



**PORT PREPARATION, FLUSH DIAPHRAGM INSTALLATION:**

DRILL 1/4 (Ø.250) THROUGH  $\triangle 1$   $\textcircled{A}$   
 FLAT BOTTOM REAM Q (Ø.332) X .920  $\pm$ .003 DEEP  $\triangle 1$   
 TAP 3/8-24 UNF-2B X .350 MIN DEPTH PERFECT THREAD

4. MOUNTING TORQUE ON 3/8 HEX: 30 TO 40 LB-INCHES.

3. MATERIAL, BODY & DIAPHRAGM: 17-4PH STAINLESS STEEL HARDENED TO Rc 44-45.

2. WEIGHT OF 2011V: 13 GRAMS.

ALL PART NUMBER LETTERSUFFIXES ARE TO BE INTERPRETED AS FOLLOWS:  
 I.E. - 107-0000-01  $\textcircled{X}$   
 M - MACHINED ONLY (UNPLATED)      G - MATERIAL HAS BEEN GRAINED  
 P - PLATED/PAINTED                      S - MATERIAL HAS BEEN SAWCUT  
 H - HEAT TREATED                        E - ENVIRONMENTAL TEST

EXCEPT AS OTHERWISE NOTED	
ALL DIMENSIONS IN INCHES	
TOLERANCE: .XXX = $\pm$ .005	.XX = $\pm$ .01
SURFACE FINISH EXCEPT AS NOTED	$\checkmark$
BREAK EDGES TO DEBURR	
RADIUS OR CHAMFER	
$\triangle 1$ THESE DIAS $\textcircled{O}$ TO .001	T.I.R.
FILLETS -	MAX RAD.

		CHATSWORTH, CA.		
				SCALE 1X
DATE 3/21/96	PART NO. MOD 2011V			
DRAWN N.C.	CHECKED R.A.	MAT'L		
APPROVED	NEXT ASSEMBLY		USED ON 2011V	
TITLE			DWG NO.	
<b>OUTLINE/INSTALLATION DRAWING,          MODEL 2011V ENGINE PRESSURE SENSOR</b>			<b>127-2011V</b>	
			SHEET 1 OF 1	

**SPECIFICATIONS MODEL 2011V  
DYNAMIC PRESSURE SENSOR**

SPECIFICATION	VALUE	UNITS
<b>PHYSICAL</b>		
WEIGHT	13.0	GRAMS
SIZE (HEX X HEIGHT)	.375 X 1.88	INCHES
MOUNTING PROVISION	3/8-24 UNF-2A MALE THREAD	
CONNECTOR, AXIALLY MOUNTED AT TOP	10-32 UNF-2A	
BODY/CONNECTOR MATERIAL	STAINLESS STEEL, HARDENED	17-4 PH
DIAPHRAGM MATERIAL	STAINLESS STEEL	17-5 PH
<b>PERFORMANCE</b>		
SENSITIVITY, NOM.	5	mV/Psi
RANGE F.S. FOR +5 VOLTS OUT	1000	Psi
MAXIMUM PRESSURE	2000	Psi
MOUNTED RESONANT FREQUENCY, NOM.	130	kHz
MINIMUM RISE TIME OF INPUT PRESSURE PULSE	2	μSEC
EQUIVALENT ELECTRICAL NOISE FLOOR (RESOLUTION)	.009	Psi
NON-LINEARITY (ZERO BASED BEST FIT ST.LINE METHOD) [1]	±1	%F.S.
ACCELERATION SENSITIVITY, AXIAL DIRECTION	.02	Psi/G
DISCHARGE TIME CONSTANT	4.0	SEC
LOWER -3db FREQUENCY	.04	Hz
<b>ENVIRONMENTAL</b>		
MAXIMUM VIBRATION	1000	G's RMS
MAXIMUM SHOCK	3,000	G, ' s PEAK
TEMPERATURE RANGE	-100 TO +250	°F
MAXIMUM FLASH TEMPERATURE AT DIAPHRAGM	+3000	°F
THERMAL COEFFICIENT OF SENSITIVITY	0.03	%/°F
ENVIRONMENTAL SEAL	HERMETIC	WELDED/GLASS TO METAL
<b>ELECTRICAL</b>		
EXCITATION (COMPLIANCE) VOLTAGE RANGE	+18 TO +30	VDC
EXCITATION CURRENT RANGE [2]	2 TO 20	mA
OUTPUT IMPEDANCE, NOM.	100	Ohms
OUTPUT BIAS VOLTAGE, NOM	+10	VDC
OUTPUT SIGNAL POLARITY FOR INCREASING PRESSURE	POSITIVE GOING	
<b>SUPPLIED ACCESSORIES</b>		
MODEL 6606 SEAL, BRASS, 2 SUPPLIED, BOTH MODELS		

**NOTES:**

- [1] PERCENT FULL SCALE, ZERO BASED BEST FIT STRAIGHT LINE METHOD.  
 [2] FROM CONSTANT CURRENT TYPE POWER UNIT ONLY. THIS SENSOR **MUST NOT BE CONNECTED TO A DC POWER SOURCE WITHOUT CURRENT LIMITING, 20 mA MAXIMUM.**  
 3 A CALIBRATION CERTIFICATE TRACEABLE TO NIST IS SUPPLIED WITH EACH INSTRUMENT.