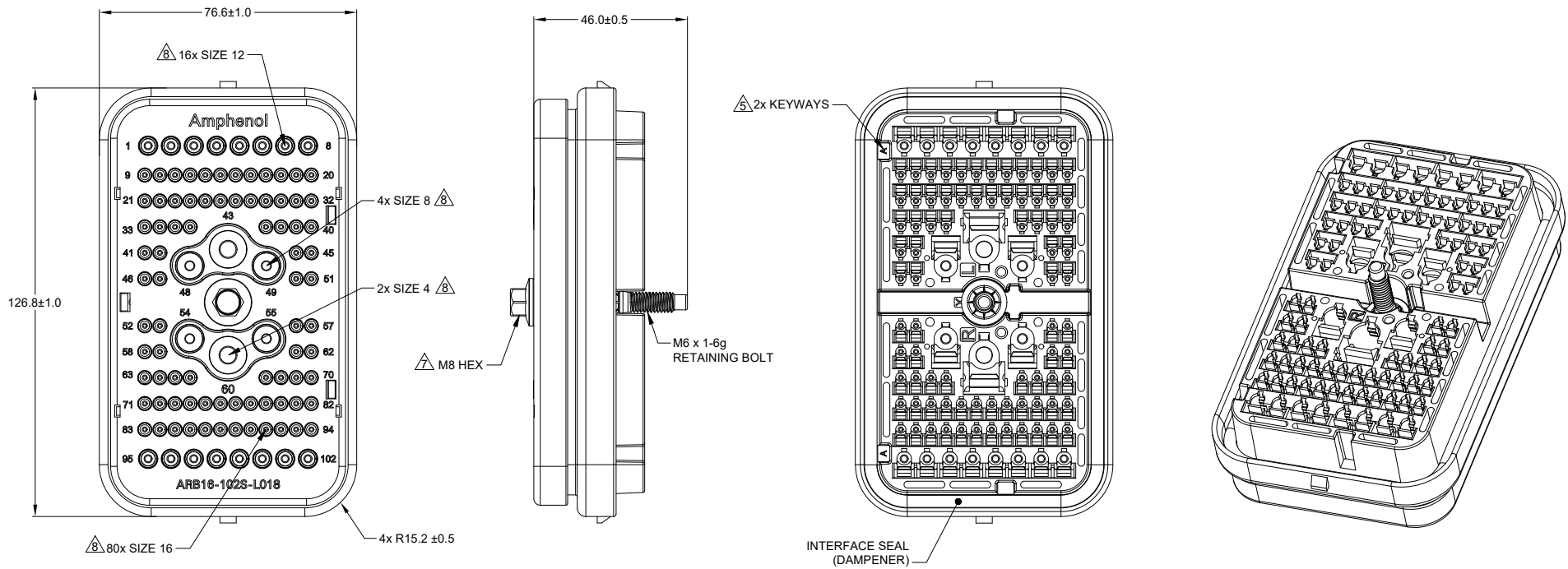


REVISIONS					
REV	ECO	DESCRIPTION	DATE	BY	APPR
A1	-	RELEASE NEW DRAWING	08/MAY/23	VITO	TOMMY



NOTES: UNLESS OTHERWISE SPECIFIED

- MATERIAL:
HOUSING, END CAP: THERMOPLASTIC, BLACK
WIRE SEAL, INTERFACE SEAL, O-RING : SILICONE RUBBER
THREADED INSERT, SCREW : STAINLESS STEEL
- MODIFICATIONS: REDUCED DIAMETER 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 MEGOHMS MIN @ 25°C
3.4 MOISTURE RESISTANCE:
IP68 (1M 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: ARB12-102PxR-XXXX RECEPTACLE, ARBF-1x INTERFACE FLANGE,
(x = A,B,C,D KEYS ; XXXX = ALL MODIFICATIONS)

SEE SHEET 2 FOR OTHER KEY ARRANGEMENTS


6. ALL DIMENSIONS ARE FOR REFERENCE USE ONLY

MATING TORQUE REQUIREMENT: 30 - 35 IN-LB [3.38 - 3.95 NM]

8. ITEMS SOLD SEPARATELY:
WEDGE: AWB-51SxR AND AWB-51SxL (x = A,B,C,D KEYS)
INTERFACE FLANGE: ARBF-1x (x = A,B,C,D KEYS)

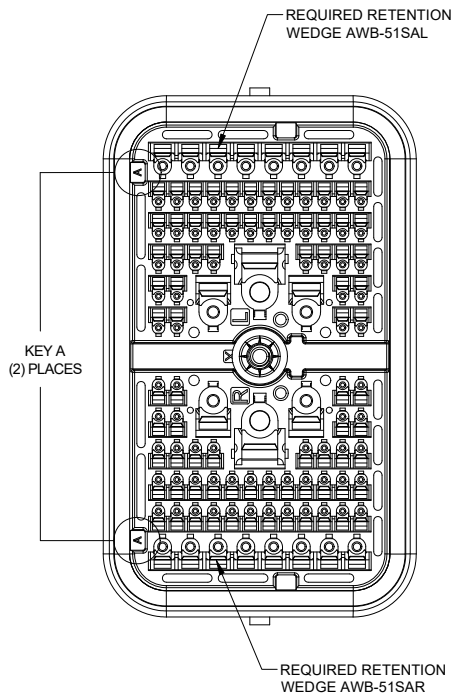
9. CONTACT SIZE AND REAR SEAL WIRE RANGE:

CONTACT SIZE	MIN. INSUL O.D.	MAX. INSUL O.D.	TYPICAL WIRE RANGE	CURRENT RATING
4	6.63 mm (.261 in)	7.42 mm (.292 in)	6 AWG (16-13.0 mm ²)	100 AMPS
8	3.43 mm (.135 in)	5.59 mm (.220 in)	8 - 10 AWG (10.0 - 5.0 mm ²)	60 AMPS
12	2.46 mm (.097 in)	4.01 mm (.158 in)	10 - 14 AWG (6.0 - 2.0 mm ²)	25 AMPS
16	1.35 mm (.053 in)	3.05 mm (.120 in)	14 - 20 AWG (2.0 - 0.5 mm ²)	13 AMPS

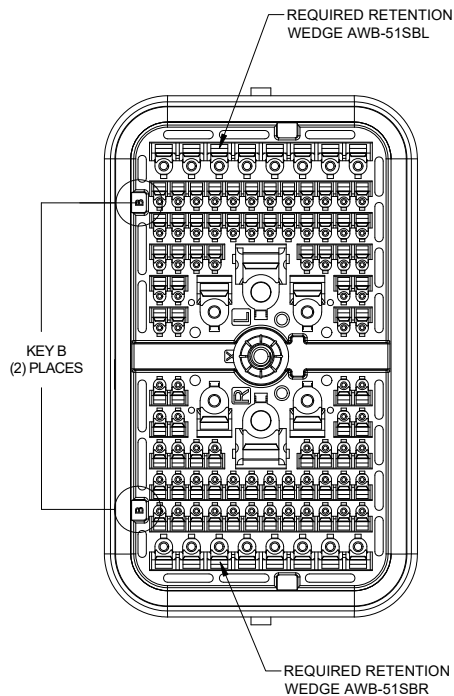
SEE SHEET 2		DESCRIPTION		ITEM	
QUANTITY	PART NUMBER				
MATERIALS LIST					
UNLESS OTHERWISE SPECIFIED 1) All dimensions are in metric(mm). 2) Tolerances are as follows: 1 PL DEC ±0.30 Fractions ±1/64 2 PL DEC ±0.15 Angles ±1° 3 PL DEC ±0.08 3) Note reference = 		SIGNATURES	DATE	<div>Amphenol</div> <div>Sine Systems - www.amphenol-sine.com 44724 Morley Drive Clinton Township, MI 48036</div> <div>102 POS, PLUG, SOCKET, ARB SERIES,KEYED, REDUCED SEAL, BLACK</div>	
DRAWN: VITOLJ		CHECKED: OtonLJ	ENGINEER: TOMMY XIE		DATE: 08MAY23
MATERIAL SPECIFICATIONS: WEIGHT: 230.7 g		CUSTOMER:			
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:		SCALE: NONE			SHEET 1 OF 2
		SIZE: B C-		TYPE: ARB16-102SxR-L018	DWG NO: A1

TITLE: 102 POS, PLUG, SOCKET, ARB SERIES, KEYED, REDUCED SEAL, BLACK
DWG NO.: ARB16-102SxR-L018
REV: A1
SH: 1
OF: 2

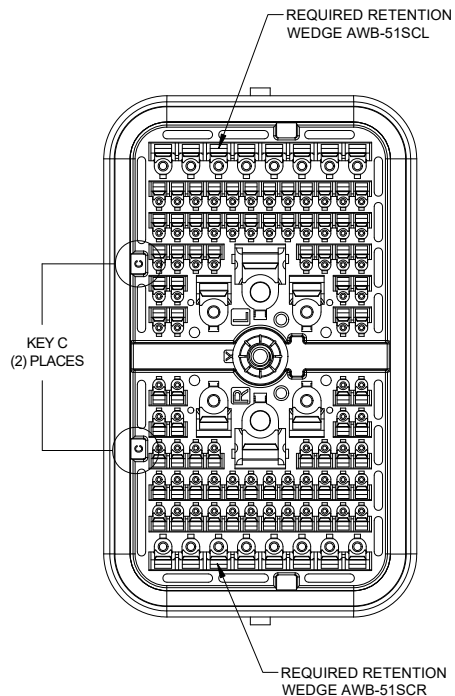
REVISIONS					
REV	ECO	DESCRIPTION	DATE	BY	APPR
A1	-	RELEASE NEW DRAWING	08/MAY/23	VITO	TOMMY



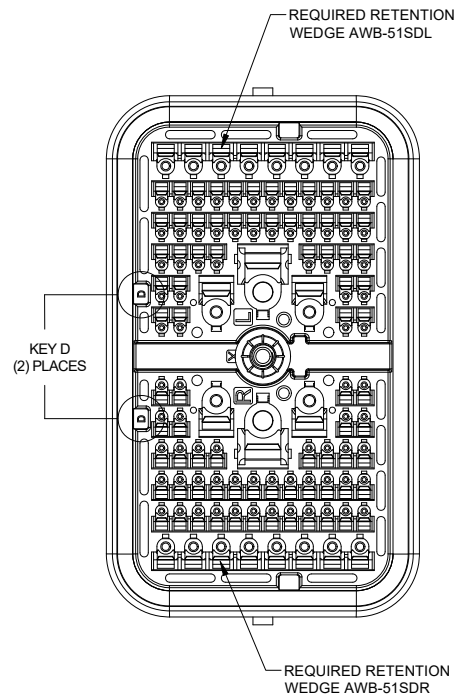
PART NUMBER	REF
ARB16-102SAR-L018	DRB16-102SAE-L018





PART NUMBER	REF
ARB16-102SBR-L018	DRB16-102SBE-L018



PART NUMBER	REF
ARB16-102SCR-L018	DRB16-102SCE-L018



PART NUMBER	REF
ARB16-102SDR-L018	DRB16-102SDE-L018

ARB16-102SxR-L018			
QUANTITY	PART NUMBER	DESCRIPTION	ITEM
MATERIALS LIST			
UNLESS OTHERWISE SPECIFIED		SIGNATURES	DATE
1) All dimensions are in metric(mm).		DRAWN:	VITOLJ
2) Tolerances are as follows:		CHECKED:	OtonLJ
1 PL DEC ± 0.30		ENGINEER:	
2 PL DEC ± 0.15		APPROVAL:	TOMMY XIE
3 PL DEC ± 0.08		CUSTOMER:	
3) Note reference = 			
MATERIAL SPECIFICATIONS:			
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:			
			
		Sine Systems - www.amphenol-sine.com 44724 Morley Drive Clinton Township, MI 48036	
		102 POS, PLUG, SOCKET, ARB SERIES,KEYED, REDUCED SEAL, BLACK	
SIZE	B	TYPE	C-
DWG NO.	ARB16-102SxR-L018		REVISION
SCALE	NONE		A1
		SHEET	2 OF 2

TITLE: 102 POS, PLUG, SOCKET, ARB SERIES, KEYED, REDUCED SEAL, BLACK
DWG NO: ARB16-102SxR-L018
REV: A1
SH: 2
OF: 2

A Series™ - Contact Size 4 Options (Works with: ATHD and DuraMate Series)

Machined Contacts, Pins and Sockets					
Part Number	Description	Size	AWG	Type	Amps
AT60-203-04141-4	Male Contact - Pin, Copper Alloy, Nickel-Plated	4	4	Machined	100A
AT60-204-0490	Male Contact - Pin, Copper Alloy, Nickel-Plated	4	6	Machined	100A
AT62-203-04141-4	Female Contact - Socket, Copper Alloy, Nickel-Plated	4	4	Machined	100A
AT62-203-04141	Female Contact - Socket, Copper Alloy, Nickel-Plated	4	6	Machined	100A

Tooling - Machined Contacts	
Part Number	Description
WA23	Heavy Duty Pneumatic Crimp Tool -Uses Universal Positioner Part No. WA23-101DA and Crimp Locator MFX-3961
WA23-138DA	Die Assembly -for Heavy Duty Pneumatic Crimp Tool, Size 4
WA23-11	Contact Locator, Size 4
96-978-22	Crimper and Dies -for Size 10mm²-185mm² Wires
AT11-027-0405	Contact Removal Tool, Plastic, Size 4, 4AWG

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

Machined Contacts, Pins and Sockets					
Part Number	Description	Size	AWG	Type	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 ² -185mm ² 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	Type
*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

*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	Type
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	Type
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 - Ssize 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	Type
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				
Part Number	Description	Size	AWG	Type
AT60-14-0122	Male Contact - Pin, Nickel-plated	16	14-18	Stamped & Formed
AT62-14-0122	Female Contact - Socket, Nickel-plated	16	14-18	Stamped & Formed
AT60-14-0144	Male Contact - Pin, Gold-plated	16	14-18	Stamped & Formed
AT62-14-0144	Female Contact - Socket, Gold-plated	16	14-18	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
AT60-16-0144	Male Contact - Pin, Gold-plated	16	16-18	Stamped & Formed
AT62-16-0144	Female Contact - Socket, Gold-plated	16	16-18	Stamped & Formed
AT60-16-0622	Male Contact - Pin, Nickel-plated	16	16-20	Stamped & Formed
AT62-16-0622	Female Contact - Socket, Nickel-plated	16	16-20	Stamped & Formed
AT60-16-0644	Male Contact - Pin, Gold-plated	16	16-20	Stamped & Formed
AT62-16-0644	Female Contact - Socket, Gold-plated	16	16-20	Stamped & Formed
AT60-16-0677	Male Contact - Pin, Tin-plated	16	16-20	Stamped & Formed
AT62-16-0677	Female Contact - Socket, Tin-plated	16	16-20	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
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

Tooling - Stamped & Formed Contacts	
MF3-3950	Crimp Die - Size 16, 18-20AWG
MF3-3953	Crimp Die - Size 16, 16-18AWG
MF3-3975	Crimp Die - Size 16, 14-16AWG
MF3-3990	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