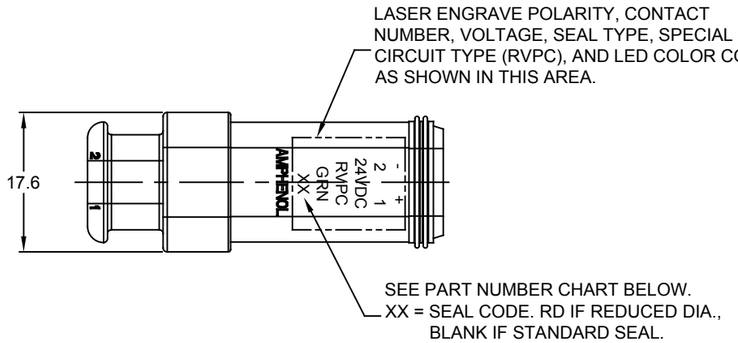
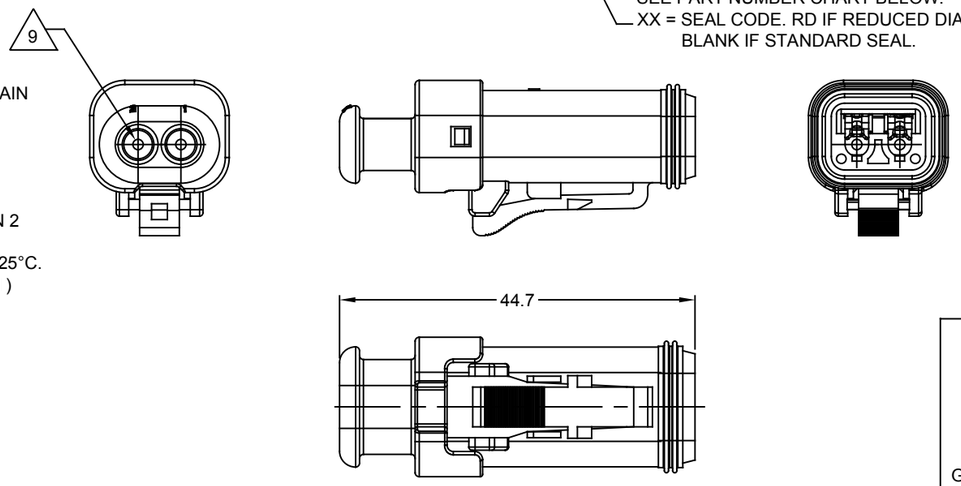
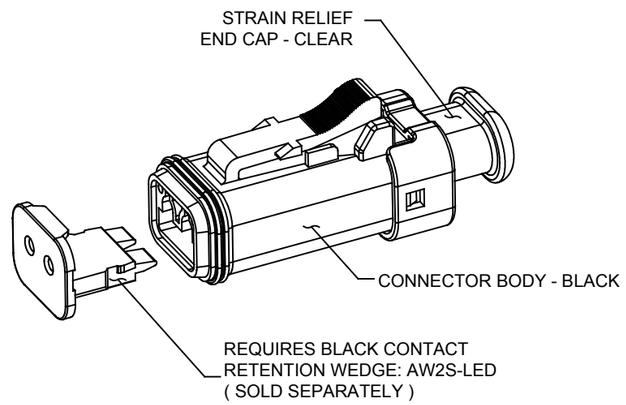
REVISIONS					
REV	ECO	DESCRIPTION	DATE	BY	APPR
A1	-	RELEASE NEW DRAWING	22JUN18	SULLEN	TOMMY
A2	-	UPDATE DRAWING	18MAR19	SULLEN	TOMMY







NOTES: UNLESS OTHERWISE SPECIFIED

1. MATERIAL:
   HOUSING: THERMOPLASTIC, BLACK
   SEAL: SILICONE RUBBER

2. MODIFICATIONS: LIGHT EMITTING DIODE (GREEN), STRAIN RELIEF END CAP, REVERSE VOLTAGE PROTECTION CIRCUIT (RVPC).

3. CONNECTOR SPECIFICATIONS:
   3.1 CURRENT RATING: 13 AMPS
   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: IP67 (MATED CONDITION)
   3.5 MATING CYCLE DURABILITY: 100 CYCLES
   3.6 ROHS COMPLIANT

4. LED SPECIFICATIONS:
   4.1 FORWARD CURRENT: 30 MILLIAMPS TYPICAL; 100 MILLIAMPS MAXIMUM
   4.2 REVERSE CURRENT: 50 MICROAMPS MAXIMUM
   4.3 POWER DISSIPATION: 120 MILLIWATTS MAXIMUM
   4.4 FORWARD VOLTAGE: 4 VOLTS MAXIMUM
   4.5 REVERSE VOLTAGE: 5 VOLTS MAXIMUM

5. RESISTANCE SPECIFICATIONS:
   5.1 RESISTANCE VALUE (R1): 680 OHMS;
   5.2 RESISTANCE VALUE (R2): 0 OHMS;
   5.3 POWER RATING: ⅛ WATTS
   5.4 MAX.WORKING VOLTAGE: 150 VOLTS

6. SUPPRESSOR DIODE SPECIFICATIONS:
   6.1 STAND-OFF VOLTAGE: 26 VOLTS;
   6.2 MAX. FORWARD CURRENT: 5μA @ 26V
   6.3 PEAK PULSE POWER DISSIPATION: 400 WATTS

7. MATING PART: AT04-2P* RECEPTACLE
   (* = MODIFICATIONS AND COLORS)

8. ALL DIMENSIONS ARE FOR REFERENCE USE ONLY.

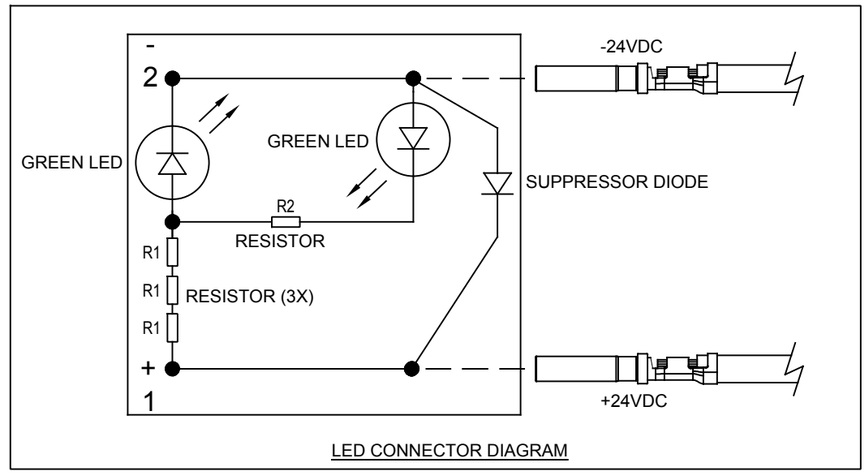
9 CONTACT SIZE AND REAR SEAL WIRE RANGE:

REDUCED DIAMETER SEAL:

CONTACT SIZE	MIN. INSUL O.D.	MAX. INSUL O.D.	TYPICAL WIRE RANGE
16	1.35 mm (.053 in)	3.05 mm (.120 in)	14 - 20 AWG

STANDARD SEAL:

CONTACT SIZE	MIN. INSUL O.D.	MAX. INSUL O.D.	TYPICAL WIRE RANGE
16	2.24 mm (.088 in)	3.68 mm (.145 in)	14 - 20 AWG



LED CONNECTOR DIAGRAM

COMPONENT TYPES:
R2 RESISTOR: TYPE 0805, R0Ω, 1/8W
SMD LED: KPA-1606ZGC-G
R1 RESISTOR: TYPE 0805, R680Ω, 1/8W
SMD T.V.S. DIODE: 400W, 26V, P4SMAJ26CA

PART NUMBER CHART	
SEAL	PART NUMBER
STANDARD	AT06-2S-LED24V01
REDUCED DIAMETER	AT06-2S-LED24VR1

	SEE P/N CHART		
	PART NUMBER	DESCRIPTION	ITEM
QUANTITY	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 = X

MATERIAL SPECIFICATIONS:

PROCESS SPECIFICATIONS:

NEXT ASS'Y:

SIGNATURES		DATE
DRAWN:	SULLEN.ZHANG	18MAR19
CHECKED:	ORION.LI	18MAR19
ENGINEER:		
APPROVAL:	TOMMY.XIE	18MAR19
CUSTOMER:		

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Amphenol

Sine Systems - www.amphenol-sine.com
44724 Morley Drive
Clinton Township, MI 48036

AT SERIES, 2-WAY, PLUG, LED, 24V
CLEAR CAP, BLACK, RVP CIRCUIT

SIZE	TYPE	DWG NO:	REVISION
B	C-	AT06-2S-LED24VX1	A2

SCALE: NONE SHEET 1 OF 1

TITLE: AT SERIES, 2-WAY, PLUG, LED, 24V, CLEAR CAP, BLACK, RVP CIRCUIT
DWG NO: AT06-2S-LED24VX1
REV: A2
SH: 1
OF: 1

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