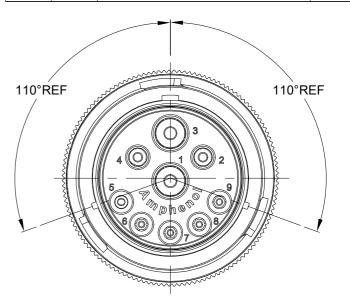
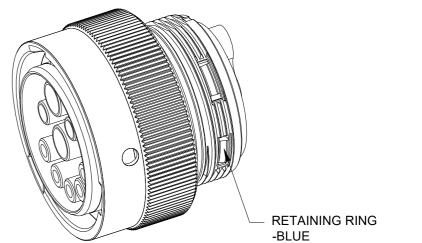


**REVISIONS** REV ECO DESCRIPTION DATE APPR RELEASE NEW DRAWING A1 27/JAN/21 IAN TOMMY A2 UPDATE NOTES 12/JUL/21 IAN TOMMY

TITLE 09POS, PLUG, SOCKET, 24SZ, RD SEAL, DURAMATE AHDM

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## NOTES: UNLESS OTHERWISE SPECIFIED

1. MATERIAL:

SHELL: ZINC ALLOY, NICKEL PLATED COUPLING RING: ALUMINUM ALLOY, NICKEL PLATED INSERT AND RETAINING RING: THERMOPLASTIC SEAL: SILICONE RUBBER

2. MODIFICATIONS: THREADED HOUSING;

REDUCED DIA. WIRE SEAL FOR SIZE 12 & SIZE 16;

- 3. SPECIFICATIONS:
  - 3.1 OPERATING TEMPERATURE: -55°C TO +125°C.
  - 3.2 DIELECTRIC WITHSTANDING VOLTAGE: LESS THAN 2 MILLIAMPS CURRENT LEAKAGE @ 1500 VOLTS AC.
  - 3.3 INSULATION RESISTANCE: 1000 MEGOHM MIN @ 25°C.
  - 3.4 MOISTURE RESISTANCE: IP67&IP69K (MATED CONDITION).
  - 3.5 MATING CYCLE DURABILITY: 100 CYCLES.
  - 3.6 RoHS COMPLIANT.
- 4. MATING PART: AHDM04-24-91P\* & AHDM07-24-91P\* RECEPTACLES (\* = SEAL TYPE)

- 5. CONTACTS 4 AND 5 ARE INTERNALLY CONNECTED. (BUILT - IN BRIDGE)
- 6. CAVITY 5 IS WITH CONTACT SIZE 16 AND THE GROMMENT IS SEAL
- 7. ALL DIMENSIONS ARE FOR REFERENCE USE ONLY.
- /8\ CONTACT SIZE AND WIRE RANGE:

CONTACT	MIN. INSUL	MAX. INSUL	TYPICAL WIRE	CURRENT
SIZE	O.D.	O.D.	RANGE	RATING
8	3.43mm	5.59mm	8-10AWG	60AMPS
0	(.135in)	(.220in)	(10.0-5.0mm <sup>2</sup> )	OUAIVIPS
12	2.46mm	4.01mm	10-14AWG	25AMPS
12	(.097in)	(.158in)	(6.0-2.0mm <sup>2</sup> )	ZOAIVIPO
16	1.35mm	3.05mm	14-20AWG	12 A M D C
16	(.053in)	(.120in)	(2.0-0.5mm <sup>2</sup> )	13AMPS

9. MEET THE DIMENSION OF IMPLEMENT BUS BREAKAWAY CONNECTOR OF ISO 11783-2.

	AHDM0	6-24-91S	SR					
QUANTITY	PART N	NUMBER	2	DESCRIPT				ITEM -
	MATERIALS LIST							
	WISE SPECIFIED	SIGN	IATURES	DATE				
1) All dimensions are in metric(mm). 2) Tolerances are as follows:  1 PL DEC ±0.30   Fractions ±1/64		DRAWN:	IAN	17/JAN/22	Amphenol			
2 PL DEC ±0.15 3 PL DEC ±0.08	Fractions ±1/64 Angles ±1°	CHECKED:	SULLEN	17/JAN/22	Sine Systems - www.amphenol-sine.com		nol-sine.com	
3) Note reference = X		ENGINEER:			44724 Morley Drive Clinton Township, MI 48036			
MATERIAL SPECIFICA	TIONS:	APPROVAL:	TOMMY	18/JAN/22	2 Cilitori Township, ivii 40000			
		CUSTOMER:			09POS,PLUG,SOCKET,24SZ,			
			G IS SUPPLIED F		RD SEAL, DURAMATE AHDM			
PROCESS SPECIFICATIONS:		SPECIFICATIO SHOWN HERE THE AMPHENI OF REPRODU	ONLY. DESIGN ONS AND PERFO ON ARE THE PR OL CORPORATIO CTION ARE IMPL ARE SUBJECT TO	RMANCE DATA ROPERTY OF ON. NO RIGHTS LIED. ALL	ATA SIZE TYPE DWG NO:  AHDM06-24-91SR		A2	
NEXT ASS'Y:			RING VARIATION			SHEET 1 OF	1	

## A Series™ - Contact Size 8 Options (Works with: ATHD and DuraMate Series)

Machined Contacts, Pins and Sockets						
Part Number	Description	Size	AWG	Туре	Amps	
AT60-204-08141	Male Contact - Pin, Copper Alloy, Nickel-Plated	8	8-10	Machined	60A	
AT62-203-08141	Female Contact - Socket, Copper Alloy, Nickel-Plated	8	8-10	Machined	60A	
AT60-204-08141-16	Male Contact - Pin, Copper Alloy, Nickel-Plated	8	6	Machined	60A	
AT62-203-08141-16	Female Contact - Socket, Copper Alloy, Nickel-Plated	8	6	Machined	60A	

Tooling - Machined Contacts						
Part Number	Description					
WA23	Heavy Duty Pneumatic Crimp Tool -Uses Universal Positioner Part No. WA23-101DA and Crimp Locator MFX-3961					
WA23-2	Die Assembly -for CA-5E12 Heavy Duty Pneumatic Crimp Tool, Size 8					
WA23-3	Die Assembly -for CA-5E12 Heavy Duty Pneumatic Crimp Tool, Size 6					
WA23-10	Contact Locator, Size 6 and Size 8					
96-978-22	Crimper and Dies -for Size 10mm <sup>2</sup> -185mm <sup>2</sup> Wires					
AT114008	Contact Removal Tool, Plastic, Size 8, 8-10AWG					

## **A Series™** - Contact Size 12 Options (Works with: AHD-6, ATP, ATHD, DuraMate and PanelMate Series)

Machined Contacts, Sockets & Pins						
Part Number	Description	Size	AWG	Туре		
*AT60-204-12141-10	Male Contact - Pin, Nickel-plated	12	10-12	Machined		
*AT62-203-12141-10	Female Contact - Socket, Nickel-plated	12	10-12	Machined		
AT60-220-1231	Male Contact - Pin, Gold-plated	12	12-14	Machined		
AT62-210-1231	Female Contact - Socket, Gold-plated	12	12-14	Machined		
AT60-204-12141	Male Contact - Pin, Nickel-plated	12	12-14	Machined		
AT62-203-12141	Female Contact - Socket, Nickel-plated	12	12-14	Machined		

<sup>\*</sup>Works with ATP Series only

	DiagnosticGrade™ Machined Contacts, Sockets & Pins • Smaller AWG for Diagnostic Applications • Gold-plated • Increased Mating Cycles • Cost-effective							
	Part Number	Description	Size	AWG	Туре			
Γ	65-54749	Male Contact - DiagnosticGrade™, Pin, Gold-plated	12	20	Machined			
	AT62-210-1231-1820	Female Contact - DiagnosticGrade™, Socket, Gold-plated	12	20	Machined			

	Tooling - Machined Contacts							
Part Number	Description							
AUTK-12 Hand Crimp Tool, Size 12								
AUTK-100 Universal Heavy Duty Contact Crimping Tool Kit, Size 12/16/20								
CA-5D12	Universal Hand Crimp Tool, Size 12/16/20							
CA-5E12	Pneumatic Crimp Tool, Size 12/16/20							
M300-25A Hand Crimp Tool used with Crimp Locator MFX-3966, Size 12, 10AWG								
MFX-3966	Contact Locator used with Hand Crimp Tool M300-25A, Size 12, 10AWG							

Contact Removal Tools (For both Machined or Stamped & Formed Contacts)							
Part Number Description							
ATRT-100	Contact and Wedgelock Extraction Tool						
AT11-337-1205	Contact Removal Tool, Plastic, Size 12						

Sealing Plugs (For both Machined or Stamped & Formed Contacts)						
Part Number Description						
A114017	Sealing Plug, Size 12, White					

Stamped & Formed Contacts, Sockets & Pins							
Part Number	Description	Size	AWG	Туре			
AT60-12-0244	Male Contact - Pin, Gold-plated	12	10-12	Stamped & Formed			
AT62-12-0244	Female Contact - Socket, Gold-plated	12	10-12	Stamped & Formed			
AT60-12-0222	Male Contact - Pin, Nickel-plated	12	10-12	Stamped & Formed			
AT62-12-0222	Female Contact - Socket, Nickel-plated	12	10-12	Stamped & Formed			
AT60-12-0144	Male Contact - Pin, Gold-plated	12	12-14	Stamped & Formed			
AT62-12-0144	Female Contact - Socket, Gold-plated	12	12-14	Stamped & Formed			
AT60-12-0166	Male Contact - Pin, Nickel-plated	12	12-14	Stamped & Formed			
AT62-12-0166	Female Contact - Socket, Nickel-plated	12	12-14	Stamped & Formed			

Tooling - Stamped & Formed Contacts						
Part Number	Description					
MFX-3973	Crimp Die - Size 12					
MFX-3985	Crimp Die - Svize 12, 10-12AWG -02XX Series					
ATT-12-00	Hand Crimp Tool - Size 12, 12AWG					
ATT-12-01	Hand Crimp Tool - Size 12, 10AWG					

## A Series™ - Contact Size 16 Options (Works with: AT, ATV, AHD-9, ARC, DuraMate and PanelMate Series)

Machined Contacts, Sockets & Pins							
Part Number	Description	Size	AWG	Туре			
AT60-215-1631	Male Contact - Pin, Gold-plated	16	14	Machined			
AT62-209-1631	Female Contact - Socket, Gold-plated	16	14	Machined			
AT60-215-16141	Male Contact - Pin, Nickel-plated	16	14	Machined			
AT62-209-16141	Female Contact - Socket, Nickel-plated	16	14	Machined			
AT60-202-1631	Male Contact - Pin, Gold-plated	16	16-20	Machined			
AT62-201-1631	Female Contact - Socket, Gold-plated	16	16-20	Machined			
AT60-202-16141	Male Contact - Pin, Nickel-plated	16	16-20	Machined			
AT62-201-16141	Female Contact - Socket, Nickel-plated	16	16-20	Machined			
AT60-202-1631-22	Male Contact - Pin, Gold-plated	16	22-24	Machined			
AT62-201-1631-22	Female Contact - Socket, Gold-plated	16	22-24	Machined			
AT60-202-16141-22	Male Contact - Pin, Nickel-plated	16	22-24	Machined			
AT62-201-16141-22	Female Contact - Socket, Nickel-plated	16	22-24	Machined			

Tooling - Machined Contacts		
Part Number	Description	
AUTK-16	Hand Crimp Tool, Size 16	
AUTK-100	Universal Heavy Duty Contact Crimping Tool Kit, Size 12/16/20	
CA-5D12	Universal Hand Crimp Tool, Size 12/16/20	
CA-5E12	Pneumatic Crimp Tool, Size 12/16/20	

Contact Removal Tools (For both Machined or Stamped & Formed Contacts)				
Part Number	Description			
ATRT-100	Contact and Wedgelock Extraction Tool			
AT11-310-1605	Contact Removal Tool, Plastic, Size 16			

Sealing Plugs (For both Machined or Stamped & Formed Contacts)				
Part Number	Description			
A114017	Sealing Plug, Size 16, White			
A114017-SR	Sealing Plug, Size 16, SR01 Series, Black			
AT13-217-1605	Locking Sealing Plug, Size 16, Grey			
AT13-217-1605-SR	Locking Sealing Plug, Size 16, SR01 Series, Red			

Stamped & Formed Contacts, Sockets & Pins						
Description	Size	AWG	Туре			
Male Contact - Pin, Nickel-plated	16	14-18	Stamped & Formed			
Female Contact - Socket, Nickel-plated	16	14-18	Stamped & Formed			
Male Contact - Pin, Gold-plated	16	14-18	Stamped & Formed			
Female Contact - Socket, Gold-plated	16	14-18	Stamped & Formed			
Male Contact - Pin, Nickel-plated	16	16-18	Stamped & Formed			
Female Contact - Socket, Nickel-plated	16	16-18	Stamped & Formed			
Male Contact - Pin, Gold-plated	16	16-18	Stamped & Formed			
Female Contact - Socket, Gold-plated	16	16-18	Stamped & Formed			
Male Contact - Pin, Nickel-plated	16	16-20	Stamped & Formed			
Female Contact - Socket, Nickel-plated	16	16-20	Stamped & Formed			
Male Contact - Pin, Gold-plated	16	16-20	Stamped & Formed			
Female Contact - Socket, Gold-plated	16	16-20	Stamped & Formed			
Male Contact - Pin, Tin-plated	16	16-20	Stamped & Formed			
Female Contact - Socket, Tin-plated	16	16-20	Stamped & Formed			
Male Contact - Pin, Nickel-plated	16	20-22	Stamped & Formed			
Female Contact - Socket, Nickel-plated	16	20-22	Stamped & Formed			
Male Contact - Pin, Gold-plated	16	20-22	Stamped & Formed			
Female Contact - Socket, Gold-plated	16	20-22	Stamped & Formed			
	Description  Male Contact - Pin, Nickel-plated Female Contact - Socket, Nickel-plated Male Contact - Pin, Gold-plated Female Contact - Socket, Gold-plated Male Contact - Pin, Nickel-plated Male Contact - Pin, Nickel-plated Male Contact - Socket, Nickel-plated Male Contact - Socket, Nickel-plated Male Contact - Socket, Gold-plated Female Contact - Socket, Gold-plated Male Contact - Pin, Nickel-plated Female Contact - Socket, Nickel-plated Male Contact - Pin, Gold-plated Female Contact - Socket, Gold-plated Male Contact - Pin, Tin-plated Female Contact - Pin, Tin-plated Male Contact - Pin, Nickel-plated Male Contact - Pin, Gold-plated	DescriptionSizeMale Contact - Pin, Nickel-plated16Female Contact - Socket, Nickel-plated16Male Contact - Pin, Gold-plated16Female Contact - Socket, Gold-plated16Male Contact - Pin, Nickel-plated16Female Contact - Pin, Nickel-plated16Male Contact - Pin, Gold-plated16Female Contact - Pin, Gold-plated16Male Contact - Pin, Mickel-plated16Female Contact - Socket, Gold-plated16Female Contact - Pin, Nickel-plated16Male Contact - Pin, Gold-plated16Female Contact - Socket, Gold-plated16Male Contact - Pin, Tin-plated16Female Contact - Pin, Tin-plated16Male Contact - Pin, Nickel-plated16Male Contact - Pin, Nickel-plated16Female Contact - Socket, Nickel-plated16Male Contact - Pin, Nickel-plated16Male Contact - Pin, Nickel-plated16Male Contact - Pin, Gold-plated16	DescriptionSizeAWGMale Contact - Pin, Nickel-plated1614-18Female Contact - Socket, Nickel-plated1614-18Male Contact - Pin, Gold-plated1614-18Female Contact - Socket, Gold-plated1614-18Male Contact - Pin, Nickel-plated1616-18Female Contact - Socket, Nickel-plated1616-18Male Contact - Pin, Gold-plated1616-18Female Contact - Socket, Gold-plated1616-18Male Contact - Pin, Nickel-plated1616-20Female Contact - Socket, Nickel-plated1616-20Male Contact - Pin, Gold-plated1616-20Female Contact - Socket, Gold-plated1616-20Male Contact - Pin, Tin-plated1616-20Female Contact - Pin, Tin-plated1616-20Male Contact - Pin, Nickel-plated1616-20Male Contact - Socket, Tin-plated1616-20Male Contact - Pin, Nickel-plated1620-22Female Contact - Socket, Nickel-plated1620-22Male Contact - Pin, Gold-plated1620-22			

Tooling - Stamped & Formed Contacts		
MFX-3950	Crimp Die - Size 16, 18-20AWG	
MFX-3953	Crimp Die - Size 16, 16-18AWG	
MFX-3975	Crimp Die - Size 16, 14-16AWG	
MFX-3990	Crimp Die - Size 16, 20-22AWG	
ATT-16-00	Hand Crimp Tool - Size 16, 14-16AWG	
ATT-16-01	Hand Crimp Tool - Size 16, 18-20AWG	
ATT-1612-03	Hand Crimp Tool - Size 16, 20-22AWG	