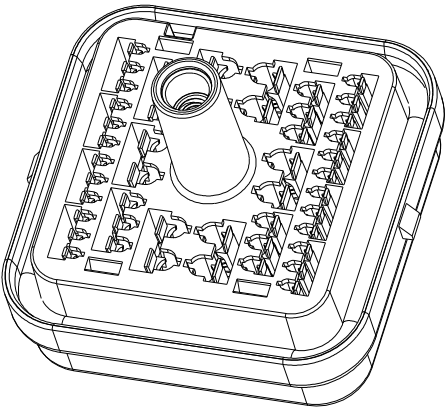
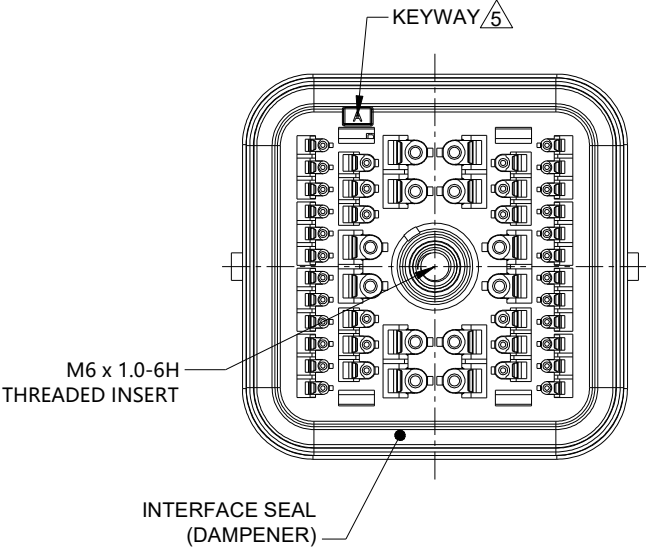
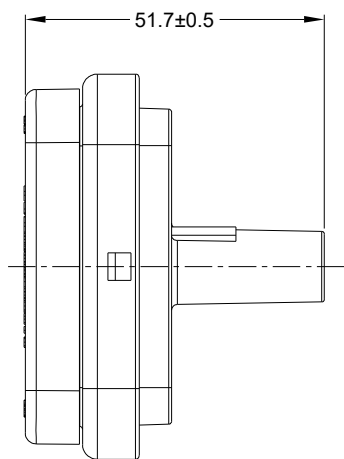
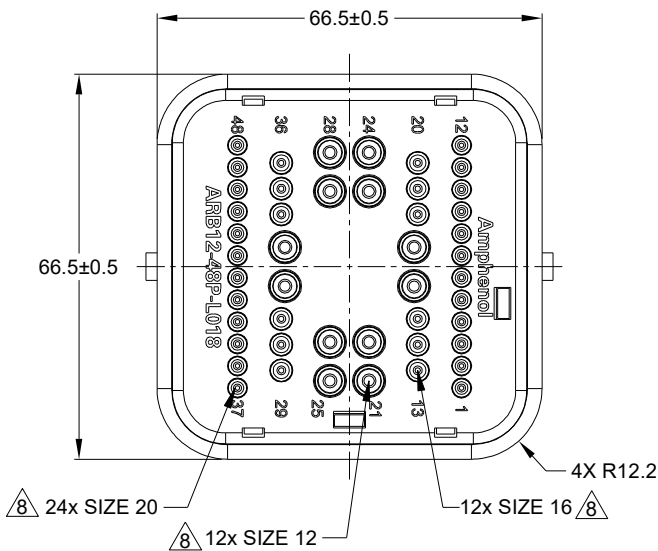


REVISIONS					
REV	ECO	DESCRIPTION	DATE	BY	APPR
A1	-	RELEASE NEW DRAWING	09/MAR/23	IAN	TOMMY



NOTES: UNLESS OTHERWISE SPECIFIED

- MATERIAL:
HOUSING, END CAP: THERMOPLASTIC, BLACK
SEAL: SILICONE RUBBER
THREADED INSERT: 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 (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: ARB16-48SxR-XXXX PLUG
(x = A,B,C,D KEYS ; XXXX = ALL MODIFICATIONS)

5. SEE SHEET 2 FOR OTHER KEY ARRANGEMENTS

6. ALL DIMENSIONS ARE FOR REFERENCE USE ONLY

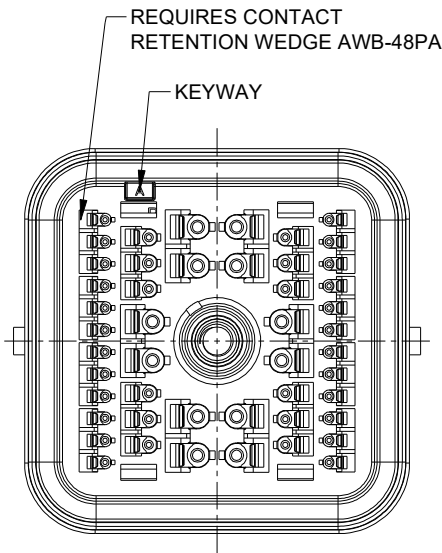
- ITEMS SOLD SEPARATELY:
WEDGE: AWB-48Px (x = A,B,C,D KEYS)
INTERFACE FLANGE: ARBF-2x (x = A,B,C,D KEYS)

8. CONTACT SIZE AND REAR SEAL WIRE RANGE:

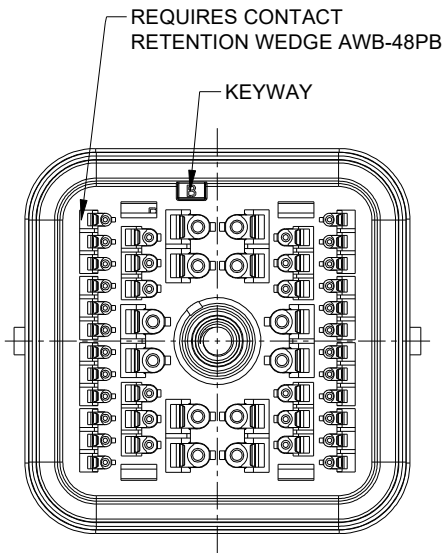
CONTACT SIZE	MIN. INSUL O.D.	MAX. INSUL O.D.	TYPICAL WIRE RANGE	CURRENT RATING
12	2.46 mm (.097 in)	4.013 mm (.158 in)	10 - 14 AWG (6.0 - 2.0 mm ²)	25 AMPS
16	1.35 mm (.053 in)	3.048 mm (.120 in)	14 - 20 AWG (2.0 - 0.5 mm ²)	13 AMPS
20	1.02 mm (.040 in)	2.413 mm (.095 in)	16 - 22 AWG (1.5-0.35 mm ²)	7.5 AMPS

QUANTITY	SEE SHEET 2 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 2 PL DEC ±0.15 3 PL DEC ±0.08 3) Note reference =		SIGNATURES DRAWN: IAN.XIAO CHECKED: SULLEN.ZHANG ENGINEER: APPROVAL: TOMMY.XIE CUSTOMER: 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.	DATE 09/MAR/23 09/MAR/23 11/MAR/23
MATERIAL SPECIFICATIONS: WEIGHT:94.2g		Amphenol Sine Systems - www.amphenol-sine.com 44724 Morley Drive Clinton Township, MI 48036	
PROCESS SPECIFICATIONS:		48 POS,RECEPTACLE,PIN,ARB SERIES, REDUCED SEAL,BLACK	
NEXT ASS'Y:		SIZE B C-	REVISION A1
SCALE: NONE		DWG NO: ARB12-48PxR-L018	SHEET 1 OF 2

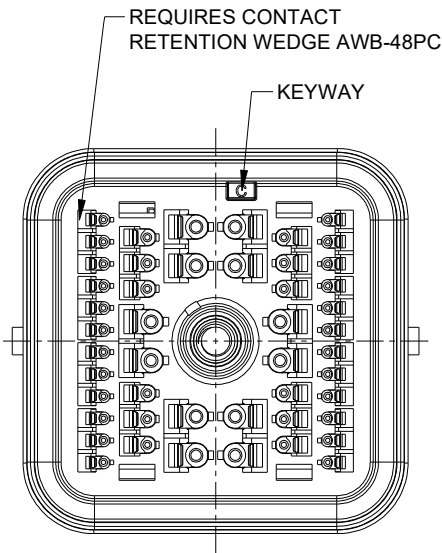
REVISIONS					
REV	ECO	DESCRIPTION	DATE	BY	APPR
A1	-	RELEASE NEW DRAWING	09/MAR/23	IAN	TOMMY



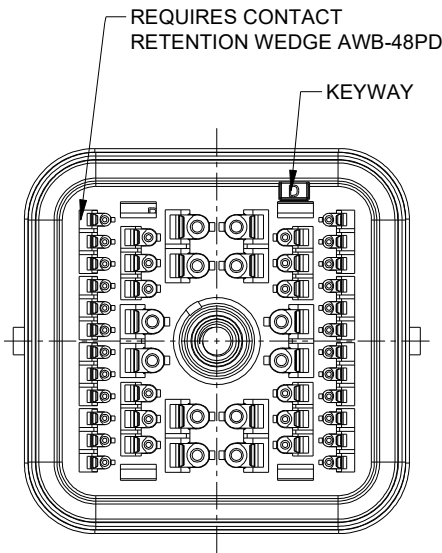
PART NUMBER	REF
ARB12-48PAR-L018	DRB12-48PAE-L018




PART NUMBER	REF
ARB12-48PBR-L018	DRB12-48PBE-L018



PART NUMBER	REF
ARB12-48PCR-L018	DRB12-48PCE-L018



PART NUMBER	REF
ARB12-48PDR-L018	DRB12-48PDE-L018

	ARB12-48PxR-L018														
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 2 PL DEC ±0.15 3 PL DEC ±0.08 3) Note reference = 		<table><tr><th>SIGNATURES</th><th>DATE</th></tr><tr><td>DRAWN: IAN.XIAO</td><td>09/MAR/23</td></tr><tr><td>CHECKED: SULLEN.ZHANG</td><td>09/MAR/23</td></tr><tr><td>ENGINEER:</td><td></td></tr><tr><td>APPROVAL: TOMMY.XIE</td><td>11/MAR/23</td></tr><tr><td>CUSTOMER:</td><td></td></tr></table> <p>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.</p>	SIGNATURES	DATE	DRAWN: IAN.XIAO	09/MAR/23	CHECKED: SULLEN.ZHANG	09/MAR/23	ENGINEER:		APPROVAL: TOMMY.XIE	11/MAR/23	CUSTOMER:		<div>Amphenol</div> <div>Sine Systems - www.amphenol-sine.com 44724 Morley Drive Clinton Township, MI 48036</div> <div>48 POS,RECEPTACLE,PIN,ARB SERIES, REDUCED SEAL,BLACK</div>
SIGNATURES	DATE														
DRAWN: IAN.XIAO	09/MAR/23														
CHECKED: SULLEN.ZHANG	09/MAR/23														
ENGINEER:															
APPROVAL: TOMMY.XIE	11/MAR/23														
CUSTOMER:															
MATERIAL SPECIFICATIONS: WEIGHT:94.2g															
PROCESS SPECIFICATIONS:															
NEXT ASS'Y:															
		<table><tr><td>SIZE</td><td>TYPE</td><td>DWG NO:</td><td>REVISION</td></tr><tr><td>B</td><td>C-</td><td>ARB12-48PxR-L018</td><td>A1</td></tr></table>	SIZE	TYPE	DWG NO:	REVISION	B	C-	ARB12-48PxR-L018	A1					
SIZE	TYPE	DWG NO:	REVISION												
B	C-	ARB12-48PxR-L018	A1												
		SCALE: NONE	SHEET 2 OF 2												

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

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

Machined Contacts, Sockets & Pins				
Part Number	Description	Size	AWG	Type
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	Type
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	
MF3-3974	Crimp Die - Size 20
MF3-3976	Crimp Die - Size 20 (20-22AWG -04XX Series)
MF3-3978	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