

REVISIONS					
REV	ECO	DESCRIPTION	DATE	BY	APPR
A1	-	RELEASE NUMBER	27/NOV/24	LYNCH	TOMMY
A2	-	REMOVE BRIGDE, CONTACT AND SEALING PLUG	20/OCT/25	LYNCH	TOMMY

NOTES: UNLESS OTHERWISE SPECIFIED

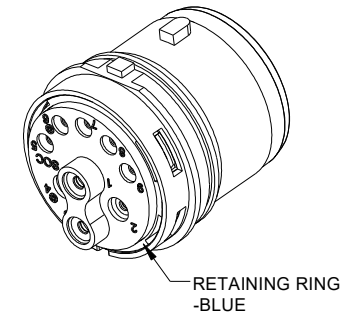
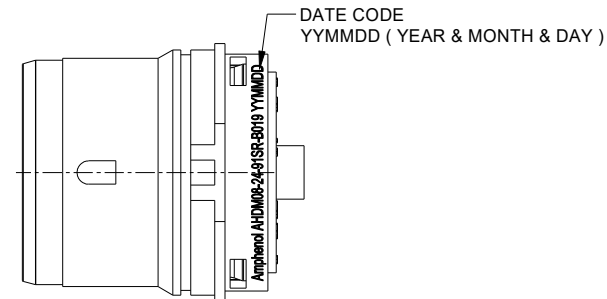
- MATERIAL:
SHELL: ALUMINUM ALLOY, ANODIZE
INSERT AND RETAINING RING: THERMOPLASTIC
SEAL: SILICONE RUBBER
- MODIFICATIONS: REDUCED DIA. WIRE SEAL FOR SIZE 12 & SIZE 16.
- SPECIFICATIONS:
 - OPERATING TEMPERATURE: -55°C TO +125°C.
 - DIELECTRIC WITHSTANDING VOLTAGE: LESS THAN 2 MILLIAMPS CURRENT LEAKAGE @ 1500 VOLTS AC.
 - INSULATION RESISTANCE: 1000 MEGOHM MIN @ 25°C.
 - MOISTURE RESISTANCE:
IP68 (IM OF WATER FOR A PERIOD OF 24 HOURS, MATED CONDITION);
IP69K (MATED CONDITION)
 - MATING CYCLE DURABILITY: 100 CYCLES
 - RoHS COMPLIANT
- MATING PART: AHDM09-24-91P*-B019 RECEPTACLE (*= 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
8	3.43mm (.135in)	5.59mm (.220in)	8-10AWG (10.0-5.0mm ²)	60AMPS
12	2.46mm (.097in)	4.01mm (.158in)	10-14AWG (6.0-2.0mm ²)	25AMPS
16	1.35mm (.053in)	3.05mm (.120in)	14-20AWG (2.0-0.5mm ²)	13AMPS

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.

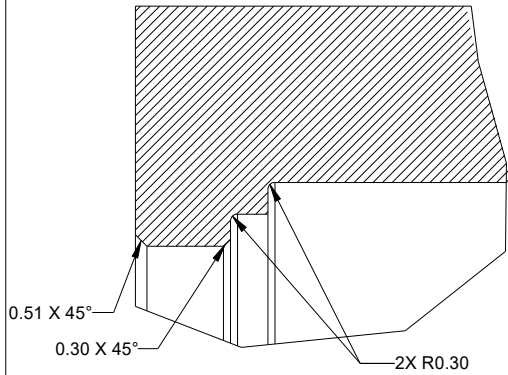


QUANTITY	AHDM08-24-91SR-B019	HD36-24-91SE-B019	ITEM
	PART NUMBER	DESCRIPTION	

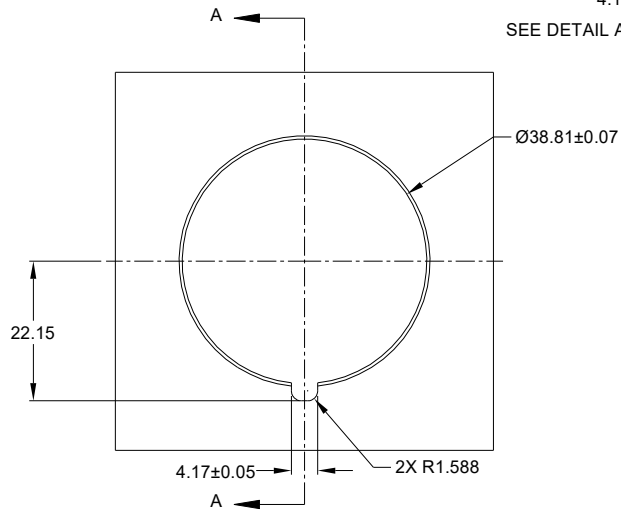
MATERIALS LIST			
UNLESS OTHERWISE SPECIFIED 1) All dimensions are in metric (mm). 2) Tolerances are as follows: 1 PL DEC ±0.30 Fractions ±1/64 2 PL DEC ±0.15 Angles ±1° 3) Note reference =		SIGNATURES	DATE
DRAWN: LYNCHPAN			20/OCT/25
CHECKED: SULLENZHANG			21/OCT/25
ENGINEER:			
APPROVAL: TOMMY XIE			22/OCT/25
MATERIAL SPECIFICATIONS:		CUSTOMER:	
WEIGHT: 42.7g			
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:		SIZE	TYPE
		B	C-
		SCALE	NONE
		DWG NO:	REVISION
		AHDM08-24-91SR-B019	A2
		SHEET	1 OF 2

TITLE: 09POS, PLUG, SOC, RD SEAL, 24SZ, DURAMATE AHDM SERIES
DWG NO.: AHDM08-24-91SR-B019
REV: A2
SH: 1
OF: 2

REVISIONS					
REV	ECO	DESCRIPTION	DATE	BY	APPR
A1	-	RELEASE NUMBER	27/NOV/24	LYNCH	TOMMY
A2	-	REMOVE BRIGDE, CONTACT AND SEALING PLUG	20/OCT/25	LYNCH	TOMMY

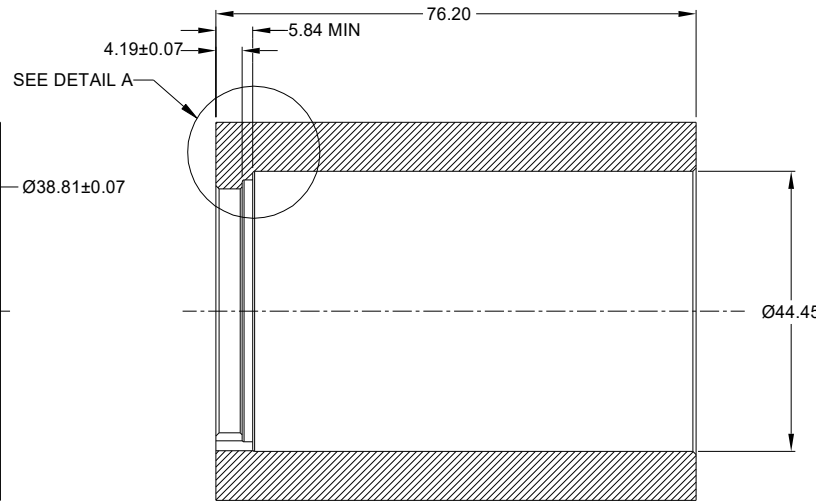


DETAIL A
SCALE 3:1

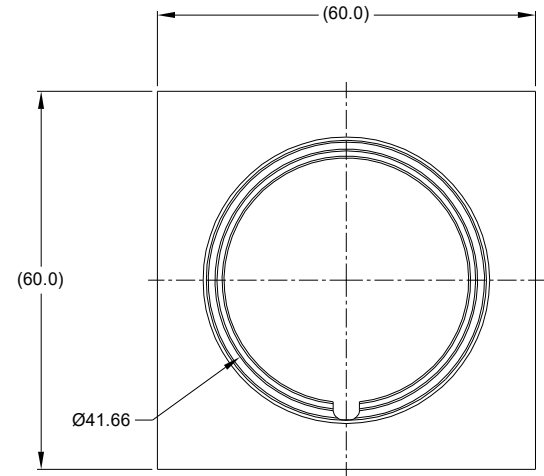


MOUNTING DETAIL FOR PLUG

ALL DIMENSIONS ARE ±0.13
UNLESS OTHERWISE SPECIFIED



SECTION A-A



QUANTITY	PART NUMBER	DESCRIPTION	ITEM
MATERIALS LIST			
UNLESS OTHERWISE SPECIFIED 1) All dimensions are in metric(mm). 2) Tolerances are as follows: 1 PL DEC ±0.30 Fractions ±1/64 2 PL DEC ±0.15 Angles ±1° 3 PL DEC ±0.06 3) Note reference =		SIGNATURES DATE DRAWN: LYNCHPAN 20/OCT/25 CHECKED: SULLENZHANG 21/OCT/25 ENGINEER: APPROVAL: TOMMY XIE 22/OCT/25	
MATERIAL SPECIFICATIONS: WEIGHT: 42.7g		Amphenol 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.		09POS, PLUG, SOC, RD SEAL, 24SZ, DURAMATE AHDM SERIES	
NEXT ASSY:		SIZE: B C- SCALE: NONE	DWG NO: AHDM08-24-91SR-B019 REVISION: A2 SHEET 2 OF 2

TITLE: 09POS, PLUG, SOC, RD SEAL, 24SZ, DURAMATE AHDM SERIES
 DWG NO: AHDM08-24-91SR-B019
 REV: A2
 SH: 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 ²)	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 ²	2.40 - 3.81mm	Nickel-Plated	-	-
AT60-14-0122-LP	Pin	S&F	Size 16	13A	14-18AWG	2.0-0.75mm ²	2.40 - 3.81mm	Nickel-Plated	-	Loose Piece
AT60-14-0144	Pin	S&F	Size 16	13A	14-18AWG	2.0-0.75mm ²	2.40 - 3.81mm	Gold-Plated	-	-
AT60-14-0144-LP	Pin	S&F	Size 16	13A	14-18AWG	2.0-0.75mm ²	2.40 - 3.81mm	Gold-Plated	-	Loose Piece
AT60-16-0122	Pin	S&F	Size 16	13A	16-18AWG	1.5-0.75mm ²	1.91 - 3.55mm	Nickel-Plated	-	-
AT60-16-0122-LP	Pin	S&F	Size 16	13A	16-18AWG	1.5-0.75mm ²	1.91 - 3.55mm	Nickel-Plated	-	Loose Piece
AT60-16-0144	Pin	S&F	Size 16	13A	16-18AWG	1.5-0.75mm ²	1.91 - 3.55mm	Gold-Plated	-	-
AT60-16-0144-LP	Pin	S&F	Size 16	13A	16-18AWG	1.5-0.75mm ²	1.91 - 3.55mm	Gold-Plated	-	Loose Piece
AT60-16-0622	Pin	S&F	Size 16	13A	16-20AWG	1.0-0.5mm ²	1.40 - 2.54mm	Nickel-Plated	-	-
AT60-16-0622-LP	Pin	S&F	Size 16	13A	16-20AWG	1.0-0.5mm ²	1.40 - 2.54mm	Nickel-Plated	-	Loose Piece
AT60-16-0644	Pin	S&F	Size 16	13A	16-20AWG	1.0-0.5mm ²	1.40 - 2.54mm	Gold-Plated	-	-
AT60-16-0644-LP	Pin	S&F	Size 16	13A	16-20AWG	1.0-0.5mm ²	1.40 - 2.54mm	Gold-Plated	-	Loose Piece
AT60-16-0322	Pin	S&F	Size 16	13A	20-22AWG	0.5-0.35mm ²	1.31 - 1.50mm	Nickel-Plated	-	-
AT60-16-0344	Pin	S&F	Size 16	13A	20-22AWG	0.5-0.35mm ²	1.31 - 1.50mm	Gold-Plated	-	-
AT60-16-0377	Pin	S&F	Size 16	13A	20-22AWG	0.5-0.35mm ²	1.31 - 1.50mm	Tin-Plated	-	-
AT60-16-0822	Pin	S&F	Size 16	13A	20-22AWG	0.5-0.35mm ²	1.31 - 1.50mm	Nickel-Plated	4,000	-
AT60-16-0844	Pin	S&F	Size 16	13A	20-22AWG	0.5-0.35mm ²	1.31 - 1.50mm	Gold-Plated	4,000	-
AT62-14-0122	Socket	S&F	Size 16	13A	14-18AWG	2.0-0.75mm ²	2.40 - 3.81mm	Nickel-Plated	-	-
AT62-14-0122-LP	Socket	S&F	Size 16	13A	14-18AWG	2.0-0.75mm ²	2.40 - 3.81mm	Nickel-Plated	-	Loose Piece
AT62-14-0144	Socket	S&F	Size 16	13A	14-18AWG	2.0-0.75mm ²	2.40 - 3.81mm	Gold-Plated	-	-
AT62-14-0144-LP	Socket	S&F	Size 16	13A	14-18AWG	2.0-0.75mm ²	2.40 - 3.81mm	Gold-Plated	-	Loose Piece
AT62-16-0122	Socket	S&F	Size 16	13A	16-18AWG	1.5-0.75mm ²	1.91 - 3.55mm	Nickel-Plated	-	-
AT62-16-0122-LP	Socket	S&F	Size 16	13A	16-18AWG	1.5-0.75mm ²	1.91 - 3.55mm	Nickel-Plated	-	Loose Piece
AT62-16-0144	Socket	S&F	Size 16	13A	16-18AWG	1.5-0.75mm ²	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 ²)	Insulation OD (mm)	Plating	Reel Size	Packaging
AT62-16-0144-LP	Socket	S&F	Size 16	13A	16-18AWG	1.5-0.75mm ²	1.91 - 3.55mm	Gold-Plated	-	Loose Piece
AT62-16-0622	Socket	S&F	Size 16	13A	16-20AWG	1.0-0.5mm ²	1.40 - 2.54mm	Nickel-Plated	-	-
AT62-16-0622-LP	Socket	S&F	Size 16	13A	16-20AWG	1.0-0.5mm ²	1.40 - 2.54mm	Nickel-Plated	-	Loose Piece
AT62-16-0644	Socket	S&F	Size 16	13A	18-20AWG	1.0-0.5mm ²	1.40 - 2.54mm	Gold-Plated	-	-
AT62-16-0644-LP	Socket	S&F	Size 16	13A	18-20AWG	1.0-0.5mm ²	1.40 - 2.54mm	Gold-Plated	-	Loose Piece
AT62-16-0822	Socket	S&F	Size 16	13A	20-22AWG	0.5-0.35mm ²	1.31 - 1.50mm	Nickel-Plated	4,000	-
AT62-16-0844	Socket	S&F	Size 16	13A	20-22AWG	0.5-0.35mm ²	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

AHD, ARB, ATP, ATHD, DuraMate™ and PanelMate™ Series

Size 12 Contact & Tooling Options

Contacts - Machined

Part Number	Type	Style	Contact Size	Amp	Wire Range (AWG)	Wire Range (mm ²)	Insulation OD (mm)	Plating	Reel Size	Packaging
AT60-204-12141-10	Pin	Machined	Size 12	25A	10-12AWG	-	-	Nickel-Plated	-	-
AT60-204-12141	Pin	Machined	Size 12	25A	12-14AWG	-	-	Nickel-Plated	-	-
AT60-220-1231	Pin	Machined	Size 12	25A	12-14AWG	-	-	Gold-Plated	-	-
AT60-204-12NKIT	Pin	Machined	Size 12	25A	12-14AWG	-	-	Nickel-Plated	-	-
AT60-220-1231-1618	Pin	Machined	Size 12	25A	16-18AWG	-	-	Gold-Plated	-	-
AT60-220-1231-1820	Pin	Machined	Size 12	25A	18-20AWG	-	-	Gold-Plated	-	-
AT62-203-12141-10	Socket	Machined	Size 12	25A	10-12AWG	-	-	Nickel-Plated	-	-
AT62-203-12141	Socket	Machined	Size 12	25A	12-14AWG	-	-	Nickel-Plated	-	-
AT62-203-12NKIT	Socket	Machined	Size 12	25A	12-14AWG	-	-	Nickel-Plated	-	-
AT62-210-1231	Socket	Machined	Size 12	25A	12-14AWG	-	-	Gold-Plated	-	-
AT62-210-1231-1618	Socket	Machined	Size 12	25A	16-18AWG	-	-	Gold-Plated	-	-
AT62-210-1231-1820	Socket	Machined	Size 12	25A	18-20AWG	-	-	Gold-Plated	-	-

Contacts - Stamped & Formed

AT60-12-0222	Pin	S&F	Size 12	25A	10-12AWG	6.0-4.0mm ²	3.56 - 5.18mm	Nickel-Plated	-	-
AT60-12-0222-LP	Pin	S&F	Size 12	25A	10-12AWG	6.0-4.0mm ²	3.56 - 5.18mm	Nickel-Plated	-	Loose Piece
AT60-12-0244	Pin	S&F	Size 12	25A	10-12AWG	6.0-4.0mm ²	3.56 - 5.18mm	Gold-Plated	-	-
AT60-12-0244-LP	Pin	S&F	Size 12	25A	10-12AWG	6.0-4.0mm ²	3.56 - 5.18mm	Gold-Plated	-	Loose Piece
AT60-12-0144	Pin	S&F	Size 12	25A	12-14AWG	4.0-2.0mm ²	2.87 - 4.47mm	Gold-Plated	-	-
AT60-12-0144-LP	Pin	S&F	Size 12	25A	12-14AWG	4.0-2.0mm ²	2.87 - 4.47mm	Gold-Plated	-	Loose Piece
AT60-12-0166	Pin	S&F	Size 12	25A	12-14AWG	4.0-2.0mm ²	2.87 - 4.47mm	Nickel-Plated	-	-
AT60-12-0166-LP	Pin	S&F	Size 12	25A	12-14AWG	4.0-2.0mm ²	2.87 - 4.47mm	Nickel-Plated	-	Loose Piece
AT62-12-0222	Socket	S&F	Size 12	25A	10-12AWG	6.0-4.0mm ²	3.56 - 5.18mm	Nickel-Plated	-	-
AT62-12-0222-LP	Socket	S&F	Size 12	25A	10-12AWG	6.0-4.0mm ²	3.56 - 5.18mm	Nickel-Plated	-	Loose Piece
AT62-12-0244	Socket	S&F	Size 12	25A	10-12AWG	6.0-4.0mm ²	3.56 - 5.18mm	Gold-Plated	-	-
AT62-12-0244-LP	Socket	S&F	Size 12	25A	10-12AWG	6.0-4.0mm ²	3.56 - 5.18mm	Gold-Plated	-	Loose Piece
AT62-12-0144	Socket	S&F	Size 12	25A	12-14AWG	4.0-2.0mm ²	2.87 - 4.47mm	Gold-Plated	-	-
AT62-12-0144-LP	Socket	S&F	Size 12	25A	12-14AWG	4.0-2.0mm ²	2.87 - 4.47mm	Gold-Plated	-	Loose Piece
AT62-12-0166	Socket	S&F	Size 12	25A	12-14AWG	4.0-2.0mm ²	2.87 - 4.47mm	Nickel-Plated	-	-
AT62-12-0166-LP	Socket	S&F	Size 12	25A	12-14AWG	4.0-2.0mm ²	2.87 - 4.47mm	Nickel-Plated	-	Loose Piece

Tooling

Part Number	Tool Name	Style	Contact Size	Wire Range (AWG)	Material	Color
MXF-3966	Contact Locator for Hand Crimp Tool M300-25A	Machined	Size 12	10AWG	-	-
AUTK-12	Hand Crimp Tool	Machined	Size 12	10-18AWG	-	-
M300-25A	Hand Crimp Tool w MXF-3966 Locator	Machined	Size 12	10-18AWG	-	-
CA-5E12	Pneumatic Crimp Tool	Machined	Size 12/16/20	12-26AWG	-	-
CA-5D12	Universal Hand Crimp Tool	Machined	Size 12/16/20	12-26AWG	-	-
AUTK-100	Universal Heavy Duty Contact Crimping Tool Kit	Machined	Size 12/16/20	12-26AWG	-	-

AHD, ARB, ATP, ATHD, DuraMate™ and PanelMate™ Series

Size 12 Contact & Tooling Options, cont.

Tooling, cont.

Part Number	Tool Name	Style	Contact Size	Wire Range (AWG)	Material	Color
MX-3973-G or K	Crimp Die Press Applicator	S&F	Size 12	12AWG	-	-
MX-3985-G or K	Crimp Die Press Applicator	S&F	Size 12	10-12AWG	-	-
ATT-12-00	Hand Crimp Tool	S&F	Size 12	12-14AWG	-	-
ATT-12-01	Hand Crimp Tool	S&F	Size 12	10AWG	-	-
ATRT-100	Contact and Wedgelock Extraction Tool	Universal	Universal	-	Steel	Silver
AT11-337-1205	Contact Extraction Tool	Universal	Size 12	-	Plastic	Orange
A114017	Seal Plug	Universal	Size 12/16	-	Thermoplastic	White

ARB, ATHD and DuraMate™ Series

Size 8 Contact & Tooling Options

Contacts - Machined

Part Number	Type	Style	Contact Size	Amp	Wire Range (AWG)	Wire Range (mm ²)	Insulation OD (mm)	Plating	Reel Size	Packaging
AT60-204-08141-16	Pin	Machined	Size 8	60A	6AWG	-	-	Nickel-Plated	-	-
AT60-204-08141	Pin	Machined	Size 8	60A	8-10AWG	-	-	Nickel-Plated	-	-
AT62-203-08141-16	Socket	Machined	Size 8	60A	6AWG	-	-	Nickel-Plated	-	-
AT62-203-08141	Socket	Machined	Size 8	60A	8-10AWG	-	-	Nickel-Plated	-	-

Tooling

Part Number	Tool Name	Style	Contact Size	Wire Range (AWG)	Material	Color
96-978-22	Crimper and Die	Machined	Size 3.6mm-10mm	10mm ² -185mm ²	n/a	n/a
AT114008	Contact Extraction Tool	Machined	Size 8	8-10AWG	Plastic	Green
WA23	Pneumatic Crimp Tool	Machined	-	8-0000AWG	-	-
WA23-2	WA23 Die Assembly for Pneumatic Crimp Tool	Machined	Size 8	8AWG	n/a	Silver
WA23-3	WA23 Die Assembly for Pneumatic Crimp Tool	Machined	Size 6	6AWG	n/a	n/a
WA23-10	WA23 Locator for Pneumatic Crimp Tool	Machined	Size 6	6AWG	n/a	Blue