

45.7±0.5 12.8 Ø42.3 Ø40.1 6.1

REVISIONS REV ECO DESCRIPTION DATE BY APPR A1 RESEALE NEW DRAWING 01/MAR/22 VITO TOMMY

SIZE 12 CONTACTS 6 **SIZE 16 CONTACTS** (4 PLACES) (19 PLACES) 47.6 - SIZE 20 CONTACT /6\ (6 PLACES)

MATERIAL:

HOUSING: THERMOPLASTIC; BLACK

SEAL: SILICONE RUBBER

2. MODIFICATIONS: BACKSHELL RING ADAPTER (BRA); REDUCED DIA. WIRE SEAL

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: 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
- 4. MATING PART: AHDP06-24-29S\* (\* = SEAL TYPE)
- 5. ALL DIMENSIONS ARE FOR REFERENCE USE ONLY.

## 6 CONTACT SIZE AND WIRE RANGE:

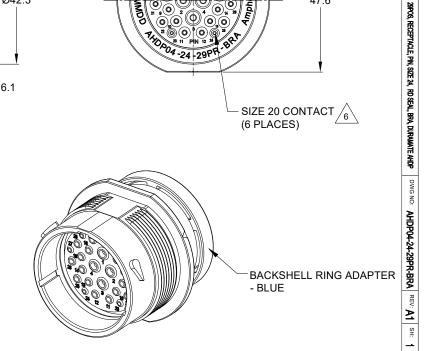
CONTACT	MIN. INSUL	MAX. INSUL	TYPICAL WIRE	CURRENT
SIZE	O.D.	O.D.	RANGE RATING	
20	1.02 mm (.040 in)	2.10 mm (.083 in)	16-22 AWG (1.5-0.5mm²)	7.5 AMPS
16	1.35 mm (.053in)	2.62 mm (.103 in)	14-20 AWG (2.0-0.5mm²)	13 AMPS
12	2.46 mm (.097 in)	4.01 mm (.158 in)	10-14 AWG (6.0-2.0mm²)	25 AMPS

Ø43.08±0.12 41.45 +0.2

RECOMMENDED PANEL MOUNTING HOLE

1 11/16-18 UNEF THREAD

RECOMMENDED PANEL THICKNESS: 1.6 TO 4.7MM



SCALE: NONE

REF: HDP24-24-29PE-L017

DURAMATE SHEET 1 OF 1

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ITEM

QUANTITY	PART N	IUMBE	R	DESCRIPTION				
			MAT	ERL	LS LIST			
UNLESS OTHERWISE SPECIFIED		SIG	NATURES	DATE	Amphor	$\overline{}$		
All dimensions at 2) Tolerances are at 1 PL DEC ±0.30		DRAWN:	VITO.LI	01/MAR/22	Ampheno			
2 PL DEC ±0.15 3 PL DEC ±0.08	Angles ±1*	CHECKED:	SULLENZHANG	02/MAR/22	Sine Systems - www.amphenol-sii	ne.com		
3) Note reference =	• 🛕	ENGINEER:			44724 Morley Drive			
MATERIAL SPECIFICAT	TIONS:	APPROVAL	TOMMY.XIE	03/MAR/22	Clinton Township, MI 48036			
WEIGH	WEIGHT: 51.1g		Ŀ		29POS, RECEPTACLE,	,		
PROCESS SPECIFICAT		INFORMATI	ING IS SUPPLIED F ON ONLY. DESIGN	FEATURES,	SIZE 24, RD SEAL, BRA, DURA	MATE AHDP		
PROCESS SPECIFICAT	ions.	SHOWN HE THE AMPHE	TIONS AND PERFO REON ARE THE PR ENOL CORPORATIO DUCTION ARE IMPL	OPERTY OF ON. NO RIGHTS	B C- AHDP04-24-29PF	R-BRA A		

AHDP04-24-29PR-BRA

NEXT ASS'V

7. RECEPTACLE IS SUPPLIED WITH DUST CAP.

## **A Series™** - Contact Size 20 Options (Works with: ATM, DuraMate and PanelMate Series)

	Machined Contacts, Sockets & Pins			
Part Number	Description	Size	AWG	Туре
AT60-010-2031	Male Contact - Pin, Gold-plated	20	16-18	Machined
AT62-005-20141	Female Contact - Socket, Gold-plated	20	16-18	Machined
AT60-010-20141	Male Contact - Pin, Nickel-plated	20	16-18	Machined
AT62-005-2031	Female Contact - Socket, Nickel-plated	20	16-18	Machined
AT60-202-2031	Male Contact - Pin, Gold-plated	20	20-22	Machined
AT62-201-2031	Female Contact - Socket, Gold-plated	20	20-22	Machined
AT60-202-20141	Male Contact - Pin, Nickel-plated	20	20-22	Machined
AT62-201-20141	Female Contact - Socket, Nickel-plated	20	20-22	Machined

Tooling - Machined Contacts			
Part Number	Description		
AUTK-20	Hand Crimp Tool, Size 20		
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		

Stamped & Formed Contacts, Sockets & Pins					
Part Number	Description	Size	AWG	Туре	
AT60-20-0144	Male Contact - Pin, Gold-plated	20	16-22	Stamped & Formed	
AT62-20-0144	Female Contact - Socket, Gold-plated	20	16-22	Stamped & Formed	
AT60-20-0244	Male Contact - Socket, Gold-plated	20	16-22	Stamped & Formed	
AT62-20-0244	Female Contact - Socket, Gold-plated	20	16-22	Stamped & Formed	
AT60-20-0122	Male Contact - Pin, Nickel-plated	20	16-22	Stamped & Formed	
AT62-20-0122	Female Contact - Socket, Nickel-plated	20	16-22	Stamped & Formed	
AT60-20-0222	Male Contact - Socket, Nickel-plated	20	16-22	Stamped & Formed	
AT62-20-0222	Female Contact - Socket, Nickel-plated	20	16-22	Stamped & Formed	
AT60-20-0277	Male Contact - Socket, Tin-plated	20	16-22	Stamped & Formed	
AT62-20-0277	Female Contact - Socket, Tin-plated	20	16-22	Stamped & Formed	
AT60-20-0422	Male Contact - Socket, Nickel-plated	20	20-22	Stamped & Formed	
AT62-20-0444	Female Contact - Socket, Gold-plated	20	20-22	Stamped & Formed	

Tooling - Stamped & Formed Contacts			
MFX-3974	Crimp Die - Size 20		
MFX-3976	Crimp Die - Size 20 (20-22AWG -04XX Series)		
MFX-3978	Crimp Die - Size 20 (20-22AWG -02XX Series)		
ATT-20-00	Hand Crimp Tool - Size 20 (20AWG)		

Contact Removal Tools (For both Machined or Stamped & Formed Contacts)				
Part Number	Description			
ATRT-100	Contact and Wedgelock Extraction Tool			
AT11-240-2005	Contact Removal Tool, Plastic, Size 20			

Sealing Plugs (For both Machined or Stamped & Formed Contacts)				
Part Number	Description			
AT13-204-2005	Sealing Plug, Size 20, White			
AT13-204-2005-SR	Sealing Plug, Size 20, SR01 Series, Black			
ATM13-217-2005	Locking Sealing Plug, Size 20, Grey			
ATM13-217-2005-SR	Locking Sealing Plug, Size 20, SR01 Series, Blue			

## 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-20	Hand Crimp Tool, Size 20				
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				
Part Number	Description	Size	AWG	Туре
AT60-14-0144	Male Contact - Pin, Gold-plated	16	14-16	Stamped & Formed
AT62-14-0144	Female Contact - Socket, Gold-plated	16	14-16	Stamped & Formed
AT60-14-0122	Male Contact - Pin, Nickel-plated	16	14-16	Stamped & Formed
AT62-14-0122	Female Contact - Socket, Nickel-plated	16	14-16	Stamped & Formed
AT60-16-0144	Male Contact - Pin, Gold-plated	16	16-18	Stamped & Formed
AT62-16-0144	Female Contact - Socket, Gold-plated	16	16-18	Stamped & Formed
AT60-16-0122	Male Contact - Pin, Nickel-plated	16	16-18	Stamped & Formed
AT62-16-0122	Female Contact - Socket, Nickel-plated	16	16-18	Stamped & Formed
AT60-16-0644	Male Contact - Pin, Gold-plated	16	18-20	Stamped & Formed
AT62-16-0644	Female Contact - Socket, Gold-plated	16	18-20	Stamped & Formed
AT60-16-0622	Male Contact - Pin, Nickel-plated	16	18-20	Stamped & Formed
AT62-16-0622	Female Contact - Socket, Nickel-plated	16	18-20	Stamped & Formed
AT60-16-0844	Male Contact - Pin, Gold-plated	16	20-22	Stamped & Formed
AT62-16-0844	Female Contact - Socket, Gold-plated	16	20-22	Stamped & Formed
AT60-16-0822	Male Contact - Pin, Nickel-plated	16	20-22	Stamped & Formed
AT62-16-0822	Female Contact - Socket, Nickel-plated	16	20-22	Stamped & Formed

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	

## 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
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	
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	