

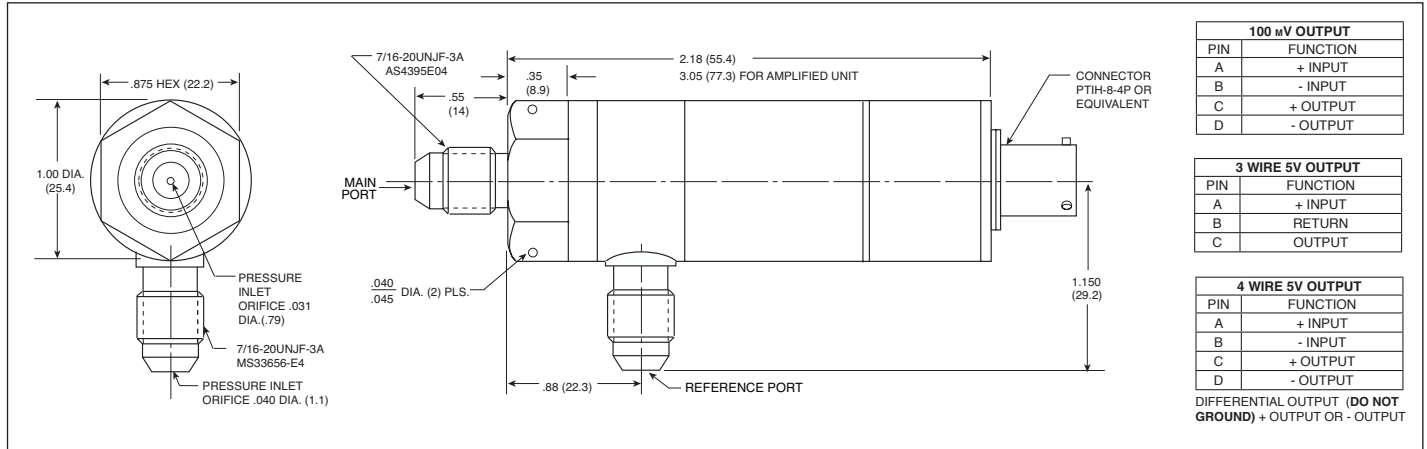
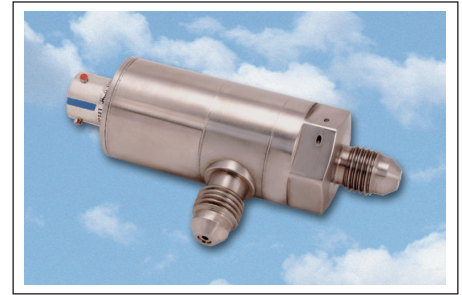


AIRCRAFT DIFFERENTIAL PRESSURE TRANSDUCER

APT-51HL-1000 Differential (100mV Output)

APTE-51HL-1000 Differential (5V Output)*

- Developed For Use With High Line Pressure Compared To Low Differential Pressure
- Ideal For Measuring Pressure Drop Across Air Filters To Monitor Filter Clogging
- Commonly Used For Measuring Across Venturi Pressure Drops
- High Natural Frequencies
- Leakproof, All Welded Construction (No Leak After Exposure To 2000°F 1093°C)
- Utmost In Safety (Secondary Containment Of Pressure Media)
- Fully Qualified (Passed Extensive Environmental Tests, RTCA/DO-160F)
- Unprecedented Stability And Reliability To High Temperatures (Ruggedized Internal Construction)



SPECIFICATIONS	UNAMPLIFIED APT-SERIES			AMPLIFIED APTE SERIES	
	.7 10	1.7 25	3.5 50	7 100	17 BAR 250 PSI
Pressure Range	10VDC Regulated			28VDC ± 4V	
Excitation	100mV (Typ.)			5VDC Diff. or Single Ended	
Output	100mW (Typ.)			280mW (Typ.)	
Power Consumption	1000 Ohms (Min.)			N/A	
Input Impedance	2000 Ohms (Max.)			100 Ohms (Max.)	
Output Impedance	-65°F to +300°F (-55°C to +150°C)			-65°F to +250°F (-55°C to +120°C)	
Operating Temperature Range	0.45 Lb. (Max.)			0.6 Lb. (Max.)	
Weight	Case Length May Vary With Range, Measuring Mode, Pressure Port and Connector				
Case Outline	316 SS And 17-4 PH SS				
Construction Materials	10 Times Rated Pressure, 2000 PSI Max. (138 Bar)				
Line Pressure	2 Times Rated Pressure Range				
Proof Pressure (Delta)	5 Times Rated Pressure Range				
Burst Pressure (Delta)	100 Megohms Min. @ 50VDC				
Insulation Resistance	75 Inch-Pounds (Max.)				
Mounting Torque	± 2% FSO From 32°F (0°C) to 185°F (85°C), Increasing to ± 3% FSO at -65°F (-55°C) and +250°F (120°C), The APT Maintains ± 3% FSO to 300°F (150°C)				
Total Error Band	Infinitesimal				
Resolution	At Least 30,000 Hours				
MTBF	-65°F to +300°F (-55°C to +150°C)				
Fluid Temperature	-65°F to +185°F (-55°C to +85°C)				
Storage Temperature Range (Non Operating)	Up To 51,000 Feet				
Altitude-Operating	Main Port: Clean Dry Gas Reference Port: Clean Dry Gas				
Media Compatibility	100% Relative Humidity				
Humidity	Operational After Being Subjected to "G" Levels of 12 "G"s Per MIL-STD-810C, Method 513.2 Procedure 1				
Acceleration	RTCA/DO-160F, Sec 8, Cat R, D & D1 Random Vibration Curves				
Vibration	RTCA/DO-160F, Sec 7, Cat B, 20g, 11 msec sawtooth shock				
Mechanical Shock	APTE SERIES: Meets RTCA DO-160 Sections 18, 19 and 21 All Cat. A, Section 20 Cat. U. (With Shielded Cable)				
Electromagnetic Interference					

Note: Custom pressure ranges, accuracies and mechanical configurations available. Dimensions are in inches. Dimensions in parenthesis are in millimeters. All dimensions nominal. (H) Continuous development and refinement of our products may result in specification changes without notice. Copyright © 2014 Kulite Semiconductor Products, Inc. All Rights Reserved.

TYPICAL ERROR BAND

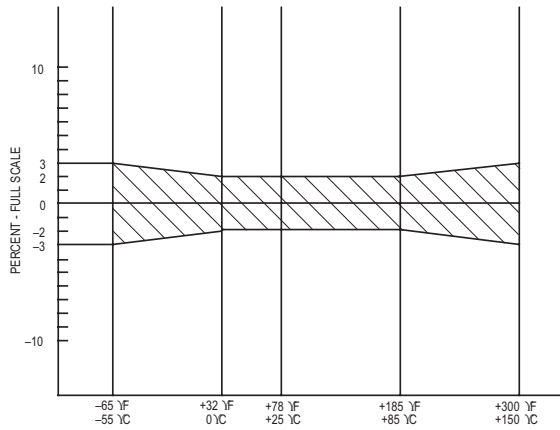


FIG I: TYPICAL ERROR BAND - UNAMPLIFIED UNIT

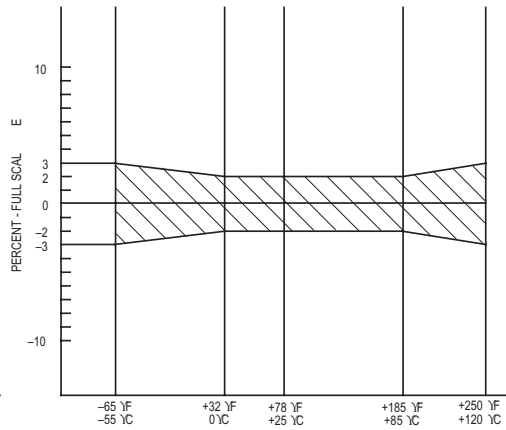
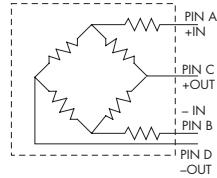


FIG II: TYPICAL ERROR BAND - AMPLIFIED UNIT

NOTE: OTHER TEMPERATURE RANGES AND TIGHTER SPECIFICATIONS ARE AVAILABLE.

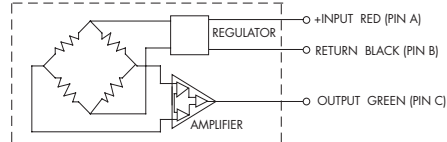
WIRING

0 - 100 mV OUTPUT



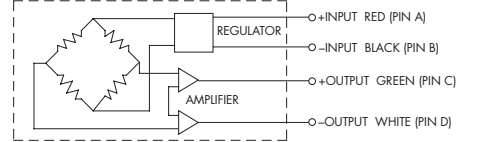
APT-51HL-1000

3 WIRE 0.5 - 5V OUTPUT



APTE-51HL-1000-XXXD-3

4 WIRE 0 - 5V OUTPUT



DIFFERENTIAL OUTPUT - DO NOT GROUND + OUTPUT OR - OUTPUT

APTE-51HL-1000-XXXD-4

* Ordering Information

3 Wire:

APTE-51HL-1000-XXXD-3

4 Wire:

APTE-51HL-1000-XXXD-4

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