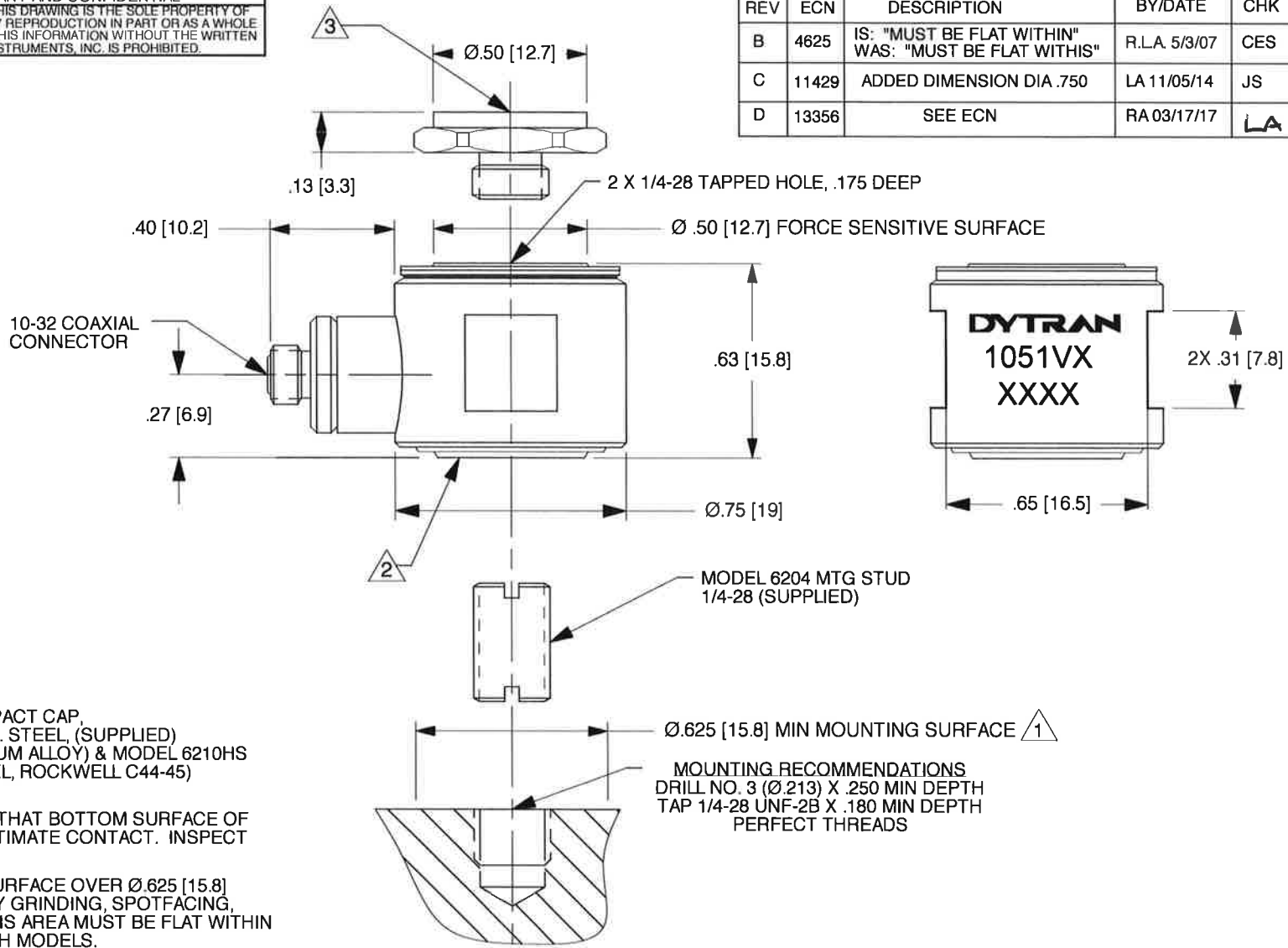


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REV	ECN	DESCRIPTION	BY/DATE	CHK	APPR
B	4625	IS: "MUST BE FLAT WITHIN" WAS: "MUST BE FLAT WITHIS"	R.LA. 5/3/07	CES	CES
C	11429	ADDED DIMENSION DIA .750	LA 11/05/14	JS	LN
D	13356	SEE ECN	RA 03/17/17	LA	LN



- 3 MODEL 6210S IMPACT CAP,
MATERIAL: 303 ST. STEEL, (SUPPLIED)
MODEL 6210A (ALUM ALLOY) & MODEL 6210HS
(17-4 PH ST. STEEL, ROCKWELL C44-45)
ALSO AVAILABLE
- 2 IT IS IMPORTANT THAT BOTTOM SURFACE OF
SENSOR BE IN INTIMATE CONTACT. INSPECT
FOR BURRS, ETC.
- 1 PREPARE FLAT SURFACE OVER $\varnothing .625$ [15.8]
MINIMUM AREA BY GRINDING, SPOTFACING,
LAPPING ETC. THIS AREA MUST BE FLAT WITHIN
.001 TIR, TYP BOTH MODELS.

MOUNTING RECOMMENDATIONS
 DRILL NO. 3 ($\varnothing .213$) X .250 MIN DEPTH
 TAP 1/4-28 UNF-2B X .180 MIN DEPTH
 PERFECT THREADS

NOTES: UNLESS OTHERWISE SPECIFIED

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.		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. DIMENSION IN BRACKETS [] ARE IN MILLIMETERS. TOLERANCES ARE: INCHES METRIC ANGLES .XX ± .03 .X ± 0.8 ± 1° .XXX ± .010 .XX ± 0.25		CONTRACT NO.				OUTLINE/INSTALLATION DRAWING, MODEL 1051V	
USED ON	NEXT ASSY	MATERIAL	APPROVALS	DATE	SIZE				
APPLICATION		FINISH	ORIG	N.C.	1/30/82	A	2W033	127-1051V	D
THIRD ANGLE PROJECTION USA		DO NOT SCALE DRAWING	CHK	N.C.	1/30/82	SCALE: NONE		ASHLAR GRAPHITE	SHEET 1 OF 1
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		APP		LN.	11/19/14	DWG. NO.			

Model Number 1051V2	PERFORMANCE SPECIFICATION	DOC NO PS1051V2
	DYNAMIC FORCE SENSOR, IEPE	REV B, ECN 13810, 10/20/17



- COMPRESSIVE & TENSILE LOADINGS
- EXCELLENT LINEARITY
- IEPE, VOLTAGE MODE

PHYSICAL

Weight, Max.
Connector
Material
Sensing Element

ENGLISH		SI	
1.0	oz	28	grams
10-32		10-32	
Stainless Steel		Stainless Steel	
Quartz		Quartz	
Compression		Compression	

PERFORMANCE

Sensitivity, ± 10 %
Compression Range
Maximum Compression
Tension Range
Maximum Tension [1]
Resolution
Linearity [2]
Resonant Frequency, Unloaded
Stiffness, Force Sensor

100	mV/lbf	22.5	mV/N
50	lbf	222.4	N
1,000	lbf	4448	N
50	lbf	222.4	N
500	lbf	2224	N
0.0007	lbf, rms	0.00311	N
±1	% Full Scale	±1	% Full Scale
75	kHz	75	kHz
11.4	lbf/μin	2.0	kN/μm

ENVIRONMENTAL

Maximum Shock, Unloaded
Maximum Vibration, Unloaded
Temperature Range
Thermal Coefficient
Seal

10,000	g pk	98100	m/s ²
5,000	g pk	49050	m/s ²
-100 to +250	°F	-73 to +121	°C
0.03	%/°F	0.05	%/°C
Epoxy		Epoxy	

ELECTRICAL

Output Voltage F.S.
Output Impedance
Bias Voltage
Compliance Voltage Range
Supply Current Range [3]
Discharge Time Constant, Nom

±5	V	±5	V
<100	Ω	<100	Ω
7.5 to 11.5	VDC	7.5 to 11.5	VDC
18 to 30	VDC	18 to 30	VDC
2 to 20	mA	2 to 20	mA
100	Sec	100	Sec

This family also includes:

Model	Sens. (mV/lbf)	Compression Range (lbf)	Max. Compression (lbf)	Tension Range (lbf)	Max. Tension (lbf)	T.C. (sec)	Resolution (lbf, RMS)
1051V1	500	10	200	10	200	50	0.00014
1051V3	50	100	2000	100	500	500	0.0014
1051V4	10	500	10000	500	500	2000	0.007
1051V5	5	1,000	15000	500	500	2000	0.014
1051V6	1	5,000	15000	500	500	2000	0.07

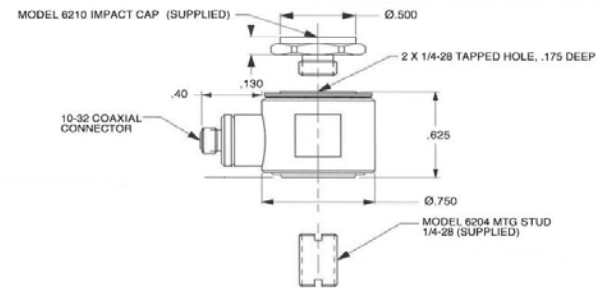
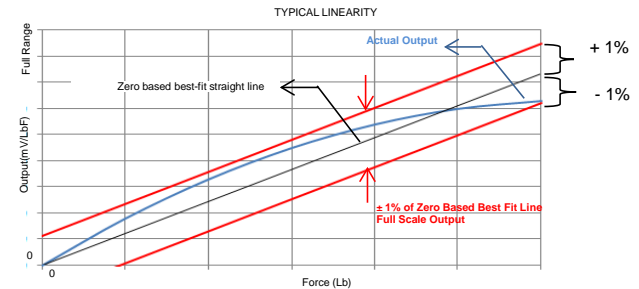
Refer to the performance specifications of the products in this family for detailed description.

Supplied Accessories:

- 1) Accredited calibration certificate (ISO 17025)
- 2) MOD 6210 STEEL IMPACT CAP
- 3) MOD 6204 1/4-28 MOUNTING STUD

Notes:

- [1] Absolute maximum tension. Do not exceed in any case!
- [2] Percent of full scale or any lesser range, zero based best-fit straight line method.
- [3] Power the device only with constant current type power units. Do not apply power to this system without current limiting. This will destroy the integral IC amplifier.



Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-1051V for more information.



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