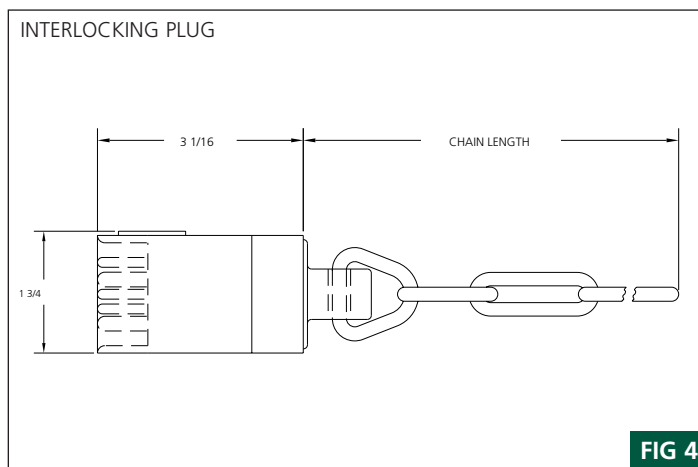
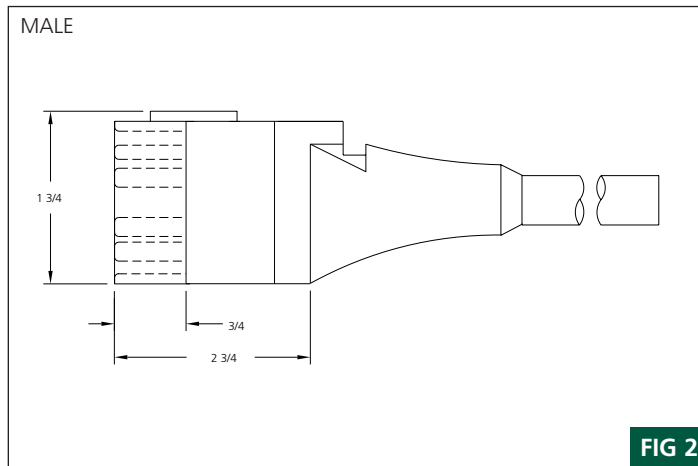
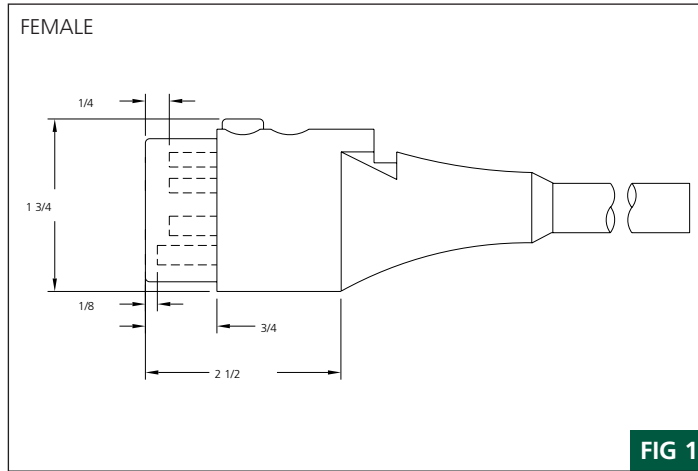
	3P	4P	5P	6P	7P
FEMALE FACE VIEW					
COLOR CODE	1- green 2- black 3- white	1- green 2- black 3- white 4- red X- no connection	1- green 2- orange 3- black 4- white 5- red	1- green 2- orange 3- blue 4- black 5- white 6- red	1- green 2- orange 3- blue 4- white/ black trace 5- black 6- white 7- red
VOLTAGE	600V AC	600V AC	600V AC	600V AC	600V AC
CURRENT/ CONDUCTOR	#12/25A —	#12/20A —	#12/16A —	#12/16A #14/12A	#12/16A #14/12A

FEMALE	FIG	FEMALE PLUGS WITH 600V AC NEOPRENE JACKETED SO CABLE AND MATING RECEPTACLES				
#12 6' CABLE	1	—	—	—	33809	—
#12 12' CABLE	1	—	—	—	33810	34120
#14 6' CABLE	1	—	—	—	33812	34122
#14 12' CABLE	1	—	—	—	—	34123
MATING RECEPTACLE	3	—	—	—	33806	34110

MALE	FIG	MALE PLUGS WITH 600V AC NEOPRENE JACKETED SO CABLE AND MATING RECEPTACLES				
#12 6' CABLE	2	—	33204	—	33804	34109
#12 12' CABLE	2	32903	33203	33502	33802	34106
#14 6' CABLE	2	—	—	—	33807	34111
#14 12' CABLE	2	—	—	—	33805	34132
MATING RECEPTACLE	3	32901	33201	33501	33801	34101

# Specifications

## PLUG DIMENSIONS



### MECHANICAL (PLUG)

PLUG FACE: BLACK NEOPRENE  
 SHROUD (MALE ONLY): POLYCARBONATE  
 CONTACT: BRASS  
 CABLE: BLACK NEOPRENE JACKET, TYPE 50  
 UL LISTED, CSA 90° C CERTIFIED

### OUTSIDE DIAMETER:

	#14 AWG	#12 AWG
3/C	—	.620" (15.8mm)
4/C	—	.675" (17.2mm)
5/C	—	.740" (18.8mm)
6/C	.730" (18.5mm)	.765" (19.4mm)
7/C	.720" (18.3mm)	.780" (19.8mm)
STRANDING	41 X #30	65 X #30

### MECHANICAL (RECEPTACLE)

HOUSING: NEOPRENE  
 CONTACT: BRASS  
 FLIP LID: NEOPRENE  
 TERMINATION: SCREW TYPE  
 TERMINAL WIRE SIZES: #16 TO #12 AWG

### ELECTRICAL

VOLTAGE RATING: 600V AC  
 AMPERAGE: 12A TO 20A

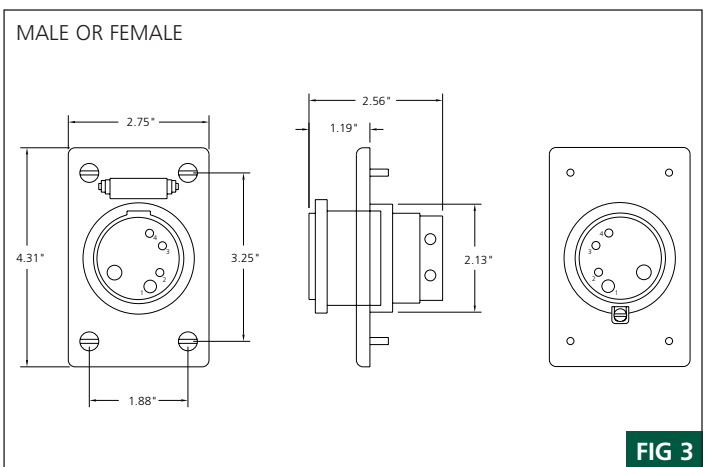
### ENVIRONMENTAL

AMBIENT OPERATING TEMP: -4° TO 140° F (-20° TO 60° C)

### CERTIFICATIONS

UL: UL RECOGNIZED, FILE NO E46237

## RECEPTACLE DIMENSIONS





# Safety Plugs

Provide electrical lock-outs during machine maintenance  
 Color-coded configurations to assist in safety lock out  
 Fit standard FS or FD boxes

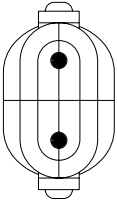
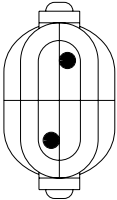
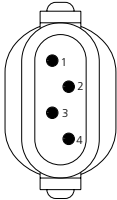
	2P	2P	4P
MALE FACE VIEW			
COLOR	yellow	red	orange*
VOLTAGE	600V AC/DC	600V AC/DC	600V AC/DC
CURRENT	25A	25A	25A

	FIG	MALE SHORTING PLUGS		FIG	
SHORTING PLUGS W/ 1' CHAIN	1	22803	22904	2	43302
SHORTING PLUGS W/ 2' CHAIN	1	22804	22905	2	43303
SHORTING PLUGS W/ 3' CHAIN	1	22805	22906	2	43304
	FIG	FEMALE RECEPTACLES		FIG	
ANGLE RECEPTACLES	5	22801	22903	6	43301
CAST RECEPTACLE ASSEMBLY**	3	22806	22902	4	43305

## SUB-ASSEMBLIES AND MISCELLANEOUS COMPONENTS

INSERT FOR CAST ASSEMBLY	22802	22901	—
INSERT WITH MOUNTING SHELL	22807	22907	—

\*Available in red as option

\*\* Includes insert, mounting shell and wiring box

# Specifications

**MECHANICAL (SHORTING PLUG)**

BODY: NITRILE/PVC COMPOUND  
 CONTACT: BRASS, SOLID  
 CHAIN YOKE: ZINC-PLATED STEEL

**MECHANICAL (ANGLE RECEPTACLE)**

HOUSING & BODY: NITRILE/PVC COMPOUND  
 CONTACT: BRASS

**MECHANICAL (CAST RECEPTACLE)**

HOUSING: ALUMINUM  
 CONTACT: BRASS  
 INSERT: NITRILE/PVC  
 GASKET: NEOPRENE

**ELECTRICAL**

VOLTAGE RATING: 600V AC/DC  
 AMPERAGE: 25A

**ENVIRONMENTAL**

AMBIENT OPERATING TEMP: -4° TO 194° F (-20° TO 90° C)

**CERTIFICATIONS**

UL: UL RECOGNIZED, FILE NO E46237  
 CSA: CSA CERTIFIED, FILE NO LR6837

## RECEPTACLES

SHORTING PLUG - 2 POLE

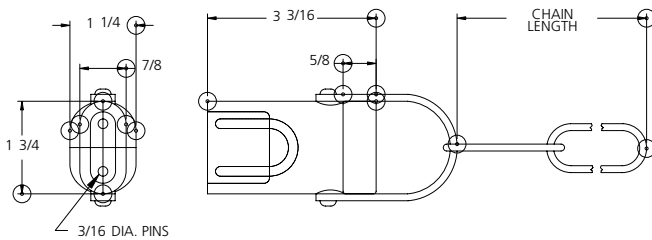


FIG 1

SHORTING PLUG - 4 POLE

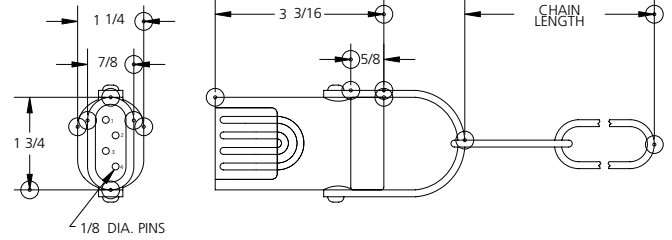


FIG 2

CAST RECEPTACLE ASSEMBLY - 2 POLE

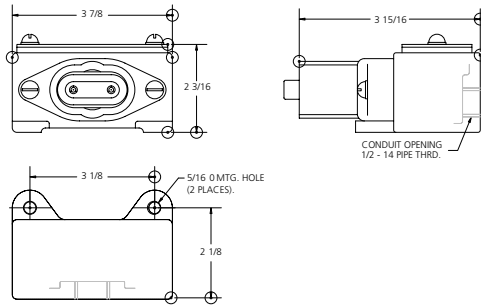


FIG 3

CAST RECEPTACLE ASSEMBLY - 4 POLE

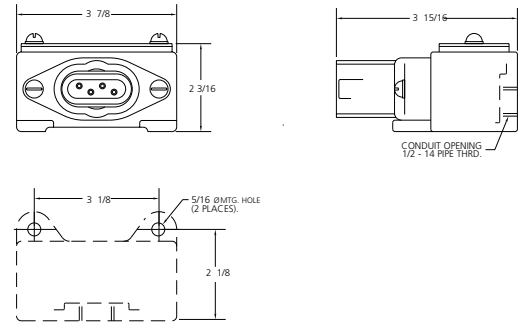


FIG 4

ANGLE RECEPTACLE ASSEMBLY - 2 POLE

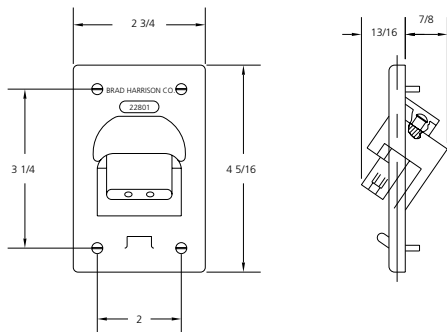


FIG 5

ANGLE RECEPTACLE ASSEMBLY - 4 POLE

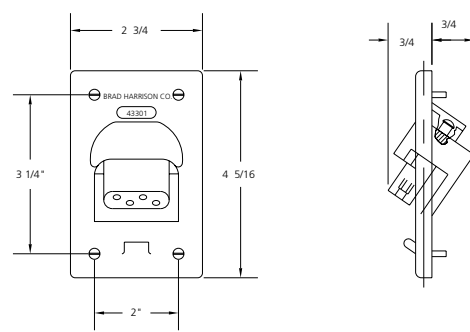


FIG 6



# Dual Round Connectors

Heavy-duty, rugged delivery of power in tough environments  
 Unique design prevents mismatching to insure safety  
 Insulated and locking flip lids on receptacles for safe lock-outs

	9P	11P**	11P
MALE FACE VIEW			
COLOR CODE	1A- green/black trace    1B- orange 2A- red                      2B- red/black trace 3A- white                    3B- white/black trace 4A- black                    4B- blue Socket- green-gnd	1A- green/black trace    1B- orange 2A- red                      2B- red/black trace 3A- white                    3B- white/black trace 4A- black                    4B- blue 5A- jumpered to 5B      5B- jumpered to 5A Socket- green-gnd	1A- red/black trace        1B- orange/black trace 2A- green/black trace    2B- black 3A- red                      3B- blue 4A- white                    4B- blue/black trace 5A- white/black trace    5B- orange Socket- green-gnd
VOLTAGE	600V AC/DC	600V AC/DC	600V AC/DC
CURRENT	7A	7A	7A

	FIG	STRAIGHT MALE PLUGS WITH 600V AC NEOPRENE JACKETED SO CABLE		
12' CABLE	1	23002	23318	23312
18' CABLE	1	23003	—	—
24' CABLE	1	23010	—	—
MATING RECEPTACLE	2	23001	23301	23301

\*\* Uses 9 conductor cable

# Specifications

## MECHANICAL (PLUG)

PLUG FACE: NEOPRENE  
 BODY: NEOPRENE  
 CONTACT: BRASS  
 CABLE: BLACK NEOPRENE JACKET, TYPE S0,  
 OVER 26 X #30 COPPER STRANDING,  
 UL LISTED, CSA 90° C CERTIFIED  
 9/C 0.72" (18.3mm)  
 11/C 0.67" (17.0mm)

## MECHANICAL (RECEPTACLE)

HOUSING: ALUMINUM  
 INSERT: NEOPRENE  
 FLIP LID: SPRING-LOADED  
 CONTACT: BRASS  
 TERMINATION: SCREW TYPE  
 MAXIMUM WIRE TERMINATION: #16 AWG

## ELECTRICAL

VOLTAGE RATING: 600V AC/DC  
 AMPERAGE: 7A

## ENVIRONMENTAL

AMBIENT OPERATING TEMP: -4° TO 194° F (-20° TO 90° C)

## CERTIFICATIONS

UL: UL RECOGNIZED, FILE NO E46237

## DIMENSIONS

STRAIGHT MALE PLUG

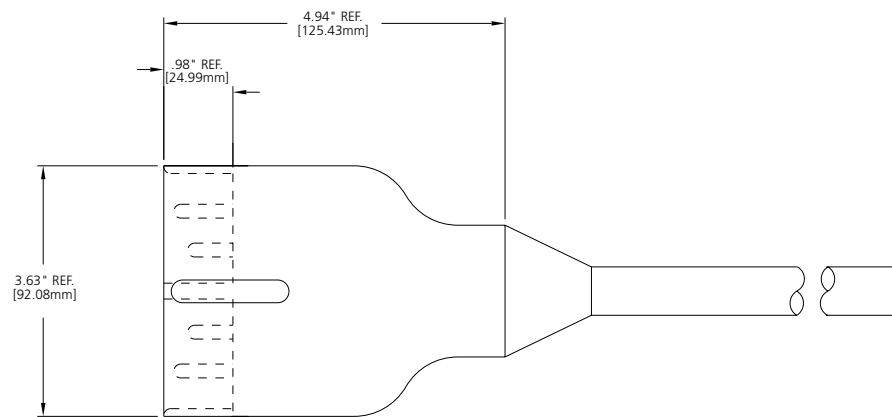


FIG 1

RECEPTACLE-FEMALE

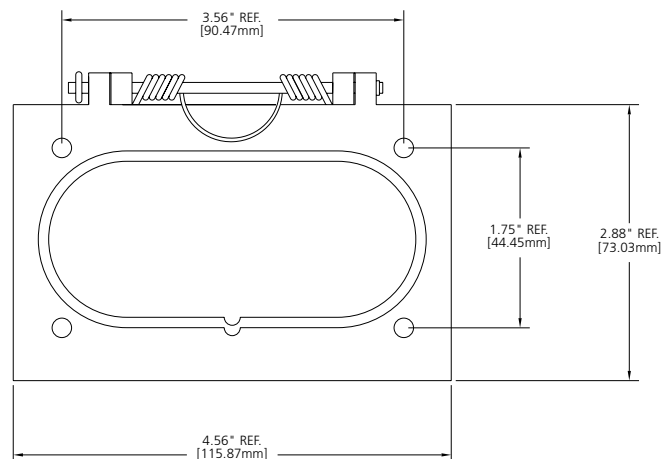


FIG 2



# Dual Round Connectors

Heavy-duty, rugged delivery of power in tough environments  
 Unique design prevents mismatching to insure safety  
 Insulated and locking flip lids on receptacles for safe lock-outs

	16P	17P
MALE FACE VIEW		
COLOR CODE	1A- blue/black trace 2A- black/white trace 3A- red/white trace 4A- green/white trace 5A- blue/white trace 6A- black/red trace 7A- orange/black trace 8A- green/black trace 1B- red/black trace 2B- white/black trace 3B- blue 4B- green 5B- red 6B- white 7B- black 8B- orange	1A- red/white trace 2A- green/white trace 3A- white 4A- red 5A- orange 6A- blue 7A- black 8A- white/red trace Socket green-gnd 1B- blue/white trace 2B- black/red trace 3B- white/black trace 4B- red/black trace 5B- orange/black trace 6B- blue/black trace 7B- black/white trace 8B- green/black trace
VOLTAGE	600V AC/DC	600V AC/DC
CURRENT	7A	7A

	FIG	STRAIGHT MALE PLUGS WITH 600V AC NEOPRENE JACKETED SO CABLE	
12' CABLE	1	25216	25420
MATING RECEPTACLE	3	25204	25401
	FIG	HAMMERHEAD MALE PLUGS WITH 600V AC NEOPRENE JACKETED SO CABLE	
12' CABLE	2	25219	25423
MATING RECEPTACLE	3	25204	25401
FEMALE INSERTS	FIG	INSERTS - 2 REQUIRED PER RECEPTACLE	
INSERT		—	25404

# Specifications

## MECHANICAL (PLUG)

PLUG FACE: NEOPRENE  
 BODY: NEOPRENE  
 CONTACT: BRASS  
 CABLE: BLACK NEOPRENE JACKET,  
 OVER 26 X #30 COPPER STRANDING,  
 UL LISTED, CSA 90° C CERTIFIED  
 16/C 0.72" (18.3mm)  
 17/C 0.84" (21.4mm)

## MECHANICAL (RECEPTACLE)

HOUSING: ALUMINUM  
 INSERT: NEOPRENE  
 FLIP LID: SPRING-LOADED  
 CONTACT: BRASS  
 TERMINATION: SCREW TYPE  
 MAXIMUM WIRE TERMINATION: #16 AWG

## ELECTRICAL

VOLTAGE RATING: 600V AC/DC  
 AMPERAGE: 7A

## ENVIRONMENTAL

AMBIENT OPERATING TEMP: -4° TO 194° F (-20° TO 90° C)

## CERTIFICATIONS

UL: UL RECOGNIZED, FILE NO E46237

## DIMENSIONS

STRAIGHT CORDSET-MALE

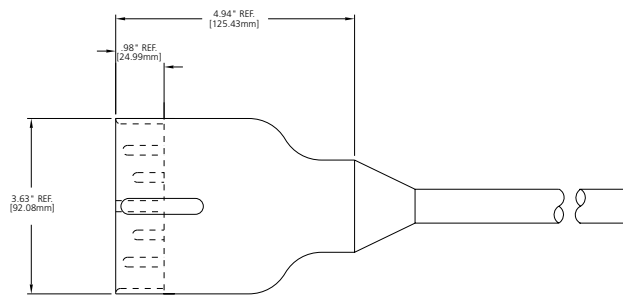


FIG 1

HAMMERHEAD CORDSET-MALE

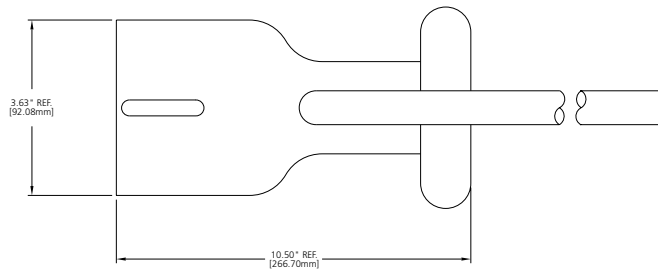


FIG 2

RECEPTACLE-FEMALE

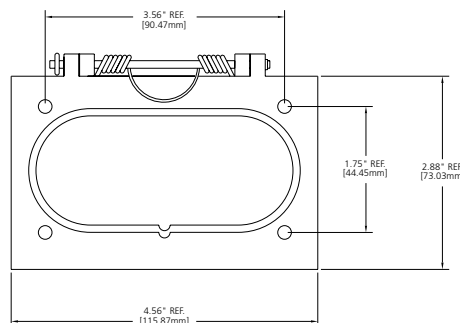


FIG 3



# Quick-Change® Cordsets

Quick-disconnect and positive alignment of power conductors in harsh environments  
 #10, #12 and #14 AWG yellow Type SOW cable  
 Single- and double-ended cordsets and mating receptacles

	2P			3P			4P		
MALE FACE VIEW									
COLOR CODE	1- black 2- white			1- black 2- white 3- green-gnd			1- black      3- red 2- green-gnd    4- white		
VOLTAGE	600V AC/DC			600V AC/DC			600V AC/DC		
CURRENT	18A	25A	30A	18A	25A	30A	15A	20A	25A
CONDUCTOR	#14	#12	#10	#14	#12	#10	#14	#12	#10

MALE	FIG	SINGLE-ENDED CORDSETS WITH 600V TYPE SOW CABLE								
3'	1	32019	32026	32050	32319	32353	32404	32634	32650	32754
6'	1	32020	32027	32051	32320	32354	32405	32635	32676	32755
12'	1	32021	32028	32052	32321	32355	32406	32636	32677	32756
MATING RECEPTACLE	FIG	RECEPTACLES WITH 12" LONG PVC-INSULATED WIRES								
THREAD 1/2"	2	32015	32034	32067	32315	32359	32421	32630	32682	32769
THREAD 3/4"	2	32016	32035	32068	32316	32360	32422	32631	32683	32770
FEMALE/MALE EXTENSION	FIG	DOUBLE-ENDED CORDSETS WITH 600V TYPE SOW CABLE								
6'	3	662020C05F060	662020C06F060	662020C07F060	663020C05F060	663020C06F060	663020C07F060	664020C05F060	664020C06F060	664020C07F060

## CATALOG OPTIONS

P/N 55-0172 closure cap assembly for receptacles  
 P/N 55-0170 threaded adapter plus closure cap assembly for cordsets

Use the following chart to modify your part's specifications

32015AL

<b>BODY MATERIAL</b>	<b>CODE</b>
ALUMINUM .....	AL

# Specifications



**MECHANICAL (CORDSET)**

PLUG FACE: NITRILE/SBR  
 MOLDED BODY: NITRILE/SBR  
 COUPLING NUT: THERMOPLASTIC WITH OPTIONAL ALUMINUM

CABLE: YELLOW NEOPRENE CABLE JACKET TYPE SOW, 105° C UL LISTED, 90° C CSA CERTIFIED

OUTSIDE DIAMETER:	#14 AWG	#12 AWG	#10 AWG
2/C	.55" (13.9mm)	.63" (15.9mm)	.69" (17.4mm)
3/C	.58" (14.6mm)	.66" (16.6mm)	.72" (18.3mm)
4/C	.62" (15.8mm)	.71" (18.0mm)	.74" (18.8mm)
STRANDING	41 X #30	65 X #30	105 X #30

**MECHANICAL (RECEPTACLE)**

INSERT MATERIAL: NITRILE/SBR  
 SHELL MATERIAL: THERMOPLASTIC WITH OPTIONAL ALUMINUM

CABLE: 10/12/14 AWG, 1 CONDUCTOR PVC JACKETED, 105° C

STRANDING:	#14 AWG	#12 AWG	#10 AWG
TINNED COPPER	41 X #30	65 X #30	105 X #30

**ELECTRICAL**

VOLTAGE RATING:	600V AC/DC		
AMPERAGE	#14 AWG	#12 AWG	#10 AWG
2/C	18A	25A	30A
3/C	18A	25A	30A
4/C	15A	20A	25A

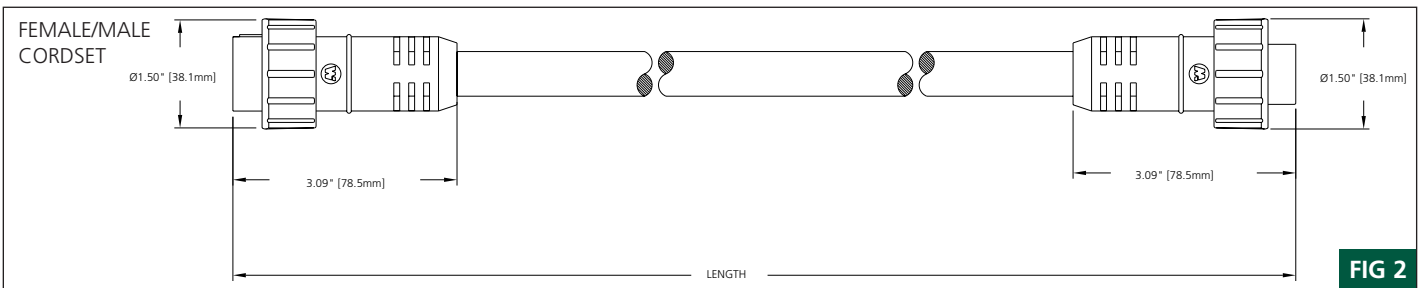
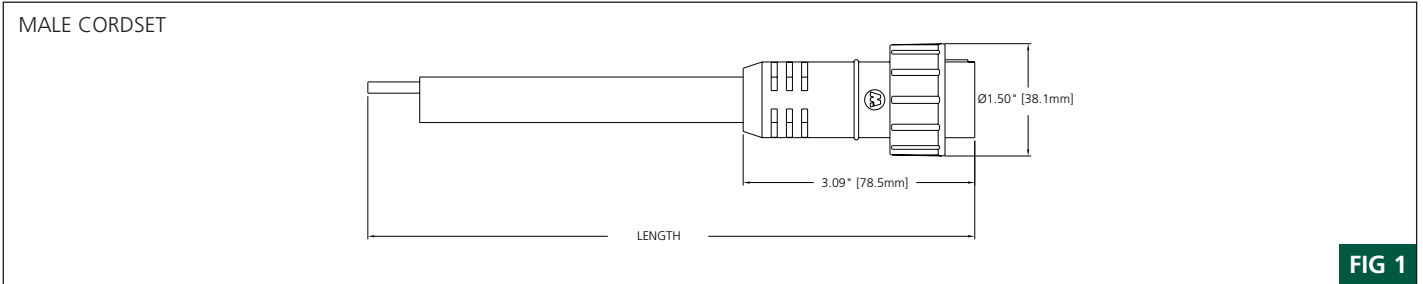
**ENVIRONMENTAL**

PROTECTION: IP 68, NEMA 6P  
 AMBIENT OPERATING TEMP: -4° TO 221° F (-20° TO 105° C)

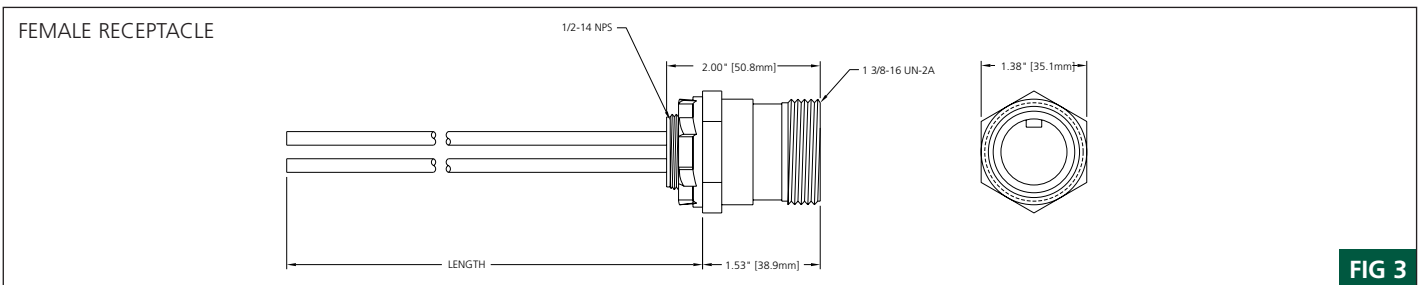
**CERTIFICATIONS**

UL: UL RECOGNIZED, FILE NO E46237  
 CSA: CSA CERTIFIED, FILE NO LR6837

## CONNECTOR DIMENSIONS



## RECEPTACLE DIMENSIONS





# Quick-Change® Cordsets

Quick disconnect and positive alignment of power conductors in harsh environments  
 #10, #12 and #14 AWG yellow Type SOW cable  
 Single-ended cordsets and mating receptacles

	2P			3P			4P		
FEMALE FACE VIEW									
COLOR CODE	1- black 2- white			1- black 2- white 3- green-gnd			1- black      3- red 2- green-gnd    4- white		
VOLTAGE	600V AC/DC			600V AC/DC			600V AC/DC		
CURRENT	18A	25A	30A	18A	25A	30A	15A	20A	25A
CONDUCTOR	#14	#12	#10	#14	#12	#10	#14	#12	#10

FEMALE	FIG	SINGLE-ENDED CORDSETS WITH 600V TYPE SOW CABLE								
3'	1	32022	32029	32053	32322	32342	32407	32637	32669	32757
6'	1	32023	32030	32054	32323	32350	32408	32638	32678	32758
12'	1	32024	32031	32055	32324	32356	32409	32639	32679	32759
MATING RECEPTACLE	FIG	RECEPTACLES WITH 12" LONG PVC-INSULATED WIRE								
THREAD 1/2"	2	32017	32032	32065	32317	32357	32419	32632	32680	32767
THREAD 3/4"	2	32018	32033	32066	32318	32358	32420	32633	32681	32768

## CATALOG OPTIONS

P/N 55-0172 closure cap assembly for receptacles  
 P/N 55-0170 threaded adapter plus closure cap assembly for cordsets

Use the following chart to modify your part's specifications

32017AL

**BODY MATERIAL**      **CODE**  
 ALUMINUM ..... AL

# Specifications



**MECHANICAL (CORDSET)**

PLUG FACE: NITRILE/SBR  
 MOLDED BODY: NITRILE/SBR  
 COUPLING NUT: THERMOPLASTIC WITH OPTIONAL ALUMINUM

CABLE: YELLOW NEOPRENE CABLE JACKET  
 TYPE SOW, 105° C UL LISTED,  
 90° C CSA CERTIFIED

OUTSIDE DIAMETER:	#14 AWG	#12 AWG	#10 AWG
2/C	.55" (13.9mm)	.63" (15.9mm)	.69" (17.4mm)
3/C	.58" (14.6mm)	.66" (16.6mm)	.72" (18.3mm)
4/C	.62" (15.8mm)	.71" (18.0mm)	.74" (18.8mm)
STRANDING	41 X #30	65 X #30	105 X #30

**MECHANICAL (RECEPTACLE)**

INSERT MATERIAL: NITRILE/SBR  
 SHELL MATERIAL: THERMOPLASTIC WITH OPTIONAL ALUMINUM

CABLE: 10/12/14 AWG, 1 CONDUCTOR PVC  
 JACKETED, 105° C

STRANDING:	#14 AWG	#12 AWG	#10 AWG
	41 X #30	65 X #30	105 X #30

**ELECTRICAL**

VOLTAGE RATING:	600V AC/DC		
AMPERAGE	#14 AWG	#12 AWG	#10 AWG
2/C	18A	25A	30A
3/C	18A	25A	30A
4/C	15A	20A	25A

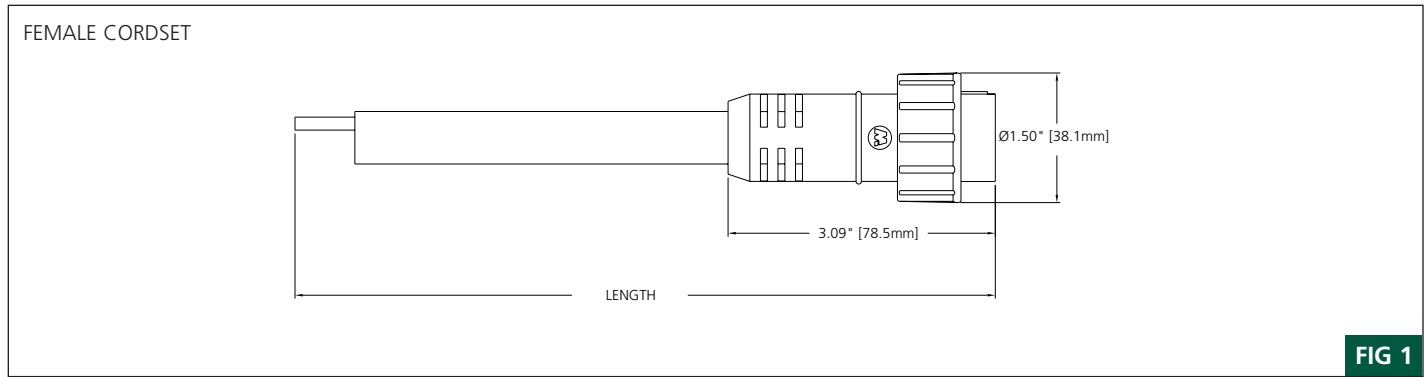
**ENVIRONMENTAL**

PROTECTION: IP 68, NEMA 6P  
 AMBIENT OPERATING TEMP: -4° TO 221° F (-20° TO 105° C)

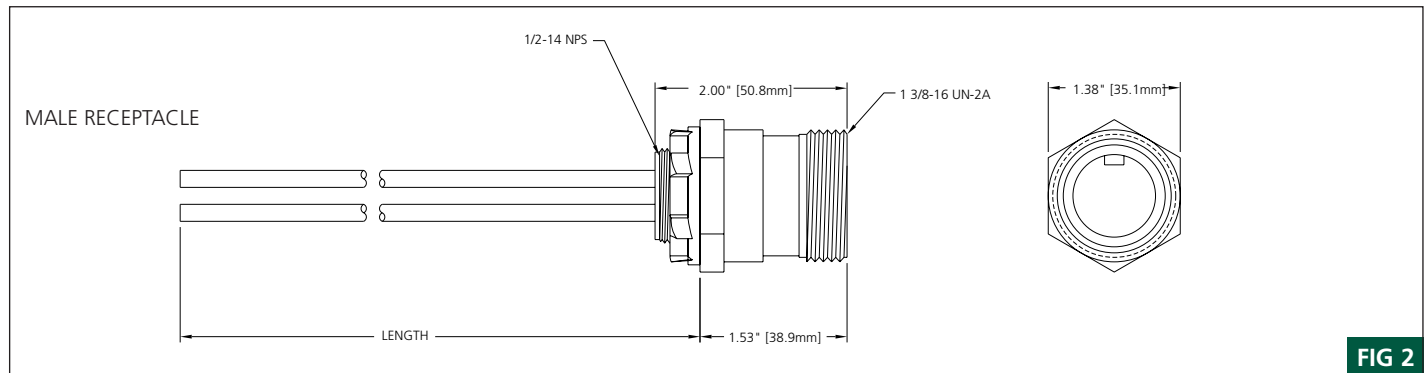
**CERTIFICATIONS**

UL: UL RECOGNIZED, FILE NO E46237  
 CSA: CSA CERTIFIED, FILE NO LR6837

## CONNECTOR DIMENSIONS



## RECEPTACLE DIMENSIONS



**Brad**<sup>®</sup>  
from **molex**



# M23

signal and  
power connectors

**BradConnectivity**<sup>™</sup>



**Molex** empowers the Industrial Infrastructure with innovative industrial communication, control, connectivity and power solutions for a wide range of applications. Molex manufactures and distributes products and solutions worldwide, with dedicated local support to meet specific customer requirements.

## The Brad<sup>®</sup> Brand of Automation Products – Designed for Performance and Reliability

Molex's reputation for quality and performance starts here. As automation technologies continue to improve the consistency, quality and cost of products manufactured throughout the world, Molex is at the forefront. To stay ahead of the game, market leaders are focused on increasing productivity through reduced downtime, reduced maintenance and higher output. With over 100,000 part numbers, no other company offers more connectivity products than Brad. As a result, Molex's Brad products have become the industry standard in automation solutions.



**BradCommunications**<sup>™</sup>



**BradConnectivity**<sup>™</sup>



**BradControl**<sup>™</sup>



**BradPower**<sup>™</sup>

### **BradCommunications**<sup>™</sup>

Network interface cards, PLC backplanes, switches, gateways, simulation software and diagnostic tools.

### **BradConnectivity**<sup>™</sup>

Connectors, cordsets and distribution boxes for sensor, actuator and bus network applications.

### **BradControl**<sup>™</sup>

Network I/O for on-machine and in-cabinet applications.

### **BradPower**<sup>™</sup>

Modular, flexible wiring systems for machine power distribution and motor control.

Molex operates from 59 locations in 19 countries spanning North America, Europe and Asia/Pacific, so we have the resources to assist you locally with all of your project needs.

# M23 connectivity



**BradConnectivity™ M23 connectors and receptacles for signal and power applications were designed to meet our customers' stringent requirements for reliability and performance in the harshest of industrial environments.**

**M23 Signal Connectors** include field attachable male and female cable connectors and receptacles from 6-pole to 19-pole in straight and right-angled versions. Cable connectors for a broad range of cable outer diameters and receptacles for front mounting or back mounting guarantee the highest flexibility. Inserts are available with solder contacts or for crimp contacts. The integrated locking clip secures the contacts in the inserts and an easy assembly and disassembly without the need of special assembly tools.

**M23 Power Connectors** for power applications up to 28 amps. Brad® offers field-attachable cable connectors and receptacles in 5+PE and 4+3+PE versions. Applying the same modular design as the signal connectors, both pole counts can be used in straight and right-angled versions. Easy to assemble and disassemble – no special tools required.

Crimp contacts are available with different crimp ranges. Female contacts with integrated springs assure exceptional electrical performance with ultimate contact reliability in both signal and power product ranges.



# M23 signal connectors

The modular design of BradConnectivity™ M23 Signal Connectors guarantees maximum flexibility for all kinds of signal applications. A wide range of pin counts are available for solder or crimp contacts.

Available in either bulk-packed connectors, which include all piece parts you need for your connection, or single components like housing, insert and contacts which keep you flexible for different applications.

Significant design features offer a user-friendly assembly of BradConnectivity™ M23 Signal Connectors:

- Cable assembly and shielding in one assembly step
- Clipped-on strain-relief insert prevents cable rotation
- Flexible EMC-O-Ring guarantees reliable EMC-protection
- Radial-encompassing spring contacts assure low plug-in resistance and high mating cycles
- Integrated locking clip secures the contact in the insert and allows easy assembly and disassembly



## Mechanical Data

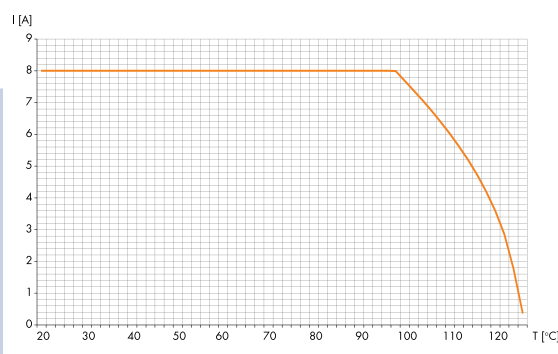
Housing	Copper-Zinc Alloy Die Casting
Housing surface	Nickel-plated brass
Inserts (for contacts)	Thermoplastic Polyamid PA 6 (Nylon 6/6), PBT Fire protection class V-0
Contacts	Brass Alloy
Contact surface at point of contact	Nickel- and gold-plated (0,25µm Au)
Minimum mating cycles	>1000
Seals/O-Rings	Buna-N standard
Temperature range	-40°C – 125°C (-40°F – 257°F)
Type of contacts	Crimp, solder, dip-solder (PCB)
Protection	IP67 per EN 60625 (connected), NEMA 4x
Cable diameter range	3 – 17 mm (0.12 – 0.55")

## Electrical Data

Number of positions	6	7	9 (8+1)	12	16	17	19 (16+3)
Number of contacts	6	7	8 1	12	16	17	16 3
Contact-Ø [mm]	2	2	1 2	1	1	1	1 1.5
Nominal current [A]	20	20	8 20	8	8	8	8 10
Nominal voltage [V~]	300	300	300	300	150	150	150
Test voltage (Breakdown voltage) [V~]	2500	2500	2500	2500	1500	1500	1500
Insulation resistance [MΩ]	>10 <sup>10</sup>	>10 <sup>10</sup>	>10 <sup>10</sup>	>10 <sup>10</sup>	>10 <sup>6</sup>	>10 <sup>6</sup>	>10 <sup>6</sup>
Max. contact resistance [mΩ]	3	3	3	3	3	3	3
Degree of protection*	3	3	3	3	3	3	3

## Derating

Straight connectors male + female wires 12x AWG17



\* Conductive, as well as dry non-conductive dirt accumulation can occur. It can be temporarily conductive due to condensation. Typical for industrial and factory environments.

# Individual Kits

## FIELD-ATTACHABLE CABLE CONNECTORS



**Female  
Straight**



**Female  
90°**



**Male  
Straight**

Part No.  
Material No.

	Cable Diameter	Solder Contacts	Crimp Contacts	Without Contacts	Solder Contacts	Crimp Contacts	Without Contacts	Solder Contacts	Crimp Contacts	Without Contacts
<b>6-Pole</b>	3 – 7 mm	KAS6S00-551 1202300001	KAS6S00-401 1202300004	KAS6S00-001 1202300007	–	–	–	KAS6S06-551 1202300106	KAS6S06-401 1202300109	KAS6S06-001 1202300112
	7 – 12 mm	KAS6S00-555 1202300002	KAS6S00-405 1202300005	KAS6S00-005 1202300008	KAS6S01-555 1202300064	KAS6S01-405 1202300066	KAS6S01-005 1202300068	KAS6S06-555 1202300107	KAS6S06-405 1202300110	KAS6S06-005 1202300113
	11 – 17 mm	KAS6S00-559 1202300003	KAS6S00-409 1202300006	KAS6S00-009 1202300009	KAS6S01-559 1202300065	KAS6S01-409 1202300067	KAS6S01-009 1202300069	KAS6S06-559 1202300108	KAS6S06-409 1202300111	KAS6S06-009 1202300114
	Crimp range*	0,75-2,5 mm <sup>2</sup>			0,75-2,5 mm <sup>2</sup>			0,75-2,5 mm <sup>2</sup>		
<b>7-Pole</b>	3 – 7 mm	KAS7S00-551 1202300010	KAS7S00-401 1202300013	KAS7S00-001 1202300016	–	–	–	KAS7S06-551 1202300115	KAS7S06-401 1202300118	KAS7S06-001 1202300121
	7 – 12 mm	KAS7S00-555 1202300011	KAS7S00-405 1202300014	KAS7S00-005 1202300017	KAS7S01-555 1202300070	KAS7S01-405 1202300072	KAS7S01-005 1202300074	KAS7S06-555 1202300116	KAS7S06-405 1202300119	KAS7S06-005 1202300122
	11 – 17 mm	KAS7S00-559 1202300012	KAS7S00-409 1202300015	KAS7S00-009 1202300018	KAS7S01-559 1202300071	KAS7S01-409 1202300073	KAS7S01-009 1202300075	KAS7S06-559 1202300117	KAS7S06-409 1202300120	KAS7S06-009 1202300123
	Crimp range*	0,75-2,5 mm <sup>2</sup>			0,75-2,5 mm <sup>2</sup>			0,75-2,5 mm <sup>2</sup>		
<b>9-Pole</b>	3 – 7 mm	KAS9S00-551 1202300019	KAS9S00-421 1202300022	KAS9S00-001 1202300025	–	–	–	KAS9S06-551 1202300124	KAS9S06-411 1202300127	KAS9S06-001 1202300130
	7 – 12 mm	KAS9S00-555 1202300020	KAS9S00-425 1202300023	KAS9S00-005 1202300026	KAS9S01-555 1202300076	KAS9S01-425 1202300078	KAS9S01-005 1202300080	KAS9S06-555 1202300125	KAS9S06-415 1202300128	KAS9S06-005 1202300131
	11 – 17 mm	KAS9S00-559 1202300021	KAS9S00-429 1202300024	KAS9S00-009 1202300027	KAS9S01-559 1202300077	KAS9S01-429 1202300079	KAS9S01-009 1202300081	KAS9S06-559 1202300126	KAS9S06-419 1202300129	KAS9S06-009 1202300132
	Crimp range*	0,34-1,0 mm <sup>2</sup> / 0,75-2,5 mm <sup>2</sup>			0,34-1,0 mm <sup>2</sup> / 0,75-2,5 mm <sup>2</sup>			0,14-1,0 mm <sup>2</sup> / 0,75-2,5 mm <sup>2</sup>		
<b>(8 + 1)</b>	3 – 7 mm	KASCS00-551 1202300028	KASCS00-021 1202300031	KASCS00-001 1202300034	–	–	–	KASCS06-551 1202300133	KASCS06-011 1202300136	KASCS06-001 1202300139
	7 – 12 mm	KASCS00-555 1202300029	KASCS00-025 1202300032	KASCS00-005 1202300035	KASCS01-555 1202300082	KASCS01-025 1202300084	KASCS01-005 1202300086	KASCS06-555 1202300134	KASCS06-015 1202300137	KASCS06-005 1202300140
	11 – 17 mm	KASCS00-559 1202300030	KASCS00-029 1202300033	KASCS00-009 1202300036	KASCS01-559 1202300083	KASCS01-029 120-2300085	KASCS01-009 1202300087	KASCS06-559 1202300135	KASCS06-019 1202300138	KASCS06-009 1202300141
	Crimp range*	0,34-1,0 mm <sup>2</sup>			0,34-1,0 mm <sup>2</sup>			0,14-1,0 mm <sup>2</sup>		
<b>12-Pole</b>	3 – 7 mm	KASCS00-551 1202300028	KASCS00-021 1202300031	KASCS00-001 1202300034	–	–	–	KASCS06-551 1202300133	KASCS06-011 1202300136	KASCS06-001 1202300139
	7 – 12 mm	KASCS00-555 1202300029	KASCS00-025 1202300032	KASCS00-005 1202300035	KASCS01-555 1202300082	KASCS01-025 1202300084	KASCS01-005 1202300086	KASCS06-555 1202300134	KASCS06-015 1202300137	KASCS06-005 1202300140
	11 – 17 mm	KASCS00-559 1202300030	KASCS00-029 1202300033	KASCS00-009 1202300036	KASCS01-559 1202300083	KASCS01-029 120-2300085	KASCS01-009 1202300087	KASCS06-559 1202300135	KASCS06-019 1202300138	KASCS06-009 1202300141
	Crimp range*	0,34-1,0 mm <sup>2</sup>			0,34-1,0 mm <sup>2</sup>			0,14-1,0 mm <sup>2</sup>		
<b>16-Pole</b>	3 – 7 mm	KASHS00-551 1202300037	KASHS00-021 1202300040	KASHS00-001 1202300043	–	–	–	KASHS06-551 1202300142	KASHS06-011 1202300145	KASHS06-001 1202300148
	7 – 12 mm	KASHS00-555 1202300038	KASHS00-025 1202300041	KASHS00-005 1202300044	KASHS01-555 1202300088	KASHS01-025 1202300090	KASHS01-005 1202300092	KASHS06-555 1202300143	KASHS06-015 1202300146	KASHS06-005 1202300149
	11 – 17 mm	KASHS00-559 1202300039	KASHS00-029 1202300042	KASHS00-009 1202300045	KASHS01-559 1202300089	KASHS01-029 1202300091	KASHS01-009 1202300093	KASHS06-559 1202300144	KASHS06-019 1202300147	KASHS06-009 1202300150
	Crimp range*	0,34-1,0 mm <sup>2</sup>			0,34-1,0 mm <sup>2</sup>			0,14-1,0 mm <sup>2</sup>		
<b>17-Pole</b>	3 – 7 mm	KASJS00-551 1202300046	KASJS00-021 1202300049	KASJS00-001 1202300052	–	–	–	KASJS06-551 1202300151	KASJS06-011 1202300154	KASJS06-001 1202300157
	7 – 12 mm	KASJS00-555 1202300047	KASJS00-025 1202300050	KASJS00-005 1202300053	KASJS01-555 1202300094	KASJS01-025 1202300096	KASJS01-005 1202300098	KASJS06-555 1202300152	KASJS06-015 1202300155	KASJS06-005 1202300158
	11 – 17 mm	KASJS00-559 1202300048	KASJS00-029 1202300051	KASJS00-009 1202300054	KASJS01-559 1202300095	KASJS01-029 1202300097	KASJS01-009 1202300099	KASJS06-559 1202300153	KASJS06-019 1202300156	KASJS06-009 1202300159
	Crimp range*	0,34-1,0 mm <sup>2</sup>			0,34-1,0 mm <sup>2</sup>			0,14-1,0 mm <sup>2</sup>		
<b>19-Pole</b>	3 – 7 mm	KASLS00-551 1202300055	KASLS00-221 1202300058	KASLS00-001 1202300061	–	–	–	KASLS06-551 1202300160	KASLS06-111 1202300163	KASLS06-001 1202300166
	7 – 12 mm	KASLS00-555 1202300056	KASLS00-225 1202300059	KASLS00-005 1202300062	KASLS01-555 1202300100	KASLS01-225 1202300102	KASLS01-005 1202300104	KASLS06-555 1202300161	KASLS06-115 1202300164	KASLS06-005 1202300167
	11 – 17 mm	KASLS00-559 1202300057	KASLS00-229 1202300060	KASLS00-009 1202300063	KASLS01-559 1202300101	KASLS01-229 1202300103	KASLS01-009 1202300105	KASLS06-559 1202300162	KASLS06-119 1202300165	KASLS06-009 1202300168
	Crimp range*	0,34-1,0 mm <sup>2</sup> / 0,56-1,0 mm <sup>2</sup>			0,34-1,0 mm <sup>2</sup> / 0,56-1,0 mm <sup>2</sup>			0,14-1,0 mm <sup>2</sup> / 0,14-1,0 mm <sup>2</sup>		

\* Crimp range only applies to "Crimp Contacts" versions.

# M23 signal connectors

## Individual Kits

### FRONT PANEL-MOUNT RECEPTACLES

Part No.  
Material No.



**Female  
Flange-Mount  
4x Ø 3,2 mm**



**Male  
Flange-Mount  
4x Ø 3,2 mm**



**Male 90°  
Flange-Mount  
4x Ø 2,7 mm,  
rotatable**

	Female Flange-Mount 4x Ø 3,2 mm			Male Flange-Mount 4x Ø 3,2 mm			Male 90° Flange-Mount 4x Ø 2,7 mm, rotatable		
	Solder Contacts	Crimp Contacts	Without Contacts	Solder Contacts	Crimp Contacts	Without Contacts	Solder Contacts	Crimp Contacts	Without Contacts
<b>6-Pole</b>	KRS6G20-553 1202310001	KRS6G20-403 1202310002	KRS6G20-003 1202310003	KRS6G26-5531 1202310022	KRS6G26-4031 1202310023	KRS6G26-0031 1202310024	KRS6G27-5512 1202310043	KRS6G27-4012 1202310044	KRS6G27-0012 1202310045
Crimp range*	0,75-2,5 mm <sup>2</sup>			0,75-2,5 mm <sup>2</sup>			0,75-2,5 mm <sup>2</sup>		
<b>7-Pole</b>	KRS7G20-553 1202310004	KRS7G20-403 1202310005	KRS7G20-003 1202310006	KRS7G26-5531 1202310025	KRS7G26-4031 1202310026	KRS7G26-0031 1202310027	KRS7G27-5512 1202310046	KRS7G27-4012 1202310047	KRS7G27-0012 1202310048
Crimp range*	0,75-2,5 mm <sup>2</sup>			0,75-2,5 mm <sup>2</sup>			0,75-2,5 mm <sup>2</sup>		
<b>9-Pole (8 + 1)</b>	KRS9G20-553 1202310007	KRS9G20-423 1202310008	KRS9G20-003 1202310009	KRS9G26-5531 1202310028	KRS9G26-4131 1202310029	KRS9G26-0031 1202310030	KRS9G27-5512 1202310049	KRS9G27-4112 1202310050	KRS9G27-0012 1202310051
Crimp range*	0,34-1,0 mm <sup>2</sup> / 0,75-2,5 mm <sup>2</sup>			0,14-1,0 mm <sup>2</sup> / 0,75-2,5 mm <sup>2</sup>			0,14-1,0 mm <sup>2</sup> / 0,75-2,5 mm <sup>2</sup>		
<b>12-Pole</b>	KRSCG20-553 1202310010	KRSCG20-023 1202310011	KRSCG20-003 1202310012	KRSCG26-5531 1202310031	KRSCG26-0131 1202310032	KRSCG26-0031 1202310033	KRSCG27-5512 1202310052	KRSCG27-0112 1202310053	KRSCG27-0012 1202310054
Crimp range*	0,34-1,0 mm <sup>2</sup>			0,14-1,0 mm <sup>2</sup>			0,14-1,0 mm <sup>2</sup>		
<b>16-Pole</b>	KRSHG20-553 1202310013	KRSHG20-023 1202310014	KRSHG20-003 1202310015	KRSHG26-5531 1202310034	KRSHG26-0131 1202310035	KRSHG26-0031 1202310036	KRSHG27-5512 1202310055	KRSHG27-0112 1202310056	KRSHG27-0012 1202310057
Crimp range*	0,34-1,0 mm <sup>2</sup>			0,14-1,0 mm <sup>2</sup>			0,14-1,0 mm <sup>2</sup>		
<b>17-Pole</b>	KRSJG20-553 1202310016	KRSJG20-023 1202310017	KRSJG20-003 1202310018	KRSJG26-5531 1202310037	KRSJG26-0131 1202310038	KRSJG26-0031 1202310039	KRSJG27-5512 1202310058	KRSJG27-0112 1202310059	KRSJG27-0012 1202310060
Crimp range*	0,34-1,0 mm <sup>2</sup>			0,14-1,0 mm <sup>2</sup>			0,14-1,0 mm <sup>2</sup>		
<b>19-Pole (16 + 3)</b>	KRSLG20-553 1202310019	KRSLG20-223 1202310020	KRSLG20-003 1202310021	KRSLG26-5531 1202310040	KRSLG26-1131 1202310041	KRSLG26-0031 1202310042	KRSLG27-5512 1202310061	KRSLG27-1112 1202310062	KRSLG27-0012 1202310063
Crimp range*	0,34-1,0 mm <sup>2</sup> / 0,56-1,0 mm <sup>2</sup>			0,14-1,0 mm <sup>2</sup> / 0,14-1,0 mm <sup>2</sup>			0,14-1,0 mm <sup>2</sup> / 0,14-1,0 mm <sup>2</sup>		

### BACK PANEL-MOUNT RECEPTACLES

Part No.  
Material No.



**Male Flange-Mount  
4xM3**






**Male Single Hole-Mount  
M25x1,5**

	Male Flange-Mount 4xM3				Male Single Hole-Mount M25x1,5			
	Solder Contacts	PCB Contacts	Crimp Contacts	Without Contacts	Solder Contacts	PCB Contacts	Crimp Contacts	Without Contacts
<b>6-Pole</b>	KRS6P46-5541 1202310064	KRS6P46-7741 1202310065	KRS6P46-4041 1202310066	KRS6P46-0041 1202310067	KRS6P46-550 1202310092	KRS6P46-770 1202310093	KRS6P46-400 1202310094	KRS6P46-000 1202310095
Crimp range*	0,75-2,5 mm <sup>2</sup>				0,75-2,5 mm <sup>2</sup>			
<b>7-Pole</b>	KRS7P46-5541 1202310068	KRS7P46-7741 1202310069	KRS7P46-4041 1202310070	KRS7P46-0041 1202310071	KRS7P46-550 1202310096	KRS7P46-770 1202310097	KRS7P46-400 1202310098	KRS7P46-000 1202310099
Crimp range*	0,75-2,5 mm <sup>2</sup>				0,75-2,5 mm <sup>2</sup>			
<b>9-Pole (8 + 1)</b>	KRS9P46-5541 1202310072	KRS9P46-7741 1202310073	KRS9P46-4141 1202310074	KRS9P46-0041 1202310075	KRS9P46-550 1202310100	KRS9P46-770 1202310101	KRS9P46-410 1202310102	KRS9P46-000 1202310103
Crimp range*	0,14-1,0 mm <sup>2</sup> / 0,75-2,5 mm <sup>2</sup>				0,14-1,0 mm <sup>2</sup> / 0,75-2,5 mm <sup>2</sup>			
<b>12-Pole</b>	KRSCP46-5541 1202310076	KRSCP46-7741 1202310077	KRSCP46-0141 1202310078	KRSCP46-0041 1202310079	KRSCP46-550 1202310104	KRSCP46-770 1202310105	KRSCP46-010 1202310106	KRSCP46-000 1202310107
Crimp range*	0,14-1,0 mm <sup>2</sup>				0,14-1,0 mm <sup>2</sup>			
<b>16-Pole</b>	KRSHP46-5541 1202310080	KRSHP46-7741 1202310081	KRSHP46-0141 1202310082	KRSHP46-0041 1202310083	KRSHP46-550 1202310108	KRSHP46-770 1202310109	KRSHP46-010 1202310110	KRSHP46-000 1202310111
Crimp range*	0,14-1,0 mm <sup>2</sup>				0,14-1,0 mm <sup>2</sup>			
<b>17-Pole</b>	KRSJP46-5541 1202310084	KRSJP46-7741 1202310085	KRSJP46-0141 1202310086	KRSJP46-0041 1202310087	KRSJP46-550 1202310112	KRSJP46-770 1202310113	KRSJP46-010 1202310114	KRSJP46-000 1202310115
Crimp range*	0,14-1,0 mm <sup>2</sup>				0,14-1,0 mm <sup>2</sup>			
<b>19-Pole (16 + 3)</b>	KRSLP46-5541 1202310088	KRSLP46-7741 1202310089	KRSLP46-1141 1202310090	KRSLP46-0041 1202310091	KRSLP46-550 1202310116	KRSLP46-770 1202310117	KRSLP46-110 1202310118	KRSLP46-000 1202310119
Crimp range*	0,14-1,0 mm <sup>2</sup> / 0,14-1,0 mm <sup>2</sup>				0,14-1,0 mm <sup>2</sup> / 0,14-1,0 mm <sup>2</sup>			



\* Crimp range only applies to "Crimp Contacts" versions.

# Bulk-Packed Components



## FIELD-ATTACHABLE CABLE CONNECTOR HOUSINGS

Part No. Material No.		Female Straight		Female 90°		Male Straight
	Cable Diameter	Housing	Housing		Housing	
Housing Only	3 – 7mm	KAS0S00-001 1202320001	–		KAS0S06-001 1202320006	
	7 – 12mm	KAS0S00-005 1202320002	KAS0S01-005 1202320004		KAS0S06-005 1202320007	
	11 – 17mm	KAS0S00-009 1202320003	KAS0S01-009 1202320005		KAS0S06-009 1202320008	

## FRONT PANEL-MOUNT RECEPTACLES HOUSINGS

Part No. Material No.		Female Flange-Mount 4x Ø 3,2 mm		Male Flange-Mount 4x Ø 3,2 mm		Male 90° Flange-Mount 4x Ø 2,7 mm rotatable
	Housing	Housing	Housing		Housing	
Housing Only	KRS0G20-003 1202320009	KRS0G26-0031 1202320010	KRS0G27-0012 1202320011			

## BACK PANEL-MOUNT RECEPTACLES HOUSINGS

Part No. Material No.		Male Flange- Mount 4xM3		Male Single Hole- Mount M25x1,5
	Housing	Housing		
Housing Only	KRS0G46-0041 1202320012	KRS0P46-000 1202320013		

## INSERTS

	Female Inserts			Male Inserts		
	Solder Contacts	PCB Contacts	Without Contacts	Solder Contacts	PCB Contacts	Without Contacts
6-Pole	KIS60-55 1202320014	KIS60-77 1202320015	KIS60-00 1202320016	KIS66-55 1202320035	KIS66-77 1202320036	KIS66-00 1202320037
7-Pole	KIS70-55 1202320017	KIS70-77 1202320018	KIS70-00 1202320019	KIS76-55 1202320038	KIS76-77 1202320039	KIS76-00 1202320040
9-Pole (8 + 1)	KIS90-55 1202320020	KIS90-77 1202320021	KIS90-00 1202320022	KIS96-55 1202320041	KIS96-77 1202320042	KIS96-00 1202320043
12-Pole	KISC0-55 1202320023	KISC0-77 1202320024	KISC0-00 1202320025	KISC6-55 1202320044	KISC6-77 1202320045	KISC6-00 1202320046
16-Pole	KISH0-55 1202320026	KISH0-77 1202320027	KISH0-00 1202320028	KISH6-55 1202320047	KISH6-77 1202320048	KISH6-00 1202320049
17-Pole	KISJ0-55 1202320029	KISJ0-77 1202320030	KISJ0-00 1202320031	KISJ6-55 1202320050	KISJ6-77 1202320051	KISJ6-00 1202320052
19-Pole (16 + 3)	KISL0-55 1202320032	KISL0-77 1202320033	KISL0-00 1202320034	KISL6-55 1202320053	KISL6-77 1202320054	KISL6-00 1202320055

Part No.  
Material No.

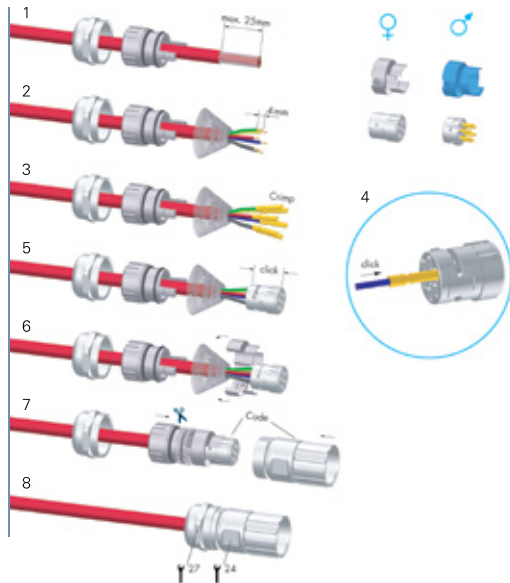
## CONTACTS

Crimp Range	Female Contact Ø 1,0 mm	Male Contact Ø 1,0 mm
0,08-0,56 mm <sup>2</sup>	KCS00-01 1202320056	–
0,14-1,0 mm <sup>2</sup>	–	KCS06-01 1202320062
0,34-1,0 mm <sup>2</sup>	KCS00-02 1202320057	–
1,0-1,5 mm <sup>2</sup>	KCS00-03 1202320058	KCS06-03 1202320063
	Female Contact Ø 1,5 mm	Male Contact Ø 1,5 mm
0,14-0,56 mm <sup>2</sup>	KCS00-10 1202320059	–
0,14-1,0 mm <sup>2</sup>	–	KCS06-10 1202320064
0,56-1,0 mm <sup>2</sup>	KCS00-20 1202320060	–
	Female Contact Ø 2,0 mm	Male Contact Ø 2,0 mm
0,75-2,5 mm <sup>2</sup>	KCS00-40 1202320061	KCS06-40 1202320065

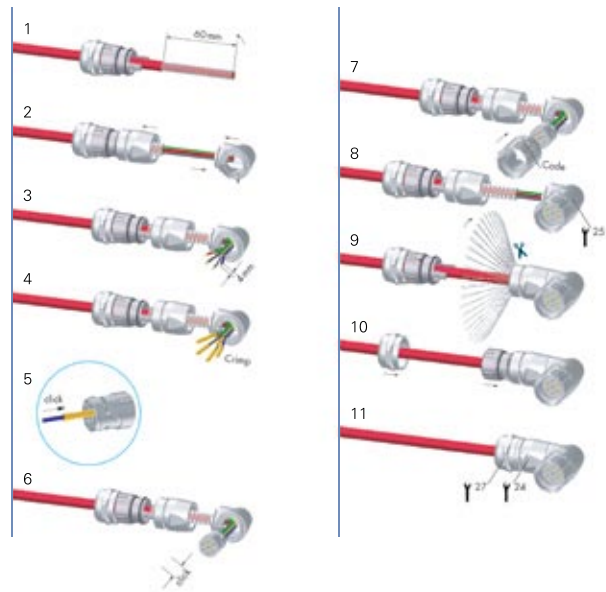
# M23 signal connectors

## Assembly Instructions

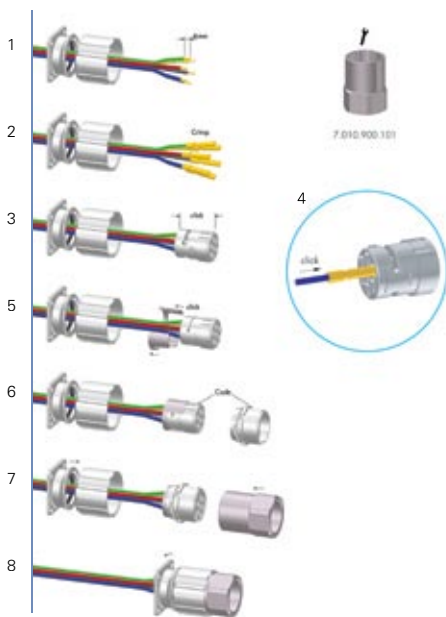
### CABLE CONNECTOR STRAIGHT



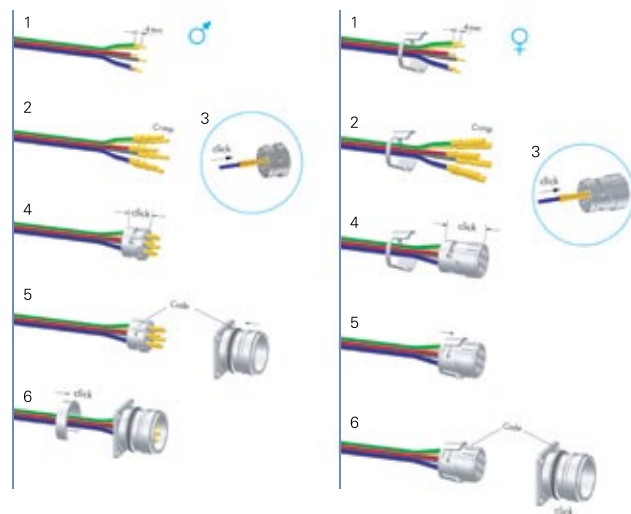
### CABLE CONNECTOR 90°



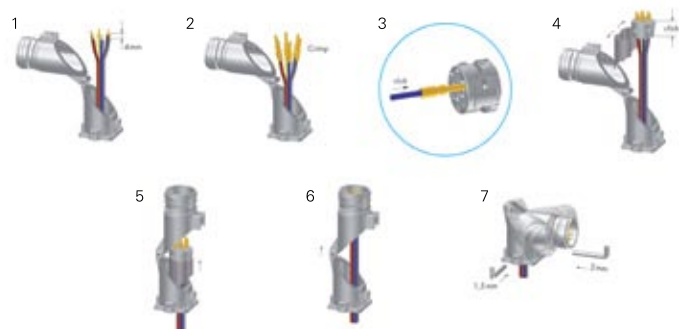
### PANEL CONNECTOR FEMALE



### PANEL CONNECTOR MALE



### PANEL CONNECTOR 90°



## Crimp Tool Setting

Part No. Material No.	Crimp Contact	Cross section (mm <sup>2</sup> )	AWG	Crimp Tool Setting	Locator Setting
KCS06-01 1202320062	Male Contact Ø 1 mm	0.14	AWG26	0.86	1
		0.25	AWG24	0.90	
		0.34	AWG22	0.95	
		0.56	AWG20	0.98	
		0.75	AWG18	1.03	
		1.00	AWG17	1.08	
KCS00-01 1202320056	Female Contact Ø 1 mm (0,08-0,56 mm <sup>2</sup> )	0.08	AWG28	0.75	2
		0.14	AWG26	0.78	
		0.25	AWG24	0.82	
		0.34	AWG22	0.86	
		0.56	AWG20	0.90	
KCS00-02 1202320057	Female Contact Ø 1 mm (0,34-1,0 mm <sup>2</sup> )	0.34	AWG22	0.77	2
		0.56	AWG20	0.82	
		0.75	AWG18	0.88	
		1.00	AWG17	0.95	
KCS06-10 1202320064	Male Contact Ø 1,5 mm	0.14	AWG26	0.65	3
		0.25	AWG24	0.68	
		0.34	AWG22	0.72	
		0.56	AWG20	0.81	
		0.75	AWG18	0.95	
		1.00	AWG17	1.07	
KCS00-10 1202320059	Female Contact Ø 1,5 mm (0,14-0,75 mm <sup>2</sup> )	0.14	AWG26	0.70	2
		0.25	AWG24	0.73	
		0.34	AWG22	0.77	
		0.56	AWG20	0.85	
		0.75	AWG18	1.05	
KCS00-20 1202320060	Female Contact Ø 1,5 mm (0,34-1,0 m <sup>2</sup> )	0.34	AWG22	0.88	2
		0.56	AWG20	0.95	
		0.75	AWG18	1.05	
		1.00	AWG17	1.13	
KCS06-40 1202320065	Male Contact Ø 2,0 mm	0.75	AWG18	1.20	4
		1.00	AWG17	1.35	
		1.50	AWG16	1.45	
		2.50	AWG14	1.60	
KCS00-40 1202320061	Female Contact Ø 2,0 mm	0.75	AWG18	1.20	5
		1.00	AWG17	1.35	
		1.50	AWG16	1.45	
		2.50	AWG14	1.60	

# M23 power connectors

With M23 Power Connectors, BradConnectivity™ offers a versatile solution for power applications up to 28 amps. The modular design offers a maximum on flexibility; male and female contact inserts work with all different housing styles.

Like the BradConnectivity M23 Signal Connector range, Power Connectors are available as kits as well as bulk parts. Essential design features guarantee the simplest assembly and a secure power connection:

- Modularity: Same insert for all housings
- The integrated locking clip allows quick assembly
- Complete assembly and disassembly without special tools
- Lowest contact resistance as a result of a gold-plated contact area
- Integrated strain-relief fitting



## Mechanical Data

Housing	Copper-Zinc Alloy Die Casting
Housing surface	Nickel-plated brass
Inserts (for contacts)	Thermoplastic Polyamid PA 6 (Nylon 6/6), PBT Fire protection class V-0
Contacts	Brass Alloy
Contact surface at point of contact	Nickel- and gold-plated (0,25µm Au)
Minimum mating cycles	>1000
Seals/O-Rings	Buna-N standard
Temperature range	-40°C – 125°C (-40°F – 257°F)
Type of contacts	Crimp
Protection	IP67 per EN 60625 (connected), NEMA 4x
Cable diameter range	7 – 17 mm (0.28 – 0.55")

## Electrical Data

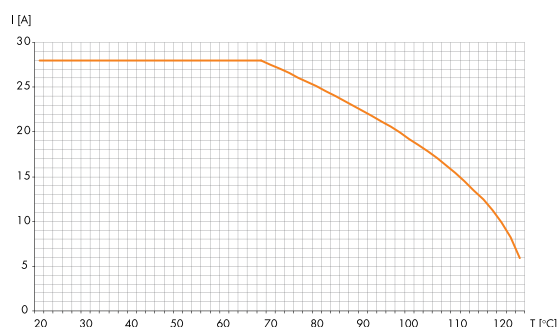
	5+PE	4+3+PE	
Number of positions	5+PE	4	4
Number of contacts	6	4	4
Contact-Ø [mm]	2	1	2
Nominal current 1) [A]	28	8	28
Nominal voltage [V~] Degree of Protection 2*	800	300	800
Nominal voltage [V~] Degree of Protection 3**	600	300	600
Test voltage (Breakdown voltage) 4) [V~]	4000	2500	4000
Insulation resistance [MΩ]	>10 <sup>13</sup>	>10 <sup>13</sup>	
Max. contact resistance) [mΩ]	3	3	

## Derating

Straight connectors male + female M23, 5+PE, wires 5 x AWG12

\* No permanent conductive dirt accumulation will occur. Temporary conductive dirt accumulation, such as condensation, is possible. Typical for households, offices, laboratories and test labs.

\*\* Conductive, as well as dry non-conductive dirt accumulation can occur. It can be temporarily conductive due to condensation. Typical for industrial and factory environments.



## Individual Kits

### FIELD-ATTACHABLE CABLE CONNECTORS

Part No.  
Material No.



**Female  
Straight**



**Female  
90°**



**Male  
Straight**

	Cable Diameter	Female Straight		Female 90°		Male Straight	
		Crimp Contacts	Without Contacts	Crimp Contacts	Without Contacts	Crimp Contacts	Without Contacts
<b>6-Pole (5 + PE)</b>	7 – 12 mm	KAP6S00-105 1202330001	KAP6S00-005 1202330003	KAP6S01-105 1202330009	KAP6S01-005 1202330011	KAP6S06-105 1202330017	KAP6S06-005 1202330019
	11 – 17 mm	KAP6S00-109 1202330002	KAP6S00-009 1202330004	KAP6S01-109 1202330010	KAP6S01-009 1202330012	KAP6S06-109 1202330018	KAP6S06-009 1202330020
	Crimp range*	0,75-2,5 mm <sup>2</sup>		0,75-2,5 mm <sup>2</sup>		0,75-2,5 mm <sup>2</sup>	
<b>8-Pole</b>	7 – 12 mm	KAP8S00-115 1202330005	KAP8S00-005 1202330007	KAP8S01-115 1202330013	KAP8S01-005 1202330015	KAP8S06-115 1202330021	KAP8S06-005 1202330023
	11 – 17 mm	KAP8S00-119 1202330006	KAP8S00-009 1202330008	KAP8S01-119 1202330014	KAP8S01-009 1202330016	KAP8S06-119 1202330022	KAP8S06-009 1202330024
	Crimp range*	0,25-1,0 mm <sup>2</sup> / 0,75-2,5 mm <sup>2</sup>		0,25-1,0 mm <sup>2</sup> / 0,75-2,5 mm <sup>2</sup>		0,25-1,0 mm <sup>2</sup> / 0,75-2,5 mm <sup>2</sup>	

### FRONT PANEL-MOUNT RECEPTACLES

Part No.  
Material No.



**Female  
Flange-Mount  
4x Ø 3,2 mm**



**Male  
Flange-Mount  
4x Ø 3,2 mm**

	Crimp Contacts	Without Contacts	Crimp Contacts	Without Contacts
<b>6-Pole (5 + PE)</b>	KRP6G00-103 1202340001	KRP6G00-003 1202340002	KRP6G06-103 1202340005	KRP6G06-003 1202340006
Crimp range*	0,75-2,5 mm <sup>2</sup>		0,75-2,5 mm <sup>2</sup>	
<b>8-Pole (4 + 3 + PE)</b>	KRP8G00-113 1202340003	KRP8G00-003 1202340004	KRP8G06-113 1202340007	KRP8G06-003 1202340008
Crimp range*	0,25-1,0 mm <sup>2</sup> / 0,75-2,5 mm <sup>2</sup>		0,25-1,0 mm <sup>2</sup> / 0,75-2,5 mm <sup>2</sup>	



**Male 90° Flange-Mount  
4x Ø 2,7 mm,  
rotatable,  
Flange 25x25 mm**



**Male 90° Flange-Mount  
4x Ø 3,2 mm,  
rotatable,  
Flange 28x28 mm**

	Crimp Contacts	Without Contacts	Crimp Contacts	Without Contacts
<b>6-Pole (5 + PE)</b>	KRP6G07-1012 1202340009	KRP6G07-0012 1202340010	KRP6G07-1052 1202340013	KRP6G07-0052 1202340014
Crimp range*	0,75-2,5 mm <sup>2</sup>		0,75-2,5 mm <sup>2</sup>	
<b>8-Pole (4 + 3 + PE)</b>	KRP8G07-1112 1202340011	KRP8G07-0012 1202340012	KRP8G07-1152 1202340015	KRP8G07-0052 1202340016
Crimp range*	0,25-1,0 mm <sup>2</sup> / 0,75-2,5 mm <sup>2</sup>		0,25-1,0 mm <sup>2</sup> / 0,75-2,5 mm <sup>2</sup>	

### BACK PANEL-MOUNT RECEPTACLES

Part No.  
Material No.



**Male  
Flange-Mount  
4x Ø 3,2 mm**



**Male Single Hole-Mount  
M25x1,5**




	Crimp Contacts	Without Contacts	Crimp Contacts	Without Contacts
<b>6-Pole (5 + PE)</b>	KRP6G46-1031 1202340017	KRP6G46-0031 1202340018	KRP6P46-100 1202340021	KRP6P46-000 1202340022
Crimp range*	0,75-2,5 mm <sup>2</sup>		0,75-2,5 mm <sup>2</sup>	
<b>8-Pole (4 + 3 + PE)</b>	KRP8G46-1131 1202340019	KRP8G46-0031 1202340020	KRP8P46-110 1202340023	KRP8P46-000 1202340024
Crimp range*	0,25-1,0 mm <sup>2</sup> / 0,75-2,5 mm <sup>2</sup>		0,25-1,0 mm <sup>2</sup> / 0,75-2,5 mm <sup>2</sup>	

\* Crimp range only applies to "Crimp Contacts" versions.

# M23 power connectors

## Bulk-Packed Components

### FIELD-ATTACHABLE CABLE CONNECTOR HOUSINGS

Part No. Material No.		Female Straight		Female 90°		Male Straight
	Cable Diameter	Housing	Housing	Housing	Housing	
Housing only	7 – 12 mm	KAP0S00-005 1202350001	KAP0S01-005 1202350003	KAP0S01-005 1202350004	KAP0S06-005 1202350005	
	11 – 17 mm	KAP0S00-009 1202350002	KAP0S01-009 1202350004		KAP0S06-009 1202350006	

### FRONT PANEL-MOUNT RECEPTACLE HOUSINGS

Part No. Material No.		Female Flange-Mount 4x Ø 3,2 mm		Male Flange-Mount 4x Ø 3,2 mm
Housing only	Housing	Housing	Housing	
	KRPOG00-003 1202350007	KRPOG06-003 1202350008		

Part No. Material No.		Male 90° Flange-Mount 4x Ø 2,7 mm, rotatable, Flange 25x25 mm		Male 90° Flange-Mount 4x Ø 3,2 mm, rotatable, Flange 28x28 mm
Housing only	Housing	Housing	Housing	
	KRPOG07-0012 1202350009	KRPOG07-0052 1202350010		

### BACK PANEL-MOUNT RECEPTACLE HOUSINGS

Part No. Material No.		Male Flange-Mount 4x Ø 3,2 mm		Male Single Hole-Mount M25x1,5
Housing only	Housing	Housing	Housing	
	KRPOG46-0031 1202350011	KRPOP46-000 1202350012		

### INSERTS

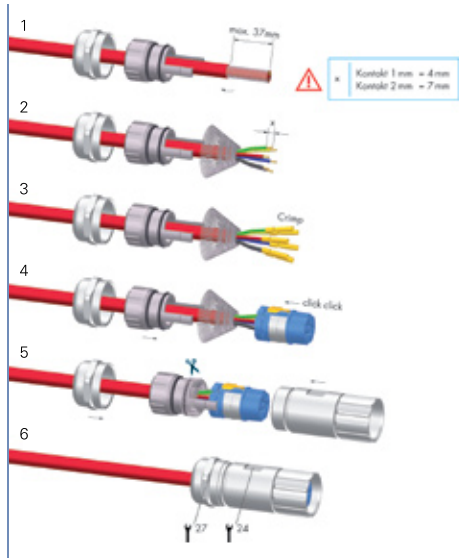
	Female Inserts	Male Inserts
6-Pole (5 + PE)	Without Contacts KIP60-00 1202350013	Without Contacts KIP66-00 1202350015
8-Pole (4 + 3 + PE)	KIP80-00 1202350014	KIP86-00 1202350016

### CONTACTS

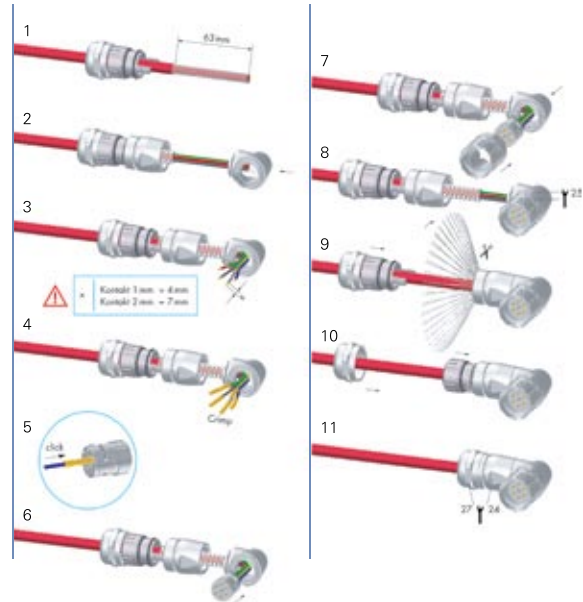
Crimp Range	Female Contact Ø 1,0 mm	Male Contact Ø 1,0 mm
0,25-1,0 mm <sup>2</sup>	KCP00-01 1202350017	KCP06-01 1202350020
0,75-2,5 mm <sup>2</sup>	Female Contact Ø 2,0 mm KCP00-10 1202350018	Male Contact Ø 2,0 mm KCP06-10 1202350021
2,5-4,0 mm <sup>2</sup>	KCP00-20 1202350019	KCP06-20 1202350022

# Assembly Instructions

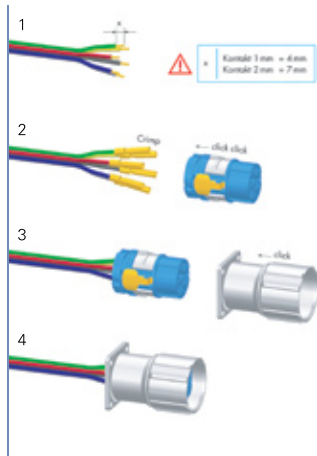
## CABLE CONNECTOR STRAIGHT



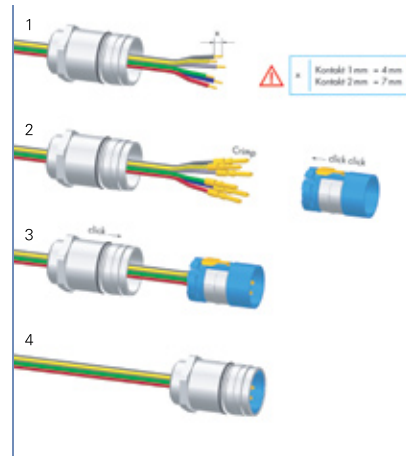
## CABLE CONNECTOR 90°



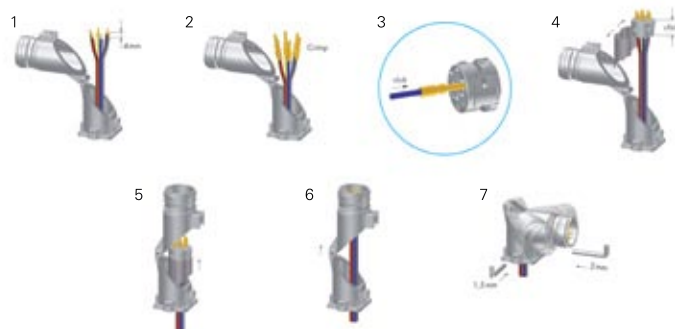
## PANEL CONNECTOR FEMALE



## PANEL CONNECTOR MALE



## PANEL CONNECTOR 90°



## Crimp Tool Setting

Part No. Material No.	Crimp Contact	Cross section (mm <sup>2</sup> )	AWG	Crimp Tool Setting	Locator Setting
KCP06-01 1202350020	Male Contact Ø 1 mm	0.14	AWG26	0.75	1
		0.25	AWG24	0.80	
		0.35	AWG22	0.85	
		0.50	AWG20	1.03	
		0.75	AWG18	1.08	
		1.00	AWG17	1.13	
KCP00-01 1202350017	Female Contact 1 mm	0.14	AWG26	0.75	2
		0.25	AWG24	0.80	
		0.35	AWG22	0.85	
		0.50	AWG20	0.89	
		0.75	AWG18	0.95	
		1.00	AWG17	1.02	
KCP06-10 1202350021	Male Contact Ø 2 mm	0.75	AWG18	1.20	7
		1.00	AWG17	1.40	
		1.50	AWG16	1.55	
		2.50	AWG14	1.70	
KCP06-20 1202350022	Male Contact Ø 2 mm	2.50	AWG14	1.47	7
		4.00	AWG12	1.60	
KCP00-10 1202350018	Female Contact Ø 2 mm	0.75	AWG18	1.20	8
		1.00	AWG17	1.40	
		1.50	AWG16	1.55	
		2.50	AWG14	1.70	
KCP00-20 1202350019	Female Contact Ø 2 mm	2.50	AWG14	1.47	8
		4.00	AWG12	1.60	

# M23

## Tools and Accessories

### M23 SIGNAL



**Crimp Tool**

For manual crimping of machined crimp contacts for signal connectors

KS-TOOL-01  
1201550012



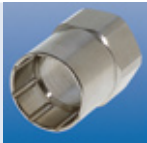
**Locator For Crimp Tool**

Locator for Male Contacts

KS-LOC-01  
1201550013

Locator for Female Contacts

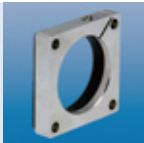
KS-LOC-02  
1201550014



**Assembly Tool**

For female receptacles

KS-TOOL-02  
1201550015



**Adapter Flange**

For straight connectors

KA-FLANGE  
1201550016

### M23 POWER



**Crimp Tool**

For manual crimping of machined crimp contacts for power connectors

KP-TOOL-01  
1201550017



**Locator For Crimp Tool**

Locator for Male Contacts

KP-LOC-01  
1201550018

Locator for Female Contacts

KP-LOC-02  
1201550019



**Adapter Flange**

For straight connectors

KA-FLANGE  
1201550016

Part No.  
Material No.

Part No.  
Material No.

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Network interface cards, PLC backplanes, switches, gateways, simulation software and diagnostic tools.

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Connectors, cordsets and distribution boxes for sensor, actuator and bus network applications.

## BradControl™

Network I/O for on-machine and in-cabinet applications.

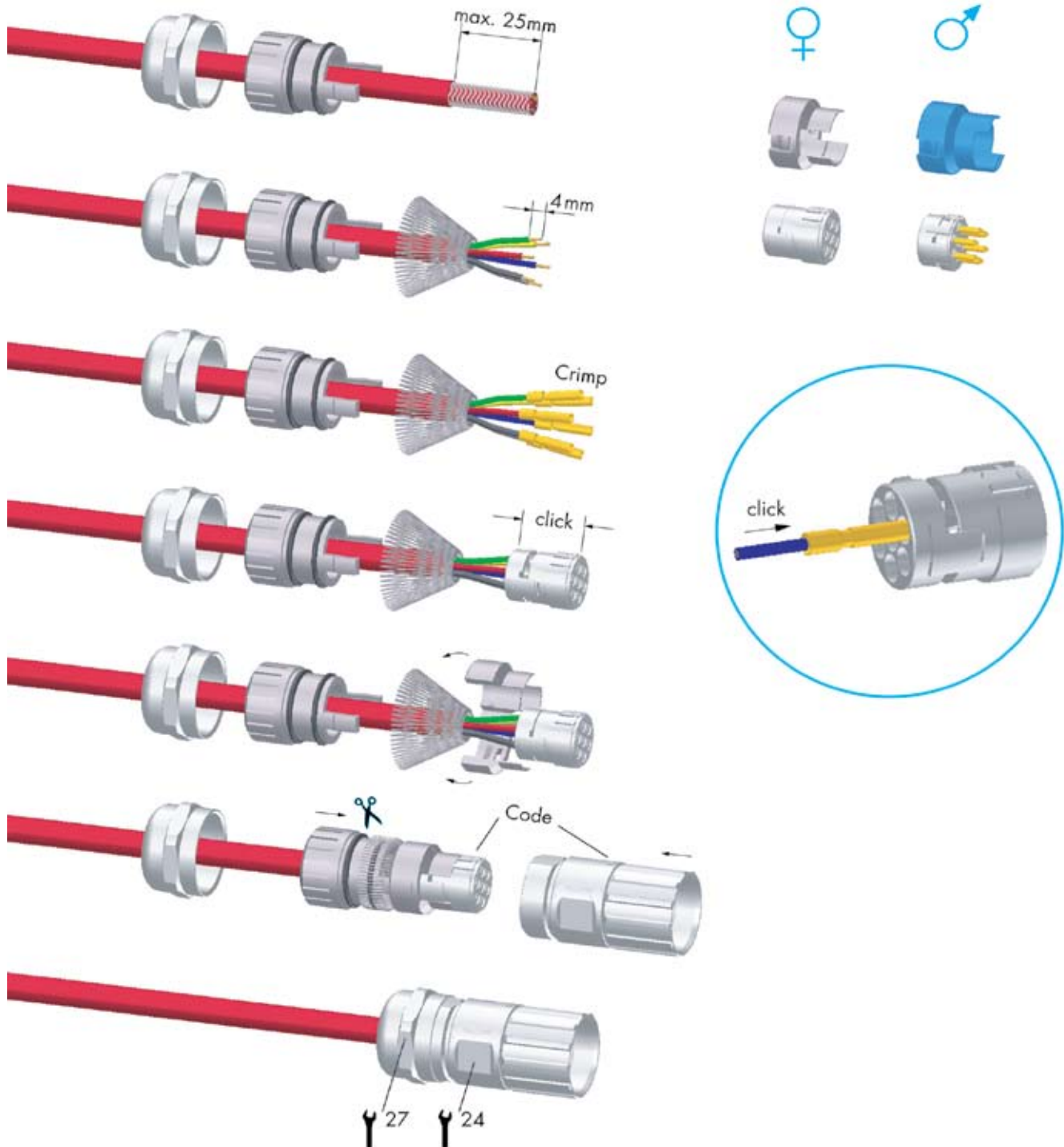
## BradPower™

Modular, flexible wiring systems for machine power distribution and motor control.

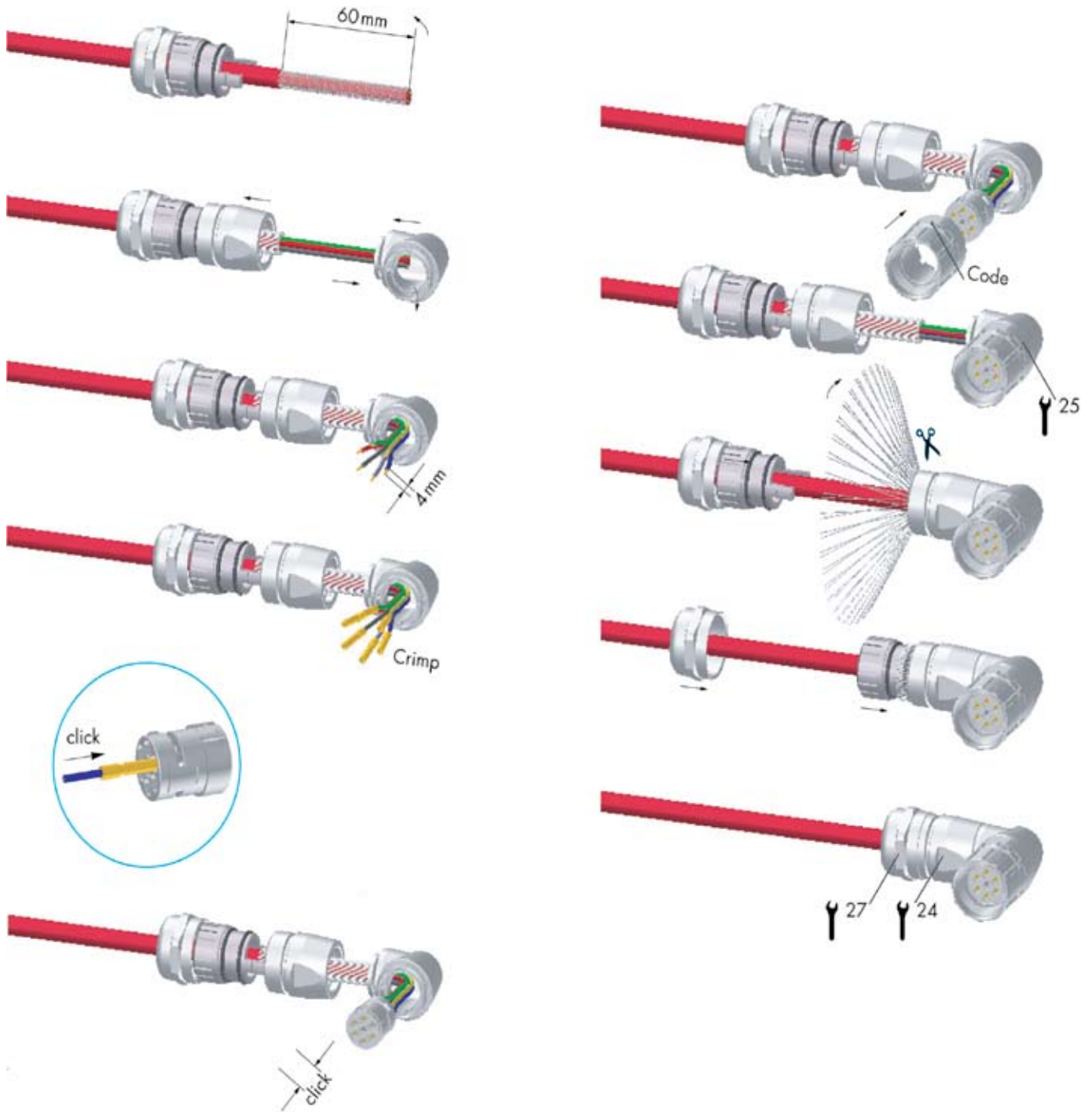
woodhead.com

**Brad**<sup>®</sup>  
from **molex**

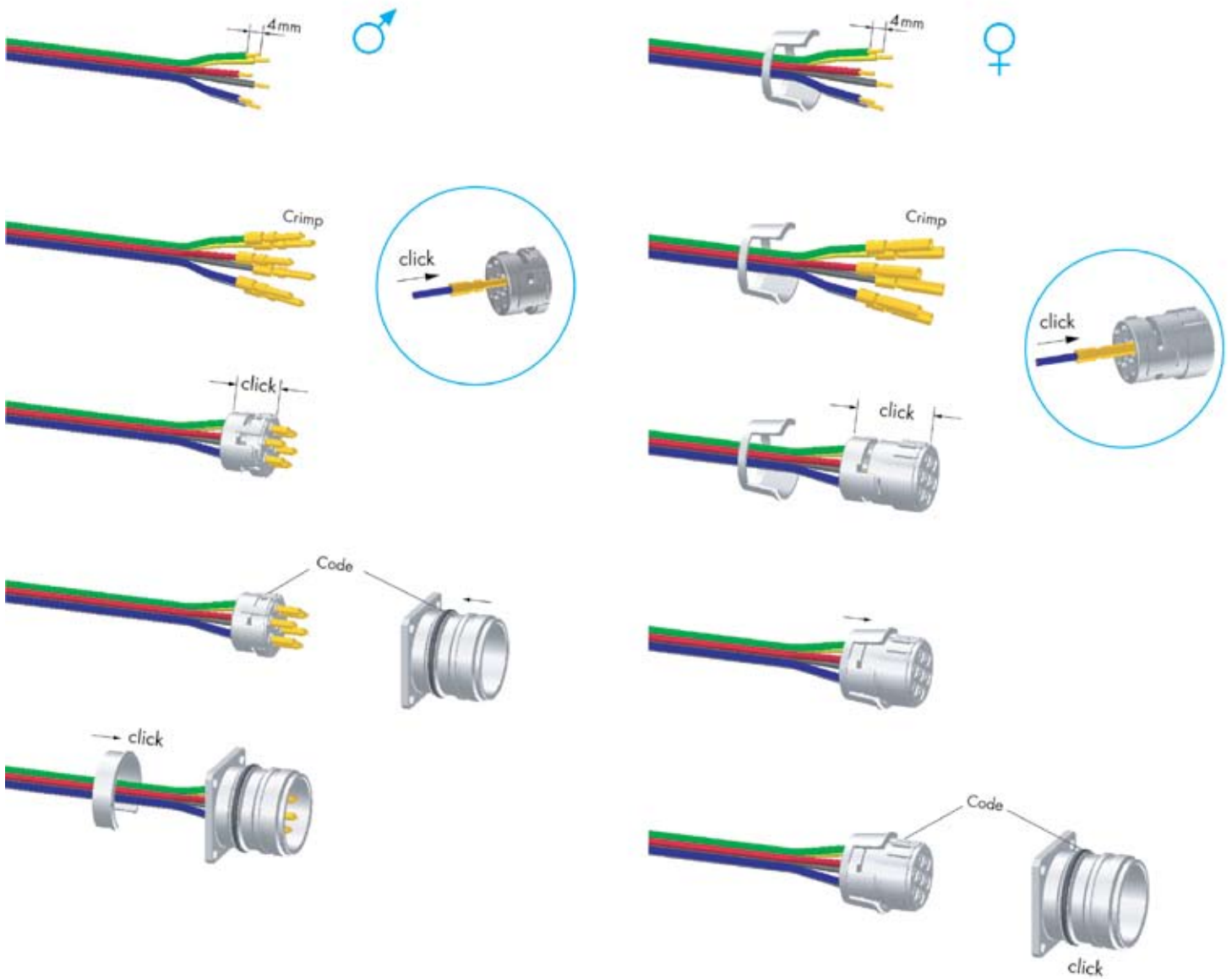
## M23 Signal Connector Assembly Instructions Cable Connector Straight



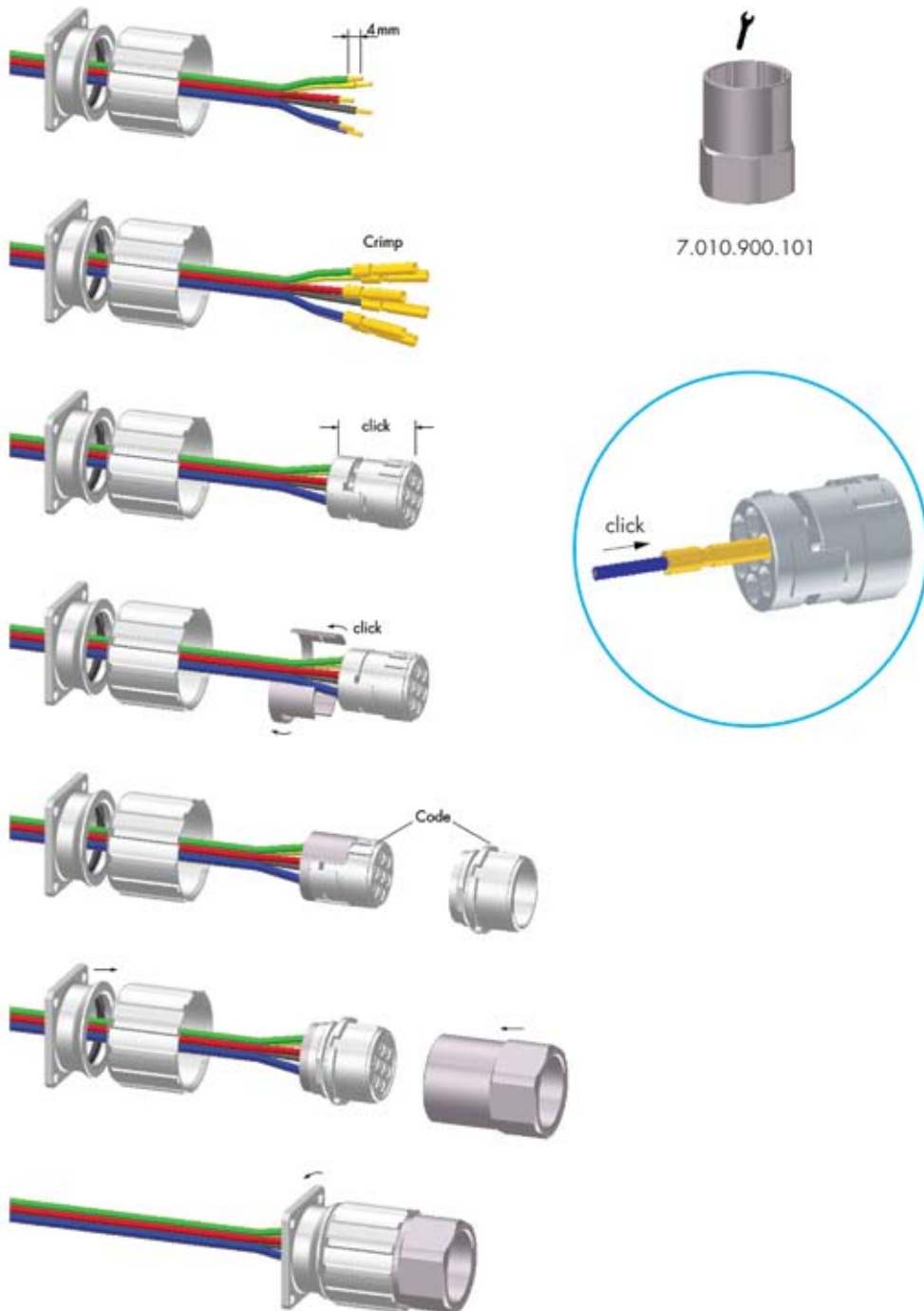
## M23 Signal Connector Assembly Instructions Cable Connector 90°



## M23 Signal Connector Assembly Instructions Panel Connector Female



## M23 Signal Connector Assembly Instructions Panel Connector

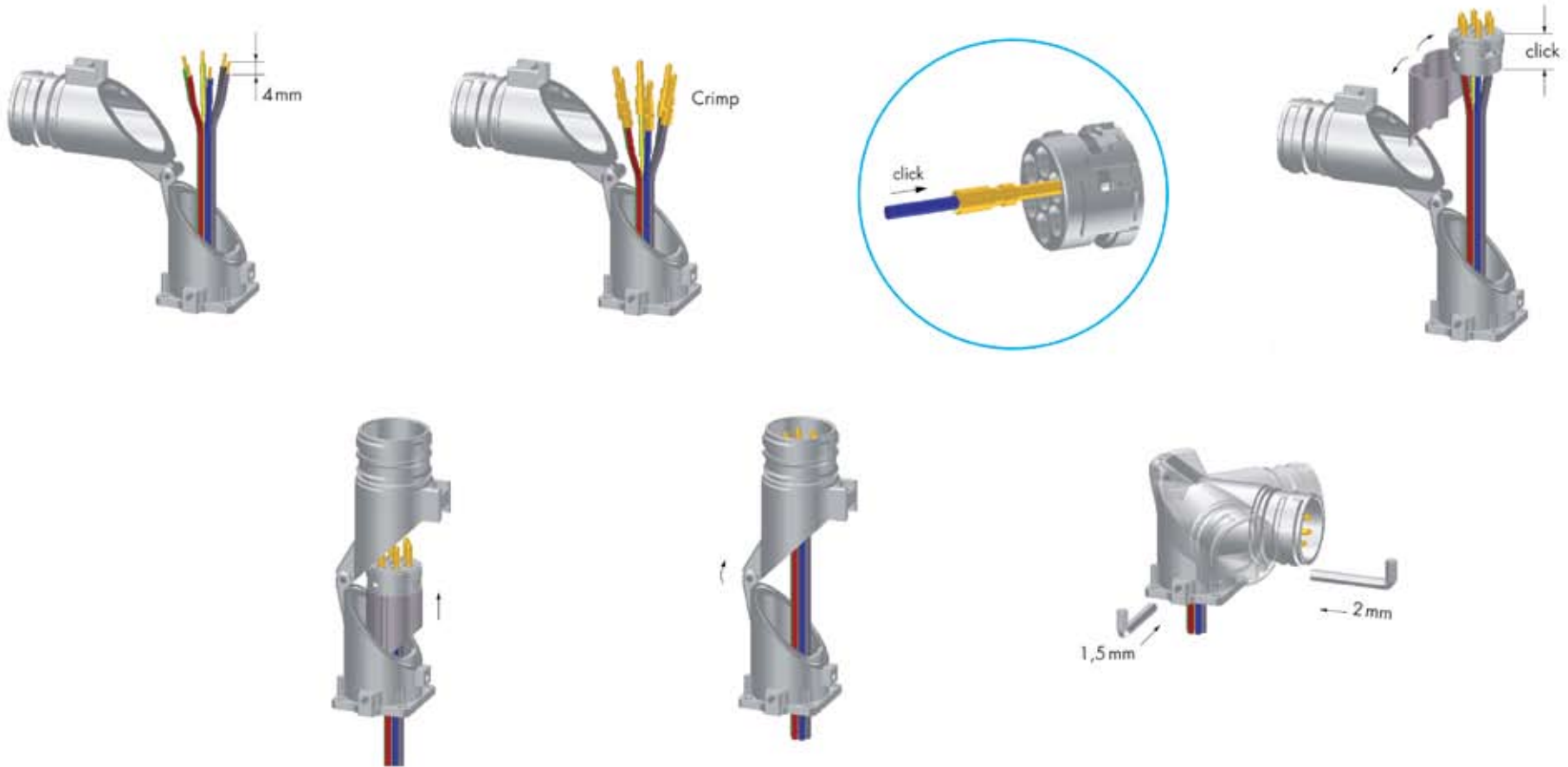


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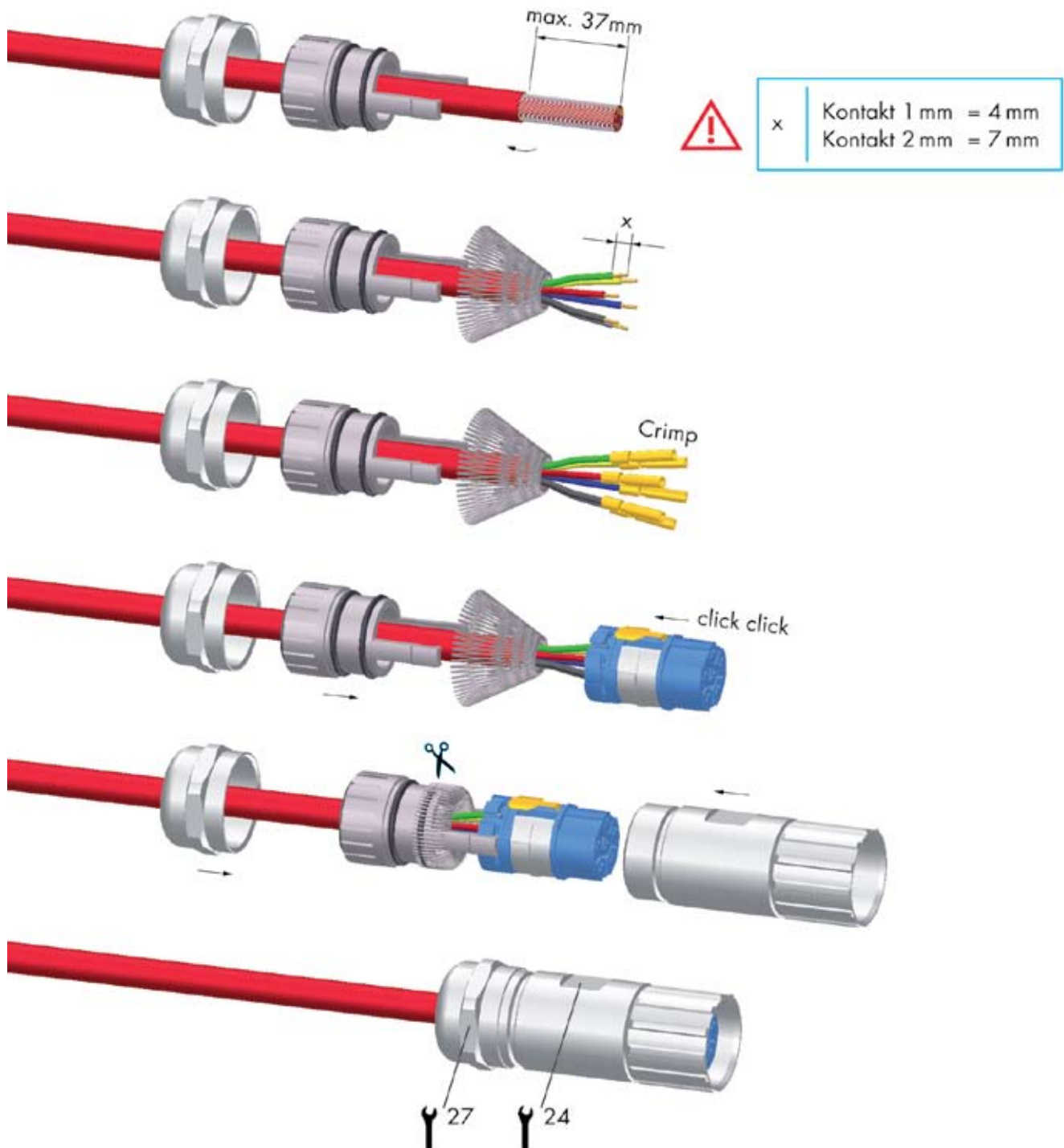
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## M23 Signal Connector Assembly Instructions

### Panel Connector 90°

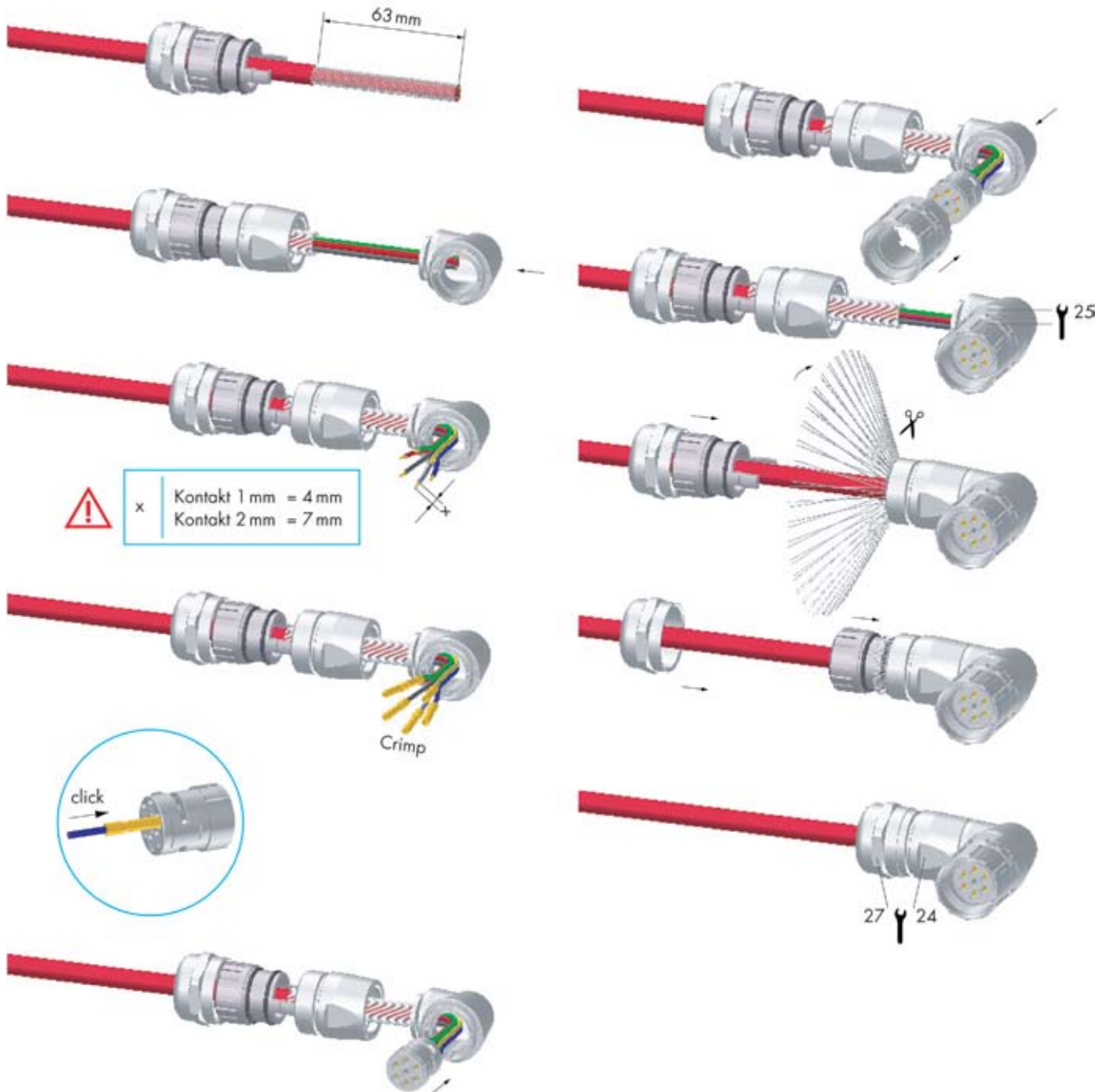


## M23 Power Connector Assembly Instructions Cable Connectors Straight



## M23 Power Connector Assembly Instructions

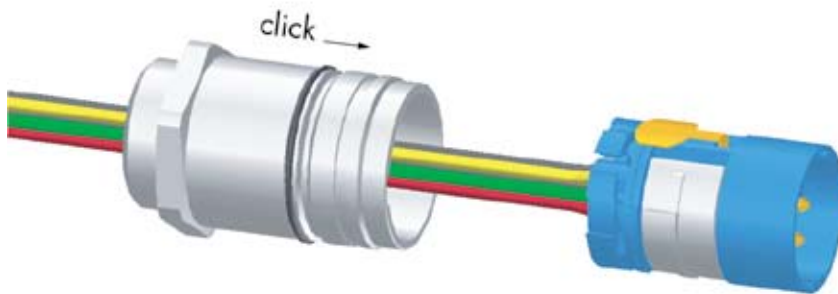
### Cable Connectors 90°



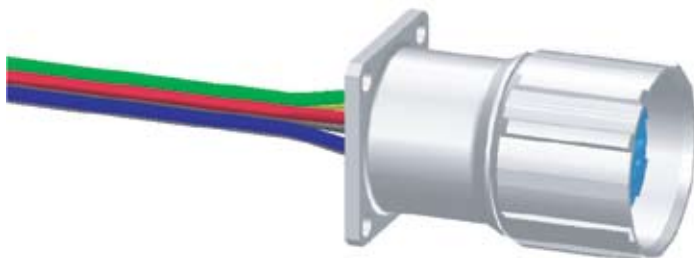
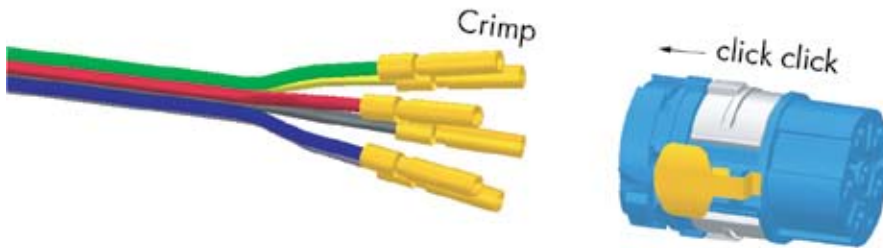
## M23 Power Connector Assembly Instructions Panel Connector



x	Kontakt 1 mm = 4 mm
	Kontakt 2 mm = 7 mm



## M23 Power Connector Assembly Instructions Panel Connector Female



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from **molex**

## M23 Power Connector Assembly Instructions

### Panel Connector 90°

