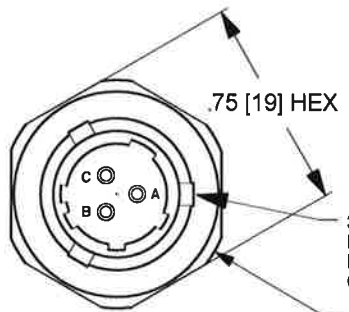


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MODEL NUMBER	SENSITIVITY
3306A1	5 mV/G

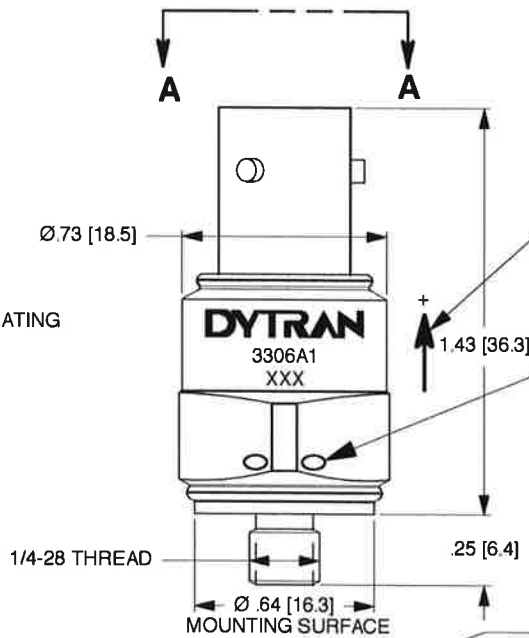
REV	ECN	DESCRIPTION	BY/DATE	CHK	APPR
D	13267	REVISED NOTE 6	RA 02/10/17	LA	LN
E	13374	SEE ECN	EM 02/23/17	W	AS



VIEW A-A

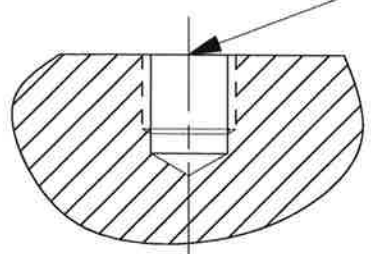
PINOUT:
 PIN A-CASE GROUND
 PIN B-SIG/PWR GND RET
 PIN C-SIG/PWR

3-PIN BAYONET STYLE
 MS3443H898PN CONNECTOR,
 HERMETIC SEE NOTE 6 FOR MATING
 CONNECTOR SUGGESTIONS.
 Ø .811 [28.6] HEX CORNERS



ARROW INDICATES SENSE AND
 DIRECTION OF ACCELERATION FOR
 POSITIVE-GOING OUTPUT VOLTAGE

Ø.047 [1.2] LOCKWIRE
 HOLES, TYP 2 HOLES



**MOUNTING SURFACE
 PREPARATION:**
 PREPARE FLAT CIRCULAR AREA
 APPROX. Ø.750, FLAT TO WITHIN
 .0005 T.I.R. AT CENTER, DRILL
 Ø.213 X .320 DEEP MIN
 BOTTOM TAP 1/4-28 UNF-2B X
 .270 DEEP MIN

7. MINOR VOIDS, SCARS, SCRATCHES AND MOUNTING BLEMISH/
 WITNESS MARKS ON EXTERNAL SURFACES ARE ALLOWED DUE TO
 RESTRAINING AND HANDLING DURING TESTING, TRANSPORT OR
 PROCESSING. THESE APPEAR AS INDICATORS THAT DO NOT AFFECT
 FORM, FIT OR FUNCTION AS INTENDED BY DESIGN OR APPLICATION

6. TYPICAL MATING CONNECTORS ARE: MS3476W898SN (STANDARD
 PLUG, CADMIUM FINISH). FOR PLUG W/RFI FINGERS:
 MS3475 W898SN. OTHER VARIATIONS ARE AVAILABLE. MATES WITH 6435AXX,
 (XX DENOTES LENGTH IN FEET)

- 5. MATERIAL, BODY & CONNECTOR: 300 SERIES STAINLESS STEEL
 - 4. SENSING ELEMENT: QUARTZ SHEAR.
 - 3. POWER/SIGNAL GROUND INSULATED FROM OUTER CASE. INSUL.
RES: > 10 MEGOHMS.
 - 2. SEALING: HERMETIC.
 - 1. WEIGHT: 37 GRAMS.
- NOTES: UNLESS OTHERWISE SPECIFIED

USED ON	NEXT ASSY
APPLICATION	
THIRD ANGLE PROJECTION USA	

UNLESS OTHERWISE SPECIFIED:
 INTERPRET DIM & TOL PER ASME
 Y14.5M-1994 REMOVE BURRS
 COUNTERSINKS INTERNAL THDS 90°
 TO MAJOR DIA CHAM EXT THDS 45° TO
 MAJOR DIA THD LENGTHS AND
 DEPTHS ARE FOR THDS PER MIL-S-
 7742
 DIMENSIONS APPLY AFTER FINISHING.

ALL MACHINED SURFACES
 TOTAL RUNOUT WITHIN .005 BREAK
 SHARP EDGES .005 TO .010 MACHINE
 FILLET RADI .005 TO .015 WELDING
 SYMBOLS PER AWS A2.4
 ABBREVIATIONS PER MIL-STD-12

CONTRACT NO		
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. DIMENSION IN BRACKETS [] ARE IN MILLIMETERS. TOLERANCES ARE:		
INCHES XX ±.03 XXX ±.010	METRIC X ± 0.8 XX ± 0.25	ANGLES ± 1°
FINISH		
DO NOT SCALE DRAWING		

		MASTER		CHATSWORTH, CA.	
ONLY IF IN RED					
SCALE 2X	DESIGN NC	DATE 10-10-07			
DRAWN RA	DATE 04/26/10	PART NO.			
CHECKED EP	DATE 04/28/10	MAT'L			REV E
APPROVED DV	DATE 04/29/10	NEXT ASSEMBLY		USED ON	
TITLE OUTLINE/INSTALLATION DRAWING, MODELS 3306A1			DWG NO. 127-3306A1		
			SHEET 1 OF 1		

Model Number 3306A1	PERFORMANCE SPECIFICATION	DOC NO PS3306A1
HIGH FREQUENCY IEPE QUARTZ SHEAR ACCELEROMETERS		REV E, ECN 13374, 03/23/17



- **LOW TEMPERATURE APPLICATION**
- **EXCELLENT LINEARITY**
- **ELECTRICALLY ISOLATED**
- **HERMETICALLY SEALED**

PHYSICAL

Weight
Size
Connector [4]
Mounting Provision : Integral Stud
Material : Housing, Base and Connector
Element Material, Style

ENGLISH		SI	
1.30	oz	37	grams
.750 X 1.4	Inches	19.05 X 35.56	mm
3 Pin, MS3443H898PN		3 Pin, MS3443H898PN	
1/4 - 28 UNF-2A		1/4 - 28 UNF-2A	
300 Series S.S.		300 Series S.S.	
Quartz, Shear		Quartz, Shear	

PERFORMANCE

Sensitivity, ±5% [1]
Range F.S for ± 5 Volts Output
Frequency Range ±3db
Filter Rolloff Rate
Filter Corner Frequency
Resonant Frequency
Noise floor
Spectral Noise
Linearity [2]
Maximum Transverse sensitivity
Strain Sensitivity

5	mV/g	0.51	mV/m/s ²
±1000	g	± 9810	m/s ²
1.6 to 2500	Hz	1.6 to 2500	Hz
12	db/octave	12	db/octave
2,500	Hz	2,500	Hz
>35	kHz	>35	kHz
0.007	Grms	0.069	m/s ² rms
0.002	Grms/sqr(Hz)	0.02	m/s ² rms/sqr(Hz)
0.0007	Grms/sqr(Hz)	0.007	m/s ² rms/sqr(Hz)
0.0003	Grms/sqr(Hz)	0.003	m/s ² rms/sqr(Hz)
0.0001	Grms/sqr(Hz)	0.001	m/s ² rms/sqr(Hz)
± 1%	% F.S.	± 1%	% F.S.
5	%	5	%
0.002	g/μσ	0.02	m/s ² /μσ

ENVIRONMENTAL

Maximum Vibration
Maximum Shock
Temperature Range
Seal

±1000	G's,peak	±9810	m/s ² peak
±2000	G's,peak	±19620	m/s ² peak
-320 to+300	*F	-195 to +149	*C
Hermetic		Hermetic	

ELECTRICAL

Supply Current Range [3]
Compliance Voltage Range
Output Impedance, Typ
Bias Voltage
Discharge Time Constant
Output Signal Polarity for Acceleration Towards Top
Electrical Isolation, Ground (Pin B) to case(pin A)

2 to 20	mA	2 to 20	mA
+ 18 to +30	Volts	+ 18 to +30	Volts
100	Ω	100	Ω
+7.5 to +9.5	VDC	+7.5 to +9.5	VDC
0.1 to 1.0	Sec	0.1 to 1.0	Sec
Positive		Positive	
10	GΩ,min	10	GΩ,min

This family also includes:

Model	Sensitivity	Range F.S ± 5 Volts	Max Vibration/Shock	Resonant Frequency

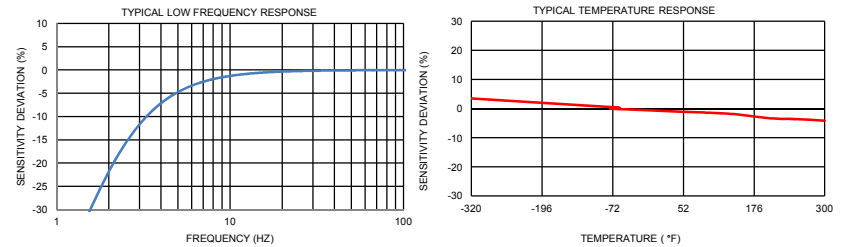
Refer to the performance specifications of the products in this family for detailed description

Supplied Accessories:

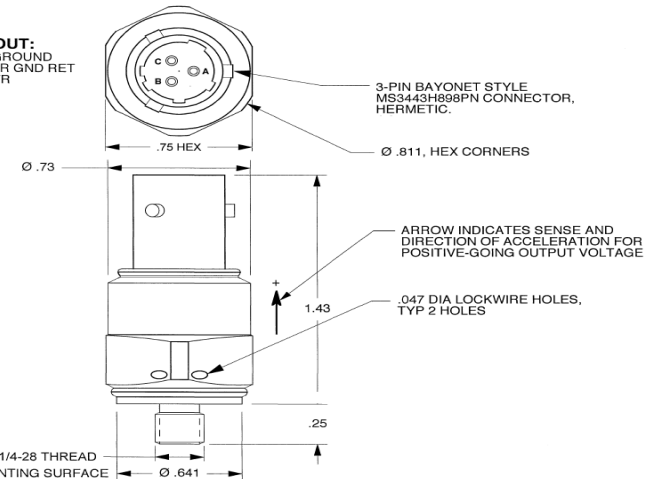
- 1) Accredited calibration certificate (ISO 17025)

Notes:

- [1] Measure at 100Hz, 1 Grms per ISA RP 37.2
- [2] Measure 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] Typical mating connectors are: MS3476W898SN (Standard plug, Cadmium finish). For plug W/RFI fingers: MS3475W898SN. Other variations are available.
- [5] Lock wire holes are included in the base
- [6] In the interest of constant product improvement, we reserve the right to change specifications without notice.



PINOUT:
PIN A-CASE GROUND
PIN B-SIG/PWR GND RET
PIN C-SIG/PWR



Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-3306A1 for more information.



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