

SOURIAU

Delta-D™



SOUR002



FRAMATOME CONNECTORS
INTERNATIONAL

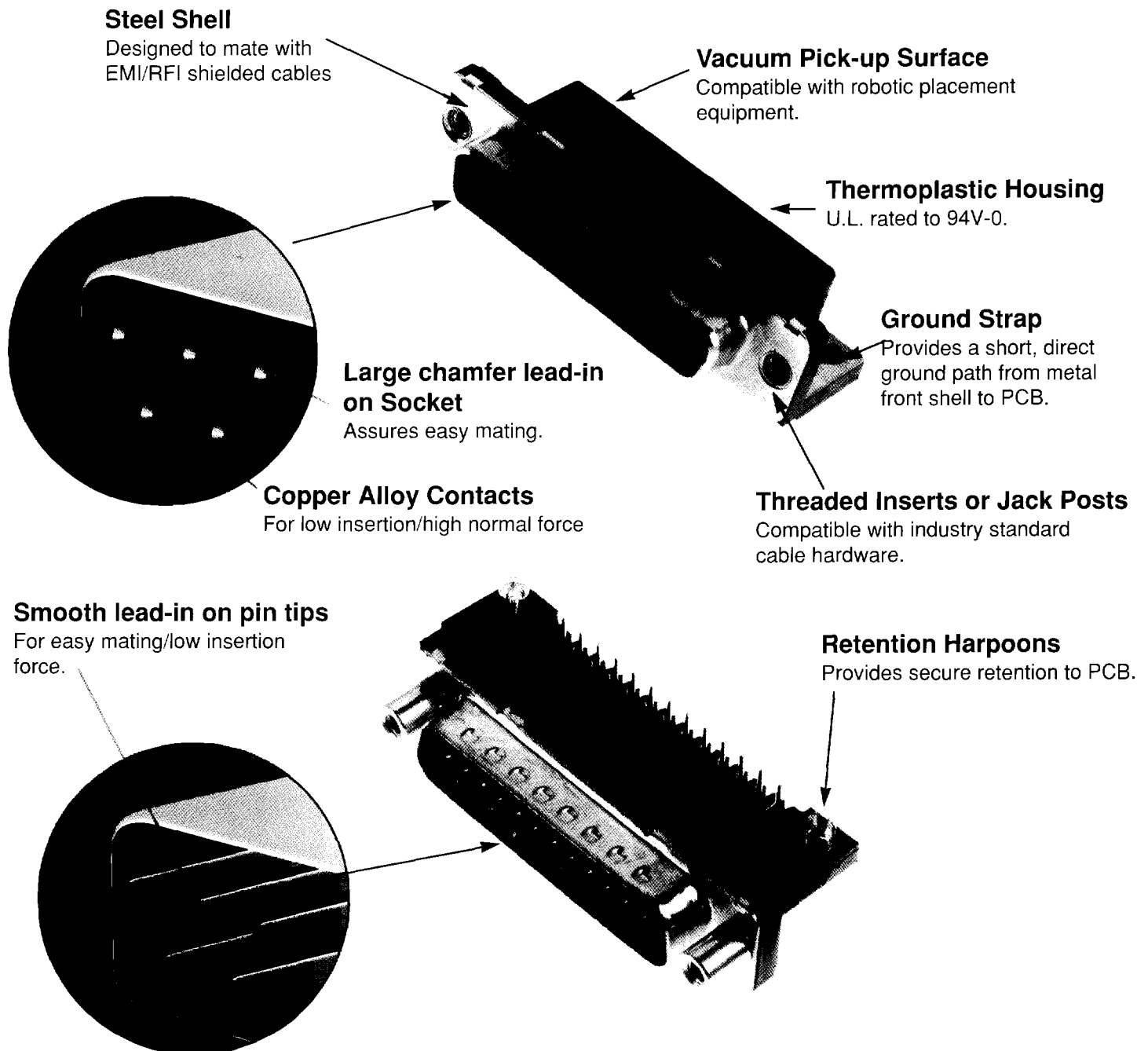
Delta-D Design Features

The Delta-D™ product line is a commercial D-subminiature connector series used in a wide variety of input/output interconnect applications. Delta-D connectors can be found in data processing equipment, data peripherals, telecommunications, instrumentation and industrial controls.

Delta-D offers low cost to users without sacrificing high performance. The thermoplastic housing is UL rated to 94 V-0. Steel shells are designed to mate with EMI/RFI shielded cables. Grounding straps provide a direct ground path from the metal shell to the PCB.

Contacts are stamped from high-strength copper alloy. Contact underplating is nickel on the entire contact with selective gold plating on the mating area and tin on the solder tails.

All Delta-D connectors meet the dimensional requirements specified in Mil-C-24308. Design features accommodate robotic placement.



Technical Characteristics

Material:

Shells: Tin-plated steel with indents on male
 Insulators: Self extinguishing thermoplastic to UL 94V-0
 Contacts: Size 20 (\varnothing 1mm), copper alloy, gold plated on mating area, tin plated termination, nickel underplate on entire contact
 Harpoons: Tin-plated brass
 Grounding: Tin-plated brass
 Threaded Inserts: Tin-plated brass
 Female Screwlock: Tin-plated brass

Mechanical Endurance:

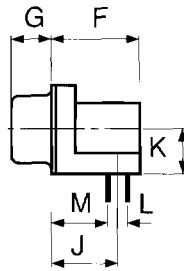
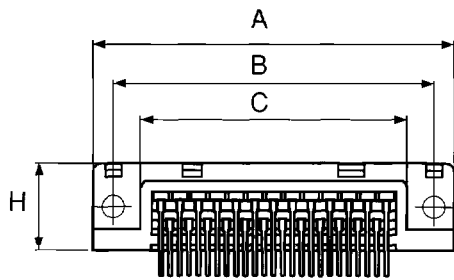
≥ 200 matings/unmatings (gold flash)

Electrical:

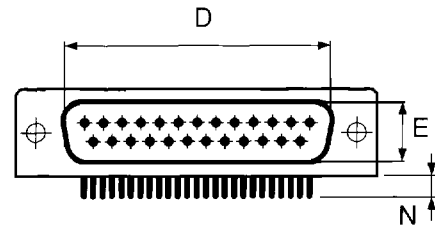
Maximum current rating: 5 Amps per contact
 Maximum voltage: 1,000 V r.m.s.
 Rated voltage: 300 V r.m.s.
 Initial Contact Resistance: ≤ 10 m Ω
 Shell Resistance: ≤ 5 m Ω
 Insulation Resistance: $\geq 5,000$ m Ω

Environmental:

Operating Temperature Range: -55°C $+125^{\circ}\text{C}$
 Salt Spray: 24 hours
 Damp Heat: 21 days



Note: dimensions D and E:
 inside dimensions of male connector
 external dimensions of female connector

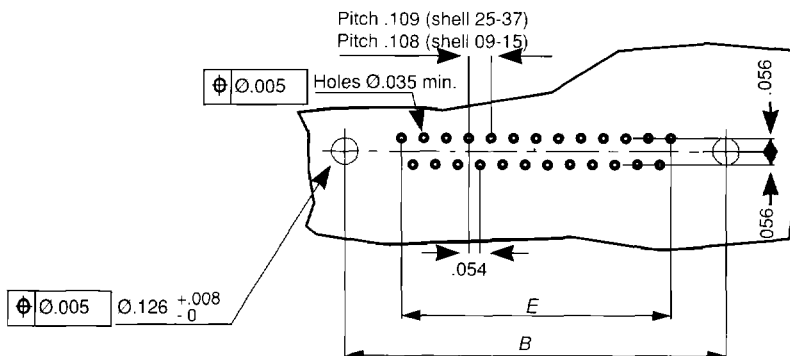


| | A | B | C | D | E | F | G | H | J | K | L | M | N | |
|----|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|-----------------------------|-----------------------------|-----------------------------|------------------------------|--|----------------|
| | $\pm .015$ ($\pm 0,38$) | $\pm .005$ ($\pm 0,12$) | $\pm .004$ ($\pm 0,10$) | $\pm .010$ ($\pm 0,25$) | $\pm .010$ ($\pm 0,25$) | $\pm .004$ ($\pm 0,10$) | $\pm .010$ ($\pm 0,25$) | $\pm .015$ ($\pm 0,38$) | $\pm .004$ ($\pm 0,1$) | $\pm .004$ ($\pm 0,1$) | $\pm .004$ ($\pm 0,1$) | $\pm .006$ ($\pm 0,15$) | $\pm .012$ ($\pm 0,30$) Terminal Length | |
| 9 | P | 1.213 (30,81) | .984 (24,99) | .668 (16,96) | .661 (16,79) | .324 (8,23) | .496 (12,60) | .230 (5,85) | .495 (12,58) | .374 (9,50) | .248 (6,30) | .112 (2,84) | .318 (8,08) | .125 (3,18) |
| | S | 1.213 (30,81) | .984 (24,99) | .668 (16,96) | .638 (16,21) | .310 (7,87) | .496 (12,60) | .238 (6,05) | .495 (12,58) | .374 (9,50) | .248 (6,30) | .112 (2,84) | .318 (8,08) | .125 (3,18) |
| 15 | P | 1.541 (39,14) | 1.312 (33,32) | .991 (25,18) | .989 (25,12) | .324 (8,23) | .496 (12,60) | .230 (5,85) | .495 (12,58) | .374 (9,50) | .248 (6,30) | .112 (2,84) | .318 (8,08) | .125 (3,18) |
| | S | 1.541 (39,14) | 1.312 (33,32) | .991 (25,18) | .966 (24,54) | .310 (7,87) | .496 (12,60) | .238 (6,05) | .495 (12,58) | .374 (9,50) | .248 (6,30) | .112 (2,84) | .318 (8,08) | .125 (3,18) |
| 25 | P | 2.088 (53,03) | 1.852 (47,04) | 1.540 (39,12) | 1.529 (38,84) | .324 (8,23) | .496 (12,60) | .230 (5,85) | .495 (12,58) | .374 (9,50) | .248 (6,30) | .112 (2,84) | .318 (8,08) | .125 (3,18) |
| | S | 2.088 (53,03) | 1.852 (47,04) | 1.540 (39,12) | 1.506 (38,25) | .310 (7,87) | .496 (12,60) | .238 (6,05) | .495 (12,58) | .374 (9,50) | .248 (6,30) | .112 (2,84) | .318 (8,08) | .125 (3,18) |
| 37 | P | 2.736 (69,32) | 2.500 (63,50) | 2.192 (55,68) | 2.177 (55,30) | .324 (8,23) | .496 (12,60) | .230 (5,85) | .495 (12,58) | .374 (9,50) | .248 (6,30) | .112 (2,84) | .318 (8,08) | .125 (3,18) |
| | S | 2.736 (69,32) | 2.500 (63,50) | 2.192 (55,68) | 2.154 (54,71) | .310 (7,87) | .496 (12,60) | .238 (6,05) | .495 (12,58) | .374 (9,50) | .248 (6,30) | .112 (2,84) | .318 (8,08) | .125 (3,18) |

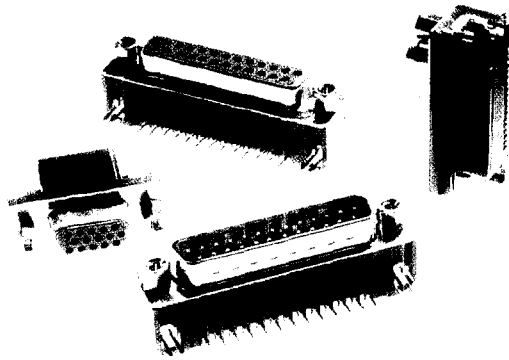
PC Board Drilling Dimensions

(plated holes)

(Thickness $.062 \pm .007$)



| Shell | B $\pm .005$ ($\pm 0,13$) | E $\pm .003$ ($\pm 0,08$) |
|-------|--------------------------------|--------------------------------|
| 09 | .984 (24,99) | .431 (10,95) |
| 15 | 1.312 (33,32) | .755 (19,18) |
| 25 | 1.852 (47,04) | 1.305 (33,15) |
| 37 | 2.500 (63,50) | 1.956 (49,68) |



D-Subminiature

ors

1. Quality, Reliability & Performance

Delta-D D-Subminiature connectors are designed and manufactured to give you the highest possible quality, reliability and performance.

Produced with the highest quality materials selected for long-term performance, Delta-D not only offers design features critical to dependability, but quality you can only get through control of the entire manufacturing process.

Delta-D D-Subminiature connectors are UL and CSA approved. They fully meet the dimensional standards of Mil-C-24308 and are designed to accommodate robotic placement.

2. Worldwide Inventory & Availability

Burndy is backed by the FCI (Framatome Connectors International) commitment to worldwide inventory and production capacity, so that Delta-D connectors are available in virtually every country of the world.

Our Customer Service personnel are prepared to quickly meet your requests for quotes and samples. In addition, Delta-D connectors are available through Burndy's network of authorized distributors throughout the United States and Canada.

Competitive Pricing

Delta-D D-Subminiature connectors are competitively priced for your application. Burndy's commitment to quality and performance is reflected in our pricing. We offer a complete line of Delta-D D-Subminiature connectors, including high density, high performance, and high speed connectors. We also offer a complete line of Delta-D D-Subminiature connectors, including high density, high performance, and high speed connectors. Burndy is able to provide the advantages of our customers' choice of these interconnect products.

One solid source for all your input/output interconnect requirements

For all I/O interconnect requirements, Burndy is your dependable source.

- Delta-D Series low cost D-Subminiature connectors
- MHS-D high density connectors for SCS and other high performance I/O applications
- MICROSHIELD high density, ribbon style contact connectors for high performance I/O applications
- SCS cable assemblies
- Souriau D-Sub connectors for industrial and military applications

Innovative design features to meet your requirements

As a leader in connector innovations, FCI stresses *continuous improvement* at all levels including customer input and in-house evaluation from engineering to manufacturing.

You can see the results in the Delta-D line as it incorporates the performance, design features and accessories that address customers' needs.

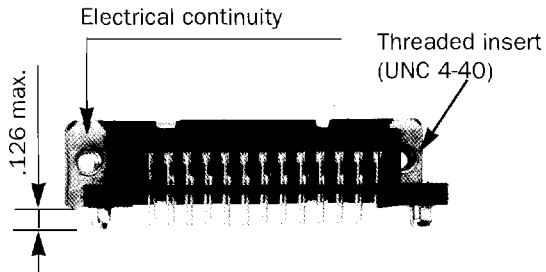
- Nickel underplating with selective gold plating in the mating area and tin plating on the solder tail assure contact reliability, good solderability and low cost by placing the gold in the mating area only.
- Contacts of copper alloy for low insertion/high normal force characteristics.
- Steel shells are designed to mate with EMI/RFI shielded cables.
- Large chamfer lead-in on the sockets assures easy mating.
- Smooth lead-in on pin tips for easy mating/low insertion force.
- The vacuum pick-up surface is compatible with robotic placement equipment.
- Retention harpoons are available to provide secure retention to the PCB.
- Thermoplastic housing is U.L. rated to 94V-0.

Hardware Options

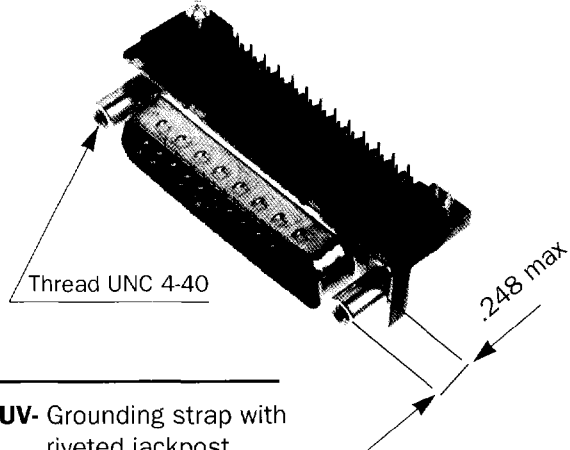
Assembly options and specific dimensions

Delta-D offers various options for retention on the PC Board or the front hardware. Each assembly option corresponds to two letters included in the part number when ordering.

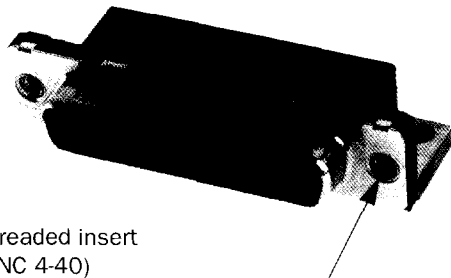
GX- Harpoon with grounding strap
Threaded insert (UNC 4-40).



GV- Harpoon with grounding strap and
riveted jackpost (UNC 4-40).



UX- Grounding strap with
threaded insert (UNC 4-40).
No harpoons.



UV- Grounding strap with
riveted jackpost
(UNC 4-40).
No harpoons.



Part Numbering System

Series **D 25 P 33E 4 GV 00**

Number of Contacts 9, 15, 25, 37

Contacts **P: Pin**
S: Socket

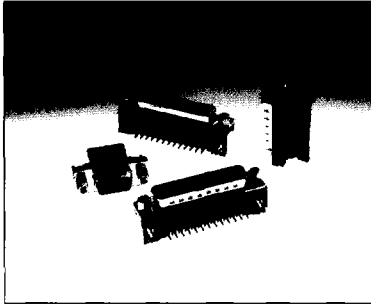
| Terminations | Code | Type | Pitch Between Row | Length of Termination | PCB Thickness |
|--------------|------------|----------------------------|-------------------|-----------------------|---------------|
| | 33E | Rt. angle, .318" Footprint | .112 | .125 | .063 |

Plating Class **4: Standard Class gold flash (>200 mating/unmating)**
30 μ" gold also available - consult factory

Hardware Options **GX**
GV See Hardware Options above
UV
UX

Variations **00** Standard series

Contact Burndy for all Your Input/Output Interconnect Requirements!



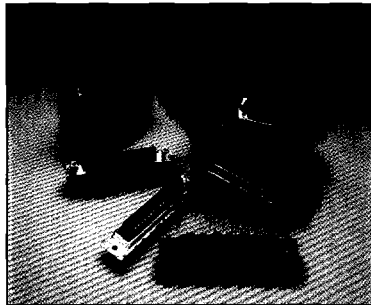
Delta-D™

Low cost, high reliability D-subminiature series. Available in 9, 15, 25 and 37 positions, male and female configurations.



Mini-D

High density, shielded connector series for use in SCSI and other high performance I/O applications.



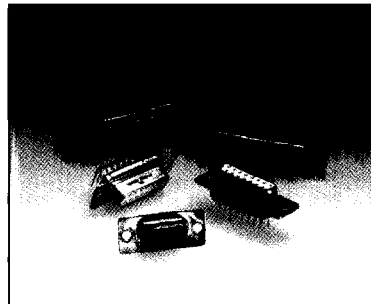
Microshield™

High density, shielded connectors with a rugged ribbon-style contact system for use in any high performance I/O application.



SCSI Cable Assemblies

SCSI-1, SCSI-2 and SCSI-3 cable assemblies. SCSI/Microshield adaptor cables.



Souriau D-Sub

D-Subminiature connectors for industrial and military applications.



Burndy Corporation

51 Richards Avenue
Norwalk, CT 06856
Tel (203) 838-4444
Customer Service Fax (203) 852-8629
or (203) 852-8522