Amphenol Aerospace

TRACER - RAPID PROTOTYPING

FUNCTIONAL & CUSTOMIZABLE PROTOTYPES - *FAST*

PDS - 316



Introducing Amphenol's newest innovation – TRACER Rapid Prototyping

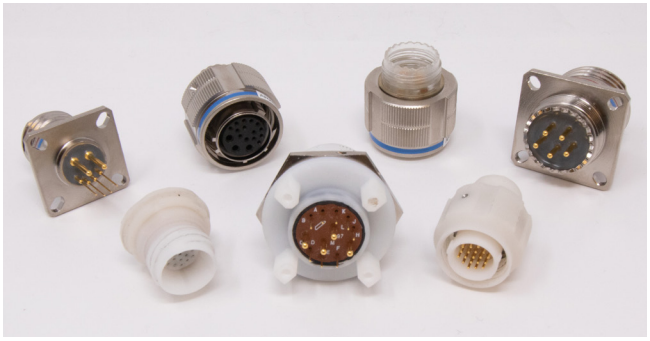
Achieve any pin-out you can imagine thanks to Amphenol's new revolutionary insulator technologies (patent pending). We can rapidly produce connectors in any standard or custom contact configuration and get you fully functional sample pieces within a few weeks. See page 3 for instructions on how to use the ***Tracer Pattern Design Tool***.

Additionally, the Tracer team may be able to provide prototypes of standard or derivative product if no official paperwork is required. Engineering services can also be purchased through the Tracer prototyping service, such as heat rise or vibration.

MIL-DTL-38999 • REVERSE-BAYONET GT • MIL-DTL-5015 • 2M Micro38999 • And more!

FOR NEW DESIGN PROTOTYPING:

- PC boards with cramped layouts that have difficulty routing traces out of traditionally concentric MIL-STD-1560 insert layouts
- Applications that need additional insulation between their power and signal wiring
- Customers who want to avoid using sealing plugs in unused cavities
- Customers who need a path to production that avoids long-lead times for initial prototypes



FEATURES AND BENEFITS:

For Board Designers:

- Flexible trace routing for board layer reduction
- Place your board through-holes anywhere for easy trace routing
- Mount board level components under circular connectors

For Everyone:

- Fully customizable pin-outs
- Samples available in **15 days or less***
- Can offer variable levels of sealing and environmental ingress protection
- Offers a bridge to full-rate production

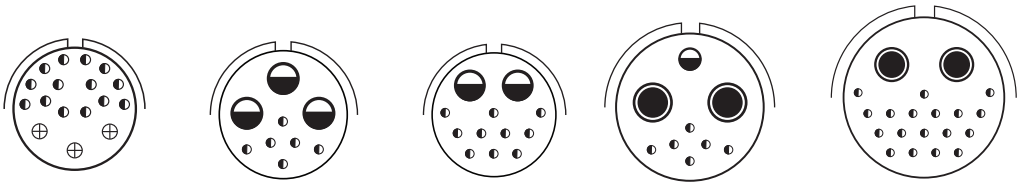
*Connector styles & classes limited if metal housings are required. Composite housings in any configuration also available at the cost of some environmental performance. Contact factory for details.

Contact • Office: +1 (607) 563-5532 • Email: tracer@amphenol-aao.com
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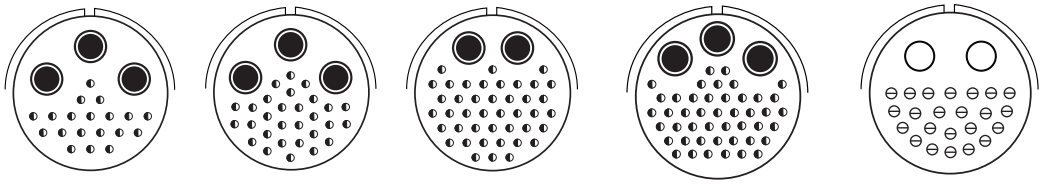
TRACER
Rapid Prototyping

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Tracer Power/Signal Arrangements-Direct Current (VDC) With and Without Ground



Shell Size & Insert Arrg. for:											
Series III TV	13-AX		15-AX		15-AZ		17-AZ			19-AX	
Service Rating	M		II		II		II			II	
Number of Contacts	3	14	3	6	2	10	2	1	6	2	18
Contact Size	16	22D	12	22D	12	22D	8	12	22D	8	22D



Shell Size & Insert Arrg. for:										
Series III TV	21-AZ		23-AZ		23-AX		25-AX		25-22	
Service Rating	II		II		II		II		M	
Number of Contacts	3	19	3	29	2	42	3	46	2	23
Contact Size	8	22D	8	22D	8	22D	8	22D	4	20

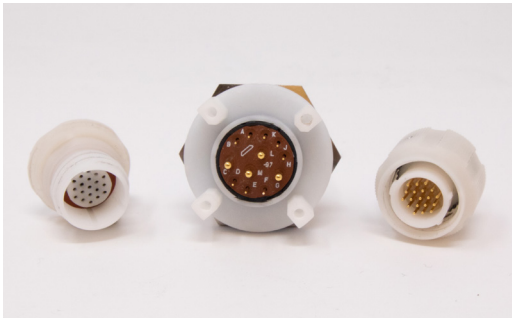


CONTACT LEGEND	4	8	10	12	16	20	22	22M	22D	23*

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TRACER PATTERN DESIGN TOOL

USER GUIDE



The ***Tracer Pattern Design Tool*** will allow users to access 3D models designed to provide visualization of geometries for inserts and contacts, as well as electrical spacing for contacts in our 38999 Series III connectors.

USERS WILL BE ABLE TO:

- Design Custom Insert Arrangements without the need for an engineer
- Combine these models with their own assemblies to check fit
- Determine connector spacing
- Locate mounting holes

Proof OF CONCEPT

TRACER Rapid Prototyping

Click or Scan for more information and Tracer Pattern Design Tool

DIRECTIONS:

1. Download ***Tracer Pattern Design Tool***
2. Open Zip Folder and Extract contents then save them in a marked folder on your Desktop.
3. Open parametric program.
4. Drag and drop .STP files into your parametric software.
5. Each component should be saved as a .PRT file.
   NOTE: There will be a few examples provided of full Insert Arrangements. These should be saved as .ASM files.
6. When the file opens, the 3D model will be visible. Save the file with the Part Number that it came with.
7. Use the extruded quadrant markers to create new datum planes for assembly and location purposes.
   NOTE: A .STP file erases all dimensions, datum planes, etc. and leaves it as a simple 3D model. The Inserts and Contacts have been designed with extruded quadrant markers to allow for the creation of new datum planes which help with assembly.
8. Place the contact cylinders on the face of the insert cylinders making sure that nothing overlaps.

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