

MIL-E-QUAL[®] (MIL-C-5015 EQUIVALENT)

2-37 CONTACTS



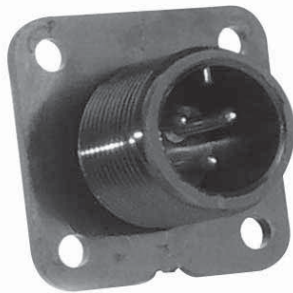
CABLE END - SOCKET
MATES WITH PANEL MOUNT



CABLE END - PIN
MATES WITH PANEL MOUNT



PANEL MOUNT - SOCKET
MATES WITH CABLE END



PANEL MOUNT - PIN
MATES WITH CABLE END



CABLE CAP



RECEPTACLE CAP
OVERMOLDED ONLY



MOLDED CABLE END ASSEMBLY

SPECIFICATIONS

Mechanical Specifications

Life:	300 insertion / withdrawal cycles minimum
Coupling Locking Style:	Threaded
Backshell Style:	Threaded
Conductor Size:	#12 contacts accepts 12 through 16 AWG #16 contacts accepts 16 through 20 AWG

Electrical Specifications

Voltage Rating:	600 VAC for shell types 3101A and 3102A 500 VAC for shell type 3106A up to 28 positions 277 VAC for shell type 3106A from 29 or greater positions 23.0 A – max (See page 108 for Electrical Current Rating Chart)
Current Rating:	

Environmental Specifications

Operating Temperature Rating:	-40°C to +75°C (-40°F to +167°F)
Salt Atmosphere (Corrosion):	48Hr salt spray contacts when mated
Weathertight:	Consult factory with specific application

Material Specifications

Cable Pin / Socket

Mechanical Backshell (Threaded):	Thermoplastic, Black with UV Inhibitor UL94HB
Strap:	Thermoplastic, Black with UV Inhibitor UL94HB
Screws:	Stainless Steel
Grommet:	Elastomer
Coupling Ring:	Thermoplastic, Black with UV Inhibitor UL94HB
Contacts:	Copper Alloy, Silver Plated, Gold Optional
Connector Body:	Thermoplastic
Connector Cap (Optional):	Thermoplastic
O-Ring (Optional):	Elastomer
Alternate Keys/Different Keyways Available	W, X, Y or Z Consult factory

Box Receptacle, In-Line receptacle, Pin/Socket

Contacts:	Copper Alloy, Silver Plated, Gold Optional
Receptacle Body:	Thermoplastic, Black with UV Inhibitor UL94HB
Receptacle Cap (Optional):	Thermoplastic, Black with UV Inhibitor UL94HB
Gasket (Optional):	Elastomer
Alternate Keys/Different Keyways Available	W, X, Y or Z Consult factory

Molded Cable Assemblies

Weathertight:	NEMA 6P, 13: IEC IP67 when mated
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Certifications

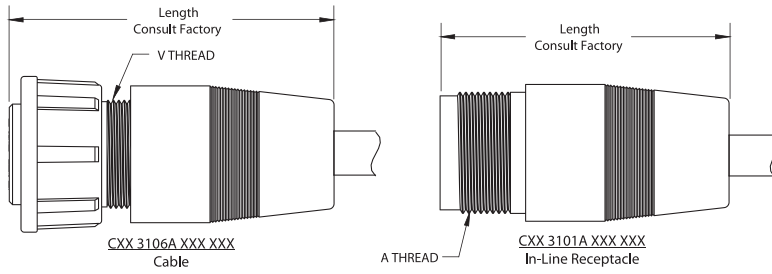
UL File #E150822
CSA File #181200 Patterns: 18-11, 18-1, 18-19, 20-27
U.L. Temperature 75°C (167°F) max.
Not for current interruption

Options

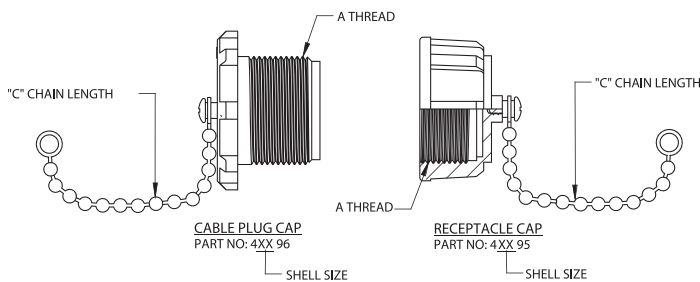
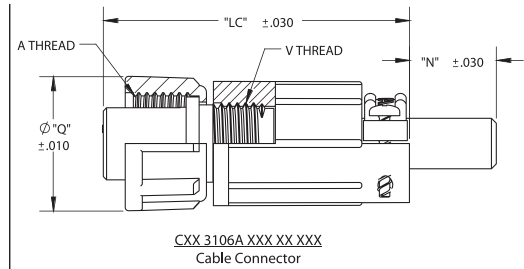
UV Rating:	F1 available
Flame Rating:	UL94V-0 available

Consult factory for optional colors and materials

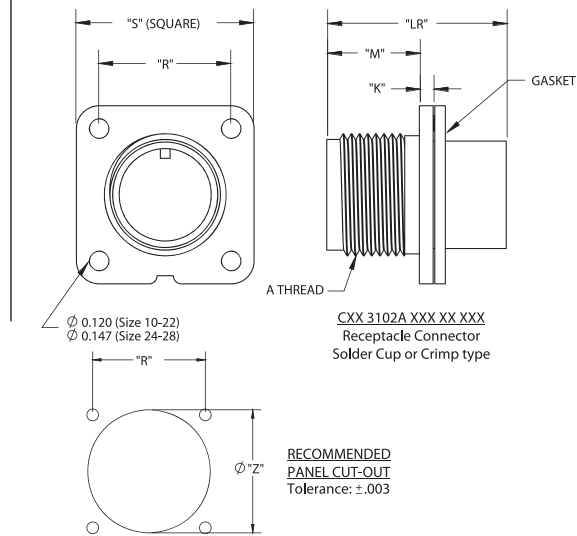
CUSTOM OVERMOLDED ASSEMBLIES



FIELD INSTALLABLE KITS



BOX RECEPTACLE KITS



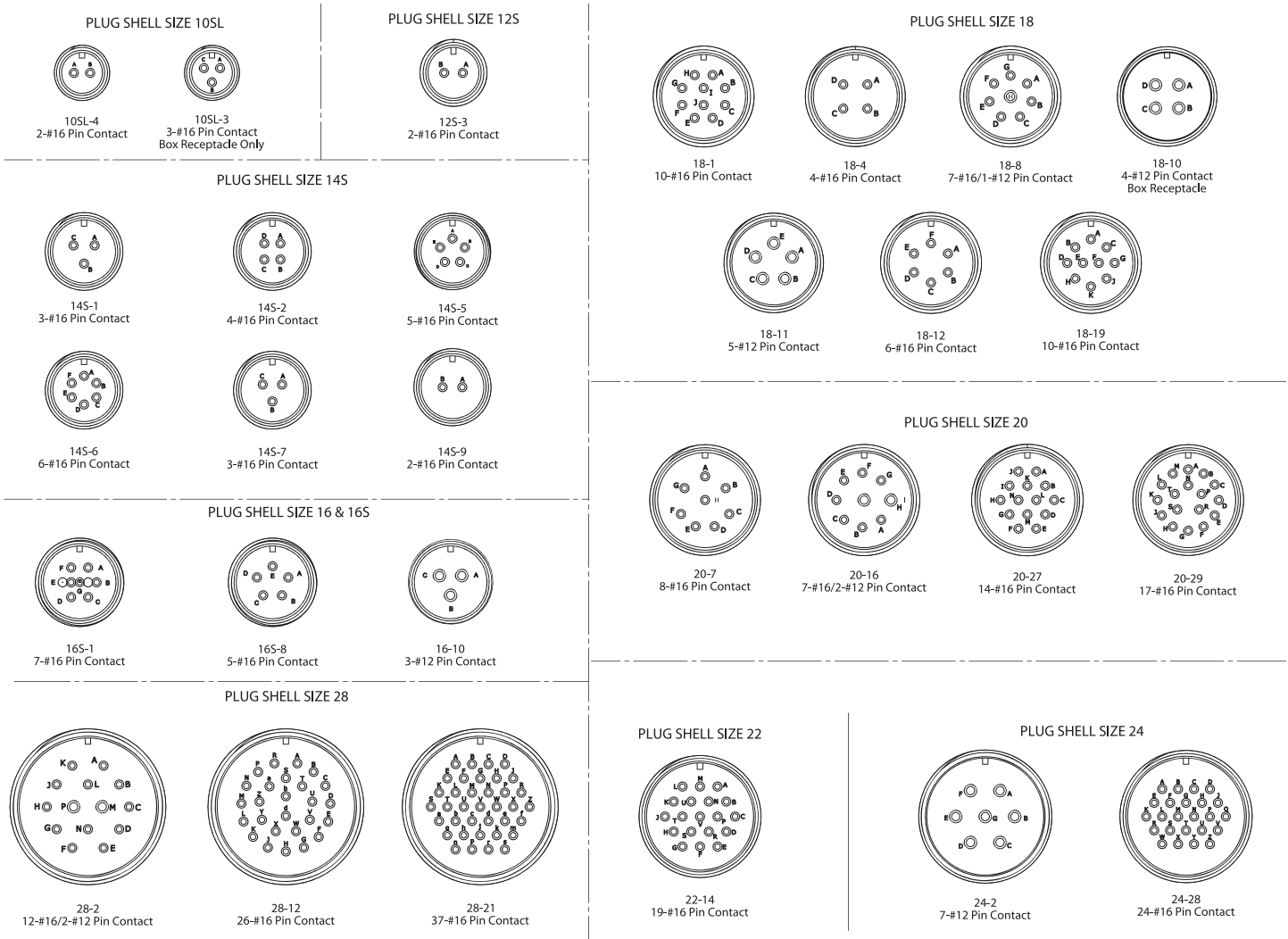
All dimensions are for reference only.
Units shown: in[mm].

Connector Size	LC	N	Q	V Fitting Threads
	Inch mm	Inch mm	Inch mm	
10SL	1.800 47.7	0.535 13.6	0.825 20.9	1/2-20
12S	1.900 48.3	0.535 13.6	0.965 24.1	5/8-24
14S	2.000 50.8	0.553 14.0	1.160 29.5	3/4-20
16S	2.200 56.0	1.425 36.2	1.250 31.8	7/8-20
16	2.400 61.0	1.425 36.2	1.320 33.5	7/8-20
18	2.570 65.3	1.425 36.2	1.435 36.4	1-20
20	2.866 72.8	1.445 36.7	1.440 36.6	1-1/8-18
22	2.892 73.5	1.445 36.7	1.765 44.8	1-1/4-18
24	2.892 73.5	1.445 36.7	1.765 44.8	1-3/8-18
28	2.972 75.5	1.440 36.6	2.099 53.3	1-5/8-18

Connector Size	A Coupling Threads	C	K	LR	M	R	S	Z
		Inch mm	Inch mm	Inch mm	Inch mm	Inch mm	Inch mm	Inch mm
10SL	5/8-24	3.5 88.9	0.080 2.0	0.940 23.9	9/16 14.3	25/32 19.8	1.0 25.4	0.635 16.1
12S	3/4-20	3.5 88.9	0.085 2.2	0.957 24.3	9/16 14.3	13/16 20.6	1-3/32 27.8	0.760 19.3
14S	7/8-20	3.5 88.9	0.090 2.3	1.130 28.7	9/16 14.3	29/32 23.0	1-11/64 29.8	0.885 22.5
16S	1-20	3.5 88.9	0.140 3.6	1.170 29.7	19/32 15.1	31/32 24.6	1-9/32 32.5	1.010 25.7
16	1-20	3.5 88.9	0.140 3.6	1.360 34.5	3/4 19.0	31/32 24.6	1-9/32 32.5	1.010 25.7
18	1-1/8-18	5.0 127.0	0.140 3.6	1.330 33.8	21/32 16.7	1-1/16 27	1-3/8 34.9	1.135 28.8
20	1-1/4-18	5.0 127.0	0.142 3.6	1.330 33.8	3/4 19.0	1-5/32 29.4	1-1/2 38.1	1.260 32.0
22	1-3/8-18	5.0 127.0	0.145 3.7	1.210 30.7	3/4 19.0	1-1/4 31.8	1-5/8 41.3	1.385 35.2
24	1-1/2-18	6.0 152.4	0.145 3.7	1.220 31.0	13/16 20.6	1-3/8 34.9	1-25/32 45.2	1.510 38.4
28	1-3/4-18	6.0 152.4	0.145 3.7	1.220 31.0	13/16 20.6	1-9/16 39.7	2.0 50.8	1.760 44.7

BOX RECEPTACLE / CABLE PLUG / CABLE RECEPTACLE PIN

Face View



NOTE: Mating face of pin insert shown (socket opposite). Unless otherwise specified, arrangements are per MIL-STD 165L. For alternate key positions, consult factory.

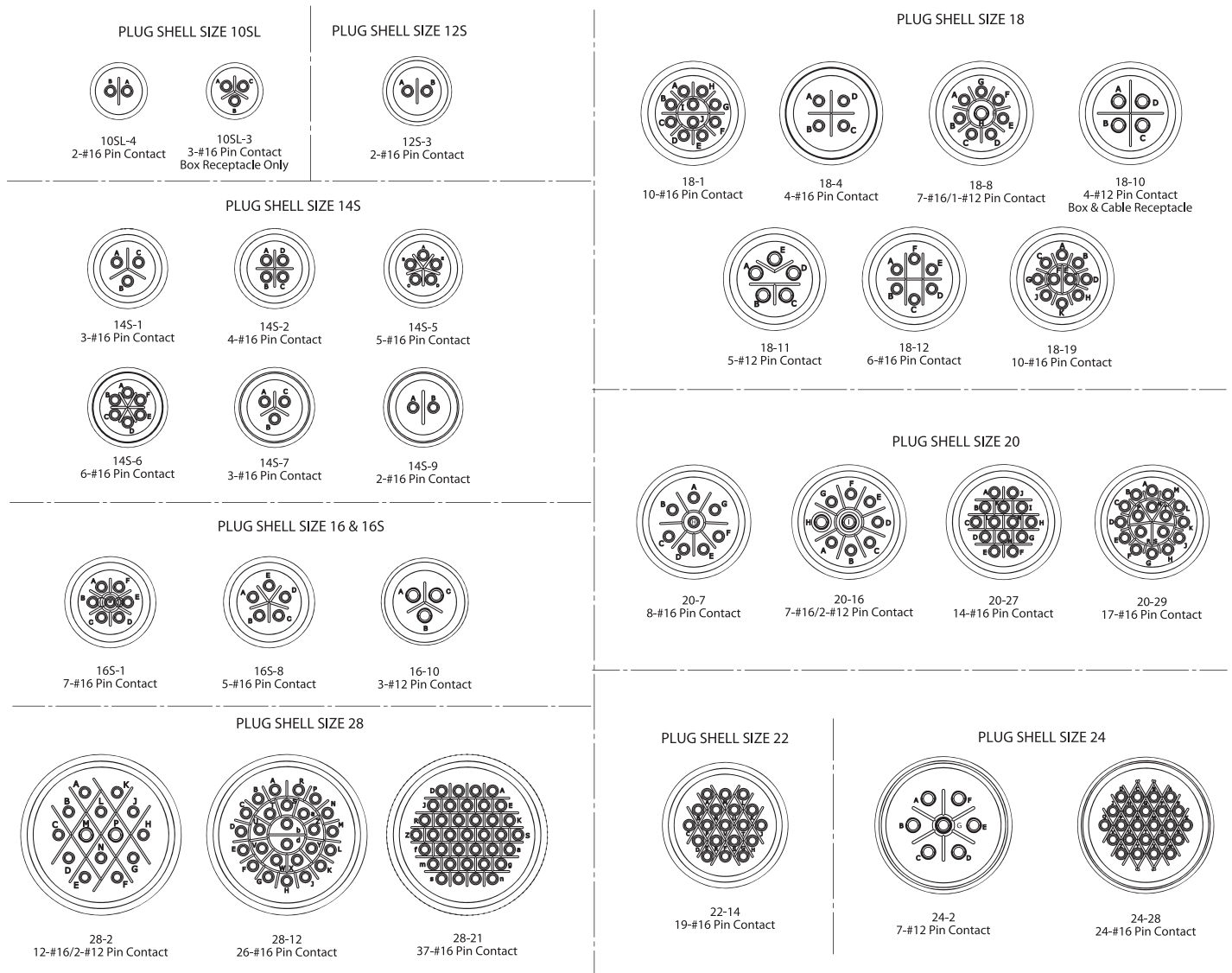
NOTE: *9 contacts: 7-#16/2-#12 cable end, socket only. Panel: pin only.

NOTE: 10SL-4 available in cable end socket and panel mount pin styles only.

All dimensions are for reference only. Units shown: in[mm].

BOX RECEPTACLE / CABLE PLUG / CABLE RECEPTACLE PIN

Wire View

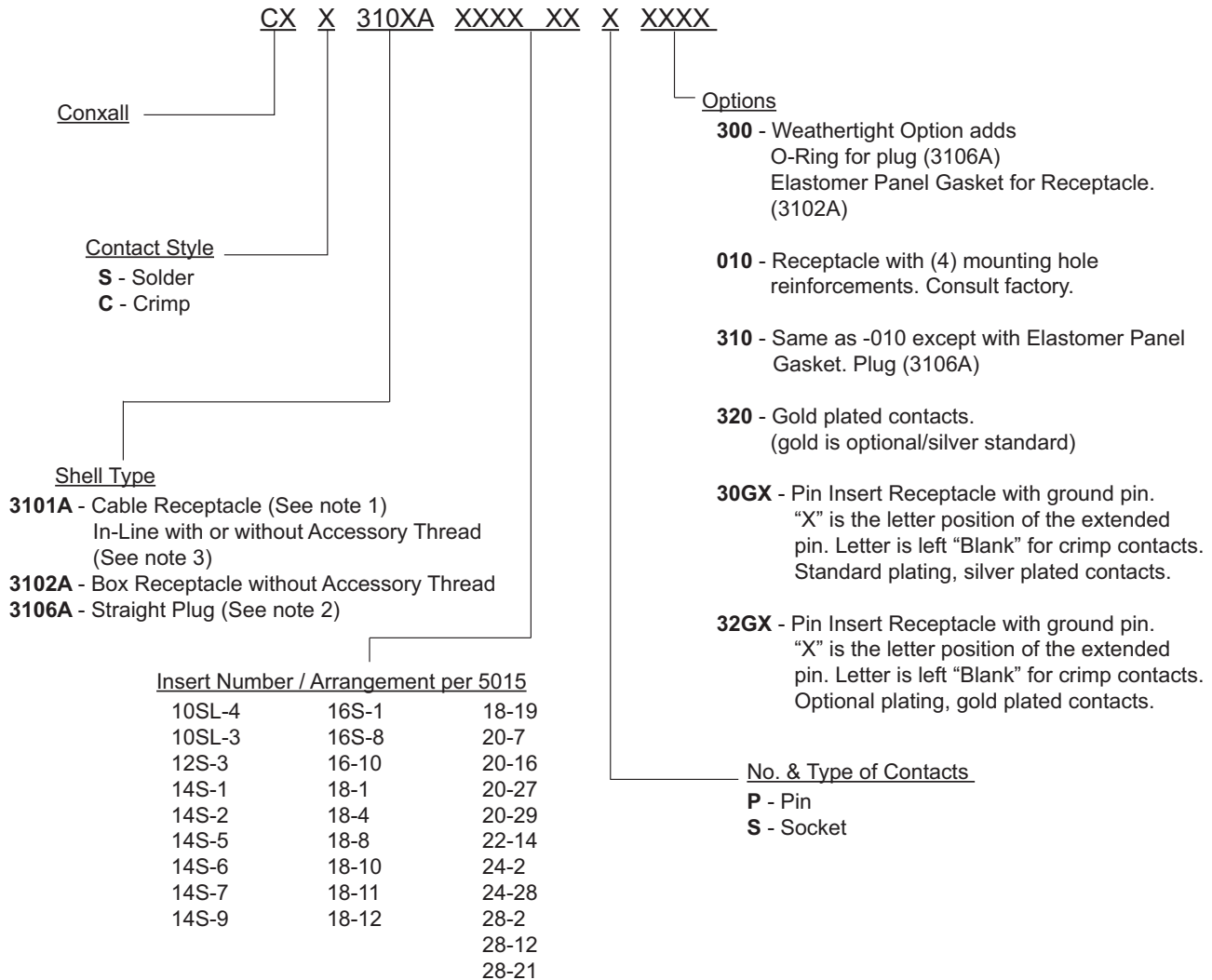


NOTE: Rear face of pin insert shown (socket opposite). Unless otherwise specified, arrangements are per MIL-STD 165L. For alternate key positions, consult factory.

*9 contacts: 7-#16/2-#12 cable end, socket only. Panel: pin only.

All dimensions are for reference only. Units shown: in[mm].

PART NUMBER TO ORDER



**Complete P/N contains no spaces or dashes.
 Consult factory for optional colors and materials**

**Note 1: All Plugs, Box Mount Receptacles and In-Line Receptacles include
 Crimp or Solder Contacts specified.**

Note 2: Straight Plugs include Backshell Assembly with Cable Clamp and Bushing.

**Note 3: In-Line Receptacles can be with or without Accessory Thread. Consult factory for
 availability. In-Line Receptacles without Accessory Thread can be overmolded.**

MIL-E-QUAL® ELECTRICAL CURRENT RATING CHART

CONTACT SIZE	CONDUCTOR SIZE - AWG	NUMBER OF CONDUCTORS	CURRENT RATING
#12	#12	1 through 3	23.0A
		4 through 6	17.0A
		7 through 9	13.0A
	#14	1 through 3	17.0A
		4 through 6	12.75A
		7 through 9	11.0A
	#16	1 through 3	13.0A
		4 through 6	9.75A
		7 through 9	8.45A
#16	#16	1 through 3	13.0A
		4 through 6	9.75A
		7 through 10	8.45A
		10 through 20	5.85A
		21 through 30	4.55A
		31 and up	3.9A
	#18	1 through 3	10.0A
		4 through 6	7.5A
		7 through 9	6.5A
		10 through 20	4.5A
		21 through 30	3.5A
		31 and up	3.0A
	#20	1 through 3	7.5A
		4 through 6	5.6A
		7 through 9	4.8A
		10 through 20	3.4A
		21 through 30	2.62A
		31 and up	2.3A

TOOLING

CON-X® MANUAL CONTACT CRIMPING TOOL

Handle	Description	Positioner	Contact Sizes	Wire Sizes	Conductor Strip Length
359-24	Multi Contact Turret Crimp Tool	357-124	#12	12-14 AWG	7/32 in
			#16	16-18-20 AWG	7/32 in
			#20	20-22-24 AWG	3/16 in
359-21	Single Contact Crimp Tool	357-122	#20	20-22-24 AWG	3/16 in
		357-125	#22	22-24 AWG	5/32 in
		357-126	#26(Cable Pin Only)	24-26-28 AWG	3/16 in
		357-127	#26(Panel Pin, Cable & Panel Socket)	24-26-28 AWG	3/16 in

CON-X® MANUAL CONTACT INSERTION TOOL

Handle	Description	Insertion Bits	Contact Sizes
356-1	Single Contact Hand Tool	356-12	#12
		356-16	#16
		356-20	#20
		356-22	#22 (20 AWG Crimp Barrel)
		356-22-1-K	#22 (22 AWG Crimp Barrel)
		356-26-K	#26

MIL-E-QUAL® MANUAL CONTACT CRIMPING TOOL

Handle	Description	Positioner	Contact Sizes	Wire Sizes	Conductor Strip Length
359-24	Hand Crimp Tool	358-112	#12	12-14 AWG	7/32 in
			#16	16-18-20 AWG	9/32 in

MIL-E-QUAL® MANUAL CONTACT INSERTION TOOL

Handle	Description	Insertion Bits	Contact Sizes
356-1	Single Contact Hand Tool	356-12	#12
		356-16	#16