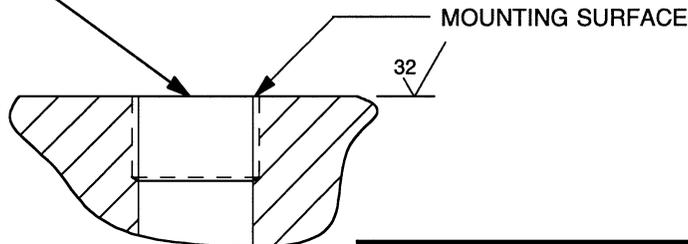


**MOUNTING PREPARATION**

PREPARE FLAT SURFACE (TO .001 TIR)  
OVER 2.00 MIN DIAMETER AREA.  
DRILL 39/64 (Ø.609) THRU, AT CENTER  
TAP 11/16-12 UNS-2B X .430 MIN THREAD  
DEPTH



1. MATERIAL, HOUSING & CONNECTOR HOUSING:  
300 SERIES STAINLESS STEEL. TOP AND  
BOTTOM SURFACES, 17-4 PH ST. STEEL
2. WEIGHT - 460 GRAMS
3. TORQUE TO 20-25 LB-FT AT INSTALLATION  
USING WRENCH ON WRENCH FLATS ONLY.
4. DO NOT APPLY IMPACT LOADS TO FORCE  
SENSOR WITHOUT IMPACT CAP, MODEL 6217  
OR EQUIVALENT. CONSULT FACTORY FOR  
SPECIAL IMPACT CAPS FOR YOUR  
PARTICULAR APPLICATION.

<b>EXCEPT AS OTHERWISE NOTED</b>	
ALL DIMENSIONS IN INCHES TOLERANCE: .XXX ± ± .XX ± ±	
SURFACE FINISH EXCEPT AS NOTED	✓
BREAK EDGES TO DEBURR RADIUS OR CHAMFER	
△ THESE DIAS ⊙ TO T.I.R.	
FILLETS -	MAX RAD.

<b>DYTRAN</b> INSTRUMENTS, INC.		CHATSWORTH, CA.	
SCALE 1X	REV	DATE	ECN
DATE 8/19/96	PART NO. 1060V1 - 1060V6		
DRAWN N.C.	CHECKED D.Z.	MAT'L	
APPROVED	NEXT ASSEMBLY	USED ON	
TITLE <b>OUTLINE/INSTALLATION DRAWING FORCE SENSOR, SERIES 1060V</b>			DWG NO. <b>127-1060V</b>
SHEET 1 OF 1			



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

**PHYSICAL**

Weight, Max.  
Connector  
Housing  
Sensing Element

ENGLISH		SI	
Weight, Max.	16.10 oz	460	grams
Connector	Coaxial	Coaxial	
Thread	10-32	10-32	
Housing	Material: Stainless steel	Material: Stainless steel	
	Isolation: Case grounded	Isolation: Case grounded	
Sensing Element	Material: Quartz	Material: Quartz	
	Mode: Compression	Mode: Compression	

**PERFORMANCE**

Sensitivity, +/-10%  
Compression Range  
Maximum Compression, +/-5%  
Tension Range  
Maximum Tension [1], +/-5%  
Resolution  
Linearity [2]  
Mounted Resonance (Unloaded)  
Stiffness

Sensitivity, +/-10%	1 mV/Lb	0.22	mV/N
Compression Range	5000 Lbs.Force	22240	N
Maximum Compression, +/-5%	30000 Lbs.Force	133440	N
Tension Range	1000 Lbs.Force	4448	N
Maximum Tension [1], +/-5%	1000 Lbs.Force	4448	N
Resolution	.07 Lb. RMS	0.31136	N RMS
Linearity [2]	± 1 % Full Scale	± 1	% Full Scale
Mounted Resonance (Unloaded)	≥ 75 kHz	≥ 75	kHz
Stiffness	50 Lb/μin	8.66	kN/μm

**ENVIRONMENTAL**

Coefficient Of Thermal Sensitivity  
Operating Temperature  
Maximum Vibration  
Maximum Shock  
Environmental Seal

Coefficient Of Thermal Sensitivity	0.03 %/°F	0.05	%/°C
Operating Temperature	-100 to +250 °F	-73 to +121	°C
Maximum Vibration	±3000 g's, Peak	±29400	m/s^2 Peak
Maximum Shock	5,000 g's, Peak	49,000	m/s^2 Peak
Environmental Seal	Epoxy	Epoxy	

**ELECTRICAL**

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

Supply Current [3]	2 to 20 mA	2 to 20	mA
Compliance Voltage	18 to 30 VDC	18 to 30	VDC
Discharge Time Constant, Min.	1500 Seconds	1500	Seconds
F.S. Output Voltage	5 Volts	5	Volts
Output Impedance	100 Ω	100	Ω

**This family also includes:**

Model	Sensitivity (mV/Lb)	Range (LbsF) Compressive, Tensile	Max Force (LbsF) Compressive, Tensile	Discharge Time Constant (Sec)
1060V1	10	500, 500	10000, 1000	150
1060V2	5	1000, 1000	20000, 1000	300
1060V4	0.5	10000, 1000	40000, 1000	2000
1060V5	0.2	25000, 1000	50000, 1000	2000
1060V6	0.1	50000, 1000	60000, 1000	2000

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

**Supplied Accessories:**

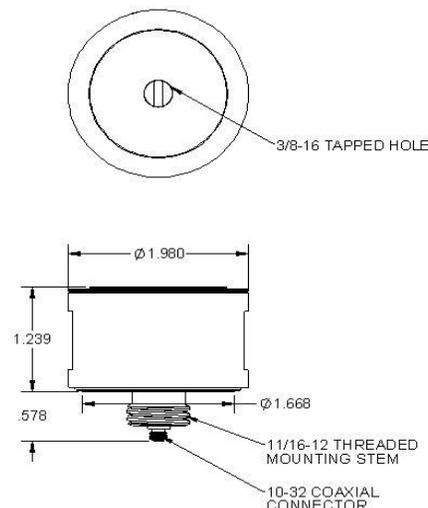
- 1) Accredited Calibration Certificate (ISO 17025)
- 2) MOD 6232 MOUNTING STUD

**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 these instruments only with constant current type power units. Do not connect to a source of voltage 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 127-1060V for more information.

