

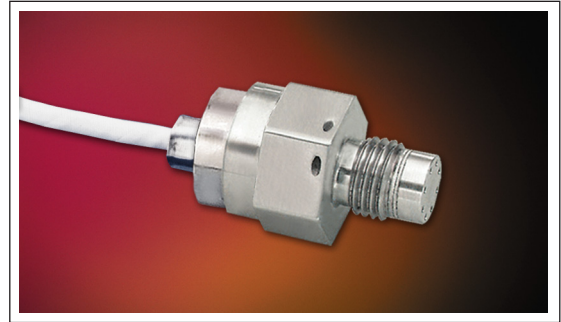


# HIGH TEMPERATURE IS® PRESSURE TRANSDUCER

## HEL-375 (M) SERIES

- Small Pressure Sensitive Area
- Patented Leadless Technology VIS®
- High Natural Frequency
- No Internal Lead Flexing
- Extra Low G Sensitivity
- -65°F To 525°F Temperature Capability

The ruggedness of this sensor has not compromised its performance. It was designed for ease of installation and will operate properly in any medium compatible with 15-5 SS or SiO<sub>2</sub>. Coupled with high temperature, its Patented Leadless Construction makes it possible for the sensing unit to be installed in such a way that will not compromise its high natural frequency.



Kulite recommends the **KSC Series** of signal conditioners to maximize the measurement capability of the HEL-375 transducer.

**OPTIONAL CONNECTOR VERSION  
HERMETICALLY SEALED**

BL8112-8-4P-SP-M136  
(or EQUIV.) Connector

**ORDER AS: HEL-375(M)CO**

PIN	DESIGNATION
A	+ INPUT
B	- INPUT
C	+ OUTPUT
D	- OUTPUT

NOT AVAILABLE ON DIFFERENTIAL UNIT

PRESSURE REFERENCE TUBE .030 X 1" LONG  
(.76 X 25.4) FO R PSIG & PSID UNITS

4 COND. # 30 AWG SHIELDED CABLE 30" (762) LONG

HEX PROFILE AFTER CRIMPING

SILICONE 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) PLCS

"B" SCREEN  
"M" SCREEN OPTIONAL

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

COLOR	DESIGNATION
RED	+ INPUT
BLACK	- INPUT
GREEN	+ OUTPUT
WHITE	- OUTPUT

INPUT	Pressure Range	0.7 10	1.0 15	1.7 25	3.5 50	7 100	17 250	35 500	70 1000	140 BAR 2000 PSI	
	Operational Mode	Absolute, Gage, Differential		Absolute, Gage, Sealed Gage, Differential			Absolute, Sealed Gage				
	Over Pressure	2 Times Rated Pressure to 500 PSI (35 BAR), 1.5 Times Rated Pressure Above 500 PSI (35 BAR)									
	Burst Pressure	3 Times Rated Pressure to a Maximum of 3000 PSI (210 BAR)									
	Pressure Media	Most Liquids and Gases - Please Consult Factory (All Media May Not Be Suitable with O-Ring Supplied)									
	Rated Electrical Excitation	10 VDC/AC									
	Maximum Electrical Excitation	12 VDC/AC									
OUTPUT	Input Impedance	1000 Ohms (Min.)									
	Output Impedance	1000 Ohms (Nom.)									
	Full Scale Output (FSO)	100 mV (Nom.)									
	Residual Unbalance	± 5 mV (Typ.)									
	Combined Non-Linearity, Hysteresis and Repeatability	± 0.1% FSO BFSL (Typ.), ± 0.5% FSO (Max.)									
	Resolution	Infinitesimal									
	Natural Frequency of Sensor Without Screen (KHz) (Typ.)	175	200	240	300	380	550	700	1000	1400	
ENVIRONMENTAL	Acceleration Sensitivity % FS/g Perpendicular	1.0x10 <sup>-3</sup>	6.5x10 <sup>-4</sup>	5.0x10 <sup>-4</sup>	3.0x10 <sup>-4</sup>	1.5x10 <sup>-4</sup>	1.0x10 <sup>-4</sup>	6.0x10 <sup>-5</sup>	4.5x10 <sup>-5</sup>	2.0x10 <sup>-5</sup>	
	Insulation Resistance	100 Megohm Min. @ 50 VDC									
	Operating Temperature Range	-65°F to +525°F (-55°C to +273°C)									
	Compensated Temperature Range	+80°F to +450°F (+25°C to +232°C)									
	Thermal Zero Shift	± 1% FS/100°F (Typ.)									
	Thermal Sensitivity Shift	± 1% /100°F (Typ.)									
	Linear Vibration	10-2,000 Hz Sine, 100g. (Max.)									
PHYSICAL	Mechanical Shock	20g half Sine Wave 11 msec. Duration									
	Electrical Connection	4 Conductor 30 AWG Shielded Cable 30" Long									
	Weight	17 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.) 9 Nm										

Note: Custom pressure ranges, accuracies and mechanical configurations available. Dimensions are in inches. Dimensions in parenthesis are in millimeters. All dimensions nominal. (I) 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.