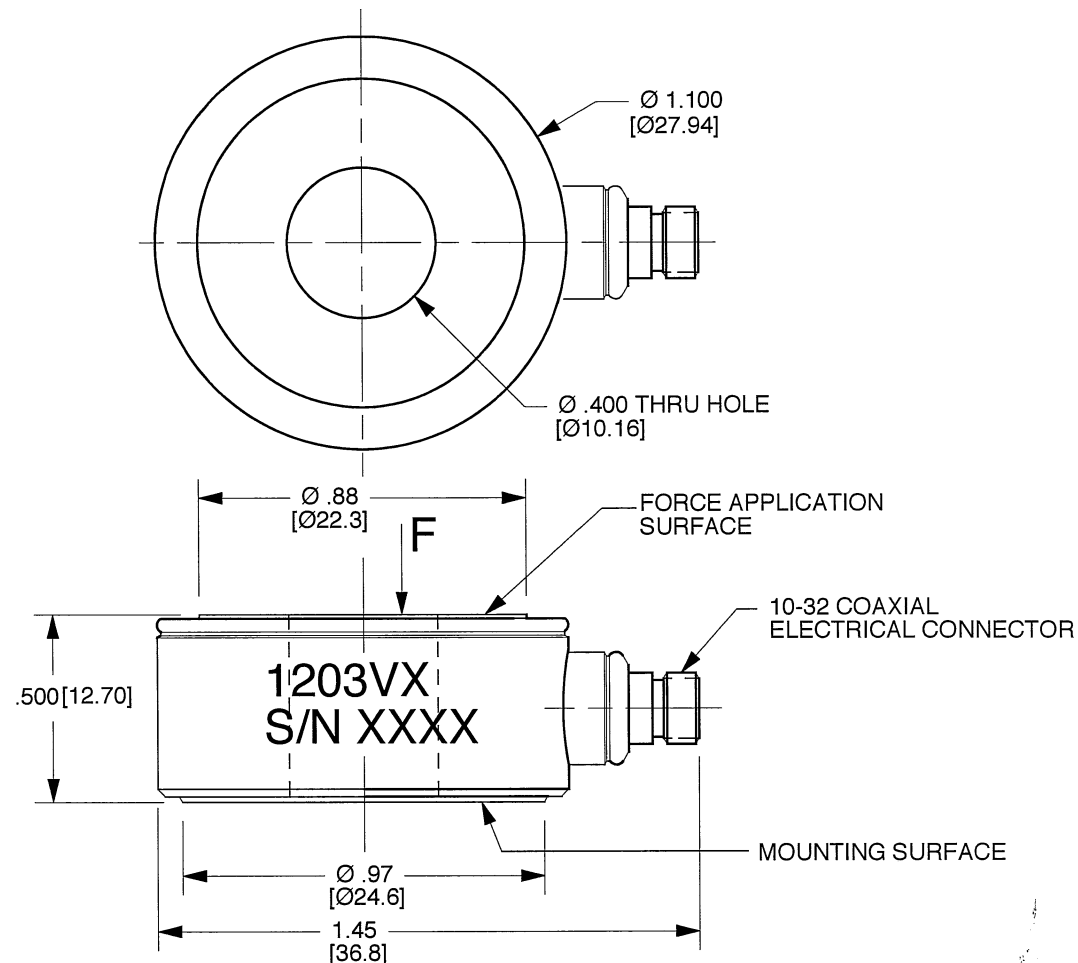


DYTRAN PROPRIETARY AND CONFIDENTIAL			
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MODEL	SENSITIVITY	TC (SEC)	RANGE F.S.
1203V1	50 mV/Lb	90	100 Lb
1203V2	10 mV/Lb	450	500 Lb
1203V3	5 mV/Lb	850	1000 Lb
1203V4	1 mV/Lb	1800	5000 Lb
1203V5	0.5 mV/Lb	1800	10,000 Lb

REV	ECN	DESCRIPTION	BY/DATE	CHK	APPR
A	8074	UPDATED FORMAT	RA, 11/17/11	JS	<i>[Signature]</i>



4. WEIGHT: 50 GRAMS.
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

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.

63  
 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

CONTRACT NO		
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. DIMENSION IN BRACKETS [ ] ARE IN MILLIMETERS. TOLERANCES ARE:		
INCHES .XX ±.03 .XXX ±.010	METRIC .X ± 0.8 .XX ± 0.25	ANGLES ± 1°
FINISH		
DO NOT SCALE DRAWING		

		<b>MASTER ONLY IF IN RED</b>		CHATSWORTH, CA.	
SCALE 2X	DESIGN NC	DATE 10-10-07			
DRAWN NC	DATE 12/17/01	PART NO. MODEL SERIES 1203V			
CHECKED R.A.	DATE 08/01/06	MAT'L -			REV A
APPROVED N.C.	DATE 08/01/06	NEXT ASSEMBLY -	USED ON	SERIES 1203V	
TITLE <b>OUTLINE/INSTALLATION DRAWING, MODEL SERIES 1203V FORCE SENSORS</b>			DWG NO. <b>127-1203V</b>		
			SHEET 1 OF 1		

Model Number 1203V2	PERFORMANCE SPECIFICATION	Doc No PS1203V2
Force Sensors, IEPE		REV B, ECN 8761, 06/20/12



- RING STYLE FORCE SENSOR
- HERMETICALLY SEALED
- EXCELLENT LINEARITY

**PHYSICAL**

Weight, Max.  
Connector [1]

Housing

Sensing Element

Type  
Material  
Material  
Isolation  
Material  
Mode

ENGLISH		SI	
1.75	oz	50	grams
10-32		10-32	
Stainless steel		Stainless steel	
Stainless steel		Stainless steel	
Case grounded		Case grounded	
Quartz		Quartz	
Compression		Compression	

**PERFORMANCE**

Sensitivity, ± 10 %  
Compression Range  
Maximum Compression  
Discharge Time Constant  
Broadband Resolution  
Maximum Unloaded Shock  
Maximum Unloaded Vibration  
Linearity [2]  
Resonant Frequency  
Stiffness

10	mV/Lb	2.47	mV/N
500	Lb Force	2.22	kN
1,000	Lb Force	4.45	kN
450	Seconds	450	Seconds
0.00014	Lb, rms	6.23E-07	kN, rms
10,000	g's	98,100	m/s <sup>2</sup>
5,000	g's, Peak	49,050	m/s <sup>2</sup> Peak
± 1	% Full Scale	± 1	% Full Scale
>75	kHz	>75	kHz
20	Lb/µin	3.46	kN/µm

**ENVIRONMENTAL**

Coefficient Of Thermal Sensitivity  
Operating Temperature  
Environmental Seal

0.03	%/°F	0.05	%/°C
-100 to +250	°F	-73 to +121	°C
Hermetic		Hermetic	

**ELECTRICAL**

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

2 to 20	mA	2 to 20	mA
18 to 30	VDC	18 to 30	VDC
5	Volts	5	Volts
<100	Ω	<100	Ω
7.5 to 9.5	VDC	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)
1203V1	50	100	200	90
1203V3	5	1,000	5,000	850
1203V4	1	5,000	10,000	1800
1203V5	0.5	10,000	15,000	1800

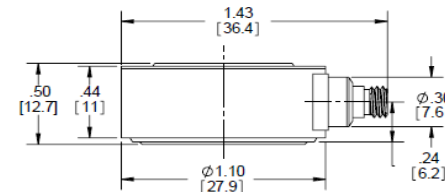
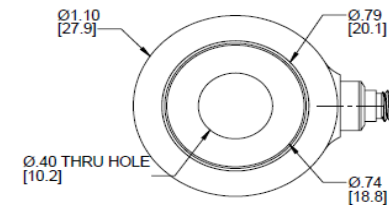
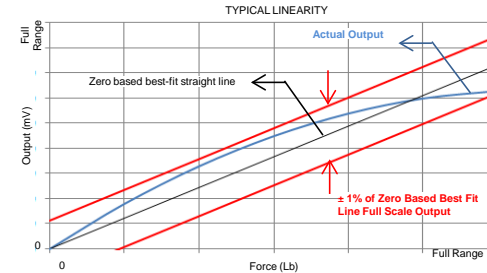
Please refer to the performance specifications of the products in this family for detailed description

**Supplied Accessories:**

1) Accredited calibration certificate (ISO 17025)

**Notes:**

- [1] Radially mounted with 10-32 receptacle micro coaxial connector
- [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 127-1203V for more information.



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