



# DIP and D Subminiature Jumpers

## Features:

- Aries offers a wide array of DIP/D Subminiature jumper configurations and wiring possibilities for all your programming needs.
- Reliable, electronically tested solder connections.
- Cable is potted to provide strain relief.
- Protective covers are also provided on headers.
- 10-color cable allows for easy identification and tracing.
- 9 pin "D" connector available with 8 or 14 pin header.
- 15 pin "D" connector available with 14 or 16 pin header.
- 25 pin "D" connector available with 24 pin header.
- 37 pin "D" connector available with 40 pin header.
- 50 pin "D" connector available with two 24 pin headers.
- Consult factory for jumper lengths under 2.000 [50.80].

## HEADER Specifications:

- Header body is red UL 94-HB Glass-filled Nylon. Consult factory for UL 94V-0 rated material.
- Header pins are Brass, 1/2 hard.
- Header pin plating is 10µ [2.5µm] min. Gold per MIL-G-45204 over 50µ [1.27µm] min. Nickel per QQ-N-290.

## D-SUBMINIATURE CONNECTOR SPECIFICATIONS:

- Insulator is UL 94V-0 flame-retardant thermoplastic.
- Contacts are Copper Alloy.
- Contact plating is 100µ [2.54µm] min. Gold over Nickel.

## CABLE SPECIFICATIONS:

- Insulation is UL Style 2697 Polyvinyl Chloride (PVC).
- Laminate is clear PVC, self-extinguishing.
- Conductors are 28 AWG, 7/36 strand, Tinned Copper per ASTM B 33.
- Current rating=1 Amp @ 10°C [50°F] above ambient.
- Voltage rating=300 Volts.
- Temperature rating=176°F [80°C].
- Capacitance=13.0 pf/ft. [42.7pf/meter] nominal @ 1 MHz.
- Crosstalk: 10' sample, 5 ns rise time with 2 lines driven. Near end=4.7%; Far end=4.3% nominal.
- Propagation delay=1.5 ns/ft. [4.9 ns/meter] nominal.
- Insulation resistance=1010 Ohms (10 ft. [3 meters] min.).

## Mounting Considerations:

- Suggested PCB hole size=.033 ± .002 [.86 ± .05].



Note: Aries specializes in custom design and production. In addition to the standard products shown on this page, special materials, platings, sizes, and configurations can be furnished, depending on quantities. Aries reserves the right to change product specifications without notice.

## ORDERING INFORMATION

XXX-XXX-XXX

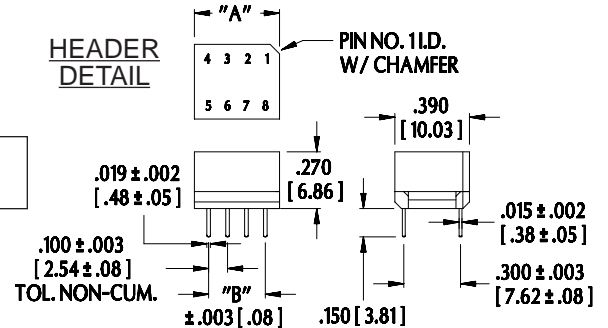


Length "L" in inches:

"D" to DIP=2.000 [50.80] min.

"D" to "D"=3.000 [76.20] min.

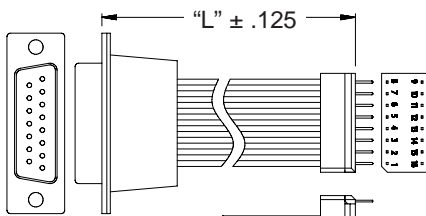
### HEADER DETAIL



## ALL DIMENSIONS: INCHES [MILLIMETERS]

All tolerances ± .005 [.13] unless otherwise specified

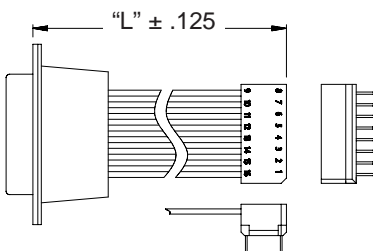
Numbers shown pin side for reference only.



STYLE A

$$"A" = (\text{NO. OF PINS PER ROW} \times .100 [2.54]) + .095 [2.41]$$

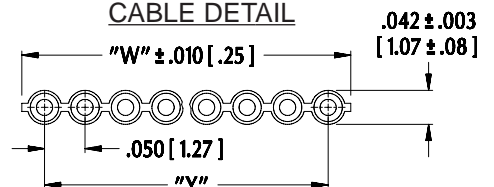
$$"B" = (\text{NO. OF PINS PER ROW} - 1) \times .100 [2.54]$$



STYLE B

See Data Sheet 11017 for other configurations and additional information.

### CABLE DETAIL



$$"W" = (\text{NO. OF CONDUCTORS} \times .050 [1.27]) + .005 [.08]$$

$$"Y" = (\text{NO. OF CONDUCTORS} - 1) \times .050 [1.27]$$

**ARIES**  
ELECTRONICS, INC.  
http://www.arieselec.com • info@arieselec.com

**NORTH AMERICA**  
Frenchtown, NJ USA  
TEL: (908) 996-6841  
FAX: (908) 996-3891



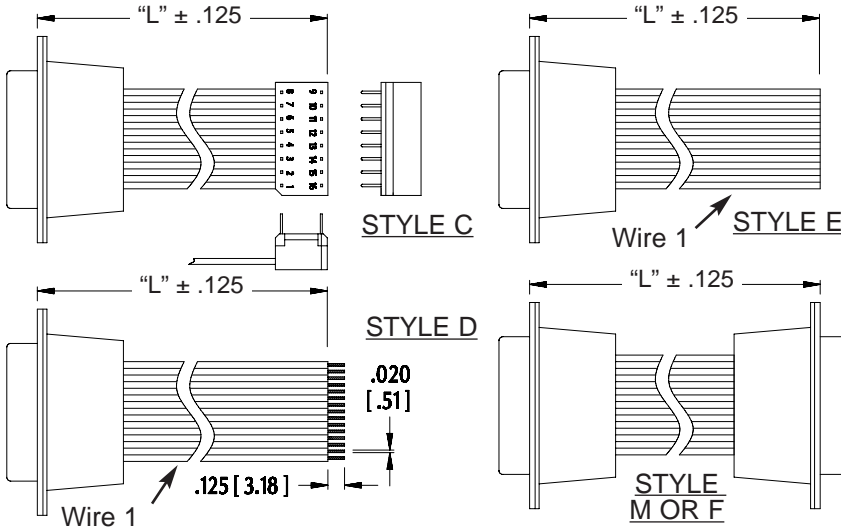
**UK/IRELAND/GB**  
TEL: +44 870 240 0249  
FAX: +44 1653 600493  
uking@arieselec.com

**EUROPE/MAINLAND/HOLLAND**  
TEL: +31 78 615 94 65  
FAX: +31 78 615 43 11  
europe@arieselec.com

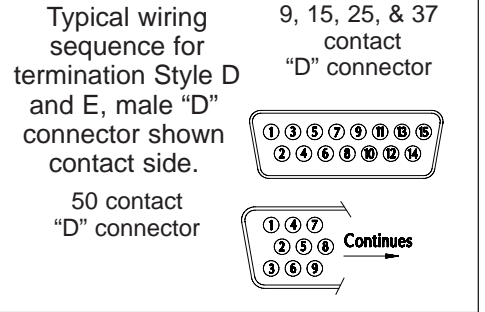
11016  
REV.B



# DIP and D Subminiature Jumpers (cont.)



Note: All DIP header chamfers (pin 1 I.D.) shown with female "D" connector. For male "D" connector, pin 1 is in diagonally opposite corner.

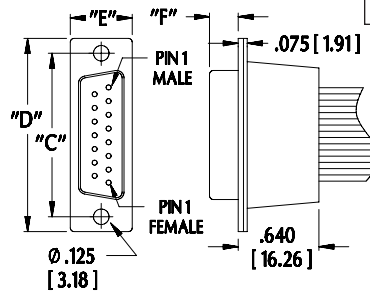


See Data Sheet 11016 for other configurations and additional information.

WIRING LIST - "D" TO DIP

"D" Connector	9 "D" 8 DIP	9 "D" 14 DIP	15 "D" 14 DIP	15 "D" 16 DIP	25 "D" 24 DIP	37 "D" 40 DIP	50 "D" (2) 24 DIP
1	1	1	1	1	1	1	1B
2	2	2	2	2	2	2	24B
3	3	3	3	3	3	3	2B
4	4	4	4	4	4	4	23B
5	Dummy	5	5	5	5	5	3B
6	8	14	6	6	6	6	22B
7	7	13	7	7	7	7	4B
8	6	12	Dummy	8	8	8	21B
9	5	11	14	16	9	9	5B
10			13	15	10	10	20B
11			12	14	11	11	6B
12		DIP 6 thru 10 Dummy	11	13	12	12	19B
13			10	12	Dummy	13	7B
14			9	11	24	14	18B
15			8	10	23	15	8B
16					22	16	17B
17				DIP 9 Dummy	21	17	8B
18					20	18	4A
19					19	19	22A
20					18	40	3A
21					17	39	23A
22					16	38	2A
23					15	37	24A
24					14	36	1A
25					13	35	Dummy
26						34	Dummy
27						33	13B
28						32	12B
29						31	14B
30						30	11B
31						29	15B
32						28	10B
33						27	16B
34						26	21A
35						25	15A
36						24	20A
37						23	6A
38							19A
39							7A
40						DIP 20,21,22 Dummy	18A
41							8A
42							17A
43							9A
44							16A
45							10A
46							15A
47							11A
48							14A
49							12A
50							13A

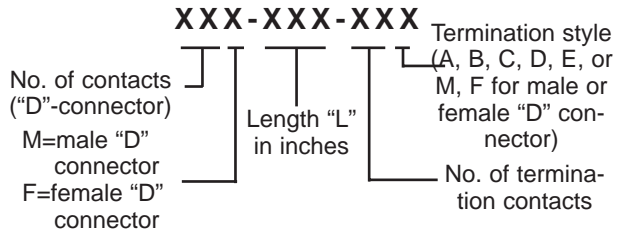
D SUBMINIATURE CONNECTOR DETAIL



No. of Pins	Dim. "C"	Dim. "D"	Dim. "E"	Dim. "F"
9 Male	.984 [24.99]	1.220 [30.99]	.494 [12.55]	.325 [8.26]
9 Female	.972 [24.69]	1.219 [30.96]	.494 [12.55]	.243 [6.17]
15 Male	1.310 [33.27]	1.545 [39.24]	.494 [12.55]	.232 [5.89]
15 Female	1.312 [33.33]	1.542 [39.17]	.494 [12.55]	.243 [6.17]
25 Male	1.850 [46.99]	2.094 [53.19]	.494 [12.55]	.230 [5.84]
25 Female	1.850 [46.99]	2.094 [53.19]	.494 [12.55]	.243 [6.17]
37 Male	2.500 [63.50]	2.737 [69.52]	.494 [12.55]	.230 [5.84]
37 Female	2.500 [63.50]	2.740 [69.60]	.494 [12.55]	.243 [6.17]
50 Male	2.406 [61.11]	2.640 [67.06]	.494 [12.55]	.230 [5.84]
50 Female	2.406 [61.11]	2.643 [67.13]	.494 [12.55]	.243 [6.17]

Minimum length "L" =  
 "D" to DIP: 2.000 [50.80]  
 "D" to "D": 3.000 [76.20]

## ORDERING INFORMATION



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UK/IRELAND/GB  
 TEL: +44 870 240 0249  
 FAX: +44 1653 600493  
 uking@arieselec.com

EUROPE/MAINLAND/HOLLAND  
 TEL: +31 78 615 94 65  
 FAX: +31 78 615 43 11  
 europe@arieselec.com

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