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REVISIONS					
REV.	ECN	DESCRIPTION	BY/DATE	CHK	APPR
A	14399	INITIAL RELEASE	DP 08/13/18	PA	LN

D

D

C

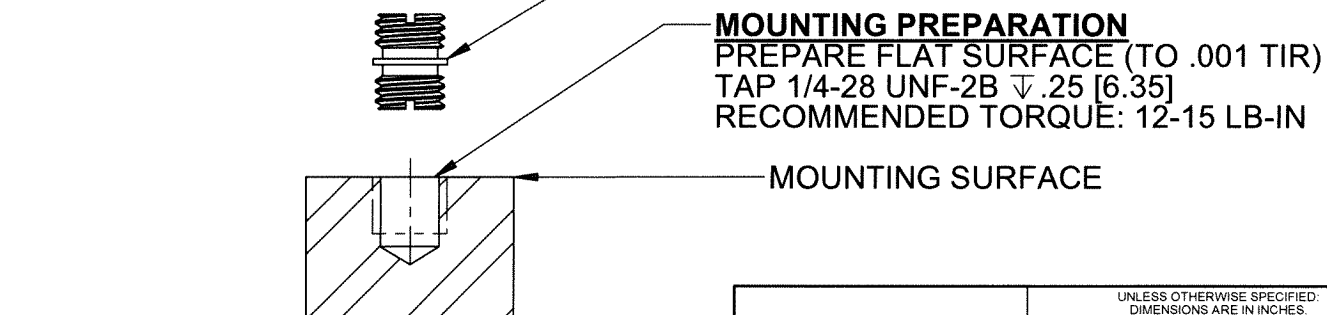
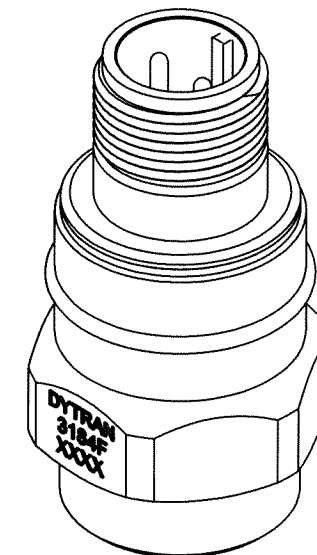
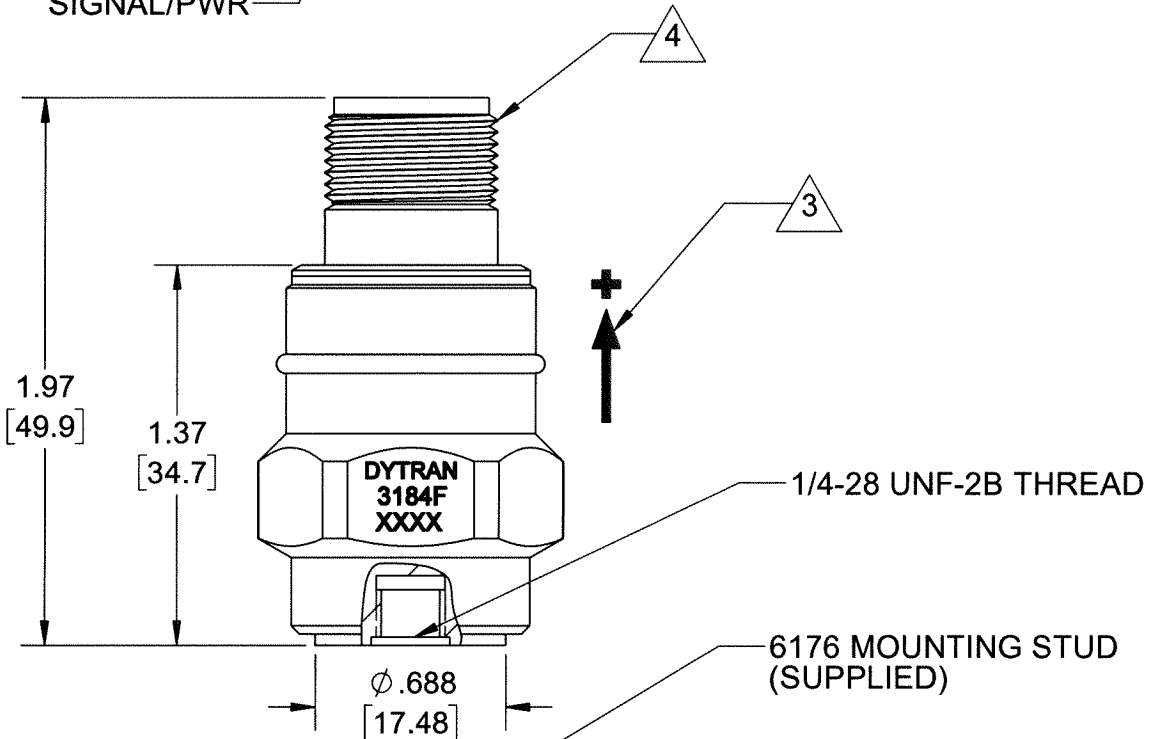
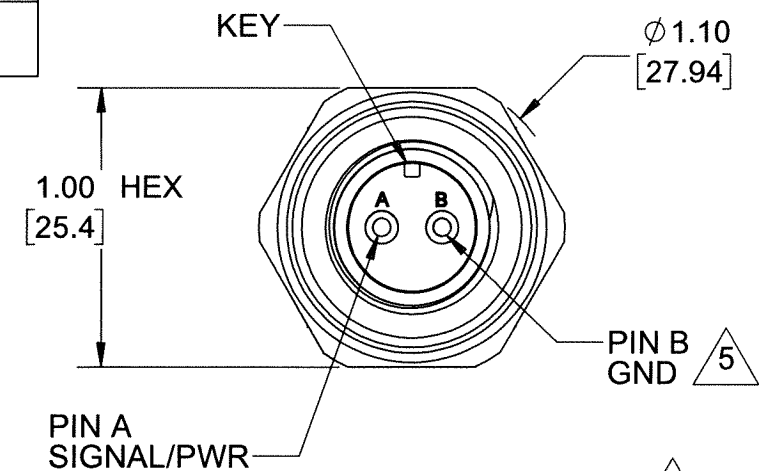
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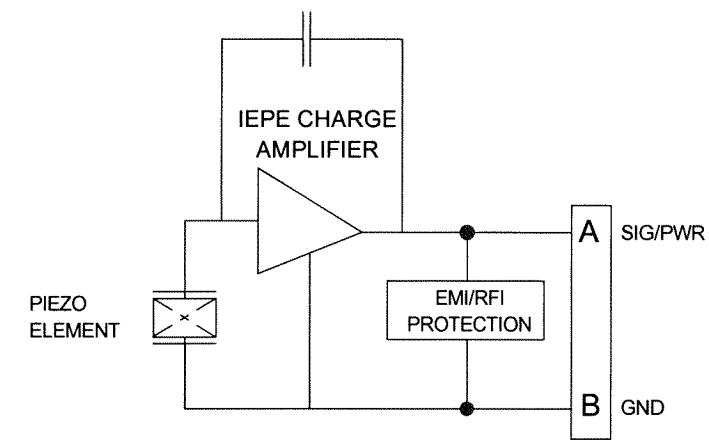
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A

A



MOUNTING PREPARATION
 PREPARE FLAT SURFACE (TO .001 TIR)
 TAP 1/4-28 UNF-2B ∇ .25 [6.35]
 RECOMMENDED TORQUE: 12-15 LB-IN



SCHEMATIC

- 5 GND PIN IS ISOLATED FROM CASE.
 - 4 MS3102A10-4P CONNECTOR.
 - 3 ARROW INDICATES DIRECTION OF ACCELERATION FOR POSITIVE OUTPUT.
 - 2. HOUSING AND CONNECTOR MATERIAL: 300 SERIES S.S.
 - 1. WEIGHT: 135 GRAMS, MAX
- 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.
 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	DP	07/26/18
CHK	PA	08/14/18
APP	LN	8/14/18

DO NOT SCALE DRAWING

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 DYTRAN INSTRUMENTS, INC. Chatsworth, CA

TITLE: **OUTLINE/INSTALLATION DWG, MODEL 3184F**

SIZE B	CAGE CODE 2W033	DWG NO 127-3184F	REV A
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SCALE: 3:2 SHEET 1 OF 1

MODEL NUMBER 3184F	PERFORMANCE SPECIFICATION	DOC NO. PS3184F
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SINGLE AXIS ACCELEROMETER, IEPE	REV A, ECN 14399, 08/06/18
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- INTERNALLY CASE ISOLATED
- EMI/RFI PROTECTION

PHYSICAL

Weight, Max
Mounting Provision
Connector (Mighty Mouse), side exit
Material Body

	ENGLISH		SI	
Weight, Max	4.73	oz	135	grams
Mounting Provision	1/4-28		1/4-28	
Connector (Mighty Mouse), side exit	2 PIN	Type	2 PIN	
Material Body	300 SERIES S.S.	Material	300 SERIES S.S.	

PERFORMANCE

Sensitivity +/- 10% [1]
Range F.S. For ± 5 Volts Output
Frequency Range, ± 5%
Frequency Range, ± 10%
Element Resonant Frequency
Equivalent Electrical Noise Floor
Linearity [2]
Transverse Sensitivity, Max.
Strain Sensitivity @250µε

	ENGLISH		SI	
Sensitivity +/- 10% [1]	100	mV/g	10	mV/ m/s ²
Range F.S. For ± 5 Volts Output	± 50	g pk	± 490.5	m/s ² pk
Frequency Range, ± 5%	5 to 2000	Hz	5 to 2000	Hz
Frequency Range, ± 10%	3.3 to 2500	Hz	3.3 to 2500	Hz
Element Resonant Frequency	>15	kHz	>15	kHz
Equivalent Electrical Noise Floor	0.0005	g rms	0.005	m/s ² rms
Linearity [2]	± 1	%F.S	± 1	%F.S
Transverse Sensitivity, Max.	5%		5%	
Strain Sensitivity @250µε	0.001	g/µε	0.01	m/s ² /µε

ENVIRONMENTAL

Maximum Vibration
Maximum Shock
Temperature Range
Seal
Coefficient Of Thermal Sensitivity

	ENGLISH		SI	
Maximum Vibration	500	±gpk	4900	± m/s ² pk
Maximum Shock	5000	±gpk	49000	± m/s ² pk
Temperature Range	-40 to +160	°F	-40 to 71	°C
Seal	Hermetic		Hermetic	
Coefficient Of Thermal Sensitivity	0.002	%/°F	0.004	%/°C

ELECTRICAL

Supply Current [3]
Compliance Voltage Range
Output Impedance TYP
Bias Voltage
Discharge Time Constant
Electrical Isolation [4]

	ENGLISH		SI	
Supply Current [3]	2 to 20	mA	2 to 20	mA
Compliance Voltage Range	+18 to +30	V	+18 to +30	V
Output Impedance TYP	100	Ω	100	Ω
Bias Voltage	10 to 11.5	VDC	10 to 11.5	VDC
Discharge Time Constant	0.1 to 0.4	sec	0.1 to 0.4	sec
Electrical Isolation [4]	10	GΩ	10	GΩ

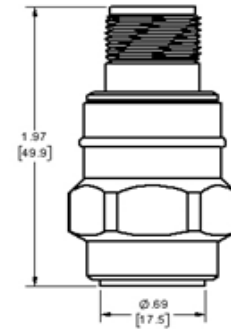
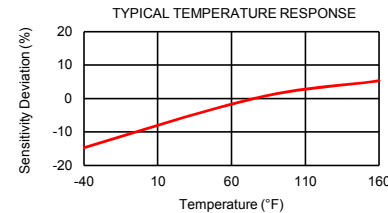
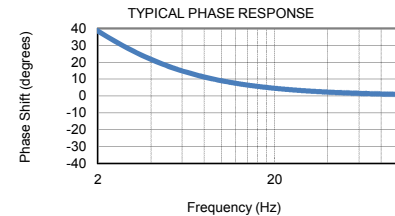
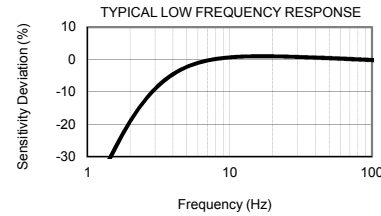
This family also includes:

Model	Sensitivity (mV/g)	Range (Gpeak)	Resolution (Grms)	Oper. Temp(°F)	TC

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

Notes:

- [1] Measured at 100Hz +/-1Hz, 1 grms per ISA RP 37.2.
- [2] Measured using zero-based best straight-line method, % of F.S. or any lesser range.
- [3] Do not apply power to this device without current limiting, 20 mA MAX. To do so will destroy the integral IC amplifier
- [4] Electrical ground isolated from sensor case.
- [5] 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 127-3184F for more information.



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