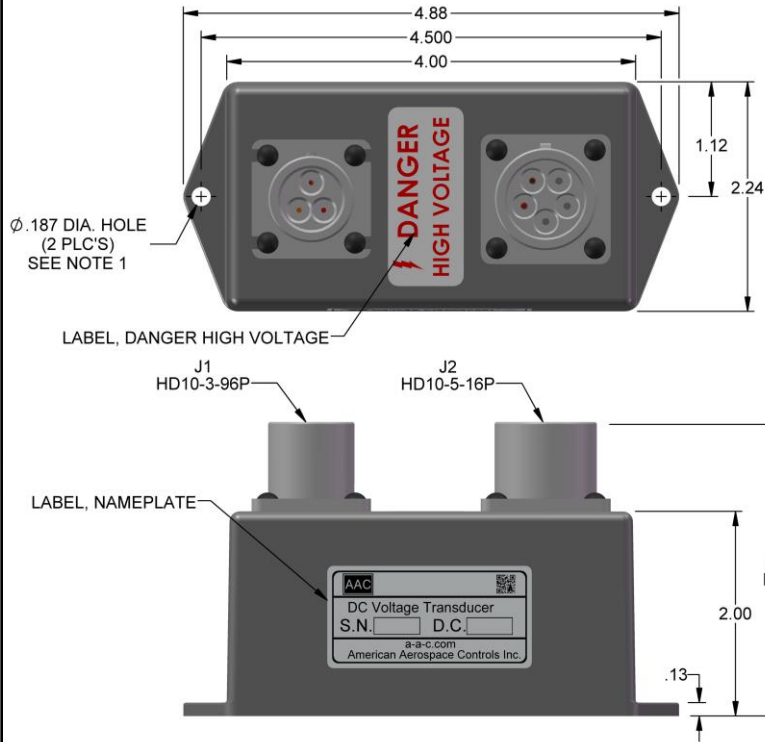


Dimensions in Inches, Tolerances: .XX ± .03 .XXX ± .010

**DC VOLTAGE TRANSDUCER
SERIES S657
LOOP POWER TWO & THREE WIRE
4 TO 20mA OUTPUT**



| PART NUMBER | RANGE | OVERLOAD | PART NUMBER | RANGE | OVERLOAD |
|-------------|---------------|----------|-------------|----------------|-----------|
| S657-L75 | 0 to ± 75mVdc | ±1Vdc | S657-100 | 0 to ± 100Vdc | ± 300Vdc |
| S657-1 | 0 to ± 1Vdc | ± 25Vdc | S657-150 | 0 to ± 150Vdc | ± 300Vdc |
| S657-2 | 0 to ± 2 Vdc | ±70Vdc | S657-300 | 0 to ± 300Vdc | ± 600Vdc |
| S657-5 | 0 to ± 5Vdc | ±100Vdc | S657-500 | 0 to ± 500Vdc | ± 1000Vdc |
| S657-10 | 0 to ± 10Vdc | ±200Vdc | S657-750 | 0 to ± 750Vdc | ± 1500Vdc |
| S657-20 | 0 to ± 20Vdc | ±300Vdc | S657-1200 | 0 to ± 1200Vdc | ± 1800Vdc |
| S657-50 | 0 to ± 50Vdc | ±300Vdc | S657-1500 | 0 to ± 1500Vdc | ± 2000Vdc |
| S657-60 | 0 to ± 60Vdc | ±300Vdc | S657-2000 | 0 to ± 2000Vdc | ± 3000Vdc |
| S657-75 | 0 to ± 75Vdc | ±300Vdc | | | |

INPUT

| | |
|---------------------|-------------------------|
| RANGE | See Table |
| OVERLOAD CONTINUOUS | See Table |
| OVERLOAD TRANSIENT | 6Kvdc FOR 100µ-sec |
| ISOLATION | 5Kv RMS 60Hz For 1 min. |
| BURDEN @ FULL SCALE | 500µA Max. |

OUTPUT

| | |
|--------------------------------|---|
| CURRENT SIGNAL | 4 to 20mAdc FS (Full Scale) |
| ACCURACY | ±0.5% FS (±0.1mA max.) over temp. range |
| POLARITY SENSING | 4 to 20mAdc proportional to the absolute. Value of the input voltage. |
| RESPONSE (10 to 90%) | 5m-sec. max. |
| LOAD RESISTANCE | 250 Ohms nominal |
| LOAD RESISTANCE RANGE | 0 to 500 Ohms |
| CURRENT SIGNAL @ OVERLOAD | 24mAdc typ. |
| ISOLATION MODE REJECTION RATIO | >85db @ 60Hz |

POWER SUPPLY

| | |
|---------------------------------------|--------------------------------|
| SUPPLY VOLTAGE | +19 to 32Vdc |
| CURRENT DRAIN | 24mA max. |
| TRANSIENT(With 250Ω Source Impedance) | 60Vdc 5 sec. 100Vdc 1m-sec. |
| PROTECTION | Reverse Polarity Protected |

ENVIRONMENTAL AND PHYSICAL CHARACTERISTICS

| | |
|-------------------------------------|-------------------------------|
| OPERATING TEMPERATURE | -40° to +85°C |
| STORAGE TEMPERATURE | -55° to +85°C |
| OPERATION HUMIDITY | 0 to 100% relative humidity |
| SHOCK & VIBRATION | 20g shock, 10g @ 5-200Hz |
| INSULATION RESISTANCE | 500M-Ohms @ 500Vdc |
| DIELECTRIC STRENGTH | 1.5Kv RMS 60Hz Continuous. |
| CASE (UL Flammability rating 94-V0) | Thermoplastics Cyclicolac ABS |
| WEIGHT | 1.5 lbs. max. |

TERMINAL IDENTIFICATION

J2

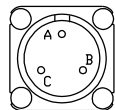
| | |
|-------|-----------------------|
| J2-A. | SUPPLY VOLTS (+) |
| J2-B. | OUTPUT SIGNAL (+) |
| J2-C. | SUPPLY & OUTPUT (RTN) |
| J2-D. | SPARE |
| J2-E. | SPARE |

NOTE:

- RECOMMENDED MOUNTING HARDWARE #8 SCREW, #8 SPLIT LOCKWASHER AND # 8 FLAT WASHER. TORQUE MAXIMUM 18 IN-LB.

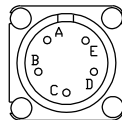
TERMINAL IDENTIFICATION

- J1**
- J1-A. SPARE
 - J1-B. INPUT VOLTS (+/-)
 - J1-C. INPUT VOLTS (+/-)



J1
DEUTSCH
CONNECTOR
HD10-3-96P

MATING
CONNECTOR
HD16-3-16S



J2
DEUTSCH
CONNECTOR
HD10-5-16P

MATING
CONNECTOR
HD16-5-16S

TRANSDUCER SUPPLIED WITH MATING CONNECTORS AND SOCKET CONTACTS.

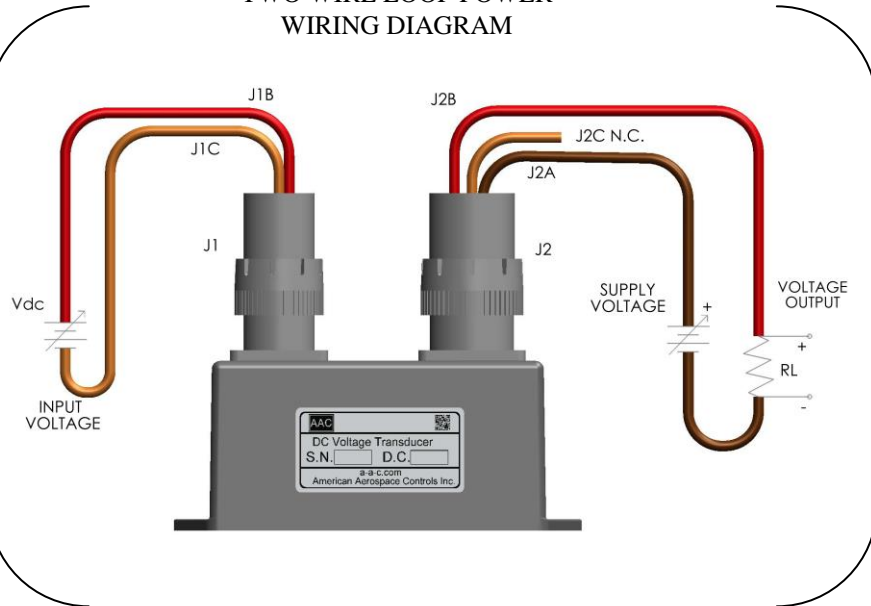
| | | | |
|---------------------|------------|--------------------------------|-------------------|
| SHEET 1 OF 2 | AAC | DRAWING NUMBER S657 | REV. V |
|---------------------|------------|--------------------------------|-------------------|

**DC VOLTAGE TRANSDUCER
SERIES S657
WIRING DIAGRAM
LOOP POWER TWO & THREE WIRE
4 to 20 mA OUTPUT**

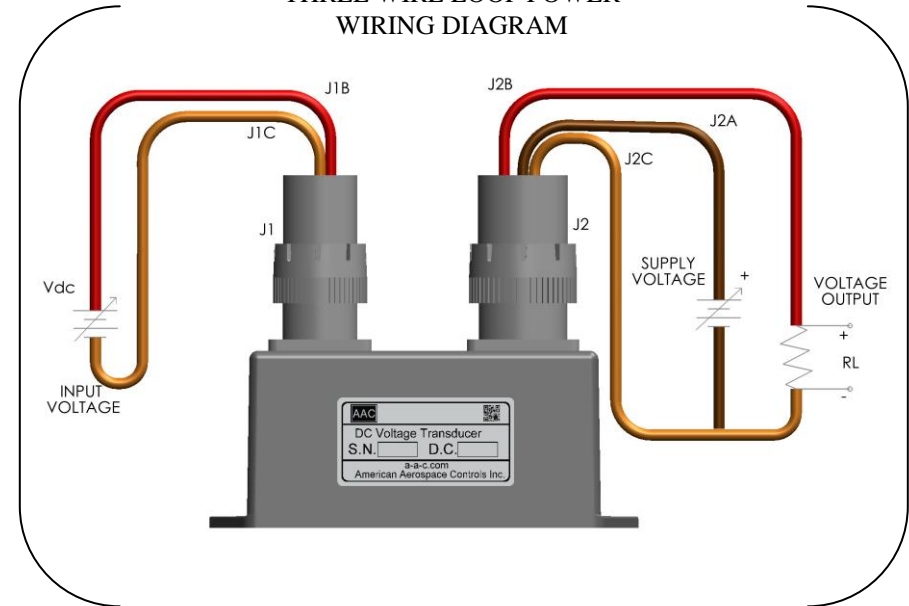
Features:

- High precision voltage measurement capability. (0.5% over temperature range)
- 2 wire loop power operation.
- 13 models for voltage measurements of 10 TO 2000Vdc.
- Galvanic isolation between voltage input and output signal.
- Wide temperature range -40° C TO +85° C.
- 100% Electronic design.
- 5 Year warranty.

**TWO WIRE LOOP POWER
WIRING DIAGRAM**



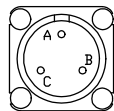
**THREE WIRE LOOP POWER
WIRING DIAGRAM**



TERMINAL IDENTIFICATION

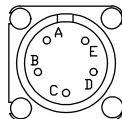
J1

- J1-A. SPARE
- J1-B. INPUT VOLTS (+/-)
- J1-C. INPUT VOLTS (+/-)



J1
DEUTSCH
CONNECTOR
HD10-3-96P

MATING
CONNECTOR
HD16-3-16S



J2
DEUTSCH
CONNECTOR
HD10-5-16P

MATING
CONNECTOR
HD16-5-16S

TERMINAL IDENTIFICATION

J1

- J2-A. SUPPLY VOLTS (+)
- J2-B. OUTPUT SIGNAL (+)
- J2-C. SUPPLY & OUTPUT (RTN)
- J2-D. SPARE
- J2-E. SPARE

SHEET 2 OF 2



**DRAWING NUMBER
S657**

**REV.
V**