

# Product Data Sheet

## Amphenol® Universal “Header Assembly” for Flex Print/PC Board Mounting

No. 169-3

### Mounts to all MIL-DTL-38999 and MIL-C-26482 Connectors

The use of connectors with printed circuit termination is rapidly gaining popularity due to the rise of high volume, vapor phase or wave solder manufacturing processes. Termination of this style of connector to flex print or a printed circuit board represents a major cost in the manufacturing process for users. When adding flex or printed circuit board assemblies to an expensive filter or filter/transient protection connector, the total cost of a failed solder joint, a bent pin, or an unanticipated electrical failure becomes prohibitive. The universal header assembly from Amphenol will provide for easy separation of the connector from the board on these occasions.

#### Header Assemblies Provide Cost Savings

Incorporation of the header assembly provides the user with time and cost saving potentials. These header assemblies can be vapor phase or wave soldered to flex or printed circuit boards prior to the receipt of the EMI/EMP connector. Headers can be installed to standard connectors, allowing for electrical testing that would adversely affect the sensitive diodes, MOV's or capacitors in the EMI/EMP connectors. Expensive connector assemblies can be easily removed from and reattached to the header assembly as the manufacturing process dictates.

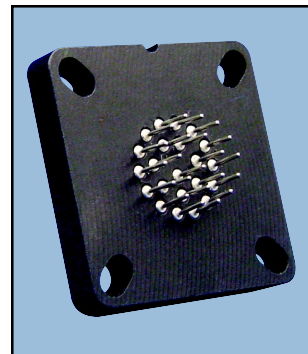
#### Mounting Applications

Shell modifications are recommended, but are not necessary. The header assembly can be attached to connectors with standard flange placement or directly to the circuit board. The ideal application would involve either a single flange moved all the way to the rear of the connector or a double flange. Cinch nuts can be installed in either flange to allow easier mounting to the panel or the header assembly. The forward flange would mount the connector to the panel; the rear flange would be used to mount the header assembly. Various types of captivated or loose attaching screws can be utilized for unique applications.

Amphenol universal headers are slotted to allow mounting to all series of MIL-DTL-38999 or MIL-C-26482 connectors without special alterations. They are of similar dimension as the flange of the mounting connector and would be approximately .185 inches (4.70 mm) thick.

#### Incorporates a Shorter Pin/Socket Contact

The heart of the header assembly is a short pin/socket contact. The tail of the contact would accommodate standard through-hole diameters and thickness of the flex or printed circuit board materials. The socket is imbedded in the molded material, making electrical engagement with the printed circuit tail of the connector.



**Headers provide easy separation of the connector from the PC board.**

#### Cylindrical Configuration

- 3 PCB stickout dimensions are available.
- Size 22D contacts use .175 thick headers
- Size 16 to 20 contacts use .195 thick headers
- Consult Amphenol, Sidney NY for additional configurations.
- Headers for cylindrical connectors accommodate up to 128 pins. Consult Amphenol catalogs for mating connector contact layouts (12-092 and 12-090 for MIL-DTL-38999 and 12-070 for MIL-C-26482)

#### Mounting to Rectangular ARINC Connectors

- Headers for ARINC connector arrangements accommodate up to 150 pins
- Consult Amphenol, Sidney, NY for ARINC configurations and detailed dimensions.

#### Materials

- Body is molded from Torlon or PPS (Polyphenylene Sulfide)
- Electrical engagement areas of the header contact are plated with .00003 inches minimum of gold over .00005 inches minimum of nickel.

See drawing on back of standard header.

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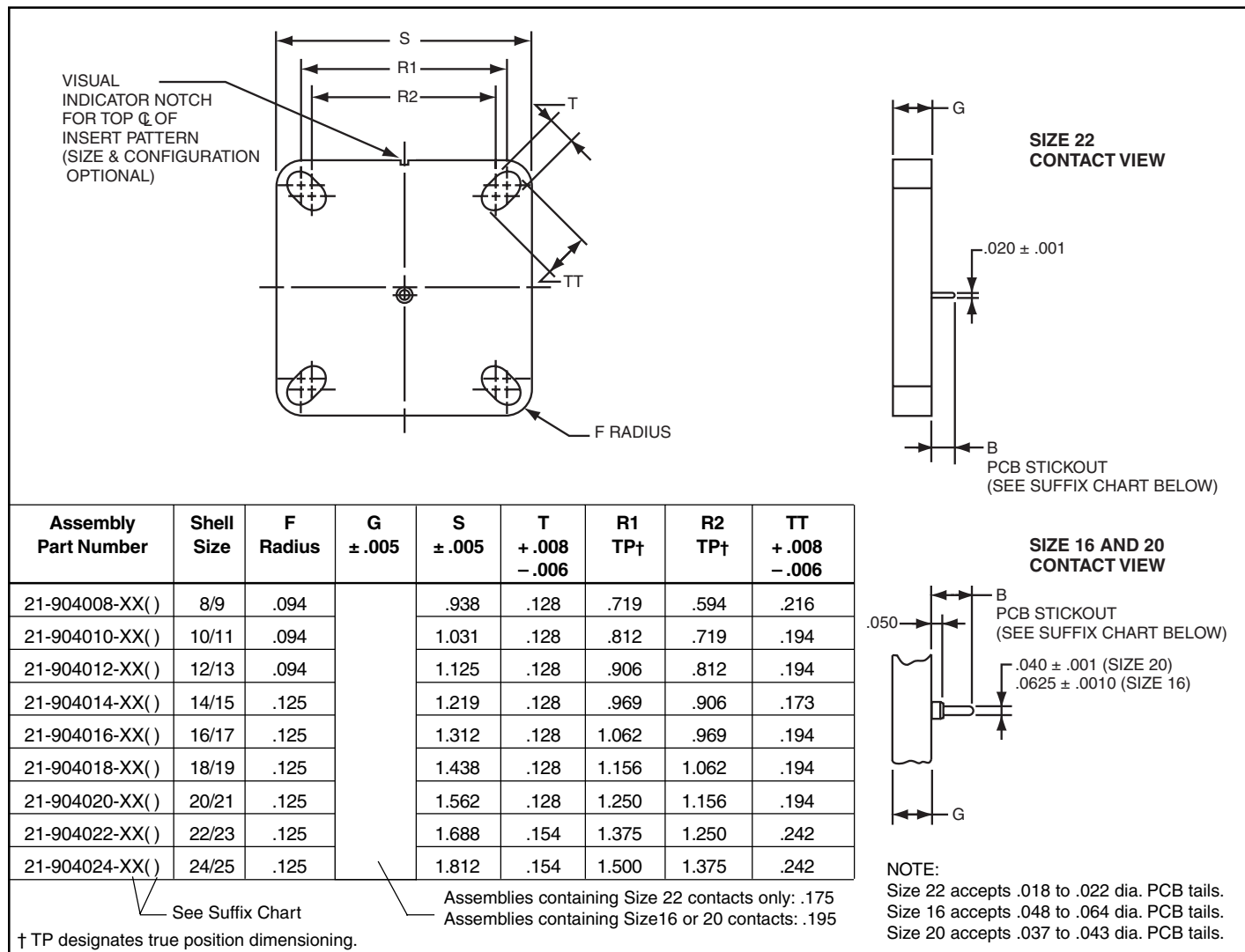
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Printed in U.S.A. 1/2004

The drawing below shows the standard universal adapter for use with MIL-DTL-38999 and MIL-C-26482 connectors. Consult Amphenol, Sidney NY for drawings of headers for ARINC configurations.



## HOW TO ORDER INFORMATION

### For Universal Adapter Used with MIL-DTL-38999 and MIL-C-26482 Connectors

Use coded number as follows:

Designates Amphenol® Interface Adapter: **21-9040**

Shell size designation for MIL-DTL-38999 Series I, II, III and IV or MIL-C-26482, Series 1 and 2. See Suffix chart. **XX**

Arrangement number - See MIL-STD-1560 or MIL-STD-1669. Also consult Amphenol catalogs 12-092 (MIL-DTL-38999 Series III), 12-090 (MIL-DTL-38999 Series I, II), and 12-070 (MIL-C-26482, Series 1, 2). **- XX**

Contact PCB Stickout designation See Suffix chart. **X**

## ASSEMBLY NUMBER SUFFIX CHART

Shell Size Designation*	Arrangement Number Suffix***	Contact PCB Stickout**	
		Suffix	B ± .015 Stickout
08	Insert Arrangement Suffix from MIL-STD-1560 or MIL-STD-1669	1	.120
10		2	.185
12		3	.270
14			
16			
18			
20			
22			
24			

\* Shell size designation for MIL-DTL-38999 Series I, II, III & IV and MIL-C-26482 Series 1 & 2:  
Examples: Shell size 9 use 08. Shell size 25 use 24.

\*\* Size 22 contacts available in all 3 stickout lengths.

\*\*\* Size 16 and 20 contacts available only in .185 and .270 lengths.

Consult Amphenol, Sidney NY for information.

For how to order information on adapters to be used with ARINC connectors, consult Amphenol, Sidney NY.