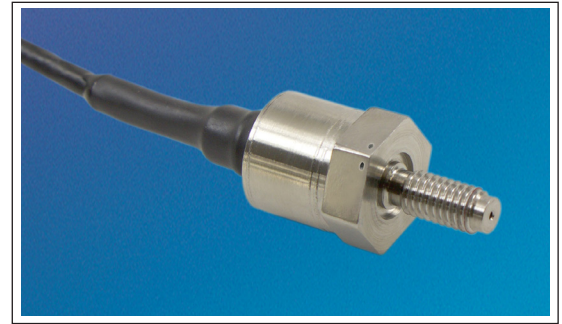




MINIATURE AEROSPACE PRESSURE TRANSDUCER

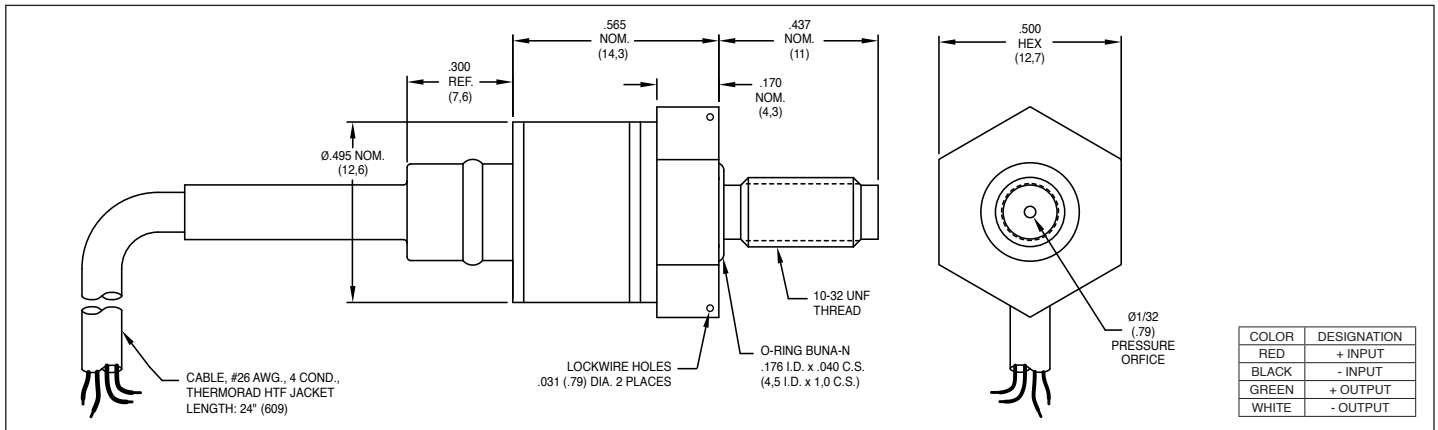
HKM-17-500 SERIES

- Excellent Stability
- All Welded Construction
- Hermetic Sealed Package
- Robust Construction
- High Natural Frequencies
- Aerospace Quality Components
- Silicon on Silicon Integrated Sensor **VIS**[®]
- Thermorad Jacket Compatible With Most Aircraft Fluids
- Intrinsically Safe Applications Available (i.e. IS-HKM-17-500)



The HKM-17-500 is a miniature threaded pressure transducer. The hexagonal head and o-ring seal make it easy to mount and simple to apply. The HKM-17-500 utilizes an oil filled capsule as a force collector. This sensing sub-assembly is then welded to a stainless steel body. The solid state piezoresistive sensing element coupled with a metal diaphragm and an intervening film of non-compressible silicone oil make this transducer compatible with most aircraft fluids.

This advanced construction results in a highly stable, reliable and rugged instrument with all the advantages of microcircuitry such as, significant miniaturization, excellent repeatability, and low power consumption and small size.



INPUT	Pressure Range	3.5 50	7 100	17 250	35 BAR 500 PSI
	Operational Mode	Absolute, Sealed Gage			
	Over Pressure	2 Times Rated Pressure			
	Burst Pressure	3 Times Rated Pressure			
	Pressure Media	Any Liquid or Gas Compatible With 15-5 PH 17-4 PH Stainless Steel or 316 Stainless Steel			
	Rated Electrical Excitation	10 VDC			
	Maximum Electrical Excitation	12 VDC			
	Input Impedance	1000 Ohms (Min.)			
OUTPUT	Output Impedance	3000 Ohms (Max.)			
	Full Scale Output (FSO)	100 mV			
	Residual Unbalance	0 mV			
	Resolution	Infinitesimal			
ENVIRONMENTAL	Insulation Resistance	100 Megohm Min. @ 50 VDC			
	Operating Temperature Range	-65°F to +250°F (-55°C to +121°C)			
	Compensated Temperature Range	+68°F to +168°F (+20°C to +75°C)			
	Total Error Band	± 2% (Max.) (End Point Settings, Combined Non-Linearity, Hysteresis, Repeatability and All Thermal Effects Included)			
	Linear Vibration	20g Peak, Sine 10 to 2000 Hz			
	Altitude	Unaffected			
PHYSICAL	Humidity	100% Relative Humidity			
	Mechanical Shock	20g Half Sine Wave 11 msec. Duration			
	Electrical Connection	4 Conductor 26 AWG Shielded, Thermorad HTF Jacketed Cable, 24" (609)			
	Weight	25 Grams (Max.) Excluding Cable			
PHYSICAL	Pressure Sensing Principle	Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon			
	Mounting Torque	25 Inch-Pounds (Max.) (2.8 Nom.)			

Note: Custom pressure ranges, accuracies and mechanical configurations available. Dimensions are in inches. Dimensions in parenthesis are in millimeters. All dimensions nominal. (E) Continuous development and refinement of our products may result in specification changes without notice. Copyright © 2020 Kulite Semiconductor Products, Inc. All Rights Reserved.