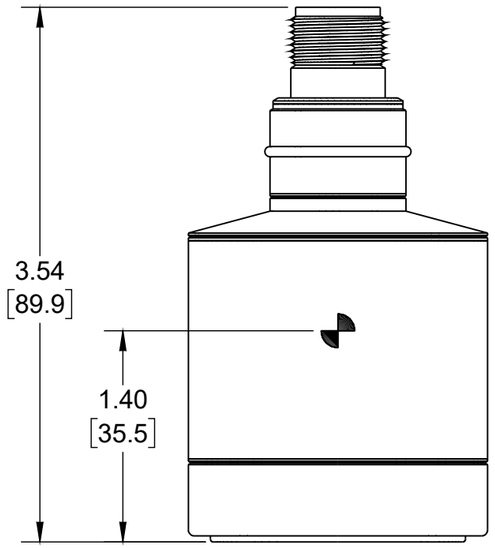
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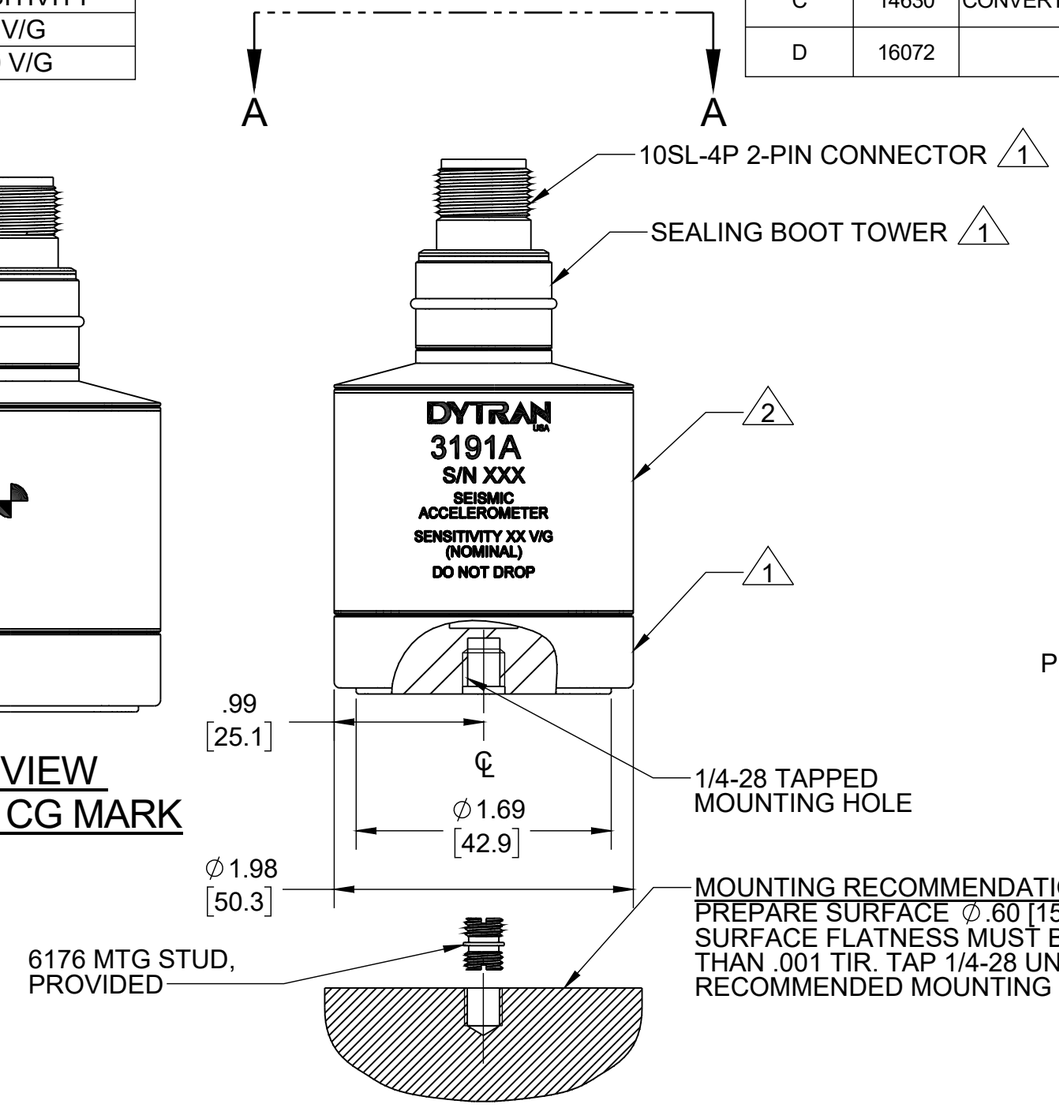
MODEL	SENSITIVITY
3191A	5 V/G
3191A1	10 V/G

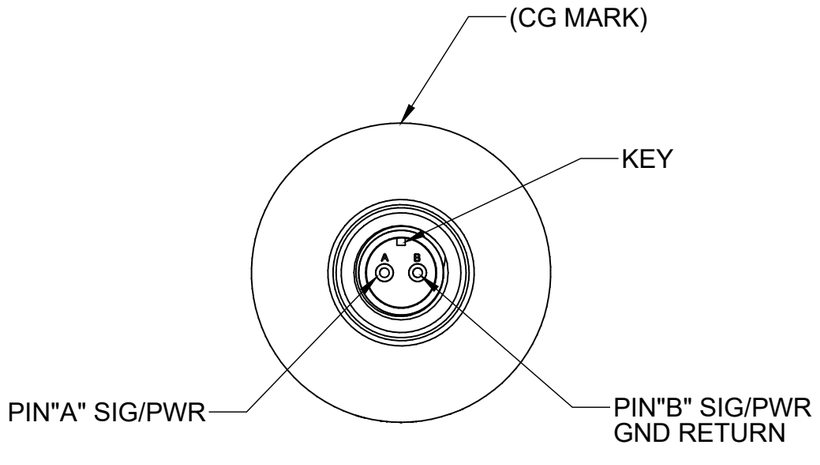
REVISIONS

REV.	ECN	DESCRIPTION	BY/DATE	CHK	APPR
C	14630	CONVERTED TO SOLIDWORKS; ADDED CENTER OF GRAVITY MARKING	DP 10/18/18	RA	LN
D	16072	REVISE VIEWS TO SHOW MODEL, SERIAL, MARKING	RA, 02/15/21	AM	LN



REAR VIEW
SHOWING CG MARK





SECTION A-A

4. TEMPERATURE RANGE: -51 °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. 63
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.

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES.
DIMENSIONS IN BRACKETS [ ] ARE IN MILLIMETERS TOLERANCES ARE:
DECIMALS .XX ±.03 .XXX ±.010
METRIC .X ±0.8 .XX ±0.25
ANGLES ±1°

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

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

SIZE	CAGE CODE	DWG NO	REV
B	2W033	127-3191A	D

SCALE: 1:1 SHEET 1 OF 1

Model Number 3191A1	PERFORMANCE SPECIFICATIONS	DOC NO PS3191A1
	IEPE SINGLE AXIS ACCELEROMETER	REV H, ECN 16498, 12/10/21



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

		ENGLISH		SI	
PHYSICAL					
Weight, Max		27	oz	775	grams
Connector	Type	2 -PIN, MIL-C-5015-10SL-4P		2 -PIN, MIL-C-5015-10SL-4P	
Mounting Provision		1/4-28, TAPPED HOLE		1/4-28, TAPPED HOLE	
Material, Housing/Connector		300 SERIES		300 SERIES	
Sensing Element		CERAMIC		CERAMIC	
Element Style		ANNULAR SHEAR		ANNULAR SHEAR	
PERFORMANCE					
Sensitivity, ±5% [2]		10	V/g	1	$V/m/s^2$
Range for ± 5 Volts Output		0.5	g pk	5	m/s^2 pk
Frequency Response, ±5%		0.08 to 1000	Hz	0.08 to 1000	Hz
±10%		0.065 to 1500	Hz	0.065 to 1500	Hz
±3db		0.045 to 3000	Hz	0.045 to 3000	Hz
Resonant Frequency		> 8	kHz	> 8	kHz
Linearity [3]		± 1	% F.S.	± 1	% F.S.
Maximum Transverse sensitivity		5	%	5	%
Strain Sensitivity @ 250με		0.001	g/με	0.01	$m/s^2/με$
Coefficient of Thermal Sensitivity		0.07	%/°F	0.14	%/°C
Broad Band Resolution		3.0E-06	g RMS	2.9E-05	m/s^2 RMS
Spectral Noise	1Hz	0.31	μg RMS/√(Hz)	3.04	$μm/s^2$ RMS/√(Hz)
	10Hz	0.15	μg RMS/√(Hz)	1.47	$μm/s^2$ RMS/√(Hz)
	100Hz	0.061	μg RMS/√(Hz)	0.60	$μm/s^2$ RMS/√(Hz)
	1000Hz	0.030	μg RMS/√(Hz)	0.29	$μm/s^2$ RMS/√(Hz)
ENVIRONMENTAL					
Maximum Shock		100	g pk	981	m/s^2 pk
Operating Temperature Range		-60 to +250	°F	-51 to 121	°C
Seal		HERMETIC		HERMETIC	
ELECTRICAL					
Supply Current Range [4]		2 to 20	mA	2 to 20	mA
Compliance Voltage Range		+18 to +30	Volts	+18 to +30	Volts
Output Impedence,Typ		100	Ω	100	Ω
Bias Voltage		+11 to +13	VDC	+11 to +13	VDC
Discharge Time Constant		3 to 7	Sec	3 to 7	Sec
Electrical Isolation		10	GΩ,min	10	GΩ,min

This family also includes:

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

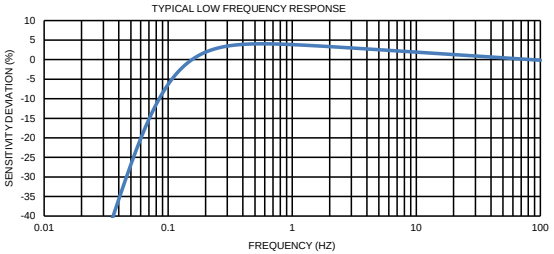
Refer to the performance specifications of the products in this family for detailed description

Supplied Accessories:

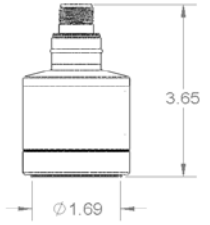
1) Accredited calibration certificate (ISO 17025)
2) Model 6176 mounting stud

Notes:

[1] All specifications are at room temperature unless otherwise specified.
[2] Measured at 100Hz, 0.25 g RMS per ISA RP 37.2.
[3] Measured using zero-based straight line method, % of F.S. or any lesser range.
[4] Do not apply power to this system without current limiting, 20 mA MAX. To do so will destroy the amplifier.
[5] In the interest of constant product improvement, we reserve the rights to change the specifications 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 technicalv experts.







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

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