

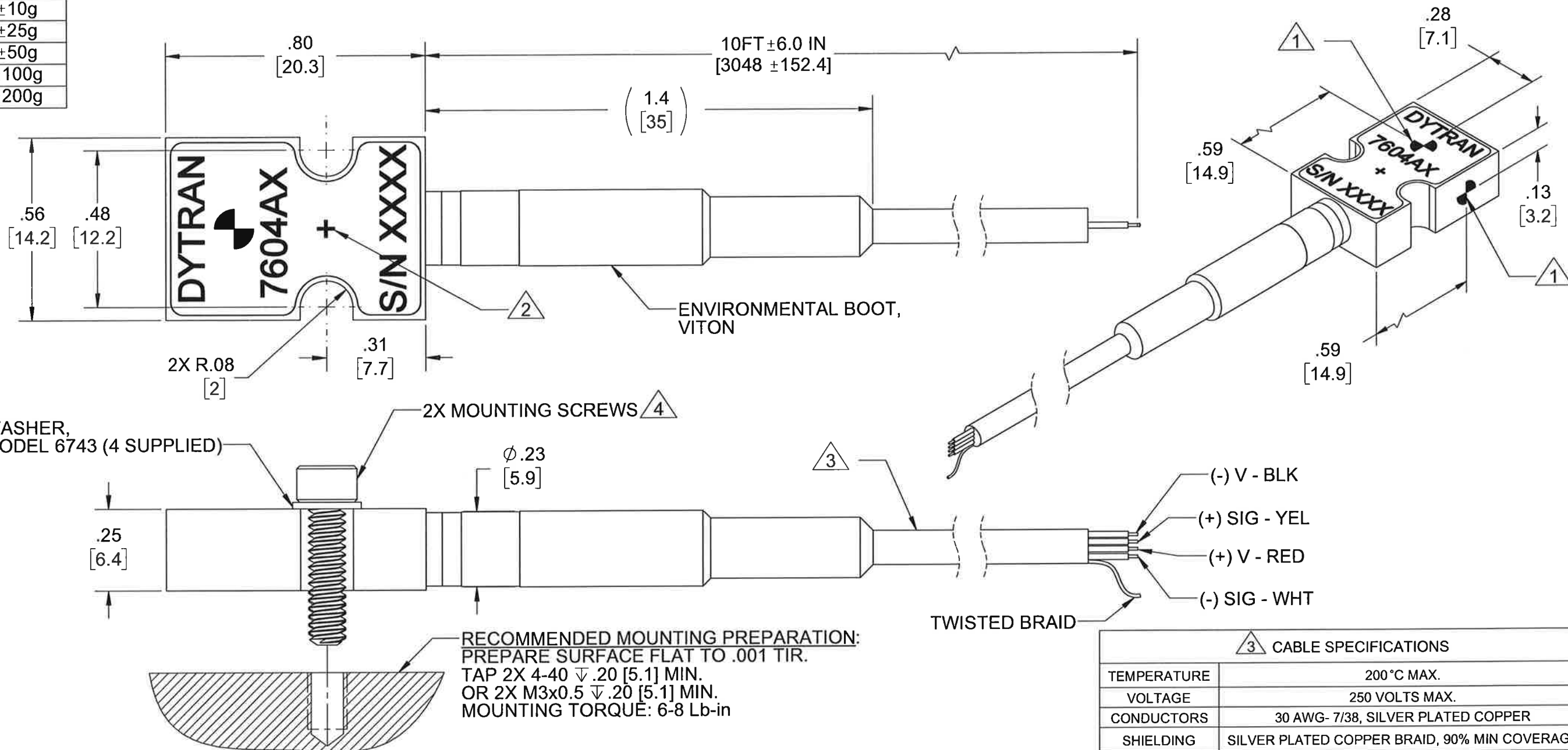
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REVISIONS

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



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, ∅.105 IN. [2.7mm] MAX., ∅.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: 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

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES. DIMENSIONS IN BRACKETS [] ARE IN MILLIMETERS TOLERANCES ARE:

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 7604A2	PERFORMANCE SPECIFICATION	DOC NO PS7604A2
	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

PHYSICAL

Weight, Max (less cable)
Integral Cable
Material

ENGLISH		SI	
0.1	oz	3.6	grams
Flying Leads		Flying Leads	
Titanium Alloy		Titanium Alloy	

PERFORMANCE

Input Range
Frequency Response (±3dB)
Resonant Frequency
Sensitivity Differential, ±5% [1]
Output Noise, Differential, Typ
Non-Linearity, Max [2]
Sensitivity Change with Excitation Voltage (6-22 Volts)
Cross Axis Sensitivity
Zero Measurand Output

±10	g	±98	m/s ²
0-600	Hz	0-600	Hz
3.5	kHz	3.5	kHz
50	mV/g	5.1	mV/m/s ²
18	μ g rms/√ Hz	177	μ m/s ² /√ Hz
0.5	% F.S	0.5	% F.S
0.3	%	0.3	%
< 3	%	< 3	%
±50	mV	±50	mV

ENVIRONMENTAL

Maximum Mechanical Shock (0.1 ms)
Bias Temperature Shift, Max [3]
Sensitivity Temperature Shift
Operating Temperature Range
Seal

5000	gpk	49050	m/s ² peak
111	(ppm of span)/°F	200	(ppm of span)/°C
277	ppm/°F	500	ppm/°C
-40 to +248	°F	-40 to +120	°C
Hermetic		Hermetic	

ELECTRICAL

Output Common Mode Voltage ± VDC
Output Impedance, Nom
Operating Voltage [6]
Operating Current, Max
Change in Operating Current to Excitation Voltage

[4]		[4]	
1225	Ω	1225	Ω
±3 to ±11	VDC	±3 to ±11	VDC
13	mA Dc	13	mA Dc
0.25	mA/V	0.25	mA/V

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)
7604A1	±5	0-400	100	2000	12
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

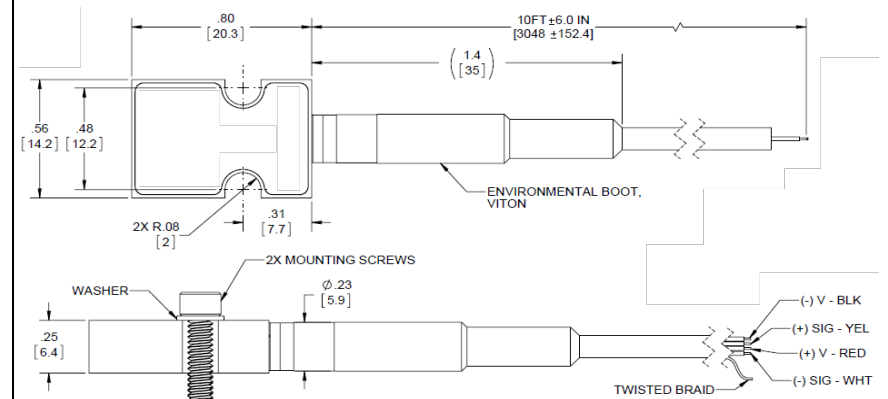
Refer to the performance specifications of the products in this family for detailed description

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.

