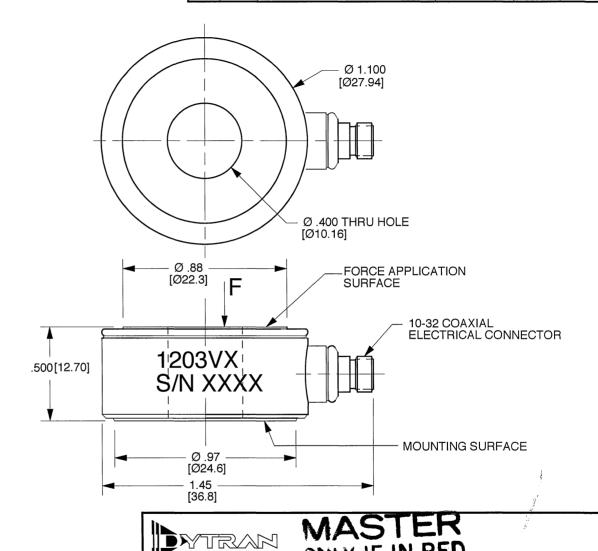
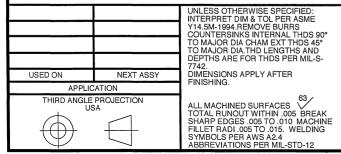
REV ECN DESCRIPTION BY/DATE CHK APPR
A 8074 UPDATED FORMAT RA, 11/17/11 J5





- 3. ENVIRONMENTAL SEAL: HERMETIC.
- 2. MATERIAL: LOAD-BEARING SURFACES: HARDENED 17-4 PH STAINLESS STEEL. HOUSING AND CONNECTOR: 300 SERIES STAINLESS STEEL.
- 1. POLARITY: POSITIVE-GOING WITH COMPRESSION.

### NOTES: UNLESS OTHERWISE SPECIFIED



CONTRACT NO 2X UNLESS OTHERWISE SPECIFIED RAWN NC DIMENSIONS ARE IN INCHES. DIMENSION IN BRACKETS [] ARE IN MILLIMETERS. TOLERANCES ARE: CHECKED R.A. INCHES METRIC ANGLES .XX ±.03  $.X \pm 0.8$ ±1° APPROVED .XXX ±.010  $.XX \pm 0.25$ N.C. ITLE FINISH

DO NOT SCALE DRAWING

INSTRUMENTS, INC.

ONLY IF IN RED

CHATSWORTH, CA.

SCALE DESIGN NC DATE 10-10-07

DRAWN NC 12/17/01 MODEL SERIES 1203V

CHECKED DATE 08/01/06 MAT'L - REV A

APPROVED N.C. DATE 08/01/06 NEXT ASSEMBLY 08/01/06

N.C. DATE NEXT ASSEMBLY DWG NO.

OUTLINE/INSTALLATION DRAWING, MODEL SERIES 1203V FORCE SENSORS

127-1203V

SHEET 1 OF 1

Model Number 1203V1	PERFORMANCE SPECIFICATION	Doc No PS1203V1
	Force Sensors, IEPE	REV C, ECN 15472, 12/13/19

mV/N

%/°C



- RING STYLE FORCE SENSOR
- HERMETICALLY SEALED
- EXCELLENT LINEARITY

W: XXXX	- Call
PHYSICAL	
Weight, Max.	
Connector [1]	Type
	Material
Housing	Material
	Isolation
Sensing Element	Material
	Mode

ENGLISH	ł		S
		_	
1.75	oz		50
10-32			10-32
Stainless steel			Stainless steel
Stainless steel			Stainless steel
Case grounded			Case grounded
Quartz			Quartz
Compression			Compression

mV/Lb

51	
-	
50	grams
10-32	
Stainless steel	
Stainless steel	
Case grounded	
Quartz	
Compression	

12.36

# Sensitivity, ± 10 % Compression Range Maximum Compression

PERFORMANCE

Discharge Time Constant
Broadband Resolution Maximum Unloaded Shock
Maximum Unloaded Vibration
Linearity [2]
Resonant Frequency
Stiffness Preload

100	Lb Force
200	Lb Force
90	Seconds
0.00014	Lb, rms
10,000	g's
5,000	g's,Peak
± 1	% Full Scale
>75	kHz
20	Lb/μin
2000	Lb Force
	-

LD FOICE	0.44	KIN
Lb Force	0.89	kN
Seconds	90	Seconds
Lb, rms	6.23E-07	kN, rms
g's	98,100	m/s^2
g's,Peak	49,050	m/s^2 Peak
% Full Scale	± 1	% Full Scale
kHz	>75	kHz
Lb/μin	3.46	kN/μm
Lb Force	8.90	kN
•		

## ENVIRONMENTAL

Coefficient Of T	hermal	Sensitivity
Operating Temp	perature	!
Environmental S	Seal	

0.03	%/°F
-100 to +250	°F
Hermetic	

0.05
-73 to +121
Hermetic

#### ELECTRICAL

Supply current
Voltage Range [3]
Full Scale Output Voltage
Output Impedence
Bias Voltage

mA	2 to 20
VDC	18 to 30
Volts	5
Ω	<100
VDC	7.5 to 9.5

2 to 20	mA
18 to 30	VDC
5	Volts
<100	Ω
7.5 to 9.5	VDC
	_

#### This family also includes:

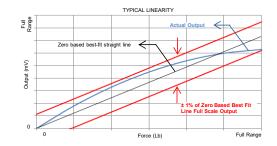
Model	Sensitivity (mV/Lb)	Range (Lbs.Force)	Max.Force (Lbs.Force)	Discharge T.C. (sec)	
1203V2	10	500	1,000	450	
1203V3	5	1,000	5,000	850	
1203V4	1	5,000	10,000	1800	
1203V5	0.5	10,000	15,000	1800	

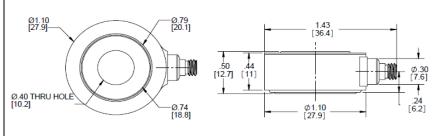
Please refer to the performance specifications of the products in this family for detailed description

#### Supplied Accessories:

1) Accredited calibration certificate (ISO 17025)

- [1] Radially mounted with 10-32 receptacle micro coaxial connector
- [2] Percent of full scale or any lesser range, Zero based best-fit sraight line method.
- [3] Power these instruments only with constant current type power units. Do no connect to a source of voltage without current limiting. This will destroy the integral IC amplifier.
- [4] 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 overtime. 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 127-1203V for more information

