



## HIGH INTENSITY MICROPHONES

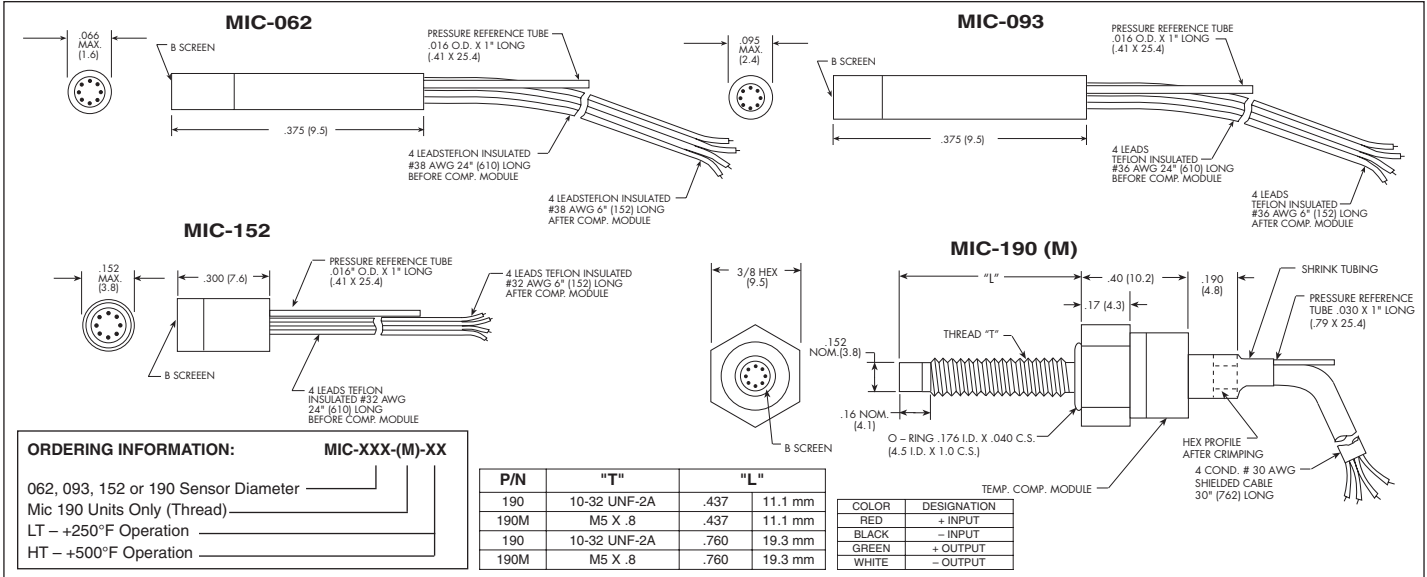
### MIC SERIES

- Low G Sensitivity
- Omnidirectional Capability
- Small Size
- Flat Response
- Wide Dynamic Range
- High Static Pressure
- Steady State Response Capability



The Kulite MIC Series is designed for the measurement of sound pressure where conventional microphones cannot operate due to dynamic pressure, high static pressure or high temperature. Acoustic pressures over the dynamic range 100 to 194 dba can be measured.

The sensor is extremely rugged and does not require additional protection except when used in flows containing particles (i.e. wind tunnels, engine test cells, etc.). Screens are available for all Kulite microphones.



SPECIFICATIONS	MIC-062	MIC-093	MIC-152 & MIC-190 (M)
Sensitivity db Below 1 V/μ bar		-127	
Sensitivity Output in mV at SPL of 160 dba* (Nominal)		9 mV (Nom.)	
Dynamic Range*		100 to 194 dba	
Resonant Frequency (Mechanical)		125 kHz	
Outside Diameter (in.)	0.066	0.095	0.152
Operating Temperature Range		-65°F to 250°F (-55°C to 120°C)	
Thermal Sensitivity		Less Than ± 0.5 db/100°F	
Excitation Voltage (DC or AC)		10V	
Input Impedance		1000 Ohms (Min.)	
Output Impedance		1000 Ohms (Nom.)	
Maximum Static Pressure		25 PSI (1.7 BAR)	

### SOUND PRESSURE LEVEL (SPL) TO PSI CONVERSION CHART

SPL	PSI(RMS)	SPL	PSI(RMS)	SPL	PSI(RMS)	SPL	PSI(RMS)	SPL	PSI(RMS)	SPL	PSI(RMS)
110	0.0009	124	0.0046	138	0.0230	152	0.12	166	0.58	180	2.90
111	0.0010	125	0.0052	139	0.0258	153	0.13	167	0.65	181	3.25
112	0.0012	126	0.0058	140	0.0290	154	0.15	168	0.73	182	3.65
113	0.0013	127	0.0065	141	0.0325	155	0.16	169	0.82	183	4.10
114	0.0015	128	0.0073	142	0.0365	156	0.18	170	0.92	184	4.60
115	0.0016	129	0.0082	143	0.0410	157	0.21	171	1.03	185	5.16
116	0.0018	130	0.0092	144	0.0460	158	0.23	172	1.15	186	5.79
117	0.0021	131	0.0103	145	0.0516	159	0.26	173	1.30	187	6.49
118	0.0023	132	0.0115	146	0.0579	160	0.29	174	1.45	188	7.28
119	0.0026	133	0.0130	147	0.0649	161	0.33	175	1.63	189	8.17
120	0.0029	134	0.0145	148	0.0728	162	0.37	176	1.83	190	9.17
121	0.0033	135	0.0163	149	0.0817	163	0.41	177	2.05	191	10.29
122	0.0037	136	0.0183	150	0.0917	164	0.46	178	2.30	192	11.54
123	0.0041	137	0.0205	151	0.1029	165	0.52	179	2.58	193	12.95

### SPL in dba re .0002 dynes/cm<sup>2</sup>

REF: GAIN 1	Ratio	2	5	10	20	50	100	200	316	500	1000
DB		6	14	20	26	34	40	46	50	54	60
REF: GAIN 1000	Ratio	2	5	10	20	50	100	200	316	500	1000
DB		-54	-46	-40	-34	-26	-20	-14	-10	-6	0

Note: Custom pressure ranges, accuracies and mechanical configurations available. Dimensions are in inches. Dimensions in parenthesis are in millimeters.

Continuous development and refinement of our products may result in specification changes without notice - all dimensions nominal (F)