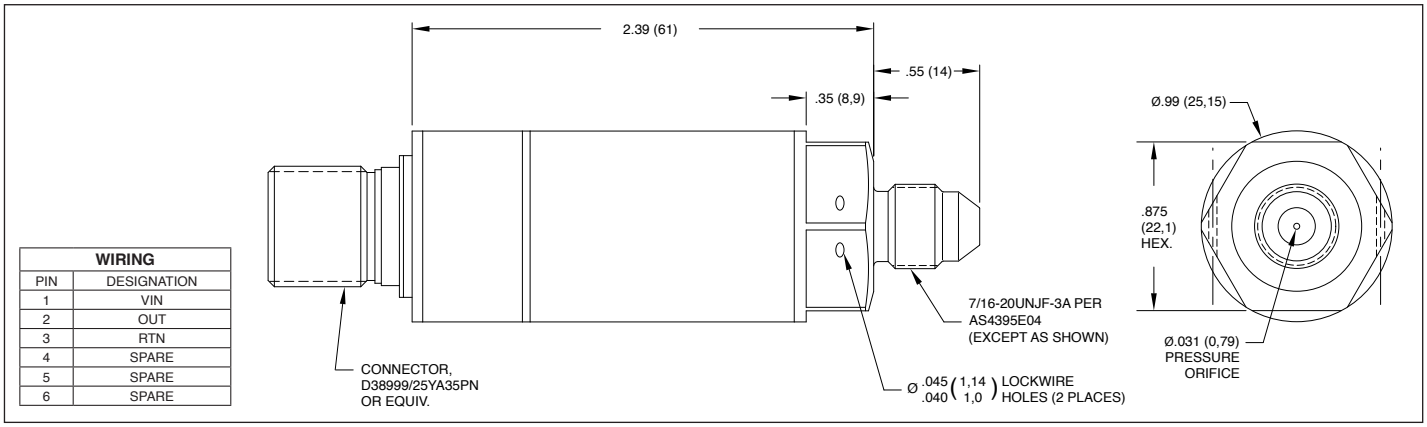
5 VDC OUTPUT HIGH ACCURACY HIGH PRESSURE AIRCRAFT PRESSURE TRANSDUCER

APTE-743-1000

- 5 VDC Output
- Rugged All Welded Construction
- Excellent Long Term Stability
- Silicon on Silicon Integrated Sensor **VIS**®
- Analog Output
- High Overload Capabilities
- Intrinsically Safe Applications Available (i.e. IS-APTE-743-1000)

The ingenious application of modern solid state technology to pressure sensing makes the APTE-743-1000 Series the most advanced pressure transducer available of its class. Designed to measure liquid or gas pressure, the transducer is of all-welded stainless steel construction, with integral pressure port and isolation diaphragm. The APTE-743-1000 provides an extremely rugged, accurate and inexpensive means for pressure-to-voltage conversion. The output, and the ability to withstand high voltages between leads and case make the APTE-743-1000 Series Transducers ideally suited for a large number of high accuracy aircraft applications.



WIRING	
PIN	DESIGNATION
1	VIN
2	OUT
3	RTN
4	SPARE
5	SPARE
6	SPARE

INPUT	Pressure Range	70 1000 / 140 2000 / 200 BAR 3000 PSI
	Operational Mode	Absolute, Sealed Gage
	Over Pressure	2 Times Rated Pressure
	Burst Pressure	5 Times Rated Pressure Range to a Maximum of 10000 PSI (690 BAR)
	Construction Materials	15-5 PH or 316 SS
	Media Compatibility	JP-4 and JP-5 Grade Aviation Turbine Fuel Per MIL-T-5624, Hydraulic Fluid Per MIL-H-5606, MIL-H-83282, Engine and Transmission Lubrication Oil Per MIL-L-7808 and MIL-L-23699 and Aviation Gasoline Per MIL-G-5572 All Grades
	Rated Electrical Excitation	12 ± 4 VDC or 28 ± 4 VDC
	Maximum Electrical Current	25 mA (Max.)
OUTPUT	Output Impedance	50 Ohms (Typ.)
	Full Scale Output	5 VDC
	Residual Unbalance	0.5V
	Total Error Band	± 0.5% (End Point Settings, Combined Non-Linearity, Hysteresis, Repeatability and All Thermal Effects Included)
	Amplifier Bandwidth (-3dB)	DC to 10 KHz
	Resolution	Infinitesimal
	Insulation Resistance	100 Megohm Min. @ 50 VDC
ENVIRONMENTAL	Operating Temperature Range	-65°F to +250°F (-55°C to +120°C)
	Compensated Temperature Range	-65°F to +250°F (-55°C to +120°C)
	Linear Vibration	20g Peak, Sine 10 to 2000 Hz
	Humidity	100% Relative Humidity
	Mechanical Shock	20g half Sine Wave 11 msec. Duration
PHYSICAL	Pressure Port	7/16-20 UNJF-3A 33656-E4
	Electrical Connection	D38999/25YA35PN Per AS4395E04
	Weight	120 Grams Approx.
	Pressure Sensing Principle	Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon
	Mounting Torque	80-100 Inch-Pounds (Max.)

Note: Custom pressure ranges, accuracies and mechanical configurations available. Dimensions are in inches. Dimensions in parenthesis are in millimeters. All dimensions nominal. Continuous development and refinement of our products may result in specification changes without notice.

KULITE SEMICONDUCTOR PRODUCTS, INC. • One Willow Tree Road • Leonia, New Jersey 07605 • Tel: 201 461-0900 • Fax: 201 461-0990 • www.kulite.com