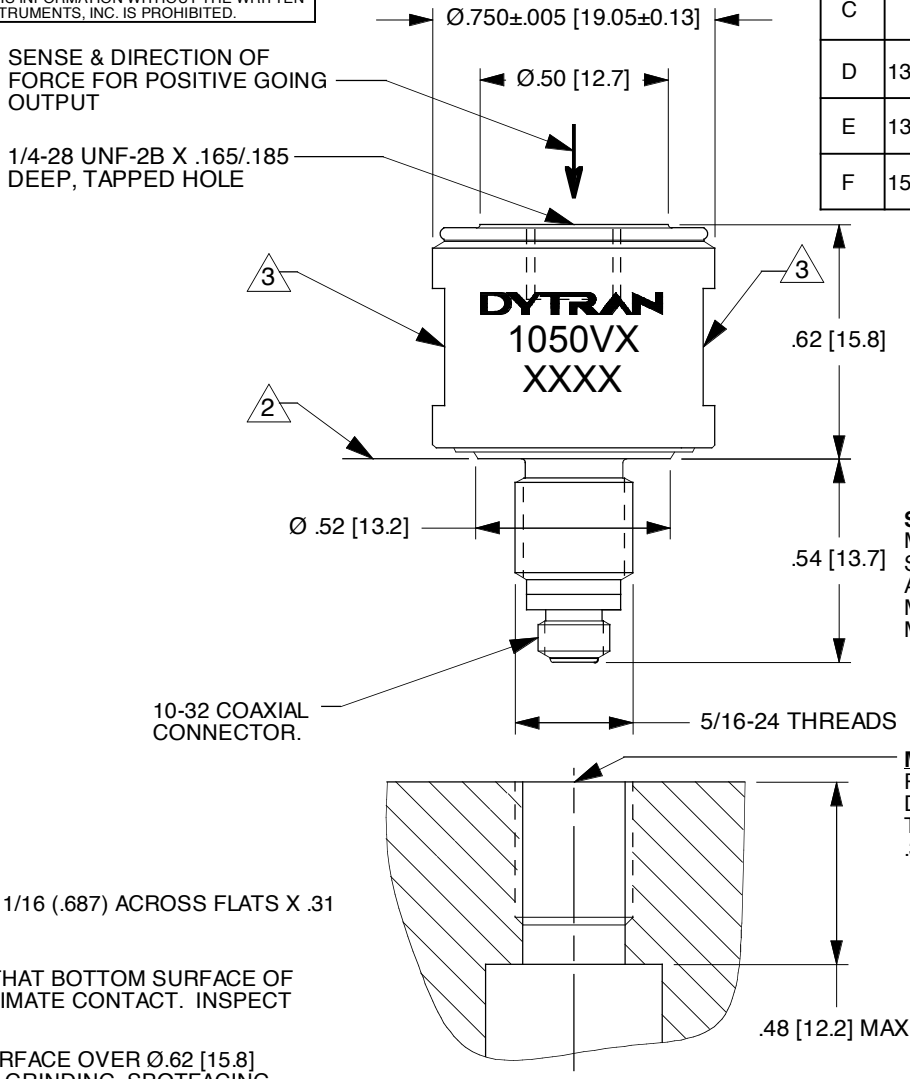
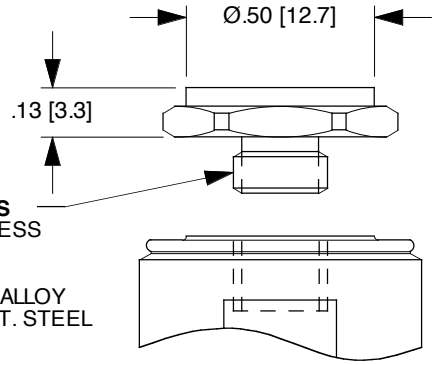
REV	ECN	DESCRIPTION	BY/DATE	CHK	APPR
C	-	SEE ECN	NC, 11/29/05	NC	NC
D	13356	SEE ECN	RA, 03/20/17	LA	LN
E	13851	Ø.750±.005 [19.05] WAS: Ø.75 [19]	RA, 11/09/17	MH	LN
F	15815	1/4 UNF-2B X .165/.185 WAS: 1/4 UNF-2B X .200	RA, 06/25/20	DP	LN- SEE PDM





SERIES 6210 IMPACT CAPS
MODEL 6210S, 303 STAINLESS STEEL (SUPPLIED)
ALSO AVAILABLE:
MODEL 6210A, ALUMINUM ALLOY
MODEL 6210HS, 17-4 PH ST. STEEL

MOUNTING RECOMMENDATIONS
PORT PREPARATION:
DRILL "I" (Ø.272) THRU
TAP 5/16-24 UNF-2B X
.360 [9] MIN. DEPTH PERF. THREADS

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 Ø.62 [15.8] 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 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.

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

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	

MATERIAL

FINISH

DO NOT SCALE DRAWING

CONTRACT NO.

APPROVALS		DATE
ORIG	N.C.	1/30/82
CHK	N.C.	1/30/82
APP	N.C.	11/29/05
APP		

DYTRAN INSTRUMENTS, INC.
CHATSWORTH, CA.

TITLE
OUTLINE/INSTALLATION DRAWING, MODEL 1050V FORCE SENSOR

SIZE	CAGE CODE	DWG. NO.	REV
A	2W033	**127-1050V**	**F**

SCALE: NONE | ASHLAR GRAPHITE | SHEET 1 OF 1

Model Number 1050V4	PERFORMANCE SPECIFICATION	Doc No PS1050V4
	Force Sensors, IEPE	REV C, ECN 16158, 04/19/21

- **DYNAMIC FORCE SENSOR**
- **VOLTAGE MODE**
- **EXCELLENT LINEARITY**

		ENGLISH		SI	
PHYSICAL					
Weight, Max.		1.12	oz	32	grams
Connector	Type	Coaxial		Coaxial	
	Thread	10-32		10-32	
Housing	Material	Stainless steel		Stainless steel	
	Isolation	Case grounded		Case grounded	
Sensing Element	Material	Quartz		Quartz	
	Mode	Compression		Compression	
PERFORMANCE					
Sensitivity, +/-10%		10	mV/lbf	2.25	mV/N
Compression Range		500	lbf	2224	N
Maximum Compression , +/-5%		10000	lbf	44480	N
Tension Range		500	lbf	2224	N
Maximum Tension [1], +/-5%		1000	lbf	4448	N
Resolution		.007	lbf, RMS	0.03114	N RMS
Linearity [2]		± 1	% Full Scale	± 1	% Full Scale
Mounted Resonance (Unloaded)		≥ 75	kHz	≥ 75	kHz
Stiffness		11.4	lbf/µin	1.97	kN/µm
ENVIRONMENTAL					
Coefficient Of Thermal Sensitivity		0.03	%/°F	0.05	%/°C
Operating Temperature		-100 to +250	°F	-73 to +121	°C
Maximum Shock		10,000	g pk	98,000	m/s^2 pk
Environmental Seal		Epoxy		Epoxy	
ELECTRICAL					
Supply Current [4]		2 to 20	mA	2 to 20	mA
Compliance Voltage		18 to 30	VDC	18 to 30	VDC
Discharge Time Constant, Min.		1000	Sec	1000	Sec
F.S. Output Voltage		5	Volts	5	Volts
Output Impedance		100	Ω	100	Ω
Bias Voltage		7.5 to 9.5	VDC	7.5 to 9.5	VDC

This family also includes:

Model	Sensitivity (mV/lbf)	Range (lbf) Compressive, Tensile	Max Force (lbf) Compressive, Tensile	Discharge Time Constant (Sec)
1050V1	500	10, 10	200, 200	>20
1050V2	100	50, 50	1000, 1000	>50
1050V3	50	100, 100	2000, 1000	>100
1050V5	5	1000, 500	15000, 1000	>1200
1050V6	1	5000, 500	15000, 1000	>2000

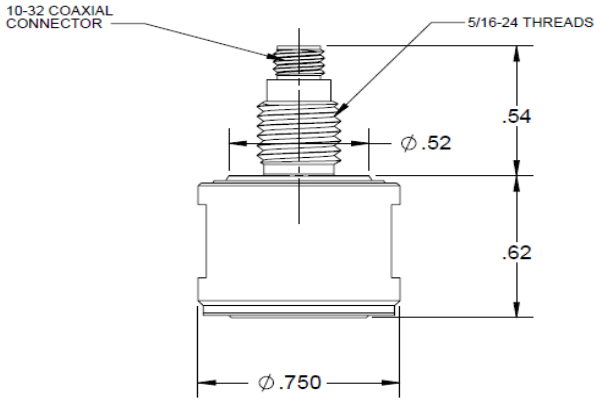
Refer to the performance specifications of the products in this family for detailed description

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] Measure using zero-based straight line method, % of F.S. or any lesser range.
[3] All specifications are at room temperature unless otherwise specified.
[4] Do not apply power to this system without current limiting, 20 mA MAX. To do so will destroy the IC charge amplifier
[5] In the interest of constant product improvement, we reserve the right to change 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 over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts.



Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-1050V for more information.

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