

## 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 94 V-0
- Durability of 500 mating and unmating cycles
- Contact plating available in gold flash, 15 µm, or 30 µm 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 UL 94 V-0
- Contacts: Phosphor Bronze hard temper with Gold thickness options (gold flash 1–3 µin, 15 µin, 30 µin, 50 µin) over 50 µin min. Nickel on contact mating area. 100 µin 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: 20 mΩ max.
- Insulation Resistance: 500 MΩ min. at 500 VDC for 1 min max.
- Current Rating: 3 A per contact
- Voltage Rating: 250 VAC
- DWV Contact to Contact: 1,000 VAC, 60 Hz, 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

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## PART NUMBER SELECTOR

Find part number details using the search box on [www.amphenol-cs.com](http://www.amphenol-cs.com)

**NFX17**   **E**   **15**   **P**   **0**   **3**   **C**   **1**   **A**   **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
D	50-position

Contact Type	
S	Socket Connector
P	Plug Connector

Number of Contacts	
15	15-position (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)
25	25-position (for regular)
37	37-position (for regular)

Contact Plating & Shield Plating	
3	30 µin Gold Mating Area, 30 µin Gold on Tails, Nickel Shield
4	15 µin Gold Mating Area, 15 µin Gold on Tails, Nickel Shield
5	30 µin Gold Mating Area, Gold Flash Tails, Nickel Shield
6	15 µin Gold Mating Area, Gold Flash Tails, Nickel Shield
7	Gold Flash Mating Area, Gold Flash Tails, Nickel Shield
8	30 µin Gold Mating Area, Tin Tails, Nickel Shield
9	15 µin 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	15 µin Gold Mating Area, Tin Tails, Tin Shield
D	30 µin Gold Mating Area, Tin Tails, Tin Shield
E	Gold Flash Mating Area, Tin Tails, Front Shield Nickel, Rear Shield Tin
E	#4-40 UNC thread, with 4-40 UNC hex jack socket supplied separate
F	#4-40 UNC thread with 4-40 UNC hex jack socket installed but removeable
N	No Contacts

Serial Number	
No Digits = Standard	
1	

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
F	IDC

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	120 [3.05] Through hole
3	#4-40 UNC thread, with 4-40 UNC jack socket riveted to connector
4	#4-40 UNC thread
5	#4-40 UNC thread, with 4-40 UNC round jack socket installed (removable)
6	M3 x 0.5 thread
E	#4-40 UNC thread, with 4-40 UNC hex jack socket supplied separate
F	#4-40 UNC thread with 4-40 UNC hex jack socket installed but removeable

## 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, 3.05 mm 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, 3.05 mm 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, 3.05 mm 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 Through-hole, 3.05 mm Clear Hole, Gold Flash	NFD17A7W2S72E1CA
D-Sub, 7W2S Combo Socket, Vertical PCB Through-hole, 3.05 mm Clear Hole, 15 µin Gold	NFD17A7W2S42E1CA
D-Sub, 7W2S Combo Socket, Vertical PCB Through-hole, 3.05 mm Clear Hole, 30 µin Gold	NFD17A7W2S32E1CA

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