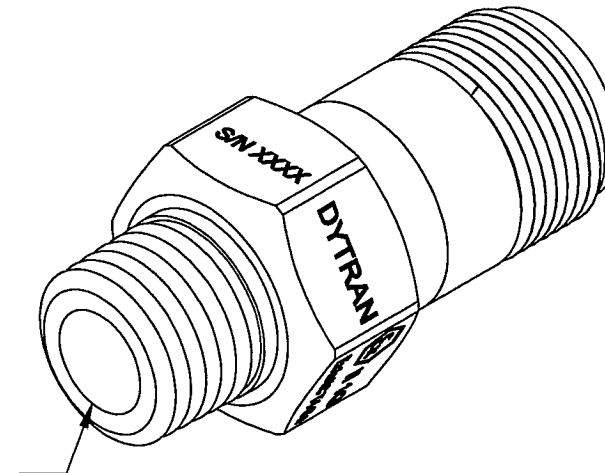
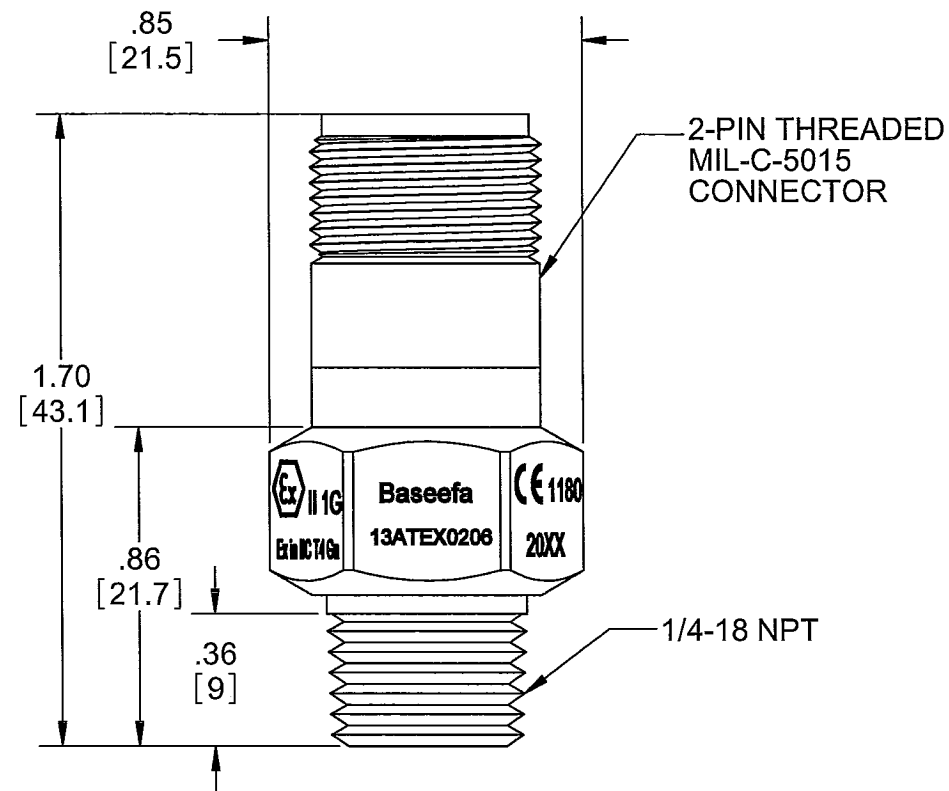
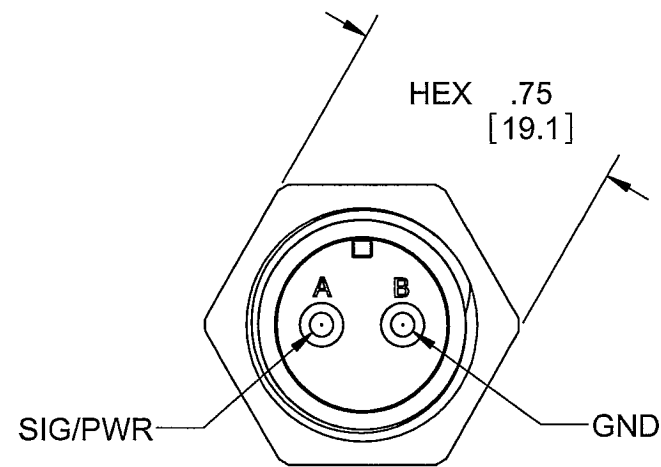


**PROPRIETARY AND CONFIDENTIAL**

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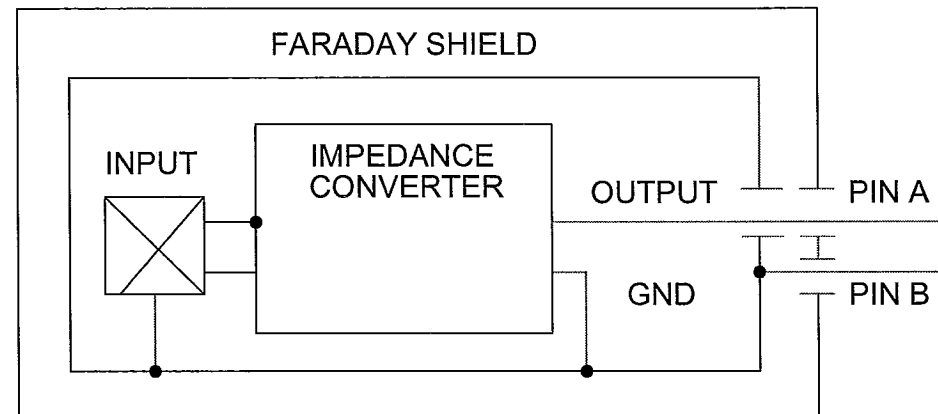
**REVISIONS**

REV.	ECN	DESCRIPTION	BY/DATE	CHK	APPR
A	5698	INITIAL RELEASE	01/26/09	ANS	DV
B	5351	UPDATED FORMAT	RA, 07/28/10	EP	DV
C	10439	ADDED SCHEMATIC, NOTES 3 & 4, CONFIGURATION CONTROL STAMP, AND ATEX MARKING	AB 10/02/13		



SENSING DIAPHRAGM  
φ .31  
[φ 7.9]

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



**SCHEMATIC DIAGRAM**

**NO CHANGES ALLOWED**  
WITHOUT CONSENT OF  
CONFIGURATION CONTROL BOARD  
DYTRAN INSTRUMENTS, INC.

ENG QA

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 >100MΩ

NOTES: UNLESS OTHERWISE SPECIFIED

<p>UNLESS OTHERWISE SPECIFIED: INTERPRET DIM &amp; TOL PER ASME Y14.5M - 1994. REMOVE BURRS. COUNTERSINK INTERNAL THDS 90° TO MAJOR DIA. CHAM EXT THDS 45° TO MINOR DIA. THD LENGTHS AND DEPTHS ARE FOR MIN FULL THDS. DIMENSIONS APPLY AFTER FINISHING.</p> <p>ALL MACHINED SURFACES. TOTAL RUNOUT WITHIN .005. BREAK SHARP EDGES .005 TO .010. MACHINED FILLET RADII .005 TO .015. WELDING SYMBOLS PER AWS A2.4. ABBREVIATIONS PER MIL-STD-12.</p>	<p>UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES. TOLERANCES ARE:</p> <p>DECIMALS .XX ±.01 .XXX ±.005</p> <p>ANGLES ±1°</p>		<p><b>DYTRAN</b> INSTRUMENTS, INC. Chatsworth, CA</p> <p><b>MASTER ONLY IF IN RED</b></p>	
	<p>APPROVALS</p> <p>ORIG DV 04/28/08</p> <p>CHK ANS 01/27/09</p> <p>APP DV 01/27/09</p>		<p>DATE</p> <p>01/27/09</p>	
	<p>DO NOT SCALE DRAWING</p>		<p>THIRD ANGLE PROJECTION</p>	
	<p>SIZE <b>B</b></p> <p>CAGE CODE <b>2W033</b></p> <p>SCALE: 2:1</p>		<p>DWG NO <b>127-2006V</b></p> <p>REV <b>C</b></p> <p>SOLIDWORKS SHEET 1 OF 1</p>	

**MODEL NUMBER**  
**2006V1**

**PERFORMANCE SPECIFICATION**

**DOC NO.**  
**PS2006V1**

**DYNAMIC PRESSURE SENSOR, IEPE**

REV F, ECN 15538, 01/16/20



- **HIGH SENSITIVITY**
- **ACCELERATION COMPENSATION**
- **ELECTRICALLY ISOLATED HOUSING**

**PHYSICAL**

Weight, Max  
Mounting Provision  
Connector  
Diaphragm Material

	ENGLISH	SI
Weight, Max	2.3 oz	65 grams
Mounting Provision	1/4-18 MNPT	1/4-18 MNPT
Connector	MIL-C-5015, 2 PIN	MIL-C-5015, 2 PIN
Diaphragm Material	316L	316L

**PERFORMANCE**

Sensitivity +/- 10%  
Range F.S for +/- 5 volts peak out  
Maximum Pressure  
Equivalent Electrical Noise (Resolution)  
Mounted Resonant Frequency  
Frequency Response, +/- 10%  
Minimum Rise Time of Input Pulse  
Discharge Time Constant  
Linearity [1]  
Lower -3db Frequency  
Acceleration Sensitivity, Axial Direction

Sensitivity +/- 10%	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 <sup>6</sup> 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 2.0 sec	0.17 to 2.0 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  
Maximum Shock  
Temperature Range  
Thermal Coefficient Of Sensitivity  
Environmental Seal  
Power/Sig Ground Isolation, Min

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	0.03 % / °F	0.02 % / °C	
Environmental Seal	Hermetic	Hermetic	
Power/Sig Ground Isolation, Min	100 MΩ	100 MΩ	

**ELECTRICAL**

Excitation Voltage Range  
Excitation Current Range [2]  
Output Impedance NOM  
Output Bias Voltage  
Output Signal Polarity

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. Temp(°F)	TC (Sec)
2006V2	50	100	0.0014	-40 to +250	0.17 to 2.0
2006V3	100	50	0.0007	-40 to +250	0.17 to 2.0

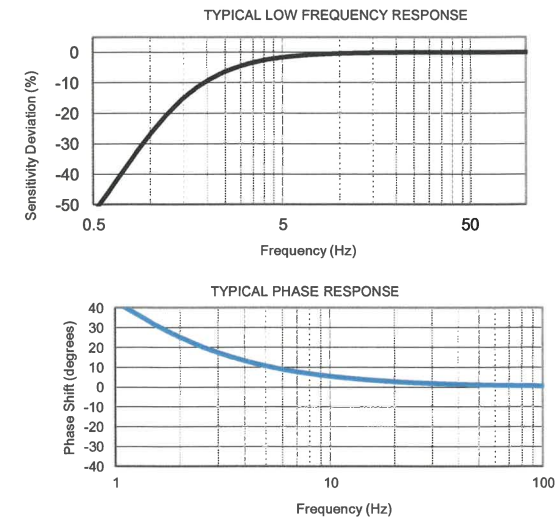
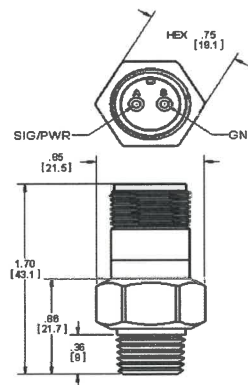
Please, refer to the performance specifications of the products in this family for detailed description.

**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. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary overtime. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts.

**CERTIFICATIONS:**

ATEX Ex II 1G Ex ia IIC T4 Ga (marked on each microphone)  
Baseefa13ATEX0206(marked on each microphone)  
CE certified (marked on each microphone)



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



21592 Marilla Street, Chatsworth, California 91311 Phone: 818.700.7818 Fax:818.700.7880 www.dytran.com For permission to reprint this content, please contact info@dytran.com

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