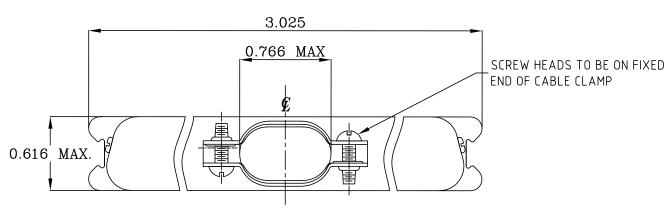
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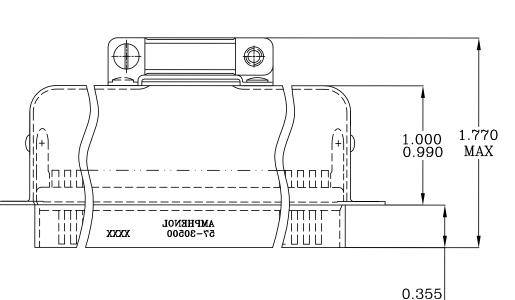
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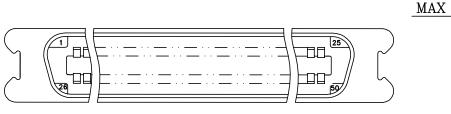
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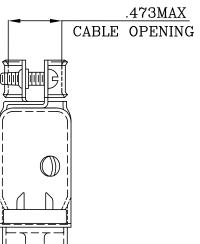


### **SPECIFICATIONS:**

- 1) SOLDER CUP CONTACT: TO ACCOMMODATE 22-30 AWG SOLID AND 24-30 STRANDED CONNECTOR WIRES.
- 2) DIELECTRIC: DIALLY-PHTHALATE PER MIL-M-14F TYPE MDG UL-94V0
- 3) CONTACT MATERIIAL: COPPER ALLOY
- 4) CONTACT: 20 MICRO-INCHES MIN. GOLD MATING AREA: 3-5 MICRO-INCHES GOLD TERMINAL AREA: 50 MICRO-INCHES MIN. NICKEL UNDERPLATING ALL OVER.
- 5) SHELL MATERIAL: ZINC PLATED STEEL WITH CLEAR CHROMATE COATING
- 6) CURRENT CAPACITY: 5 AMPS/CONTACT
- 7) VOLTAGE RATING: 700 VOLTS D.C. AT SEA LEVEL 200 VOLTS D.C. AT 70,000 FEET
- 8) INSULATION RESISTANCE: >5000 M OHM

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- 9) DIELECTRIC WITHSTANDING VOLTAGE: 1200 VAC (RMS) AT SEA LEVEL
- 10) CONNECTOR MATING FORCE: REFER TO TABLE 1.



SECTION A-A

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- 11) CONTACT RETENTION FOR
- 12) DURABILITY: 250 CYCLES
- 13) VIBRATION: NO INTERRUP
- 14) OPERATING TEMPERATUR

## CUSTOMER

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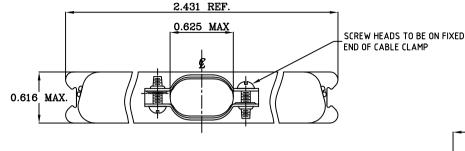
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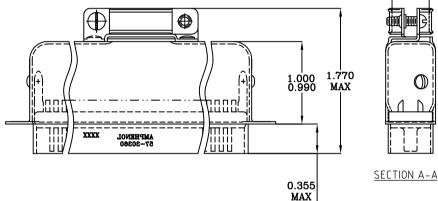
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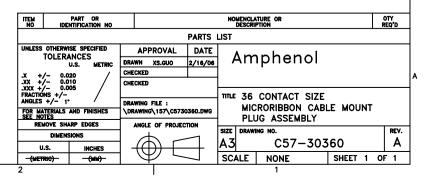
TABLE 1

CONNECTOR SIZES	AVERAGE MATING FORCE (POUNDS)
14	5
24	8
36	12
50	15
64	19

9) DIELECTRIC WITHSTANDING VOLTAGE: 1200 VAC (RMS) AT SEA LEVEL

- 10) CONNECTOR MATING FORCE: REFER TO TABLE 1.
- 11) CONTACT RETENTION FORCE: 2 LBS MAX.
- 12) DURABILITY: 250 CYCLES MIN.
- 13) VIBRATION: NO INTERRUPTIONS < 1u SEC.
- 14) OPERATING TEMPERATURE: -55°C TO +105°C (-67°F TO +221°F)

### CUSTOMER INFORMATION DRAWING



### SPECIFICATIONS:

1) SOLDER CUP CONTACT: TO ACCOMMODATE 22-30 AWG SOLID AND 24-30 STRANDED CONNECTOR WIRES.

- 2) DIELECTRIC: DIALLY-PHTHALATE PER MIL-M-14F TYPE MDG UL-94V0
- 3) CONTACT MATERIAL: COPPER ALLOY
- 4) CONTACT: 20 MICRO-INCHES MIN. GOLD MATING AREA: 3-5 MICRO-INCHES GOLD TERMINAL AREA: 50 MICRO-INCHES MIN. NICKEL UNDERPLATING ALL OVER.
- 5) SHELL MATERIAL: ZINC PLATED STEEL.
- 6) CURRENT CAPACITY: 5 AMPS/CONTACT

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- 7) VOLTAGE RATING: 700 VOLTS D.C. AT SEA LEVEL 200 VOLTS D.C. AT 70,000 FEET
- 8) INSULATION RESISTANCE: >5000 M OHM

# DE-09P & DE-09S



• UL File: E119881

Connectors according to MIL C24308

### Specifications :

MATERIALS AND	Platings
Shells	Steel yellow chromated over zinc or tinned steel with or without dimples on plug connector
Insulator	Glass-filled thermoplastic, UL 94V-0
Rear Insert	Brass, 118µ" up to 197µ" (3µm up to 5µm) tinned over nickel 78µ" up to 118µ" (2µm up to 3µm)
Boardlock	Tin-lead plating 157μ" up to 236μ" (4μm up to 6μm) over nickel
	$78\mu'' \text{ up to } 118\mu'' (2\mu \text{m up to } 3\mu \text{m})$
Screwlock	Brass, 236µ" up to 394µ"
	(6μm up to 10μm) tinned over nickel 78μ" up to 118μ" (2μm up to 3μm)
Contacts	D: brass
	DF: pin = brass
	Socket = copper alloy
Right Angle Version	Selective gold in mating area over 78µ" up to 118µ"
	(2μm up to 3μm) nickel; 118μ" up to 197μ"
Straight Version	( $3\mu$ m up to $5\mu$ m) tin-lead on termination area over $78\mu$ " up to $118\mu$ " ( $2\mu$ m up to $3\mu$ m) nickel Full gold plating over $78\mu$ " up to $118\mu$ " ( $2\mu$ m up to $3\mu$ m) nickel

### ELECTRICAL DATA

Current Rating Voltage Rating Withstanding Voltage Insulation Resistance Contact Resistance 7.5 A 300 V AC/rms 50Hz 1000V AC/rms 50Hz for one minute 5000M  $\Omega$  D: 8.5m  $\Omega$  max. DF: 5m  $\Omega$  max.

### CLIMATIC DATA

**Operating Temperature** 

D: -67 °F (-55 °C) to +185 °F (85 °C), peak at 257 °F (125 °C) DF: -67 °F (-55 °C) to + 257 °F (125 °C)

### MECHANICAL DATA

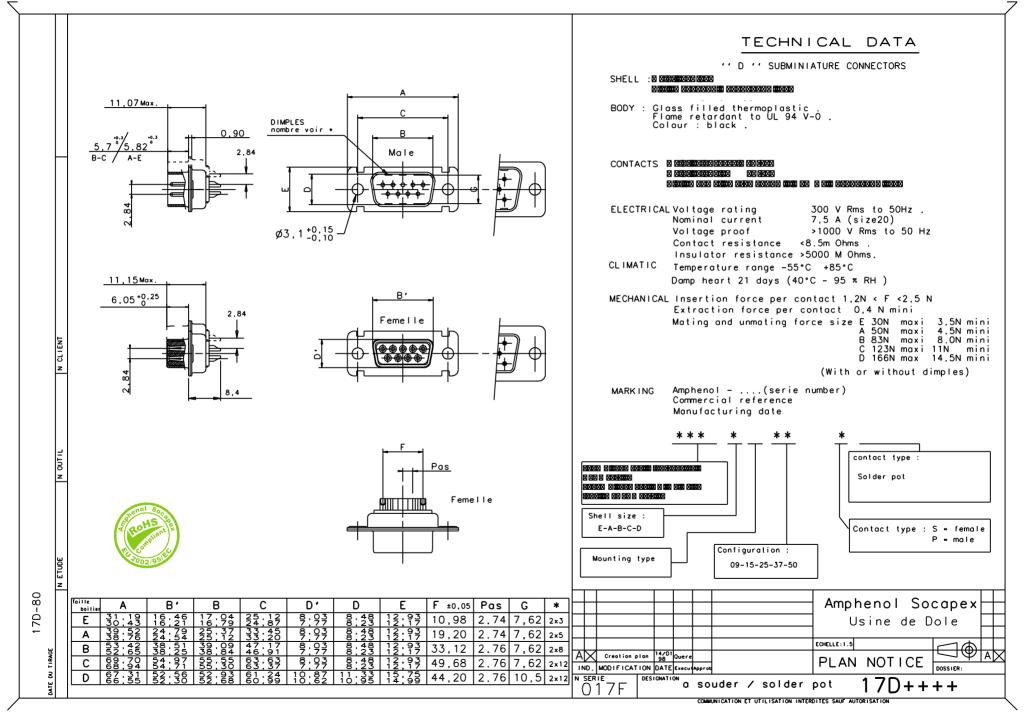
No. of Contacts	Mate (max.)	Unmate (min.)
9 (size E)	6.74 (3.05)	0.79 (0.36)
15 (size A)	11.24 (5.09)	1.01 (0.46)
25 (size B)	18.66 (8.44)	1.8 (0.81)
37 (size C)	27.65 (12.51)	2.47 (1.1)
50 (size D)	32.38 (14.65)	3.56 (1.6)



## DE-09P & DE-09S

		TECHNICAL DATA
		'' D'' SUBMINIATURE CONNECTORS
	<u>11,07 Mox.</u> <u>0,90</u> <u>11,07 Mox.</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0,90</u> <u>0</u> <u>0,90</u> <u>0</u> <u>0</u> <u>0</u> <u>0</u> <u>0</u> <u>0</u> <u>0</u> <u></u>	BODY : Glass filled thermoplastic . Flame retardant to UL 94 V-0 . Colour : black .
	B-C / A-E 2.84 B-C / A-E 2.84 C / A-E $C / A-E$	CONTACTS & Exclamatical concerces and materia & Exclamatical control and material & Exclamatical control and a con
		ELECTRICAL Voltage rating 300 V Rms to 50Hz . Nominal current 7,5 A (size20) Voltage proof >1000 V Rms to 50 Hz Contact resistance <8.5m Ohms .
		Insulator resistance >5000 M Ohms. CLIMATIC Temperature range -55°C +85°C
	<u>11,15Mox.</u> 6,05 <sup>+0,25</sup>	Damp heart 21 days (40°C - 95 ≈ RH ) MECHANICAL Insertion force per contact 1,2N < F <2,5 N
		Extraction force per contact 0,4 N mini Mating and unmating force size E 30N maxi 3.5N mir A 50N maxi 4.5N mir
IENT		A 50N maxi 4.5N mir B 83N maxi 8.0N mir C 123N maxi 11N mir
N CLIENT		D 166N max 14.5N min (With or without dimples)
		MARKING Amphenol –(serie number) Commercial reference Manufacturing date
		*** * ** *
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		Mounting type         Configuration :
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## DE-09P & DE-09S



# DA-15P & DA-15S





#### Features:

Solder Cup style for wire termination.

- ▶ Offered with .120 mounting holes, 4-40 clinch nuts, and dual float bushings.
- ▶ Offered in 9, 15, 25, 37, and 50 position plugs and sockets.
- □• Available with gold flash.
- RoHS version available
- Approvals:
  - UL Recognized Files E170218 (UL1977) and E130965 (UL1863).
  - ▶ CSA Approved File LR31996.

### Materials:

Insulator Material: Glass-filled polyester (white), UL 94V-O rated
 Connector Shell: Steel with zinc plating and yellow chromate finish or tin plating (grounding indents on plug), RoHS zinc plated with clear chromate
 4-40 Clinch Nut: Steel with cadmium plating and yellow chromate finish. RoHS zinc plating with clear chromate finish.

### **Mechanical:**

Individual Contact Insertion and Separation Force (minimum/maximum): 0.7 oz./12 oz. Durability: 500 mating cycles

### **Electrical:**

Withstanding Voltage: Minimum 1250V RMS @ sea level Current Rating: 5 Amps Contact Resistance: 2.7 milliohms maximum Insulation Resistance: 5000 megohms maximum (initial); 1000 megohms (minimum) after environmental testing

### **Environmental:**

Operating Temperature: -65°C to + 125°C Shock: 50G peak per MIL-STD-202, Method 213, Condition G Vibration: 12 cycles in three perpendicular directions @ 10-2000Hz, per MIL-STD-202, Method 204, Condition D Moisture Resistance: 90-95% relative humidity @ 40°C for 96 hours per MIL-STD-202, Method 103

# DB-25P & DD-50P

Offered in Wire Wrap and Solder Cup styles for wire termination and vertical style for PCB mount. Offered with .120 mounting holes, 4-40 clinch nuts, and dual float bushings. ■ Offered in 9, 15, 25, 37, and 50 position plugs and sockets. **F**EATURES Available with gold flash or 30µin. gold plating. Approvals: • UL Recognized - Files E170218 (UL1977) and E130965 (UL1863). • CSA Approved - File LR31996. See pages 4-5 thru 4-10 for standard dimensions, contact arrangements, and panel mounting specifications. Insulator Material: Glass-filled polyester (white), UL 94V-O rated MATERIALS Connector Shell: Steel with zinc plating and yellow chromate finish or tin plating (grounding indents on plug) 4-40 Clinch Nut: Steel with cadmium plating and yellow chromate finish Dual Float Bushing: Stainless steel, passivated **Operating Temperature:** -65°C to + 125°C ENVIRONMENTAL Shock: 50G peak per MIL-STD-202, Method 213, Condition G Vibration: 12 cycles in three perpendicular directions @ 10-2000Hz, per MIL-STD-202, Method 204, Condition D Moisture Resistance: 90-95% relative humidity @ 40°C for 96 hours per MIL-STD-202, Method 103 Withstanding Voltage: Minimum 1250V RMS @ sea level **Current Rating:** 5 Amps ELECTRICAL **Contact Resistance:** 2.7 milliohms maximum Insulation Resistance: 5000 megohms maximum (initial); 1000 megohms (minimum) after environmental testing MECHANICAL Individual Contact Insertion and .312 (7.92) Separation Force (minimum/maximum): 0.7 oz./12 oz. Durability: 500 mating cycles Available with stamped or machined contacts. Will accommodate up to 20 AWG wire. .200 (5.08) REF. Materials

Contact Material: Copper Alloy

- Contact Plating:
  - Stamped contacts with gold flash or 30µin. gold in mating area, gold flash or tin/lead on remainder. All over nickel.
  - Screw machine contacts with gold flash or 30µin. gold. All over nickel.

## **DB-25S**





### Features:

Solder cup style for wire termination.

- Offered with .120 mounting holes, 4-40 clinch nuts.
- Offered in 9, 15, 25, 37, and 50 position plugs and sockets.
- Available with gold flash.
- RoHS version available
- Approvals:
  - UL Recognized Files E170218 (UL1977) and E130965 (UL1863).
  - CSA Approved File LR31996.

### Materials:

**Insulator Material:** Glass-filled polyester (white), UL 94V-O rated **Connector Shell:** Steel with zinc plating and yellow chromate finish or tin plating (grounding indents on plug) **4-40 Clinch Nut:** Steel with cadmium plating and yellow chromate finish.

### **Mechanical:**

Individual Contact Insertion and Separation Force (minimum/maximum): 0.7 oz./12 oz. Durability: 500 mating cycles

### **Electrical:**

Withstanding Voltage: Minimum 1250V RMS @ sea level Current Rating: 5 Amps Contact Resistance: 2.7 milliohms maximum Insulation Resistance: 5000 megohms maximum (initial); 1000 megohms (minimum) after environmental testing

### **Environmental:**

Operating Temperature: -65°C to + 125°C Shock: 50G peak per MIL-STD-202, Method 213, Condition G Vibration: 12 cycles in three perpendicular directions @ 10-2000Hz, per MIL-STD-202, Method 204, Condition D Moisture Resistance: 90-95% relative humidity @ 40°C for 96 hours per MIL-STD-202, Method 103

### Features

# DC-37P & DC-37S

Solder Cup style for wire termination.

- Offered with .120 mounting holes, 4-40 clinch nuts, and dual float bushings.
- Offered in 9, 15, 25, 37, and 50 position plugs and sockets.
- Available with gold flash.
- RoHS version available
- Approvals:
  - UL Recognized Files E170218 (UL1977) and E130965 (UL1863).
  - CSA Approved File LR31996.

### Materials

- Insulator Material: Glass-filled polyester (white), UL 94V-O rated
- Connector Shell: Steel with zinc plating and yellow chromate finish or tin plating (grounding indents on plug), RoHS zinc plated with clear chromate
- 4-40 Clinch Nut: Steel with cadmium plating and yellow chromate finish. RoHS zinc plating with clear chromate finish.

### Mechanical

• Individual Contact Insertion and Separation Force (minimum/maximum): 0.7 oz./12 oz.

### Durability

• 500 mating cycles

### Electrical

- Withstanding Voltage: Minimum 1250V RMS @ sea level
- Current Rating: 5 Amps
- Contact Resistance: 2.7 milliohms maximum
- Insulation Resistance: 5000 megohms maximum (initial); 1000 megohms (minimum) after environmental testing

### Environmental

- Operating Temperature: -65°C to + 125°C
- Shock: 50G peak per MIL-STD-202, Method 213, Condition G
- Vibration: 12 cycles in three perpendicular directions @ 10-2000Hz, per MIL-STD-202, Method 204, Condition D
- Moisture Resistance: 90-95% relative humidity @ 40°C for 96 hours are Mil

### Materials

- Contact Material
  - Copper Alloy
- Contact Plating
  - Stamped contacts with gold flash on remainder. All over nickel.

