

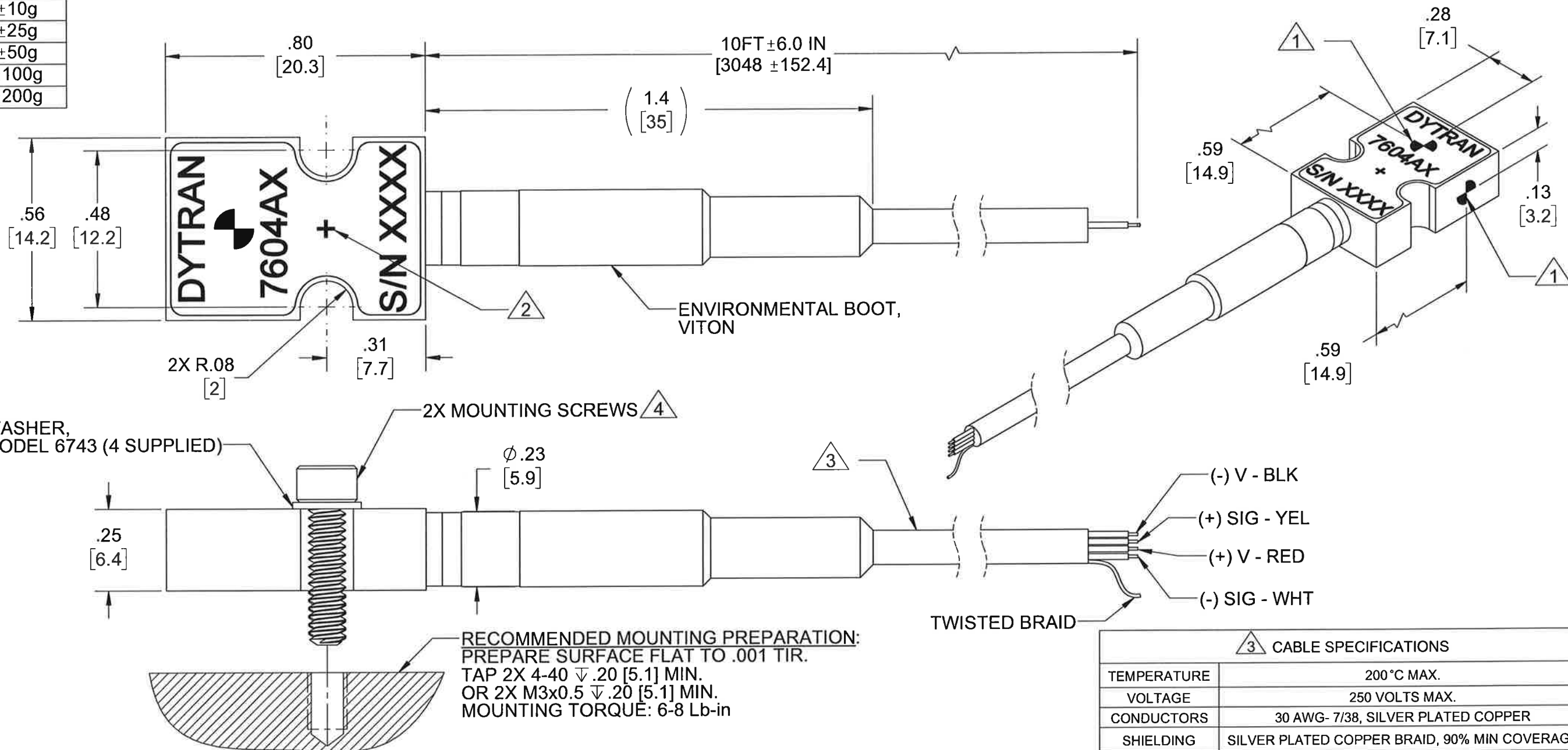
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REVISIONS

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



WASHER, MODEL 6743 (4 SUPPLIED)

2X R.08 [2]

2X MOUNTING SCREWS [4]

$\phi .23$ [5.9]

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

(-) V - BLK
 (+) SIG - YEL
 (+) V - RED
 (-) SIG - WHT

TWISTED BRAID

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, $\phi .105$ IN. [2.7mm] MAX., $\phi .095$ 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.

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.

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

DO NOT SCALE DRAWING

THIRD ANGLE PROJECTION USA

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

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

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 Chatsworth, CA

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

SIZE	CAGE CODE	DWG NO	REV
B	2W033	127-7604A	B

SCALE: 4:1 SHEET 1 OF 1

Model Number 7604A4	PERFORMANCE SPECIFICATION	DOC NO PS7604A4
	VARIABLE CAPACITANCE ACCELEROMETER	REV E, ECN 13958, 01/10/18



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

ENGLISH		SI	
Weight, Max (less cable)	0.1 oz	3.6 grams	
Integral Cable	Flying Leads	Flying Leads	
Material	Titanium Alloy	Titanium Alloy	
PERFORMANCE			
Input Range	±50 g	±491 m/s ²	
Frequency Response (±3dB)	0-1200 Hz	0-1200 Hz	
Resonant Frequency	3.5 kHz	3.5 kHz	
Sensitivity Differential, ±5% [1]	10 mV/g	1.0 mV/m/s ²	
Output Noise, Differential, Typ	50 μg rms/√Hz	491 μm/s ² /√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)	5000 gpk	49050 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	±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 mAVV	0.25 mAVV	

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
7604A2	±10	0-600	50	5000	18
7604A3	±25	0-900	20	5000	25
7604A5	±100	0-1400	5	5000	100
7604A6	±200	0-1750	2.5	5000	200

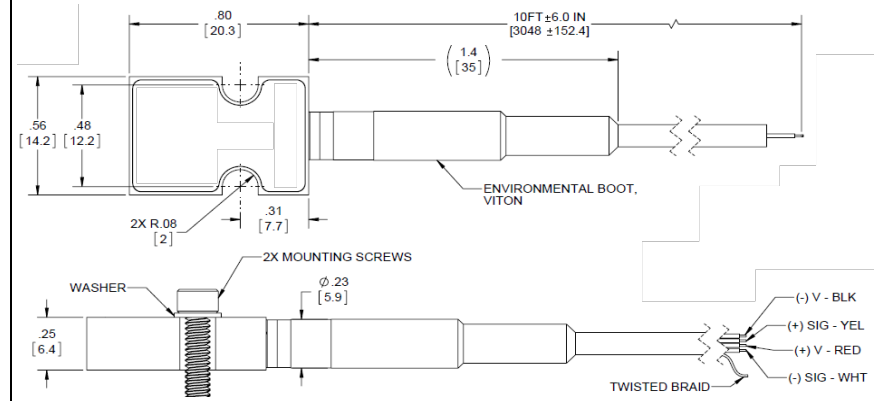
Refer to the performance specifications of the products in this family for detailed description

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.



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



21592 Marilla Street, Chatsworth, California 91311 Phone: 818.700.7818 Fax: 818.700.7880 www.dytran.com
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