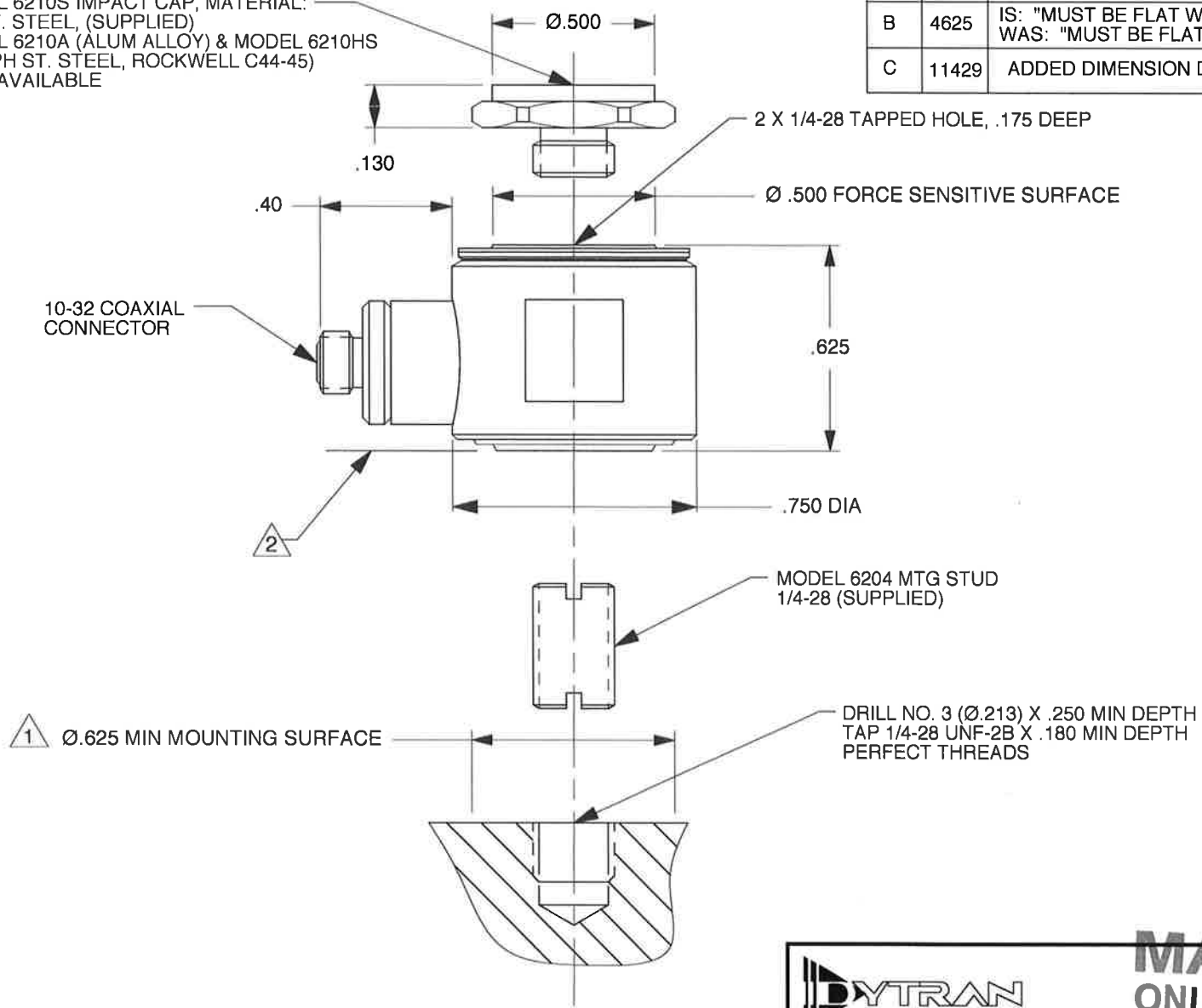


MODEL 6210S IMPACT CAP, MATERIAL:
 303 ST. STEEL, (SUPPLIED)
 MODEL 6210A (ALUM ALLOY) & MODEL 6210HS
 (17-4 PH ST. STEEL, ROCKWELL C44-45)
 ALSO AVAILABLE

REV	ECN	DESCRIPTION	BY/DATE	CHK	APPR
B	4625	IS: "MUST BE FLAT WITHIN" WAS: "MUST BE FLAT WITHIS"	R.L.A. 5/3/07	CES	CES
C	11429	ADDED DIMENSION DIA .750	LA 11/05/14	JK	LN



- ③ WRENCH FLATS: 11/16 (.687) ACROSS FLATS X .31 HIGH.
- ② IT IS IMPORTANT THAT BOTTOM SURFACE OF SENSOR BE IN INTIMATE CONTACT. INSPECT FOR BURRS, ETC.
- ① PREPARE FLAT SURFACE OVER $\varnothing .625$ MINIMUM AREA BY GRINDING, SPOTFACING, LAPPING ETC. THIS AREA MUST BE FLAT WITHIN .001 TIR, TYP BOTH MODELS.

EXCEPT AS OTHERWISE NOTED

ALL DIMENSIONS IN INCHES
 TOLERANCE: .XXX = ± .XX ±

SURFACE FINISH EXCEPT AS NOTED ✓

BREAK EDGES TO DEBURR RADIUS OR CHAMFER

① THESE DIAS \odot TO T.I.R.

FILLETS - MAX RAD.

DYTRAN
INSTRUMENTS, INC.

MASTER
ONLY IF IN RED

CHATSWORTH, CA.

SCALE	2X	REV	DATE	ECN	SEE REV BLK
DATE	1/30/82	PART NO.			
DRAWN	N.C.	CHECKED	MAT'L		
APPROVED	LN	11/19/14	NEXT ASSEMBLY	USED ON	SERIES 1051V
TITLE					DWG NO.
OUTLINE/INSTALLATION DRAWING, MODEL 1051V					127-1051V
					SHEET 1 OF 1

Model Number 1051V4	PERFORMANCE SPECIFICATION	DOC NO PS1051V4
	DYNAMIC FORCE SENSOR, IEPE	REV A, ECN 12897, 08/18/16



- 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, ± 5 %
Compression Range
Maximum Compression
Tension Range
Maximum Tension [1]
Resolution
Linearity [2]
Resonant Frequency, Unloaded
Stiffness, Force Sensor

10	mV/lbf	2.2	mV/N
500	lbf	2224.1	N
10,000	lbf	44482	N
500	lbf	2224.1	N
500	lbf	2224	N
0.007	lbf, rms	0.03114	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
2000	Sec	2000	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
1051V2	100	50	1000	50	500	100	0.0007
1051V3	50	100	2000	100	500	2000	0.0014
1051V5	5	1,000	15000	500	500	2000	0.014
1051V6	1	5,000	15000	500	500	2000	0.07

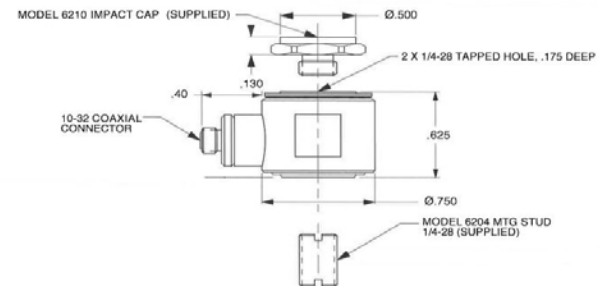
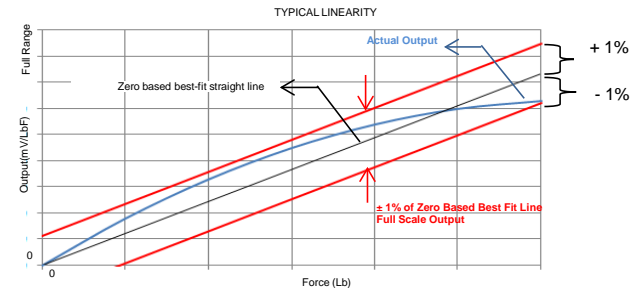
Refer to the performance specifications of the products in this family for detailed description.

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.



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