

## D-Sub Standard Density – NFD17

### STANDARD DENSITY RIGHT-ANGLE, VERTICAL THROUGH HOLE, SOLDER TYPE NON-FILTERED D-SUB CONNECTOR

Amphenol's NFD17 D-Subminiature connectors complement our extensive I/O connector product line. This line of connectors offers many superior features, high performance level and low installation cost. These proven D-Subminiature connectors are one of the most popular Input/Output interconnects, addressing a wide variety of applications in Telecommunications, Data, Consumer Industrial, Instrumentation and Medical.

- High Strength Thermoplastic components meet UL 94V-0
- Durability of 500 mating and unmating cycles
- Contact plating available in gold flash, 15µin, or 30µin of gold
- Variety of pin and socket options available
- RoHS Compliant

#### FEATURES

- Available in Straight, Angle terminations
- D-shaped shell design
- Accommodates industry standard plugs
- Meets MIL-C-24308 dimensional standards
- Through Hole Type (THT), Solder Cup, Solder Pin
- Wide operating temperature: -40°C to +85°C
- RoHS compliant



#### TARGET MARKETS



#### BENEFITS

- Support different PCB mounting requirements
- Supports the need for polarization
- Interchangeable and intermateable with other makes
- Ability to choose specific connector for applications that meets data transfer rates needed
- Ideal in applications undergoing mechanical and environmental stress
- Adaptable to a wide range of environmental conditions
- Meets environmental, health, and safety requirements

## TECHNICAL INFORMATION

### MATERIAL

- Insulator: Engineering thermoplastic; Complies with UL94V-0
- Contacts: Phosphor Bronze hard temper with Gold thickness options (gold flash 1–3µin, 15µin, 30µin, 50µin) over 50µin min. Nickel on contact mating area. 100µin min. matte tin plating on soldering tail
- Shield: Copper Alloy, Nickel plated with Tin dipped tail or stainless steel with Tin dipped tail

### ELECTRICAL PERFORMANCE

- Contact Resistance: 20mΩ max.
- Insulation Resistance: 500MΩ min. at 500VDC for 1 min max.
- Current Rating: 3A per contact
- Voltage Rating: 250VAC
- DWV Contact to Contact: 1,000VAC, 60Hz, 1 min

### MECHANICAL PERFORMANCE

- Screw Torque Force: 3.00 kg/cm min. for Brass material apply to 4–40 thread. 5.54 kg/cm min. for Steel material apply to 4–40 thread
- Durability: 500 mating and unmating cycles
- Operating Temperature Range: –40°C to +85°C
- Recommended Soldering Temperature: Soldering at 245±5°C for 5–7 seconds max.

### APPROVALS & CERTIFICATION

- REACH
- RoHS

### ENVIRONMENTAL

- Withstand Humidity 96 hours: EIA 364–31A
- Salt Spray tested 24 hours: EIA 364–26A
- Thermal Shock: –55°C to +85°C: EIA 364–32A

### SPECIFICATION

- MIL-DTL-24308

### PACKAGING

- Tray
- Carton

### TARGET MARKETS/APPLICATIONS



Data Communications  
Mobile Communications  
Power Supplies



Consumer Electronics



Router and Server  
Storage System  
Printer and Copier  
Test Equipment  
Desktop and Laptop  
Analysis Equipment



Medical Equipment  
Parking Meter  
POS and Handheld Terminal



Military Equipment

## PART NUMBERS

Description	Part Numbers
D-Sub, 9 Pin Socket, Right Angle, Boardlocks #4-40 UNC Threaded hole, Through Hole	NFD17E09SAFC1DA
D-Sub, 9 Pin Plug, Vertical, Boardlocks #4-40 UNC Screwlocks Threaded hole, Through Hole	NFD17E09PA4E1DA
D-Sub, 9 pin Socket, Vertical, Socket #4-40 UNC Screwlocks Installed, Through Hole	NFD17E09SBFE1CA
D-Sub, 9 Pin Socket, Vertical, Socket #4-40 UNC Screwlocks Installed, Through Hole	NFD17E09SAFE1CA
D-Sub, 9 Pin Plug, Vertical, 3.05mm Clear Hole, Through Hole	NFD17E09PA2E1CA
D-Sub, 15 Pin Socket, Vertical, With Fixed #4-40 UNC Screwlocks, Through Hole Press-fit	NFD17A15SA3E1AA
D-Sub, 15 Pin Socket, Vertical, 3.05mm Clear Hole, Solder Cup	NFD17A15SB2E1BA
D-Sub, 15 pin Socket, Vertical, Socket #4-40 UNC Screwlocks Installed, Through Hole	NFD17A15SBFE1DA
D-Sub, 15 Pin Plug, Vertical, 3.05mm Clear Hole, Solder Cup	NFD17A15PB2E1BA
D-Sub, 25 Pin Plug, Vertical, Socket #4-40 UNC Screwlocks Installed, Through Hole	NFD17B25PBFE1DA
D-Sub, 37 Pin Plug, Vertical, Boardlocks #4-40 UNC Screwlocks Installed, Through Hole	NFD17C37PAFE1DA
D-Sub, 37 Pin Socket, Right Angle, Socket #4-40 UNC Screwlocks Installed, Through Hole	NFD17C37SAFC1DA
D-Sub, 37 Pin Socket, Vertical, #4-40 UNC Threaded hole, Through Hole	NFD17C37SB4E1CA
D-Sub, 7W2S Combo with Threaded Spacer Clip and Sealed Base PC Pins, Through Hole	NFD17A7W2S74E1D
D-Sub, 7W2S Combo Socket, Vertical PCB Thru Hole, 3.05 Clear Hole, Gold Flash	NFD17A7W2S72E1CA
D-Sub, 7W2S Combo Socket, Vertical PCB Thru Hole, 3.05 Clear Hole, 15µin Gold	NFD17A7W2S42E1CA
D-Sub, 7W2S Combo Socket, Vertical PCB Thru Hole, 3.05 Clear Hole, 30µin Gold	NFD17A7W2S32E1CA

For more information, Please visit us at [www.amphenol-cs.com](http://www.amphenol-cs.com)

# PART NUMBER SELECTOR

**NFX17**      **E**      **15**      **P**      **0**      **3**      **C**      **1**      **G**      **A**      **K**

NFD17	Non filtered, Standard D-SUB Connector
NFH17	Non filtered, High density D-Sub Connector

Shell Size	
E	9 position
A	15 position
B	25 position
C	37 position
F	50 position

Number of Contacts	
15	15 position (for high density)
26	26 position (for high density)
44	44 position (for high density)
62	62 position (for high density)
78	78 position (for high density)
09	9 position (for regular)
15	15 position (for regular)
26	26 position (for regular)
XX	XX position (for regular)

Contact Type	
S	Socket Connector
P	Plug Connector

Contact Plating & Shield Plating	
3	30µm Gold Mating Area, 30µm Gold on Tails, Nickel Shield
4	15µm Gold Mating Area, 15µm Gold on Tails, Nickel Shield
5	30µm Gold Mating Area, Gold Flash Tails, Nickel Shield
6	15µm Gold Mating Area, Gold Flash Tails, Nickel Shield
7	Gold Flash Mating Area, Gold Flash Tails, Nickel Shield
8	30µm Gold Mating Area, Tin Tails, Nickel Shield
9	15µm Gold Mating Area, Tin Tails, Nickel Shield
0	Gold Flash Mating Area, Tin Tails, Nickel Shield
B	Gold Flash Mating Area, Tin Tails, Tin Shield
C	15µm Gold Mating Area, Tin Tails, Tin Shield
D	30µm Gold Mating Area, Tin Tails, Tin Shield
N	No Contacts

Serial Number	
A	Tray Packaging
T	Bulk Packaging

Package Method	
A	Tray Packaging
T	Bulk Packaging

Contact & Boardlock Style	
A	Press Fit
B	Solder Cup
C	Solder Pin (without Fork device) --- through hole PCB
D	Solder Pin + Fork device --- through hole PCB
E	Crimp

Stack of Connector	
1	1 stack
2	2 stack

Style of Connector	
C	Right Angle (Std)
D	Right Angle .121 (3.08 footprint)
E	Vertical (Std)

Mounting Option	
2	15 position (for high density)
3	26 position (for high density)
4	44 position (for high density)
5	62 position (for high density)
6	78 position (for high density)
E	9 position (for regular)
F	15 position (for regular)

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