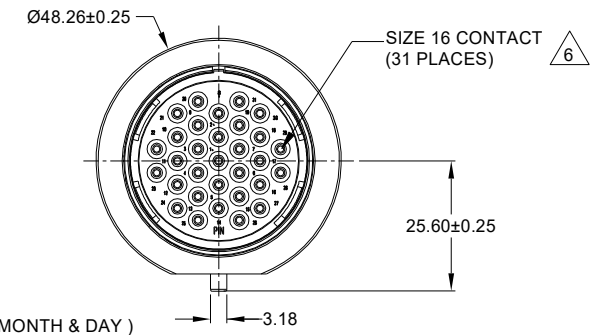
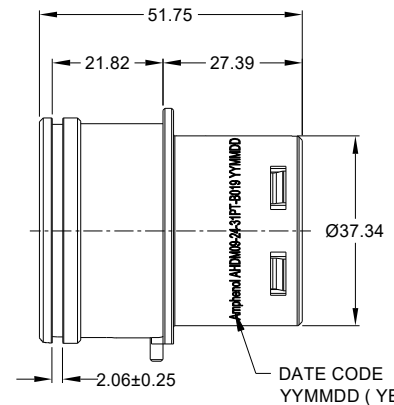
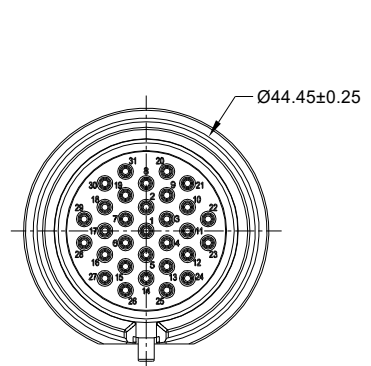


REVISIONS					
REV	ECO	DESCRIPTION	DATE	BY	APPR
A1	-	RELEASE NEW DRAWING	06/AUG/24	LYNCH	TOMMY



NOTES: UNLESS OTHERWISE SPECIFIED

- MATERIAL:  
SHELL: ALUMINUM ALLOY, ANODIZE  
INSERT AND RETAINING RING: THERMOPLASTIC  
SEAL: SILICONE RUBBER
- MODIFICATIONS: THIN WALL DIA. WIRE SEAL
- 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:  
IP68 (IM OF WATER FOR A PERIOD OF 24 HOURS, MATED CONDITION);  
IP69K (MATED CONDITION)  
3.5 MATING CYCLE DURABILITY: 100 CYCLES  
3.6 RoHS COMPLIANT
- MATING PART: AHDM08-24-31S\*-B019 PLUG (\*= SEAL TYPE).
- ALL DIMENSIONS ARE FOR REFERENCE USE ONLY.

6 CONTACT SIZE AND WIRE RANGE:

CONTACT SIZE	MIN. INSUL O.D.	MAX. INSUL O.D.	TYPICAL WIRE RANGE	CURRENT RATING
16	2.23 mm (.088 in)	2.69 mm (.106 in)	14-20 AWG	13 AMPS

7 OPTIONAL FEATURE.

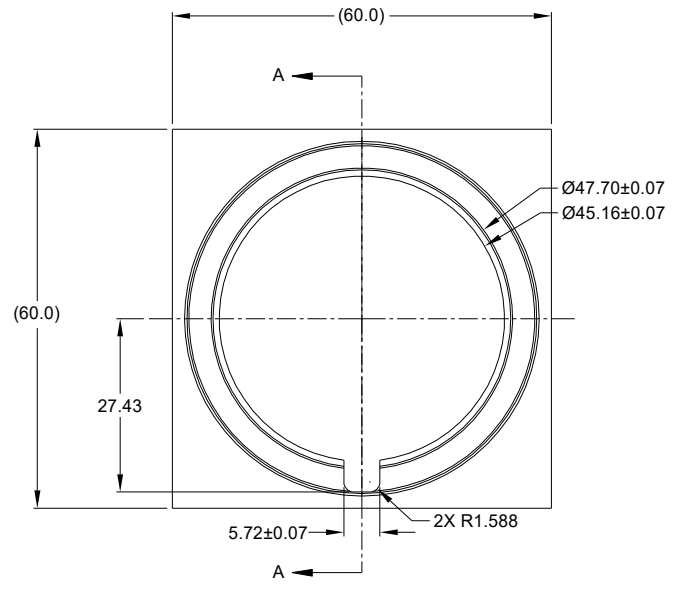
- REFER TO SHEET 2 OF THIS DRAWING FOR CUSTOM MOUNTING APPLICATION.
- 1.28MM REF NOMINAL CONNECTOR FLOAT BETWEEN SNAP RING AND SIDE OF MOUNTING.



AHDM09-24-31PT-B019		HD34-24-31PT-B019	
QUANTITY	PART NUMBER	DESCRIPTION	ITEM
<b>MATERIALS LIST</b>			
<b>UNLESS OTHERWISE SPECIFIED</b> 1) All dimensions are in metric (mm). 2) Tolerances are as follows: 1 PL DEC 30.30 2 PL DEC 30.15 3 PL DEC 30.08 Fractions ±1/64 Angles ±1° 3) Note reference =		<b>SIGNATURES</b> <b>DATE</b> DRAWN: LYNCH, PAN    27/DEC/23 CHECKED: SULEN, ZHANG    28/DEC/23 ENGINEER: APPROVAL: TOMMY, XIE    29/DEC/23 CUSTOMER:	
MATERIAL SPECIFICATIONS:		<b>Amphenol</b> Sine Systems - www.amphenol-sine.com 44724 Morley Drive Clinton Township, MI 48036	
PROCESS SPECIFICATIONS:		THIS DRAWING IS SUPPLIED FOR INFORMATION ONLY. DESIGN FEATURES, SPECIFICATIONS AND PERFORMANCE DATA SHOWN HEREON ARE THE PROPERTY OF THE AMPHENOL CORPORATION. NO RIGHTS OF REPRODUCTION ARE IMPLIED. ALL DIMENSIONS ARE SUBJECT TO NORMAL MANUFACTURING VARIATIONS.	
NEXT ASSY:		31 POS, RECEPTACLE, PIN, THIN SEAL, 24 SZ, DURAMATE AHDM SERIES DWG NO: <b>AHDM09-24-31PT-B019</b> SCALE: NONE	REVISION <b>A1</b> SHEET 1 OF 2

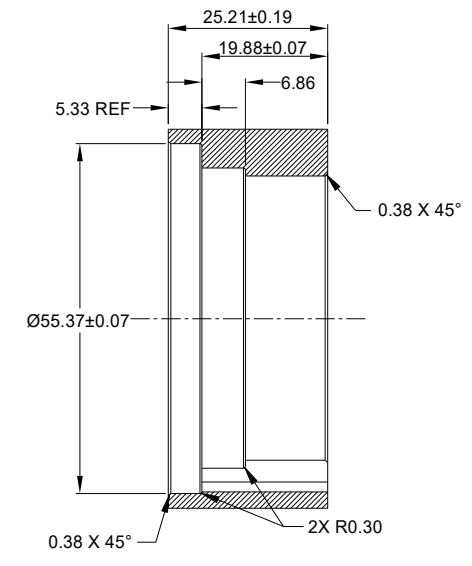
TITLE: 31 POS, RECEPTACLE, PIN, THIN SEAL, 24 SZ, DURAMATE AHDM SERIES  
 DWG NO: AHDM09-24-31PT-B019  
 REV: A1  
 SH: 1  
 OF: 2

REVISIONS					
REV	ECO	DESCRIPTION	DATE	BY	APPR
A1	-	RELEASE NEW DRAWING	08/AUG/24	LYNCH	TOMMY



MOUNTING DETAIL FOR RECEPTACLE

ALL DIMENSIONS ARE ±0.13  
UNLESS OTHERWISE SPECIFIED



SECTION A-A

TITLE: 31 POS.RECEPTACLE,PIN,THIN SEAL,24 DURAMATE AHDM SERIES  
DWG NO.: AHDM09-24-31PT-B019  
REV: A1  
SH: 2  
OF: 2

QUANTITY	PART NUMBER	DESCRIPTION	ITEM
<b>MATERIALS LIST</b>			
<b>UNLESS OTHERWISE SPECIFIED</b> 1) All dimensions are in metric(mm). 2) Tolerances are as follows: 1 PL DEC ±0.30 2 PL DEC ±0.15 3 PL DEC ±0.08 Fractions ±1/64 Angles ±1° 3) Note reference =		<b>SIGNATURES</b> DRAWN: LYNCHPAN 06/AUG/24 CHECKED: SULENZHANG 07/AUG/24 ENGINEER: APPROVAL: TOMMY.XIE 08/AUG/24	<b>DATE</b> 06/AUG/24 07/AUG/24 08/AUG/24
<b>MATERIAL SPECIFICATIONS:</b> WEIGHT:62.7g		<b>Amphenol</b> Sine Systems - www.amphenol-sine.com 44724 Morley Drive Clinton Township, MI 48036	
<b>PROCESS SPECIFICATIONS:</b> THIS DRAWING IS SUPPLIED FOR INFORMATION ONLY. DESIGN FEATURES, SPECIFICATIONS AND PERFORMANCE DATA SHOWN HEREON ARE THE PROPERTY OF THE AMPHENOL CORPORATION. NO RIGHTS OF REPRODUCTION ARE IMPLIED. ALL DIMENSIONS ARE SUBJECT TO NORMAL MANUFACTURING VARIATIONS.		31 POS,RECEPTACLE,PIN,THIN SEAL,24 SZ, DURAMATE AHDM SERIES SIZE: B C- TYPE: AHDM09-24-31PT-B019 DWG NO.: REVISION: A1	
NEXT ASSY:		SCALE: NONE	SHEET 2 OF 2

# AT, ATV, AHD, ARB, ARC, DuraMate™ and PanelMate™ Series

## Size 16 Contact & Tooling Options

### Contacts - Machined

Part Number	Type	Style	Contact Size	Amp	Wire Range (AWG)	Wire Range (mm <sup>2</sup> )	Insulation OD (mm)	Plating	Reel Size	Packaging
AT60-215-16141	Pin	Machined	Size 16	13A	14AWG	-	-	Nickel-Plated	-	-
AT60-215-1631	Pin	Machined	Size 16	13A	14AWG	-	-	Gold-Plated	-	-
AT60-202-16NKIT	Pin	Machined	Size 16	13A	16-20AWG	-	-	Nickel-Plated	-	-
AT60-202-16141	Pin	Machined	Size 16	13A	16-20AWG	-	-	Nickel-Plated	-	-
AT60-202-1631	Pin	Machined	Size 16	13A	16-20AWG	-	-	Gold-Plated	-	-
AT60-202-16141-22	Pin	Machined	Size 16	13A	22-24AWG	-	-	Nickel-Plated	-	-
AT60-202-1631-22	Pin	Machined	Size 16	13A	22-24AWG	-	-	Gold-Plated	-	-
AT62-209-16141	Socket	Machined	Size 16	13A	14AWG	-	-	Nickel-Plated	-	-
AT62-209-1631	Socket	Machined	Size 16	13A	14AWG	-	-	Gold-Plated	-	-
AT62-201-16NKIT	Socket	Machined	Size 16	13A	16-20AWG	-	-	Nickel-Plated	-	-
AT62-201-16141	Socket	Machined	Size 16	13A	16-20AWG	-	-	Nickel-Plated	-	-
AT62-201-1631	Socket	Machined	Size 16	13A	16-20AWG	-	-	Gold-Plated	-	-
AT62-201-16141-22	Socket	Machined	Size 16	13A	22-24AWG	-	-	Nickel-Plated	-	-
AT62-201-1631-22	Socket	Machined	Size 16	13A	22-24AWG	-	-	Gold-Plated	-	-

### Contacts - Stamped & Formed

AT60-14-0122	Pin	S&F	Size 16	13A	14-18AWG	2.0-0.75mm <sup>2</sup>	2.40 - 3.81mm	Nickel-Plated	-	-
AT60-14-0122-LP	Pin	S&F	Size 16	13A	14-18AWG	2.0-0.75mm <sup>2</sup>	2.40 - 3.81mm	Nickel-Plated	-	Loose Piece
AT60-14-0144	Pin	S&F	Size 16	13A	14-18AWG	2.0-0.75mm <sup>2</sup>	2.40 - 3.81mm	Gold-Plated	-	-
AT60-14-0144-LP	Pin	S&F	Size 16	13A	14-18AWG	2.0-0.75mm <sup>2</sup>	2.40 - 3.81mm	Gold-Plated	-	Loose Piece
AT60-16-0122	Pin	S&F	Size 16	13A	16-18AWG	1.5-0.75mm <sup>2</sup>	1.91 - 3.55mm	Nickel-Plated	-	-
AT60-16-0122-LP	Pin	S&F	Size 16	13A	16-18AWG	1.5-0.75mm <sup>2</sup>	1.91 - 3.55mm	Nickel-Plated	-	Loose Piece
AT60-16-0144	Pin	S&F	Size 16	13A	16-18AWG	1.5-0.75mm <sup>2</sup>	1.91 - 3.55mm	Gold-Plated	-	-
AT60-16-0144-LP	Pin	S&F	Size 16	13A	16-18AWG	1.5-0.75mm <sup>2</sup>	1.91 - 3.55mm	Gold-Plated	-	Loose Piece
AT60-16-0622	Pin	S&F	Size 16	13A	16-20AWG	1.0-0.5mm <sup>2</sup>	1.40 - 2.54mm	Nickel-Plated	-	-
AT60-16-0622-LP	Pin	S&F	Size 16	13A	16-20AWG	1.0-0.5mm <sup>2</sup>	1.40 - 2.54mm	Nickel-Plated	-	Loose Piece
AT60-16-0644	Pin	S&F	Size 16	13A	16-20AWG	1.0-0.5mm <sup>2</sup>	1.40 - 2.54mm	Gold-Plated	-	-
AT60-16-0644-LP	Pin	S&F	Size 16	13A	16-20AWG	1.0-0.5mm <sup>2</sup>	1.40 - 2.54mm	Gold-Plated	-	Loose Piece
AT60-16-0322	Pin	S&F	Size 16	13A	20-22AWG	0.5-0.35mm <sup>2</sup>	1.31 - 1.50mm	Nickel-Plated	-	-
AT60-16-0344	Pin	S&F	Size 16	13A	20-22AWG	0.5-0.35mm <sup>2</sup>	1.31 - 1.50mm	Gold-Plated	-	-
AT60-16-0377	Pin	S&F	Size 16	13A	20-22AWG	0.5-0.35mm <sup>2</sup>	1.31 - 1.50mm	Tin-Plated	-	-
AT60-16-0822	Pin	S&F	Size 16	13A	20-22AWG	0.5-0.35mm <sup>2</sup>	1.31 - 1.50mm	Nickel-Plated	4,000	-
AT60-16-0844	Pin	S&F	Size 16	13A	20-22AWG	0.5-0.35mm <sup>2</sup>	1.31 - 1.50mm	Gold-Plated	4,000	-
AT62-14-0122	Socket	S&F	Size 16	13A	14-18AWG	2.0-0.75mm <sup>2</sup>	2.40 - 3.81mm	Nickel-Plated	-	-
AT62-14-0122-LP	Socket	S&F	Size 16	13A	14-18AWG	2.0-0.75mm <sup>2</sup>	2.40 - 3.81mm	Nickel-Plated	-	Loose Piece
AT62-14-0144	Socket	S&F	Size 16	13A	14-18AWG	2.0-0.75mm <sup>2</sup>	2.40 - 3.81mm	Gold-Plated	-	-
AT62-14-0144-LP	Socket	S&F	Size 16	13A	14-18AWG	2.0-0.75mm <sup>2</sup>	2.40 - 3.81mm	Gold-Plated	-	Loose Piece
AT62-16-0122	Socket	S&F	Size 16	13A	16-18AWG	1.5-0.75mm <sup>2</sup>	1.91 - 3.55mm	Nickel-Plated	-	-
AT62-16-0122-LP	Socket	S&F	Size 16	13A	16-18AWG	1.5-0.75mm <sup>2</sup>	1.91 - 3.55mm	Nickel-Plated	-	Loose Piece
AT62-16-0144	Socket	S&F	Size 16	13A	16-18AWG	1.5-0.75mm <sup>2</sup>	1.91 - 3.55mm	Gold-Plated	-	-

# AT, ATV, AHD, ARB, ARC, DuraMate™ and PanelMate™ Series

## Size 16 Contact & Tooling Options, cont.

Contacts - Stamped & Formed, cont.

Part Number	Type	Style	Contact Size	Amp	Wire Range (AWG)	Wire Range (mm <sup>2</sup> )	Insulation OD (mm)	Plating	Reel Size	Packaging
AT62-16-0144-LP	Socket	S&F	Size 16	13A	16-18AWG	1.5-0.75mm <sup>2</sup>	1.91 - 3.55mm	Gold-Plated	-	Loose Piece
AT62-16-0622	Socket	S&F	Size 16	13A	16-20AWG	1.0-0.5mm <sup>2</sup>	1.40 - 2.54mm	Nickel-Plated	-	-
AT62-16-0622-LP	Socket	S&F	Size 16	13A	16-20AWG	1.0-0.5mm <sup>2</sup>	1.40 - 2.54mm	Nickel-Plated	-	Loose Piece
AT62-16-0644	Socket	S&F	Size 16	13A	18-20AWG	1.0-0.5mm <sup>2</sup>	1.40 - 2.54mm	Gold-Plated	-	-
AT62-16-0644-LP	Socket	S&F	Size 16	13A	18-20AWG	1.0-0.5mm <sup>2</sup>	1.40 - 2.54mm	Gold-Plated	-	Loose Piece
AT62-16-0822	Socket	S&F	Size 16	13A	20-22AWG	0.5-0.35mm <sup>2</sup>	1.31 - 1.50mm	Nickel-Plated	4,000	-
AT62-16-0844	Socket	S&F	Size 16	13A	20-22AWG	0.5-0.35mm <sup>2</sup>	1.31 - 1.50mm	Gold-Plated	4,000	-

Tooling

Part Number	Tool Name	Style	Contact Size	Wire Range (AWG)	Material	Color
AUTK-16	Hand Crimp Tool	Machined	Size 16	-	-	-
AUTK-100	Universal Heavy Duty Contact Crimping Tool Kit	Machined	Size 12/16/20	12-26AWG	-	-
CA-5D12	Universal Hand Crimp Tool	Machined	Size 12/16/20	12-26AWG	-	-
CA-5E12	Pneumatic Crimp Tool	Machined	Size 12/16/20	12-26AWG	-	-
MFX-3950-G or K	Crimp Die Press Applicator	S&F	Size 16	18-20AWG	-	-
MFX-3953-G or K	Crimp Die Press Applicator	S&F	Size 16	16-18AWG	-	-
MFX-3975-G or K	Crimp Die Press Applicator	S&F	Size 16	14-16AWG	-	-
MFX-3990	Crimp Die	S&F	Size 16	20-22AWG	-	-
ATT-16-00	Hand Crimp Tool	S&F	Size 16	14-16AWG	-	-
ATT-16-01	Hand Crimp Tool	S&F	Size 16	18-20AWG	-	-
ATT-1612-03	Hand Crimp Tool	S&F	Size 12/16	20-22AWG	-	-
ATRT-100	Contact and Wedgelock Extraction Tool	Universal	Universal	-	Steel	Silver
AT11-310-1605	Contact Extraction Tool	Universal	Size 16	-	Plastic	Lt Blue
A114017	Seal Plug	Universal	Size 12/16	-	Thermoplastic	White
A114017-SR	Seal Plug	Universal	Size 16	-	Thermoplastic	Black
AT13-217-1605	Locking Seal Plug	Universal	Size 16	-	Thermoplastic	Grey
AT13-217-1605-SR	Locking Seal Plug	Universal	Size 16	-	Thermoplastic	Red