

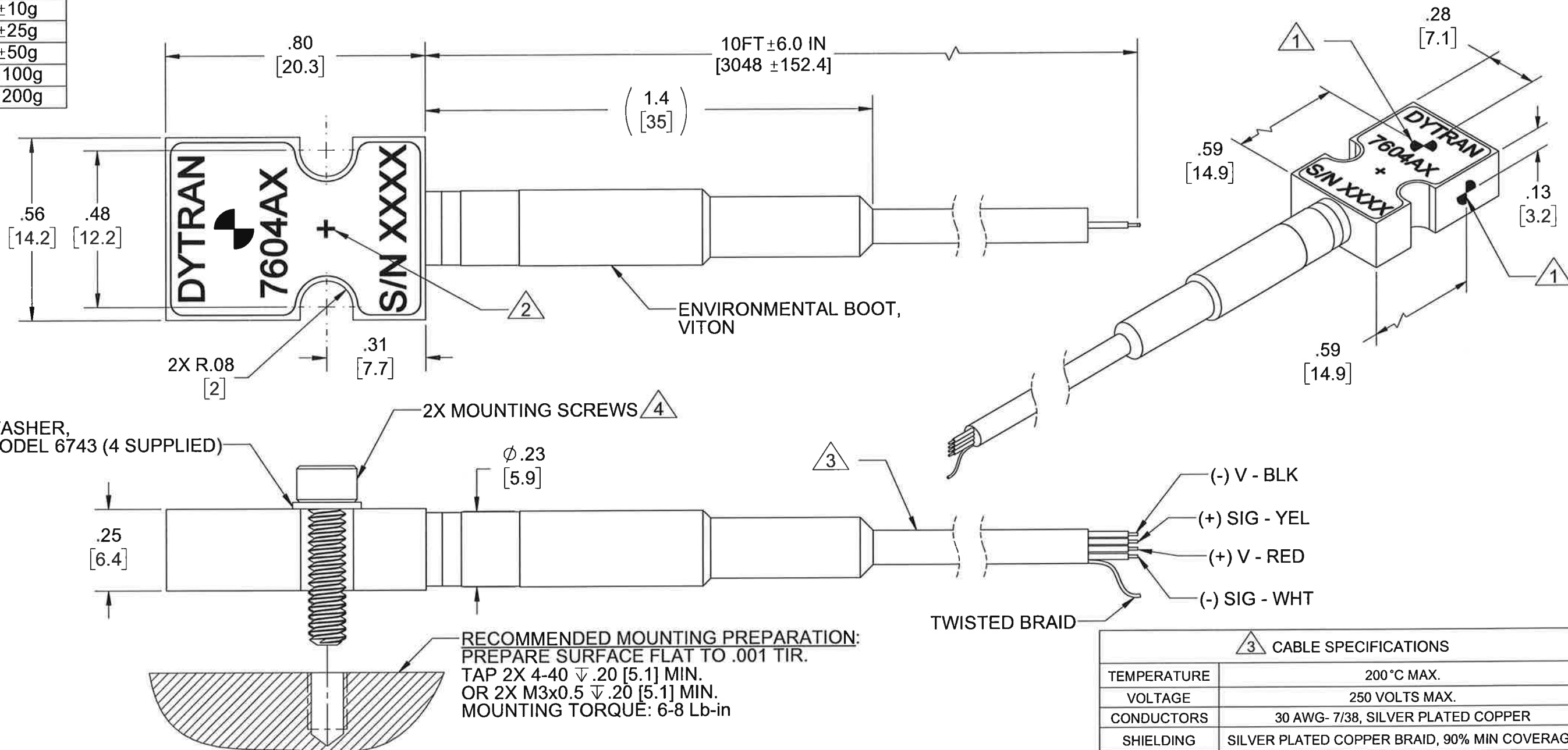
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REVISIONS

REV.	ECN	DESCRIPTION	BY/DATE	CHK	APPR
B	12548	CLARIFIED MARKING	EM 03/17/16	PA	LN

MODEL	RANGE
7604A1	±5g
7604A2	±10g
7604A3	±25g
7604A4	±50g
7604A5	±100g
7604A6	±200g



RECOMMENDED MOUNTING PREPARATION:
 PREPARE SURFACE FLAT TO .001 TIR.
 TAP 2X 4-40 ∇ .20 [5.1] MIN.
 OR 2X M3x0.5 ∇ .20 [5.1] MIN.
 MOUNTING TORQUE: 6-8 Lb-in

3 CABLE SPECIFICATIONS	
TEMPERATURE	200 °C MAX.
VOLTAGE	250 VOLTS MAX.
CONDUCTORS	30 AWG- 7/38, SILVER PLATED COPPER
SHIELDING	SILVER PLATED COPPER BRAID, 90% MIN COVERAGE
OUTER JACKET	FEP, ϕ .105 IN. [2.7mm] MAX., ϕ .095 IN. [2.4mm] MIN.

- 4 MOUNTING SCREW, MODEL 6746, 4-40 X .438, QTY. 2, SUPPLIED. MOUNTING SCREW, MODEL 6688, M3x0.5 X 12mm, QTY. 2, SUPPLIED.
- 3 CABLE, 4 CONDUCTORS, FEP JACKET. SEE TABLE FOR SPECIFICATIONS.
- 2 ARROW AND "+" SIGN INDICATES DIRECTION OF ACCELERATION FOR POSITIVE OUTPUT.
- 1 MARKING DENOTES LOCATION OF SENSING ELEMENT.

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.

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

APPROVALS: ORIG LN 12/02/13, CHK EP 12/10/15, APP DV 12/12/15

ALL MACHINED SURFACES $\sqrt{63}$
 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.

DO NOT SCALE DRAWING

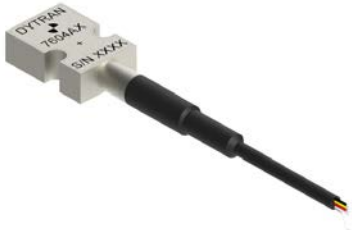
DYTRAN INSTRUMENTS, INC. MASTER ONLY IF IN RED Chatsworth, CA

TITLE: **OUTLINE/INSTALATION DRAWING, 7604A SERIES**

SIZE B	CAGE CODE 2W033	DWG NO 127-7604A	REV B
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SCALE: 4:1 SHEET 1 OF 1

Model Number 7604A1	PERFORMANCE SPECIFICATION	DOC NO PS7604A1
	VARIABLE CAPACITANCE ACCELEROMETER	REV F, ECN 14848, 02/05/19



- POWER SUPPLY IDENTICAL TO STRAIN GAGE SENSORS
- VARIABLE CAPACITANCE ACCELEROMETER
- DIFFERENTIAL MODE
- HERMETICALLY SEALED
- DC RESPONSE
- INTEGRAL CABLE
- ENVIRONMENTAL BOOT

	ENGLISH		SI	
PHYSICAL				
Weight, Max (less cable)	0.1	oz	3.6	grams
Integral Cable	Flying Leads		Flying Leads	
Material	Titanium Alloy		Titanium Alloy	
PERFORMANCE				
Input Range	±5	g	±49	m/s ²
Frequency Response (±3dB)	0-400	Hz	0-400	Hz
Resonant Frequency	3.5	kHz	3.5	kHz
Sensitivity Differential, ±5% [1]	100	mV/g	10.2	mV/m/s ²
Output Noise, Differential ,Typ	12	μ g rms/v Hz	118	μ m/s ² /V Hz
Non-Linearity, Max [2]	0.5	% F.S	0.5	% F.S
Sensitivity Change with Excitation Voltage (6-22 Volts)	0.3	%	0.3	%
Cross Axis Sensitivity	< 3	%	< 3	%
Zero Measurand Output	±50	mV	±50	mV
ENVIRONMENTAL				
Maximum Mechanical Shock (0.1 ms)	2000	gpk	19620	m/s ² peak
Bias Temperature Shift ,Max [3]	111	(ppm of span)/°F	200	(ppm of span)/°C
Sensitivity Temperature Shift	277	ppm/°F	500	ppm/°C
Operating Temperature Range	-40 to +248	°F	-40 to +120	°C
Seal	Hermetic		Hermetic	
ELECTRICAL				
Output Common Mode Voltage ± VDC	[4]		[4]	
Output Impedance,Nom	1225	Ω	1225	Ω
Operating Voltage [6]	±3 to ±11	VDC	±3 to ±11	VDC
Operating Current, Max	13	mA Dc	13	mA Dc
Change in Operating Current to Excitation Voltage	0.25	mAV	0.25	mAV

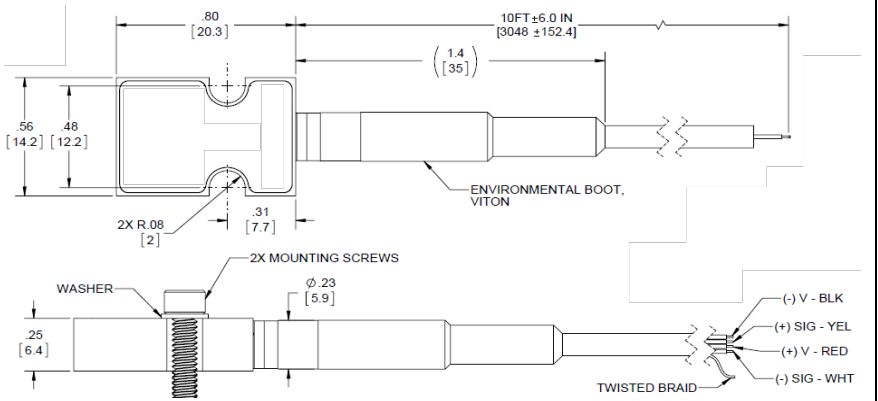
This family also includes:

Model	Input Range (g)	Frequency response (Hz)	Sensitivity Differential, ±5% (mV/g)	Max.Shock (0.1ms) (gpk)	Noise Differential (μg/√Hz)
7604A2	±10	0-600	50	5000	18
7604A3	±25	0-900	20	5000	25
7604A4	±50	0-1200	10	5000	50
7604A5	±100	0-1400	5	5000	100
7604A6	±200	0-1750	2.5	5000	200

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

- Supplied Accessories:**
- 1) Accredited calibration certificate (ISO 17025)
 - 2) Mounting screws, model 6746, 4-40, Qty. 2
 - 3) Mounting screws, model # 6688, M3x0.5, Qty. 2
 - 4) Mounting washers model # 6743, Qty. 4

- Notes:**
- [1] Single ended sensitivity is half of values shown
 - [2] -90% to +90% of Full Scale
 - [3] Over the rated temperature range
 - [4] Bias voltage equal to (+ V - (-V)) / 2
 - [5] In the interest of constant product improvement, we reserve the right to change specifications without notice.
 - [6] +6.0 to +22.0 VDC in single supply operation with V- grounded.



Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-7604A for more information.

