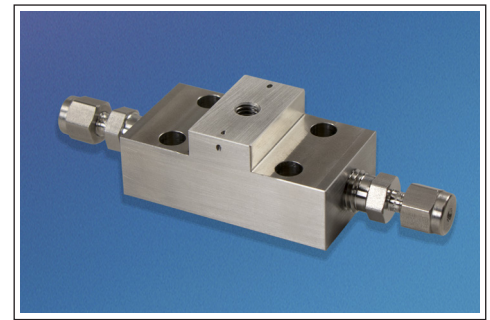




INTEGRATED SEMI-INFINITE TUBE MEASUREMENT SYSTEM

KSIT-XXX-190 SERIES

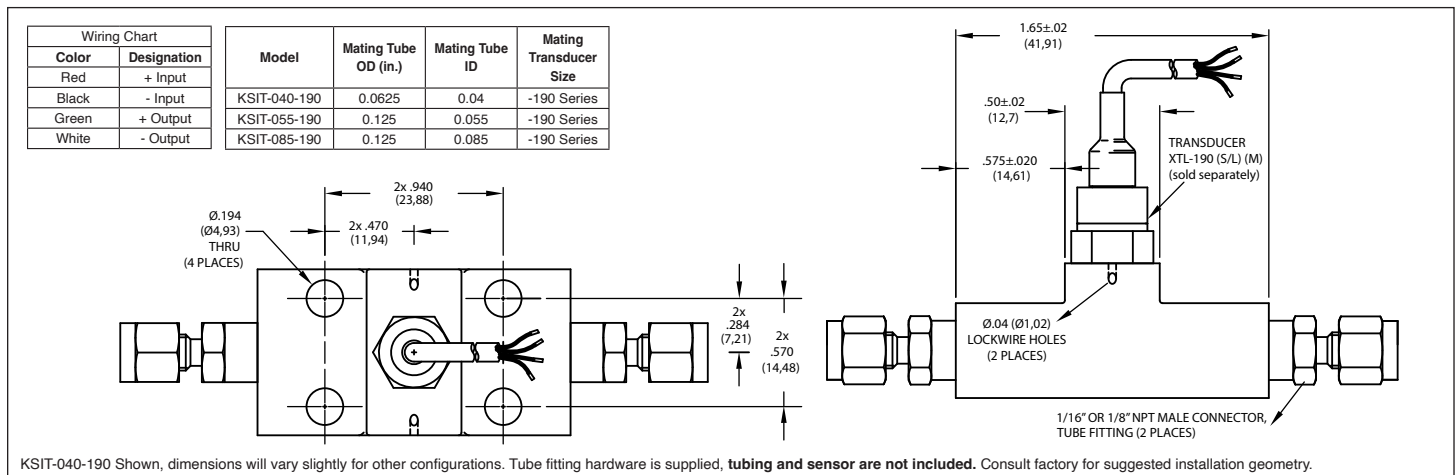
- Easily Installed SIT Solution
- Mates with 1/16" or 1/8" OD Tubing and XTL-190(S/L)(M) and XTEL-190(S/L)(M) catalog Kulite transducers
- Ideal for Dynamic Pressure Measurements in Ultra-High-Temperature Locations
- Useful Bandwidth: DC to 7 kHz



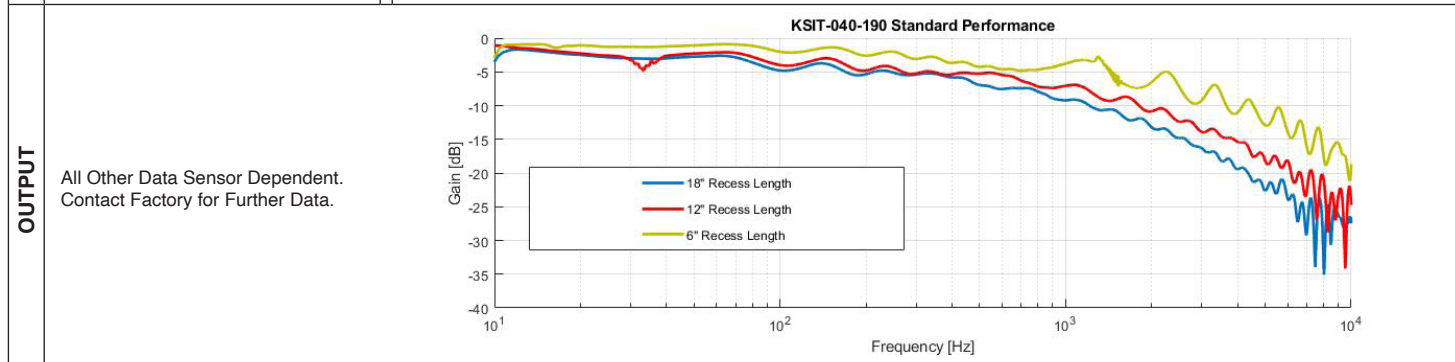
The Kulite Semi-Infinite Tube (KSIT) has been carefully designed to be an easily-installed pressure probe solution with predictable performance for use in ultra-high-temperature locations. With the ability to be installed with an absolute or differential piezoresistive pressure transducer the KSIT can be utilized in a variety of applications. Tubing extensions are easily interchangeable and replaceable by utilizing tube fitting hardware. By incorporating removable parts, the KSIT can be easily removed and cleaned of any debris or moisture between test campaigns, or fitted with a moisture release trap for long-term installations.

The KSIT package is completed by the customer with a shorter length of recess tubing to locate the KSIT unit safely away from the hot testing environment, and a longer "semi-infinite" tube used to dampen dynamic pressures via viscous dissipation such that acoustic resonances do not contaminate the frequency response. The end of the semi-infinite tube can either be capped for static and dynamic pressure readings, or looped back to the reference side of a differential sensor for purely dynamic high-resolution pressure readings.

Kulite recommends the KSC Series of signal conditioners to maximize the measurement capability of the XTL-190 / XTEL-190 transducers.



INPUT	Line Pressure (Air Only)	KSIT-040 = 4000 PSI (275 Bar) (Max.) / KSIT-055, KSIT-085 = 5000 PSI (345 Bar) (Max.)
	Temperature	Sensor Dependent
	Dynamic Pressure	Sensor Dependent



ENVIRONMENTAL	Temperature at Point of Measurement	-65°F to 3632°F (-55°C to +2000°C), Dependent on ambient temperature and recess tube length and material
	Operating Temperature Range	-65°F (-55°C) lower limit, up to 350°F (175°C) for the XTL-190 series, 450°F (232°C) for the XTEL-190 series
	Compensated Temperature Range	Sensor Dependent
PHYSICAL	Electrical Connection	Sensor Dependent
	Weight	0.3 lbs (140 g)
	Pressure Sensing Principle	Fully Active Four Arm Wheatstone Bridge Dielectrically Isolated Silicon on Silicon Patented Leadless Technology
	Mounting Torque	15 Inch-Pounds (Sensor Max.) 1.7 Nm
	Material	316L S/S

Note: Custom mechanical configurations available. Dimensions are in inches. Dimensions in parenthesis are in millimeters. All dimensions nominal. Continuous development and refinement of our products (C) may result in specification changes without notice. Copyright © 2022 Kulite Semiconductor Products, Inc. All Rights Reserved. For products designed to be used in production programs, please consult the factory. 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.