



5 VDC OUTPUT DIGITALLY CORRECTED PRESSURE TRANSDUCER

ETM-DC-375 (M) SERIES

- 5 VDC Digitally Corrected Output
- Hybrid Microelectronic Regulator-Amplifier
- All Welded Construction
- Silicon on Silicon Integrated Sensor **VIS**[®]
- Secondary Containment On Absolute And Sealed Gauge Units
- Aerospace Quality Components
- Analog Output
- Intrinsically Safe Applications Available (i.e. IS-ETM-DC-375)



ETM-375 Series transducers are miniature, threaded instruments. The sensing sub-assembly is protected from mechanical damage by a solid screen which has been shown to have minimal influence on the frequency response of the sensor. Incorporation of a Kulite proprietary electronics module within the main body of this product allows

for operation from an unregulated power supply ranging from 12 ± 4VDC or 28 ± 4VDC with reverse polarity protection available upon request. The result is a stable, digitally corrected 0 to 5 VDC output signal.

OPTIONAL CONNECTOR VERSION HERMETICALLY SEALED

PIN	DESIGNATION
A	+ INPUT
B	- INPUT/RETURN
C	+ OUTPUT
D	FACTORY USE ONLY

PTIH-8-4P CONNECTOR

Labels: CABLE STRAIN RELIEF, 4 COND. # 30 AWG SHIELDED CABLE 36" (91.4) (NOM.), .56 DIA. (14.2), .625 DIA. (15.9), 1.057 (26.8) NOM., .32 (8.1), .43 (10.9), .17 (4.3) NOM., O-RING .301 I.D. X .064 C.S. (7.6 I.D. X 1.6 C.S.), LOCKWIRE HOLES .040 DIA. (1.0) (2) PLC'S, 5/8 HEX (15.9), "B" SCREEN (STANDARD), "M" SCREEN (OPTIONAL).

P/N	"T"
375	3/8-24 UNJF-3A
375M	M 10 x 1

WIRING	
COLOR	DESIGNATION
RED	+ INPUT
BLACK	- INPUT
GREEN	+ OUTPUT
WHITE	FACTORY USE ONLY

CONSULT FACTORY FOR SPECS. ON SEALED GAGE

INPUT	Pressure Range	17 250	35 500	70 1000	170 2500	350 5000	700 10000	1400 BAR 20000 PSI	
	Operational Mode	Absolute, Sealed Gauge							
	Over Pressure	2 Times Rated Pressure to 1000 PSI (70 BAR) 1.5 Times Rated Pressure Above 1000 PSI to a Max. of 30000 PSI (2100 BAR)							
	Burst Pressure	3 Times Rated Pressure to a Max. of 35000 PSI (2400 BAR)							
	Pressure Media	Any Liquid or Gas Compatible With 15-5 PH and 316 Stainless Steel							
	Maximum Electrical Current	25 mA							
	Rated Electrical Excitation	8 - 32 VDC							
OUTPUT	Full Scale Output (FSO)	5 VDC							
	Residual Unbalance	0 VDC							
	Output Impedance	50 Ohms (Typ.)							
	Total Error Band	± 0.5% (Typ.) <i>(End Point Settings, Combined Non-Linearity, Hysteresis, Repeatability and All Thermal Effects Included)</i>							
	Bandwidth (-3dB)	DC to 2500 Hz							
ENVIRONMENTAL	Resolution	Infinitesimal							
	Insulation Resistance	100 Megohm Min. @ 50 VDC							
	Operating Temperature Range	-40°F to +280°F (-40°C to +140°C) (Max.)							
	Compensated Temperature Range	-40°F to +250°F (-40°C to +120°C)							
PHYSICAL	Linear Vibration	100g Peak, Sine up to 5000 Hz							
	Mechanical Shock	100g half Sine Wave 11 msec. Duration							
	Pressure Port	3/8 - 24 UNJF or M10x1 Thread							
	Electrical Connection	4 Conductor 30 AWG Shielded Cable 36" Long							
	Weight	24.5 Grams (Max.) Excluding Cable							
Pressure Sensing Principle	Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon								
Mounting Torque	80 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. (L) Continuous development and refinement of our products may result in specification changes without notice. Copyright © 2014 Kulite Semiconductor Products, Inc. All Rights Reserved. Kulite miniature pressure transducers are intended for use in test and research and development programs and are not necessarily designed to be used in production applications. For products designed to be used in production programs, please consult the factory.