PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF DYTRAN INSTRUMENTS INC. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF DYTRAN INSTRUMENTS INC. IS PROHIBITED 1.05 26.7 .40 10.2 4 Ø.31 THRU 7.9 R.34 .27 6.9 8.6 .55 14

REVISIONS ECN DESCRIPTION REV BY/DATE CHK **APPR** 11107 Α **INITIAL RELEASE** JS 06/23/14 Em

1.42 36.1 PIN₂ CONNECTOR: 4-PIN. 3/8-28 UNF-2A THREAD. .32 **HERMETIC** 8 .56 14.2 PIN₁

PIN 3

DETAIL A

PIN 4

CONNECTOR PINOUT PIN 1 SIG/PWR AXIS 1 PIN 2COMMON GND RTN PIN 3 SIG/PWR AXIS 3

PIN 4 SIG/PWR AXIS 2

√5\ MATING CONNECTOR: GLENAIR 800-006-06Z16-4SX

- 4. ARROWS SHOW DIRECTION OF ACCELERATIONS FOR POSITIVE-GOING OUTPUT SIGNAL.
- 3. WEIGHT: 30 GRAMS MAX
- 2. HOUSING & CONNECTOR MATERIAL: 300 SERIES STAINLESS STEEL.

1\ ADAPTER BUSHINGS: 6555A (Ø.250, [6.35]). AND 6555A1 (Ø.188, [4.77]), 1 EA. SUPPLIED

NOTES: UNLESS OTHERWISE SPECIFIED.



UNLESS OTHERWISE SPECIFIED UNLESS OTHERWISE SPECIFIED: INTERPRET DIM & TOL PER DIMENSIONS ARE IN INCHES. ASME Y14.5M - 1994. REMOVE BURRS. COUNTERSINK INTERNAL THDS 90° TO MAJOR DIA. CHAM EXT THDS 45° TO MINOR DIA. INCHES THD LENGTHS AND DEPTHS ARE FOR XX ± .03

THDS PER MIL-S-7742. 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.

DIMENSIONS IN BRACKETS [] ARE IN MILLIMETERS TOLERANCES ARE: METRIC ANGLES .X ± 0.8 ± 1°

.80 20.3

∅.040 LOCKWIRE HOLE

XXX±.010 .XX ±0.25 MATERIAL

FINISH DO NOT SCALE DRAWING TITLE:

DATE

05/14/14

7/14/1

CONTRACT NO.

APPROVALS

NC

ORIG

CHK

APP

APP

INSTRUMENTS, INC.

OUTLINE/INSTALLATION DRAWING TRIAXIAL ACCELEROMETER, 3303A

SOLIDWORKS

CAGE CODE SIZE

SCALE: NONE

DWG. NO. 127-3303A

SHEET 1 OF 1

REV

172-0081, REV D

Model Number 3303A PERFORMANCE SPECIFICATION DOC NO PS3303A IEPE QUARTZ SHEAR TRI-AXIAL ACCELEROMETER REVA, ECN 11107, 08/25/14



• TRI- AXIAL ACCELEROMETER

oz

Inches

Inches

- EXCELLENT LINEARITY
- ELECTRICALLY ISOLATED
- HERMETICALLY SEALED

 ENGLISH

This family also includes:				
Model	Sensitivity	Range F.S ± 5 Volts	Max Vibration/Shock	Resonant Frequency

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

PHYSICAL

Weight, Max

Size Length x Width x Height

Connector Type
Thread

Mounting Provision, Integral Bracket

Material Housing

Connector

Element Style

PERFORMANCE

Sensitivity, ±5% [1]

Range F.S for ± 5 Volts Output

Frequency Range [4] -15% / +5%

±5%

-5% / +15%

Resonant Frequency

Equivalent Electrical Noise Floor

Linearity [2]

Maximum Transverse sensitivity

Strain Sensitivity @ 250με

ENVIRONMENTAL

Maximum Vibration Maximum Shock

Temperature Range

Seal, Hermetic

ELECTRICAL

Supply Current Range [3]

Compliance Voltage Range

Output Impedence, Typ

Bias Voltage

Discharge Time Constant, Nom

Output Signal Polarity for Acceleration Along Arrow On The

Electrical Isolation, Case Ground To Mounting Surface

4-Pin
3/8-28 UN-2A
Ø .31 Thru Hole
316 L
304 L
Quartz Shear
10

1.05

1.05 x 1.42 x .56

	_
30	grams
26.70 x 36.1 x 14.20	mm
4-Pin	
3/8-28 UN-2A	
Ø 7.92 Thru Hole	mm
316 L	
304 L	
Quartz Shear	

SI

10	mV/g	1	mV/m/s ²
± 500	g	± 4905	m/s ²
1 to 10	Hz	1 to 10	Hz
10 to 1000	Hz	10 to 1000	Hz
1000 to 3000	Hz	1000 to 3000	Hz
> 26	kHz	> 26	kHz
0.007	Grms	0.069	m/s ² rms
± 1%	F.S.	± 1%	F.S.
5	%	5	%
0.012	α/με	0.12	m/s²/uε

peak

neak

± 600	G
± 3000	G
-60 to 250	
Welded/GTM Header	

± 5886	m/s² pea
± 29430	m/s² pea
-54 to 121	°C
Welded/GTM Header	

2 to 20	mA
+ 18 to +30	Volts
100	Ω
+7 to +9	VDC
0.3 to 1.5	Sec
Positive	
10	GΩ,min
	-

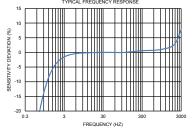
2 to 20	mA
+ 18 to +30	Volts
100	Ω
+7 to +9	VDC
0.3 to 1.5	Sec
Positive	
10	GΩ,min

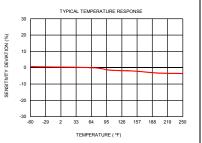
Supplied Accessories:

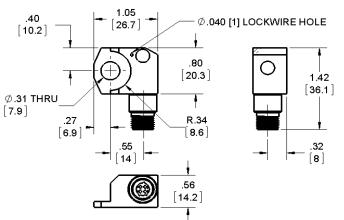
- 1) Accredited calibration certificate (ISO 17025)
- 2) Adaptor bushing (Ø .250 thru hole), model # 6555A, gty 1
- 3) Adaptor bushing (Ø .188 thru hole), model # 6555A1, qty 1

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
- IC charge amplifier.
- [4] Frequency response is referenced to nominal sensitivity
- [5] Connector mates with GLENAIR 800-006-06Z16-4SX







Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-3303A for more information.

