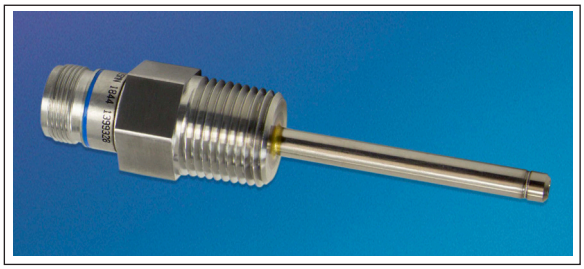
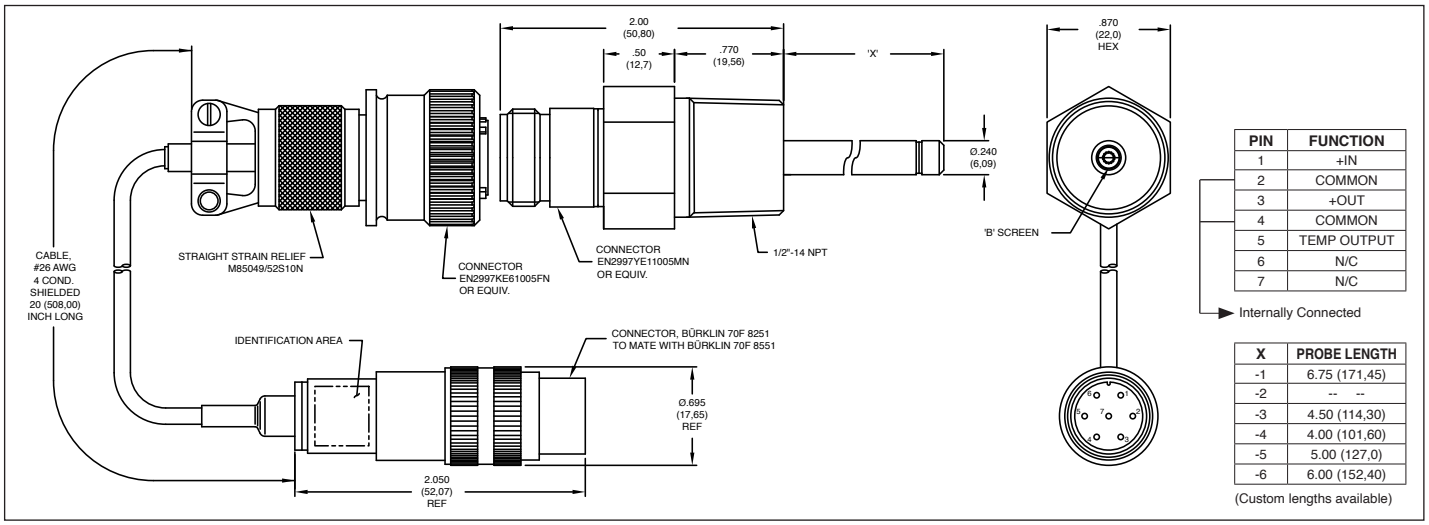
HIGH TEMPERATURE 5 VDC OUTPUT PRESSURE TRANSDUCER

ETL-11-250 (M) SERIES



- 5 VDC Output
- 350°F Temperature Capability
- Hybrid Microelectronic Regulator-Amplifier
- All Welded Construction
- Designed for use in Riciprocating Compressors
- Patented Leadless Technology
- Selectable Probe Length (X) to Eliminate Channel Resonance

ETL-11-250 Series transducers are miniature, threaded flush instruments. The sensing sub-assembly is protected from mechanical damage by a "B" screen which has been shown to have minimal influence on the frequency response of the sensor. The ETL Series uses Kulite's Patented Leadless Technology. Incorporation of a Kulite proprietary electronics module within the connector of this product allows for operation from an unregulated power supply of 12 ± 4 VDC. Standard output is a stable, low noise .5 to 5 VDC signal.



PIN	FUNCTION
1	+IN
2	COMMON
3	+OUT
4	COMMON
5	TEMP OUTPUT
6	N/C
7	N/C

X	PROBE LENGTH
-1	6.75 (171,45)
-2	-- --
-3	4.50 (114,30)
-4	4.00 (101,60)
-5	5.00 (127,0)
-6	6.00 (152,40)

INPUT	Pressure Range	17 250	34.5 500	69 1000	138 BAR 2000 PSI
	Operational Mode	Absolute			
	Over Pressure	2x Rated Pressure (<500 PSI) 1.5x Rated Pressure (≥500 PSI)			
	Burst Pressure	3 Times Rated Pressure			
	Pressure Media	Most Conductive Liquids and Gases - Please Consult Factory			
	Rated Electrical Excitation	12 ± 4 VDC			
	Maximum Electrical Current	25 mA			
OUTPUT	Output Impedance	200 Ohms (Max.)			
	Full Scale Output (FSO)	5V ± 150mV			
	Temperature Output	5th Wire Output (See Link to 5th Wire Application Note)			
	Bandwidth (-3dB)	30 KHz (NOM.)			
	Residual Unbalance	500mV ± 100mV			
	Combined Non-Linearity, Hysteresis and Repeatability	± 0.1% FSO BFSL (Typ.), ± 0.5% FSO (Max.)			
	Resolution	Infinitesimal			
	Natural Frequency (KHz) (Typ.)	Greater Than 175 KHz			
	Acceleration Sensitivity % FS/g Perpendicular	$1.0x10^{-4}$	$6.0x10^{-5}$	$4.5x10^{-5}$	$2.0x10^{-5}$
	Insulation Resistance	100 Megohm Min. @ 50 VDC			
ENVIRONMENTAL	Operating Temperature Range	-65°F to +400°F (-54°C to +204°C) (Sensor) -40°F to +185°F (-40°C to +85°C) (Amplifier and Conn. Module)			
	Compensated Temperature Range	+80°F to +350°F (+27°C to +177°C) Other Ranges Quoted on Request			
	Thermal Zero Shift	± 1% FS/100° F (Typ.)			
	Thermal Sensitivity Shift	± 1% /100° F (Typ.)			
	Linear Vibration	20g Peak, Sine 10 to 2000 Hz			
	Mechanical Shock	20g Half Sine Wave 11 msec. Duration			
PHYSICAL	Electrical Connection	BÜRKLIN 70F 8251 to Mate with BÜRKLIN 70F 8551			
	Weight	24.5 Grams (Max.) Excluding Cable			
	Pressure Sensing Principle	Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon Patented Leadless Technology			
	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. (B) Continuous development and refinement of our products may result in specification changes without notice. *Copyright © 2021 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.*

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