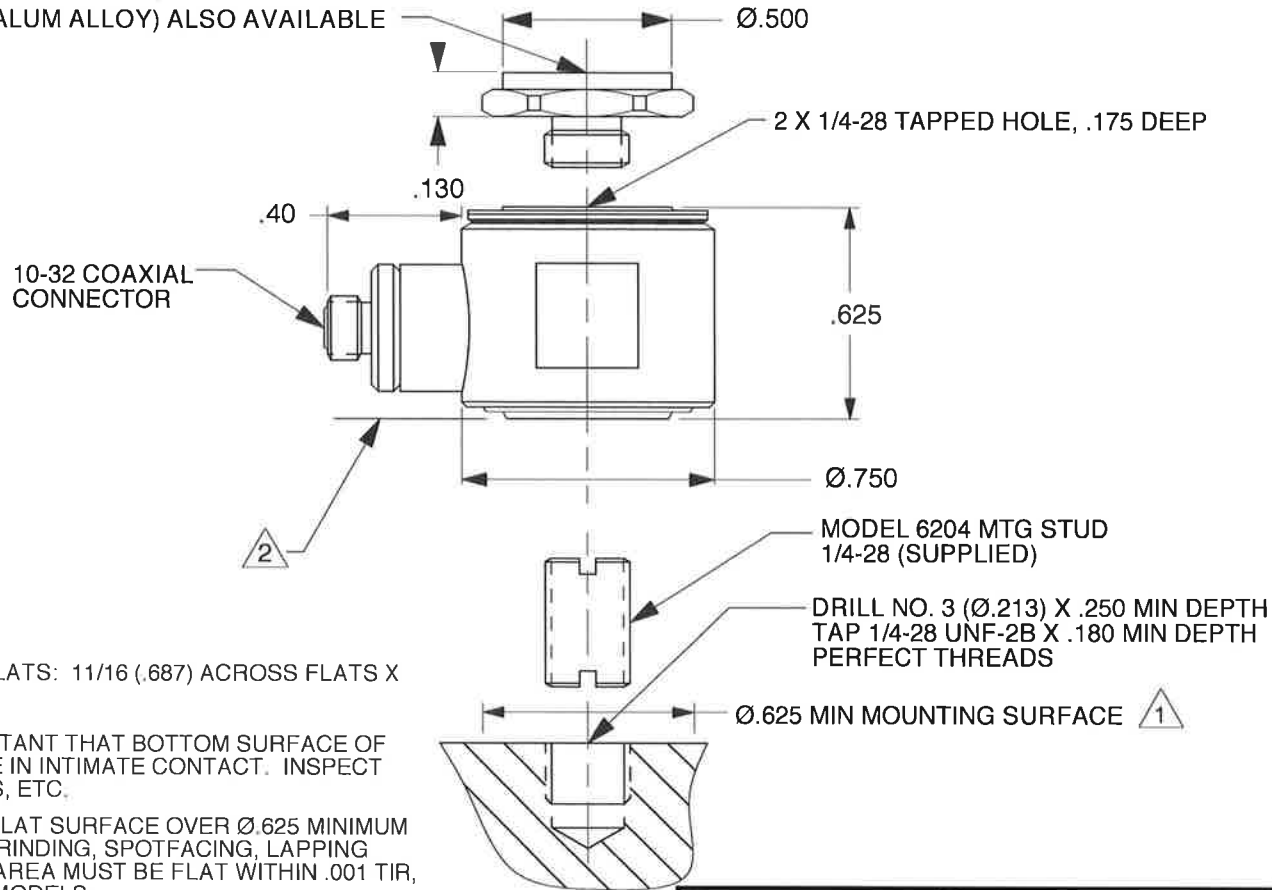


PROPRIETARY AND CONFIDENTIAL

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REVISIONS				
REV	ECN	DESCRIPTION	BY/DATE	CHK APPR
A	4625	IS: "MUST BE FLAT WITHIN" WAS: "MUST BE FLAT WITHIS"	R.L.A. 5/3/07	CES CES
B	11429	ADDED DIMENSION DIA .750	LA 11/05/14	94 LN

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



- 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.

USED ON	NEXT ASSY
APPLICATION	
THIRD ANGLE PROJECTION	
USA	

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.  
THDS PER MIL-S-7742.  
DIMENSIONS APPLY AFTER FINISHING.

63 ✓

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.

UNLESS OTHERWISE SPECIFIED:  
DIMENSIONS ARE IN INCHES.  
DIMENSIONS IN BRACKETS [ ] ARE IN MILLIMETERS  
TOLERANCES ARE:  
INCHES METRIC ANGLE  
.XX ± .03 .X ± 0.8  $\angle 1^\circ$   
.XXX ± .010 .XX ± 0.25

MATERIAL

FINISH

DO NOT SCALE DRAWING

CONTRACT NO.	
APPROVAL	DATE
ORIG	NC 12/20/00
CHK	NC 12/20/00
APP	LN 11/19/14
APP	

**DYTRAN MASTER**  
INSTRUMENTS, INC. Chatsworth, CA  
ONLY INVENTED

TITLE:  
**OUTLINE/INSTALLATION DRAWING,  
MODEL 1051C**

SIZE <b>A</b>	CAGE CODE <b>2W033</b>	DWG. NO. <b>127-1051C</b>	REV <b>B</b>
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SCALE: NONE

SHEET 1 OF 1

Model Number 1051C	<b>PERFORMANCE SPECIFICATION</b>			DOC NO PS1051C
	<b>DYNAMIC FORCE SENSOR, CHARGE MODE</b>			REV B, ECN 15438, 12/12/19



- COMPRESSIVE & TENSILE LOADINGS
- CHARGE MODE

**This family also includes:**

Model	Sens. (pC/lbf)	Compression Range (lbf)	Max. Compression (lbf)	Tension Range (lbf)	Max. Tension (lbf)

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] In the interest of constant product improvement, we reserve the rights to change the specifications without notice.

It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary overtime. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts.

**PHYSICAL**

	ENGLISH		SI	
Weight, Max.	1.1	oz	32	grams
Connector	10-32		10-32	
Material	Housing	Stainless Steel	Stainless Steel	
	Connector	Stainless Steel	Stainless Steel	
Sensing Element	Material	Quartz	Quartz	
	Mode	Compression	Compression	

**PERFORMANCE**

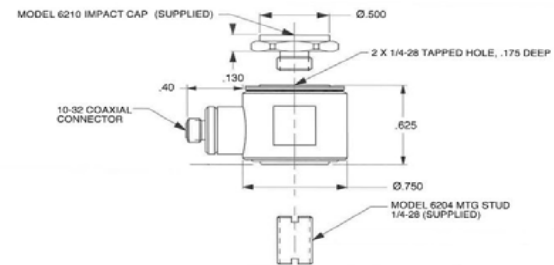
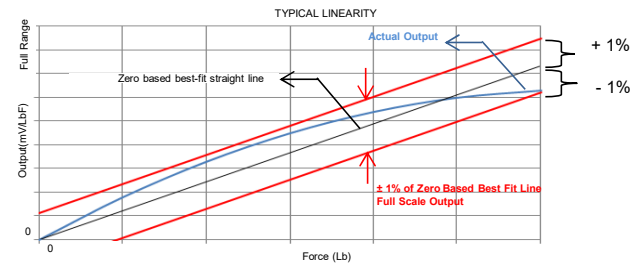
Sensitivity, ± 15 %	-18	pC/lbf	-4.0	pC/N
Compression Range	5,000	lbf	22,241	N
Maximum Compression	15,000	lbf	66,723	N
Tension Range	500	lbf	2,224	N
Maximum Tension [1]	1,000	lbf	4,448	N
Linearity [2]	±1	% Full Scale	±1	% Full Scale
Resonant Frequency, Unloaded	>75	kHz	>75	kHz
Stiffness, Force Sensor	11.4	lbf/μin	2.0	kN/μm

**ENVIRONMENTAL**

Maximum Shock, Unloaded	10,000	g pk	98100	m/s <sup>2</sup>
Maximum Vibration, Unloaded	2,500	g pk	24525	m/s <sup>2</sup>
Temperature Range	-100 to +500	°F	-73 to +260	°C
Thermal Coefficient	0.03	%/°F	0.05	%/°C
Seal	Welded/Epoxy		Welded/Epoxy	

**ELECTRICAL**

Capacitance	18	pF	18	pF
Insulation Resistance	1E+12	Ω	1E+12	Ω



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



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