

# **AP-93 PLATING - 1000 HOUR ALT-TO-CAD**

# Rohs Compliant Tri-Nickel Alloy, intermateable with Cad



Amphenol Aerospace introduces **AP-93** -- a new, durable REACH/RoHS compliant plating for aluminum connectors which outperforms Cadmium and exceeds 1000 hour salt spray requirements. **AP-93** is a conductive finish that meets or exceeds D38999 Cadmium requirements (under the commercial service class designator "DS") making it an excellent choice for harsh environments.

Military, commercial, and industrial markets continue to move away from Cadmium due to known toxic carcinogens. The new AP-93 plating finish complies with all customer requirements tied to these specifications. Amphenol is also using European Union Directive 2002/95/EC RoHS as a guide to qualification for all military, commercial, and industrial specifications requiring the reduction or elimination of these restricted materials.

**AP-93** is intermateable with Cadmium, making it a drop-in replacement for applications where Cadmium has been a preferred choice. Applications include numerous components of land, sea, air, and weapons systems, as well as space systems, as it provides superior barrier protection and excellent lubricity for threaded applications.

**AP-93** exceeds Olive-Drab Cadmium plating (Class W) by meeting 1000 hours of dynamic salt spray, 500 mating cycles, and meets the millivolt drop shell-to-shell conductivity of nickel (Class F). **AP-93** also meets a 200° C temperature rating, is compatible with other platings, and is available on all D38999-style Series III connectors. For specific applications please contact Amphenol Aerospace.

#### **FEATURES & BENEFITS**

- Available on all D38999 Series III style connectors
- Meets 1000 hour salt spray requirement
- REACH/RoHS compliant
- Intermateable with Cadmium -- excellent drop-in replacement for existing connectors.
- 500 mating cycles per D38999
- Meets 200° C temperature rating
- Meets D38999 shell-to-shell conductivity requirements

Requirements	Nickel	CAD	AP-93
336 Hours SO2 Exposure			*
500 Hours Salt Spray		*	*
1000 Hours Salt Spray			*
REACH/RoHS Compliant	*		*
CAD Intermateable		*	*
Non-Magnetic	*	*	*
Temperature Rating 200° C	*		*
Shell-to-Shell Conductivity < 2.5 millivolt	*	*	*

## AP-93 Plating How to Order: 38999 Series III Style

1.	2.	3.	4.	5.	6.	7.	8.
Connector Type	Shell Style	Service Class	Shell Size - Insert Arrangement	Contact Type	Alternate Position	PCB Length (Optional)	Modifications
TVS or PTVS (Potted Version)	07	DS	15-35	Р	А	(P25)	(Optional) *Contact Factory

1. Connector Type 38999 Series III		
TVS	Tri-Start, 200°C	
TVPS	Panel Mounted, 200°C	

\*Add P prefix for potted ex: PTV

2. She	II Style			
00	Wall Mount Receptacle			
02	Box Mount Receptacle			
07	Jam Nut Receptacle			
01	Line Receptacle			
06	Straight Plug			
96	Straight Plug with Integral Backshell			
Shell Style Double Flange				
40	Wall Mount Double Flange			
47	Jam Nut Double Flange			
Shell S	Shell Style Reduced Flange			
97	Reduced Flange Jam Nut			
98	Reduced Flange Jam Nut with Standoff			
Shell Style Clinch Nuts				
10	Wall Mount (Clinch Nuts)			
12	Box Mount (Clinch Nuts)			

3. Service Class			
DS	AP-93 Tri-Nickel Alloy, Aluminum, 1000 Hr., 200°C, -65dB@10GHz. RoHS®		

#### 4. Shell Size -Insert Arrangement

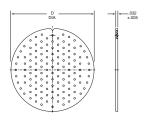
Shell Size & Insert Arrangements are on pages 75-83 of 38999+ Catalog. First number represents Shell Size, second number is the Insert Arrangement.

5. Contact Type		
Р	Pin Contacts	
S	Socket Contacts	
н	1500 Cycle Pin Contacts	
J	1500 Cycle Socket Contacts	

#### 6. Alternate Position

A, B, C, D, E omit for normal rotation parts. See page 84 of 38999+ Catalog for complete information

### **Alignment Disc Data**



Shell Size	D Dia. ±.010
9	.234
11	.350
13	.500
15	.725
17	.750
19	.850
21	.953
23	1.147
25	1.250

7. PCB CONTACT			
Contact Type	PCB Stickout ± .040		
(P15)	.150" w/ pins		
(P25)	.250" w/ pins		
(P35)	.350" w/ pins		
(S15)	.150" w/ sockets		
(S25)	.250" w/ sockets		
(S35)	.350" w/ sockets		
With Alignment Disk			
(P15AD)	.150" w/ pins		
(P25AD)	.250" w/ pins		
(P35AD)	.350" w/ pins		
(S15AD)	.150" w/ sockets		
(S25AD)	.250" w/ sockets		
(S35AD)	.350" w/ sockets		
Pre-Tin Options			
Add "T" to end of suffix for			

Pre-tinned PC tails Ex: (P15T), (S25ADT)

#### Note:

Stick out is measured from the end of the connector shell to end of the contact

#### 8. Modifications

(Optional) \*Contact Factory for details

### **X-ON Electronics**

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Circular MIL Spec Connector category:

Click to view products by Amphenol manufacturer:

Other Similar products are found below:

0025-262-542 0025-264-3014 58-570121-04S 0134-202-1200 0134-207-1206 0134-207-1800 0134-207-2207 0134-213-0806 0134-213-1007 0134-213-1009 0134-213-1208 0134-213-1800 0134-213-2209 0025-258-000 015-9516-002 60-042217-10P 60-042722-19P 0114-201-1278 602GB06EG24-61SN 0134-201-1207 0134-201-1806 0134-201-2006 0134-201-2007 0134-201-2010 0134-202-1400 0134-207-0809 0134-207-1208 0134-207-2009 0134-213-1006 6104-207-2302 6104-208-1902 6131-202-19149P 6131-204-21149P 6131-207-13149P 6131-208-13149P 6131-209-17149P 6131-210-11149P 6131-211-19149P 6131-216-19149P 6131-220-25149P 6131-259-11149P 6131-259-23149P 6131-263-19149P 6131-265-17149P 6131-265-19149P 6134-203-21149 CS3102A-20-15P CS3102A-20-15S CS3102A-28-15S