

MODEL SENSITIVITY 2006V1 10mV/PSI 2006V2 50mV/PSI 2006V3 100mV/PSI

FARADAY SHIELD IMPEDANCE INPUT CONVERTER PIN A OUTPUT **GND** - PIN B

SCHEMATIC DIAGRAM

WITHOUT CONSENT OF CONFIGURATION CONTROL BOARD DYTRAN INSTRUMENTS, INC.

NO CHANGES ALLOWED

- 4. TOTAL SENSOR CAPACITANCE, Ci (PIEZO ELEMENT PLUS CIRCUIT CAPACITORS): 18 pF MAXIMUM. SENSOR CONTAINS NO INDUCTIVE COMPONENTS.
- 3. IMPEDANCE CONVERTER HAS NO VOLTAGE ENHANCING/GENERATING PARTS.
- 2. MATERIAL: HOUSING/DIAPHRAGM 316L **CONNECTOR - 304L**
- 1. CASE TO GROUND PIN ISOLATION > $100M\Omega$

NOTES: UNLESS OTHERWISE SPECIFIED

UNLESS OTHERWISE SPECIFIED: INTERPRET DIM & TOL PER	٥
ASME Y14.5M - 1994.	ږ. ا
REMOVE BURRS.	٠,
COUNTERSINK INTERNAL THDS 90° TO MAJOR DIA.	
CHAM EXT THDS 45° TO MINOR DIA.	L
THD LENGTHS AND DEPTHS ARE FOR	c
MIN FULL THDS.	Ľ
DIMENSIONS APPLY AFTER FINISHING.	۱۲
ra/	Ľ
ALL MACHINED SURFACES.	lΑ
TOTAL RUNOUT WITHIN .005.	Ĺ
BREAK SHARP EDGES .005 TO .010.	

UNLESS OTHERWISE SPECIFIED: INTERPRET DIM & TOL PER ASME Y14.5M - 1994. REMOVE BURRS.	DECIMALS .XX ±.01 .XXX ±.005		ANGLES ±1°	
COUNTERSINK INTERNAL THDS 90° TO MAJOR DIA. CHAM EXT THDS 45° TO MINOR DIA.	API	PROVALS	DATE	Tľ
THD LENGTHS AND DEPTHS ARE FOR MIN FULL THDS.	ORIG	DV	04/28/08	
DIMENSIONS APPLY AFTER FINISHING.	CHK	ANS	01/27/09	
63/ ALL MACHINED SURFACES. TOTAL RUNOUT WITHIN .005.	APP	DV	01/27/09	SIZ
BREAK SHARP EDGES .005 TO .010. MACHINED FILLET RADII .005 TO .015. WELDING SYMBOLS PER AWS A2.4.	DO NOT S	CALE DRAWING	THIRD ANGLE PROJECTION USA	E

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES.

INSTRUMENTS, INC. Chatsworth, CONLY IF IN RED

OUTLINE/INSTALLATION DRAWING, 2006V

DWG NO CAGE CODE 2W033 SCALE: 2:1 **SOLIDWORKS**

127-2006V SHEET 1 OF

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MODEL NUMBER 2006V1 PERFORMANCE SPECIFICATION PS2006V1 DYNAMIC PRESSURE SENSOR, IEPE DOC NO. PS2006V1 REV C, ECN 10606, 12/18/13



HIGH SENSITIVITY

ENCLICH

- ACCELERATION COMPENSATION
- ELECTRICALLY ISOLATED HOUSING

		ENGLISH		SI	
PHYSICAL					
Weight, Max		1.9	oz	55	grams
Mounting Provision		1/4-18 MNPT		1/4-18 MNPT	
Connector	Туре	MIL-C-5015, 2 PIN		MIL-C-5015, 2 PIN	
Diaphragm Material	Material	316L		316L	
PERFORMANCE					
Sensitivity +/- 10%	Γ	10	mV/psi	1.45E-03	mV/Pa
Range F.S for +/- 5 volts peak out		+/-500	psi	3447379	Pa
Maximum Pressure		8000	psi	5.5 X 10′	Pa
Equivalent Electrical Noise (Resolution)		0.007	psi	48.20	Pa
Mounted Resonant Frequency		>50000	Hz	>50000	Hz
Frequency Response, +/- 10%		2 to 5000	Hz	2 to 5000	Hz
Minimum Rise Time of Input Pulse		2	μsec	2	µsec
Discharge Time Constant		0.17 to 0.5	sec	0.17 to 0.5	sec
Linearity [1]		+/-1	Hz	+/-1	%F.S
Lower -3db Frequency		1	Hz	1	Hz
Acceleration Sensitivity, Axial Direction		0.002	psi/g	0.014	Kpa/g
ENVIRONMENTAL					
Maximum Vibration		3000	g rms	3000	g rms
Maximum Shock		10000	g pk	10000	g pk
Temperature Range		-40 to +250	°F	-40 to +121	°C
Thermal Coefficient Of Sensitivity	L	0.03	%/°F	0.02	% / °C
Environmental Seal	_	Hermetic	J I	Hermetic	٠
Power/Sig Ground Isolation, Min	L	100	ΜΩ	100	МΩ
ELECTRICAL					
Excitation Voltage Range		18 to 30	VDC	18 to 30	VDC
Excitation Current Range [2]		2 to 20	mA	2 to 20	mA
Output Impedance NOM		100	Ω	100	Ω
Output Bias Voltage		7.5 to 9.5	VDC	7.5 to 9.5	VDC
Output Signal Polarity		Positive		Positive	

This family also includes:							
Model	Sensitivity (mV/psi)	Range (psi pk)	Resolution (Grms)	Oper. Te			

Model	Sensitivity (mV/psi)	Range (psi pk)	Resolution (Grms)	Oper. Temp(°F)	TC (Sec)
2006V2	50	100	0.0014	-40 to +250	0.17 to 0.5
2006V3	100	50	0.0007	-40 to +250	0.17 to 0.5

Please, refer to the performance specifications of the products in this family for detailed description.

Notes

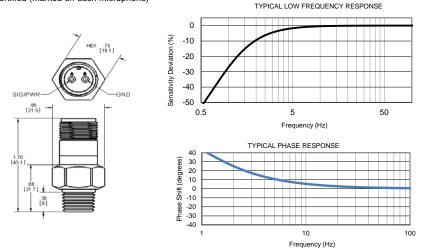
- [1] Percent full scale, zero based fit straight line method.
- [2] From constant current type power unit only. This sensor MUST NOT BE CONNECTED to a
- DC power source without current limiting, 20mA Maximum.
- [3] A calibration certificate traceable to NIST is supplied with each instrument.
- [4] In the interest of constant product improvement, we reserve the right to change the specification without notice

<u>ERTIFICATIONS:</u>

ATEX Ex II 1G Ex ia IIC T4 Ga (marked on each microphone)

Baseefa13ATEX0206(marked on each microphone)

CE certified (marked on each microphone)



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Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-2006V for more information.

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