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DWG NO 127-3191A SH 1 REV C

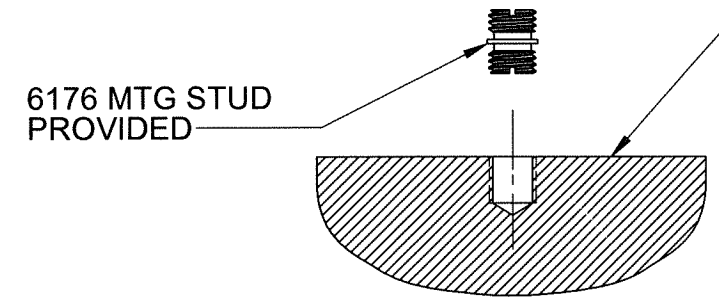
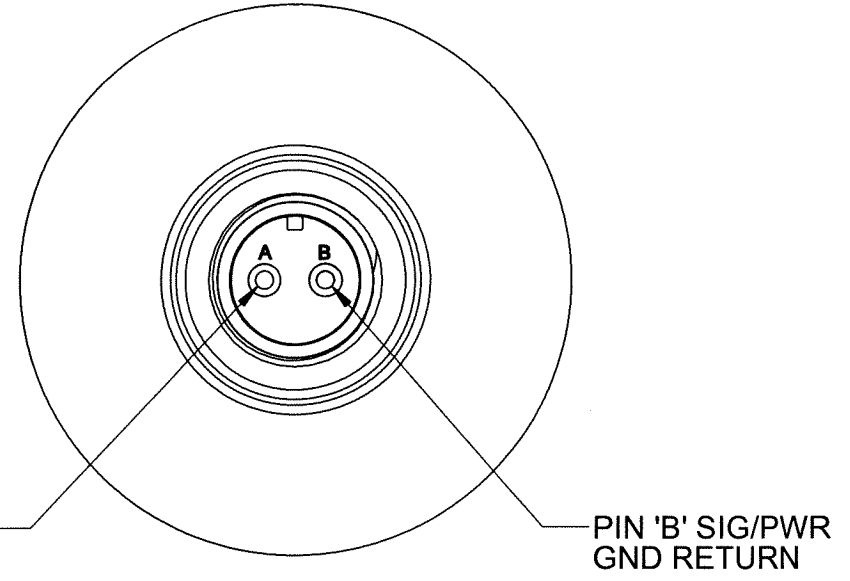
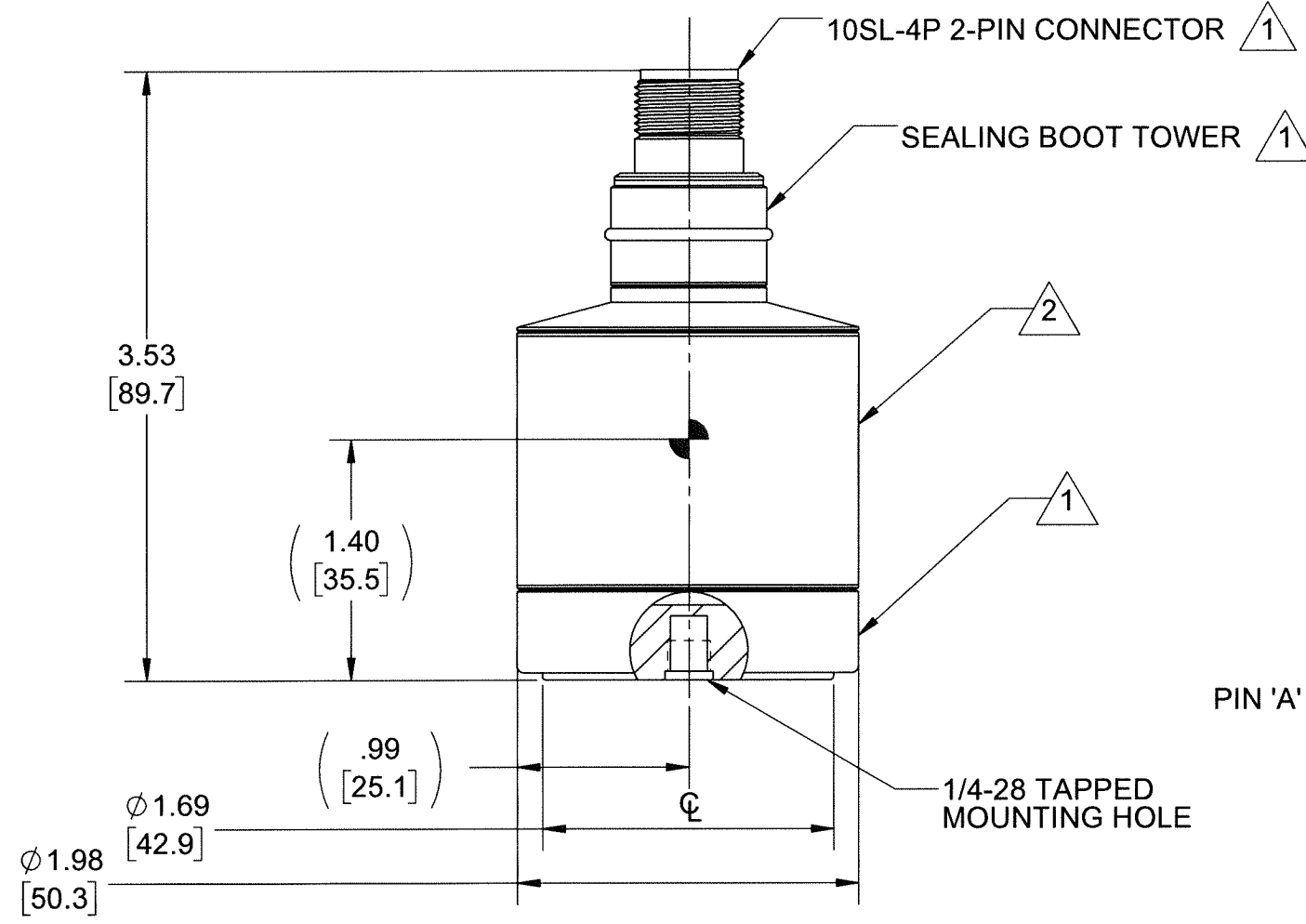
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**REVISIONS**

REV.	ECN	DESCRIPTION	BY/DATE	CHK	APPR
C	14630	CONVERTED TO SOLIDWORKS; ADDED CENTER OF GRAVITY MARKING	DP 10/18/18	RA	LN

MODEL	SENSITIVITY
3191A	5 V/G
3191A1	10 V/G



**MOUNTING RECOMMENDATIONS:**  
 PREPARE SURFACE  $\phi .60$  [15.2] MIN.  
 SURFACE FLATNESS MUST BE EQUAL OR BETTER THAN .001 TIR. TAP 1/4-28 UNF-2B  $\nabla .250$  MIN.  
 RECOMMENDED MOUNTING TORQUE 10-12 LB-IN.

- 4. TEMPERATURE RANGE: -15°C TO +107°C (-60°F TO +225°F)
  - 3. WEIGHT: 760 GRAMS
  - 2 MATERIAL: 304L
  - 1 MATERIAL: 316L
- NOTES: UNLESS OTHERWISE SPECIFIED

UNLESS OTHERWISE SPECIFIED:  
 INTERPRET DIM & 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.

ALL MACHINED SURFACES:  $\checkmark$   
 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.

DECIMALS		METRIC		ANGLES
.XX ±.03	X ± 0.8			±1°
.XXX ±.010	.XX ±0.25			

APPROVALS		DATE
ORIG	NC	12/14/95
CHK	NC	12/14/95
APP	PML	03/03/05

DO NOT SCALE DRAWING

THIRD ANGLE PROJECTION USA

**DYTRAN INSTRUMENTS, INC.** Chatsworth, CA **MASTER ONLY IF IN RED**

TITLE: **OUTLINE/INSTALLATION DWG, MODELS 3191A & 3191A1**

SIZE <b>B</b>	CAGE CODE <b>2W033</b>	DWG NO <b>127-3191A</b>	REV <b>C</b>
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SCALE: 1:1 SHEET 1 OF 1

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**IEPE SINGLE AXIS ACCELEROMETER**

REV E, ECN 14275, 06/07/18



- **HERMETICALLY SEALED**
- **HIGH SENSITIVITY**

**PHYSICAL**

Weight, Max  
Connector  
Mounting Provision  
Material, Housing/Connector  
Sensing Element  
Element Style

Type

ENGLISH		SI	
	27	oz	775
	2 -PIN, MIL-C-5015-10SL-4P 1/4-28, TAPPED HOLE		2 -PIN, MIL-C-5015-10SL-4P 1/4-28, TAPPED HOLE
	300 SERIES		300 SERIES
	CERAMIC		CERAMIC
	ANNULAR SHEAR		ANNULAR SHEAR

**PERFORMANCE**

Sensitivity, ±5% [1]  
Range for ± 5 Volts Output  
Frequency Response, ±5%  
±10%  
±3db  
Resonant Frequency  
Linearity [2]  
Maximum Transverse sensitivity  
Strain Sensitivity @ 250µε  
Coefficient of Thermal Sensitivity  
Broad Band Resolution  
Spectral Noise  
1Hz  
10Hz  
100Hz  
1000Hz

1Hz  
10Hz  
100Hz  
1000Hz

	10	V/g	1	V/m/s <sup>2</sup>
	0.5	g peak	5	m/s <sup>2</sup>
	0.08 to 1000	Hz	0.08 to 1000	Hz
	0.065 to 1500	Hz	0.065 to 1500	Hz
	0.045 to 3000	Hz	0.045 to 3000	Hz
	> 8	kHz	> 8	kHz
	± 2	% F.S.	± 2	% F.S.
	5	%	5	%
	0.001	g/µε	0.01	m/s <sup>2</sup> /µε
	0.07	%/°F	0.14	%/°C
	3.0E-06	g rms	2.9E-05	m/s <sup>2</sup> rms
	3.1E-07	grms/v(Hz)	3.0E-06	m/s <sup>2</sup> rms/v(Hz)
	1.5E-07	grms/v(Hz)	1.5E-06	m/s <sup>2</sup> rms/v(Hz)
	6.1E-08	grms/v(Hz)	6.0E-07	m/s <sup>2</sup> rms/v(Hz)
	3.0E-08	grms/v(Hz)	2.9E-07	m/s <sup>2</sup> rms/v(Hz)

**ENVIRONMENTAL**

Maximum Vibration  
Maximum Shock  
Operating Temperature Range  
Seal

	50	g peak	491	m/s <sup>2</sup> peak
	100	g peak	981	m/s <sup>2</sup> peak
	-60 to +250	°F	-51 to 121	°C
	HERMETIC		HERMETIC	

**ELECTRICAL**

Supply Current Range [3]  
Compliance Voltage Range  
Output Impedence, Typ  
Bias Voltage  
Discharge Time Constant  
Electrical Isolation

	2 to 20	mA	2 to 20	mA
	+18 to +30	Volts	+18 to +30	Volts
	100	Ω	100	Ω
	+11 to +13	VDC	+11 to +13	VDC
	3 to 7	Sec	3 to 7	Sec
	10	GΩ,min	10	GΩ,min

**This family also includes:**

Model	Sensitivity (V/g)	Frequency Response (Hz)	Time Constant (Sec)	Operating Temp (°F)
3191A	5	0.08 to 1000	4 to 5	-60 to +250

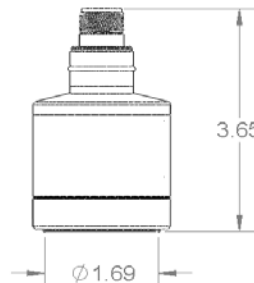
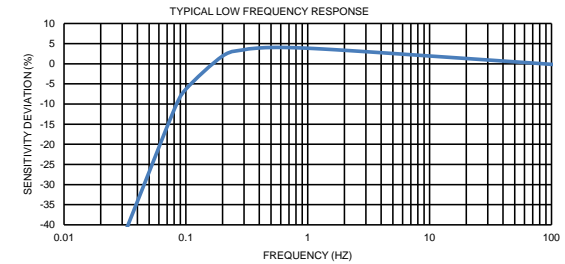
Refer to the performance specifications of the products in this family for detailed description

**Supplied Accessories:**

- 1) Accredited calibration certificate (ISO 17025)
- 2) Model 6176 mounting stud

**Notes:**

- [1] Measured at 100Hz, 1 grms per ISA RP 37.2.
- [2] Measured using zero-based straight line method, % of F.S. or any lesser range.
- [3] Do not apply power to this system without current limiting, 20 mA MAX. To do so will destroy the amplifier.
- [4] In the interest of constant product improvement, we reserve the right to change specifications without notice.



Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-3191A for more information.

