



DYTRAN
INSTRUMENTS, INC. CHATSWORTH, CA.

SCALE	2X	REV	-	DATE	-	ECN	
DATE	7/21/01	PART NO.					
DRAWN	N.C.	CHECKED	R.A.	MAT'L			
APPROVED		NEXT ASSEMBLY		USED ON			
TITLE						DWG NO.	
OUTLINE/INSTALLATION DRAWING, MODEL 3185D						127-3185D	
						SHEET 1 OF 1	

EXCEPT AS OTHERWISE NOTED

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.

- 2. WEIGHT - 55 GRAMS
- 1. INSULATION RESISTANCE BETWEEN MOUNTING SURFACE AND CONNECTOR SHELL - 10 MEGOHMS, MIN.



SPECIFICATIONS

MODEL 3185D INDUSTRIAL ACCELEROMETER

SPECIFICATION	VALUE	UNITS
PHYSICAL		
WEIGHT	55	GRAMS
SIZE (HEX x HEIGHT)	.75 x 1.67	INCHES
MOUNTING PROVISION	1/4-28, UNF-2B TAPPED HOLE AT BOTTOM	
CONNECTOR, COAXIAL, TOP MOUNTED	TNC, HERMETIC	
CASE /CONNECTOR MATERIAL	316L STAINLESS STEEL	
SENSING ELEMENT TYPE	PLANAR SHEAR, CERAMIC	
PERFORMANCE		
SENSITIVITY, +/- 5%	100	mV/G
RANGE F.S. FOR +/- 5 VOLTS OUT	+/- 50	G's
FREQUENCY RESPONSE, +/- 10%	2 (120) to 10,000 (600,000)	Hz(CPM)
MOUNTED RESONANT FREQUENCY, NOM.	25	KHz
EQUIVALENT ELECTRICAL NOISE (RESOLUTION)	.001	G, RMS
AMPLITUDE NON-LINEARITY (ZERO BASED BEST FIT ST.LINE METHOD)	2.0	% F.S., MAX.
TRANSVERSE SENSITIVITY, MAX.	5	PERCENT
STRAIN SENSITIVITY	.001	G's PER MICROSTRAIN @ 250/μ
ENVIRONMENTAL		
MAXIMUM VIBRATION	100	G's, RMS
MAXIMUM SHOCK	3000	G's, PEAK
TEMPERATURE RANGE	-60 TO +250	°F
ENVIRONMENTAL SEAL	HERMETIC	
ELECTRICAL		
EXCITATION (COMPLIANCE) VOLTAGE RANGE	+18 to +30	VDC
EXCITATION CURRENT RANGE	2 to 20	mA
OUTPUT IMPEDANCE, NOM.	100	OHMS
OUTPUT BIAS VOLTAGE, +/- 1 VOLTS	10	VDC
DISCHARGE TIME CONSTANT, MIN.	.3	SEC.
OUTPUT SIGNAL POLARITY FOR ACCELERATION TOWARD TOP	POSITIVE GOING	

SUPPLIED ACCESSORIES:

(1) MODEL 6176 1/4-28 STAINLESS STEEL MOUNTING STUD

AVAILABLE ACCESSORIES:

MODEL 6185 IMMERSION PROOF™ VITON BOOT FOR USE IN HARSH ENVIRONMENT. COMPLETELY SEALS SENSOR AND CONNECTOR FROM MOISTURE. BOOT PROVIDES TOTAL HERMETIC SEAL FROM 0 TO 5,000 PSI.

EACH UNIT SUPPLIED WITH NIST TRACEABLE CALIBRATION CERTIFICATE.