

# MIL-E-QUAL® EQUIVALENT TO MIL-C-5015



**Cable Socket**  
CXX 3106A XXXX XX S XXX



**Box Receptacle Pin**  
CXX 3102A XXXX XX P XXX



**Cable Pin**  
CXX 3106A XXXX XX P XXX



**Box Receptacle Socket**  
CXX 3102A XXXX XX S XXX



**Cable Cap**  
4XX96



**Receptacle Cap**  
4XX95

## Molded Cable Assemblies (See pages 3 & 33)

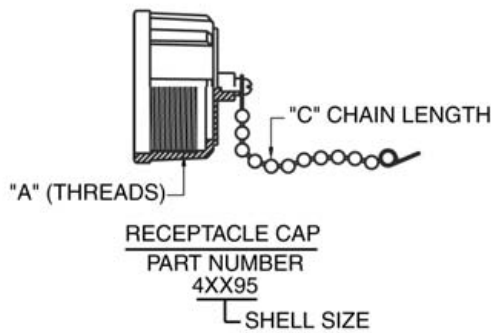
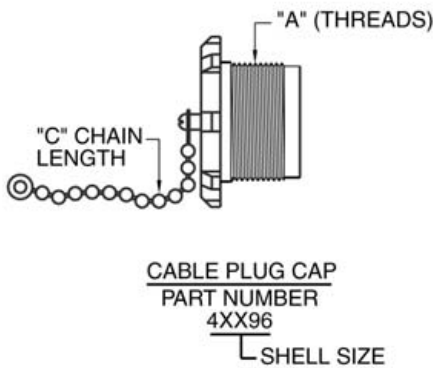
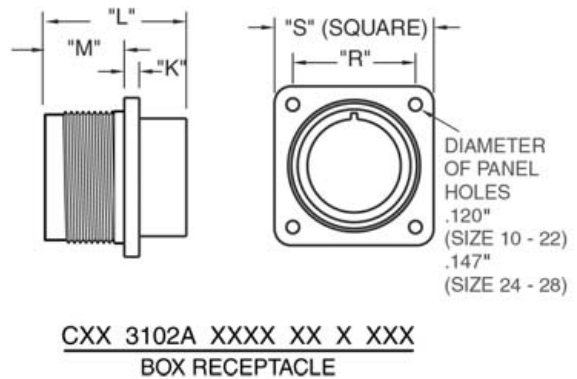
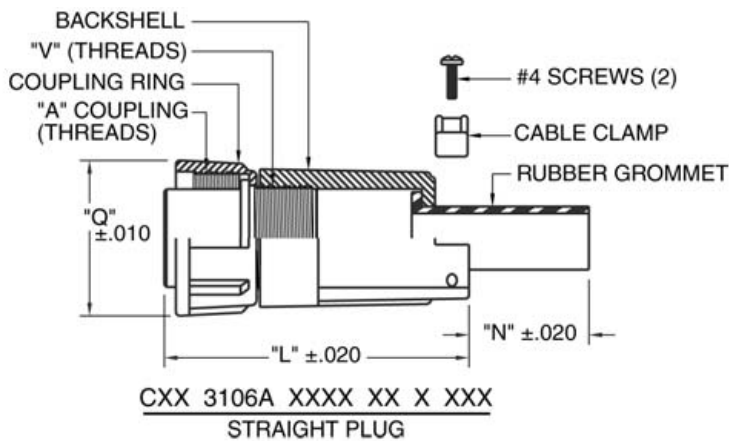


**Cable Pin**

# MIL-E-QUAL® EQUIVALENT TO MIL-C-5015

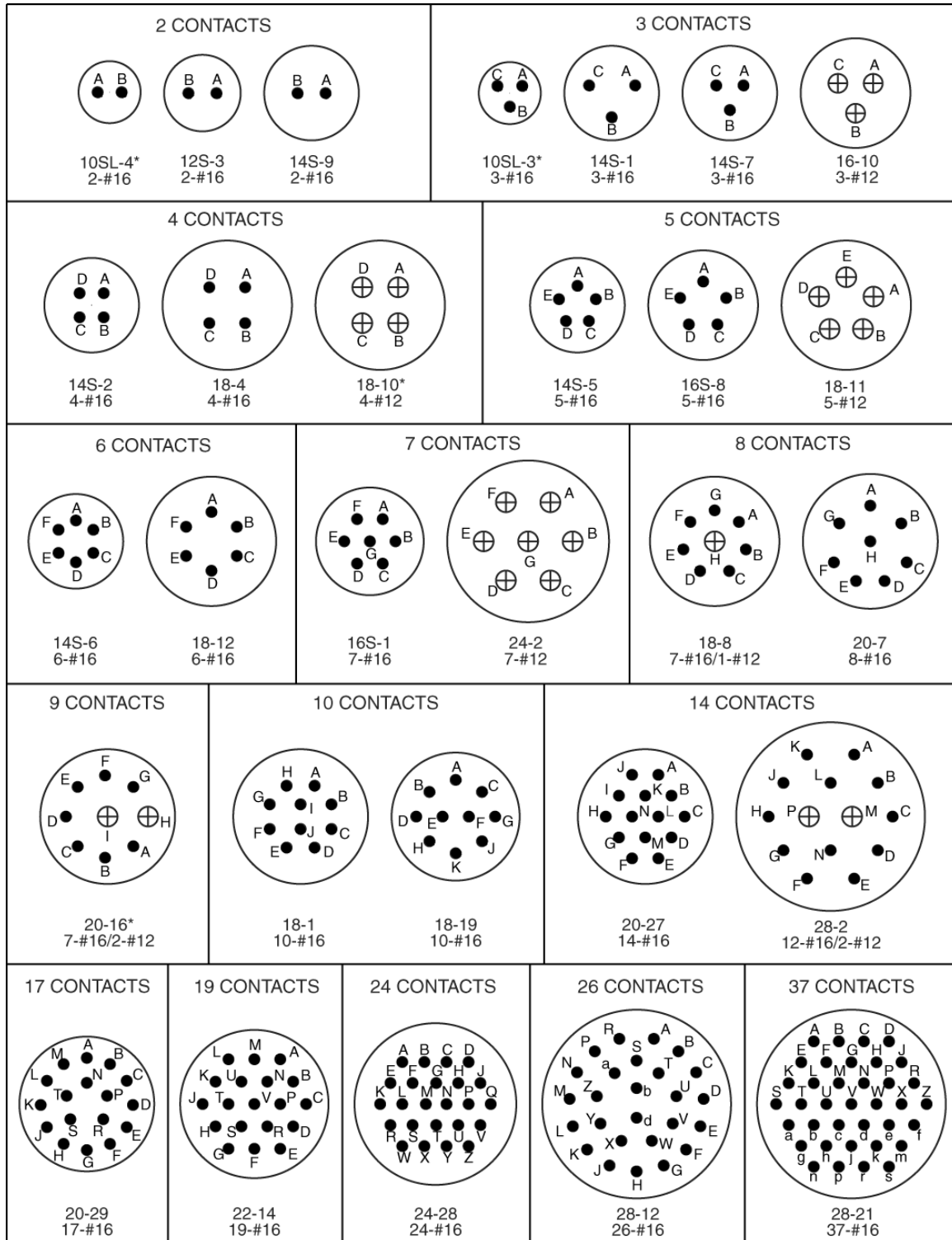
Connector Size	L	N	Q	V Fitting Threads
	INCH MM	INCH MM	INCH MM	
10SL	1.800 45.7	1.200 30.5	.900 22.9	1/2-20
12S	1.900 48.3	1.200 30.5	1.000 25.4	5/8-24
14S	1.900 48.3	1.300 33	1.200 30.5	3/4-20
16S	2.200 56.	1.425 36.2	1.250 31.8	7/8-20
16	2.400 61.	1.425 36.2	1.250 31.8	7/8-20
18	2.570 65.3	1.425 36.2	1.420 36.1	1-20
20	2.450 62.2	1.425 36.2	1.450 36.8	1-1/8-18
22	2.450 62.2	1.425 36.2	1.600 40.6	1-1/4-18
24	2.570 65.3	1.425 36.2	1.725 43.8	1-3/8-18
28	2.570 65.3	1.425 36.2	1.975 50.2	1-5/8-18

Connector Size	A Coupling Threads	K	L	M	R	S	C	Z
		Inch MM	Inch MM	Inch MM	Inch MM	Inch MM	Inch MM	Inch MM
10SL	5/8-24	.080 2	.940 23.9	9/16 14.3	23/32 18.3	1 25.4	3.5 88.9	.635 16.1
12S	3/4-20	.080 2	1.030 26.2	9/16 14.3	13/16 20.6	1-3/32 27.8	3.5 88.9	.760 19.3
14S	7/8-20	.080 2	1.143 29	9/16 14.3	29/32 23	1-3/16 30.2	3.5 88.9	.885 22.5
16S	1-20	.142 3.6	1.180 30	9/16 14.3	31/32 24.6	1-9/32 32.5	3.5 88.9	1.010 25.7
16	1-20	.142 3.6	1.350 34.3	3/4 19	31/32 24.6	1-9/32 32.5	3.5 88.9	1.010 25.7
18	1-1/8-18	.142 3.6	1.330 33.8	3/4 19	1-1/16 27	1-3/8 34.9	5.0 127.0	1.135 28.8
20	1-1/4-18	.142 3.6	1.330 33.8	3/4 19	1-5/32 29.4	1-1/2 38.1	5.0 127.0	1.260 32.0
22	1-3/8-18	.142 3.6	1.220 31.0	3/4 19	1-1/4 31.8	1-5/8 41.3	5.0 127.0	1.385 35.2
24	1-1/2-18	.142 3.6	1.220 31.0	13/16 20.6	1-3/8 34.9	1-3/4 44.5	6.0 152.4	1.510 38.4
28	1-3/4-18	.142 3.6	1.220 31.0	13/16 20.6	1-9/16 39.7	2 50.8	6.0 152.4	1.760 44.7



# MIL-E-QUAL® EQUIVALENT TO MIL-C-5015

## Contact Arrangements



Contact Arrangements shown are mating view of pin insert (socket opposite).

Unless otherwise specified, arrangements are per MIL-STD-1651A. for alternate key positions, consult factory.

\*Available in connector types: cable end socket, panel mount pin styles only.

# MIL-E-QUAL® EQUIVALENT TO MIL-C-5015

## Part Number to Order

**CX X 310XA XXXX XX X XXX**

**CONXALL**

Molded Equivalent to MIL-C-5015

**Contact Style**

S - Solder  
C - Crimp

**Shell Type**

(See Note 1)

**3101A** Cable Receptacle (in-line)  
(See Note 3)

**3102A** Box Receptacle

**3106A** Straight Plug (See Note 2)

Note 1 - All plugs and receptacles include crimp or solder contacts specified.

Note 2 - Straight Plugs include back shell assembly with cable clamp and bushing.

Note 3 - For overmolded cable construction only. Consult factory for availability.

**Deviations**

**-300** Weathertight  
Option adds:  
"O" Ring for plug (3106A)  
Rubber Gasket for receptacle (3102A)

**-010** Receptacle with (4) mounting hole reinforcement bosses. Consult factory for availability.

**-310** Same as -010 except with rubber gasket.

**Contacts**

P - Pin  
S - Socket

**Insert Number/Arrangement**

All inserts are integrally molded with connector shells for one piece construction. Contact factory for alternative W, X, Y or Z insert positions.

**Shell/Insert Sizes**

10SL-4	16S-1	18-19
10SL-3	16S-8	20-7
12S - 3	16 - 10	20-16
14S - 1	18 - 1	20-27
14S - 2	18 - 4	20-29
14S - 5	18 - 8	22-14
14S - 6	18 - 10	24-2
14S - 7	18 - 11	24-28
14S - 9	18 - 12	28-2
		28-12
		28-21

**Bushing Sizes Provided**

Plug Shell Size	Max. Cable Dia.
10SL, 12S	1/4"
14S	5/16"
16S, 16	7/16"
18	9/16"
20, 22	5/8"
24, 28	3/4"

Consult factory for your custom design assemblies and connectors. (See pages 3 & 33)

# MIL-E-QUAL<sup>®</sup> EQUIVALENT TO MIL-C-5015

## Specifications

### Typical Specifications

Manufacturers Identifications	MIL-E-QUAL <sup>®</sup>
Description	Field Installable Connector & Custom Cable Assemblies
Rating	3.4 thru 23.0A, 600V
Conductor Size	12 thru 20 AWG
Configuration	2 thru 37 Contacts per Mil - C-5015
Certification	UL Recognized File #E150822 - 250V CSA Certified File #181200-500V

### Material Specifications

#### Cable Pin/Socket

Mechanical Backshell (Threaded)	Nylon, UL Recognized, Black with UV Inhibitor
Strap	Nylon, UL Recognized, Black with UV Inhibitor
Screws	Zinc Plated
Grommet	Santoprene Rubber, Black
Coupling Ring	Nylon, UL Recognized, Black with UV Inhibitor
Contacts	Brass, Standard Silver Plated, Gold Plated Optional
Connector Body	Nylon, UL Recognized, Black with UV Inhibitor

#### Optional

Connector Cap	Nylon, UL Recognized, Black with UV Inhibitor (4XX96)
O-Ring	Neoprene Rubber, Black

Different Keyways Available

Gold Contacts

Brass, Gold over Nickel

#### Box Receptacle

Contacts	Brass, Standard Silver Plated, Gold Plated Optional
Receptacle Body	Nylon, UL Recognized, Black with UV Inhibitor

#### Optional

Receptacle Cap	Nylon, UL Recognized, Black with UV Inhibitor (4XX95)
Gasket	Neoprene Rubber, Black
Gold Contacts	Brass, Gold over Nickel

Extended Bosses

Different Keyways Available

Gasket, O-Ring, & Grommet materials are suitable for -40°C to +90°C (-40°F to +194°F). Consult factory for higher temperature requirements.

### Electrical Specifications

Voltage	500 V
Current	See Electrical Current Rating Chart (Page 34)

### Environmental Specifications

Temperature Rating	-40°C to +125°C (-40°F to +257°F)
Corrosion	48 Hr salt spray contacts
Durability	300 mate/unmate cycles minimum
Weathertight	Consult factory with specific application

### Molded Cable Assemblies

Watertight	(See Pages 3 & 33) NEMA 6P, 13: IEC IP67
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